

## **APPENDIX F ADDRESSING PERFORMANCE MEASURE TARGETS IN MPO TRANSPORTATION IMPROVEMENT PROGRAMS (TIPS)**

### **Background**

Pursuant to MAP-21 (and carried through into the FAST Act), Metropolitan Planning Organizations (MPOs) must employ a transportation performance management approach in carrying out their federally-required planning and programming activities. Chapter 23 part 150(b) of the *United States Code* [23USC §150(b)] includes the following seven national performance goals for the Federal-Aid Highway Program:

- **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 practice

On the public transportation side, transportation performance management shall be utilized to advance the general policy and purposes of the public transportation program as included in 49USC §5301(a) and (b).

The Syracuse Metropolitan Transportation Council (SMTC) TIP was developed and is managed in cooperation with the New York State Department of Transportation (NYSDOT) and the Central New York Regional Transportation Authority (CNYRTA). It reflects the investment priorities established in the SMTC's 2050 Long Range Transportation Plan (LRTP), which incorporates comments and input from affected agencies and organizations and the public.

Transportation Improvement Programs “shall include, to the maximum extent practicable, a description of the anticipated effects of the transportation improvement program toward achieving the performance targets established in the metropolitan transportation plan,

linking investment priorities to those performance targets” [23USC §134(j)(2)(D)]. Metropolitan transportation plans (MTPs) adopted or amended after the following dates must include performance targets for the associated measures:

- May 27, 2018 – Highway Safety Improvement Program (HSIP) and Highway Safety
- October 1, 2018 – Transit Asset Management
- May 20, 2019 – Pavement and Bridge Condition
- May 20, 2019 – System Performance/Freight/Congestion Mitigation & Air Quality Improvement Program
- July 20, 2020 – Public Transportation Safety Program.

Metropolitan Planning Organizations that do not adopt or amend their MTP prior to these dates are still required to support statewide performance targets or establish their own for the measures discussed above, and include “a description of the anticipated effects of the transportation improvement program toward achieving” said targets. This portion of the amended 2017-2021 TIP meets these requirements of 23USC §134(j)(2)(D).

**Figure 1: Transportation Performance**



Source: FHWA

## **HSIP and Highway Safety**

### *Performance Targets*

On March 15, 2016, the Federal Highway Administration published the final rule for the HSIP and Safety Performance Management (Safety PM) Measures in the *Federal Register* with an effective date of April 14, 2016.

The 2017 New York Strategic Highway Safety Plan (SHSP) is intended to reduce “the number of fatalities and serious injuries resulting from motor vehicle crashes on public roads in New York State.” The SHSP guides NYSDOT, the MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across New York State. The New York State Department of Transportation *Highway Safety Improvement Program* annual report documents the statewide performance targets.

The Syracuse Metropolitan Transportation Council agreed to support the NYSDOT statewide 2018 targets for the following Safety PM measures based on five year rolling averages per Title 23 Part 490.207 of the *Code of Federal Regulations* on February 16, 2018 via Resolution 2018-02.

**Table 1: New York State 2018 Safety Performance Management Targets**

Measure	Step 1: Forecast Using 5-Yr Moving Average Trendline		Step 2: Round and apply 6% Cap	
	2018 Forecast	% Change 2014-2018 vs. 2011-2015	Rounded / Capped Percent	NYSDOT Target 2018
<b>Number of Fatalities</b>	1,087	4.9%	5.0%	<b>1,086</b>
<b>Fatality Rate</b>	0.87	2.5%	3.0%	<b>0.87</b>
<b>Number of Serious Injuries</b>	10,635	7.9%	6.0%	<b>10,854</b>
<b>Serious Injury Rate</b>	8.53	5.1%	5.0%	<b>8.54</b>
<b>Number of Non-Motorized Fatalities and Serious Injuries</b>	2,833	1.4%	1.0%	<b>2,843</b>

### *Anticipated Effects*

Safety is a critical component of SMTC’s mission, and the projects on the TIP are consistent with the need to address safety. Safety is a primary consideration in the selection of projects to be included in the TIP. The current project selection process utilized at the SMTC is consistent with, and aligns to, the agency’s LRTP that contains goals, objectives, performance measures, and the anticipation of adopted performance targets such as those for Safety PM. The Long Range Transportation Plan adheres to the performance-based planning and

programming requirements established under MAP-21 and continued in the FAST Act. The LRTP guides projects associated with the SMTC’s annual work program and the TIP.

As the LRTP is the blueprint that guides transportation investment in the Metropolitan Planning Area, all new projects are evaluated against the community goals, objectives, and performance measures established in the LRTP and are applicable to the federal surface transportation authorization national goals as identified above and its planning factors. For instance, the 2050 LRTP safety goal and objectives are shown in table 2.

**Table 2: SMTC 2050 Long Range Transportation Plan Safety Goal and Objectives**

Goal	Objectives
<p><b>Increase the safety, security, and resiliency of the transportation system.</b></p>	<p>Reduce serious injuries and fatalities from vehicle crashes.</p>
	<p>Reduce pedestrian and bicycle crashes.</p>
	<p>Reduce the number of height- and weight-restricted bridges, especially along primary freight and commuter corridors.</p>

Relative to TIP project selection, project proposal forms are available for a number of varying project types; Bicycle/Pedestrian, Bridge, Paving, Safety, and Public Transit. The Safety application form, which is utilized by potential sponsors for solely safety related capital projects requires applicants to answer explicit safety relevant questions such as:

- Has a preliminary traffic engineering analysis been completed?
- Does the location have a number of serious injuries and/or fatalities?
- Is a Safety Benefit Evaluation Form (TE 164) attached?

As indicated, safety is a principal goal of the LRTP. While the remaining project types (i.e., Bicycle/Pedestrian, Bridge, Paving, and Public Transit) have their own application forms, these project types are also evaluated in relation to the safety goal. Responses to the above questions, in addition to the relationship with the LRTP are used in the evaluation process. This approach provides a clear linkage between the TIP program of projects and the policies, goals, objectives, performance measures and ultimately, performance targets outlined in the LRTP. The Transportation Improvement Program includes a number of site specific and systemic projects programmed with HSIP funds and other fund sources that are expected to materially benefit the safety of the traveling public on roadways throughout the Metropolitan Planning Area.

The Syracuse Metropolitan Transportation Council TIP has been reviewed and the anticipated effect of the overall program is that it will contribute to progress made in addressing the safety performance targets established by the State.

## **Transit Asset Management**

### *Performance Targets*

On July 26, 2016, the Federal Transit Administration (FTA) published the final rule for Transit Asset Management (TAM) in the *Federal Register* with an effective date of October 1, 2016. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The final rule defines the term “state of good repair,” requires public transportation providers to develop, adopt, and implement 2 years from the effective date a TAM Plan, and establishes State of Good Repair standards and performance measures for four transit asset categories: rolling stock, transit infrastructure, equipment, and facilities.

The Syracuse Metropolitan Transportation Council agreed to support the CNYRTA 2018 TAM targets for the following measures on February 16, 2018 via Resolution 2018-03. The CNYRTA established targets for those asset classes noted in the below table that apply to their operation. With this action, the SMTC agreed to plan and program projects in the TIP that will, once implemented, make progress toward achieving the transit asset targets.

**Table 3: CNYRTA 2018 State of Good Repair Performance Management Targets**

Asset category		Fleet Size	Vehicle Age	Default ULB	FY17 Performance Metric (Percent Exceeding ULB)	FY 18 Target
Rolling Stock	Over The Road	12	4.54	14	0%	0%
	Bus	188	7.083	14	0%	0%
	Cut-A-Way	36	4.083	8	0%	0%
Equipment	Auto	21	5.7	8	0%	0%
	Truck	12	4.083	8	0%	0%
Asset category		TERM Average Rating (1-5 Scale)	Benchmark	FY17 Performance Metric (Percent Exceeding TERM Basis Rating)	FY 18 Target	
Facilities	Admin/Maintenance	3.26	3	0%	0%	
	Passenger Parking	3.765	3	0%	0%	

ULB – Useful Life Benchmark

TERM – Transit Economic Requirements Model

TERM Rating Condition Description

Excellent 4.8-5.0 No visible defects, near-new condition

Good 4.0-4.7 Some slightly defective or deteriorated components

Adequate 3.0-3.9 Moderately defective or deteriorated components

Marginal 2.0-2.9 Defective or deteriorated components in need of replacement

Poor 1.0-1.9 Seriously damaged components in need of immediate repair

### *Anticipated Effects*

The transit program of projects contained in the TIP address amongst other items, transit asset management and State of Good Repair. The SMTC's goal of addressing transit asset condition is linked to the investment plan of the CNYRTA, and the process used to prioritize the projects within the TIP is consistent with federal requirements. Transit relevant goals and objectives from the adopted 2050 LRTP are identified in table 4.

**Table 4: SMTC 2050 Long Range Transportation Plan Transit Supportive Goals and Objectives**

<b>Goal</b>	<b>Objectives</b>
<b>Provide a high degree of multi-modal accessibility and mobility for individuals.</b>	Provide essential transit service to urban and suburban areas.
	Provide higher-quality transit service to transit oriented development (TOD) nodes throughout the community.
	Reduce the number of height- and weight-restricted bridges, especially along primary freight and commuter corridors.
<b>Protect and enhance the natural environment and support energy conservation and management.</b>	Reduce vehicle miles traveled in the region.
	Reduce on-road mobile source emissions.
	Increase the percentage of commute trips made by transit.
<b>Improve the reliability of the transportation system and promote efficient system management and operations.</b>	Improve transit on-time performance.
	Improve utilization of transit vehicles.
<b>Ensure that transportation system performance improvements are distributed equitably.</b>	Improve transit service between employment centers and priority target areas (as identified in SMTC's Environmental Justice Analysis).

The Transportation Improvement Program includes a number of bus procurements/replacements, and transit facility rehabilitation projects programmed primarily with FTA Section 5307 and/or Section 5539 program funds totaling approximately (\$36.9M [\$32.9M rolling stock and equipment, \$4.0M facilities]). Given transit's significance in the adopted 2050 LRTP, the TIP also programs flexible funds from the FHWA Surface Transportation Block Grant Program for bus replacements. Additionally, State Dedicated Funds from New York State are utilized. The extensive vehicle fleet owned, operated, and maintained by the CNYRTA comprises the majority of the transit agency's capital program. Vehicles are maintained to the highest standards and oftentimes replaced prior to reaching the FTA defined useful life, which is evident within the adopted rolling stock, equipment, and facilities targets.

The SMTC anticipates that the transit projects on the TIP, when implemented, will contribute to progress toward achieving the established transit asset management targets, and will also benefit the traveling public throughout the Metropolitan Planning Area where the CNYRTA provides public transit services. This is consistent with the LRTP goals, objectives, performance measures, and anticipated adopted performance targets. The Syracuse Metropolitan Transportation Council coordinates with CNYRTA on TAM requirements and have agreed to program investments to support the CNYRTA TAM targets.

The Syracuse Metropolitan Transportation Council TIP has been reviewed and the anticipated effect of the overall program is that it will contribute to progress made in addressing the transit performance targets established by the CNYRTA.