# of the Metropolitan Council of the Twin Cities

## **ACTION TRANSMITTAL No. 2019-23**

DATE: April 3, 2019

TO: Transportation Advisory Board FROM: **Technical Advisory Committee** 

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SUBJECT: 2019-2022 TIP Amendment: Performance Measures and Targets

> The Metropolitan Council requests an amendment to the 2019-2022 Transportation Improvement Program (TIP) to incorporate

REQUESTED ACTION: pavement / bridge and system performance / CMAQ performance measures.

That the Transportation Advisory Board approve an amendment RECOMMENDED to the 2019-2022 Transportation Improvement Program (TIP) to

incorporate pavement / bridge and system performance / CMAQ MOTION:

performance measures.

BACKGROUND AND PURPOSE OF ACTION: This TIP amendment is needed to add text related to performance measures.

Title 23, Section 450.326(d) of the CFR states: The TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets.

The initial incorporation of performance measures into the TIP included performance measure (PM) 1 – Safety with a deadline of May 27, 2018. This was amended into the 2018-2021 TIP in the spring of 2018 and is included in the current 2019-2022 TIP.

Two additional performance measures are due to be included in the TIP by the deadline of May 20, 2019. They are:

- Pavement and Bridge Performance Measure (PM2)
- Congestion Management and Air Quality (CMAQ) (PM3)

While it is not necessarily required to incorporate language on these performance measure into the current (2019-2022) TIP, the ability to amend projects into or within the TIP could be jeopardized if this language is not included. Similar language will be included in the 2020-2023 TIP current in development.

**RELATIONSHIP TO REGIONAL POLICY:** Federal law requires that all transportation projects that will be funded with federal funds must be in an approved TIP. Further, federal law requires performance-based planning related to for safety, pavement, bridge, reliability, freight, Congestion Management/Air Quality (CMAQ), and transit asset and safety. The Pavement &

Bridge Performance (PM2) and System Performance and Congestion Management and Air Quality (PM3) measures are to be incorporated into the TIP by May 20, 2019.

**STAFF ANALYSIS:** This is a text change and does not impact any individual project in the TIP. This change enables the TIP to be compliant with federal regulations and to remain flexible if an amendment is needed to an individual project. This amendment is consistent with the Metropolitan Council Transportation Policy Plan, adopted by the Metropolitan Council on October 24, 2018, with FHWA/FTA conformity determination established on December 13, 2018.

**COMMITTEE ACTION:** At its March 14, 2019, meeting, the TAC Planning Committee voted unanimously to recommend approval of the TIP amendment request.

At its April 3, 2019, meeting, the Technical Advisory Committee voted unanimously to recommend approval of the TIP amendment request.

#### ROUTING TO ACTION REQUESTED **DATE COMPLETED** TAC Planning Committee Review & Recommend 3-14-2019 TAC Funding & Programming Committee 4-3-2019 Information **Technical Advisory Committee** Review & Recommend Transportation Advisory Board Review & Adopt Metropolitan Council Transportation Review & Recommend Committee Metropolitan Council Review & Concur

# Pavement/Bridge Performance Measures (PM2)

### **Council Activities and Progress**

The Council adopted the 2020 and 2022 PM2 target for the first time over the course of 2018. Given the close coordination with MnDOT and similar performance for both the metro area and greater Minnesota, the Council chose to concur with the adopted MnDOT pavement/bridge performance measure targets. Table 3 depicts the existing metro area performance as well as the adopted statewide and regional targets for both 2020 and 2022.

Table 3: Existing Conditions and Adopted Bridge and Pavement Condition Targets for 2020 and 2022

Measure		Existing Performance	2020 Target	2022 Target
Bridges				
1.	% of bridges by deck area in good condition	46.3%	>50%	>50%
2.	% of bridges by deck area in poor condition	1.3%	<4%	<4%
Pavement				
1.	% of interstate pavement in good condition	62.7%	*	>55%
2.	% of interstate pavement in poor condition	0.8%	*	<2%
3.	% of non-interstate NHS pavement in good condition	50.7%	>50%	>50%
4.	% of non-interstate NHS pavement in poor condition	3.2%	<4%	<4%

<sup>\*</sup>No target set for this measure/year

#### Anticipated Effect of the Pavement/Bridge Performance Measures

The 2019-2022 TIP is anticipated to have a positive effect on the pavement and bridge performance measures, as there are projects programmed specifically for the purpose of improving bridge and pavement conditions. While interstate pavement condition within the metro area is performing at a level greater than the targets, non-interstate NHS pavement is not performing at the same level. This may indicate a need to focus more explicitly on non-interstate NHS facilities in the future in an effort to ensure the region continues to be on track to meet the 2020 and 2022 targets.

Currently, the metro area is not meeting the adopted target for the percent of bridges by deck area in good condition. This is offset, however, by the performance of the state a whole, which is on track to meet the established targets. Moving forward, the Council will continue to monitor bridge deck condition and explore mechanisms to ensure the future targets are met.

## System Performance Measures and Congestion CMAQ (PM3)

#### **Council Activities and Progress**

The Council adopted both the initial system reliability (shown on Table 4) and congestion mitigation and air quality (CMAQ) (Table 5) targets for the region during the fall of 2018. All of the targets associated with these measures are specific to the metro area.

Because almost all congestion within the State of Minnesota occurs within the Metro Area, the Council adopted targets specific to the region that differed from the state-wide targets. The existing metro area performance for the percent of reliable person-miles traveled on the interstate system is approximately 69%. MnDOT established a state-wide target of greater than 80%, which would likely be unattainable for the near-term future within the metro area. Instead, the Council has adopted a 2020 and 2022 target of greater than 70%. This target is appropriate in that it still aspires to be better than current conditions, but better fits the urban context than does the statewide target of 80%.

In addition to the interstate person-miles target, the Council has also elected to adopt targets that are different than MnDOT's for the truck travel time reliability index measure. This is because truck travel reliability is less in the metro area than in Greater Minnesota as a whole. The adopted MnDOT target truck travel time reliability of less than 1.5 would be very hard to attain given the increased traffic in the metro area as compared to greater Minnesota.

All of the adopted reliability targets aim for improvement over the existing conditions, and as such may be considered aspirational given recent trends. There is, however, no consequence to the Council for not meeting these targets, and the State of Minnesota as a whole is likely to meet their adopted targets. The Council has chosen these targets as a mechanism to aim for improvement in reliability in the immediate future and prioritize highway projects integrated within the TIP thusly.

Table 4: Existing Conditions and Adopted System Reliability Targets for 2020 and 2022

Measure	Existing Performance	2020 Target	2022 Target
% of reliable person-miles traveled on the Interstate	68.8%	>70%	>70%
% of reliable person-miles traveled on the non- Interstate NHS	76.5%	>75%	>75%
Truck travel time reliability index	2.23	<2.20	<2.20

Table 5: Existing Conditions and Adopted CMAQ Targets for 2020 and 2022

Measure	Existing Performance	2020 Target	2022 Target
On-road mobile source emissions – sum of emissions reductions of pollutants, in kilograms per day, for all projects funded with CMAQ funds	6,800	>6,800	>6,800
% of non-single occupancy vehicles	23.2%	>25%	>25%
Peak hour excessive delay – annual hours of delay per capita (delay is travel at less than 20 MPH or 60% of the posted speed	8.65	<8.5	<8.5

Anticipated Effect of the System Reliability and Congestion Reduction Performance Measures In total, there is over \$117 million in CMAQ projects programmed in the 2019-2022 TIP. The net benefit of these projects, as shown in table 5, is a reduction of approximately 6,800 kg/day of mobile source pollution. The CMAQ projects include the purchase of a number of transit vehicles; activities to market and incentive the use of carpools, vanpools, and ride matching programs; and projects aimed at retiming and optimizing traffic signal coordination.

The 2019-2022 TIP also includes projects which are anticipated to have a positive effect on mobility and system reliability. This includes a number of spot mobility enhancements as well as a large set-aside for future mobility projects (fiscal year 2022).