

2019-2022 TIP Amendment

With the passing of the Moving Ahead for Progress in the 21st Century (MAP-21) transportation bill, and continuing in the FAST-Act, states and MPOs are required to use performance based transportation planning practices. MPO TIPs will be required to document compliance with each of the performance based planning categories. Those categories include:

- Safety
- Pavement and Bridge Condition
- System and Freight Reliability
- Transit

The approved FFY 2019-2022 TIP includes Safety and Transit Performance Targets. This amendment will add performance targets for Pavement and Bridge Condition (PM II) and System and Freight Reliability (PM III). MPOs can either set their own performance targets or choose to support the State's (Iowa DOT) targets.

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5-7-2019

Pavement and Bridge Condition Performance Targets (PM II)

To satisfy the PM II performance measure MPOs can choose to support the DOT PM II targets or MPOs can set their own unique targets. PMII targets for the Des Moines Area MPO have been set in the Mobilizing Tomorrow Plan and will be incorporated into the amended TIP.

Condition Goals in *Mobilizing Tomorrow*

Goal 2 in *Mobilizing Tomorrow* seeks to “manage and optimize transportation infrastructure and services” and includes measures related to, but does not directly address, measures required by federal rulemaking.

In addition to setting baseline values for tracking the performance in the long-range plan, a target was set for the year 2050 to be used to evaluate the on-going performance of the transportation system. In *Mobilizing Tomorrow* those measures have a 2050 target of maintaining the system at the baseline level set when the plan was adopted.

Des Moines Area MPO Condition Performance Targets

The Iowa DOT provided 2017 pavement and bridge data in June of 2018, however, previous years’ data is not available. Because of this, it is not possible to determine any sort of trend or forecast due to a lack of sufficient data.

Table 2 presents the 2017 data that was provided to the MPO by the Iowa DOT, and recommended targets for 2018-2021 time period.

Table 1: Des Moines Area MPO Condition Performance Baselines

Performance Measure	Des Moines Area MPO 2017 Pavement and Bridge Data	2018-2021 Target
Percentage of pavements of the Interstate System in Good condition	47.5%	47.5%
Percentage of pavements of the Interstate System in Poor condition	0.9%	0.9%
Percentage of pavements of the non-Interstate NHS in Good condition	32.5%	32.5%
Percentage of pavements of the non-Interstate NHS in Poor condition	22.4%	22.4%
Percentage of NHS bridge deck area classified as in Good condition	72.3%	72.3%
Percentage of NHS bridge deck area classified as in Poor condition	1.1%	1.1%

It should be noted that calculations of good and poor condition for pavements and bridges are calculated based on FHWA-required definitions, which may not align with other condition tracking that the MPO or State utilizes. Relevant CFR information can be found [here](#).

Moving forward, as additional data points for the Des Moines Area MPO becomes available the above targets will be reviewed utilizing a more analytical approach. After review they will be adjusted given the results of additional baseline forecasting in a similar manner to which the Safety Performance Targets were set.

Iowa DOT Pavement and Bridge Condition Performance Targets

Any Iowa DOT sponsored pavement and bridge projects within the MPO area were determined in alignment with the Iowa Transportation Asset Management Plan (TAMP) and the pavement and bridge performance measures. The TAMP connects Iowa in Motion 2045 and system/modal plans to Iowa DOT's Five-Year Program and the STIP. Iowa in Motion 2045 defines a vision for the transportation system over the next 20 years, while the Five-Year Program and STIP identify specific investments over the next four to five years. The TAMP has a 10-year planning horizon and helps ensure that investments in the Five-Year Program and STIP are consistent with Iowa DOT's longer-term vision. Starting in 2019, the TAMP will also integrate the pavement and bridge performance targets.

The Iowa DOT conferred with numerous stakeholder groups, including the Des Moines Area MPO and local owners of NHS assets, as part of its target setting process. The methodology used to set targets used current and historical data on condition and funding to forecast future condition. Asset management focuses on performing the right treatment at the right time to optimize investments and outcomes. Management systems are utilized to predict bridge and pavement needs and help determine the amount of funding needed for stewardship of the system. The TAMP discusses the major investment categories that the Commission allocates funding through. Once the Commission approves the funding for these categories, Iowa DOT recommends the allocation of the funds to specific projects using the processes described in the TAMP. Pavement and bridge projects are programmed to help meet the desired program outcomes documented in the TAMP.

System and Freight Reliability Performance Targets (PM III)

The Des Moines Area MPO has chosen to support the Iowa DOT's system and freight reliability targets as submitted in the most recent baseline period performance report. The MPO supports those targets by reviewing and programming all Interstate and National Highway System projects within the MPO boundary that are included in the DOT's Transportation Improvement Program.

The Iowa DOT conferred with numerous stakeholder groups, including the Des Moines Area MPO, as part of its target setting process. Variability within the existing travel time dataset was used to forecast future condition. Projects focused on improving pavement and bridge condition also often help improve system reliability and freight movement. Additional projects focused specifically on improving these areas of system performance are developed in alignment with the target-setting process for related performance measures, and the freight improvement strategies and freight investment plan included in the State Freight Plan. This plan includes a detailed analysis and



prioritization of freight bottlenecks, which are locations that should be considered for further study and possibly for future improvements. The process also involved extensive input from State, MPO, RPA, and industry representatives. State projects identified in the freight investment plan and programmed in the STIP were highly-ranked freight bottlenecks.