



Performance and Asset Management Updates

MPO/RPA Quarterly Meeting
June 22, 2022



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Overview

- FTA and FHWA performance measures
- MPO responsibilities
- Safety (PM1) targets
- Pavement/bridge (PM2) and system performance/freight (PM3) targets
- Transportation Asset Management Plan (TAMP) update

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FTA performance measures

| Topic | Performance measures | Applicability |
|------------------|---|--|
| Asset management | Rolling stock: percent of revenue vehicles (by asset class) that have met or exceeded their useful life benchmark (ULB) | Tier I providers (large urban systems in Iowa) set their own targets. Tier II providers (small urban and regional systems in Iowa) participate in a group asset management plan and annual target-setting process sponsored by the Iowa DOT. |
| | Equipment: percent of non-revenue vehicles (by asset class) that have met or exceeded their ULB | |
| | Facilities: percent of facilities (by group) that are rated less than 3.0 on the TERM Scale | |
| Safety* | Number of fatalities | Recipients of 5307 funding (large urban systems in Iowa) set their own targets. Iowa's small urban and regional systems are not required to set safety targets at this time. |
| | Fatalities per 100 thousand vehicle revenue miles | |
| | Number of injuries | |
| | Injuries per 100 thousand vehicle revenue miles | |
| | Number of safety events (accidents, injuries, or occurrences) | |
| | Safety events per 100 thousand vehicle revenue miles | |
| | System reliability – vehicle revenue miles/failures | |

*In 2021, the Infrastructure Investment and Jobs Act (IIJA) added risk reduction performance targets for transit agencies in TMA; not effective until National Public Transportation Safety Plan is updated

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FHWA performance measures

| | Topic | Performance measure(s) |
|-----|--------------------|--|
| PM1 | Safety | -Number of fatalities -Rate of fatalities -Number of serious injuries -Rate of serious injuries -Number of non-motorized fatalities and non-motorized serious injuries |
| PM2 | Pavement | -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 |
| | Bridge | -Percentage of NHS bridges classified as in Good condition -Percentage of NHS bridges classified as in Poor condition |
| PM3 | System Performance | -Percent of person-miles traveled on the Interstate that are reliable -Percent of person-miles traveled on the non-Interstate NHS that are reliable |
| | Freight | -Truck Travel Time Reliability Index (Interstate only) |

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General MPO responsibilities

- FTA targets: set targets within 180 days of transit providers' initial target setting; encouraged to review/update targets following transit provider updates and when updating LRTP
- FHWA targets: set targets within 180 days of State DOT
 - Agree to plan and program projects so that they contribute toward the accomplishment of the State DOT target, or
 - Commit to a quantifiable target for that performance measure for the metropolitan planning area
- Incorporate measures and targets into the planning process, TIP, and LRTP
- Integrate performance-based plans from State DOT and transit providers into the planning process

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PM 1 – Safety targets

- Most recent performance evaluation

Iowa CY 2020 Safety Performance Target Assessment

| PERFORMANCE MEASURE | 2016-2020 TARGET | 2016-2020 ACTUAL | 2014-2018 BASELINE | MET TARGET? | BETTER THAN BASELINE? | MET OR MADE SIGNIFICANT PROGRESS? |
|---|------------------|------------------|--------------------|-------------|-----------------------|-----------------------------------|
| Number of Fatalities | 345.8 | 344.8 | 338.6 | Yes | N/A | YES |
| Rate of Fatalities | 1.011 | 1.058 | 1.030 | No | No | |
| Number of Serious Injuries | 1,396.2 | 1,389.6 | 1,456.2 | Yes | N/A | |
| Rate of Serious Injuries | 4.083 | 4.256 | 4.424 | No | Yes | |
| Number of Non-Motorized Fatalities & Serious Injuries | 138.1 | 131.6 | 132.6 | Yes | N/A | |

Source: FHWA

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Safety targets for 2019-2023

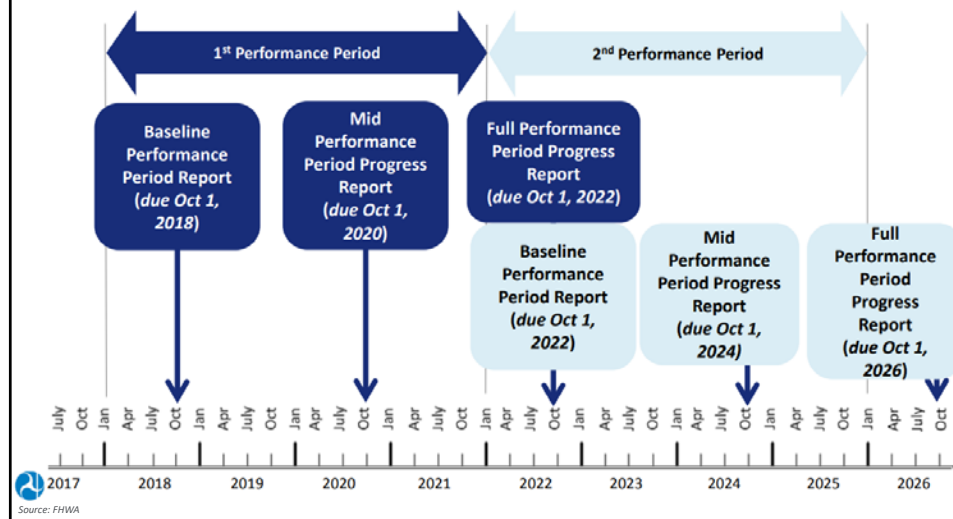
- Draft targets sent to MPOs June 14; comments due June 24
- Same methodology as past years
- Iowa DOT targets will be officially set as part of the Highway Safety Improvement Program (HSIP) annual report submittal on 8/31/22
- MPO targets will be due by 2/27/23

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PM2/PM3 timeline



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PM2 measures/targets for 2018-2021 performance period

| Performance measure | Actual Performance | | | 2-yr target | 4-yr target |
|---|-------------------------|-------------------------|---------------------------|-------------|-------------|
| | 2017 <i>Baseline</i> | 2019 <i>Mid-year</i> | 2021 <i>Final year</i> | | |
| Percent of Interstate pavements in Good condition | N/A | 66.1% | TBD | N/A | 49.4% |
| Percent of Interstate pavements in Poor condition | N/A | 0.4% | TBD | N/A | 2.7% |
| Percent of non-Interstate NHS pavements in Good condition | 50.9% | 55.4% | TBD | 48.8% | 46.9% |
| Percent of non-Interstate NHS pavements in Poor condition | 10.6% | 9.3% | TBD | 13.2% | 14.5% |
| Percent of NHS bridges classified as in Good condition | 48.9% | 48.7% | TBD | 45.7% | 44.6% |
| Percent of NHS bridges classified as in Poor condition | 2.3% | 2.2% | TBD | 3.7% | 3.2% |

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PM2

- State DOT 2- and 4-year targets for 2022-2025 performance period due 10/1/22
 - Beginning internal discussions; will provide draft targets to MPOs for review/comment
- MPO 4-year targets will be due 180 days after State DOT
- Non-Interstate NHS transition for pavement condition
 - In first performance period, measures were based only on International Roughness Index (IRI)
 - Measures will now be based on full distress (IRI, cracking percent, rutting, and faulting data)
 - Will not be directly comparable to prior IRI-only data
 - Expect both good and poor percentages to decrease

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PM3 measures/targets for 2018-2021 performance period

| Performance measure | 2017 <i>Baseline</i> | First performance period | | | | 2-yr target | 4-yr target <i>Original</i> | 4-yr target <i>Adjusted</i> |
|--|-------------------------|--------------------------|-------------------------|-------|--|----------------|-----------------------------------|-----------------------------------|
| | | 2018 | 2019 <i>Mid-year</i> | 2020 | 2021 ² <i>Final year</i> | | | |
| Person-miles traveled on the Interstate that are reliable | 100.0% | 99.8% | 99.3% | 99.9% | 99.9% | 99.5% | 99.5% | 98.5% |
| Person-miles traveled on the non-Interstate NHS that are reliable | 95.5% | 96.3% | 96.3% | 96.8% | 96.5% | N/A | 95.0% | |
| Truck Travel Time Reliability (TTTR) Index (Interstate only) | 1.12 | 1.14 | 1.19 ¹ | 1.12 | 1.13 | 1.14 | 1.14 | 1.21 |

¹FHWA accepted Iowa DOT's explanation of extenuating circumstances; this outcome was judged as "progress not determined"
²Estimated – 2021 data submittal not yet finalized

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PM3

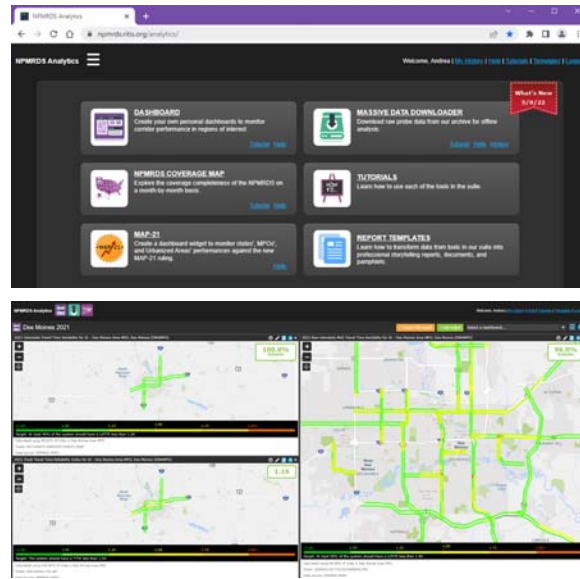
- State DOT 2- and 4-year targets for 2022-2025 performance period due 10/1/22
 - Beginning internal discussions; will provide draft targets to MPOs for review/comment
- MPO 4-year targets will be due 180 days after State DOT
- Iowa DOT currently continuing to buy-in to MAP-21 tool; MPOs encouraged to utilize the tool and its data

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<https://nprmrs.ritis.org/analytics/>



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Iowa DOT Transportation Asset Management Plan (TAMP)

- Became a requirement with MAP-21
- Addresses management of pavements and bridges on the National Highway System (NHS)
 - Need to consider locally-owned NHS
 - Memo sent to local city/county owners on May 17, 2022
 - May include other assets/systems
 - Iowa DOT TAMP includes full Primary Highway System
- 10-year horizon, updated every four years
 - Initial TAMP certified in 2018; updated in 2019 to fully address requirements
 - Updated TAMP due July 26, 2022
 - Extension until December 31, 2022 to address IIJA new requirements related to extreme weather and resilience
- FHWA certifies the processes used to develop the plan
- Each year a consistency review is submitted by July 1
 - Discuss asset management implementation
 - Compare the prior SFY lettings vs. most recent TAMP's investment plan

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Resources

- FHWA safety performance management: <https://safety.fhwa.dot.gov/hsip/spm/>
- FHWA guidance (TPM in general; PM2 and PM3): <https://www.fhwa.dot.gov/tpm/>
- FTA TAM guidance: <https://www.transit.dot.gov/TAM>
- FTA safety guidance: <https://www.transit.dot.gov/PTASP>
- Iowa DOT targets, TAMP, and miscellaneous resources: https://iowadot.gov/systems_planning/planning/federal-performance-management-and-asset-management



THANK YOU



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