

6. Performance Measures

MAP-21 and the FAST Act are placing emphasis on incorporating performance management into transportation planning and programming processes. National performance goals have been established for seven key areas (safety, infrastructure condition, congestion, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays), and MPOs are required to establish performance targets in support of these national goals.

Although the final rules for implementing performance measures were just issued in 2016, the last two MORPC Metropolitan Transportation Plans included performance measures and targets. MORPC's 2016-2040 Metropolitan Transportation Plan's measures and targets can be found at www.morpc.org/mtp2040. MORPC issues a report card each April which provides an update on the region's progress in achieving the established targets. The annual report cards are available at the MTP website. Projects in this TIP are being advanced to achieve the performance targets established in the 2016-2040 Metropolitan Transportation Plan.

As mentioned above, the final rules for implementing performance measures were effective or completed in 2016. The rules on performance measures were provided in three parts: PM1-Safety; PM2-Pavement & Bridge; and PM3-Reliability, Freight and CMAQ. The state and MPO's are required to set performance targets in these areas. The following sections provide additional detail with regard to each of the three performance measure areas.

Safety Performance Measures

The safety performance measure rules were the first to become effective (April 14, 2016). The rules identified five safety performance measures (number of fatalities, number of serious injuries, fatality rate, serious injury rate, and non-motorized fatalities & serious injuries) for which the state and MPO's are to establish baseline measurement and targets. The state was to establish targets by August 31, 2017 and the MPO's were to establish targets by February 27, 2018. As included in Addendum 1 to Section 9 of the STIP, ODOT established the following statewide baseline and targets:

ODOT Statewide Safety Performance Measures

Measure	Baseline CY 2012-2016 Avg/yr	CY 2018 Target
Number of fatalities	1,133	1,051
Number of serious injuries	9,216	9,033
Fatality rate (per 100 million VMT)	0.92	0.91
Serious injury rate (per 100 million VMT)	8.17	8.01
Non-motorized fatalities & serious injuries	856	840

With the adoption of the 2016-40 MTP in May 2016, MORPC established baseline and targets for each of the five measures. As described in the MTP these were:

MORPC 2016-2040 MTP Safety Performance Measures

Measure	Baseline CY 2010-2014 Avg/yr	2020 Target	2040 Target
Number of fatalities	96	10% reduction	39% reduction
Number of serious injuries	896	10% reduction	39% reduction
Fatality rate (per 100 million VMT)	0.69	0.63	0.42
Serious injury rate (per 100 million VMT)	6.4	5.83	3.91
Non-motorized fatalities & serious injuries	138	10% reduction	39% reduction

Although MORPC had established the above safety performance measure targets in 2016, with ODOT establishing the statewide targets in 2017 with more recent data, MORPC adopted Resolution T-1-18 in January 2018 supporting the ODOT Safety Performance Measures' targets.

As stated above, the projects in the TIP will aid the region in achieving the safety targets. Specifically, as shown in Table 10 on pages 37 and 38, 38 project phases are included in the TIP using ODOT HSIP funds totaling \$40,729,348. Five project phases are included in the TIP using county engineer controlled HSIP funding totaling \$468,585. In addition to these projects, many more projects using other funding sources, are included which will address congestion and safety issues. In particular, many projects using MORPC-attributable funding will aid the region in achieving the safety targets as safety is an important component in the project evaluation and selection process as described in Appendix B.

In addition to the specific projects in the TIP, through MORPC's Planning Work Program, MORPC annually publishes a non-freeway high crash list for the region. Along with this, MORPC also provides each community with their top 5 high crash locations. MORPC provides this to help local communities take steps to improve safety through their own resources or to provide data to apply for state or other resources.

Pavement and Bridge Performance Measures

The pavement and bridge performance measures did not become effective until May 20, 2017. The state was to establish targets by May 20, 2018 and the MPO's are to establish targets by November 16, 2018. The rules identified four pavement performance measures (percentage of interstate pavements in good condition, percentage of interstate pavements in poor condition, percentage of non-interstate NHS pavements in good condition, and percentage of non-interstate NHS pavements in poor) and two bridge performance measures (percentage of NHS bridges by deck area in good condition and percentage of NHS bridges by deck area in poor condition). In May 2018 ODOT established the following targets:

ODOT Statewide Pavement and Bridge Performance Measures

Pavements	2 Yr. Target	4 Yr. Target
Percentage of Interstate Pavements in Good Condition	N/A	50%
Percentage of Interstate Pavements in Poor Condition	N/A	1%
Percentage of Non-Interstate NHS Pavements in Good Condition	35%	35%
Percentage of Non-Interstate NHS Pavements in Poor Condition	3%	3%
Bridge	2 Yr. Target	4 Yr. Target
Percentage of NHS Bridges by deck area in Good Condition	50%	50%
Percentage of NHS Bridges by deck area in Poor Condition	5%	5%

Although MORPC's 2016-2040 MTP included measures with regard to pavement and bridge conditions, they do not match the required federal performance measures. MORPC will be reviewing the data for the region and establishing new performance measures by the November 16, 2018 deadline.

Reliability, Freight and CMAQ Performance Measures

The reliability, freight and CMAQ performance measures likewise did not become effective until May 20, 2017. The state was to establish targets by May 20, 2018 and the MPO's are to establish targets by November 16, 2018. The rules identified three reliability/freight performance measures (percent of person-miles traveled on interstate that are reliable, percent of person-miles traveled on non-interstate NHS that are reliable, and interstate truck travel time reliability index), and three CMAQ related performance measures (person hour excessive delay per capita, percent of non-SOV travel, and emission reductions from CMAQ funded projects). In May ODOT established the following targets:

ODOT Statewide Reliability, Freight and CMAQ Performance Measures

Travel Time Reliability Statewide	2 Yr. Target	4 Yr. Target
Percent of person-miles traveled on the Interstate that are reliable	85%	85%
Percent of person-miles traveled on the Non-Interstate NHS that are reliable	N/A	80%
Truck Travel Time Reliability Statewide	2 Yr. Target	4 Yr. Target
Interstate Truck Travel Time Reliability Index	<1.50	<1.50
Peak Hour Excessive Delay (PHED)	2 Yr. Target	4 Yr. Target
Annual Hours of Peak Hour Excessive Delay per Capita – Columbus	N/A	<12 hrs. / yr.
Percent of Non-SOV Travel	2 Yr. Target	4 Yr. Target
Percent of Non-SOV Travel – Columbus	18.2%	19.0%
Total CMAQ Emission Reduction Statewide	2 Yr. Target	4 Yr. Target
Volatile Organic Compounds Total Emission Reduction	69 kg/day	69 kg/day
Nitrous Oxide Total Emission Reduction	537 kg/day	537 kg/day
Particulate Matter at 2.5 Micrometers Total Emission Reduction	36 kg/day	36 kg/day

Although MORPC's 2016-2040 MTP included measures similar to these, they do not match the required federal performance measures. MORPC will be reviewing the data for the region and establishing new performance measures by the November 16, 2018 deadline.