State of New Jersey

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May 16, 2018

Robert Clark, Division Administrator
Federal Highway Administration, New Jersey Division
840 Bear Tavern Road, Suite 202
West Trenton, NJ 08628

Dear Mr. Clark:

As you know, the New Jersey Department of Transportation (NJDOT) is required to provide Safety (PM1), Infrastructure (PM2) and System Performance (PM3) targets to FHWA. In my April 27, 2018 letter to you, I provided the Safety targets. In a companion letter to this one, I will provide the Infrastructure targets. With this letter, I am pleased to provide New Jersey's 2018 System Performance Targets. The NJDOT intends to include these targets in New Jersey's Initial Performance Report due by October 1, 2018.

MAP-21, followed by the FAST Act, requires State DOTs and MPOs to implement a performance management process. For each performance area noted below (Subparts E, F, G and H), FHWA sets forth one or more performance measures. Each state must develop targets for each performance measure, and each MPO must either adopt the state target or their own regional target. All performance areas require single statewide targets, except for the two in Subpart G, where the requirements currently apply to urbanized areas with a population over 1 million. For those, there is a single target for each urbanized area, and all State DOTs and MPOs in that area must collaborate to develop and agree on a single target.

For performance areas in Subparts E, F, and G, the performance period is from January 1, 2018 to December 31, 2021. For this 4-year performance period, 2-year targets reflect the anticipated condition or performance level at the midpoint of the performance period (12/31/2019), and 4-year targets reflecting the anticipated condition or performance level at the end of the performance period (12/31/2021). For the On-Road Mobile Source Emissions Measure (Subpart H), the performance period is October 1, 2017 to September 30, 2021, based on the federal fiscal year. We will have the opportunity to adjust all 4-year targets at the mid-point of the performance period.

The following narrative describes the basic requirements and proposed targets for each performance area.

Travel Time Reliability (Subpart E)
Travel time reliability does not mean eliminating traffic congestion, but reducing its extremes to keep it within reasonable limits. The Department is using the National Performance Management Research Data Set (NPMRDS) data from 2016 and 2017 as a basis to determine travel time reliability targets. With support from the CATT Lab of the University of Maryland, travel time data has been analyzed to determine which roadway segments are reliable, and which are unreliable. Then segment length, traffic volume and vehicle occupancy data are used to calculate total person-miles of travel for the reliable and unreliable categories. The statewide reliability targets below describe the percentage of overall travel on the NHS that we expect to be reliable. At this stage, we have no definitive basis to change the baseline values for the 2- and 4-year targets, but will use the mid-year performance report as an opportunity to adjust the 4-year target as needed.

Performance Measure	Units	Baseline	2-year Target	4-year Target
Travel Time Reliability, Interstate NHS	Percentage of person-miles traveled that are reliable	82.0%	82.0%	82.0%
Travel Time Reliability, Non-Interstate NHS	Percentage of person-miles traveled that are reliable	84.1%	Not required	84.1%

Freight Reliability (Subpart F)
The Freight Reliability target is based on the same NPMRDS data source. Truck travel reliability is calculated through the Truck Travel Time Reliability (TTTR) index, which compares congested truck travel time (95th percentile) to average truck travel time (50th percentile). The highest TTTR values for segments are combined and weighted by segment length, and the sum of all length-weighted segments are divided by the total length of Interstate roadways in the state. There is no threshold, and the target is required only for interstate highways on the NHS.

The Baseline value is the average of the most recent calendar year of data (2017), which is 1.81. Data trends show a very modest increase in TTR over the calendar years of 2016 and 2017. Therefore, the Department and the MPOs agreed on a 2-year target of 1.9. However, it is anticipated that over 4 years, the target would be slightly higher, so it is set to 1.95.

Performance Measure	Units	Baseline	2-year Target	4-year Target
Truck Travel Time Reliability (TTTR)	TTTR Index, Interstate NHS	1.81	1.9	1.95

Peak Hour Excessive Delay (PHED) (Subpart G) – Urbanized Area Target
The Peak Hour Excessive Delay (PHED) measure indicates the extra time spent traveling due to extreme congestion, expressed as the number of hours per year on a per capita basis. This target is required for urbanized areas of greater than 1 million population. For NJ, the applicable

urbanized areas are New York City and Philadelphia, and a single target is required for each multi-state urbanized area.

For the New York urbanized area, partner agencies agreed that the effects of expected economic growth, especially in New York City, would exceed the impacts of investments to reduce traffic congestion. The 2 percent per year increase was the result.

For the Philadelphia urbanized area, the PHED value was 16.8 for 2017. The Vehicle Miles of Travel (VMT) forecasts for the DVRPC region for 2015–2020, based on the travel demand model, indicated a growth of 0.7% per year. On that basis, the 0.6% per year value was deemed appropriate.

Performance Measure	Units	Urbanized Area	Baseline	2-year Target	4-year Target
Peak Hour Excessive Delay (PHED)	Annual Hours of PHED per capita on the NHS	New York City (NY-NJ-CT)	20.0	Not Required	22.0 (+2%/yr.)
Peak Hour Excessive Delay (PHED)	Annual Hours of PHED per capita on the NHS	Philadelphia (PA-NJ-DE-MD)	16.8	Not Required	17.2 (+0.6%/ yr.)

Non-SOV Travel (Subpart G) – Urbanized Area Target

The Non-SOV Travel measure indicates the amount of travel not by single occupant vehicle (SOV), including modes such as walk, bus, carpool, train, bicycle, taxi, rideshare, and work at home. As with the PHED measure, the Non-SOV measure applies to the New York and Philadelphia urbanized areas. Both areas used U.S. Census American Community Survey (ACS) data as a basis for the targets. Specifically, ACS 5-year (2012-2016) estimates for journey to work trips for residents within the urbanized area.

The New York-Newark, NY-NJ-CT urbanized area's 5-year average percentage was 51.6%. This reflects a 61.8% non-SOV value for residents within the New York portion of urbanized area, and a 31.7% value for residents of the New Jersey portion of urbanized area. Given the large volume of existing transit ridership in the region where transit facilities are at capacity, the lack of any major transit projects being completed in the 4-year period, and the overall difficulty of "moving the needle" for this measure, the group decided to propose no increase for the 2-year target, and a conservative 0.1% increase for the 4-year target.

The Philadelphia area partner agencies faced similar considerations, but saw slightly more opportunities for growth in alternative modes of travel. Therefore, 0.1% increases were proposed for each 2-year increment.

Performance Measure	Units	Urbanized Area	Baseline	2-year Target	4-year Target
Non-SOV Travel	Percent of Non-SOV Travel in urbanized area	New York City (NY-NJ-CT)	51.6%	51.6%	51.7%
Non-SOV Travel	Percent of Non-SOV Travel in urbanized area	Philadelphia (PA-NJ-DE-MD)	27.9%	28.0%	28.1%

On Road Mobile Source Emissions (Subpart H)

The On Road Mobile Source Emissions measure covers expected emission benefits by pollutant from all investments made through the federal Congestion Mitigation and Air Quality (CMAQ) program. Target values are based on emissions benefits recorded in the FHWA CMAQ Public Access Database for fiscal years 2014-2017. Targets are only required for areas that are in nonattainment or maintenance status for the pollutant.

In developing the targets in consultation with the MPOs and NJDEP, consideration was given to the fact that the vehicle fleet, on average, is becoming cleaner over time. For example, the emissions benefit obtained from driving 20 fewer miles in an average model year 2014 vehicle will be greater than that obtained from driving 20 fewer miles in an average model year 2021 vehicle.

It is important to note that these 2- and 4-year targets are cumulative. The 2-year target reflects expected emissions benefits based on projects authorized in federal fiscal years 2018 and 2019, and the 4-year target reflects federal fiscal years 2018 through 2021.

As noted above, by rule this target is required to include all investments made through the federal Congestion Mitigation and Air Quality (CMAQ) program, regardless of the implementer. The target values below reflect benefits from NJDOT projects, those resulting from MPO local CMAQ programs, and NJ TRANSIT projects.

Statewide CMAQ Emissions Targets (Sum of MPO Targets)				
	Total Emissions Benefits Projections (kg/day)			
Year	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Oxides of Nitrogen (NOx)	Fine Particulate Matter ($PM_{2.5}$)
2018	10.058	16.085	59.919	2.154
2019	7.624	15.842	54.482	2.137
2020	9.442	15.631	58.946	2.122
2021	9.200	15.452	58.504	2.108
Cumulative 2-yr Target ('18-19)	**17.682**	**31.927**	**114.401**	**4.290**
Cumulative 4-yr Target ('18-21)	**36.324**	**63.010**	**231.850**	**8.520**

Coordination
For each of the System Performance targets described above, the Department has engaged in a robust coordination process through the nationally recognized interagency Complete Team. Representatives from each of the three MPOs, along with NJ TRANSIT, the Port Authority of New York and New Jersey, CATT Lab of the University of Maryland, and TRANSCOM have worked closely with the Department to ensure that the target development process met technical requirements and adequately considered policy issues. In addition, for the two urbanized area measures, Department staff have participated in regular meetings & conference calls for the NY-NJ-CT and greater Philadelphia regions, led by NJTPA and the New York Metropolitan Transportation Council (NYMTC) for the former, and DVRPC for the latter. For the New York-New Jersey Urbanized area, NJDOT has worked closely with the New York State Department of Transportation, NJTPA, the (NYMTC), and other entities to coordinate identical targets for the two urbanized area measures. Similarly, NJDOT has worked closely with DVRPC, PennDOT, DelDOT, Maryland DOT, and other entities to coordinate identical targets in the greater Philadelphia urbanized area. In so doing, both regions have ensured that all key agencies have participated in and agreed upon the required targets.

If you have any questions, please contact my office.

Sincerely,

Diane Gutierrez-Scaccetti
Acting Commissioner

bc M. Ameen, Acting Executive Director, NJTPA
B. Seymour, Executive Director, DVRPC
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