MASSACHUSETTS RELIABILITY PERFORMANCE TARGETS

Federally Required Reliability Performance Measure	Cumulative Traffic Message Channel Length (Miles)[a]	2017 Measure Value (Baseline)	Two-Year Target (CY 2019)[b]	Four-Year Target (CY 2021)[b]
Percent of person-miles on the Interstate Highway System that are reliable[c]	1,150	68.0%	68.0%	68.0%
Percent of person-miles on the non-Interstate NHS that are reliable[c]	5,257	80.0%	80.0%	80.0%
Truck Travel Time Reliability Index for the Interstate Highway System [d]	1,150	1.85	1.85	1.85

Note: The Massachusetts Department of Transportation (MassDOT) set all federally required reliability performance targets equal to 2017 baseline values.

[a] Traffic Message Channel (TMC) codes identify roadway segments for the purpose of reporting vehicle speeds, travel time, and other traffic information.

[b] The two-year target reflects conditions as of the end of CY 2019, and the four-year target reflects conditions as of the end of CY 2021.

[c] States or metropolitan planning organizations (MPOs) determine these values by calculating a Level of Travel Time Reliability (LOTTR) metric for roadway segments, which is the ratio of 80th percentile travel time to 50th percentile travel time, for four designated day and time periods. If a roadway segment has a LOTTR value of less than 1.5 for all four periods, that segment is considered reliable. States or MPOs then identify the person-miles of travel for each roadway segment and divide the total person-miles on the roadway network that are reliable by the total person-miles on the roadway network.

[d] The Truck Travel Time Reliability (TTTR) Index is a ratio of 95th percentile truck travel time to 50th percentile truck travel time. States or MPOs calculate TTTR Index values for each interstate segment for five designated day and time periods and then multiply the largest ratio value of the five periods by the segment length. States or MPOs then sum these weighted segment lengths for all segments on the Interstate Highway System and divide that value by the length of the full Interstate Highway System.

CY = calendar year. NHS = National Highway System.

Sources: National Performance Management Research Data Set, Cambridge Systematics, and MassDOT.

BOSTON REGION RELIABILITY PERFORMANCE MEASURE VALUES

Federally Required Reliability Performance Measure	Cumulative Traffic Messaging Channel Length (Miles)[a]	2017 Measure Value
Percent of person-miles on the Interstate Highway System that are reliable[b]	354	47.2%
Percent of person-miles on the non-Interstate NHS that are reliable[b]	1,799	69.0%
Truck Travel Time Reliability Index for the Interstate Highway System [c]	354	2.55

[a] Traffic Message Channel (TMC) codes identify roadway segments for the purpose of reporting vehicle speeds, travel time, and other traffic information.

[b] States or metropolitan planning organizations (MPOs) determine these values by calculating a Level of Travel Time Reliability (LOTTR) metric for roadway segments, which is the ratio of 80th percentile travel time to 50th percentile travel time, for four designated day and time periods. If a roadway segment has a LOTTR value of less than 1.5 for all four periods, that segment is considered reliable. States or MPOs then identify the person-miles of travel for each roadway segment and divide the total person-miles on the roadway network that are reliable by the total person-miles on the roadway network.

[c] The Truck Travel Time Reliability (TTTR) Index is a ratio of 95th percentile truck travel time to 50th percentile truck travel time. States or MPOs calculate TTTR Index values for each interstate segment for five designated day and time periods and then multiply the largest ratio value of the five periods by the segment length. States or MPOs then sum these weighted segment lengths for all segments on the Interstate Highway System and divide that value by the length of the full Interstate Highway System.

Sources: National Performance Management Research Data Set, Cambridge Systematics, and MassDOT.