

Transportation Performance Measure (PM 3): Travel Time Reliability Measures - Level of Travel Time Reliability - Interstates

Level of Travel Time Reliability (LOTTR) is defined as the ratio of the longer travel times (80th percentile) to a “normal” travel time (50th percentile), using data from FHWA’s National Performance Management Research Data Set (NPMRDS). Reliability is measured during the full calendar year broken down into 4 time periods: AM Peak, Midday, PM Peak and Weekends. If any of these segments have a LOTTR above 1.50, the segment is determined not reliable. All non-reliable segments are then calculated in combination with daily traffic volumes and average vehicle occupancy to produce the total number of person-miles impacted by each unreliable segment.

Travel time reliability performance measures
Interstate Travel Time Reliability Measure: % of person-miles traveled on the Interstate that are reliable
Non-Interstate Travel Time Reliability Measure: % of person-miles traveled on the non-Interstate NHS that are reliable

Data Sources:

Travel times - Travel Time Data Set (NPMRDS)

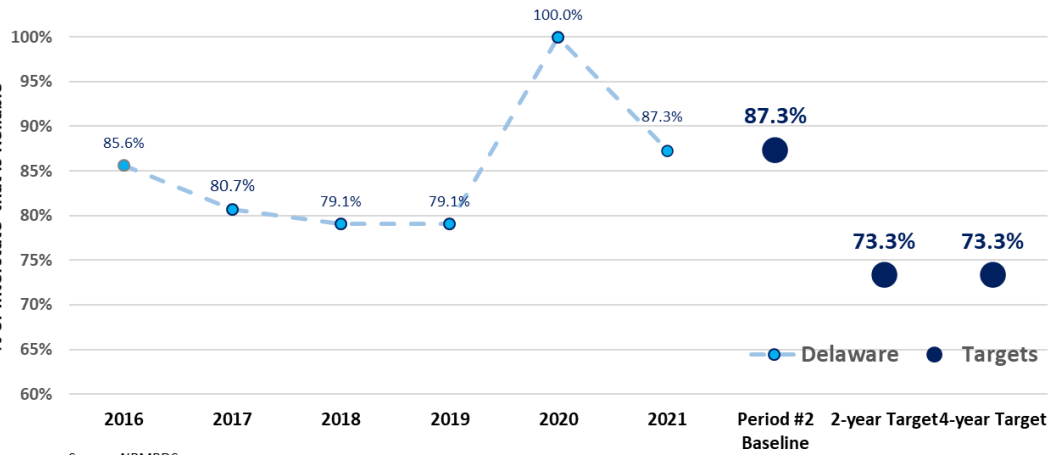
Travel volumes - Annual volume calculated as: AADT x 365 days.

Average vehicle occupancies (AVO) data tables published by FHWA.

Illustration of Reliability Determination

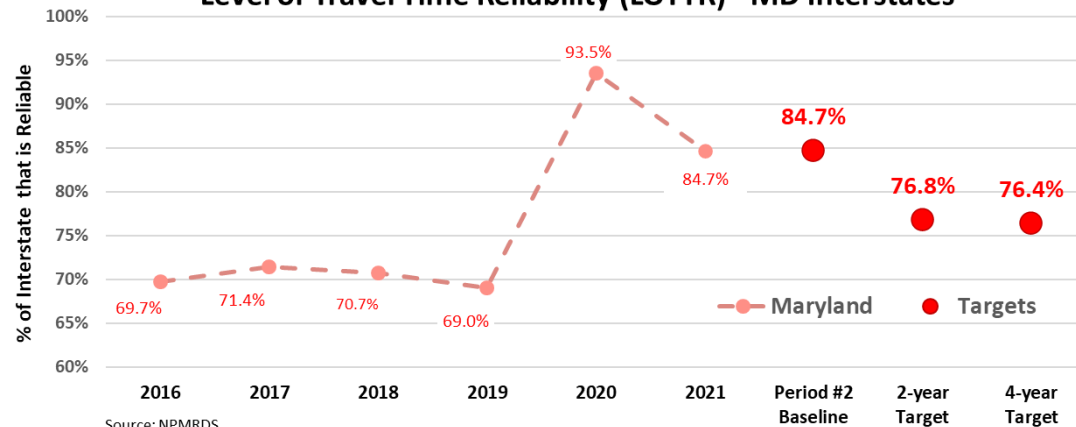
Monday – Friday	6am – 10am	$LOTTR = \frac{44 \text{ sec}}{35 \text{ sec}} = 1.26$
	10am – 4pm	LOTTR = 1.39
	4pm – 8pm	LOTTR = 1.54
Weekends	6am – 8pm	LOTTR = 1.31
Must exhibit LOTTR below 1.50 during all of the time periods		Segment IS NOT reliable

Level of Travel Time Reliability (LOTTR) - DE Interstates



Source: NPMRDS,

Level of Travel Time Reliability (LOTTR) - MD Interstates



Source: NPMRDS,

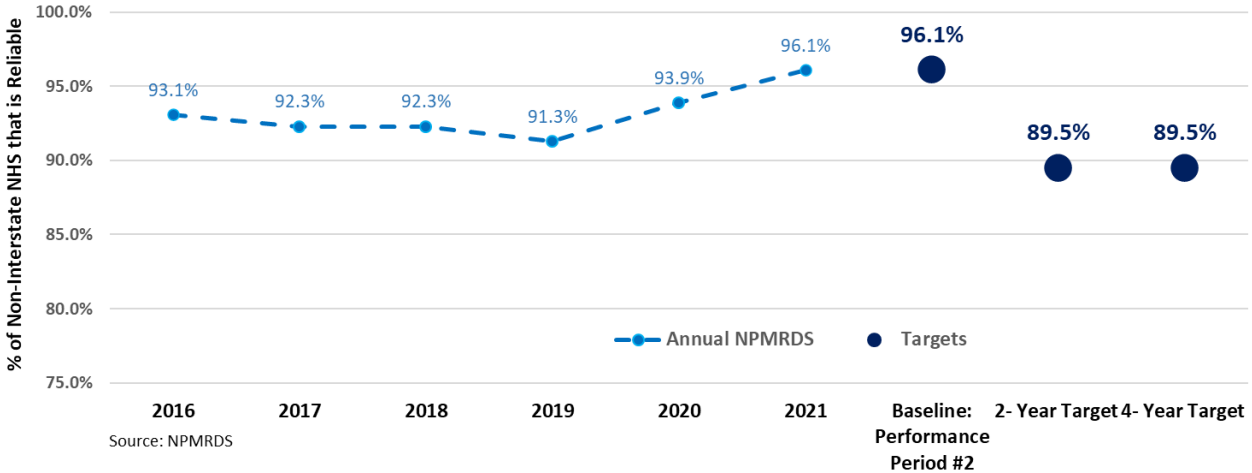
Transportation Performance Measure (PM 3): Travel Time Reliability Measures - Level of Travel Time Reliability – Non-Interstate NHS

Travel time reliability performance measures
Non-Interstate Travel Time Reliability Measure: % of person - miles traveled on the non-Interstate NHS that are reliable

Illustration of Reliability Determination

Monday – Friday	6am – 10am	$LOTTR = \frac{44 \text{ sec}}{35 \text{ sec}} = 1.26$
	10am – 4pm	LOTTR = 1.39
	4pm – 8pm	LOTTR = 1.54
Weekends	6am – 8pm	LOTTR = 1.31
Must exhibit LOTTR below 1.50 during all of the time periods		Segment IS NOT reliable

Level of Travel Time Reliability (LOTTR) - DE Non-Interstate NHS



Level of Travel Time Reliability (LOTTR) - MD Non-Interstate NHS

