

## Transportation Performance Measure Period #1: Travel Time Reliability Measures - Level of Travel Time Reliability

Level of Travel Time Reliability (LOTTR) is defined as the ratio of the longer travel times (80<sup>th</sup> percentile) to a “normal” travel time (50<sup>th</sup> 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
<b>Interstate Travel Time Reliability Measure:</b> % of person-miles traveled on the Interstate that are reliable
<b>Non-Interstate Travel Time Reliability Measure:</b> % 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 = <b>1.54</b>
Weekends	6am – 8pm	LOTTR = 1.31
Must exhibit LOTTR below 1.50 during all of the time periods		<b>Segment IS NOT reliable</b>

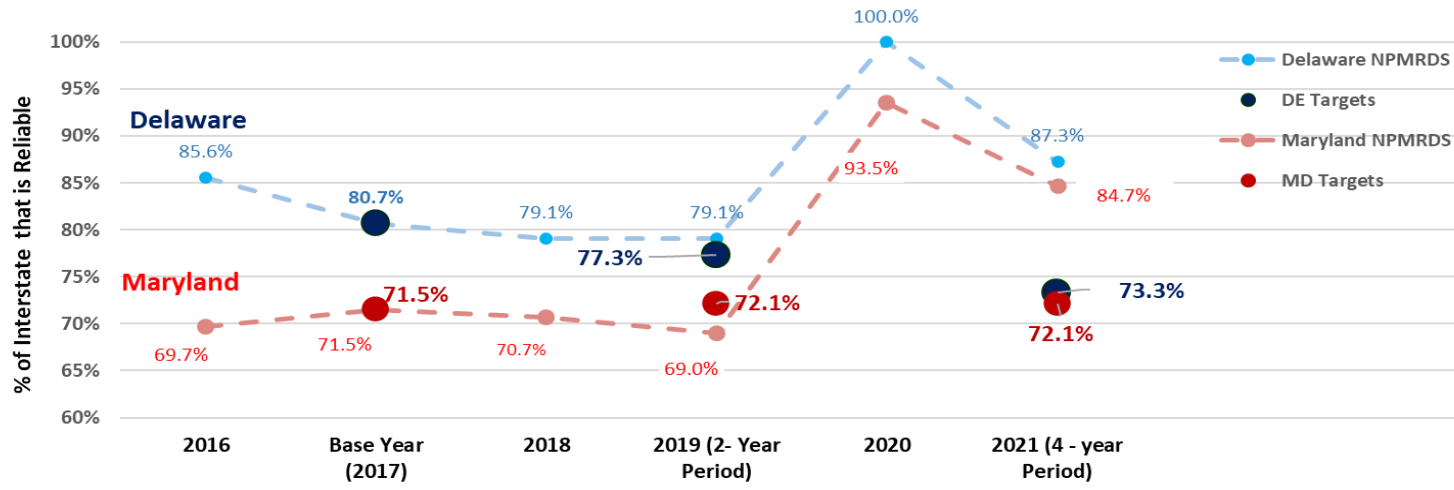
**Data Sources:**

Travel times - Travel Time Data Set (NPMRDS)

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

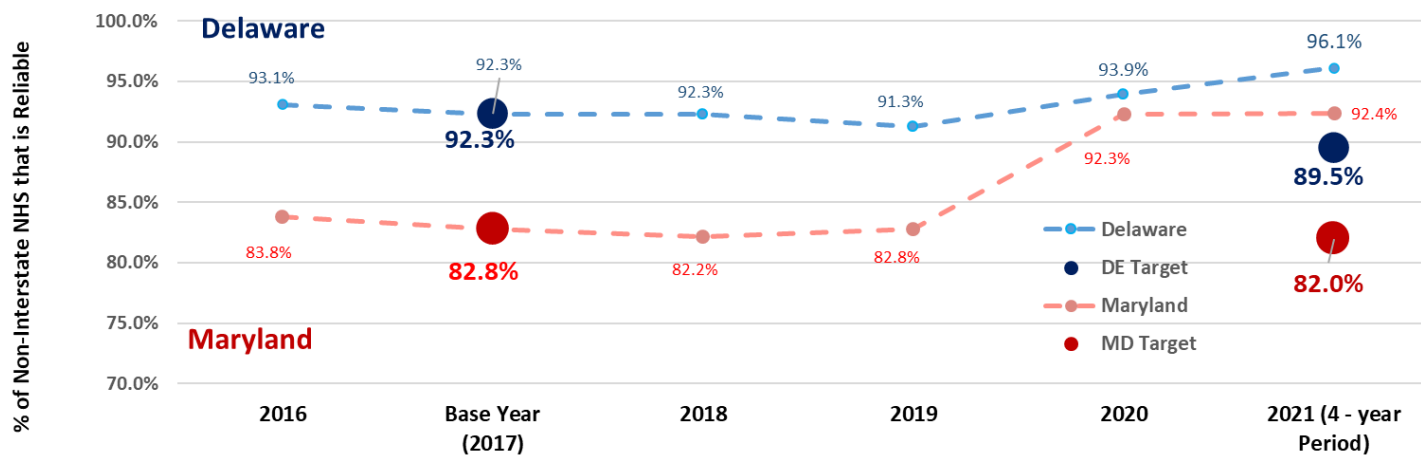
Average vehicle occupancies (AVO) data tables published by FHWA.

### Level of Travel Time Reliability (LOTR) - DE & MD Interstates



Source: NPMRDS,

### Level of Travel Time Reliability (LOTR) - DE & MD Non Interstate NHS



Source: NPMRDS