2050 Metropolitan Transportation Plan (MTP)

Performance Measures – Travel Time Reliability (VII.a)

Goal – Manage congestion and system reliability

Objective – Allow people and goods to move with greater reliability

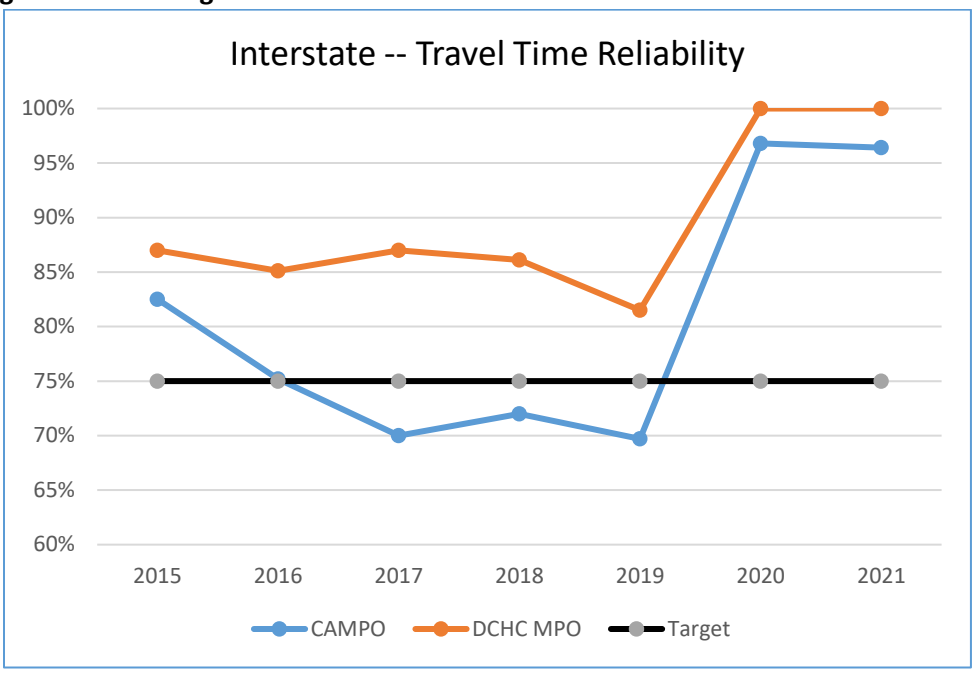
The roadway and truck travel time reliability measures is a federal Transportation Performance Measure (TPM) and thus the MPOs are required to set targets for those measures and include those targets in their long-range transportation plan, i.e., Metropolitan Transportation Plan (MTP). CAMPO and DCHC MPO both resolved to plan and program projects to contribute toward the accomplishment of the following targets: Interstate Level of Travel Time Reliability (LOTTR) – 75% or higher; Non-Interstate National Highway System (NHS) LOTTR – 70%; and, Interstate Truck Travel Time Reliability Index (TTI) – 1.7 or lower.

Level of Travel Time Reliability (LOTTR) measures the percent of person miles traveled that are reliable. As the percent increases, travelers are less likely to experience unexpected delays and less likely to have to leave early for a trip to anticipate unexpected delays and arrive on time. TTR uses actual vehicle travel data, not data from the Triangle Regional Model (TRM), and thus the data cannot be forecasted. As a result, there is not a TTR measure for the year 2050. Nonetheless, the TTR is still an important performance measure to consider in long-range transportation planning to understand the overall health of the major transportation corridors.

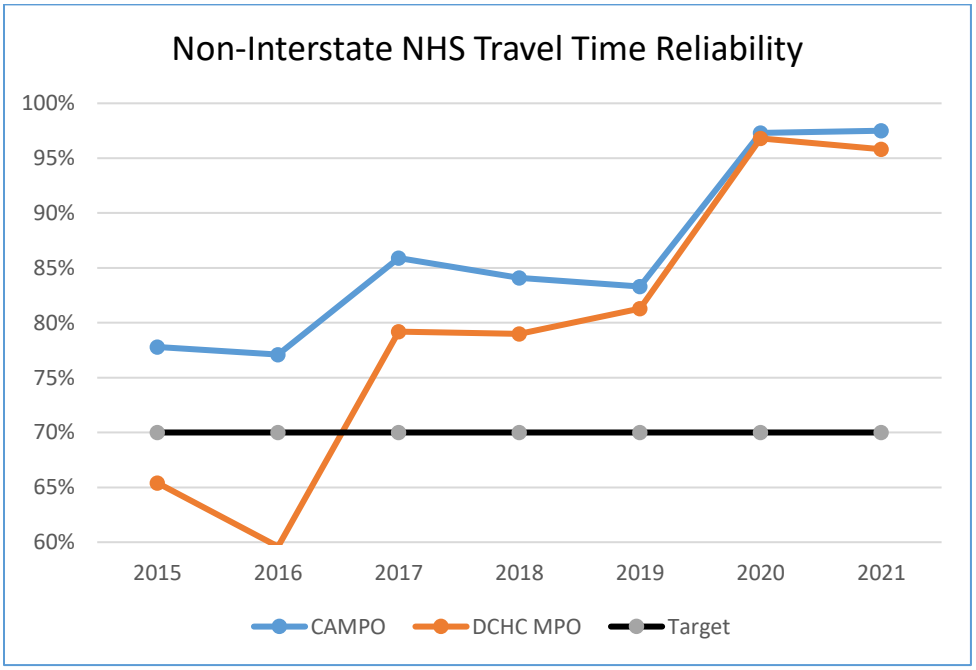
The first graphic on the next page shows the TTR for interstates. CAMPO interstates fail the 75% target for half the target years while the DCHC MPO interstates meet the target for all years. There appears to be a slight trend of decreasing reliability for both MPOs until the year 2020 when the COVID pandemic reduced travel demand and greatly improved travel reliability.

The second graphic on the next page shows the TTR for non-interstate roadways that are part of the National Highway System. Except for the first two target years when the DCHC MPO failed to meet the 70% target, both MPOs consistently meet the target. The reliability percentage jumped much higher for both MPOs in the years 2020 and 2021 during the COVID pandemic.

Target = 75% and higher



Target = 70% and higher



The **Truck Travel Time Reliability Index** (TTI) is a similar measure of reliability except a decrease in the value of the measure signifies an improvement in travel reliability for trucks. The graph below indicates that in the initial years CAMPO generally failed to meet the target while the DCHC MPO met the target. However, unreliability of truck travel on interstates in the DCHC MPO increased to the extent that the MPO no longer met the target in 2019. However, the decrease in travel demand since 2020 because of the COVIC pandemic has allowed both MPOs to meet the target.

Target = 1.7 and lower