

Travel Time Reliability Targets

- Travel Time Reliability
 - Measure variability in travel times for interstate, freeway and principal arterial class facilities
 - To determine whether magnitude of variability is considered unreasonable
- *Reliability* references the level of consistency in transportation service for a mode, trip, route or corridor for a time period.
- *Reliability* is viewed by travelers in relation to their experience, so it is used as a measure of service quality

Travel Time Reliability Targets

- FAST Act Requirements:
 - MPOs must establish specific regional targets for each metropolitan area
 - Interstate & National Hwy System only
 - 11% of regional lane-miles but 60% of regional travel
 - Must report on system performance every 4 years
 - Current Forecast Year: 2022
 - MPOs and TxDOT may consider mid-course corrections if conditions are trending differently than forecasted
 - Waco MPO adopted travel time reliability targets in 2018
 - MPO targets influence statewide targets
 - MPOs must adopt targets prior to TxDOT



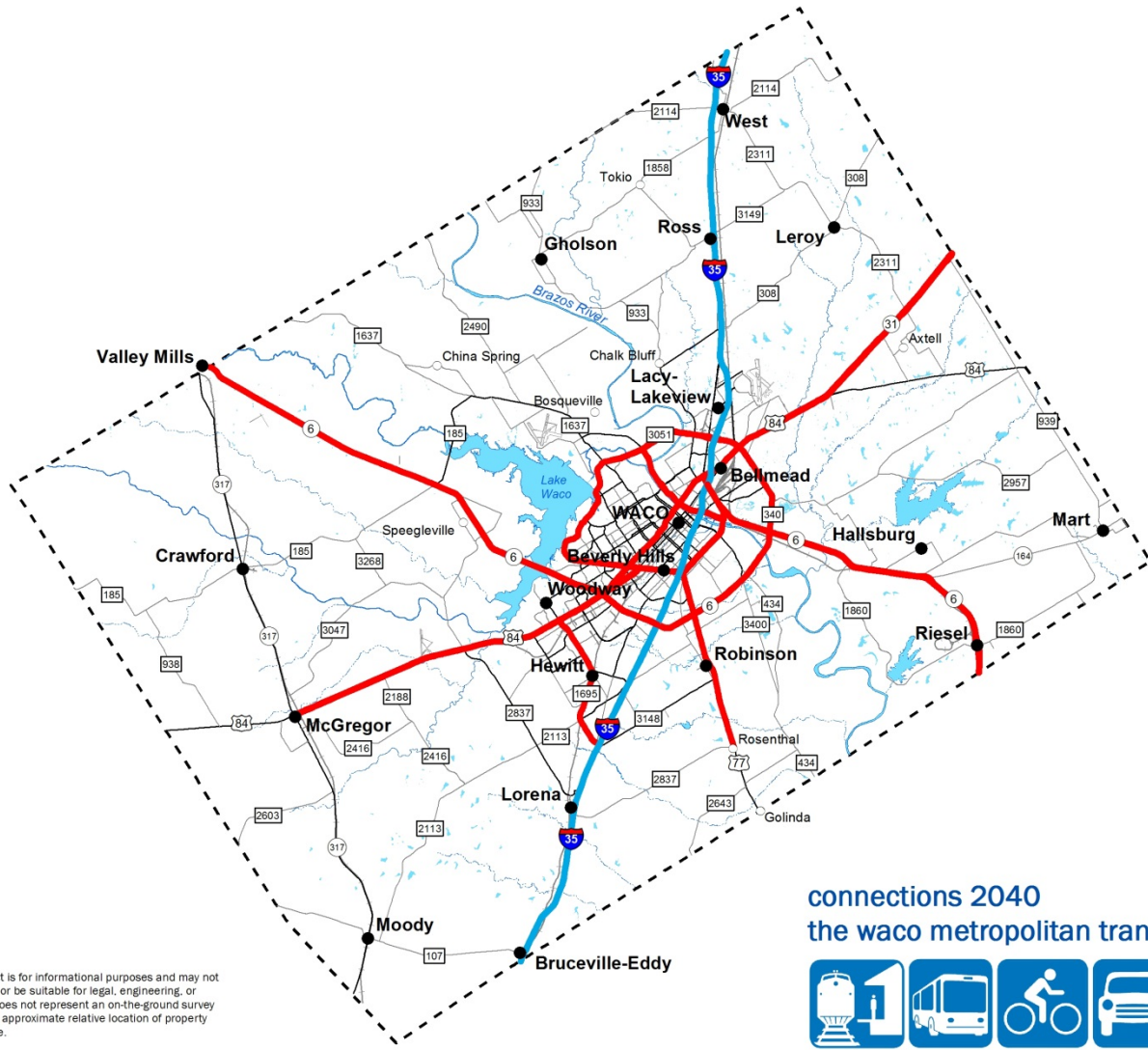
NHS Classification

- Interstate
- Non-Interstate NHS
- Waco Metropolitan Area



april, 2018

map A3-1
National Highway System Facilities
within McLennan County



Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries, if applicable.

connections 2040
the waco metropolitan transportation plan



Waco MPO: Metropolitan Transportation Plan 2040

Travel Time Reliability Targets

- MPO must establish 3 separate performance targets for ‘unreasonable’ travel time:
 1. Percent of ‘reliable’ travel for all traffic
 - 80th percentile travel time
 - Approximately worst day of a typical month
 - Interstate System
 - Remainder of National Highway System
 2. Ratio of unreliable truck travel to average truck travel
 - 95th percentile travel time
 - Approximately worst day of a typical week
 - Interstate System only



Travel Time Reliability Targets - 2018

- Texas A&M Transportation Institute (TTI) provides analysis of unreliable travel for each MPO within Texas:
 - National Performance Measure Research Data Set (NPMRDS) Phase 2, University of Maryland
 - Data sets changed in 2017
 - Produced 'curious' reliability estimates
 - IH-35 identified as 100% reliable in 2017
 - Includes section under construction in Temple
 - No other data sources available

Travel Time Reliability Targets - 2020

- New data results are more understandable
 - IH-35 reliability at 88% in 2019
 - Reconstruction complete for most of McLennan County (97 to 99% reliable range)
 - Downtown Waco Reconstruction began in 2019
 - Downtown reliability probably in the 65 to 70% range
- Need to reconsider previously adopted targets
 - 2018 was the first time adopting these targets
 - Now we are more knowledgeable about reasonable values

2022 Travel Time Reliability Targets Adopted vs Proposed Changes

Traffic	System	Adopted 2018	Proposed Change
All Traffic	Interstate	95%	80%
All Traffic	Other Freeways or Principal Arterials	85%	80%*
Trucks Only	Interstate	1.40	1.75

*MPO staff is proposing a different target from the TTI recommendation. See MPO staff considerations on next slide.

Travel Time Reliability Targets

- MPO Staff Considerations
 - Better to err on the side of slightly worse conditions than expected
 - No federal consequences for MPO failing to achieve targets
 - TxDOT flexibility to use federal funds could, however, be impacted
 - IH-35 construction will be continuing through 2022
 - Interstate reliability should improve considerably afterwards
 - Mall to Mall construction will be underway in 2022
 - Likely to impact Other Freeway / Principal Arterial conditions
 - Project was previously forecast to start in 2023