



Mobility Performance Measures Outreach

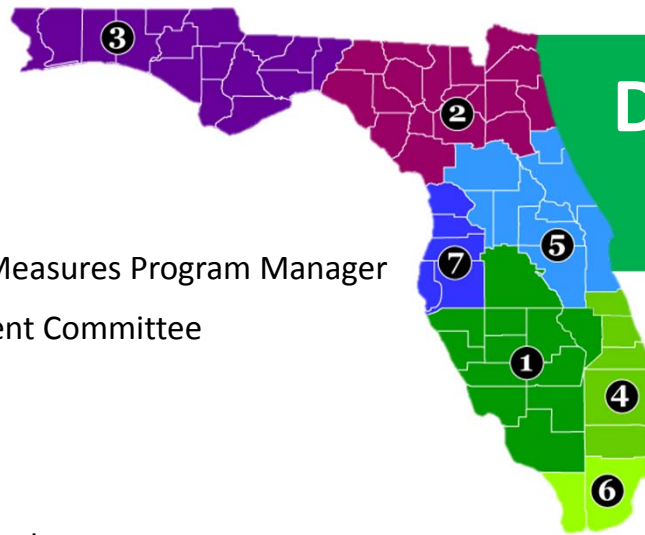
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DISTRICTS 1-7

MPOs

- All 27

October 2016 - February 2017



Recognized as THE

Premier Mobility Program

in the nation



Others



Consensus in approach and measures



Perceived Keys to Success in Florida

Our (FDOT/MPO) joint coordination with a common approach

We (FDOT & MPOs) will comply with ultimate federal requirements

FHWA
Headquarters
quote

FDOT/MPOs can
“use their own measures in
performance-based planning”

- Florida can use measures and calculation techniques most relevant to us
 - Travel time reliability
 - Congestion
 - Multimodal
 - Other



Target establishment
(conservative approach)



FDOT/ MPOs submit
consistently and together

FDOT supply every MPO

- Federally required measures
- MPOAC agreed upon additional measures



Status of MAP-21 (FAST Act) Performance Measures Requirements



(Mobility-Related) Federal Measures and Coverage

NHS



- % of the Person-Miles Traveled on the Interstate That Are Reliable
- % of the Person-Miles Traveled on the Non- Interstate NHS That Are Reliable
- % Change in Tailpipe CO2 Emissions on the NHS Compared to the Calendar Year 2017 Level ([Delayed](#))

Freight



- Truck Travel Time Reliability Index

CMAQ ([Not applicable in Florida](#))

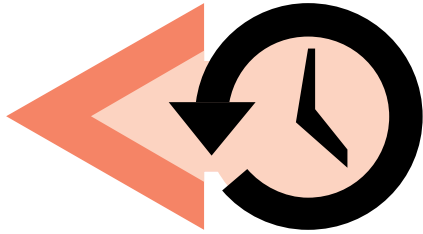


- Annual Hours of Excessive Delay Per Capita
- Percent of Non-SOV Travel
- Total Emission Reductions



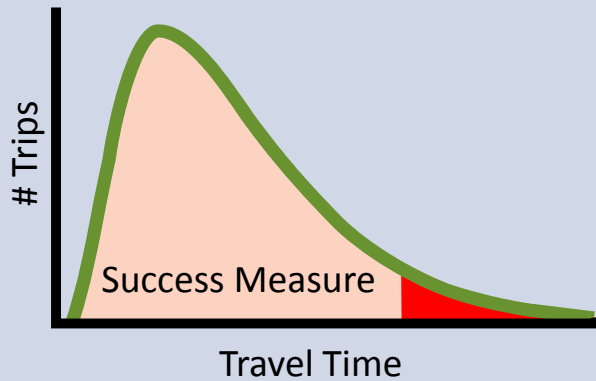
Travel Time Reliability Understanding



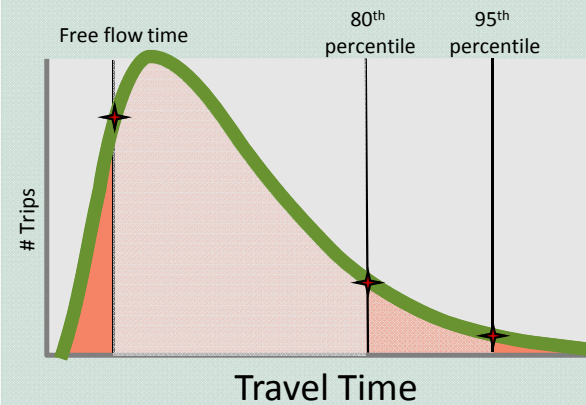


Travel Time Reliability

Percent of trips that
“succeed”



Comparison of
variability in travel
times



Level of Travel Time Reliability (LOTTR)

GENERAL (1)

Metric for analyzing travel time reliability

- Specifically for system performance
- Implied for freight movement

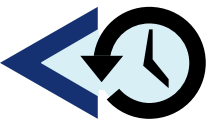
Has not been discussed in the travel time reliability literature or research

- Numerous SHRP2 projects
- HCM

Not easily understood - does not resonate with public and elected officials

- Reliable travel to highway users is a LOTTR of **1.50**; >1.50 represents less than acceptable travel time reliability
- A 1.50 or above LOTTR means the 80th percentile travel time is 50% longer than the 50th percentile travel time

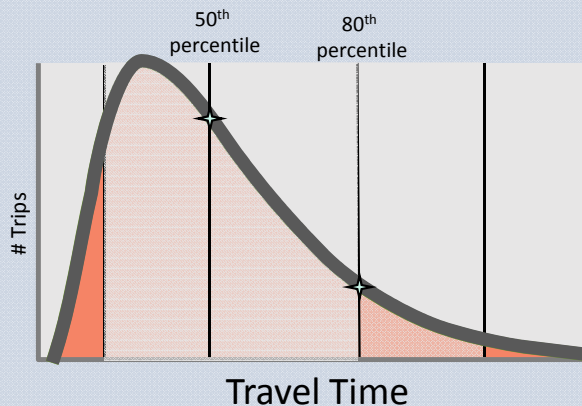




Level of Travel Time Reliability (LOTTR)

GENERAL (2)

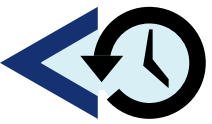
Comparison (ratio) of the 80th percentile travel time of a reporting segment to the “normal” (50th percentile) travel time of a reporting segment occurring throughout a full calendar year



Calculated annually by State for all reporting segments for 4 time periods

- Weekdays
 - 6:00 a.m. – 10:00 a.m.
 - 10:00 a.m. - 4:00 p.m.
 - 4:00 p.m. – 8:00 p.m.
- Weekends
 - 6:00 a.m. – 8:00 p.m.





Level of Travel Time Reliability (LOTTR)

CONCERNS

Not easily understood

- Not a recognized approach - has not been discussed in the travel time reliability literature or research
- Does not resonate with public and elected officials

Numerous SHRP2 projects

HCM

Calculation issues

- Values in numerator (80th % TT) and denominator (50th % TT) will **change yearly** creating instability (problem recognized with the buffer time index)
- Being calculated for “reporting segments” (typically < 0.5 mi.)

- FHWA doesn't take a position reflecting traveler perception (95th %), rather (according to FHWA) the ability of agencies to address through operational and other strategies (80th %)
- Same value applied to all facility types (freeways, generally uninterrupted flow highways, signalized arterials)





Truck Travel Time Reliability (TTTR) Index

GENERAL (1)

Metric for analyzing truck travel time reliability

- Compares 95th percentile travel time with 50th percentile travel time
- Similar to vehicular TTR measure, but instead of having a pass-fail criteria of 1.50, it is computed as an index
- Index reflects an average for the applicable area.

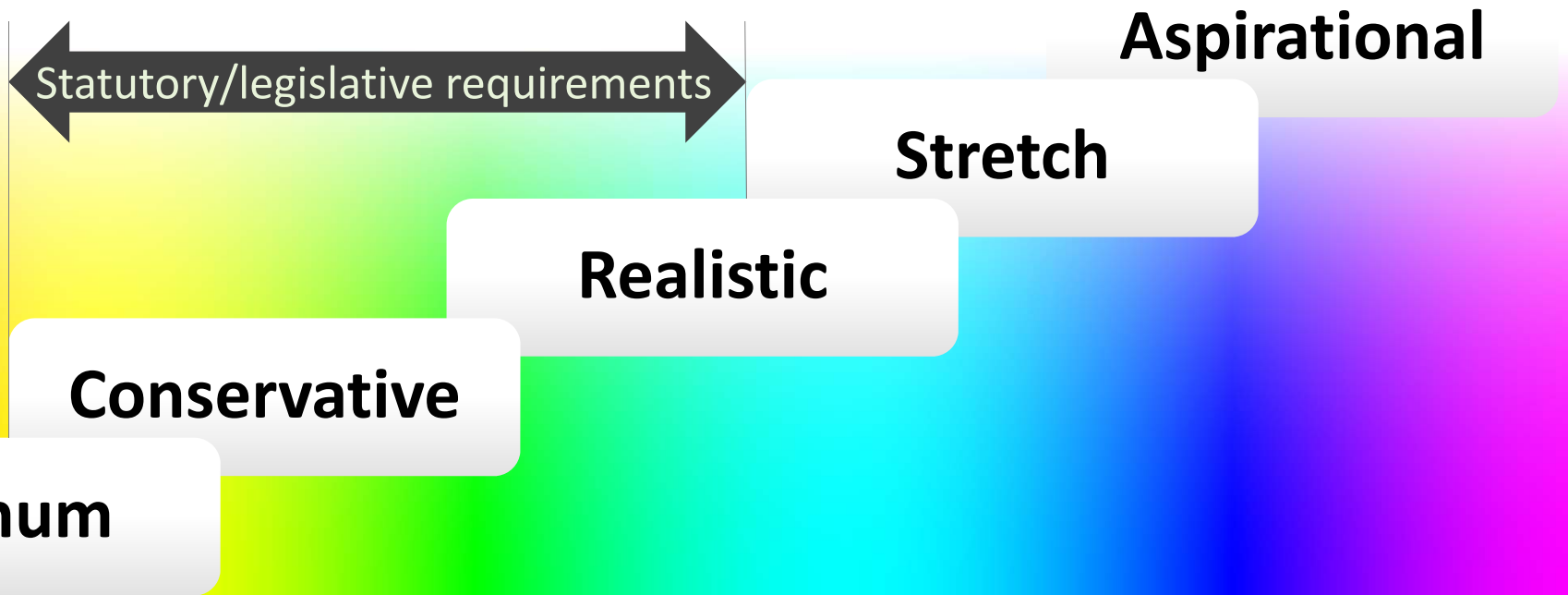
Has not been discussed in the travel time reliability literature or research

Not easily understood - does not resonate with public and elected officials





Establishment of the Right Type of Targets



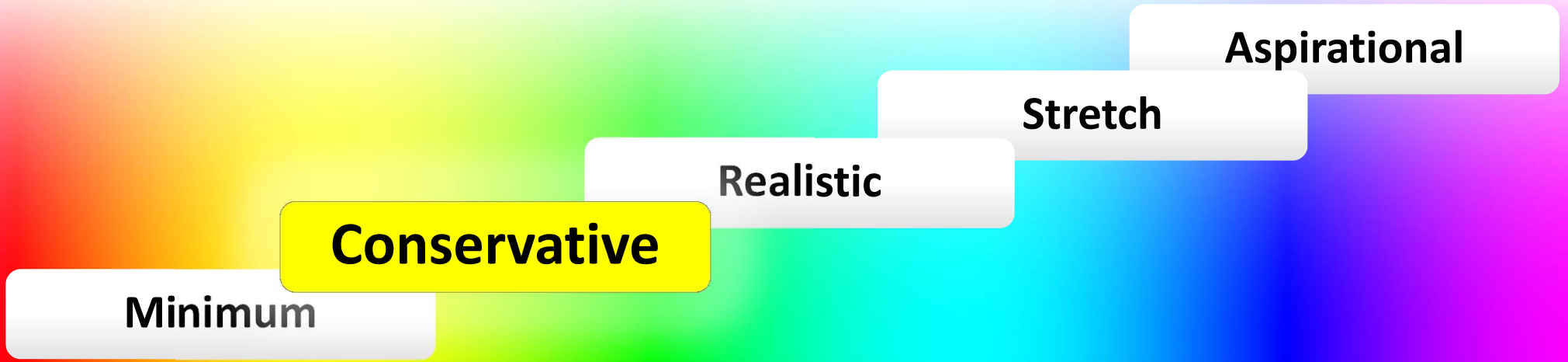
(don't be concerned about the terms; no right answer)





Preliminary Recommendation **for Map-21** Purposes

(federal reporting requirements)



Allows FDOT and MPOs most **flexibility** to use our current/evolving 😊

“Keep the Feds out of our business”; “set our internal targets to strive to do better”

Use our own existing performance based planning processes

Highway and multimodal mobility performance measures

Allows more time to get our “feet wet”

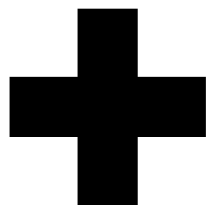


Mobility Performance Measures MPOs Would Like FDOT to Supply



TDA's' Intent on Supplying Analyses (late 2016 thinking)

FDOT will calculate and supply **all** federally required measures to each MPO



FDOT

- Supply additional measures to each MPO as MPOs agree upon through MPOAC
 - Up to 15 total
 - Up to 8 annually
 - Some measures, not annually

