## PERFORMANCE BASED PLANNING & PROGRAMMING

### **Draft 2022-2025 Targets:**

- Highway Assets (Pavement & Bridge Condition)
- Highway System Performance: Travel
   Time Reliability

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TPB Technical Committee September 9, 2022



### **Contents of Presentation**

- Action Items for TPB 2022-2025 Target Adoption
- Highway Asset Target Development
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- Highway System Performance: Travel Time Reliability Target Development
  - Methodology
  - Performance and Forecasts
  - Four-year Targets
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### Action Items – Accomplished / In-Progress

- Technical Committee briefed in March 2022
- Coordination on the PBPP requirements: DDOT-MDOT-VDOT-TPB
  - Validation of recent actual performance data
  - Discussed methodology for forecasting future performance and setting targets
- Developed draft MPO regional targets for Highway Asset (Pavement and Bridge Condition) measures and for Highway Systems Performance: Travel Time Reliability measures
  - Adoption of 2022-2025 targets
    - TPB briefing on draft targets September 21
    - TPB approval of final targets October 19
  - Report on performance vs 2018-2021 targets
    - Plan to update Visualize 2045 LRTP System Performance Report (Dec 2022) ahead of FHWA/FTA certification review of MPO (early 2023)

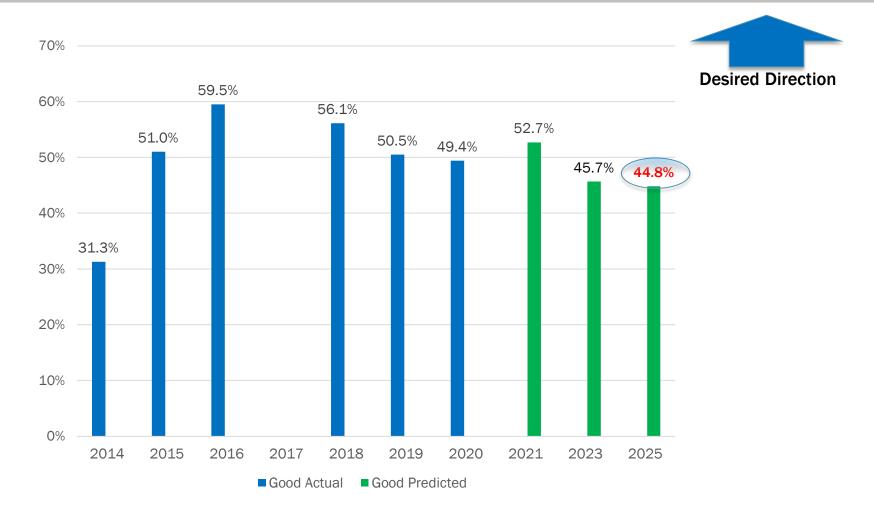


### 2022-2025 Highway Asset Target Methodology

- TPB staff used same general methodology as used in 2018
- Apply DOT forecasts (targets) to respective sub-region
  - Apply DDOT forecasts in entirety
  - Apply MDOT forecast prediction for the four MD counties in the TPB planning area
  - Apply VDOT statewide prediction to conditions in TPB area
- ❖ In general, DOTs planning for slowly degrading asset condition
  - Decreased focus on Interstate condition
  - Increased focus on other NHS and on other state-maintained roads
  - Constrained budgets vs increasing costs
  - IIJA federal funds have increased but there is uncertainty with discretionary grant awards

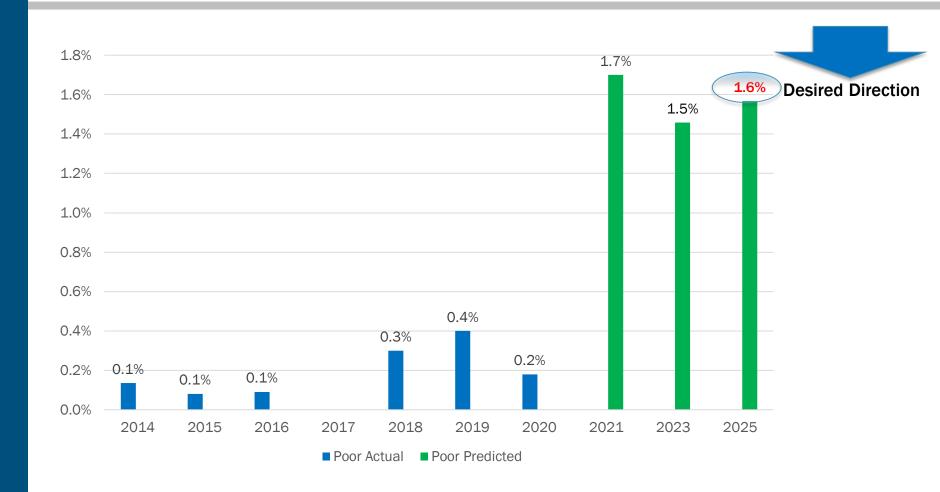


## Interstate Pavement: Performance vs. Targets (Good Condition)



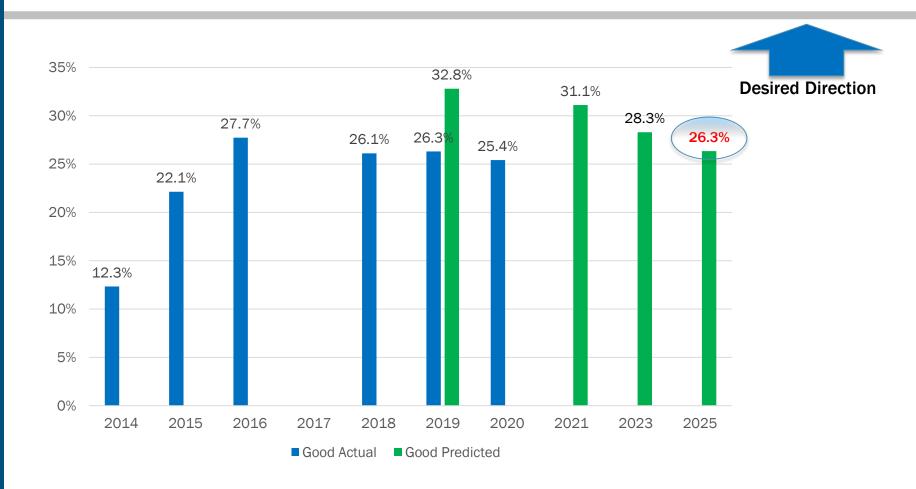


## Interstate Pavement: Performance vs. Targets (Poor Condition)



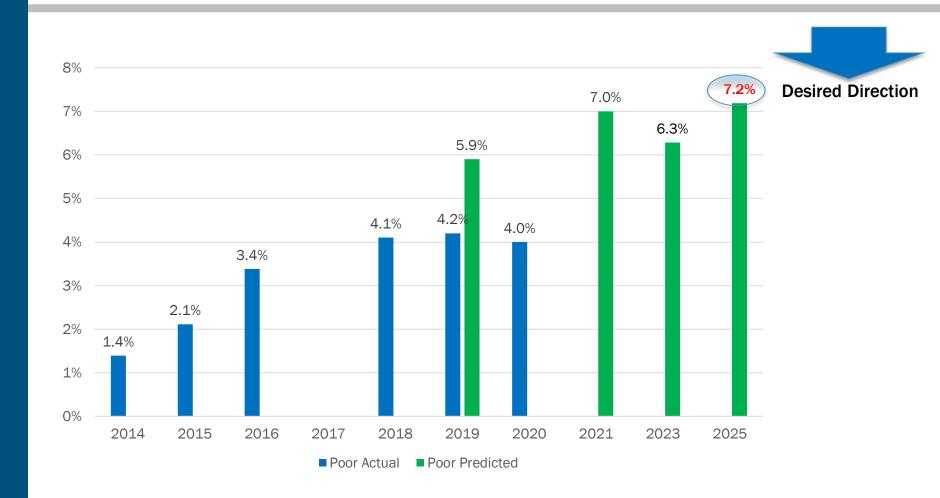


## NHS (Non-Interstate) Pavement: Performance vs. Targets (Good)



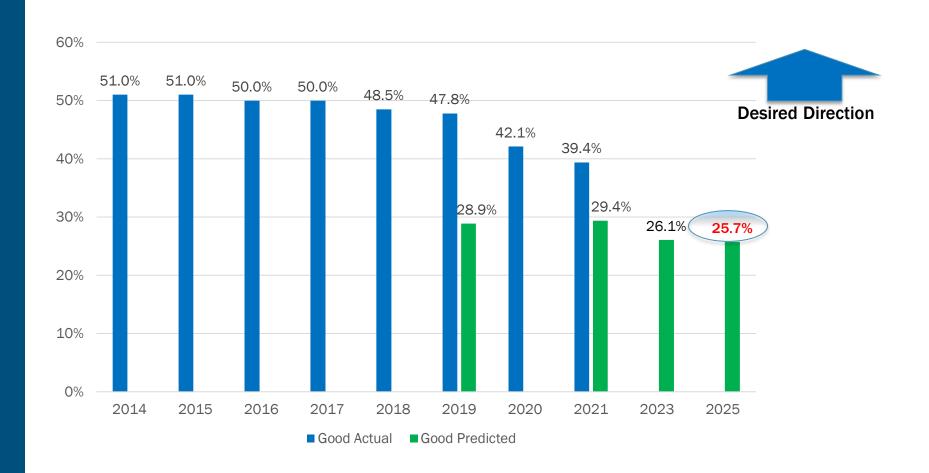


## NHS (Non-Interstate) Pavement: Performance vs. Targets (Poor)



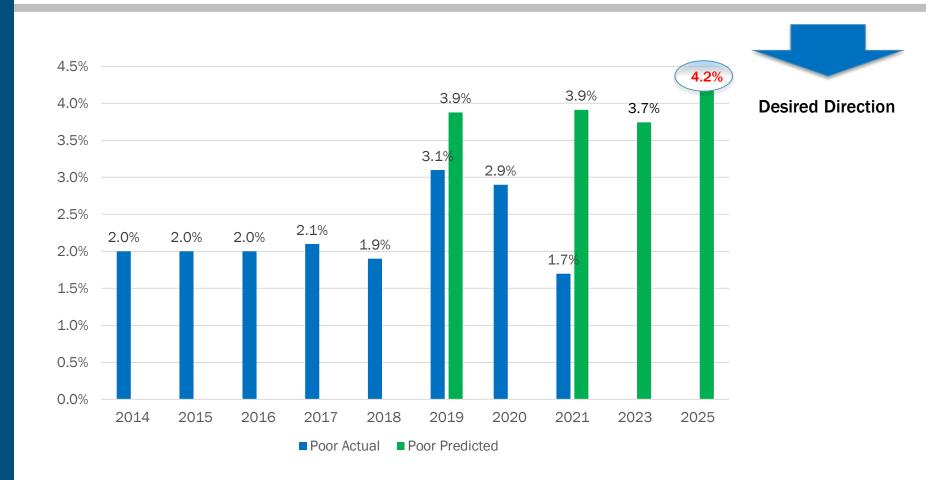


### **Bridges: Performance vs. Target (Good)**





### **Bridges: Performance vs. Target (Poor)**





## Highway Asset DRAFT 2022-2025 Targets for the NCR

Interstate Pavement	2022 – 2025 Four Year Target
(1) Percentage of pavements on the <b>Interstate</b> System in <b>Good</b> condition	44.8%
(2) Percentage of pavements on the <b>Interstate</b> System in <b>Poor</b> condition	1.6%
NHS (Non-Interstate) Pavement	
(3) Percentage of pavements on the <b>NHS</b> (excl. Interstate) in <b>Good</b> condition	26.3%
(4) Percentage of pavements on the <b>NHS</b> (excl. Interstate) in <b>Poor</b> condition	7.3%
Bridges	
(5) Percentage of <b>NHS Bridges</b> Classified as in <b>Good</b> Condition	25.7%
(6) Percentage of <b>NHS Bridges</b> Classified as in <b>Poor</b> Condition	4.2%



# Highway System Performance: Travel Time Reliability Targets



## Highway System Performance: Travel Time Reliability Performance Measures

Three performance measures:

Travel Time Reliability (TTR) – Interstate

Percent of person-miles traveled on the Interstate System that are reliable

Travel Time Reliability (TTR) – Non-Interstate NHS

Percent of person-miles traveled on the non-Interstate NHS that are reliable

Truck Travel Time Reliability (TTTR) Index
Ratio of the Interstate System Mileage providing for Reliable Truck
Travel Times

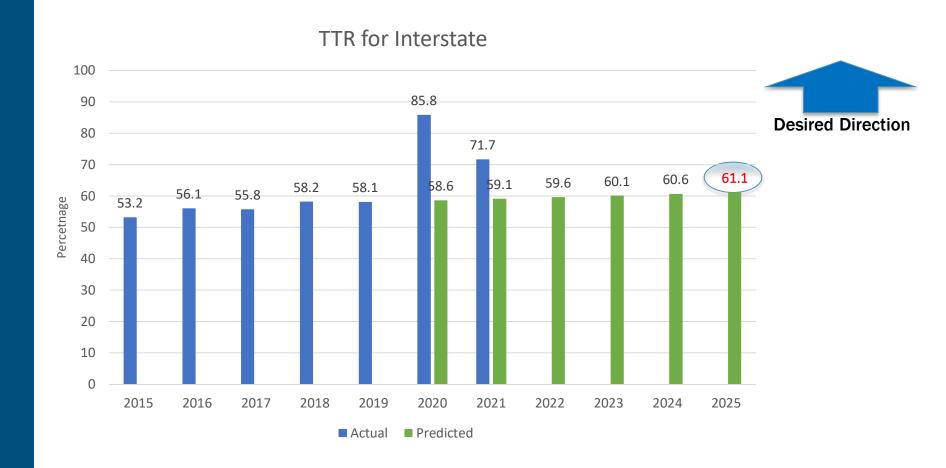


## Highway System Performance: Travel Reliability 2022-2025 Target Methodology

- Use same general methodology as used in 2018
  - Average of observed trends and short-term predictions of TPB travel demand model
    - Observed trends captured recent influences
    - Model captures the impacts of increased population and travel demand vs. road and transit changes
      - Simple (understandable and defensible) methodology
    - Exclude data from pandemic years (2020, 2021)
    - Use trend data for 2016-2019 (four years) for TTR-Interstate / 2017-2019 (three years) for TTR-NHS and TTTR Index and project from 2019
  - Both trends and model project small reductions in congestion
     >> slight improvements in travel reliability

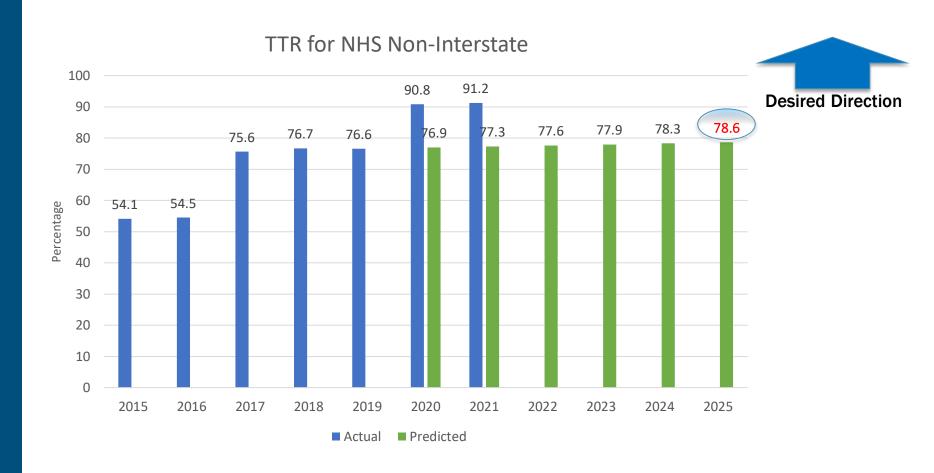


### 2022-2025 Draft TTR (Interstate) Graph and Target



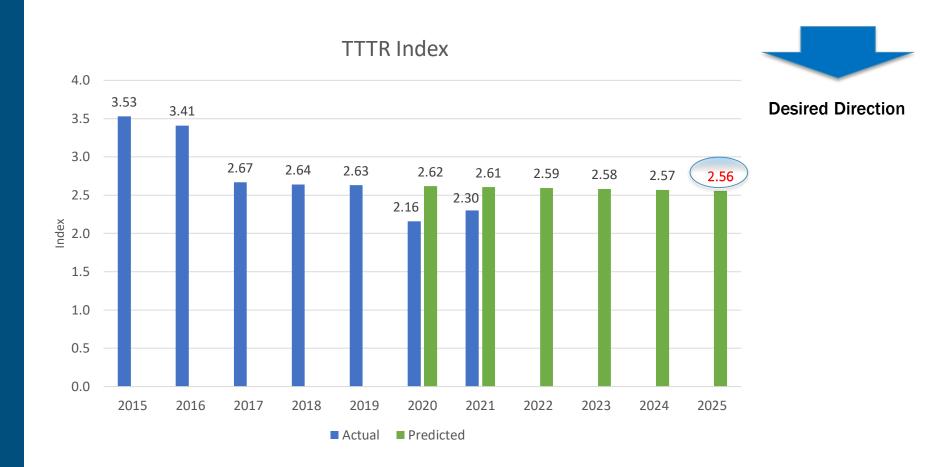


### 2022-2025 Draft TTR (NHS Non-Interstate) Graph and Target





### 2022-2025 Draft TTTR Index Graph and Target





## Highway System Performance: Travel Time Reliability DRAFT 2022-2025 Targets for the NCR

Highway System Performance: Travel Time Reliability for the NCR	2022 – 2025 Four Year Target
Travel Time Reliability (TTR) – Interstate	61.1%
Travel Time Reliability (TTR) – Non-Interstate NHS	78.6%
Truck Travel Time Reliability (TTTR) Index	2.56



### **Next Steps**

- Collect comments on the Draft 2022-2025 targets just presented
- Collecting copies of state DOT targets and any supplemental information
- TPB briefing on draft targets September 21
- TPB approval of final targets October 19
- Prepare revised Visualize 2045 LRTP System Performance Report with performance vs 2018-2021 targets and with the approved 2022-2025 targets ahead of federal certification review



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