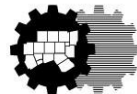


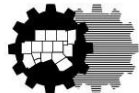
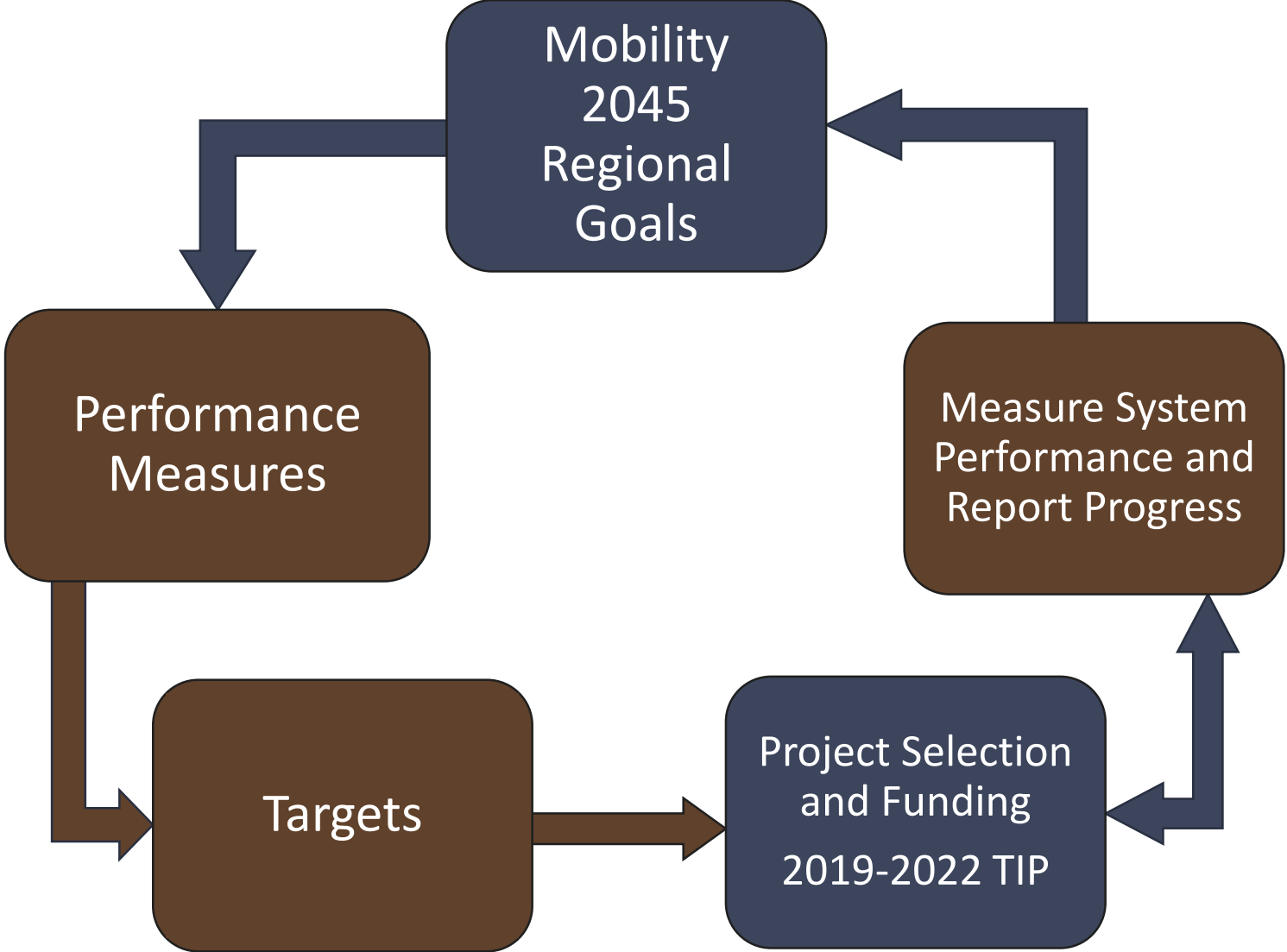
Performance Measures Target Setting

NCTCOG Public Meetings

October 8, 15, 18, 2018



Performance-Based Planning



Regional Performance Planning

Implement Required Federal Measures

National Performance

Support TxDOT Targets as Much as Possible

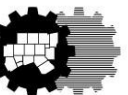
State Performance

Set Additional Goals to Support Mobility 2045

Regional Performance – Tell Our Story

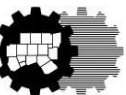
Inform the Mobility Plan

Inform the Transportation Improvement Program (TIP)



Federal Measures Target Status

| Complete | Rulemaking | Number of Measures | MPO Target Setting Deadline | Reporting Period | Reporting Schedule |
|----------|--------------------------|--------------------|-----------------------------|-------------------------------|--------------------|
| ✓ | Transit Asset Management | 4 | 12/27/2017 | Annually | Annually |
| ✓ | Safety Performance | 5 | 2/27/2018 | Annually | Annually |
| | Pavement and Bridge | 6 | 11/15/2018 | Four-Year Performance Periods | Biennially |
| | System Performance | 6 | 11/15/2018 | Four-Year Performance Periods | Biennially |



Adopted Transit Asset Management Targets

2018 Targets*



Rolling Stock

Transit Passenger Vehicles

0%



Infrastructure

Rail Tracks

0%



Equipment

Transit Support Vehicles

0%



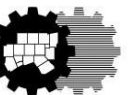
Facilities

Buildings, Stations, Park and Ride Facilities

0%

Images: DART, DCTA, Trinity Metro

*Regional targets approved by RTC on December 14, 2017. Targets will be reviewed annually.



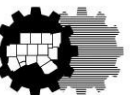
Adopted Safety Targets

Two Percent Reduction by Year 2022

| Category | TxDOT 2018 Targets | NCTCOG 2018 Targets* |
|---|-----------------------|-------------------------|
| Number of Fatalities | 3,704 | 665 |
| Fatality Rate | 1.432 | 0.96 |
| Number of Serious Injuries | 17,565 | 3,612 |
| Serious Injury Rate | 6.74 | 5.18 |
| Number of Non-motorized Fatalities and Serious Injuries | 2,151 | 560 |

Regional Safety Position: “Even one death on the transportation system is unacceptable.”

NCTCOG staff is working to develop a regional Towards Zero Deaths Plan for North Central Texas.



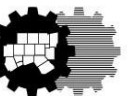
Federal Performance Measures

Pavement and Bridge

- 1. Interstate Pavement – Good**
- 2. Interstate Pavement – Poor**
- 3. Non-Interstate Pavement – Good**
- 4. Non-Interstate Pavement – Poor**
- 5. Bridge Condition – Good**
- 6. Bridge Condition – Poor**

System Performance

- 7. Interstate Reliability**
- 8. Non-Interstate NHS Reliability**
- 9. Truck Travel Time Reliability Index**
- 10. Peak Hour Excessive Delay**
- 11. Percent Non-SOV Mode Share**
- 12. On-Road Mobile Source Emissions Reduction**
 - Nitrous Oxide (NO_x)**
 - Volatile Organic Compound (VOC)**



Proposed RTC Position On Pavement Condition

Good

- NCTCOG Supports TxDOT Statewide 2022 “Good Condition” Targets for National Highway System Pavements

Poor

- NCTCOG Supports TxDOT Statewide 2022 “Poor Condition” Targets for National Highway System Pavements
- Collaboration With TxDOT To Plan and Program Projects Contributing Toward Accomplishment of Pavement Goals Will Also Include The Following Action:
 - NCTCOG Will Work With Local Governments To Focus On Improvement Of NHS Off-system Arterials In Poor Condition



Roadway Pavement Condition Targets

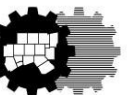
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| ID | Roadway Categories | Total Network | 2018 Baseline | 2022 Target |
|-----------------------------------|---|---------------------|---------------------|---------------------|
| STATE of TEXAS | | | | |
| Good Pavement Condition | | | | |
| 1 | Interstate National Highway System (NHS) | 19.19% | 66.80% | 66.40% |
| 2 | Non-Interstate National Highway System (NHS) | 80.81% | 54.40% | 52.30% |
| Poor Pavement Condition | | | | |
| 3 | Interstate National Highway System (NHS) | 19.19% | 0.30% | 0.30% |
| 4 | Non-Interstate National Highway System (NHS) | 80.81% | 13.80% | 14.30% |
| North Central Texas Region | | | | |
| | Interstates (on-system) ¹ | 25.90% ² | 5.81% ³ | 7.99% ³ |
| | Non-Interstate Freeway (on-system) ¹ | 13.40% ² | 6.76% ³ | 8.93% ³ |
| | Toll Roads (off-system) | 6.70% ² | 8.43% ³ | 9.32% ³ |
| | Arterials (on-system) ¹ | 30.30% ² | 18.52% ³ | 18.39% ³ |
| | Arterials (off-system) | 23.80% ² | 73.66% ³ | 69.82% ³ |

¹ On-system refers to the TxDOT System

² Mobility 2045 Plan – 2018 Baseline Network Lane-Miles

³ Based on 5-year moving average



Proposed RTC Bridge Condition Targets

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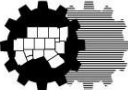
| State of Texas | | | |
|----------------|---|----------------|-------------|
| ID | Bridges | 2018 Baseline | 2022 Target |
| | | Good Condition | |
| 5 | All National Highway System Facilities* | 50.63% | 50.42% |
| | | Poor Condition | |
| 6 | All National Highway System Facilities* | 0.88% | 0.80% |

*Based on total deck area

NCTCOG supports TxDOT statewide 2022 “Good/Poor Condition” targets for NHS bridges

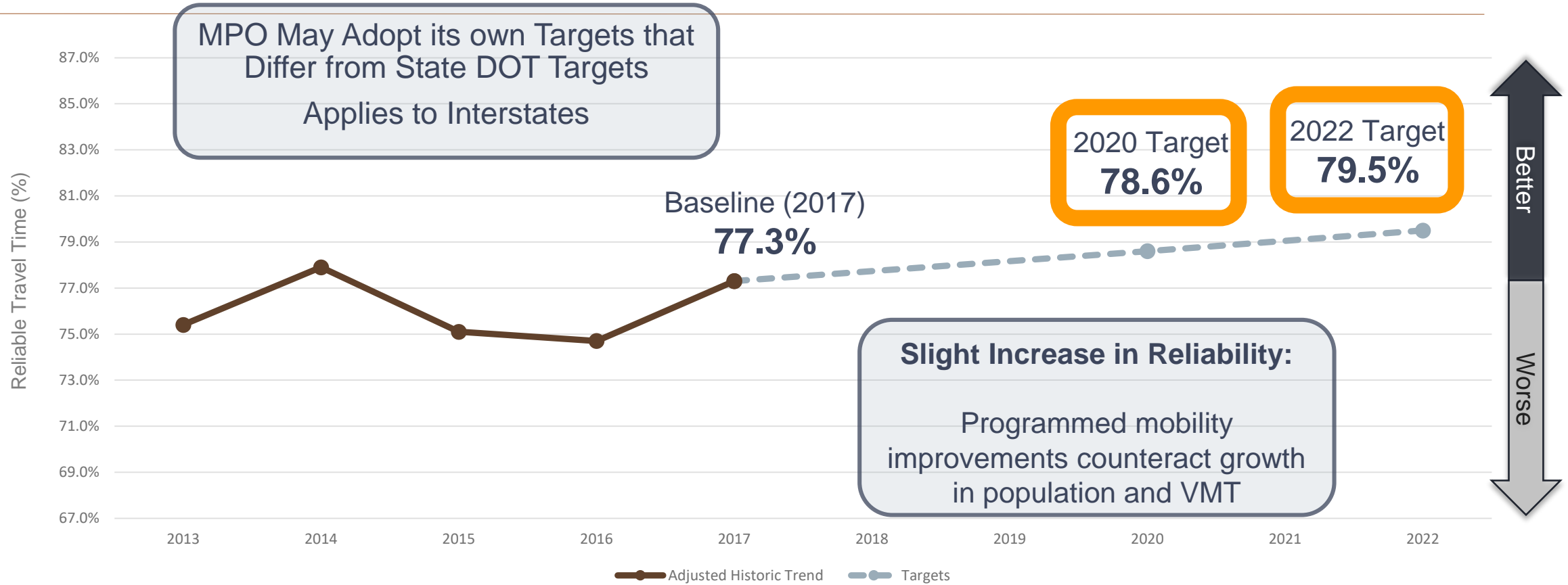
Collaboration with TxDOT to plan & program projects contributing toward accomplishment of pavement goals will also include the following action:

NCTCOG will focus on expedited programming to improve NHS bridges in poor condition

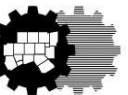


7 – Interstate Reliability

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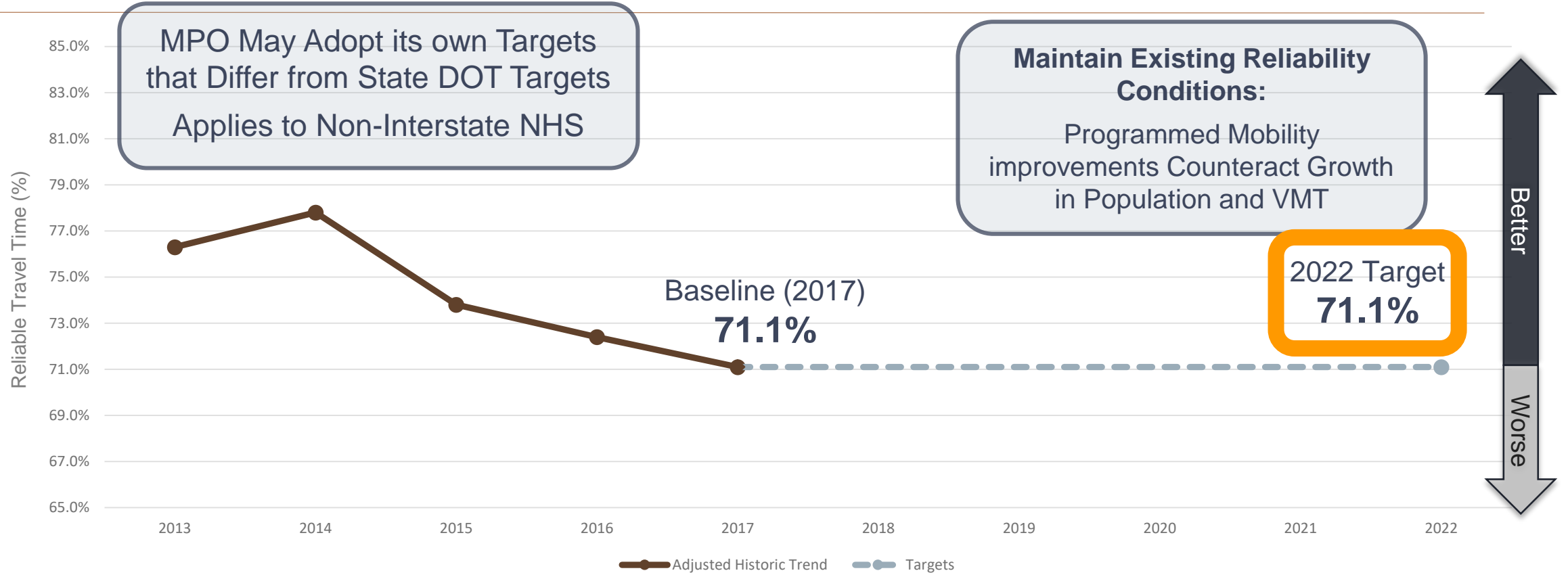


| | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 | 2022 |
|---|-------|-------|-------|-------|-------|-------|-------|
| Statewide Baseline and Targets | | | | | 79.6% | 61.2% | 56.6% |
| TTI Suggested Baseline and Targets (NCTCOG MPA) | | | | | 77.3% | 65.0% | 60.0% |
| Adjusted Historic Trend (NCTCOG MPA) | 75.4% | 77.9% | 75.1% | 74.7% | 77.3% | | |
| Baseline and Proposed MPO Targets | | | | | 77.3% | 78.6% | 79.5% |

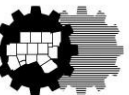


8 – Non-Interstate NHS Reliability

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| | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 | 2022 |
|--|-------|-------|-------|-------|-------|------|-------|
| Statewide Baseline and Target | | | | | 80.4% | N/A | 55.4% |
| TTI/TxDOT Suggested Baseline and Target (NCTCOG MPA) | | | | | 71.1% | N/A | 43.0% |
| Adjusted Historic Trend (NCTCOG MPA) | 76.3% | 77.8% | 73.8% | 72.4% | 71.1% | | |
| Baseline and Proposed MPO Targets | | | | | 71.1% | N/A | 71.1% |

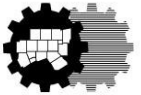


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9 – Truck Travel Time Reliability Index

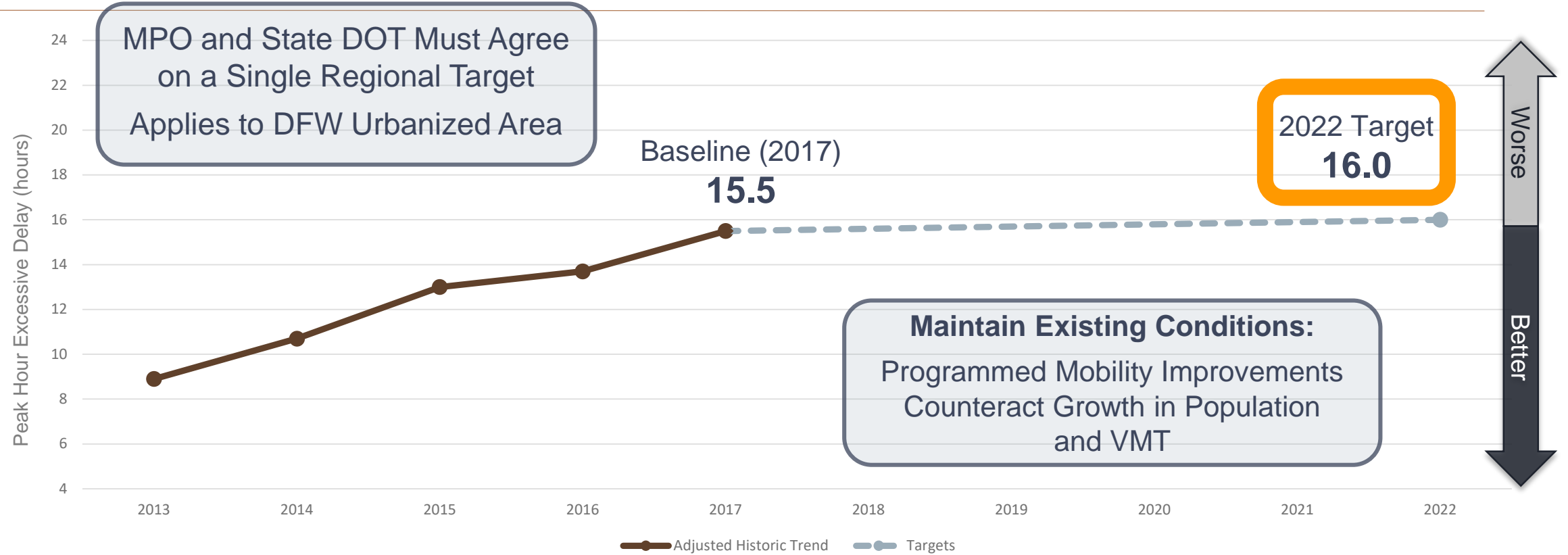


| | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 | 2022 |
|--|------|------|------|------|------|------|------|
| Statewide Baseline and Target | | | | | 1.50 | 1.70 | 1.79 |
| TTI/TxDOT Suggested Baseline and Target (NCTCOG MPA) | | | | | 1.74 | 2.40 | 2.50 |
| Adjusted Historic Trend (NCTCOG MPA) | 1.87 | 1.72 | 1.70 | 1.74 | 1.74 | | |
| Baseline and Proposed MPO Targets | | | | | 1.74 | 1.71 | 1.66 |

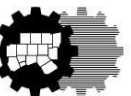


10 – Peak Hour Excessive Delay

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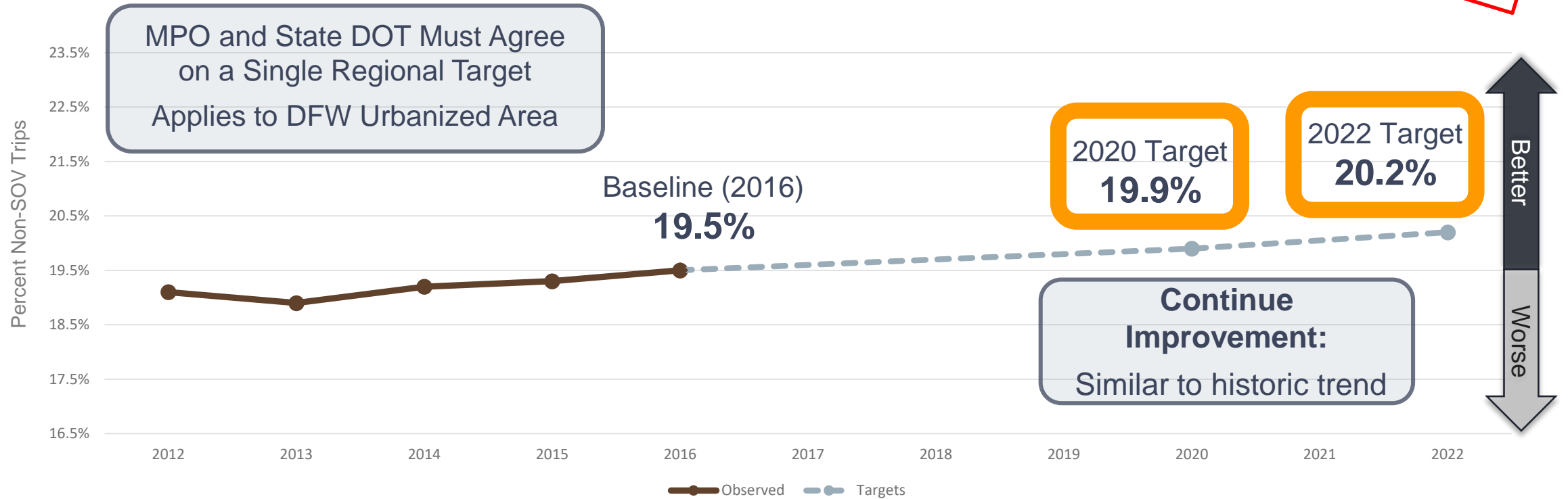


| | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 | 2022 |
|--|------|------|------|------|------|------|------|
| Statewide Baseline and Target | N/A | | | | | | |
| TxDOT Baseline and Adopted Target (DFW UA) | | | | | 15.5 | N/A | 16.0 |
| Adjusted Historic Trend (DFW UA) | 8.9 | 10.7 | 13 | 13.7 | 15.5 | | |
| Baseline and Proposed MPO Target | | | | | 15.5 | N/A | 16.0 |

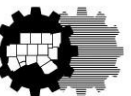


11 – Percent of Trips Non-Single Occupant Vehicle (% Non-SOV)

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| | 2012 | 2013 | 2014 | 2015 | 2016 | 2020 | 2022 |
|--|-------|-------|-------|-------|-------|-------|-------|
| Statewide Baseline and Target | N/A | | | | | | |
| TxDOT Baseline and Adopted Target (DFW UA) | | | | | 19.5% | 19.9% | 20.2% |
| Adjusted Historic Trend (DFW UA) | 19.1% | 18.9% | 19.2% | 19.3% | 19.5% | | |
| Baseline and Proposed MPO Target | | | | | 19.5% | 19.9% | 20.2% |



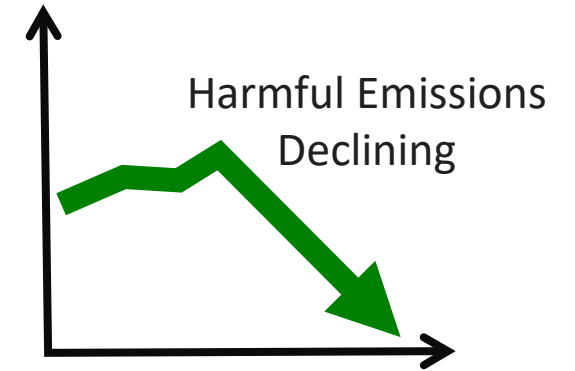
12 – Air Quality Targets

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- Nitrous Oxide (NOx) Reductions

- Combined Targets

- 2019-2020: 2,892.96 kg/day
- 2019-2022: 5,062.68 kg/day



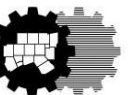
- Volatile Organic Compound (VOC) Reductions

- Combined Targets

- 2019-2020: 599.67 kg/day
- 2019-2022: 1,079.40 kg/day

MPO May Adopt its own Targets that Differ from State DOT Targets, but NCTCOG Worked Closely with TxDOT and Other MPOs on this Measure

Applies to DFW Urbanized Area



Proposed Regional Transportation Council Future Action

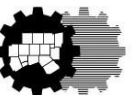
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Agree to Support the TxDOT Statewide Targets for NHS Pavement and Bridge Conditions

Focus on the Improvement of Regional NHS Off-System Arterial Pavements and NHS Bridges in Poor Condition

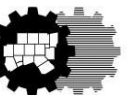
Adopt Regional Targets for Interstate Reliability, Non-Interstate Reliability, and Truck Reliability

Adopt Regional Targets Identical to TxDOT's Regional Targets for Peak Hour Excessive Delay, Non-SOV Travel, and Emissions Reductions



Schedule

| | |
|--------------------------|--|
| July 27 | STTC Information Item – Performance Measures and Targets |
| August 9 | RTC Information Item – Performance Measures and Targets |
| August 24 | STTC Workshop – Performance Measures and Targets |
| September 13 | RTC Information Item |
| September 28 | STTC Information Item – Draft Targets |
| October 8, 15, 18 | Public Meetings |
| October 11 | RTC Information Item – Draft Targets |
| October 26 | STTC Action Item - Recommend Approval of Final Targets |
| November 8 | RTC Action Item – Approval of Final Targets |
| November 15 | Target Adoption Deadline |



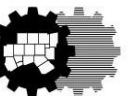
Questions

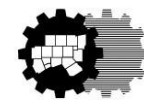
Dan Lamers

Senior Program Manager

dlamers@nctcog.org

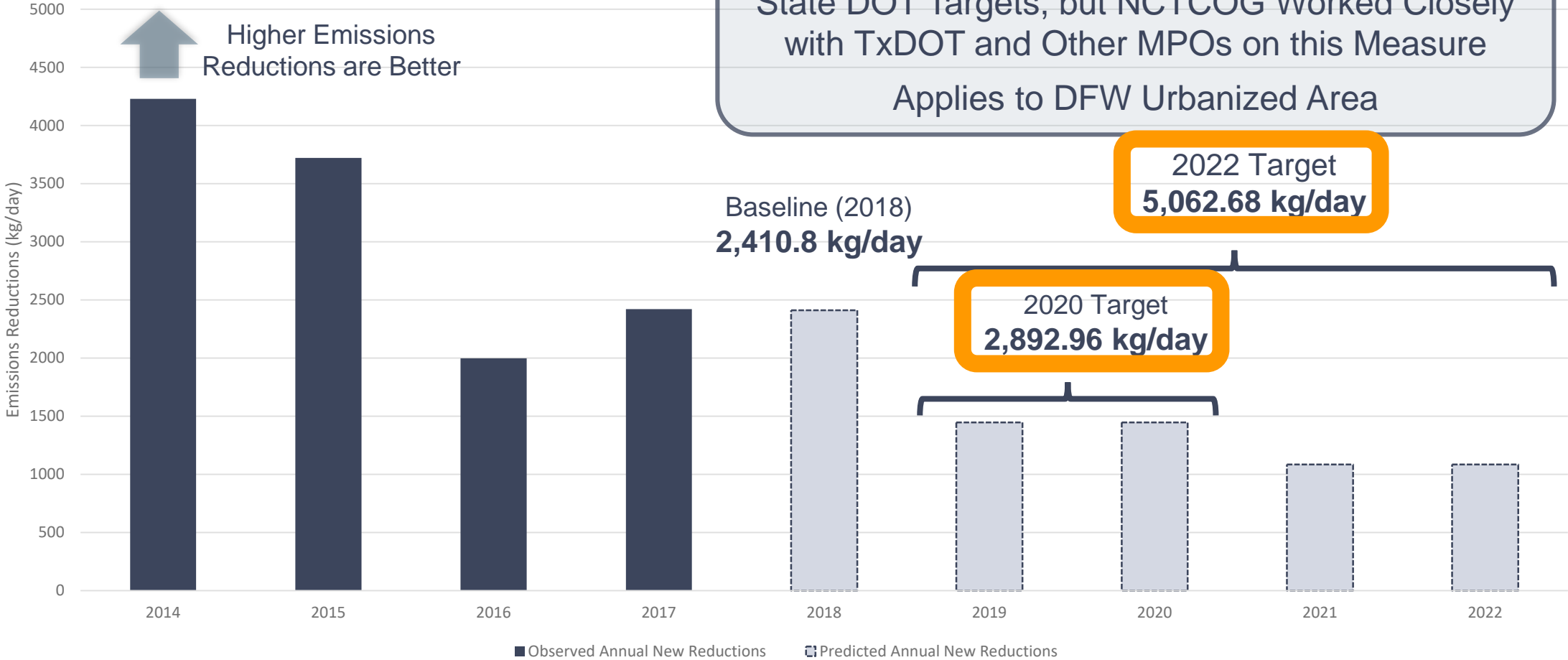
(817) 695-9263



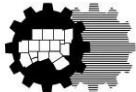


On-Road Mobile Source Emissions Reductions (NO_x)

MPO May Adopt its own Targets that Differ from State DOT Targets, but NCTCOG Worked Closely with TxDOT and Other MPOs on this Measure
 Applies to DFW Urbanized Area

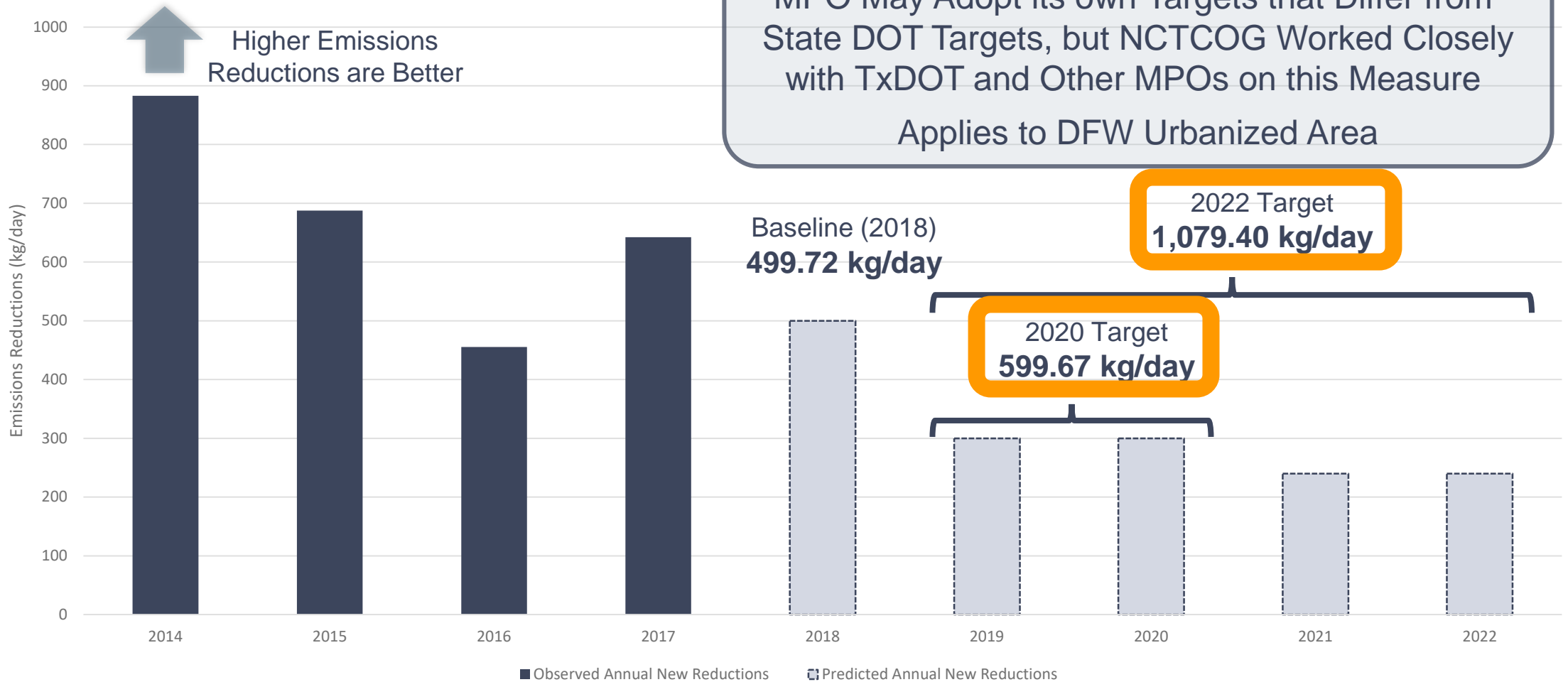


| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------------------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|
| Observed Annual New Reductions | 4,230.22 | 3,720.74 | 1,998.06 | 2,420.93 | | | | | |
| Predicted Annual New Reductions | | | | | 2,410.8 | 1,446.48 | 1,446.48 | 1,084.86 | 1,084.86 |



On-Road Mobile Source Emissions Reductions (VOC)

MPO May Adopt its own Targets that Differ from State DOT Targets, but NCTCOG Worked Closely with TxDOT and Other MPOs on this Measure
Applies to DFW Urbanized Area



| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Observed Annual New Reductions | 883.10 | 687.64 | 455.44 | 642.22 | | | | | |
| Predicted Annual New Reductions | | | | | 499.72 | 299.83 | 299.83 | 239.87 | 239.87 |

