REGIONAL SAFETY ADVISORY COMMITTEE
North Central Texas Council of Governments
Friday, January 28, 2022
10:00 am – 12:00 pm

AGENDA

1. Approval of October 22, 2021 Meeting Summary – Asma Tuly, RSAC Chair

2. Statewide Safety Task Force – Michael Morris, NCTCOG Director of Transportation

3. Arlington Entertainment District Advanced Air Mobility Pilot – Ernest Huffman, NCTCOG Airport Planning and Education Team

4. FHWA Proven Safety Countermeasures (new) – Millie Hayes, FHWA

5. 2021 NCTCOG Blocking Equipment CFP Recommendations – Camille Fountain, NCTCOG Safety Team

6. 2022 Regional Safety Targets – Kevin Kroll, NCTCOG Safety Team

7. Update Items
   a) Statewide Safety Task Force Friends of the Committee Reminder – Natalie Bettger, NCTCOG
   b) Vision Zero Planning Workshop Interest – Sonya Landrum, NCTCOG
   c) Vehicle Safety Recall Week – CheckToProtect.org - Sonya Landrum, NCTCOG
   d) National Work Zone Awareness Week Activities – Sonya Landrum, NCTCOG

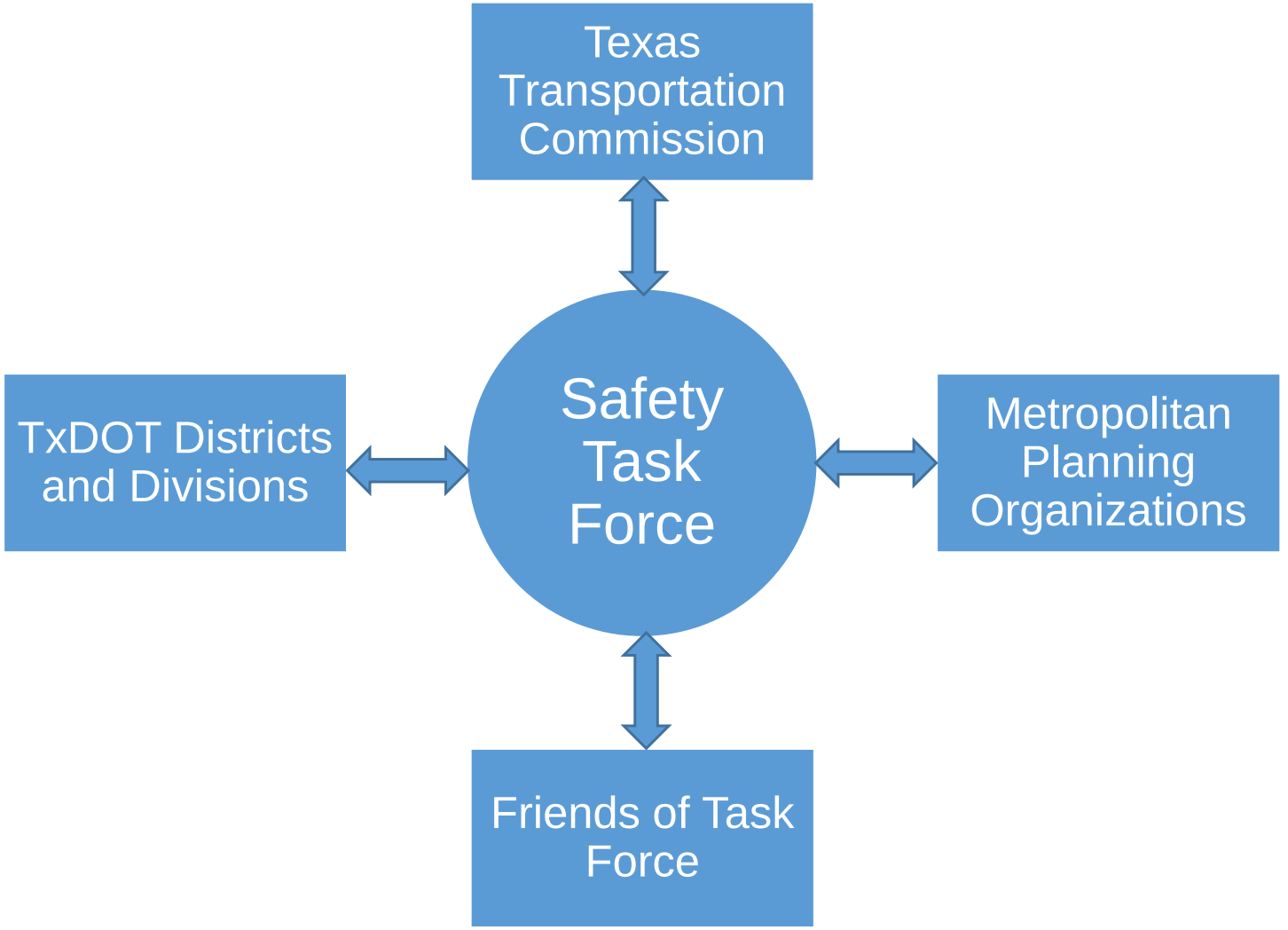
8. Safety-Related Reference Items, Topics or Training Courses Website

9. Upcoming Safety-Related Events and Training Announcements
   a) Traffic Incident Management First Responder and Manager Course:
      - March 24-25, 2022, NCTCOG
      - April 21-22, 2022, Denton County
      - June 16-17, 2022, NCTCOG
   b) Vehicle Safety Recall Week: March 7 – 11, 2022
   c) 2022 Lifesavers National Conference: March 13-15, 2022
   d) Distracted Driving Awareness Month: April 2022
   e) National Work Zone Awareness Week: April 11-15, 2022
   f) Traffic Incident Management Executive Level Course: May 5, 2022

10. Other Business (Old or New): This time provides an opportunity for members to bring items of interest before the group

11. Next RSAC Meeting: April 22, 2022, at 10 am. Format to be determined.

TxDOT Statewide Safety Initiative – Proposed Team Approach



Arlington Entertainment District Advanced Air Mobility Pilot Program

Regional Safety Advisory Committee
January 28, 2022

Presented by Ernest Huffman
Aviation Planning and Education Program Manager
North Central Texas Council of Governments

Definitions

- **Vertical Mobility** – All inclusive for use of unmanned aviation technology for Inspections, Freight Movement, Passenger Transportation and Supporting Services
- **Advanced Air Mobility (AAM)** - AAM is air transportation using electric vertical takeoff and landing (eVTOL) aircraft to move people and cargo between places not currently or easily served by surface transportation or existing aviation modes.
- **Urban Air Mobility (UAM)** - Urban Air Mobility envisions a safe and efficient aviation transportation system that will use highly automated aircraft that will operate and transport passengers or cargo at lower altitudes within urban and suburban areas.
- **Unmanned Traffic Management (UTM)** - Unmanned Aircraft System Traffic Management is a "traffic management" ecosystem for uncontrolled operations that is separate from, but complementary to, the FAA's Air Traffic Management (ATM) system.

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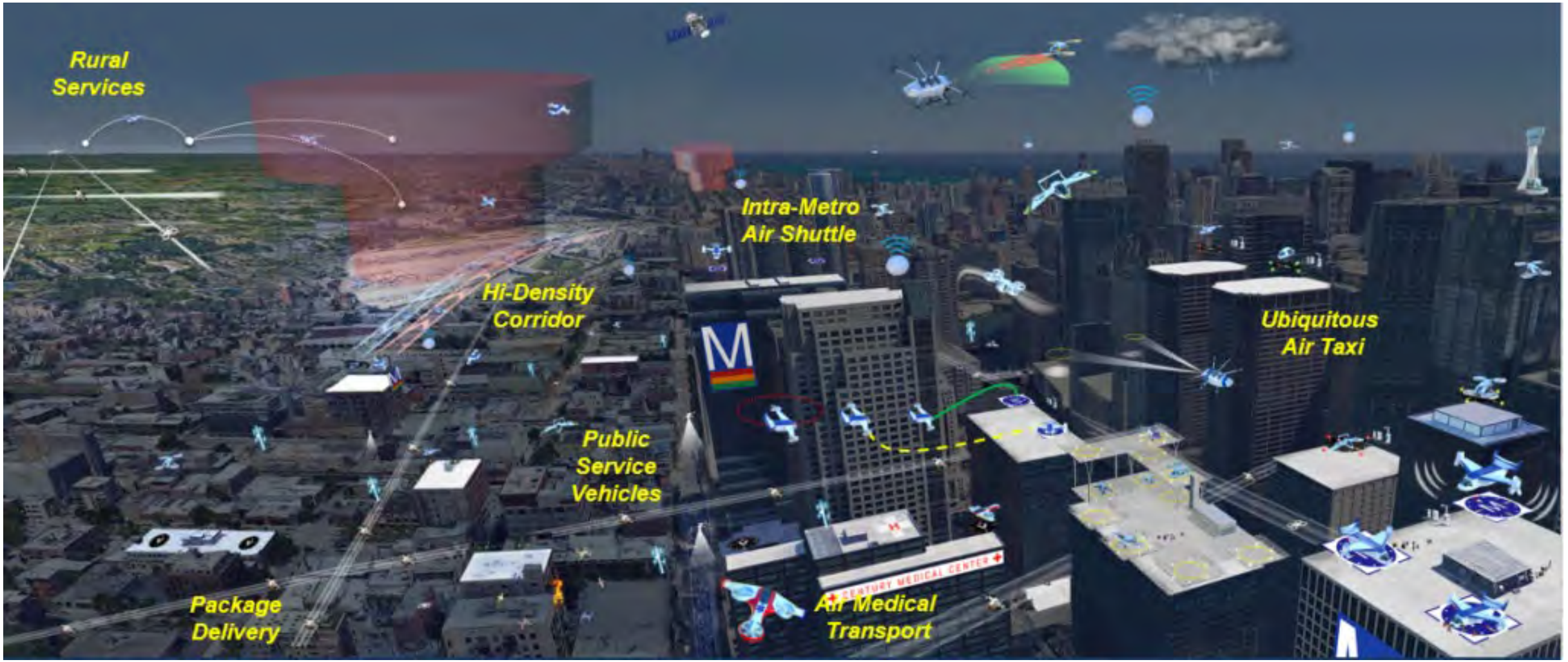
Unmanned Aircraft Systems
Safety + Integration

The Future



Source: ADVANCED AIR MOBILITY: ENSURING THE FUTURE OF TRAVEL TODAY – AEROSPACE INDUSTRY ASSOCIATION (AIA)

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The Problems

1. **Location** – Viable location to test out the systems and set up a permanent operation
2. **Users** – Viable users of the system
3. **Airspace Awareness** – We need to have vision of the airspace at all times within the pilot area
4. **Ground Risk Mitigation** – the ability to plan flights around high ground risks as a means to mitigate risks to people and property on the ground
5. **Detect and Avoid Capability** – The ability to detect and avoid other aircraft
6. **Low Altitude (Micro) Weather Monitoring** – Weather reacts differently at different altitudes and the currently used weather detection solutions out there don't help at low altitudes. We must have a complete picture of the weather in order to have the safest operations possible

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The Problems (con't)

1. **Airspace Management** – Once we have a clear picture of the airspace and weather, the city requires a means to manage the airspace in question
2. **Operations and Control Center** - OCC is the facility within you're the city wherein all tactical operational decisions are made, and surveillance displays are located establishing a maximum focus on safety, customer care and efficiency
3. **Situational Awareness** – A means to display all levels of the situation from ground to air
4. **Program Management** – A stakeholder group to manage the program
5. **Certified Waiver Process** – the process in which the ecosystem is used to expedite the FAA's waiver process for all operations
6. **Research** – Expand the regional universities research
7. **Community Engagement** – A viable community engagement plan

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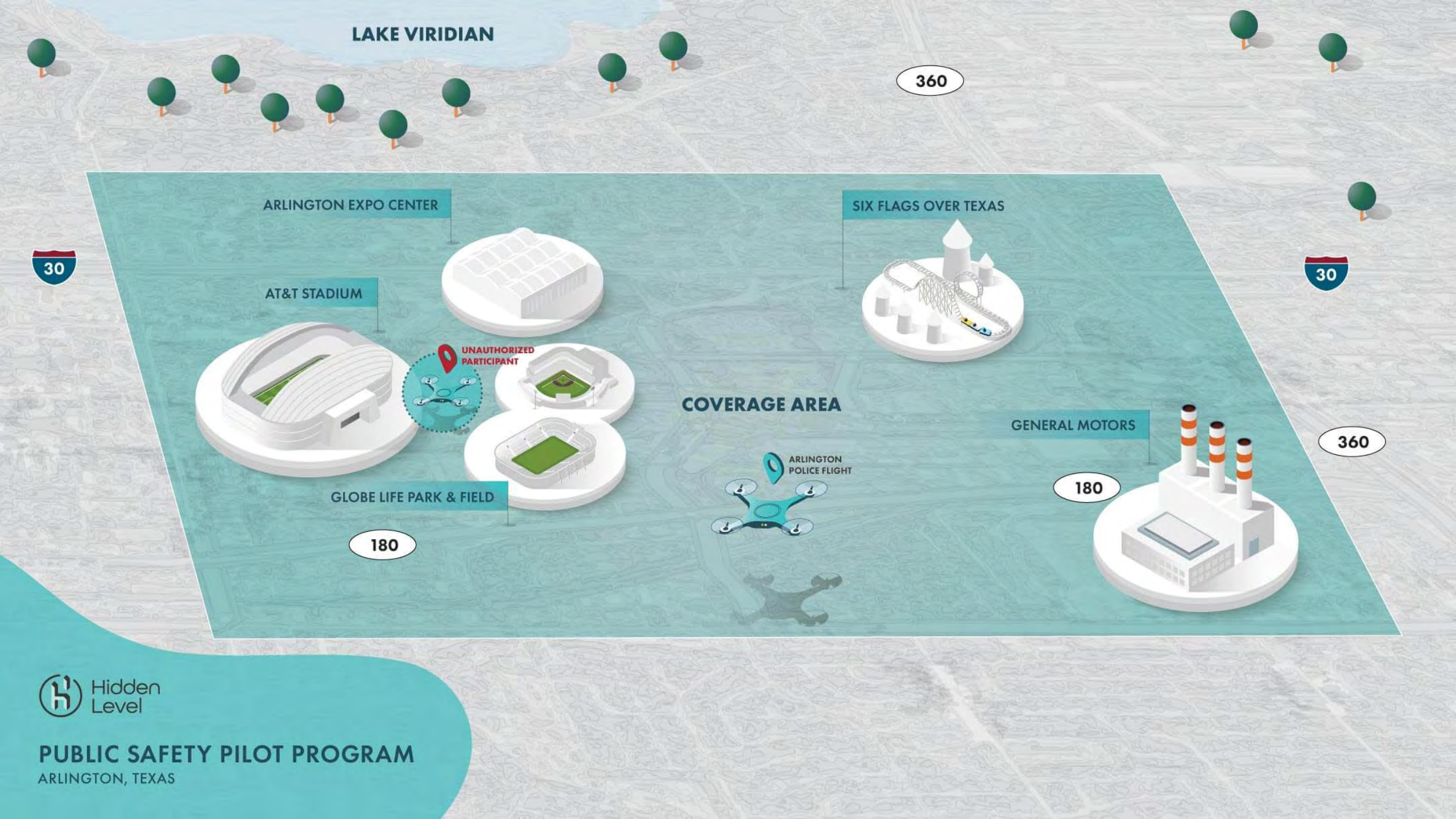
Globe Life Field
THIS BUD'S FOR YOU



Hidden Level

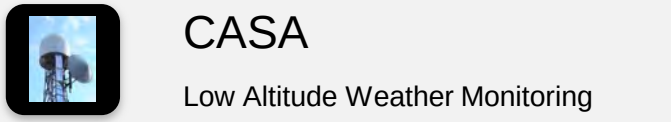
PUBLIC SAFETY PILOT PROGRAM

ARLINGTON, TEXAS

KEY TEAMING PARTNERS

SERVICE PROVIDERS

Hidden Level
Drone Detection



CASA
Low Altitude Weather Monitoring

Airspace Link
Airspace and Operations Management

Live Earth
Situational Awareness

AT&T
5G, IOT, and Public Safety Communications

Autonomous Drone Platform*

Detect and Avoid*

OPERATORS

City of Arlington
Tactical Public Safety Operations

NCTCOG Public Safety Unmanned Response Team
Tactical Public Safety Operations

University of Texas at Arlington
Research

Causey Aviation
Small Package Delivery

Flytrex
Small Package Delivery

PROGRAM MANAGEMENT

City of Arlington

NCTCOG

University of Texas at Arlington

Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere

The Ecosystem

Operations Center and Surveillance

+

Surveillance Display

+

Detect and Avoidance

→ Standard Data Package and Sharing Agreement

The Operator

Con Ops

+

Procedures

+

Crew

+

Safety Assessment

→ Application To Operate

→ FAA Approval

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YEAR ONE Schedule

1 PLANNING & INFRASTRUCTURE DEPLOYMENT 5/2021 - 9/2021

- Identify Location for Sensors
- Training Sessions for platforms
- Coordinate with all stakeholders
- Deploy sensors and other equipment
- Plan demonstration activities, schedule and milestones

2 PUBLIC SAFETY LINE OF SITE OPERATIONS 9/2021 - 9/2022

- Public Safety Manned LOS Operations
- Ops over people
- Public Safety Unmanned Response Team (PSURT) Training
- Passive UAS monitoring and reporting

3 OTHER LINE OF SIGHT OPERATIONS 10/2021 - 9/2022

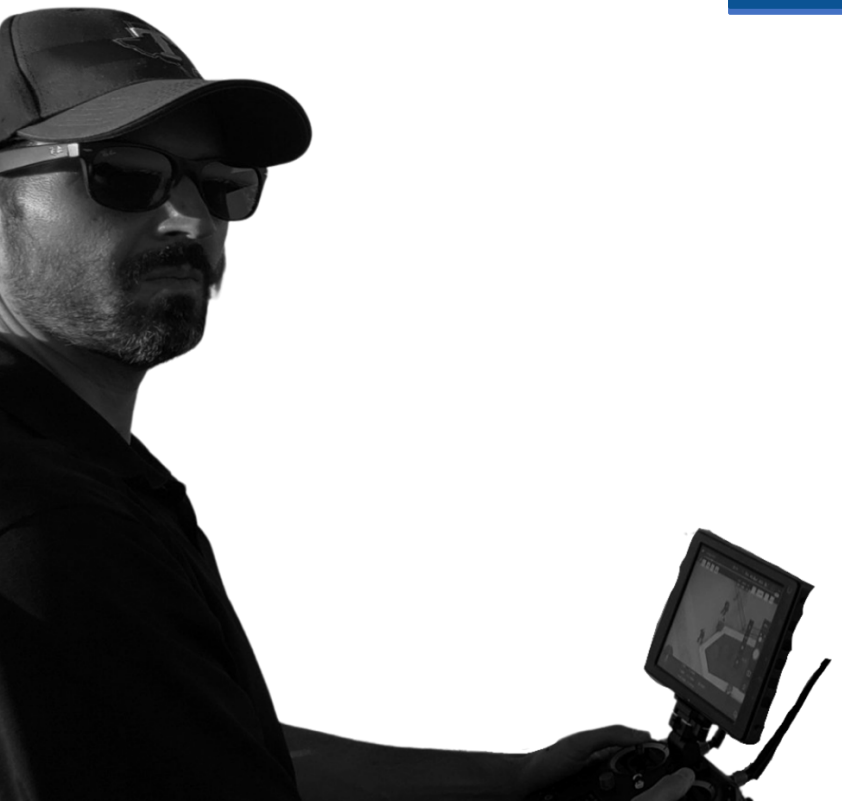
- University Manned LOS Operations
- Other LOS operations, i.e. package delivery

4 PUBLIC SAFETY BVLOS OPERATIONS 11/2021 - 8/2022

- Public Safety BVLOS Operations
- Remote Ops over people
- PSURT BVLOS Training

5 OTHER BVLOS OPERATIONS AND SYNERGIES WITH OTHER SMART CITIES INITIATIVE 1/2022 - 9/2022

- University BVLOS Operations
- Other BVLOS operations, i.e. package
- Integrate with Automated Vehicle Pilot Program



6 CLOSE OUT 9/2022

- Program Evaluations
- Stakeholder Interviews
- Share Lessons Learned with Public
- Examine Available Funding for continued operations

MAY JUNE JULY AUG SEPT OCT NOV DEC — 2021

JAN FEB MAR APR MAY JUNE JULY AUG — 2022

Use Cases

Public Safety

- Surveillance
- Traffic Congestion Management
- Emergency Response
- Medical Delivery

Commercial applications

- Package Delivery (last mile included)
- Medical Deliveries

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Results to Date

Over the course of all nine of the Dallas Cowboy’s home games, including the playoffs, we tracked 48 drone events with 22 unsafe flights, averaging more than two unsafe drone flights per game.

Hidden Level's distributed HL1000 sensors from its Airspace Monitoring Service (AMS) network in Arlington,

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What's to Come

1. Regional General Aviation and Heliport System Plan
2. Air Taxi and Air Cargo Corridor Identification and Demand Determination
3. Vertiport Location Study
4. Test Multimodal Integration and Proof of Concept for Air Taxis into the DFW Metroplex
5. Integrated Aviation Education System
6. Scaling Advanced Air Mobility Pilot Ecosystems to Other Metroplex Locations
7. Development of a Scalable Vertical Mobility Public Engagement Program
8. Congestion Management application along I-30 Corridor

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Contacts

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Visit www.northtexasuas.com for more information

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U.S. Department of Transportation
Federal Highway Administration

Proven Safety Countermeasure Initiative 2021 Update

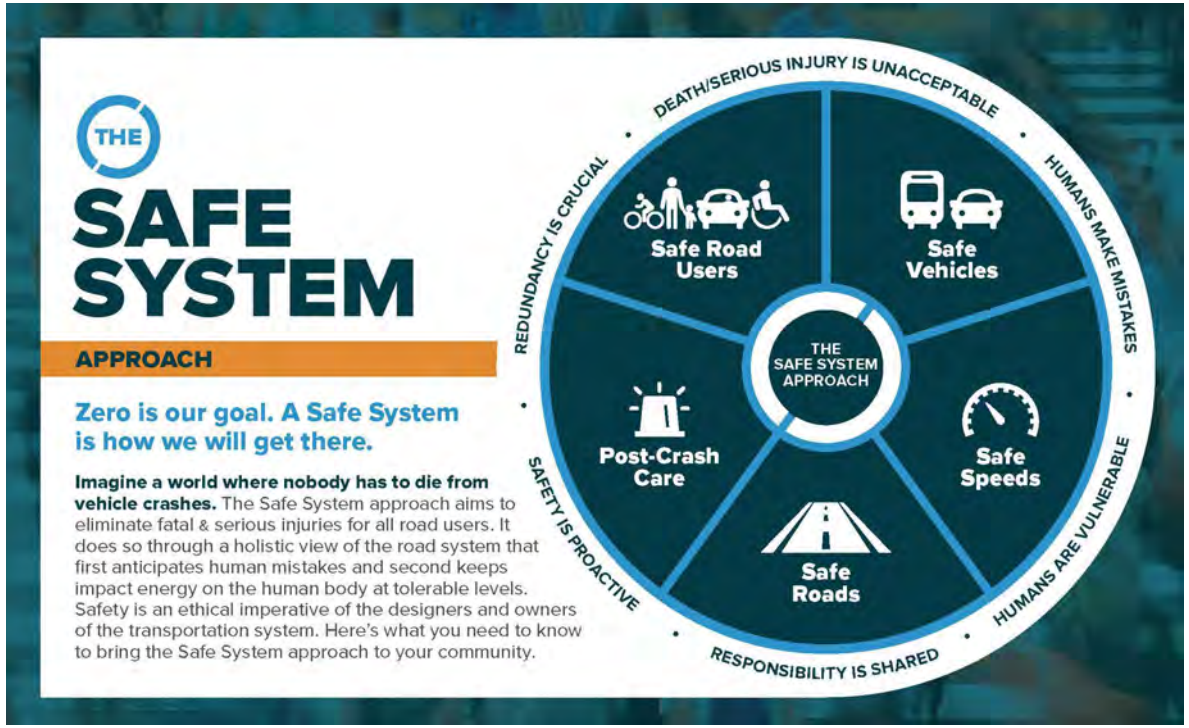
Source: Fotosearch

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

Source: FHWA

History of the Proven Safety Countermeasures

- Launched in 2008
- Updated in 2012 and 2017
- 20 countermeasures
- Selection Criteria
  - Proven effective
  - Not widespread deployment
- Guidance and Technical Assistance



Source: FHWA

PSCs Emphasize Our Priorities

- Complete Streets
- Safe System Approach
- Speed Management
- Equity
- Climate

Existing PSCs

https://safety.fhwa.dot.gov/provencountermeasures

New PSCs

Rectangular Rapid Flashing Beacons (RRFBs)

Lighting (Intersection and Segments)

Crosswalk Visibility Enhancements

Pavement Friction Management (CPFM and HFST)

Wider Edge Lines

Bicycle Lanes

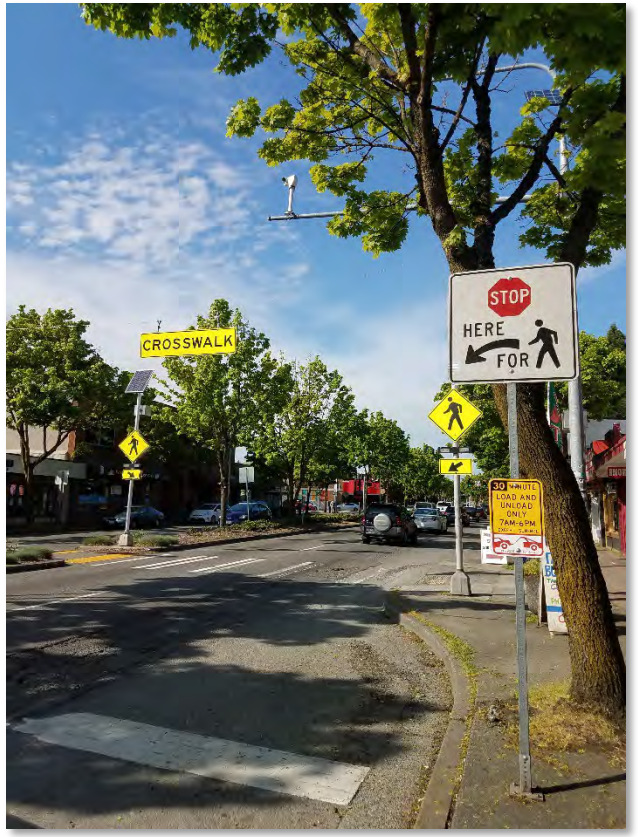
Variable Speed Limits

Speed Safety Cameras

Appropriate Speed Limits for All Road Users

Rectangular Rapid Flashing Beacons (RRFBs)

- Pedestrian-actuated conspicuity enhancement
- Supplements Pedestrian, School, or Trail Crossing post-mounted warning signs
- Solar-powered or hard wired



Source: Toole Design Group

Rectangular Rapid Flashing Beacons (RRFBs)

- **Used at uncontrolled, marked crosswalks**
- **Effectiveness**
  - 47% reduction in pedestrian crashes
  - Up to 98% motorist yielding rate
  - For best locations for installation see Table 1 of *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	● 2 4 5 6	● 5 6 7 9	○ 5 6 ● 9	● 4 5 6	● 5 6 7 9	○ 5 6 ● 9	● 4 5 6 7 9	○ 5 6 7 9	○ 5 6 ● 9
3 lanes with raised median (1 lane in each direction)	● 2 3 4 5	● ◉ 5 7 9	○ ◉ 5 ● 9	○ 3 4 5 7 9	○ ◉ 5 ● 9	○ ◉ 5 ● 9	○ 3 4 5 7 9	○ ◉ 5 ● 9	○ ◉ 5 ● 9
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	● 2 3 4 5 6 7 9	● ◉ 5 6 7 9	○ ◉ 5 6 ● 9	○ 3 4 5 6 7 9	○ ◉ 5 6 ● 9	○ ◉ 5 6 ● 9	○ 3 4 5 6 7 9	○ ◉ 5 6 ● 9	○ ◉ 5 6 ● 9
4+ lanes with raised median (2 or more lanes in each direction)	● ◉ 5 7 8 9	● ◉ 5 7 8 9	○ ◉ 5 8 ● 9	○ ◉ 5 7 8 9	○ ◉ 5 ● 8 9	○ ◉ 5 8 ● 9	○ ◉ 5 ● 7 8 9	○ ◉ 5 8 ● 9	○ ◉ 5 8 ● 9
4+ lanes w/o raised median (2 or more lanes in each direction)	● ◉ 5 6 7 8 9	○ ◉ 5 ◐ 7 8 9	○ ◉ 5 ◐ 8 ● 9	○ ◉ 5 ◐ 7 8 9	○ ◉ 5 ◐ ● 8 9	○ ◉ 5 ◐ 8 ● 9	○ ◉ 5 ◐ ● 7 8 9	○ ◉ 5 ◐ 8 ● 9	○ ◉ 5 ◐ 8 ● 9

Given the set of conditions in a cell,

\# Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.

● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.

○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

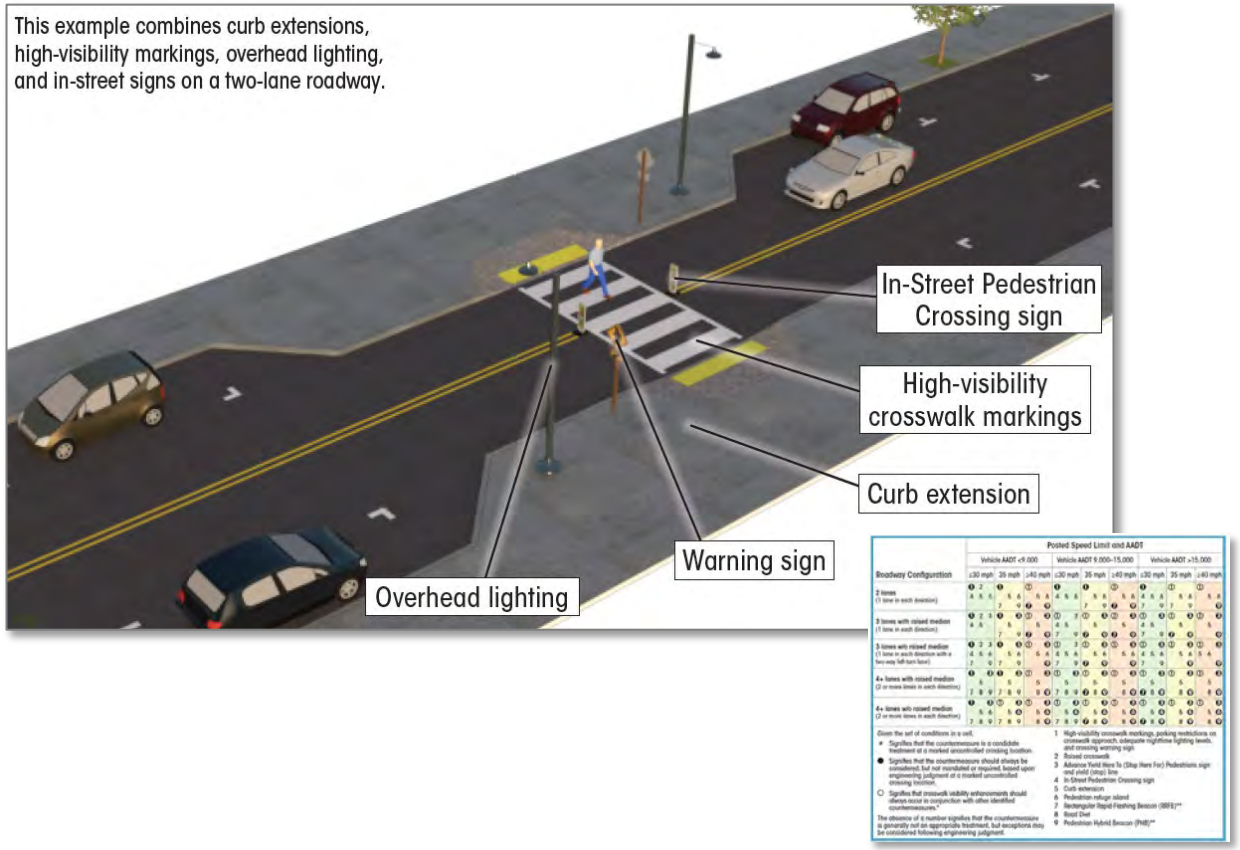
The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning sign
2 Raised crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
4 In-Street Pedestrian Crossing sign
5 Curb extension
6 Pedestrian refuge island
7 Rectangular Rapid-Flashing Beacon (RRFB)**
8 Road Diet
9 Pedestrian Hybrid Beacon (PHB)**

Source: FHWA

Crosswalk Visibility Enhancements

- **Consider at all midblock and uncontrolled crossings**
- **Crash Reduction Factors between 23 – 48%**
  - High visibility crosswalks
  - Signs
  - Curb Extension
  - Lighting
    - Place in advance of crosswalk
- **Table 1 of *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations***



Source: FHWA

Bicycle Lanes

- New or existing roadways
- Consider separated lanes
- Use *Bikeway Selection Guide* to choose lane design

Source: FHWA

Wider Edge Lines (6-inch)

- Increase drivers' perception of travel lane edge
- Most effective on rural two-lane highways
- Relatively low cost
- Durable marking material may have lower life cycle cost
- May provide better guidance to automated vehicles

Source: Thurston County, WA

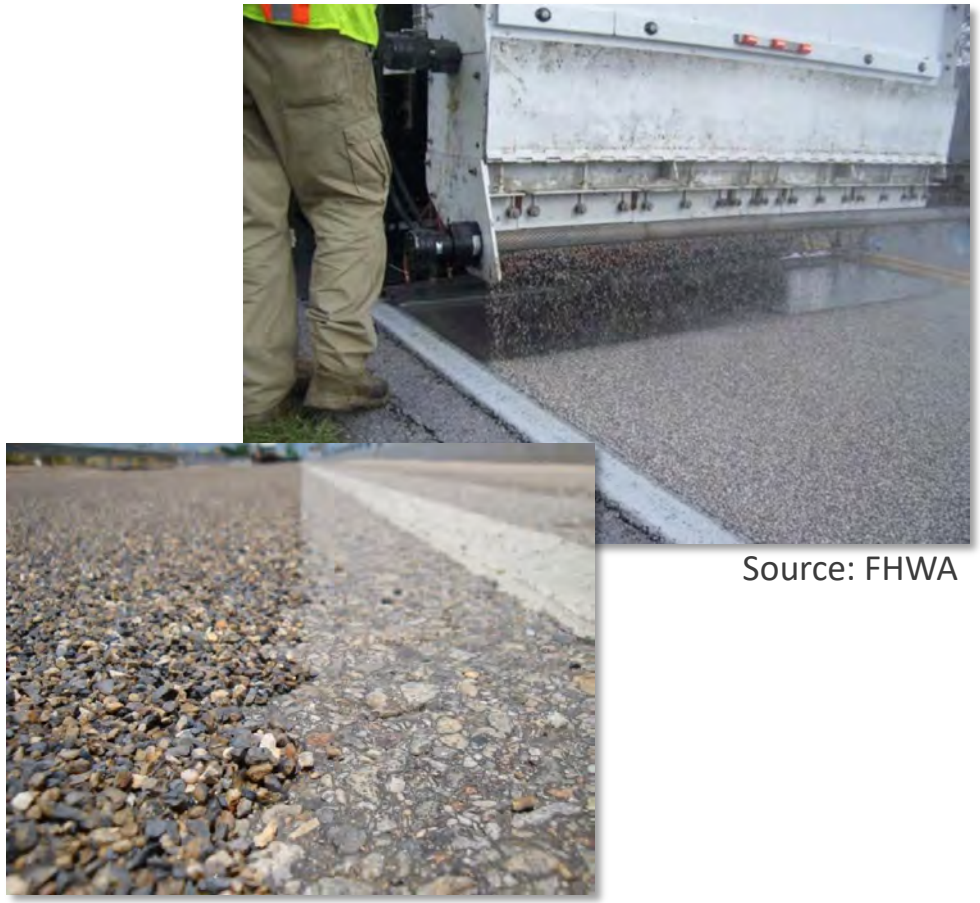
Lighting (Intersections and Segments)

- **Nighttime fatality rate is three times the daytime rate**
- **Lighting:**
  - Significantly improves visibility of the roadway
  - Increases sight distance
  - Makes roadside obstacles more noticeable/avoidable
- **Modern lighting gives precise control to reduce excessive light**
  - Affecting the nighttime sky
  - Spilling over to adjacent properties
- **Lighting can provide personal security for pedestrians, wheelchair and other mobility devices, bicyclists, and transit users**

Source: WSDOT (top) and FHWA (bottom)

Pavement Friction Management (CPFM and HFST)

- **Continuous Pavement Friction Measurement (CPFM)**
  - Provides a comprehensive picture of how friction varies across pavement segments
  - Measures friction continuously at highway speeds
  - Provides both network and project level data
  - Analyzes friction, crash, and roadway data better than traditional methods



Source: FHWA

Pavement Friction Management (CPFM and HFST)

- **High Friction Surface Treatments (HFST)**
- **Apply at**
  - Horizontal curves
  - Interchange ramps
  - Intersections and approaches
  - Locations with history of rear-end, failure to yield, wet-weather, or red-light-running crashes
  - Crosswalk approaches

Source: FHWA

Variable Speed Limits (VSL)

- **Can implement for:**
  - Congestion
  - Incidents
  - Work zones
  - Inclement weather
- **Particularly effective on**
  - Urban and rural freeways
  - High-speed arterials > 40 mph
- **Consistent with the Safe System Approach**

Source: FHWA

Speed Safety Cameras (SSCs)

- **Applications**
  - Fixed units
  - Point-to-Point (P2P) units
  - Mobile units
- **Considerations**
  - Public trust is essential
  - Use overt and covert enforcement to encourage drivers to comply with speed limits everywhere.
  - Conduct legal and policy review if SSCs are authorized within a jurisdiction.
  - USDOT published SSC Guidelines in 2008, with an update ongoing.

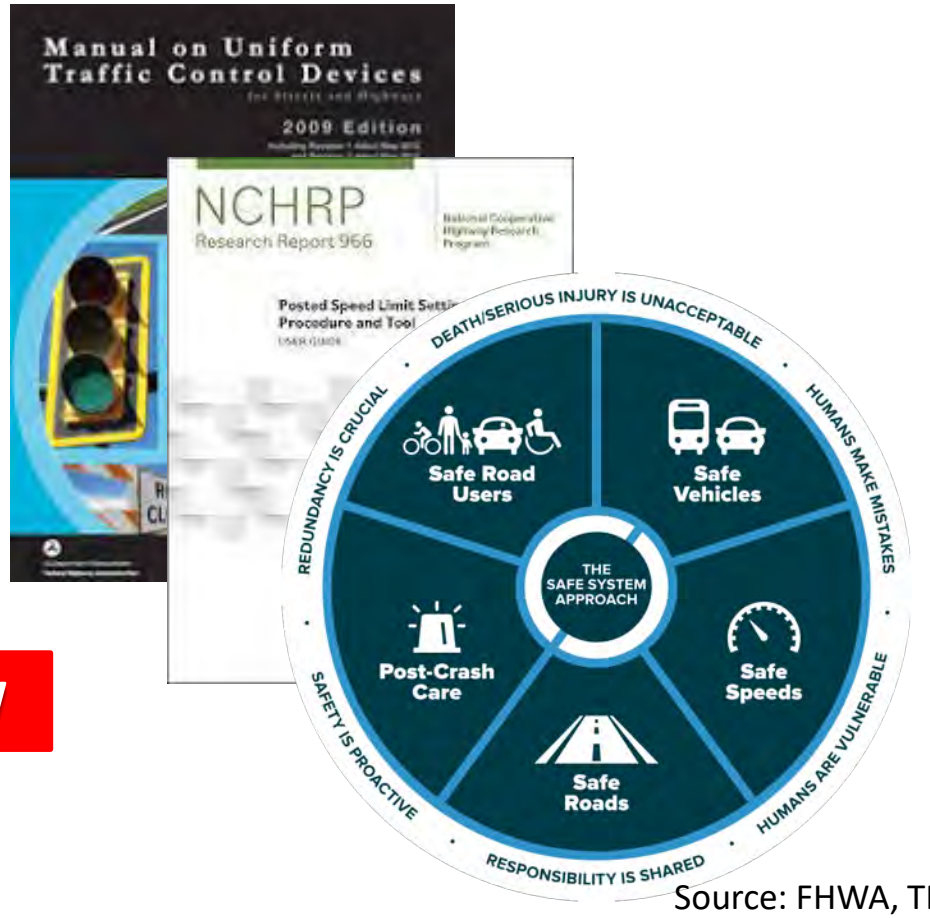
Source: Vision Zero Network

Appropriate Speed Limits for All Road Users

- **Applications**
  - Legislative Statutory Speed Limits
  - Non-Statutory Speed Limits
    - MUTCD/Engineering Judgement
    - Expert Systems Tools
      - USLIMITS2
      - NCHRP Report 966: Posted Speed Limit Setting Procedure and Tool
    - Safe System Approach

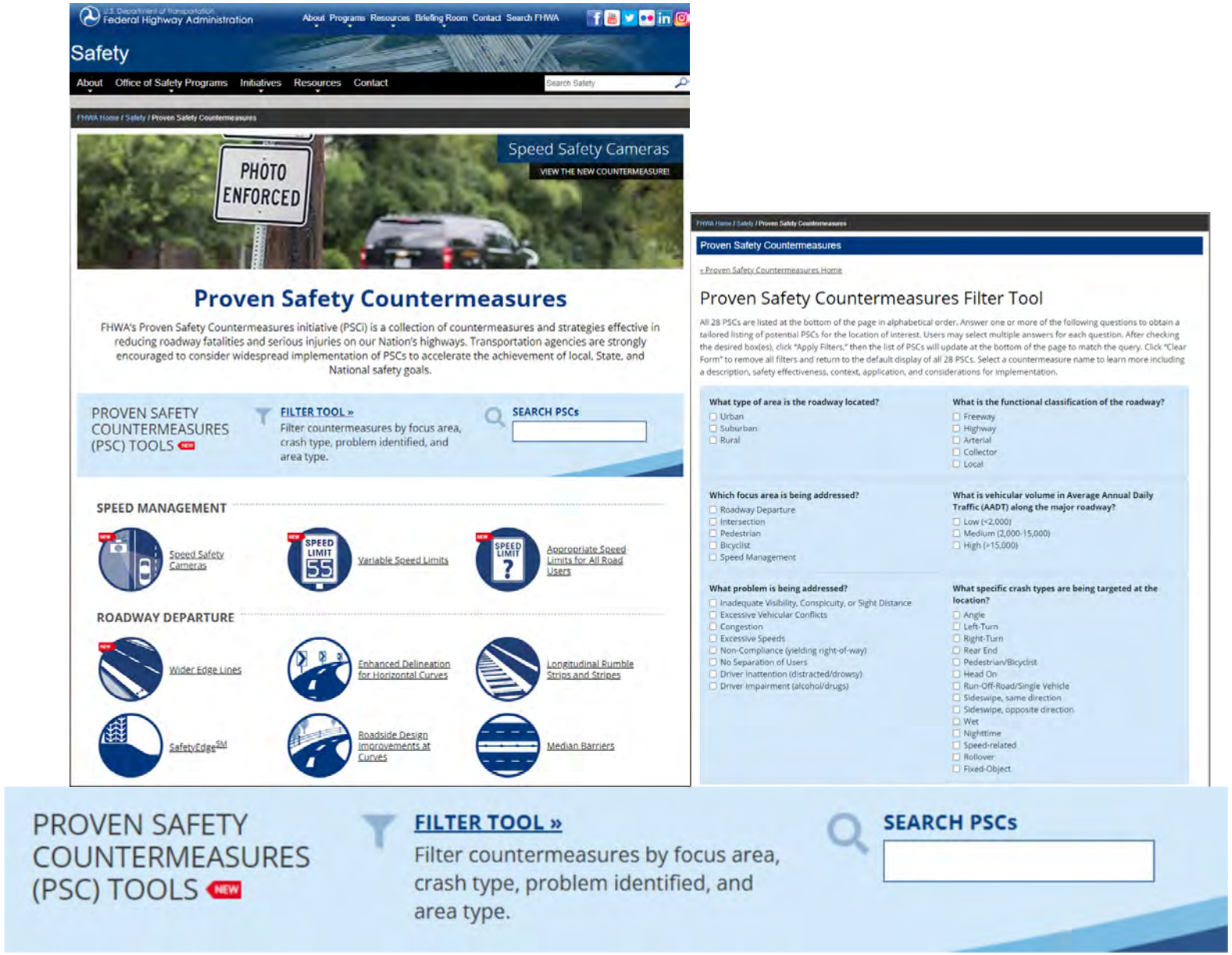
NEW

NEW



Source: FHWA, TRB

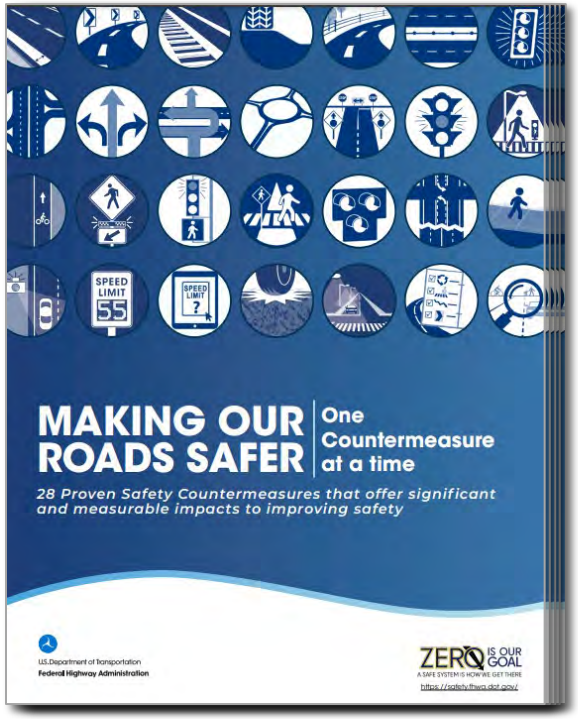
New PSC Resources



Source: FHWA

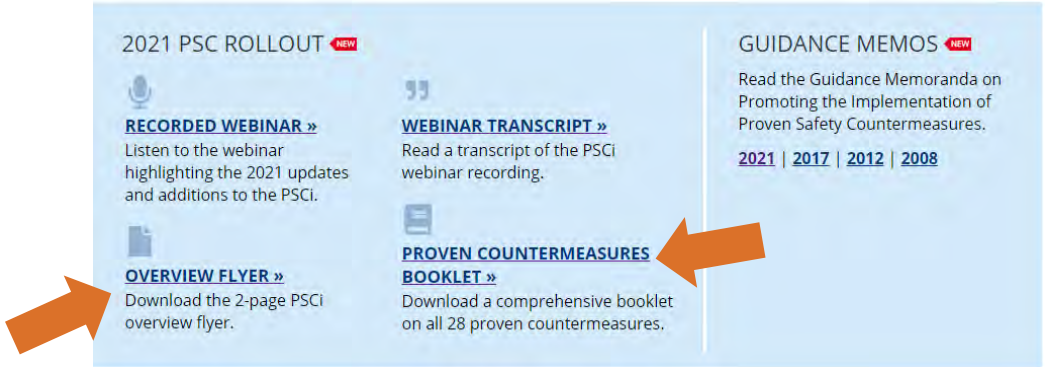
Updated Site

- New look/branding
- New search and filter tool
- Focus areas:
  - Speed Management
  - Intersections
  - Roadway Departures
  - Ped/Bicyclist
  - Crosscutting



Other Resources

- Overview Flyer
- PSC Booklet
- Videos
  - PSC Overview
  - Lighting



Source: FHWA

Amelia (Millie) Hayes, P.E., PTOE, RSP_{2I}

amelia.hayes@dot.gov

Source: Fotosearch

https://safety.fhwa.dot.gov/

https://safety.fhwa.dot.gov/provencountermeasures/

https://safety.fhwa.dot.gov/fas/

https://safety.fhwa.dot.gov/zerodeaths/zero_deaths_vision.cfm

2021 INCIDENT MANAGEMENT

FREEWAY BLOCKING EQUIPMENT

CALL FOR PROJECTS RECOMMENDATIONS

Regional Safety Advisory Committee

Camille Fountain

Senior Transportation Planner

January 28, 2022

DRIVE AWARE north texas

North Central Texas Council of Governments

2021 Incident Management Freeway Blocking Equipment Call for Projects Overview

In August 2021, the Regional Transportation Council approved $1M in Regional Toll Revenue (RTR) funds to implement the 2021 Incident Management (IM) Freeway Blocking Equipment Call for Projects

- Based on local government interest resulting from the 2020 IM Freeway Blocking Equipment Pilot Project Initiative

Purpose: Assist partner agencies in purchasing scene management blocking equipment to provide protection to incident responders responding to traffic crashes

Supports: Current incident management training recommendation to use best practices equipment and technology

Emphasizes: Importance of implementing incident management strategies and training

Improves regional roadway safety for responders and drivers

Eligible Recipients and Activities

Eligible Recipients

- Public sector partner agencies within the North Central Texas Council of Governments (NCTCOG) 12-County Metropolitan Planning Area actively involved in incident management

Eligible Counties

- Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, Wise

Eligible Activities

- Purchase of scene management blocking equipment to provide protection to incident responders responding to traffic crashes, while reducing the need for additional fire truck emergency strobe lighting
  - ➢ Examples include: Crash attenuators, crash barriers, crash cushions, etc.

Ineligible Activities

- Personnel and staffing charges
- Fire trucks/engines
- Non-attenuator vehicles

***ANY** project-related purchases or procurement activities completed **BEFORE** an Agreement between the awarded agency and TxDOT has been executed and/or a Notice to Proceed has been issued will be ineligible for payment under this Call for Projects effort.

Eligible Recipients and Activities *(Cont.)*

Eligible Crash Attenuator Equipment Examples

- Crash Attenuator Trucks
- Crash Attenuator Trailers
- Crash Attenuator that attach ‘to’ another vehicle

Funding Availability and Submitted Projects

$1 million in Regional Toll Revenue Funds approved by the Regional Transportation Council

- **Twenty percent Local Match requirement**

Total applications and funding requests received: 16 applicants (17 projects) - $2,596,025

Applications and funding received (East): 12 projects - **$2,116,513**

Applications and funding received (West): 5 projects - **$ 479,512**

Ineligible Projects

Ineligible projects received (East): 3 projects - $415,520

Ineligible projects received (West): 1 project - $200,000

Eastern Sub-Region Applications

1. City of Cedar Hill Fire – 1 project
2. City of Coppell Fire – 1 project
3. City of Dallas – Office of Government Affairs – 2 projects *(1 ineligible)*
4. City of Dallas Police – 1 project *(Ineligible)*
5. City of Denton Fire – 1 project
6. City of Frisco Fire – 1 project
7. City of Garland Fire – 1 project
8. City of Irving Fire – 1 project *(Ineligible)*
9. City of Lancaster Fire – 1 project
10. City of Rowlett Fire – 1 project
11. City of Terrell Emergency Management – 1 project

Ineligible Projects Submitted

- City of Dallas Government Affairs: Truck with Message Board – $55,000
- City of Dallas Police: Truck with Arrowboard & Plow attachment – $278,634
- City of Irving Fire: Arrowboards – $81,886

Western Sub-Region Applications

1. City of Burleson Fire – 1 Project
2. City of Euless Police – 1 Project
3. City of Fort Worth Police – 1 Project *(Ineligible)*
4. City of Grapevine Fire – 1 Project
5. City of North Richland Hills Fire – 1 Project

Ineligible Projects Submitted

- City of Fort Worth Police: All in one TIM Vehicle – $200,000

Scoring Criteria

Scoring Component	Available Points
TIM Training Attendance – NCTCOG or In-house Training (Since August 2013), TIM Self-Assessment Participation	20
Crash Data in Jurisdiction (2016 - 2020)	10
Adoption of Incident Management Resolution	10
Incident Management Goals/Targets in Place	5
Adoption/Implementation of Regional Performance Measure Standard Definitions	5
Explanation of how equipment will be used to provide protection to First Responders (Specify if the equipment will be mounted to vehicles other than fire apparatus) – *15 points for innovativeness (Non-fire truck vehicle deployment)*	50
Total Score	**100**

Projects Approved for Funding

Minimum Project Score Considered for Project Funding is 70.

	City/Agency Name	Total Project Cost	Approved Project Cost (80%)	Equipment Requested	Quantity Requested	Project Score
PROJECTS RECOMMENDED FOR FUNDING - SCORE '70' OR ABOVE						
1	City of Frisco Fire *(East)*	$153,580	$122,864	Crash Attenuator Truck	1	94
2	City of Coppell Fire *(East)*	$112,334	$89,867	Highway Safety Attenuator/Arrowboard Combo	1	93
3	City of Dallas (Government Affairs) *(East)*	$375,000	$300,000	Scorpion/Truck Combo	3	92
4	City of Terrell Emergency Management *(East)*	$127,295	$101,836	Truck Mounted Attenuator (all-in-one)	1	88
5	City of North Richland Hills Fire *(West)*	$136,441	$109,153	Truck Mounted Attenuator (all-in-one)	1	87
6	City of Lancaster Fire *(East)*	$112,217	$89,774	Attenuator Truck	1	86
7	City of Euless Police *(West)*	$57,814	$46,251	Truck Mounted Crash Attenuator	1	80
8	City of Denton Fire (East)	$200,000	$160,000	Public Safety Blocker Unit (Truck/Attenuator)	1	73
9	City of Garland Fire *(East)*	$450,000	$360,000	Scorpion Attenuator	3	71
10	City of Grapevine Fire *(West)*	$40,292	$32,234	Scorpion II Model C	1	71
	Total	$1,764,973	$1,411,979			

Projects not recommended for funding - received a project score below 70

- City of Cedar Hill Fire: Scorpion II, TL-3 Towable Attenuator - $60,000
- City of Burleson Fire: Scorpion II Model C, TL-3 Truck Mounted Attenuator - $44,965
- City of Rowlett Fire: Scorpion II, TL-3 Attenuator - $110,567

Schedule

Date	Action
~~July 23, 2021~~	~~Regional Safety Advisory Committee (Info) – IM Freeway Blocking Equipment CFP Notice~~
~~August 12, 2021~~	~~RTC (Action) – Request RTR Funds to Conduct CFP~~
~~August 27, 2021~~	~~STTC (Action) – Endorsement of RTC Action~~
~~September 3, 2021~~	~~Open Call for Projects (60 days)~~
~~September 13, 2021~~	~~IM Blocking Equipment CFP Forum~~
~~November 1, 2021~~	~~Close Call for Projects~~
~~Nov. 2 – Nov. 16, 2021~~	~~Evaluate Submitted Proposals~~
~~December 3, 2021~~	~~STTC (Action) – Approval of Selected Projects~~
~~December 13, 2021~~	~~Public Comment Period Begins~~
~~January 13, 2022~~	~~RTC (Action) – Approval of Selected Projects~~
January 28, 2022	**TIP Mods Due**
Late June/Early July 2022	Federal/State STIP Approval
July 2022	TTC Approval
Fall/Winter 2022	Agencies Execute Agreement with TxDOT
30 Days after executed agreement and/or 30 Days prior to FY noted in agreement	TxDOT Sends RTR Funding to City/Implementing Agency
Winter 2022	Agencies Purchase Blocking Equipment

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Regional Safety
Advisory Committee

FEDERAL HIGHWAY ADMINISTRATION SAFETY PERFORMANCE TARGETS UPDATE

Kevin Kroll | 1.28.2022

DRIVE AWARE north texas

2021-2022 Federal Performance Measures Schedule

Rulemaking	Upcoming RTC Action	Next Anticipated RTC Action	Target-Setting Schedule
Transit Safety (PTASP)	May 2021	Early 2025	Every 4 Years
PM1 – Roadway Safety	February 2022 (Information)	Early 2023	Annual (Targets established as reductions over 5-year period)
Transit Asset Management (TAM)	Mid 2022	2026	Every 4 Years
PM2 – Pavement and Bridge	Late 2022	Late 2024	Biennial
PM3 – System Performance, Freight, and CMAQ	Late 2022	Late 2024	Biennial

Background

Federal legislation specifies quantitative performance measures that must be tracked and reported annually.

- 2018 Safety Performance Targets approved by Regional Transportation Council (RTC) in December 2017

  Established Regional Safety Position:

  Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.

- 2018 – 2022 Safety Performance Target reduction schedule affirmed by RTC in February 2019
- Targets updated annually
- In May of 2019, the Texas Transportation Commission (TTC) adopted Minute Order 115481, directing TxDOT to work toward the goal of reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050.

TxDOT Target Setting

Previous State Safety Performance Target: Two percent reduction in each of the five performance measures by the target year of 2022

New State Safety Performance Targets

- Fifty percent reduction for fatalities and fatality rate measures by the target year of 2035
- Two percent reduction by 2022 targets remain for Serious Injury, Serious Injury Rate, and Non-motorized fatalities and serious injuries

Roadway Safety Performance Targets

- Target: Number of Fatalities
- Target: Rate of Fatalities
- Target: Number of Serious Injuries
- Target: Rate of Serious Injuries
- Target: Number of Non-motorized Fatalities plus Serious Injuries

Safety Performance (PM1) Trends and Target Performance

Performance Measure	Desired Improvement Trend	Current Trend*	2018 Target Met	2019 Target Met	2020 Target Met**
	State of Texas				
1. No. of Fatalities	↘	↗	Yes	Yes	Yes
2. Fatality Rate	↘	↘	Yes	Yes	Yes
3. No. of Serious Injuries	↘	↘	Yes	Yes	Yes
4. Serious Injury Rate	↘	↘	Yes	Yes	Yes
5. No. of Non-motorized Fatalities and Serious Injuries	↘	↗	Yes	Yes	Yes
	North Central Texas (NCTCOG) Region				
1. No. of Fatalities	↘	↗	Yes	Yes	Yes
2. Fatality Rate	↘	↘	Yes	Yes	Yes
3. No. of Serious Injuries	↘	↘	Made Significant Progress	Yes	Made Significant Progress
4. Serious Injury Rate	↘	↘	Made Significant Progress	Yes	Made Significant Progress
5. No. of Non-motorized Fatalities and Serious Injuries	↘	↗	Yes	Yes	Yes

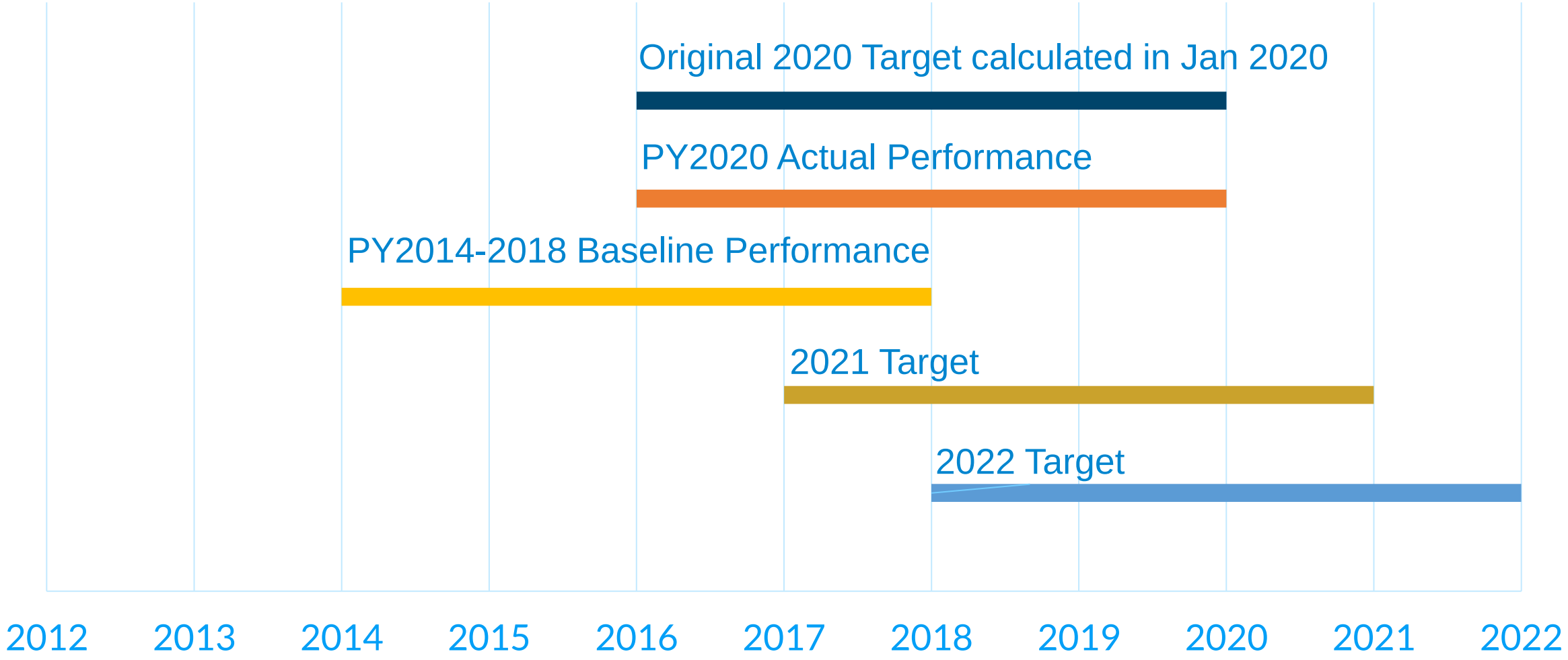
*Current trend using data from the previous five years of available data (2016-2020)
**FHWA expected to release state results in March 2021.
Observed safety performance is compared to targets on a two-year delay

NCTCOG Actual Safety Performance 2020

Safety Performance Measures	Original 2020 Target	PY2020 Actual Performance	PY2014-2018 Baseline Performance	Met Target?	Better than the Baseline?	Met or Made Significant Progress?
Number of Fatalities	589.3	587.4	542.2	Yes	No	Yes
Rate of Fatalities	0.803	0.803	0.784	Yes	No	
Number of Serious Injuries	3,514.7	3,560	3,743.2	No	Yes	
Rate of Serious Injuries	4.768	4.891	5.434	No	Yes	
Number of Non-Motorized Fatalities and Serious Injuries	595.0	587.8	547.2	Yes	No	

Targets are based on 5-year rolling averages

Safety Performance Measures Data Timeline



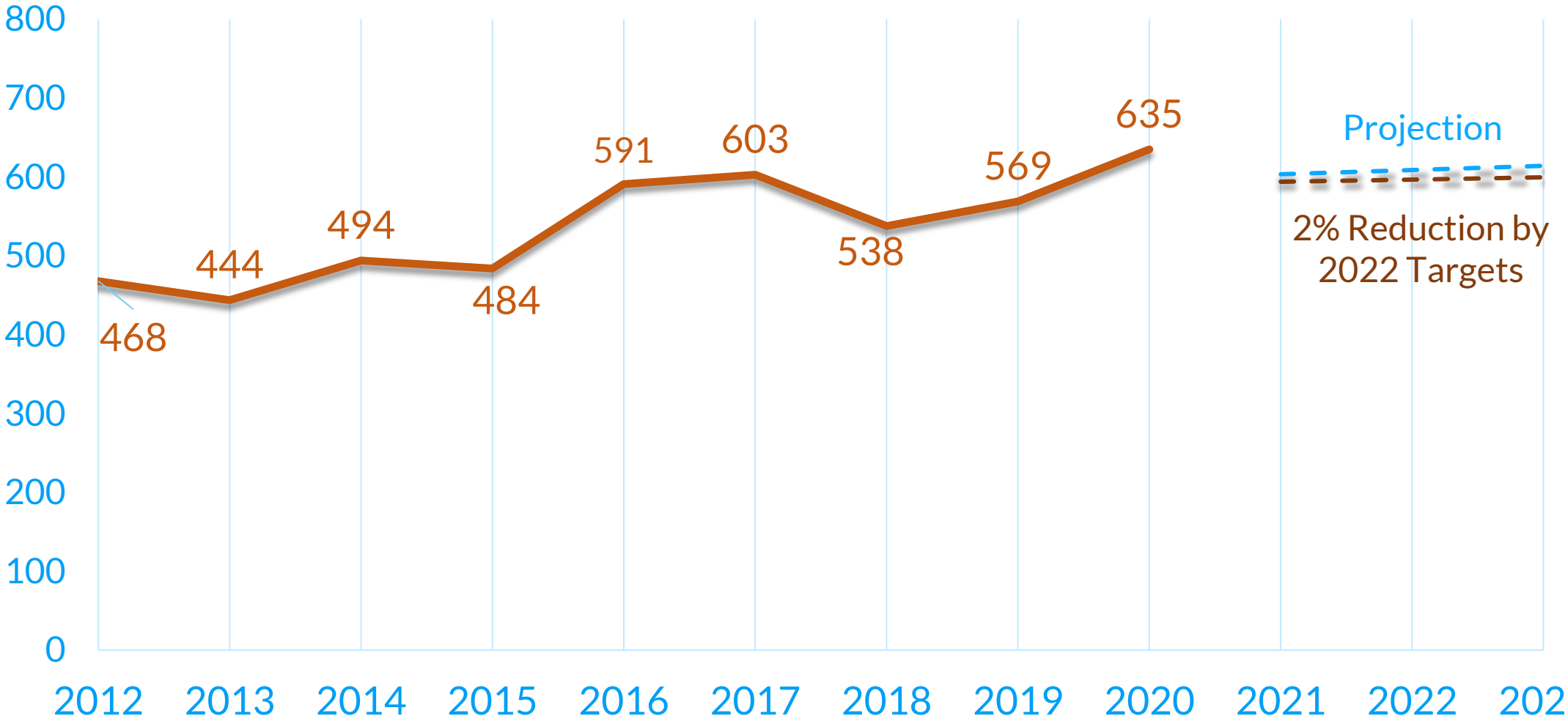
NCTCOG and TxDOT Safety Performance Targets and Projections

Safety Performance Targets	2020 TxDOT Targets	2020 NCTCOG Targets	2021 TxDOT Targets	2021 NCTCOG Targets	2022 TxDOT Targets	2022 NCTCOG Targets
	1.2% Reduction		1.6% Reduction		2.0% Reduction	
No. of Fatalities	4,068	589.3	3,687*	572.4	3,563*	579.5
Fatality Rate	1.48	0.803	1.33*	0.762	1.27*	0.755
No. of Serious Injuries	18,602	3,514.7	17,151	3,375.3	16,677	3032.9
Serious Injury Rate	6.56	4.768	6.06	4.485	5.76	3.939
No. of Non-motorized Fatalities and Serious Injuries	2,477	595.0	2,316.4	592.3	2,367	596.9

Targets are based on a 5-year rolling average. 2022 targets calculated using 2018-2020 (observed) and 2021-2022 (projected).

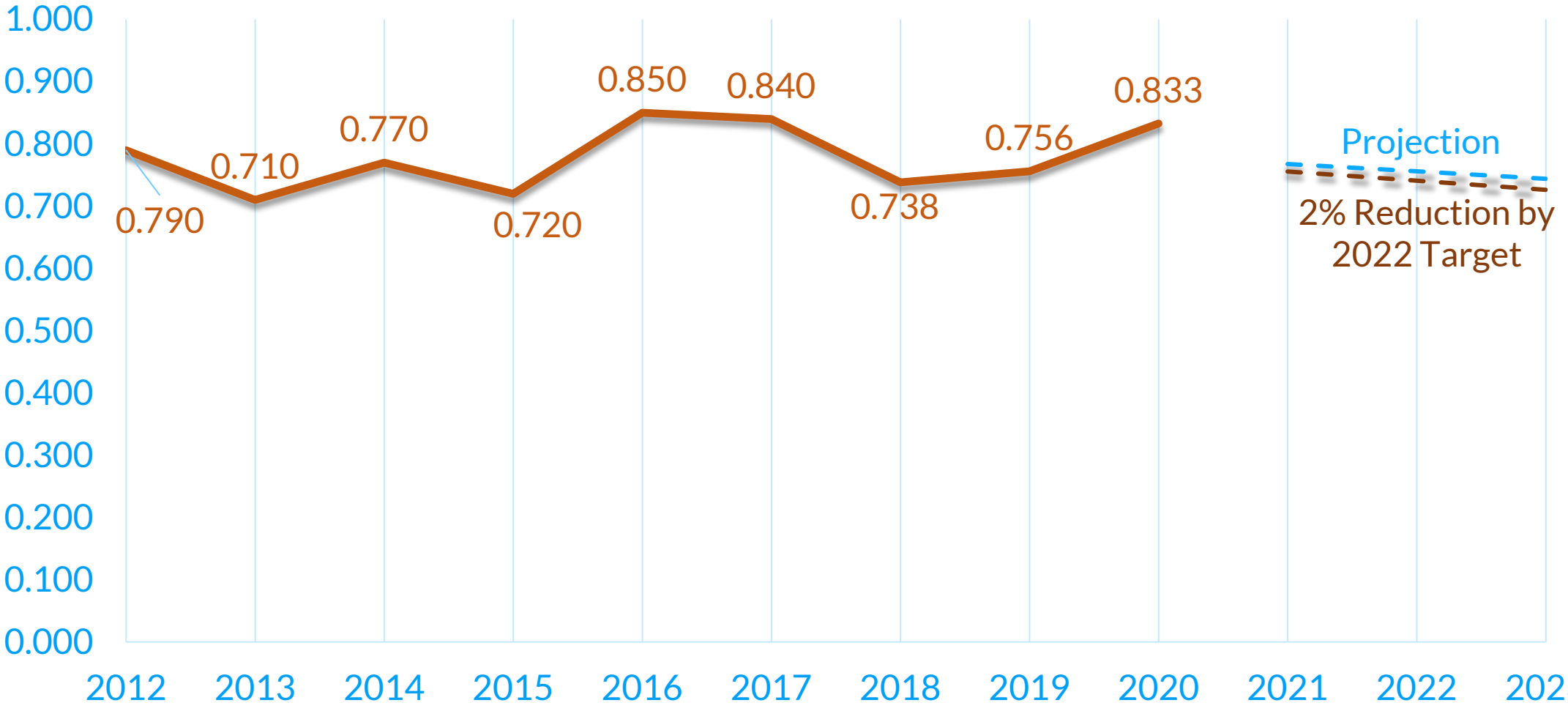
TxDOT 2021 and 2022 fatalities and fatality rate targets calculated using a 50% reduction by 2035

NCTCOG Region Fatalities - Actual Performance



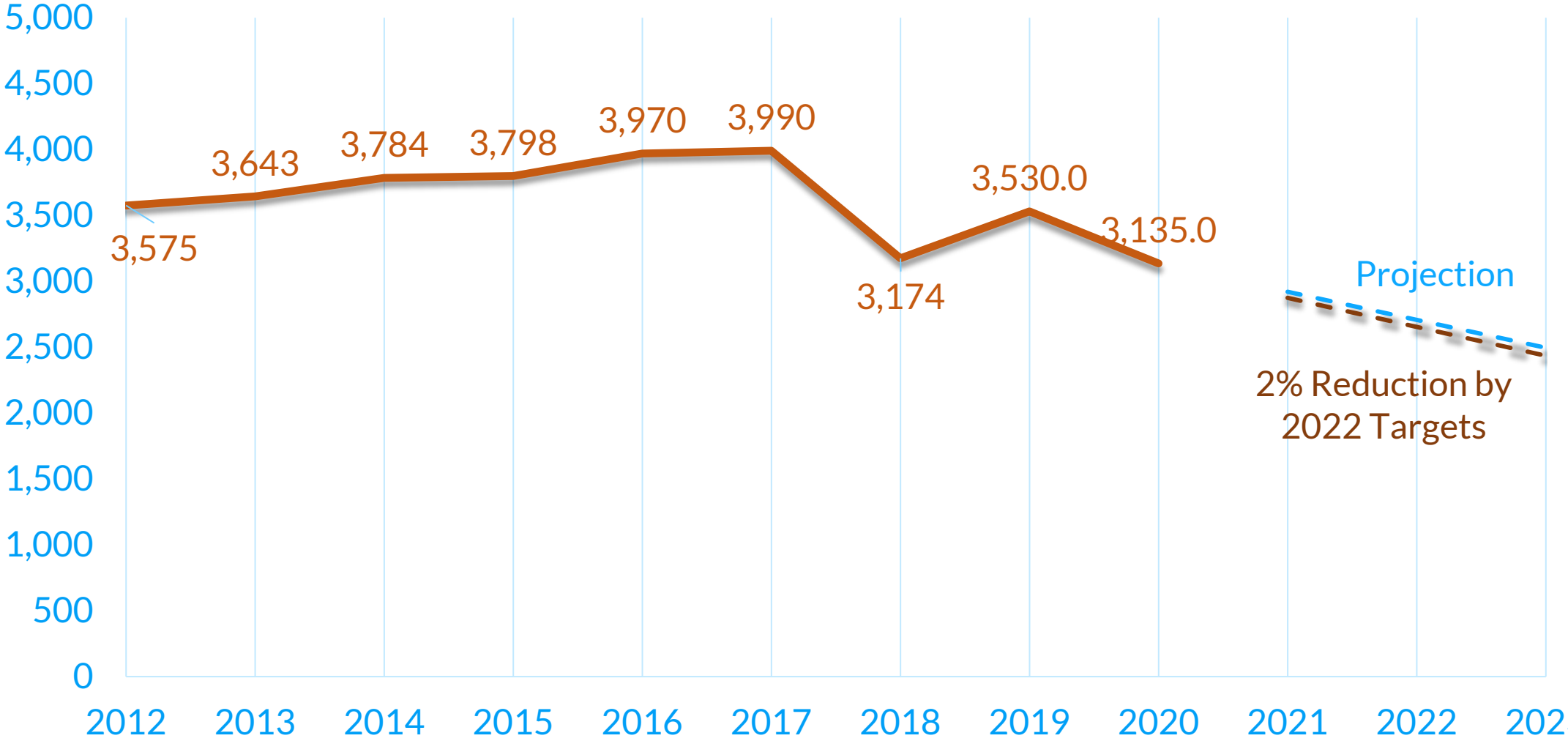
Future projections calculated using the previous 5 years of available data (2016-2020)

NCTCOG Region Fatality Rates - Actual Performance



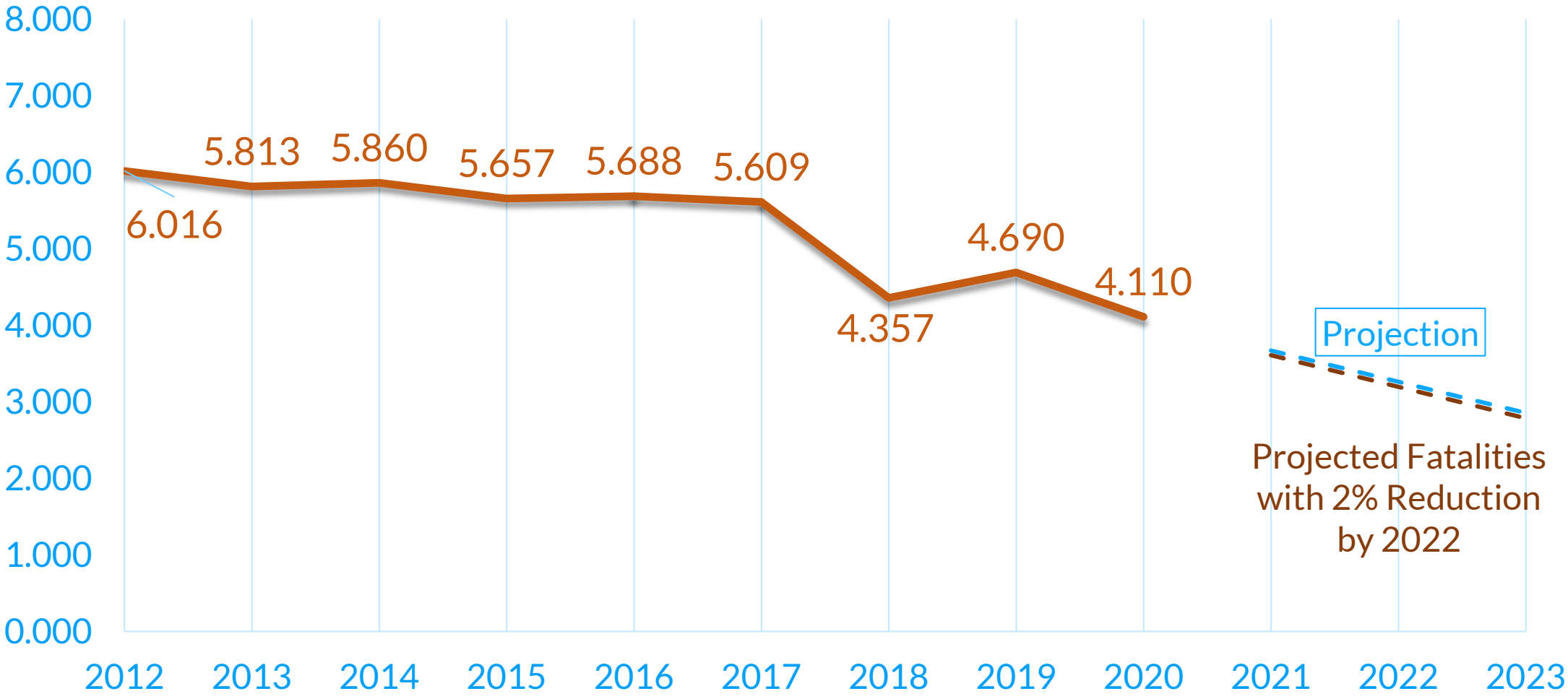
Future projections calculated using the previous 5 years of available data (2016-2020)

NCTCOG Region Serious Injuries - Actual Performance



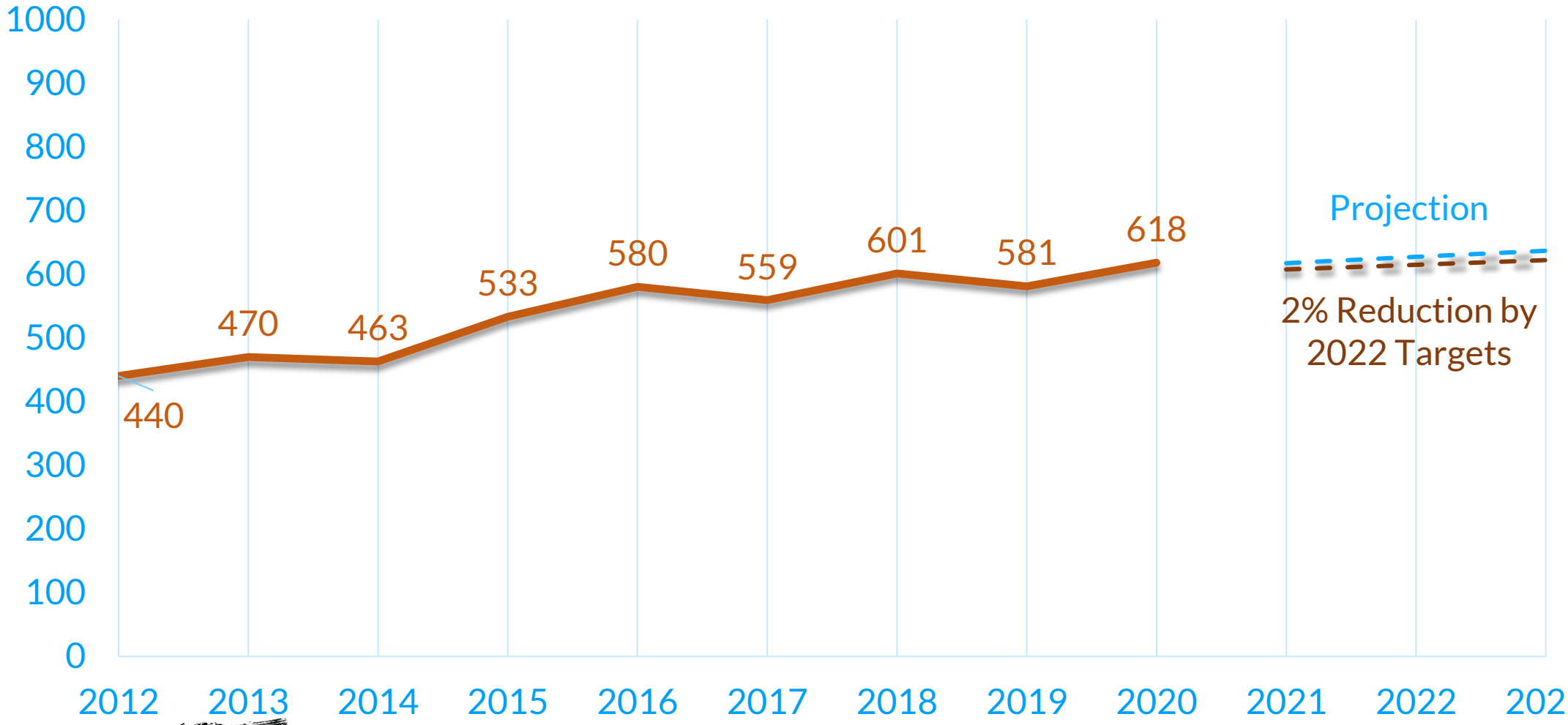
Future projections calculated using the previous 5 years of available data (2016-2020)

NCTCOG Region Serious Injury Rates - Actual Performance



Future projections calculated using the previous 5 years of available data (2016-2020)

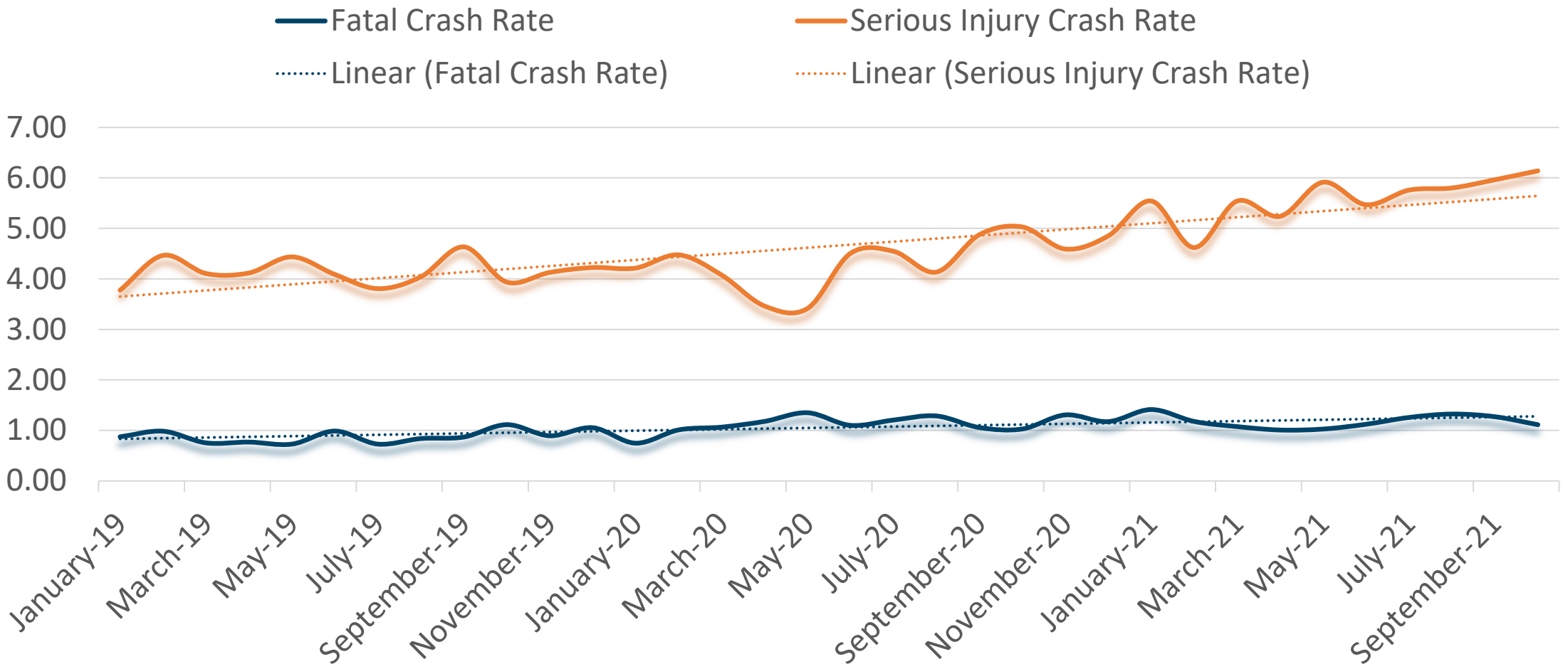
NCTCOG Region Non-motorized Fatalities and Serious Injuries - Actual Performance



Future projections calculated using the previous 5 years of available data (2016-2020)

NCTCOG Region Looking Forward: Fatal and Serious Injury Crash Rates

2019-2021



DRIVE AWARE north texas

Fatal and serious injury rates calculated per 100 million vehicle miles traveled.
VMT estimated by the NCTCOG Modeling Team to reflect monthly changes in traffic volumes experienced during Covid-19 effected traffic volume.s

NCTCOG Safety-Related Programs and Projects

Safety Program Area
* Regional Roadway Safety Plan
Drive Aware North Texas - Driver Behavior Social Marketing Campaign
Intersection Safety Implementation Plan
WWD Mitigation Project
Traffic Incident Management Training Program
Crash Reconstruction Software/Equipment Training Program
Incident Management Call for Projects
Commercial Vehicle Enforcement Training for Judges & Prosecutors
Commercial Vehicle Enforcement Equipment and Training Program
Mobility Assistance Patrol Program
Regional Safety Information System - Crash Database
Abandoned Vehicle Working Group / Regional Policy Development
Annual Safety Performance Report Publication
FHWA Safety Performance Target
Regional Safety Advisory Committee
* Vision Zero Program Development Workshop
* Vision Zero Regional Policy Resolution Development
* NCTCOG Systemic Safety Improvements Program
Air Quality
DFW Clean Cities
Emissions Enforcement

Bike and Pedestrian
Education and Outreach - Look Out Texans
Regional Pedestrian Safety Plan
Bike/Ped Technical Training/Workshops
Safety Spot Improvement Program
Transportation Alternative Funding CFPs
“Routes to Rail Stations” Study
Safe Routes to School
Bicycle and Pedestrian Advisory Committee
Congestion Management
Emerging Technology Investment Programs
Freeway Management & HOV Enforcement
Congestion Management Process
Peak Hour Lane Implementation
TSM / ITS
Regional Traffic Signal Retiming Program
Traffic Signal/Intersection Improvement Program
Traffic Signal Cloud Data
Transit
Public Transportation Agency Safety Plan (PTASP)

Freight
Fort Worth Rail Crossing Evaluation
Truck Lane Restrictions Planning
Freight Safety Initiative
Canyon Falls/US 377 and UPRR
Linfield Closing/Ped Crossing over UPRR
Prairie Creek Road Grade Separation
Streamlined Project Delivery
Denton County East-West Corridor
Automated Vehicles
AV 2.0
Texas Connected Freight Corridor: IH 30
AV Truck Data Sharing
Traffic Signal Data Sharing
Waze/511DFW Data Sharing
DSTOP
Aviation
Know Before You Fly (Your Drone) Workshops
UAS Safety and Integration Initiative/Task Force

*denotes an upcoming program, policy, or project

Date	NCTCOG Safety Performance Targets Actions to Date
December 2017	STTC/RTC (Action) - Presented 2018 Safety Performance Targets. * Affirmed support of 2018 TxDOT Targets
January/February 2019	STTC/RTC (Action) - Presented 2019 Safety Performance Targets. *Reaffirmed support of 2018 TxDOT Targets and affirmed support of 2019 – 2022 TxDOT Targets
January 24, 2020	RSAC/STTC (Information) - Presented 2020 Safety Performance Targets Update and 2018 preliminary safety targets vs. actual performance update to STTC. Item pulled from RTC due to special agenda
July 24, 2020	RSAC – Presented final safety targets vs. actual performance.
January/February 2021	RSAC/STTC/RTC (Information) - Present 2021 Safety Performance Targets Update and 2019 preliminary safety targets vs. actual performance update to STTC and RTC
January/February 2022	STTC/RTC (Information) - Present proposed 2022 Safety Performance Targets and 2020 preliminary safety targets vs. actual performance update to STTC and RTC
January/February 2023	STTC/RTC (Action) - Present proposed 2023 Safety Performance Targets and 2021 preliminary safety targets vs. actual performance update to STTC and RTC

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