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:
      o March 24-25, 2022, NCTCOG
      o April 21-22, 2022, Denton County
      o 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

- Texas Transportation Commission
- Metropolitan Planning Organizations
- TxDOT Districts and Divisions
- Friends of Task Force
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.
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
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 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.
<table>
<thead>
<tr>
<th>SERVICE PROVIDERS</th>
<th>OPERATORS</th>
<th>PROGRAM MANAGEMENT</th>
</tr>
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<tbody>
<tr>
<td>Hidden Level</td>
<td>City of Arlington</td>
<td>City of Arlington</td>
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<tr>
<td>Drone Detection</td>
<td>Tactical Public Safety Operations</td>
<td>Tactical Public Safety Operations</td>
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<td>CASA</td>
<td>NCTCOG Public Safety Unmanned Response Team</td>
<td>NCTCOG</td>
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<tr>
<td>Low Altitude Weather Monitoring</td>
<td>University of Texas at Arlington Research</td>
<td>University of Texas at Arlington</td>
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<td>Airspace Link</td>
<td>University of Texas at Arlington</td>
<td>Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere</td>
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<tr>
<td>Airspace and Operations Management</td>
<td>Causey Aviation</td>
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<tr>
<td>Live Earth</td>
<td>Causey Aviation</td>
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<td>Situational Awareness</td>
<td>Small Package Delivery</td>
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<td>AT&amp;T</td>
<td>Flytrex</td>
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<tr>
<td>5G, IOT, and Public Safety Communications</td>
<td>Small Package Delivery</td>
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<td>AT&amp;T</td>
<td>Flytrex</td>
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<tr>
<td>Autonomous Drone Platform*</td>
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<tr>
<td>Detect and Avoid*</td>
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</tbody>
</table>
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

The Ecosystem

The Operator

UAS

Unmanned Aircraft Systems
Safety + Integration
PLANNING & INFRASTRUCTURE DEPLOYMENT 5/2021 - 9/2021
• Identify Location for Sensors
• Training Sessions for platforms

DEPLOYMENT 5/2021 - 9/2021
• Plan demonstration activities, schedule and milestones

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

OTHER LINE OF SIGHT OPERATIONS 10/2021 - 9/2022
• University Manned LOS Operations
• Other LOS operations, i.e. package delivery

PUBLIC SAFETY BVLOS OPERATIONS 11/2021 - 8/2022
• Public Safety BVLOS Operations
• Remote Ops over people
• PSURT BVLOS Training

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

CLOSE OUT 9/2022
• Program Evaluations
• Stakeholder Interviews
• Share Lessons Learned with Public
• Examine Available Funding for continued operations

YEAR ONE Schedule

MAY JUNE JULY AUG SEPT OCT NOV DEC | JAN FEB MAR APR MAY JUNE JULY AUG
2021 2022
Use Cases

Public Safety

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

Commercial applications

• Package Delivery (last mile included)
• Medical Deliveries
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.
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
Contacts

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Aviation Planning and Education Program Manager
North Central Texas Council of Governments

ehuffman@nctcog.org
(817)704-5612

Visit www.northtexasuas.com for more information
Proven Safety Countermeasures Initiative 2021 Update
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

Source: FHWA
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

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.

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

Source: FHWA, TRB
New PSC Resources
Updated Site

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

Source: FHWA
Other Resources

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

Source: FHWA
Amelia (Millie) Hayes, P.E., PTOE, RSP$_{21}$
amelia.hayes@dot.gov

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

Source: Fotosearch
2021 INCIDENT MANAGEMENT
FREEWAY BLOCKING EQUIPMENT
CALL FOR PROJECTS RECOMMENDATIONS

Camille Fountain
Senior Transportation Planner
January 28, 2022
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

<table>
<thead>
<tr>
<th>Scoring Component</th>
<th>Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIM Training Attendance – NCTCOG or In-house Training (Since August 2013), TIM Self-Assessment Participation</td>
<td>20</td>
</tr>
<tr>
<td>Crash Data in Jurisdiction (2016 - 2020)</td>
<td>10</td>
</tr>
<tr>
<td>Adoption of Incident Management Resolution</td>
<td>10</td>
</tr>
<tr>
<td>Incident Management Goals/Targets in Place</td>
<td>5</td>
</tr>
<tr>
<td>Adoption/Implementation of Regional Performance Measure Standard Definitions</td>
<td>5</td>
</tr>
<tr>
<td>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) – <em>15 points for innovativeness (Non-fire truck vehicle deployment)</em></td>
<td>50</td>
</tr>
</tbody>
</table>

**Total Score** 100
Projects Approved for Funding

Minimum Project Score Considered for Project Funding is 70.

<table>
<thead>
<tr>
<th>City/Agency Name</th>
<th>Total Project Cost</th>
<th>Approved Project Cost (80%)</th>
<th>Equipment Requested</th>
<th>Quantity Requested</th>
<th>Project Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Frisco Fire (East)</td>
<td>$153,580</td>
<td>$122,864</td>
<td>Crash Attenuator Truck</td>
<td>1</td>
<td>94</td>
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<tr>
<td>City of Coppell Fire (East)</td>
<td>$112,334</td>
<td>$89,867</td>
<td>Highway Safety Attenuator/Arrowboard Combo</td>
<td>1</td>
<td>93</td>
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<tr>
<td>City of Dallas (Government Affairs) (East)</td>
<td>$375,000</td>
<td>$300,000</td>
<td>Scorpion/Truck Combo</td>
<td>3</td>
<td>92</td>
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<tr>
<td>City of Terrell Emergency Management (East)</td>
<td>$127,295</td>
<td>$101,836</td>
<td>Truck Mounted Attenuator (all-in-one)</td>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td>City of North Richland Hills Fire (West)</td>
<td>$136,441</td>
<td>$109,153</td>
<td>Truck Mounted Attenuator (all-in-one)</td>
<td>1</td>
<td>87</td>
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<tr>
<td>City of Lancaster Fire (East)</td>
<td>$112,217</td>
<td>$89,774</td>
<td>Attenuator Truck</td>
<td>1</td>
<td>86</td>
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<td>City of Euless Police (West)</td>
<td>$57,814</td>
<td>$46,251</td>
<td>Truck Mounted Crash Attenuator</td>
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<td>80</td>
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<td>City of Denton Fire (East)</td>
<td>$200,000</td>
<td>$160,000</td>
<td>Public Safety Blocker Unit (Truck/Attenuator)</td>
<td>1</td>
<td>73</td>
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<td>City of Garland Fire (East)</td>
<td>$450,000</td>
<td>$360,000</td>
<td>Scorpion Attenuator</td>
<td>3</td>
<td>71</td>
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<td>City of Grapevine Fire (West)</td>
<td>$40,292</td>
<td>$32,234</td>
<td>Scorpion II Model C</td>
<td>1</td>
<td>71</td>
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<td><strong>Total</strong></td>
<td><strong>$1,764,973</strong></td>
<td><strong>$1,411,979</strong></td>
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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
<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tr>
<td>July 23, 2021</td>
<td>Regional Safety Advisory Committee (Info) — IM Freeway Blocking Equipment CFP Notice</td>
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<tr>
<td>August 12, 2021</td>
<td>RTC (Action) — Request RTR Funds to Conduct CFP</td>
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<tr>
<td>August 27, 2021</td>
<td>STTC (Action) — Endorsement of RTC Action</td>
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<tr>
<td>September 3, 2021</td>
<td>Open Call for Projects (60 days)</td>
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<tr>
<td>September 13, 2021</td>
<td>IM Blocking Equipment CFP Forum</td>
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<tr>
<td>November 1, 2021</td>
<td>Close Call for Projects</td>
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<tr>
<td>Nov. 2 – Nov. 16, 2021</td>
<td>Evaluate Submitted Proposals</td>
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<tr>
<td>December 3, 2021</td>
<td>STTC (Action) — Approval of Selected Projects</td>
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<tr>
<td>December 13, 2021</td>
<td>Public Comment Period Begins</td>
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<tr>
<td>January 13, 2022</td>
<td>RTC (Action) — Approval of Selected Projects</td>
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<tr>
<td>January 28, 2022</td>
<td>TIP Mods Due</td>
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<tr>
<td>Late June/Early July 2022</td>
<td>Federal/State STIP Approval</td>
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<tr>
<td>July 2022</td>
<td>TTC Approval</td>
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<tr>
<td>Fall/Winter 2022</td>
<td>Agencies Execute Agreement with TxDOT</td>
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<tr>
<td>30 Days after executed agreement and/or 30 Days prior to FY noted in agreement</td>
<td>TxDOT Sends RTR Funding to City/Implementing Agency</td>
</tr>
<tr>
<td>Winter 2022</td>
<td>Agencies Purchase Blocking Equipment</td>
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</table>
Contact Information

https://www.nctcog.org/fimcfp

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Regional Safety Advisory Committee

FEDERAL HIGHWAY ADMINISTRATION SAFETY PERFORMANCE TARGETS UPDATE

Kevin Kroll | 1.28.2022
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<th>Rulemaking</th>
<th>Upcoming RTC Action</th>
<th>Next Anticipated RTC Action</th>
<th>Target-Setting Schedule</th>
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<tr>
<td>Transit Safety (PTASP)</td>
<td>May 2021</td>
<td>Early 2025</td>
<td>Every 4 Years</td>
</tr>
<tr>
<td><strong>PM1 – Roadway Safety</strong></td>
<td>February 2022 (Information)</td>
<td>Early 2023</td>
<td>Annual (Targets established as reductions over 5-year period)</td>
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<tr>
<td>Transit Asset Management (TAM)</td>
<td>Mid 2022</td>
<td>2026</td>
<td>Every 4 Years</td>
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<tr>
<td><strong>PM2 – Pavement and Bridge</strong></td>
<td>Late 2022</td>
<td>Late 2024</td>
<td>Biennial</td>
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<tr>
<td><strong>PM3 – System Performance, Freight, and CMAQ</strong></td>
<td>Late 2022</td>
<td>Late 2024</td>
<td>Biennial</td>
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</table>
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.
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

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Desired Improvement Trend</th>
<th>Current Trend*</th>
<th>2018 Target Met</th>
<th>2019 Target Met</th>
<th>2020 Target Met**</th>
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<tr>
<td><strong>State of Texas</strong></td>
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</tr>
<tr>
<td>1. No. of Fatalities</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>2. Fatality Rate</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>3. No. of Serious Injuries</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>4. Serious Injury Rate</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5. No. of Non-motorized Fatalities and Serious Injuries</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>North Central Texas (NCTCOG) Region</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. No. of Fatalities</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>2. Fatality Rate</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>3. No. of Serious Injuries</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Made Significant Progress</td>
<td>Yes</td>
<td>Made Significant Progress</td>
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<tr>
<td>4. Serious Injury Rate</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Made Significant Progress</td>
<td>Yes</td>
<td>Made Significant Progress</td>
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<tr>
<td>5. No. of Non-motorized Fatalities and Serious Injuries</td>
<td><img src="Up" alt="Upward Trend" /></td>
<td><img src="Up" alt="Upward Trend" /></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

*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

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>589.3</td>
<td>587.4</td>
<td>542.2</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Rate of Fatalities</td>
<td>0.803</td>
<td>0.803</td>
<td>0.784</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Number of Serious Injuries</td>
<td>3,514.7</td>
<td>3,560</td>
<td>3,743.2</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Rate of Serious Injuries</td>
<td>4.768</td>
<td>4.891</td>
<td>5.434</td>
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<td>Yes</td>
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<tr>
<td>Number of Non-Motorized Fatalities and Serious Injuries</td>
<td>595.0</td>
<td>587.8</td>
<td>547.2</td>
<td>Yes</td>
<td>No</td>
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</table>

Targets are based on 5-year rolling averages
Safety Performance Measures

Data Timeline

- Original 2020 Target calculated in Jan 2020
- PY2020 Actual Performance
- PY2014-2018 Baseline Performance
- 2021 Target
- 2022 Target
## NCTCOG and TxDOT Safety Performance Targets and Projections

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

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)
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

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
<table>
<thead>
<tr>
<th>Safety Program Area</th>
<th>Bike and Pedestrian</th>
<th>Freight</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Regional Roadway Safety Plan</td>
<td>Education and Outreach - Look Out Texans</td>
<td>Fort Worth Rail Crossing Evaluation</td>
</tr>
<tr>
<td>Drive Aware North Texas - Driver Behavior Social Marketing Campaign</td>
<td>Regional Pedestrian Safety Plan</td>
<td>Truck Lane Restrictions Planning</td>
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<tr>
<td>Intersection Safety Implementation Plan</td>
<td>Bike/Ped Technical Training/Workshops</td>
<td>Freight Safety Initiative</td>
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<tr>
<td>WWD Mitigation Project</td>
<td>Safety Spot Improvement Program</td>
<td>Canyon Falls/US 377 and UPRR</td>
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<tr>
<td>Traffic Incident Management Training Program</td>
<td>Transportation Alternative Funding CFPs</td>
<td>Linfield Closing/Ped Crossing over UPRR</td>
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<tr>
<td>Crash Reconstruction Software/Equipment Training Program</td>
<td><em>Routes to Rail Stations</em> Study</td>
<td>Prairie Creek Road Grade Separation</td>
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<tr>
<td>Incident Management Call for Projects</td>
<td>Safe Routes to School</td>
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<tr>
<td>Commercial Vehicle Enforcement Training for Judges &amp; Prosecutors</td>
<td>Bicycle and Pedestrian Advisory Committee</td>
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<tr>
<td>Commercial Vehicle Enforcement Equipment and Training Program</td>
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<tr>
<td>Mobility Assistance Patrol Program</td>
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<tr>
<td>Regional Safety Information System - Crash Database</td>
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<tr>
<td>Annual Safety Performance Report Publication</td>
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<tr>
<td>FHWA Safety Performance Target</td>
<td>Emerging Technology Investment Programs</td>
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<tr>
<td>Regional Safety Advisory Committee</td>
<td>Freeway Management &amp; HOV Enforcement</td>
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<tr>
<td>* Vision Zero Program Development Workshop</td>
<td>Congestion Management Process</td>
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<tr>
<td>* Vision Zero Regional Policy Resolution Development</td>
<td>Peak Hour Lane Implementation</td>
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<tr>
<td>* NCTCOG Systemic Safety Improvements Program</td>
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<tr>
<td>Air Quality</td>
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<td>DFW Clean Cities</td>
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<tr>
<td>Emissions Enforcement</td>
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<td>Transit</td>
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<tr>
<td>Public Transportation Agency Safety Plan (PTASP)</td>
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</tbody>
</table>

* denotes an upcoming program, policy, or project
<table>
<thead>
<tr>
<th>Date</th>
<th>NCTCOG Safety Performance Targets Actions to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2017</td>
<td>STTC/RTC (Action) - Presented 2018 Safety Performance Targets. * Affirmed support of 2018 TxDOT Targets</td>
</tr>
<tr>
<td>January 24, 2020</td>
<td>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</td>
</tr>
<tr>
<td>July 24, 2020</td>
<td>RSAC – Presented final safety targets vs. actual performance.</td>
</tr>
<tr>
<td>January/February 2021</td>
<td>RSAC/STTC/RTC (Information) - Present 2021 Safety Performance Targets Update and 2019 preliminary safety targets vs. actual performance update to STTC and RTC</td>
</tr>
<tr>
<td>January/February 2022</td>
<td>STTC/RTC (Information) - Present proposed 2022 Safety Performance Targets and 2020 preliminary safety targets vs. actual performance update to STTC and RTC</td>
</tr>
<tr>
<td>January/February 2023</td>
<td>STTC/RTC (Action) - Present proposed 2023 Safety Performance Targets and 2021 preliminary safety targets vs. actual performance update to STTC and RTC</td>
</tr>
</tbody>
</table>
Roadway Safety Team

Sonya J. Landrum
Program Manager
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Camille Fountain
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