REGIONAL SAFETY ADVISORY COMMITTEE
North Central Texas Council of Governments
Friday, July 23, 2021
10:00 am – 12:00 pm

Click here to join the meeting

Please MUTE your telephone during the meeting unless you are asking a question.

AGENDA

1. Approval of April 23, 2021 Meeting Summary – Asma Tuly, RSAC Chair

2. RSAC Member Introductions (Please turn on camera while introducing yourself.) – All

3. City of Grand Prairie Crash Attenuator Project (2020 CFP) – Captain John Stevenson, Grand Prairie Fire Dept.


5. Regional Ecosystem Framework Survey – Kate Zielke, NCTCOG Streamlined Project Delivery and Environmental Justice Team

6. Pedestrian Safety Action Plan Update – Matthew Fall, NCTCOG Sustainable Development

7. City of Dallas Vision Zero Crash Data Analysis – Kathryn Rush, City of Dallas POSTPONED TO OCT MTG

8. NCTCOG Regional Roadway Safety Plan Development – Kevin Kroll, NCTCOG Safety

9. 2021 Regional Blocking Equipment Call for Projects – Camille Fountain, NCTCOG

10. Update Items
   a) Predictive Crash Analysis Software RFP Update – Kevin Kroll, NCTCOG
   b) Traffic Incident Management Call for Projects Status Update – Camille Fountain, NCTCOG

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

12. Upcoming Safety-Related Events and Training Announcements
   a) 2021 Virtual ATSIP Traffic Records Forum
      o August 16-20, 2021
   b) Traffic Incident Management First Responder and Manager Course:
      o September 23 – 24, 2021, NCTCOG
      o October 21 – 22, 2021, NCTCOG

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

14. Next RSAC Meeting: October 22, 2021 at 10 am
Grand Prairie Fire Department
TMA Blocker Project

- **To provide a protective barrier for Emergency Responders during Highway Response Operations.**
  - Tens of thousands of collisions occur every year between regular drivers and police or fire vehicles. In 2017 alone, more than 15,000 fire department vehicles were involved in collisions nationwide, leading to 1,080 injury incidents and 18 deaths, including 10 cases of firefighters being directly struck by other vehicles. *(US DOT. 2014. Traffic Safety Facts)*

- **To provide a protective barrier which reduces the risk of injury and death to motorists on public roadways.**
  - Collision with another motor vehicle was the most common first harmful event for fatal, injury, and property-damage-only crashes. **Collisions with fixed objects accounted for only 17 percent of all crashes, but they accounted for 43 percent of fatal crashes.** *(US DOT. 2014. Traffic Safety Facts)*
The average comprehensive cost for a fatal collision involving a regular citizen is more than $11 million, but first responder collisions and deaths are much more costly for several reasons.

- Fire trucks can cost more than $2 million to replace.

- Emergency vehicle collisions often result in lawsuits that can incur settlements reaching millions of dollars in city and municipal costs and insurance payouts.

- Disability for injured emergency responders, training costs for new recruits, overtime pay to cover recovering responders, costs of operating reserve apparatus, and additional expenses related to collisions and struck-by incidents all contribute to the extra cost of these incidents.
Driver killed; 4 firefighters injured after car crashes into back of fire truck in Vermilion
Grand Prairie Fire Department
TMA Blocker Project
Grand Prairie Fire Department
TMA Blocker Project
Grand Prairie Fire Department
TMA Blocker Project
Grand Prairie Fire Department
TMA Blocker Project
Grand Prairie Fire Department
TMA Blocker Project

- TraFix Scorpion TMA’s are tested and approved for lateral impacts.
- DOT MASH certified
- TMA can be removed and replaced in less than 4 hours
- Vehicle roll-over protection
- Allows for re-use of blocking apparatus
- Provides a tested and approved crash attenuator for motorist safety.
- Total project cost for both blockers $65,000.
Grand Prairie Fire Department TMA Scorpion Project

Contact:
John Stevenson
jstevens@gptx.org
972-237-8315

Travis McCain
Gul Highway Equipment
travis@ghetx.com
682-708-8721
A Case Study of Waycare’s AI-based Traffic Management Operations in Nevada and Texas

Presented by Paul-Matthew Zamsky
Waycare is a cloud-based platform that provides AI solutions for proactive traffic management.

- Automated Incident Identification
- Crash Prediction and Forecasting
- Irregular Congestion Detection
- Collaborative Tools for Faster Response
Using AI to transform disparate sources of data into actionable traffic safety insights

Traffic Incidents  
Traffic Detectors  
Connected Vehicles  
Weather  
Construction  
Navigation Apps

Actionable Insights
- Incident Identification
- Traffic Disruption
- Crash Prediction
- Hazard Detection
- Notifications to other agencies, etc.
Case Study

Nevada Deployment
Our first deployment occurred in Southern Nevada in July 2017 and has since expanded in both project scope and territory.
We are now deployed throughout districts 1 & 2 and used by four regional agencies.
The Regional Transportation Commission of Southern Nevada (RTC) uses Waycare for traffic incident management.
Impact by the numbers:

Identifying incidents 9 minutes faster on average than reported CAD system - enabling faster and smarter incident response

Faster Incident Identification:
Waycare identified incidents on average 9.32 minutes faster

Increasing Incidents Identified:
Waycare identified 21% of all incidents

9.32 minutes faster on average

Quarters 1-4 of 2019

Quarter 1 of 2020

- Incidents identified by current TMC Sources
- Incidents identified first by Waycare sources
CTRMA Deployment & Use of Connected Vehicles
The Central Texas Regional Mobility Authority (CTRMA) is using Waycare in its Traffic & Incident Management Center.

- Faster incident detection and crash prediction
- Reduced response and clearance times
- Implementing anonymized data from connected vehicles
As part of the deployment, the platform is ingesting data from about 250,000 connected vehicles in the region every second.
Different sources of **in-vehicle data** provide powerful traffic safety insights

- Vehicle sensors
- Aftermarket telematics devices
- Dashboard camera
- IoT-enabled devices
- Crowdsourced Data
- Infotainment Systems
Different types of connected vehicle data for different use cases

**Aggregated**
Typically generated through probe data

- Traffic Flow / Speed
- Travel Time & Delays
- Length of Queues
- Traffic Volume

**Individual Car Data**
Rich data transmitted through connected vehicle sensors or aftermarket telematics devices

- Location (Lat/Long)
- Speed / Heading
- Driver Behavior *
- Additional Metadata *

* Acceleration, Deceleration, Harsh Braking, Automated Emergency Brake, Traction control
* Fuel level, wiper speed, seat belts status
CV technology is a useful tool for understanding unusual driving behaviors which could signify a problem on the roadway.

By one estimate, connected vehicles (in-built and ODB2 combined) generate an average of 259 TB of data per day.

- Harsh braking
- Fast Acceleration
- Irregular steering
- Intersection wait-times
- Vehicle direction
Visualization:
Using individual car data to automatically identify incidents faster
Thank You

Paul-Matthew Zamsky
Head of Strategic Partnerships,
paul.zamsky@waycaretech.com
waycaretech.com
Help guide development of the Regional Ecosystem Framework (REF), an environmental screening tool for North Central Texas.

The North Central Texas Council of Governments is updating the REF tool and the online one-stop-shop for environmental data, to better meet users’ needs. Learn more at www.nctcog.org/REF. Please complete the survey at the link below. NCTCOG would benefit from your opinions even if you do not use these tools. The survey should take about 5-10 minutes to complete.

Survey link: https://form.jotform.com/211364644456053

Please respond by July 30, 2021
REGIONAL PEDESTRIAN SAFETY ACTION PLAN

Regional Safety Advisory Committee

July 23, 2021
Pedestrian Traffic Fatalities: 2020 U.S. Preliminary Data

Though there were far fewer cars on the road in 2020, the pedestrian fatality rate (per 1 billion vehicle miles traveled) jumped 20%.

2016 | 2017 | 2018 | 2019 | 2020*

*2.2 Jan-June 2020 compared to 1.8 Jan-June 2019

Percentage increase in number of fatalities (2010-2019)

5% All Other Traffic Deaths

Percentage of Pedestrians

46% 45% 40% 35% 30% 25% 20% 15% 10% 5% 0%

Source: NHTSA Fatality Analysis Reporting System

NCTCOG.org/PedSafetyPlan
Regional Pedestrian Safety Action Plan

- **Dallas and Fort Worth** are designated by FHWA as **Pedestrian Safety Focus Cities**
- NCTCOG initiated the regional Pedestrian Safety Action Plan (PSAP) in response to a decade of increasing numbers of reported pedestrian-involved crashes and fatalities

**BENEFITS OF THE PLAN**
- Complements Mobility 2045
- Enhances Mobility 2045 goals and policies with a more targeted focus on pedestrian safety
- Creates a specific roadmap for activities, investments, and improvements in the region
- Creates a guide/template for partners to develop detailed local plans

7 States Account for 54% of Pedestrian Deaths, Jan-June 2020
Key Elements of the Regional Plan

1. Demographics and contributing factors based on reported crashes

2. Crash density maps as a visual aid in identifying crashes per square mile

3. Goals and Policies in support of RTC safety position and regional coordination:
   - RTC “encourages the implementation of all reasonable pedestrian safety countermeasures that enable the region to achieve adopted safety performance targets” [From PSAP: RTC action item approved June 10, 2021]

4. Priority Pedestrian safety corridors: based on density of highest reported crash history

5. Action Plan to guide projects and programs that will address pedestrian safety issues
Pedestrian Crashes and Fatalities
12-County MPA

7,072
TOTAL PEDESTRIAN CRASHES IN MPA from 2014-2018
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

672
TOTAL PEDESTRIAN FATALITIES REGIONWIDE from 2014-2018
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

1 in 5 of ALL FATALITIES for all modes of travel is a PEDESTRIAN
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

AGE RANGE with the highest number of FATAL AND SERIOUS INJURY PEDESTRIAN CRASHES is
23-29 for MALES
and
25-33 for FEMALES
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

70% of All Fatal & Serious Injury Pedestrian Crashes involve MALES
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

NCTCOG.org/PedSafetyPlan
Pedestrian Crashes and Fatalities
12-County MPA

95% of Fatal & Serious Crashes are Happening IN URBAN AREAS
Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

More than 2/3 of FATAL & SERIOUS INJURY PEDESTRIAN CRASHES are happening at NON-INTERSECTIONS
Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

Nearly 2/3 of all pedestrian crashes and 80% of fatal pedestrian crashes happen in DARK LIGHTING CONDITIONS
Source: TxDOT’s Crash Records Information System (CRIS) for MPA region from 2014-2018

NCTCOG.org/PedSafetyPlan
Pedestrian Safety Opinion Survey

Online MetroQuest survey facilitated by TxDOT was conducted during:
May – July 2019

Five sections to complete: 5-7 minutes

Number of Participants: 1,045

Gender of respondents:
56% Female, 44% Male

Age of Respondents evenly distributed between 25-64

NCTCOG.org/PedSafetyPlan
Opinion Survey: Key Results

Respondents noted:

...they would like to TRAVEL MORE ON FOOT

...they would walk more if there were MORE SIDEWALKS AND TRAILS

...the ABSENCE of sidewalks and trails is the most significant BARRIER to walking more often

...they are NOT COMFORTABLE using paved shoulders (prefer WIDE SIDEWALKS and SHARED-USE PATHS)

... all SAFETY MEASURES are HIGHLY PREFERRED (crosswalk striping, midblock pedestrian signals, pedestrian lighting & vertical separations from traffic)

...EDUCATIONAL OUTREACH should be aimed at ALL roadway users (pedestrians, bicyclists, drivers)
TxDOT Research Project: North Texas Bicycle and Pedestrian Crash Analysis (R1-6983)

• Led by TxDOT’s Research and Technology Implementation Division
• Manually coded five years of crash records from TxDOT’s Crash Records Information System (CRIS) using FHWA’s Pedestrian and Bicycle Crash Analysis Tool (PBCAT)
• Identified the most common crash types, locations, contributing factors, and demographics of individuals involved in crashes
• Methodology to identify “High-Risk Incidence Crash Corridors”
• Identified a list of possible countermeasures for each corridor, based on the identified crash types/attributes

NCTCOG.org/PedSafetyPlan
Areas examined for high-risk crash corridors

Legend
- Counties
- Urbanized Area

Crashes per Square Mile
- 0
- 1-9
- 10-16
- 20-46
- 60-99
- 100+

NCTCOG 12 County Metropolitan Planning Area

1) Source: TxDOT's Crash Records Information System - 2014 - 2018 data is current as of January 2019. All TxDOT disclaimers apply.
2) Data displayed contains reportable crashes with latitude and longitude information. Additional crashes may have occurred.
3) This data is composed of TxDOT "Reportable Crashes" that occur or originate on a traffic way, result in injury to or death of any person, or damage to the property of any person to the apparent extent of $1,000.
## Ranking Corridors for Future Road Safety Audits:

<table>
<thead>
<tr>
<th>Corridor/Street Name</th>
<th>City</th>
<th>On/Off-System</th>
<th>Number of Lanes</th>
<th>Length (Miles)</th>
<th>Total Crashes</th>
<th>Avg # of Crashes Per Mile</th>
<th>Avg # of Crashes Per Mile (Points 60)</th>
<th>Proximity to Educational Centers (in Feet)</th>
<th>Proximity to Educational Centers (Points 20)</th>
<th>Proximity to Public Transportation (in Feet)</th>
<th>Proximity to Public Transportation (Points 20)</th>
<th>Total (100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamar St.</td>
<td>Dallas</td>
<td>Off</td>
<td>4</td>
<td>1.16</td>
<td>43</td>
<td>37.22</td>
<td>60</td>
<td>127</td>
<td>19</td>
<td>5</td>
<td>20</td>
<td>99</td>
</tr>
<tr>
<td>Main St.</td>
<td>Fort Worth</td>
<td>Off</td>
<td>4</td>
<td>0.45</td>
<td>20</td>
<td>44.19</td>
<td>60</td>
<td>2297</td>
<td>0</td>
<td>32</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Locust St</td>
<td>Denton</td>
<td>On</td>
<td>3</td>
<td>1.67</td>
<td>10</td>
<td>5.99</td>
<td>10</td>
<td>103</td>
<td>19</td>
<td>22</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>Spring Valley Rd.</td>
<td>Richardson</td>
<td>Off</td>
<td>4</td>
<td>2.15</td>
<td>17</td>
<td>7.91</td>
<td>10</td>
<td>811</td>
<td>8</td>
<td>4</td>
<td>20</td>
<td>38</td>
</tr>
<tr>
<td>N Center St</td>
<td>Arlington</td>
<td>Off</td>
<td>3</td>
<td>2.25</td>
<td>8</td>
<td>3.55</td>
<td>10</td>
<td>45</td>
<td>20</td>
<td>1321</td>
<td>0</td>
<td>30</td>
</tr>
</tbody>
</table>
Plan Goals:

1. **Eliminate** all serious injury and fatal pedestrian crashes across the region by 2050 (Supports RTC and the TxDOT/TTC safety goals)

2. **Balance the safety and needs** of all users of all ages and abilities in the transportation system design, maintenance and operation phases, with priority given to the most vulnerable users

3. **Provide a high level of comfort** in the design, construction and maintenance of transportation facilities

4. **Integrate** within roadway design the most direct facility alignments that prioritize safe pedestrian movements

5. **Implement** all reasonable pedestrian safety countermeasures to achieve adopted regional safety performance targets

NCTCOG.org/PedSafetyPlan
### Plan Policies:
(Infrastructure and Non-Infrastructure Projects and Programs)

<table>
<thead>
<tr>
<th></th>
<th>Education/Evaluation/Encouragement</th>
<th>Enforce Safety Policies, Promote Safe Travel, and Increase Public Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Collaborate to implement the Plan</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Develop educational programs and resources</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Integrate proven safety countermeasures as part of all future roadway projects</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Prioritize implementation of safety countermeasures along the regional pedestrian safety corridors</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Perform Multimodal Level of Service (MMLOS) analysis as part of the roadway design process</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Provide law enforcement information and training of the laws concerning the most vulnerable roadway users</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Support state legislation on safety topics (lower speed limits in urban districts, motorists to stop/ yield to pedestrians, the use of a wireless communication device while operating a motor vehicle)</td>
<td></td>
</tr>
</tbody>
</table>

NCTCOG.org/PedSafetyPlan
Plan Action Items:
(Infrastructure and Non-Infrastructure Projects and Programs)

<table>
<thead>
<tr>
<th></th>
<th>Education/ Evaluation/ Encouragement</th>
<th>Engineering</th>
<th>Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop performance measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Coordinate/support educational programs/campaigns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Coordinate/support policies, programs and marketing campaigns aimed at students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Update the PSAP at least every five years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Conduct annual monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Facilitate projects and programs that improve pedestrian safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Conduct Roadway Safety Audits (RSA) for the pedestrian safety corridors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Implement safety improvements in the pedestrian safety corridors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>RTC legislative program related to safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Information for law enforcement personnel (pedestrian rights/responsibilities and pedestrian crash reporting)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Top 5 Takeaways:

- Residents desire to walk more. They want a more connected, safe, and comfortable pedestrian network.

- Target projects based on common conditions in crashes, and programs towards demographics frequently involved in crashes (findings from crash data analysis).

- Pedestrian Level of Service (comfort) should be considered and prioritized within future roadway design.

- Regionally significant (high-risk) corridors should be prioritized in project selection.

- Local Governments are encouraged to develop local PSAPs.
## Project Schedule

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2019:</td>
<td>PSAP Stakeholder Committee Meeting #1</td>
</tr>
<tr>
<td>May 6 – July 5, 2019:</td>
<td>Online public opinion safety survey</td>
</tr>
<tr>
<td>May 2020:</td>
<td>PSAP Stakeholder Committee Meeting #2</td>
</tr>
<tr>
<td>January 2021:</td>
<td>PSAP Stakeholder Committee Meeting #3 (Final)</td>
</tr>
<tr>
<td>February 24, 2021:</td>
<td>BPAC Briefing</td>
</tr>
<tr>
<td>April 23, 2021:</td>
<td>STTC Information</td>
</tr>
<tr>
<td>May 13, 2021:</td>
<td>RTC Information</td>
</tr>
<tr>
<td>May 28, 2021:</td>
<td>STTC Action to Recommend RTC Endorse Plan</td>
</tr>
<tr>
<td>June 10, 2021:</td>
<td>RTC Action to Endorse Plan</td>
</tr>
<tr>
<td>2021-2022:</td>
<td>Road Safety Audits for Select Corridors (Currently Underway!)</td>
</tr>
<tr>
<td>2022:</td>
<td>Integration into Mobility Plan (2045 Update)</td>
</tr>
</tbody>
</table>

NCTCOG.org/PedSafetyPlan
Thank You!

Contacts

Karla Weaver, AICP
Senior Program Manager
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Matt Fall
Senior Transportation Planner
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Kevin Kokes, AICP
Program Manager
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Bobby Kozub
Transportation Planner
rkozub@nctcog.org
NCTCOG ROADWAY SAFETY PLAN DEVELOPMENT

Regional Safety Advisory Committee
July 23, 2021

Kevin Kroll | Senior Transportation Planner
Purpose and Need

• Federal safety performance measure targets were established in 2016. These new performance management requirements were designed to ensure that State DOTs and Metropolitan Planning Organizations (MPO) choose the most efficient investments for Federal transportation funds.

• Regional Transportation Council 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.”

• RTC provided funding for the development of a Roadway Safety Plan and towards future safety projects
NCTCOG Roadway Safety Plan Development Process

Task 1  Conceptualization
• Project initiation and work plan
• Research and background

Task 2  Development
• Crash data analysis
• Stakeholder Input
• Development of crash mitigation strategies and countermeasures

Task 3  Implementation
• Implementation of projects and programs based on Roadway Safety Plan findings

Task 4  Review
• Ongoing iterative review of plan and implementation
• Before and after analysis
FHWA Road Safety Plan Guidance

Welcome to the local road safety plan do-it-yourself website! We are so happy you are here. On this site, you’ll find everything you need to make a plan that fits your community and gets people home safely. Watch the video below to learn how to use the site and build your plan. If you need help, contact us anytime.

How to Use This Site

LOCAL ROAD SAFETY PLANS: Your Map to Safer Roadways

Introduction to the Safe System Approach

Tribal Transportation Safety Plans with Adam Larsen

Tools and Resources

Guides & Training

LRSP Examples

LRSP Sites
# Review of Safety Plans

<table>
<thead>
<tr>
<th>Other Cities/MPOs</th>
<th>Texas</th>
<th>NCTCOG Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Boston</td>
<td>Texas Strategic Highway Safety Plan (SHSP)</td>
<td>Pedestrian Safety Action Plan (NCTCOG)</td>
</tr>
<tr>
<td>New York Metropolitan Transportation Council</td>
<td></td>
<td>Existing and/or upcoming City/District Vision Zero plans</td>
</tr>
<tr>
<td>Kansas City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hillsboro County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2017 Texas SHSP Emphasis Areas

- Distracted Driving
- Intersection Safety
- Pedestrian Safety
- Impaired Driving
- Older Road Users
- Roadway and Lane Departures
- Speeding

https://www.texasshsp.com/emphasis-areas/
NCTCOG Emphasis Areas

What other local emphasis areas should we focus on?

Helpful tools:
• Crash Data Summary Template Tool
• Crash Tree Diagram Tool

https://safety.fhwa.dot.gov/LRSPDIY/#
This table shows CRIS crash data for the 12-county NCTCOG area, 2016-2020

An attribute is overrepresented if the proportion of fatal and serious injury crashes is either five percent or more than two times the proportion of total crashes.

<table>
<thead>
<tr>
<th>Weather Condition</th>
<th>NCTCOG Area</th>
<th>All Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>15,009</td>
<td>45,356</td>
</tr>
<tr>
<td>Cloudy</td>
<td>10,885</td>
<td>39,143</td>
</tr>
<tr>
<td>Rain</td>
<td>15,729</td>
<td>64,907</td>
</tr>
<tr>
<td>Steet/Hail</td>
<td>13,158</td>
<td>57,741</td>
</tr>
<tr>
<td>Snow</td>
<td>19,058</td>
<td>47,740</td>
</tr>
<tr>
<td>Fog</td>
<td>18,073</td>
<td>1,264</td>
</tr>
<tr>
<td>Blowing Sand/Snow</td>
<td>15,009</td>
<td>846</td>
</tr>
<tr>
<td>Severe Crosswinds</td>
<td>15,123</td>
<td>1,245</td>
</tr>
<tr>
<td>Other (Explain in Narrative)</td>
<td>12,182</td>
<td>251</td>
</tr>
<tr>
<td>Unknown</td>
<td>16,158</td>
<td>1,245</td>
</tr>
<tr>
<td>First Harmful Event</td>
<td>58</td>
<td>2,270</td>
</tr>
<tr>
<td>Animal</td>
<td>58</td>
<td>0.3%</td>
</tr>
<tr>
<td>Fixed Object</td>
<td>18,058</td>
<td>2.5%</td>
</tr>
<tr>
<td>Motor Vehicle in Transport</td>
<td>4,886</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other Non Collision</td>
<td>58</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other Object</td>
<td>58</td>
<td>0.3%</td>
</tr>
<tr>
<td>Overturned</td>
<td>13,339</td>
<td>9,094</td>
</tr>
<tr>
<td>Parked Car</td>
<td>4,254</td>
<td>12,082</td>
</tr>
<tr>
<td>Pedalcyclist</td>
<td>2,294</td>
<td>6,302</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>24</td>
<td>222</td>
</tr>
<tr>
<td>Hit Run</td>
<td>24</td>
<td>222</td>
</tr>
</tbody>
</table>

Identifies overrepresentations of fatal and serious injury crashes within NCTCOG area

Identifies overrepresentations of crashes compared to the state and/or peer locations
Crash Tree Diagram Tool
Next Steps

**Analyze**
- Continue to analyze crash data and identify opportunities to improve roadway safety

**Collaborate**
- Solicit stakeholder feedback on safety issues and countermeasures

**Plan**
- Identify proven countermeasures for each emphasis area

**Implement**
- Screen and prioritize candidate safety projects and programs
NCTCOG Safety Program Contacts

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2021 NCTCOG INCIDENT MANAGEMENT BLOCKING EQUIPMENT CALL FOR PROJECTS

Regional Safety Advisory Committee
July 23, 2021

Camille Fountain, Transportation Planner
$1M Available Based on Local Government Interest Resulting from the 2020 IM 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 Practice Equipment and Technology

Emphasizes: Importance of Implementing Incident Management Strategies and Training
Eligible Recipients

• Public Sector Partner Agencies within the NCTCOG 10-County Nonattainment Area Actively Involved in Incident Management
  • Police, Fire/EMS, Courtesy Patrol, etc.

Eligible Activities

• Purchase of Scene Management Blocking Equipment to Provide Protection to Incident Responders Responding to Traffic Crashes, While Not Adding Additional Fire-Truck Lighting
  ➢ Examples include: crash attenuators, crash barriers, crash cushions, brooms/sweepers, etc.

Ineligible Activities

• Personnel and Staffing Charges
• Fire Trucks/Engines
Blocking Equipment Recommendations

Eligible Blocking Equipment Recommendations
• Blocking Equipment Should Minimize the Need for a Fire Apparatus on Scene Solely for the Purpose of Blocking

Eligible Blocking Equipment Recommendation Benefits
• Removes the Possibility of a Fire Apparatus Being Struck
• Minimizes Additional Lighting On-Scene
  ➢ Lighting Can be Distracting to Motorists
  ➢ Lighting Can Attract Intoxicated Motorists ‘To’ a Scene vs. ‘Away From’
• Blocking Equipment Placed on ‘Non-Fire Truck’ Vehicles Will be Scored Higher Than Equipment Placed on Fire Trucks When Ranking Projects
<table>
<thead>
<tr>
<th>Scoring Component</th>
<th>Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIM Training Attendance - NCTCOG or In-house (Since August 2013)</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 Incident Responders</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
## Proposed Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 23, 2021</td>
<td>Regional Safety Advisory Committee (Information) – IM Blocking Equipment CFP Notice</td>
</tr>
<tr>
<td>August 12, 2021</td>
<td>RTC (Action) – Request Approval to Conduct Blocking Equipment CFP/RTR Funds</td>
</tr>
<tr>
<td>August 27, 2021</td>
<td>STTC (Action) – Request Endorsement of RTC Approval to Conduct Blocking Equipment CFP/RTR Funds</td>
</tr>
<tr>
<td>August 30, 2021</td>
<td>Open Call for Projects (60 days)</td>
</tr>
<tr>
<td>September 13, 2021</td>
<td>IM Blocking Equipment CFP Forum</td>
</tr>
<tr>
<td>October 28, 2021</td>
<td>Close Call for Projects</td>
</tr>
<tr>
<td>Nov. 1 – Nov. 19, 2021</td>
<td>Evaluate Submitted Proposals</td>
</tr>
<tr>
<td>December 3, 2021</td>
<td>STTC (Action) – Proposed Selected Projects</td>
</tr>
<tr>
<td>December 13, 2021</td>
<td>Public Comment Period Begins</td>
</tr>
<tr>
<td>January 13, 2022</td>
<td>RTC (Action) – Proposed Selected Projects</td>
</tr>
<tr>
<td>January 28, 2022</td>
<td>TIP Mods Due</td>
</tr>
<tr>
<td>Early June 2022/Mid-June 2022</td>
<td>FHWA Approval</td>
</tr>
<tr>
<td>August 2022</td>
<td>TTC Approval</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>Execute Agreement with TxDOT</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>TxDOT Sends RTR Funding to City/Implementing Agency</td>
</tr>
<tr>
<td>Winter 2022</td>
<td>Cities Purchase Blocking Equipment</td>
</tr>
</tbody>
</table>
Funding Allocation

As per Federal Highway Administration (FHWA) Buy America compliancy requirements for equipment or manufactured products which incorporate iron or steel, 100 percent of any iron or steel must be domestically produced and manufactured.

Due to FHWA Buy America compliancy requirements related to iron or steel, staff recommends that the Incident Management Blocking Equipment Pilot Project be funded using non-federal funding sources.
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