AGENDA

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

2. City of Dallas Vision Zero Crash Data Analysis – Kathryn Rush, City of Dallas

3. FHWA MLK Blvd Road Safety Audit Overview – Julie Anderson, NCTCOG Sustainable Development

4. NCTCOG Roadway Safety Plan Crash Data Analysis – Kevin Kroll, NCTCOG Safety

5. Drive Aware North Texas Program Development – Michael Misantonis, NCTCOG Safety

6. Mobile Barrier Pilot Overview – Katherine Beck, NCTCOG Program Administration

7. Update Items
   a) Predictive Crash Analysis Software Request for Proposals Update – Kevin Kroll, NCTCOG
   b) NCTCOG Blocking Equipment CFP Deadline Reminder – Camille Fountain, NCTCOG
   c) 2021 Traffic Incident Management Self-Assessment Participation Reminder (points available) – Camille Fountain, NCTCOG
   d) 2021 TxDOT HSIP Call for Projects Deadline Reminder – Camille Fountain, NCTCOG
   e) Our Driving Concern Safety Training Material, Sonya Landrum, NCTCOG
   f) Regional Traffic Incident Management Attendance Outreach – Britney Lawrence, 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 October 21 – 22, 2021, NCTCOG
   b) FHWA Talking TIM Webinar, October 27, 2021
   c) 2021 NCT Regional Traffic Incident Management Self-Assessment, Oct. 28, 2021
   d) 2021 NCTCOG Incident Management Blocking Equipment CFP Deadline, November 1, 2021
   e) Traffic Incident Management Executive Level Course, November 4, 2021
   f) Crash Responder Safety Week (CRSW), November 8-14, 2021
   g) 2022 Lifesavers National Conference, March 13-15, 2022

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

11. Next RSAC Meeting: January 21, 2022, at 10 am
Dallas Vision Zero Action Plan
Crash and Survey Data Analysis

Regional Safety Advisory Committee
October 22, 2021
Presentation Outline

• Introduction to Vision Zero Dallas
• Crash Data Analysis Methodology
• Severe Crashes in Dallas:
  – WHO
  – WHEN
  – WHERE
  – HOW
  – WHY
• Public Survey Responses
• Focus Areas for Vision Zero Action Plan
Dallas City Council passed a Vision Zero Resolution in December 2019.

- Committed the City to a goal of zero traffic fatalities and a 50% reduction in severe injuries by 2030.

- Directed the City Manager to:
  - Develop a Vision Zero Action Plan by December 2021
  - Convene a Vision Zero Task Force that will collaborate with city departments on the development of a Vision Zero Action Plan
  - Direct city departments to participate in Vision Zero Action Plan development, implementation, and evaluation
Intro to Vision Zero Dallas

Vision Zero Action Plan (VZAP): A course of action for how we will meet the Vision Zero goal. Scope of work:

1. **Public and stakeholder engagement**: Task Force, public survey and interactive comment map, public meetings, etc.

2. **Crash data analysis** and identification of focus areas (locations and topics).


4. **Assessment of existing policies, programs, practices**.

5. **Draft Recommendations**: formulate strategies and policies, and create an implementation plan with department/agency buy-in.

6. **Prepare the Vision Zero Action Plan**.
Crash Data Analysis Methodology

• Data Source: TxDOT Crash Records Information System CRIS. Data was cleaned by City of Dallas staff.

• The following filters were applied to extract the crash data used in the analysis:
  1. Crashes located in the City of Dallas.
  2. Crashes that were not on limited-access roadways (e.g., non-interstate roadways).
  4. Crashes in which the “Injury Severity” in the crash report was listed as Killed or Incapacitating. (Which will be collectively referred to as Severe Crashes.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Crashes</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2019</td>
<td>184,447</td>
<td>485,855</td>
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<tr>
<td></td>
<td>131,997</td>
<td>339,245</td>
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<tr>
<td>Killed</td>
<td>890</td>
<td>956</td>
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<td>Killed – Total</td>
<td>569</td>
<td>614</td>
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<td>Serious Injury</td>
<td>4,478</td>
<td>5,395</td>
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<tr>
<td>Serious Injury – Total</td>
<td>3,433</td>
<td>4,122</td>
</tr>
<tr>
<td>Killed + Severe Injury – Total</td>
<td>5,368</td>
<td>6,351</td>
</tr>
<tr>
<td>Killed + Severe Injury – not on limited access highways</td>
<td>4,002</td>
<td>4,736</td>
</tr>
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</table>
Severe Crashes in Dallas: WHO

• **Pedestrians:** Looking at how people travel in Dallas, pedestrians are significantly overrepresented in severe crashes.

• **People of Black and African American Race/Ethnicity:** People identifying as Black or African American are most likely to be involved in severe crashes (37%), despite only accounting for 24% of the City’s population (2019 ACS 5-Year Estimates).

Source: 2019 ACS 5-Year Estimate
Severe Crashes in Dallas: WHEN

- **Just After Sunset:** More severe and fatal injuries occur between sunset and midnight than any other part of the day, with the highest density of severe crashes occurring from 6:00 pm to 9:00 pm.

- There is a spike in crashes in late fall and early spring.

- However, in police reports lighting was not reported to be an issue. 51% of severe crashes occurred when it was light outside.
Severe Crashes in Dallas: WHERE

- The High Injury Network (HIN) identifies streets where disproportionate number of severe crashes have occurred, and where investments in safety are most urgent. 60% of severe crashes occurred on 8% of streets.
- More than half of severe crashes occur on principal arterials.
Severe Crashes in Dallas: HOW

The following behaviors were found in the highest percentage of severe crashes.

1. **Speeding Related** (Failed to Control Speed, Speeding Over Limit, or Unsafe Speed): 19%
2. **Driving Under the Influence** (Drugs, Alcohol, or Had Been Drinking): 14%
3. Failure to drive in a single lane: 12%
4. Pedestrian failure to yield the right of way to vehicles: 11%
5. Failure to yield when turning left: 10%
6. Running a red light: 10%
Severe Crashes in Dallas: WHY are they severe?

Traveling at Higher Speeds
• The higher the speed, the more likely a crash will occur and the more severe it will be.

Not Using Proper Restraints
• When people do not wear a seatbelt, they increase their chance of death from less than 1% to over 10%!
• 14% of people that were killed or severely injured were not wearing a seat belt.
Public Survey Responses

• An online survey and interactive comment map were open June 9, 2021 through August 16, 2021.

• 1,692 responses were received to the survey, and the interactive map had 281 comments.

• When asked what the top three challenges to moving safely around Dallas are, 66% said “**People driving too fast**,” followed by 64% who said “**Distracted drivers**.”
Focus Areas for Vision Zero Action Plan

Seven **Topic Focus Areas** were identified through the crash data analysis and public survey, with additional input from the Vision Zero Task Force.

1. **Speeding/Unsafe Travel Speeds** (19% of crashes)
2. **Pedestrians** (36% of crashes)
3. **Left-Turn Crashes** (10% of crashes)
4. **Red Light Running** (10% of crashes)
5. **Under the Influence** (14% of crashes)
6. **Not Using Proper Restraints** (e.g., Seat Belt, Car Seat) (16% of crashes)
7. **Distracted Driving** (only 5% in crash data, but a top priority in the survey)
Focus Areas for Vision Zero Action Plan

Geographic Focus Areas – “Hot Spot Locations”

• **High-Injury Network (HIN)**

• **High Priority Corridors**: the top 50 miles on the HIN with the highest number of fatal and severe injury crashes per mile, with extra weighting (1.5) for locations in Equity Focus Areas.

• **High Priority Intersections**: the top 50 intersections with the highest number of fatal and severe injury crashes.
Focus Areas for Vision Zero Action Plan

Geographic Focus Areas – “Systemic Safety Locations”

• Severe crashes rarely occur in the same location twice, making them seem random. But the circumstances in which they occur and contributing factors are often fairly predictable.

• Hot spot analyses helps us prioritize locations where several crashes have occurred in the past.

• Systemic safety analyses helps us identify specific types of locations that should be addressed citywide to prevent future crashes.

Source: FHWA, Systemic Safety Project Selection Tool
## Vision Zero Action Plan – Next Steps

<table>
<thead>
<tr>
<th>Task</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<td>Crash Data Analysis</td>
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<tr>
<td>Assessment of Existing Policies, Programs, Practices</td>
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<tr>
<td>Formulate Recommendations &amp; Implementation Plan</td>
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<td>Vision Zero Action Plan - Draft &amp; Finalize</td>
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</table>

Task Force Meeting – x
QUESTIONS?

Dallascityhall.com/VisionZero

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City of Dallas
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Road Safety Audits

Regional Safety Advisory Committee

October 22, 2021

Julie Anderson, Sr. Transportation Planner, NCTCOG

North Central Texas Council of Governments
History of Pedestrian Crashes and Fatalities

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

7 States Account for 54% of Pedestrian Deaths, Jan-June 2020

- State of Texas is designated by FHWA as a Pedestrian and Bicycle Safety Focus State
- Dallas and Fort Worth are designated by FHWA as Pedestrian and Bicycle Safety Focus Cities

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

1 in 5 of all fatalities for all modes of travel is a pedestrian.

7,072 total pedestrian crashes in MPA 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
Pedestrian Crashes and Fatalities Locations

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
Key Elements of the Regional Pedestrian Safety Action Plan
Endorsed by the Regional Transportation Council (RTC) on June 10, 2021

1. **Demographics and contributing factors** based on reported crashes

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

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

4. **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”

5. **Action Plan** to guide projects and programs that will address pedestrian safety issues

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

Urbanized Area
Pedestrian Crashes per Square Mile (2014 - 2018)

Legend
- Counties
- Urbanized Area
- Crashes per Square Mile

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 occurs or originates on a traffic way, results in injury to or death of any person, or damage to the property of any person to the apparent extent of $1,000.
Road Safety Audit: Dallas
MLK Blvd, SH 352 to Malcolm X Blvd
Road Safety Audit: Dallas
MLK Blvd, SH 352 to Malcolm X Blvd

- Identified as a Primary Pedestrian Safety Corridor
- Identified by City of Dallas as a “High Injury Corridor”
- Funding approved by the Regional Transportation Council to conduct engineering to retrofit/road diet MLK Blvd to a context-sensitive “Complete Street” to support Dallas Vision Zero goals
- City staff intend to use the results from the RSA to inform the engineering phase
Road Safety Audit: Dallas
MLK Blvd, SH 352 to Malcolm X Blvd

8-step RSA Process

This RSA focused on pedestrian and bike travel and safety in the corridor, with vehicle safety being a minimal part of observations.
**Road Safety Audit: Dallas**

**MLK Blvd, SH 352 to Malcolm X Blvd**

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**Review Team**

- **Kierra Williams** *(City of Dallas)*
- **Sgt. Ira Carter** *(Dallas PD)*
- **Erick Ramirez** *(TxDOT)*
- **Pat Rohmer** *(NCTCOG)*
- **Stu Burzette** *(NCTCOG)*
- **Erin Curry** *(NCTCOG)*
- **Bobby Kozub** *(NCTCOG)*
- **Julie Anderson** *(NCTCOG)*
- **Daniel Herrig** *(City of Richardson)*
- **Stephen Ratke** *(FHWA)*
- **Millie Hayes** *(FHWA)*
- **Ed Burgos** *(FHWA)*
Road Safety Audit: Dallas
MLK Blvd, SH 352 to Malcolm X Blvd

What the team did this week

• Tuesday:
  – Midday observation
  – HS dismissal period
  – Malcolm X PM Peak
  – Night review

• Wednesday:
  – AM peak 352/DART crossing
  – HS arrival period
  – PM Peak 352
Day and night observations

Pedestrian facilities and activity

Corridor activity

Bus stops and lighting
Preliminary Recommendations from RSA Core Team

Observations

- Students crossing (midblock)
- Lack of dedicated school bus drop-off/pick-up area
- Safety concerns for cyclists riding on MLK (speeding, no protected lanes)
- MLK and meadow ped signal not working
- Motorists parking between school’s “Exit Only” driveway and Meyers Street lacks visibility
- Street sign missing on Meadows westbound
Preliminary Recommendations from RSA Core Team

Martin Luther King Jr Blvd. & Malcolm X Blvd: Recommendations

1. Relocate Pedestrian Poles and Buttons
   - Repair broken one first

2. Reposition ADA Ramps

3. Repave/Extend Intersection Corner(s) for Bus Stop
Road Safety Audit: Dallas
Phase 2 – MLK Blvd, Malcolm X to Botham Jean Blvd

- Preliminary recommendations provided to City of Dallas staff for RSA Phase 1
- Phase 2 expected to be held in November; MLK Blvd from Malcolm X to Botham Jean Blvd
- A full report encompassing recommendations for the entire MLK Blvd corridor to be provided after Phase 2 RSA is complete
FHWA and NCTCOG held a Workshop in April 2021 to inform local professionals about the process to conduct road safety audits

- Cities are encouraged to conduct RSAs for the Pedestrian Safety Corridors identified in the regional Pedestrian Safety Action Plan (corridors with the highest density of pedestrian crashes in the region)

Information and resources on the FHWA website: www.safety.FHWA.dot.gov/rsa
Thank You!

Contacts

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Transportation Planner
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NCTCOG.org/PedSafetyPlan
The NCTCOG Regional Roadway Safety Plan is designed to provide a framework to identify, analyze, and prioritize safety improvements within the NCTCOG Region.

The plan will serve as a guide for the implementation of future systemic safety projects and programs.

Approximately $25 million allocated for the development of the regional safety plan and for future safety program and project implementation.
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
- Prioritization and 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
NCTCOG Emphasis Areas

What local emphasis areas should we focus on?

Helpful tools available from FHWA:
- Crash Data Summary Template Tool
- Crash Tree Diagram Tool

https://safety.fhwa.dot.gov/LRSPDIY/#
Crash Data Summary Template Analysis

Compare fatal and serious injury crashes to all crashes within the NCTCOG area

- Identify crash types and factors where fatalities and serious injuries are overrepresented

Compare NCTCOG area crash data to Houston-Galveston Area Council data and Statewide data

- Fatal and serious injury crashes
- All crashes

A crash factor is considered overrepresented if the proportion of fatal and serious injury crashes is either 5 percent or more than two times the proportion of total crashes.

Example – the percentage of all on system crashes is 46% of the total, but 54% of fatal and serious injury crashes occur on system (fatal and serious injury crashes are >5% higher)
Crash Data Summary Template
Example

<table>
<thead>
<tr>
<th>Crash Data Summary Template</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1 - Year 5 Subject Data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HGAC</td>
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<tr>
<td></td>
<td>2016 - 202</td>
</tr>
<tr>
<td>Crash in Work Zone</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Wrong Way Driving Crashes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Crash Location</td>
<td>ON ROADWAY</td>
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<td>OFF ROADWAY</td>
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<tr>
<td></td>
<td>SHOULDER</td>
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<td>MEDIAN</td>
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<td>NOT APPLICABLE</td>
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<td>Speeding Related</td>
<td>Yes</td>
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<td></td>
<td>No</td>
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<tr>
<td>Distracted Driving Related</td>
<td>Yes</td>
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<tr>
<td></td>
<td>No</td>
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</table>

Example: Fatalities and serious injuries are overrepresented compared to all crashes within NCTCOG area Factor is overrepresented in NCTCOG area relative to comparison group
<table>
<thead>
<tr>
<th>Analyzed Data Categories with Fatal and Serious Injury Overrepresentations - NCTCOG</th>
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<tbody>
<tr>
<td><strong>Alcohol Involvement</strong></td>
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<tr>
<td>By Weekday</td>
</tr>
<tr>
<td>CMV Involved</td>
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<tr>
<td>Crash Hour</td>
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<td>Crash in Work Zone</td>
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<td><strong>Crash Location</strong></td>
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<td>Crash Month</td>
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<td><strong>Crashes Involving Impaired Drivers</strong></td>
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<td>Distracted Driving Related</td>
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<tr>
<td><strong>Drug Involvement</strong></td>
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<tr>
<td>First Harmful Event</td>
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</table>
## Fatal and Serious Injury Overrepresentations
### NCTCOG Area

<table>
<thead>
<tr>
<th>Fatal and Serious Injury Overrepresentation Category</th>
<th>Fatal and Serious Injury Overrepresented Factor</th>
<th>Annual Average Fatalities and Serious Injuries</th>
<th>Percent of Fatal and Serious Injury Crashes</th>
<th>Percentage of All Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On system/Off System</td>
<td>On System</td>
<td>2,197</td>
<td>53.9%</td>
<td>46.1%</td>
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<tr>
<td>Light Conditions</td>
<td>Dark, not lighted</td>
<td>579</td>
<td>14.2%</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>Dark, lighted</td>
<td>1,162</td>
<td>28.5%</td>
<td>22.5%</td>
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<tr>
<td>Intersection Related</td>
<td>Non-Intersection</td>
<td>2,481</td>
<td>60.9%</td>
<td>51.7%</td>
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<td>Wrong Way Driving Crashes</td>
<td>WWD Crash</td>
<td>98</td>
<td>1.2%</td>
<td>0.5%</td>
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<tr>
<td>Speeding Related</td>
<td>Speeding Related</td>
<td>518</td>
<td>13.3%</td>
<td>4.7%</td>
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<tr>
<td>Rural Flag</td>
<td>Rural Crash</td>
<td>694</td>
<td>16.9%</td>
<td>8.7%</td>
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<tr>
<td>Helmet Usage (Motorcycle)</td>
<td>Worn, damaged</td>
<td>191</td>
<td>32.6%</td>
<td>25.6%</td>
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<tr>
<td></td>
<td>not worn</td>
<td>254</td>
<td>43.4%</td>
<td>35.2%</td>
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<tr>
<td>Drug Involvement</td>
<td>Drugs Involved</td>
<td>279</td>
<td>6.8%</td>
<td>0.9%</td>
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<tr>
<td>Most Harmful Event</td>
<td>One motor vehicle - straight</td>
<td>1,796</td>
<td>43.7%</td>
<td>22.5%</td>
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<td>Motorcycle Involved</td>
<td>Motorcycle Involved</td>
<td>560</td>
<td>13.7%</td>
<td>1.6%</td>
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<tr>
<td>Person Type</td>
<td>Other Cyclist</td>
<td>643</td>
<td>6.1%</td>
<td>0.6%</td>
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<td>Pedestrian</td>
<td>485</td>
<td>4.6%</td>
<td>0.5%</td>
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<td>Restraint Use</td>
<td>Child Booster Seat</td>
<td>635</td>
<td>13.8%</td>
<td>1.8%</td>
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<td>None</td>
<td>1,170</td>
<td>25.4%</td>
<td>2.1%</td>
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## Comparison to Houston-Galveston Area Council Data – Fatal and Serious Injury Crashes

<table>
<thead>
<tr>
<th>Fatal and Serious Injury Overrepresentations Category</th>
<th>Fatal and Serious Injury Overrepresented Factor</th>
<th>Percent of Fatal and Serious Injury Crashes HGAC</th>
<th>Percent of Fatal and Serious Injury Crashes NCTCOG</th>
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<tbody>
<tr>
<td>Traffic Control Device</td>
<td>None</td>
<td>10.9%</td>
<td>16.1%</td>
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<td>Warning Sign</td>
<td>0.2%</td>
<td>0.6%</td>
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<tr>
<td>Functional Class</td>
<td>US and State Highways</td>
<td>23.4%</td>
<td>29.0%</td>
</tr>
<tr>
<td></td>
<td>County Road</td>
<td>14.8%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Rural Flag</td>
<td>Urban</td>
<td>59.6%</td>
<td>83.1%</td>
</tr>
<tr>
<td>Alcohol Involvement</td>
<td>Alcohol Involved</td>
<td>8.4%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Drug Involvement</td>
<td>Drugs Involved</td>
<td>1.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Restraint Use</td>
<td>Child Booster Seat</td>
<td>8.2%</td>
<td>13.8%</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>13.7%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Crashes Involving Impaired Drivers</td>
<td>Fatigued or Asleep</td>
<td>3.7%</td>
<td>13.7%</td>
</tr>
<tr>
<td></td>
<td>Medication</td>
<td>0.1%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>
## Comparison to Houston-Galveston Area Council Data – All Crashes

<table>
<thead>
<tr>
<th>All Crashes Overrepresentation Category</th>
<th>All Crashes Overrepresented Factor</th>
<th>Percent of All Crashes HGAC</th>
<th>Percent of All Crashes NCTCOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Part</td>
<td>Exit/Off Ramp</td>
<td>0.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Traffic Control Device</td>
<td>Warning Sign</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Crosswalk</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Crash in Work Zone</td>
<td>Crash in Work Zone</td>
<td>3.3%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Distracted Driving Related</td>
<td>Distracted Driving</td>
<td>12.7%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Functional Class</td>
<td>US and State Highways</td>
<td>20.2%</td>
<td>25.2%</td>
</tr>
<tr>
<td></td>
<td>County Road</td>
<td>14.5%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Rural Flag</td>
<td>Urban</td>
<td>65.6%</td>
<td>91.3%</td>
</tr>
<tr>
<td>Alcohol Involvement</td>
<td>Alcohol Involved</td>
<td>2.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Drug Involvement</td>
<td>Drugs Involved</td>
<td>0.3%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Crashes Involving Impaired Drivers</td>
<td>Fatigued or Asleep</td>
<td>10.5%</td>
<td>25.2%</td>
</tr>
<tr>
<td></td>
<td>Medication</td>
<td>0.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Most Harmful Event</td>
<td>One Motor Vehicle - Going Straight</td>
<td>16.8%</td>
<td>22.5%</td>
</tr>
</tbody>
</table>
## Comparison to State of Texas – Fatal and Serious Injury Crashes

<table>
<thead>
<tr>
<th>Fatal and Serious Injury Overrepresentations Category</th>
<th>Fatal and Serious Injury Overrepresented Factor</th>
<th>Percent of Fatal and Serious Injury Crashes Texas</th>
<th>Percent of Fatal and Serious Injury Crashes NCTCOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Part</td>
<td>Connector/Flyover</td>
<td>0.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>On System</td>
<td>Off System</td>
<td>37.4%</td>
<td>46.1%</td>
</tr>
<tr>
<td>Light Conditions</td>
<td>Dark, Lighted</td>
<td>22.2%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Functional Class</td>
<td>County Road</td>
<td>7.3%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Rural Flag</td>
<td>Urban</td>
<td>59.9%</td>
<td>83.1%</td>
</tr>
<tr>
<td>Helmet Usage (Bicycle)</td>
<td>worn, unknown damage</td>
<td>0.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td></td>
<td>not worn</td>
<td>57.1%</td>
<td>70.8%</td>
</tr>
<tr>
<td>Crashes Involving Impaired Drivers</td>
<td>Drugs</td>
<td>10.2%</td>
<td>17.3%</td>
</tr>
<tr>
<td></td>
<td>Medication</td>
<td>0.3%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Restraint Use</td>
<td>None</td>
<td>12.8%</td>
<td>25.4%</td>
</tr>
</tbody>
</table>
## Comparison to State of Texas – All Crashes

<table>
<thead>
<tr>
<th>All Crashes Overrepresentations Category</th>
<th>All Crashes Overrepresented Factor</th>
<th>Percent of All Crashes Texas</th>
<th>Percent of All Crashes NCTCOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crash Location</td>
<td>On Roadway</td>
<td>75.5%</td>
<td>81.2%</td>
</tr>
<tr>
<td>Functional Class</td>
<td>County Road</td>
<td>6.6%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Rural Flag</td>
<td>Urban</td>
<td>76.2%</td>
<td>91.3%</td>
</tr>
<tr>
<td>Helmet Usage (Bicycle)</td>
<td>not worn</td>
<td>50.0%</td>
<td>69.7%</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/
Fatal and Serious Injury Overrepresentation Analysis Summary

Crashes at Night
• Dark, lighted and non-lighted

Motorcycles

Restraint/Personal Protection Usage
• No seatbelt used
• Child booster seats
• Helmets (bicycle and motorcycle)

Wrong Way Driving
Crash Tree Tool Analysis

Seatbelt Not Worn – All Crashes

Gender
- Male – 73%
- Female – 27%

Ethnicity (Male)
- White – 39%
- Hispanic – 30%
- Black – 27%
- Other – 4%

Age (Hispanic Male)
- 18-25 years old – 42%
Countermeasure Development

**Engineering**
- Crashes at Intersections
- Bicyclists and Pedestrians
- Older Roadway Users
- Roadway and Lane Departures

**Enforcement**
- Speeding
- Impaired Driving

**Emergency Response**
- Crashes Occurring at Night
- Wrong Way Driving

**Education**
- Helmet Usage
- Seatbelts and booster seats
- Distracted Driving

*Emphasis areas can fit into more than one group.*
Next Steps

**Analyze**
- Finish crash data analysis by further assessing data breakdowns within each emphasis area

**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
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Camille Fountain
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Drive Aware North Texas Campaign Overview

• Drive Aware North Texas Campaign Goals

• Safety Campaign Marketing Efforts – Speeding Commercial

• Drive Aware North Texas Website Content
Drive Aware North Texas
Campaign Goal

• An educational campaign aimed at improving negative driver behaviors that are the leading contributing factors for serious injury and fatality crashes in the North Central Texas region.

• Implemented by the North Central Texas Council of Governments

• Website launched in October 2021

www.driveawarentx.org/
Drive Aware North Texas Webpage

• 16-County Crash Totals by County

• Crash Causes – Contributing Factors for Serious Injury and Fatality Crashes

• Current Contributing Factor Focus Areas
  • Speeding
  • Impaired Driving
  • Distracted Driving
  • Wrong Way Driving

• Driver Behavior Safety Tips

• Resources and Contact Us

www.driveawarentx.org/
Potential Mobile Barrier Pilot Program

Regional Safety Advisory Committee

Kate Beck
10.22.2021
Purpose of Today’s Presentation

• Describe mobile barrier technology, applications, benefits and drawbacks

• Describe potential pilot program

• Discussion and gauge level of interest
Description of Technology

- 18”w x 32”t reactive tension system barrier
  - 1-meter, unanchored barrier segments
- Barrier transfer machine
- Typical lateral transfers of 10-16’ in one pass
Enhanced Work Zone Safety

• Example: Replace plastic channelizing devices for short-term lane closures:
  ➢ Night work, high volumes, high speeds, trucks, narrow corridors, site distance, drop-offs, crash data, equipment in work zone, etc.

Potential Mobile Barrier Pilot Program
Enhanced Work Zone Safety

• Example: Crossover + contraflow lane
  ➢ Close one bound of traffic to increase work zone area, but maintain normal lane configuration for peak direction of travel
Local Example: Dallas North Tollway

- High volumes, heavy truck traffic, narrow lanes, and worker exposure
- Restricted lane-closure allowance

Potential Mobile Barrier Pilot Program
Traffic Operations

• Examples: IH 30 HOV lane operation east of downtown Dallas; Golden Gate Bridge contraflow in San Francisco

Potential Mobile Barrier Pilot Program
Applications: Event Management

• Can provide short-term, protected, dedicated travel lanes for major events and/or security
Applications: Demonstration Projects?

• Such as: NYC Plaza Program, Open Streets, Transit Lane Pilots...
Description of Pilot Program

• Long-term (3+ year) lease of barrier and barrier transfer machines (estimate 2 miles of barrier)
• Operation, maintenance, service, and inspections included – fully turn-key
• Direct coordination by vendor with project contractors, at project meetings, etc.
• Cost/reservation system to be determined
Benefits: SAFETY

• Enhance work zone safety
  ➢ Positive protection where anchored barrier is not feasible protects workers and motorists

• Minimal worker exposure in setting up/taking down

• Potential to reduce congestion during construction may reduce associated collisions
Benefits: Efficiency

• Flexibility:
  ➢ Feasible for short- and longer-term projects
  ➢ Ease of adjustment

• Deployment:
  ➢ Deploys at up to 5mph with two staff; maximizes working hours

• Can enable accelerated construction strategies:
  ➢ Bridge remove-and-replace

Potential Mobile Barrier Pilot Program
Drawbacks

- Potential under-utilization
- Relative cost
- Complications from shared asset
  - Construction delays, etc.
  - Maximum project duration (proof of concept)
- Owner liability?
- Contractor level-of-comfort
Options

1. NCTCOG enters into lease agreement, funds initial program term, and monitors utilization and success as proof of concept

2. Regional partners pledge to utilize, coordinate on program logistics, and share in program cost
Questions/Discussion