

REGIONAL SAFETY ADVISORY COMMITTEE

North Central Texas Council of Governments

Friday, October 27, 2023

10:00 am – 12:00 pm

- 1) Approval of July 28, 2023 Meeting Summary – Chad Marbut, RSAC Vice Chair**
- 2) NTE/LBJ/35W Partnership with Teens in the Driver Seat – Robert Hinkle, North Tarrant Express**
- 3) Safe System Approach for Speed Management, Millie Hayes, FHWA**
- 4) Transportation Technology and Innovation Updates – Connor Sadro, NCTCOG**
- 5) Non-Core County High Injury Network Analysis – Michael Misantonis, NCTCOG**
- 6) Preliminary Safety Targets/Quarterly Crash Report Update – Kevin Kroll, NCTCOG**
- 7) 2023 HSIP Call for Projects – Brandi Bush, TxDOT Dallas**



North Central Texas
Council of Governments





NTE/LBJ/35W Partnership with Teens in the Driver Seat

**Regional Safety Advisory Committee
October 27, 2023
Robert Hinkle, North Tarrant Express**



National Teen Driver Safety Week Events
Birdville Independent School District
October 2023

Safe System Approach for Speed Management



Zero is our goal. A Safe System is how we get there.



U.S. Department of Transportation
Federal Highway Administration

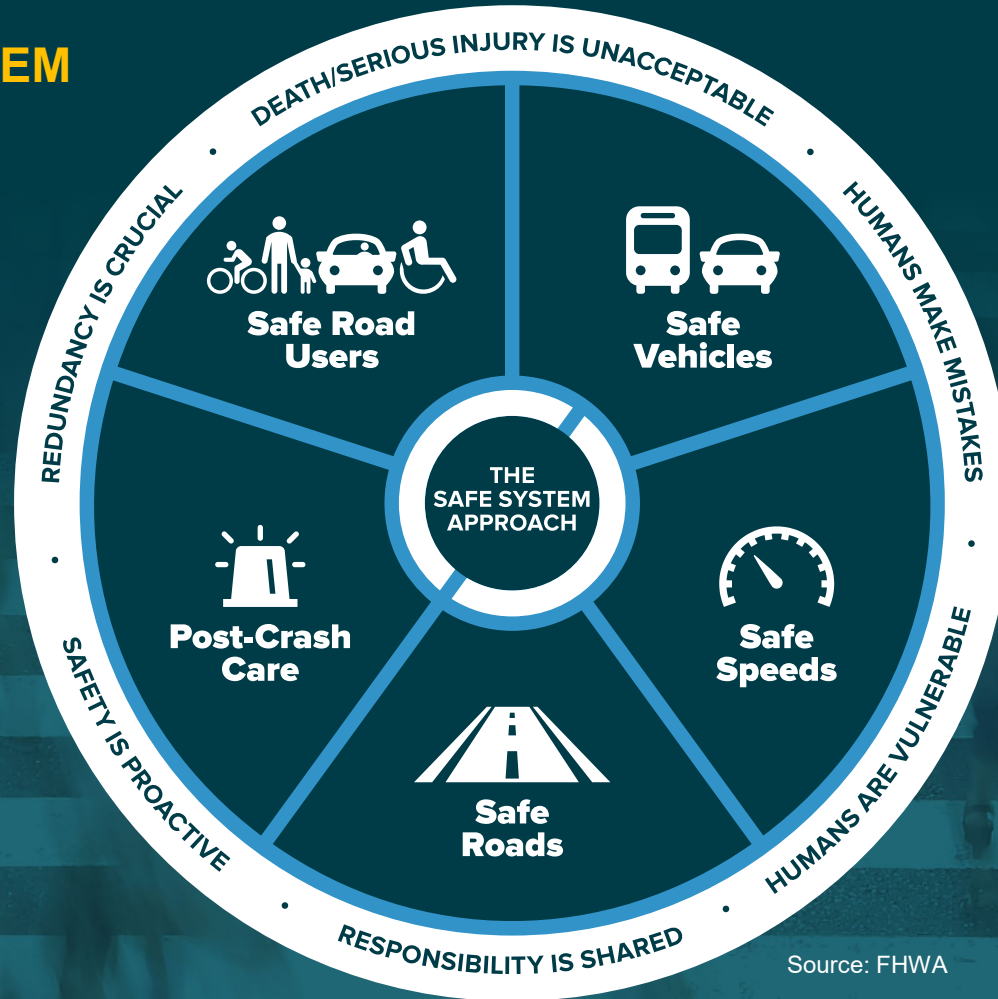
ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

The contents of this presentation do not have the force and effect of law and are not meant to bind the public in any way.

DISCLAIMERS

- Except for any statutes or regulations cited, the contents of this presentation do not have the force and effect of law and are not meant to bind the public in any way. This presentation is intended only to provide information regarding existing requirements under the law or agency policies.
- The U.S. Government does not endorse products, manufacturers, or outside entities. Names/logos appear in this presentation only because they are considered essential to the objective of the presentation. They are included for informational purposes only and not intended to reflect a preference, approval, or endorsement of any one product or entity.
- Unless noted otherwise, FHWA is the source for all images in this presentation.

THE SAFE SYSTEM APPROACH



Death/serious injury
is unacceptable



Humans make
mistakes



Humans are
vulnerable



Responsibility is
shared



Safety is proactive

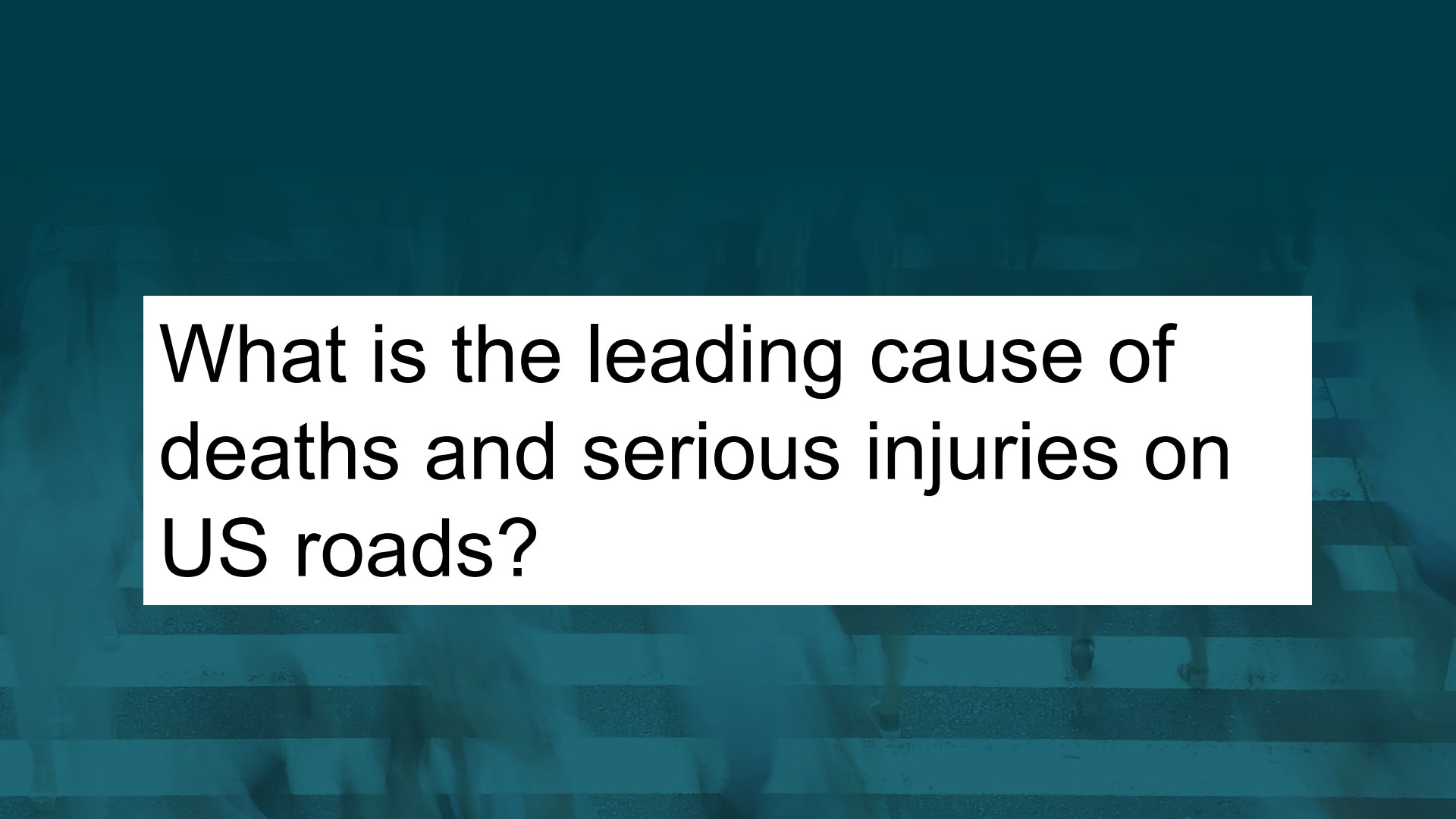


Redundancy
is crucial

Source: FHWA

ACHIEVING SAFE SPEEDS – WHO IS RESPONSIBLE?



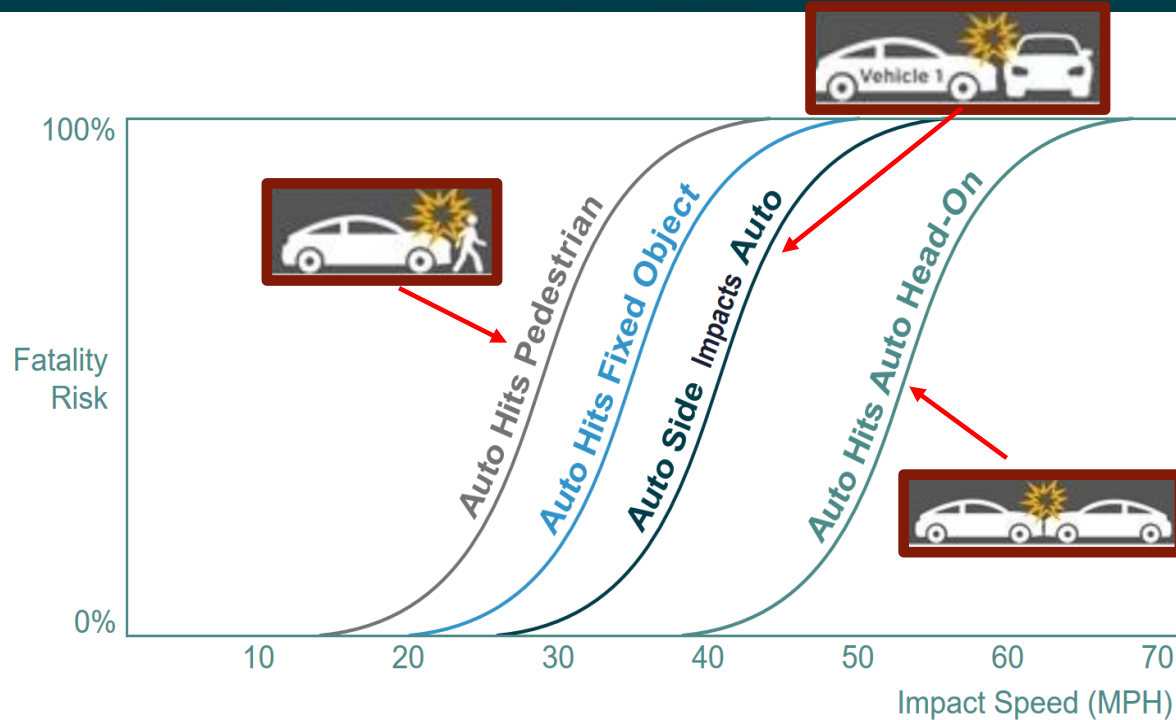
The background of the slide is a blurred, teal-tinted image of a large crowd of people walking, likely at a public event or protest. The focus is on the lower legs and feet of the individuals, creating a sense of movement and density.

What is the leading cause of deaths and serious injuries on US roads?



Humans are
vulnerable

The Safe System Approach involves matching vehicular operating speeds to the appropriate conditions of the road



Designing and
operating safe roads is
an exercise of
managing kinetic
energy

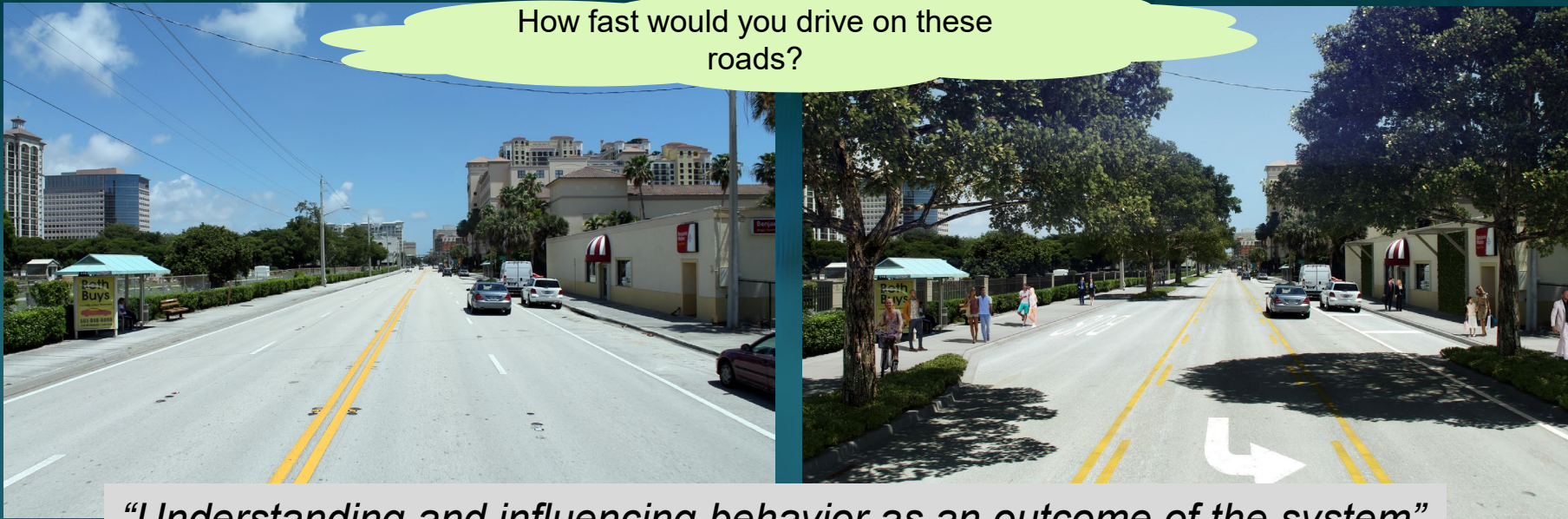
$$K = \frac{1}{2}mv^2$$

Thoughts on the Safe Roads Element



Roads should be designed for the behavior we want

How fast would you drive on these roads?



“Understanding and influencing behavior as an outcome of the system”

New Zealand Speed Management Guide

Dixie Highway Proposed Reconfiguration - West Palm Beach, FL

A blurred, high-angle photograph of a large crowd of people crossing a street with white zebra stripes. The image is overlaid with a semi-transparent blue filter. The motion blur gives a sense of speed and movement.

Speed Management

What is speed, anyway?

Design Speed

- The Design Speed is a selected speed used to determine the various geometric design features of the roadway.

-AASHTO Green Book, 2001

Operating Speed

- Operating Speed is the speed at which drivers are observed operating their vehicles during free flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature.

-AASHTO Green Book, 2001

Posted / Regulatory Speed

- Posted speed is the maximum speed limit on a section of highway using a regulatory sign as determined in accordance with the Texas Transportation Code.
- Prima Facie speed is the maximum speed limit for certain types of roads as directed in the Texas Transportation Code.

Relationship Between Design, Operating, And Posted Speeds

- Are design, operating, and posted speed equal?
- Should they be?
- FHWA Memorandum 2015: Relationship between Design Speed and Posted Speed
 - Replaces a 1985 memo that suggested design speed should be equal or greater than the posted speed of facility.
 - There is no regulatory requirement for a relationship between design speed and posted speed
 - NCHRP 504 failed to develop a relationship between design speed and posted or operating speeds

Source: <https://www.fhwa.dot.gov/design/standards/151007.cfm>

Selecting A Design Speed

- “The higher the better” approach has not helped us reduce fatalities and injuries on our roadways.
- Who is helped by traditional practices of setting design speeds above posted speeds?
- “Forgiving design” practices are valid, but past approaches built primarily on rural contexts are not sophisticated enough for most situations.



Target Speed

Target Speed is the highest speed at which vehicles should operate on a road based on location context and consistency with the level of multi-modal activity generated by adjacent land uses to provide both mobility for motor vehicles and a supportive environment for pedestrians, bicyclists, and public transit users.

Reference: www.fhwa.dot.gov/planning/css/design/controls/factsheet3_ite.cfm

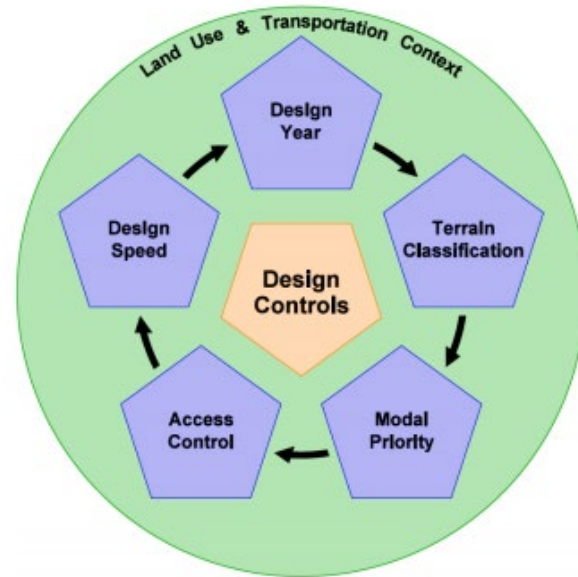


Target Speed

- A proactive approach to establishing a speed consistent with the context characteristics. Target speed is the design operating speed, which aligns design, posted and operating speed as the same value.
- The target speed selection is derived from other design controls, as well as transportation and land use context characteristics.

-WSDOT

Exhibit 1103-1 WSDOT Design Controls























































Target Speed

Land Use Context and Roadway Type

	Land-Use Context			
	Rural	Suburban	Urban	Urban Core
Freeways	High	High	High	High
Principal Arterial	High	Intermediate / High	Low / Intermediate	Low
Minor Arterial	High	Low / Intermediate	Low / Intermediate	Low
Collector	Low / Intermediate	Low / Intermediate	Low	Low
Local	Low / Intermediate	Low	Low	Low

Modal Accommodation

	Land-Use Context			
	Rural	Suburban	Urban	Urban Core
Freeways				
Principal Arterial	  	  	  	  
Minor Arterial	  	  	  	  
Collector	  	  	  	  
Local	  	  	  	  

*Definitions of low, intermediate, high speeds DO NOT match across documents

NEW Resource



Safe System Approach for Speed Management


U.S. Department of Transportation
Federal Highway Administration

ZERO IS OUR GOAL
A SAFE SYSTEMS HOW WE GET THERE

“This report highlights the importance of achieving target speeds and kinetic energy management on all roads in a network. Emphasis is placed on the overlap of the safe speeds and safe roads elements of the Safe System Approach, as the appropriate target speed for a road depends on the road design, roadway context, and desired mix of roadway users.”

1. Introduction (page 4)

https://highways.dot.gov/sites/fhwa.dot.gov/files/Safe_System_Approach_for_Speed_Management.pdf



SAFE SYSTEM APPROACH

Zero is our goal. A Safe System is how we get there.



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

Safety & Traffic Operations Specialist

FHWA Texas Division

amelia.hayes@dot.gov

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

ITE Resources: <https://www.ite.org/technical-resources/topics/safe-systems/>

Transportation Innovation & Technology Updates

1. Work Zone Data Exchange (WZDx) Program
2. Situational Awareness Apps
3. NCT 9-1-1 STIC Incentive Program



Work Zone Data Exchange – NCTCOG RFP

Three categories of services

1. Convert raw work zone data into WZDx format
2. Establish WZDx-compliant reporting system
3. General WZDx services

Five vendors under contract:

- Blynco
- iCone
- Mixon Hill
- Navjoy
- One.Network

TXShare
Your Public Sector Solutions Center

Situational Awareness Apps – Blyncsy Contract

Sandbox of “Payver” tech

1. NCTCOG assisted Blyncsy with regional outreach to agencies to test the “Payver” technology
2. Payver by Blyncsy uses Artificial Intelligence (AI) Vision and crowdsourced dash camera footage to automate the surveying process in a standardized way

Plano/Blyncsy Case Study

- City of Plano safety complaints
- The City wanted to test AI over manual
- Mitigation of manual surveying costs
- Traffic Engineers have more time for repairs



NCT 9-1-1 STIC Incentive – TTIP Collaboration

Project: Improving Emergency Response to Roadway Incidents Using Traffic Speed Deviation Alerts from Crowdsourced Data (“Project”)

Tasks:

- Tool Development
- NCTCOG9-1-1 Tool Roll Out
- Training Manual Prep
- FSL Levelled Outreach
- Final Report



Connor Sadro

Planner II

Transportation Technology and Innovation Program (TTIP)

North Central Texas Council of Governments

csadro@nctcog.org

LinkedIn

:





Non-Core County High Injury Network Analysis

Roadway Safety Advisory Committee
10.27.2023 | Michael Misantonis

Please make sure that your device is muted.

High Injury Network Background

- Network of designated road segments where the highest concentrations of fatal and serious injury crashes occur
- Five-year range of crash data from 2016-2020
- Can be used to help prioritize safety improvements in the region and be used in tandem with the findings of our systemic analysis

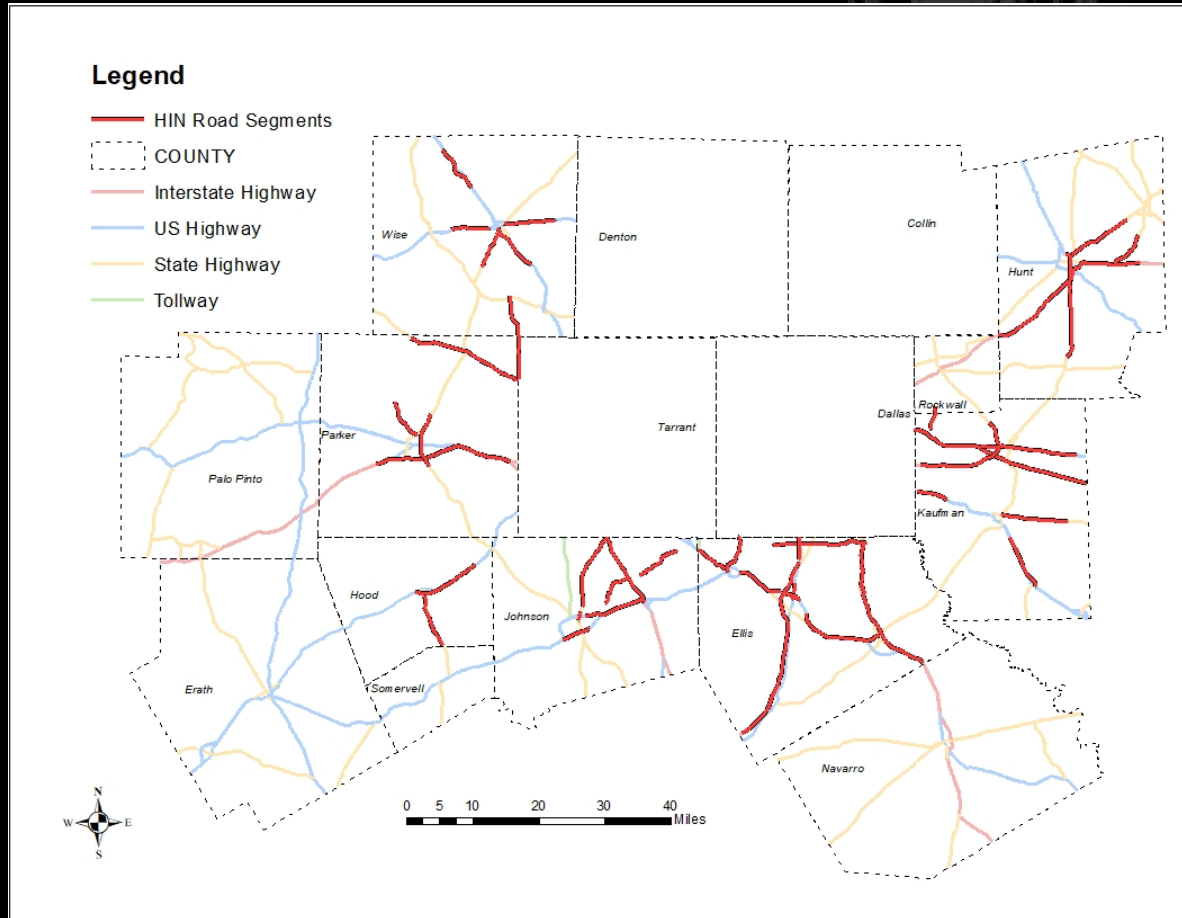
Methodology

- Create a grid density map of fatal and serious injury crashes
- Identify the road segments within the selected grids
- Identify the number of crashes that occurred on each road segment
- Use the scoring formula to show how each segment should be prioritized

Prioritization Scoring

- Prioritization Score = $\frac{\text{Number of Fatal and Serious Injury Crashes} + (2 * \text{Number of Fatal Crashes}) + (1 * \text{Number of Serious Injury Crashes})}{\text{VMT}}$

Road Segment Map



Road Segment Crash Summary

- Top Segments
 - IH20 Parker County – Segment Limits: Bennett Hills Dr. and Walsh Ranch Pkwy.
 - IH 20 Kaufman County – Segment Limits: FM460 and County Road 127
 - IH 20 Segment 2 Kaufman County – Segment Limits: FM740 and FM 148
 - IH30 Hunt County – Segment Limits: County Road 3201 and FM 2642
 - FM0051 – Segment Limits: Green Branch Rd. and Old Airport Rd.
- Counties:
 - Wise, Hunt, Parker, Kaufman, Rockwall, Hood, Johnson, Ellis
- 616 Total Serious Injury Crashes
- 169 Total Fatal Crashes
- 785 Total Crashes

NCTCOG Safety Program Contacts

Kevin Kroll
Principal Transportation Planner
kkroll@nctcog.org

Sonya Landrum
Program Manager
slandrum@nctcog.org

Michael Misantonis
Transportation Planner
mmisantonis@nctcog.org

Shreya Bandi
sbandi@nctcog.org

DriveAwareNTX.org
driveawarentx@nctcog.org

Camille Fountain
Senior Transportation Planner
cfountain@nctcog.org





Regional Safety Advisory Committee

Preliminary Regional Safety Performance Targets Update – 2024-2027

Kevin Kroll | Principal Transportation Planner

October 27, 2023

Safety Performance Targets

- Regional Transportation Council (RTC) approval of current performance targets established through 2027
- NCTCOG currently supporting TxDOT targets
- Fatalities, fatality rates, and bike and pedestrian fatalities to 50 percent by 2035 and zero by 2050
- Serious injuries, serious injury rates, and bike and pedestrian serious injuries two percent reduction from the trend line*

Number of
Fatalities

Rate of
Fatalities*

Number of
Serious Injuries

Rate of Serious
Injuries*

Bicyclist and
Pedestrian
Fatalities and
Serious Injuries

*Rates Calculated
per 100 million
Vehicle Miles
Traveled



Preliminary NCTCOG Safety Performance Update for 2022

Safety Performance Measures	Original 2022 Target	PY2022 Actual Performance	PY2016-2020 Baseline Performance	Met Target?	Better than the Baseline?	Met or Made Significant Progress?
Number of Fatalities	579.5	622.2	584.8	No	No	No
Rate of Fatalities	0.755	0.799	0.802	No	Yes	
Number of Serious Injuries	3,032.9	3645.8	3,559.8	No	No	
Rate of Serious Injuries	3.939	4.685	4.891	No	Yes	
Number of Non-Motorized Fatalities and Serious Injuries	594.7	594.6	588.4	Yes	No	

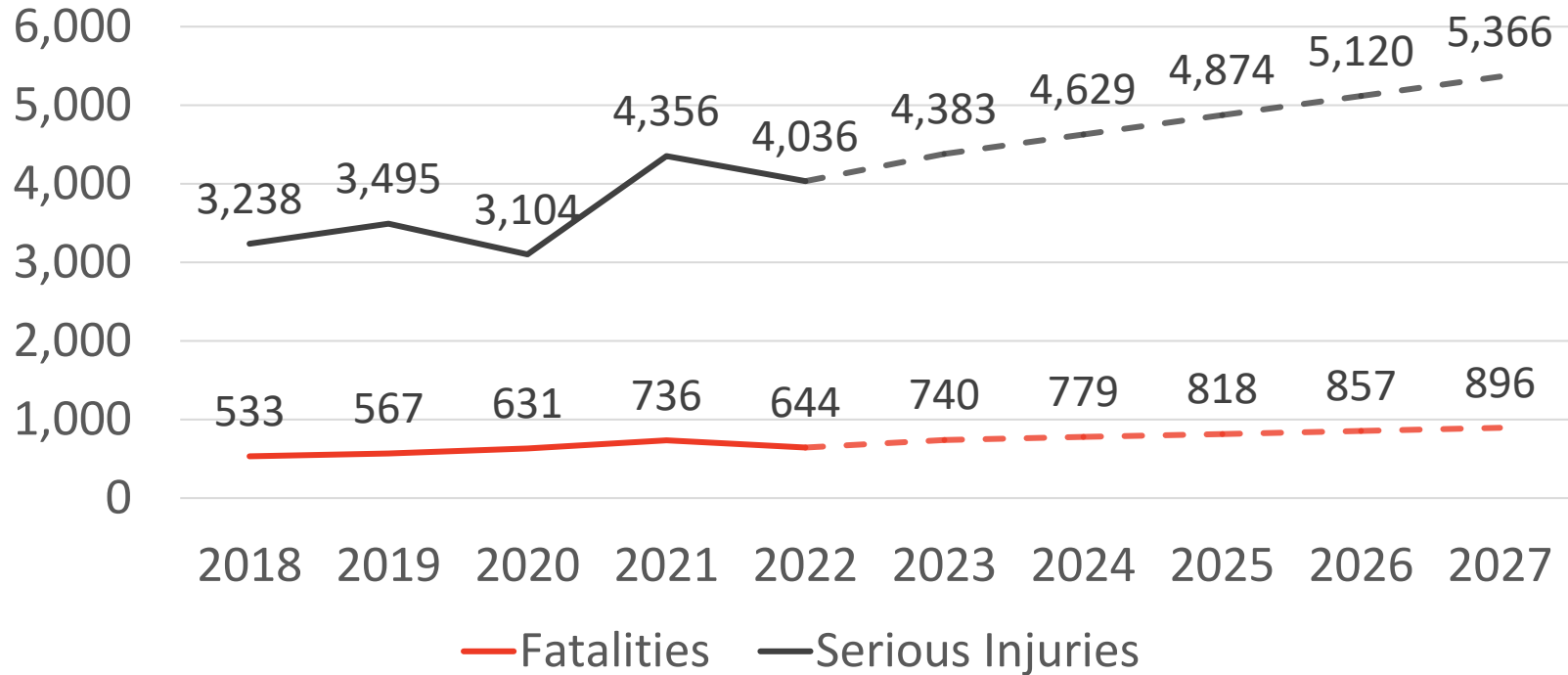
Original 2022 Target was calculated in early 2022 and included observed data for 2018-2020 and projected data for 2021-2022

PY2022 actual performance includes 2018-2022 observed data

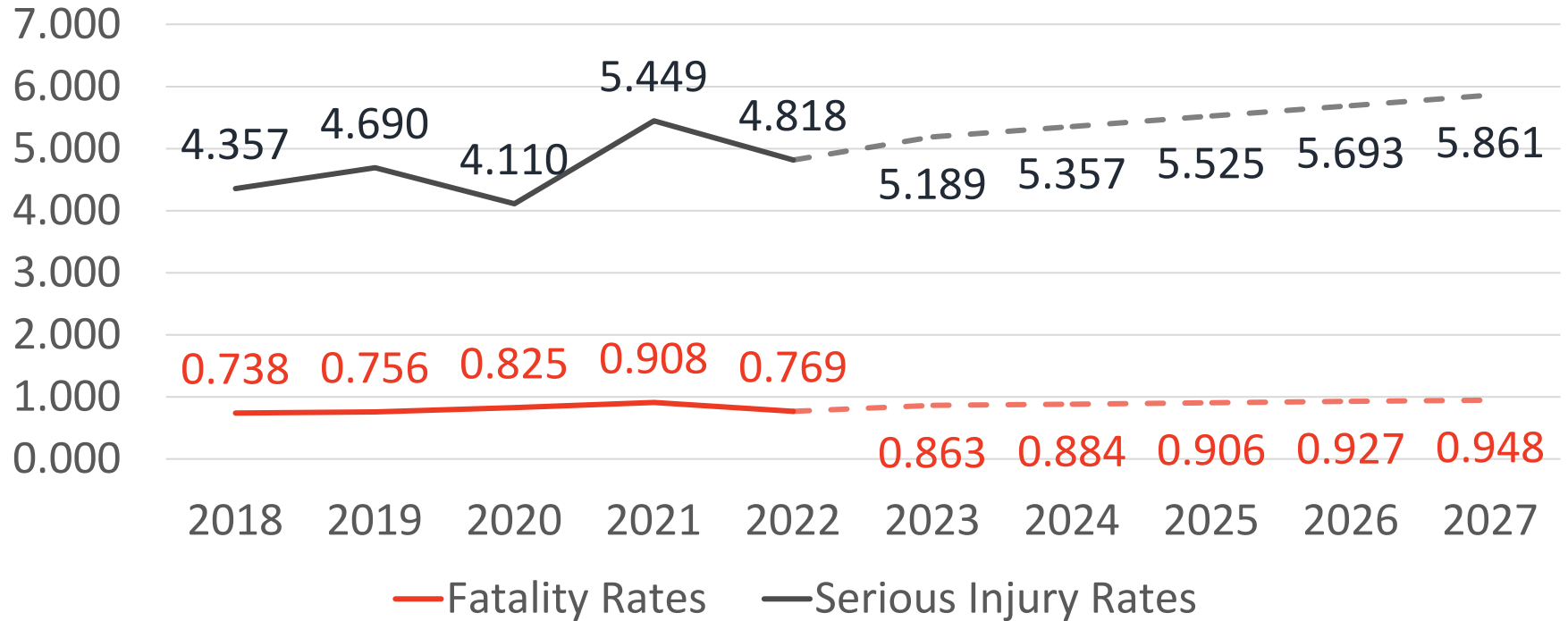


Preliminary Regional Performance Targets Update

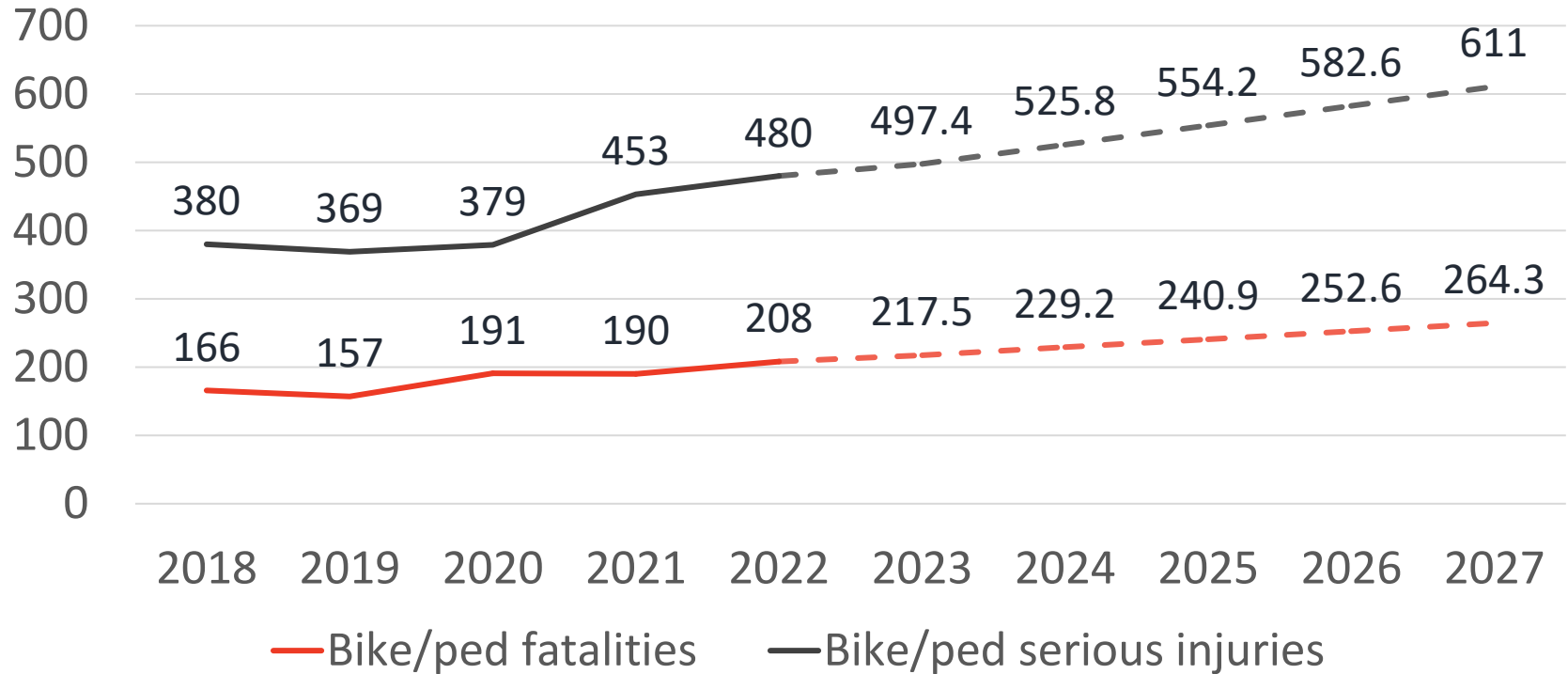
Observed and Projected Vehicle Fatalities and Serious Injuries (2018-2027)



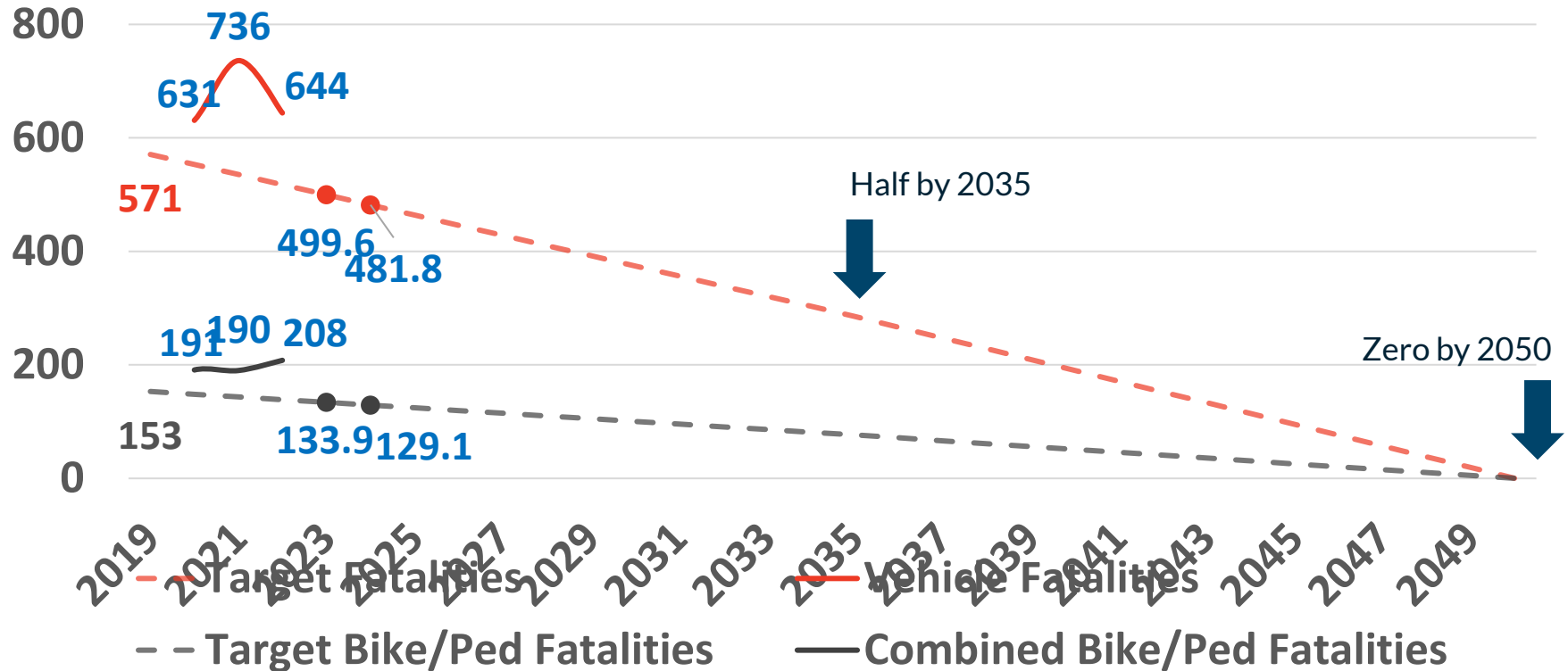
Observed and Projected Vehicle Fatality and Serious Injury Rates (2018-2027)



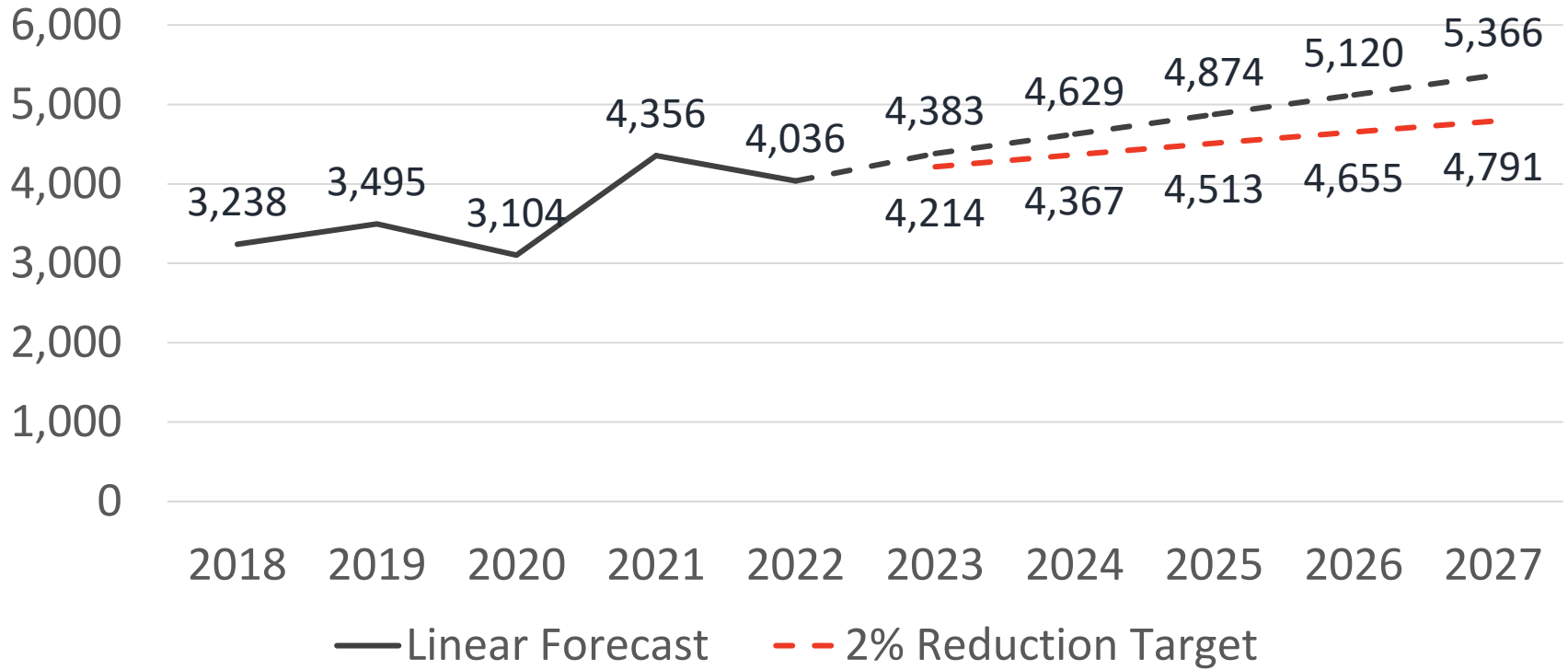
Observed and Projected Bike/Ped Fatalities and Serious Injuries (2018-2027)



Observed and Projected Fatal and Bike/Ped Fatalities Based on 50 Percent by 2035 Target (2019-2050)



Observed and Projected Serious Injuries (2018-2027)

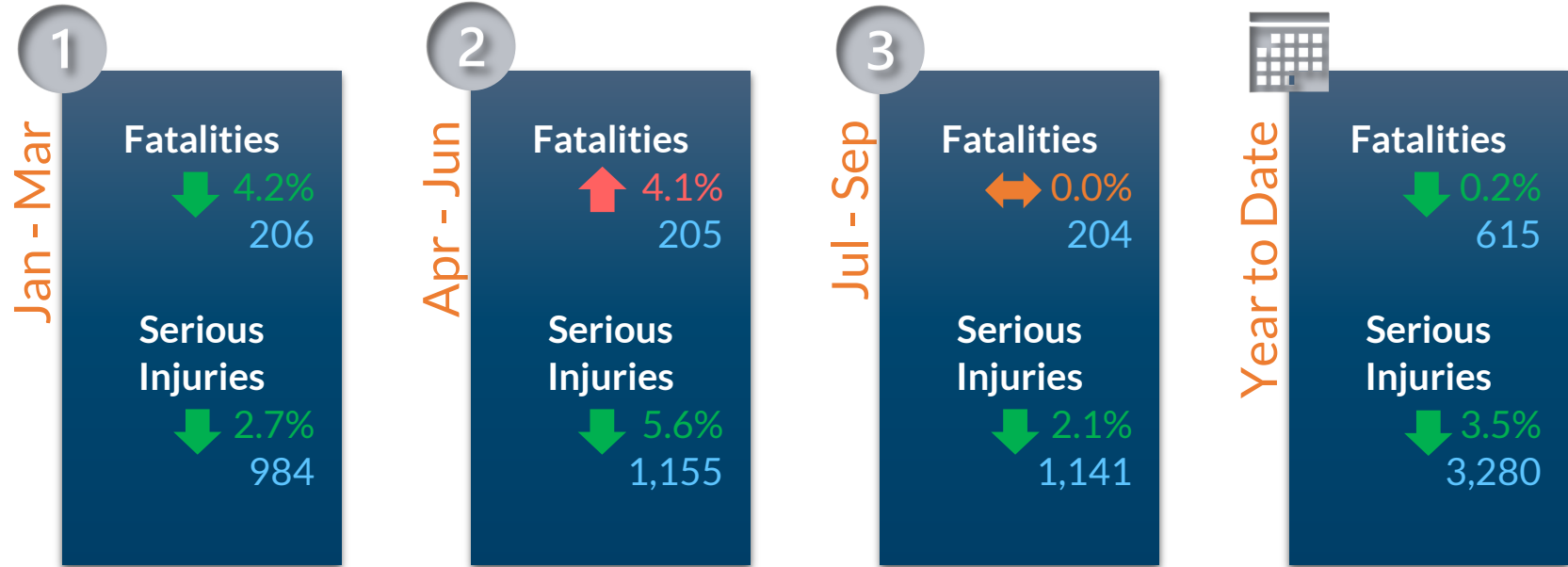


Preliminary NCTCOG Safety Performance Targets 2024-2027

Safety Performance Targets	2023 Adopted Targets	Preliminary 2024 Targets	Target Reduction
No. of Fatalities	590.4	583.3	50% by 2035
Fatality Rate	0.767	0.730	50% by 2035
No. of Serious Injuries	3,711.5	3,943.7	2% per year
Serious Injury Rate	4.615	4.793	2% per year
No. of Non-motorized Fatalities and Serious Injuries	637.3	634.7	50% by 2035 for fatalities, 2% per year for serious injuries



Quarterly Performance: All Fatalities and Serious Injuries Change from 2022 to 2023



Fatalities and serious injury data taken from TxDOT's CRIS October 17, 2023
Percentages represent the change in each injury type from 2022 to 2023
Totals represent total injuries in each quarter for 2023



Quarterly Performance: Bicyclist and Pedestrian Fatalities and Serious Injuries Change from 2022 to 2023



Bicyclist

- Fatalities
- Serious Injuries

11.8% ↓
3.9% ↑

Total
15
53

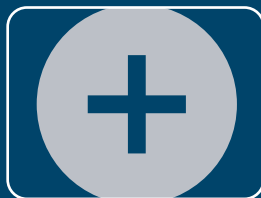


Pedestrian

- Fatalities
- Serious Injuries

1.5% ↓
3.9% ↓

Total
131
294



Bike Ped Combined

- Fatalities
- Serious Injuries

2.7% ↓
2.8% ↓

Total
146
347

Fatalities and serious injury data taken from TxDOT's CRIS October 17, 2023

Percentages represent the change in each injury type from 2022 to 2023

Totals represent total injuries for the first 3 quarters of 2023 (Jan-Sept)



Roadway Safety Team



Sonya J. Landrum

Program Manager

slandrum@nctcog.org

Camille Fountain

Senior Transportation Planner

cfountain@nctcog.org



Shreya Bandi

Transportation Planning Intern

SBandi@nctcog.org

Kevin Kroll

Principal Transportation Planner

kkroll@nctcog.org

Michael Misantonis

Transportation Planner

mmisantonis@nctcog.org





2023 HSIP

NCTCOG - Regional Safety Advisory Committee

10/27/2023

November 16, 2023



HELP #EndTheStreakTX

End the streak of daily deaths on Texas roadways.

TxDOT.gov (Keyword: #EndTheStreakTX)



#EndTheStreakTX Toolkit





- *“The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.”*
- Federally-funded, State-administered
- Establish annual safety performance targets for five measures
- If a State doesn't meet performance targets additional annual reporting requirements

Legislated under Section 148 of Title 23, *United States Code* (23 U.S.C. 148) and regulated under Part 924 of Title 23, Code of Federal Regulations (23 CFR Part 924)



Oversight includes:

- Review and approval of HSIP Guidance Document
 - Monthly project letting reports
 - Annual assessments of our program
 - HSIP Annual Report to FHWA on performance
 - HSIP Annual Implementation Plan (if performance is not met)
-
- Why is this important?
 - TRF ensures TxDOT remains in compliance with FHWA requirements
 - TRF striving to provide more support, flexibility, and transparency



Roadway &
Lane
Departure

Speed
Related

Intersection
Safety

Occupant
Protection

Impaired
Driving

Districted
Driving

Vulnerable
Road Users:
Pedestrian

Vulnerable
Road Users:
Pedalcyclist






Post-Crash
Care

Younger
Drivers

Older
Drivers

2023 HSIP Program - Timeline



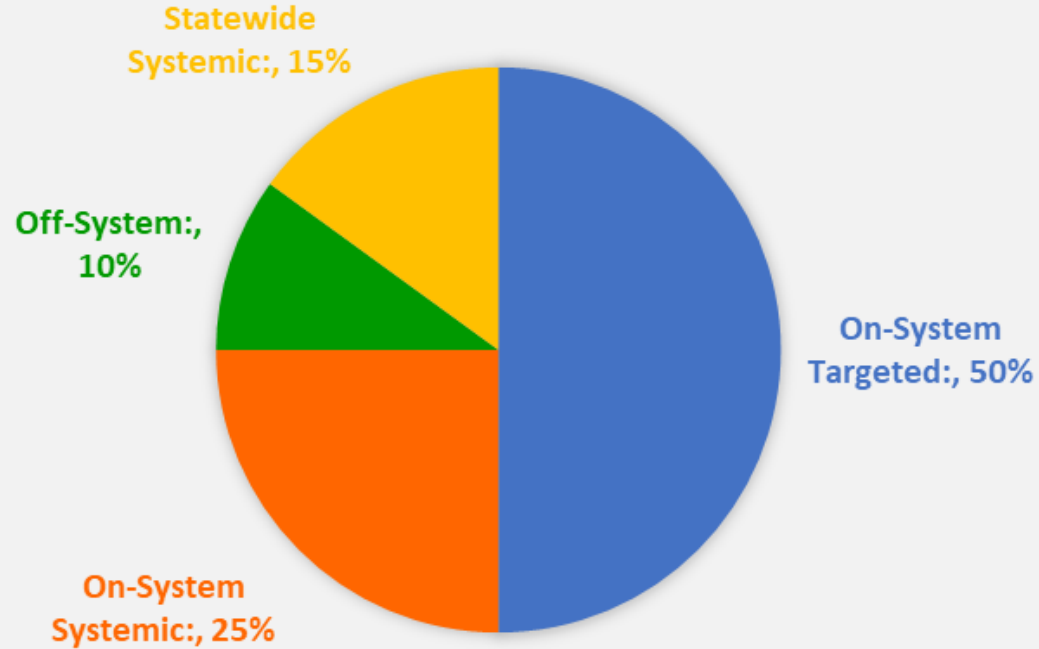
Agenda Item	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
2024 HSIP Program Announced 10/2/23												
District FY 24-27 Submittals Due 12/15/2023 *												
												
Project selections confirmed by 03/15/24												

*District Submittals Include

- Confirm FY 24 – FY 26 projects already approved for scope, schedule, & estimate for both on and off system
- Submit additional projects to fill in your funding gaps for FY 24 – FY 26
- Submit all projects for FY 27



HSIP FUNDING BREAKDOWN





FY 24	
Total:	\$387,421,639
On-System Targeted:	\$193,710,819
On-System Systemic:	\$96,855,410
Off-System:	\$38,742,164
Statewide Systemic:	\$58,113,246

FY 25	
Total:	\$395,987,128
On-System Targeted:	\$197,993,564
On-System Systemic:	\$98,996,782
Off-System:	\$39,598,713
Statewide Systemic:	\$59,398,069

FY 26	
Total:	\$404,723,927
On-System Targeted:	\$202,361,963
On-System Systemic:	\$101,180,982
Off-System:	\$40,472,393
Statewide Systemic:	\$60,708,589

FY 27	
Total:	\$387,592,013
On-System Targeted:	\$193,796,007
On-System Systemic:	\$96,898,003
Off-System:	\$38,759,201
Statewide Systemic:	\$58,138,802



Targeted Selection Method

- High crash locations and clusters.
- Each eligible targeted project is subjected to a benefit-cost analysis. The formula used for this purpose is the Safety Improvement Index (SII).
- The SII is the ratio of the annual savings in preventable crash costs that have occurred at a location to the cost of constructing the proposed improvement.
- Each countermeasure has a specific Crash Reduction Factor, which represents the percentage reduction in crash costs or severity of the applicable crash types that can be expected as a result of the improvement.



Systemic Approach

- A systemic approach involves implementing improvements based on high-risk roadway features.
- This approach broadens traffic safety efforts by considering risk and crash history when identifying where to make low-cost safety improvements.
- Identifies a “problem” based on systemwide data, such as urban pedestrian crashes. These crashes are often spread across the network with few or no locations experiencing a “cluster” of crashes.
- Systemic projects are not location specific but rather across a network such as a corridor or region.



Intersections

- Urban/Rural intersection improvements
- Two-Way Left-Turn Lanes (TWLTLs/Continuous Turn Lanes)
- Dedicated right and left turn lanes
- Signal head back plates with reflective borders
- Close Median Openings (Crossovers)

Roadway Lane Departure

- Roadway widening
- Safety lighting
- Enhanced Delineation on Curves
- Median Barrier

Pedestrian

- Safety lighting at urban intersection
- Installation of attachments to existing concrete barrier systems to deter prohibited pedestrian crossings on divided highways
- Uncontrolled crossing locations
- Median and crossing islands in urban and suburban areas

Example District Systemic Countermeasures: Intersection



Urban/Rural intersection improvements



Backplates with Retroreflective Borders




Dedicated right and left turn lanes



Example District Systemic Countermeasures: Roadway Lane Departure



Safety lighting




Safety Benefits:

Lighting can reduce crashes up to:

42%
for nighttime injury pedestrian crashes at intersections.¹


33-38%
for nighttime crashes at rural and urban intersections.¹

28%
for nighttime injury crashes on rural and urban highways.¹



Source: WSDOT

Enhanced Delineation on Curves



Safety Benefits:

Chevron Signs
25% reduction in night-time crashes.¹
16% reduction in non-intersection fatal and injury crashes.²


Oversized Chevron Signs
15% reduction in fatal and injury crashes.²

Sequential Dynamic Chevrons
60% reduction in fatal and injury crashes.²

In-Lane Curve Warning Pavement Markings
35-38% reduction in all crashes.^{4,5}

New Fluorescent Curve Signs or Upgrade Existing Curve Signs to Fluorescent Sheeting
18% reduction in non-intersection, head-on, run-off-road, and sideswipe in rural areas.¹

Median Barrier



8%
of all fatalities on divided highways are due to head-on crashes.¹

Safety Benefits:

Median Barriers Installed on Rural Four-Lane Freeways

97%
reduction in cross-median crashes.²

Example District Systemic Countermeasures: Pedestrian



Rectangular Rapid Flashing Beacons



Safety Benefits:

RRFBs can reduce crashes up to:

47%

for pedestrian crashes.⁴

RRFBs can increase motorist yielding rates up to:

98%

(varies by speed limit, number of lanes, crossing distance, and time of day).³



RRFBs used at a trail crossing. Source: LJB

Median and crossing islands in urban and suburban areas



Safety Benefits:

Median with Marked Crosswalk

46%

reduction in pedestrian crashes.²

Pedestrian Refuge Island

56%

reduction in pedestrian crashes.²

Pedestrian Hybrid Beacons



Safety Benefits:

55%

reduction in pedestrian crashes.⁴

29%

reduction in total crashes.³

15%

reduction in serious injury and fatal crashes.³



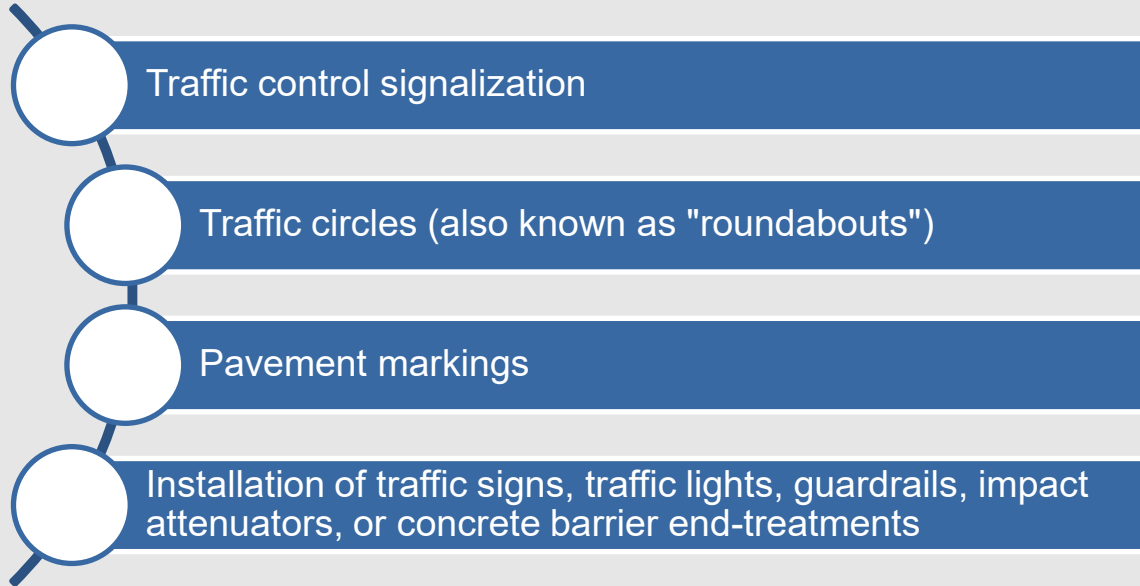
Example of PHBs mounted on a mast arm. Source: FHWA



G-Match

- List of Approved G-Match Work codes can be found on [SharePoint](#)
- TRF is continuing our efforts to encourage local participation in the HSIP program.
- In accordance with [23 USC §120\(c\)\(1\)](#): Federal share payable, Increased Federal Share for Certain Safety Projects, TRF and FHWA have evaluated the HSIP countermeasures for eligibility for 100% federal funding for construction dollars
- All projects must conform to the guidelines for HSIP projects, e.g., meeting minimum SII
- Safety Engineering will consider off-system projects a priority for this increased share.

Examples of potentially eligible projects include (G-Match):



Examples of potentially eligible projects include (G-Match):



WC	Safety Countermeasure - Description	Definition	G?
101	Install Warning/Guide Signs	Provide advance signing for unusual or unexpected roadway features where no signing existed previously.	Yes
107	Install Traffic Signal	Provide a traffic signal where none existed previously. This does not include the installation of flashing beacons.	Yes
108	Improve Traffic Signals	Improve existing intersection signals to current design standards.	Yes
110	Install Pedestrian Signal	Provide a pedestrian signal at an existing signalized location where no pedestrian phase exists, but pedestrian crosswalks are existing, or in conjunction with Refer to W.C. 403 for installation of pedestrian crosswalks.	Yes
111	Interconnect Signals	Provide a communication link between two or more adjacent signals in a corridor. Specify all signalized intersections to be included in the interconnection.	Yes
113	Install Delineators	Install post-mounted delineators to provide guidance.	No
114	Install School Zones	Place school zones to include flashers, signing and/or pavement markings where none existed previously. Refer to W.C. 403 for pedestrian crosswalk markings.	Yes
118	Replace Flashing Beacon with a Traffic Signal	Replace an existing flashing beacon at an intersection with a traffic signal.	Yes
119	Install Overhead Signs	Install overhead advance regulatory, warning or guide signing for unusual or unexpected roadway features where no signing existed previously.	Yes
122	Install Advanced Warning Signals (Intersection- Existing Warning Signs)	Provide flasher units in advance of an intersection where none previously existed but where advance warning signs already exist.	Yes
123	Install Advanced Warning Signals (Curve- Existing Warning Signs)	Provide flasher units in advance of a curve where none previously existed. Advance warning signs already exist.	Yes
124	Install Advanced Warning Signals and Signs (Intersection)	Provide flasher units and signs in advance of an intersection where none previously existed.	Yes
125	Install Advanced Warning Signals and Signs (Curve)	Provide flasher units and signs in advance of a curve where none previously existed.	Yes
128	Install Advanced Warning Signs (Intersection)	Provide signs in advance of an intersection where none previously existed.	Yes
130	Install Advanced Warning Signs (Curve)	Provide signs in advance of a curve where none previously existed.	Yes
131	Improve Pedestrian Signals	Bring existing pedestrian signal units into conformance with current standards.	Yes
132	Install Advance Warning Signals and Signs	Provide flasher units and signs in advance of hazard where none previously existed.	Yes
133	Improve School Zone	Improve an existing school zone by upgrading signing, pavement markings or signals.	Yes
136	Install LED Flashing Chevrons (Curve)	Install LED flashing chevrons on curve to provide guidance.	Yes
137	Install Chevrons (Curve)	Install chevrons on curve to provide guidance.	Yes
138	Install Flashing Yellow Arrow	Improve existing intersection signals by adding a flashing yellow arrow indication and install the LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-17T) sign. Refer to W.C. 108 for improvement of traffic signal.	Yes
139	Install Surface Mounted Delineators on Centerline	Install surface mounted delineators on centerline.	Yes
140	Wrong Way Driver Warning Signs	Provide warning signs to warn wrong way drivers at freeway entrances.	Yes

- G-Match List could be found in TRF Sharepoint Documents (link sent in email for this year's call)
- Unchanged from last year




Project Submittals

- Submittal Form/Cover Page
- Location Information and Map
- Scope of Work
- Cost Estimate from TxC
- SII Report/Crash Data (*Targeted Projects only*)
- Supplemental Information (*Typical Sections, Layouts, etc.*)
- Selection Method (*Targeted vs Systemic*) (*On cover sheet*)
- *TxC Entering Requirements*

Submission Information – Cover Page



All fields must be filled out as best as possible

 HSIP Project Submission			
Save a Copy		Reset Form	
Proposal Information			
District	<input type="text"/>	County	<input type="text"/>
Comments	<input type="text"/>		
File Name	<input type="text"/>	Supervised By	<input type="text"/>
Roadway Information			
Primary Roadway	<input type="text"/>	Control Section(s)	<input type="text"/>
Limits From	<input type="text"/>	DFO*	<input type="text"/>
Limits To	<input type="text"/>	DFO*	<input type="text"/>
<small>*Lat/Long pairs for off-system</small>			
On or Off System	<input type="text"/>	Speed Limit	<input type="text"/>
Length	<input type="text"/>	Current AADT	<input type="text"/>
Intersecting Roadway	<input type="text"/>	Speed Limit	<input type="text"/>
On or Off System	<input type="text"/>	Current AADT	<input type="text"/>
Project Information			
Targeted or Systemic	<input type="text"/>	Crashes	K <input type="text"/>
Work Code(s)	<input type="text"/>		A <input type="text"/>
Preferred Letting	<input type="text"/>		B <input type="text"/>
Let FY	<input type="text"/>		SII <input type="text"/>
Estimate			
Bid Items (See Guidelines for instructions)	<input type="text"/>		
ROW (if required)	<input type="text"/>		
Mobilization and Barricades (≥ 8%)	<input type="text"/>		
Safety (2-5%)	<input type="text"/>		
Inflation (0-12% by Let FY)	\$ 0		
Total	\$ 0		



Submit Program in TxDOTCONNECT by **December 15, 2022**

Perform Field Evaluations

- Ensure work need and scope
- Assists with complete and accurate estimates
- Submit only the highest priority projects

Work with Planning Office

- Ensure work isn't already scheduled
- Coordinate letting dates with compatible work before submitting

Preferred Letting Date

- Ensure the FY chosen is deliverable



Estimates

- TRF uses the estimate to compare at PS&E time
- Only work types programmed can be part of safety project
- Use district average bid prices

Confirm Programmed Projects

- Review and confirm current scope, schedule, & estimate for all FY 23, FY 24, and FY 25 projects in the “Programmed Projects” grid of the Traffic Safety page in TxDOTCONNECT

Review Process

- District submits program to “Statewide” review in TxDOTCONNECT
- TRF will review projects and schedule a District HSIP Workshop to discuss
- TRF will add comments, then return the program to the district for updates
- Repeat as needed
- TRF will Program projects into the UTP and funding lines will show Approved in September 2023.
- TRF will coordinate with FIN to approve FY23 funding lines on a case-by-case basis



Scope vs Overrun

- Scope change is work added to or removed from approved work codes
- Overrun is increased cost, but work remains the same as submitted
- Scope changes must be submitted and approved prior to PS&E
- Overruns are approved at time of PS&E

Scope changes resulting in cost increases will impact district budget

Change Orders

- Change order during construction
- Change order additional work into an existing project – LIMITED and case by case basis

Change orders will not impact district budget

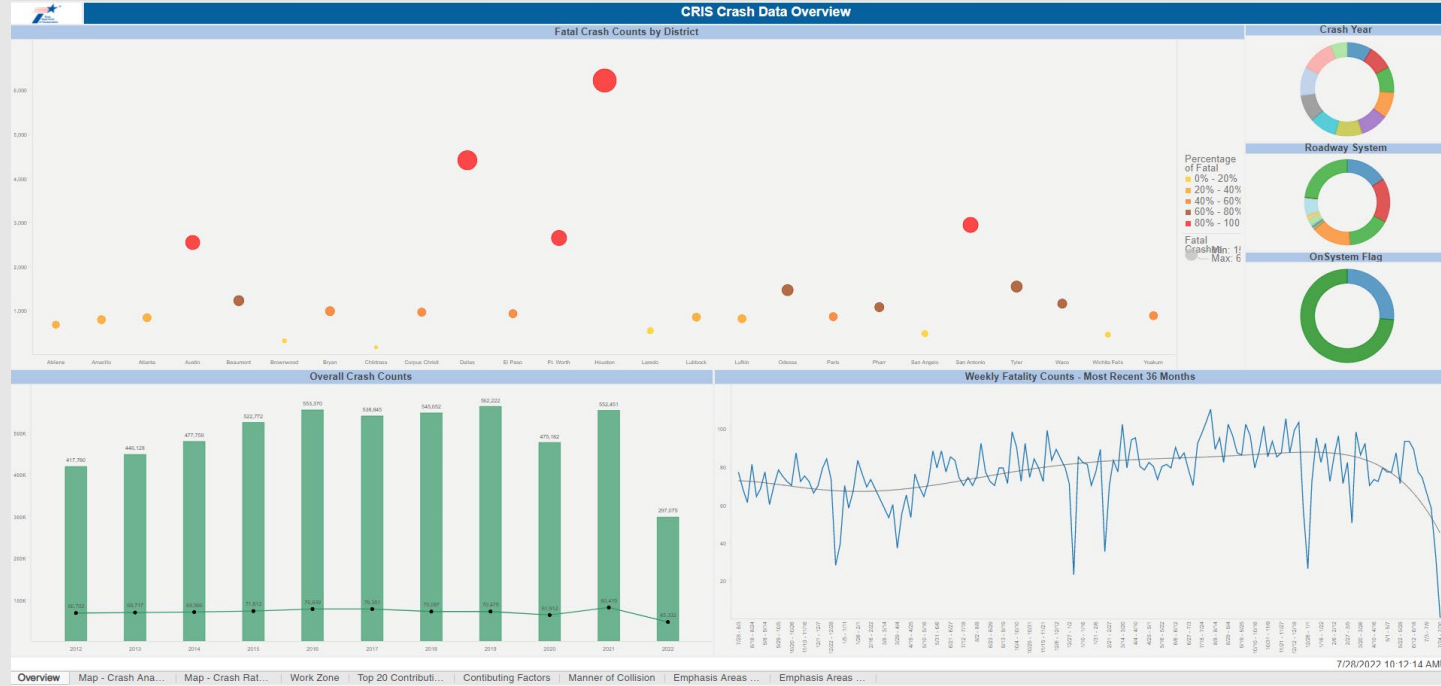
Notify TRF-Safety about any changes made to any project.

- Approval required to move project from one FY to another FY

Tools: Crash Data & Analysis Dashboard Page



<https://tntoday.dot.state.tx.us/TRF/Pages/CRIS-Dashboard-Page.aspx>





How to Documents

- How to calculate SII.docx
- How to find DFO's (new CRIS).docx
- AFA Guidance
- How to input funding lines in TxDOTCONNECT

CAVS Data

- CAVS Data has been updated and placed in the 2023 HSIP Program folder in SharePoint
- Off-System files may be shared with your local jurisdictions

TRF Sharepoint – Tools found [here](#).