



Some links included in these slides may only be accessible within the TxDOT network. External users or those outside of TxDOT may encounter access restrictions.

Highway Safety Improvement Program

2026 TRF – District Webinar



September 3, 2025

HELP MAKE TEXAS SAFER FOR EVERYONE

DRIVE *like a* TEXAN™

Kind. Courteous. Safe.

[DriveLikeATexan.com](https://www.DriveLikeATexan.com)



Purpose of HSIP

- *"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, FHWA requires additional annual reporting measures

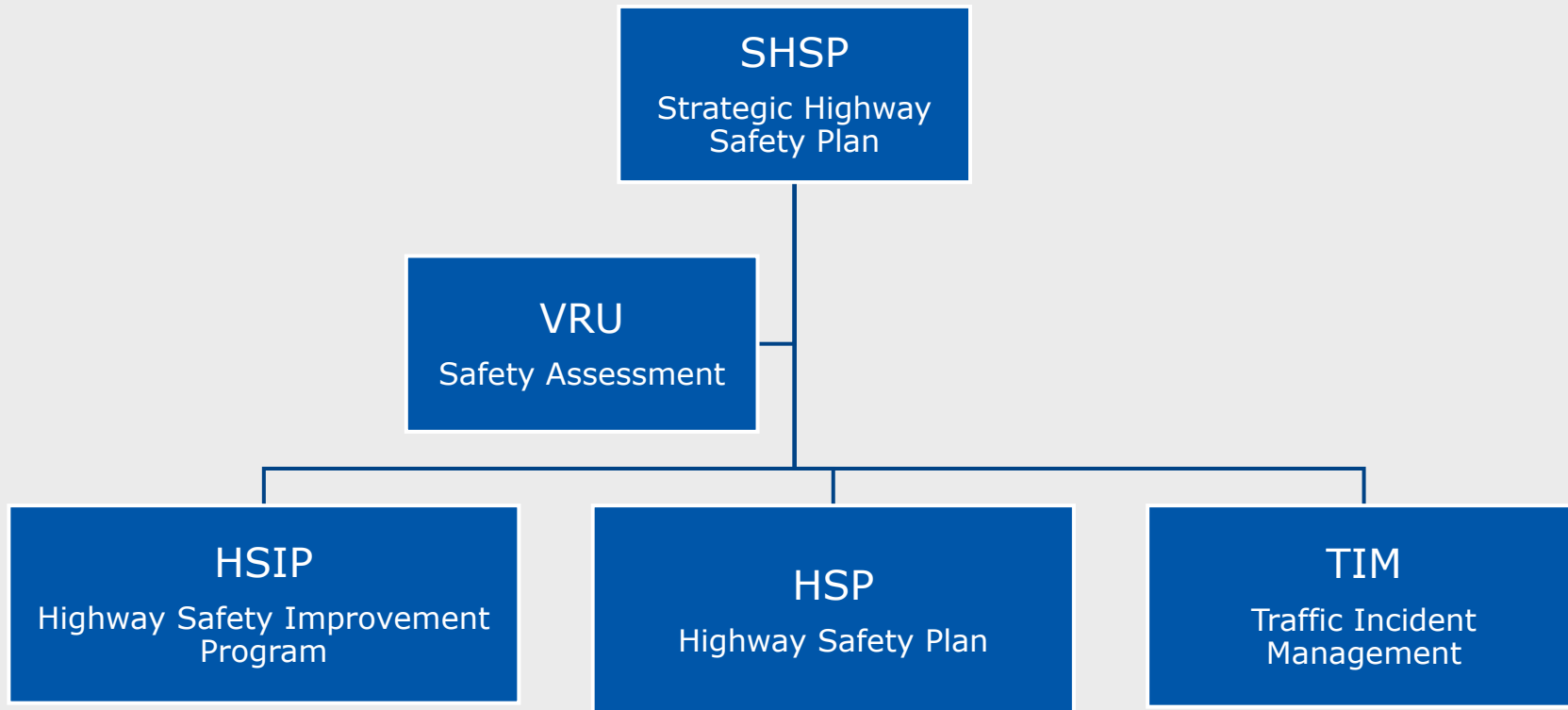
Legislated under Section 148 of Title 23, *United States Code* (23 U.S.C. 148) and regulated under Part 924 of Title 23, *Code of Federal Regulations* (23 C.F.R. Part 924)

FHWA Oversight

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

2022-2027 Texas Strategic Highway Safety Plan











Texas Strategic Highway Safety Plan

ABOUT EMPHASIS AREAS RESOURCES ANNUAL CRASHES

PROGRAMS CALENDAR CONTACT TELEMATICS DATA

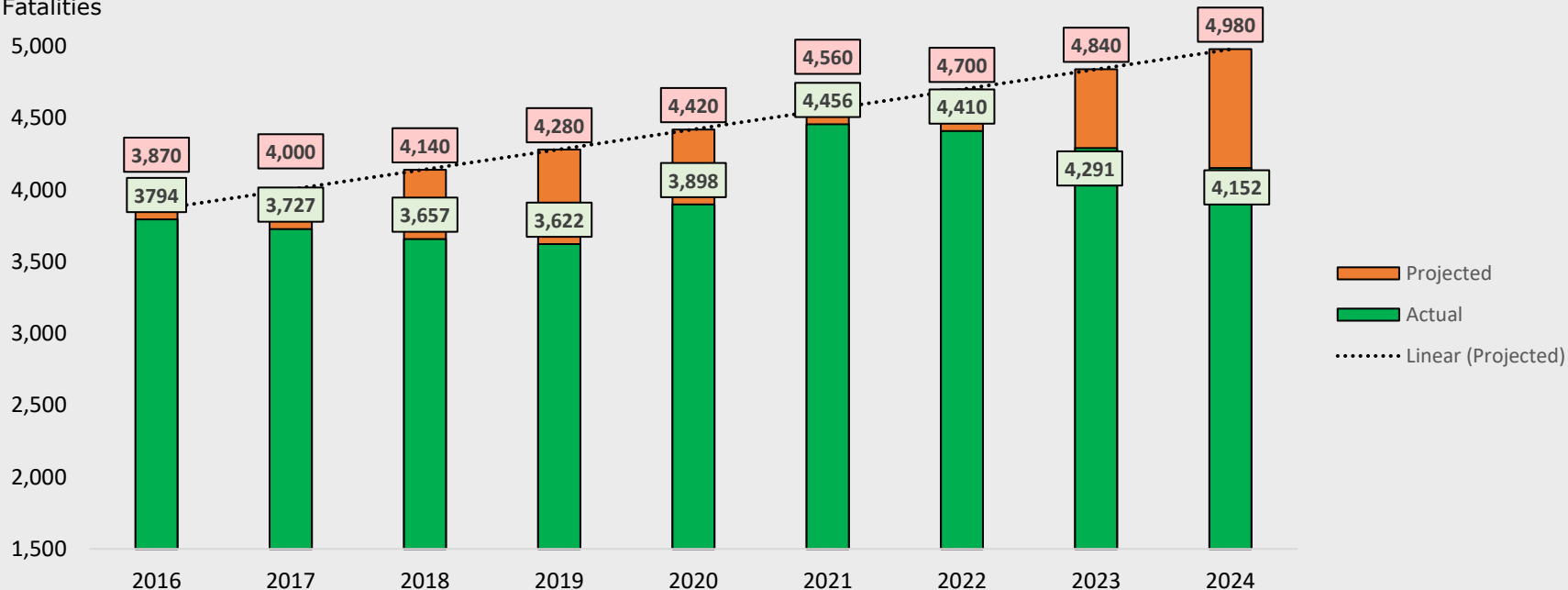
Home — Emphasis Areas

Emphasis Areas

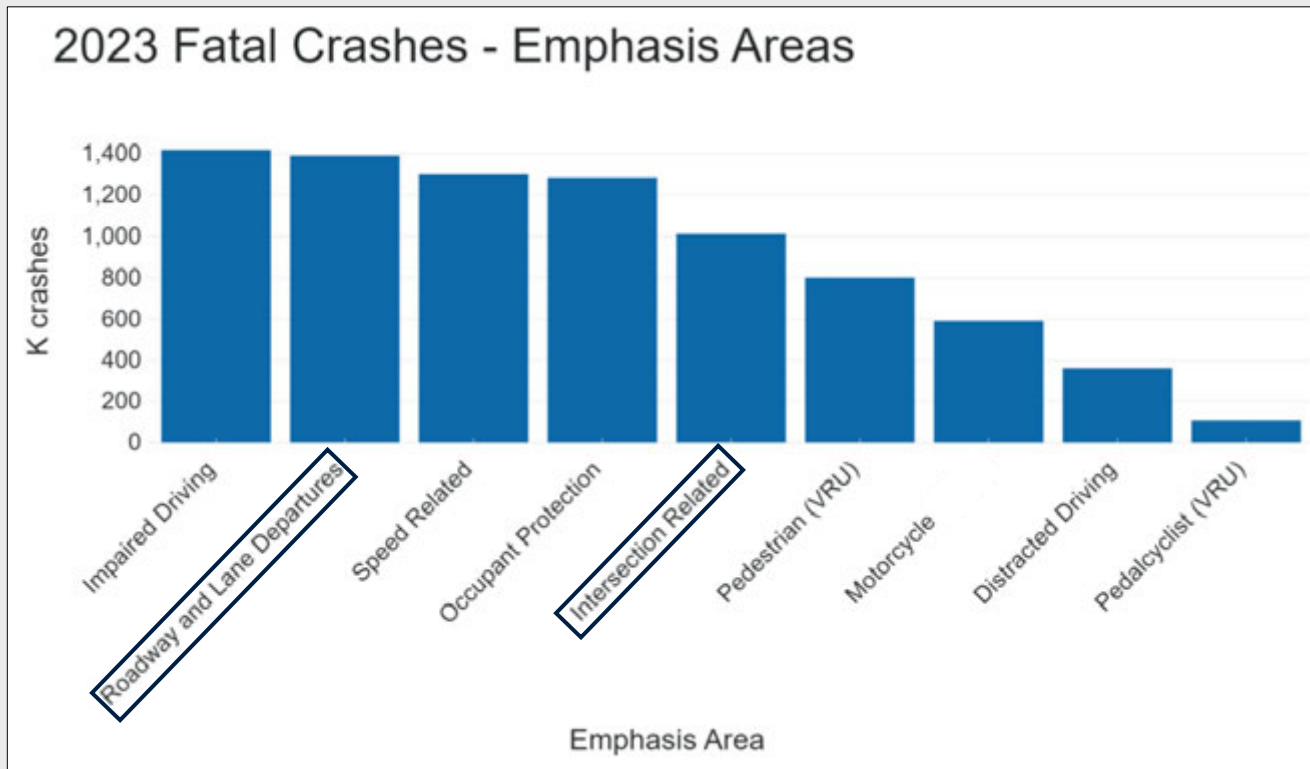
 Roadway & Lane Departures	 Intersection Safety	 Occupant Protection
 Impaired Driving	 Speed Related	 Distracted Driving
 Vulnerable Road Users	 Post-Crash Care	

Texas Fatality Trends

Fatalities



2023 Fatal Crash Recap



HSIP Countermeasures (Types of Work)

Work Code	Safety Countermeasure	Work Code	Safety Countermeasure	Work Code	Safety Countermeasure
101	Install Warning/Guide Signs	145	Flashing Stop Beacon or LED-embedded Stop Signs	510	Construct Turn Arounds
107	Install Traffic Signal	150	Dynamic Speed Feedback Signs	515	Construct Interchange
108	Improve Traffic Signals (Hardware)	151	Variable Speed Limit (VSL)	516	Close Crossover
109	Implement Leading Pedestrian Interval (LPI) Timing	201	Install Median Barrier	517	Add Through Lane
110	Install Pedestrian Signal	203	Install Raised Median	518	Install Continuous Turn Lane
111	Install Signal Coordination or Adaptive Signal Timing (Interconnect Signals)	204	Flatten Side Slope	519	Add Left Turn Lane
113	Install Delineators	209	Safety Treat Fixed Objects	520	Lengthen Left Turn Lane
114	Install School Zones	217	Install Impact Attenuation System	521	Add Right Turn Lane
115	Install Pedestrian Countdown Timer	218	Widen Bridge	522	Lengthen Right Turn Lane
118	Replace Flashing Beacon with a Traffic Signal	220	Truck Parking Facilities	523	Construct Pedestrian Over/Under Pass
119	Install Overhead Signs	225	Pedestrian Crossing Deterrent	524	Increase Turning Radius
122	Install Advanced Warning Beacons (Intersection - Existing Warning Signs)	303	Resurfacing	525	Convert to One Way Frontage Roads
123	Install Advanced Warning Beacons (Curve- Existing Warning Signs)	304	Safety Lighting (Non-Intersection)	526	Positive Offset Left-turn Lanes
124	Install Advanced Warning Beacons and Signs (Intersection)	305	Safety Lighting (Intersection)	532	Milled Edgeline Rumble Strips
125	Install Advanced Warning Beacons and Signs (Curve)	401	Install Pavement Markings	533	Profile Edgeline Markings
128	Install Advanced Warning Signs (Intersection)	402	Install Edgeline Marking	534	Raised Edgeline Rumble Strips
130	Install Advanced Warning Signs (Curve)	403	Install Pedestrian Crosswalk	536	Widen Paved Shoulders (to >5 ft.)
131	Improve Pedestrian Signals	404	Install Centerline Marking	537	Construct Paved Shoulders (> 5ft.)
132	Install Advance Warning Beacons and Signs	407	Install Sidewalks	538	Convert 2 Lane Facility to 4 Lane Divided
133	Improve School Zone	408	Add Shared Use Path	540	Install Passing Lanes on 2 Lane Road
134	Install Advanced Pedestrian Crossing Signage	409	Install Pedestrian Refuge Islands	541	Provide Additional Paved Surface Width
136	Install LED Flashing Chevrons (Curve)	410	Install Dedicated Bicycle Lanes	542	Milled Centerline Rumble Strips
137	Install Chevrons (Curve)	502	Widen Lane(s)	543	Profile Centerline Markings
138	Install Flashing Yellow Arrow	503	Widen Paved Shoulder (to 5 ft. or less)	544	Raised Centerline Rumble Strips
139	Install Surface Mounted Delineators on Centerline	504	Construct Paved Shoulders (1-4 ft.)	545	Transverse Rumble Strips
140	Wrong Way Driver Warning Signs	505	Improve Vertical Alignment	547	Construct a Single-Lane Roundabout
141	Wrong Way Driver Warning Markings	506	Improve Horizontal Alignment	550	Restricted Crossing U-Turn (RCUT)
142	Wrong Way Driver Advanced Technologies	507	Increase Superelevation	551	Median U-Turn (MUT)
143	Pedestrian Hybrid Beacon	508	Realign Intersection		
144	Install RRFB	509	Channelization		

FY 2025 HSIP Accomplishments

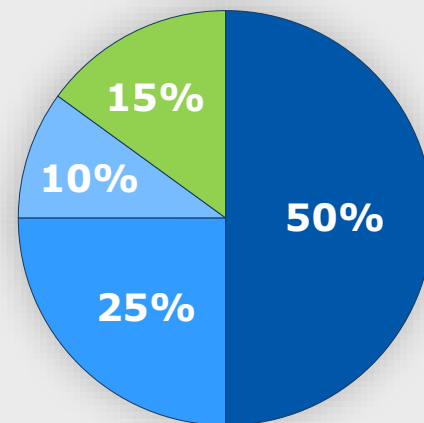
- *FY25 HSIP Letting*
 - \$276M (\$30M aggregated underrun)
- *FY25 State Systemic Widening (SSW) Letting*
 - \$17.2M (exceeded \$15.5M target)
- *FY25 Overruns (at letting)*
 - \$15.5M (reduced from \$24M in FY 24)
- *FY25 Change Orders*
 - \$6.3M (increased approvals from \$4.5M in FY 24)

Current Program Constraints

- FY 2026, 2027, and 2028 have been reported to FIN as fully programmed
- DES is coordinating with Districts to achieve an annual \$12 Billion Letting Target. The “Available to Let Date” field in TxDOT Connect may be utilized for potential project acceleration. TRF supports all opportunities to accelerate safety projects.
- Estimate overruns necessitating an increase in Authorized Amount should be coordinated between the Districts and TRF as far in advance of final PS&E submittal as possible
- Where additional Cat 8 are not available, the general recommendation for estimate overruns will be to supplement with other funding sources (Cat 11SF, Cat 1, etc)

Detailed HSIP Guidance

- Project Identification (project types and funding categories),
Design Considerations, Crash Analysis, Estimating Guidance,
Submittal Documentation, Post-Approval changes to Letting, Scope, and Funding
- Approximately \$340 million allocated to TxDOT annually for:
 - Targeted projects (50%): Locations with crash history
 - Systemic projects (25%): Locations with or without crash history, but could have similar features / deficiencies as Targeted projects (AASHTOWare Safety future functionality will include predictive analytics)
 - Off-System (10%): Locations within City/County jurisdiction
 - Annual Priority (15%): Annual area of focus chosen by TRF (competitive selection of projects). TRF will issue separate call for Annual Priority at a later time



- District Targeted
- District Systemic
- District Off-system
- Annual Priority

FY26-FY29 HSIP Funding

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 28	
Total:	\$337,036,533
On-System Targeted:	\$168,518,267
On-System Systemic:	\$84,259,134
Off-System:	\$33,703,653
Annual Priority:	\$50,555,480

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

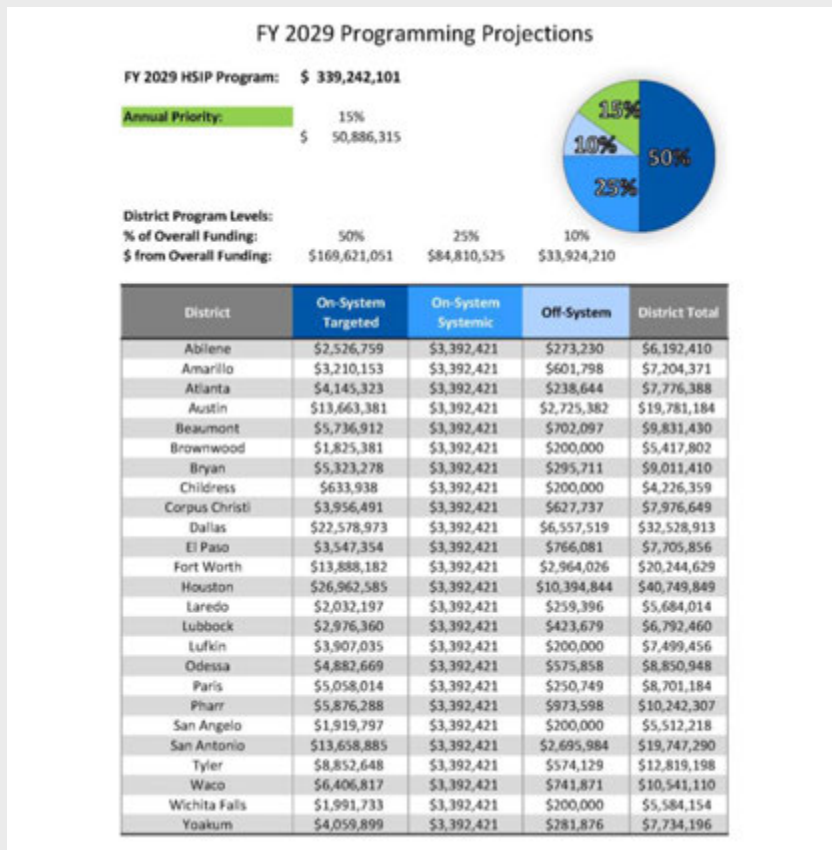
FY 29	
Total:	\$339,242,101
On-System Targeted:	\$169,621,051
On-System Systemic:	\$84,810,525
Off-System:	\$33,924,210
Annual Priority:	\$50,886,315

*FY 26 and 27 include 15% over base UTP allocation

Funding Projections for FY 2029

- Located in

[2026 HSIP](#)
[Program](#)
[SharePoint](#)



HSIP Special Rules

HSIP Special Rules Determinations

The HSIP special rules³ apply to a State DOT if any of the following instances occur:

- **High-Risk Rural Roads** – The fatality rate on rural roads increased over the most recent 2-year period, which compares the 5-year averages for CY 2016-2020 with CY 2018-2022.
- **Older Drivers and Pedestrians** – The rate per capita of traffic fatalities and serious injuries for drivers and pedestrians aged 65 and over in a State increased over the most recent 2-year period, which compares the 5-year averages for CY 2016-2020 with CY 2018-2022.
- **Vulnerable Road User Safety** – The total annual fatalities of vulnerable road users in a State represents not less than 15 percent of the total annual crash fatalities in the State, which is based on annual data for CY 2022.

HSIP SPECIAL RULES DETERMINATIONS	SPECIAL RULES APPLIES?	REQUIRED CORRESPONDING ACTIONS
High-Risk Rural Roads	Yes	Obligate in FY 2025 an amount equal to at least 200 percent of the FY 2009 high-risk rural roads set-aside in the amount of \$14,572,152.
Older Drivers and Pedestrians	Yes	Include strategies to address the increase in older driver and pedestrian fatal and serious injury rates in the next SHSP update. Additionally, a secondary analysis should be conducted to determine whether the emphasis on safety programs and countermeasures should be focused on drivers and/or pedestrians.
Vulnerable Road User Safety	Yes	Obligate in FY 2025 not less than 15 percent of the amount apportioned under 23 U.S.C. 104(b)(3) for highway safety improvement projects to address the safety of vulnerable road users. <i>NOTE: Your State's Vulnerable Road User Safety Assessment should be used to guide these investment decisions.</i>

HRRR (YS60) & VRU (YS70) by FY

Year of LET	APPORTIONMENT CODE	
	YS60	YS70
FY 2024	\$20,374,439	\$49,846,702
FY 2025	\$17,087,573	\$51,297,169
FY 2026	\$30,877,552	\$63,424,389
FY 2027	\$9,344,063	\$50,545,534
FY 2028	\$537,427	\$69,135,215

- Approximate annual targets:
 - \$15M (HRRR)
 - \$48M (VRU)

2026 HSIP Program - Timeline

Agenda Item	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
TPP UTP Update Aug 2025 2026 HSIP Webinar & Program Call 9/3/25		▲									
District FY 26-29 Submittals Due 12/19/2025 *		■				▲					
Project reviews and FIN approvals complete by 4/30/26					■						▲

- * District Submittals Include
 - Confirm FY 26 – FY 28 projects already approved for scope, schedule, & estimate for both on and off system
 - Submit all projects for FY 29 by December 19, 2025**

Type of Work involved in HSIP – District Targeted

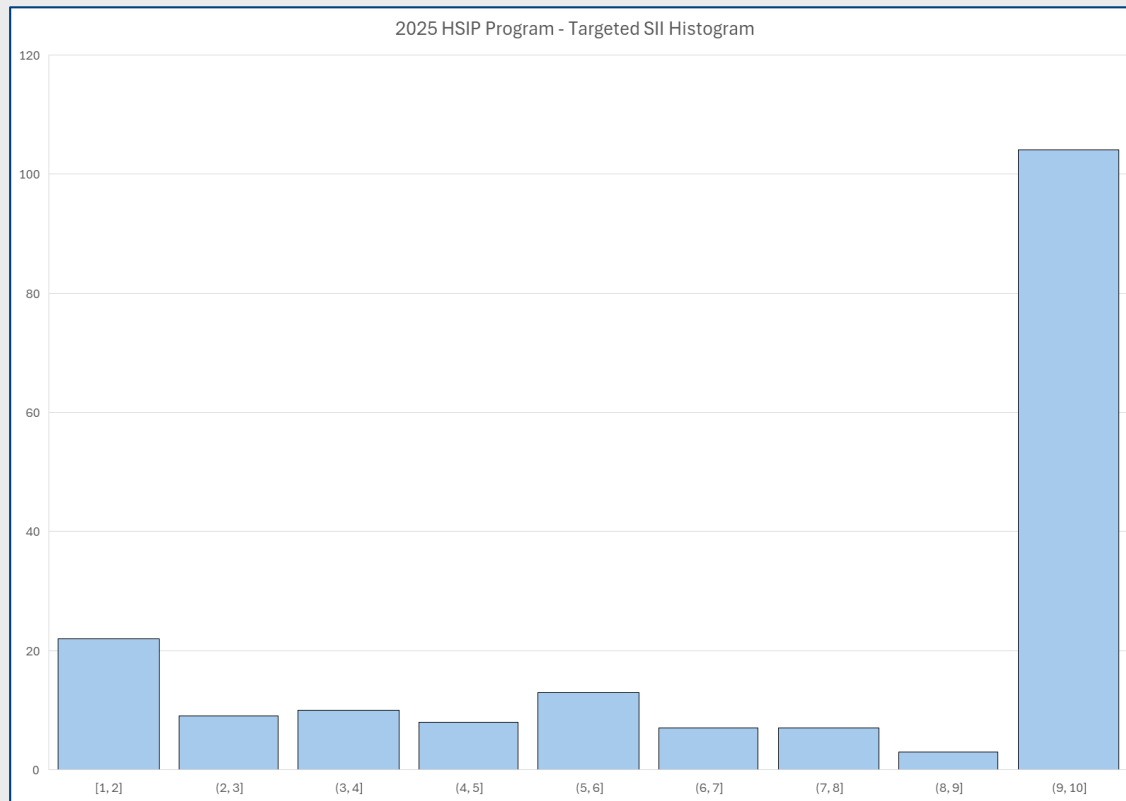
Targeted Selection Method (reactive)

- High crash locations and clusters.
- Safety Improvement Index (SII): Benefit-Cost Analysis
 - To qualify, SII ratio must be greater than 1.0
 - Projects with $SII < 3.0$ will be considered medium/high risk if estimate increases
- Each countermeasure has a specific Crash Reduction Factor to be used with the SII calculation
- Preventable crash data must match each project's location
 - Consider for project delays, qualifying crash data cannot be older than 7 years relative to letting FY



Safety Improvement Index (SII) Distribution

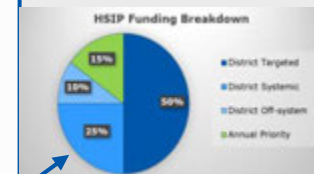
- SII changes linearly with project estimates
- A project with an SII of 2.0 could have an estimate overrun of 100% (i.e. the budget doubles) and the project would still qualify with an SII of 1.0
- TRF will closely review bid item estimates for projects with an initial SII less than 3.0 (12%) and will monitor for overrun risk



Type of Work involved in HSIP – District Systemic

Systemic Approach (proactive)

- Proven effective countermeasures even on roadway segments not experiencing crash hot spots
- A Systemic approach involves implementing improvements based on high-risk roadway features.
- Evidence of crash history is Not Required
- Identifies a “problem” based on system-wide 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.



District Systemic - Approved Systemic Safety Countermeasures

<https://highways.dot.gov/safety/proven-safety-countermeasures>

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)
- Roundabouts (Convert Stop/Signal controlled to Roundabout)

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
- Sidewalks (Prioritized Segment on PSAP)

Off-System Projects

100% Funded

- All construction costs for HSIP off-system projects will be 100% FED funded through G-match eligibility or STATE Transportation Development Credits (TDC/Toll Credits).

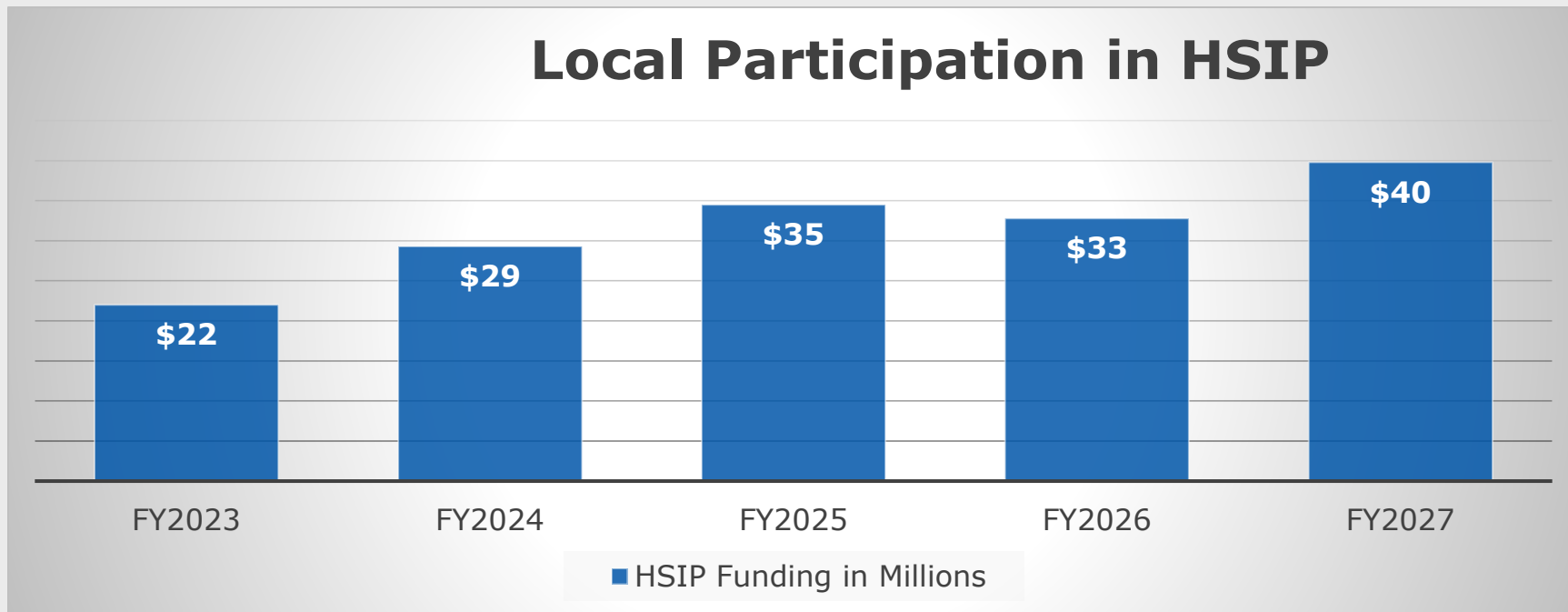
G-Match

- TRF is continuing our efforts to encourage local participation in the HSIP program.
- List of Approved G-Match Work codes can be found in the HSIP Guidance
- All projects must conform to the guidelines for HSIP projects

Transportation Development Credits (TDC/Toll Credits)

- If an off-system project is NOT on the G-match list, TxDOT will apply the 10% match for the LOCAL participation with STATE Transportation Development Credits (TDC)
- Local Governments are responsible for any overruns at time of letting

HSIP Off-System (Local Government Projects)



Off-System Projects

Local Road Safety Plans

- Districts are encouraged to collaborate with local governments and facilitate the development of an LRSP.
 - A [local road safety plan \(LRSP\)](#) provides a framework for identifying, analyzing, and prioritizing roadway safety improvements on local roads. The LRSP development process and content are tailored to local issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads.
 - Take advantage of LG Safety Action Plan that may have been developed through SS4A FY22-26 (FY24 Recipients: Concho Valley COG, City of Converse, Universal City, Boerne, Denton, Grapevine, Arlington, etc) as well as Vision Zero Plans (Dallas, Fort Worth, San Antonio, Austin, Houston, etc).



Work Code Updates

- Preventable Crash Types: Appendix C in the HSIP Guidelines includes the verbiage for the numeric codes on the crash reports, organized by preventable crash types for each work code.
- Some preventable crash criteria was revised. Some Reduction Factor and Service Life values have been updated as well.

OR Example:

WORK CODE	OR
304	Light Condition = 3 Dark, Not Lighted
Safety Lighting	Light Condition = 4 Dark, Lighted
	Light Condition = 6 Dark, Unknown Lighting

In this example, a crash would count as preventable for adding Safety Lighting if the Light Condition field on the CR-3 Crash Report is coded as 3 "Dark, Not Lighted", 4 "Dark, Lighted", OR 6 "Dark, Unknown Lighting"

AND Example:

WORK CODE	OR	AND
305	Light Condition = 3 Dark, Not Lighted	Intersection Related = 1 Intersection
Safety Lighting at Intersection	Light Condition = 4 Dark, Lighted	Intersection Related = 2 Intersection Related
	Light Condition = 6 Dark, Unknown Lighting	

In this example, a crash would count as preventable for adding Safety Lighting at an Intersection if any of the following combinations are present in the crash report:

- Light Condition = 3 AND Intersection Related = 1
- Light Condition = 3 AND Intersection Related = 2
- Light Condition = 4 AND Intersection Related = 1
- Light Condition = 4 AND Intersection Related = 2
- Light Condition = 6 AND Intersection Related = 1
- Light Condition = 6 AND Intersection Related = 2

AND + OR Example:

WORK CODE	OR	AND
524	First Harmful Event = 7 Fixed Object	Vehicle Body Style = 87 Truck - tractor
Increase Turning Radius		Vehicle Body Style = 91 Semitrailer
	Vehicle Movements/Manner of Collision = 13 Two Vehicles, Angle, One Straight, One Right Vehicle Movements/Manner of Collision = 20 Two Vehicles, Same Straight, Rear End Vehicle Movements/Manner of Collision = 21 Two Vehicles, Same Straight, Side Swipe Vehicle Movements/Manner of Collision = 30 Two Vehicles, Opposite Straight Vehicle Movements/Manner of Collision = 33 Two Vehicles, Opposite, One Straight, One Right	

A few Work Codes have combinations of AND + OR crash criteria, separated by the black line as shown above. In this example, a crash would count as preventable for Increasing Turning Radius if any of the following combinations or values are present in the crash report:

- First Harmful Event = 7 AND Vehicle Body Style = 87
- First Harmful Event = 7 AND Vehicle Body Style = 91
- Vehicle Movements/Manner of Collision = 13 OR 20 OR 21 OR 30 OR 33

Work Code Updates

- 100's Signing: Recommended to use Reflective Strips on sign posts (see spec 658 and standard D&OM(SIGN)-25)
- 107 Install Traffic Signal: New research for separate Reduction Factors for Rural (35%) versus Urban (20%). SPICE and CAP-X analysis now required.
- 108 Improve Traffic Signals: Can upgrade wire signals with mast arms, retroreflective backplates on signal heads, add / realign curb ramps, pavement marking enhancements
- 140, 141, 142 Wrong Way Driver countermeasures: Added examples, standards and specs
- 201 Install Median Barrier: Consider factors that might influence median barrier type (CTB versus steel cable): existing median width, percent truck traffic, cable post spacing, material availability, maintenance cost, and inside shoulder widening

Work Code Updates

- 407 Install Sidewalks: Use PathWeb, Google Street View, or conduct field inspection for any unexpected obstructions on existing sidewalks
- 500's Pavement widening countermeasures: Please review the Roadway Design Manual for lane and shoulder width requirements based on functional class and ADT. Approvals for widening in excess of RDM requirements will be considered on a case-by-case basis
- 500's Any pavement work: Recommend field inspections, core samples, overlay, review/approval by District Pavement Engineer
- 525 Convert to One-Way Frontage Road: Reminder of DES policy that any work performed on a Two-Way Frontage Road still requires approval from DES to maintain Two-Way operation.

HSIP Project Submittal documentation

- Project Submittal Form: **New format in excel**. Contains the basic project information corresponding to various data input into TxDOT Connect (forms can be used as manual input, or new automated input)
- Project Layout: plan view of project location, with callouts and annotations of proposed work
 - New automated Submittal Form will identify additional documentation needed (i.e. typical sections, signal warrants, etc)
- Bid Item Estimate: as close as possible to a 100% bid item estimate
 - Reference HSIP Estimating Guidance on [SharePoint](#)
 - New Excel Submittal Form will list bid item specs that are likely to be needed for the project
- Supporting crash data (previous 3 years 2022-2024) for Targeted projects, and Safety Improvement Index (SII)
- CSJ's programmed completely in TxDOT Connect (Project Details, Location, Estimated Cost, Funding screens)

Naming Convention for HSIP – Application & TxDOT Connect

Project Naming Convention

- **New Submittal Form Excel file will auto-name the submittal form**

This same name should be used for the PDF Portfolio or ZIP File

- **Projects on same highway & same Control Section (Most projects):**

Program Call_YYYY_DIS_HWY_CSJ

(Example: 2026_ATL_FM 3001_XXXX-XXX-XXX.pdf or .zip)


- **Projects on same highway spanning more than one Control Section (or County):**

Program Call_YYYY_DIS_HWY_CSJ, etc

(Example: 2026_ATL_FM 3001_XXXX-XXX-XXX, etc.pdf or .zip)

Submit PDF Portfolios and ZIP Files to the HSIP [Box.com](https://www.box.com) website

Submission Form Overview



2026 Program Call
HSIP Project Submission Form
 (UTP 2027 - TRF 2027 Sub-Program)

Typical Bid Item Specs

500	MOBILIZATION
502	BARRICADES, SIGNS, AND TRAFFIC HANDLING
506	TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS
636	SIGNS
644	SMALL ROADSIDE SIGN ASSEMBLIES
647	LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES
650	OVERHEAD SIGN SUPPORTS
654	SIGN WALKWAYS
658	DELINEATOR AND OBJECT MARKER ASSEMBLIES
666	RETROREFLECTORIZED PAVEMENT MARKINGS
668	PREFABRICATED PAVEMENT MARKINGS AND RUMBLE STRIPS

SAVE FORM 2026_SAT_FM775_0850-04-032 AUTO

Proposal Information

District: County:

Comments:

Project Work Codes*

101 Install Warning/Guide Signs	
136 Install LED Flashing Chevrons (Curve)	
633 Profile Edgeline Markings	
643 Profile Centerline Markings	

*You include up to 8 work codes per scope of project

Supervised By:

Roadway Information

Primary Roadway Limits From	FM 775	C-S-J	0850-04-032
Limits To	3.2 Mi. West of US 87	Beg DFO	18.805
	3.5 Mi. West of US 87	End DFO	19.175

On or Off System: Length (miles):

Selection Method Work Code Combo*

Targeted	RF	35%
101 Install Warning/Guide Signs	K	1
136 Install LED Flashing Chevrons (Curve)	A	0
633 Profile Edgeline Markings	B	1
September 2025	SII	57.87
2026		

*See WC Combo RF Calculator tab to determine Top 3 Work Code B Combo Bid-Adjusted Factor

Preferred Letting:
 Letting Fiscal Year:

Additional documentation needed

Cost Estimate

Bid Items (See 2026 HSIP Guidelines - Appendix D for additional info)	
Force accounts (Safety contingency, Erosion control, etc. under 5%)	
Subtotal (ToC Estimated Construction - Letting Estimate field)	\$ 135,750.00
Inflation (0-12% by Lot FY) <input type="text" value="0%"/>	\$ -
Total Requested Amount (ToC Funding request - Out of Funding line; use in SB Code)	\$ 60,050.00

*Add items plus force accounts without inflation. Check inflation in "Total Requested Amount"

This form is not intended for the purpose of evaluating and enhancing the safety of highways. The review form is not subject to the same review process as the HSIP application.

Submission Information – Cover Page (Automatic Fill in)

All fields must be filled out as best as possible

Please don't print to PDF, use Save Form button

Drop-down menu for Work Code Selection. Additional fields for up to 8 Work Codes

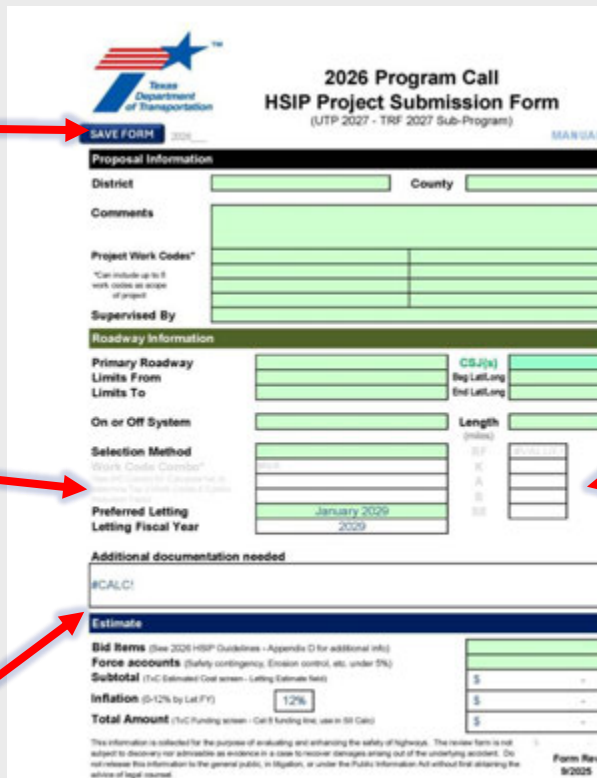
Top 3 Work Codes Combinations for Determining Reduction Factor

Reduction Factor and SII

Additional Documents Needed: Documents that will need to be submitted based on the selected Work Code(s) to submit with your Project Portfolio

Make sure you are using the latest version found in [SharePoint](#)

**Form Rev
9/2025**



**2026 Program Call
HSIP Project Submission Form**
(UTP 2027 - TRF 2027 Sub-Program)

Proposal Information

District: County:

Comments:

Project Work Codes*

*Can include up to 8 work codes as scope of project

Supervised By:

Roadway Information

Primary Roadway Limits From: CSJ(s):

Limits To: Beg Lat, Long:

On or Off System: Length (miles):

Selection Method

Work Code Combo:

Preferred Letting Fiscal Year:

Additional documentation needed

#CALCI:

Estimate

Bid Items (Use 2026 HSIP Guidelines - Appendix D for additional info)

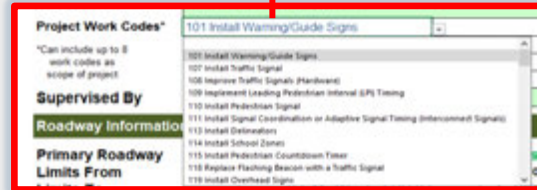
Force accounts (Safety contingency, Erosion control, etc. under 5%)

Subtotal (11C Estimated Cost screen - Letting Estimate field)

Inflation (5-12% by Let FY)

Total Amount (11C Funding screen - Call 8 funding line, use in 9B Call)

Form Rev 9/2025



Project Work Codes*

101 Install Warning/Guide Signs

102 Install Warning/Guide Signs

103 Install Traffic Signal

104 Improve Traffic Signals (Hardware)

105 Implement Leading Pedestrian Interval (LPI) Timing

106 Install Pedestrian Signal

107 Install Signal Coordination or Adaptive Signal Timing (Interconnected Signals)

108 Install Detour Signs

109 Install School Zones

110 Install Pedestrian Countdown Timer

111 Replace Flashing Beacon with a Traffic Signal

112 Install Overhead Signs

Work Code Reduction Factor Calculator

How many Work Codes are in your Combo? **4**

Work Code Combo

101 136 533 543

RF is referenced from "WC Combos" tab

RF = 35%

Table 1A -- Enter Project-Specific Information

Total Corridor Length (miles)	Total Number of Intersections
0.37	0.37

Drop-down menu. Up to 8 Work Codes

Tie-breaker Drop-down menu to select "Top 3"

Table 1B -- Ranking Criteria to Select Most Effective Safety Treatments (ONLY NEEDED FOR COMBOS WITH 4 OR MORE WORK CODES)

ID	Work Code (WC)	Description	Definition	Reduction Factor (RF)	CMF	Type of Work	Total Length of Improvements (in Miles)	Total Number of Intersections with Improvements	Override % Amount of Work	Calculated Amount of Work done	F*L	Rank (F*L)
A	101	Install Warning/Guide Signs	Provide advance signing for unusual or unexpected roadway features where no signing existed previously.	20%	0.80	Other			20%	20%	0.04	4
B	136	Install LED Flashing Chevrons (Curve)	Install LED flashing chevrons on curve to provide guidance. May include Dynamic LED Chevron System.	35%	0.65	Corridor	0.25			68%	0.23649	1
C	533	Profile Edgeline Markings	Install profile edgeline markings. Stand-alone rumble strip project proposals will not be accepted.	7%	0.93	Corridor	0.37			100%	0.07	2
D	543	Profile Centerline Markings	Install profile centerline markings and preformed thermoplastic strips along the centerline. Stand-alone centerline rumble strip project proposals will not be accepted.	7%	0.93	Corridor	0.25			68%	0.0473	3

Final Ranking for Submission Form

Top 3

Top 3

Top 3

Work Code Reduction Factor Calculator

Table 2A -- Top 3 (most effective) Safety Treatments

ID	WC	Description	Definition	RF	CMF
B	136	Install LED Flashing Chevrons (Curve)	Install LED flashing chevrons on curve to provide guidance. May include Dynamic LED Chevron System.	35%	0.65
C	533	Profile Edgeline Markings	Install profile edgeline markings. Stand-alone rumble strip project proposals will not be accepted.	7%	0.93
D	543	Profile Centerline Markings	Install profile centerline markings and preformed thermoplastic strips along the centerline. Stand-alone centerline rumble strip project proposals will not be accepted.	7%	0.93

Reduction Factor for SII Calculation

Table 2B -- Summary Results for Combined Effect of Multiple Safety Treatments

Method	Combined CMF	Crash Reduction	Recommended Method based on Magnitude	Recommended Method based on Overlap%	Recommended Combined CMF	Recommended Reduction Factor
Additive Method	N.A.	N.A.			0.65	35%
Dominant Effect	0.65	35%	X	X		
Dominant Common Residual TSAP	0.69	31%		X		
Dominant Common Residual FHWA	0.75	25%		X		

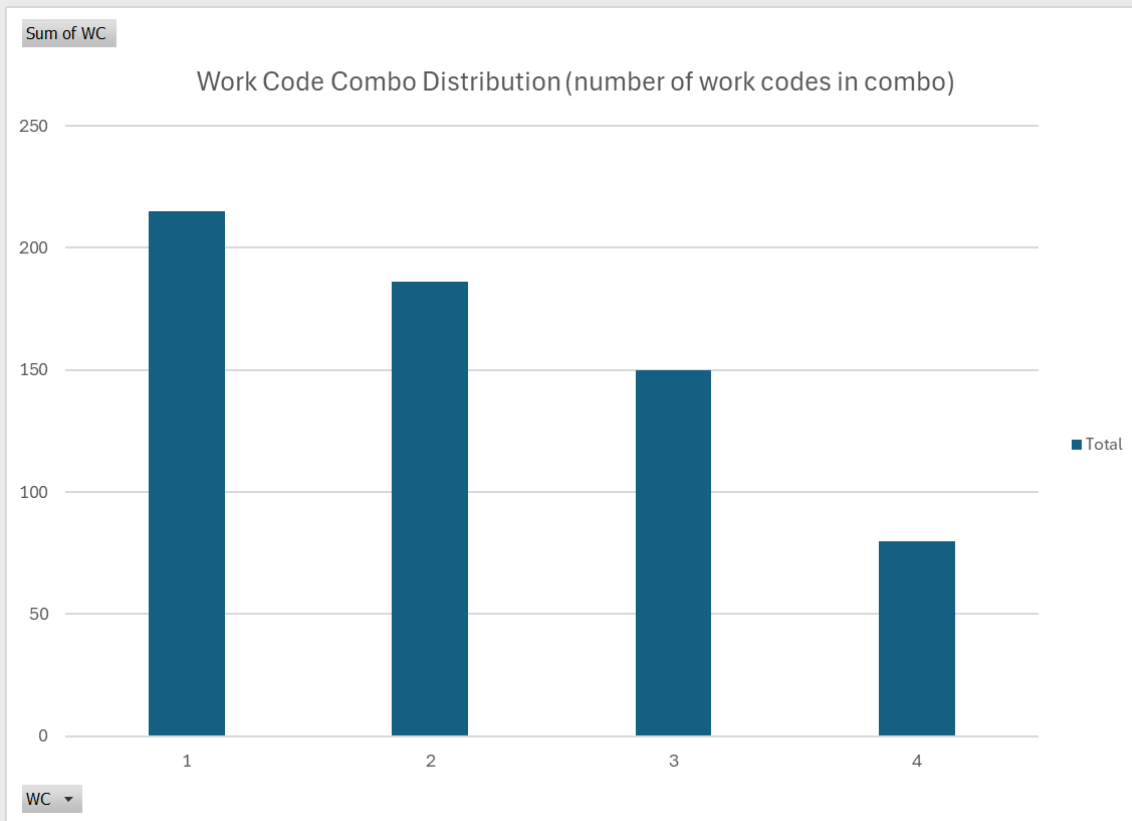
Note: The "X" mark indicates which method to rely on based on FHWA guidance (Magnitude & Overlap); however, if all methods include "X" mark select the value with lowest reduction. The user may use Engineering Judgement to select the final combined CMF value.

Table 2C-- Overlap Percentage for Preventable Crash Codes

Work Code (WC)	Manner of Collision	Roadway Related	First Harmful Event	Intersection Related	Light Condition	Object Struck	Surface Condition	Contributing Factor	Part of Roadway No. 1 Involved	Vehicle Body Style	Roadway Part
A	20,21,22,23,24,30	2,3,4	0	0	0	0	0	0	0	0	0
B	30	2,3,4	0	0	0	0	2,5,6,9	0	0	0	0
C	30	3,4	0	0	0	0	2,5,6,9	0	0	0	0
Overlap %	17%	100%					100%				
Overall Overlap %					72%						

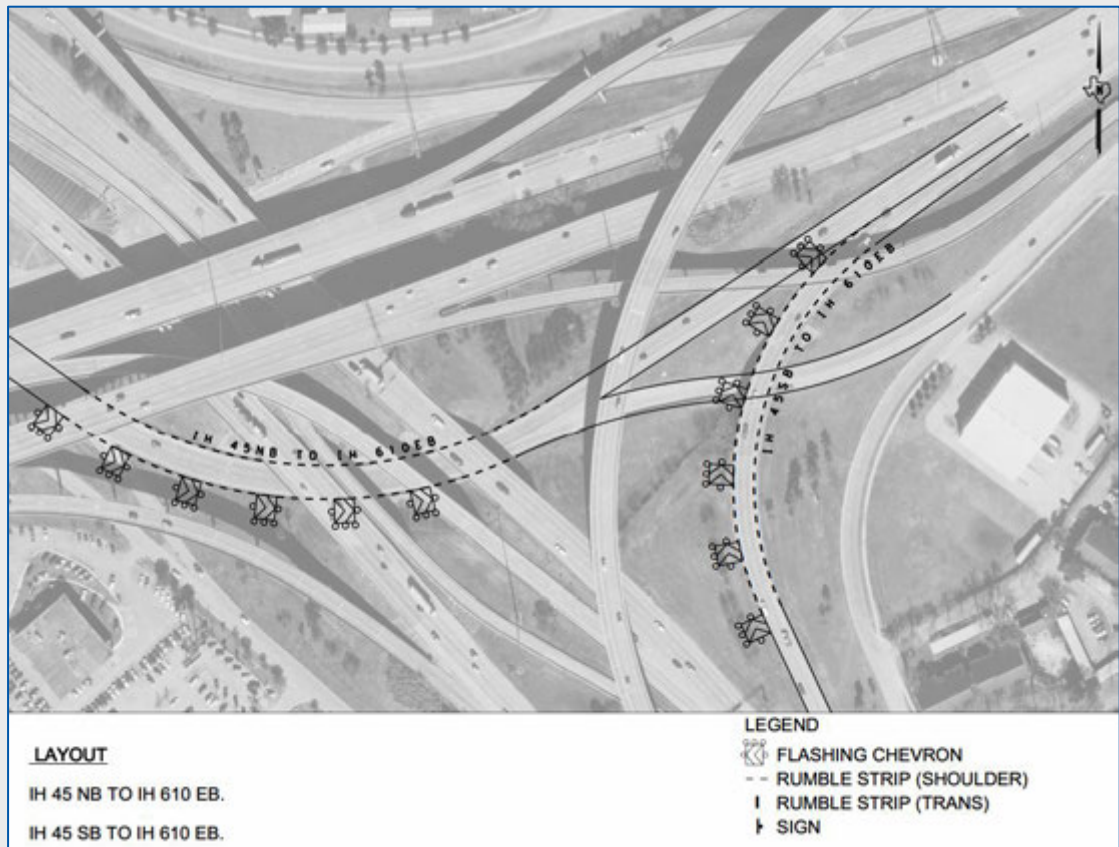
Work Code Combo Distribution

- For most projects (87%) the new submission form WC Combo Calculator will automatically provide a project-specific Crash Reduction Factor
- For projects with more than 3 work codes (13%) the WC Combo Calculator will require user input regarding the overall “benefit” of each WC with respect to each project



HSIP Project Layout

- Plan view of the project (can be satellite image, or CAD drawing) with symbols / callouts
- Does not have to be "PS&E Quality"
- Used to verify and confirm the scope has not changed at 100% PS&E
- Certain work codes may require typical sections and other additional documentation



2026 HSIP Program - Estimates

Estimates

- TRF uses the initial estimate to compare at PS&E time
- Only work types that are approved and programmed can be part of safety projects
- Use current District average low bid unit prices (may use Statewide averages when District average prices for certain bid items are unavailable)

Commonly overlooked bid items (2024 TxDOT Specs Required):

- Item 100 Series Prep ROW, Excavation, Embankment, Blading, Pavement Removal
- Item 200 & 300 Series Pavement items (and related Special Specs)
- Item 400 Series Drainage and Hydraulics: modify or reconstruct culverts, pipes, SET's, headwalls, wingwalls, backfill, shoring, riprap, etc
- Required Item 500 Mobilization & Item 502 Barricades, Signs, and Traffic Handling (no longer a lump sum on the submittal form), also consider 503 Portable Changeable Message Signs, 505 Truck Mounted Attenuators and Trailer Attenuators, and 662 Work Zone Pavement Markings
- Item 506 Erosion Control (plus some related items in the 100's: Sodding, Seeding, Watering)

Detailed Bid Item Estimate

Major Bid Items						
ITEM	CODE	DESCRIPTION	UNIT	QTY	PRICE	Total
500	6001	MOBILIZATION	LS	1.00	\$31,305.51	\$31,305.51
502	6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	1.00	\$10,000.00	\$10,000.00
680	6011	INSTALL HWY TRF SIG (UPGRADE)	EA	17.00	\$6,600.00	\$112,200.00
682	6002	VEH SIG SEC (12")LED(GRN ARW)	EA	29.00	\$510.68	\$14,809.58
682	6004	VEH SIG SEC (12")LED(YEL ARW)	EA	58.00	\$524.15	\$30,400.70
682	6006	VEH SIG SEC (12")LED(RED ARW)	EA	29.00	\$472.18	\$13,693.08
682	6049	BACKPLATE W/REFL BRDR(4 SEC)	EA	29.00	\$259.60	\$7,528.40
682	6060	BACKPLATE W/REFL BRDR(3 SEC)	EA	124.00	\$244.48	\$30,314.90
684	6031	TRF SIG CBL (TY A)(14 AWG)(5 COND)	LF	1680.00	\$7.43	\$12,474.00
6027	6003	CONDUIT (PREPARE)	LF	3600.00	\$15.13	\$54,450.00
6027	6008	GROUND BOX (PREPARE)	EA	54.00	\$688.60	\$37,184.40
SubTotal:						\$354,360.56
		SAFETY CONTINGENCY	LS	1	5%	\$17,718.03
		INFLATION (FY 2025 = 4%, FY 2026 = 8%, FY 2027 = 12%)	LS	1	12%	\$44,649.43
PROJECT TOTAL						\$416,728.01

- Required with every project submittal, include a detailed bid item estimate (+force accounts for safety contingency, erosion control, etc.)

- Notice mobilization & barricades should be included in the bid items of the estimate

Estimate	
Bid Items (See 2025 HSIP Guidelines - Appendix D for instructions)	\$ 354,361
Force accounts (Safety contingency, erosion control, etc. under 5%)	\$ 17,718
Subtotal (TxC estimated cost screen in the letting estimate field)	\$ 372,079
Inflation (0-12% by Let FY)	\$ 44,649
Total Amount (TxC funding screen in Cat 8 funding line & SII Calculation)	\$ 416,728

Programming your HSIP Projects - TxDOTConnect

Estimate

Bid Items (See 2025 HSIP Guidelines - Appendix D for instructions)	\$ 354,361
Force accounts (Safety contingency, erosion control, etc. under 5%)	\$ 17,718
Subtotal (TxC estimated cost screen in the letting estimate field)	\$ 372,079
Inflation (0-12% by Let FY)	\$ 44,649
Total Amount (TxC funding screen in Cat 8 funding line & SII Calculation)	\$ 416,728

Auto-Calculated in the HSIP form

Project Cost Summary Estimated Cost Tab in TxC

Project Cost Totals	Project
Letting Estimate	\$372,078.59
Sealed Engineer's Estimate	\$0.00
Construction Letting Low Bid	\$0.00
Utilities Letting Low Bid	\$0.00
Combined Project Letting Low Bid	\$0.00
Construction Estimate without Joint Bid	\$372,078.59
Construction Estimate without Joint Bid with Inflation	\$416,728.02

Inflation Auto-Calculated at bottom of Estimated Cost Screen

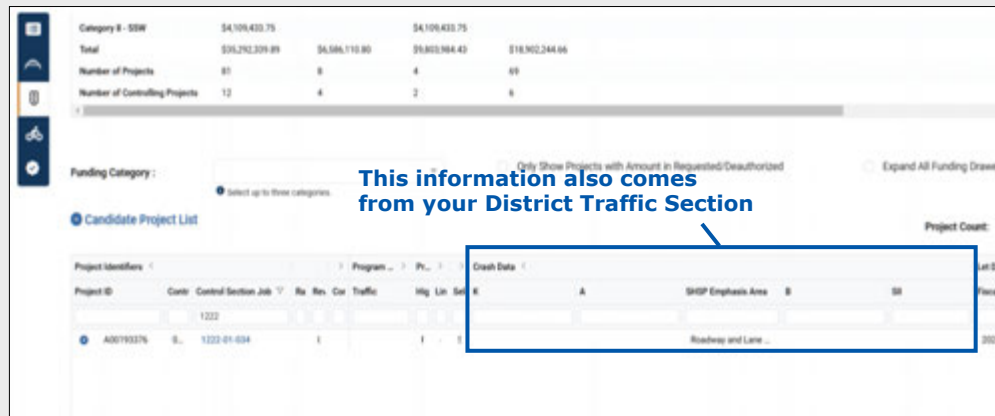
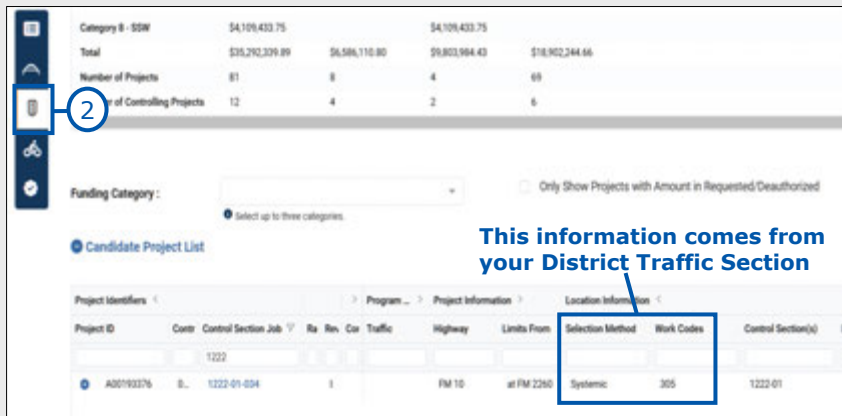
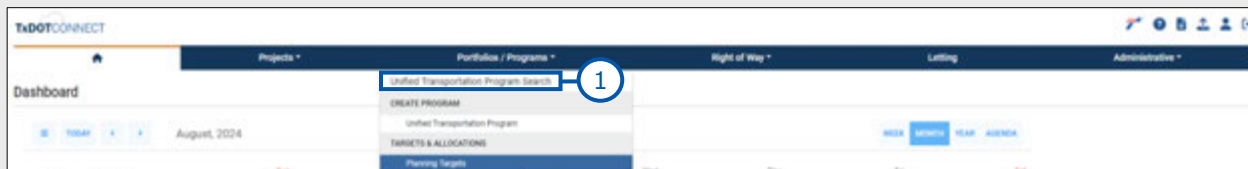
Inflation	Percentage	Project
Letting Estimate	12%	\$44,649.43
Inflation Amount		
Letting Estimate with Inflation	12%	\$416,728.02

Construction Funding Tab in TxC

Status	Amt	Cat	Wrk Pgm	PID
Approved	\$416,728.02	8	2708	HES

Programming your HSIP Projects – TxDOT Connect

- Once projects are programmed into the included fiscal years, with a **pending** Cat 8 funding line, they are pulled into the District Traffic Program Page (**TRFSTW2027**), and additional data must be entered.
- This data can ONLY be entered on the Traffic page as indicated by the Stoplight circled below.
- These additional data fields support our federal reporting requirements.



2026 HSIP Program - Reminders

Review Process

- **District should keep their TRF 2027 Sub-Programs in District Control**
- TRF will review projects and schedule a District HSIP call to discuss (Feb/Mar/Apr)
- TRF will coordinate with FIN to approve FY 29 funding lines (Mar/Apr/May)
- Once all funding lines have been approved, TRF will notify Districts that they may submit their TRF 2027 Sub-Programs to Statewide control for the UTP 2027 update (estimated to be complete in May)

2026 HSIP Program - Reminders

Upload projects to Box and email TRF_TE_Safety by December 19, 2025

Do not wait to submit NEW FY26 HSIP projects

- These should be submitted in advance of the December due date for early approval

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

2026 HSIP Program – Guidelines Additional Information

Scope vs Overrun

- Scope change: *work added to or removed from approved work codes*
- Overrun: *increased cost, but work remains the same as submitted*
- Scope changes must be submitted for approval as soon as they are identified and prior to 100% PS&E Submittal
- Overruns are reviewed prior to 100% PS&E Submittal (as soon as overrun is identified by District)*
- *Scope changes resulting in cost increases will impact district budget*

Change Orders

- Change order additional work into an existing project – LIMITED and case by case basis
- *Change Orders resulting in cost increases could impact district budget*

Notify TRF_TE_Safety about any changes made to project.

- Approval required for letting date changes (particularly FY changes) & change orders.
- Notification needed for Cancellation

HSIP Tools

TRF SharePoint – Tools found [here](#)

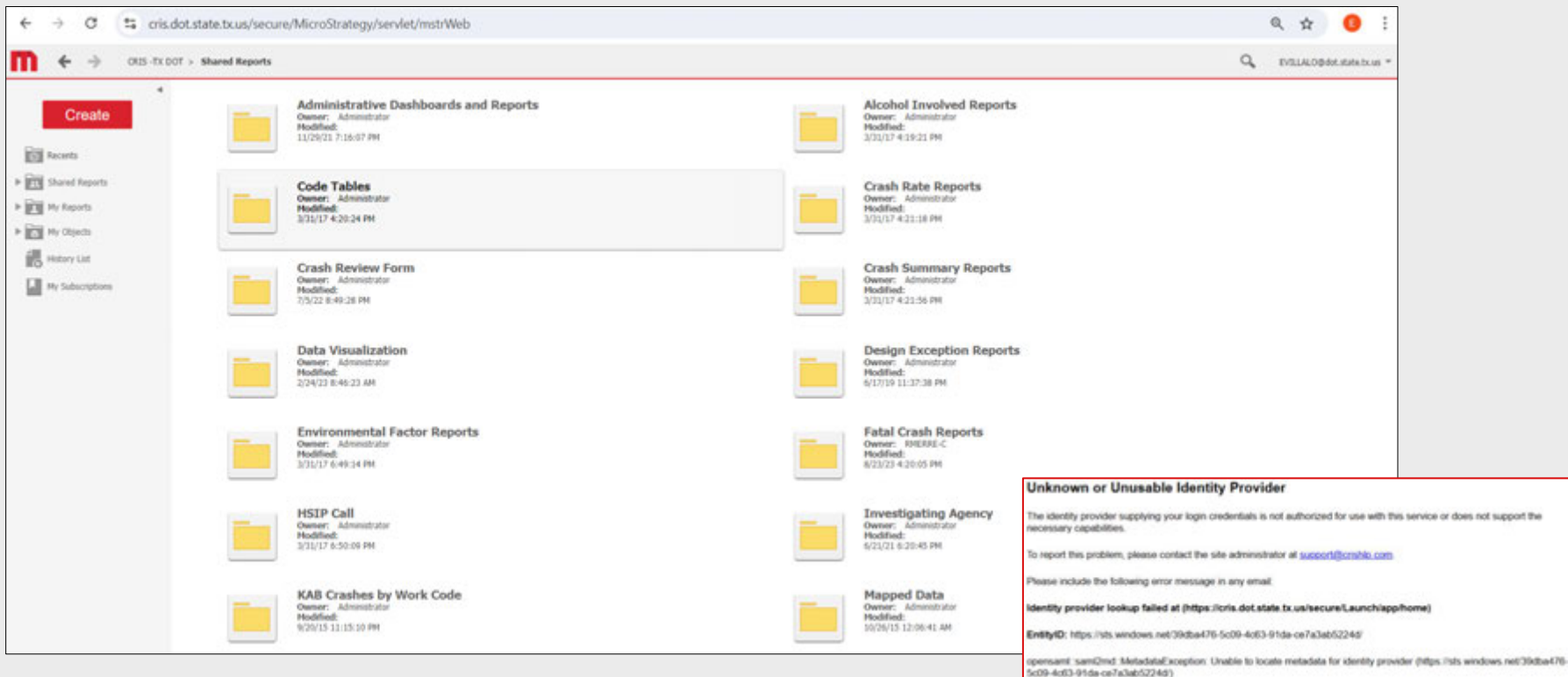
How to Documents

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

CAVS Data

- [CAVS Data](#) has been updated and placed in the 2026 HSIP Program folder in SharePoint
- Off-System files may be shared with your local jurisdictions

Tools: CRIS – MicroStrategy (TxDOT)



The screenshot displays the CRIS MicroStrategy web interface. The browser address bar shows cris.dot.state.tx.us/secure/MicroStrategy/servlet/mstrWeb. The page title is "CRIS - TX DOT > Shared Reports". A sidebar on the left contains a "Create" button and a list of navigation items: "Recents", "Shared Reports", "My Reports", "My Objects", "History List", and "My Subscriptions". The main content area is a grid of report folders, each with a yellow folder icon, title, owner, and modified date. The folders are:

- Administrative Dashboards and Reports** (Owner: Administrator, Modified: 11/29/21 7:16:07 PM)
- Code Tables** (Owner: Administrator, Modified: 3/31/17 4:20:24 PM)
- Crash Review Form** (Owner: Administrator, Modified: 7/5/22 8:49:28 PM)
- Data Visualization** (Owner: Administrator, Modified: 2/24/23 8:46:23 AM)
- Environmental Factor Reports** (Owner: Administrator, Modified: 3/31/17 6:49:34 PM)
- HSIP Call** (Owner: Administrator, Modified: 3/31/17 6:50:06 PM)
- KAB Crashes by Work Code** (Owner: Administrator, Modified: 8/20/15 11:15:10 PM)
- Alcohol Involved Reports** (Owner: Administrator, Modified: 3/31/17 4:19:21 PM)
- Crash Rate Reports** (Owner: Administrator, Modified: 3/31/17 4:21:18 PM)
- Crash Summary Reports** (Owner: Administrator, Modified: 3/31/17 4:21:56 PM)
- Design Exception Reports** (Owner: Administrator, Modified: 6/17/19 11:37:38 PM)
- Fatal Crash Reports** (Owner: RHEFFE-C, Modified: 8/23/23 4:20:05 PM)
- Investigating Agency** (Owner: Administrator, Modified: 6/21/21 9:20:45 PM)
- Mapped Data** (Owner: Administrator, Modified: 10/26/15 12:06:41 AM)

An error message is displayed in a red-bordered box at the bottom right:

Unknown or Unusable Identity Provider

The identity provider supplying your login credentials is not authorized for use with this service or does not support the necessary capabilities.

To report this problem, please contact the site administrator at support@crshtb.com

Please include the following error message in any email:

Identity provider lookup failed at (<https://cris.dot.state.tx.us/secure/Launch/app/home>)

EntityID: <https://its.windows.net/39dba476-5c09-4d63-91da-ce7a3ab5224d/>

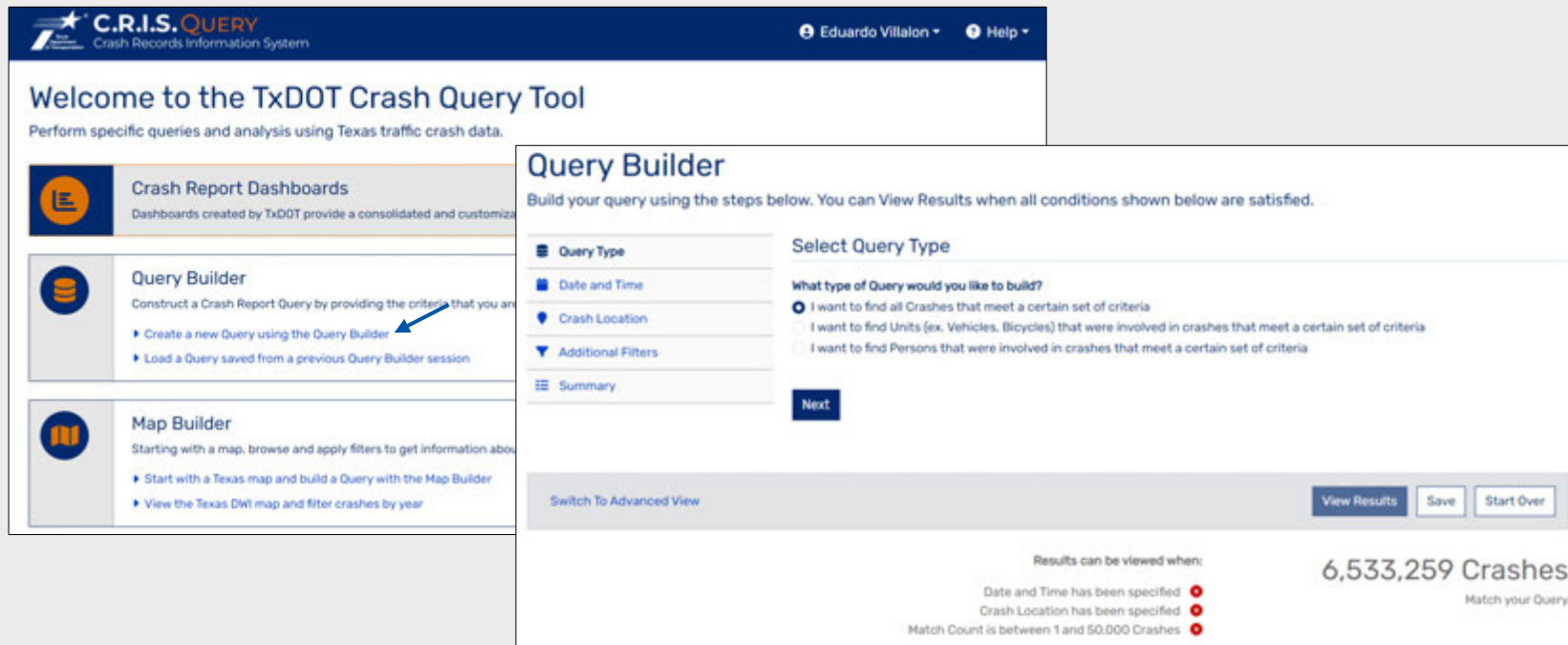
spn: <https://its.windows.net/39dba476-5c09-4d63-91da-ce7a3ab5224d/>

spn: <https://its.windows.net/39dba476-5c09-4d63-91da-ce7a3ab5224d/>

<https://cris.dot.state.tx.us/secure/Launch/app/home>

Email TRF_Crash@txdot.gov for access

Tools: CRIS Query (open to public)



C.R.I.S. QUERY
Crash Records Information System

Eduardo Villalon Help

Welcome to the TxDOT Crash Query Tool

Perform specific queries and analysis using Texas traffic crash data.

- Crash Report Dashboards**
Dashboards created by TxDOT provide a consolidated and customized view of crash data.
- Query Builder**
Construct a Crash Report Query by providing the criteria that you are looking for.
 - Create a new Query using the Query Builder
 - Load a Query saved from a previous Query Builder session
- Map Builder**
Starting with a map, browse and apply filters to get information about crashes.
 - Start with a Texas map and build a Query with the Map Builder
 - View the Texas DWI map and filter crashes by year

Query Builder

Build your query using the steps below. You can View Results when all conditions shown below are satisfied.

- Query Type
- Date and Time
- Crash Location
- Additional Filters
- Summary

Select Query Type

What type of Query would you like to build?

- ☒ I want to find all Crashes that meet a certain set of criteria
- ☐ I want to find Units (ex. Vehicles, Bicycles) that were involved in crashes that meet a certain set of criteria
- ☐ I want to find Persons that were involved in crashes that meet a certain set of criteria

Next

Switch To Advanced View

View Results Save Start Over

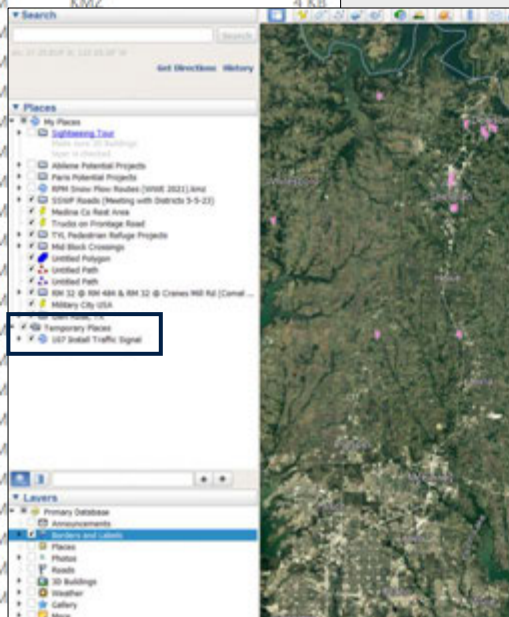
Results can be viewed when:

- Date and Time has been specified
- Crash Location has been specified
- Match Count is between 1 and 50,000 Crashes

6,533,259 Crashes
Match your Query

Tools: Crash Analysis ViSualization - CAVS (TxDOT & LG's)

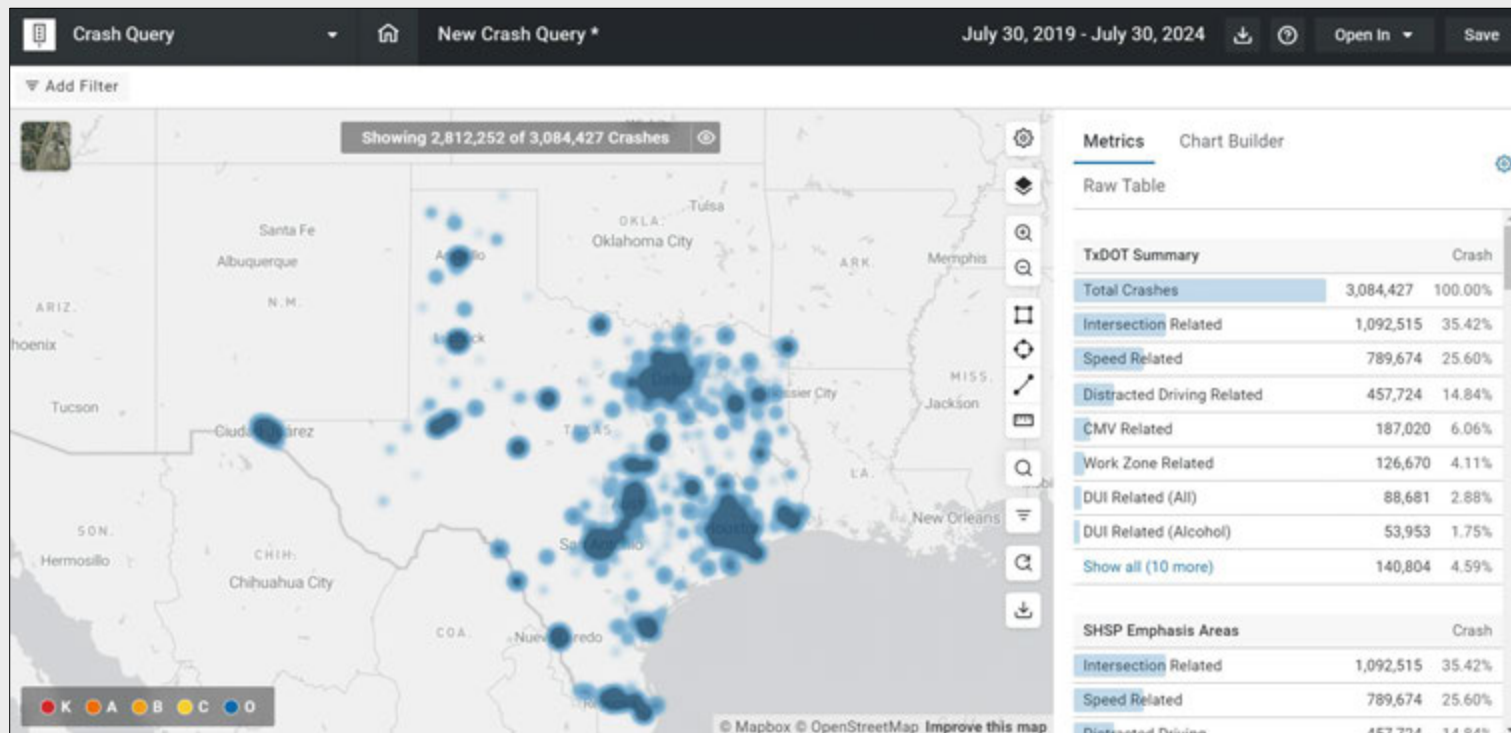
101 Install Warning-Guide Signs.kmz	6/27/2024 3:48 PM	KMZ	27 KB
107 Install Traffic Signal.kmz	6/27/2024 3:48 PM	KMZ	9 KB
107, 124.kmz	6/27/2024 3:48 PM	KMZ	6 KB
107, 305.kmz	6/27/2024 3:48 PM	KMZ	4 KB
108 Improve Traffic Signals.kmz	6/27/2024 3:48 PM		
108, 111.kmz	6/27/2024 3:48 PM		
108, 124.kmz	6/27/2024 3:48 PM		
108, 128, 305.kmz	6/27/2024 3:48 PM		
108, 131, 305.kmz	6/27/2024 3:48 PM		
108, 138.kmz	6/27/2024 3:48 PM		
108, 305.kmz	6/27/2024 3:48 PM		
108, 407.kmz	6/27/2024 3:48 PM		
109 Implement Leading Pedestrian Interv...	6/27/2024 3:48 PM		
110 Install Pedestrian Signal.kmz	6/27/2024 3:48 PM		
111 Interconnect Signals.kmz	6/27/2024 3:48 PM		
112 Install Pedestrian Countdown Timer.k...	6/27/2024 3:48 PM		
113 Install Delineators.kmz	6/27/2024 3:48 PM		
114 Install School Zones.kmz	6/27/2024 3:48 PM		
114, 403, 407.kmz	6/27/2024 3:48 PM		
118 Replace Flashing Beacon with a Traff...	6/27/2024 3:48 PM		
119 Install Overhead Guide Signs.kmz	6/27/2024 3:48 PM		
122 Install Advance Intersection Warning ...	6/27/2024 3:48 PM		
123 Install Advance Curve Warning Signal...	6/27/2024 3:48 PM		
123, 136.kmz	6/27/2024 3:48 PM		
123, 137.kmz	6/27/2024 3:48 PM	KMZ	27 KB



FATAL INJURY	
FATAL INJURY	
Crash Report	Link
Crash ID	19145197
Severity	FATAL INJURY
Severity ID	4
District	Panis
District ID	1
County	Garland
Highway	NO DATA
Control Section	NO DATA
Milepost	0
DFO	0
Year	2022
Date	09/22/2022
Latitude	33.65647357
Longitude	-96.65899558
Functional System	NO DATA
Functional System Code	-1
On System	No
On System ID	N
Bridge Detail	NOT APPLICABLE
Bridge Detail Code	8
Surface Condition	DRY
Surface Condition Code	1
Weather Condition	CLEAR
Weather Condition Code	11
Light Condition	DAYLIGHT
Light Condition Code	1
Road Part	MAIN/PROPER LANE
Road Part Code	1
Manner of Collision	ONE MOTOR VEHICLE - GOING STRAIGHT
Manner of Collision Code	1
First Harmful Event	PEDALCYCLIST
First Harmful Event Code	5
Object Struck	NOT APPLICABLE
Object Struck Code	64
Roadway Related	ON ROADWAY
Roadway Related Code	1
Intersection Related	NON INTERSECTION
Intersection Related Code	4
Crash Contributing Factor List	DRIVER INATTENTION
Rural Flag	N
101	N
107	Y

CAVS data for 2026 HSIP Program has been loaded to SharePoint: [CAVS Data by District - All Documents](#)

Tools: AASHTOWare Safety (TxDOT & LG's)



Tools: Crash Data & Analysis Dashboards



[Crash data and analysis dashboard page](#)

Email TRF_Crash@txdot.gov for access

<https://www.txdot.gov/about/advisory-committees/bicycle-pedestrian-advisory-committee/pedestrian-safety-action-plan.html>

HELP MAKE TEXAS SAFER FOR EVERYONE

DRIVE *like a* TEXAN™

Kind. Courteous. Safe.

[DriveLikeATexan.com](https://www.DriveLikeATexan.com)

