



Heads up, Texas

TALK / TEXT CRASH

Drive smart.
Keep kids safe.

IF YOU LOVE IT,

CLICK IT

BE SAFE. DRIVE SMART. 

Strategic Planning and PP&E for FY 2024

Larry Krantz, MPA
BTS Program Manager

#EndTheStreakTX

End the streak of daily deaths
on Texas Roadways.



Takeaways from this presentation



- NHTSA has added Equity requirements to all states' traffic safety operations
- Texas tapped its TRCC for assistance in defining and identifying “underserved and overrepresented” communities and added them into the existing strategic planning concept begun in FY 2023.
- For the sake of uniformity, the big-picture Equity and strategic planning data analysis (where to go and why) has been conducted for you and for our subgrantees so we can all work together to accomplish this new mission
- The bulk of this presentation is a review of our strategic planning process, what data we use, how we analyze it, how to read it, and how to use it to guide your operations in FY 2024



TxDOT Goals and Strategies



- **Promote Safety:** Champion a culture of safety
 - Reduce crashes and fatalities by continuously improving guidelines and innovations along with increased targeted awareness and education
- **Deliver the Right Projects:** Implement effective planning and forecasting processes that deliver the right projects on-time and on-budget
 - Use scenario-based forecasting, budgeting, and resource management practices to plan and program projects.
 - Align plans and programs with strategic goals
- **Foster Stewardship:** Ensure efficient use of state resources
 - Operate efficiently and manage risk



- **Reduce crashes and fatalities** by continuously improving guidelines and innovations along with increased **targeted awareness and education**
 - Use scenario-based forecasting, budgeting, and resource management practices to **plan and program projects**.
 - Align plans and programs with **strategic goals**
 - Operate efficiently and **manage risk**

Developing, Operating and Evaluating a Data-Driven Program



- **Project Outputs** + Strategic Deployment = Outcomes
 - What are the program outputs?
 - Subgrantees: Training, Education, Messaging
 - TSSs: Roll-over convincer, Car seats, coalitions, etc.

Developing, Operating and Evaluating a Data-Driven Program



- **Project Outputs** + **Strategic Deployment** = **Outcomes**
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 - What is the strategy guiding project deployment?
 - TxDOT identifies Priority Communities (PC's)
 - Subgrantees directed to attempt to deploy project outputs in PC's
 - TSSs directed to attempt to deploy organic resources in PC's

Developing, Operating and Evaluating a Data-Driven Program



- **Project Outputs** + **Strategic Deployment** = **Outcomes**
 - What are the program outputs?
 - Subgrantees: Training, Education, Messaging
 - TSSs: Roll-over convincer, Car seats, coalitions, etc.
 - What is the strategy guiding project deployment?
 - TxDOT identifies Priority Communities (PC's) with data, analysis tools
 - Subgrantees directed to attempt to deploy project outputs in PC's
 - TSSs directed to attempt to deploy organic resources in PC's
 - How did the combination of outputs and strategic deployment achieve the desired outcomes in Priority Communities?

FY 2024 Highway Safety Office Goals and Strategies



- **Reduce crashes and fatalities** by continuously improving guidelines and innovations along with increased **targeted awareness and education**
 - Use scenario-based forecasting, budgeting, and resource management practices to **plan and program projects**.
 - Align plans and programs with **strategic goals**
 - Operate efficiently and **manage risk**
- Public Participation and Engagement (PP&E):
 - Introduce and consider **Social Equity** when developing “targeted awareness and education” resources and deployment strategies
 - **Identify and engage with underserved communities** that are also **overrepresented in crash data**



- Public Participation and Engagement (PP&E):
 - Introduce and consider **Social Equity** when developing “targeted awareness and education” resources and deployment strategies
 - **Identify and engage with underserved communities** that are also **overrepresented in crash data**
- How are we defining underserved?
 - TTI’s Equity Index
- How are we defining overrepresented?
 - TxSTORM (Texas State Trend Over-Representation Model)
- Existing triangulated crash data model used in FY 2023

Texas State Trend Over-Representation Model (texastrcc.org)



HOME CONT

Latest (FY 2023)

Instructions

TxSTORM - KA
Jurisdiction

TxDOT District

- Select all
- Abilene
- Amarillo
- Atlanta
- Austin
- Beaumont
- Brownwood
- Bryan
- Childress
- Corpus Christi
- Dallas
- El Paso
- Ft. Worth
- Houston
- Laredo
- Lubbock
- Lufkin
- Odessa
- Paris
- Pharr
- San Angelo
- San Antonio
- Tyler
- Waco
- Wichita Falls
- Yoakum

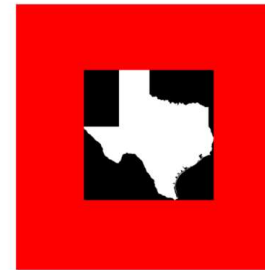
County

All
Number of FY Months

10

County	DUI flag RIVAL Score	OP flag RIVAL Score	SP flag RIVAL Score	ITC flag RIVAL Score	CMV flag RIVAL Score	PED flag R
Jurisdiction						
Jurisdiction	DUI flag RIVAL Score	OP flag RIVAL Score	SP flag RIVAL Score	ITC flag RIVAL Score	CMV flag RIVAL Score	PED flag
OUTSIDE CITY LIMITS, Starr	15.23	-2.02	0.04	-1.46	-1.34	
CONROE, Montgomery	15.05	0.02	1.00	0.44	-0.93	
OUTSIDE CITY LIMITS, Wichita	15.05	4.80	12.08	-1.58	6.99	
STEPHENVILLE, Erath	14.72	1.49	-1.37	6.45		
OUTSIDE CITY LIMITS, Anderson	12.46	2.33	-2.63	-2.06		
LEAGUE CITY, Galveston	10.82	-0.20	1.13	-0.14		
GALVESTON, Galveston	9.64	-2.46	14.15	3.43		
OUTSIDE CITY LIMITS, Navarro	9.64	14.75	14.17	3.93		
OUTSIDE CITY LIMITS, Hidalgo	8.88	-1.61	10.04	24.51		
GRAND PRAIRIE, Tarrant	7.89	-1.51	4.18	0.39		
BROWNFIELD, Terry	7.17	1.87	-0.82	4.73		
CASTLE HILLS, Bexar	7.17	-1.53	1.63	4.73		
GLENN HEIGHTS, Dallas	7.17	-0.85	1.50	6.93		
HEWITT, McLennan	7.17	7.00	-0.82	-0.91		
KEMAH, Galveston	7.17	-1.14	-1.49	1.43		
OUTSIDE CITY LIMITS, Wilbarger	7.17	-2.74	1.50	14.49		
ROCKPORT, Aransas	7.17	-0.85	-1.19	-1.46		
SHENANDOAH, Montgomery	7.17	-0.85	-0.61	-0.91		
TAYLOR, Williamson	7.17	-1.53	-2.10	-2.41		
DENTON, Denton	7.12	-0.88	-4.34	8.76		
OUTSIDE CITY LIMITS, Henderson	7.12	16.73	-2.23	4.37		
Selected Area	-272.54	282.14	308.00	916		

■ ≥ 2X State Average
 ↑ > State Average
 → ≤ State Average
 ↓ ≤



TxSTORM

Texas State Trend Over-Representation Model

A multi-agency product of the Texas Traffic Records Coordination Committee designed to identify crash-related trends and facilitate the efficient deployment of resources

Equity Index and Crash Rate Dashboard



HOME CONT

Equity Index and Crash Rate Dashboard

Equity Index & Crash Rates per Population and Annual VMT by County

State equity indexes range from -6.96 to 4.78. The larger the number the more affluent the county. The median equity index for the state is 0.14.

Crash Severity

All

TxDOT District

- Abilene
- Amarillo
- Atlanta
- Austin
- Beaumont
- Brownwood
- Bryan
- Childress
- Corpus Christi
- Dallas
- El Paso
- Ft. Worth
- Houston
- Laredo
- Lubbock
- Lufkin
- Odessa
- Paris
- Pharr
- San Angelo
- San Antonio
- Tyler
- Waco
- Wichita Falls
- Yoakum

TxDOT County

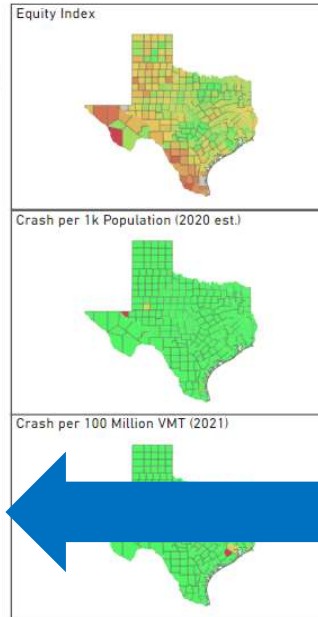
All

TxDOT County	Equity Index	Crashes per Pop.	Crashes per VMT	Count of Crash	Population 2020	VMT 2021	State Index Ranking
PRESIDIO	-6.96	3.93	25.62	24	6,109	93,664,825.42	252
STARR	-5.73	1.82	26.07	120	65,861	460,230,692.60	251
DIMMIT	-5.43	6.41	29.76	55	8,577	184,786,788.37	250
HUDSPETH	-5.06	27.47	15.42	88	3,203	570,545,366.95	249
ZAPATA	-4.66	2.45	26.01	34	13,874	130,701,251.03	248
CULBERSON	-4.85	26.54	16.99	58	2,185	341,422,232.14	247
BROOKS	-4.45	6.94	19.45	49	7,057	251,915,263.33	246
WILLACY	-4.32	2.73	26.45	55	20,150	207,941,075.78	245
MAVERICK	-4.07	18.85	24.59	99	5,252	402,627,675.39	244
COCHRAN	-3.93	-3.91	21.98	10	2,557	45,505,980.67	243
HIDALGO	-3.89	1.87	209.07	1632	872,806	780,605,837.63	242
JIM HOGG	-3.83	1.44	0.26	7	4,846	2,692,372,662.76	241
KING	-3.82	37.59	29.64	10	266	33,740,979.76	240
FRIJO	-3.43	-4.83	14.35	89	18,409	620,091,347.56	239
DUVAL	-3.40	3.57	18.65	35	9,807	187,702,456.03	238
CAMERON	-3.34	1.93	24.97	813	421,445	3,255,503,300.21	237
ZAVALA	-3.20	5.69	32.95	55	9,662	166,934,689.12	236
DAWSON	-3.18	5.05	26.02	63	12,473	242,146,261.63	235

The equity index presented here combines twelve socio-economic factors using a principle component analysis. Socio-economic characteristics captured in the index include: (i) total population, (ii) educational attainment, (iii) median age, (iv) unemployment rate, (v) industry of employment, (vi) health insurance accessibility, (vii) population living below poverty line, (viii) median household income, (ix) housing occupancy type, (x) median house value, (xi) race, and (xii) ethnicity. 5-yr data profile from the American Community Survey (ACS; 2017-2021) were downloaded at the county level for the analysis.

Crashes per Pop. = Count of crashes per 1,000 population. Crashes are fatal and suspected serious injury crashes from the years 2018-2022. Crashes per VMT = Count of crashes per 100 million annual vehicle miles traveled in 2021. Crashes are fatal and suspected serious injury crashes from the years 2018-2022.

For other index-related details, you can reach out to n.sinha@tmi.tamu.edu.



Strategic Planning Data Types

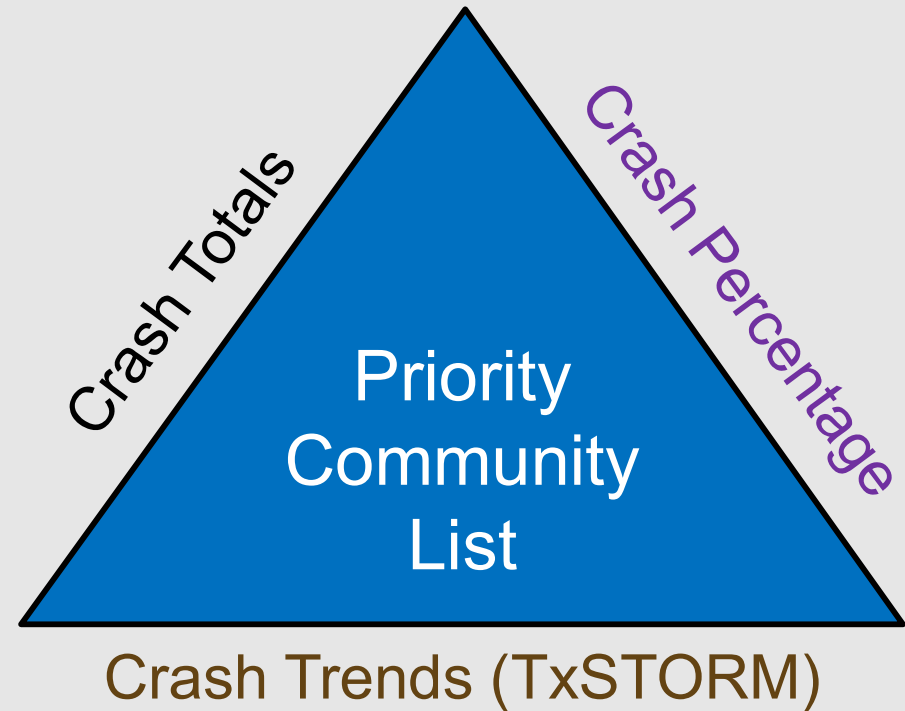


- Current FY crashes involving at least one:
 - Impaired driver (DWI-KA)
 - At least one unsecured occupant (OP-KA)
 - Driver aged 25 or younger (YD)
 - Driver aged 65 or older (MD)
 - Occupant aged 8 or younger present (CP)
 - At least one motorcycle (MC)
 - At least one pedalcyclist (Bike)
 - At least one pedestrian (PED)
- Aggregated Youth Alcohol (YD+DWI)

Triangulated Data for KA Crashes



- Priority Community List includes:
 - Crash Totals
 - Crash Percentage
 - Crash Trends (TxSTORM)



Triangulated Data for KA Crashes



- Crash Totals
 - Where do these types of crashes occur the most in Texas? (~Top 50)



Total Crashes



District	Jurisdiction	DWI-KA	DWI-KA%	TxSTORM-DWI-KA
Houston	HOUSTON	75	7.40%	-59.39
Dallas	DALLAS	62	7.48%	-39.06
San Antonio	SAN ANTONIO	60	11.52%	-28.87
Houston	OUTSIDE CITY LIMITS Harris County	50	7.02%	-34.54
Austin	AUSTIN	45	11.75%	-17.38
Fort Worth	ARLINGTON	33	18.86%	-4.63
Houston	OUTSIDE CITY LIMITS Montgomery County	27	16.46%	-7.73
Amarillo	AMARILLO	23	18.11%	6.60
Pharr	OUTSIDE CITY LIMITS Hidalgo County	21	23.86%	-8.39
Houston	OUTSIDE CITY LIMITS Fort Bend County	17	14.91%	1.96
Austin	OUTSIDE CITY LIMITS Bastrop County	17	19.77%	0.91
Tyler	OUTSIDE CITY LIMITS Smith County	17	16.35%	-3.24
Odessa	MIDLAND	16	19.75%	3.99
Corpus Christi	CORPUS CHRISTI	16	16.33%	-7.26
Dallas	IRVING	15	16.13%	-2.97
Lubbock	LUBBOCK	15	20.00%	-2.97
El Paso	EL PASO	15	7.43%	-11.89
Lufkin	OUTSIDE CITY LIMITS Polk County	12	20.69%	7.36

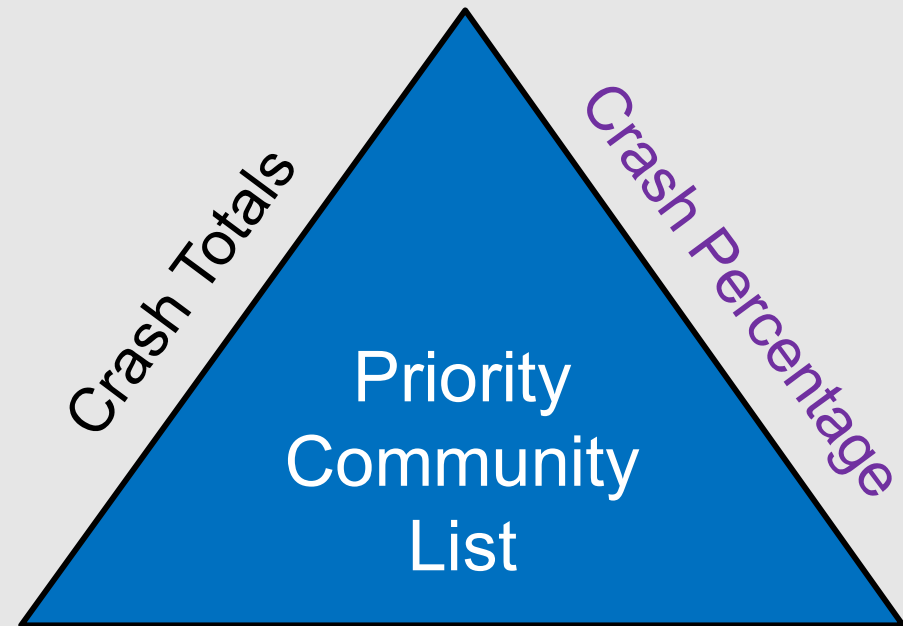


Crash Trends (TxSTORM)

Triangulated Data for KA Crashes



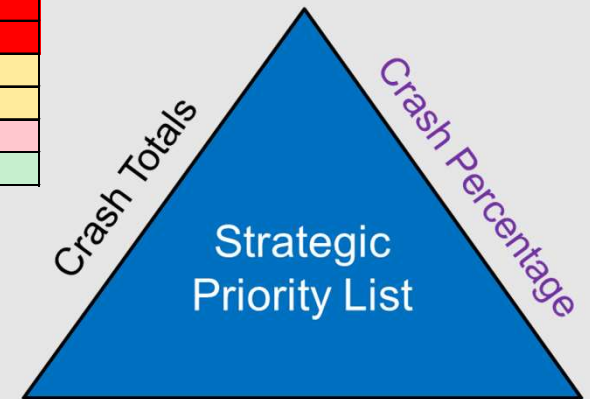
- Crash Totals
 - Where do these types of crashes occur the most in Texas? (~Top 50)
- Crash Percentage
 - Which communities have the highest percentage of crash type? (~Top 50)
 - Formula = $\text{DWI-KA} / \text{Total KA}$



Crash percentage



District	Jurisdiction	DWI-KA	DWI-KA%	TxSTORM-DWI-KA
Fort Worth	NEWARK	3	100.00%	4.00
Brownwood	OUTSIDE CITY LIMITS Stephens County	2	100.00%	0.11
Atlanta	OUTSIDE CITY LIMITS Camp County	3	75.00%	0.48
Fort Worth	COOL	2	66.67%	2.94
Wichita Falls	VERNON	2	66.67%	2.94
Austin	NIEDERWALD	3	60.00%	8.87
Lubbock	BROWNFIELD	3	60.00%	4.00
Houston	RICHMOND	2	50.00%	3.00
Austin	TAYLOR	2	50.00%	2.94
Yoakum	WHARTON	2	50.00%	2.94
Brownwood	OUTSIDE CITY LIMITS Mills County	2	50.00%	0.11
Tyler	OUTSIDE CITY LIMITS Anderson County	8	44.44%	6.22
Houston	KEMAH	3	42.86%	8.87
Houston	SHENANDOAH	2	40.00%	2.94
Brownwood	BROWNWOOD	2	40.00%	0.11
Dallas	FARMERSVILLE	2	40.00%	0.11
Pharr	OUTSIDE CITY LIMITS Starr County	4	36.36%	2.78
Wichita Falls	WICHITA FALLS	7	33.33%	-0.35

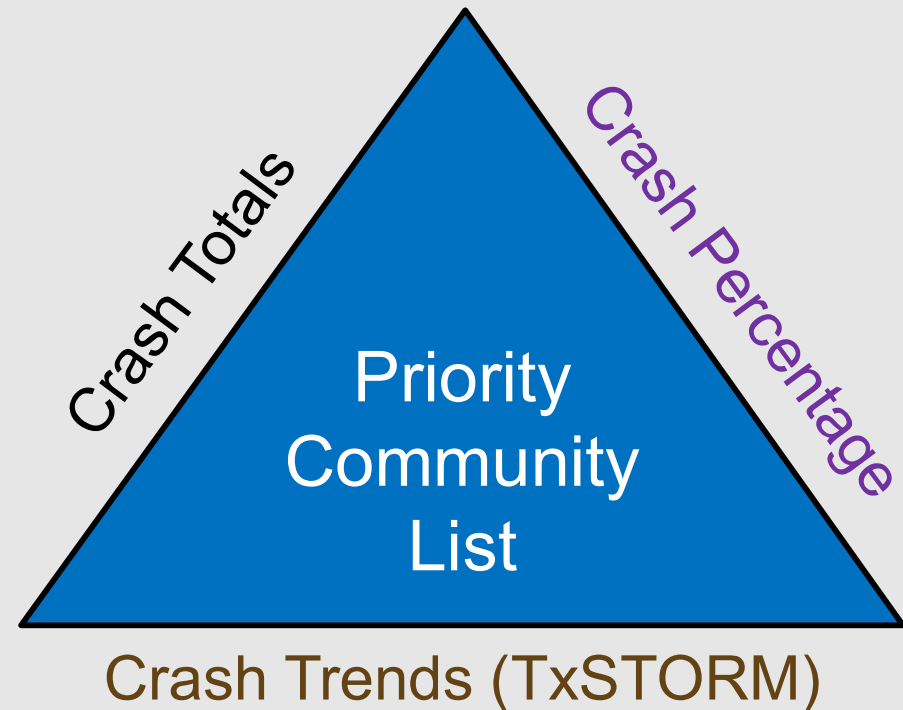


Crash Trends (TxSTORM)

Triangulated Data for KA Crashes



- Crash Totals
 - Where do these types of crashes occur the most in Texas? (~Top 50)
- Crash Percentage
 - Which communities have the highest percentage of crash type? (~Top 50)
 - Formula = $\text{DWI-KA} / \text{Total KA}$
- Crash Trends
 - Where are these types of crashes trending up the fastest? (~Top 50)
 - Higher TxSTORM score = Steeper trend



TxSTORM Values (Steepest Adverse Trend)



District	Jurisdiction	DWI-KA	DWI-KA%	TxSTORM-DWI-KA
Houston	CONROE	8	21.62%	13.69
Houston	LEAGUE CITY	7	25.00%	9.46
Austin	SAN MARCOS	11	21.57%	9.44
Dallas	OUTSIDE CITY LIMITS Navarro County	10	30.30%	9.28
Austin	NIEDERWALD	3	60.00%	8.87
Houston	KEMAH	3	42.86%	8.87
Dallas	OUTSIDE CITY LIMITS Dallas County	3	27.27%	8.87
San Antonio	CASTLE HILLS	3	25.00%	8.87
Fort Worth	STEPHENVILLE	3	21.43%	8.87
Lufkin	OUTSIDE CITY LIMITS Polk County	12	20.69%	7.36
Amarillo	AMARILLO	23	18.11%	6.60
Tyler	OUTSIDE CITY LIMITS Anderson County	8	44.44%	6.22
Waco	BELTON	5	27.78%	5.99
Fort Worth	NEWARK	3	100.00%	4.00
Lubbock	BROWNFIELD	3	60.00%	4.00
Odessa	MIDLAND	16	19.75%	3.99
Houston	RICHMOND	2	50.00%	3.00
Fort Worth	COOL	2	66.67%	2.94



Crash Trends (TxSTORM)

Combining Equity Index, TxSTORM, Triangulated Data



District	Jurisdiction	DWI-KA	DWI-KA%	TxSTORM-DWI-KA
Houston	CONROE	8	21.62%	13.69
Houston	LEAGUE CITY	7	25.00%	9.46
Austin	SAN MARCOS	11	21.57%	9.44
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Houston	RICHMOND	2	50.00%	3.00
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Equity Index
+ TxSTORM





HELP

#EndTheStreakTX

End the streak of daily deaths on Texas roadways.

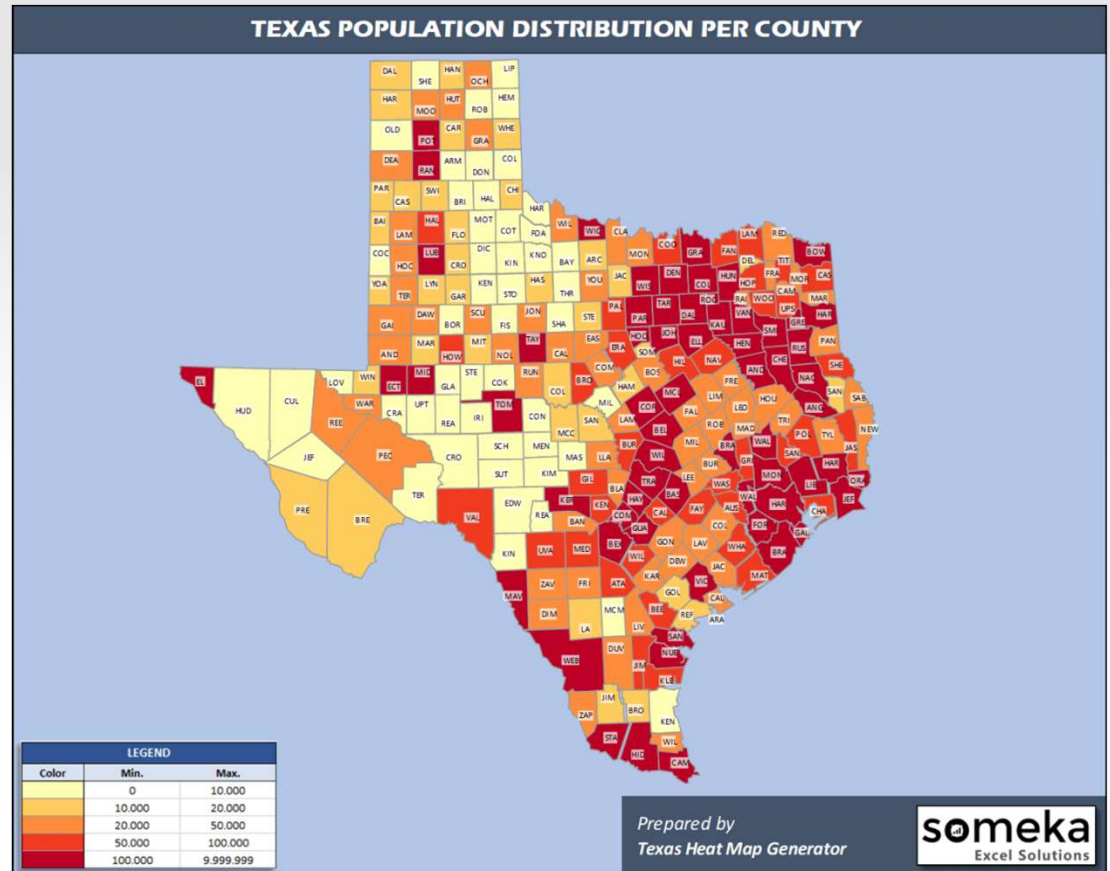
[TxDOT.gov](https://www.txdot.gov) (Keyword: #EndTheStreakTX)



[#EndTheStreakTX Toolkit](#)



Strategic Planning



Data available



Using TxSTORM



- Relative Impact Value (RIVAL or “TxSTORM Score”)
 - Top 25 most critical (Dark Red)
 - Above statewide average (Lighter Red)
 - Above zero (Yellow)
 - Below zero (Green)
- Development of Master Strategic Plan
 - Use triangulated data to identify “Priority Communities”
 - PM, TSS coordination to ensure resources are deployed to PC’s



Strategic Planning



- What does success look like for the project you selected?
 - What is the purpose of the project?
 - What resources does the project produce?
 - General or specialized training
 - Educational messaging
 - Enforcement Hours
 - What is the intended audience?
 - Is there a plan for how the resources are distributed?
 - What data is used to guide the plan?
 - What is the desired outcome? How will it be measured?

General Grant Outputs vs. Outcomes



- Output
 - Total number of items made/distributed
 - Total number of classes delivered
 - Total number of students trained
 - Total number of surveys conducted
 - Total number of impressions made

- Outcome
 - What impacts did the outputs have on the problem?
 - Where were the outputs allocated? How was that determined?

Developing a Data-Driven Program



- Did the project achieve its objectives (outputs)?
 - Widgets, classes, trainings, impressions, etc
- Did those outputs “move the needle” where they were delivered?
 - Were crashes reduced?



- Elements of a Strategic Plan
 - How need is identified and prioritized
 - Data used to identify need
 - Plan to address the identified needs in specific communities
 - How activities will be documented



- Maximize ROI
 - What does this project do?
 - Are its outputs aimed at program priorities?
 - Are we getting what we're paying for?
 - How do we know?

Tracking Grant-Funded Activity



June 2023 LEA Contacts

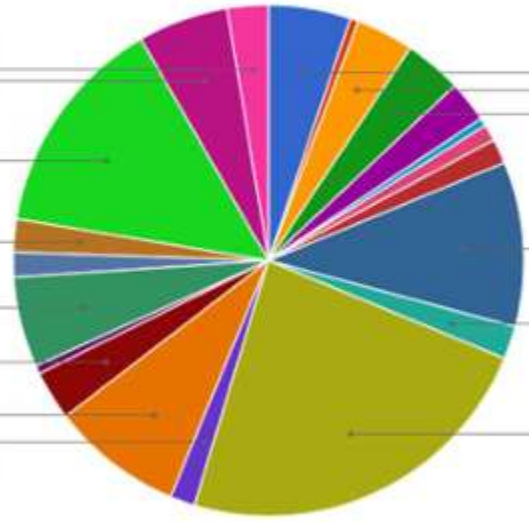
Chart type

Bar Pie

LEL
Date:
Agency Name:
Reason for Contact:
Contact Initiated By:
TxDOT District:
County:
Additional Notes:

TxDOT District:

Wichita Falls	5
Waco	11
Tyler	27
San Antonio	4
Paris	11
Lufkin	6
Lubbock	16
Laredo	3



Abilene	10
Atlanta	7
Austin	7
Dallas	20
Fort Worth	4
Houston	45

192 responses in 192 results

Tracking Strategic Plan Progress



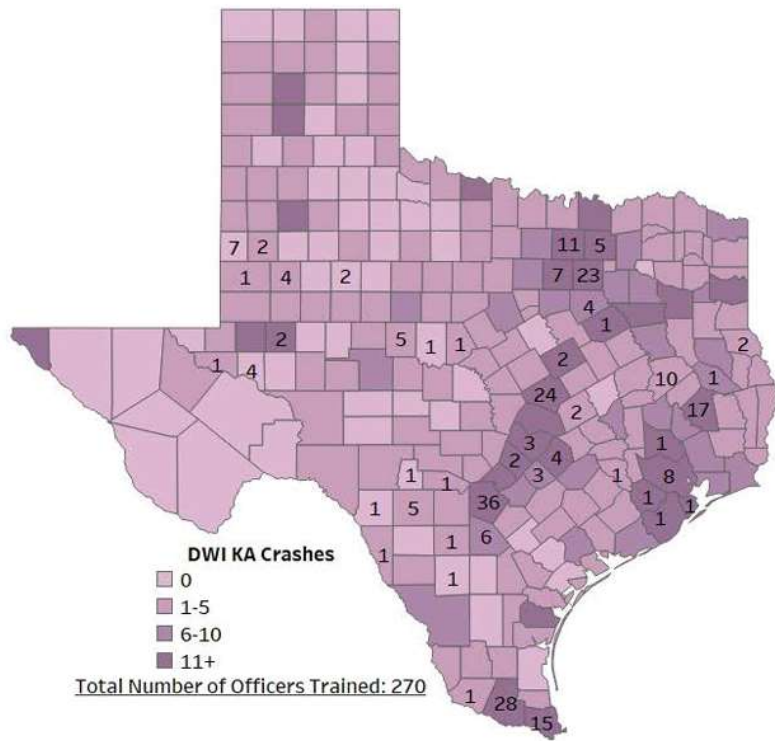
First Event Held Date	TxDOT Dist	Strategic Priority Community	First Contact Period			Second Contact Period			April	May	June
			October	November	December	January	February	March			
	Abilene	OUTSIDE CITY LIMITS Taylor County			14-Dec		20-Feb	8-Mar	27-Apr		
	Abilene	OUTSIDE CITY LIMITS Mitchell County			14-Dec		20-Feb	8-Mar	27-Apr		
STEP IDM 23	Amarillo	OUTSIDE CITY LIMITS Potter County		11-Nov	13-Dec		7-Feb	30-Mar			
	Amarillo	PERRYTON			8-Dec		22-Feb	30-Mar			
	Atlanta	HOOKS		28-Nov			2-Feb	15-Mar	13-Apr		
	Atlanta	MOUNT PLEASANT		28-Nov			2-Feb				
STEP Comp 23	Austin	OUTSIDE CITY LIMITS Williamson County	6-Oct	29-Nov	6-Dec		8-Feb			24-May	
	Austin	OUTSIDE CITY LIMITS Bastrop County			29-Dec		9-Feb	27-Mar		23-May	
	Austin	GEORGETOWN			29-Dec		21-Feb	30-Mar		25-May	
	Austin	PFLUGERVILLE	5-Oct	28-Nov		30-Jan	24-Feb			23-May	
	Austin	LLANO			29-Dec		21-Feb	29-Mar		16-May	
	Austin	OUTSIDE CITY LIMITS Hays County			29-Dec		9-Feb	30-Mar		25-May	
	Austin	OUTSIDE CITY LIMITS Caldwell County			29-Dec		9-Feb	30-Mar			
	Austin	GIDDINGS			29-Dec		21-Feb	30-Mar		24-May	
STEP Comp/CMV/IDM 23	Austin	AUSTIN	20-Oct	3-Nov	20-Dec		8-Feb				
STEP Comp/CMV 23	Austin	KYLE		16-Nov	1-Dec		8-Feb	30-Mar		24-May	
STEP Comp 23	Austin	OUTSIDE CITY LIMITS Travis County			16-Dec		8-Feb			25-May	
STEP Comp 23	Austin	CEDAR PARK			27-Dec					25-May	
	Austin	LEANDER			29-Dec		21-Feb	30-Mar		24-May	
	Beaumont	OUTSIDE CITY LIMITS Liberty County		30-Nov			2-Feb	8-Mar	13-Apr	5-May	28-Jun
	Brownwood	OUTSIDE CITY LIMITS Brown County		1-Oct	20-Dec		16-Feb	30-Mar			
	Brownwood	BROWNWOOD			21-Dec		17-Feb	30-Mar			
STEP Comp 23	Bryan	COLLEGE STATION			14-Dec			8-Mar		5-May	1-Jun
	Corpus Christi	ROCKPORT			10-Dec		27-Feb				
	Corpus Christi	ROBSTOWN			9-Dec						
	Corpus Christi	PORT ARANSAS			10-Dec		24-Feb				
STEP Comp/IDM 23	Dallas	DALLAS			13-Dec		20-Feb	8-Mar	10-Apr	15-May	16-Jun
	Dallas	OUTSIDE CITY LIMITS Kaufman County			14-Dec		20-Feb				
	Dallas	RICHARDSON			14-Dec		6-Feb	7-Mar		9-May	30-Jun
	Dallas	MABANK			27-Dec		20-Feb				
	Dallas	LEWISVILLE			14-Dec		20-Feb	28-Mar		9-May	30-Jun
STEP Comp 23	Dallas	MCKINNEY			28-Dec	5-Jan	24-Feb	28-Mar			
	Dallas	OUTSIDE CITY LIMITS Denton County			9-Dec		20-Feb				30-Jun
	Dallas	DENTON	13-Oct				20-Feb				
	Dallas	OUTSIDE CITY LIMITS Collin County	13-Oct				20-Feb	28-Mar		9-May	25-Jun
	Dallas	OUTSIDE CITY LIMITS Ellis County			14-Dec		20-Feb	29-Mar		22-May	

Outputs into Outcomes



FY23 YTD DWI KA Crashes & Advanced DWI Trainees

Numbers represent officers trained per county



FY23 YTD DWI KA Crashes & Refresher Trainees

Numbers represent officers trained per county

