

ID 26-0632

Vision Zero Action Plan

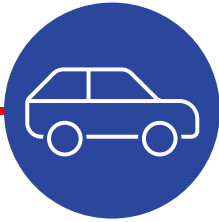
Farhan Butt, Ph.D., P.E., M. ASCE

Deputy Director, Transportation Services
Department of Development Services

May 19, 2026



VISION ZERO



Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all.



Reduce traffic fatalities and injuries

Promotes improved road design, traffic engineering, and community engagement



Enhanced quality of life

Fosters pedestrian-friendly environments, promoting active transportation, and reducing traffic stress



Economic Benefits

Lowers healthcare costs, reduced property damage, and increased productivity and commercial spending



Sustainable and smart urban planning

Encourages sustainable transportation choices such as walking, cycling, and public transit, reducing dependency on single-occupancy vehicles

DENTON VISION ZERO & SAFE SYSTEM APPROACH

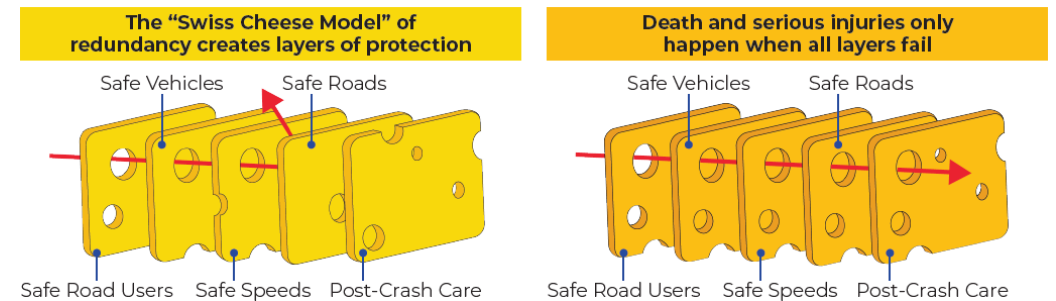
The Safe System Approach relies on six fundamental principles that direct safety policies, programs, and projects. It also establishes five complementary pillars of safety.

Core Principles:

- Death or serious injury is unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

Five Pillars of Safety:

1. Safer People
2. Safer Vehicles
3. Safer Speeds
4. Safer Roads
5. Post-Crash Care



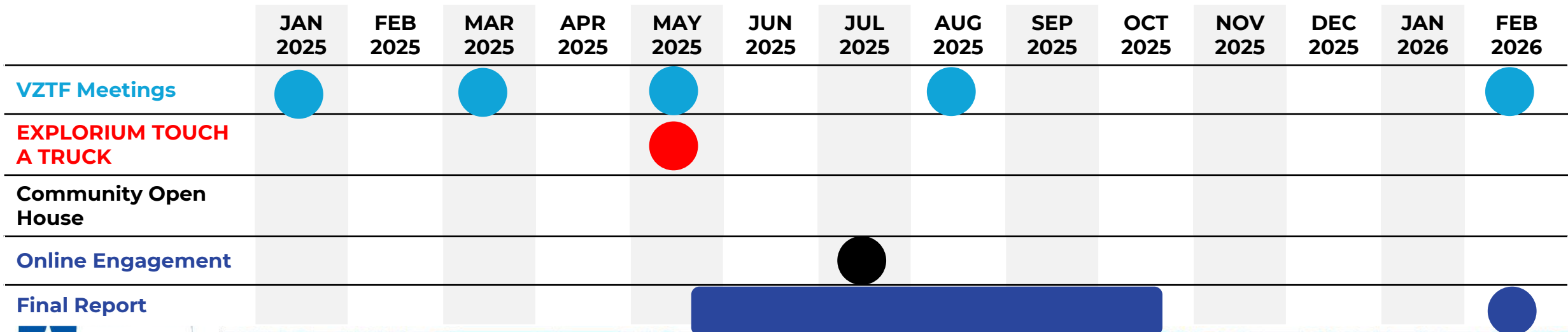
PROJECT TIMELINE

MISSION STATEMENT

“Our mission is to create a safe, accessible, and sustainable transportation future for all Denton residents. Through data, community engagement, and innovation, we aim to eliminate fatalities and serious injuries, ensuring a network that protects and serves everyone.”

VISION ZERO TARGET

Alignment with TxDOT
 50% reduction by 2035
 100% reduction by 2050
 Add incremental goals



ENGAGEMENT

Online Engagement:

Survey: May 15-Sep 18, 2025

Interactive Map: May 27-Oct 31, 2025

- 2,131 views
- 1,588 visits
- **609 total contributions**
 - 516 map survey pins
 - 193 written surveys

In Person Engagement:

6 VZTF Meetings:

Jan 15, 2025-Feb 23, 2026

Explorium Touch a Truck Pop Up: *May 19, 2025*

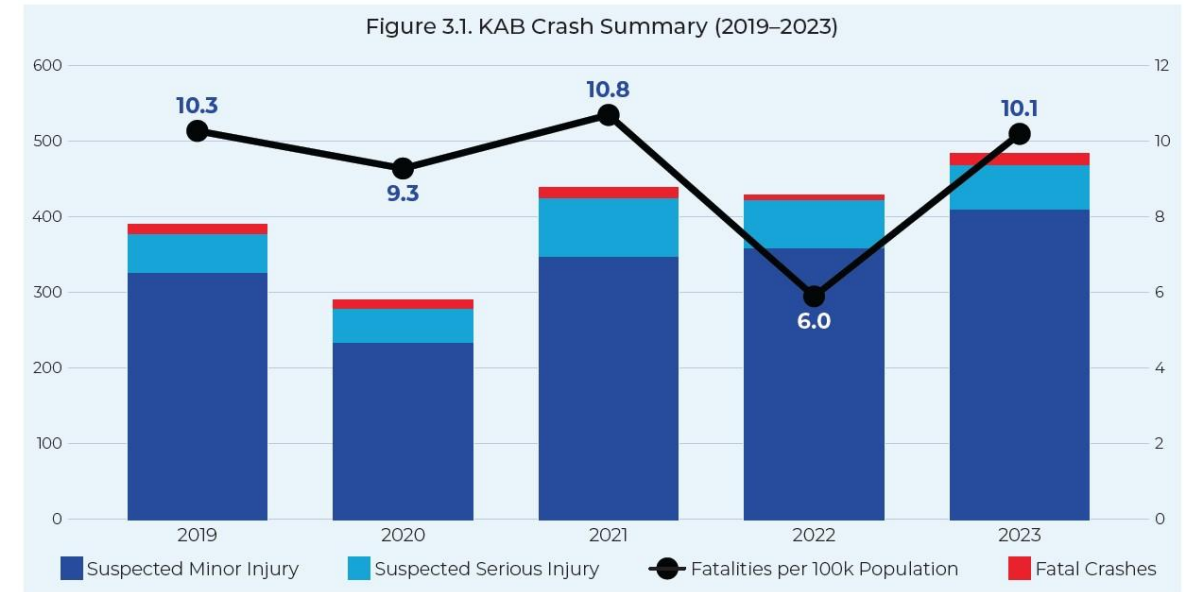
- *Prior year attendance of 2,300 visitors.*

Community Workshop: *Jul 24, 2025*

- 30 participants

CRASH ANALYSIS

- Crash data was collected from 2019-2023
- Total crashes: **15,575**
- Total fatal crashes: **68**
- Crashes peaked in 2019 with **3,742** total crashes
- Number of fatalities per 100k population reached a period high in 2021 of **10.8**
- While the overall crash frequency has decreased in recent years, KAB crash severity has **increased**



Year	K – Fatal Injury		A – Suspected Serious Injury		B – Suspected Minor Injury		Grand Total
2019	14	0.4%	52	1.4%	325	8.7%	2,742
2020	13	0.5%	46	1.7%	233	8.7%	2,683
2021	16	0.5%	78	2.3%	346	10.3%	3,349
2022	9	0.3%	64	2.2%	357	12.3%	2,911
2023	16	0.6%	59	2.0%	409	14.2%	2,890
Total	68	0.4%	299	1.9%	1,670	10.7%	15,575

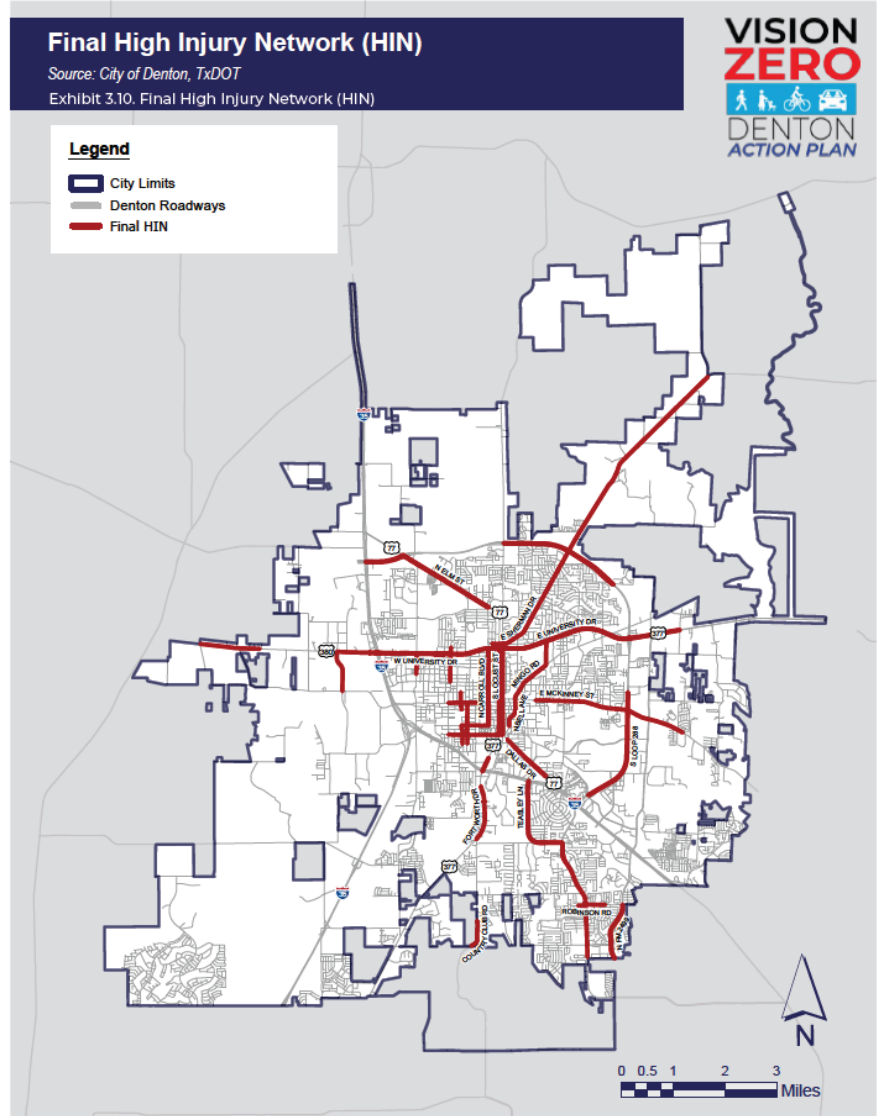
HIGH INJURY NETWORK

A data driven approach combined with a qualitative examination of model results is used to select segments for the High Injury Network. This identifies areas and roadways that experience amplified safety concerns in Denton.

9.4% of Total Road Network

66.9% of Fatal, Severe Injury, and Possible Injury, and Possible Injury Crashes

67% of Fatal Crashes



STUDY CORRIDORS

Six road segments within the High-Injury Network (HIN) were chosen as study corridors. These selections were made with contributions from City Staff and the VZTF. Together, the corridors cover **10** miles of roadway and recorded **298** KAB crashes.

Limits					Crashes					
Study Corridor	Origin	Ending	Length (Mi.)	Functional Class	K	A	B	Total KABs	Peak Volume	Peak Critical Crash Rate
W University Dr	N Bonnie Brae	Old North Rd	3.7	Primary Arterial	4	22	107	133	31,453	3.13
N Carroll Blvd	380	W Highland St	1.5	Primary Arterial	1	3	53	39	28,998	3.23
E Sherman Dr	N Bell Ave	E Windsor Dr	0.7		0	0	0	0	0	0.00
Dallas Dr	Johnson	Rio Grande	1	Primary Arterial	2	3	26	31	26,716	3.16
Malone St	380	Panhandle	0.7	Collector	0	2	8	10	30,979	2.81
E Mckinney	Audra	Loop 288	2.1	Primary Arterial	0	6	27	33	33,667	3.37
Totals			10.06		7	39	252	298		

COUNTERMEASURES APPLICATION & TOOLBOX

Each Countermeasure includes the following information:

- What is it?
- Where does it work?
- Other considerations?

A Crash modification factor (CMF) is used to compute the expected number of crashes after implementing a countermeasure on a road or intersection

Example:

According to the CMF Clearinghouse, a roundabout has a CMF of 0.59. If a signalized intersection experienced 100 crashes, you could expect a reduction of 41 total crashes at the intersection after installing a roundabout.

Countermeasures	CMF
Raised Medians and Pedestrian Refuge Island	0.29
Rectangular Rapid Flashing Beacons (RRFB)	0.31
Bike Lanes	0.435
Roadway Reconfiguration	0.53
Curb Extensions	0.58
Roundabout	0.59
Sidewalks	0.598
Lane Designation Markings and Signs	0.8
Improving Signing and Visibility at Signals	0.81
Mid-Block Crosswalk	0.82
High Contrast Lane Markings	0.84
Retro-Reflective Backplates	0.85
Dynamic Speed Feedback Signs	0.95
Wider Edge Lines	0.97



GETTING TO ZERO

The action items for Denton's Vision Zero Action Plan were developed according to the five pillars of safety and are broken down accordingly.

The action item tables include the following:

- Action
- Emphasis Area
- Timeframe
- Implementation Partners



ACTION MATRIX

The Matrix provides detailed information for each action:

- Action description
- Emphasis area(s)
- Timeframe
- Responsible partners
- Funding pathway

The full Matrix includes **43 actions**, organized by pillar.

Each action is designed to:

- Reduce severe crash risk
- Improve multimodal safety
- Advance behavioral, operational, and engineering solutions
- Build toward a citywide culture of safety

Actions by Pillar

- Safer People
 - 9 Actions
- Safer Vehicles
 - 5 Actions
- Safer Speeds
 - 5 Actions
- Safer Roads
 - 14 Actions
- Post-Crash Care
 - 9 Actions

STAFF RECOMMENDATION

Staff recommends approval of the Vision Zero Action Plan:

- The Plan was developed with input from multiple local and regional stakeholders (City of Denton, Denton County, DISD, TWU, UNT, NCTCOG, TXDOT, and DCTA)
- The plan provides a roadmap for the city to achieve the vision of the Vision Zero Task Force of having zero fatalities by 2050.
- The report was presented to the Mobility Committee on April 29, 2026
- City Council's adoption of the plan increases the city's ability to target Federal and State grant funding for projects in the future that align with the plan's recommendations.

QUESTIONS?

Farhan Butt, Ph.D., P.E., M. ASCE
Deputy Director, Transportation Services