

Harris County
ENGINEERING DEPARTMENT

Harris County - Vision Zero

2024 Texas Pedestrian Safety Forum
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What is Vision Zero?



The image of a future where no one is killed or seriously injured in transport.



Establishes that loss of human life in traffic is unacceptable.



Responsibility of safety is shared between designers and users of transportation systems.



Increase safe, healthy, equitable mobility for all



Vision Zero Action Plan

Vision Zero Resolution adopted in
August 2020

- Zero traffic fatalities and serious injuries in Harris County by 2030

Vision Zero Action Plan adopted in
September 2022

- Crash Trends & Causative Factors
- Vision Zero Goals, Priorities, and Strategies
- Addendum with High Injury Network Corridors and safety improvement action steps



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Vision Zero Action Plan Goals

Eliminate all traffic-related fatalities in the region by 2030



GOAL 1: Promote a culture of traffic safety



GOAL 2: Enhance Harris County processes and collaboration



GOAL 3: Build safe streets that provide transportation equity for all users

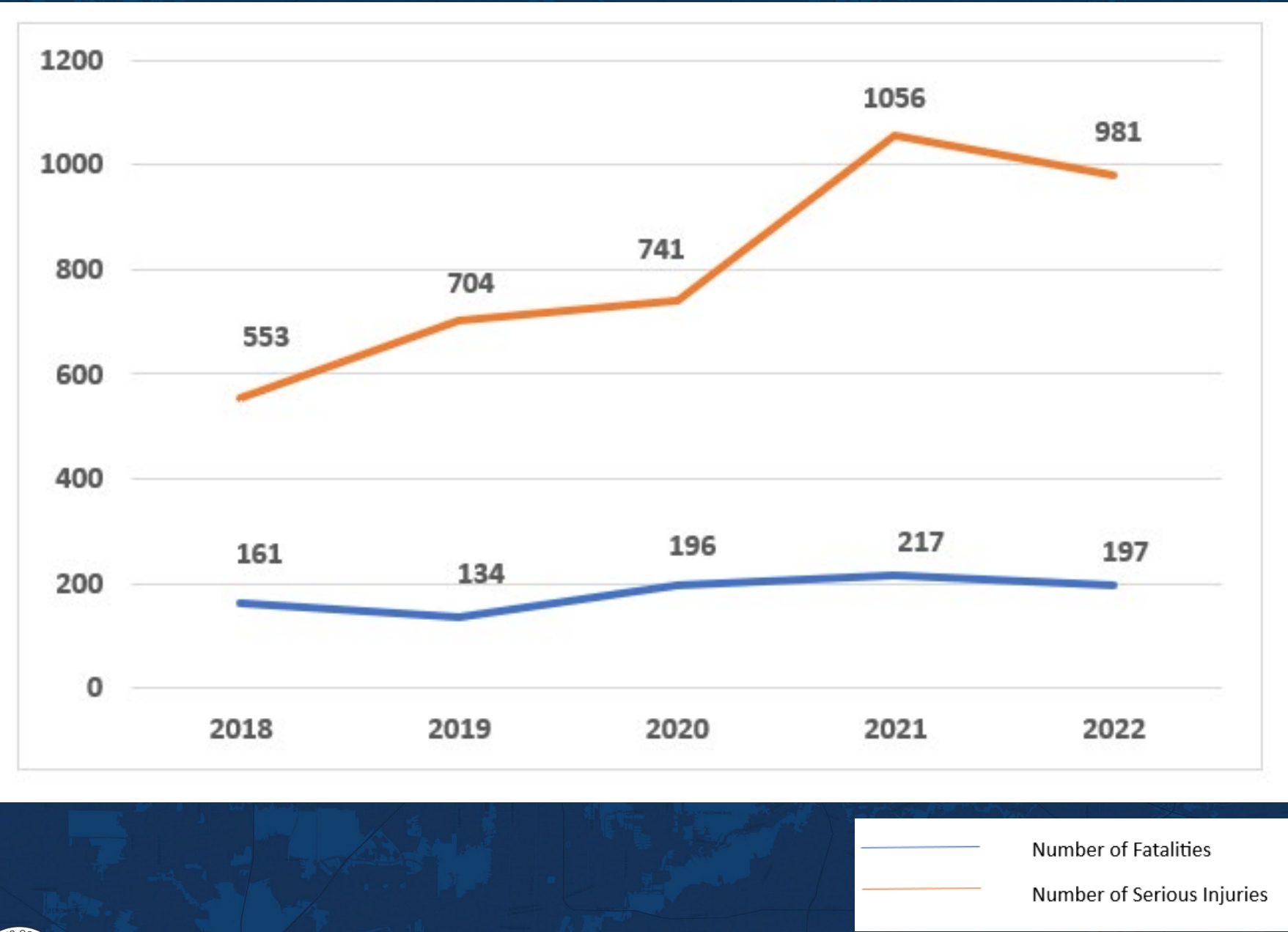


GOAL 4: Improve data collection and evaluation

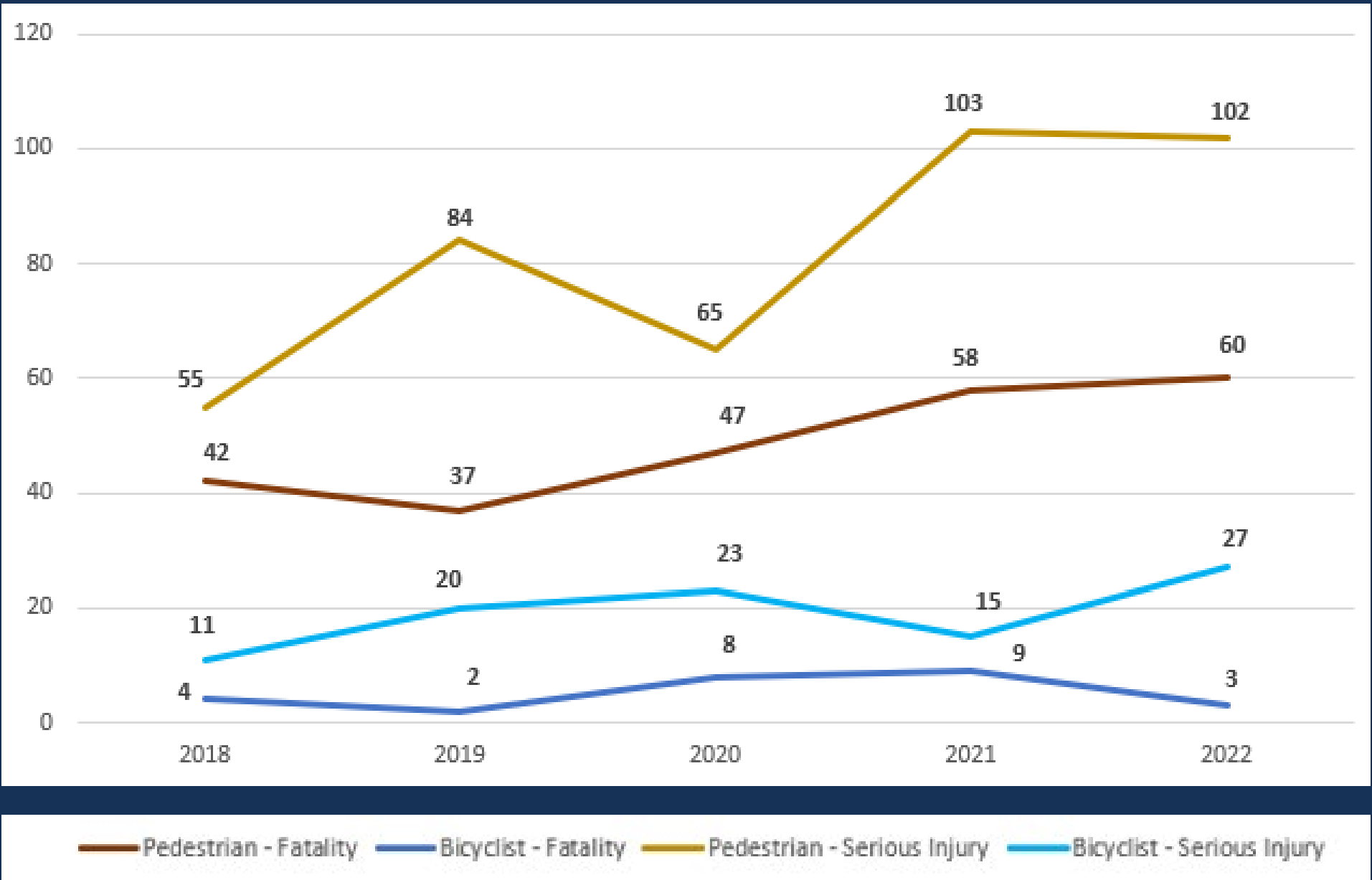


Number of Fatalities and Serious Injuries

Number of Traffic Fatalities and Serious Injuries in Unincorporated Harris County (2018-2022)



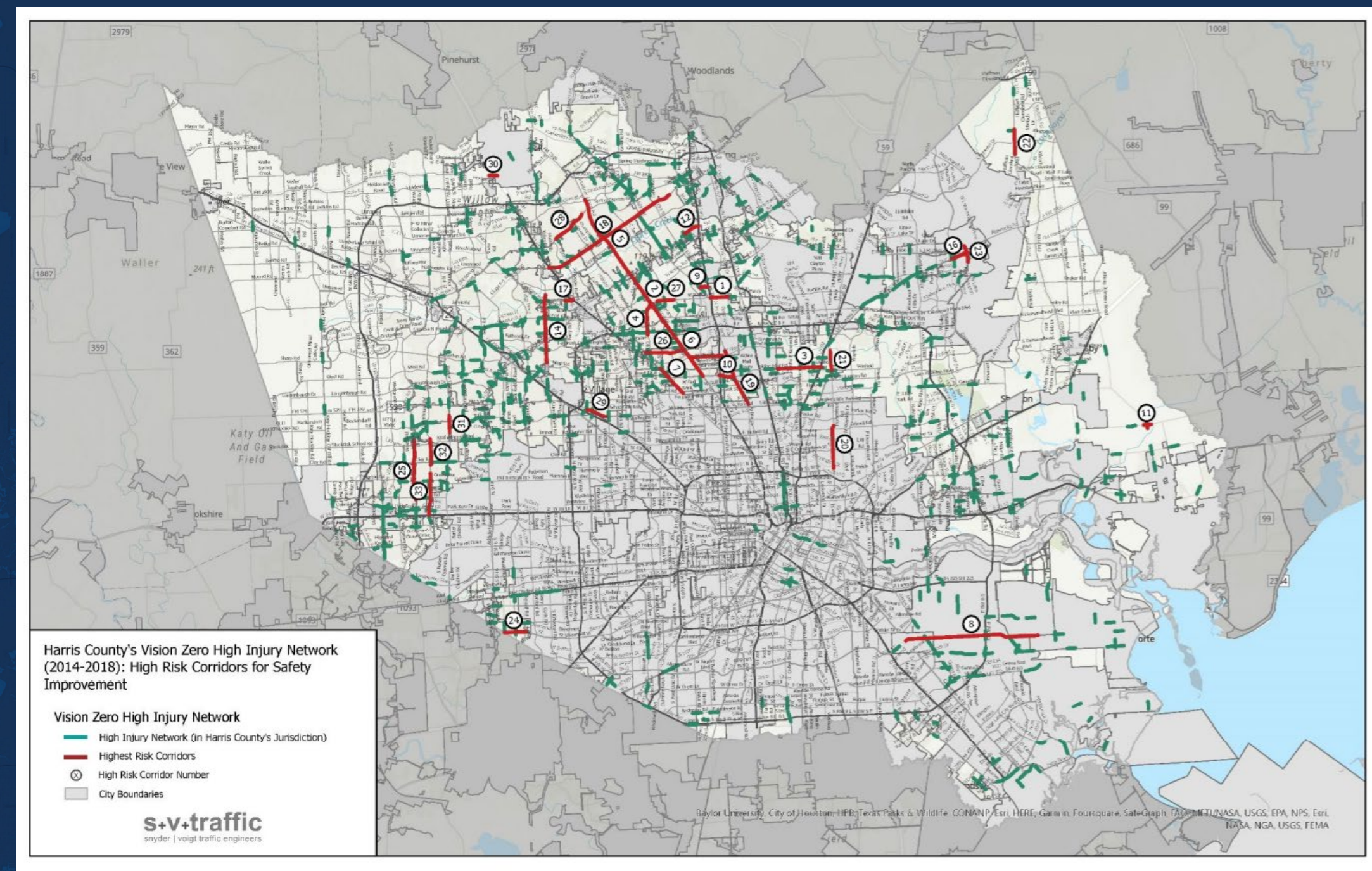
Number of Bicycle-Pedestrian Fatalities and Serious Injuries in Unincorporated Harris County (2018-2022)



Vision Zero Strategies

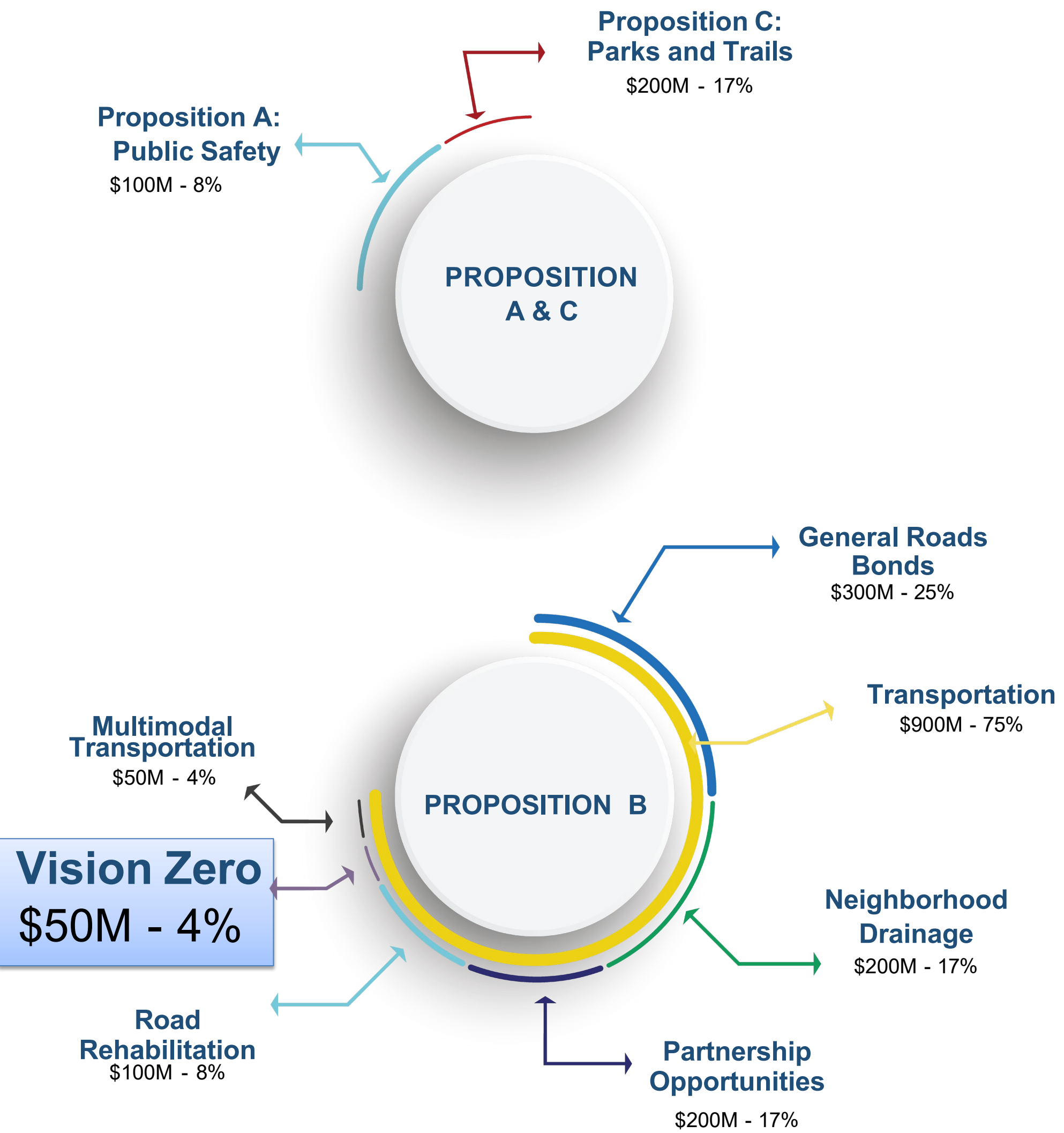
- **Education:** Develop training and education resources
- **Engineering:** Establish guidelines for safety improvements
- **Enforcement:** Encourage & collaborate with law enforcement to focus on violations impacting all modes
- **Encouragement:** Collaborate with H-GAC & local agencies on regional safety campaigns
- **Evaluation:** Publish annual report, conduct studies, update HIN every three years
- **Equity:** Include community leaders, establish funding source for implementation, ensure bike-ped improvements in socially vulnerable communities

Vision Zero Action Plan – High Injury Network Corridors



Vision Zero Implementation

2022 Harris County Bond



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Vision Zero Implementation Project Progress in 2023



- 61 transportation projects of \$222 million



- 404 traffic studies
- 289 school zone flashers were inspected and commissioned



- 1,433 school zone flashers maintained
- 1,071 traffic signals maintained.



Vision Zero Implementation

- **Vision Zero Implementation Group**
 - Precincts and relevant County departments
 - conducted two meetings during Spring 2023 and Fall 2023
 - Road safety audit on Veterans Memorial was conducted in February 2023
- **Phase 2 draft assessment of the top 33 high injury corridors**
 - Draft assessment completed and was shared with all Precincts in 2023
- **Data Updates:**
 - Adopted plan included 2014-2018 data. Additional years of crash data continuously updated
 - Next step is to update the high injury network with these new data

Phase 2 Assessment of High Injury Network Corridors (Examples)



Vision Zero Implementation

Since the adoption of Vision Zero Action Plan
(September 2022):

18 Federal and State grant applications of \$400M were submitted
to help Vision Zero goals:

- 10 H-GAC grant applications
- 3 Transportation Alternatives
- 2 Safe Streets for All (SS4A) grant applications
- 2 Reconnecting Communities applications
- 1 RAISE grant application
- 1 Department of Energy Grant



Awarded 5 Federal and State grants of \$26 million:

- Rankin Road Access Management Project
- Richey Road Access Management Project
- Mason Creek Trail Project
- Safe Routes to School Planning Project
- Reconnecting Alief Planning Project



Vision Zero Implementation

Since the adoption of Vision Zero Action Plan (September 2022):

5 new corridor planning studies were initiated based on high injury corridors

- Veterans Memorial Dr & Fall Brook Dr Corridor Study
- Aldine Mail Route Corridor Study
- Spencer Hwy (I-45 to SH 146) Corridor Study
- W. Mount Houston Rd & Airline Dr Corridor Study
- Sheldon Rd from Bear Bayou to Market St Corridor Study



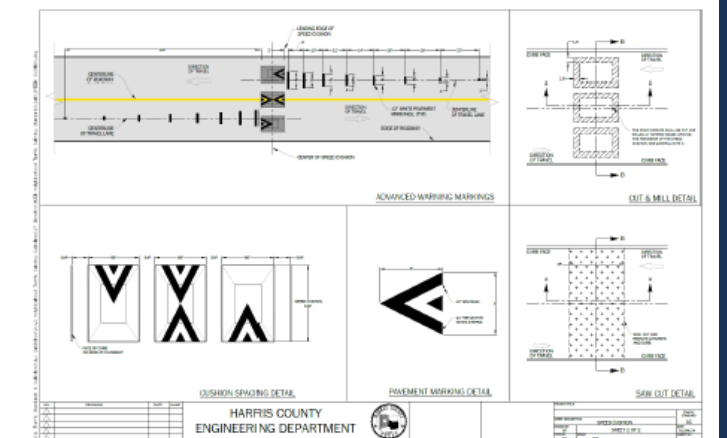
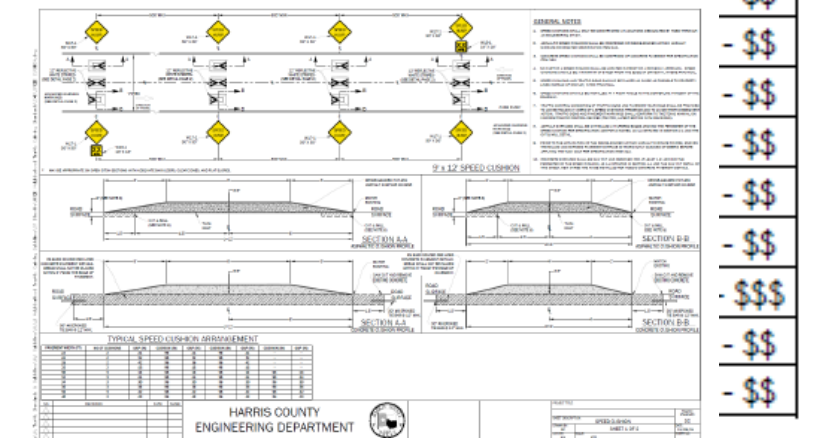
Vision Zero Implementation

- Guidelines for Traffic Calming adopted in September 2023
- Traffic Calming Policy is under development and review

Traffic Calming Measures	Traffic Concerns			Applicability				Minimum Level of Traffic Calming Study	Cost	
	Speeding	Cut Through Traffic	Safety	Intersection	Roadway Segment w/Open Ditch	Roadway Segment w/Curb & Gutter	Neighborhood or District		Installation	Maintenance
Speed Monitoring & Awareness Measures										
Neighborhood Education Campaigns	!	!	!	+	+	+	+	No study required	\$	\$
Temporary Enforcement	!	!	!	+	+	+	+	No study required	\$	-
Reduced Speed Limit Signs	!	!	!	-	+	+	+	TRANSP § 545.355	\$	\$
Speed Feedback Signs	+	!	!	-	+	+	+	Permit	\$\$	\$
High Visibility Crosswalks	-	-	!	+	+	+	+	Minor	\$	\$
Pedestrian Crossing Signs	!	-	!	+	+	+	+	Minor	\$	\$
Vertical Deflection Measures ("Drive Over")										
Speed Humps & Speed Cushions*	+	+	+	-	!	+	+	Minor	\$	\$
Speed Tables & Raised Crosswalks*	+	+	+	-	-	+	+	Regular	\$\$	\$
Raised Intersection	!	!	!	+	-	-	+	Regular	\$\$\$	\$ - \$\$
Horizontal Deflection Measures ("Drive Around")										
Corner Extension / Bulb Out*	!	-	!	+	-	-	-			-\$
Choker / Pinchpoint*	!	!	-	-	!	-	-			-\$
Chicane*	+	!	!	-	-	-	+			-\$
Median Island / Pedestrian Refuge*	!	-	+	+	+	-	+			-\$
Median Barrier & Forced Turn Island*	-	+	!	+	+	-	-			-\$
On-Street Parking	!	-	-	-	-	-	-			-\$
Delineation of Wide Cross Sections	!	-	+	+	+	+	+			-\$
Neighborhood Traffic Circle*	+	+	+	+	+	+	+			-\$
Small Modern & Mini Roundabout*	!	-	+	+	+	+	+			-\$

Technical diagrams for traffic calming measures, including speed cushions, speed tables, and roundabouts. The diagrams show cross-sections and plan views of the measures, along with associated cost estimates. The cost estimates are categorized by the level of traffic calming study required: No study required (\$), Permit (\$\$), Minor (\$), Regular (\$\$), and Major (\$\$\$\$).

* Appropriate for temporary trial installation



Vision Zero Implementation – Next Steps

- Continue collaboration through Vision Zero Implementation Group
- Conduct Safe Routes to School Plan and other corridor planning
- Update design guidelines to meet Vision Zero Goals
- Develop Vision Zero outreach campaign
- Design and construct safety improvement projects
- Pursue grant funds for safety improvements

