



# TRANSPORTATION PUBLIC WORKS

## The Evolution of Vision Zero in Austin

Texas Statewide Pedestrian Safety Forum

August 24th, 2023



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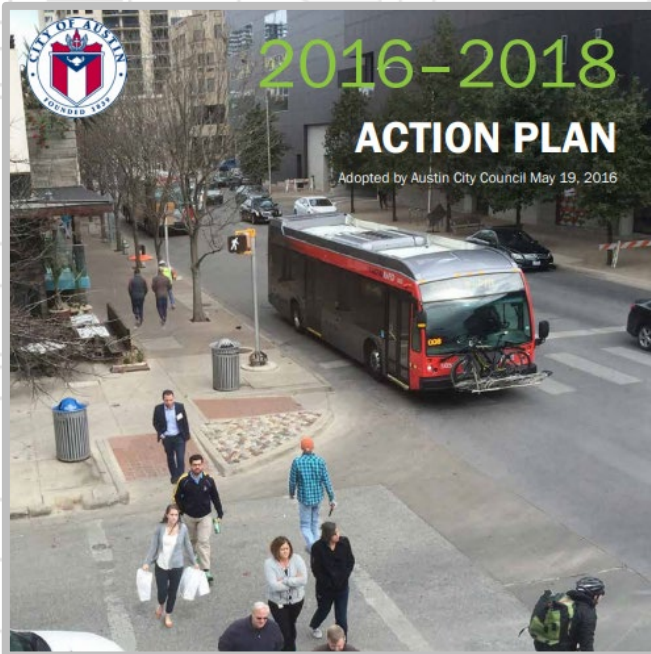


# Overview

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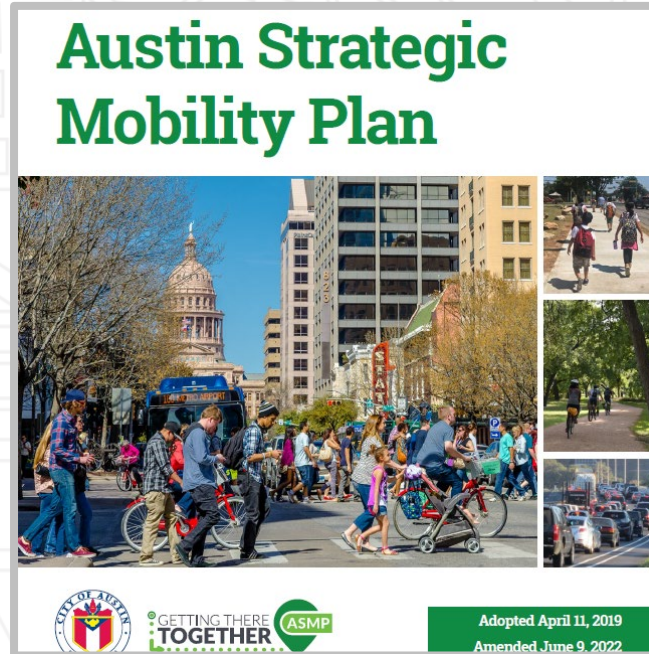
# Program Timeline



2015-2017

**2015:** Vision Zero goal adopted, second Texas city to do so after San Antonio

- 2016:**
- Vision Zero Action Plan published
  - Voters approve 2016 Mobility Bond funds of \$720M for infrastructure investments

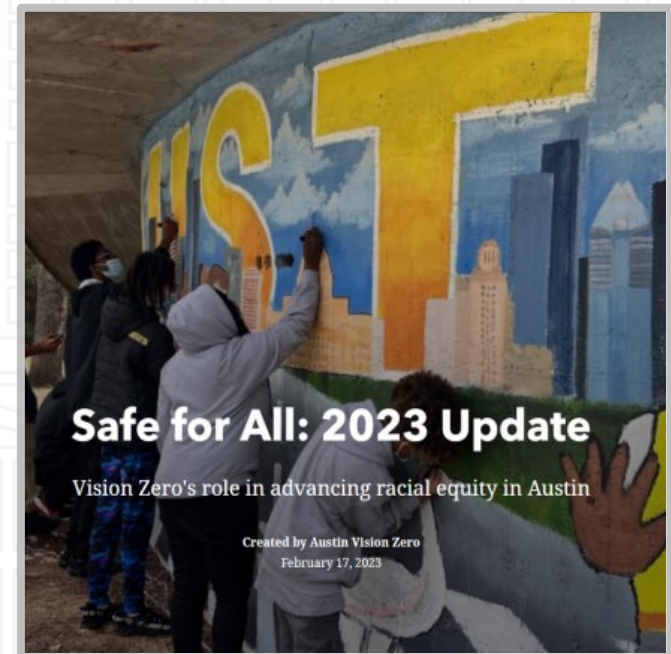


2018-2020

- 2018:**
- Pedestrian Safety Action Plan published
  - Voters approve 2018 Bond which includes \$15M for transportation safety

- 2019:**
- Transportation Safety Officer hired
  - Austin Strategic Mobility Plan adopted
  - Unified crash editor v1.0 launched

- 2020:**
- High-Injury Roadways initiative
  - Voters approve 2020 Bond which includes \$65M for Safety/Vision Zero



2021-2023

- 2021:**
- Two-year program update published
  - "Safe for All" Equity Report published

- 2023:**
- Austin is awarded a grant of \$22.9M from Safe Streets and Roads for All
  - Two-year program update published

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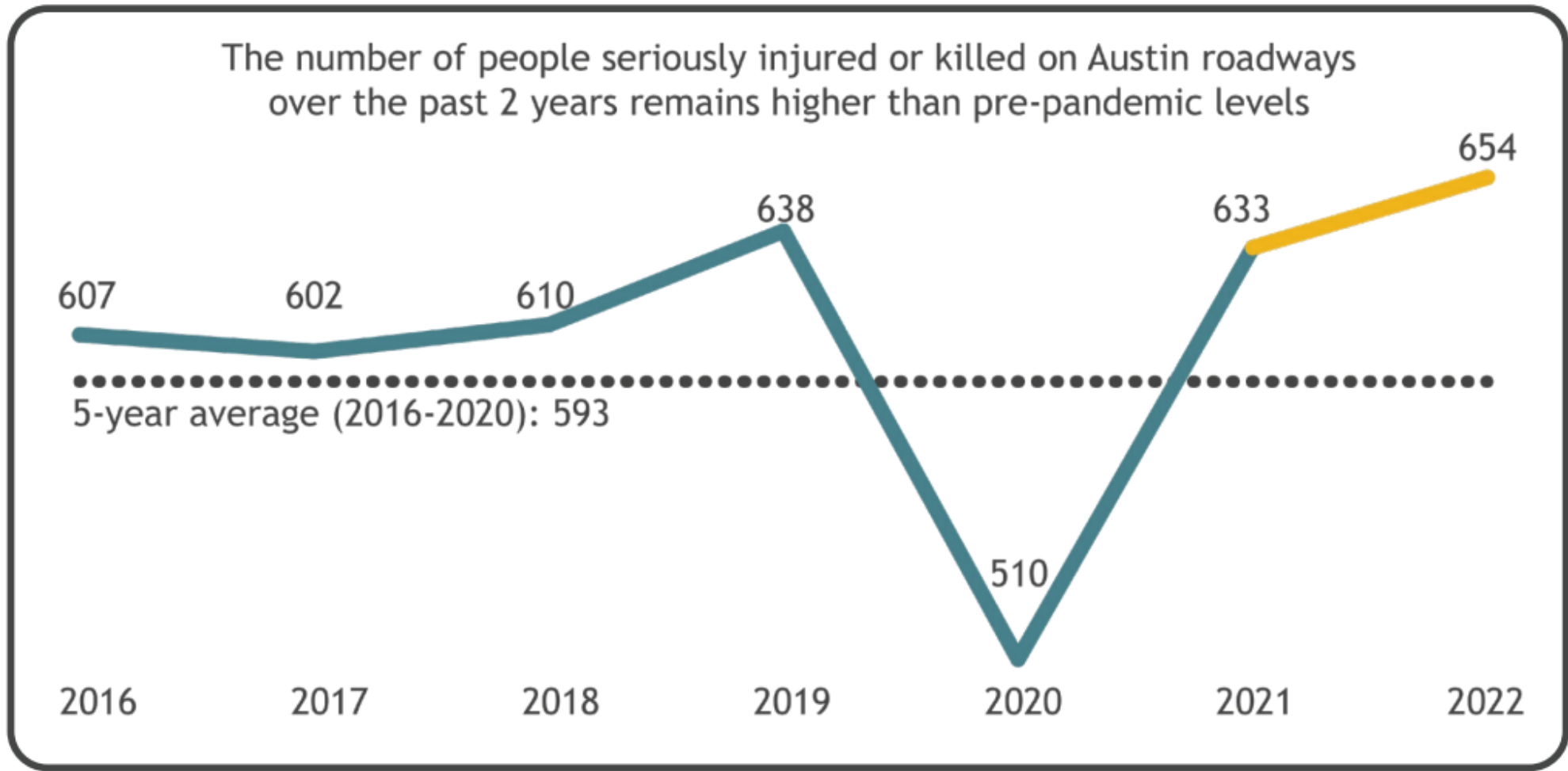


# Starting with Data

Where we started, what tools we built

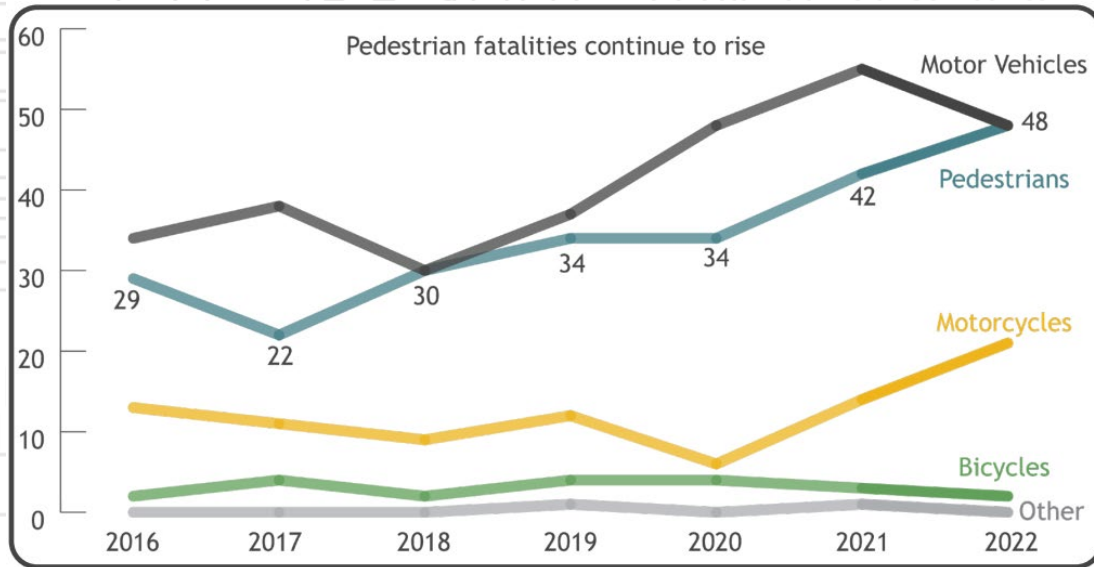


# Traffic Deaths and Serious Injuries



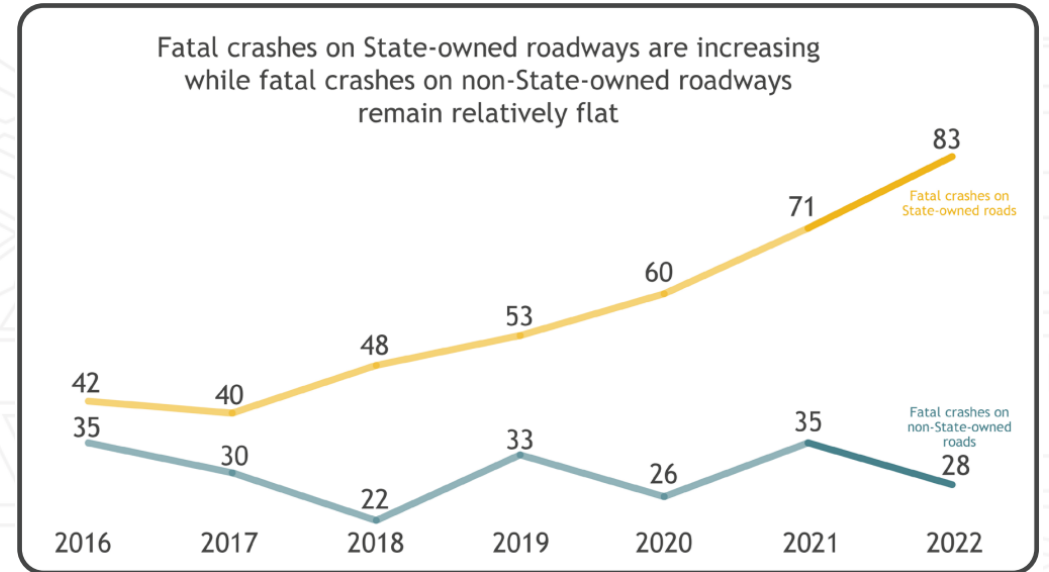


# Traffic Fatality Trends



## Pedestrians rise in share of traffic deaths

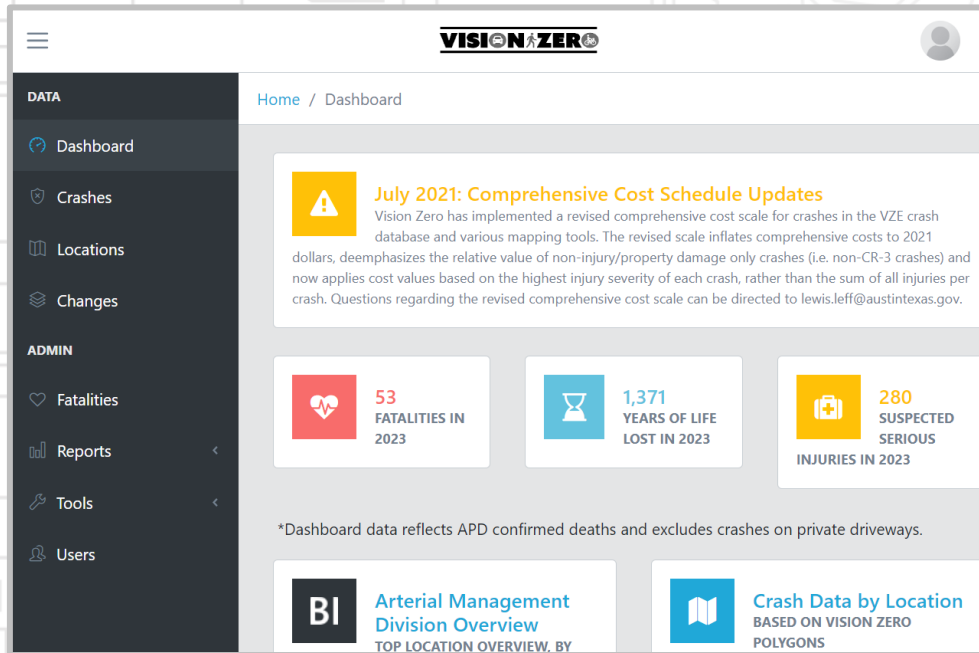
Pedestrian fatalities continued to rise at an alarming rate, as 42 and 48 pedestrians were killed in 2021 and 2022, respectively, compared with the previous five-year average of 30 per year.



## Crashes increase on State-owned roadways

Fatal crashes occurring on State-owned roadways increased substantially while those occurring on City-owned streets remained relatively flat.

# Vision Zero Tools



Vision Zero Editor

**What it does:** Provides a standardized interface that allows City staff to more easily access Vision Zero crash data and perform quality control tasks.

**How we use it:** Review crash data, prioritize safety improvements, and add notes about safety treatments



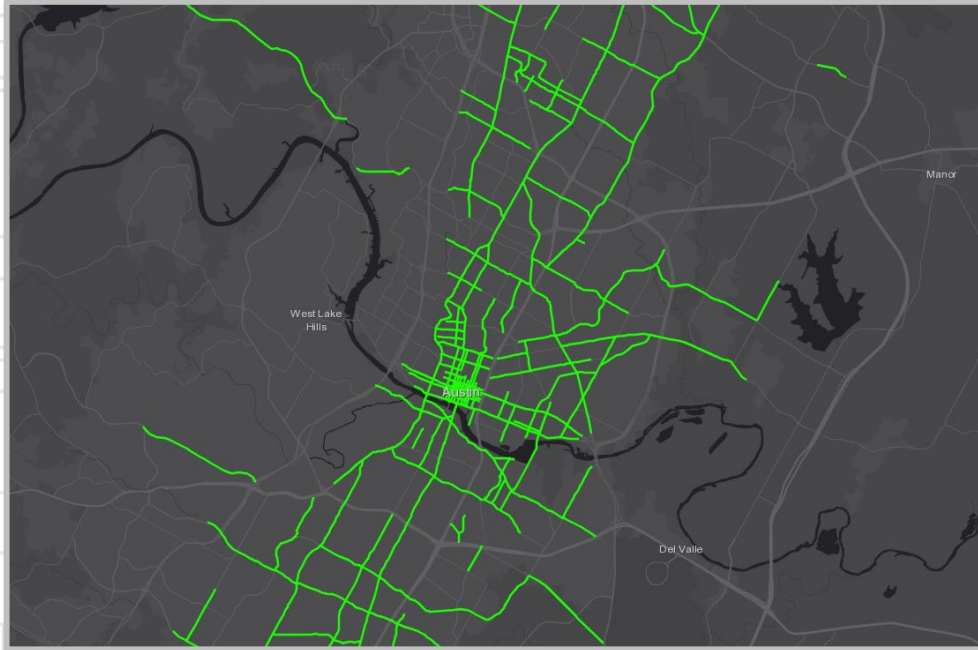
Crash Data by Location

**What it does:** Displays crash data and comprehensive costs associated with custom polygons on Austin street network.

**How we use it:** Identify crash hotspots and analyze crash patterns to inform safety treatments and initiatives



# Vision Zero Tools

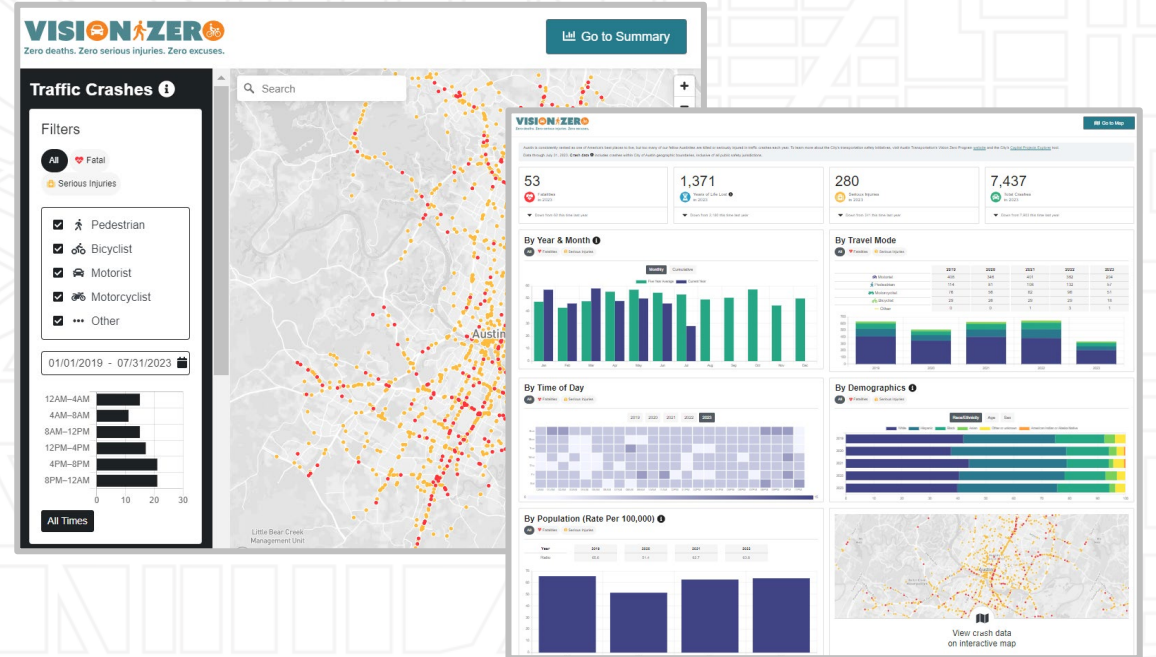


High-Injury Network

**What it does:** Austin's High-Injury Network includes just 8% of the city's street network but contains nearly 70% of all serious injury or fatal crashes for all modes (2017-2021). Can view injury network by mode (bicycle, motorcycle, motor vehicle, pedestrian)

**How we use it:** Used to identify locations where engineering, education, or enforcement interventions should be prioritized to have the most impact in improving safety.

[AustinTexas.gov/VisionZero](https://austintexas.gov/VisionZero) (under Data and Tools)



Vision Zero Viewer

**What it does:** Publicly available dashboard with summary data and map view of fatal and serious injury crashes in Austin full purpose jurisdiction, including mode, demographic data, year and month, time of day, and by population

**How we use it:** Conveying data transparency on program metrics

<https://visionzero.austin.gov>



# Leveraging Data & Analysis

Informing and evaluating projects



# Leveraging Tools for Implementation & Analysis



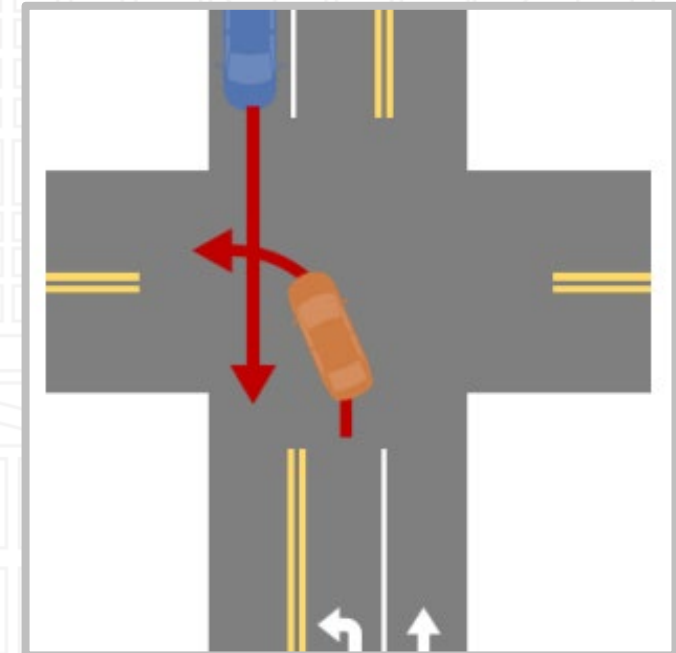
Leading Pedestrian Intervals

**December 2021:** Austin installed LPIs at 110 locations in 2019. Analysis showed that, in addition to overall crashes having decreased 64% downtown in the year following March 2020 due to factors related to COVID-19, **there was an additional 18 percentage point reduction in the annualized number of pedestrian crashes involving left-turning vehicles at downtown intersections that received LPIs in the year following LPI implementation compared with those that did not.**



Treatments on High-Injury Roadways

**December 2021:** The High-Injury Roadways initiative identified 13 sections of roadways that comprise more than half of the top 100 comprehensive cost locations in Austin. Following low-cost, high-impact treatments, analysis of crashes in 2021 compared to previous 3-year average showed a **decrease in injury and fatal crashes by 17%** compared to control group.



Signal strategies reduce left-turn crashes

**January 2022:** Analysis of 24 locations with high occurrence of crashes involving one straight movement and one left turn. Treatments included “protected-only” phasing, installing flashing yellow arrow, and installing more prominent signage or signal heads. Results include a **64% reduction in the annualized number of Opposite Direction-Left Turn injury & fatal crashes.**

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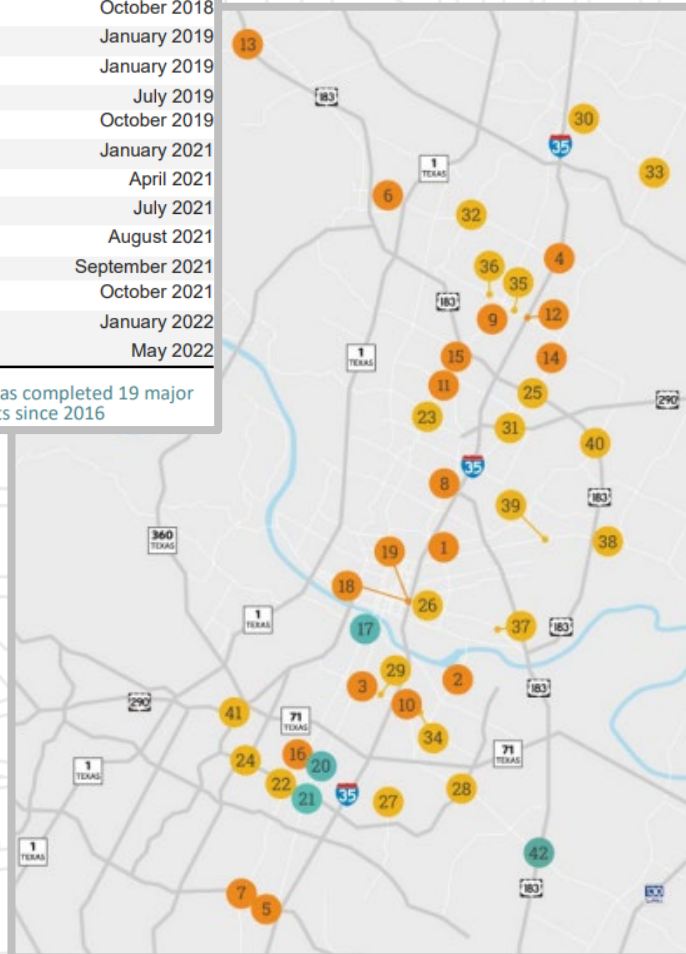


# Major Intersection Safety

**Table 1. Completed intersection safety projects**

Location	Completion date
IH-35 and Martin Luther King, Jr. Blvd	November 2016
US 183 and Cameron Rd. (NE & EB)	December 2016
N. Lamar Blvd.- Rutland Dr. to Rundberg Ln.	June 2017
N. Lamar Blvd. and Parmer Ln.	July 2017
S. Pleasant Valley Rd. and Elmont Dr.	June 2018
S. Congress Ave. and Oltorf St.	July 2018
45th St. and Red River St.	October 2018
Slaughter Ln. and Menchaca Rd.	January 2019
Slaughter Ln. and Cullen Ln.	January 2019
IH-35 and Braker Ln.	July 2019
Slaughter Ln. and S. 1 <sup>st</sup> St.	October 2019
N. Lamar Blvd. and Payton Gin Rd.	January 2021
Lakeline Blvd. and US 183	April 2021
N. Lamar Blvd. and Morrow St.	July 2021
N. Lamar Blvd. and St Johns Ave.	August 2021
Braker Ln. and Stonelake Blvd.	September 2021
Oltorf St. and Parker Ln.	October 2021
Rundberg Ln. and IH-35	January 2022
Cameron Rd. and Ferguson Ln.	May 2022

Austin Transportation Department has completed 19 major intersection safety projects since 2016



- Analysis of 13 major intersection safety projects completed since 2016
  - 19 major intersection projects completed, as of July 2022
  - 13 projects had one year of crash data after project completion
- Historical crash data and site visits informed safety improvements
- Treatments involved lower-cost interventions (e.g. traffic signal timing, refreshed crosswalk markings) and more substantial treatments (e.g. concrete medians, shared-use paths)
- Results:
  - **30% reduction in crashes per year following project completion**
  - **31% reduction in serious or fatal crashes**
  - **19% reduction in pedestrian involved-crashes**
  - **23% reduction in injury or fatal crashes involving pedestrians**

# Continuing Improvements

Engagement, infrastructure investments, future initiatives





# Engagement Across the City



## Vision Zero Leadership Council

Representatives from governmental entities to share information on data trends and initiatives. Agencies include Austin Public Health, Austin Police, Austin Fire, Municipal Court, CapMetro, Austin-Travis County EMS, Travis County District Attorney's Office, Austin ISD, TxDOT, and Federal Highway Administration



## Vision Zero Alliance

Representatives include non-government organizations and individuals who are interested in Vision Zero efforts



# VISION ZERO TWO-YEAR UPDATE

2021-2022



**VISION  
ZERO**

## Key Highlights 2021-2022

- Completing 7 major intersection safety projects and initiating construction, design, or scoping on another 25 intersections.
- Installing low-cost, high-impact systemic projects at more than 40 locations.
- Completing rapid response safety interventions at 34 locations with recent traffic fatalities.
- Lowering speed limits on nearly 50 arterial streets and hundreds of residential streets.
- Leveraging local community bond dollars to secure over \$27 million in federal funds for rapidly increasing the scale and scope of our work.

Read our latest 2-year update: [AustinTexas.gov/VisionZero](https://AustinTexas.gov/VisionZero)

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# Future Efforts

## Additional Data Sources

- Video analytics
- Hospital data
- EMS data
- Travis County Medical Examiner's Office toxicology results

## Systemic Safety

- Shifting away from hotspot approach to a more proactive, Safe Systems approach
- For example: low-cost, high-impact systemic safety countermeasures at approximately 50 signalized intersections and adjacent corridors throughout the city; street lighting and pedestrian lighting; access management
- Left turn calming pilot

# VISION N ZER

## Thank you

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[AustinTexas.gov/VisionZero](https://AustinTexas.gov/VisionZero)