#### **2021 Vision Zero Update**

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#### Introduction



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Vision Zero is the Austin community's adopted goal to achieve zero transportation-related fatalities and serious injuries on our roadways. The policy was first adopted as an amendment to the Imagine Austin Comprehensive Plan in 2015 and is an explicit policy goal of the 2019 Austin Strategic Mobility Plan. Vision Zero is a proven international effort that brings resources and best practices to Austin from cities worldwide.

In an effort to accelerate efforts to make significant progress towards the goal of zero, Austin Transportation created the Transportation Safety Officer position in 2019 with strong support from the City Manager's Office and City Council. Shortly thereafter, the Vision Zero program added three full-time positions to support the planning, analysis, and communications needs of the program.

This report is an update on the Vision Zero program's efforts made in 2019 and 2020 and future program initiatives. This report is not comprehensive to the City's many programs which lead to safer streets like Safe Routes to School, 2016 Mobility Bond, Sidewalks, Bikeways, and others. The Vision Zero program's growth in the past two years have expanded the depth and breadth of City traffic safety initiatives, but there is a long way to go to reach our goal of zero.

### Data and Methodology



Access to better crash data is critical to understand where and why crashes occur in Austin. Better crash data and a new, proactive methodology have enabled Vision Zero to take on an expanded role in identifying, prioritizing, and funding effective traffic safety countermeasures.

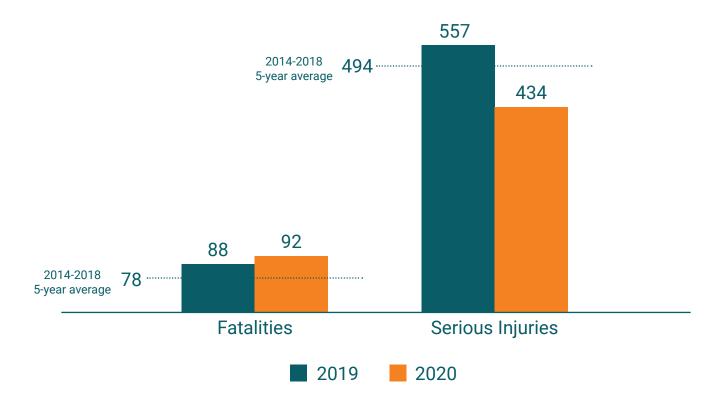
#### Data and Methodology: Two-Year Trends



Note: The Vision Zero team is still evaluating the impact that the COVID-19 pandemic had on crash statistics, but a combined 18% reduction in fatalities and serious injuries in 2020 is one positive outcome in this otherwise challenging year.

Traffic fatalities increased 5% in 2020 from 2019, which means four more friends and neighbors died this year compared to the prior year. Serious injuries decreased by 22% in 2020, which means that 119 fewer community members suffered life altering injuries last year than the prior year.

Traffic fatalities in both 2019 and 2020 exceeded Austin's five year average (see chart below).



# Data and Methodology: Methodology



A <u>new prioritization methodology</u> has been developed to ensure Vision Zero bond funds are used as effectively as possible, delivering both large-scale improvements at high crash intersections and interim treatments that can immediately address the most prevalent crash patterns.

Additional equity criteria, like percentage and number of people of color involved in severe crashes at specific locations, are now being incorporated into the Vision Zero methodology. This will increase priority for analysis and identification of project locations with a high number or percentage of crash victims who are people of color.

### Data and Methodology: Crash Data Management



High quality crash data provides the foundation for all of the Vision Zero program's safety initiatives. Over a nine-month period in 2019 and 2020, the Vision Zero team worked closely with Austin Transportation's Data and Technology Services group to create a custom in-house crash database. This ensures dozens of transportation planners and engineers have direct access to accurate crash records.

Using the enhanced crash data, the Vision Zero team built a number of tools that provide staff across all of Austin Transportation's divisions with new analysis and insights into the most prevalent crash types, emerging hot spots, temporal trends, and more. These insights are critical to prioritize safety initiatives and investments at locations with the highest concentration of severe crashes, and to prioritize effective treatments where high risk exists due to the current roadway conditions. These new tools support evaluation of the effectiveness of interventions and investments over time.

These crash data management efforts also enabled greater data transparency and public access through the creation of the <u>Vision Zero Viewer</u>. This is an interactive dashboard and web map that allows the community to see high-level trends comparing the current year to previous years, as well as the locations of all serious injury and fatal crashes over the past five years.

#### **Safety Improvements**



Over a dozen low-cost, rapid response safety improvements have been implemented at fatal crash locations over the past two years. These improvements were recommended by the Vision Zero **Fatality Review Board (FRB)**, a multidisciplinary group of subject matter experts in engineering, planning, traffic enforcement, public health, and other fields who regularly review all recent fatal crashes and recommend engineering treatments that may help mitigate future, similar crashes. Safety improvements implemented from FRB recommendations include high visibility signage, new or refreshed street markings, plastic delineators to better manage risky car movements or highlight certain roadway features, changes to traffic signal timing, and more.

Vision Zero has also taken on an expanded role in reviewing development applications and identifying safety mitigation measures to be funded by new development. Vision Zero staff now review all development proposals that are located adjacent to the High-Injury Network, and have recommended new pedestrian hybrid beacons, traffic signal upgrades, sidewalks, and other critical safety improvements for over 60 projects over the past two years.

### Safety Improvements: High-Injury Roadways



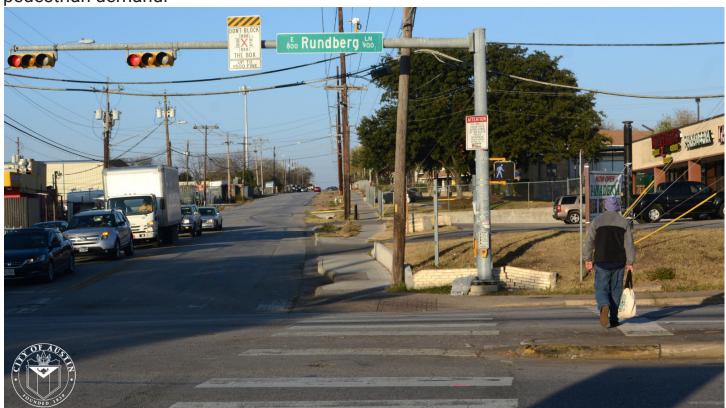
In 2020, Vision Zero staff identified 13 roadway sections to implement a package of low-cost, high-impact engineering treatments to be paired with safety signage and targeted traffic enforcement for key dangerous driving behaviors. These 13 sections are referred to as <a href="High-Injury Roadways">High-Injury Roadways</a> (HIR), and comprise more than half of the top 100 <a href="comprehensive cost locations">comprehensive cost locations</a> in Austin. Engineering treatments implemented on these rodways include changes to traffic signal timing (e.g. switching from permissive to protected left turns), visibility enhancements (e.g. retroreflective backplates on traffic signals), refreshed crosswalks and other markings, battery backup systems, and others. Early results show a 10% additional reduction in serious injury and fatal crashes on the High-Injury Roadways compared to the city as a whole in 2020.



# Safety Improvements: Leading Pedestrian Intervals TRANSPORTATION

To reduce pedestrian crash risk in the city's most active pedestrian environment, leading pedestrian intervals (LPIs) were implemented at over 110 intersections downtown in early 2020. LPIs provide pedestrians four to seven seconds of dedicated time to begin crossing an intersection before drivers receive a green light. Every intersection within the area bordered by 15th Street, North Lamar Boulevard, West Cesar Chavez Street and Interstate 35 now features a LPI for at least one pedestrian crossing. Following implementation of the project, an intercept survey of downtown pedestrians was conducted finding that 87% of respondents agreed or strongly agreed that they felt safer crossing knowing they had a head start.

Vision Zero and Arterial Management staff have also implemented LPIs at over 40 other locations across the city in the past two years, based on analysis of crashes and pedestrian demand.



# **Safety Improvements:** Intersection Safety



Through the <u>Transportation Safety Improvement Program</u>, safety improvements are developed and implemented at Austin's highest crash intersections. Three projects were completed in 2019 and 2020 and three are in construction now. Early results demonstrate reduced injury crashes and crash rates at many of these locations.

Using Vision Zero data, signalized intersection locations with high levels of specific crash types were found that could be addressed through lower-cost changes to traffic signal timing. For example, crashes involving one vehicle going straight and one vehicle making a left turn across the path of the first vehicle account for nearly 8% of all serious injury and fatal crashes. Top locations of this crash type were found and protected green arrows for left turns were implemented at these signals during specific times of day. Studies show a potential reduction of this crash type by up to 33%.



### Safety Improvements: Systemic Safety



Austin's Vision Zero program is one of the first in the United States to undertake an in-depth systemic safety analysis, a traffic safety approach that seeks to prevent severe crashes before they occur by proactively addressing high risk locations. This approach complements the traditional hot-spot approach to traffic safety that reacts to documented crash patterns at individual locations.

Using the latest five years of serious injury and fatal crash data, this analysis resulted in a recommended set of relatively low cost and high-impact engineering countermeasures that can be deployed at hundreds of locations throughout the city. Work is ongoing to develop these recommendations into projects, and the results from this work will help prioritize safety investments across the city for years to come.

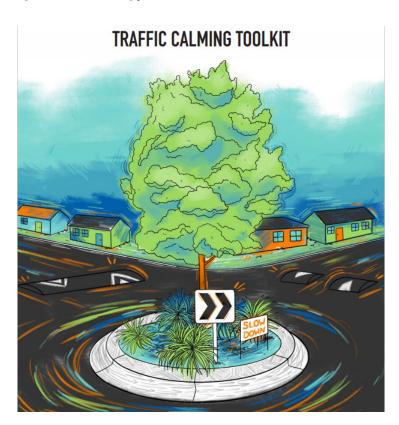


#### Safety Improvements: Speed Management



Managing for safe speeds is widely recognized as one of the most important things cities can do to substantially reduce severe crashes. The Vision Zero program partnered with the Traffic Engineering Division on a two-year effort to reform Austin Transportation's approach to managing for safe speeds. With input from over 1,100 community members, a holistic Speed Management Program was developed that incorporates new approaches to setting safe speed limits and implementing traffic calming treatments in high priority locations.

As a result of this new approach, nearly 900 miles of streets will see reduced speed limits over time, including around 850 miles of residential streets being reduced to 25 mph. The new program takes a proactive, data-driven approach to fund residential traffic calming projects based on citywide need, and explicitly incorporates equity criteria into the scoring methodology.



### Communications



For the past two years Vision Zero has developed a number of strategic communications

For the past two years Vision Zero has developed a number of strategic communications initiatives to encourage changes in the human behaviors that contribute to the majority of serious injury and fatal crashes in Austin.

## **Communications:**Content



Vision Zero partnered with ATXN in 2019 and 2020 to produce bilingual educational videos for Austin's "Fatal Four" contributing factors:

- Speed (<u>English</u>) (<u>Spanish</u>),
- Distraction (<u>English</u>) (<u>Spanish</u>),
- Failure to Yield (<u>English</u>) (<u>Spanish</u>), and
- Impairment (<u>English</u>) (<u>Spanish</u>).

Regular messaging (including images) is developed to distribute on social media, in radio, and in print to inform individuals of Vision Zero initiatives, especially the four key driving behaviors to avoid when driving.

Vision Zero staff developed yard signs around safe driving, which are widely available and distributed to interested residents and neighborhoods.



# Communications: Campaigns



Focused digital and traditional media campaigns reach key demographics, including younger drivers and specific neighborhoods adjacent to High-Injury Roadways to inform them as safety improvements are completed along each section.

Citywide communications efforts are routinely developed to coincide with major events and holidays throughout the year, such SXSW in March, Independence Day in July, and the end of Daylight savings in November.

Vision Zero staff attend external traffic safety education opportunities, including participation on the KAZI Health talk radio show and Fox 7 Safe Kids Austin segment, as well as back-to-school events in Colony Park and at the Palmer Events Center in 2019.

Internally, Vision Zero staff participated in the City of Austin Employee Safety conference in summer 2019. The team also presented at the Austin Police Department's (APD) New Cadet Training in fiscal year 2020 to share with cadets the goals of Vision Zero, how crashes impact different modes, and the importance of accurate crash information for implementing engineering solutions and high priority locations. Vision Zero hopes to have the opportunity to present similar information to future cadet classes.

## **Partnerships**



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Getting to zero requires strong partnerships with the Austin community and regional transportation, emergency response, and public health partners. Over the past two years we have formed a number of collaborative working groups and other resource sharing efforts to expand the reach of the program and promote systems safety across the City.

### Partnerships: Community Partners



The **Vision Zero Leadership Council** was formed in May 2019 and meets roughly every six weeks to provide guidance and direction on Vision Zero program priorities and initiatives. The Leadership Council is comprised of representatives from TxDOT, the Travis County Attorney and District Attorney Offices, Austin-Travis County EMS, Austin Fire Department, APD, Austin Independent School District, Capital Metropolitan Transportation Authority, City of Austin Housing and Planning Department, Austin Municipal Court, Federal Highway Administration, and Austin Public Health.

The **Vision Zero Alliance**, which represents over 30 organizations and stakeholders, was formed in 2019 and meets quarterly to provide input and feedback on various Vision Zero program initiatives. The Alliance includes representatives from City boards and commissions, non-profit groups like Mothers Against Drunk Driving (MADD) and Central Texas Families for Safe Streets, institutional partners like the Texas A&M Transportation Institute, and individual traffic safety advocates.

#### Partnerships: Local & State Partners



Vision Zero continues to build partnerships with other Austin Transportation divisions, City departments, local transit providers and the Texas Department of Transportation to find opportunities to incorporate safety into existing processes.

Vision Zero partnered with Austin Transportation's Active Transportation and Street Design Division to identify additional safety improvements on the **Longhorn Dam Multimodal Improvements project.** Coordination with the Public Works Department was strengthened by serving on the technical advisory group for forthcoming updates to the Sidewalk and Urban Trails plans to incorporate crash data and include a new pedestrian crossing prioritization framework.

New safety initiatives were co-developed with Capital Metro including development of an application to identify candidate bus stops that can be moved or closed to improve safety, deploying sidewalks decals that encourage bus riders to walk to the nearest safe crossing, and presenting to area paratransit providers.

Vision Zero has coordinated with TxDOT to implement safety improvements on State-controlled roadways within the City, which accounted for ~70% of Austin's traffic fatalities in 2020. A high-profile example is the median barrier extension on IH-35 north of 51st Street to Rundberg Lane, which serves as a temporary solution to address the high number of pedestrian fatalities along this stretch of freeway while IH-35 reconstruction designs contemplate additional pedestrian crossings. Since the barrier was completed in July 2020, there has been one fatality involving a pedestrian in this area whereas there were four in 2018 and four in 2019.

#### Partnerships: Law Enforcement



Traffic enforcement and stronger penalties for dangerous driving behaviors can be effective tools for achieving reductions in fatalities and serious injuries when utilized as part of a holistic safety strategy.

Vision Zero has established partnerships with APD to focus enforcement efforts on the driver behaviors that lead to the most severe injuries. This includes the No Refusal Initiative which aims to reduce impaired driving on our streets, and Vision Zero in Action, which focuses on speeding and distracted driving on the High Injury Roadways (HIR).

APD's No Refusal Initiative produced 1,900 DWI-related arrests in 2019 and over 1,400 in 2020. Vision Zero in Action enables specific traffic enforcement efforts to primarily address speeding and distracted driving at high priority crash locations. Over 11,000 warnings and citations were issued for these two behaviors through VZA in 2019 and 2020 on high crash priority streets.

Vision Zero also partnered with APD and the Austin Municipal Court to reform how injury crashes with failure-to-yield citations are handled to align with the state law of increased penalties for this dangerous behavior, which is a contributing factor in approximately 16 percent of fatal and serious injury crashes. Following this change, recipients of failure-to-yield citations involved in crashes with serious injuries must now appear in court.

### **Equity**



As part of the Vision Zero team's commitment to prioritize equity, five years of severe injury and fatal crash data was reviewed to understand victim disparities by race/ethnicity. The data shows that the Black/African-American community is disproportionately impacted by these crashes, and the Hispanic/Latino community is a growing share of severe crash victims.

As part of the broader community conversations about systemic changes needed to promote equitable and safe transportation, the Vision Zero team is reforming current prioritization frameworks to ensure future investments account for the racial disparities seen in severe crash data.

The team has published a public-facing StoryMap on Vision Zero's role in advancing racial equity in Austin:

View the <u>Safe for All Storymap</u>. (<u>Seguro para Todos</u>)

This report highlights the racial disparities in traffic violence in Austin, touches upon the historical context and institutional factors that have contributed to and perpetuated these disparities, and enumerates in more detail some of the ways in which the Vision Zero program will seek to advance racial equity within our work.

#### **Next Steps**



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The work outlined in this update report reflects progress in improving safety within Austin but more work must be done to achieve the goals of Vision Zero.

Next year the team will continue to move forward existing initiatives and develop new strategies to reduce serious injury and fatal crashes in Austin. Below are three key initiatives for the upcoming year.

- Continue progress on existing initiatives such as the Fatality Review Board, <u>High-Injury Roadways</u> and coordination with other City departments, ATD divisions and local transit providers to identify opportunities to partner on safety improvements throughout the city.
- Launch a "Vision Zero Stories" campaign to provide people who have been directly
  impacted by crashes an opportunity to participate in <u>Vision Zero work</u> and to inform
  others in the community of the true impacts of severe crashes. Research shows this
  can be an effective behavior change strategy to complement our engineering and
  enforcement efforts.
- Incorporate the results from the Systemic Safety analysis into 2020 Bond project prioritization and develop systemic safety projects to implement at large numbers of high crash and high risk locations throughout Austin.

# Who We've Lost: 2019-20 Fatalities



Donald Lee Langston Alan Emmanuel Carrillo Forton, Sr. Derrick Dewayne Wooley Mona Monique Ramon Narciso Mejia Gutierrez Jesse Jay Gomez Jr Danires Antonio Guerra-Mancia

Edgard Martinez Steven Lamont Hill

Nestor P. Yruegas Mario Martinez-Buenrostro

Ramon Cho Linda Cadena Gloria Wilson Alan Wayne Goldsberry

Zebulon Lyle Beer
Michael Wayne Allen Parrish

Michael Wayne Allen Parrish Armando De La Cruz

Raymond Cipple
India Deshaun McKinley
Jessica Paige Sears

George Barney Grant Jeffrey Bourgeois Graham Blake Tillerson

Kenneth Harlan Bee Paul Herrera

Austin Frank Boggus Martina Venancio-Cabrera Ruben Beer Krumholz Lisa Deborah Vann

Maximino Flores

Elias Samuel Jurado Travis Larsen

Travis Larsen Jacob T Byrd David Sandlin Inez Whitener

Miguel Angel Rodriguez Andrea Granzotti

Charlotte Dukes Alejandro Hernandez Ronnie Lindsey

Gilbert Cortinas
Julian Rene Murillo

Gabriel Isaiah Marmolejo

Jose Zamarripa Brian Allen Tucker Sarah Christina Dabadie Roberto Luna Pantoja Travaughn Avery

Olivia Sanders Shelby Paige Bean Eber Misael Castillo Ortiz

Marcos David Sorto Caldron Terri Lynne Campbell

Roberta Gail Ruggles Roderick Davis

Ginger Mattox

Dawon Jermaine Davis James Henry Omary

Aron Franco

Jedidiah Ephraim Brown Shawn (Fire Eagle) Thane West

Lucino Gonzalez
Bruce Chavez
Rocky Anthony Bell
Margarita Escalante Ibarra

Margarita Escalante Ibarra Alejandra Berenice-Sanabria-Alejandro

Daminik Lopez

Harrison Thomas Beard

Katie (Katy) Lynne Johnson Riley

Samuel Williams
Calvin Bench
Lee Martin Cagle
Theodore Tjomsland
Vincent Laroy Cleveland

Owen William Macki Raquel Gitane Aveytia

James Mares Jacob August Boelter

Jaymes Torres Javier Elijah Garcia

Jennifer Tavares

Jacob Mitchell Levy Juan Palacios D'avion Lee Suon

Mario Estrada Fabian Rey Morales Leon Jay Harvey Mauro Carrasco Mota

Braulia Arce Hernandez
Mary Gonzales-Limas

Amisi Lukongo Elvin Diaz-Felipe Ana Argueta Matthew Smith

Merry Daye

Ricardo Velazquez Romero

Allison Banks Cody Faust Isaac Albarran Mark Evans Risean Deontay Green

James Lee Beasley Matthew James Almasi Damir Hererra Perez

Rachelle Velin Covey Armando Casares Juan Francisco Lugo Mary Serrano

Christian Sharp Lydia Quintanilla David Tienda

Carlos Alvarez-Recarte Mauricio Garcia

Mario Granado-Godoy Billy DeWayne Brewster III Christian Livingston Scott Remmenga

Joe Ogg

Jeanny Nunez Noguera Louis Chambers

Edgar Montoyoa Felipe Ramirez Jr. Smelin Roque Valesquez Anthony Washington Anthony Ukadiba

Aamna Najam Cedric Myron Benson

Josephine Guerra Derril Lovelace

Daryl Wayne Anderson Jr. Douglas Joseph Vogelsass

Felix Ybarra

Xavier Rashard Tunsun Matthew McDonald Casey Ballard Christopher Forrest Justin Allen Smith Leslie Valderrama

Brendan James O'Connor

Matthew Waters Guadalupe Padilla Palacios

Cecil Wade Walker Lance Christopher Smith Luis Fernando Martinez-Vertiz

Halbert Henricks Cesar Saunders

Victor Carr Patrick Leonard Ervin Cheyeanna Sage Serrano Christian Edward Barrios Michael Clay Myers David John Medrano

Rogelio Andres Leon Salmeron

John Guiling
Aric Maxwell
Elvira Cadena Trujillo
Carlos Moncada Cruz
Michael Cannatti
James Bourgeois
Hannah Jaggers
Cheung Chou

Garrett Evan Davis
Keaton Michael Carnley
Lilliana Martinez
Earnest Turner
Carlos Cardenas Jr

Jessica Rae Saathoff
Javier Emanuel Nino-Esparza

Rosbel Guadelupe Tamez Blair Dismukes

Messiah Zion Mouton Trevor James Ralston Mark Sands

Anthony John Diaz
Laura Wray
Jesus Servantez
Ann Bottenfield-Seago
David Hilburn Sell
Douglas Ashton Days\*
Margarito Gonzalez Castro\*
Alfonso Sanchez Angeles\*

Alejandro Aguilera\* William Talyor Barrett\* Mikayla Guerrero\*

Savannah Grace Rodriguez\* Ronald H Coleman\*

Ronald H Coleman\*
Selia Marie Nuylan\*
Donald Gibbs\*
Robert Russell\*
Jessie Jay Woosley\*
Mark Weaver\*
Bradley Wayne Smith\*
William Bonne Lamb\*
Pedro Hernandez\*

\* fatalities occurred in the City of Austin Full

Purpose Jurisdiction, but do not meet ATD fatal crash criteria