




Texas Pedestrian Safety & The Safe Systems Approach

Becky Walker, Regional Program Manager, TX

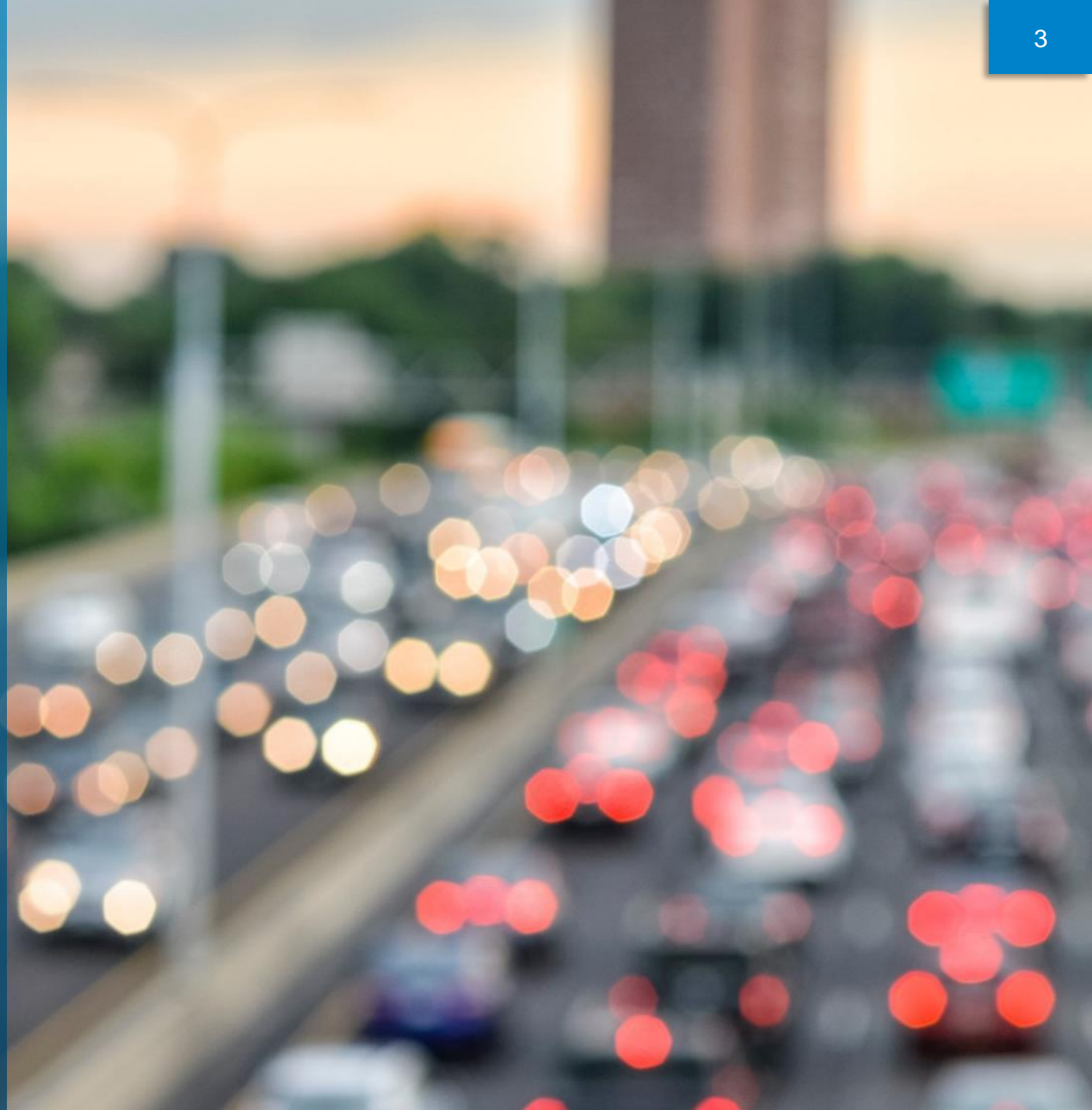
August 18, 2022

An aerial photograph of a complex highway interchange with multiple lanes and overpasses. The image is in a dark, blue-tinted style. A large white rectangular box is centered over the image, containing text. The box is framed by blue L-shaped corner brackets on the top-left, top-right, bottom-left, and bottom-right. Below the main text, there is a horizontal line of small dots.

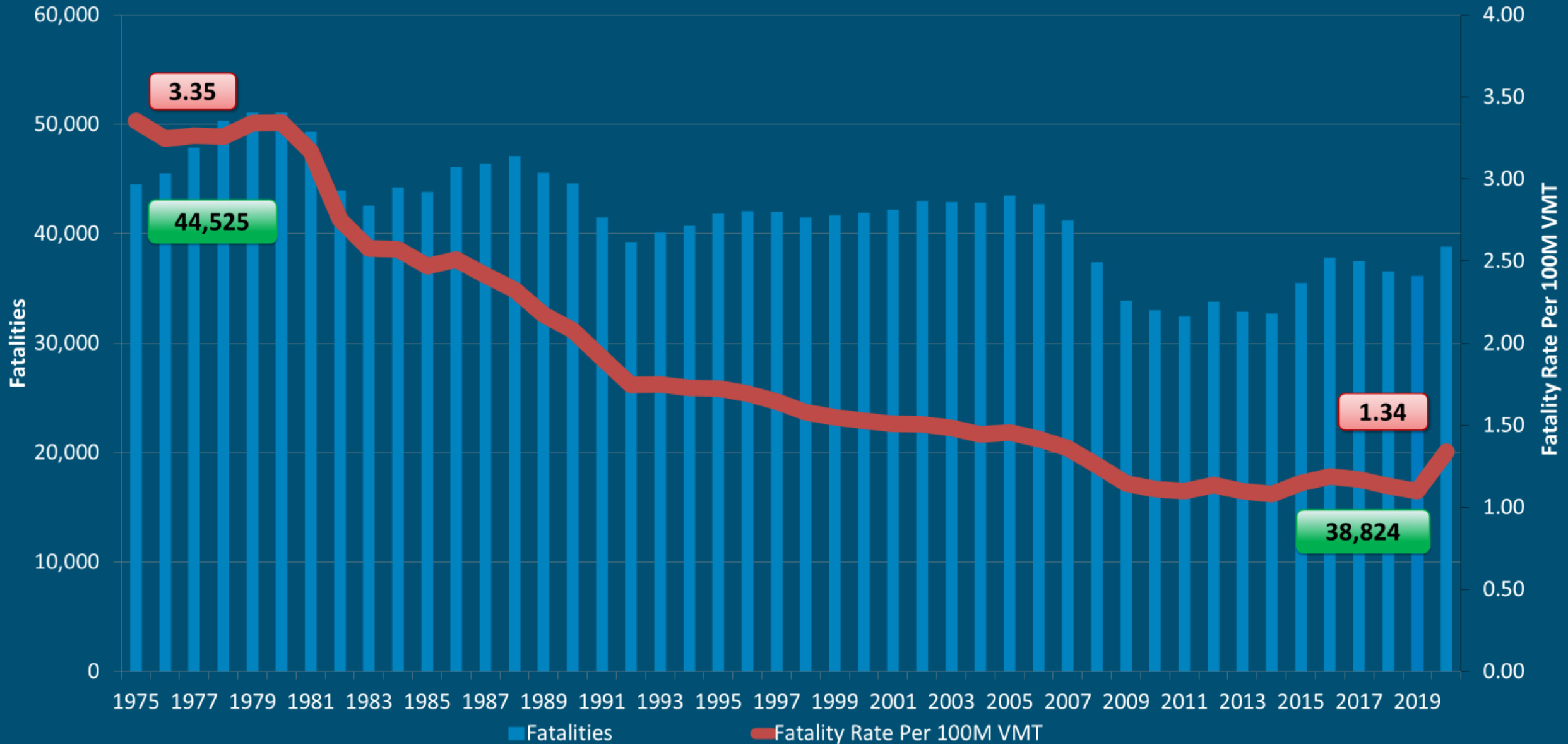
Save lives, prevent injuries and reduce economic costs due to road traffic crashes through education, research, safety standards and enforcement activity.

NHTSA's Mission

Looking at the Data



FATALITIES & FATALITY RATE (PER 100M VMT) 1975-2020





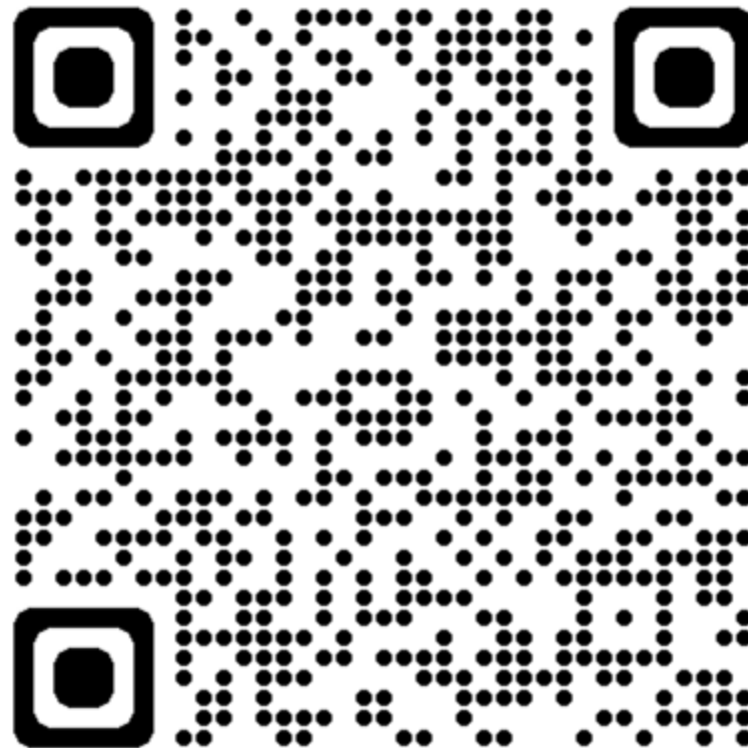
U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

TRAFFIC SAFETY FACTS

Crash • Stats



Early Estimate of Motor Vehicle Traffic Fatalities for the First 9 Months (January–September) of 2021



Our Current Reality

Traffic fatalities are a public health crisis affecting all road users.

1.25M

Lives lost globally each year from traffic crashes

Source: World Resources Institute

42,915

Estimated lives lost on U.S. roads in 2021

Source: NHTSA

7,342

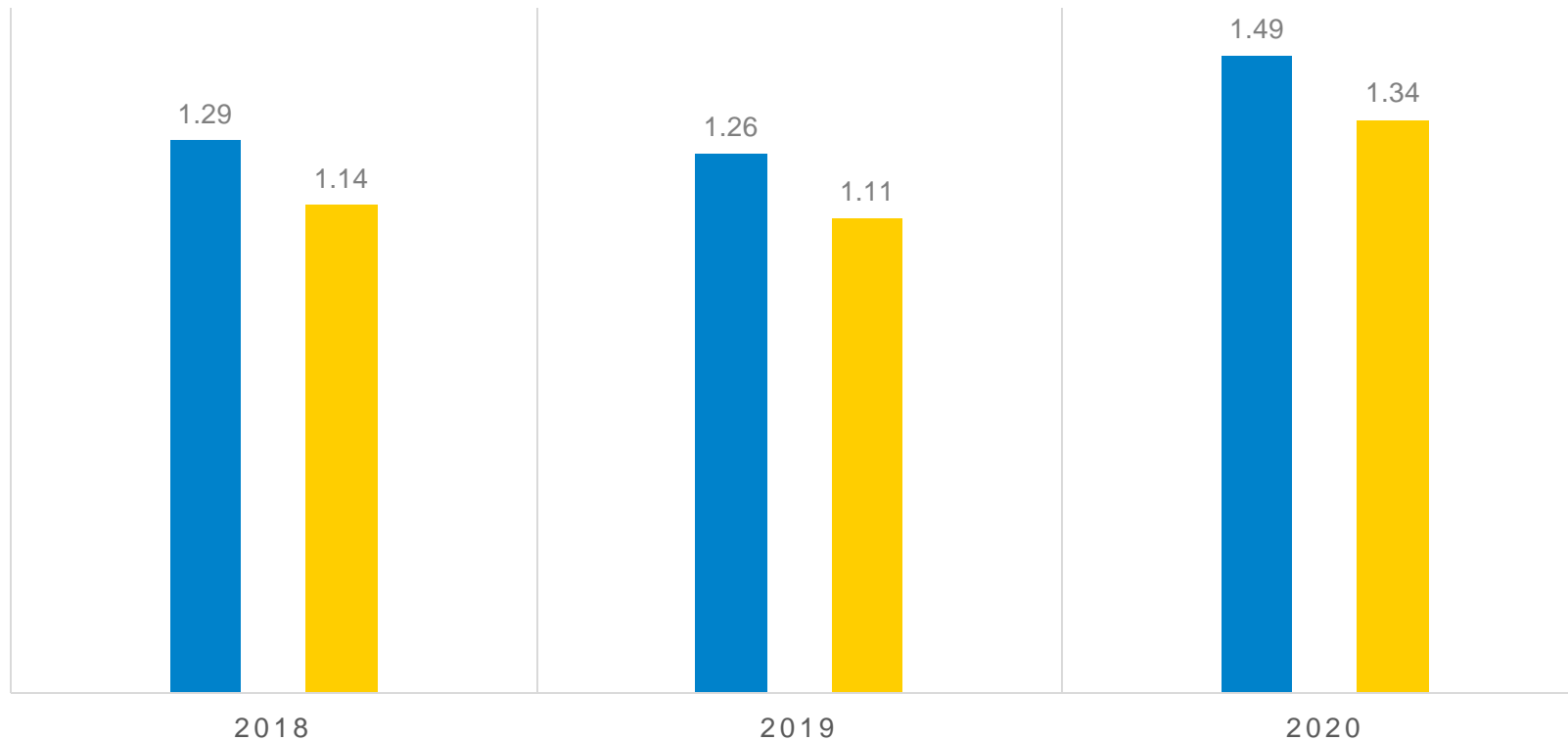
Estimated pedestrians killed in U.S. traffic crashes in 2021

Source: NHTSA

Fatalities per 100 million VMT

MOTOR VEHICLE FATALITY RATES, TX AND U.S., 2018 - 2020

■ Texas ■ U.S.



TX

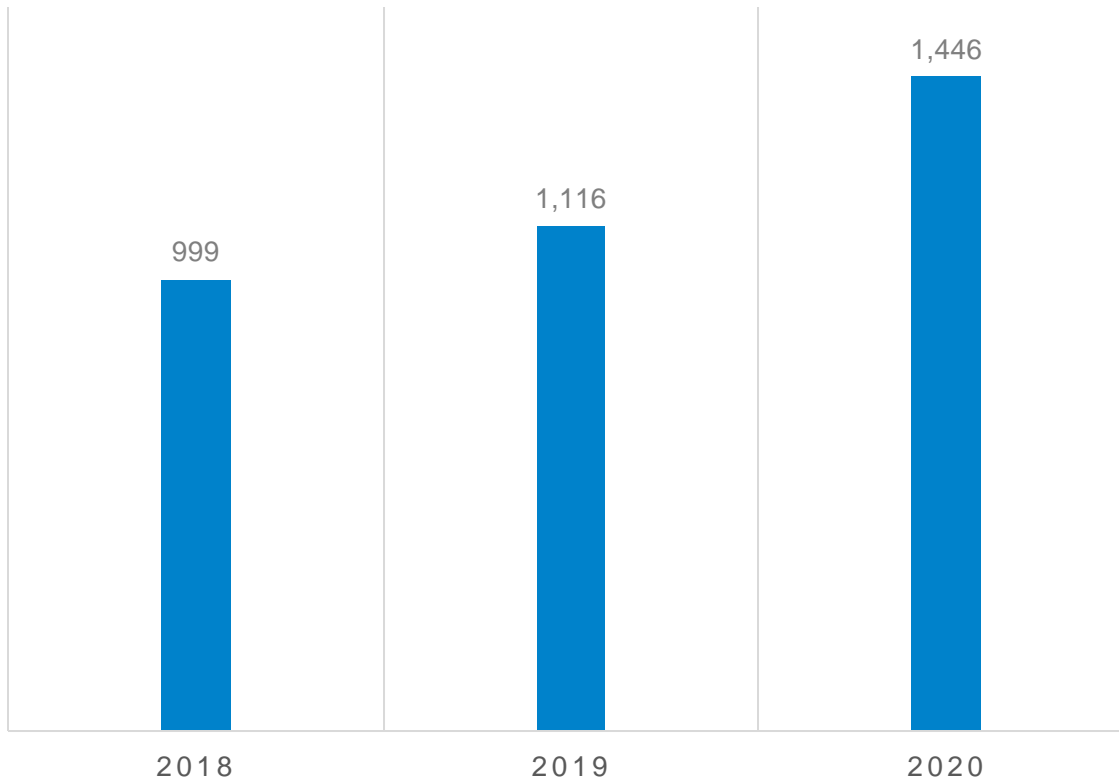
15.5% increase in
fatalities per 100M
VMT, 2018-2020

U.S.

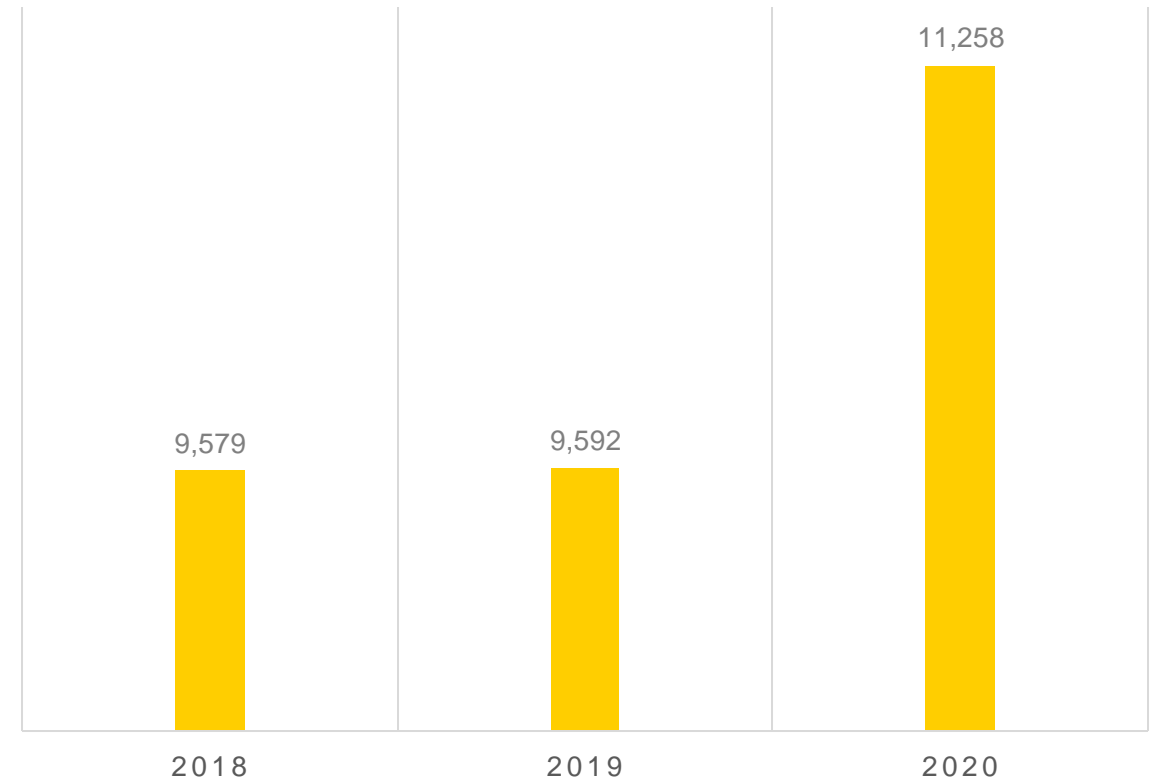
17.5% increase in
fatalities per 100M
VMT, 2018-2020

Speed Fatalities

SPEED FATALITIES (TX)



SPEED FATALITIES (U.S.)



44.7% speed-related fatalities, 2018-2020

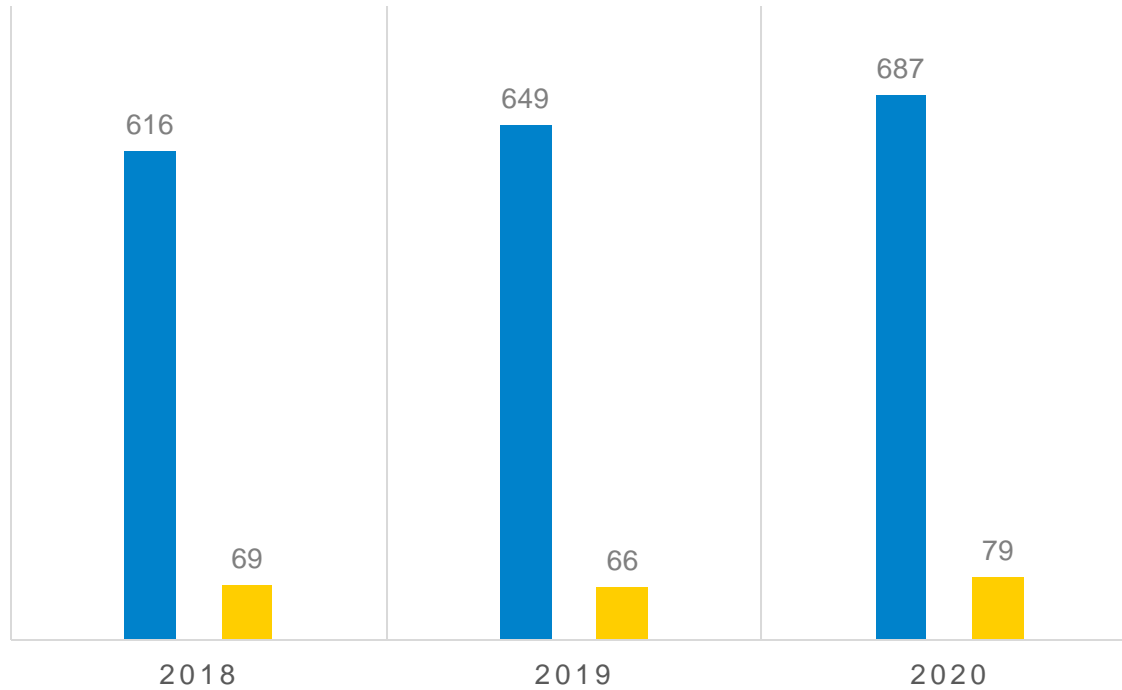


17.5% speed-related fatalities, 2018-2020

Ped/Bike Fatalities

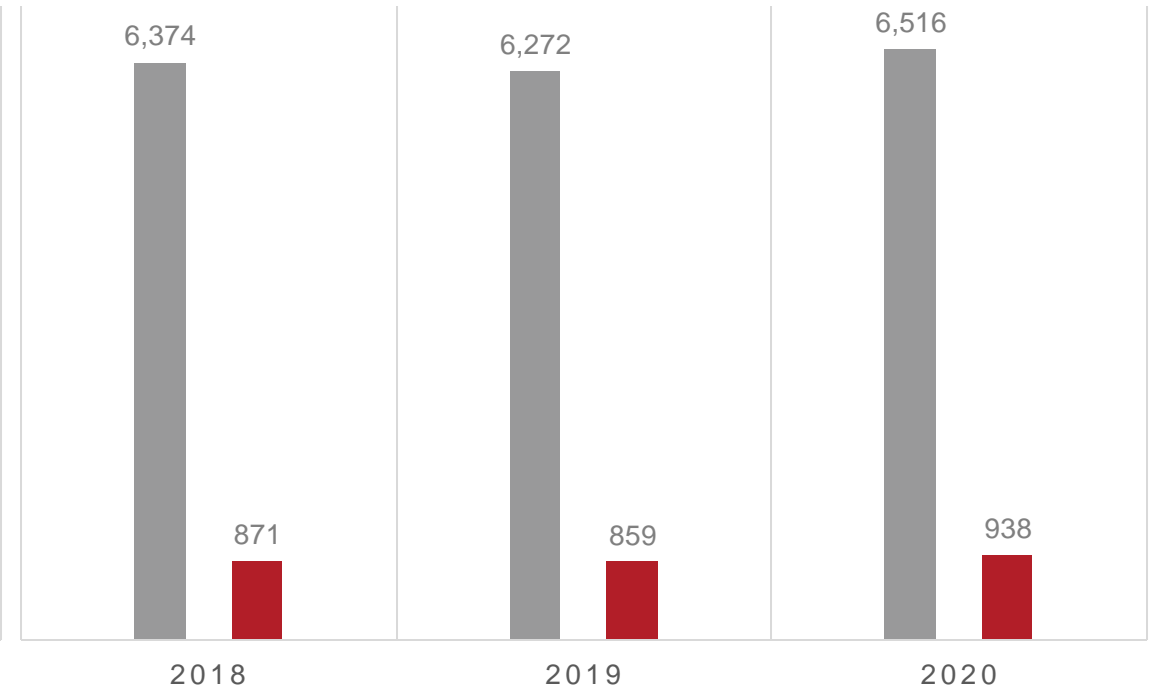
PEDESTRIAN & BICYCLIST FATALITIES (TX)

■ Pedestrian ■ Bicyclist



PEDESTRIAN & BICYCLIST FATALITIES (U.S.)

■ Pedestrian ■ Bicyclist



↑ **11.8%** ped/bike combined, 2018-2020

↑ **2.9%** ped/bike combined fatalities, 2018-2020

HTSA

[Ratings](#)
[Recalls](#)
[Risky Driving](#)
[Road Safety](#)
[Equipment](#)
[Technology & Innovation](#)

REPORT A PROBLEM

NCSA Tools, Publications, and Data

Here you will find the National Center for Statistics and Analysis (NCSA) FARS and GES/CRSS query reporting tools and traffic safety publications to choose from:

Crash Data Publications (CrashStats)

Find More →

Fatality and Injury Reporting System Tool (FIRST)

Find More →

State Traffic Safety Information (STSI)

Find More →

Traffic Safety Facts Annual Report Tables

Find More →

Fatal Motor Vehicle Crash Data Visualization

Find More →

FARS Data Tables

Crash Viewer

Product Information Catalog and Vehicle Listing (vPIC)

Download Your Data

- FARS - Fatality Analysis Reporting System
- NASS - General Estimates System
- CRSS - Crash Report Sampling System
- NASS - Crashworthiness Data System
- CISS - Crash Investigation Sampling System

About Data

- Fatality Analysis and Reporting System (FARS) File Version Release Calendar
- Terms and Acronyms
- Holiday Time Periods

<https://cdan.dot.gov>

<https://www.nhtsa.gov/research-data/national-center-statistics-and-analysis-ncsa>

<https://www.trafficsafetymarketing.gov/>

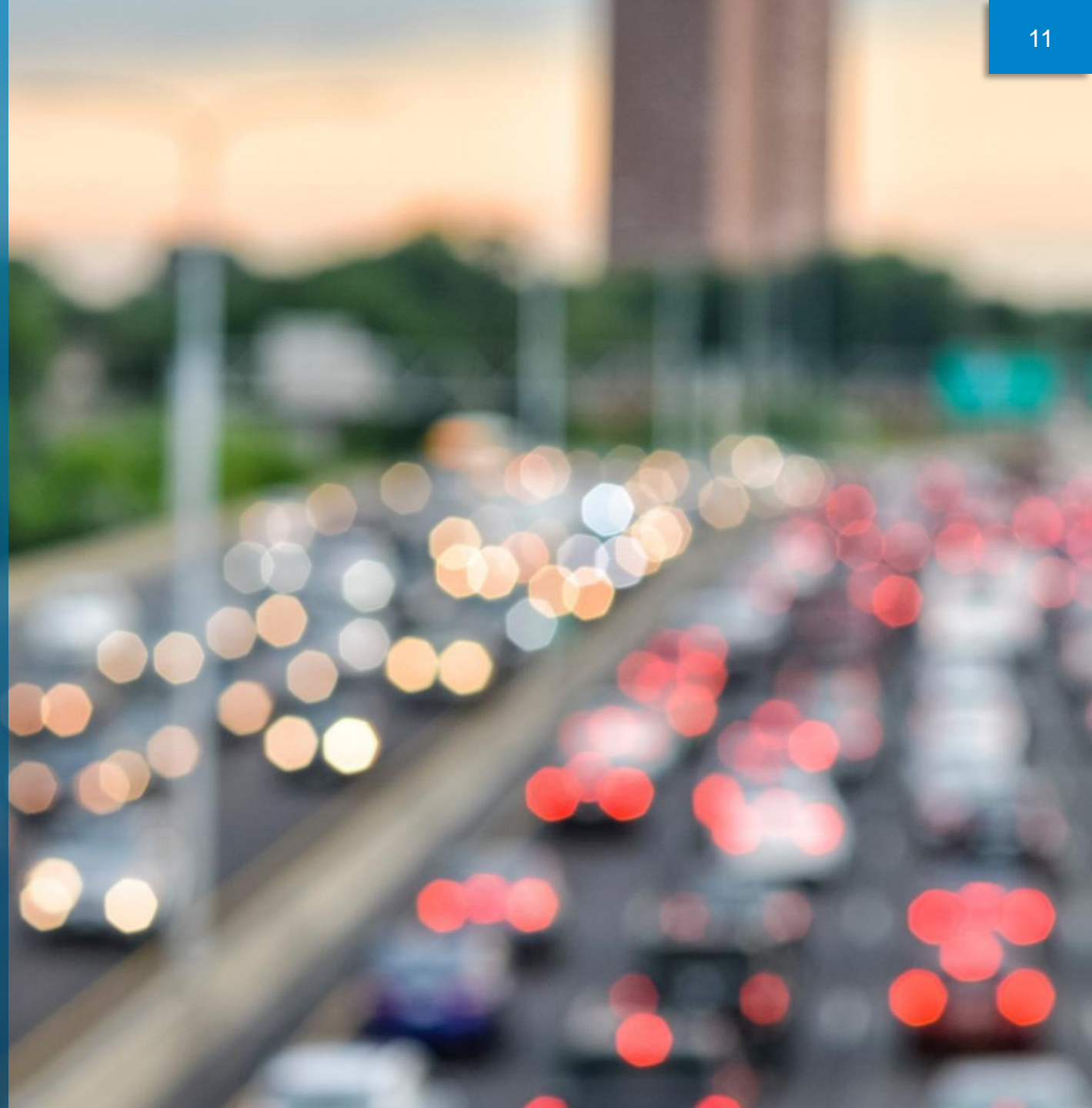
Resources

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

National Roadway
Safety Strategy

&

Safe System
Approach





“Zero is the only acceptable number of deaths
and serious injuries on our roadways.”

.....

Secretary Pete Buttigieg

National Roadway Safety Strategy

USDOT's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets.

- **Sets a vision and goal** for the safety of the Nation's roadways.
- **Adopts the Safe System Approach** principles to guide our safety actions.
- **Identifies new priority actions and notable changes to existing practices** and approaches that target our most significant and urgent problems and are, therefore, expected to have the most substantial impact.
- **Call to Action** We will be partnering with stakeholders to identify actions to get us closer to zero roadway fatalities.
- www.transportation.gov/NRSS



Source:
NHTSA

Successful Safe System Adopters



Sweden

Vision Zero

60-70%

Reduction in fatalities
1994-2015

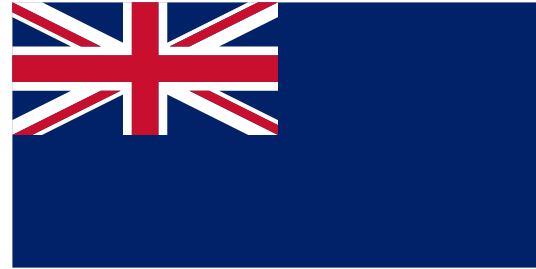


Netherlands

Sustainable Safety

50-60%

Reduction in fatalities
1994-2015

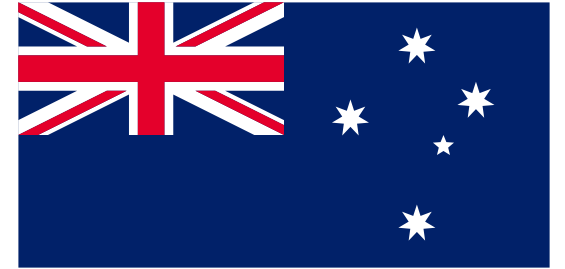


Australia

Safe System

50-60%

Reduction in fatalities
1994-2015



New Zealand

Safer Journeys

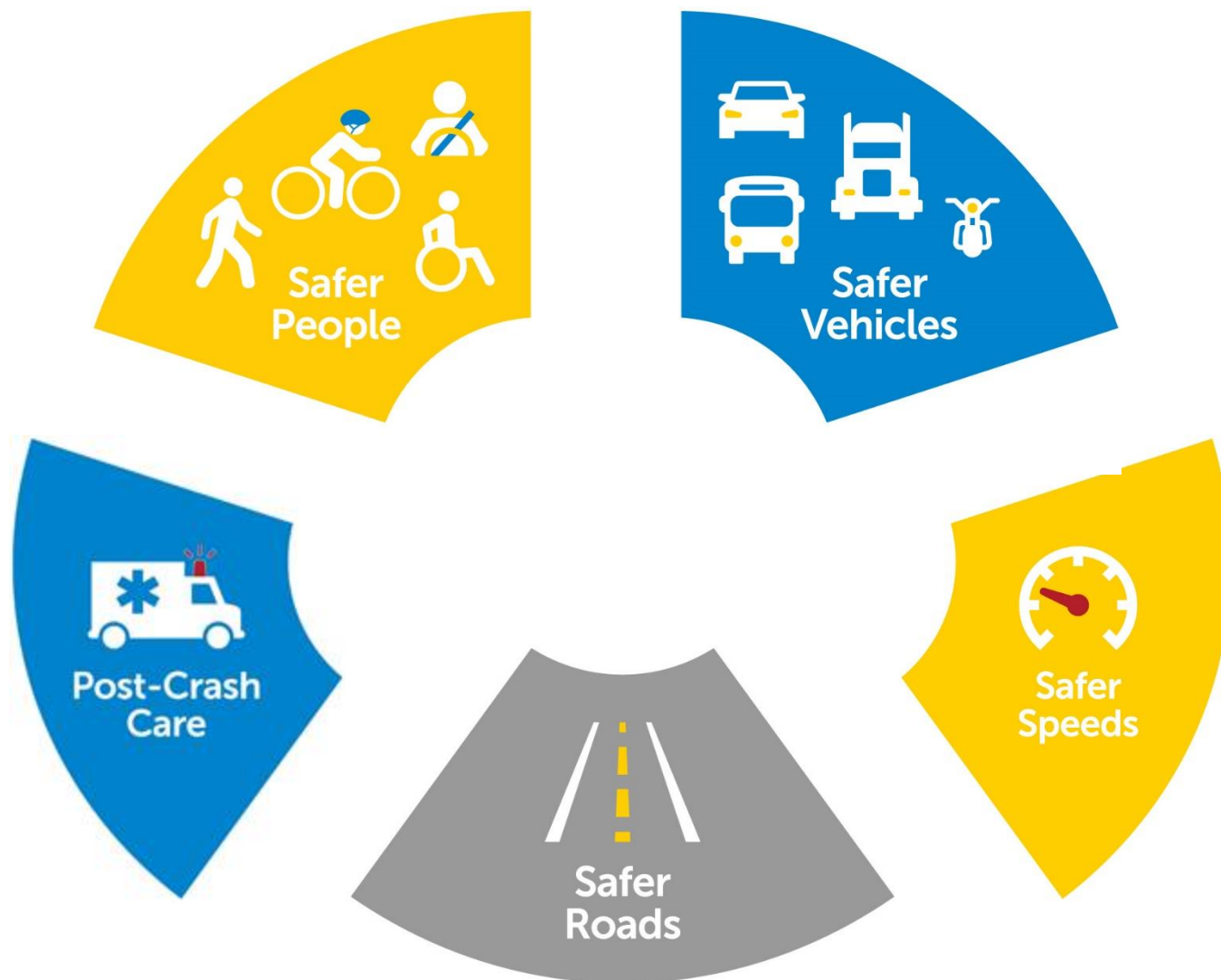
50-60%

Reduction in fatalities
1994-2015

Safe System Approach



The 5 Elements



Safer People



Walk



Bike



Drive



Transit



Other



Safer Vehicles

Active safety

Measures to reduce the chance of a crash occurring

- Lane departure warning
- Automatic emergency braking

Passive safety

Protective systems for when crashes do occur

- Seatbelts and airbags
- Crash-absorbing vehicle crumple zones



**Safer
Vehicles**

Safer Vehicles

Other road user safety

Measures that protect other road users

- Bicyclist and pedestrian detection
- Vehicle size and design

New technology

Leveraging connected and automated vehicle technology to improve safety



**Safer
Vehicles**

Safer Speeds

“Speed is at the heart of a forgiving road transport system. It transcends all aspects of safety: without speed there can be no movement, but with speed comes kinetic energy and with kinetic energy and human error come crashes, injuries, and even deaths.”

Organization for Economic Co-operation and Development



Safer Speeds: Reducing Pedestrian Fatalities

Hit by a vehicle
traveling at

23

MPH

10% risk of death



Hit by a vehicle
traveling at

42

MPH

50% risk of death



Hit by a vehicle
traveling at

58

MPH

90% risk of death



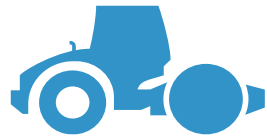
Safer Roads

Safe roads are designed to:

1. Prevent crashes
2. Keep impacts on the human body at tolerable levels



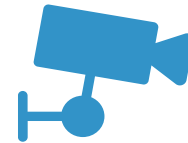
Design



Construction



Maintenance



Operation



Safer Roads: Avoiding Crashes



**Separating
users in space**



**Separating
users in time**



**Increasing
attentiveness
and awareness**



Safer Roads: Crash Kinetic Energy



**Managing
speed**



**Manipulating
mass**



**Manipulating
crash angles**



Post-Crash Care

Vital post-crash actions include:



Emergency
response



Medical care



Crash
investigation



Traffic
incident
management



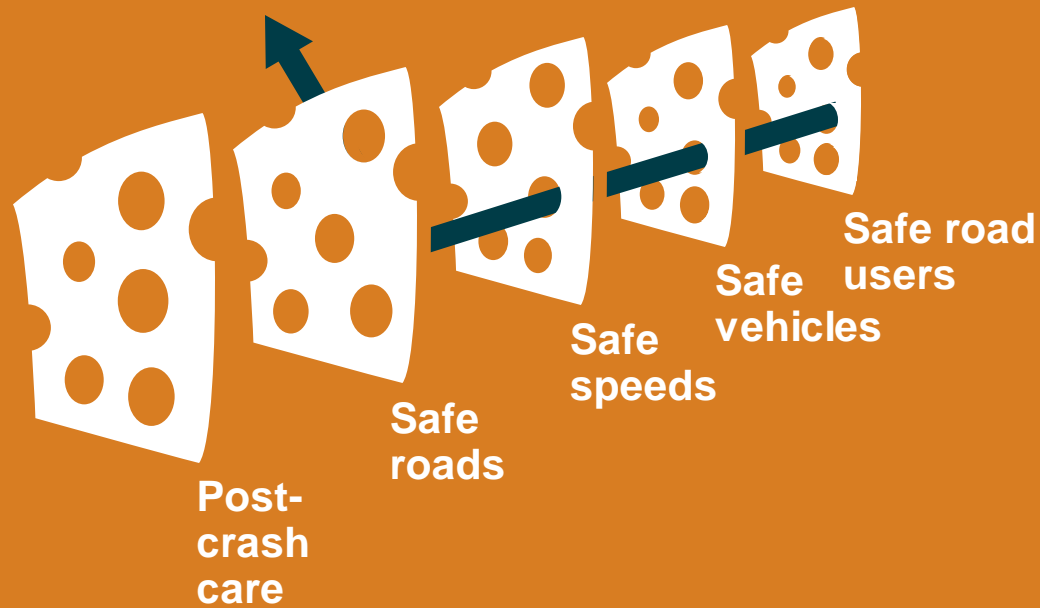
Justice



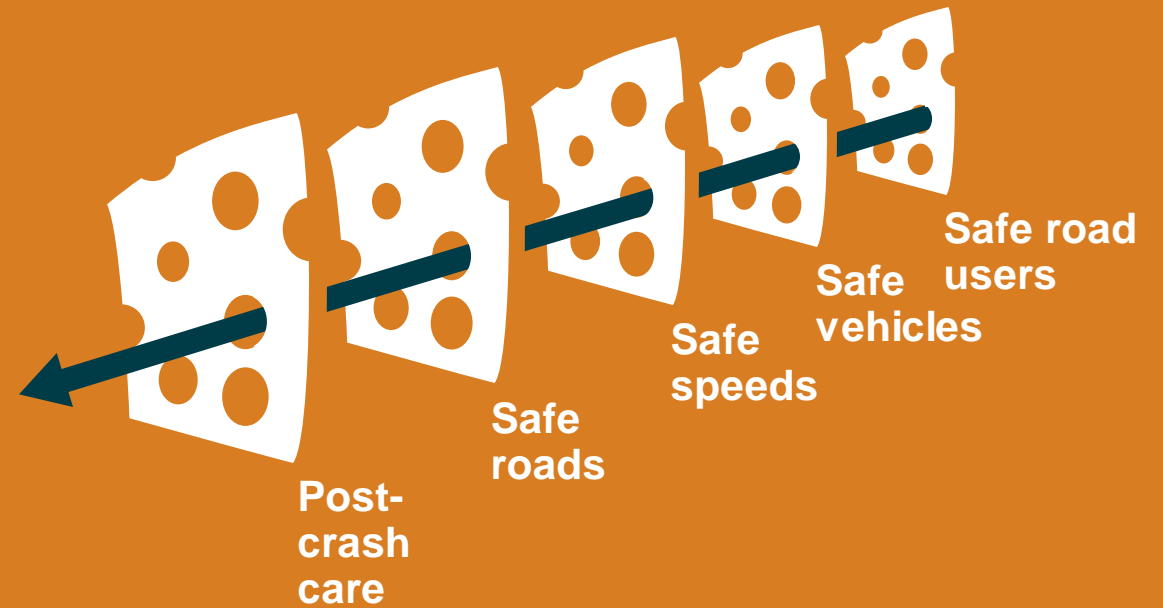
Post-Crash
Care

The 5 Safe System Elements Create Redundancy

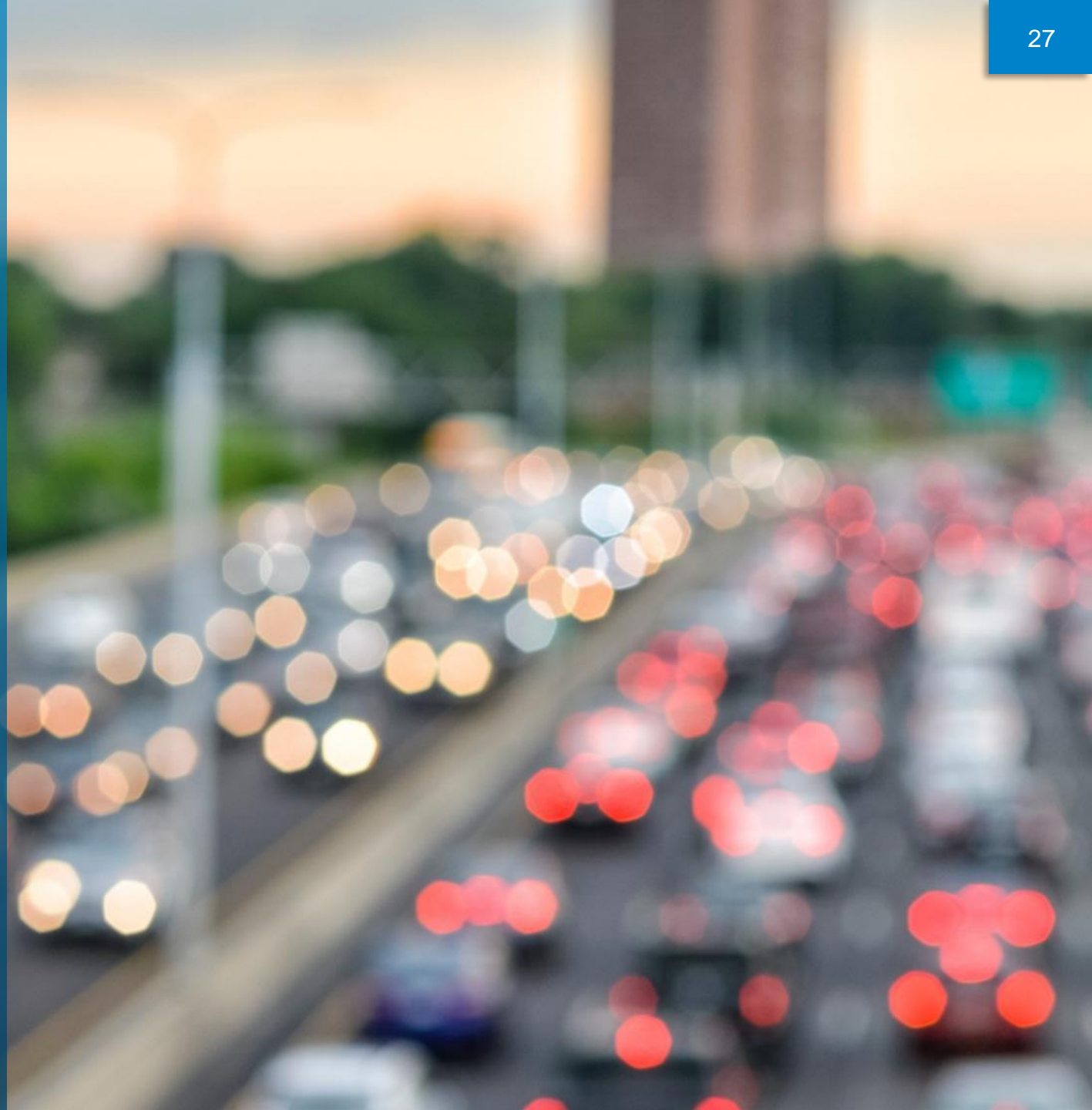
The “Swiss Cheese Model” of redundancy creates layers of protection



Death and serious injuries only happen when all layers fail



Call to Action





Strategies for a Safer TEXAS

Save the Date!
Tuesday, September 13, 2022
8:30 a.m. – 11:00 a.m. CT

To Register: https://us02web.zoom.us/webinar/register/WN_G4S39pGJSwGQ-jC9hh1b-A



Strategies for a Safer TEXAS

August 9 – September 13 – October 6



Strategies for a Safer Texas

What is it?

- Call to action among new and traditional partners seeking commitments to action

Why is this important?

- Texas has the deadliest roads in the USA.
- Engages new and traditional partners on reducing fatality increases and meeting the safety needs of all Texans

How will this help Texas?

- Brings diverse safety stakeholders to the table seeking commitment to action
- Generates new perspectives on safety challenges
- Facilitates stronger communication and commitment at the local and State levels



You are invited to Zoom webinars hosted by NHTSA

Tuesday, September 13, 2022

8:30 am – 11:00 am CT

Scan here to
register:



Thursday, October 6, 2022

8:30 am – 11:00 am CT

Scan here to
register:



Questions? Contact Jill McAninch (NHTSA Media Contractor)
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