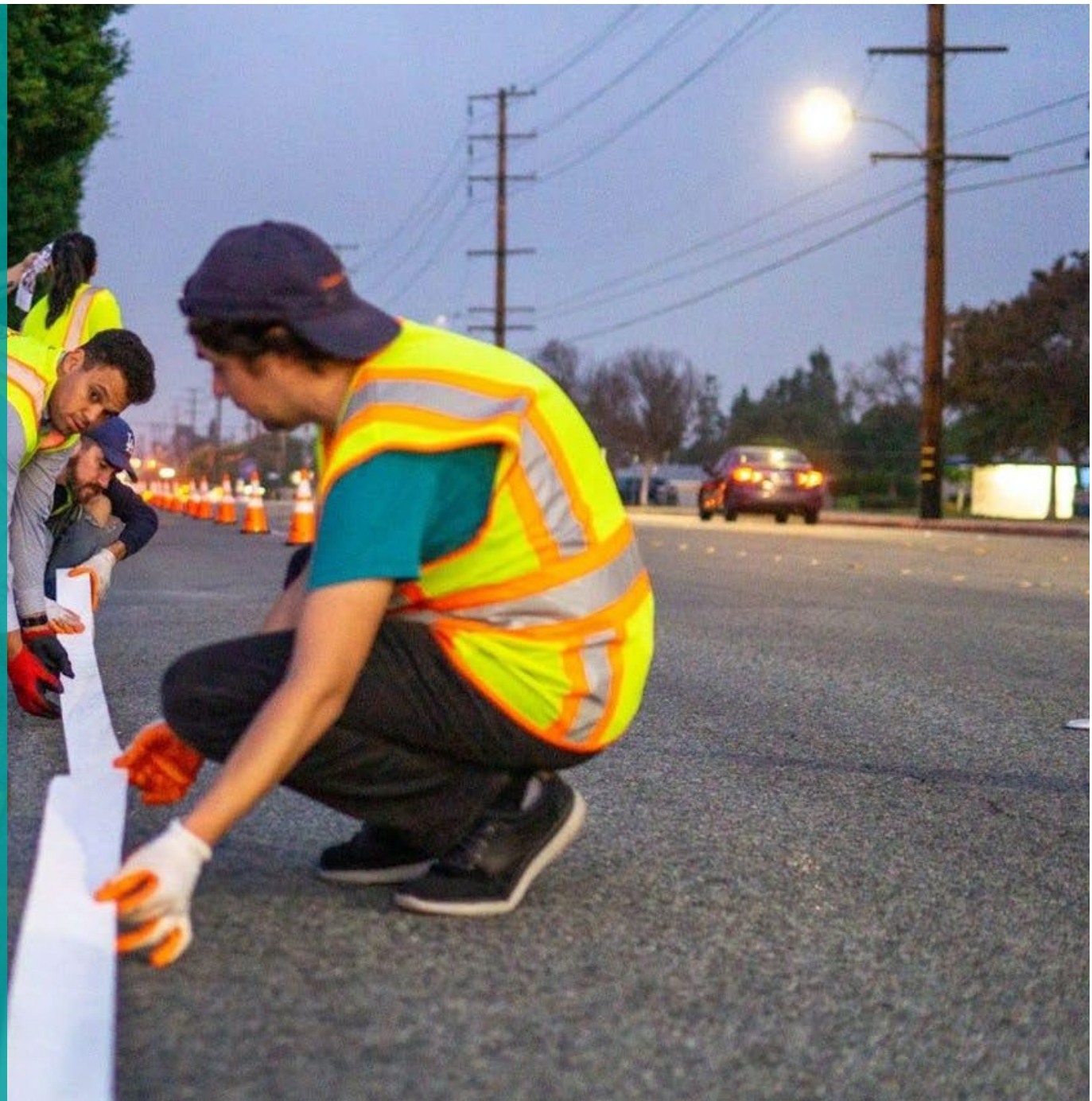


Safety and Vision Zero in Alabama

2023 ATPA Conference

alta



Agenda

- What is the transportation safety problem today?
- All about SS4A
- Lessons Learned

The Transportation Safety Problem



42,795 people were killed in *preventable* traffic crashes in the U.S. in 2022 (Apr 2023 estimate)



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

TRAFFIC SAFETY FACTS
Crash • Stats





National Vital Statistics Reports

Volume 70, Number 9

Deaths: Leading Causes for 2019

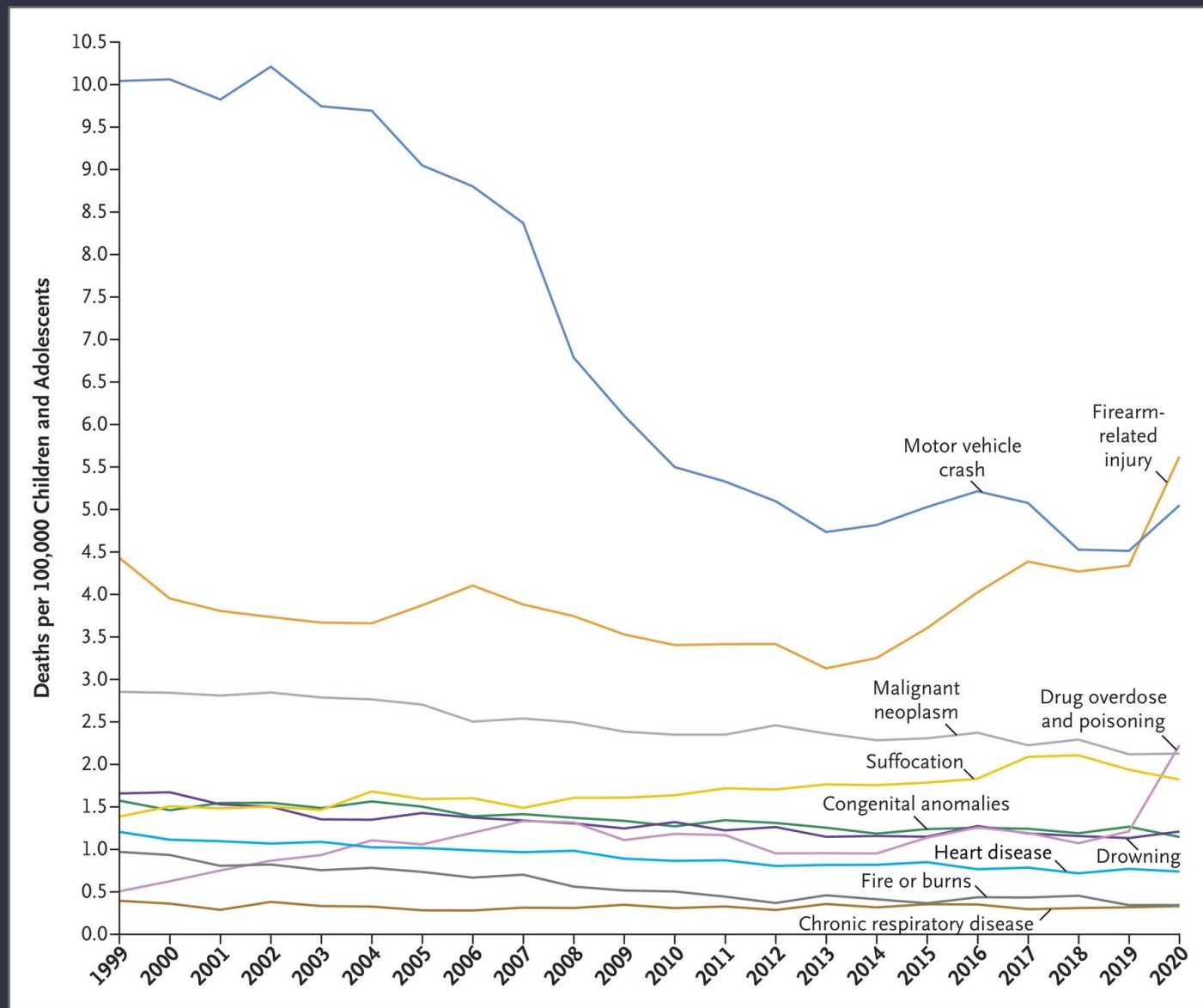
by Melonie Heron, Ph.D., Division of Vital Statistics

Motor vehicle accidents would rank 12th

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
National Vital Statistics System



Leading Causes of Death - Children



An estimated **5.4 million roadway users** had medically consulted injuries in 2021 (1.6% of population)

14,795 per day

National Safety Council estimate –data from National Center for Health Statistics, state departments of health and state traffic authorities



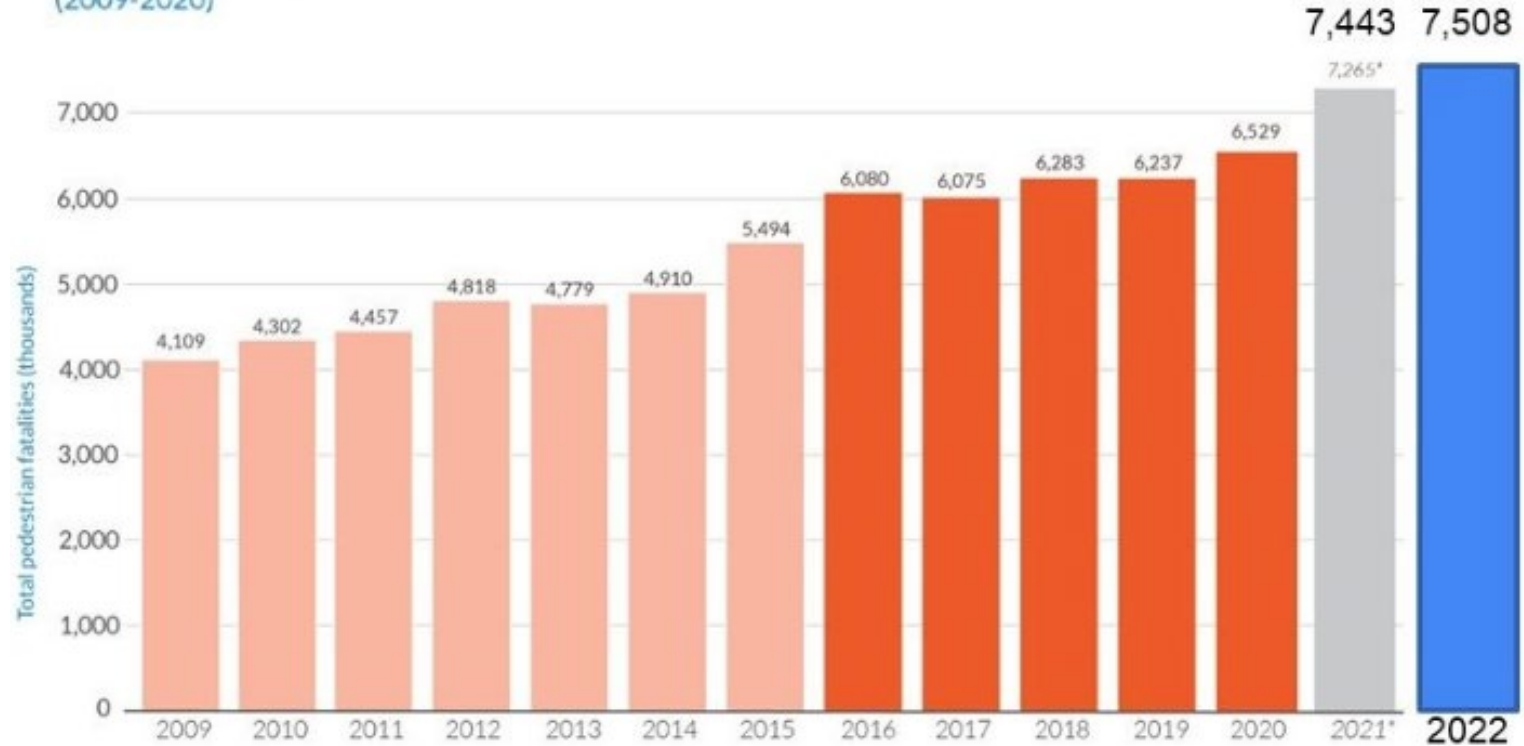
Pedestrians are Most Vulnerable

Nearly 7,500 people—**over 20 per day**—were struck and killed while walking in 2021.

15% of roadway deaths were pedestrians (US pedestrian mode share – 2.8%)



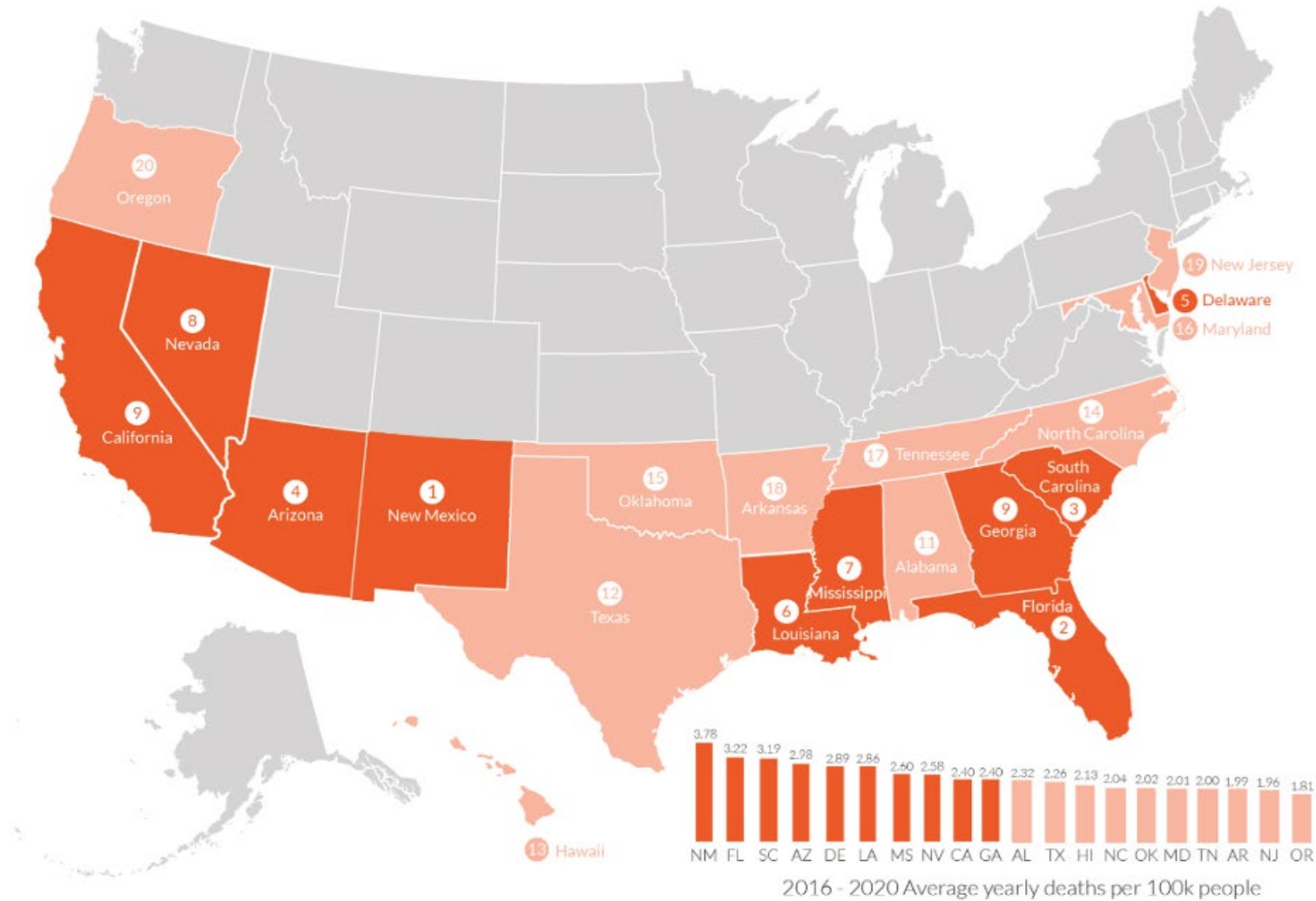
U.S. pedestrian fatalities (2009-2020)

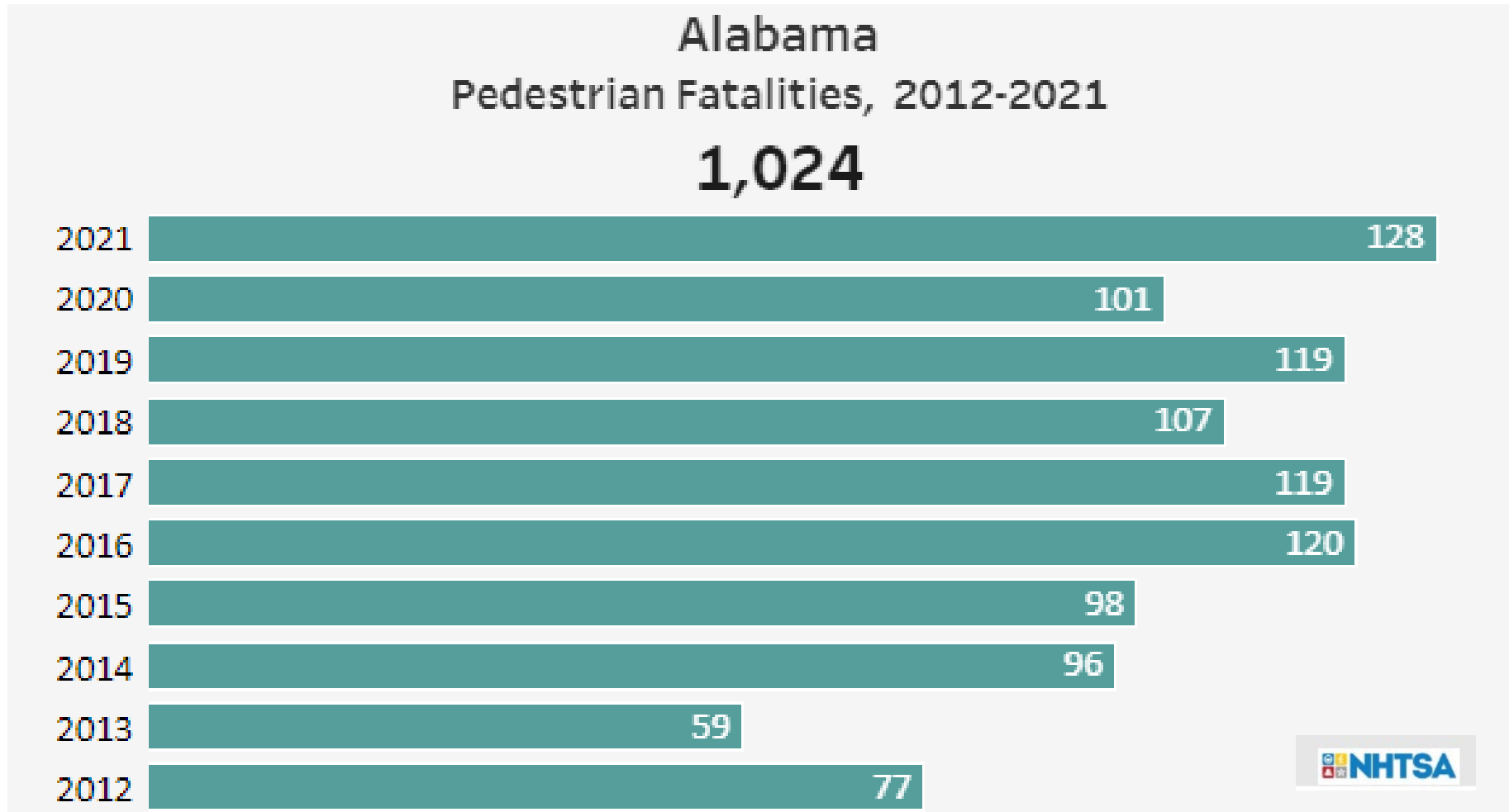


*This estimate for 2021 is produced by applying the 11.5 percent increase for 2021 projected by the Governors Highway Safety Administration (GHSA) to the federal FARS data for 2020 used in this report.

THE TOP 20

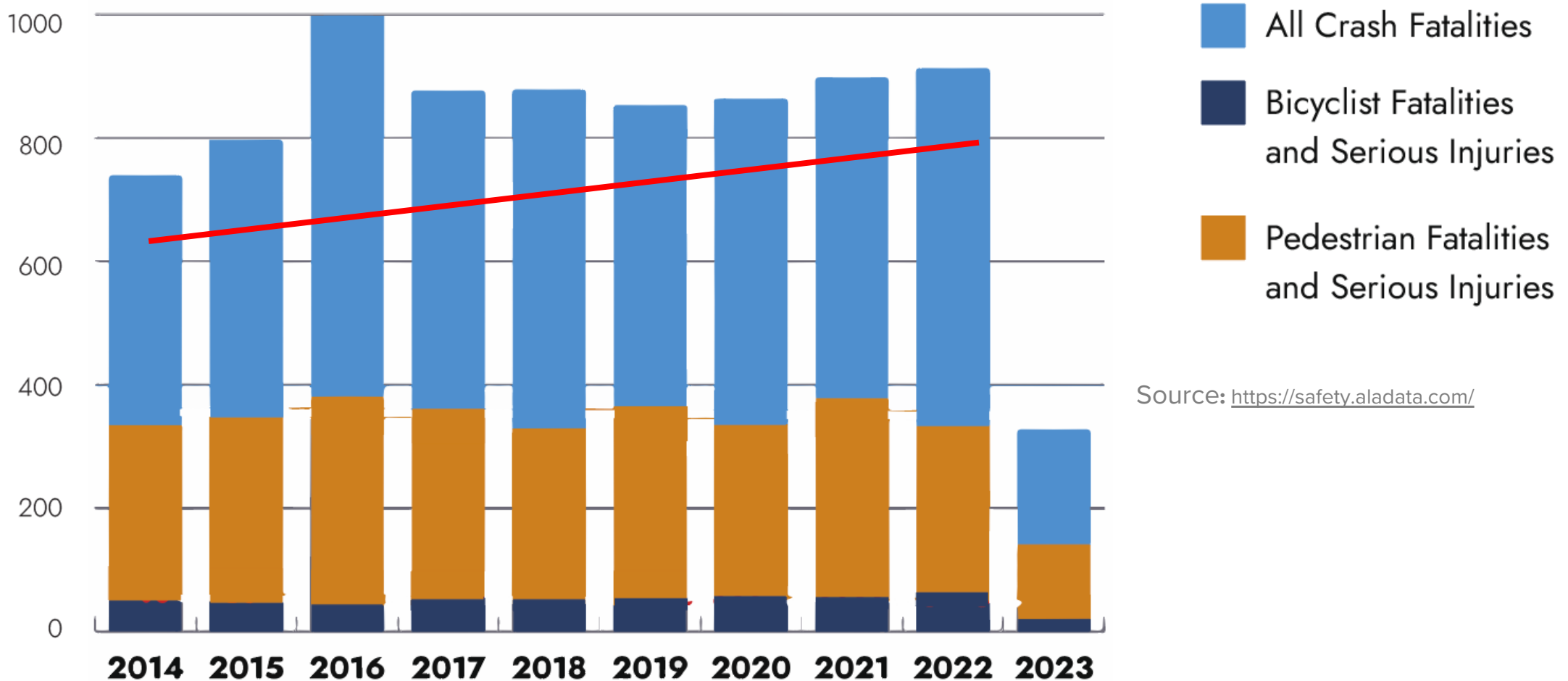
Most dangerous states for pedestrians (2016-2020)





Fatalities and Serious Injuries in AL

9-year period

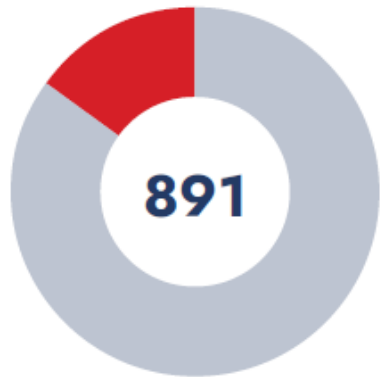


Source: <https://safety.aladata.com/>

VRU Fatalities and Serious Injuries in AL

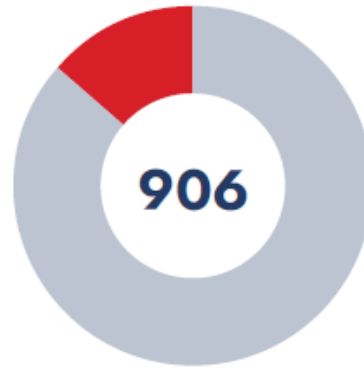
Out of all fatalities.....

15% involved  or 





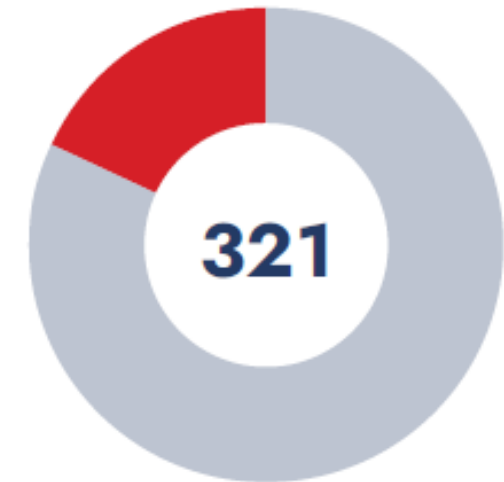
2021

13.6% involved  or 



2022

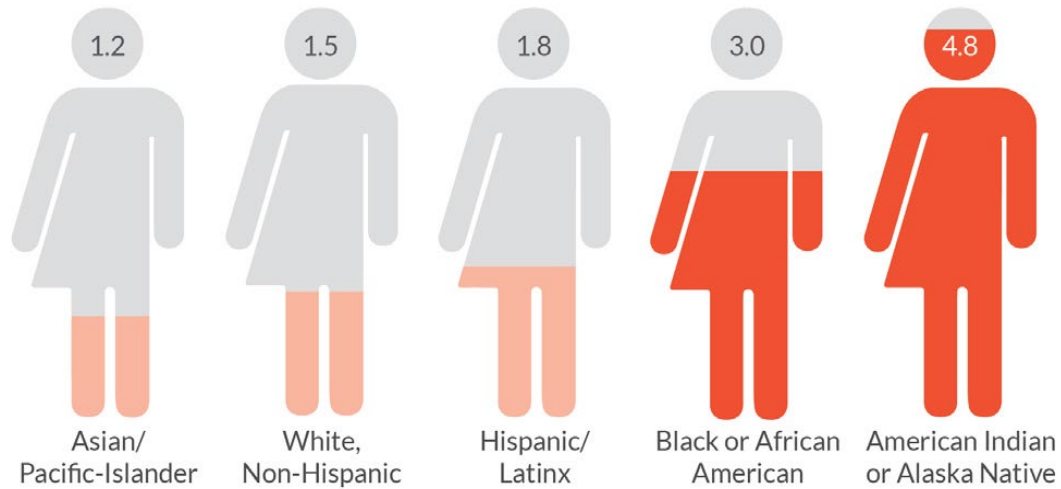
17.8% involved  or 



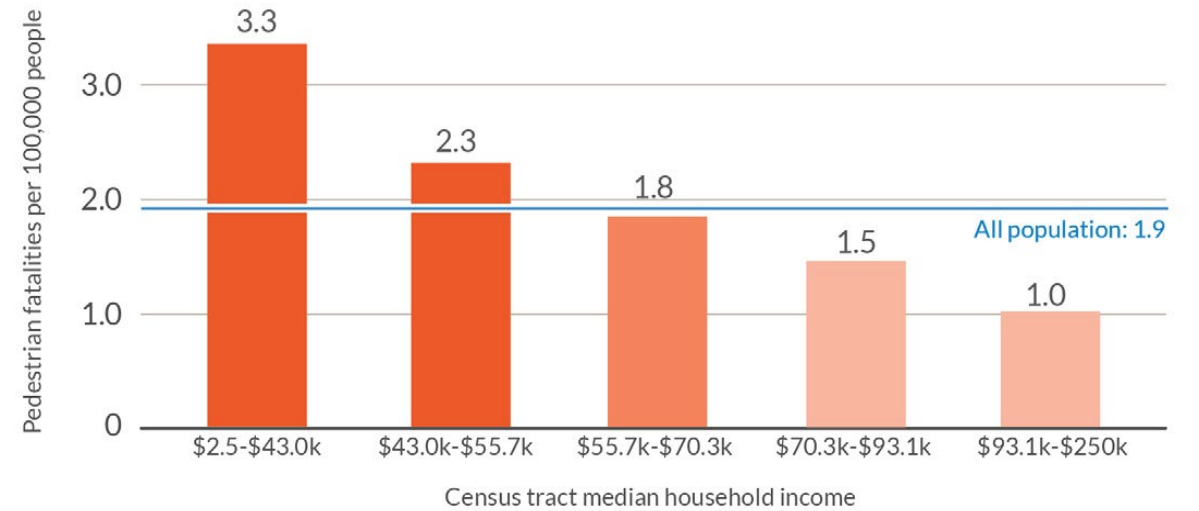
2023

Pedestrian Fatality Disparities

Pedestrian deaths per 100,000 by race & ethnicity (2016-2020)



Pedestrian fatalities per 100,000 people by census tract income



Source: Dangerous by Design 2022

Why are ped deaths increasing?



Land use



Speed



**Road
designed for
vehicles**



**Vehicle
size**



**And
others...**

The percentage of pedestrian fatalities where **no sidewalk** was noted on the crash report rose to **67% in 2020** from an average of 62% over the four preceding years.



“



Today we commit that our goal is this: Zero. Our goal is zero deaths, a country where, one day, nobody has to say goodbye to a loved one because of a traffic crash.

- Pete Buttigieg, U.S. Secretary of Transportation, on National Roadway Safety Strategy release, January 27, 2022

SS4A Program: Safety Action Plans and Implementation



Safe Streets and Roads for All (SS4A)

\$5 billion over 5 years:

- Action Planning
- Supplemental Planning
- Implementation



U.S. Department of Transportation

S | S
— —
4 | A

Bipartisan Infrastructure Law funding targets high-crash sites in cities and counties; also supports the U.S. DOT's comprehensive strategy to reduce roadway deaths, a crisis claiming more than 40,000 lives each year

Safe Streets and Roads for All

(FY22) in Alabama

Action Plans

- City of Dothan
- City of Foley
- City of Northport
- City of Talladega
- City of Enterprise
- Jackson County Dept of Public Works
- Birmingham RPC
- TARCOG



Safe Streets and Roads for All (FY23)

**Action Plan, Supplemental
Planning, and Demonstration
Projects** - \$100k min to \$10M max

Implementation Projects - \$2.5M
min to \$25M max

Due: July 10, 2023



SS4A



LEADERSHIP COMMITMENT + GOAL SETTING

Work with our client leaders to develop commitment in the form of a Vision Zero Resolution for Council/Board adoption.



PLANNING STRUCTURE

Lead a Vision Zero Task Force/Committee of technical representatives and community partners to guide the process.



SAFETY ANALYSIS

Develop a systemic safety analysis that identifies trends, risk factors and crash profiles by mode.



ENGAGEMENT + COLLABORATION

Organize a robust community engagement effort to ensure that we're hearing from voices across the community about their unique safety experiences and challenges.



EQUITY CONSIDERATIONS

Overlay USDOT's Disadvantaged Communities layer with the HIN to understand potential disparities.



POLICY + PROCESS CHANGES

Conduct an assessment of the state, region, and local existing safety practices.



STRATEGY + PROJECT SELECTIONS

Identify specific actions matched with performance measures, timeline details, budget considerations, and stakeholder partnership needs.



PROGRESS + TRANSPARENCY

Identify a robust set of performance measures to evaluate implementation efforts.

Vision Zero / Safety Plans: Lessons Learned



Action Plan Recipe for Success





Leadership and Commitment

LEADERSHIP STRUCTURE



Mayor's office

Commits the city to Vision Zero and plays a key role in managing the process to achieve it

Vision Zero Task Force / Steering Committee

Key city agencies — including transportation, police, health and the mayor's office — appointed by the mayor to lead the strategy and implementation of Vision Zero



Vision Zero Working Groups / Subcommittees

Often interdisciplinary groups focused on specific aspects of achieving Vision Zero, like engineering or marketing



Message from Mayor Cooper

For Nashville to work, and work for everyone, then every person must be safe as they navigate our city — no matter how they get around, where they live, or their age or background.

That's the core of Nashville's Vision Zero mission — the simple and paramount belief that traffic deaths are unacceptable and preventable.

The Nashville Vision Zero Action Plan is a five-year plan to set us on a clear path toward eliminating pedestrian and traffic deaths.

state partners, community stakeholders and Nashville residents.

We cannot achieve this ambitious goal alone. Just as people and partners across Davidson County, the region, and state-level transportation experts helped Nashville create this plan, their collaboration will be equally important to achieving it.

Sincerely,

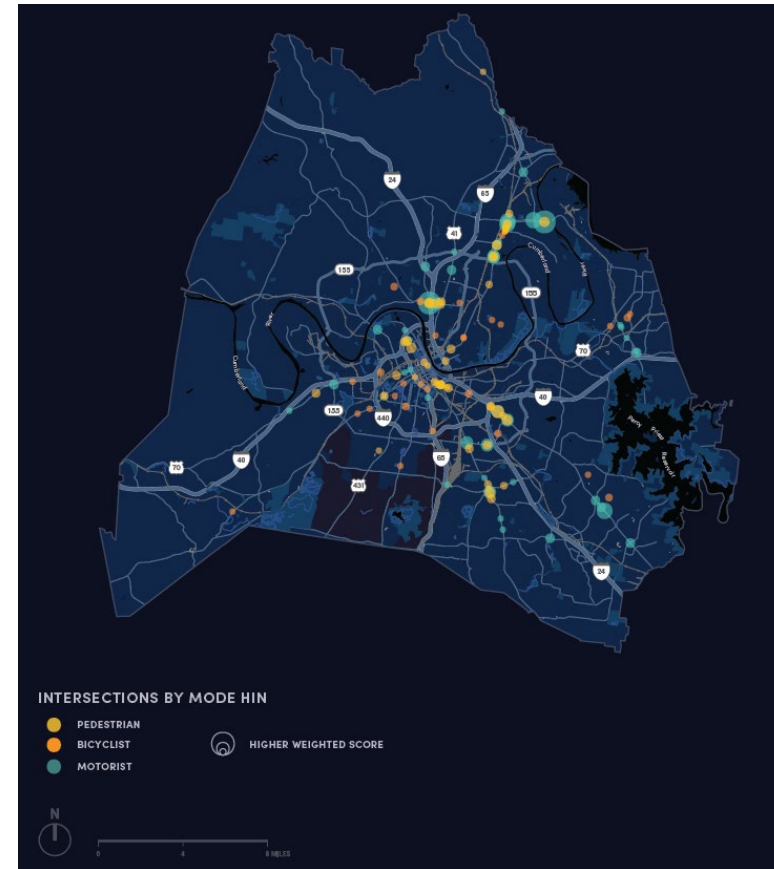
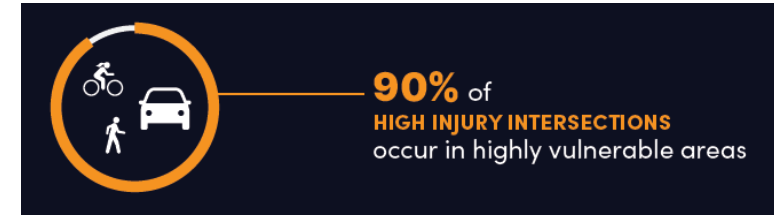
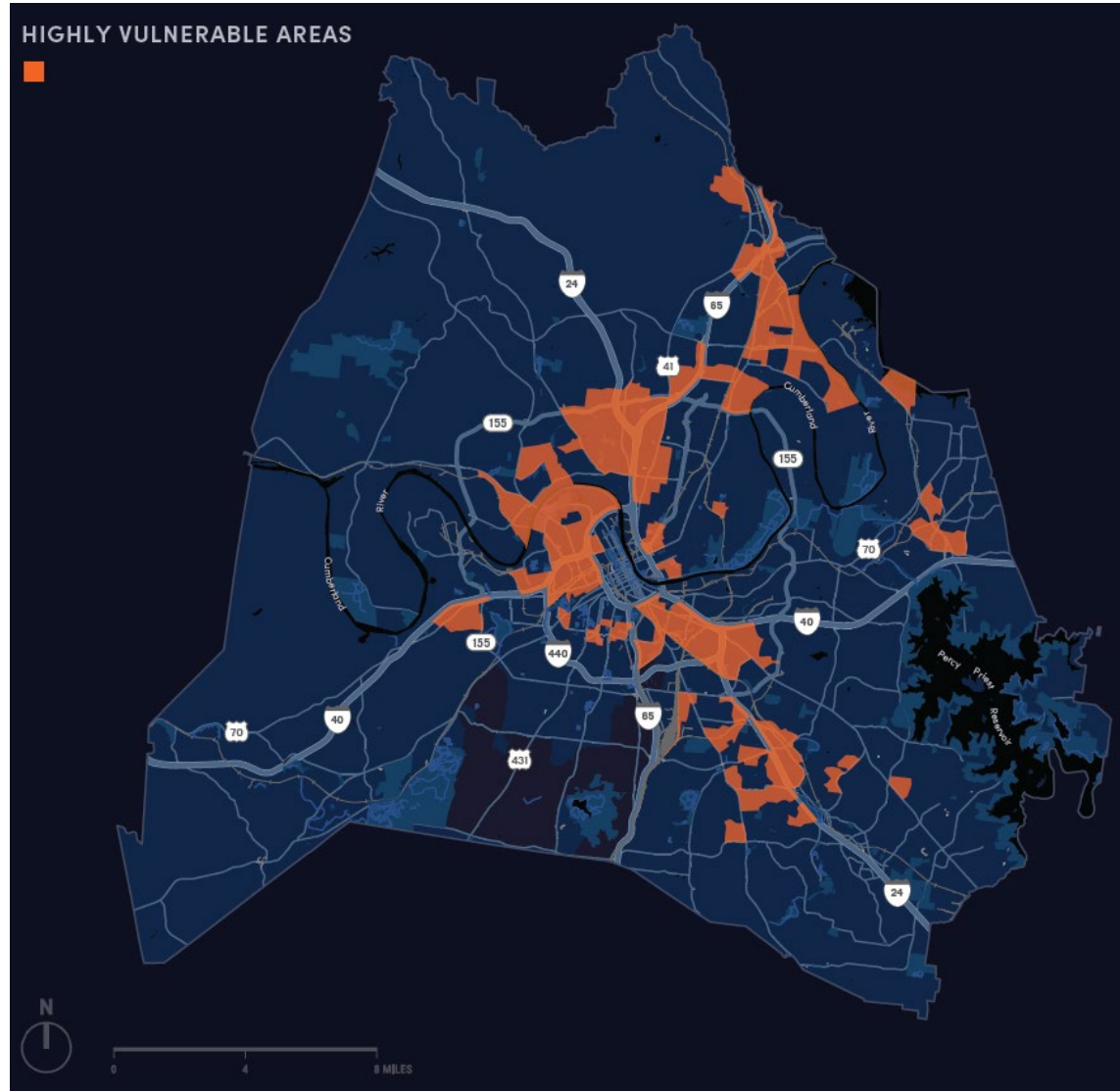


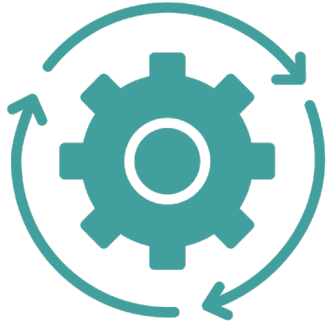
Listen and engage all roadway users





Lessons:
Identify
where
Vulnerable
Communities
are located





**Complete the
right kind of data
analytics**



What is happening? Who is impacted?

Systemic Safety Analysis



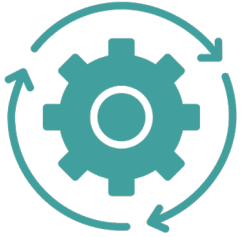
Where are the most dangerous areas?

High Injury Network and Predictive
Analysis



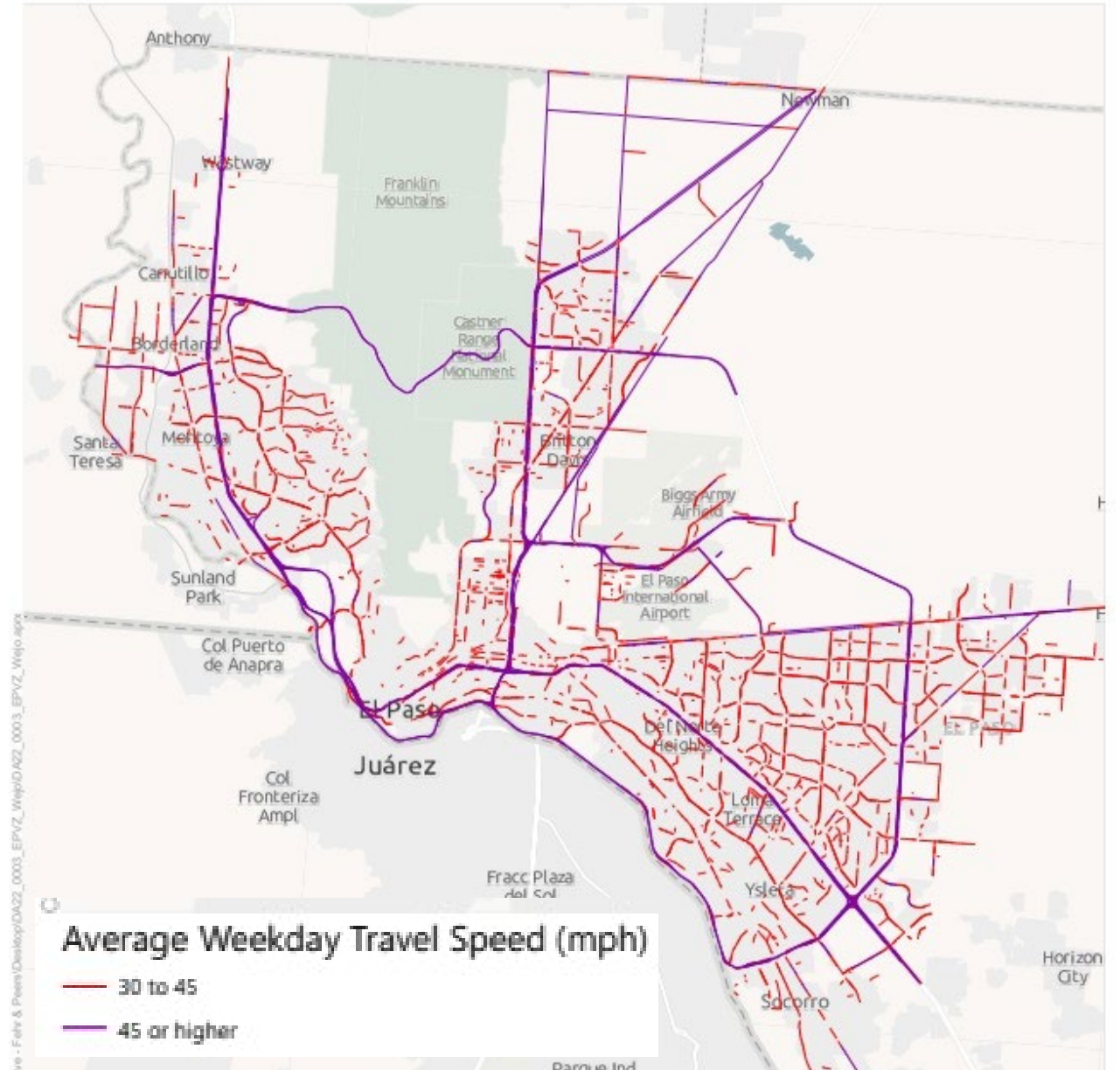
How can we Prevent?

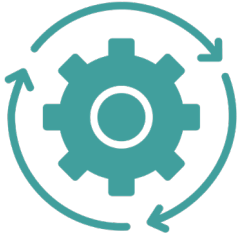
Collision Profiles + Countermeasures



Lessons: Use Innovative Data Sources & Technology

- Consider underreported bicycle and pedestrian crashes & near misses.
- Take advantage of big data vendors, like Ecopia and Wejo





Lessons:

Look Forward, Not Backward

- Proactively plan and implement safety improvements, rather than retroactively respond to crashes
- Use crash profiles to identify unsafe actions and conditions
- Consider predictive analyses

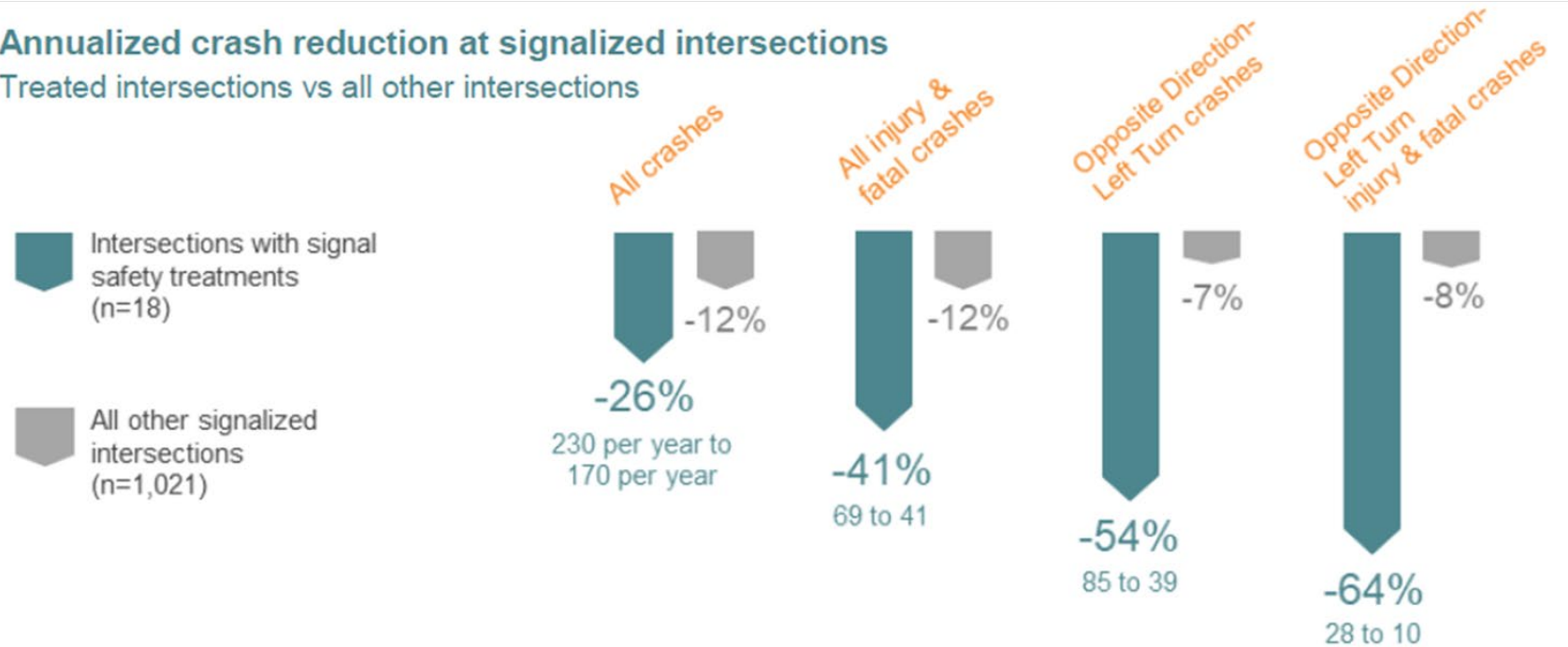


Lessons: Always Evaluate your Actions!

Graphic from Austin, Texas
Vision Zero Program

Annualized crash reduction at signalized intersections

Treated intersections vs all other intersections



Lessons: Understand Crash Profiles

Findings from the
City of Knoxville
Safety Action Plan



CRASH PROFILE 1: MOTOR VEHICLE CRASHES IN COMMERCIAL AREAS

This factor analyzes crashes that resulted in death or serious injury that occurred within 200 feet of an area with commercial land use in the City of Knoxville.

OWNERSHIP



46% on local roads

54% on TDOT
maintained roads

MODE: MOTOR VEHICLES



SERIOUS AND FATAL CRASHES



POTENTIAL COUNTERMEASURES

- Access management
- Driveway improvements, including sight distance improvements
- Lane narrowing
- Controlled pedestrian crossings



Clinton Highway & Callahan Drive / Schaad Road



Strawberry Plains Pike & Region Lane

Lessons: Tell the story

Public engagement boards from LADOT Vision Zero

IT'S TIME FOR A SAFER AVALON BOULEVARD

HERE IS WHY WE NEED TO TAKE ACTION RIGHT NOW

People killed and seriously injured on Avalon Boulevard between Jefferson Boulevard and 120th Street

WHAT KINDS OF COLLISIONS ARE KILLING AND SERIOUSLY INJURING PEOPLE?
CRASHES AFFECT EVERYONE WHO SHARES THE STREET



Distribution of severe and fatal collisions on Avalon Boulevard. Source: CHP, LAPD, LADOT 2009-2017. It takes time to process and verify collision records. Data from 2014-2017 is provisional. The collision intensity map uses verified data from 2009-2013 to show multi-year collision trends.

WHY DOES THIS MATTER? COLLISIONS LIKE THESE IMPACT OUR COMMUNITIES

Pedestrian Killed On Avalon Boulevard in South LA
November 23, 2014 12:16 PM
First Street - 46th Street, Avalon Boulevard, Pedestrian Killed, South Los Angeles

LOS ANGELES (CBSLA.com) — A motorist struck and killed a 41-year-old man early Sunday morning in South Los Angeles.

The man was struck on Avalon Boulevard near 46th Street at about 12:35 a.m. Los Angeles County coroner's investigator Dana Bee told City News Service.

Source: CBS News Los Angeles. Published: November 23, 2014.

Woman, Child Struck By Car In South LA
April 11, 2015 10:16 PM

LOS ANGELES (KABC) — A woman and her young child were struck by a car on Avalon Boulevard in South Los Angeles on Friday night.

Source: CBS News Los Angeles. Published: April 11, 2015.

1 person was killed and 6 people were seriously injured on Avalon & Imperial Highway in 5 crashes between 2009-2017

Source: Google Maps; Data source: CHP, LAPD, LADOT

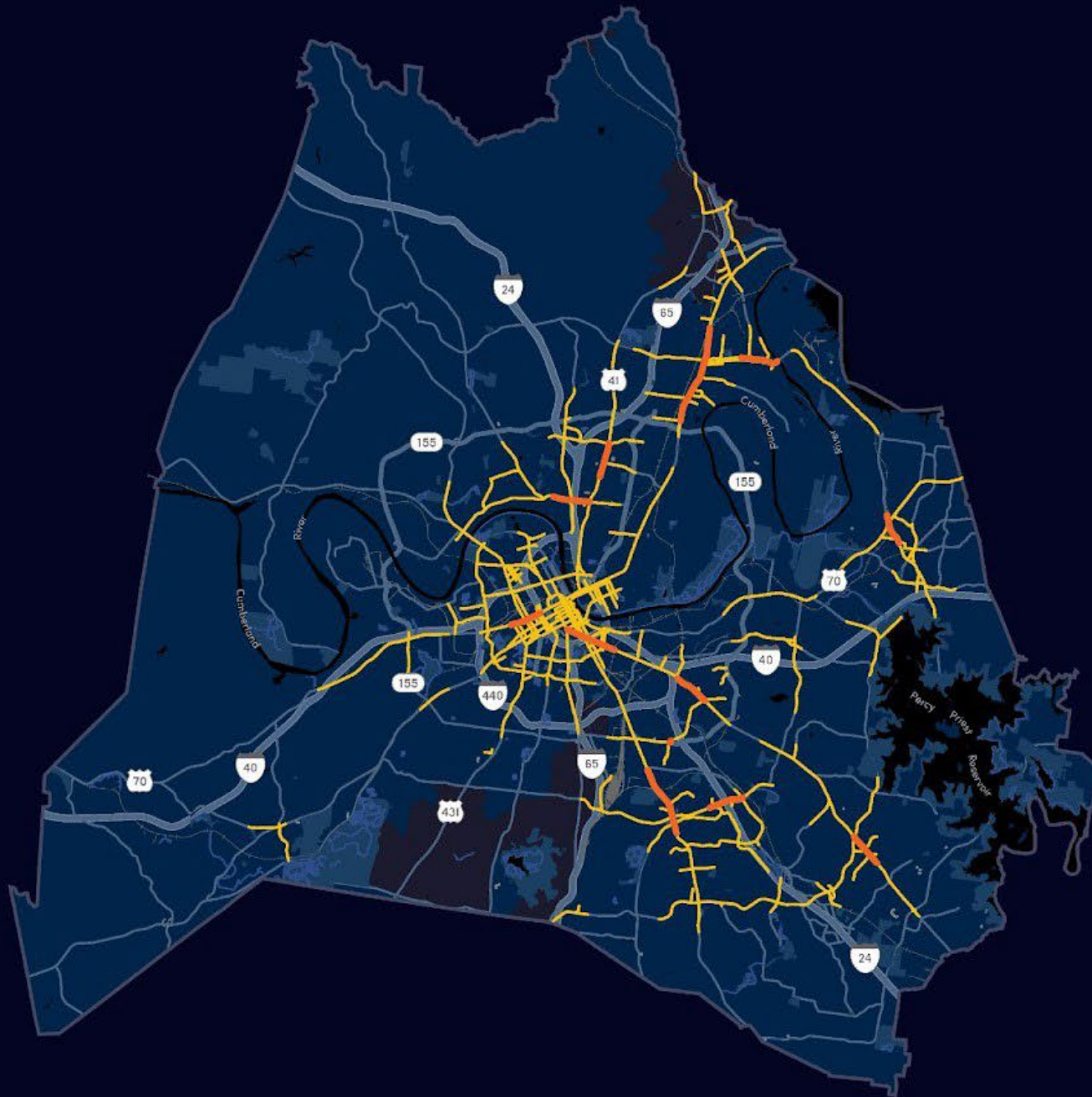
CAR CRASHES INTO SOUTH LOS ANGELES HOME; 6 INJURED

LOS ANGELES (KABC) — The driver of an SUV crashed into a nearby home after striking two pedestrians at an intersection in South Los Angeles Friday night.

Source: ABC 7 News. Published: April 11, 2015.



2009-2017	2009-2013
102 COLLISIONS WITH SERIOUS INJURY	13 COLLISIONS WITH SERIOUS INJURY
13 COLLISIONS WHERE SOMEONE DIED	115 COLLISIONS AND SERIOUS INJURIES
TOTAL	TOTAL



6%
OF STREETS
account for

59% of all
**FATAL AND
SERIOUS INJURIES**
for all modes

STREETS IN THE HIGH INJURY NETWORK INCLUDE:

- West Trinity Lane
- Gallatin Pike
- Murfreesboro Pike
- Nolensville Pike
- Harding Place
- Lafayette Street
- Charlotte Ave
- Old Hickory Blvd
- Dickerson Pike



HIGH INJURY NETWORK - ALL MODES

- PRIORITY HIGH INJURY STREETS
- HIGH INJURY STREETS



MAP 1

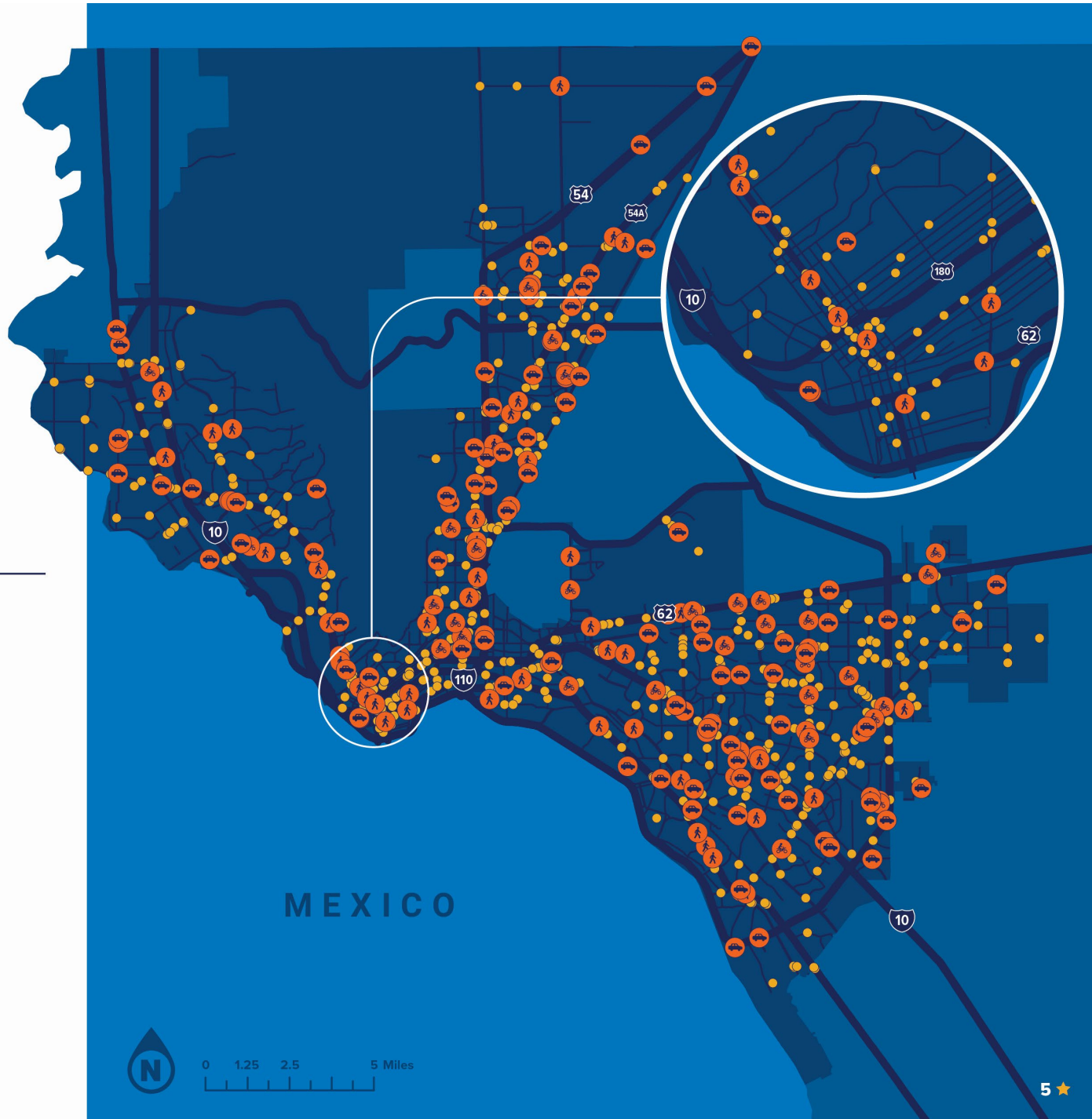
KSI Crashes 2017–2021

Killed or Seriously Injured (KSI) crashes represent the most serious types of crashes on our roadways and are the key crashes Vision Zero wants to prevent and eliminate.

- Serious Injury
- Death
- Mode Type



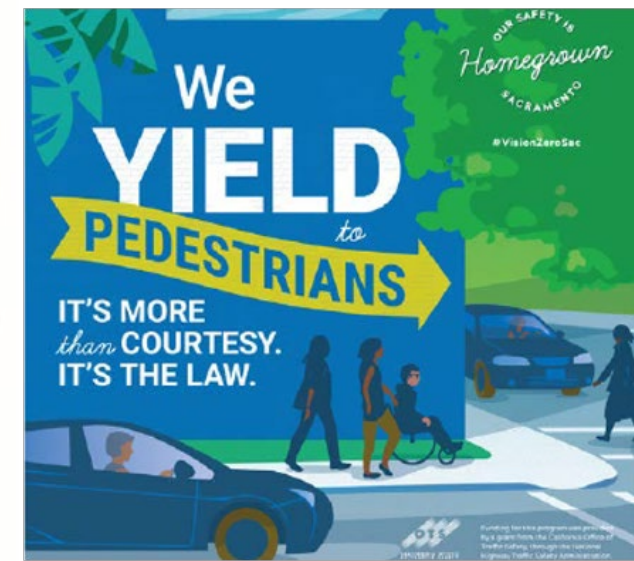
From 2017 to 2022, El Paso had **262 fatal injuries** and **881 suspected serious injuries**.





Initiate Campaigns and Programmatic Activities

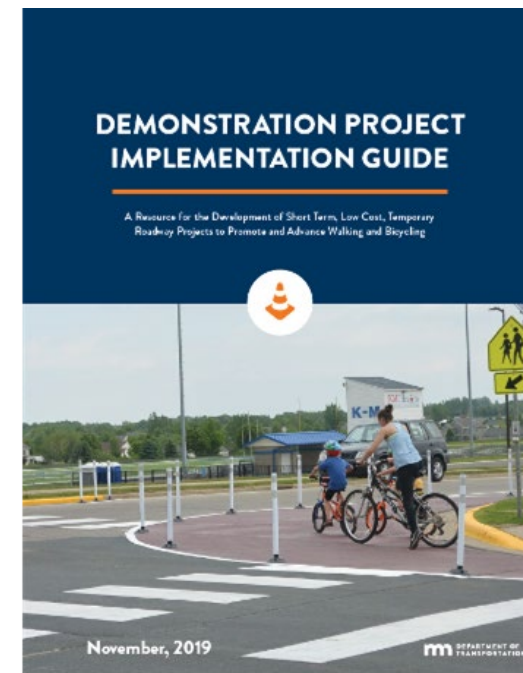
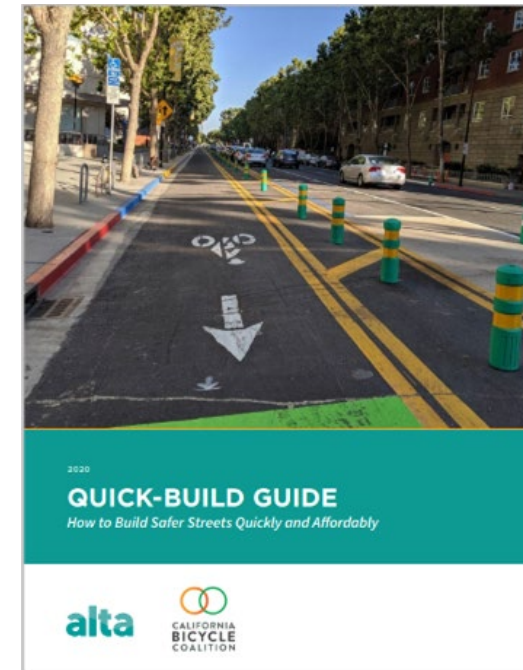
Graphics from Roanoke Pedestrian Safety Campaign and Sacramento Vision Zero Campaign





Lessons: Gather Live Input and Test Solutions

Kirkwood, MO demonstration projects and MNDOT Demonstration Project Implementation Guide





Develop implementable projects ready for funding

Auburn, AL Protected
Intersection



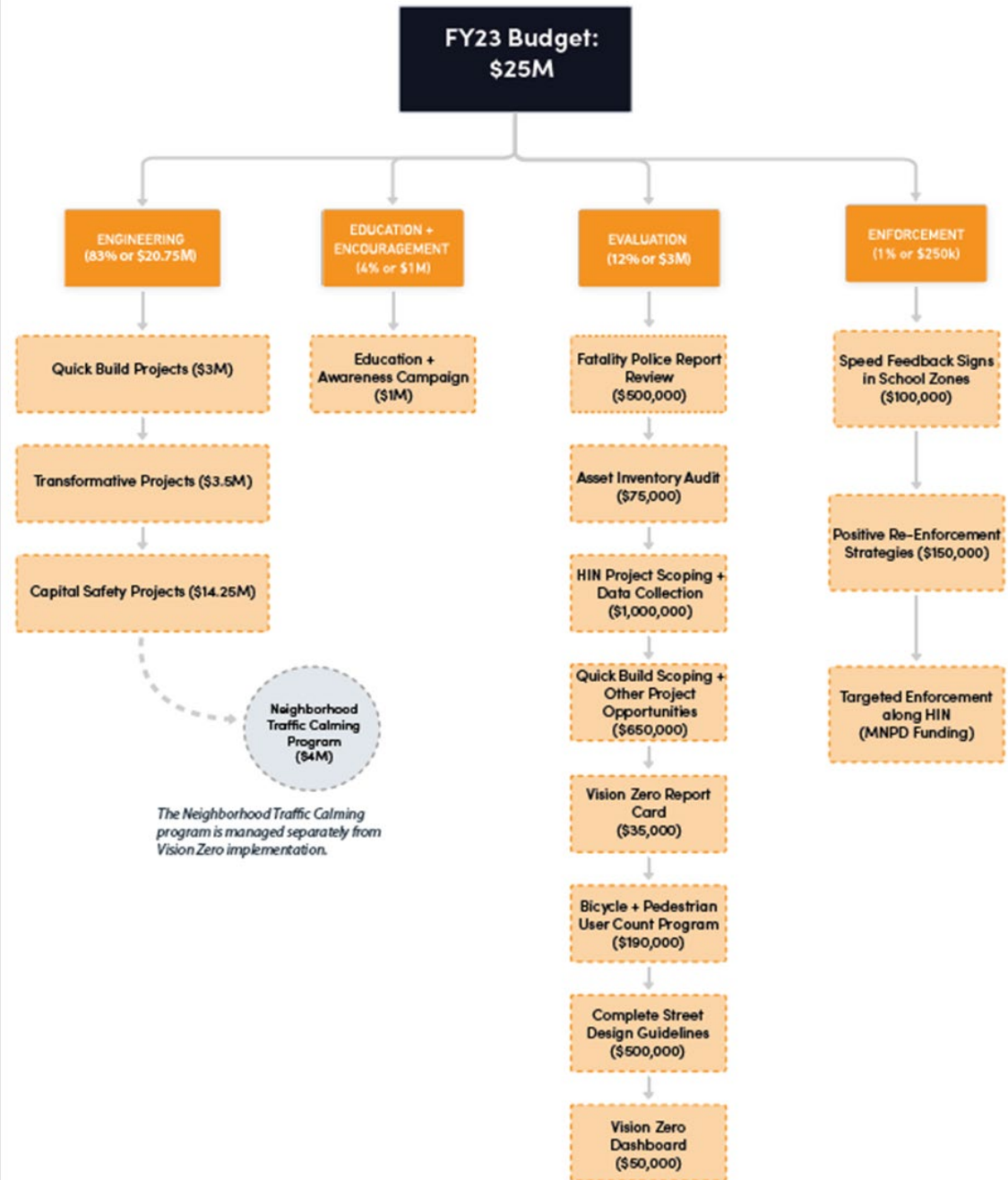
Lessons Learned





Lessons: Develop an Implementation Toolkit

- > FY22 – 23: **\$25 million**
- > Engineering: **83%**, \$20.75M
- > Education/Encouragement: 4%, \$1M
- > Evaluation: 12%, \$3M
- > Enforcement: 1%, \$250k



Thank you!

alta