

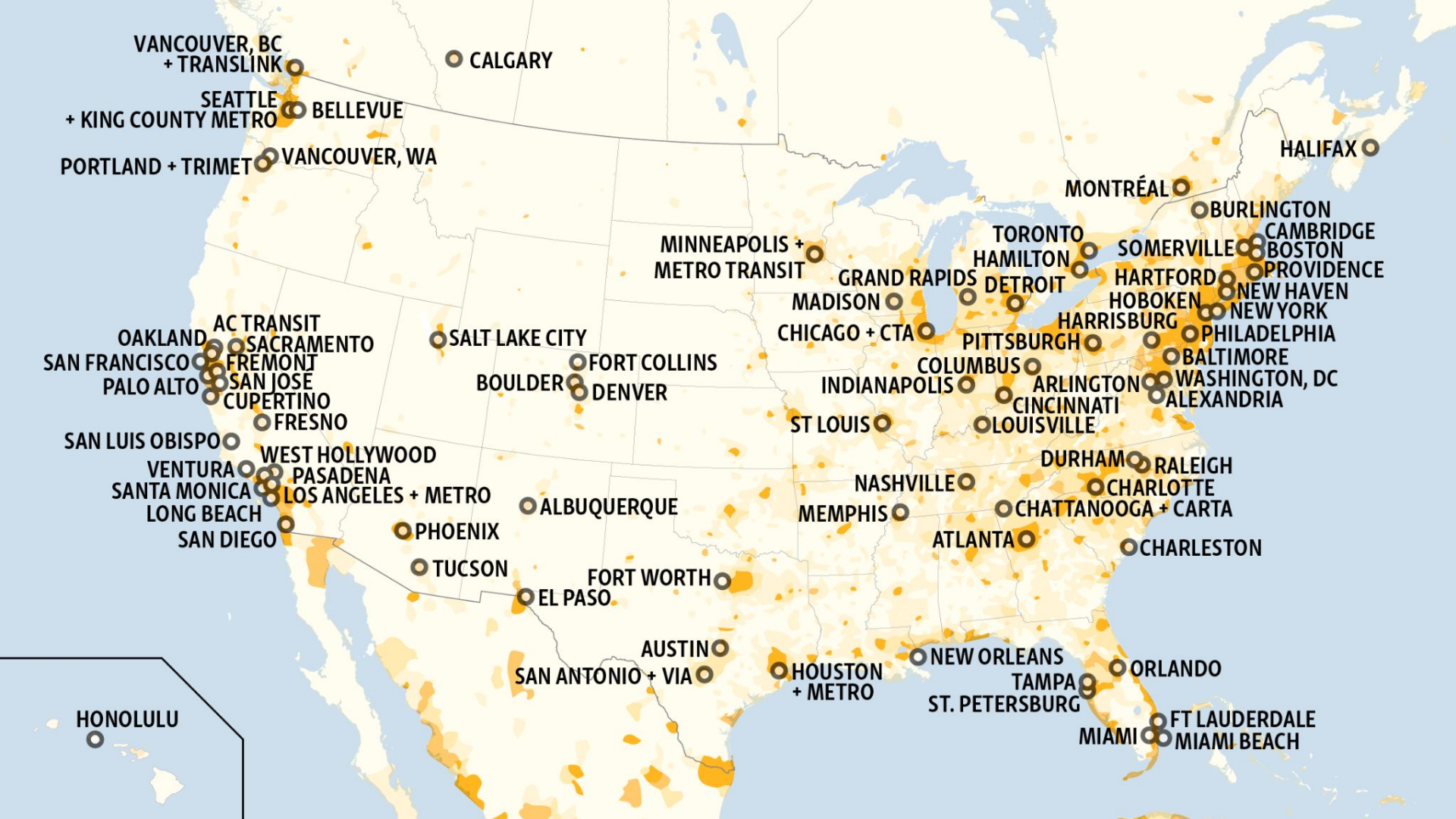
An aerial photograph of a city intersection at dusk. The intersection features vibrant, multi-colored painted crosswalks and sidewalks in shades of pink, yellow, and blue. Several cars are visible on the roads, and a yellow school bus is in the bottom left corner. The background shows residential buildings and trees under a sunset sky.

# Incorporating Equity in Transportation Planning

## Texas Pedestrian Safety Forum

Zabe Bent | NACTO | Director of Design  
@nacto | @ZabeBent

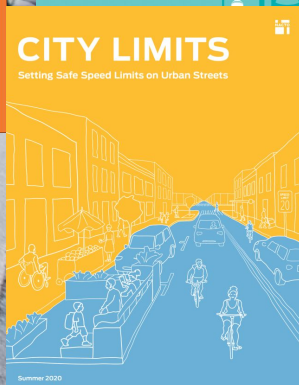
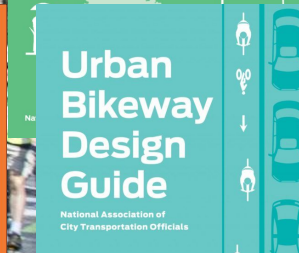
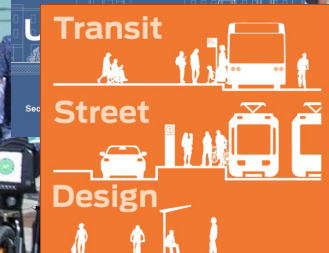




**5 cities, 2 transit agencies**  
**~21% of Texas's population**









# NHTSA Early Estimates Show Record Increase in Fatalities Nationwide

Share:



August 17, 2022 | Washington, DC

The National Highway Traffic Safety Administration today released its [early estimates of traffic fatalities for the first quarter of 2022](#).

NHTSA estimates that 9,560 people died in motor vehicle traffic crashes in the first quarter of 2022.

This is an increase of about 7% as compared to the 8,935 fatalities projected for the same quarter in 2021. This would be the highest number of first-quarter fatalities since 2002.

According to NHTSA's early estimates, the fatality rate for the first quarter of 2022 increased to 1.27 fatalities per 100 million vehicle miles traveled, up from the projected rate of 1.25 fatalities per 100 million vehicle miles in the first quarter of 2021.



In urban areas, arterials make up  
**15%** of streets, but **73%** of deaths







**52%** of urban arterials in the U.S. are  
state-owned







A study of the country's most dangerous streets for pedestrians found that...



97% are multi-lane roads





1 2 3 4 5

70% are 5 or more lanes



75% have speed limits of 30 mph+





SPEED  
LIMIT  
**35**

BICYCLES  
MAY USE  
SIDEWALK  
  
BIKE PATH

Manor

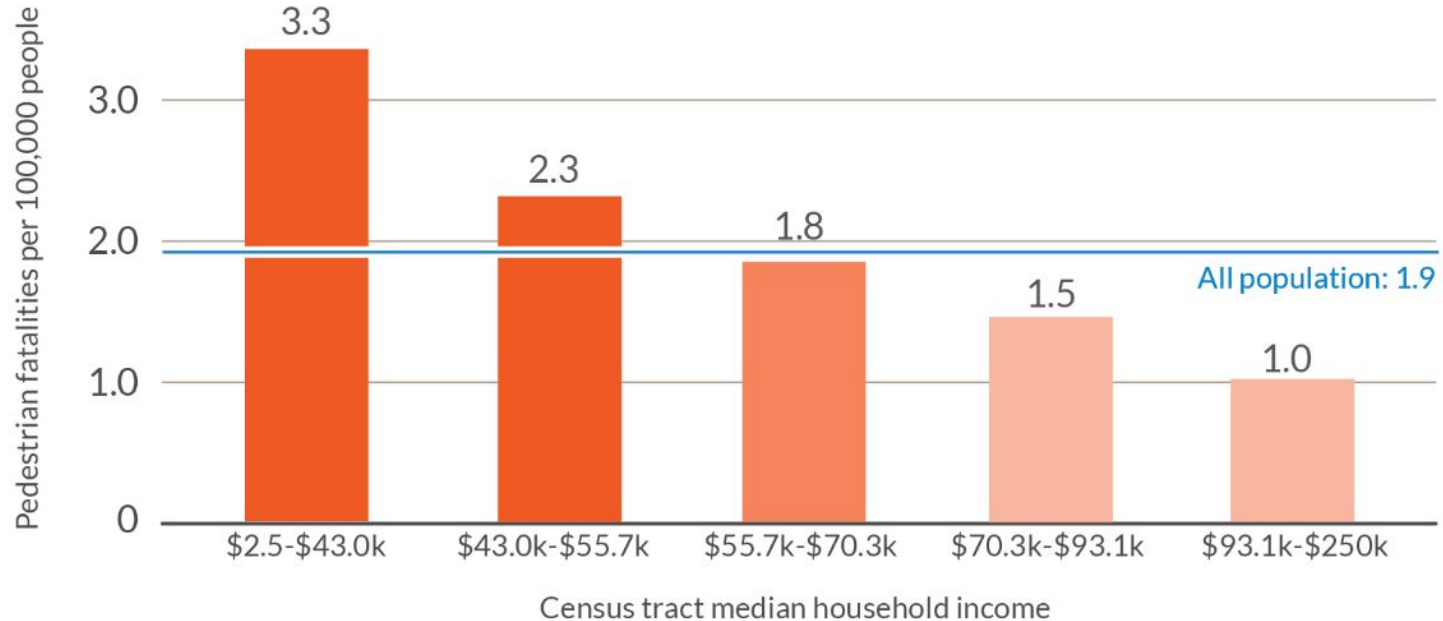


**75%** border low-income neighborhoods



## People walking in lower-income areas are killed at far higher rates

*Pedestrian fatalities per 100k people by census tract income*



**DANGEROUS BY DESIGN 2022**

[smartgrowthamerica.org/dangerous-by-design](https://smartgrowthamerica.org/dangerous-by-design)



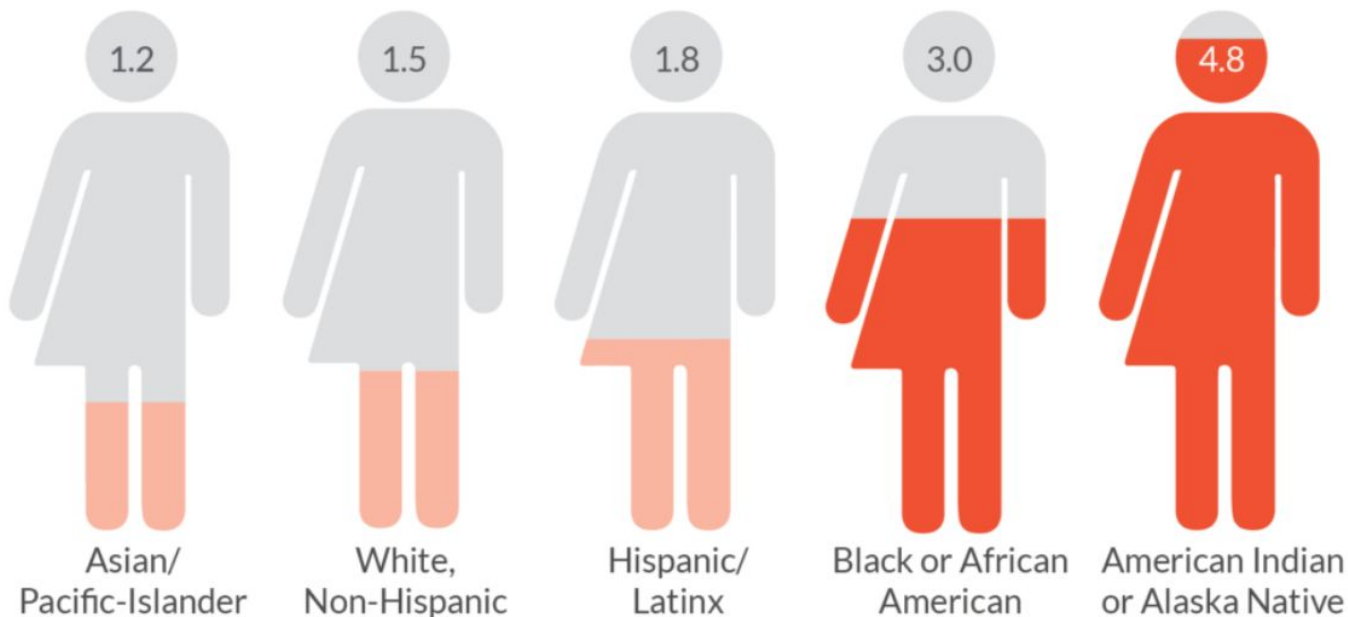
Smart Growth America  
Improving lives by improving communities



National Complete  
Streets Coalition

## People of color, particularly Native and Black Americans, are more likely to die while walking than any other race or ethnic group

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



**DANGEROUS BY DESIGN 2022**

[smartgrowthamerica.org/dangerous-by-design](https://smartgrowthamerica.org/dangerous-by-design)



Smart Growth America  
Improving lives by improving communities



National Complete  
Streets Coalition



# How do we embed equity & safety in our work?

Foundation in values

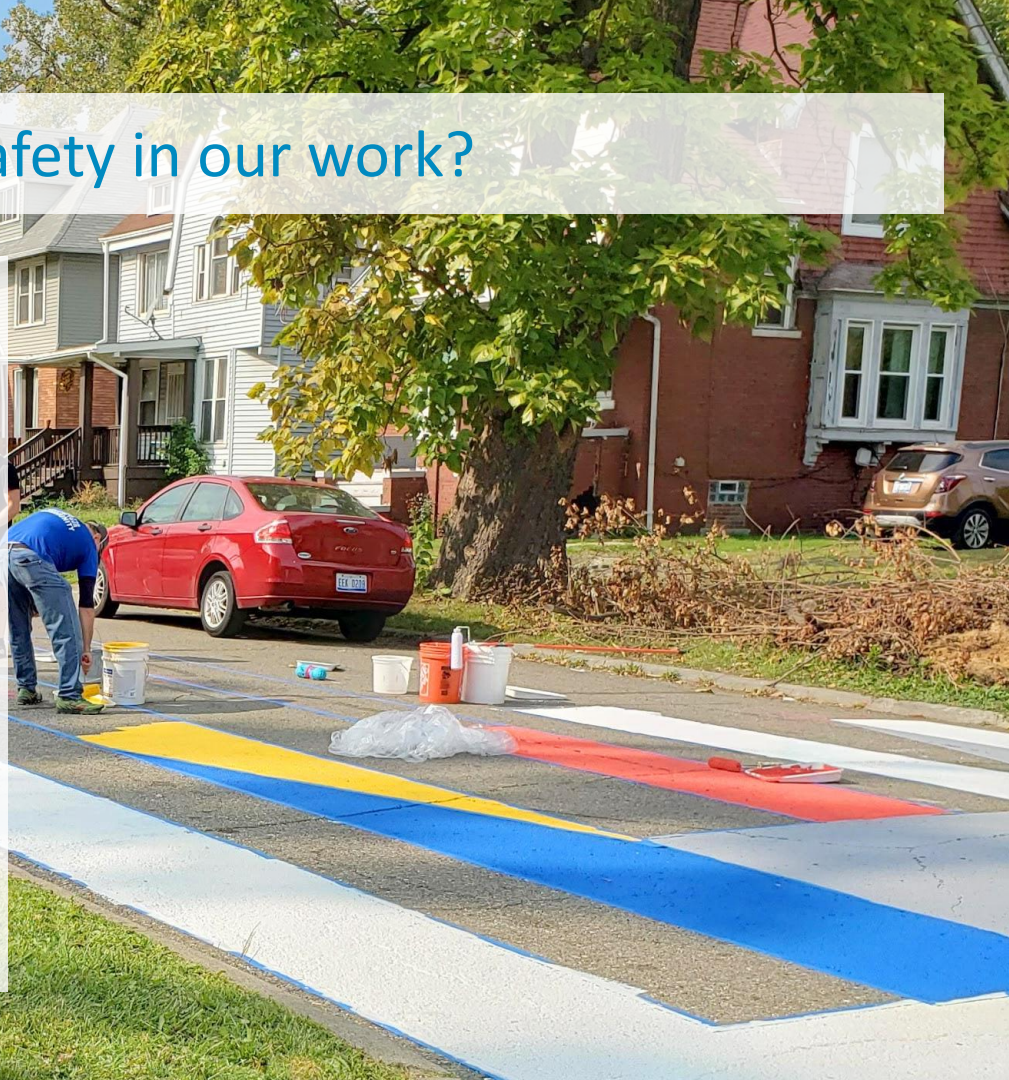
Focus on risks

Determine who & where— and  
talk to them

Change policies too

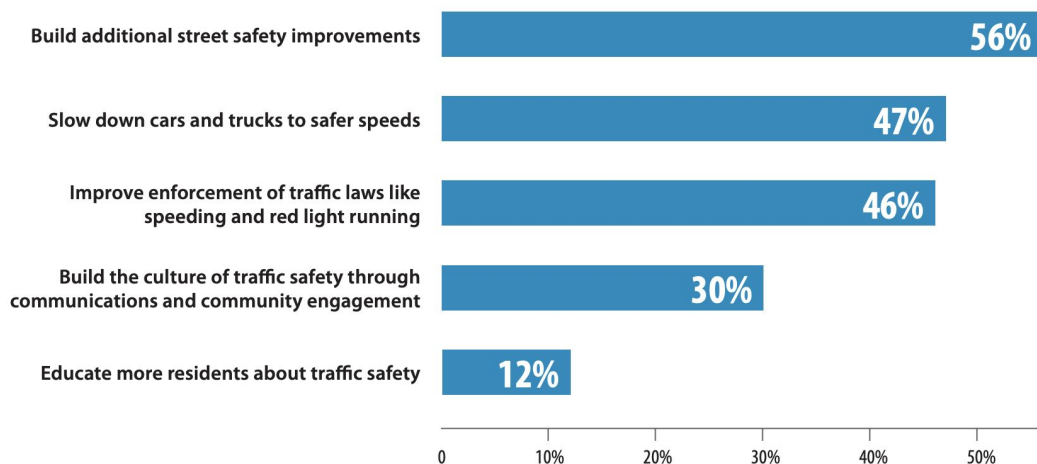
Embed opportunities

Be proactive!



# Foundation in Values

**Question 2: If you could choose two areas that the City should focus on to improve traffic safety, what would they be?**



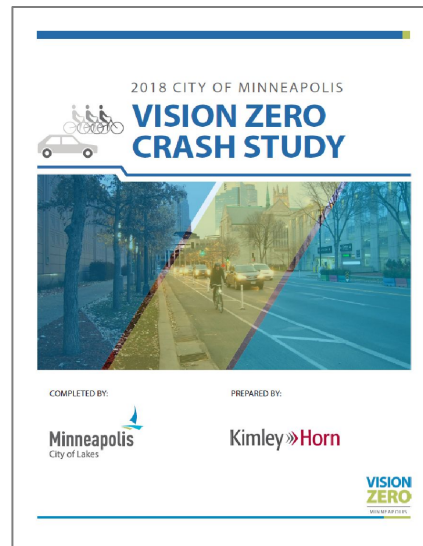
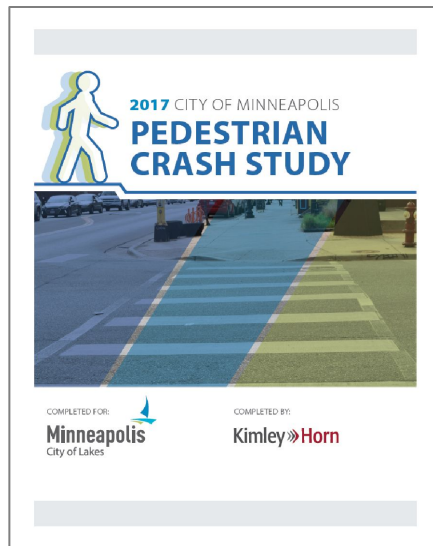
*Based on 1,139 responses.*

**ONE LIFE LOST  
ON OUR  
STREETS IS  
ONE  
TOO  
MANY**

ABDISHAKUR  
ANTONIO  
ANTWANIKA  
COLIN  
DANA  
DEBRA  
FELICIA  
HAILU  
KENNETH  
KIMBERLY  
KIMEL  
RASHID  
SCOTT  
SHERYL  
STEVEN  
TERRENCE  
TYRONE

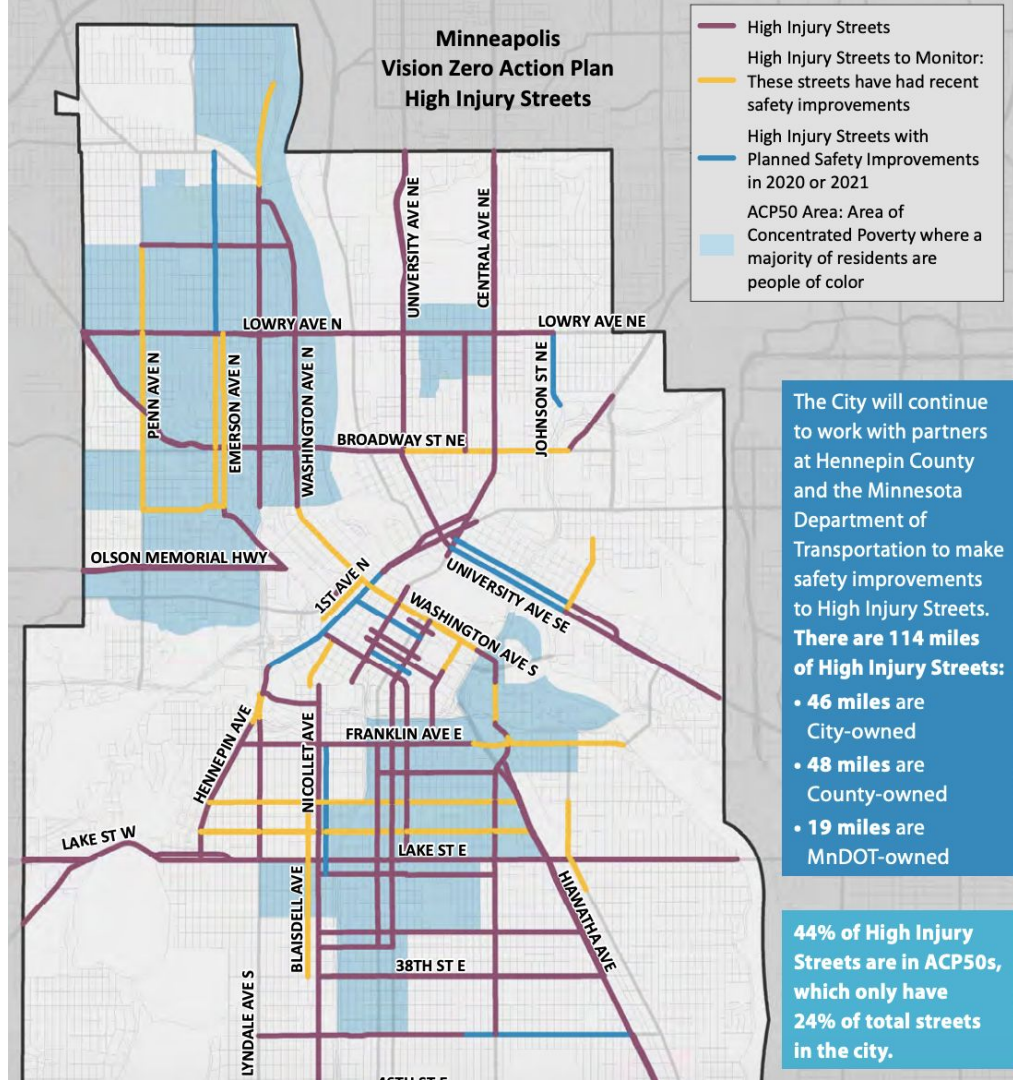


# Focus on Risks



# Redesigning High-Crash Corridors: a Powerful Equity Program

9 % of Streets →  
70 % of people killed or  
severely injured





# SAN FRANCISCO'S HIGH INJURY NETWORK

The Vision Zero High Injury Network (HIN) guides the city's investments in infrastructure and programs, and ensures that Vision Zero projects support those most in need.

**75%**

of San Francisco's severe and fatal traffic injuries occur on just

**13%**

of our streets.

**31%**

of city streets are in Communities of Concern,

**50%**

of the high injury network is in those same communities.

## MAP LEGEND



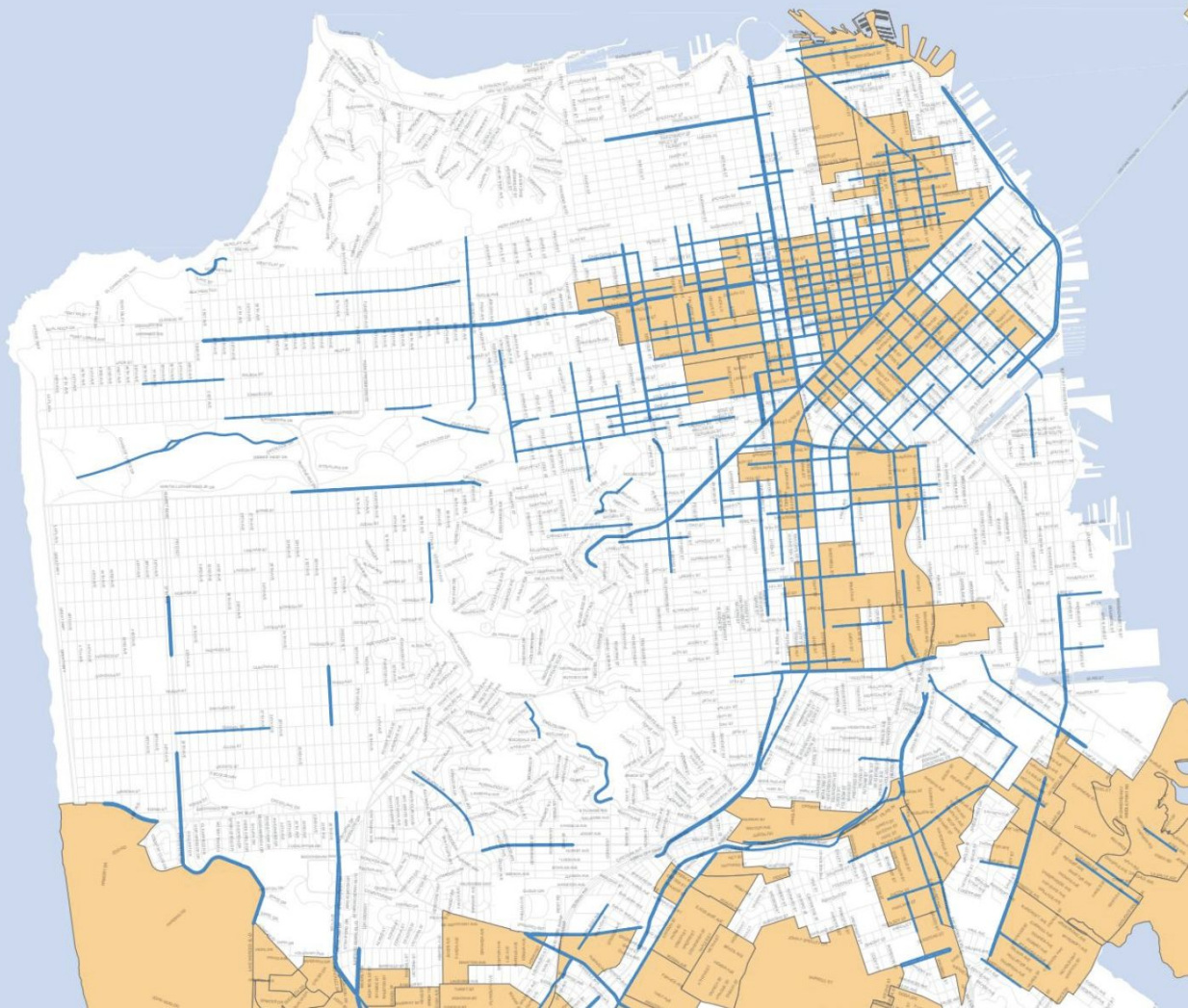
### High Injury Network

The 13% of streets where 75% of severe and fatal collisions occur.



### Metropolitan Transportation Commission Communities of Concern

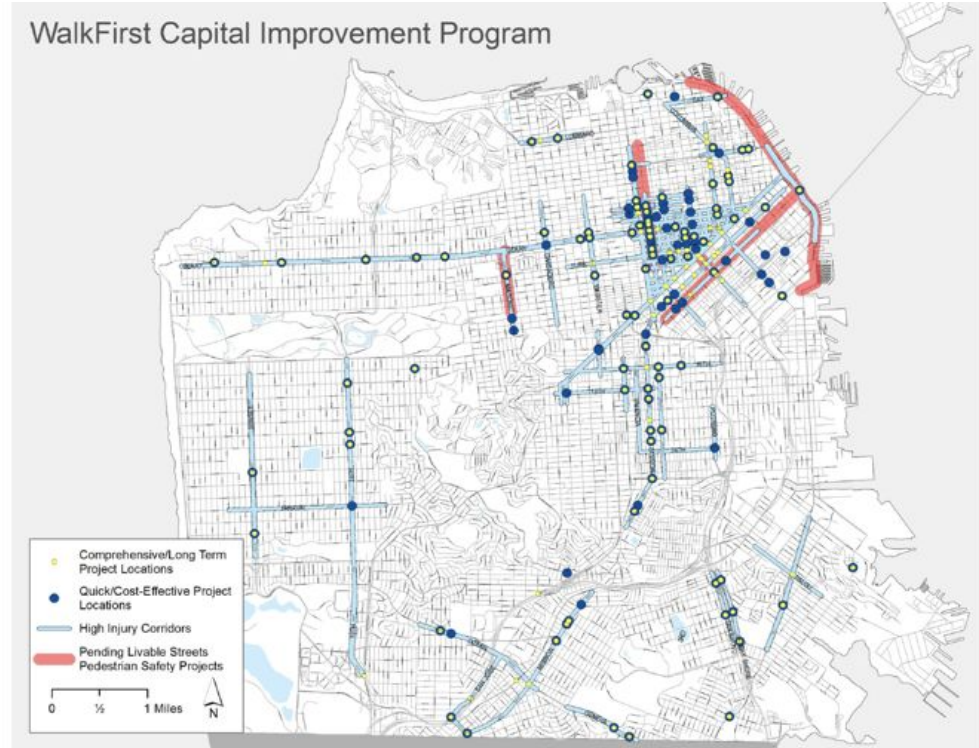
Low-income communities, communities of color, seniors and people who rely on walking and transit as their primary means of transportation.



# High-Injury Corridors

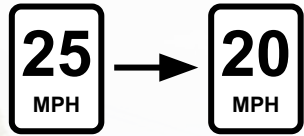


# Priority Projects





# Policy Change: Lower Speed Limits



in **Portland**

% vehicles  
> 25mph

% vehicles  
> 30mph

% vehicles  
> 35mph

-2%

-25%

-47%



# CITY LIMITS

Setting Safe Speed Limits on Urban Streets



Summer 2020



Portland (credit: PBOT)



# NCUTCD's recommended changes align with City Limits:



## Conflict Density

(how frequently potential conflicts arise on a given street)



## Activity Level

(potential pedestrian, bicycle, transit, and stationary / public space use on a street)

## SPEED LIMIT SIGNS AND PLAQUES

### Section 2B.21 Speed Limit Sign (R2-1)

**Standard:** Support:

01 Speed zones (other than statutory speed limits e.g, established by Federal or state law) ~~shall only be~~ are established on the basis of an engineering study that has been performed in accordance with traffic engineering practices.

**Guidance:**

02 Among the factors that are ~~should be~~ considered when establishing or reevaluating speed limits within speed zones are the following:

- A. Speed distribution of free-flowing vehicles (such as current 85th percentile; the pace; review of past speed studies)
- B. Reported crash experience for at least a 12-month period relative to similar roadways
- C. Road characteristics (such as lane widths; curb/shoulder condition; grade; ~~alignment~~; median type; sight distance)
- D. Road context (such as roadside development and environment, (number of driveways, land use); functional classification; parking practices; presence of sidewalk/bicycle facilities ~~pedestrian activity; bicycle activity~~).
- E. Road Users (such as pedestrian activity, bicycle activity)

# Major Street Redesign – ped safety in all projects



Bus Lanes



Bike Lanes



Turn Bays/Lanes



Speed Limit Change



Signal Timing



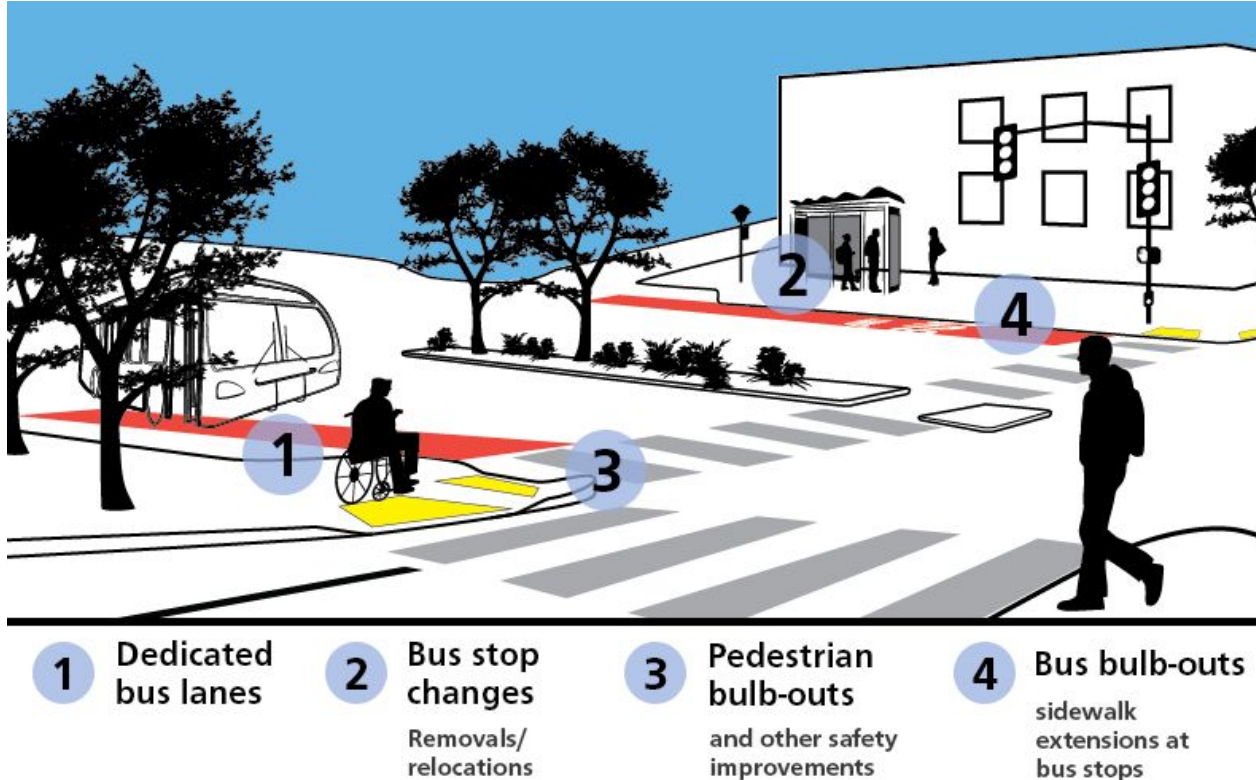
Signal Installation



Midblock Crossings



# Major Street Redesign – ped safety in all projects



# Major Street Redesign – ped safety in all projects







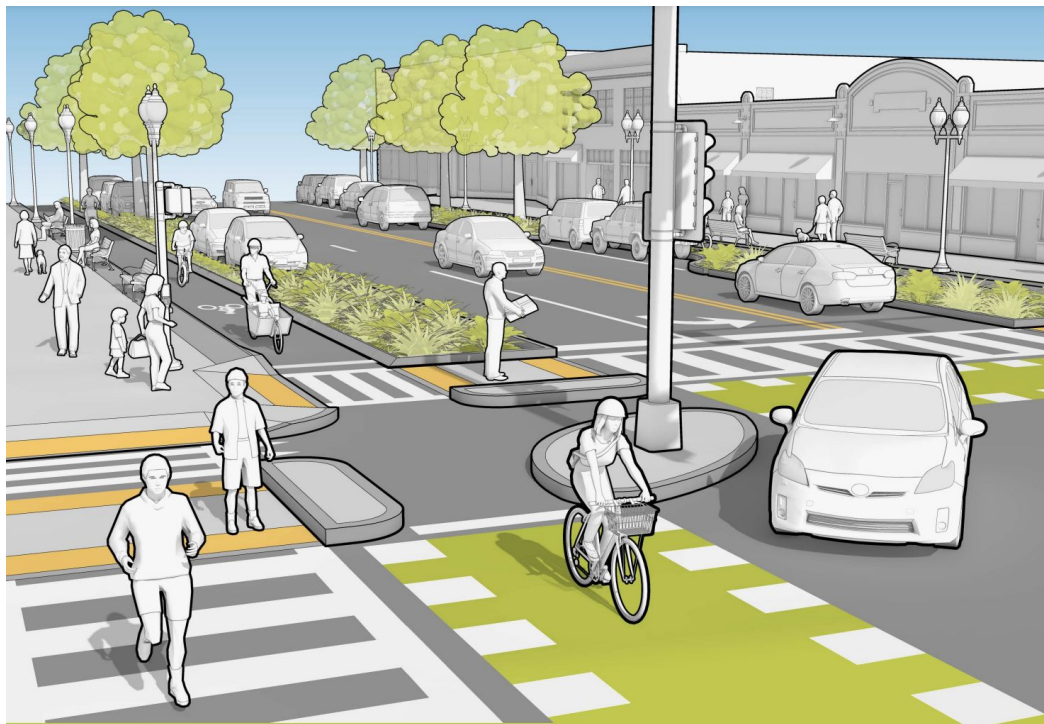




OHIO DEPARTMENT OF  
TRANSPORTATION

# ODOT MULTIMODAL DESIGN GUIDE

APRIL 2022



## SEPARATED BIKE LANE

PLANNING & DESIGN GUIDE

2015

MASSACHUSETTS DEPARTMENT  
OF TRANSPORTATION



# ACHIEVING MULTIMODAL NETWORKS

APPLYING DESIGN FLEXIBILITY  
& REDUCING CONFLICTS



U.S. Department of Transportation  
Federal Highway Administration

AUGUST 2016

## KEY DESIGN FLEXIBILITY

The **2011 AASHTO Green Book** provides flexibility when it comes to selecting appropriate design speeds given the context of a particular roadway:

*"Design speed should be a logical one with respect to the anticipated operating speed, topography, the adjacent land use, and the functional classification of the highway. In selection of design speed every effort should be made to attain a desired combination of safety, mobility, and efficiency within the constraints of environmental quality, economics, aesthetics, and social or political impacts"*

**AASHTO Green Book 2011, p. 2-54**

### **SOUTH GOLDEN ROAD GOLDEN, CO**

The City of Golden installed a series of four roundabouts resulting in improvements to traffic operations and economic development. Initially, South Golden Road served 12,000 vehicles per day via four travel lanes and one center turn lane. The wide roadway, inconsistent sidewalks, and numerous driveways contributed to speeding and reduced access to side streets. In 1999, four roundabouts and raised medians were constructed. After installation, the 85th percentile travel speed decreased from 47 mi/h to 35 mi/h, and travel time decreased from an average of 103 to 78 seconds. The crash rate dropped 67 percent and traffic-related injuries dropped over 80 percent. The more pedestrian-oriented environment contributed to economic activity, and sales tax revenue increased 68 percent.



# New with IIJA: any FHWA-recognized guidance allowed

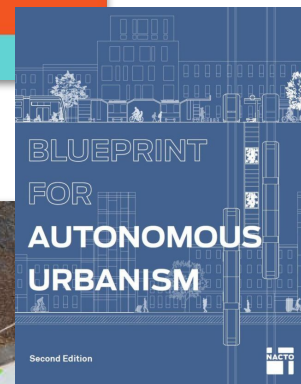
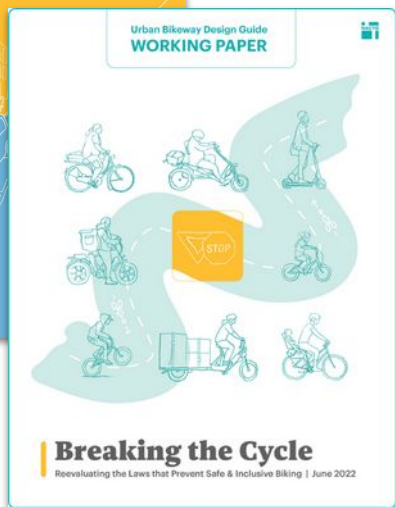
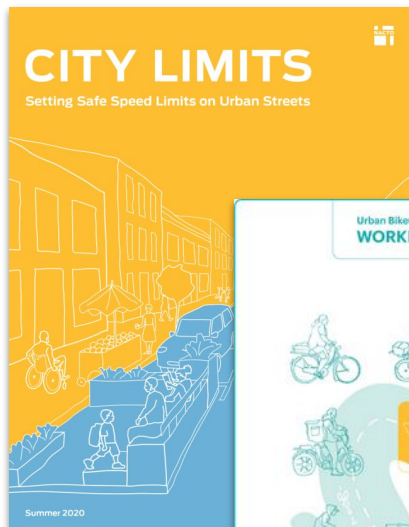
*Cities must formally adopt a design guide to apply it to federally-funded projects.*

§11129





# NACTO activities



A background image showing a community cleanup project on a residential street. Several people are visible, some painting blue and yellow lines on the sidewalk. There are houses, trees, and parked cars in the background. The image is split into two panels by a vertical line.

Foundation in values

Focus on risks

Determine who & where—  
& talk to them

Change policies too

Embed opportunities

Be proactive!

**Who does this project help?**

How? How much?

Is it safe (not just safer)?

**Is it comparable to others?**

**Who is not in the room?**

**How can we hear from them?**

How do we address concerns?

How do we make it stick?





Thank you!  
zabe@nacto.org

@nacto | @ZabeBent