



**WELCOME TO THE**

# SETTING SPEEDS FOR HEALTH AND SAFETY WEBINAR





# ABOUT THE SPEAKERS

**KEN MCLEOD**

**Policy Director**

League of American Bicyclists





# ABOUT THE SPEAKERS

## ROZIA HENSON

**Virginia State Delegate**

D - Counties of Fairfax (part) and Prince  
William (part), 19th District





# ABOUT THE SPEAKERS

## BRAD HOYLMAN-SIGAL

**NEW YORK STATE SENATOR**

47th Senate District, Chairman of Committee on  
Judiciary





# ABOUT THE SPEAKERS

## JENNY O'CONNELL

**Associate Director of Programs**

National Association of City

Transportation Officials (NACTO)



# New Speed Limit Authorization in the MUTCD, and Applicability of NACTO's *City Limits* guide

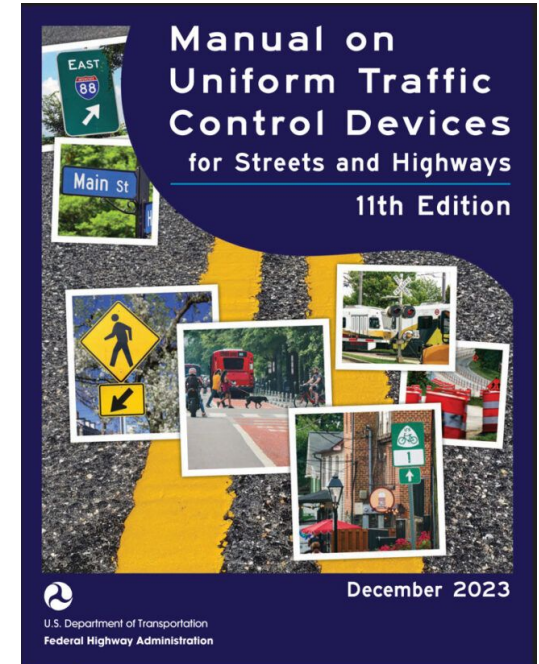
Jenny O'Connell | NACTO

June 11, 2024



# MUTCD 11th Edition Publication

- Released in December 2023, effective as of January 18, 2024
  - First update since 2009
  - By law, must be updated every four years going forward
- States have two years to adopt, have their own that is in substantial conformance











# MUTCD 11th Edition Application



- The MUTCD applies to:
  - Pretty much every type of street or roadway
  - Most rigorously applied on federally-funded projects
- It covers **signs, signals, and markings**
  - Precisely how they look
  - What they are supposed to mean
  - Some aspects of how you are supposed to use these devices.
- Limits
  - It does not cover the built aspects of geometric design e.g. turn radius
  - But....markings are part of geometric design, especially for urban bike, ped, & transit infrastructure.
  - Traffic laws differ from city to city, so meaning of signals varies
  - There is no MUTCD police



# What we requested and got:

-  Restructure the document as a proactive safety regulation
-  **Modernize method for setting speed zones**
-  Make it easier to install crosswalks
-  Make it easier to install “midblock” signals
-  Remove the new section on automated vehicles
-  Explicitly allow use of green bike lanes, red transit lanes, and asphalt art
-  Eliminate geometric restrictions for urban bikeways
-  Change the update process to be more inclusive and transparent

# Speed Limits in the MUTCD



# Introduction: Speed limits

Maximum (or minimum) **speed limits** are typically established by law.

**Speed zones** are street sections that have a different speed limit than that established by statute. These are set with an *engineering study*.

## Section 2B.21: Speed Limit Sign



**06 Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall consider the roadway context.**

07 Among the factors that should be considered when conducting an engineering study for establishing or reevaluating speed limits within speed zones are the following:

- A. Roadway environment (such as roadside development, number and frequency of driveways and access points, and land use), functional classification, public transit volume and location or frequency of stops, parking practices, and pedestrian and bicycle facilities and activity;
- B. Roadway characteristics (such as lane widths, shoulder condition, grade, alignment, median type, and sight distance);
- C. Geographic context (such as an urban district, rural town center, non-urbanized rural area, or suburban area), and multi-modal trip generation;
- D. Reported crash experience for at least a 12-month period;
- E. Speed distribution of free-flowing vehicles including the pace, median (50th-percentile), and 85th percentile speeds; and
- F. A review of past speed studies to identify any trends in operating speeds.

08 When the 85th-percentile speed is appreciably greater than the posted speed limit, and the roadway context does not support setting a higher speed limit, the engineering study should consider whether changes to geometric features, enforcement, and/or other speed-reduction countermeasures might improve compliance with the posted speed limit. A similar approach should be used if the results of past speed studies indicate that the 85th-percentile speed has consistently increased.

09 On urban and suburban arterials, and on rural arterials that serve as main streets through developed areas of communities, the 85th-percentile speed should not be used to set speed limits without consideration of all factors described in Paragraph 7 of this Section.

You are **required** to use an engineering study that considers roadway context.

You **should** consider roadway environment, roadway characteristics, geographic context, reported crash experience, speed distribution, and a review of past speed studies.

C. Geographic context (such as an urban district, rural town center, non-urbanized rural area, or suburban area), and multi-modal trip generation;

When the 85th percentile speed is greater than the posted speed, or has risen over time, you **should** consider design, enforcement, and other speed management changes to increase compliance.

When the 85th-percentile speed is appreciably greater than the posted speed limit, and the roadway context does not support setting a higher speed limit, the engineering study should consider whether changes to geometric features, enforcement, and/or other speed-reduction countermeasures might improve compliance with the posted speed limit. A similar approach should be used if the results of past speed studies indicate that the 85th-percentile speed has consistently increased.

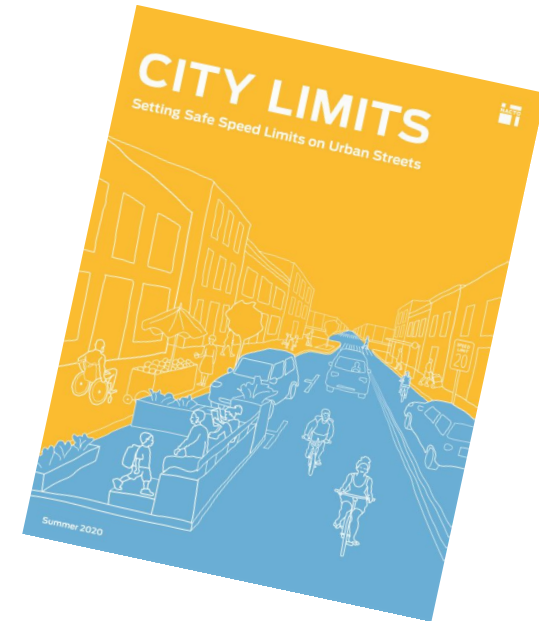
On urban and suburban arterials, you **should not** use the 85th percentile speed alone to set speed limits.

# So how should we set speed zones?

04 Jurisdictions can use speed limit setting tools and methods such as expert systems and those consistent with the safe system approach as part of the required engineering study for a non-statutory speed limit. As speed limit setting tools vary, jurisdictions need to be aware of their limitations and advantages, possible variation between the tools and the need to explore gaps or weaknesses of tools, and weigh the output accordingly in consideration of setting speed limits.

# Speed Limit Setting Tools

- **NACTO's *City Limits***
  - Data-supported, draws from real examples in North American cities, covers multiple types of speed setting and management tools
- **FHWA's USLIMITS2**
  - An online expert systems tool, where data is processed by web-based software to recommend a speed limit based on volume, speed, and contextual data



# City Limits Introduction

- Guidance on how to set speed limits on urban streets using a Safe System approach
- Offers three tools for setting speed limits on urban streets:
  - Setting Default Speed Limits on many streets at once
  - Designating Slow Zones in sensitive areas
  - Setting Corridor Speed Limits using a Safe Speed Study



# City Limits Offers a Safe Speed Study Tool for Setting Speed Limits



- A contextually sensitive tool for determining the correct speed limit on a corridor.
- The Safe Speed Study methodology analyzes **conflict density** and **activity level**, among other contextual factors, to determine the speed limit that will **best minimize the risk** of a person being killed or seriously injured.

# Safe Speed Study Introduction



CONFLICT DENSITY

How frequently potential conflicts arise on a given street



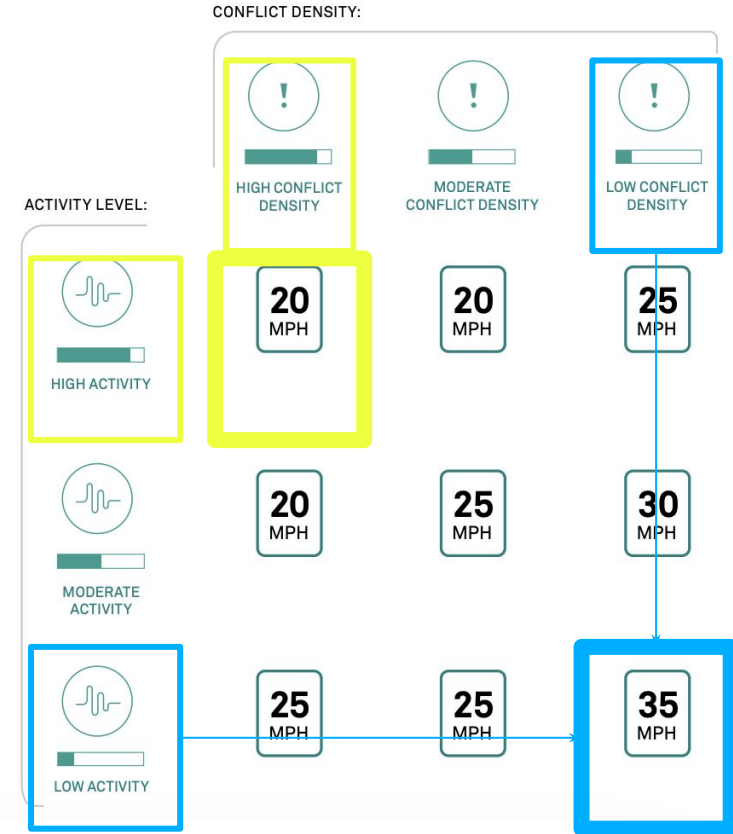
ACTIVITY LEVEL

How active a street currently is or is expected to be

**High conflict, high activity** streets will require **lower speed limits** since the risk of a crash is high, while somewhat higher speeds can be tolerated on low conflict, low activity streets.

# Risk Matrix Overview

The risk matrix is based on the idea that **high conflict, high activity** streets will require **lower speed limits** since the risk of a crash is high, while **low conflict, low activity** streets can tolerate **somewhat higher speed limits**.



# Combining Analyses Example A



HIGH CONFLICT  
DENSITY

+



HIGH ACTIVITY

=



# Combining Analyses Example B





# WE HAVE THE POWER TO BUILD A CULTURE FOR SAFER STREETS

Changing our culture towards safer streets requires action at every level aligning policy, programs, and people.





FROM MARGINS TO MAINSTREAM

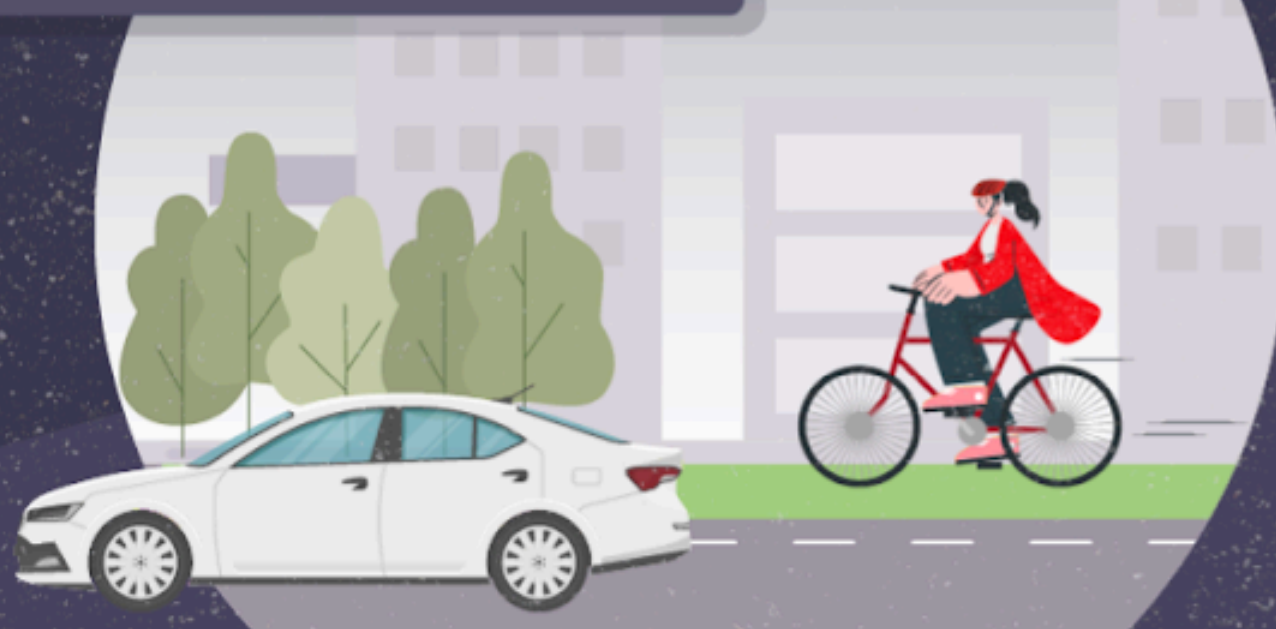
# REFRAMING ROAD DESIGN

Designing for people is not optional.  
We create stronger communities and  
safer roads when people come first.



1

TRADITIONAL  
CAR CENTRIC AWARENESS



2

REFORMED  
WORKING TOWARDS SAFETY



3

REFRAMED  
PEOPLE-FIRST, SAFETY-FIRST





**Take the pledge:**

[bikeleague.org/slow-roads-save-lives](https://bikeleague.org/slow-roads-save-lives)



## TAKE THE PLEDGE

**Help the League show the broad support across the country for Slow Roads.**

Slow roads are safe roads. And safe roads make life better for everybody.

When roads are slow, our communities and neighborhoods thrive. When roads are safe, there are fewer crashes and those that do occur are less severe. In terms of both livability and survivability, slow roads are the best roads.

Roadway crashes are preventable and our national, state, and local leaders should prioritize efforts to eliminate and mitigate the scourge of traffic violence. Slow roads are critical to that.

A person hit by a vehicle traveling at 20 miles per hour (mph) has a 90 percent chance of survival. The risk of death more than doubles if that person is hit by a driver going 30 mph. Whether the crash occurs due to distraction, intoxication, speeding, or any other bad behavior, the crash speed controls whether the person hit is likely to live or die.

The most common speed limit on a road where a person biking or walking is killed is 45 mph. More than 90 percent of the nearly 43,000 traffic deaths in the United States are on roads with speed limits over 30 mph.

We need safer streets in the United States.

To do that, we must embrace the protection provided by slow roads and slow speeds in our neighborhoods and other places where people biking, walking, or using mobility devices frequently intermix with motor vehicles. That's how other countries have successfully reduced traffic deaths: a combined embrace by government leaders and individuals of a traffic safety culture that favors slower speeds, including maximum vehicle travel speeds have been set to 20 mph (or less) on neighborhood roads and other streets where people live, work, learn, and play.

### Show Your Support for Slow Roads Save Lives

As an individual driver, I support the "Slow Roads Save Lives" campaign and I pledge to embrace slower speeds by:

- Speaking up for the value of slow speeds, which reduce dangers to everyone by limiting the physical forces of potential crashes.
- Supporting transformational policy and roadway designs, which help make roads slower and safer for everyone.
- Driving 20 mph in my neighborhood, on the blocks where my family and neighbors live, walk, and play.
- Driving with an intention of speed limit compliance at all times and recognizing that I control the speed of my vehicle.



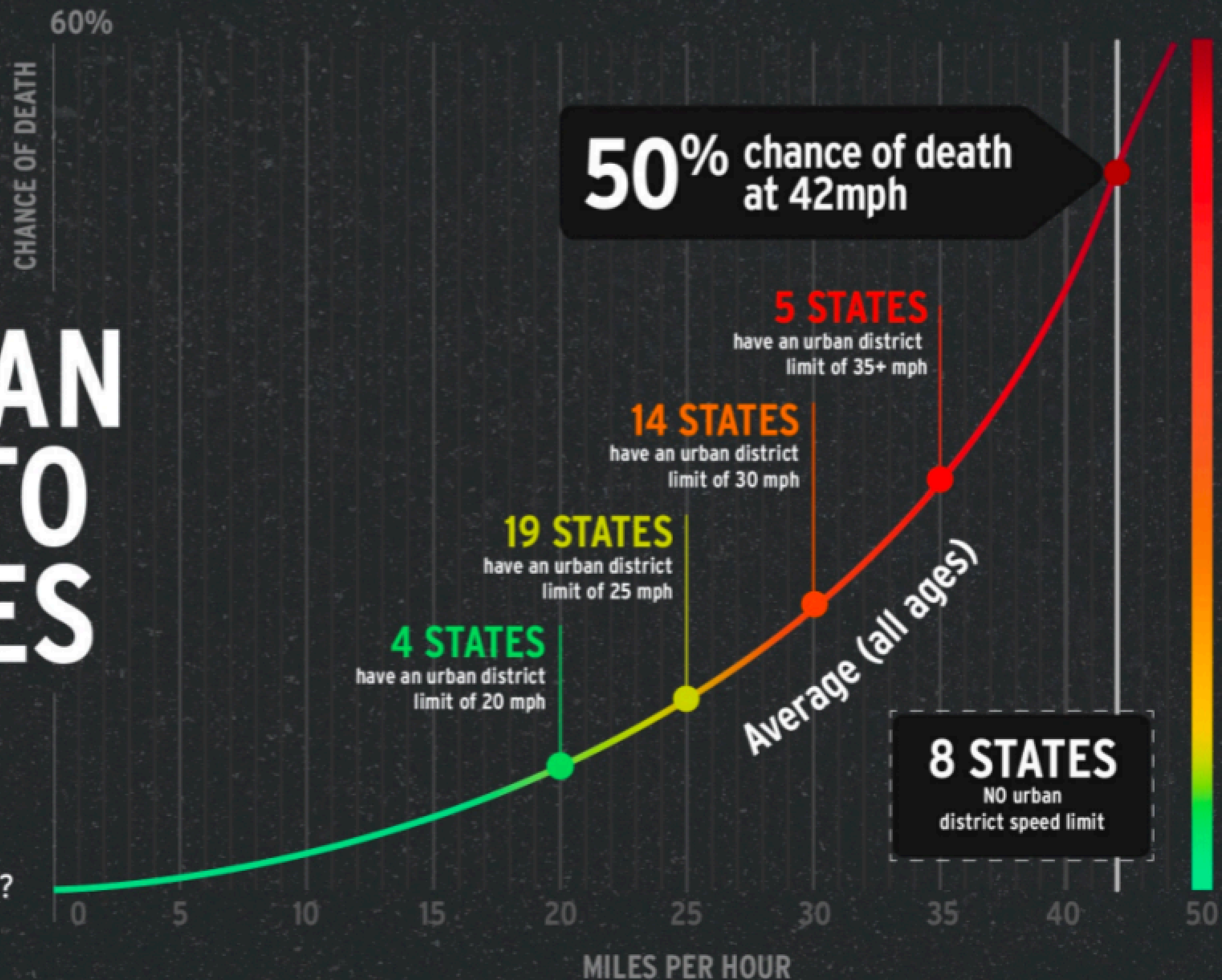


# STATES CAN CHOOSE TO SAVE LIVES

Making 90% of crashes survivable, by choosing (or not) to set smarter, more appropriate speed limits.



WHAT WILL YOUR STATE CHOOSE?



# Download the 2023 Mini-Report on Speed Limits for Public Health



[bikeleague.org/setting-speed-limits-for-health-and-safety](https://bikeleague.org/setting-speed-limits-for-health-and-safety)



The League of American Bicyclists developed this report with funding from the Centers for Disease Control and Prevention's Division of Nutrition, Physical Activity, and Obesity.



2023 MINI-REPORT ON SPEED LIMITS FOR PUBLIC HEALTH  
A report by the League of American Bicyclists

## Setting Speed Limits for Health and Safety

High speeds on roadways are a public health issue because they contribute to injury severity or death in roadway crashes<sup>1</sup> and discourage people from using public spaces, including roads, for walking, biking, and other physical activities.<sup>2</sup> Lower speed limits can lead to better health outcomes, by preventing or reducing serious crashes and fatalities,<sup>3</sup> and by encouraging more people to use physically active modes of transportation, such as walking and biking.<sup>4</sup> For these reasons, lower speeds in communities are recommended by public health authorities such as the Centers for Disease Control and Prevention,<sup>5</sup> World Health Organization,<sup>6</sup> and many others.<sup>7</sup>

To help improve public health and safety on our nation's roadways, an understanding of how speed limits are currently set, as well as the health and safety implications of those speed limits, is important. According to a technical report by Health Resources in Action, policy and regulatory changes – like speed limits – are “necessary prerequisites to implementing engineering and enforcement interventions that impact speed and environmental conditions and result in improved population health.”<sup>8</sup>

### The Purpose of This Report

This mini-report on setting speed limits shows the current framework for speed limit policies through a review of state laws that set speed limits. It is designed to help inform conversations on how lowering speed limits can help save lives and encourage physically active modes of transportation, such as walking and biking. Readers can use the information provided to identify opportunities that may exist to lower speed limits to ones that are safer for all roadway users.





# SAFE SYSTEM: SAFE STREETS



## State

State legislatures and agencies play key roles in setting speed limits and allowing lower speeds



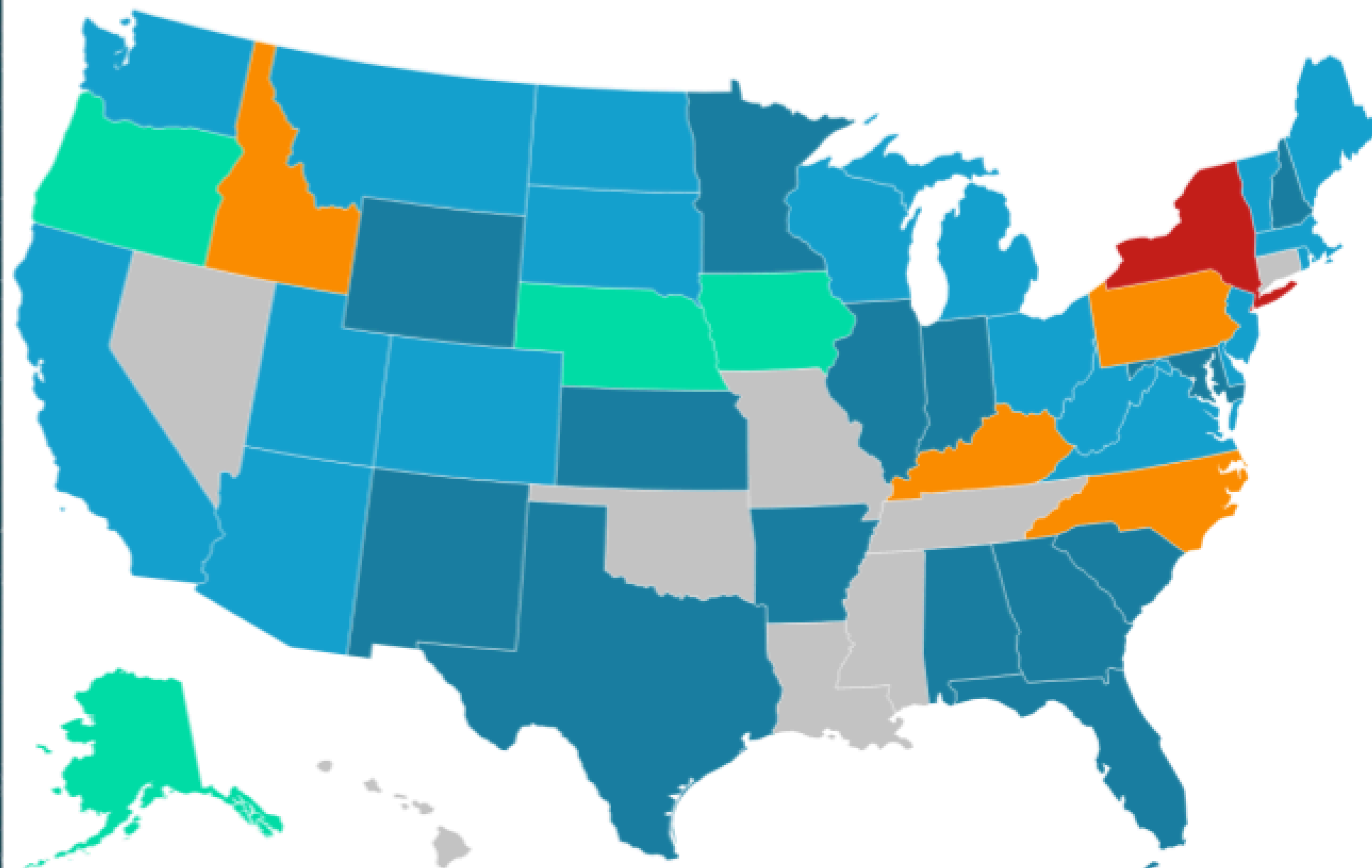
## Community

From farmer's markets to street fairs, communities thrive where speeds are slow

## Default Speed Limits for Urban and Business districts

Current default statutory urban and business district speed limits by state, as of January 2023

20 mph 25 mph 30 mph 35 mph 55 mph None listed



The Uniform Vehicle Code (UVC) set default urban district speed limits at 30 mph in 1956 and that recommendation was unchanged through the last version of the UVC published in 2000. Several states, like New York and North Carolina, set speed limits at the jurisdiction level and those laws are shown here as urban district limits as they apply to incorporated cities, towns, or other urban areas.

Map: League of American Bicyclists • Created with Datawrapper

Action is needed at each level of our social environment to support slower, safer streets. 



# SAFE SYSTEM: SAFE STREETS



## State

State legislatures and agencies play key roles in setting speed limits and allowing lower speeds



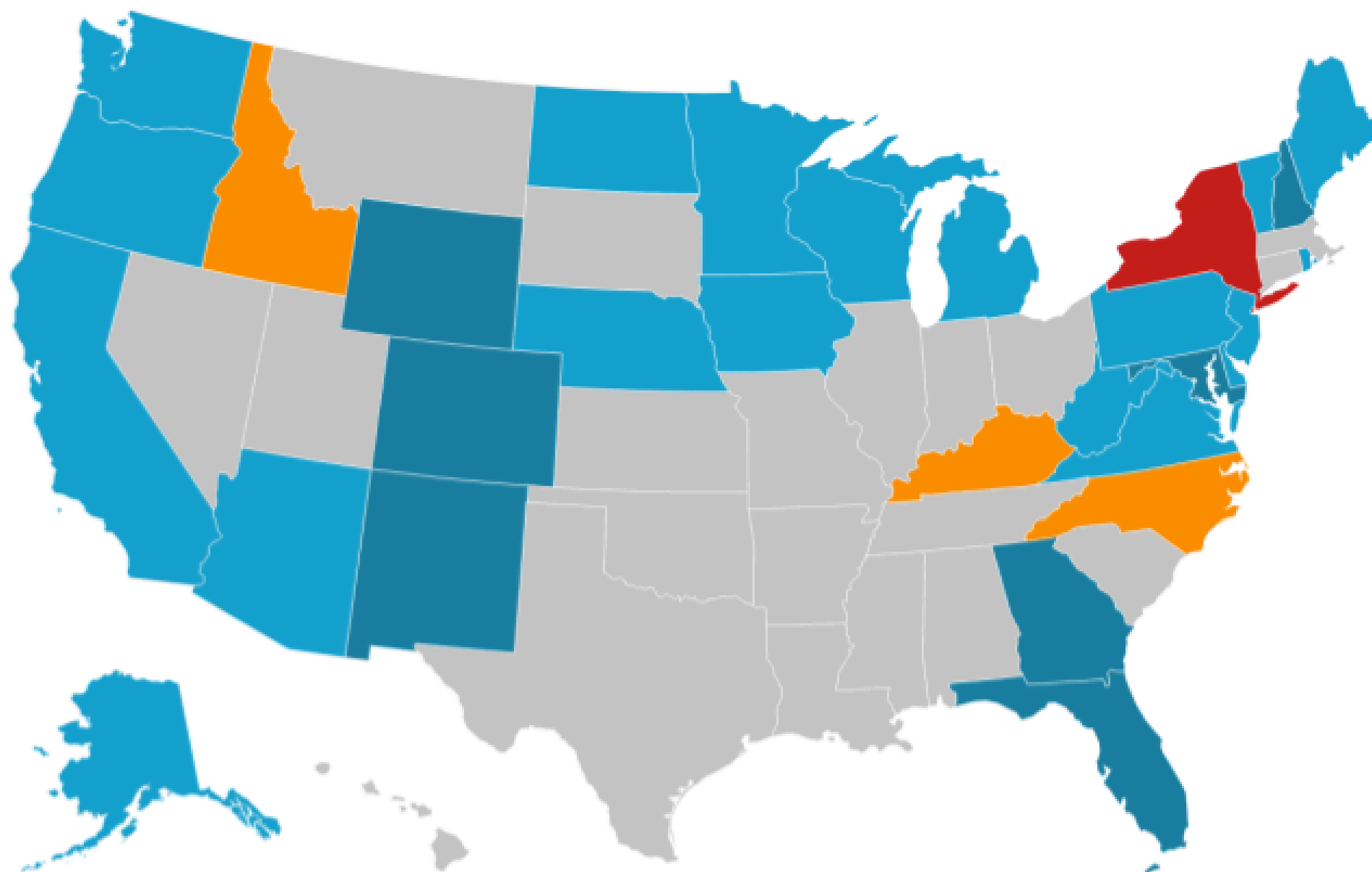
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## Default Residential district speed limits

Current default statutory residential district speed limits by state, as of February 2023

25 mph 30 mph 35 mph 55 mph None listed



Without additional considerations such as school or safety zones, there is considerable variation in the minimum speed limit allowable by code in residential areas. Many codes do not define a residential district at all, and instead include such areas within their definition for urban districts. Several states, like New York and North Carolina, set speed limits at the jurisdiction level and those laws are shown here as residential district limits as they apply to incorporated cities, towns, or other urban areas.

Map: League of American Bicyclists • Source: The League of American Bicyclists • Created with Datawrapper

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# SAFE SYSTEM: SAFE STREETS



## State

State legislatures and agencies play key roles in setting speed limits and allowing lower speeds



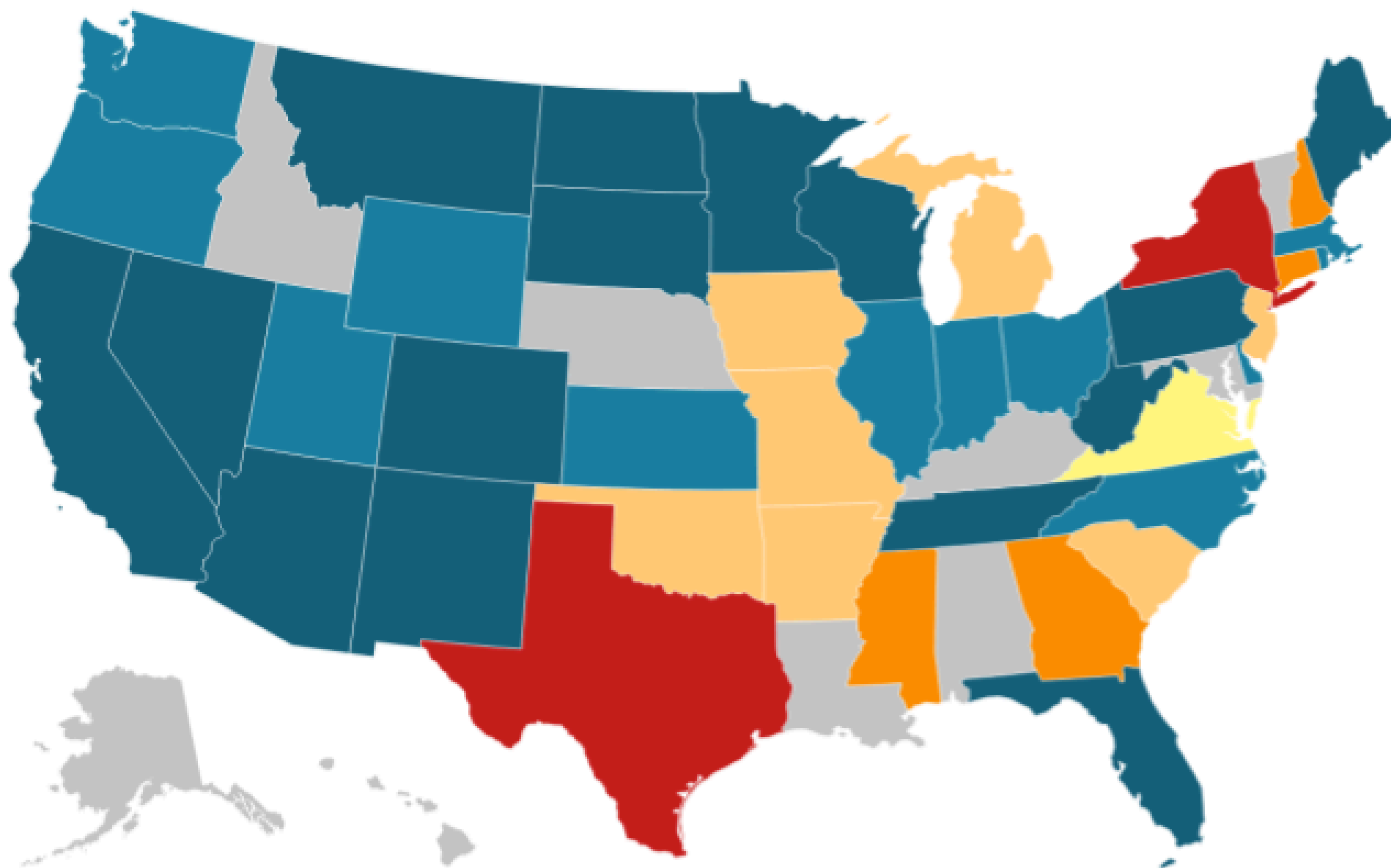
## Community

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## Lowest School Zone Speed Limits Allowed by State Law

School Zone speed limits are typically allowed to be lower than other speed limits in order to provide safety to children, but state practices vary widely. Several states prevent school zones from having speed limits less than 25 miles per hour.

■ 15 MPH   
 ■ 20 MPH   
 ■ 25 MPH typical; 15 MPH in residential areas   
 ■ 25 MPH   
 ■ Limited variation from normal posted speed limit   
 ■ Limited variation from observed driver speed   
 ■ No Statute



Data displayed was identified as representing the "Low Range (MPH)" in the report "School Zone Speed Limits (SZSLs): Effectiveness of SZSLs in reducing vehicle speeds, crash severity and crash frequency" (2023)

Map: The League of American Bicyclists • Source: Minnesota Department of Transportation • Created with Datawrapper

Action is needed at each level of our social environment to support slower, safer streets.



# SAFE SYSTEM: SAFE STREETS



## State

State legislatures and agencies play key roles in setting speed limits and allowing lower speeds



## Community

From farmer's markets to street fairs, communities thrive where speeds are slow

## States with Speed Limit Laws for Alleys and Parks

When state legislatures choose to set speed limits for alleys and parks, they often choose relatively low speeds. For alleys, their geometric constraints justify low speeds. For parks, the considerations are more diverse ranging from urban playgrounds, to camping areas, and rugged wildlife refuges with potential challenging terrain and wildlife encounters.

State	Alley Speed Limit	Park Speed Limit
Minnesota	10 mph	10 mph (camping areas)
Texas	15 mph	30 mph (county park that borders the Gulf of Mexico)
Wisconsin	15 mph	15 mph (when children present)
California	15 mph	
Oregon	15 mph	25 mph
Indiana	15 mph	
Alaska	15 mph	
Maryland	15 mph (Baltimore County)	
Ohio	15 mph (in municipality)	
Illinois	15 mph (urban)	20 mph
North Dakota		25 mph
Washington		25 mph (15 mph in certain park areas)
Michigan		25 mph
Iowa		35 mph (state parks and preserves)
Oklahoma		35 mph (state parks and wildlife refuges)

Table: The League of American Bicyclists • Source: National Highway Traffic Safety Administration (2012) • Created with Datawrapper

Action is needed at each level of our social environment to support slower, safer streets. 

# SIGNED FOR 20, DESIGNED FOR 20

Read how states are letting locals lower the limit:

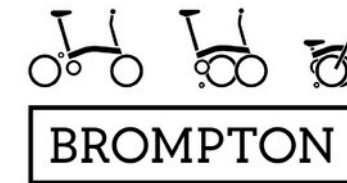
[bikeleague.org/2024-state-speed-legislation](https://bikeleague.org/2024-state-speed-legislation)





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