

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 crashes¹ and discourage people from using public spaces, including roads, for walking, biking, and other physical activities.² Lower speed limits can lead to better health outcomes, by preventing or reducing serious crashes and fatalities,³ and by encouraging more people to use physically active modes of transportation, such as walking and biking.⁴ For these reasons, lower speeds in communities are recommended by public health authorities such as the Centers for Disease Control and Prevention,⁵ World Health Organization,⁶ and many others.⁵

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."

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.





Appropriate speed limits support activity-friendly routes to everyday destinations

Access to safe places for physical activity, such as parks, safe streets, connected sidewalks and bike lanes, trails, and greenways, is important for physical activity and being physically active is one of the most important ways people of all ages and abilities can improve their health.⁹ Designing communities to provide access to these places for everyone helps increase physical activity.¹⁰ That's why included design for and access to safe places for physical activity are among the strategies of the Active People, Healthy NationSM Initiative, an initiative led by the CDC to help 27 million Americans become more physically active by 2027.

Activity-friendly routes to everyday destinations are routes that "include pedestrian, bicycle, and public transit transportation systems that offer a direct and convenient connection!" to places where people go frequently such as schools, workplaces, community centers, restaurants, and parks. Speed management with all road users in mind, including pedestrians and cyclists, is an important factor to consider when designing communities to support health and safety. Making it "easy for people to bike by providing buffered and protected bicycle lanes, separated bike paths, and networks of low-speed, low-volume bicycle-safe streets" is one design tenet the CDC's Active People, Healthy NationSM initiative recommends for transportation professionals looking to support physical activity in their communities.¹²

High vehicle speeds on roadways have been found to both create safety risks and to discourage people from biking and walking. According to a 2022 study, "[n]early 25% of US adults reported that traffic is a barrier to walking where they live [and of those who reported traffic as a barrier], 79% selected vehicle speed as a contributing traffic characteristic."¹³ According to data from the National Highway Traffic Safety Administration (NHTSA), motorists driving "too fast" was the most frequently reported threatening action for people walking and the second most frequently reported threatening action for bicyclists. ¹⁴ According to a CDC survey, only 33.5% of respondents reported that "It is safe to walk in my neighborhood because many drivers follow the posted speed limits." ¹⁵



What is an appropriate speed for an activity-friendly route?

An appropriate speed for an activity-friendly route to an everyday destination is based on providing safety for all road users, including people biking and walking. Slower speeds ensure safety by reducing physical forces in a crash and providing a more robust ability to avoid crashes due to reaction, braking, and other factors. On routes with higher speeds, infrastructure and other countermeasures may mitigate the increased physical forces in a crash or substitute for the factors that allow people to avoid crashes more easily at lower speeds.

According to the World Health Organization and the more than 100 countries that signed the Stockholm Declaration on Road Safety in 2020, ¹⁶ when people and vehicles mix in a frequent and planned manner, speeds should be managed to achieve a maximum of 20 mph, unless strong evidence exists that higher speeds are safe. It is important to note that in countries that have operationalized this goal, it is achieved by roadway design changes that reduce speeds along with lower speed limit signs.¹⁷ The review of speed limits in this report assesses current state law support for 20 mph speed limits.

Speed limits are primarily a matter of state policy rather than national or local policy. State laws related to speed limits typically:

- » Set the lower and upper boundaries of speed limits,
- » Establish default speed limits for certain types of roadways, and
- » Specify how localities can change speed limits, often while reserving state authority over traffic studies used for determining speed limits.

States typically answer the question of "what is an appropriate speed limit" in one of two ways:

- » 1) Traffic studies conducted by traffic engineers, or
- » 2) Statutes or ordinances enacted by elected officials.

In many states, traffic studies have historically relied on observing the current speed choices of drivers to set speed limits. This deference to driver speed choice is stated by one state Department of Transportation as "based upon the nationally accepted principle that the majority of drivers are cautious, prudent and drive at speeds that are reasonable and proper, regardless of the posted speed limit." In response to criticism of the historic approach to speed limit traffic studies, the most recent Manual on Uniform Traffic Control Devices (MUTCD) removed requirements to consider current driver speed choice and instead requires the consideration of roadway context.

Statutes and ordinances rely on the policy and political judgment of elected officials based on their representation of constituents. Statutes typically set speed limits for certain types of roads or contexts, and provide a modification process that typically requires a traffic study. According to USDOT, "[t]he MUTCD does not preclude States or localities from passing laws to set statutory speed limits."²⁰

THE BOTTOM LINE: Most state laws currently set speed limits higher than 20 mph and do not provide a clear legal procedure for local communities who may want to implement roadway design changes that reduce speeds along with lower speed limit signs. State laws often restrict the ability of local communities to manage speeds without time-consuming and costly studies that are required to consider current driver speed choices but which don't have to consider traffic injuries and fatalities.²¹

Reference to Statutory Speed Limits In This Report

This resource looks at speed limits set by state laws, which we will refer to as statutory speed limits, because they are more readily available than other speed limit-related data and reflect policymaker choices about speed limits in the United States.

Types Of Places That Hold Promise for Enabling 20 Mph Speed Limits

Business, urban, and residential district statutory speed limits hold promise for enabling 20 mph speed limits. Currently, these district-based statutory speed limits often create default speed limits at 25 mph or above. However, they also provide a statute-based authority to implement speed limits without a traffic study that may provide an opportunity for jurisdictions to pursue lower speed limits to increase safety. Local jurisdictions may use existing district-based authority to lower speed limits where traffic studies have raised speed limits in the past and state lawmakers may consider using these frameworks to clearly provide for proactively designing and signing streets for 20 mph speed limits.

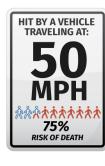
Background

The United States has recognized the need to manage travel speeds to improve traffic safety. In the National Roadway Safety Strategy published by the US Department of Transportation in 2022, one of five objectives is identified as "Safer Speeds." Twenty miles per hour (mph) speed limits can be promoted for public health and safety because they help make vehicle crashes less common and when vehicle crashes occur at speeds of 20 mph or less then they are more likely to be survivable. According to data from the AAA Foundation for Traffic Safety, a person hit by a motor vehicle traveling 20 mph has at least a 90% chance of survival. This high chance of survival makes slower speeds safer.









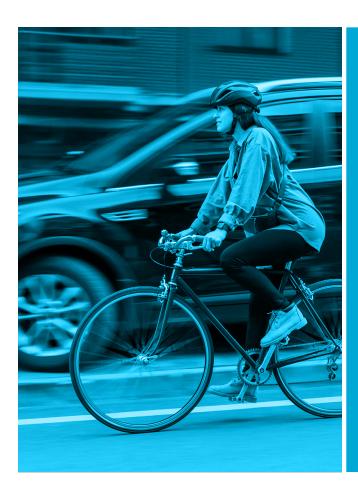


https://www.transportation.gov/NRSS/SaferSpeeds from AAA Foundation for Traffic Safety, Impact Speed and a Pedestrian's Risk of Severe Injury or Death

According to the U.S. Department of Transportation (USDOT), "The primary reason for regulating individual speed choices is the significant risks drivers can impose on others." ²⁴ Individual speed choices can be managed in a variety of ways, including posted and unposted speed limits, physical infrastructure designed to limit or encourage certain speed choices, technology that aids drivers in complying with speed limits, enforcement that punishes people for violating speed limits, and education that creates a cultural norm of speed choice. Regardless of the method(s) chosen, risk is a key factor for understanding the need for managing individual speed choices. Statutory speed limits reflect how elected officials choose an appropriate level of risk for drivers to expose others to in different conditions, and these choices create the context for how compliance with those speed limits may be best achieved.

Setting speed limits based on the risk of injury in a crash is different from the traditional approach of setting speed limits based on prevailing driver speed choices. Rather than relying on the "principle that the majority of drivers are cautious, prudent and drive at speeds that are reasonable and proper, regardless of the posted speed limit"sk-based speed limit setting uses physics to control crash forces. This risk-based approach may also be called an injury minimization or Safe System Approach. According to a 2019 study by the AAA Foundation for Traffic Safety, practitioners were 11 times more likely to use prevailing driver speed choices when setting speed limits than injury severity studies.

While the physics of an individual crash can depend on a variety of factors, the basic equation is that force is a product of mass and acceleration. Speed typically governs acceleration as people and vehicles experience acceleration forces relative to the speed that they were traveling before the collision. Mass is beyond the scope of this document, but has increased in recent years. According to the Environmental Protection Agency's 2023 Vehicle Trends report, vehicle weights are at a record high with an average vehicle weight of 4,303 pounds.²⁸



Speed vs. Speeding

Vehicle speed and the behavior of speeding (e.g. driving above the legal speed limit) is often conflated in discussions of traffic safety. There is often an assumption that the legal speed limit of any given road has been determined based on safety, and therefore abiding by the existing legal speed limit should be enough to keep all roadway users safe. However, crash survivability depends only on a drivers' vehicle speed - not whether they were obeying the posted speed limit. According to AAA data, a person hit by a vehicle traveling at 32 mph has a 25% risk of death.²⁹ This is true whether the speed limit is 30 mph and the driver is slightly speeding or whether the speed limit is 35 mph and they are actually driving below the legal speed limit. This resource addresses speed limits

Benchmarking Speed Limits

Ideally, it would be possible to identify the prevalence of 20 mph speed limits through publicly available data on posted and unposted speed limits for all public roads in each state. Unfortunately, publicly available data on speed limits is not available at a national level. According to the Federal Highway Administration's Model Inventory of Roadway Elements³⁰, speed limits are included in three important data products: the Highway Performance Monitoring System,³¹ the Strategic Highway Research Program 2 Roadway Information Database,³² and the Highway Safety Manual,³³ but none of these data products produce data on speed limits that allows comparisons between states or localities.

Without data on existing speed limits, it is difficult to say how common 20 mph speed limits are in the United States. Without data it is also difficult to understand the contexts in which higher speed limits may exist. For example, if higher speed limits are accompanied by appropriate safe infrastructure such as protected bicycle and pedestrian facilities that can better protect people using higher speed roadways, then those higher speeds may be appropriate because their risk has been mitigated. Two examples highlighted below suggest that 20 mph speed limits are likely uncommon.

The state of Virginia is one of five states where the state owns most of the public road miles in the state.³⁴ Specifically in urban areas, where biking and walking is more common, the state owns 48.5 percent of public road miles.³⁵ According to data from the Virginia Department of Transportation (VDOT), while over 6,000 miles of VDOT roadway have 25 mph speed limits, the default speed limit set by state law for business and residence districts, fewer than ten miles have 20 mph speed limits.³⁶ These data may be illustrative of default speed limits functioning as minimum speed limits in most circumstances.



A recent report by the Federal Highway Administration (FHWA)³⁷ discussed how New Zealand recently applied a new framework of default 30 kilometer per hour [~20 mph] speeds as safe and appropriate for areas where people and vehicles are planned to mix. According to the report, prior to the new framework "the default speed limit in New Zealand is 100km/h [~60 mph] on rural roads and 50km/h [~30 mph] on urban streets."

Similar default speeds can be found in many states across the United States. Upon review of New Zealand's roadway network under the new 30 km/h framework, the national agency estimated that "over 90 percent of roads and streets currently has speed limits that are too high to be considered 'safe and appropriate." While states may have different built environments from each other and from New Zealand, it may be likely that a similar re-examination of speed limits in states would find similar results about "too high" speed limits under a 20 mph speed limits framework.

In the absence of data on actual speed limits in the United States, default speed limits set by state law may provide insight on the prevalence of 20 mph speed limits. The last review of speed limit laws by the NHTSA was completed over a decade ago in 2012.³⁸ When discussing speed limit laws, this resource uses the term "statutory speed limits" which NHTSA defines as "one specifically provided for under a State's traffic code [which] may vary by highway type (e.g., interstate) or by location (e.g., urban district) [and] may or may not require[d to] be posted.³⁹"

THE BOTTOM LINE: Based on a review of all 50 states for this report, statutory speed limits suggest that 20 mph speed limits are rare in the United States and that the number of statutes that provide for 20 mph speed limits has not significantly changed over the last decade. Data systems do not currently support reporting on the existence or extent of 20 mph speed limits in all states, so statutory speed limits provide the best benchmark for their prevalence in the United States at this time and can be monitored for changes that support increased prevalence.



Types of Statutory Speed Limits for Slower Speeds

Statutory speed limits are speed limits set by state law. They can set minimum speed limits or maximum speed limits. State laws also provide the framework for how to alter speed limits and may impose burdens for raising or lowering speed limits. On average, states have more than five types of speed limits created by state law, although there can be a great variance. For instance, six states have zero statutory speed limits while Ohio, Michigan, and Wisconsin each have more than ten types.⁴⁰

There are generally four types of statutory speed limits that may provide for 20 mph speed limits:

- » Urban/Business Districts Four states currently set urban or business district speed limits at 20 mph.
- » Residential districts More than half of states specify residential districts, but no state currently provides for a default speed limit of 20 mph in residential districts. Several enable 20 mph speed limits in certain residential district contexts.⁴¹
- » School Zones Twenty-five states set school zone speed limits at 20 mph or less.
- » Alleys and Park roads Ten states set speed limits for alleys at less than 20 mph and two states set speed limits for roads in parks at 20 mph or less.

Statutory speed limits often function as minimum speed limits for both the setting of speed limits and the design speed chosen by traffic engineers when designing a road. Speed limits are imposed in the initial design and creation of a roadway and re-evaluated over time, with the most common method of re-evaluation in the United States involving a review of current operating speeds as a primary consideration.⁴² According to National Cooperative Highway Research Program Report 504, the three most common approaches for deciding on a design speed for a roadway are functional classification, legal speed limit, and legal speed limit plus 5 or 10 mph.⁴³

Choosing a higher design speed tends to lead to higher operating speeds, and the use of operating speeds to set speed limits has been found to increase speed limits over time.⁴⁴ These practices mean that in most cases roads will be designed for speeds equal to or higher than the lowest statutory speed limit and speed limits may be adjusted higher over time based on operating speeds. For these reasons, changing statutory speed limits may be a necessary, if not fully sufficient, step in creating roads where drivers naturally choose to drive at slower safer speeds that impose less risk on people biking and walking.

Many state laws that enable and/or set 20 mph speed limits tend to be limited in time and place rather than broadly applicable to public roads. For example, school zones are the most common place where 20 mph speed limits are enabled by state law. Even these speed limits are often limited to certain hours or to within only a few hundred feet adjacent to school grounds. Alleys and park roads also have strict limitations that prevent their broader application.

Of the types of statutory speed limits that currently provide for 20 mph speed limits, urban or business district speed limits provide the most widely applicable policy tool for achieving 20 mph speed limits in large sections of a community. According to the most recent version of the Uniform Vehicle Code (UVC), an urban district is "the territory contiguous to and including any street which is built up with structures devoted to business, industry or dwelling houses situated at intervals of less than 100 feet for a distance of a quarter of a mile or more.⁴⁵"

The UVC was an entirely voluntary document created by a private organization that ceased operations in the early 2000s and there is no current effort to create a new version, but occasional efforts to update sections take place under the National Committee on Uniform Traffic Control Devices.⁴⁶ The UVC will be discussed in this resource to provide background information and because it was influential in many states during its publication.

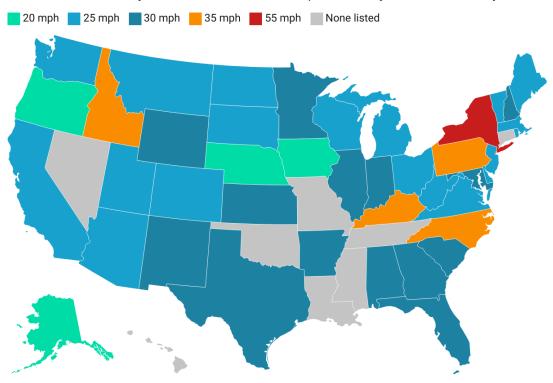
Speed Limits for Slower Speeds: Urban or Business District Speed Limits

Urban and business district speed limits were recommended by the UVC starting in the 1920s, with an initial recommended speed limit of 20 mph. After several revisions between 1926 and 1956, business districts were eliminated and the UVC recommended urban districts have speed limits of 30 mph in 1956. That recommendation was unchanged until the last published UVC. In preparing this report, no studies, meeting notes, or other historical documents were found related to the justification for that recommendation.

As of January 2023, only four states use these designated districts to enable 20 mph speed limits. It is unknown how many communities use the full extent of this statutory power to implement 20 mph speed limits in their urban and business districts. Statutory power for lower speed limits in urban districts can be a powerful tool for local governments, as it can allow slower safer speeds without the need for approval by the state DOT or a traffic study.⁴⁷

Default Speed Limits for Urban and Business districts





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.

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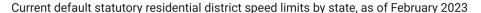
Speed Limits for Slower Speeds: Residential District Speed Limits

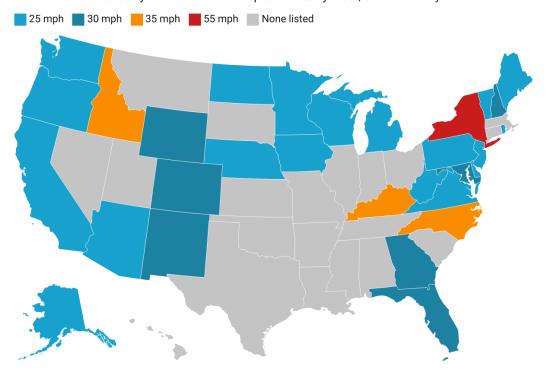
Lower speed limits for residential districts were promoted by the UVC from 1926 until 1956, with an original recommended speed limit of 20 mph. They are less common than urban or business district speed limits and as of January 2023 no state sets the statutory speed limit for a residential district at or below 20 mph.

Florida may come the closest by providing that "with respect to a residence district, a county or municipality may set a maximum speed limit of 20 or 25 miles per hour on local streets and highways after an investigation determines that such a limit is reasonable. It is not necessary to conduct a separate investigation for each residence district.⁴⁸" This statutory power can be seen in the private development of the Villages, where county statutory power has been used to implement 20 mph speed limits within the private development.⁴⁹ While 20 mph speed limits are currently not common for residential districts, a reinvigoration of this type of statutory speed limit may play a role in enabling 20 mph speed limits and encouraging more developers to opt for 20 mph speed limits in residential or mixed-use developments.

If legislators chose to lower residential district statutory speed limits to 20 mph, then they would likely have broad applicability. Pennsylvania's definition is illustrative of the scope of this type of district and similar to the definition used by many other states: "The territory contiguous to and including a highway not comprising a business district when the property on the highway for a distance of 300 feet or more is in the main improved with residences or residences and buildings in use for business." Single family residential subdivisions, streetcar suburbs, and mixed use urban areas may all be covered by this definition as it essentially asks for an observer to look up and down the block and see if the land use is residential or residential mixed with businesses.

Default Residential district speed limits





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.

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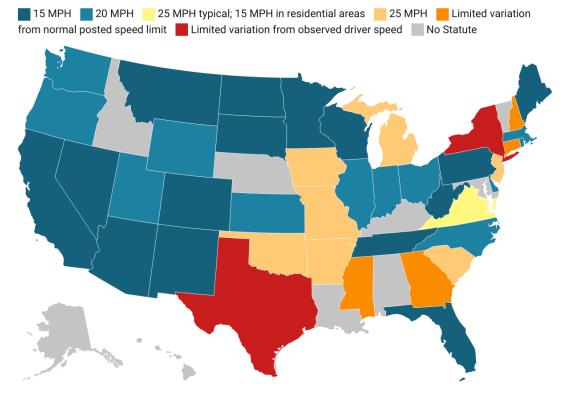
Speed Limits for Slower Speeds: School Zone Speed Limits

School zone speed limits are often limited to the area adjacent to a school and limited to the hours that a school is in session or that students are coming or going from the school. For these reasons, they have limited use in changing public policy to broadly allow 20 mph speed limits to promote better public health. However, school zone speed limits are also often the lowest speed limits found in state law and a prominent example of public policy prioritizing lower speeds for public safety.

Due to the limitations on time and place, school zone speed limits are most effective when integrated with proactive speed management that ensures a low differential between the school zone speed limit, the speed limit for the same road outside of school hours, and the speed limits of adjacent streets. Regardless of supporting infrastructure, a recent Minnesota Department of Transportation report found that school zone speed limits result in lower driver speeds and that speed limit compliance was highest when the difference between the school zone speed limit and speed limit at other times was low.⁵¹ In Seattle, after changes to state law allowed the city to implement 20 mph speed limits throughout non-arterial streets and 25 mph speed limits on arterial streets, many built environment changes were implemented in school zones to support 20 mph school zones.⁵² A proactive policy of lowering speed limits meant that there was a small or no difference between the school zone speed limit and the speed limit at other times of the day, making permanent built environment changes appropriate for the slower speed easier to justify.

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.



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)

Source: https://mdl.mndot.gov/_flysystem/fedora/2023-02/trs2301.pdf

As of January 2023, many states provide for a range of school zone speed limits that are relative to the posted speed limit at other times of the day. Without an associated speed management policy like Seattle's that lowers speed limits to reduce the differential with school zones, these laws may serve to keep speed limits higher in school zones than otherwise allowed.

Examples of this type of limitation include:

- » Restrictions on lowering the speed limit in a school zone more than 10 or 20 mph below the posted speed limit otherwise existing outside of school zone hours.
- » For example, Georgia does not allow a school zone to be more than 20 mph below the posted speed limit that exists at other times, so a 45 mph speed limit can be lowered to no lower than 25 mph during the hours of a school zone speed limit.
- » Restrictions on lowering the speed limit in a school zone more than 10 or 15 mph below the 85th percentile speed observed on the roadway outside of school zone hours.
- » For example, New York state does not allow a school zone speed limit to be more than 10 mph below the 85th percentile of the observed driver speeds on the roadway outside of school zone hours. If 15 percent of drivers are observed going 35 mph or more then the school zone speed limit cannot be lower than 25 mph regardless of whether drivers are breaking the law when observed going 35 mph or more.



Speed Limits for Slower Speeds: Alleys and Parks

Alleys and parks tend to be very limited in scope, but can have some of the lowest statutory speed limits based on context.

Alley statutory speed limits are usually very slow because of the geometric constraints of the road type. There are seven states that provide for alley speed limits of 15 mph or less statewide, and three that provide alley speed limits of 15 mph for specific jurisdictions or urban contexts. Alley statutory speed limits are often limited to roads that are not through roads, may be only one lane, and which provide access to the rear or side of buildings.⁵³ At least one state also requires local designation.⁵⁴

Park road statutory speed limits vary somewhat widely in scope and speed limit. Several states, like Minnesota, Wisconsin, and Washington provide speed limits under 20 mph for certain areas with children or campers. 55 Other states are more concerned with sprawling state parks and refuges. 56 Some states, like Illinois, contemplate urban parks and park zones that are very similar to school zones, with similar restrictions. 57

For both alley and park statutory speed limits, their restricted nature prevents them from being used to widely promote 20 mph speed limits as currently written.

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
lowa		35 mph (state parks and preserves)
Oklahoma		35 mph (state parks and wildlife refuges)

Speed Limits for Slower Speeds: Explicit Preemption of Slower Speeds

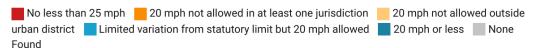
While this discussion has focused on laws that create slow speed limits, the review of state laws also identified **five states that explicitly do not allow 20 mph speed limits** on public roads that are not subject to a school zone speed limit or other special circumstance. In these states, legislative changes would be needed before 20 mph speed limits could be used more broadly.

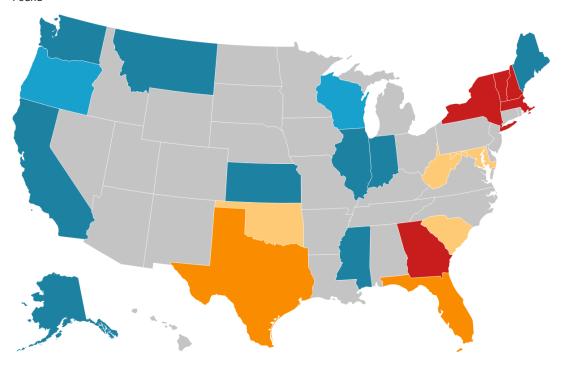
State laws that explicitly preempt 20 mph speed limits typically do so by:

- » Saying a speed limit in an urban district or similar district can be no less than 25 mph;
- » Saying a speed limit outside of an urban district or similar district can be no less than 25, 30, or 35 mph; or
- » Saying a speed limit in an urban district or similar district in a certain type of jurisdiction, like a county or municipality, can be no less than 25 mph.

Explicit Limits on Lower Speed Limits

Only five states explicitly preempt the creation of 20 mph speed limits in urban districts. Most states have no explicit legal barriers to 20 mph speed limits, meaning they have room in their policies and procedures to support 20 mph speed limits for health and safety.





State laws allowing 20 mph speed limits may be a necessary precursor to agencies designing roadways to achieve 20 mph speeds. The policies and procedures adopted by each state Department of Transportation and local agency responsible for roadways may use posted speed limits in determining the design speed of a roadway, preventing 20 mph design speeds if they are not allowed by law.

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Most states do not have explicit legal barriers to 20 mph speed limits and can develop policies and procedures to enable more 20 mph streets under existing laws. However, there may be functional barriers to reducing speed limits to 20 mph when state laws do not provide for 20 mph speed limits. Functional barriers include requirements for traffic studies to justify reducing speed limits, which may be cost-prohibitive and add significant delays to roadways projects; requirements that speed limits are based on existing travel speeds, often called the "85th percentile rule;" requirements that a state rather than local agency administer the traffic study; and requirements that a state rather than local agency approve any speed limit reduction. Restrictions on lowering speed limits are usually justified by preserving the enforceability of a speed limit.

These functional barriers can be addressed by legislative changes or by administrative changes. Examples of recent legislative changes that reduced barriers to lower speed limits include:

- washington where RCW 46.61.415 (3) provides that "Local authorities in their respective jurisdictions may establish a maximum speed limit of 20 miles per hour on a nonarterial highway or part of a nonarterial highway [which] does not need to be determined on the basis of an engineering and traffic investigation if the local authority has developed procedures regarding establishing a maximum speed limit under this subsection."58
- » Minnesota where 169.14 Subd. 5h. provides that "A city may establish speed limits for city streets under the city's jurisdiction...without conducting an engineering and traffic investigation [if the city] develop[s] procedures to set speed limits based on the city's safety, engineering, and traffic analysis."59
- » California where 2021's AB 43 created a new type of district called a "business activity district" with special rules that provide that "Notwithstanding any other law, a local authority may, by ordinance, determine and declare a 25 or 20 miles per hour prima facie speed limit on a highway contiguous to a business activity district when posted with a sign that indicates a speed limit of 25 or 20 miles per hour."60

Examples of recent administrative changes that reduced barriers to lower speed limits include:

- » Colorado where the Colorado Department of Transportation recently announced changes to its speed management process "embracing a new technique that allows state traffic engineers to weigh other factors more heavily while setting speed limits on state-controlled roads and highways. Those include the road's purpose, geometry and the number of pedestrians and cyclists who use it."61
- » Minnesota where the Minnesota Department of Transportation issued "Guidelines for Determining Speed Limits on Municipal Roadways" that lay out a process for reducing speed limits and implementing pedestrian and bicycle safety strategies, while acknowledging that the critique of the "85th percentile rule" related to its exclusion of biking and walking "is correct." Several cities that used existing authority to lower speed limits to 20 mph are highlighted.
- » Massachusetts where the Massachusetts Department of Transportation created a "Safe speeds: roadway treatment technical toolkit" that emphasizes establishing a target speed and choosing infrastructure treatments appropriate for achieving safety given that chosen target speed. Beyond just the potential for changing posted speed limits, the toolkit says "effective speed management requires a comprehensive plan that includes physical roadway features designed to control driving speeds." While Massachusetts law currently prevents speed limits of 20 mph, a 2016 legislative change lowered urban speed limits from 30 mph to 25 mph and has been reinforced by policies and toolkits related to roadway design.64

THE BOTTOM LINE: The current rarity of 20 mph speed limits can be seen as a barrier because that rarity supports attitudes like "speed limits less than 25 mph are generally considered to be unrealistically low for public roads." To counter this attitude it will take active engagement among state and local agencies to develop new approaches that embrace 20 mph speed limits as speed limits that save lives and better support health and safety.

Conclusion

Statutory speed limits are one part of a comprehensive speed management approach. With the USDOT adopting a Safe System Approach that includes a Safe Speed objective, it is important to understand current laws, policy, and attitudes about what is a "safe speed." Research on crash severity shows that even a 5 mph decrease in the speed of a crash can have dramatic impacts on whether a crash results in serious injury or death. As more states, through their agencies and legislatures, engage with the Safe System Approach they should consider statutory speed limits as one way to say what is a "safe speed" for different contexts and how statutory speed limits can support "safe speeds."

Twenty mph speed limits are promoted for public health and safety because they help ensure that vehicle crashes are less common and more survivable when they occur. Currently, 20 mph speed limits are rarely promoted or enabled through state statutory speed limit laws. In urban district speed limits, it is more common for 20 mph speed limits to be explicitly prohibited than encouraged. With 19 states currently setting statutory speed limits in urban and business districts at 30 mph or above, significant opportunities for reducing risk exist without reaching the international best practice of 20 mph speeds. Decreasing vehicle speeds by any amount will reduce crash severity and improve injury outcomes.

Achieving 20 mph speeds on roads where people biking, walking, and using mobility devices are planned to regularly interact with people driving motor vehicles is likely to improve traffic safety and encourage physical activity, which has many health benefits. Of people who report traffic as a barrier to walking where they live, 79% report vehicle speed as contributing to traffic being a barrier. Decreasing vehicle speeds by any amount may address vehicle speeds as a barrier to walking and this may be particularly important in the 11 states that currently set statutory speed limits in residential districts at 30 mph or above.

This resource adds to the understanding of the legal frameworks that can be used to inform speed limit management at state and local levels to improve health and safety. Although not common, some states have begun to make changes to statutory speed limits and their efforts can help inform efforts in other states to set speeds 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. This report is designed to help highlight the importance of lowering speeds to help prevent injuries and fatalities and support activity-friendly routes to everyday destinations. These efforts are part of the Active People, Healthy NationSM Initiative that is working to help 27 million Americans become more physically active by 2027.





Endnotes

- 1 According to a study by the AAA Foundation for Traffic Safety, a person hit by a vehicle is five times more likely to die if hit at 42 miles per hour compared to 23 miles per hour. https://www. transportation.gov/NRSS/SaferSpeeds
- 2 https://www.sciencedirect.com/science/article/pii/ S2211335522003102
- 3 "In downtown Seattle, lowering default speed limits reduced the likelihood that a crash would involve an injury by a fifth on arterial roads" https://www.iihs.org/news/detail/lowering-speed-limitsmakes-seattle-streets-safer
- 4 https://www.victoriawalks.org.au/Assets/Files/Safe%20Speed%20 Report%20Dec%20202008.pdf referenced as one study supporting "studies have found that speed reduction schemes improve people's perception of safety and increase involvement in regular physical activity." in https://www.heartfoundation. org.au/getmedia/c771e0c2-8628-46d3-97c5-9ab2585c6114/ ReduceSpeed.pdf
- 5 https://www.cdc.gov/transportation/
- 6 https://www.who.int/publications/m/item/speed-management--a-road-safety-manual-for-decision-makers-and-practitioners.-2nd-edition
- 7 https://hria.org/resources/community-speed-reduction/
- 8 https://hria.org/wp-content/uploads/2017/01/TechReport_131209. pdf
- 9 https://www.cdc.gov/physicalactivity/community-strategies/ activity-friendly-routes-to-everyday-destinations.html
- 10 https://www.cdc.gov/physicalactivity/community-strategies/activity-friendly-routes-to-everyday-destinations.html
- 11 https://www.cdc.gov/physicalactivity/community-strategies/activity-friendly-routes-to-everyday-destinations.html
- 12 https://www.cdc.gov/physicalactivity/activepeoplehealthynation/everyone-can-be-involved/transportation.html
- 13 https://www.sciencedirect.com/science/article/pii/ S2211335522003102#:~:text=Nearly%2025%25%20of%20US%20 adults,as%20a%20potential%20mitigation%20strategy.
- 14 https://www.nhtsa.gov/sites/nhtsa.gov/files/811841b.pdf (see Figures 2.8 and 8.8)
- 15 Carlson, S.A., Watson, K.B., Paul, P., Schmid, T.L. and Fulton, J.E., 2017. Understanding the demographic differences in neighborhood walking supports. Journal of Physical activity and Health, 14(4), pp.253-264. Retrieved at https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC9619130/

- 16 https://www.roadsafetysweden.com/about-the-conference/stockholm-declaration/ (The United States joined other countries in the Stockholm Declaration but dissociated itself from several paragraphs unrelated to its statement related to safe speeds that endorsed the goal of "a maximum road travel speed of 30 km/h in areas where vulnerable road users and vehicles mix in a frequent and planned manner, except where strong evidence exists that higher speeds are safe"). See https://www.roadsafetysweden.com/contentassets/b37f0951c837443eb9661668d5be439e/u.s.-explanation-of-position-on-the-2020-stockholm-declaration.pdf
- 17 https://swov.nl/en/fact-sheet/30-kmh-zones
- 18 https://wisconsindot.gov/dtsdManuals/traffic-ops/manuals-andstandards/teops/13-05.pdf
- 19 https://www.federalregister.gov/ documents/2023/12/19/2023-27178/national-standards-for-trafficcontrol-devices-the-manual-on-uniform-traffic-control-devices-for

20 ld.

- 21 See Section 2B.13 Speed Limit Sign at https://mutcd.fhwa.dot. gov/htm/2009r1r2r3/part2/part2b.htm requiring an "an analysis of the current speed distribution of free-flowing vehicles." This requirement was eliminated in the 11th edition MUTCD published in December 2023, with the new requirement specifying "an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall consider the roadway context." https://mutcd.fhwa.dot.gov/pdfs/11th_Edition/Chapter2b.pdf. States have a two year adoption period to conform with the 11th edition MUTCD: https://mutcd.fhwa.dot.gov/resources/state_info/index.htm
- 22 https://www.transportation.gov/NRSS/SaferSpeeds
- 23 https://aaafoundation.org/impact-speed-pedestrians-risk-severeinjury-death/ and https://bikeleague.org/slow-roads-recap/
- 24 https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa09028/resources/DOT%20Speed%20Management%20Strategic%20Initiative.pdf
- 25 https://wisconsindot.gov/dtsdManuals/traffic-ops/manuals-and-standards/teops/13-05.pdf
- 26 https://aaafoundation.org/review-of-current-practice-for-setting-posted-speed-limits/
- 27 https://aaafoundation.org/review-of-current-practice-for-setting-posted-speed-limits/
- 28 See https://www.epa.gov/system/files/documents/2023-12/420r23033.pdf (at p. 22) and https://www.epa.gov/automotivetrends
- 29 https://aaafoundation.org/impact-speed-pedestrians-risk-severe-injury-death
- 30 https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa17048.pdf
- 31 https://highways.dot.gov/safety/data-analysis-tools/rsdp/rsdp-tools/highway-performance-monitoring-system-hpms
- 32 https://highways.dot.gov/safety/data-analysis-tools/rsdp/rsdp-tools/strategic-highway-research-program-shrp2

- 33 https://www.highwaysafetymanual.org/Documents/HSMP-1.pdf
- 34 https://www.fhwa.dot.gov/policyinformation/statistics/2020/hm10.
- 35 https://www.fhwa.dot.gov/policyinformation/statistics/2020/hm10.cfm
- 36 https://www.virginiaroads.org/datasets/vdot-posted-speed-limits/explore?filters=eyJDQVJfU1BFRURfTEINSVQiOlsyMCw3MF19
- 37 https://international.fhwa.dot.gov/programs/mrp/docs/FHWA-PL-23-006.pdf
- 38 https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/summary_ state_speed_laws_12th_edition_811769.pdf
- 39 https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/summary_ state_speed_laws_12th_edition_811769.pdf
- 40 See https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/summary_state_speed_laws_12th_edition_811769.pdf and https://www.datawrapper.de/_/GAHzc/
- 41 E.g. Florida provides that "with respect to a residence district, a county or municipality may set a maximum speed limit of 20 or 25 miles per hour on local streets and highways after an investigation determines that such a limit is reasonable" http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0316/Sections/0316.183.html
- 42 https://aaafoundation.org/review-of-current-practice-for-setting-posted-speed-limits/
- 43 https://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_504.pdf (see Table 19)
- 44 https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa12004.pdf
- 45 https://bikeleague.org/sites/default/files/UVC%20Definitions.pdf
- 46 https://ncutcd.org/wp-content/uploads/Sponsor%20 Comments/2022A/21B-ROR-01.pdf
- 47 "the issue officially now heads to the Ohio Department of Transportation, ODOT spokesman Matt Bruning said Tuesday that review should be perfunctory under the approach the city is using, which is to designate all of Downtown a 'business district.' ODOT had previously said it would have to approve a city traffic study before the speeds could be lowered, but that was before it understood the legal approach the city intended to employ, Bruning said. Therefore, the only state action still needed is to essentially make a record in a journal of the new speed limits, he said." https://www.usatoday.com/story/news/local/2023/02/07/odot-approval-sought-to-cut-downtown-speed-limits-to-25-mph-limit/69871374007/

- 48 http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_ Statute&URL=0300-0399/0316/Sections/0316.183.html
- 49 https://www.districtgov.org/images/whatshappening/ SpeedLimitStudy-SumterCounty.pdf
- 50 Title 75, Section 102 https://www.legis.state.pa.us/WU01/LI/LI/CT/ HTM/75/00.001.002.000..HTM
- 51 https://mdl.mndot.gov/_flysystem/fedora/2023-02/trs2301.pdf
- 52 https://sdotblog.seattle.gov/2018/07/30/new-speed-limit-map/; https://www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero/speedlimits; and https://sdotblog.seattle.gov/2021/04/02/were-working-with-seattle-public-schools-to-keep-families-safe-as-in-person-schooling-returns-with-new-school-streets-where-most-cars-are-not-allowed/
- 53 See, e.g. https://www.revisor.mn.gov/statutes/ cite/169.011#:~:text=%22Alleyway%22%20means%20a%20 private%20or%20public%20passage%20or,two%20or%20 more%20owners%20of%20abutting%20real%20properties.
- 54 https://law.justia.com/codes/indiana/2022/title-9/article-13/chapter-2/section-9-13-2-2-5/
- 55 https://docs.legis.wisconsin.gov/statutes/statutes/346/IX/57/4/i
- 56 https://law.justia.com/codes/oklahoma/2022/title-47/section-47-11-801/
- 57 See Sec. 11-605.3. Special traffic protections while passing parks and recreation facilities and areas.https://law.justia.com/codes/illinois/2022/chapter-625/act-625-ilcs-5/chapter-11/
- 58 https://apps.leg.wa.gov/RCW/default.aspx?cite=46.61.415
- 59 https://www.revisor.mn.gov/statutes/cite/169.14
- 60 https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB43
- 61 https://www.cpr.org/2023/09/15/cdot-lower-speed-limit-change-colorado/
- 62 See page 19 https://mdl.mndot.gov/items/2023RIC07
- 63 https://www.mass.gov/info-details/safe-speeds-roadwaytreatment-technical-toolkit
- 64 https://www.mass.gov/info-details/about-the-role-of-speed-limits
- 65 https://portal.ct.gov/-/media/DOT/documents/dstc/Guidelines-for-Establishing-Speed-Limits-in-the-State-of-Connecticut-102021.pdf
- 66 https://www.sciencedirect.com/science/article/pii/ S2211335522003102#:~:text=Nearly%2025%25%20of%20US%20 adults,as%20a%20potential%20mitigation%20strategy.