# City of Minneapolis Speed Limit Evaluation

3/12/2020

# Prepared by:



## Contents

Notice of Approval - 2

**Executive Summary** - 3

Background - 4

State legislation - 4

Local City policy and input that inform speed limits - 4

Minneapolis speed limit goals and guiding principles - 8

Coordination - 9

**Existing Conditions** – 9

Minneapolis speed limits - 9

Speed limits in other states – 11

Analysis - 12

National research, guidance, and standards for setting urban speed limits – 12

National safety research implications for speed limits - 15

Recent speed limit changes by other cities – 18

Local data - 19

Minneapolis street characteristics - 23

**Conclusions and Findings** – 26

Recommendations for City of Minneapolis Speed Limits – 28

Tiered approach to speed limits – 28

Application of the tiered approach to individual streets – 29

Future speed limit modifications - 31

Next Steps - 31

Communications and education plan - 31

Signage plan – 32

Traffic signal plan – 33

Enforcement considerations – 33

Evaluation plan – 33



Minneapolis Public Works 350 South 5<sup>th</sup> Street, Room 203 Minneapolis, MN 55415 Tel 612.673.2352 www.minneapolismn.gov



March 12, 2020

RE: Speed limit changes on City-owned streets

The City of Minneapolis is reducing speed limits on City streets in accordance with City policies and recent State legislative authority based on the attached *City of Minneapolis speed limit evaluation*. The new speed limits will be implemented as follows:

- 20 mph on City of Minneapolis minor streets. These are predominately local residential streets.
- 25 mph on most major City streets. Major streets are generally arterial and collector streets.
- 35 mph on four short segments of major City streets based on conditions.
- Alleys and Nicollet Mall will retain speed limits of 10 mph.

The map of these new speed limits on City streets is shown on page 30. The speed limit changes on individual streets will go into effect when signed as outlined in the signage plan portion of the evaluation.

Bryan Dodds, P.E.

City Engineer/Deputy Director of Public Works

Robin Hutcheson

**Director of Public Works** 

# **Executive Summary**

This report is a summary of the analysis undertaken to inform the City of Minneapolis approach to setting speed limits on City streets in accordance with City policies and recent State legislative authority.

The current speed limit on most streets owned by the City of Minneapolis is 30 miles per hour (mph), which is the statutory urban speed limit set by the Minnesota State Legislature. In May 2019, the Minnesota Legislature passed a law granting cities the authority to set speed limits on streets they control, effective August 1, 2019.

The report sets the new speed limits as follows:

- 20 mph on City of Minneapolis minor streets. These are predominately local residential streets.
- 25 mph on most major City streets. Major streets are generally arterial and collector streets.
- 35 mph on four short segments of major City streets based on conditions.
- Alleys and Nicollet Mall will retain speed limits of 10 mph.

The map of these new speed limits on City streets is shown on page 30.

Speed limits on streets owned by other jurisdictions, including the Minnesota Department of Transportation, Hennepin County, Minneapolis Park Board, and University of Minnesota, will not be changed as part of this process.

The City of Minneapolis has been partnering with the City of Saint Paul on speed limit changes and will implement changes on a similar timeline.

The new speed limits were determined based on the findings from detailed technical analysis, including:

- Speed limits lower than 30mph are justified because they:
  - o promote public health, safety and welfare (a person hit at 30 mph is three times as likely to be killed or severely injured than a person hit at 20 mph),
  - o support City policies,
  - o align with emerging national best practices for safe urban street operations, and
  - o are part of the City's comprehensive approach to Vision Zero, which includes other important actions to improve safety and support lower, safer speeds.
- Forthcoming guidance from the National Association of City Transportation Officials
  recommends a tiered approach by categories of streets as a best practice for setting speed limits
  and recommends 20 mph speed limit for minor urban streets and a 25 mph speed limit for
  major urban streets.
- These lower speed limits are reasonable given the clear differences in the design, context, safety, expectations, and operations of minor and major City streets.
- The City would not be able to easily message and educate on a single default speed limit given that County and MnDOT streets will continue to have 30 mph speed limits or higher and it's unknown if or when that will change.
- Portland and Seattle, which have similarities with Minneapolis in context and street design, have found success with this tiered approach.

# **Background**

# State legislation

In May 2019, the Minnesota Legislature passed and Governor Walz signed into law the authority allowing cities to set speed limits. Both statutes went into effect August 1, 2019.

The City of Minneapolis plans to use the new law to change speed limits from the state statutory urban speed limit of 30 mph. Cities must do so "in a consistent and understandable manner... based on the city's safety, engineering, and traffic analysis." They also must provide "appropriate signs" and consider "methods to effectively communicate the change to the public."

#### Full language of this statute is:

Minnesota Statutes, Section 169.14, Subd. 5h. **Speed limits on city streets.** A city may establish speed limits for city streets under the city's jurisdiction other than the limits provided in subdivision 2 without conducting an engineering and traffic investigation. This subdivision does not apply to town roads, county highways, or trunk highways in the city. A city that establishes speed limits pursuant to this section must implement speed limit changes in a consistent and understandable manner. The city must erect appropriate signs to display the speed limit. A city that uses the authority under this subdivision must develop procedures to set speed limits based on the city's safety, engineering, and traffic analysis. At a minimum, the safety, engineering, and traffic analysis must consider national urban speed limit guidance and studies, local traffic crashes, and methods to effectively communicate the change to the public.

The other new 2019 speed limit-related statute (Section 169.011, Subd. 64) expands the definition of a residential roadway and allows cities the authority to enact a speed limit of 25 mph on streets "in an area zoned exclusively for housing that is not a collector or arterial street." To utilize this provision, cities are not required to do a study, but must post speed limit signs at the beginning and end of the roadway section. Minneapolis does not currently plan to utilize this statute.

### Local City policy and input that inform speed limits

Existing City of Minneapolis policy prioritizes traffic safety and access for people walking, biking, and taking transit. Three different City policies—Minneapolis 2040, the Minneapolis Vision Zero Action Plan, and the Minneapolis Vision Zero policy—specifically reference lowering speed limits to meet those goals. Details of existing Minneapolis policy and plans that inform speed limits and a summary of related community input are included in the following sections.

#### **City Council speed limits staff direction**

In December 2019, the City Council adopted a <u>staff direction</u> that accompanied a process-focused speed limits ordinance change:

- 1. Directing Public Works to present a report on the technical analysis and communications plan for speed limit changes to the Transportation and Public Works Committee by no later than March 17, 2020.
- 2. Directing the City Engineer to set speed limits that:

- support reaching the City's Vision Zero traffic safety goal of zero traffic deaths or severe injuries;
- reflect the City's Complete Streets policy by improving access and comfort for people walking, biking, and taking transit;
- reflect projected future street use resulting from anticipated land use changes;
- support moving people and goods; and
- are reasonable, comfortable, and technically defensible.

#### Minneapolis Vision Zero policy and Vision Zero Action Plan

In September 2017, the Minneapolis City Council unanimously adopted a Vision Zero resolution, which set a goal of eliminating traffic deaths and severe injuries on City of Minneapolis streets by 2027. The resolution explicitly acknowledges that Vision Zero "may result in changes to the City's approach to the planning and design of streets" and the potential "to advocate for reduced City speed limits."

The 2020-2022 Vision Zero Action Plan, which was adopted by the City Council in December 2019, identifies "reduce speed limits" as a strategy and includes actions to:

- "Analyze, determine, and implement new speed limits on City streets.
- Proactively communicate speed limit changes and the connection between speed and safety.
- Utilize mobile speed wagons and high-visibility enforcement with warnings to increase awareness and compliance with new speed limits.
- Partner with Hennepin County and MnDOT on speed limit changes on their streets as appropriate.
- Monitor and evaluate results of speed limit changes and communication efforts and adjust as appropriate.
- Update the City's Street Design Guide as part of the Transportation Action Plan to support new speed limits."

The Vision Zero Action Plan also includes "supporting safe speeds" as a critical component of the work: "Given the importance of traffic speeds in supporting safety, supporting safe speeds is a priority in this plan. Safe speeds can vary for different types of streets based on the context, demands, and design. No single speed-related action alone will lead to safe speeds; a combination of policy changes, street design, education, communications, and enforcement are needed."

#### **Strategic and Racial Equity Action Plan**

Public safety is one of eight goals of the 2019 City of Minneapolis Strategic and Racial Equity Action Plan (SREAP). SREAP says "the City prioritizes collaborative and community-inclusive strategies to ensure safety for all members of our community." SREAP also has a goal on built environment and transportation: "the City prioritizes high quality neighborhoods, streets, infrastructure and equitable access to multimodal transportation in all parts of the City through thoughtful planning and design."

#### Minneapolis 2040 Comprehensive Plan

The Minneapolis 2040 Comprehensive Plan, initially adopted by the City Council in 2018, has goals for "healthy, safe, and connected people" and "complete neighborhoods," which will provide all residents

"access to employment, retail services, healthy food, parks, and other daily needs via walking, biking, and public transit."

"The Transportation policies of the [Minneapolis 2040] plan support a multimodal network that prioritizes walking, biking and transit. The polices are intended to achieve outcomes that increase equity in our transportation system, address climate change and reduce carbon emissions, improve human health through improved air quality and increases in active travel, and enable the movement of people, goods, and services across the city."

Minneapolis 2040 actions that inform the City's approach to speed limits include:

- Under the Pedestrian policy: "Improve safety for pedestrians, and prioritize pedestrians over
  other road users, especially at street intersections; focus on signals, crosswalks, lighting,
  signage, visibility, and lowering vehicular speeds through street design and other measures."
- Under the Vision Zero policy: "Pursue changes to state statute to allow reduction of speed limits on Minneapolis streets, and use existing statutory authority to reduce speed limits on streets with bicycle facilities."
- Under the Complete Streets policy: "Implement the Complete Streets Policy throughout all phases of transportation projects and initiatives, including programming, planning, design, construction, operation, and maintenance."

## **Minneapolis Complete Streets policy**

The Minneapolis Complete Streets policy, adopted in May 2016, "establishes a modal priority framework that prioritizes people as they walk, bicycle, and take transit over people when they drive." The policy notes that "safety of the most vulnerable street users must be the highest priority, because they are the most at risk."

The Complete Streets policy includes a section on street operations: "The operation of the public right-of-way is a significant opportunity to implement the City's modal priority framework that prioritizes people as they walk, bicycle, and take transit. The timing of traffic signals will reflect this modal priority framework, such that signal timing plans will incorporate multimodal metrics. Ongoing monitoring and evaluation of the operation of the public right-of-way should support safe, comfortable, and convenient travel for people that choose to walk, bicycle, take transit, or drive a vehicle." Lowering of speeds will support the safety and comfort of people as pedestrians, bicyclists, and transit users.

# **Draft Transportation Action Plan**

The City of Minneapolis is currently updating its 10-year transportation plan, called the Transportation Action Plan. A draft of the plan was released on March 8, 2020.

The Transportation Action Plan has six goals:

- Climate: Reshape the transportation system to address climate change, using technology, design, and mobility options to aggressively reduce greenhouse gas emissions caused by vehicles.
- Safety: Reach Vision Zero by prioritizing safety for all people and eliminate traffic fatalities and severe injuries by 2027.

- Equity: Build and operate a transportation system that contributes to equitable opportunities and outcomes for all people.
- Prosperity: Provide mobility options that move people and goods through reliable connections; retain top talent and grow Minneapolis as the economic engine of the region.
- Mobility: Embrace and enable innovation and advances in transportation to increase and improve mobility and access options for all.
- Active partnerships: Create and seize opportunities to achieve shared goals and responsibilities
  through partnering and leveraging funding opportunities with national and regional partners
  and others who invest in the city.

Minneapolis Public Works is also updating the City's Street Design Guide in coordination with the Transportation Action Plan. The updated Street Design Guide will use Complete Streets and Vision Zero as guiding policies and likely will identify target operating speeds between 20 and 25 mph for most City streets, depending on context, purpose, and use.

#### City of Minneapolis legislative agenda related to speed limits

When adopting the Vision Zero policy in 2017, the City Council also added gaining local control of speed limits to the City's legislative agenda: "improve roadway safety, reduce crashes, and support neighborhood livability by enabling local municipalities to set underlying speed limits, and supporting additional design features on local roadways."

#### Community input around traffic speeds and speed limits

Public Works regularly receives concerns and input about traffic speeds from residents and neighborhood organizations. These concerns and input are received through the City's 311 system, the over 150 neighborhood meetings attended annually, and through direct communications. Two ways that Public Works responds to these concerns and input are by deploying mobile speed display signs at approximately 150 locations annually, and conducting over 300 speed and crash evaluations annually. In totality, Public Works responds to approximately 8,000 requests annually related to traffic safety. A majority of these requests relate to local residential streets where most drivers are not exceeding the current 30 mph speed limit. The volume of resident concerns about traffic speeds led to the creation of the 2009 traffic calming guidance referenced in Access Minneapolis. Some of the requests from residents and neighborhood organizations are to lower speed limits, although the City has lacked the authority to do so on most streets.

During 2019 engagement around the Vision Zero Action Plan, many residents offered concerns around traffic speeds. "Slow down cars and trucks to safer speeds" was consistently ranked as the second highest priority area the City should focus on to improve traffic safety. Highlights from 965 responses to the online Vision Zero Action Plan questionnaire include:

- 59% of respondents said "speed limits that are too high" was somewhat a problem or a significant problem;
- 73% said "streets that are wide and encourage higher driving speeds" was somewhat a problem or a significant problem; and
- 90% said they are somewhat or very concerned about speeding traffic.

During the comment period on the draft 2020-2022 Vision Zero Action Plan, the City received 139 comments specifically about the strategy to lower speed limits. There was more support expressed than opposition to reducing speed limits. Supporters generally spoke to the safety benefits of lower speeds while opponents often expressed skepticism about the value of reducing the speed limit and suggested enforcing the existing speed limits instead. The plan was adjusted to include a section on the interconnected strategies needed to support safe speeds and an enforcement-related action was added with the speed limit strategy.

## Minneapolis speed limit goals and guiding principles

Based on City Council actions, City policies and plans, the following set of goals and guiding principles were established regarding speed limits.

#### **Speed limit goals**

The City manages its "public right-of-way to protect the public health, safety and welfare" (Minneapolis Code of Ordinances, chapter 451.20, Subd. 5). Therefore, the City seeks to achieve these goals with the proposed speed limits process:

- Set speed limits that:
  - support reaching the City's Vision Zero traffic safety goal of zero traffic deaths or severe injuries;
  - reflect the City's Complete Streets policy by improving access and comfort for people walking, biking, and taking transit;
  - o reflect projected future street use resulting from anticipated land use changes;
  - o support moving people and goods; and
  - o are reasonable, comfortable, and technically defensible.
- Educate street users so that they know about new speed limits and the important connection between speed and safety.

#### **Speed limit guiding principles**

- Set speed limits in a consistent and understandable manner.
- Create and follow a technical and data-driven review process that is defensible and replicable by other cities in Minnesota.
- Partner where feasible with neighboring cities, Hennepin County, and MnDOT to maximize consistency in new speed limits.
- Coordinate the speed limit change with Vision Zero Action Plan implementation.
- Monitor and evaluate the results of the speed limit changes, and adjust if necessary.

# Coordination

Minneapolis Public Works has collaborated with internal and external partners throughout the speed limit analysis. Minneapolis has partnered with the City of Saint Paul to ensure consistency in general approach, communications, and implementation timeline. Key decisions around process, analysis, recommendations, and implementation were made jointly between the two cities.

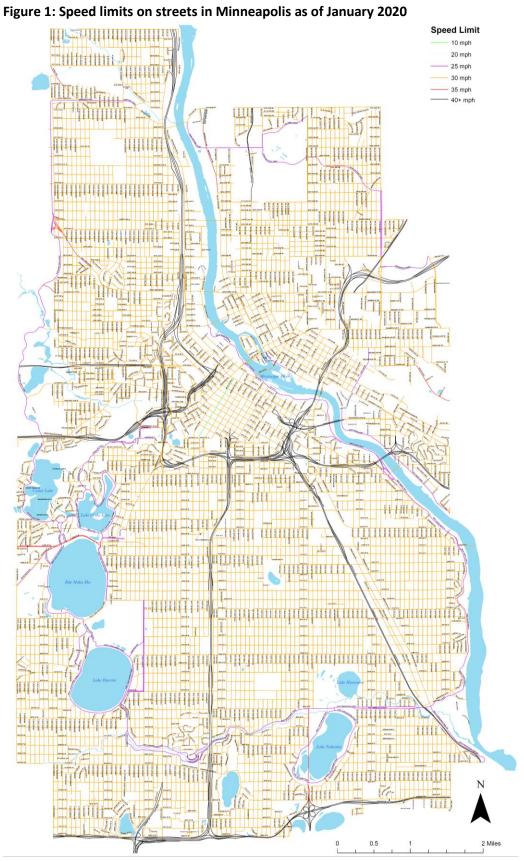
Internal collaborators include the City Attorney's office, Communications, Police, and the Vision Zero Task Force. Minneapolis Public Works also coordinated with the Minnesota Department of Transportation, Hennepin County, Minneapolis Park and Recreation Board, and Metro Transit. City engineers in adjacent cities were informed of process, timeline, goals, and approach. Staff shared goals, background information, and process steps with the City Engineers Association of Minnesota and League of Minnesota Cities.

A draft version of this analysis was shared with four engineers from different perspectives for a peer review. Each reviewer felt that the recommendations were technically defensible based on the background and analysis while their questions and feedback helped us further strengthen our approach.

# **Existing conditions**

## Minneapolis speed limits

The current speed limit on most streets owned by the City of Minneapolis is 30 mph (Figure 1), which is the statutory urban speed limit set by the Minnesota State Legislature. The speed limit on most Hennepin County roads and MnDOT trunk highways is also 30 mph, although a few more segments have higher speed limits. The speed limit on Minneapolis Park and Recreation Board parkways is 25 mph.



# Speed limits in other states

In 2017, a majority of states (30) had a default urban speed limit of 25 mph, including all of Minnesota's neighboring states (see Figure 2). In addition, 17 states allow 20 mph speed limit if certain conditions are met. Since 2017 some states have made changes to their speed limits under various conditions.

Speed Limit

Speed Limit

Speed Limit

Substitute

Sub

Figure 2: Default urban speed limit

Sources: USDOT, NHTSA As of 2017

# **Analysis**

# National research, guidance, and standards for setting urban speed limits

In recent years, the transportation industry has sought change in approach to setting urban speed limits and that is now beginning to yield new and updated guidance. New and updated guidance is moving toward a safe-systems approach to setting speed limits on urban streets rather than one focused on current observed traffic speeds. This section outlines this new and updated guidance.

### **National Transportation Safety Board**

In 2017, the National Transportation Safety Board released a comprehensive report <u>Reducing Speeding-Related Crashes Involving Passenger Vehicles</u>. The report directly addresses the traditional methods for setting speed limits and the challenges with those methods:

"Typically, speed limits are set by statute, but adjustments to statutory speed limits are generally based on the observed operating speeds for each road segment—specifically, the 85th percentile speed of free-flowing traffic. Raising speed limits to match the 85th percentile speed can result in unintended consequences. It may lead to higher operating speeds, and thus a higher 85th percentile speed. In general, there is not strong evidence that the 85th percentile speed within a given traffic flow equates to the speed with the lowest crash involvement rate for all road types. Alternative approaches and expert systems for setting speed limits are available, which incorporate factors such as crash history and the presence of vulnerable road users such as pedestrians" (Executive Summary, Page x).

#### The report goes on to say:

"The relationship between speed and injury severity affects more than just speeding vehicle occupants. This is particularly true in urban areas where the interaction between vehicles and vulnerable road users such as pedestrians is considerably higher. A safe system approach to setting speed limits emphasizes the consideration of human biomechanical tolerances and shifts the focus from vehicles to all road users. Especially in urban areas, it has emerged as an alternative to the use of the 85th percentile speed in setting speed limits in speed zones" (Rethinking How to Set Speed Limits, page 29).

The report recommends changes to the Federal Highway Administration's *Manual on Uniform Traffic Control Devices* ("MUTCD") "to, at a minimum, incorporate the safe system approach for urban roads to strengthen protection for vulnerable road users" (page 29).

#### Manual on Uniform Traffic Control Devices (MUTCD)

The MUTCD sets minimum standards and provides guidance to ensure uniformity and consistency on the public transportation system. In the State of Minnesota, the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) is used. The MN MUTCD and MUTCD are, in general, identical in language, and exact in language as it references speed limits. It is routine that new and addendum language of the MUTCD is adopted by the MN MUTCD.

Based on the National Transportation Safety Board recommendation, the National Committee on Uniform Traffic Control Devices (NCUTCD) began collecting feedback and considering changes to the MUTCD related to setting speed limits.

The current MUTCD offers the following standards (not guidance) for setting speed limits:

- "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 include an analysis of the current speed distribution of free-flowing
  vehicles."
- "The Speed Limit sign... shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph" (Section 2B.13 page 56).

The current MUTCD offers the following guidance (not standard) on setting speed limits:

- "States and local agencies should conduct engineering studies to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes."
- "When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th-percentile speed of free-flowing traffic" (Section 2B.13, page 58).

The current MUTCD offers the following option (not guidance or standard) on setting speed limits:

- "Other factors that may be considered when establishing or reevaluating speed limits are the following:
  - A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
  - B. The pace;
  - C. Roadside development and environment;
  - D. Parking practices and pedestrian activity; and
  - E. Reported crash experience for at least a 12-month period" (Section 2B.13, page 58).

The National Committee on Uniform Traffic Control Devices (NCUTCD) recently approved <u>recommended</u> <u>changes to the current MUTCD related to setting speed limits</u>. These recommendations are provided to FHWA for consideration in the next edition of the MUTCD, which requires federal rulemaking. The FHWA has not initiated rule making for the next edition of the MUTCD yet, but this is expected to begin within the next year. The recommendations approved by the NCUTCD include:

- Removing from standard that "The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles."
- Upgrading and revising the considerations for establishing speed zones to read:
  - "Factors that 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 85<sup>th</sup> percentile, the pace, and 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, and sight distance).
  - D. Road context (such as roadside development and environment including number of driveways and land use, functional classification, parking practices, presence of sidewalks/bicycle facilities).

- E. Road users (such as pedestrian activity, bicycle activity)."
- Revising the guidance statement regarding the posted speed limit being made within 5 mph of the 85<sup>th</sup> percentile speed to apply only "on freeways, expressways, or rural highways."

#### **National Association of City Transportation Officials speed limit guidance**

The National Association of City Transportation Officials (NACTO) guide *City Limits: Setting Safe Speeds for Urban Streets* provides urban speed limit guidance and will be released in March 2020.

NACTO's guide identifies two general approaches (citywide or category of street) for setting speed limits and states the following:

"Cities have two options for setting default speed limits: citywide or by category of street (e.g., major, minor, alley).

Citywide speed limits are generally easier to implement and may be easier for drivers to follow. However, in cities where there is clear differentiation between major arterial streets and local or minor streets, setting speed limits based on category of street can sometimes allow cities to lower speed limits on a large number of streets below what would be allowable citywide (i.e., 20 mph on minor streets vs. 25 mph citywide).

If cities have the authority to set default speed limits, they should decide whether to implement citywide limits or category limits based on what makes the most sense given the local conditions" (page 46).

If setting a default citywide speed limit, NACTO recommends using 25 mph. "Setting or lowering default citywide speed limits is an inexpensive, scalable way to quickly improve safety outcomes, and establish a basis for larger safety gains. Default citywide limits also provide consistent expectations and messages about speed across the jurisdiction, which is easy for drivers to follow" (page 47).

If using category speed limit approach, NACTO recommends:

- Major streets: 25 mph.
  - "A 25 mph speed limit on urban multi-lane streets has demonstrable safety benefits for all users. Major streets feature a combination of high motor vehicle traffic volume, signalization of major intersections, and an inherently multimodal street environment" (page 49).
- Minor streets: 20 mph.
  - "A 20 mph speed limit on minor streets supports safe movement and contextually appropriate design on the majority of city streets. Since minor streets tend to have either very low volumes or operate at the speed of the most cautious driver, cities can apply a category speed limit to minor streets without detailed review of street characteristics. Minor streets include physically small streets where low speeds are often already present, as well as low-vehicle-volume streets with few or no transit stops" (page 50).
- Alleys and shared streets: 10 mph

NACTO identifies that cities can define "slow zones."

"Slow Zones are specifically designated areas with slower speeds than otherwise similar streets in the same jurisdiction. Neighborhood-scale or site-specific zones are useful for addressing high-priority areas such as areas with elevated collision rates or sensitive land uses (schools, parks, etc.). Cities should create slow zones based on their own location-specific needs, but several types of slow zones are relatively common" (page 54).

The guide provides examples of potential slow zones in school, park, and senior areas; neighborhoods and districts; and in downtown areas.

The NACTO guide includes additional details for analyzing speeds on major streets if a jurisdiction is not able to set default citywide or category speed limits. The guide recommends setting safe speed limits by evaluating conflict density and activity level. Their recommendations say that streets with high activity and high conflict density should have 20 mph speed limits while urban streets with low activity levels and low conflict density should have maximum speed limits of 35 mph.

#### National Cooperative Research Program report on speed limit guidance

There is an active research study on speed limits that is not yet available, so its recommendations could not be considered as part of this analysis. Public Works will consider this study as part of future evaluation of speed limits. The research objectives of <a href="National Cooperative Research Program">National Cooperative Research Program</a> (NCHRP) project 17-76 are to:

- Identify and describe factors that influence operating speed; and
- Provide guidance to make informed decisions related to establishing speed limits on roadways.

#### National safety research implications for speed limits

There are a number of studies that address impact of traffic speeds and safety. Generally, higher speeds increase the likelihood of a crash and the likelihood that a crash will be severe or fatal.

The National Transportation Safety Board 2017 report *Reducing Speeding-Related Crashes Involving Passenger Vehicles* summarizes the connection between speed and safety:

"Speed—and therefore speeding—increases crash risk in two ways: (1) it increases the likelihood of being involved in a crash, and (2) it increases the severity of injuries sustained by all road users in a crash.

The relationship between speed and crash involvement is complex, and it is affected by factors such as road type, driver age, alcohol impairment, and roadway characteristics like curvature, grade, width, and adjacent land use. In contrast, the relationship between speed and injury severity is consistent and direct. Higher vehicle speeds lead to larger changes in velocity in a crash, and these velocity changes are closely linked to injury severity. This relationship is especially critical for pedestrians involved in a motor vehicle crash, due to their lack of protection" (Executive Summary page ix).

A key factor in the likelihood of a crash is how far it takes to stop. Figure 3 outlines the relationship between stopping sight distance and speed. Stopping sight distance grows with speed. According to the American Association of State Highway and Transportation Officials (AASHTO), it takes the average driver 301 feet to stop at 40 mph, 197 feet at 30 mph, and 112 feet at 20 mph. A change from 30 to 20 mph results in a vehicle stopping 85 feet sooner, which is a significant distance. To understand this better and provide a Minneapolis context, a typical city long block is 600 feet and short block is 300 feet. Thus, the reduced 85 feet distance is 14% of a long block and 28% of a short block. Another way to visualize these 85 feet as almost 5 car lengths of 18 feet each. Note that other research yields different stopping distances based on different reaction times and speeds of braking (AASHTO guidance is conservative), but it always takes longer to stop at higher speeds.

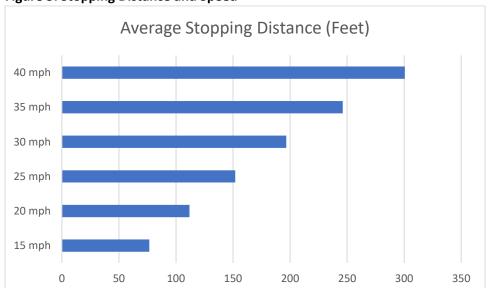


Figure 3: Stopping Distance and Speed

Data Source: American Association of State Highway and Transportation Officials (AASHTO). A Policy on Geometric Design of Highways and Streets. Washington, DC: AASHTO, 2011. "Assumes 2.5 second perception-braking time and 11.2 ft/sec2 driver deceleration."

Figure 4 (next page) shows the relative crash risk for a pedestrian hit at different speeds. A person is about 74 percent more likely to be killed if they're struck by a vehicle traveling at 30 mph than at 25 mph. A person hit at 35 mph is 3 times as likely to be killed than at 25 mph.

While the fact that lower traffic speeds increase safety is well established, there has been less study on the impact of speed limits on traffic speeds. A 2018 Insurance Institute for Highway Safety study <a href="Lowering the Speed Limit from 30 to 25 mph in Boston: Effects on Vehicle Speeds">Lowering the Speed Limit from 30 to 25 mph in Boston: Effects on Vehicle Speeds</a> is the most recent detailed look at the impact of a change in speed limits on vehicle speeds. The study concluded that "lowering the speed limit in urban areas is an effective countermeasure to reduce speeds and improve safety for all road users" (page 2).

The study found significant reductions in the odds that vehicles were exceeding 30 mph and 35 mph. There was a 29.3 percent decline in the odds of speeding for vehicles traveling faster than 35 mph. Reduction in higher urban speeds is especially valuable because risk to pedestrians increases drastically between 25 mph and 35 mph.

Figure 4: Pedestrian Risk and Impact Speed



The study shows that there was only a small change in the average traffic speed in Boston after the speed limit change, reinforcing that people generally drive to what they feel is comfortable given the context and design of the street. These results also suggest that there was less speed differential with the 25-mph limit than with the 30-mph limit since higher-end speeds decreased. Minimizing speed differential has been one of the long-standing rationales for using the 85<sup>th</sup> percentile for setting speed limits, but this study reinforces that behavior on urban streets is different than rural and highway conditions.

The Seattle Department of Transportation recently released evaluation of speed limit changes they made in 2016. Figure 5 (next page) shows they have seen a 21 percent reduction in total crashes on local streets since they lowered speed limit on those streets to 20 mph.

Seattle also found a 13 percent reduction in total crashes and 20 percent reduction in fatal and serious injury crashes after downtown speed limits were lowered from 30 mph to 25 mph. Seattle found even larger reduction in crashes after speed limits were lowered on several streets outside of downtown and recently decided to expand 25 mph speed limits to most arterial streets across the city.

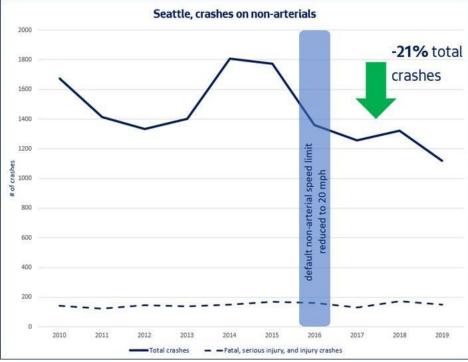


Figure 5: Seattle crashes on non-arterial streets after speed limit change

Source: Dongho Chang, Seattle Department of Transportation

# Recent speed limit changes by other cities

A growing number of cities have lowered speed limits in recent years, including Charlotte, Seattle, Albuquerque, Cambridge, Boston, Portland, and New York City. In Minnesota, Nevis was the first city to lower speed limits after the new speed limit: they lowered speed limits on residential streets to 20 mph.

To inform the City's speed limit recommendations, Minneapolis spoke with New York City, Portland, and Seattle about their experiences, process, and lessons learned from recent speed limit changes. New York City provides an example of a city that recently changed their citywide default speed limit to 25 mph while Portland and Seattle provide slightly different examples of using a tiered category approach to setting speed limits. Overall, each city lowered speed limits to support safety and has found success with their speed limit change.

#### **New York City**

New York City uses a citywide default speed limit for all streets and then identifies specific slow zones with lower speed limits and some larger streets with higher speed limits. In 2014, New York City lowered their citywide default speed limit to 25 mph from 30 mph. The change came shortly after state law was changed to give New York City the authority to lower speed limits to 25 mph.

New York City had signed 20 mph "slow zones" in about 30 areas of the city—typically quieter residential neighborhoods. These slow zones were in place prior to the change in the default speed limit and are accompanied by signage and traffic calming features. New York City has not added slow zones after they changed the default speed limit.

In New York City, only a few non-limited access highways have a speed limit higher than 25 mph. Those are all signed. The City of New York has created maps that document speed limits before and after the change in default speed limit.

#### **City of Portland**

Portland uses a tiered category approach to setting speed limits with default speed limits for business districts and residential districts and street-by-street designations for other streets. Portland does not currently have broad authority to set speed limits on all their streets, but does have authority to set residential speed limits at 20 mph. In 2018, Portland lowered the speed limit on residential district streets to 20 mph shortly after getting legislative authority to do so. The state statutory speed limit is 20 mph for business districts (mostly downtown) and has been so for many years.

Portland has been working to lower speed limits on non-residential streets for several years and must get approval from the Oregon Department of Transportation to do so. In 2016, Portland received Oregon DOT approval for an alternative process to make lowering those speed limits easier. Portland continues to seek further legislative authority over their speed limits. More details on Portland's approach to speed limits are available here.

#### **City of Seattle**

Seattle uses a tiered category approach to setting speed limits. In 2016, Seattle City Council adopted new default speed limits of 20 mph for residential streets and 25 mph for arterial streets unless otherwise signed. Those changes came a few years after the Washington state legislature gave cities the authority to lower speed limits on residential streets. Otherwise, the default urban statutory speed limit in Washington state is 25 mph.

Seattle has been lowering speed limits on many of its higher speed streets as well in recent years. They have been piloting use of the 50<sup>th</sup> percentile (rather than 85<sup>th</sup> percentile) for setting speed limits on busier street in their urban village areas. In December 2019, Seattle announced that it was lowering the speed limit on most arterial streets to 25 mph. More details on Seattle's speed limits are <u>available here</u>.

#### Local data

#### Minneapolis crash analysis implications for speed limits

In 2017 and 2018, Minneapolis completed two comprehensive crashes studies that analyzed non-Interstate crashes in the city between 2007 and 2016: the Pedestrian Crash Study, which focused on pedestrian crashes, and the Vision Zero Crash Study, which focused on motor vehicle and bicycle crashes.

Two top implications from these studies for speed limits are:

- 1. Speed and speeding are key factors in severe and fatal crashes in Minneapolis.
- 2. While crashes happen on all types of streets, crashes are concentrated on higher-traffic streets, which often have higher design and operating speeds.

Key findings from Minneapolis crash studies that help inform future speed limits include:

- An average of 11 people were killed in traffic crashes on streets in Minneapolis each year and an additional 84 were severely injured. People walking and people biking are overrepresented in severe and fatal crashes on Minneapolis streets. Nationally, pedestrians are growing as a percentage of severe and fatal crashes in recent years.
- Streets with higher speed limits were more likely to have more crashes (Figure 6, next page)
  and crashes on those streets were more likely to be severe or fatal than for streets with lower
  speed limits. Those differences were especially pronounced for pedestrians (Figure 7, next
  page).
- Speeding was one of the top 5 behaviors leading to severe crashes in Minneapolis, based on follow-up analysis of the crash studies done for the Vision Zero Action Plan. Speeding was also one of the highest behavioral factor in severe and fatal crashes in Hennepin County (19.5% of severe crashes) from 2014-2018, according to Minnesota Department of Public Safety crash data. In the Vision Zero Crash Study, speeding was identified as the one contributing factor in 15 percent of severe fixed-object vehicle crashes, 8 percent of severe rear-end vehicle crashes, and 2 percent of severe right-angle vehicle crashes. Given the reporting format of crashes prior to 2016, it is challenging to understand the full role that speeding played in crashes. This was due to officers only having the ability to input one contributing factor for each party in a crash.
- More than 80 percent of crashes in Minneapolis happen at intersections. Turning vehicles failing to yield the right-of-way was a frequent cause of pedestrian and bicycle crashes.
- 70 percent of severe and fatal crashes happen on just 9 percent of streets in Minneapolis, which carry 34 percent of traffic. These streets are identified as High Injury Streets. The High Injury Streets (Figure 8, page 22) are mostly busier streets with more people travelling by all modes. A majority of the High Injury Streets are state highways or county roads, which are not part of this study because speed limit authority is only granted for local city streets.

City streets on the High Injury Streets include sections of: Dowling Avenue N, Emerson Avenue N, Fremont Avenue N, Lyndale Avenue N, Plymouth Avenue N, Monroe Street NE, Johnson Street NE, 15<sup>th</sup> Avenue SE, Hennepin Avenue, 3<sup>rd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> Streets in downtown, 3<sup>rd</sup> Avenue S, 15<sup>th</sup> Street, Blaisdell Avenue, Nicollet Avenue, 1<sup>st</sup> Avenue S, 11<sup>th</sup> Avenue S, 24<sup>th</sup> Street, 26<sup>th</sup> Street, 28<sup>th</sup> Street, 31<sup>st</sup> Street E, 35<sup>th</sup> Street E, 36<sup>th</sup> Street E, and 38<sup>th</sup> Street E.

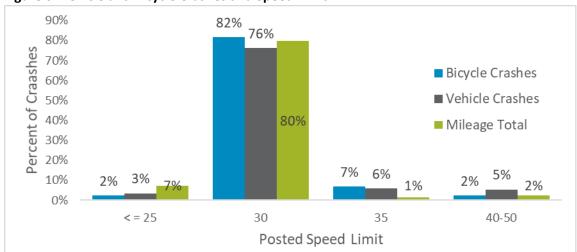


Figure 6: Vehicle and Bicycle Crashes and Speed Limit

Source: Vision Zero Crash Study

Figure 7: Pedestrian Crash Severity and Speed Limit



Posted Speed Limit On Street Where Crash Occured

Source: Minneapolis Pedestrian Crash Study

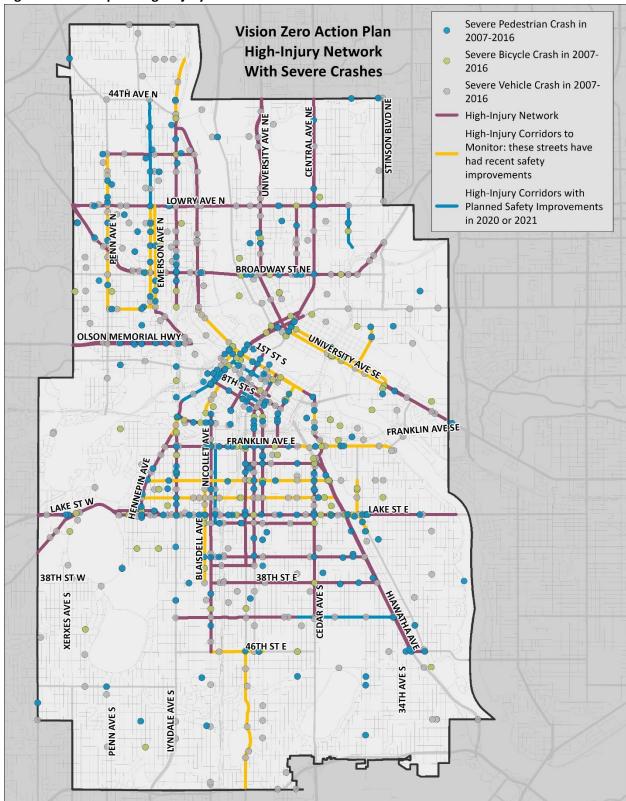


Figure 8: Minneapolis High Injury Streets

<sup>\*</sup>Based on 2007-2016 data in the Pedestrian and Vision Zero crash studies

#### Minneapolis traffic speed study implications for speed limits

Minneapolis did a comprehensive study of traffic speeds in the summer of 2018 to inform traffic calming and safety efforts and allow for future evaluation of traffic calming measures. 11,060 radar readings were taken during free-flow conditions at 448 locations.

Key findings and conclusions from City speed study include:

- The median speed (50<sup>th</sup> percentile) across all local residential streets was 22 mph. Local residential streets are the city's safest streets based on the Pedestrian and Vision Zero Crash Studies, although severe and fatal crashes still periodically happen on them. While only 5 percent of drivers are exceeding the current 30 mph speed limit on local residential streets, the City regularly get concerns about traffic being too fast on these streets. These concerns suggest that the current speed limit does not reflect the expectations of residents and the City can do better at setting the appropriate speed that supports safety and community expectations on these streets.
- The median speed for other City streets, which are generally collector or arterial streets, was 27 mph. The median speed for City streets on the Vision Zero Action Plan High-Injury Network was higher—30 mph—but still with a majority of drivers at or below the current speed limit. This indicates that current speed limit is higher than most drivers are comfortable traveling; and that the speed limit should be lowered to support safety on those streets.
- For City collector and arterial streets, the 85<sup>th</sup> percentile speed is close to 35 mph—a speed too high to support safety on Minneapolis streets given the local context, crash analysis, and local and national research. The uses and context of these streets reinforces that the 85<sup>th</sup> percentile is not appropriate as the primary input for safely setting urban speed limits in Minneapolis.
- There was not a lot of difference in average speeds by part of the city when controlling for street type. This suggests that the same speed limit can be applied to similar streets throughout the city.

#### Minneapolis street characteristics

The City of Minneapolis owns and manages a range of streets with different designs, uses, and contexts. This section outlines five categories of streets that were considered when setting speed limits. More details on street types are available in the City's current <u>Design Guidelines for Streets and Sidewalks</u>, which are being updated as part Transportation Action Plan. More details on how individual streets were classified for speed limits is covered in the *Application of the tiered approach to individual streets* section (page 28) in this study.

#### **Local residential streets = Minor Streets**

About 75% of City streets (and about 65% of all streets) are local residential streets. These streets primarily serve short trips and have low traffic volumes (generally far less than 1,000 average daily traffic (ADT), no transit service, and modest, but regular pedestrian and bicycle use. They are typically lined with residential homes ranging from entirely single-family homes to high-density multi-family buildings. These roadways are typically 32-feet wide or narrower with two-way traffic and parking allowed on both sides. Parking utilization varies in different parts of the city, but most blocks will regularly have some cars parked on each side of the street. They typically have sidewalks and boulevards

on both sides and no dedicated space for bicycling. For this speed limit study these are considered "minor" streets. Figure 9 shows a typical local residential street.



Figure 9: Example of a local residential street

#### Mixed-use, commercial, and downtown streets = Major Streets

About 17% of City streets (and about 22% of all streets) are mixed-use, commercial, or downtown streets. These streets typically have medium to high traffic volumes (most are 3,000-10,000 ADT, although some carry higher traffic), most have transit service, and moderate to high demand for walking and biking. Most of these streets are either mostly commercial or have a mix of commercial and residential land-use ranging from moderate to high density. Most of these streets have two to four traffic lanes. A majority have parking on both sides, some have bike lanes, and nearly all have sidewalks on both sides. These are nearly all collector or minor arterial streets. For this speed limit study, these are considered "major" streets. Two examples of these streets outside of downtown are: Johnson Street Northeast and Nicollet Avenue South.

#### **Local industrial access streets = Minor Streets**

About 2% of City streets are local industrial access streets. These streets serve short trips to and from industrial uses, have low traffic volumes, no transit service, and modest pedestrian and bicycle use. Most of these roadways are 32-feet wide or narrower with two-way traffic and parking on both sides.

Some of these streets lack sidewalks; they do not have dedicated space for bicycling. For this speed limit study these are considered "minor" streets. An example of a local industrial street is Kennedy Street Northeast.

## Residential access streets = Major Streets

About 5% of City streets are fronted generally by residential land use, serve more traffic and slightly longer trips than local residential streets, and often have regular bus service. Most of these streets are 36- to 44-feet wide with two-way traffic and parking allowed on both sides. They almost all have sidewalks on both sides of the street; a portion have bicycle lanes. For this speed limit study, these are mostly considered "major" streets. Two examples of these streets are: Monroe Street Northeast and Grand Avenue South.

#### **Parkways**

Parkways represent about 5 percent of all streets in Minneapolis, but nearly all parkways are owned by the Minneapolis Park and Recreation Board. Very few parkway street segments are owned by the City of Minneapolis.

#### Future street changes with growth and development

Minneapolis is a growing city, and the use of streets will likely evolve with new development. An example of this is the evolution of the North Loop over the last 20 years. Even with development, the street type for individual streets typically does not change without a significant design change as part of a street reconstruction project. Overall, the land use changes in Minneapolis 2040 are expected to increase demand for walking, biking, and transit in the city. Demand for on-street parking, which narrows open driving space when used, sometimes increases with new development. While individual developments typically increase demand for driving in the immediate area, daily driving in Minneapolis declined 2 percent between 2007 and 2016 even as the population of the city increased by 8 percent<sup>1</sup>.

Potential future land use changes are discussed further as part of the *Application of the tiered approach to individual streets* section (page 29) in this study.

<sup>1</sup> Source: Daily vehicle miles travelled data are from MnDOT and population data are from the State Demographer.

# **Conclusions and Findings**

Based data and research as documented in this speed limits study, the key conclusions from our analysis are:

- Lower traffic speeds reduce both the likelihood of crashes and that those crashes will be severe or fatal.
- A majority of states have lower speed limits than Minnesota. All of Minnesota's neighboring states have a 25 mph default urban speed limit.
- The traditional approach of using 85<sup>th</sup> percentile speed to set speed limits is no longer considered appropriate or the best practice for urban streets.
- When setting urban speed limits with broad authority, there are two common options emerging from guidance and recent city speed limit changes:
  - o default citywide speed limit of 25 mph; or
  - tiered speed limits by minor and major streets with 20 mph on the minor local residential streets and generally 25 mph speed limits on the major collector and arterial streets.
- For Minneapolis, a tiered approach to speed limits is most appropriate with 20 mph on local residential streets and generally 25 mph on collector and arterial streets.

The above key conclusions were based on these specific study findings:

- A. Speed limits lower than 30mph are justified because they:
  - promote public health, safety and welfare,
  - support City policies,
  - align with emerging national best practices for safe urban street operations, and
  - are part of the City's comprehensive approach to Vision Zero, which includes other important actions to improve safety and support lower, safer speeds.
- B. Forthcoming guidance from the National Association of City Transportation Officials recommends a tiered approach by categories of streets as a best practice for setting speed limits and recommends 20 mph speed limit for minor urban streets and a 25 mph speed limit for major urban streets.
- C. These lower speed limits prioritize public health and safety (a person hit at 30 mph is three times as likely to be killed or severely injured than a person hit at 20 mph).
- D. These lower speed limits are reasonable given the clear differences in the design, context, safety, expectations, and operations of minor and major City streets.
  - Minor City streets generally serve short, local connections, have low traffic volumes, have onstreet parking, are narrow and require slow speeds when two cars pass each other, do not have dedicated space for biking, and have frequent entrances to residents or businesses.
  - A citywide 25 mph speed limit does not best reflect the design, land use, mode use, and expectations of minor City streets, which are about 80% of City-owned streets. The median (50<sup>th</sup> percentile) free-flow speed today on Minneapolis minor streets is 22 mph.
  - Major City streets generally serve longer trips than minor streets, have higher traffic volumes, have traffic signals to support safe crossing of all modes, and are wider in width. The median free-flow speed today on major Minneapolis streets is 27 mph.

- E. The City would not be able to easily message and educate on a single default speed limit given that County and MnDOT streets will continue to have 30 mph speed limits or higher and it's unknown if or when that will change.
- F. Portland and Seattle, which have similarities with Minneapolis in context and street design, have found success with this tiered approach.
- G. The speed limits align with the design speeds in the draft update to the City's Street Design Guide, which is based on national best practices to support City policies such as Vision Zero and Complete Streets.

In totality, these conclusions and findings meet State Law and are aligned with the City Council staff direction to set speed limits that:

- support reaching the City's Vision Zero traffic safety goal of zero traffic deaths or severe injuries;
- reflect the City's Complete Streets policy by improving access and comfort for people walking, biking, and taking transit;
- reflect projected future street use resulting from anticipated land use changes;
- support moving people and goods; and
- are reasonable, comfortable, and technically defensible.

# Recommendations for City of Minneapolis Speed Limits

Based upon the above findings and conclusions, the recommendations are as follows:

# Tiered approach to speed limits

Minneapolis will implement a tiered approach to setting speed limits. The recommended tiered speed limits are:

- The speed limit on City of Minneapolis "minor" streets will be 20 mph unless otherwise signed. These are predominately local residential streets.
- Major City streets will generally have speed limits of 25 mph and be signed. Major streets are generally arterial and collector streets.
- Some major City streets will have speed limits higher than 25 mph based on conditions and be signed.
- Alleys and Nicollet Mall will retain speed limits of 10 mph.

Figure 10: Summary of recommended speed limit changes

Speed	Streets	Jurisdiction	Mileage*	Change	Conclusions/Findings
(mph)					
10	Alleys &	City	All alleys	No change	Appropriate for context, usage,
	Nicollet Mall				and design
20	Minor – City	City	~66%	30 to 20	Safety benefits
	local				Matches NACTO guidance
	streets**				Streets are generally narrow
					and serve local trips
					Current median free-flow speed
					is 22 mph
25	Parkways	Park Board	~5%	No change	City does not have jurisdiction
(Signed)					
25	Major – City	City	~17%	30 to 25	Safety benefits
(Signed)	collector &				Matches NACTO guidance
	arterial				Streets are generally wider and
	streets***				serve longer trips
					Current median free-flow speed
					is 27 mph
30	Major –	County &	~10%	No change	City does not have jurisdiction
(Signed)	Arterials	State			
35	4 short	City	~0.1%	40 to 35	Safety benefits
(signed)	segments of				Matches NACTO guidance
	Major City				Segments have few conflicts and
	streets***				connect to Interstates
35+	Major	State &	~2%	40 to 35 on	City streets at this speed have
(Signed)	Commuter	County		four City	few conflicts or access points
	Routes			streets:	

<sup>\*</sup>Mileage is draft approximate percentage of all non-Interstates in Minneapolis.

<sup>\*\*</sup> Some City collector streets were determined to be appropriate at 20 mph.

<sup>\*\*\*</sup> Some City local streets were determined to be appropriate at 25 mph.

<sup>\*\*\*\*</sup>Details on these segments are in the Application of the tiered approach to individual streets section on page 29.

# Application of the tiered approach to individual streets

Based on the tiered approach outlined in Figure 10, a map of recommended future speed limits on each City street is shown in Figure 11 on the next page. An interactive version of the map will be available at www.visionzerompls.com.

The method to determine appropriate speed limits on individual streets started from the Metropolitan Council's street functional classification system, which is based on the context, function, and design of the street.

The recommended speed limits correlated to functional class are:

- Arterial City streets are major streets and will generally have 25 mph speed limits and are
  evaluated to determine whether a higher speed limit is appropriate based on context and
  design.
- <u>Collector</u> City streets are generally major streets with 25 mph speed limits and are evaluated to determine whether a lower speed limits is appropriate based on context and design.
- <u>Local</u> City streets are generally minor streets with 20 mph speed limits and are evaluated to determine whether a higher speed limit is appropriate based on context and design.

Arterial streets were evaluated to determine if a higher than 25 mph speed limit is appropriate based on local context and design. To determine where higher speed limits are appropriate, the National Association of City Transportation Officials (NACTO) *Checklist for Analyzing Existing Conditions and Using the Safe Speed Study Table* was used for speed limit guidance. Most City arterials have moderate or high activity levels and moderate to high conflict density and, therefore, should not have higher than 25 mph speed limits. Four segments of arterial streets have low conflict density and low activity levels and the speed limit will be set at 35 mph; these streets currently have 40 mph speed limits. These four unique segments are Lyndale Avenue N and West Lyndale Avenue between 49th Avenue and 53rd Avenue adjacent to I-94 and short sections of 3rd and 4th Street S as they connect to I-35W in downtown.

Local streets were evaluated to determine if a 25 mph speed limit is more appropriate based on current design and use, and collector streets were evaluated to determine if a 20 mph speed limit is more appropriate based on current design and use. Collector and local streets that included all of the following characteristics are proposed to have 25 mph speed limits:

- Segment is at least half a mile long;
- Has continuous sidewalk or trail;
- Does not have an advisory bike lane and is not a bicycle boulevard;
- Has average daily traffic above 2,000 or regular route bus service throughout the day; and
- Has at least 20 feet in width of open driving space (not including 7-foot (residential) or 8-foot (commercial/industrial) parking area).

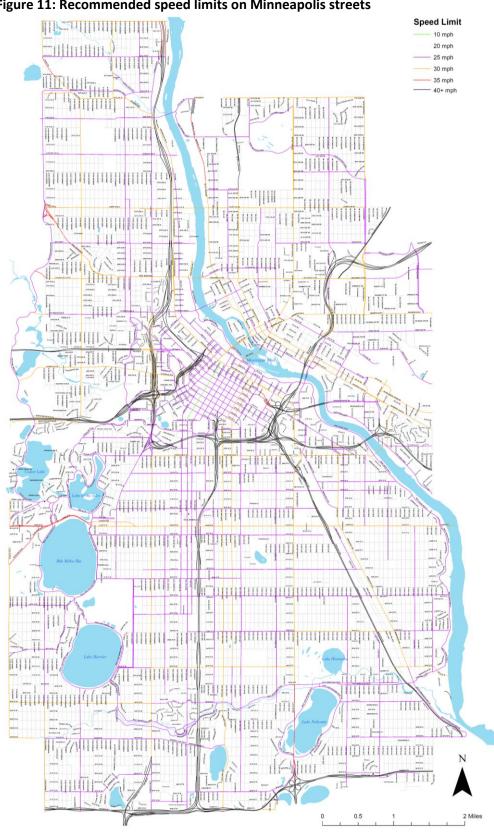


Figure 11: Recommended speed limits on Minneapolis streets

# Future speed limit modifications

Public Works will do a thorough evaluation of the speed limit change within 3 years of implementation of the speed limit changes (see *Evaluation plan* section on page 33. Staff will consider any potential adjustments to speed limits at that time. Ahead of that evaluation, these three items are being pursued:

- 1. Speed limits on border streets that have shared ownership with a neighboring city will be lowered in the future after discussion and agreement can be reached the adjacent city.
- 2. Evaluate and implement dynamic school zone speed limits of 20 mph on major City streets adjacent to schools as funding is available and in coordination with the City's Vision Zero Action Plan and Safe Routes to School program. School zone speed limits are intended be implemented through dynamic speed limit signs that are programmed to clearly specify the speed limit at different times of day.
- 3. Street function, context, and designs evolve over time. As conditions evolve, it may be appropriate to change the speed limit on a street if there is a significant change in street design.

# **Next steps**

This section includes summary of next steps that support these speed limit changes. In summary, there are five key efforts underway: communication/education, signage, traffic signals, enforcement, and evaluation, which are further outlined below.

Most signing and signal efforts will be accomplished over the next 8 months. The communication, education, and evaluation will occur over the next 2 to 3 years.

## Communications and education plan

The City will implement a proactive communications and outreach plan to educate people about the new speed limits. The City will use the speed limit changes as an opportunity to highlight the important connection between traffic speed and safety.

The City will coordinate with the City of Saint Paul on communications and education around new speed limits and work to have shared messages, materials, press events, and other efforts. The City of Minneapolis and City of Saint Paul are expected to jointly announce forthcoming changes in speed limits mid-March, 2020.

The communications and education efforts will intentionally reach people from many backgrounds, including culturally specific approaches and materials in multiple languages.

## Core message:

• Slower is safer. Slower speeds on our local streets make travel safer for everyone no matter how they get around.

#### Messages around new speed limits:

- To support safer streets, the cities of Minneapolis and Saint Paul are lowering speed limits on most streets.
- The new speed limit will be 20 mph on most City-owned streets unless otherwise signed.
- Major City-owned streets will generally be signed at 25 mph.
- Speed limits on county roads and MnDOT trunk highways will continue to be signed at 30 mph or higher.
- If you are in doubt about the speed limit, go 20 mph. Slower is always safer for you and people around you.
- Follow all posted speed limit signs. If there are no signs, the speed limit is 20 mph.

Additional messages will explain the safety benefits of lower speeds and the details of the process around selecting and implementing the new speed limits.

#### **Communications and outreach strategies**

- Leverage the cities of Minneapolis and Saint Paul's communication tools channels to promote the speed change.
- Utilize small contracts with community-based organizations to create and share culturally relevant messages.
- Leverage earned media to get out the word.
- Determine the best mix of paid media (social ads, print ads, yard signs, etc.) to promote the speed change.
- Leverage community interest in the change to help get out the word.
- Promote the speed limit change at community events like Open Streets and National Night Out.
- Promote the change as part of engagement around Vision Zero and street projects.

Detailed communications and outreach tactics based on these strategies will be used. Education strategies and actions will be evaluated and adapted as needed.

#### Signage plan

The City will provide appropriate signage to communicate speed limits and is coordinating with the City of Saint Paul on a unified approach to signage. The City is also coordinating with MnDOT and Hennepin County on speed limit signage.

The core features of the Minneapolis signage plan include:

- Signage at gateway locations on major collector and arterial roadways showing the citywide speed limit in Minneapolis is 20 mph unless otherwise posted. These signs may also be placed periodically in non-gateway locations as appropriate.
- Speed limit signage on streets where the speed limit is above 20 mph. Locations of signs for speed limits above 20 mph will be guided by:
  - At speed limit transition points;
  - Near intersections with arterial or other high-traffic streets; and

- At least once every mile and at least 1/4-mile apart.
- Signage for streets with 20 mph speed limits may be posted at speed limit transition points.

# Traffic signal plan

The proposed changes in speed limit will necessitate changing traffic signal timing and how traffic signals are coordinated from signal to signal at about 90% of signalized intersections.

#### **Enforcement considerations**

Minneapolis will start with focusing on education of the speed limit change through communications and outreach rather than enforcement. Education cards with information on the new speed limits will be made for use by police officers in all traffic stops. For 2020, consideration should be given to educating offenders instead of ticketing them during any speeding-related stops that result from the new speed limits.

# Evaluation plan

Public Works will complete and present an initial evaluation of speed limit changes to the City Council Transportation and Public Works Committee within 3 years of implementation of speed limit changes. The evaluation is expected to include:

- Results from a traffic speed study in the summer of 2021 that uses the same locations and times as the 2018 traffic speed study.
- A comparison of crashes on City streets with 2 years of data before and after the speed limit change.
- Any future recommendations around speed limits, supporting safe traffic speeds, or additional evaluation.