# Minneapolis VISION ZERO ACTION PLAN 2023-2025







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## **IN MEMORIAM**

We remember the 52 people tragically lost in traffic crashes on Minneapolis streets from 2019 to 2021. All were lives ended too soon. We recognize the huge personal toll on families, loved ones, friends, and community. One life lost on our streets is one too many and we will work with urgency to get to zero.



## **Vision Zero Overview**

Vision Zero is an international movement to end traffic deaths and severe injuries on our streets. Moving around Minneapolis should be safe for everyone, no matter how they travel or what neighborhood they are in.

Each year, about 14 people are killed and 143 suffer severe injuries in traffic crashes on Minneapolis streets (average from 2017 to 2021). That is unacceptable and preventable. The Minneapolis City Council adopted a <u>Vision Zero Resolution</u> on September 20, 2017. It commits to the goal of zero traffic deaths and severe injuries on City streets by 2027.

The City Council adopted the <u>2020-2022 Vision Zero Action Plan</u> to prioritize steps to improve traffic safety. This updated Vision Zero Action Plan builds on the previous plan and prioritizes work for 2023 to 2025. A detailed status update of the actions in the 2020-2022 Action Plan <u>is available here</u>. A summary of community engagement that informs this update is included on page 37.

### Systematic and data-driven approach

Vision Zero takes a systematic approach to traffic safety that coordinates efforts across engineering, public safety, health, and community outreach and uses the best available data.

### Preventable crashes, not "accidents"

Too often crashes that lead to traffic deaths and severe injuries are called "accidents," which implies that they are not preventable or are the result of individual mistakes. Vision Zero says that traffic deaths and severe injuries are unacceptable and preventable crashes.

### **Equity**

Vision Zero allows us to center efforts around the people most impacted by traffic crashes and build collective actions to make streets safe.

### **Building safe systems**

Vision Zero recognizes that humans will make mistakes, but that we need to design safe systems so that individual mistakes do not lead to death or severe injuries.

### **Engaging community and partners**

Vision Zero provides a collective goal that the City works on collaboratively across multiple departments with community members and partner agencies. Together, we work to build a culture that prioritizes safety over speed supported by safe street designs and other measures.

# **Minneapolis Vision Zero Guiding Principles**<sup>1</sup>

The Vision Zero principles guide the process, actions, performance measures, and implementation of the Vision Zero Action Plan.



## Safety and human life first

The loss of human life in traffic deaths on our streets is unacceptable. The City is committed to ending death and life-altering

injuries on our streets. We will work with urgency to implement Vision Zero as one death on our streets is one too many.



## Equity

We will acknowledge and work to eliminate racial, economic, and other disparities in

traffic crashes and in our approach to Vision Zero. We will work to deliver fair and just opportunities and outcomes for all people.

![](_page_4_Picture_10.jpeg)

## **Data-driven**

Vision Zero strategies and actions will be developed from relevant data, recognized best practices, and community experiences

and input. We will also work to improve the data we have and recognize its gaps.

![](_page_4_Picture_14.jpeg)

## Accountability

We will set clear objectives and report on them regularly. We will be transparent and include meaningful and diverse community

engagement that helps guide actions. We will actively collaborate with community and agency partners to embrace, develop, and implement Vision Zero. We will adapt our approach as needed in the future.

![](_page_4_Picture_18.jpeg)

<sup>1</sup> These guiding principles were developed in the engagement process for the 2020-2022 Vision Zero Action Plan and remain unchanged in this update.

## National Momentum for Vision Zero

In January 2022, the U.S. Department of Transportation announced the National Roadway Safety Strategy, which sets a long-term national goal of zero roadway fatalities. It outlines USDOT's commitment to a <u>Safe</u> <u>System Approach</u> to traffic safety, which is similar to Vision Zero principles. The Strategy includes actions in five areas: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. This plan aligns with the approach of the National Roadway Safety Strategy. National research show that we can make significant progress toward getting to zero traffic deaths across the country. <u>The Road to Zero Coalition</u>, managed by the nonprofit National Safety Council, released a <u>roadmap</u> to zero traffic deaths in 2021 outlining both the critical need for safer streets and the opportunities that exist to make significant <u>national progress toward zero traffic</u> <u>deaths</u> (see figure below). These steps are reflected in our Vision Zero Action Plan strategies and actions, along with the work of our <u>Transportation Action Plan</u> and <u>Street Design Guide</u>.

### **National steps for Vision Zero**

![](_page_5_Figure_4.jpeg)

Source: Vision Zero Network

## **Traffic Safety Trends**

Vision Zero uses data to target improvements that will reduce crashes, save lives, and address inequities experienced on the street related to crashes. Some important traffic safety facts are included in this section. Additional Vision Zero crash analysis is <u>available here</u>, including the <u>2022 Vision Zero Crash Study</u>, <u>2018 Vision Zero crash study</u>, and <u>2017 Pedestrian Crash Study</u>.

### Traffic deaths increasing across the country

An estimated 42,915 people died in traffic crashes in the United States in 2021<sup>2</sup>. This is a 31% increase from traffic deaths in 2014. Traffic deaths have especially spiked since 2020, with an increase of 18% experienced in just 1 year.

### Fatal crashes spiked in Minneapolis in 2020 and 2021 as total crashes at historic lows

Similar to national trends, fatal crashes in Minneapolis generally declined until 2014 and then began increasing until they spiked in 2020 and 2021. There were 23 fatal crashes in 2021, the highest number since 2007.

While fatal crashes were up significantly, total crashes in 2021 were down 44% compared to the average of 2016 to 2019 and all pedestrian and bicycle crashes were down 47% compared to 2016 to 2019.

![](_page_6_Figure_7.jpeg)

## Traffic deaths in Minneapolis

<sup>2</sup> Source: <u>National Highway Traffic Safety Administration</u>. September 2022.

### Fatal crashes involving reckless driving and speeding increased since 2020

In Minneapolis, a significant increase in reckless driving and speeding contributed to the spike in fatal crashes in 2020 and 2021. About 36% of fatal crashes involved very reckless driving<sup>3</sup> from 2017-2019 compared to about 56% of fatal crashes in 2020 and 78% of fatal crashes in 2021. Likely about two-thirds of all fatal crashes in 2021 involved speeding<sup>4</sup>, which was more than double the percentage for fatal crashes in 2017-2019.

# Severe and fatal crashes on streets in Minneapolis

There were an average of 150 severe injury<sup>5</sup> or fatal traffic crashes on streets in Minneapolis each year from 2017 to 2021.

# Percent of fatal crashes that involved reckless driving

![](_page_7_Figure_5.jpeg)

Source: Minneapolis Public Works review of MnDOT MnCMAT. 2022.

![](_page_7_Figure_7.jpeg)

## Severe and fatal crashes by mode<sup>6</sup>

<sup>3</sup> We define very reckless driving as a fatal hit and run crash or a crash combining two of the most unsafe activities (high speeding, running a red light or stop sign, driving under the influence, driving off the road, and distracted driving).

<sup>4</sup> Based on Public Works staff review of fatal crash reports. In some cases, including for hit and run crashes, it is hard to tell for sure whether speeding was involved.

<sup>5</sup> A "severe injury" crash is what Minneapolis calls a crash identified as "serious injury" on the crash report. Crash severity is typically identified by an officer at the scene based on the information they have available at that time. Serious injuries require significant medical attention. Full definition is available in the 2022 Vision Zero Crash Report.

<sup>6</sup> Crashes involving people in mobility assistive devices (5 total) and motorized foot scooters (5 total) are included in pedestrian crash figures.

## Location of traffic deaths and severe injuries

![](_page_8_Figure_1.jpeg)

Source: 2022 Vision Zero Crash Study. Excludes freeway and intentional crashes.

## **High Injury Streets**

Severe crashes are concentrated on relatively few streets, identified as High Injury Streets (see map on page 11). These streets are 9% of all streets in Minneapolis but had 66% of severe and fatal crashes from 2017-2021. High Injury Streets were determined based on consultant analysis of fatal and injury crashes and account for where crashes are grouped along corridors<sup>7</sup>. High Injury Intersections are also identified, which are the 26 highest risk intersections. The 2022 Vision Zero Crash Study also includes High Injury Street maps for pedestrians, bicyclists, and motorists; about a dozen street segments were high injury for a particular mode, but did not make the full High Injury Street map.

Some High Injury Streets have had major recent work that we anticipate will improve safety. There are also 33 miles of streets identified as High Injury Streets previously that did not reach that threshold in analysis of the most recent crash data. We will monitor the safety of both previously identified High Injury Streets and streets with major recent work and consider prioritizing potential additional safety investments on these streets as prudent.

![](_page_9_Picture_3.jpeg)

<sup>7</sup> More details on High Injury Street methodology are available in the <u>2022 Vision Zero Crash Study</u>.

## Bicyclists and pedestrians are overrepresented in severe and fatal crashes

People in Minneapolis make 16% of their trips on foot, but pedestrians were 31% of severe traffic injuries and deaths from 2017 to 2021. People in Minneapolis make 3% of their trips by bicycle, but bicyclists were 11% of severe traffic injuries and deaths. The share of trafficrelated severe injuries and deaths borne by people walking has increased in recent years while bicycling has gotten relatively safer (although disparities remain).

## 68% 56% 3% 11% 16% 31% 31% % of Trips % of Severe Injuries/Deaths

Source: Injuries/deaths from 2022 Vision Zero Crash Study, % of trips from 2019 Met Council Travel Behavior Inventory. Automobile category includes cars, trucks, & motorcycles, but not transit

#### Severe injuries and deaths by mode

## **High Injury Streets**

![](_page_10_Figure_1.jpeg)

# Crashes are more concentrated in neighborhoods with more people with lower incomes

While 26% of Minneapolitans live in census tracts in areas of concentrated poverty where over half of residents are people of color (called "ACP50 areas"<sup>8</sup>), 40% of severe and fatal crashes occurred in these neighborhoods from 2017 to 2021.

![](_page_11_Figure_2.jpeg)

Source: 2022 Vision Zero Crash Study based on 2017-2021 severe and fatal crashes, 2018 ACP50 areas, and 2020 Census population. Excludes freeway and intentional crashes.

<sup>8</sup> Public Works is preparing a Racial Equity Framework for Transportation. The Racial Equity Framework will propose a new Transportation Equity Priority designation, which will replace Areas of Concentrated Poverty with more than 50% people of color (ACP50) as the geographic-based way of considering equity in transportation. We anticipate updating the Vision Zero Action Plan to reflect the new designation before final approval of this plan.

## Native American residents are most disproportionately impacted by traffic deaths

Native American residents are 1 percent of the Minneapolis population, but were 4 percent of people killed in vehicle crashes and 5 percent of people killed in pedestrian and bicycle crashes between 2011 and 2019<sup>9</sup>. Black residents are overrepresented in fatal vehicle crashes in Minneapolis and underrepresented in pedestrian and bicycle deaths. White, Latino, and Asian residents are slightly less likely to die in a traffic crash.

![](_page_12_Picture_2.jpeg)

### Traffic deaths by race and ethnicity

![](_page_12_Figure_4.jpeg)

Source: Vision Zero Crash Study analysis of national Fatality Analysis Reporting System and American Community Survey data; includes freeway crashes

<sup>9</sup> 2019 is the most recent year available for the national crash database that includes race of crash victims.

# Speed is a significant factor in crashes

Higher traffic speeds make crashes more likely to happen and make crashes more likely to result in a severe injury or death.

Higher traffic speeds increase risk, especially for people walking and biking. National research has found that a person hit at 20 miles per hour has a 13% likelihood of suffering a severe injury or being killed while a person hit at 40 miles per hour has a 73% likelihood of suffering a severe injury or being killed. And the risk of severe injury or death is significantly higher for older adults.

![](_page_13_Picture_3.jpeg)

![](_page_13_Figure_4.jpeg)

### Five unsafe behaviors lead to most crashes

The five behaviors that lead to the most severe and fatal crashes on Minneapolis streets are: driving under the influence of alcohol or drugs, distracted driving, speeding, red light running, and unsafe turning (failing to yield the right-of-way when turning)<sup>10</sup>.

Top 5 unsafe behaviors on Minneapolis streets

![](_page_14_Figure_3.jpeg)

Source: Analysis of crash dataset used in the 2019 Vision Zero Crash Study.

### Select factors in severe and fatal crashes<sup>11</sup>

![](_page_14_Figure_6.jpeg)

Source: Vision Zero Crash Study 2022. Excludes freeway and intentional crashes.

<sup>10</sup> This analysis was done in 2019 and was not updated as part of the 2022 Vision Zero Crash Study. The findings of the 2022 crash study suggest that these likely remain the five most unsafe behaviors.

<sup>11</sup> Excludes driving under the influence and distracted driving as they are not reliably captured in crash reports. A single crash can have multiple factors. This is of 749 total severe and fatal crashes.

## **Strategies and Actions**

To make progress toward the goal to eliminate traffic deaths and serious injuries by 2027, the City has prioritized a set of strategies and actions for implementation from 2023 to 2025, building off previous efforts outlined in the 2020-2022 Vision Zero Action Plan. The City plans to update the Vision Zero Action Plan in the future to guide the initiative as it evolves.

### The strategies and actions focus on four systems:

- Safe Streets: using street design, infrastructure, and operations to improve traffic safety;
- Safe People: supporting and encouraging safe human behavior;
- Safe Vehicles: regulating and maintaining safe vehicle fleets; and
- Safety Data: supporting a data-driven approach to Vision Zero and ensuring accountability for progress towards goals.

![](_page_15_Picture_7.jpeg)

### **Implementation approach**

The City is committed to using a Safe System approach to help reach Vision Zero. <u>According to the U.S.</u> <u>Department of Transportation</u>, a Safe System approach includes the following principles:

- Death and Serious Injuries are Unacceptable. A Safe System approach prioritizes the elimination of crashes that result in death and serious injuries.
- 2. Humans Make Mistakes. People will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes, and avoid death and serious injuries when a crash occurs.
- 3. Humans Are Vulnerable. Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.
- Responsibility is Shared. All stakeholders including government at all levels, industry, nonprofit/advocacy, researchers, and the general public – are vital to preventing fatalities and serious injuries on our roadways.
- 5. **Safety is Proactive.** Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.
- 6. **Redundancy is Crucial.** Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.

The strategies and actions in this plan align with the Safe System approach and were developed by City staff across multiple departments with input from community members and external partners (a summary of engagement is included on page 37).

The strategies and actions focus on tangible work items over the next three years that will allow the City and its partners to:

- Work rapidly and urgently to save lives;
- Address disparities in traffic crashes, including for people living in lower-income neighborhoods, Native American residents, pedestrians, and bicyclists;
- Ensure that our actions support equity and do not exacerbate other existing inequities, including addressing inequities related to traffic safety enforcement;
- Make strategic choices based on data, including targeting action on High Injury Streets (see page 11) and addressing the most dangerous behaviors (see page 15); and
- Target additional community engagement to key topics such as speed safety camera pilot, traffic enforcement, and street safety improvements in ACP50 areas (or other future designations that prioritize equity).

![](_page_17_Picture_0.jpeg)

## **Supporting Safe Speeds**

Given the importance of traffic speeds in supporting safety, supporting safe speeds is a priority in the Safe System approach and in this plan. Safe speeds can vary for different types of streets based on the context, demands, and design. Strategies and actions to support safe speeds are incorporated through multiple sections of this plan. No single speed-related action alone will lead to safe speeds; a combination of policy changes, street design, education, communications, and enforcement are needed.

### **Recognizing Post-Crash Care**

Prompt and quality emergency response and care after a crash is a key part of a Safe System approach. Minneapolis is served by two Level 1 Trauma hospitals, two Level 1 Pediatric hospitals, one Level 2 Trauma hospital, and two Level 3 Trauma hospitals. Minneapolis Fire Department and local emergency medical services staff provide excellent and prompt post-crash care. Given the quality of post-crash care, this plan does not include specific actions in this area, but we are committed to supporting this continued care.

![](_page_17_Picture_5.jpeg)

# **SAFE STREETS**

Safe Streets strategies and actions use street design, infrastructure, and operations to improve traffic safety.

Safe Streets investments build off the decades of work the City has done to support safety. These efforts include using crash data and community feedback to help prioritize street infrastructure investments, dedicated investments in pedestrian, bicycle, and vehicle safety projects, and incorporating safety improvements regularly in street projects. These strategies and actions complement strategies and actions in the <u>Minneapolis Transportation</u> <u>Action Plan</u> and build on actions taken in the 2020-2022 Vision Zero Action Plan.

The 2022 Vision Zero Crash Study, 2018 Vision Zero crash study, and 2017 Pedestrian Crash Study analyzed crash data for trends to inform Vision Zero work. Key findings from these studies include:

- Severe crashes are concentrated on relatively few streets, noted as High Injury Streets.
   While crashes are concentrated on High Injury Streets, it is often hard to predict the exact location or nature of a severe or fatal crash that may happen along a corridor.
- Pedestrians and bicyclists are overrepresented in severe and fatal crashes.
- Crashes are disproportionately concentrated in neighborhoods with more people with low incomes, where a majority of residents are people of color.
- Driver speeding is a significant challenge and has gotten much worse since 2020. Streets with higher speed limits and higher speeds are generally more likely to have greater number of severe and fatal crashes.
- Most crashes (83 percent) and most severe severe/fatal crashes (67%) happen at intersections. Nearly half of all severe and fatal crashes (46%) happen at signalized

intersections in particular. Angle crashes (24%) and crashes involving left-turning vehicles (12%) are a significant share of all severe/fatal crashes. Turning vehicles are involved in a majority of all pedestrian and bicycle crashes spread fairly equally between right and left turners, although left-turn crashes are much more likely to be severe or fatal.

- Nighttime crashes make up a disproportionate share of severe and fatal crashes (42%).
- As more people are bicycling, bicycling has become safer. Bicycle crashes are somewhat less concentrated on High Injury Streets.
- 4-lane undivided streets are most likely to have concentrations of severe and fatal crashes.

The City will focus additional attention on addressing City-owned High Injury Streets and collaborating with Hennepin County and the Minnesota Department of Transportation on High Injury Streets they own. The map of High Injury Streets is on page 11. These streets collectively experienced 66% of the severe and fatal crashes between 2017 and 2021, but only make up 9% of the streets in Minneapolis. Some High Injury Streets have either recently been improved with safety treatments or are planned for improvement in the near future. Some streets were previously identified as High Injury Streets based on 2007-2016 crash data but are no longer reaching that threshold based on 2017-2021 crash data. The City will monitor those streets and consider proactive safety investments as prudent while prioritizing the recently identified High Injury Streets. There are also some streets that are identified as bicycle or pedestrian High Injury Streets, but do not reach the overall threshold for inclusion across all modes; we have included those streets as a reference to inform potential mode-specific safety improvements.

The City will make proactive investments in proven safety treatments (including federal proven safety countermeasures), and continue to evaluate new and innovative safety treatments. The focus will be on supporting safe speeds and safe interactions at intersections. The City will work to ensure that safety treatments serve the safety needs of people across many backgrounds and experiences, including people with disabilities, children, older adults, and other vulnerable street users.

![](_page_19_Picture_2.jpeg)

Safety treatments may include, but are not limited to:

- Safe lane conversions: reconfiguring a 4-lane twoway street (2 lanes in each direction) to become a 3-lane street (one lane in each direction plus a center left-turn lane) or making a 3-lane one-way street into 2 lanes.
- **Slow turn wedges:** using various materials (e.g. raised curbs, bollards) to extend the corner radius into the street at an intersection, to prevent drivers from turning the corner at a higher speed.
- **Medians:** raised landscape or concrete islands in the center of the street in between two opposing lanes of traffic.
- Intersection daylighting: removing and preventing parking at the street corner to increase visibility.
- **Removing high-speed turn lanes:** removing or adjusting "slip" lanes and other free-flowing turn lanes that encourage higher speed turns.
- **Protected left-turn signal phases:** providing a time during a traffic signal that is dedicated to left-turning vehicles with a green left-turn arrow.
- Leading pedestrian or bicycle intervals: providing a brief "head start" for pedestrians or bicyclists at a traffic signal that allows them to begin crossing the street before motor vehicles get the green light.
- Bump outs: using various materials to extend the curb line out in the street to increase visibility of pedestrians and reduce driver speeds at a pedestrian crossing.
- Pedestrian signal heads and accessible pedestrian signals: signals that tell pedestrians when to cross the street at an intersection, which are accessible to people with disabilities (such as people using wheelchairs or who are blind).
- **Retroreflective backplates:** reflective yellow backplates that are placed behind traffic signals to increase their visibility to drivers.
- **Pedestrian crossing signals:** Rectangular rapidflashing beacons (RRFB), pedestrian hybrid beacons, or other flashing pedestrian signals that are used

![](_page_20_Picture_12.jpeg)

at pedestrian crossings where there is not a traffic signal or stop sign.

- **Pedestrian safety islands:** medians in the center of the street that also serve as a place for pedestrians to wait while crossing one direction of traffic at a time.
- Crosswalk visibility / pavement marking enhancements: includes zebra crosswalks, other crosswalks that are highly visible, green paint for bicycle crossings, stop bars for vehicles, and advance stop/yield markings.
- In-street pedestrian crosswalk signs: signs that say "State law: stop for pedestrians in crosswalk."
- Bicycle lanes and protected bike lanes: space separated from motor vehicle traffic where bicyclists can ride, through paint or physical barrier.
- Bikeway medians and other protected intersection treatments: barriers that protect bicyclists as they approach intersections, slow turning speeds, and improve visibility of bicyclists.
- Hardened centerlines: using various materials (e.g. raised curbs, bollards) to create a raised centerline near the crosswalk at an intersection, to prevent drivers from "cutting" the corner at higher speeds while turning.
- **Raised crossings:** elevating a pedestrian or bicycle crossing closer to the level of the sidewalk to increase visibility and support safe traffic speeds.
- Speed cushions or speed humps: bumps that support safe traffic speeds and are designed to work well for emergency vehicles and buses.
- Street lighting improvements: enhancing the quality and direction of lighting, especially at intersections and crossing points.
- **Roundabouts:** design for busier street intersections that help manage traffic speeds and nearly eliminate the risk of dangerous right-angle crashes.
- **Traffic circles:** design for local street intersections that help manage traffic speeds and nearly eliminate the risk of dangerous right-angle crashes.
- **Chicanes:** a curve designed into a street to support safe traffic speeds.

![](_page_21_Picture_13.jpeg)

# Strategy 1: Advance street design strategies to reduce dangerous vehicle speeds.

### **Actions:**

- 1.1 Pilot speed control measures on busier streets, including raised crossings, speed cushions, and chicanes.
- Evaluate pilot speed control measures; if successful, expand use and add details to the Street Design Guide as appropriate.
- 1.3 Seek changes to State Aid rules to allow local communities to design streets to support speed limits.
- 1.4 Manage <u>neighborhood traffic calming program</u>.
- 1.5 Continue to expand use of pedestrian safety islands, medians, and other established treatments that manage speed and improve safety on busier streets.
- 1.6 Explain the connection between speed and safety when communicating and engaging on street design projects.
- 1.7 Utilize mobile speed wagons to increase awareness and compliance with speed limits.
- 1.8 Seek to partner with Hennepin County and MnDOT to lower speed limits on most roadways in Minneapolis to 25 mph and design roadways to support slower speeds.
- 1.9 Study the potential use of mini-roundabouts at busier street intersections.

# Strategy 2: Make and maintain cost-effective safety improvements systematically and rapidly on High Injury Streets.

- 2.1 Proactively implement safety conversions (for example, 4-to-3 lane safety conversions) or other safety treatments to address City-owned high-injury 4-lane undivided streets.
- 2.2 Partner with Hennepin County and the Minnesota

![](_page_22_Picture_15.jpeg)

Department of Transportation (MnDOT) to proactively implement safety conversions (for example, 4-to-3 lane safety conversions) or other safety treatments to address high-injury 4-lane undivided streets they own.

- 2.3 Install and maintain proven lower-cost safety treatments at signalized and unsignalized intersections on the City's High Injury Streets.
- 2.4 Partner with MnDOT and Hennepin County to fund, proactively install, and maintain proven intersection safety treatments on High Injury Streets they own.
- 2.5 Seek to strategically upgrade quick-build safety improvements to concrete, prioritizing treatments that can be installed cost efficiently.
- 2.6 Develop a plan to prioritize safety upgrades based on technical analysis, community and partner agency engagement, and maintenance demands.
- 2.7 Ensure that flexible delineators on quick-build safety improvements are replaced as necessary at least annually to ensure safety benefits are retained. Develop systems to improve monitoring of delineators. Periodically consider whether adjustments in delineator designs are appropriate to improve effectiveness or durability.
- 2.8 Explore additional methods to maximize the cost efficiency of proactive safety improvements.
- 2.9 Add a section on quick-build safety treatments to the Street Design Guide.
- 2.10 Evaluate the reconfiguration of 3-lane one-way streets to reduce travel lanes or add alternative uses, such as transit priority lanes or bikeways in line with the Transportation Action Plan.
- 2.11 Prioritize proactive street lighting upgrades at and leading up to intersections along High Injury Streets.
- 2.12 Develop publicly available prioritization procedures for rectangular rapid-flashing beacons (RRFBs).

![](_page_23_Picture_11.jpeg)

# Strategy 3: Incorporate safety improvements into upcoming projects in the street right-of-way.

**Actions:** 

- 3.1 Add to and update the City's Street Design Guide regularly to integrate Vision Zero goals and reflect latest guidance, evaluation, and research on safe streets.
- 3.2 Install accessibility improvements in line with the <u>Americans with Disabilities Act (ADA) Transition</u> <u>Plan for Public Works</u>.
- 3.3 Explore the potential of establishing a fund to support safety improvements in coordination with utility work or private development projects that include curb work. Such a program could allow the City to take advantage of additional opportunities to improve safety at lower cost.
- 3.4 Explore the potential of incentives for developers to install safety improvements in coordination with required curb work adjacent to development projects.

## Strategy 4: Strategically and equitably prioritize safety investments on non-High Injury Streets and respond to community traffic safety requests.

- 4.1 Manage community traffic safety requests in a transparent, consistent, and equitable way through the <u>neighborhood traffic calming program</u>.
- 4.2 Identify non-High Injury Streets that would benefit most from proactive safety treatments to inform future installations if additional funding becomes available.
- 4.3 Develop publicly available marked crosswalk prioritization procedures.
- 4.4 Develop procedures for intersection daylighting in coordination with metered and non-metered parking.

![](_page_24_Picture_12.jpeg)

## Strategy 5: Implement a comprehensive update to traffic signal operations to support safety and other City goals.

**Actions:** 

- 5.1 Make traffic signal operations changes to support City goals for safety, Complete Streets, and mobility. This may include, but is not limited to:
- Retiming progression of traffic signals to support safe speeds and updated speed limits;
- Incorporating dedicated or restricted turn phases at all prudent intersections;
- Incorporating leading pedestrian intervals at all prudent intersections;
- Including walk signals at all signalized intersections (by default) and if not used, incorporating responsive actuation buttons; and
- Continuing to implement pedestrian countdown-timers on all new signals with timing that is consistent and understandable.
- 5.2 Develop unified approach on bicycle signals, ideally across the region in partnership with other agencies.

### Strategy 6: Engage with community members proactively on street safety improvements while moving quickly to make streets safer.

- 6.1 Proactively engage communities on High Injury Streets, especially in Areas of Concentrated Poverty where a majority of residents are people of color (ACP50 areas)<sup>12</sup>, to deliver the best safety projects possible to serve community needs and to build support for traffic safety investments.
- 6.2 Contract with local community- and culturallybased organizations to support engagement work on select safety projects.

![](_page_25_Picture_13.jpeg)

<sup>&</sup>lt;sup>12</sup> Public Works is preparing a Racial Equity Framework for Transportation. The Racial Equity Framework will propose a new Transportation Equity Priority designation, which will replace Areas of Concentrated Poverty with more than 50% people of color (ACP50) as the geographic-based way of considering equity in transportation. We anticipate updating the Vision Zero Action Plan to reflect the new designation before final approval of this plan.

6.3 Pilot follow-up engagement at select locations where traffic safety improvements were installed as part of project evaluation.

### Strategy 7: Communicate on traffic safetyfocused projects consistently in engagement, construction, education, and evaluation work.

### **Actions:**

7.1 Maintain communications tools that aid staff in sharing traffic safety-related information when doing engagement on street projects.

## Strategy 8: Support transportation options that reduce driving.

**Actions:** 

- 8.1 Implement Minneapolis 2040 Plan policies and actions that support more walking, biking, and transit, including the City's Complete Streets policy.
- 8.2 Implement Transportation Action Plan strategies and actions to expand access and use of walking, biking, transit, and emerging mobility options.

### Strategy 9: Evaluate select street safety treatments and projects and make adjustments as prudent based on the results.

- 9.1 Evaluate select safety treatments and select street safety projects.
- 9.2 Complete evaluation of 2020 speed limit change.
- 9.3 Include summary of relevant traffic safety evaluations in each annual Vision Zero report.

![](_page_26_Picture_13.jpeg)

# **SAFE PEOPLE**

Safe People strategies and actions support and encourage safe human behavior when traveling streets. This section covers education, communications, traffic enforcement, and investing in community wellbeing and safety.

It is important for people to be predictable and safe when they travel, regardless of how they get around. People generally use our streets in a safe way, and we want to promote and support that.

Mistakes or reckless behaviors do occur and there has been a particular rise in reckless driving leading to fatal crashes since 2020. The five leading causes of severe and fatal crashes on Minneapolis streets are:

- speeding;
- driving under the influence of alcohol or drugs;
- distracted driving;
- red light running while driving; and
- unsafe turning while driving.

### **Education and communications**

Delivering traffic safety results from education and communications campaigns takes significant resources over a sustained period. National Highway Traffic Safety Administration guidance notes that the effectiveness of mass market communications campaigns for traffic safety is rarely studied and that campaigns should be tied to focused traffic enforcement efforts to maximize safety benefits. Given these realities, the City will maximize our effectiveness by supporting State or County-led education efforts and sharing messages on Vision Zero improvements rather than on large education or communications campaigns.

![](_page_27_Picture_11.jpeg)

# Strategy 1: Support partnerships to expand access to drivers' safety education.

**Actions:** 

- 1.1 Explore potential partnerships to expand access to drivers' education in Minneapolis high schools and to expand access to traffic safety education for adults.
- 1.2 Work with the Minnesota Department of Public Safety to add more bicycle, scooter, and other mobility options to the driver's education curriculum.
- 1.3 Explore a pilot to train City staff in traffic safety.

### Strategy 2: Strategically communicate to build a traffic safety culture and educate about safe behaviors.

- 2.1 Integrate Vision Zero messaging throughout City of Minneapolis programs and projects that relate to traffic safety.
- 2.2 Create Vision Zero communications and education materials in multiple languages.
- 2.3 Utilize and reinforce messages created through the state's Toward Zero Death program when appropriate.
- 2.4 Work with local community- and culturally-based organizations to shape and share Vision Zero-related messages, including providing contracts.
- 2.5 Explore potential partnerships for effective communications approaches to address reckless driving.
- 2.6 Share Vision Zero messages regularly on Cityowned communications channels.
- 2.7 Maintain the Vision Zero Minneapolis webpage and social media accounts to share information and engage with community members.

![](_page_28_Picture_14.jpeg)

### **Traffic enforcement**

Traffic enforcement can help improve traffic safety, but research shows that it is most effective when automated with traffic safety cameras, done in coordination with other safety efforts, and done as part of highly visibility education and communications campaigns<sup>13</sup>. The City is working to design and implement self-enforcing streets and to support education and other efforts to reduce the long-term need for traffic enforcement.

This plan focuses on realistic near-term actions related to traffic enforcement recognizing the need for some effective, fair, and equitable traffic enforcement; the lack of capacity in the Minneapolis Police Department for traffic enforcement; and police reform efforts and forthcoming consent decree to address discriminatory outcomes and build community trust.

![](_page_29_Picture_3.jpeg)

### **Capacity constraints**

Due to a variety of factors, Minneapolis Police stopped fewer than 3,000 people in 2021 for moving or equipment violations—compared to about 16,000 traffic stops in 2019 and about 90,000 traffic stops in 2012. The City has had challenges recruiting and retaining officers and have redirected officer resources to addressing violent crime. There also is no longer a traffic enforcement unit, which means there are no officers focused primarily on traffic safety and enforcement. The traffic investigations unit is also very short on capacity making detailed investigation only possible on select severe and fatal crashes. And Police have struggled to find officers interested in taking overtime shifts to do focused Minnesota Toward Zero Deaths-funded traffic enforcement. The City is working to recruit more officers, but it is not anticipated that additional capacity for traffic enforcement will be available in the near term.

Traffic control agents housed in Regulatory Services also do traffic related enforcement, primarily focused on parking violations. Their capacity is also constrained. State law also does not clearly allow moving violations to be enforced by agents who are not licensed peace officers.

## Addressing discriminatory outcomes and building trust

The 2022 Minnesota Department of Human Rights investigation of the City and the Police Department found that people of color and Indigenous people are more likely to be stopped for a traffic violation when it is light outside and race is potentially visible than when it is dark outside and race of individuals is harder to determine. It also found that Black and white individuals are treated differently during traffic stops in a variety of problematic ways, including higher likelihood of searches, citations, lengthy stops, use of force, and arrest.

<sup>&</sup>lt;sup>13</sup> National Highway Traffic Safety Administration guidance rates numerous potential traffic enforcement efforts. It rates automated speed enforcement as the most effective enforcement strategy. It notes that high visibility saturation patrols for driving under the influence have been found effective if coupled with strong communications campaigns. It says that high visibility speed enforcement yields "inconclusive" results with safety benefits in some cases, but not in others.

The City has been working to implement a variety of police reforms, including no longer conducting stops for expired tabs, most items dangling from a rearview mirror, and inoperable license plate lights (see The Minneapolis Police Department Policy and Procedure Manual Policy 7-601 for details). The City will continue work to advance procedural justice in traffic stops and work to specifically address racial disparities in traffic stops<sup>14</sup>.

### **Evaluating enforcement alternatives**

In 2021, the Office of Performance and Innovation began an evaluation of potential unarmed traffic safety enforcement alternatives after a City Counciladopted staff direction. A summary of that initial work was presented to City Council in November 2021. Their work consisted of understanding the current landscape of traffic enforcement between Police and Regulatory Services. They found that Police have many avenues to select when enforcing traffic violations ranging from arrest to issuing a ticket whereas Traffic Control agents are restricted to issuing tickets given their scope of work focuses on non-moving violations. When analyzing Police data they identified clear racial disparities in traffic enforcement, especially for Black drivers. Given the serious capacity limitations for the Police Department on traffic enforcement, the City will continue to explore alternative approaches to delivering this needed service without straining the capacity of Police to respond to other priorities.

### **Automated traffic enforcement**

Automated traffic enforcement is proven to improve safety. <u>Federal Highway Administration</u> research found that speed safety cameras can reduce injury crashes by up to 47% on busy arterial streets. <u>National</u> <u>Highway Traffic Safety Administration guidance</u> gives automated enforcement it's highest effectiveness rating. <u>Research on red light cameras</u> have found a 14% estimated reduction in citywide intersection fatal crash rates for cities with red light cameras. More than 100 communities in 18 states and Washington, D.C. <u>have</u> <u>speed safety camera programs</u>. University of Minnesota research found strong support from Minnesota residents for speed safety cameras, especially in work zones and school zones<sup>15</sup> and the City has heard general support for automated enforcement in engagement around this plan and the previous Vision Zero Action Plan<sup>16</sup>.

Existing Minnesota law does not support effective implementation of automated traffic enforcement. In 2021, the City completed a technical study of automated enforcement to inform a potential future program and efforts to get state enabling legislation. The study looked at research and other cities to understand how automated enforcement programs are structured and managed, and strategies to ensure effective and equitable implementation.

MnDOT and the Minnesota Department of Public Safety also looked at automated enforcement as part of the <u>2022 Work Zone Speed Management Study</u>. That study recommends a speed safety camera pilot in highway work zones.

The City is focused initially on getting legislative authority for a speed safety camera pilot. Such a program would help address the growing statewide challenge of dangerous speeding. During the 2022 legislative session, two bills were introduced that would enable a speed safety camera pilot program. The City was primarily involved with the bill <u>House File 4242</u>/ <u>Senate File 3996</u>, which includes best practices to protect privacy, ensure fairness, and support equity (<u>bill summary</u>). The bills were not adopted in 2022, but did have a positive House committee hearing. The City will work to partner with cities, state agencies, and community groups to continue to build support for state enabling legislation.

<sup>&</sup>lt;sup>14</sup> Police Department policy requires officers to document several details when doing a traffic stop, including race, age, and gender of the driver. Officers often document that based on observation. Detailed information on <u>Police Department stops is available here</u>.

<sup>&</sup>lt;sup>15</sup> Survey found 83% of Minnesotans were very supportive or supportive of speed cameras in work zones and 81% were "very supportive" or "supportive" of speed cameras in school zones. University of Minnesota Center for Transportation Studies. 2012.

<sup>&</sup>lt;sup>16</sup> In 2022 Vision Zero Action Plan questionnaire, 63% were strongly or somewhat supportive of installing speed safety cameras while 25% were opposed (1,386 respondents). In 2019 Vision Zero Action Plan engagement, 58% said they would be in favor of Minneapolis using automated traffic enforcement while 28% were not in favor (1,595 responses). The City heard more support than opposition across nearly all demographics and areas of the city in both questionnaires, but neither questionnaire is a fully representative sample.

Once state law enables speed safety cameras, additional local work will be needed to inform a local pilot. That work includes additional community engagement, determining department roles, budgeting, potential City ordinance change, and a variety of technical and logistical details. If a speed safety camera pilot is successful, the City will consider exploring the potential of other automated safety enforcement such as red light safety cameras.

## Strategy 3: Work to implement a speed safety camera pilot of automated enforcement.

**Actions:** 

- 3.1 Seek legislative authority to enable a fair, equitable, and effective speed safety camera pilot.
- 3.2 Once there is legislative authority for a speed safety camera pilot, create the detailed structure for a local pilot. The local pilot will be informed by significant community engagement, including culturally-relevant and in-language activities to connect with traditionally underrepresented communities.
- 3.3 Do a comprehensive evaluation of the speed safety camera pilot, including traffic safety impacts, equity evaluation, and recommendations for whether the program should be continued or terminated.

### Strategy 4: Strategically, equitably, and fairly enforce traffic laws to reduce the most dangerous behaviors on Minneapolis streets.

**Actions:** 

4.1 Finalize study to evaluate alternative approaches to staffing and implementing traffic enforcement started by the Office of Performance and Innovation. This work should cover both moving and non-moving violations<sup>17</sup> with a priority on moving violations given their connection to injuries and deaths. The work should be informed by community engagement that centers the voices of communities most impacted by traffic crashes and traffic enforcement.

- 4.2 Implement reforms to address racial disparities in traffic stops outlined in the Minnesota Department of Human Rights investigation of the City and the Police Department.
- 4.3 Focus traffic enforcement on the five leading behaviors in severe crashes on Minneapolis streets: driving under the influence of alcohol or drugs, distracted driving, speeding, red light running, and unsafe turning.
- 4.4 Seek opportunities to do proactive communications, education, and media efforts around any new enforcement focuses. Start new campaigns with educational warnings and when possible, coordinate with Minnesota Department of Public Safety communications campaigns.

![](_page_31_Picture_13.jpeg)

<sup>17</sup> Moving violations involve operating a motor vehicle in an illegal way while it is in motion, including speeding, running a red light or stop sign, failure to yield the right of way, and impaired or distracted driving. Non-moving violations include equipment violations (for example, vehicle light not working or expired license plate tab) and parking or stopping violations.

### **Community wellbeing and safety**

There are unacceptable disparities in traffic crashes, especially in Areas of Concentrated Poverty (see page 12). These disparities mirror disparities in many other outcomes and have been exacerbated since 2020 with the COVID-19 pandemic, the trauma caused by the murder of George Floyd, and increased gun violence. While severe and fatal crashes have grown significantly in some areas of Minneapolis, especially on the Northside, wealthier areas in far South and Southwest Minneapolis have seen very few severe and fatal crashes since 2020. There has been an increase in traffic deaths related in some way to gun violence or police chases (5 of 23 total fatal crashes in 2021). And around the country, people experiencing homelessness are more likely to die in traffic crashes and we see evidence of similar trends in Minneapolis.

Addressing disparities is a key priority for the City and happening in many areas with many departments involved. <u>The Minneapolis 2040 Plan's first goal</u> is "Eliminate disparities: In 2040, Minneapolis will see all communities fully thrive regardless of race, ethnicity, gender, country of origin, religion, or zip code having eliminated deep-rooted disparities in wealth, opportunity, housing, safety, and health." While Vision Zero is not a primary consideration in this work, investments to eliminate disparities, support community wellbeing, and community safety are essential for Vision Zero.

# Strategy 5: Invest in community wellbeing and community safety.

**Actions:** 

5.1 Explore opportunities for coordination and potential collaboration between Vision Zero work and community safety, violence prevention, and homeless outreach efforts.

![](_page_32_Picture_6.jpeg)

# **SAFE VEHICLES**

Safe Vehicle actions address the City's role in regulating and maintaining safe vehicle fleets.

Vehicle safety regulations are a key part of reaching Vision Zero. Federal requirements for seat belts and air bags <u>have saved hundreds of thousands of lives</u> across the country and requirements for new traffic safety technology are being considered. The federal government manages vehicle safety regulations and the City's role in vehicle safety is more limited.

Information that informs our approach to Safe Vehicles includes:

- The 2022 Vision Zero Crash Study and the 2018 Vision Zero Crash Study both found that large trucks are only involved in about 3% of severe and fatal crashes in Minneapolis, which is lower than average for Minnesota, the U.S. in general, and most large cities. As such, we do not have many focused actions related to large trucks as compared to some other cities.
- Less than 1% of severe and fatal crashes from 2017 to 2021 involved people using motorized foot scooters. The City includes safety regulations as part of City ordinances and safety is a part of the process for considering scooter rental vendors. The City will support improved safety for scooter riding through Safe Streets and Safe People actions as well.

# Strategy 1: Support safety with mobility technologies and the City's vehicle fleet.

- 1.1 Pilot and manage emerging vehicle technologies with the potential to improve safety while ensuring they support City goals.
- 1.2 Continue to monitor safety on the City's scooter share program and make adjustments to requirements, education, or design as appropriate.
- 1.3 Evaluate the potential to use smaller vehicles in the public fleet to align with safer street designs.
- 1.4 Support efforts to require prudent additional vehicle safety features with a particular focus on measures that will increase pedestrian and bicycle safety.

# **SAFETY DATA**

Safety Data actions support the data-driven approach to Vision Zero and ensure accountability for progress towards goals. Public Works uses crash reports made by the Police Department to inform many of the strategies and actions in this plan, prioritize investments, and evaluate treatments and projects.

### Strategy 1: Maintain quality traffic safetyrelated data and analysis.

### **Actions:**

- 1.1 Explore the potential of a new user-friendly system for sharing Minneapolis traffic crash data with the public.
- 1.2 Maintain a Minneapolis Public Works crash database and update at least quarterly.
- 1.3 Maintain an online <u>traffic safety concerns reporting</u> <u>system</u> in coordination with the neighborhood traffic calming program and Vision Zero capital program. Regularly monitor community feedback.
- 1.4 Create and maintain a Vision Zero metric tracking page on the City website.
- 1.5 Evaluate ways to further integrate predictive crash analysis into Vision Zero planning.
- 1.6 Evaluate potential changes in officer training for traffic crash reporting to improve the accuracy of the collected safety data.
- 1.7 Support changes to crash data reporting systems to better reflect all mobility options, including motorized foot scooters, and to collect data on race and disability status.

### Strategy 2: Report regularly on Vision Zero.

**Actions:** 

2.1 Issue an annual Vision Zero report.

![](_page_34_Picture_14.jpeg)

# **Monitoring Progress**

Evaluation and regular reporting are essential for the data-driven approach to Vision Zero and accountability to the commitment of eliminating traffic deaths and severe injuries. The City issues annual Vision Zero reports, which are <u>maintained on our website</u>. Some metrics will be reported annually while others will be reported every two or three years based on the resources needed for the reporting.

## **Performance metrics:**

- 1. Change in total combined number of traffic deaths and severe injuries, including breakdown by mode, age, race, and whether it was in an ACP50 area
- 2. Percentage change in drivers exceeding 30 miles per hour and median traffic speeds on select streets
- 3. Percentage of High Injury Streets with new traffic safety treatments
- 4. Miles of four-lane undivided High Injury Streets converted to safer configurations
- Number of total intersections with new traffic safety treatments, listed separately by those with design changes and those with traffic signal-related changes

- 6. Percentage of new street safety treatments in ACP50 areas
- 7. Number of residents reached by Vision Zero engagement work, including breakdown of those reached by City staff-led engagement and engagement led by community- and culturallybased organizations
- 8. Percentage change in traffic stops that are of people of color
- 9. Percentage of traffic stops focused on the top five unsafe behaviors on Minneapolis streets

<sup>&</sup>lt;sup>18</sup> Includes crashes on City, County and State-owned streets in Minneapolis, but excludes 1) crashes on freeways; 2) crashes on private property; 3) crashes reported as a suicide or a Homicide in which the 'party at fault' intentionally inflicted serious bodily harm that causes the victim's death; and 4) Crashes caused directly and exclusively by a medical condition.

<sup>&</sup>lt;sup>19</sup> ACP50 area is an Area of Concentrated Poverty where a majority of residents are people of color. Will also report on other future designations that prioritize equity.
<sup>20</sup> Improvements should be measured as a percentage of the problem areas of the corridor that have been addressed. This can include a variety of improvements such as lane safety conversions, intersection improvements (including signal retiming, dedicated turn phases, etc.), midblock crossing improvements, etc. For example, if 25% of the intersections along the corridor have undergone a safety improvement, only 25% of the corridor can be counted. Over time, this measure may need to be reevaluated if the desired crash reduction results are not achieved.

<sup>&</sup>lt;sup>21</sup> Public Works is preparing a Racial Equity Framework for Transportation. The Racial Equity Framework will propose a new Transportation Equity Priority designation, which will replace Areas of Concentrated Poverty with more than 50% people of color (ACP50) as the geographic-based way of considering equity in transportation. We anticipate updating the Vision Zero Action Plan to reflect the new designation before final approval of this plan.

## **Engagement Summary**

This plan is informed by extensive <u>engagement on the Transportation Action Plan</u>, <u>engagement on the original Vision Zero Action Plan</u>, feedback from the 2022 Vision Zero survey, and feedback on recent street projects and street safety projects.

While there are many different—and sometimes competing—perspectives, we have heard several themes through our engagement:

- strong support for improving traffic safety, especially for people with disabilities and people walking or biking;
- increasing concern about aggressive driving and speeding;
- a desire for the City to rapidly improve street safety; and
- hope that the City can equitably improve traffic enforcement.

### 2022 Vision Zero survey

Feedback on the 2022 Vision Zero survey was collected primarily online with in-person collection at a few community events; 1,519 people responded to the survey. Note that the survey does not provide a representative sample of Minneapolis: Black, Indigenous, Latino, and Asian residents are underrepresented as are people younger than 35, residents of North and Southeast, and people with household incomes below \$50,000. All responses from the survey are available here.

![](_page_36_Picture_9.jpeg)

![](_page_37_Figure_0.jpeg)

Question 1: How much do you support or oppose more measures to help achieve slower and safer traffic speeds on busier streets (e.g. Nicollet Avenue, Lyndale Avenue N, or Monroe Street NE) in Minneapolis?

Based on 1519 responses

## Question 2: Would you support or oppose these specific measures **on busier streets** in Minneapolis to help achieve safer traffic speeds?

![](_page_38_Figure_1.jpeg)

Based on 1519 responses