Strategies and Actions

Implementation Approach

Collaboration across department, agency, and community partners is essential to achieving Vision Zero.

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 2020 to 2022. 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.

These strategies and actions were developed by City staff across multiple departments with significant input and direction from community stakeholders, external partners, and the public (a summary of engagement is included on page 26).

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 inequities in other areas, including proactively engaging the community and addressing equity related to traffic safety enforcement;
- Make strategic choices based on data, including targeting action on High Injury Streets and addressing the most dangerous behaviors; and
- Include ongoing meaningful and diverse community engagement throughout implementation.



Supporting Safe Speeds

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.

Safe Streets

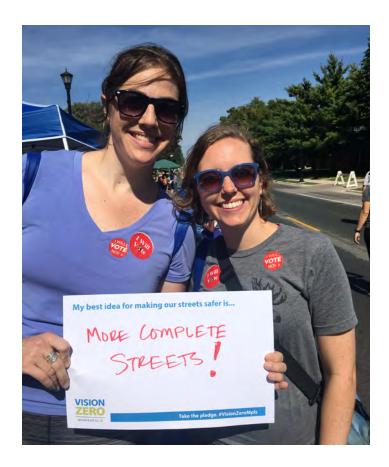
Safe Streets strategies and actions use street design, infrastructure, and operations to improve traffic safety.

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 will complement strategies and actions in the Minneapolis Transportation Action Plan.

In 2017 and 2018, the City comprehensively analyzed 10 years of crash data for trends to inform Vision Zero work. Key findings from the <u>Pedestrian Crash Study</u> and <u>Vision Zero Crash Study</u> include:

- Severe crashes are concentrated on relatively few streets, noted as High Injury Streets;
- Most crashes (88 percent) happen at intersections and a majority (57 percent) happen at signalized intersections;
- Pedestrians and bicyclists are overrepresented in severe and fatal crashes;
- As more people are bicycling, bicycling has become safer;
- 4-lane undivided streets are most likely to have concentrations of severe and fatal crashes;
- Streets with higher speed limits and higher speeds are generally more likely to have more severe and fatal crashes; and
- Crashes are disproportionately concentrated in neighborhoods with more people with low incomes, and where a majority of residents are people of color.

The City will focus additional attention on addressing City-owned High Injury Streets and collaborating with Hennepin County and Minnesota Department of Transportation on High Injury Streets they own. These streets collectively experienced 70 percent of the severe and fatal crashes between 2007 and 2016, but only make up 9 percent of the streets in Minneapolis. Figure 10 shows the map of High Injury Streets. Some



High Injury Streets have either recently been improved with safety treatments, or are planned for improvement in the near future. The City will monitor those streets and focus Vision Zero resources on proactive investments on other High Injury Streets in the near term.

The City will make proactive investments in proven safety treatments, 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, older adults, and other vulnerable street users.

Safety treatments may include, but are not be limited to:

- 4-to-3 lane safety conversions: reconfiguring a
 4-lane street (2 lanes in each direction) to become a
 3-lane street (one lane in each direction plus a center left-turn lane).
- 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.

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- 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 between drivers and pedestrians.
- 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 bump 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 at pedestrian crossings where there is not a traffic signal or stop sign.
- Pedestrian refuge 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.
- Bicycle lanes and protected bike lanes: space separated from motor vehicle traffic where bicyclists can ride.
- 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.

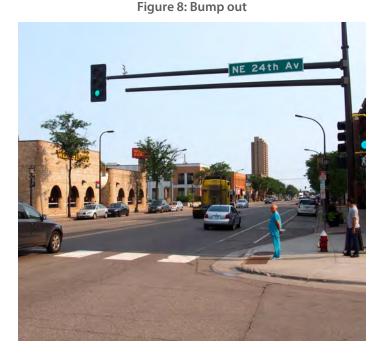
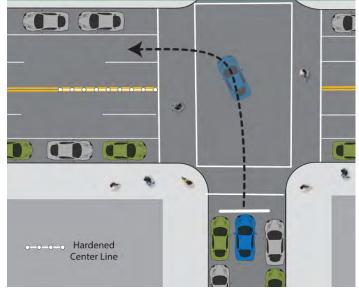
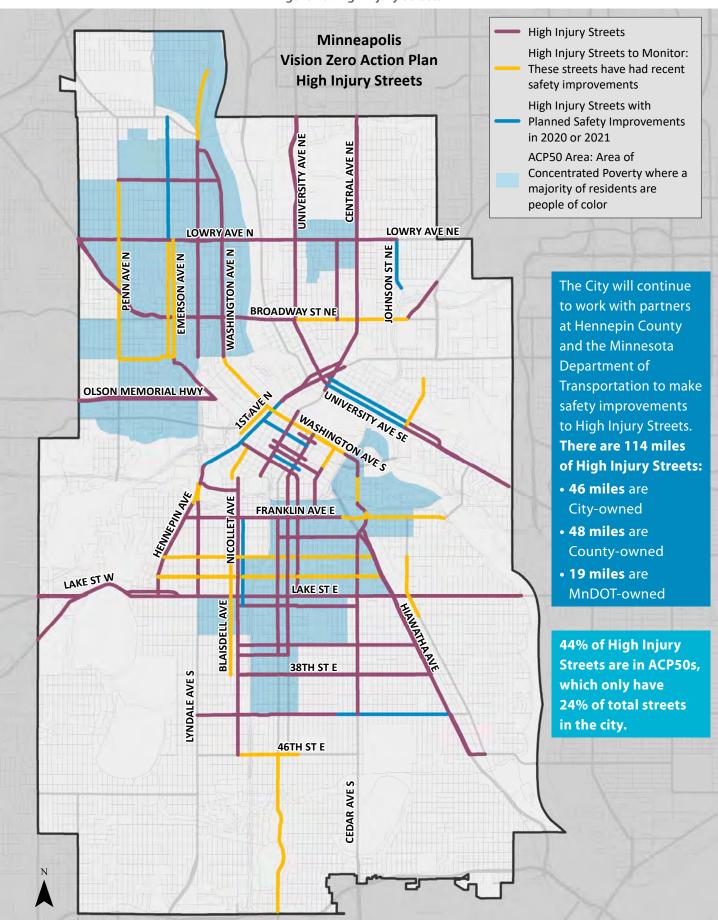


Figure 9: Hardened centerline



Source: National Association of City Transportation Officials (NACTO), New York City Department of Transportation

Figure 10: High Injury Streets



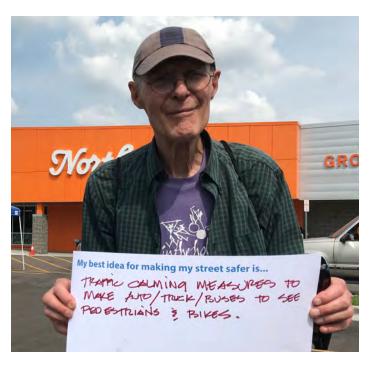
Strategy 1: Reduce speed limits.

Actions:

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

Strategy 2: Make 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 highinjury 4-lane undivided streets. High Injury Streets with 4 lanes include sections of Lyndale Avenue N, Hennepin Avenue S, 3rd Avenue S, and 31st Street E.
- 2.2 Partner with Hennepin County 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. High Injury Streets with 4 lanes include sections of Lowry Avenue N and NE, Broadway Avenue N and NE, Washington Avenue N, Lyndale Avenue S, Lake Street, Franklin Avenue, and 46th Street E.
- 2.3 Partner with 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. High Injury Streets with 4 lanes include sections of: Central Avenue NE, 3rd Avenue S, and University Avenue NE.





- 2.4 Install and maintain proven lower-cost safety treatments at signalized and unsignalized intersections on the City's High Injury Streets.

 Develop an intersection safety improvement plan based on technical analysis, community and partner agency engagement, and maintenance needs.
- 2.5 Partner with MnDOT and Hennepin County to fund, proactively install, and maintain proven intersection safety treatments on High Injury Streets they own.

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

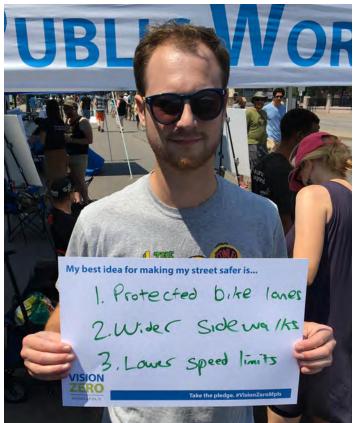
Actions:

- 3.1 Update the City's Street Design Guide as part of the Transportation Action Plan to integrate Vision Zero goals, reflect latest guidance and research on safe streets, and align with new speed limits.
- 3.2 Train staff and consistently use the updated Street Design Guide for all appropriate street projects to effectively evaluate proactive and reactive street safety treatments for different contexts and challenges.
- 3.3 Update ordinance for utility companies working in street rights-of-way to incorporate safety improvements, and work with utility companies to ensure compliance.
- 3.4 Update requirements for private developers to include safety improvements when working in the public right-of-way (particularly when doing curb work), and ensure compliance.
- 3.5 Work to incorporate safety treatments as part of public utility projects that include significant curb work.

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

- 4.1 Update procedures for responding to community traffic safety requests to make responses more transparent, consistent, and equitable and to maximize safety improvements.
- 4.2 Identify non-High Injury Streets that would benefit most from proactive safety treatments to inform future update to the Vision Zero Action Plan.





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

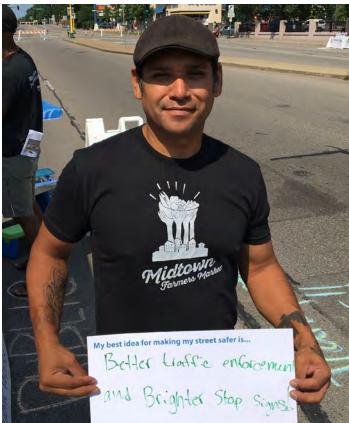
Actions:

- 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, but adjusting timing so that it is consistent and understandable.

Strategy 6: Engage with community members proactively on street safety improvements.

- 6.1 Proactively engage the community on High Injury Streets, especially in Areas of Concentrated Poverty where a majority of residents are people of color (ACP50 areas), to deliver the best safety projects possible to serve community needs and to build community support for traffic safety investments.
- 6.2 Provide engagement funding to support local community- and culturally-based organizations to support engagement work on select safety projects.
- 6.3 Pilot follow-up engagement at select locations that see traffic safety improvements as part of project evaluation.





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

Actions:

- 7.1 Create a public brand for Minneapolis Vision
 Zero efforts and use it consistently on street
 infrastructure and operations projects that include
 significant safety elements.
- 7.2 Create and implement procedures for incorporating the public brand and traffic safety education into engagement, construction, education, and evaluation work for traffic safety-focused projects. The procedures will include:
 - Consistently sharing safety rationale for street projects using a variety of techniques;
 - Sharing information about street projects at locations where the street is being improved; and
 - Consistently educating street users on how to use new traffic safety-focused street elements.

Strategy 8: Support transportation options that reduce driving.

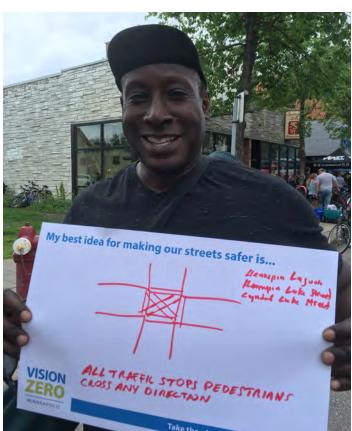
Actions:

- 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 forthcoming Transportation Action Plan strategies to expand access and use of walking, biking, transit, and emerging mobility options.

Strategy 9: Evaluate street safety treatments regularly and consistently and adjust treatments as prudent based on the results.

- 9.1 Evaluate street safety projects and related work.
- 9.2 Include summary of street safety evaluations in each annual Vision Zero report.





Safe People

Safe People strategies and actions support and encourage safe human behavior when traveling streets.

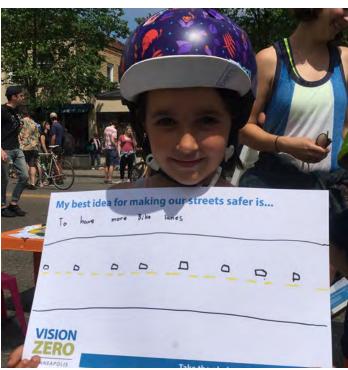
It is important for people to be predictable and safe when they travel, regardless of how they get around. In order to have the biggest impact on safety, the City plans to focus additional attention for the implementation of Safe People actions on the five leading causes of severe and fatal crashes on Minneapolis streets:

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

Strategy 1: Expand access to quality drivers' and traffic safety education.

- 1.1 Evaluate and begin implementing ways to expand access to drivers' and multimodal transportation safety education in Minneapolis high schools. Potential strategies to be evaluated include:
 - Incorporating drivers' and transportation safety education as part of the base high school curriculum:
 - Subsidizing drivers' and transportation safety education access for low-income residents; and
 - Creating drivers' and transportation safety education programs at high schools or community education programs that do not currently have access.
- 1.2 Evaluate and begin implementing ways to expand access and improve the quality of drivers' education and traffic safety education for adults, including older adults.
- 1.3 Support state-level changes to drivers' education and testing to better incorporate bicycle, walking, and other mobility options (for example, scooters) safety.





- 1.4 Train all City staff in traffic safety as a requirement to drive a City vehicle and incorporate traffic safety into other training opportunities as feasible.
- 1.5 Review compliance with requirements for safety education for ride hailing drivers (for example, Lyft and Uber) and evaluate potential adjustments.

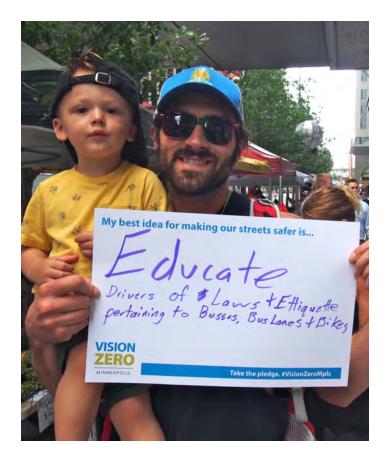
Strategy 2: Expand safe walking and bicycling education for youth.

Actions:

- 2.1 Fully integrate walk safety training within the Minneapolis Public School's bicycle education program.
- 2.2 Expand Minneapolis Public School's bicycle and walk education program so that it reaches all students in 4th or 5th grade.
- 2.3 Evaluate opportunities to expand walking and biking safety education to charter and private schools.
- 2.4 Engage students directly in street projects adjacent to schools.

Strategy 3: Strategically communicate to build a traffic safety culture and educate about safe behaviors.

- 3.1 Integrate Vision Zero messaging throughout City of Minneapolis programs and projects that relate to traffic safety.
- 3.2 Create and use a message toolkit to get key safety messages out consistently with media interactions around crashes.
- 3.3 Create a public brand for Minneapolis Vision Zero efforts and use consistently in traffic safety efforts.
- 3.4 Coordinate a communications campaign around speed limit change to educate travelers about the key connection between speed and safety, and increase understanding of new speed limits.
- 3.5 Create Vision Zero communications and education materials in multiple languages.
- 3.6 Utilize and reinforce messages created through the state's Toward Zero Death program.
- 3.7 Work with local community- and culturally-based organizations to shape and share Vision Zero-related messages, including providing small contracts.



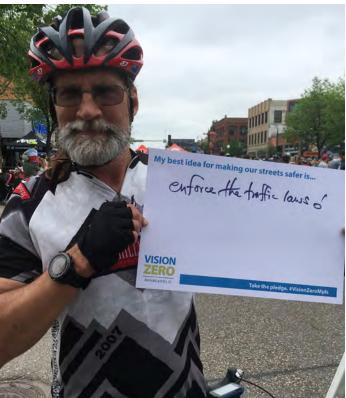
- 3.8 Share Vision Zero messages regularly on Cityowned communications channels.
- 3.9 Proactively work to earn more media around traffic safety work.
- 3.10 Use small paid digital ads and public service announcements to expand the reach of Vision Zero messages.
- 3.11 Maintain the Vision Zero Minneapolis website and social media accounts to share information and engage with community members.
- 3.12 Evaluate Vision Zero communications annually and adjust as needed.

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

Actions:

- 4.1 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.
- 4.2 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.
- 4.3 Create and implement a system to regularly evaluate the City's traffic enforcement efforts in coordination with Vision Zero efforts.
- 4.4 Seek legislative authority to implement automated enforcement for red-light running and speeding.
- 4.5 Evaluate implementation of an automated enforcement system for when the City receives legislative authority to use it. This evaluation will include:
 - Potential systems the City could use;
 - · How to maximize the traffic safety benefits of a system;
 - Analyzing privacy considerations and approaches;
 - Best practices for implementing automated enforcement in an equitable way, including ensuring the enforcement does not disproportionately fall on people of color or people with low incomes;
 - Potential locations of cameras; and
 - Best practices for education, communications, and engagement.
- 4.6 Evaluate recreating the traffic enforcement and crash reduction unit.
- 4.7 Evaluate and implement ways to expand access to the City's diversion program for traffic tickets.





4.8 Evaluate the potential to adjust traffic-related fines based on income, so they do not disproportionately impact people with lower incomes.

Safe Vehicles

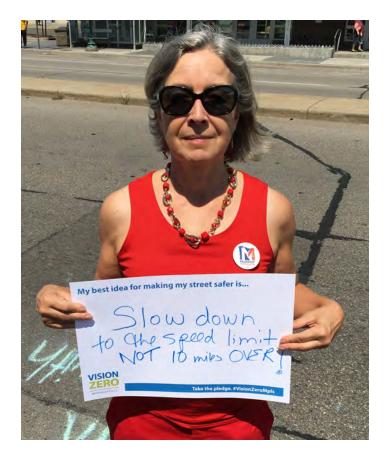
Safe Vehicle actions address the City's role in regulating and maintaining safe vehicle fleets.

Information that informs our approach to Safe Vehicles includes:

- The Vision Zero Crash Study found that large trucks are only involved in about 3 percent of severe and fatal crashes in Minneapolis, which is lower than average for Minnesota, the U.S. in general, and most large cities.
- In 2018, the initial pilot year for shared electric scooters, there were 6 reported traffic crashes involving scooters and none were severe or fatal.
- The City does not currently have specific safety data for ride hailing services.

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

- 1.1 Develop a scorecard for determining how advanced mobility options (ride hailing, scooters, etc.) are shaping the safety of city streets and develop actions as appropriate.
- 1.2 Pilot and manage emerging vehicle technologies with the potential to improve safety while ensuring they support City goals.
- 1.3 Continue to monitor safety on the City's scooter share pilot and make adjustments to requirements, education, or design as appropriate.
- 1.4 Evaluate the potential to use smaller vehicles in the public fleet to align with safer street designs.
- 1.5 Explore and support efforts to require safety equipment on large trucks to improve visibility and awareness, remove blind spots and otherwise improve safety, especially when making turns.





Safety Data

Safety Data actions support the data-driven approach to Vision Zero and ensure accountability for progress towards goals.

Strategy 1: Improve the quality and timeliness of relevant traffic safety data.

Actions:

- 1.1 Develop a new user-friendly system for sharing Minneapolis traffic crash data with the public.
- 1.2 Maintain up-to-date crash data records and update at least quarterly.
- 1.3 Maintain an online traffic safety concerns reporting system, integrate feedback received through 311, and monitor at least every six months to track community feedback trends.
- 1.4 Evaluate ways to integrate hospital records and 911 call data into regular Vision Zero data analysis.
- 1.5 Evaluate ways to integrate predictive crash analysis into Vision Zero planning.
- 1.6 Evaluate potential requirements for transportation network companies to share crash data.
- 1.7 Evaluate potential changes in officer training for traffic crash reporting.
- 1.8 Evaluate ways to expand traffic safety data related to people with disabilities.
- 1.9 Further analyze motorcycle crashes to inform future targeted safety actions.

Strategy 2: Report regularly on Vision Zero.

Actions:

2.1 Issue an annual Vision Zero report and a progress report every six months.



