



DESIGN

Design for people



There are over 1,000 miles of streets in Minneapolis. Streets include sidewalks, transit stops, bikeways and roadway space. They provide space for trees and include critical infrastructure such as pipes for drinking water, stormwater drains to collect rain and cables for electricity and communications. They are the common canvas for public art and community gathering places.

Minneapolis streets are the backbone of people's daily routines and we want to make sure they work for everyone, no matter your race, gender, or background, or how you choose to get around. Yet, street designs of the last century have favored the movement of cars over people. Wide roads and complicated intersections have resulted in streets that are uncomfortable for many, especially those walking, bicycling or taking transit, the very young, old or those experiencing any type of special mobility needs. Additionally, current auto-centric street designs make it challenging to build attractive and welcoming public spaces, where people want to walk, bicycle, shop and spend more time. Design can make the difference between whether people feel like they belong in a space or if they choose to be there at all. Acknowledging that people feel more or less comfortable in public spaces because of gender identity, race, or ability, or whether they travel with children, or fear racial profiling or sexual harassment, are all underlying principles of how we will design our streets.

The City recognizes the consequences of past street design decisions and adopted a Climate Action Plan (2013), Complete Streets Policy (2016) and commitment to Vision Zero (2017), all of which take a fresh approach to thinking about how we design our streets and how street design can impact people's choices of how to travel. To ensure that Minneapolis street design reflects these priorities, the Minneapolis Transportation Action Plan is updating our Street Design Guide. This new design guide is a key step to make walking, bicycling and transit real options for people of all backgrounds and in all neighborhoods of Minneapolis, eliminating all traffic deaths and severe injuries and addressing the effects of climate change.

The Street Design Guide will be finalized in early 2021, separate from and guided by the Transportation Action Plan.



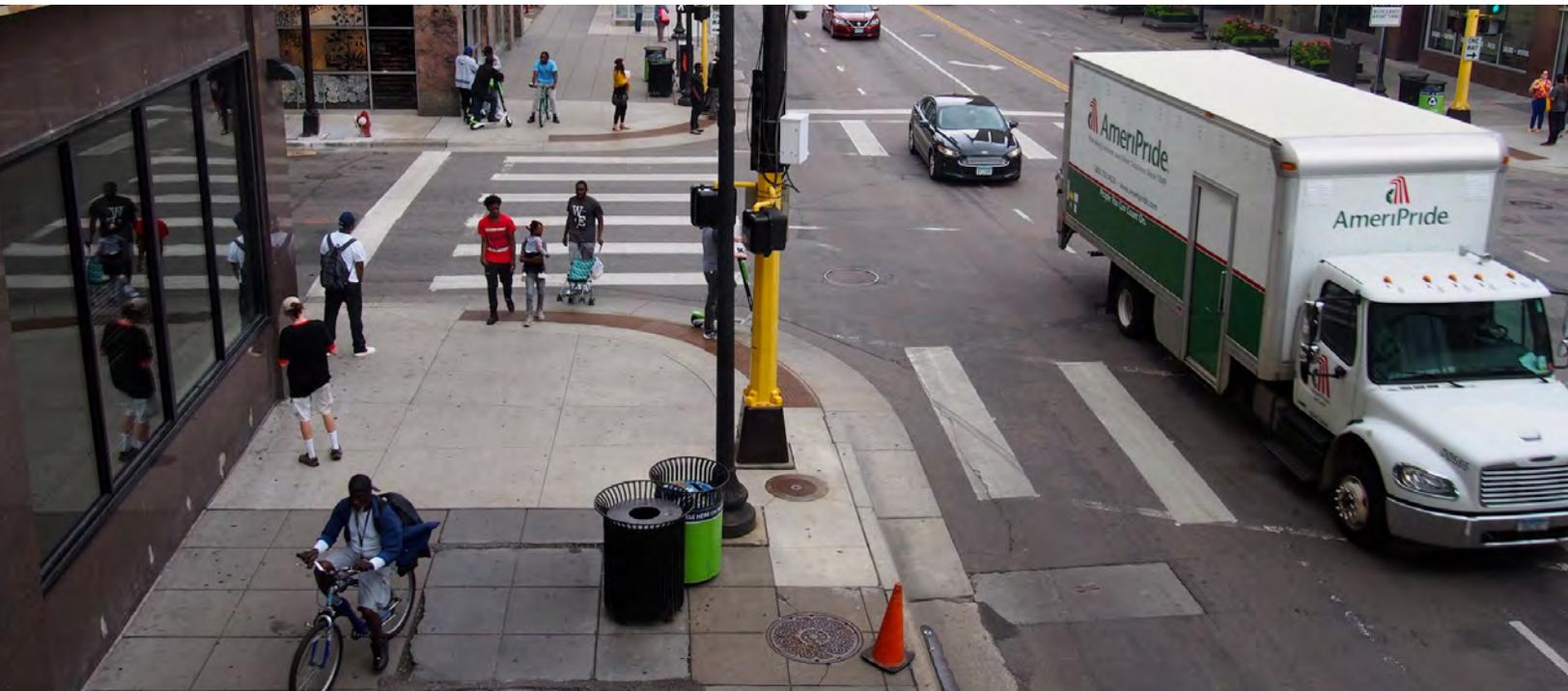
DESIGN STRATEGIES

- 1** Develop a Street Design Guide that informs the planning and design of all future street projects. The Street Design Guide will recognize streets as the city's largest public space and institutionalize the City's Complete Streets Policy, Vision Zero commitment, greenhouse gas emission reduction goal, commitment to racial justice and stormwater management requirements through the design of city right of way.
- 2** Foster vibrant public spaces for street life.
- 3** Incorporate carbon-reduction design elements into City infrastructure projects.
- 4** Green the streets.
- 5** Use street design to improve transit operations.

Seek design exceptions and variances to established standards when standards established by other units of government conflict with the City's Complete Streets Policy.
- 6**

SEE ALSO STRATEGY:

- [Bicycling Strategy 3 — Neighborhood greenways](#)





STRATEGY 1

Develop a Street Design Guide that informs the planning and design of all future street projects. The Street Design Guide will recognize streets as the city's largest public space and institutionalize the City's Complete Streets Policy, Vision Zero commitment, greenhouse gas emission reduction goal, commitment to racial justice and stormwater management requirements through the design of city right of way.

The City of Minneapolis has strong policies that direct resources and set an agenda relative to transportation. Key policies include:

- Complete Streets, which establishes a modal priority framework that prioritizes people as they walk, bicycle and take transit over people when they drive;
- Vision Zero, which sets a goal of ending traffic related fatalities and life-changing injuries on our streets by 2027;
- Climate-related goal to reduce citywide greenhouse gas emissions by 30% by 2025 and 80% by 2050 (from 2006 emissions levels);
- Commitment to racial justice, detailed in the City's Strategic Racial Equity Action Plan, which seeks to dismantle institutional injustice and close racial disparities in health, housing, public safety and economic opportunities; and
- Stormwater management programs that increase pervious areas and incorporate stormwater quality practices into linear projects to improve the water quality in the city's lakes, creeks and the Mississippi River.

These policies give clear direction for an approach to how we design our streets. Street design must reflect these policies and translate them into opportunities for increased health and safety outcomes for everyone and improved walking, biking, transit and green infrastructure.

The Street Design Guide will:

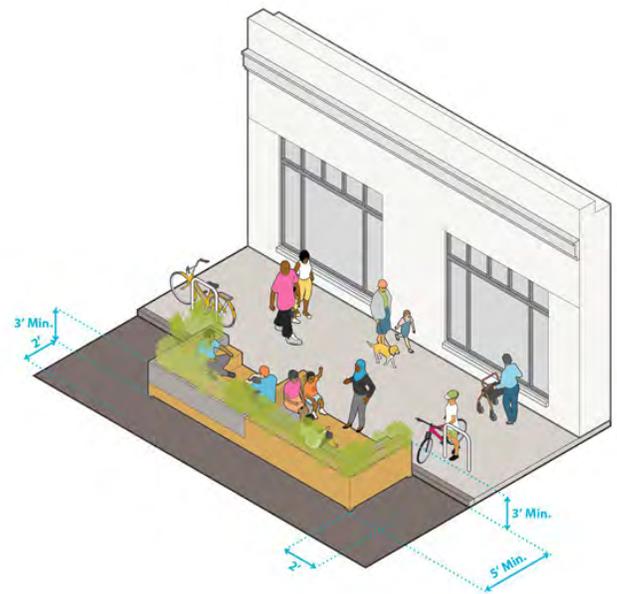
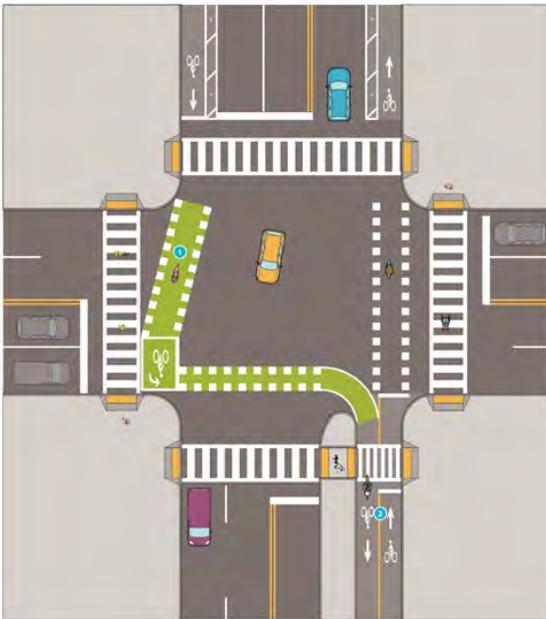
- Directly support transportation goals and provide the starting point for all designs for street reconstruction projects in the city.
- Serve as a starting point for street design changes to better meet our goals and provide safer and more convenient options without waiting for a street reconstruction project, through projects that rely primarily on operational changes through street restriping and use of bollards.
- Inform approaches for all partnership projects on streets owned and operated by other jurisdictions.



Figure 148: Typical street type in Street Design Guide



Figure 149: Typical design exhibit in Street Design Guide





ACTIONS

Actions to develop a Street Design Guide that informs the planning and design of all future street projects.

Actions	Supports	Difficulty
<p>DO ACTION 1. 2020-2023 (YEARS 0-3)</p> <p>Establish an updated street typology based on planned land use and built form, including consideration of schools, parks and other destination, to inform the character of streets and organize design guidance.</p>	Safety, Mobility	Low
<p>DO ACTION 1.2 2020-2023 (YEARS 0-3)</p> <p>Create typical concepts and cross-sections for each street type based on common street widths, including designs for reconstruction, resurfacing and other interim street projects.</p>	Safety	Low
<p>DO ACTION 1.3 2020-2023 (YEARS 0-3)</p> <p>Publish the Street Design Guide online in a user-friendly format on a platform that is accessible to City staff, partner agencies, private developers and the public.</p>	Safety, Active partnerships	Low
<p>DO ACTION 1.4 2020-2023 (YEARS 0-3)</p> <p>Update requirements for private development and utility work that impacts the street right of way to incorporate treatments detailed in the Street Design Guide. <i>See Walking Strategy 7</i></p>	Safety, Active partnerships	Low
<p>DO ACTION 1.5 2020-2023 (YEARS 0-3)</p> <p>Update the Complete Streets checklist for transportation projects to align with the Street Design Guide.</p>	Safety	Low
<p>DO ACTION 1.6 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Review the Street Design Guide every two years and make updates as needed to reflect changes in transportation options, local and national best practices and new information as a result of research and evaluation of pilot projects and data evaluation.</p>	Safety	Low
<p>DO ACTION 1.7 2024-2027 (YEARS 4-7)</p> <p>Research, evaluate and adopt design guidance for automated vehicles and automated transit curbside use needs and travel lane impacts. <i>See Technology Action 1.5</i></p>	Safety, Mobility, Active partnerships	High



STRATEGY 2

Foster vibrant public spaces for street life.

Streets are spaces where people travel through but also where people gather, meet, socialize, and speak up as part of our democracy. This strategy aims to create more attractive places within the public right of way that are inviting, that encourage people to linger and enjoy the city where they live, work or play. Many initiatives that support people enjoying public space also have multiple benefits, for example, added greenery helps contain stormwater and can treat stormwater through water purification naturally before entering the city’s waterways.



Figure 152: City Parklet

Figure 150: Lou Gehrig Plaza in Bronx, NY



Figure 151: Public art in Minneapolis





Figure 153: Sidewalk design allows ample space for activities



ACTIONS

Actions to foster vibrant public spaces for street life.

Actions	Supports	Difficulty
<p>DO ACTION 2.1 2020-2023 (YEARS 0-3) Create a Minneapolis Plaza Program to convert underused street space for pedestrians, greening and green infrastructure using guidance from the plaza standards in the Minneapolis Zoning Code.</p>	Climate, Prosperity, Active partnerships	Medium
<p>DO ACTION 2.2 2024-2027 (YEARS 4-7) Revamp the existing courtesy bench program (Minneapolis Ordinance 283) and create a new request process for installing benches and potentially other street furniture.</p>	Equity, Prosperity	Medium
<p>DO ACTION 2.3 2024-2027 (YEARS 4-7) Coordinate with the Department of Community Planning and Economic Development to simplify the process to ‘paint the pavement’ through creative crosswalks, murals and other art in the public right of way.</p>	Prosperity, Active partnerships	Medium
<p>DO ACTION 2.4 2020-2023 (YEARS 0-3) Establish the parklet and street café programs as permanent seasonal programs instead of pilot programs.</p>	Safety, Active partnerships	Low

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ACTIONS (continued)

Actions to foster vibrant public spaces for street life.

Actions	Supports	Difficulty
DO ACTION 2.5 2024-2027 (YEARS 4-7) Explore opportunities for car-free streets, implement pilots, and make permanent improvements.	Climate, Safety, Prosperity, Mobility	High
DO ACTION 2.6 2020-2023 (YEARS 0-3); ON-GOING Consolidate or eliminate existing curb cuts and minimize new curb cuts for vehicle access across sidewalks during street and development projects <i>See Walking Strategy 7</i>	Safety, Equity, Mobility	Medium
DO ACTION 2.7 2020-2023 (YEARS 0-3) Collaborate with community to develop and implement a long-term vision for the public infrastructure at the intersection of 38th Street and Chicago Avenue, including designs that are conducive to allowing space for a memorial to honor George Floyd.	Equity, Prosperity, Active partnerships	Medium

SEE ALSO STRATEGIES AND ACTIONS:

- **Walking Action 2.4** — Covert slip lanes to community space
- **Bicycling Strategy 3** — Neighborhood greenways
- **Bicycling Action 10.2** — Open Streets Minneapolis is sustainable and evolves
- **Technology Action 3.1** — Implement mobility hub network

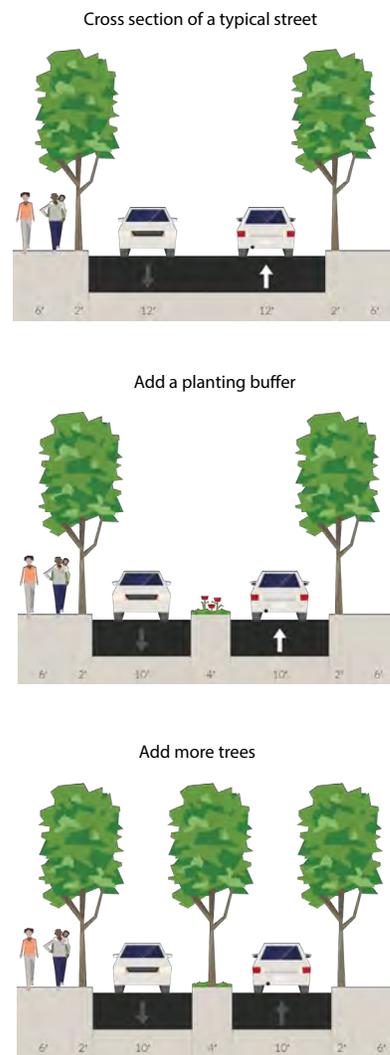


STRATEGY 3

Incorporate carbon-reduction design elements into City infrastructure projects.

This strategy goes beyond how people travel to consider actions that are aimed at the materials we travel on and the impervious space they cover. Continuing to test and evaluate materials as they become available for inclusion in our capital transportation projects to increase product longevity and reduce environmental impacts, minimizing the footprint of the impervious portion of the street design and being open to alternatives to salt and sand that meet objectives around safety in snow and ice are the focus of the strategy.

Figure 154: Reducing lane width of travel lanes offers multiple benefits, including less impervious surface





ACTIONS

Actions to incorporate carbon-reduction design elements into City infrastructure projects.

Actions	Supports	Difficulty
DO ACTION 3.1 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Test and evaluate traditional, new and emerging techniques in pavement materials, utilities and other public infrastructure to increase material longevity and reduce lifecycle carbon footprint.	Climate	Low
DO ACTION 3.2 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Update the Street Design Guide to reflect evaluations and best practices related to environmental stewardship objectives.	Climate	Low
DO ACTION 3.3 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Reduce the negative environmental impacts of street designs by decreasing the amount of asphalt or concrete in favor of increasing green space.	Climate	Medium
DO ACTION 3.4 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Continue investigating alternatives to traditional salt and sand winter maintenance and continue to train staff in related topics such as the Minnesota Pollution Control Agency Smart Salting.	Climate	Low



STRATEGY 4

Green the streets.

Green street elements bring life to the street, capture carbon from the air, reduce heat island effects and provide critical stormwater management function to reduce localized flooding and improve water quality. We will seize opportunities as we make improvements to streets to increase functional and aesthetic street treatments that contribute to climate benefits in the city. Functional elements treat and/or contain stormwater before entering the larger stormwater network. Aesthetic treatments include public realm improvements like plantings, boulevards and trees that help contribute to a sense of place.

Figure 155: Temporary installation of trees helps add greenery quickly and creates street life



Greening the streets helps to rectify the impacts of past street design and land use decisions that resulted in more impervious surface and less green cover in areas of the city that suffered racist redlining housing policy. Even today, neighborhoods in Minneapolis can face a 10 degree difference in heat depending on green coverage.⁶⁸

⁶⁸ "Racist housing policies have created some oppressively hot neighborhoods", National Geographic



Figure 156: Incorporating stormwater infrastructure on street projects will help with localized flooding issues



ACTIONS

Actions to green the streets.

Actions	Supports	Difficulty
<p>DO ACTION 4.1 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Build and maintain stormwater infrastructure into streets, using features such as vegetation and bioswales to reduce runoff and treat water prior to entering waterways.</p>	<p>Climate, Active partnerships</p>	<div style="background-color: #c48e3a; color: white; padding: 5px; display: inline-block;">Medium</div>
<p>DO ACTION 4.2 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Experiment with soil additives, such as biochar, fly ash, and iron fillings to retain pollutants, encourage vegetation growth and help street trees and plants survive in harsh winter conditions.</p>	<p>Climate</p>	<div style="background-color: #c48e3a; color: white; padding: 5px; display: inline-block;">Medium</div>
<p>DO ACTION 4.3 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Add greening elements to streetscapes to support the comfort and pleasure of people using the streets, as bikeway protection where appropriate, around transit stops and stations and in high volume pedestrian areas.</p>	<p>Climate, Active partnerships</p>	<div style="background-color: #c48e3a; color: white; padding: 5px; display: inline-block;">Medium</div>

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ACTIONS (continued)

Actions to green the streets.

Actions	Supports	Difficulty
DO ACTION 4.4 <i>2024-2027 (YEARS 4-7)</i> Explore creating a program to proactively install street trees or other greening elements in underutilized parking spaces, either permanently and/or temporarily.	Climate, Equity	Low
SUPPORT ACTION 4.5 <i>2020-2023 (YEARS 0-3); ON-GOING</i> Increase the tree canopy and urban forest coverage by 2040 by working with the Minneapolis Parks and Recreation Board to preserve and enhance trees in the City's right of way. Prioritize coverage where it least exists and in areas of concentrated poverty with majority people of color.	Climate, Equity, Active partnerships	Medium



STRATEGY 5

Use street design to improve transit operations.

Many high frequency transit corridors are the same corridors where people want to be bicycling, walking or visiting for shopping or other needs. Designing the right of way to support all these activities, and creatively bringing design and operational options together that integrate these uses can be seen in examples locally and from afar.

Figure 157: Bike/transit interaction



Figure 158: Transit island, Chicago



Figure 159: Parklet designed into bus stop, San Antonio



Figure 160: Bus bump out



ACTIONS

Actions to use street design to improve transit operations.

Actions	Supports	Difficulty
<p>DO ACTION 5.1 2020-2023 (YEARS 0-3); ON-GOING Adapt street designs, signals, organization and operations as appropriate to support transit facilities and transit priority.</p>	Climate, Safety, Prosperity, Mobility	High
<p>DO ACTION 5.2 2020-2023 (YEARS 0-3); ON-GOING Design intersections and transit stops to foster safe and predictable interactions between all users consistent with the updated Street Design Guide and Metro Transit’s bus stop design guidelines. Explore integrating creative ideas like parklets and plazas with bus stop designs. <i>See Technology Action 3.1</i></p>	Safety, Equity, Mobility, Active partnerships	High
<p>SUPPORT ACTION 5.3 2020-2023 (YEARS 0-3); ON-GOING Support Metro Transit’s efforts to improve wayfinding throughout the city in the public right of way, with an emphasis on connections to the high frequency network. <i>See Walking Action 8.1, Transit Action 6.8, Technology Action 3.1</i></p>	Safety, Mobility, Active partnerships	Low

SEE ALSO ACTIONS:

- **Bicycling Action 4.3** — Install transit island for bicycle/transit compatibility
- **Transit Action 2.5** — Plan for transit during street reconstruction projects



STRATEGY 6

Seek design exceptions and variances to established standards when standards established by other units of government conflict with the City's Complete Streets Policy.

Regional functional classification is a national system of classifying streets into different categories, with implications for street design, intersection controls and speed limits. Classifications have impacts on which streets are eligible to receive regionally allocated federal funds through the Regional Solicitation process. There are four classes defined within the Twin Cities metropolitan area, including:

- **Principal arterials**, which are intended to move vehicle traffic over long distances. The principal arterials in Minneapolis are the Interstate system, Hiawatha Avenue and Olson Memorial.
- **Minor arterials**, including A and other minor arterials, which are intended to serve medium-to-short trips and support access to major traffic generators. Examples include Broadway Avenue, Lake Street, Lyndale Avenue and Johnson Street Northeast.
- **Collector streets**, including major and minor collectors, which are intended to balance providing direct access to residences and businesses and providing connections between neighborhoods and to arterial streets. Examples include Dowling Avenue North, 18th Avenue Northeast and 38th Street.
- **Local streets**, which are intended to primarily provide direct access to residences and businesses and serve only short trips.

Municipal State Aid Routes are designated streets within Minneapolis that are eligible to receive funds for street maintenance and construction based on a formula determined by the State Legislature.

Projects on the State Aid System need to follow the Municipal State Aid Rules, however variances or design exceptions can be sought and granted where desired designs do not conform with current State Aid Standards.



Figure 161: Municipal state aid routes in Minneapolis

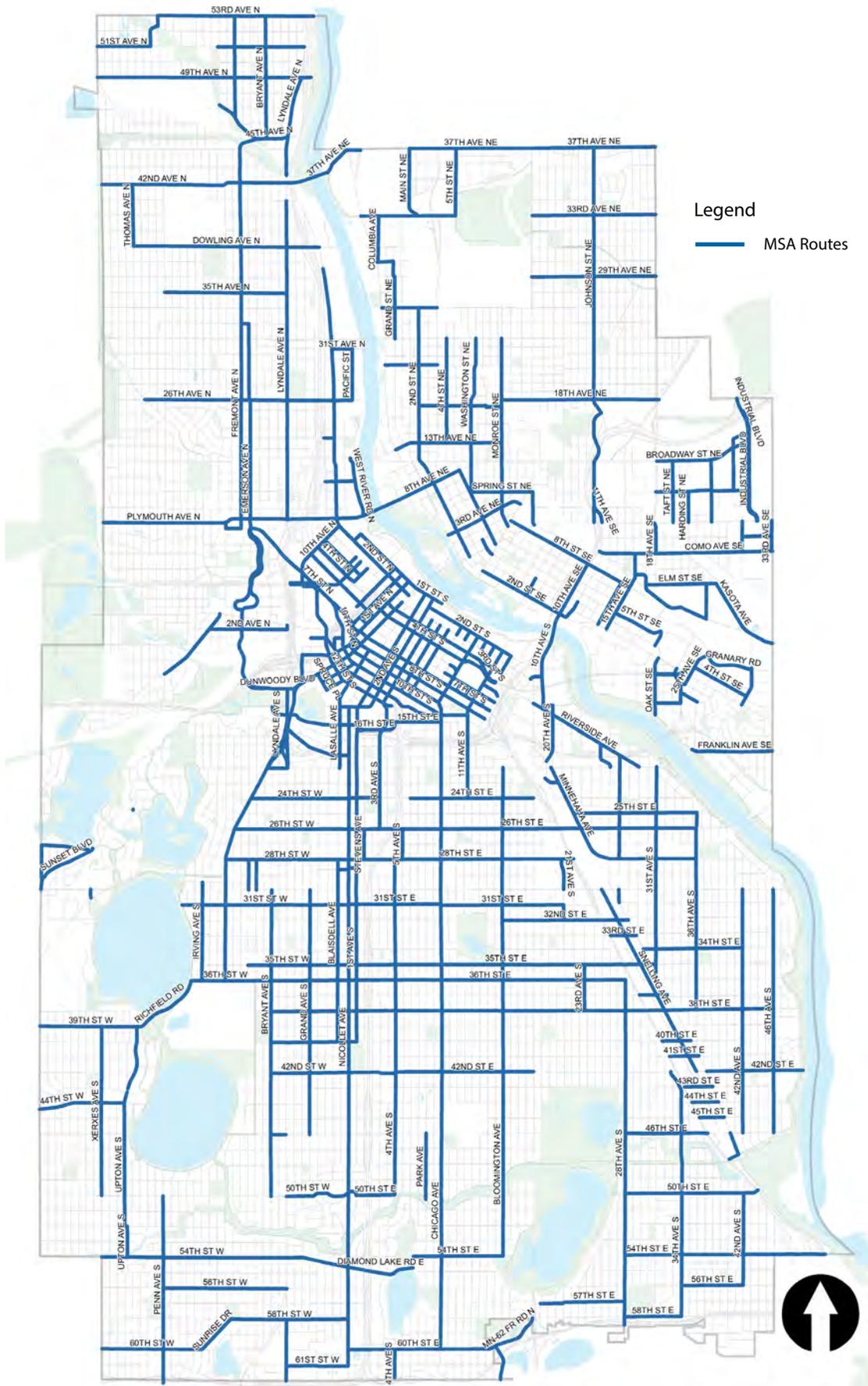
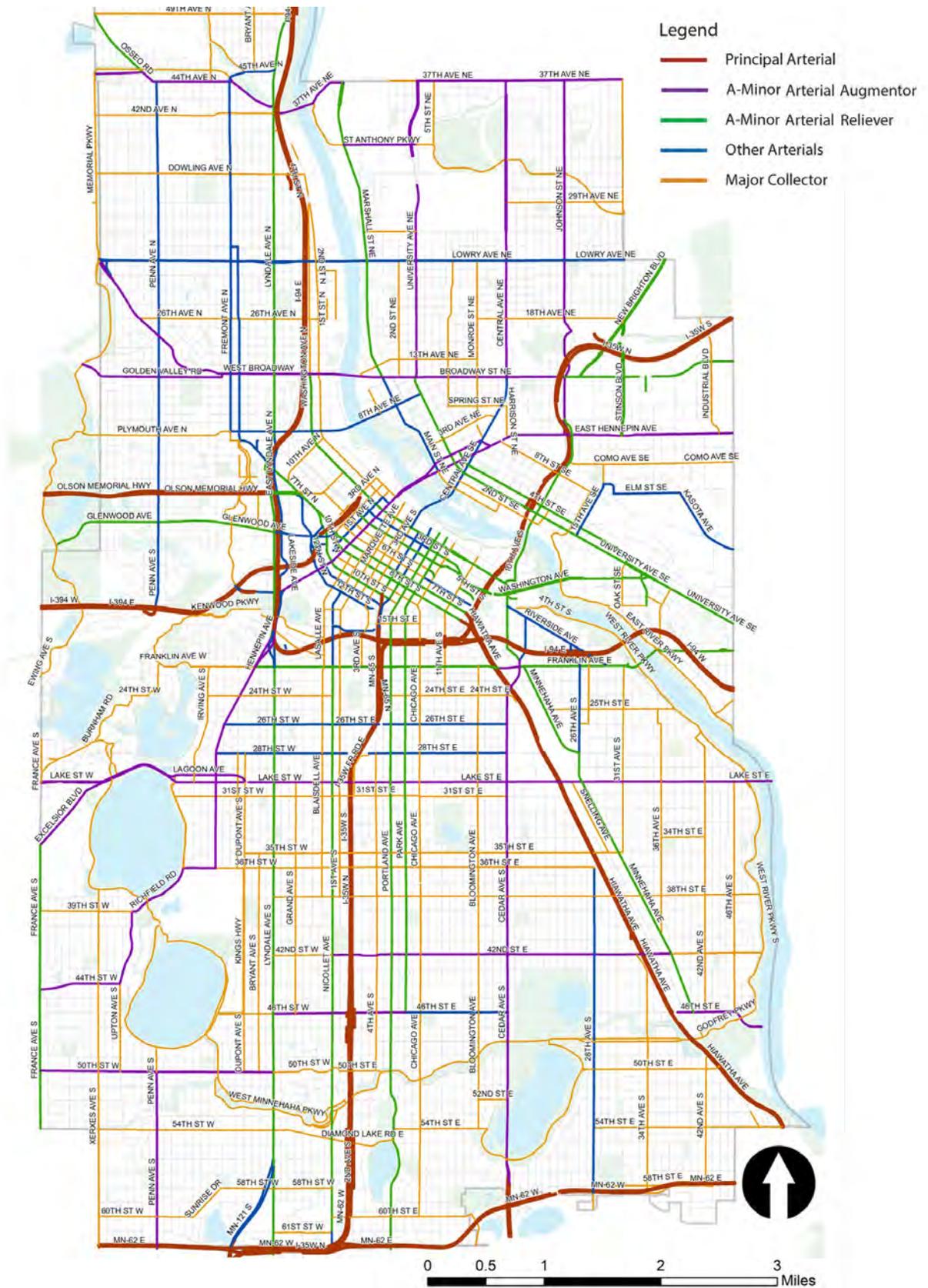




Figure 162: Functional classifications, in Minneapolis, as of 2020





ACTIONS

Actions to seek design exceptions and variances when standards established by other units of government conflict with the City's Complete Streets Policy.

Actions	Supports	Difficulty
<p>DO ACTION 6.1 2020-2023 (YEARS 0-3)</p> <p>Work with the Minnesota Department of Transportation to request changes to the Twin Cities Regional Functional Classification System to better align with updated street typologies in the Street Design Guide. Initial changes include:</p> <ul style="list-style-type: none"> • Add 3rd St N/S from 2nd Ave N to Portland Ave as an A-Minor Arterial on the regional functional classification system. • Add 6th St N/S from 2nd Ave N to 13th Ave as an A-Minor Arterial on the regional functional classification system. • Add 11th St N/S and 12th St N/S from I-35W exit to Hawthorne Ave as A-Minor Arterials on the regional functional classification system. • Add Hawthorn Ave from I-394 entrance/exit to 10th St N as an A-Minor Arterial on the regional functional classification system. • Add 4th Ave S from Washington Ave S to 7th St S as an A-Minor Arterial on the regional functional classification system. • Add 5th Ave S from Washington Ave S to 7th St S as an A-Minor Arterial on the regional functional classification system. • Remove 5th Street S from Park Ave to Chicago Ave as an A-Minor Arterial on the regional functional classification system. • Remove Minnehaha Ave from 26th Ave to Cedar Ave as an A-Minor Arterial on the regional functional classification system. • Remove 42nd Street E from Nicollet Ave to Cedar Ave as an A-Minor Arterial on the regional functional classification system and replace with an alternative east-west route with access to I-35W, for example: 35th St and 36th St or 31st Street between Lyndale Ave and Park Ave. • Add Diamond Lake Rd from Lyndale Ave S to Portland Ave S as an A-Minor Arterial on the regional functional classification system. • Remove as an A-Minor Arterial on the regional functional classification system Hennepin Ave S from Lake St to 36th St, 36th St W from Hennepin to Richfield Rd, Richfield Rd/39th St from 36th St to Sheridan Ave S, Sheridan Ave S/Upton Ave S from 39th St to 44th St, and 44th St W from Upton Ave to France Ave. • Remove St. Anthony Pkwy NE from Marshall St NE to University Ave NE as an A-Minor Arterial on the regional functional classification system • Adjust other streets as appropriate. 	Active partnerships	Low
<p>DO ACTION 6.2 2020-2023 (YEARS 0-3)</p> <p>Evaluate potential changes the City may request to the Municipal State Aid Routes to better align with the updated street typologies.</p>	Active partnerships	Low



ACTIONS (continued)

Actions to seek design exceptions and variances when standards established by other units of government conflict with the City’s Complete Streets Policy.

Actions	Supports	Difficulty
<p>DO ACTION 6.3 2024-2027 (YEARS 4-7) Evaluate potential changes to the Municipal State Aid Rules the City may advocate for to provide flexibility needed for the City to use the Street Design Guide with few or no variances.</p>	Active partnerships	Low
<p>DO ACTION 6.4 2020-2023 (YEARS 0-3); ON-GOING Evaluate the need for variances, design exceptions and pilots to support the use of the Street Design Guide during street reconstruction projects.</p>	Mobility, Active partnerships	Low

SEE ALSO ACTION:

- Freight Action 2.4 — Design vehicles on State Aid system