

**Minneapolis**  
City of Lakes

CITY OF MINNEAPOLIS

# Transportation Action Plan

December 4, 2020







Our transportation system is the backbone of our city. We all depend on it to safely get where we need to go. In Minneapolis, we are building streets that reflect our values and the vision outlined for transportation in Minneapolis 2040.





#gompls

We are focused on expanding transportation options for people walking, biking and taking transit – emphasizing low carbon and more affordable ways to get around. We are building a system for people that addresses our climate emergency. We are addressing the historic inequities in our transportation infrastructure head on, to help all people thrive.

**The Minneapolis Transportation Action Plan  
is how we will get there.**

# Letter from Mayor Frey, Council President Bender and Transportation and Public Works Committee Chair Reich

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November 18, 2020

Minneapolis is a city on the move: we adapt, we evolve, we grow and we improve. 2020 has shown that even when faced with unprecedented challenges, we can and will pull together to do the hard work of building and operating a city that works for everyone.

Our work in transportation is a foundation for how people in our city function and prosper. People rely on our public infrastructure to access jobs and education, complete everyday tasks, and meet family and socialize, if even from a distance. Our streets have given room for expanded outdoor functionality during COVID and been a place of protest in the wake of George Floyd's death. 2020 has clearly articulated streets as our collective gathering space.

With the Minneapolis Transportation Action Plan we look with intention at the next 10 years of how we will leverage changes on streets to better serve the people and businesses of Minneapolis, while making advancements toward our plan goals – climate, safety, equity, prosperity, mobility, and active partnerships. With this plan we set an important mode shift goal where 3 of every 5 trips will be taken by walking, biking or transit by 2030. We will drastically reduce the transportation sector's contribution to greenhouse gas emissions, aligning with citywide climate policies and improving the health and vitality of our community. And importantly, we continue to look for new ways to support our streets as the social fabric that welcomes and unites us – providing safe and inviting public spaces for people to come together and experience our city.

Different from recent transportation plans in Minneapolis, we are bringing together all the ways people move throughout our city into one plan, specifically calling out a City-led transit vision, addressing freight needs, leveraging opportunities to use technology to more efficiently reach our transportation goals, and giving direction to how all street needs are met within the same street space. With this plan we lay forward a path to make walking, biking or taking transit the easy decision. Through this plan, we look to address historic inequities in the transportation system and create a future where streets knit communities back together, rather than divide them. We are creating streets that better protect users from impacts of traffic crashes, better handle stormwater and create more attractive surroundings, and help to ensure people's time spent traveling or their safety and comfort while traveling is not pre-determined by income or race.

Based on the feedback we've received while developing this plan, we are confident in saying we join you in pursuit of building a more just and climate-forward transportation system for the people of Minneapolis.



Mayor Frey



Council President Bender



Transportation and Public Works  
Committee Chair Reich



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# FOREWORD

## RESILIENCY, RACIAL JUSTICE AND REAL-TIME PLANNING

### Resiliency

In mid-March 2020, just after the draft TAP was released for public comment, COVID-19 drastically changed the way and the frequency of which people in Minneapolis move. Throughout March and into June, Governor Walz issued Stay Home and Stay Safe orders, limiting what businesses were open and how people worked to prevent the spread of the pandemic. Many people lost their jobs as restaurants, shops, and other sectors of the economy were required to shutter operations by order or due to economic conditions to address the public health emergency. Others began telecommuting, and their commutes to work became non-existent. Transit was reserved for essential trips only, and fares were eliminated. From March to May 2020, car commuters in the region shrank by over half, bike commuters shrank by two-thirds and transit commuters shrank by 85%, while telecommuters increased eight-fold.<sup>1</sup> The way people used our streets dramatically changed.

We received many comments during the draft review period on the impacts of COVID-19 – praising the City for acting quickly to implement Stay Healthy Streets and eliminate the need to push a button to cross the street as a pedestrian. Commenters implored the City to continue to act as quickly as we did for COVID-19 for climate change and equity goals, and to institutionalize the reduction in vehicular traffic on our streets. Nationally, reductions in greenhouse gases, increased air quality, and increased physical activity have been documented and the same trends were felt in Minneapolis.

The Transportation Action Plan was developed with climate, equity and prosperity as three of its goals. Because of this, many of the strategies and actions in this plan reflect a unified way forward in light of public health crises or other situations which demand the City react quickly to protect street users and serve changing mobility needs.



<sup>1</sup> Metropolitan Council COVID-19 (Coronavirus) Outbreak Transportation Survey, May 2020.



Several actions have been highlighted due to COVID-19, including ways of looking at our streets as places for people to have more space to walk and bike, and manage the curb in a way that helps manage turnover and increased demand for curbside pickup. Specifically, parts of the actions listed below were experimented with or acted upon since the beginning of COVID-19:

- Walking Action 2.1
- Bicycling Action 2.4, Action 2.5, Action 3.1, Action 10.2
- Freight Action 5.2, Action 5.5
- Street Operations Action 6.1, Action 6.3, Action 6.4, Action 7.1, Action 7.4
- Design Action 2.5

Quick work during the pandemic was enabled, in part, due to the citywide conversations that occurred at all levels of the City enterprise in the development of the Transportation Action Plan. Having a set of actions in this plan helps the City to be resilient in changing conditions, and keep focused on actions that will advance citywide policy around how our streets contribute to climate, safety, equity, mobility and prosperity goals outlined in this plan.

## Racial Justice

On May 25, George Floyd died while in Minneapolis police custody at the corner of 38th and Chicago Avenue South. His death sparked weeks of protest, riots and civil unrest throughout the city, and a public debate over the role of policing and public safety ensued. There are direct ties to the work of the Transportation Action Plan, as we saw streets turn into sacred places overnight, memorializing the site where George Floyd lost his life; we saw streets with planned investments on them lose the built environment that supports and frames the street; we saw streets emerge as the place for community protest and expression; we saw artwork frame up corridors in beautiful murals, heartbreaking messaging, and calls for change.

The Transportation Action Plan was developed with climate, equity and prosperity as three of its goals. Because of this, many of the strategies and actions in this plan reflect a unified way forward in light of public health crises or other situations which demand the City react quickly to protect street users and serve changing mobility needs.



Our streets were the backdrop of much that occurred in the summer following the death of George Floyd. Beneath the surface, the impacts and citywide discourse on racial justice have also had impacts on the longerterm planning related to our public streets. Given the citywide conversation around public safety and public feedback on the topic, we re-evaluated how enforcement shows up in the plan and are confident that the actions that speak to enforcement are either administrative in nature (see Walking Action 4.3 on snow clearing), involve parked vehicles (see Transit Action 2.8 on bus only lanes) or have the goal of eliminating traffic stops that involve officer interaction (see Street Operations Action 6.6 on automated enforcement). The Progress section identifies three new strategies – on framing racial equity for transportation, engagement, and evaluation – that address improvements to how we can better connect with and serve the people of

Minneapolis.

This plan is built around seven topic areas that largely follow modal planning – walking, bicycling, taking transit, using streets with a vehicle, delivering goods. We know that the way our streets work are not modal-specific, so we also have topics on how technology allows us to leverage outcomes for citywide goals, and how everything comes together through operations and design of our streets. At the core, we are working to create more mobility options for more people so there is less reliance on private vehicles in order to access opportunities in our city. Our data shows that by focusing on creating more options for people, we are opening up opportunities for low-income and people of color in our community. Key data that make the explicit link between our work and advancing options for people who face economic disadvantages in Minneapolis include:

20% of residents live below 100% of the federal poverty thresholds (household income dependent on family size and composition); this number is 41% for black people, 34% for people of color and 12% for white people<sup>2</sup>

26% of residents live in high poverty neighborhoods; this number is 48% for black people, 38% for people of color and 17% for white people<sup>3</sup>

31% people of color households do not have access to a car; this number is 12% for white households<sup>4</sup>

Average commute times for white workers is 22 minutes versus 24 minutes for people of color workers and 27 minutes for black workers<sup>5</sup>

Minneapolis faces some of the gravest racial inequities in the nation. The data in Figure 1 points to how that plays out in transportation options for people. Given this data, it is clear that by focusing on creating more

and safer options for people to walk, bike, take transit, and access shared mobility services, we are advancing outcomes that can be directly felt by people experiencing hardship.

<sup>2</sup> [National Equity Atlas, 2017](#)

<sup>3</sup> [National Equity Atlas, 2017](#)

<sup>4</sup> [National Equity Atlas, 2017](#)

<sup>5</sup> [National Equity Atlas, 2017](#)



**Figure 1: Average travel time to work (all modes) by race, 2017**

Source: National Equity Atlas, 2017

## Real-Time Planning

Like many professional disciplines locally and nationally, the events of the spring and summer of 2020 have given rise to reflection and intentionality within transportation planning professionals at the City of Minneapolis. The team involved with creating this plan have taken pause to listen, understand, and reflect upon the role this document and how the strategies and actions it contains impacts the lives of all people who use our streets and how it reflects, upholds, or stands against institutional racism.

Several concrete changes have been made to the process and content of this plan, reflecting a deeper commitment to racial justice and providing for all people in Minneapolis, with a specific focus on equity and our city's Black, Indigenous, and people of color. These changes reflect a deep commitment from the City of Minneapolis to ensure our actions create more

just outcomes for all people in the city, and outcomes are not predictable by race.

Planning is not a static process, as the spring and summer of 2020 have highlighted. The TAP includes several key elements that address changes in our city, and the world, post-COVID and post-George Floyd.

- Additional narrative on how the TAP connects with the City's Strategic Racial Equity Action Plan;
- Updates to narrative and actions to better highlight commitments around racial equity and justice; and
- An expanded Progress section, including strategies and actions on a framework for racial justice, engagement, and evaluation.



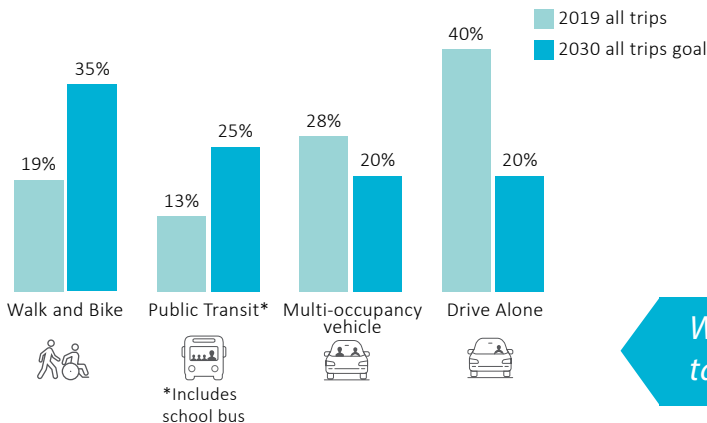
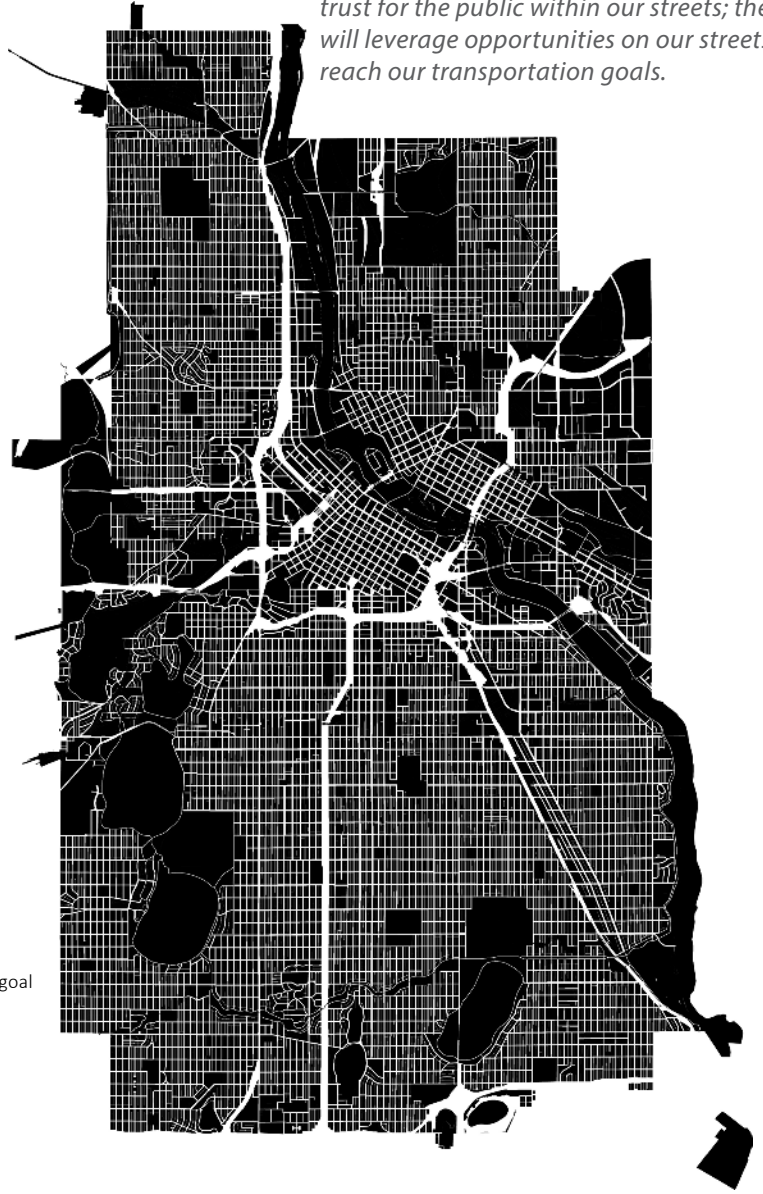
# Transportation Action Plan EXECUTIVE SUMMARY



The Minneapolis Transportation Action Plan (TAP) is a 10-year action plan to guide future planning, design and implementation of transportation projects for all people in all the ways they move around. This plan is shaped by Minneapolis 2040, the Climate Action Plan, Vision Zero, and Complete Streets.

In 2030 our streets will reflect our City values. Our streets will be designed to address a climate emergency by emphasizing low or no carbon travel. Our streets will correct historic injustices in our transportation systems, because focusing on climate justice is focusing on racial justice. Our streets will add protection for people walking and bicycling and will be designed to prioritize an effective transit system that serves all trips. Our streets will be organized to enhance access to jobs. Though our streets will continue to serve car traffic, our future depends on our ability to increase the city's population as projected in Minneapolis 2040 without the car traffic associated with growth. This plan does not eliminate places for people to drive, it simply rebalances space to incentivize and allow for low carbon transportation options.

22% of the land area of the city is held in trust for the public within our streets; the TAP will leverage opportunities on our streets to reach our transportation goals.



We've set a mode shift goal to have 3 of every 5 trips taken by walking, biking, or transit.

Source: Metropolitan Council Travel Behavior Inventory, 2019



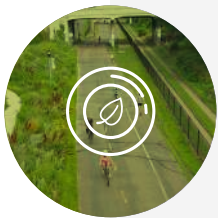
The TAP seeks to unlock the potential of our streets as places for people and as an invaluable asset for broader outcomes achieved by making the right investments in our transportation network.



The TAP outlines a vision for our streets in 2030. We did not constrain that vision with concerns about resources but rather articulated how, with additional partnerships, time, and funding, we can make our city reflect the vision for transportation laid out in [Minneapolis 2040](#).

## Transportation Goals

This plan is guided by six goals. These goals create the groundwork and will help guide transportation decisions by the City for the next 10 years. Every strategy and action will support one or more of these six goals:



### Climate

Reshape the transportation system to address climate change, using technology, design and mobility options to aggressively reduce greenhouse gas emissions caused by vehicles



### Safety

Reach Vision Zero by prioritizing safety for all people and eliminate traffic fatalities and severe injuries by 2027



### Equity

Build and operate a transportation system that contributes to equitable opportunities and outcomes for all people, and acknowledge and reverse historic inequities in our transportation system



### Prosperity

Provide mobility options that move people and goods through reliable connections; retain top talent and grow Minneapolis as the economic engine of the region



### Mobility

Embrace and enable innovation and advances in transportation to increase and improve mobility and access options for all



### Active Partnerships

Create and seize opportunities to achieve shared goals and responsibilities through partnering and leveraging funding opportunities with national and regional partners and others who invest in the city

## Strategies and Actions

The strategies and actions in this action plan reflect a tension that exists in the street that results from competing uses for limited right of way. Reaching our transportation goals requires strategic action. Listed in this plan are 56 strategies and 304 actions that we plan to undertake in the next 10 years.

Each strategy is followed by several actions, detailing how we, along with our partners, will make tangible improvements on our streets. To reflect Minneapolis goals and values in our streets, the strategies and actions within this plan are focused on seven topics:



**PROMOTE A SAFE AND INVITING WALKING AND ROLLING ENVIRONMENT**



**INCREASE THE AVAILABILITY AND SAFETY FOR BICYCLING AND MICROMOBILITY TRAVEL**



**DEFINE THE MINNEAPOLIS TRANSIT NETWORK**



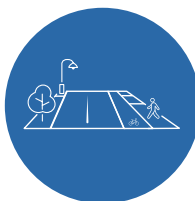
**INVITE NEW TECHNOLOGY TO ADVANCE TRANSPORTATION OPTIONS**



**MANAGE INCREASED FREIGHT NEEDS WHILE PRESERVING THE STREET**



**IMPROVE STREET OPERATIONS AND ADDRESS COMPETING DEMANDS**



**DESIGN FOR PEOPLE**





*We will find opportunities in our challenges by rethinking our streets.*

## Plan Highlights

The TAP calls for action over the next 10 years to leverage our streets to reach citywide goals. When implemented, the actions in the TAP will help us create more travel options for more people.

- 1 Reach a mode share goal** in pursuit of our climate goals where 3 of every 5 trips are taken by walking, rolling, bicycling or transit.
- 2 Improve the experience of people walking and rolling** on our streets, with the creation of a plaza program, the inclusion of pedestrian lighting on all street reconstruction projects and actions focused on safer street crossings.
- 3 Realize a City-led transit vision** that makes taking transit a more attractive and affordable option for more people.
- 4 Expand transit coverage** so that 75% of residents are within a 5-minute walk of high frequency transit and 90% are within a 10-minute walk; **implement transit advantages** along all the high frequency transit corridors.
- Use street design to **provide a more comfortable and healthier environment** for people – including more green infrastructure and trees in street projects.
- 6 Act quickly to improve our streets**, focusing on paint and lower-cost infrastructure improvements to make change that improves street design and operations.
- 7 Increase the All Ages and Abilities Network nearly twofold**, focusing on a low-stress and protected bicycle and micromobility network for all system users.
- 8 Update the Complete Streets Policy** to incorporate freight, micromobility and green infrastructure.
- 9 Adopt a strong curbside management policy** to prioritize space for people and value the competing demands for curb space.
- 10 Implement a network of mobility hubs** where people can connect to multiple shared transportation options – like transit, bikes, scooters and cars.



# INTRODUCTION

## The Transportation Action Plan in context

The Minneapolis Transportation Action Plan (TAP) is a 10-year action plan to guide future planning, design and implementation of transportation projects for all people however they choose to move around.

The TAP supports the bold policies adopted in the Minneapolis 2040 Comprehensive Plan, which identifies transportation as a critical component to increase equity, address climate change, reduce carbon emissions, improve human health through improved air quality and increased active travel and enable the movement of people, goods and services across the City of Minneapolis (the City). We anticipate the changes made through the TAP will complement the land use changes envisioned through 2040 and work in tandem with these changes over time as the city evolves.

How we achieve the vision of Minneapolis 2040 depends upon our ability to define and then realize the value of our Minneapolis streets. Approximately 22% of the land area of the city is held in trust for the public within our streets (often called the public right of way). The TAP seeks to unlock the potential of our streets as places for people and as an invaluable asset for broader outcomes achieved by making the right investments in our transportation network.

Our streets need to reflect our values of creating a more sustainable, equitable, safe and prosperous city; the set of strategies and actions contained within this plan strives to make every journey contribute to that vision.

## TRANSPORTATION CHALLENGES

We can face our challenges by rethinking our streets. Minneapolis is a city that experiences disparities of wealth based on race. We are a cold weather city that experiences heavy snow, ice and rain storms. We have largely devoted our streets to the ease of access for vehicles over the past hundred years; as a result, pedestrians, people on bikes and people in cars die and suffer life-altering injuries each year. We are both contributing to climate change as well as experiencing the effects. These challenges cannot be solved through transportation alone, but the way the City plans and provides for transportation choices has an impact on all of them.

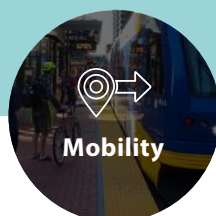
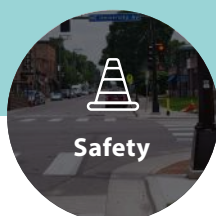
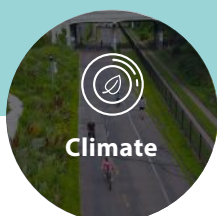
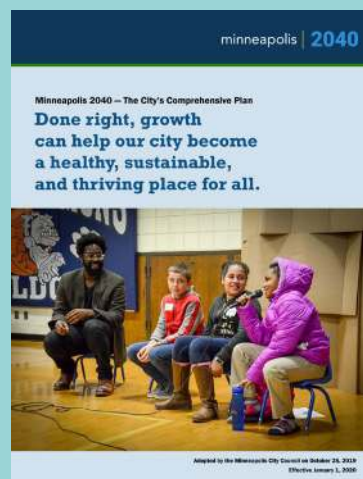
## GOALS TO GUIDE TRANSPORTATION DECISIONS

There are six transportation goals that guide the strategies and actions developed in this plan: [climate](#), [safety](#), [equity](#), [prosperity](#), [mobility](#) and [active partnerships](#).



## Links to Minneapolis 2040 goals

The goals in the TAP relate directly to the goals of Minneapolis 2040 and further refine the transportation contributions to reaching these broader citywide adopted goals. Appendix C illustrates the alignment between the transportation goals and the 14 goals of Minneapolis 2040.



### CLIMATE

Reshape the transportation system to address climate change using technology, design, and mobility options to aggressively reduce greenhouse gas emissions caused by vehicles.

Minneapolis has set a goal of reducing our greenhouse gas emissions by 80% by the year 2050.<sup>6</sup> Emissions from on-road transportation account for approximately 24% of greenhouse gas emissions in Minneapolis.<sup>7</sup> Even with mass adoption of electric cars, Minneapolis will need to reduce automobile passenger miles by 38% to reach our goal of reducing greenhouse gas emissions by 80% by 2050.<sup>8</sup>

To reach our citywide climate goals, we will need to change how we move around. We will need to improve options for transit, walking and bicycling and we'll need to rapidly electrify fleets. As our population continues to increase, every effort will support reducing miles traveled in single

occupancy and high-carbon vehicles because the health of our city and our climate depends on it.

There is an unmistakable link between climate and equity. Freeway systems were built in the Twin Cities throughout the 1950s, 60s, 70s and 80s, resulting in bifurcated neighborhoods, barriers for those walking, biking and driving, and concentrated emissions pollution in the residential neighborhoods that remained. The neighborhoods these highways went through were often poorer and housed communities of people of color. Areas deemed as hazardous (often housing people of color, immigrants and Jews) in the Home Owner's Loan Corporation maps (redlining maps) occupied 17% of land area but contained 48%

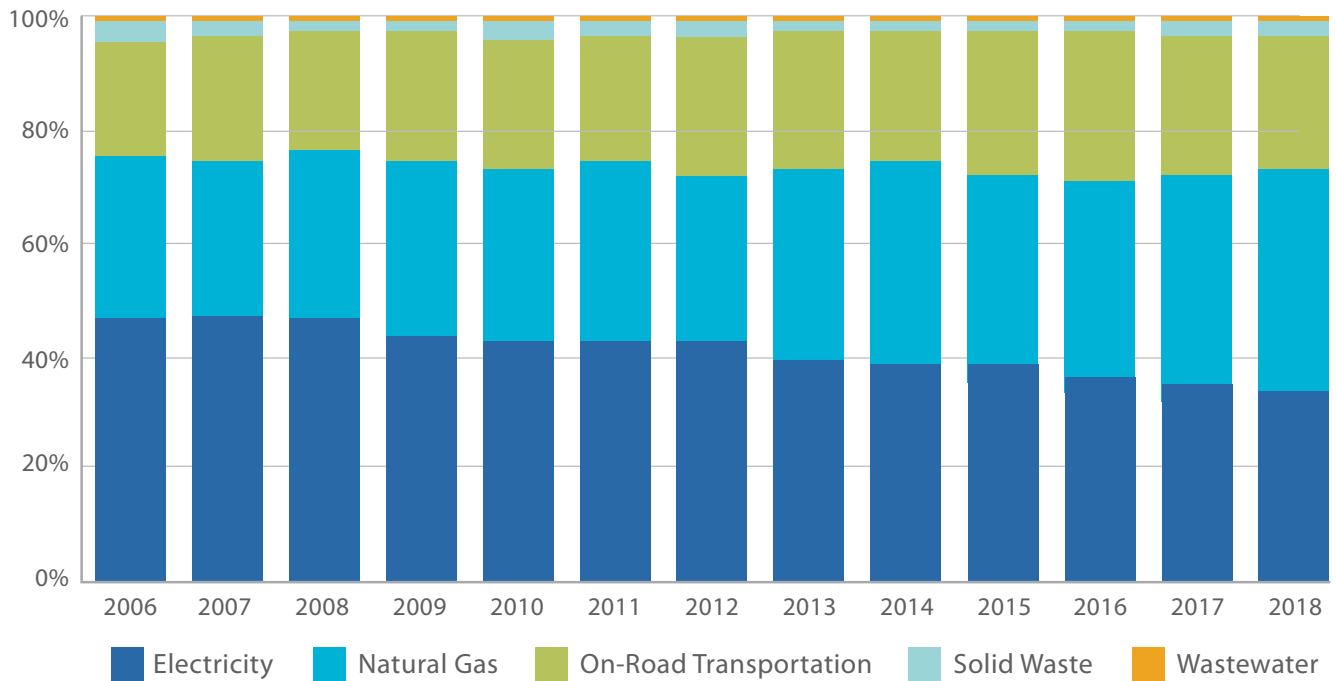
<sup>6</sup> [City of Minneapolis Climate Action Plan \(2013\)](#). 2006 baseline year for 80% reduction.

<sup>7</sup> [Citywide Greenhouse Gas Emissions Inventory \(2018\)](#)

<sup>8</sup> [Minneapolis 2040](#)

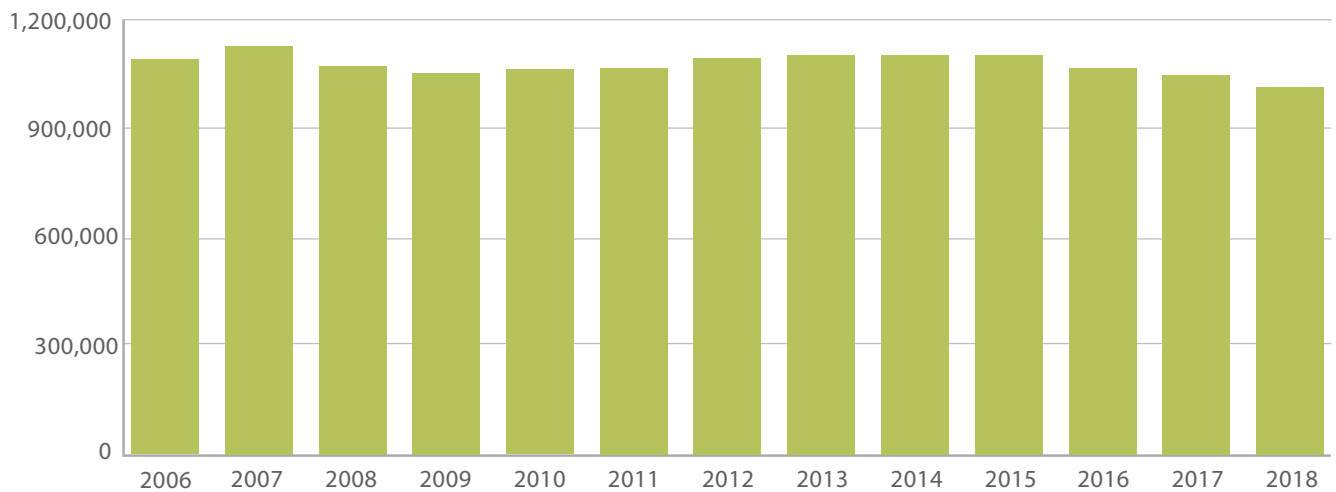
of the freeway length in Minneapolis.<sup>9</sup> Exposures to nitrogen dioxide levels, as one indicator, are 38 percent greater nationally for minority neighborhoods than in white neighborhoods; Minnesota is the state with the 15th worst exposure gap between people of color and whites.<sup>10</sup> Past redlining policies are also linked to acute differences in neighborhood temperatures - another persistent climate challenge linked to race. Land use and street design decisions that led to more impervious surface and less green cover in areas of the city create a lasting impact; even today, neighborhoods in Minneapolis can face a 10 degree difference in heat depending on green coverage.<sup>11</sup> By facing climate, we also face historic inequities created by our transportation system.

**Figure 2: Citywide emissions by type: Transportation accounts for 24% (2018)**



Source: Citywide Greenhouse Gas Emissions Inventory (2018)

**Figure 3: Total emissions (metric tons of carbon dioxide) from on-road transportation**

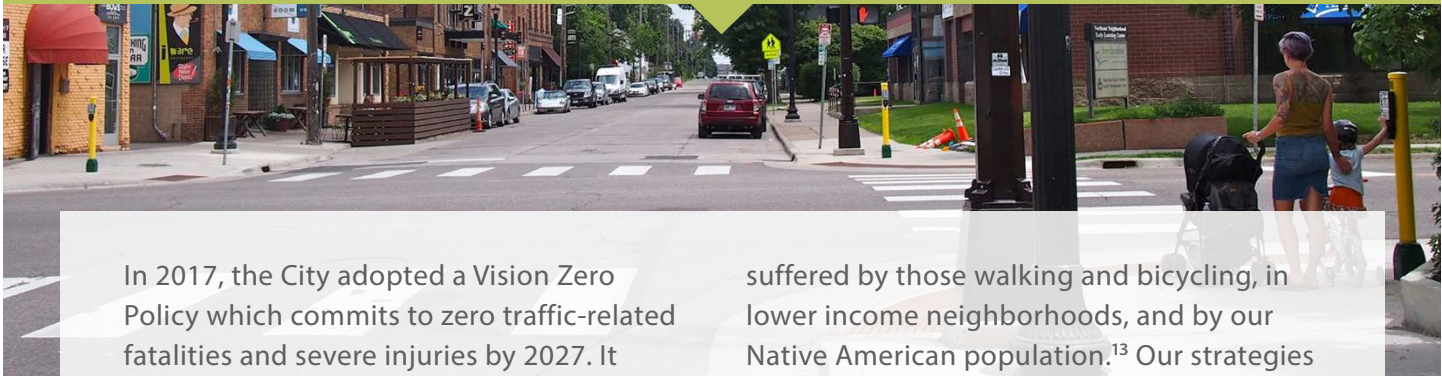


Source: Citywide Greenhouse Gas Emissions Inventory (2018)

<sup>9</sup> Institute for Metropolitan Opportunity, University of Minnesota Law School  
<sup>10</sup> Study: Vehicle pollution greater in minority neighborhoods, MPR News, 2014  
<sup>11</sup> Racist housing policies have created some oppressively hot neighborhoods, National Geographic

# SAFETY

Reach Vision Zero by prioritizing safety for all people and eliminate traffic fatalities and severe injuries by 2027.

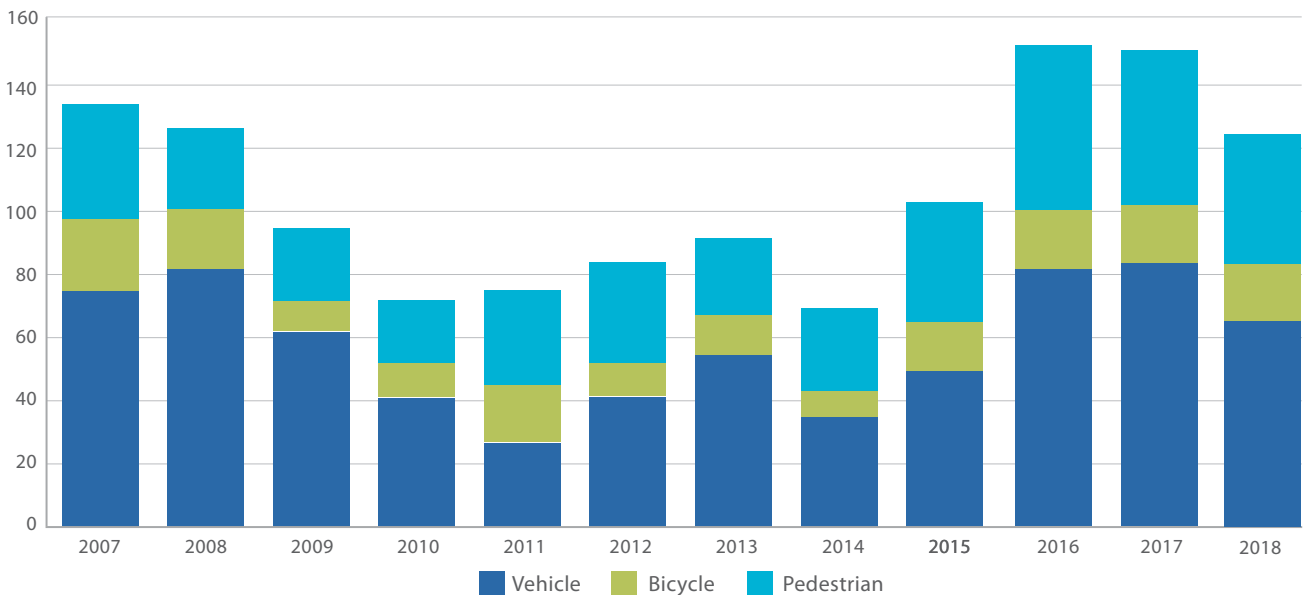


In 2017, the City adopted a Vision Zero Policy which commits to zero traffic-related fatalities and severe injuries by 2027. It is unacceptable that people die in traffic crashes on our streets. We are committed to improving safety on Minneapolis streets for all people.

Every year from 2007-2016, an average of 95 people either died or experienced a life-altering injury on streets in Minneapolis.<sup>12</sup> These injuries are disproportionately

suffered by those walking and bicycling, in lower income neighborhoods, and by our Native American population.<sup>13</sup> Our strategies and actions directly address these inequities by focusing on ways to improve conditions for those most impacted. Transitioning automobile trips to walking and bicycling requires safe streets for these users and makes progress toward our climate goal. The City has a [2020-2022 Vision Zero Action Plan](#) which details citywide actions and initiatives to make progress on our goal to end traffic fatalities and severe injuries by 2027.

Figure 4: Fatal and severe injury crashes



Source: City of Minneapolis Vision Zero Crash Study (2018)

<sup>12</sup> [City of Minneapolis Vision Zero Crash Study \(2018\)](#)

<sup>13</sup> [City of Minneapolis Vision Zero Crash Study \(2018\)](#)



# EQUITY

Build and operate a transportation system that contributes to equitable opportunities and outcomes for all people, and acknowledge and reverse historic inequities in our transportation system.



Equity translates to fair and just opportunities and outcomes for all people. The City is committed to the development of policies, practices and strategic investments to reverse racial disparity trends, eliminate institutional racism, and ensure that outcomes and opportunities for all people are no longer predictable by race.<sup>14</sup> Transportation is a critical part of this work.

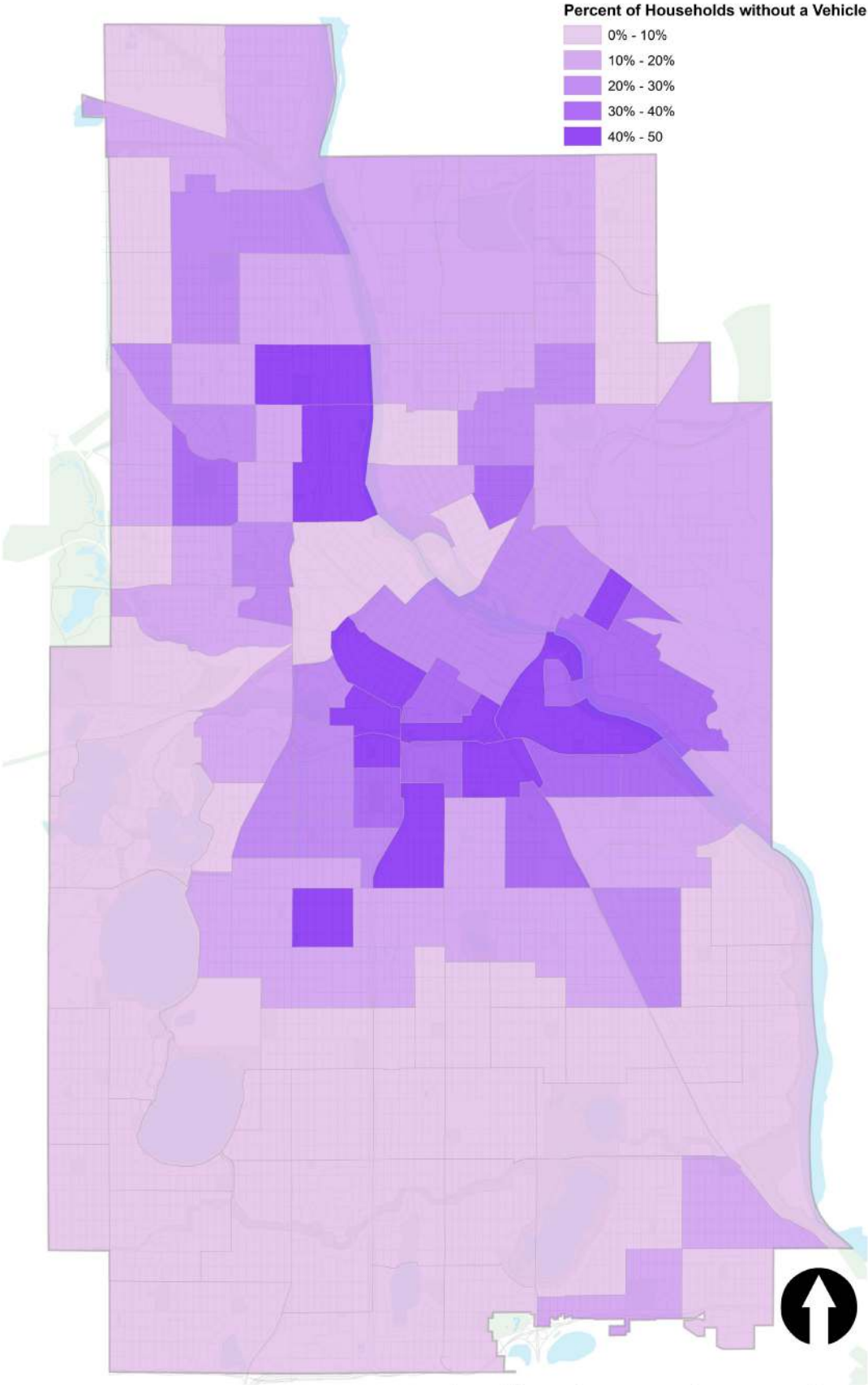
Not all people have the same access to transportation. More than one of every six people in Minneapolis (16.5%) live in a household without an automobile.<sup>15</sup> In some neighborhoods as many as 40-50% of households don't have access to a vehicle. Over three in ten people of color households do not have access to a car.<sup>16</sup> While some households choose not to own a car, there are many households that cannot afford to do so. Transportation is one of the top two household costs, accounting for approximately 16% of household income in Minneapolis.<sup>17</sup>

One of the goals of this plan is to reduce single occupancy and high-carbon motor vehicle trips, but the current transportation network affords more opportunities to those who can purchase a car, such as access to more jobs. To design, build and operate an equitable transportation system, it is imperative that we focus on underserved communities that are in need of expanded, improved and affordable mobility options. As it currently stands, people of color spend two minutes more on their commutes than white residents<sup>18</sup>; this adds up to over 17 hours more per year spent commuting.

Additionally, 11% of Minneapolis residents self-report a disability, which may present mobility challenges.<sup>19</sup> Given these realities, the existing transportation system results in different challenges for different people. The approach to our work recognizes these realities and will help address them.

<sup>14</sup> [City of Minneapolis \(2017\)](#)  
<sup>15</sup> [National Equity Atlas, 2017](#)  
<sup>16</sup> [Household Size by Vehicles Available, U.S. Census Bureau, 2013-2018 American Community Survey 5-Year Estimates](#)  
<sup>17</sup> [Center for Neighborhood Technology Housing and Affordability Index \(July 2018\)](#)  
<sup>18</sup> [National Equity Atlas, 2017](#)  
<sup>19</sup> [Disability Characteristics, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimate](#)

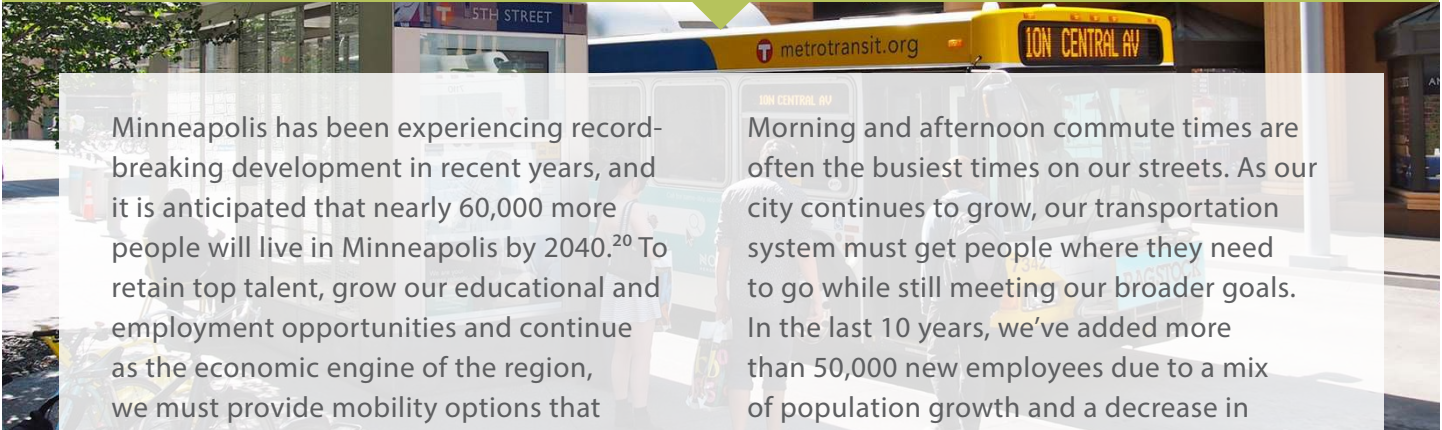
Figure 5: Households without access to a car, 2018



Source: 2018 American Community Survey 5-Year Estimates

# PROSPERITY

Provide mobility options that move people and goods through reliable connections; retain top talent and grow Minneapolis as the economic engine of the region.

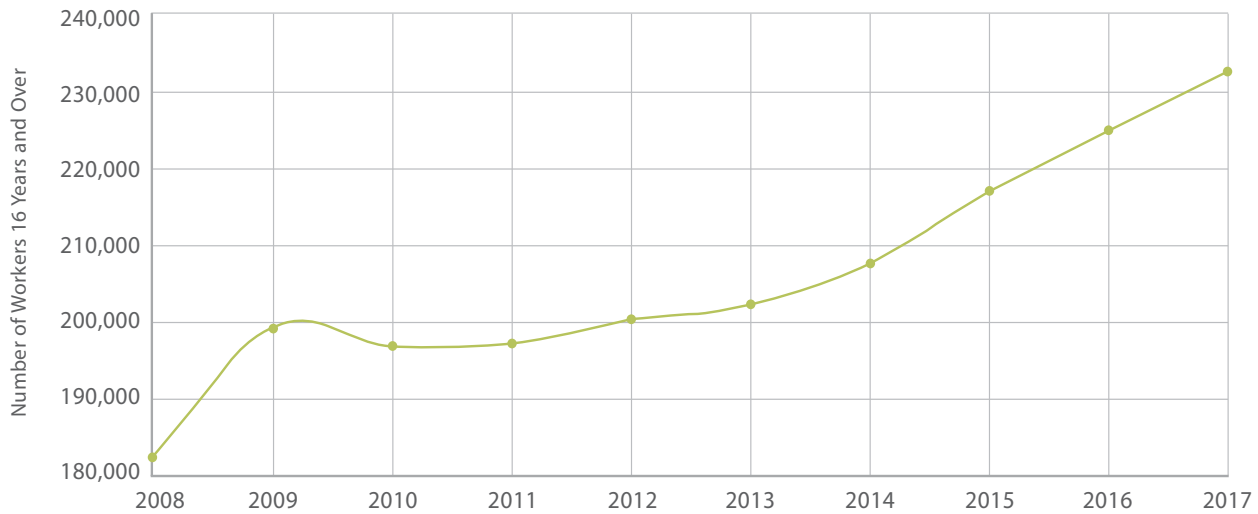


Minneapolis has been experiencing record-breaking development in recent years, and it is anticipated that nearly 60,000 more people will live in Minneapolis by 2040.<sup>20</sup> To retain top talent, grow our educational and employment opportunities and continue as the economic engine of the region, we must provide mobility options that reliably move people, goods and services (including utilities) throughout the city while significantly reducing our climate footprint.

Connecting people to jobs makes our region and city more competitive. Companies are increasingly choosing where to relocate based, in part, on the transportation choices that will be available to their employees. Increasing the number of jobs accessible by transportation options also supports individual prosperity, helping our city reach goals of equity and economic inclusion.

Morning and afternoon commute times are often the busiest times on our streets. As our city continues to grow, our transportation system must get people where they need to go while still meeting our broader goals. In the last 10 years, we've added more than 50,000 new employees due to a mix of population growth and a decrease in unemployment, from 9% in 2010 to 5.5% in 2018.<sup>21</sup> This trend is expected to continue in the coming decades as well. With 60,000 more people anticipated by 2040, it is critical that we focus on mode shift and reducing total vehicle miles traveled so that every new person does not equate to one more car on our streets. As we deal with a growing city, it's important that we provide transportation options and services, as well as the supporting infrastructure, to ensure our streets are safe, environmentally friendly and accessible to everyone who lives, works or visits our city.

Figure 6: Minneapolis Commuting Population



Source: American Community Survey 5-year estimates (2008-2017) and American Community Survey 3-year estimates (2008).

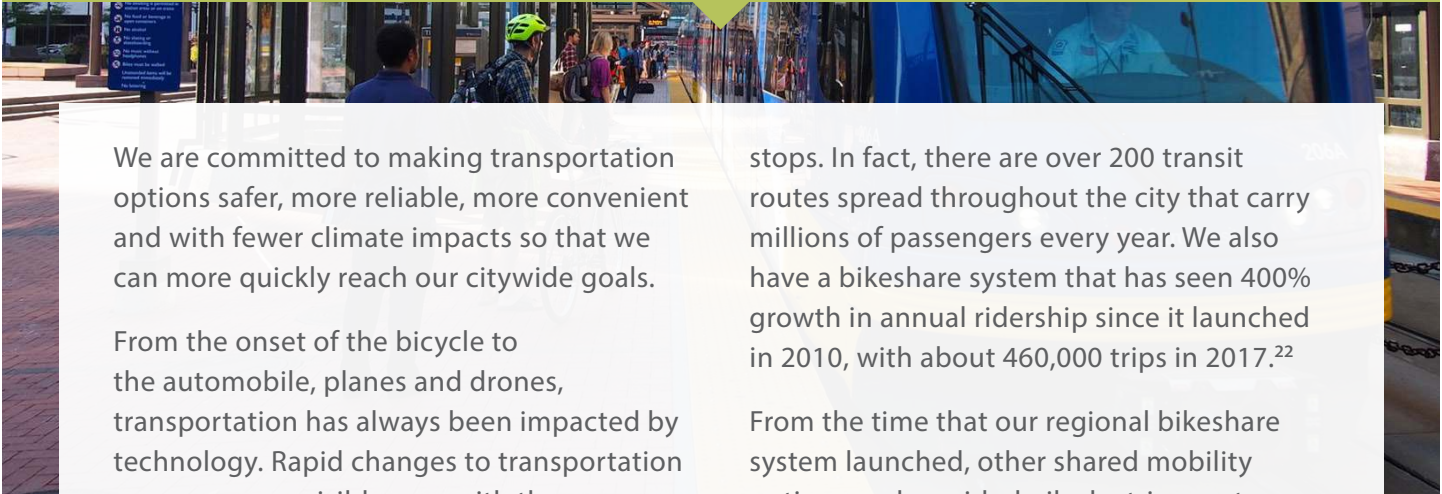
<sup>20</sup> Minneapolis 2040 and the Decennial Census, Metropolitan Council

<sup>21</sup> 2010 and 2018 American Community Survey 5-Year Estimates



# MOBILITY

Embrace and enable innovation and advances in transportation to increase and improve mobility and access options for all.



We are committed to making transportation options safer, more reliable, more convenient and with fewer climate impacts so that we can more quickly reach our citywide goals.

From the onset of the bicycle to the automobile, planes and drones, transportation has always been impacted by technology. Rapid changes to transportation are even more visible now with the introduction of bikesharing, ride-hailing, scooter sharing and car sharing options, all within the last 15 years. Predicting what might be next is challenging, but we know that if we stay committed to our goals, we can both anticipate and respond to change while harnessing technology to support the transportation future we want.

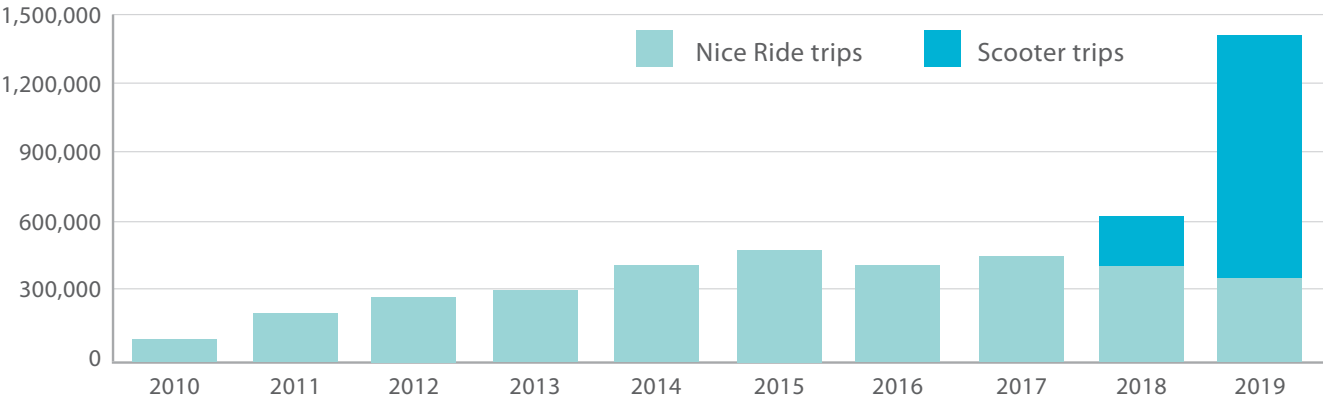
The City of Minneapolis has over 1,000 miles of streets and parkways that serve a variety of different types of mobility needs and transportation options. There are trips in and out of the city, between neighborhoods, or that serve as the last mile to and from transit

stops. In fact, there are over 200 transit routes spread throughout the city that carry millions of passengers every year. We also have a bikeshare system that has seen 400% growth in annual ridership since it launched in 2010, with about 460,000 trips in 2017.<sup>22</sup>

From the time that our regional bikeshare system launched, other shared mobility options such as ride-hail, electric scooters and dockless bikeshare have emerged. In the summer of 2018, two scooter share companies brought their businesses to Minneapolis. During the first season of operation, these companies reported about 210,000 scooter trips in 2018.

In recent years, there have also been efforts to accommodate electric vehicles. As these mobility options continue to emerge, the City will be evaluating these options to ensure they are equitably and safely operated, work to support our mode share goals and that the City's infrastructure can support the move from fossil fuel to renewable energy options.

Figure 7: Nice Ride trips (system-wide) and scooter trips in Minneapolis

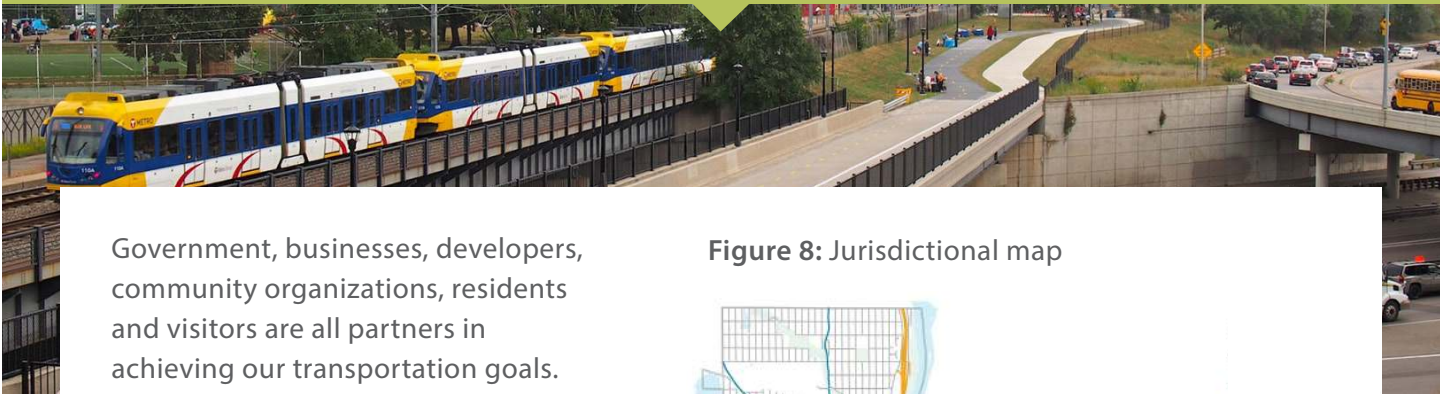


Source: Nice Ride Minnesota (2019) and Minneapolis scooter pilot program data (2019)

<sup>22</sup> Nice Ride Minnesota (2019)

# ACTIVE PARTNERSHIPS

Create and seize opportunities to achieve shared goals and responsibilities through partnering and leveraging funding opportunities with national and regional partners and others who invest in the city.

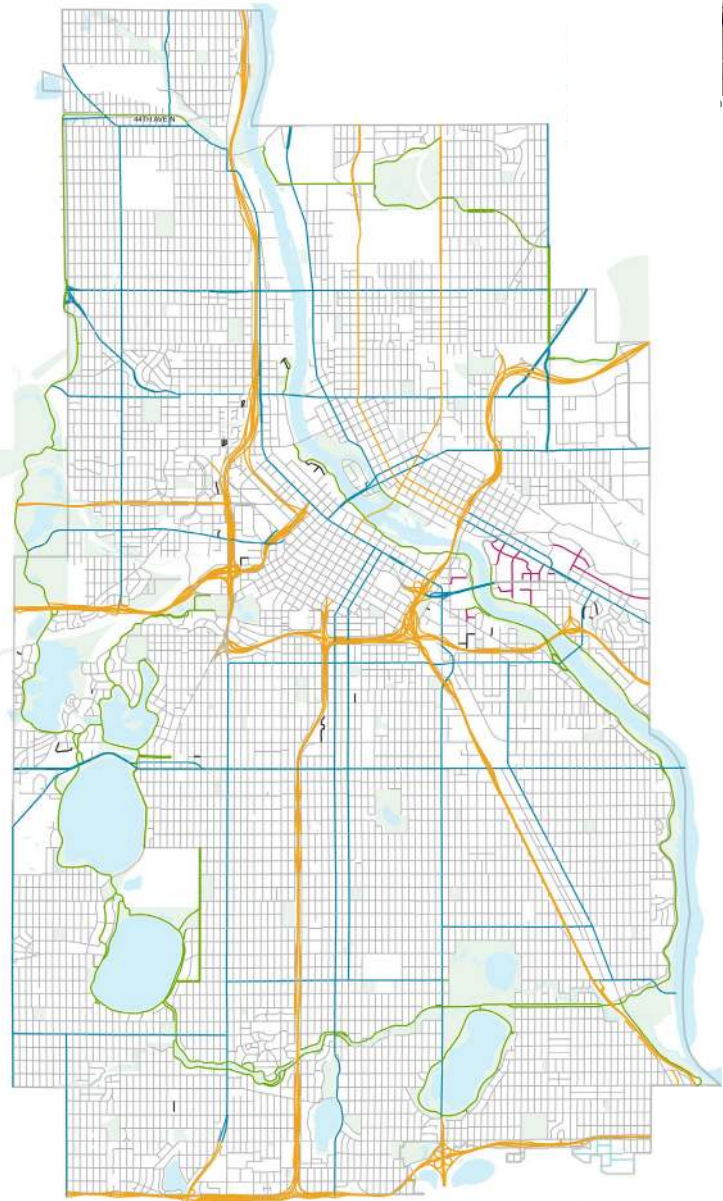


Government, businesses, developers, community organizations, residents and visitors are all partners in achieving our transportation goals. The City and our agency partners hold in trust the public right of way (often referred to as streets), which comprises 22% of the available land area.<sup>23</sup> The City has a commitment to Vision Zero and Complete Streets, and we need to work with our partners to create a more seamless transportation system that allows people to use streets as routes, places and destinations – no matter which governmental agency manages the right of way.

Figure 8: Jurisdictional map

**Jurisdiction**

- City of Minneapolis
- Hennepin County
- Minneapolis Park and Recreation Board
- Private
- MnDOT
- University of Minnesota
- US Navy



Source: Minneapolis Public Works, 2019

<sup>23</sup> City of Minneapolis Parcel, Parks, and Waterway Data

## Structure of the TAP

### RELATIONSHIP TO OTHER PLANNING EFFORTS

To reflect Minneapolis goals and values in our streets, the strategies and actions within this plan are focused on seven topics:



**PROMOTE A SAFE AND INVITING WALKING AND ROLLING ENVIRONMENT:** The plan identifies actions to make it easier, safer and more comfortable for people to get around walking or rolling using a wheelchair, stroller or other assistive mobility device. Actions are focused on a Pedestrian Priority Network. All future references to “walking” in this document are inclusive of “walking and rolling” as defined above.



**INCREASE THE AVAILABILITY AND SAFETY FOR BICYCLING AND MICROMOBILITY TRAVEL:** With an emphasis on establishing a low-stress network for all ages and abilities, the plan focuses on making the choice to bike or take other micromobility options easier for more people, as well as improving safety and comfort for those who ride.



**DEFINE THE MINNEAPOLIS TRANSIT NETWORK:** A quarter-million transit trips begin, end or travel through Minneapolis each weekday. Transit is a critical part of the City’s transportation network; the plan outlines strategies and actions to support a reliable, convenient and comfortable public transit network.



**INVITE NEW TECHNOLOGY TO ADVANCE TRANSPORTATION OPTIONS:** Technology is changing the way we travel. The plan defines how to integrate technology and new business and service models. Shared scooters, bicycles and electric vehicles are examples of new mobility options.



**MANAGE INCREASED FREIGHT NEEDS WHILE PRESERVING THE STREET:** Freight is a critical component of our economy. The plan considers how raw materials, food and packages are delivered to people and businesses every day in our city with strategies and actions to improve the sustainable and efficient movement of freight to, from and through Minneapolis.



**IMPROVE STREET OPERATIONS AND ADDRESS COMPETING DEMANDS:** This topic further defines how the City’s Complete Streets Policy, commitment to Vision Zero and transportation goals come together into daily operations and transportation system planning. It provides a foundation for evaluating competing demands within limited street space by taking a comprehensive, people-first approach.



**DESIGN FOR PEOPLE:** Streets are important community public spaces where we live, gather, travel, shop or wait for the bus, on a daily basis. We aim to design, build and maintain streets that are safe, functional and support the movement of people and goods throughout the city. Actions in this topic focus on the many ways streets need to serve people through design. The City’s Street Design Guide (to be released in 2020) is a companion document to the TAP and will identify street typologies and provide guidance for how we approach design on all streets within the city, with the exception of freeways.



## THE TAP REPLACES ACCESS MINNEAPOLIS

The TAP replaces Access Minneapolis, and all its parts, in full. Access Minneapolis was developed between 2007-2011, with updates as recently as 2017. Access Minneapolis includes:

- Downtown Action Plan
- Citywide Action Plan
- Design Guidelines for Streets and Sidewalks<sup>24</sup>
- Streetcar Planning
- Pedestrian Master Plan
- Bicycle Master Plan

### THE TAP IN RELATIONSHIP TO THE VISION ZERO ACTION PLAN?

The City adopted a [Vision Zero Action Plan](#) in December 2019 that identifies strategies and actions across multiple City departments to make progress toward our goal of zero traffic-related deaths and severe injuries; the initial plan is for years 2020-2022 and will be updated as we make progress toward our goal. The TAP and its strategies and actions support the Vision Zero Action Plan by building off the work outlined in that plan. The specific Vision Zero strategies and actions are not repeated verbatim in this document, but rather assumes the City is working toward the strategies and actions in both plans simultaneously. Those strategies and actions articulated in the Vision Zero Action Plan are set for completion by 2022.

### THE TAP'S INFLUENCE ON PROJECT PRIORITIZATION AND CAPITAL PROJECT DEVELOPMENT

The City prioritizes capital projects through the process and criteria identified as a part of its [20 Year Streets Funding Plan](#) and publishes its multi-year plan of programmed projects annually

through the [Capital Improvement Program](#) process. The TAP identifies new projects and programs that will be incorporated into the City's existing approach to prioritizing, programming and delivering transportation projects. Many projects in the TAP will require additional resources – staff time or funding – including those identified for near-term implementation (see [Quick results](#) section). The detail provided in the action plan also allows for us to apply for grant funding opportunities and potentially leverage other regional or national partnerships to achieve the actions identified.

### FISCAL PLANNING AND IMPLICATIONS

The TAP is not a fiscally constrained plan. There are strategies and actions with large financial impacts on the City and its partners. While we understand additional resources are needed, we are also adjusting our existing delivery of capital projects and programs to reflect the strategies and actions outlined and to capitalize on opportunities to value-engineer and creatively finance initiatives.

<sup>24</sup> The Design Guidelines for Streets and Sidewalks will remain in effect until the completion of the Street Design Guide, which is anticipated to be complete in early 2021.

## RELATIONSHIP TO OTHER CITY AND REGIONAL PLANS

### Metropolitan Council Transportation Policy Plan

The Metropolitan Council developed a Transportation Policy Plan as a part of its regional development guide, Thrive MSP 2040, which sets the direction for the region's growth and development. The most recent update to the Transportation Policy Plan was October 2018. The Transportation Policy Plan is a fiscally constrained plan that identifies regionally important projects. The TAP supports the Transportation Policy Plan and goes further to identify projects, some with regional impacts, which are important to the City of Minneapolis. Identification of some projects in the TAP may be incorporated into the Transportation Policy Plan in the future, in either the fiscally constrained portion or an increased revenue scenario.

### Metro Transit Network Next

Metro Transit is an operating division of the Metropolitan Council and is the regional transit agency that operates most, but not all, of the transit service in Minneapolis.<sup>25</sup> Metro Transit is currently developing a plan to guide the expansion of the regional bus network, called Network Next, and will develop a prioritized vision for the bus network of 2040, including the local and express bus network, arterial bus rapid transit network and service quality investments like speed and reliability improvements and customer facilities.

The transit strategies and actions have been developed in coordination with Metro Transit and will be coordinated with the Network Next effort.

### Minneapolis ADA Transition Plan for Public Works

The Minneapolis Americans with Disabilities Act (ADA) Transition Plan for Public Works details how the City complies with the 1990 Americans with Disabilities Act. The TAP works in tandem with the ADA Plan; as such, all projects and programs identified in the TAP will comply with the ADA. This plan goes further in identifying ways the City can create greater access through improvements to our transportation network.

### 20 Year Streets Funding Plan

The 20 Year Streets Funding Plan (approved in 2016, updated in 2018) details the process and criteria for how the City selects street improvement projects for inclusion in the annual Capital Improvement Program. The 20 Year Street Funding Plan is not superseded by the TAP; rather, the TAP helps inform how we design and operate our streets, as well as identifies additional projects outside of the typical reconstruction process that are prioritized for development. The 20 Year Street Funding Plan significantly changed the way the City identifies projects for inclusion in the Capital Improvement Program: streets are selected based on a methodology that gives approximate equal weight to asset condition and equity considerations – both community demographics and uses and modes. The methodology developed for the 20 Year Street Funding Plan has influenced individual project selection in capital programs as well, such as the Pedestrian Safety and Sidewalk Gap programs. Building equity in as a core part as to where investment occurs in the city is critical for advancing citywide goals around racial and economic equity.

<sup>25</sup> Other transit service is provided by Minnesota Valley Transit Authority, SouthWest Transit and other transit providers that serve cities and counties in the region who opted-out of Metro Transit service.

## STRATEGIC RACIAL EQUITY ACTION PLAN

The City’s [Strategic Racial Equity Action Plan](#) articulates the mission that the City of Minneapolis government takes strategic action to address climate change, dismantle institutional injustice and close disparities in health, housing, public safety and economic opportunities. Equity and safety are two of the seven values of the Strategic Racial Equity Action Plan – shared values with two of the Transportation Action Plan goals. One of the eight goals of the Strategic Racial Equity Action Plan is Built Environment and Transportation, which is defined as the City prioritizing high-quality neighborhoods, streets, infrastructure and equitable access to multimodal transportation in all parts of the city through thoughtful planning and design. The Transportation Action Plan is how the City plans to uphold that goal over the next 10 years.

One of the four operational policies of the Strategic Racial Equity Action Plan is to engage diverse communities. The identified strategic need is to improve the capacity of appointed boards and commissions (ABCs) to advance the City’s racial equity work. Specific for the work outlined in the TAP, a focus on the committees that directly work with Public Works on advancing transportation projects – the Pedestrian Advisory Committee and Bicycle Advisory Committee – is important. Strategies and actions to address increasing engagement to advance racial equity work are outlined in the PROGRESS section of the TAP.

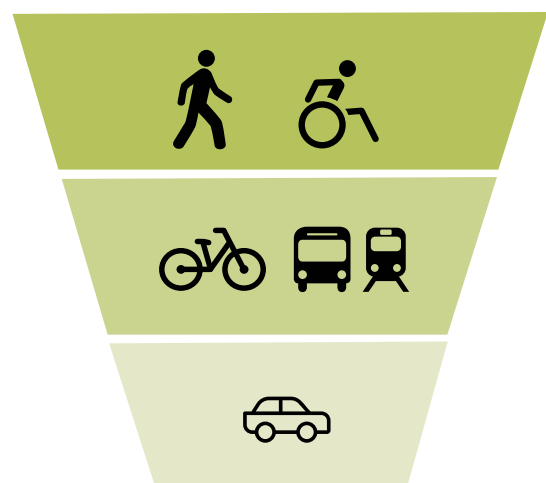
## Policies that frame the Transportation Action Plan

In addition to the Minneapolis 2040 Plan, two key transportation policies help direct the goals, strategies and actions of the TAP. The Complete Streets Policy and Vision Zero Policy provide key guidance to frame all the work detailed in the TAP.

### COMPLETE STREETS POLICY

The City of Minneapolis adopted a Complete Streets Policy in May, 2016. The Policy establishes a modal hierarchy that holds throughout all phases of planning, design, construction and operations of our streets. The TAP proposes to update the Complete Streets Policy ([see Street Operations Action 1.1](#)) to reflect greater nuance in prioritization to accommodate the complexity of our streets. Thus far, this hierarchy has proved helpful within and outside of city government to explain and guide our work. The role of freight, new mobility options, storage of vehicles and stormwater management will be reflected in the updated Complete Streets Policy.

Figure 9: Complete Streets hierarchy





# VISION ZERO MINNEAPOLIS

## VISION ZERO

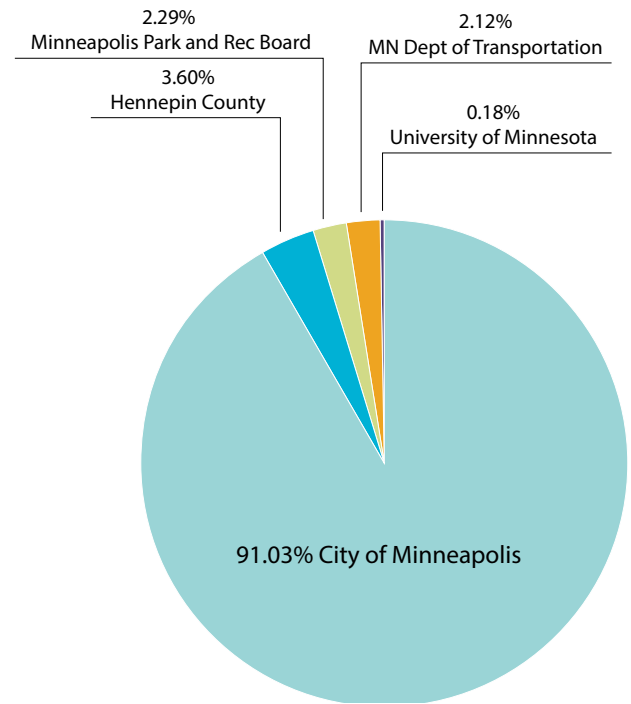
In 2017, the City adopted a Vision Zero Policy that committed to ending fatal and severe injuries on our streets within 10 years. This steadfast commitment to safety permeates throughout our plan; the work we do aims to reach Vision Zero and focus on those who are disproportionately impacted by traffic crashes (e.g., those walking, biking, Native Americans and those in ACP50 areas - areas of concentrated poverty with the majority of residents people of color).

## Key partnerships

### AGENCY PARTNERSHIPS

The City cannot reach our goals without the support of other key agencies who own, operate and manage streets within the city. Hennepin County, the Minnesota Department of Transportation, the Minneapolis Park and Recreation Board and the University of Minnesota all hold critical roles in the way our streets function. We partner at both the project level and the system-wide planning level with these agencies. While the reach of the TAP covers all streets within the city regardless of ownership, we acknowledge the jurisdictional roles and responsibilities of our partners regarding their streets.

Figure 10: Roadway jurisdiction



Source: Minneapolis Public Works, 2019

**Hennepin County** owns 85 miles of arterials within city boundaries, including some of our largest commercial corridors

like  
 Lake Street,  
 Lowry Avenue,  
 parts of  
 Lyndale Avenue and  
 West Broadway.

The **Navy** owns about 1.5 miles of streets near the southern border of the city, though they are restricted for private use.

The **Minnesota Department of Transportation** owns and operates 15 miles of state highways in Minneapolis and 30 miles of interstates, including 394, 94, and 35W.

Notable Minnesota Department of Transportation state highways include Central Avenue, Hiawatha Avenue, Olson Memorial Highway and University Ave NE.

The **Minneapolis Park and Recreation Board (MPRB)** owns and operates 55 miles of parkways within city boundaries.

These include most of the streets and trails along the lakes, river and creek, along with Kings Highway and other parkways like Saint Anthony Parkway, Minnehaha Parkway and parts of East River Parkway.

The **University of Minnesota** owns and operates just over four miles of streets within city boundaries.

These include Pillsbury Drive SE, Delaware Street SE, Church Street SE, 23rd Avenue SE, Harvard Street SE, Walnut Street SE, 6th Street SE, 5th Street SE, Beacon Street, East River Road, 2nd Street S, 5th St S, Union Street SE, 21st Avenue S and the University of Minnesota Transitway.

**Figure 11:** Minnesota Department of Transportation state highway within Minneapolis



### ORGANIZATION, INDUSTRY AND COMMUNITY PARTNERSHIPS

In addition to the agencies listed, the City has several key organizational, industry and business partnerships that will support us in achieving the strategies and actions outlined in this plan.

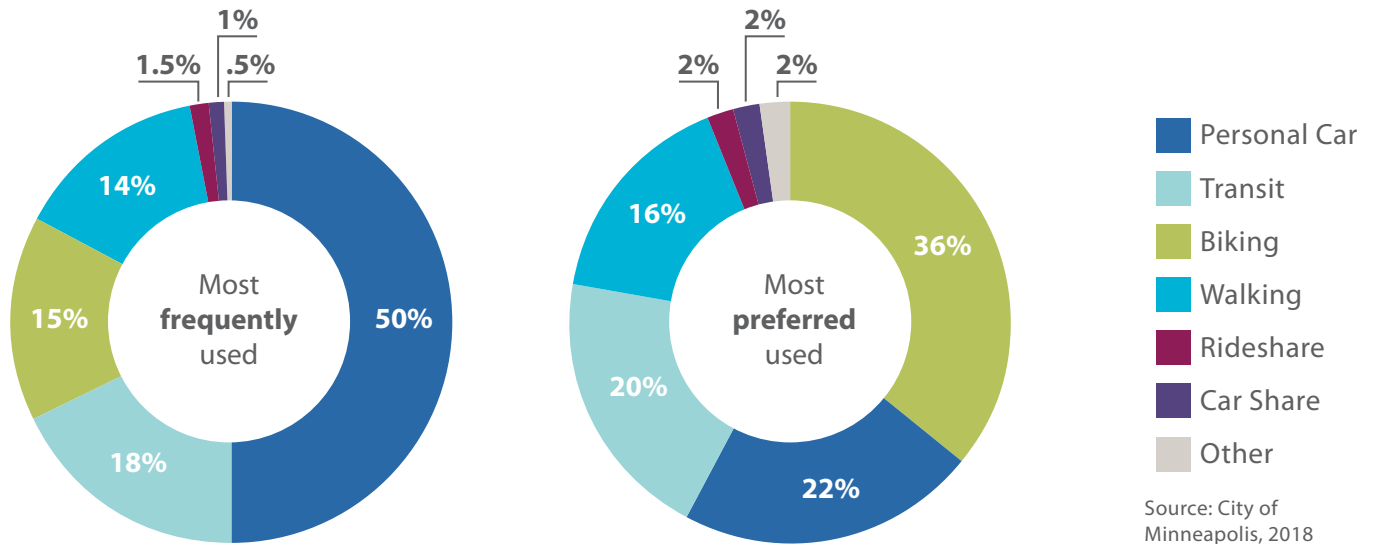
- Metro Transit is the operator of the regional transit system and delivered the transit service for 80.6 million trips systemwide in 2018, or an average of over 220,000 each day. They are a key partner in reaching our transportation vision in Minneapolis.
- Mobility providers – suburban transit providers, private ride-hailing companies and shared-micromobility companies are all partners in offering non-single occupancy travel options. These service providers offer new mobility options that promote equity and improve mobility, while transitioning dependency from the private car.
- The Twin Cities Shared Mobility Collaborative focuses on regionally advancing shared mobility and is a partner in advancing new mobility options.
- Philanthropic foundations are partners in our pursuit of data-driven decision-making and regional and national collaboration, particularly in the strategies and actions related to inviting new technology and advancing transportation options.
- Private industry, including freight shippers and business owners, are key partners for many of our freight strategies and actions.
- Private property owners and building managers are partners for maintaining and improving our pedestrian network, particularly when it comes to winter maintenance. They are also partners in coordinating improved freight deliveries. Private developers and the Department of Community Planning and Economic Development are key partners related to implementing private sector related improvements through the development review process and other land use related strategies and actions.
- The University of Minnesota and other research institutions are key partners for freight and other data or research related partnerships.



## How people move in Minneapolis

We surveyed over 5,000 people during the summer of 2018 to ask how they most often travel and how they would prefer to travel. What we heard was that half typically travel by car (50%), but many of those same people would prefer to travel more by biking (36%) and transit (22%). Every category (transit, biking, walking, rideshare, car share and other) saw an increase in desired travel mode versus current way of travel except for the private car.

Figure 12: How I travel vs. how I want to travel



The City has several policies that aim to provide people with a wide variety of transportation options that are safe, sustainable, convenient and accessible. This includes [Minneapolis 2040](#), our Complete Streets Policy, our [Climate Action Plan](#) and our Vision Zero Policy. One of the commonalities between these plans and associated policies is that they all aim to reduce the number of trips that people take in single occupancy vehicles.

Trends from various sources show that we are making progress toward reducing single occupancy vehicle trips. Despite a growth in population we have managed to keep the number of vehicle miles traveled at the same level, which shows that people are driving less per capita.<sup>26</sup> Based on our annual bicycle and pedestrian counts we have seen steady increases at our count locations over the past 10 years.<sup>27</sup> From census data we can see that younger generations are driving less than older generations.<sup>28</sup>

While there is reason to celebrate these trends, the pace at which people are reducing their driving is far too slow to reach our goals.

<sup>26</sup> Between 2008 and 2018 the annual VMT in Minneapolis decreased from 2.44 billion miles to 2.37 billion miles. In the same time, the annual VMT per capita decreased from 7,189 miles to 5,567 miles. Source: Minnesota Department of Transportation Traffic Data Reports. During this time frame population increased from about 384,000 to over 425,000.

<sup>27</sup> [Walking and Biking in Numbers](#)

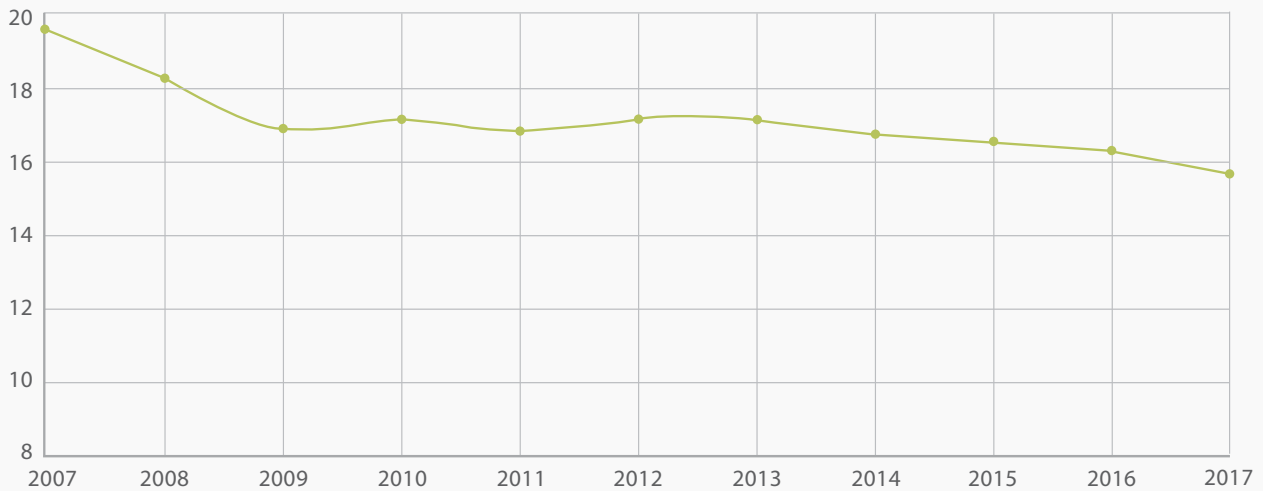
<sup>28</sup> Means of Transportation to Work by Select Characteristics, U.S. Census Bureau, [2018 American Community Survey 5-Year Estimates](#)

# A SNAPSHOT IN TIME: OUR STARTING POINT FOR TRAVEL TRENDS IN MINNEAPOLIS

## People are driving less

In the last decade the average number of miles driven per person each day has decreased by about three miles.

Figure 13: Average daily vehicle miles traveled per person in Minneapolis

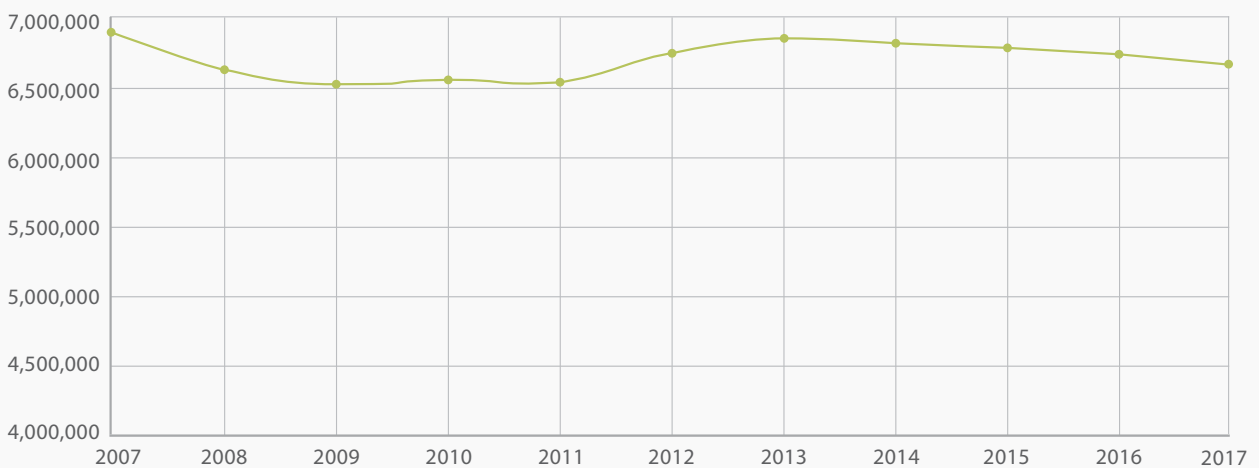


Source: Minnesota Department of Transportation Traffic Data Reports, 2007-2017

## Despite a rise in population, total vehicle miles traveled has stayed relatively constant

Between 2010 and 2018 Minneapolis saw an increase of over 35,000 people.<sup>29</sup> Despite this growth in population, the total amount of vehicle miles traveled remains fairly constant.<sup>30</sup>

Figure 14: Average daily vehicle miles traveled



Source: Minnesota Department of Transportation Traffic Data Reports, 2007-2017

<sup>29</sup> Demographic and Housing Estimates, U.S. Census Bureau, 2010 and 2018 American Community Survey 1-Year Estimates

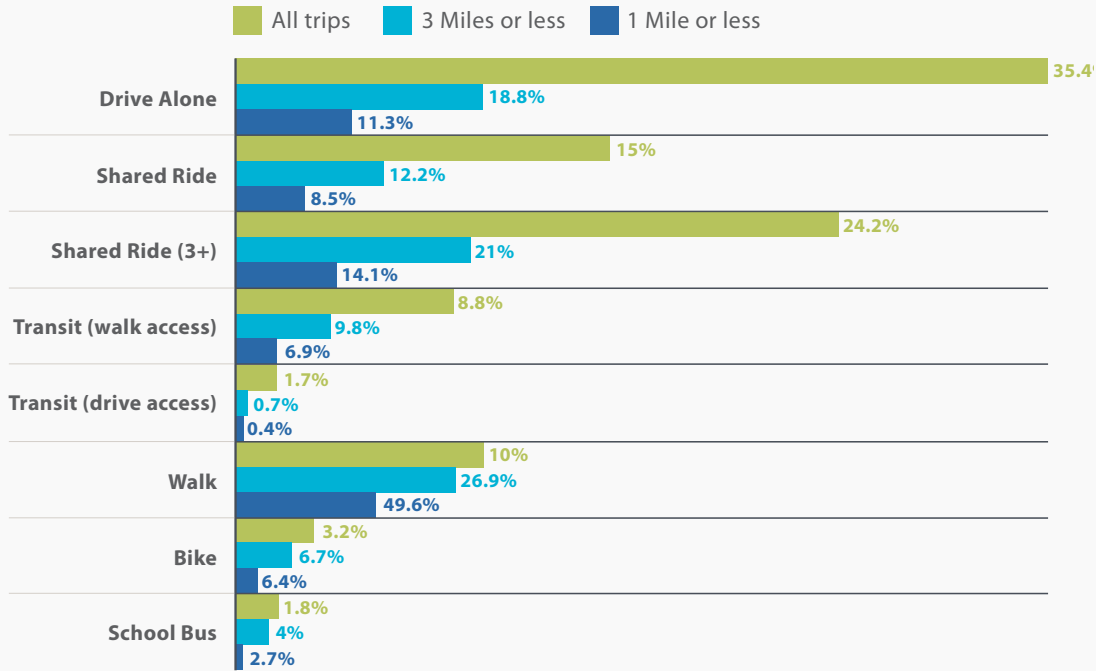
<sup>30</sup> Minnesota Department of Transportation, Roadway Data, VMT by Route System in each City within each County (2001-2014, 2016-2018)

# A SNAPSHOT IN TIME: OUR STARTING POINT FOR TRAVEL TRENDS IN MINNEAPOLIS

## People are more likely to walk, bike or take transit for shorter trips

The Metropolitan Council maintains a regional travel demand model. According to the model, for trips less than one mile people choose to walk 46% of the time and drive 16% of the time.<sup>31</sup>

Figure 15: Minneapolis trips beginning and/or ending in Minneapolis

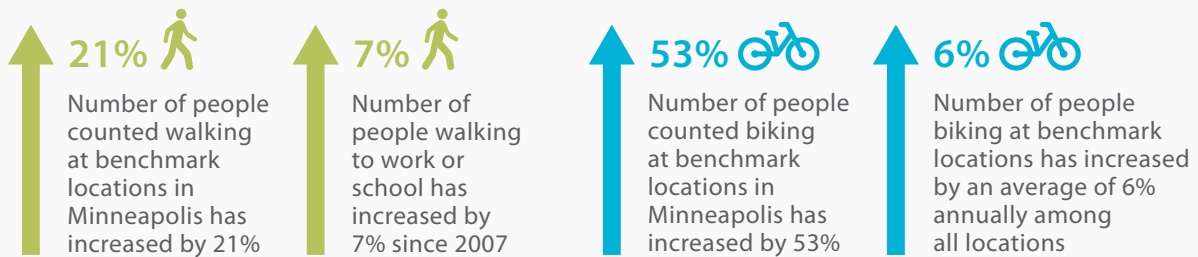


Source: Metropolitan Council Regional Travel Demand Model, 2015 Base Scenario

## People are walking and biking more

The City has been collecting information about the number of people walking and biking at 30 benchmark locations since 2007. While the mode share for bicycling and walking stayed relatively constant over this period,<sup>32</sup> these counts show that the number of people walking and biking in Minneapolis has steadily risen over this period.

Figure 16: People walking vs. biking



Source: [Walking and Biking in Numbers](#)

<sup>31</sup> Metropolitan Council Regional Travel Demand Model, 2015 Scenario

<sup>32</sup> 2010 and 2018 and American Community Survey 5-Year Estimates

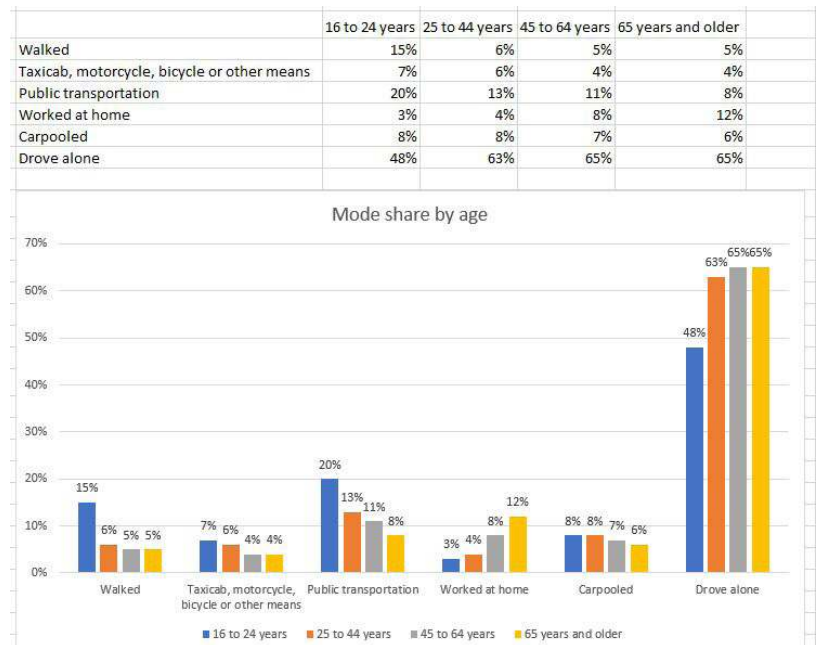


**A SNAPSHOT IN TIME: OUR STARTING POINT FOR TRAVEL TRENDS IN MINNEAPOLIS**

**Commute to work changes by age**

According to the U.S. Census Bureau clear trends are seen connecting age and commute to work preferences. Younger workers more likely to travel to work by means other than driving alone. The likelihood of walking, taking a taxi, motorcycle, bicycle or other means, using public transit, or carpooling all decline with age, while the likelihood of working at home or driving alone to work all increase with age.<sup>33</sup>

**Figure 17: Commute travel mode by age, Minneapolis residents**

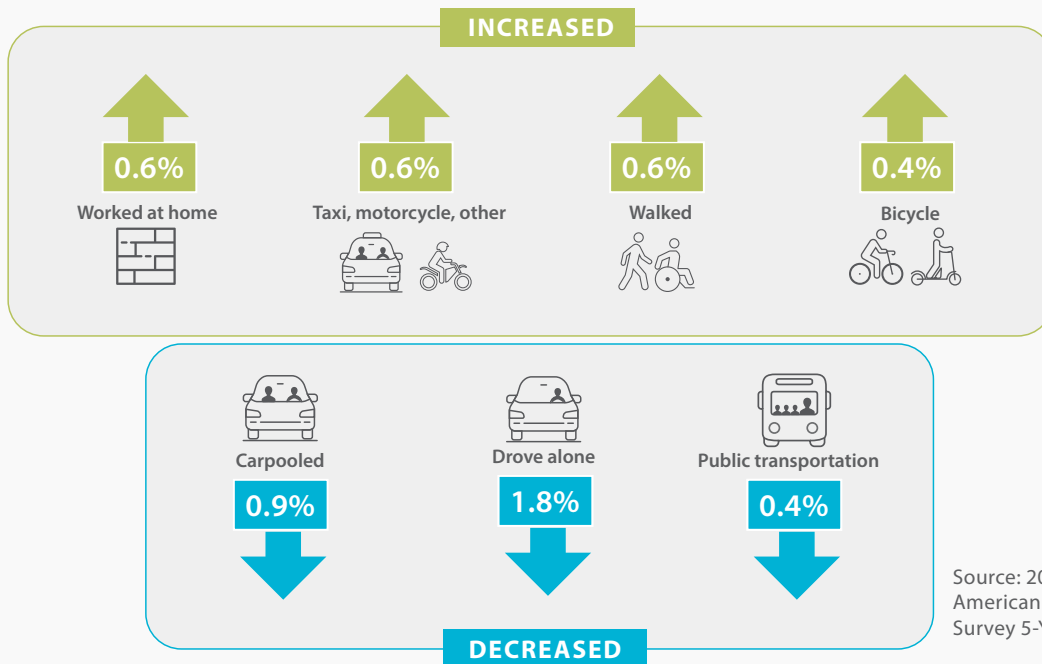


Source: 2018 American Community Survey 5-Year Estimates

**Overall commute mode share has remained fairly constant**

Between 2010 and 2018 the commute mode share to work stayed relatively constant.<sup>34</sup> While there was a slight decline in driving alone to work (-1.3%) and carpooling to work (-0.2%), there hasn't been a substantial shift in the way people get around.

**Figure 18: Driving to work alone vs. carpooling to work**



Source: 2010 and 2018 American Community Survey 5-Year Estimates

<sup>33</sup> Means of Transportation to Work by Select Characteristics, U.S. Census Bureau, [2018 American Community Survey 5-Year Estimates](#)

<sup>34</sup> American Community Survey 1-Year Estimates.



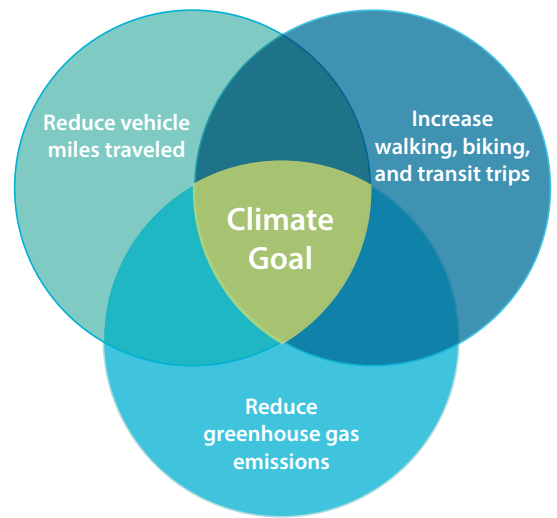
# MINNEAPOLIS STREETS

in 2030

In 2030 our streets will reflect our City values. Our streets will be designed to address a climate emergency by emphasizing low- or no-carbon travel. Our streets will add protection for people walking and bicycling and will be designed to prioritize an effective transit system that serves all trips. Our streets will be organized to enhance access to jobs. Though our streets will continue to serve car traffic, our future depends on our ability to increase the city's population as projected in Minneapolis 2040 without the car traffic associated with growth. This plan does not eliminate places for people to drive, it simply rebalances space to incentivize and allow for low carbon transportation options.

To that end, there are three major metrics that we can monitor that reflect reaching our goals: mode shift, greenhouse gas reduction and reduction in vehicle miles traveled, which emphasize the TAP's focus on climate and equity.

Figure 19: Climate goal metrics



## Shifting modes by 2030

Mode split measures the percentage of travelers using a particular type of transportation (walk, bike, transit, car) for a particular trip (work, school, errands). Mode split data is collected from the Metropolitan Council through the Travel Behavior Inventory, which has been collected every 10 years but will be collected more frequently moving forward. This dataset accounts for all trips taken by all people in a household.

Reflecting a reduction of car trips and an increase of walking, biking and transit trips is important to frame the strategies and actions of this plan, which is expressed as shifting modes.

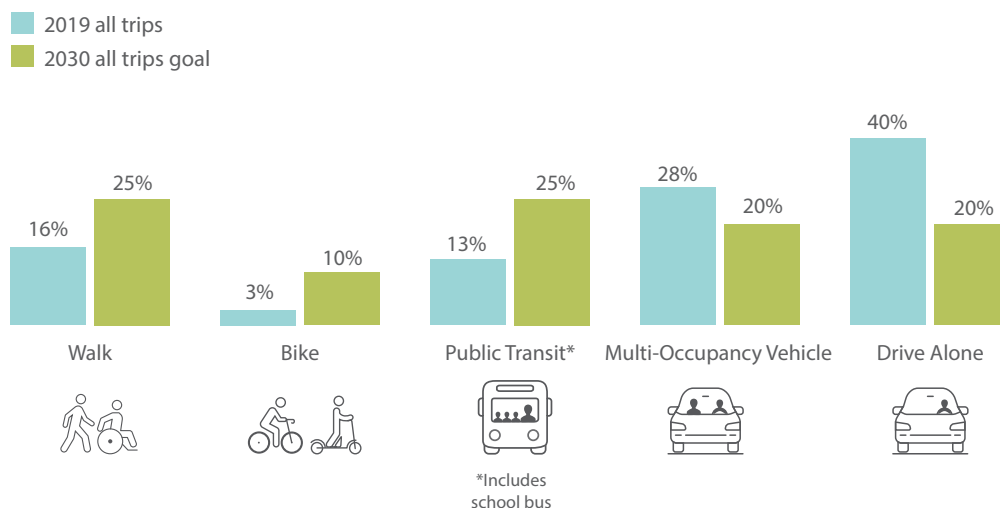
### There are six key reasons to set a 2030 mode shift goal:

<b>1</b> Reduce greenhouse gas emissions and improve air quality	<b>2</b> Allocate space across all modes equitably	<b>3</b> Reduce crash impacts from large vehicles
<b>4</b> Improve quality of life related to trip time and congestion	<b>5</b> Capture new trips from new residents in ways other than cars	<b>6</b> Reduce costs for more residents through improved access to lower cost transportation options

2019 data shows that 68% of all trips that start or end in Minneapolis are taken by car – either individually (40%) or with other people (28%). Walking, biking, transit and school bus trips account for just under a third of all trips (32%).<sup>35</sup>

**We've set a goal of having 60% of trips taken by means other than a car – 35% by walking and biking and 25% by transit.**

Figure 20: All trips starting and ending in Minneapolis; mode split (2019) and mode split goal (2030)



Source: Metropolitan Council, Travel Behavior Inventory, 2019.

<sup>35</sup> Metropolitan Council, Travel Behavior Inventory, 2019.



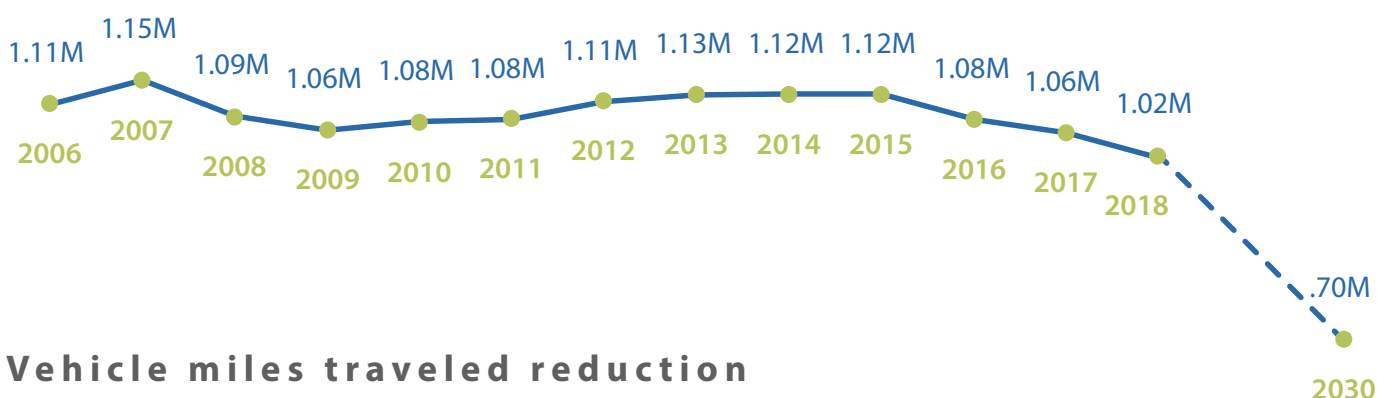
## Greenhouse gas reduction

The environmental impacts of gas-powered vehicles continue to degrade the air we breathe and have negative impacts on health, environment and quality of life. The Minneapolis Climate Action Plan set a goal of 80% reduction of greenhouse gas emissions by 2050, from 2006 baseline levels. 2006 baseline was just under 5.2 million metric tons citywide from all sources; the goal is just over one million metric tons in

2050.<sup>36</sup> Climate trends will likely require the City to take an even more aggressive stance on carbon emissions during the next 10 years, and we will update this plan to reflect future goals on carbon neutrality.

Emissions from on-road transportation account for approximately 24% of greenhouse gas emissions in Minneapolis.<sup>37</sup>

**Figure 21:** Greenhouse gas emissions (metric tons) from transportation sector historically and projected to reach City's goal

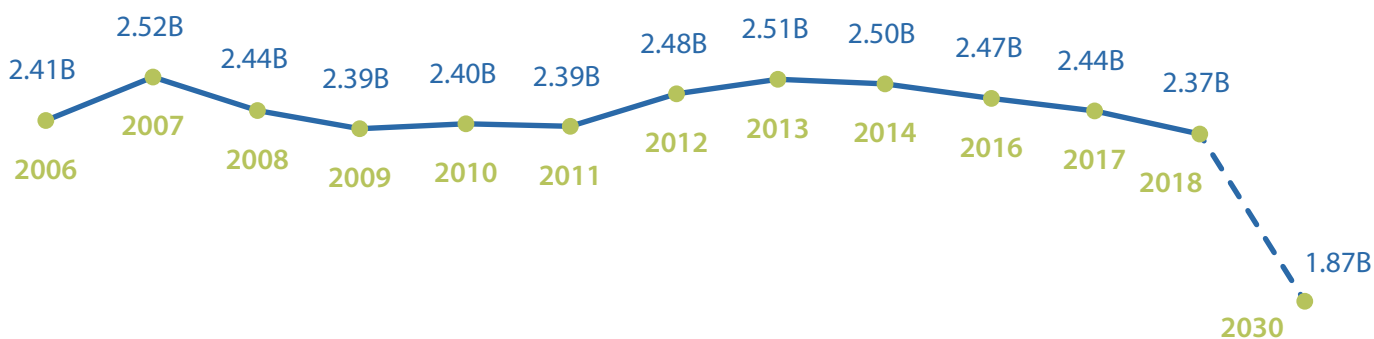


## Vehicle miles traveled reduction

Measuring the total number of vehicle miles driven is important to measuring mode shift and greenhouse gas reduction. In line with goals set in the Climate Action Plan and reinforced in Minneapolis 2040, we've set a goal of reducing

vehicle miles traveled by 1.8% per year.<sup>38</sup> To reach this goal, the average person in Minneapolis would have to travel just four miles per day less in a car.<sup>39</sup>

**Figure 22:** Vehicle miles traveled historically and projected forward



<sup>36</sup> [Climate Action Plan](#)

<sup>37</sup> Minneapolis Sustainability Office - Citywide Greenhouse Gas Emissions Inventory 2018

<sup>38</sup> The vehicles miles traveled reduction is calculated from 2018 baseline data of 2,368,057,420 miles traveled on Minneapolis streets; 1.8% annual reduction needed between 2018 and 2030. Annual vehicle miles traveled data provided by the Minnesota Department of Transportation.

<sup>39</sup> Minnesota Department of Transportation vehicle miles traveled data reflects all vehicle miles traveled in the City of Minneapolis and does not solely represent vehicle miles traveled for Minneapolis residents. Current population and projected population estimates for Minneapolis residents of all ages were used to calculate daily average mileage.

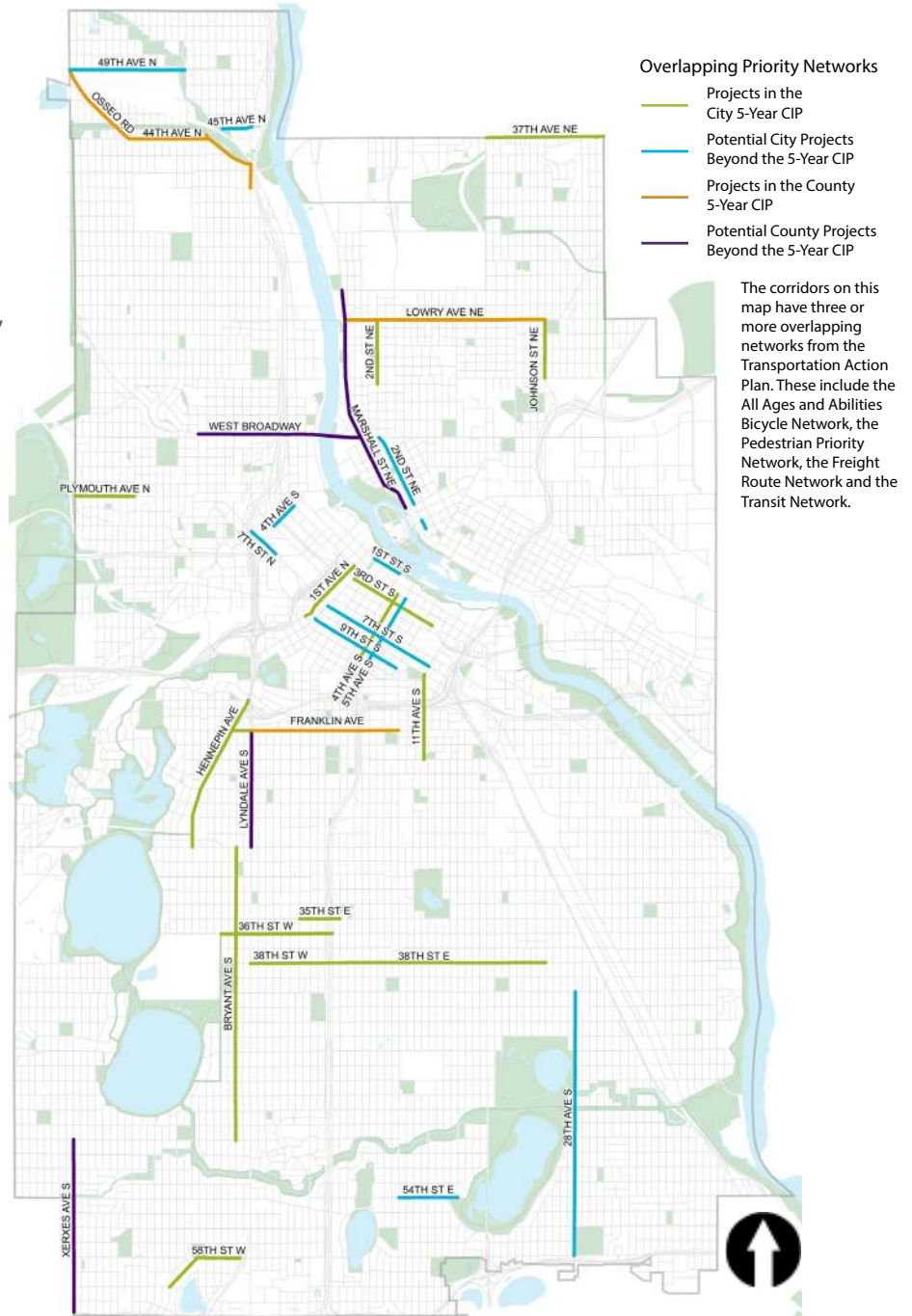
## Anticipated progress on upcoming corridors

Certain streets in Minneapolis will be reconstructed within the next 10 years – the timeframe of the TAP – and their street designs will be influenced by the strategies and actions identified in this plan.

Upcoming capital projects will be influenced by the Street Design Guide, which will reference the priority networks defined in this plan: the Pedestrian Priority Network, the All Ages and Abilities Network (for biking and micromobility), Transit Priority Projects and the Truck Route Network. When the Pedestrian Priority Network, the All Ages and Ability Network and streets with transit overlap on the same street segment, the design decisions are often most difficult, especially when the public right of way is most constrained. These corridors, while challenging, provide the greatest opportunity to make bold changes to advance mode shift goals, greenhouse gas reduction and reductions in vehicle miles traveled. The Street Design Guide will provide guidance on how all of these modes can come together to support our Complete Streets Policy.

While subject to change, the streets shown in Figure 23 are currently recommended for street reconstruction sometime within the next 10 years and have overlapping priority networks.

**Figure 23:** Upcoming street reconstruction/overlapping priority networks



## Quick results

Key quick-build projects identified in our strategies and actions are highlighted below. These are tactical projects that greatly and quickly increase access and mobility, but do not require an entire street to be reconstructed. Examples include reconfiguring streets to provide transit advantages, building out a network of mobility hubs and making operational changes to streets downtown to encourage mode shift and promote safety.

### TRANSIT PRIORITY LANES

Transit priority lanes, often realized as bus-only lanes, provide dedicated space for people traveling by bus or other transit vehicles, unobstructed from other traffic. By dedicating space on our streets for transit, we are improving the speed and reliability of travel which encourages more people to take transit. Collectively, this lightens our carbon footprint and lessens the demand for parking at destinations, which helps free up more space for active uses of our shared public

space – an example of a virtuous circle created by giving residents options. We have piloted bus-only lanes on Hennepin Avenue S, Chicago Avenue and Nicollet Avenue; these early pilots have shown that improvements can be realized in speed and reliability for those on transit. These actions are outlined in Transit Action 2.1; Transit Action 2.2 illustrates other potential opportunities to install transit only lanes.

#### Streets where we plan to allocate space for bus-only lanes include:

**4th Avenue South**  
between  
Washington Avenue  
and 10th Street South

**5th Avenue South**  
between  
Washington Avenue  
and 10th Street South

**6th Street North/South**  
between  
1st Avenue North  
and 13th Avenue South

**7th Street North/South**  
between  
1st Avenue North and  
13th Avenue South

**8th Street North/South  
downtown**  
between  
1st Avenue North and  
13th Avenue South

**4th Street North/South**  
from the  
west/freeway connections  
to the Marquette/2nd Avenue  
transit facilities

**12th Street South**  
between  
I-35W and  
Marquette Avenue South

### MOBILITY HUBS

The City has begun to pilot mobility hubs in neighborhoods throughout the city – which locate several low carbon, shared transportation services or options at the same location. This allows people to make more seamless connections between bus, bikeshare, scooters and/or carshare and helps to ensure transit trips have a more significant reach by coordinating viable options to complete the last leg of a trip. They also serve as gathering spots anchored in transportation that provide a sense of place and opportunity for people to enjoy the street.

Twelve pilot mobility hubs in Minneapolis were installed in 2019; these are providing early lessons on how to build out a network. Over the next couple of years, people should expect to see a network of mobility hubs developed throughout the city. These actions are outlined in Technology Action 3.1.





Figure 24: Downtown Minneapolis bus-only lanes

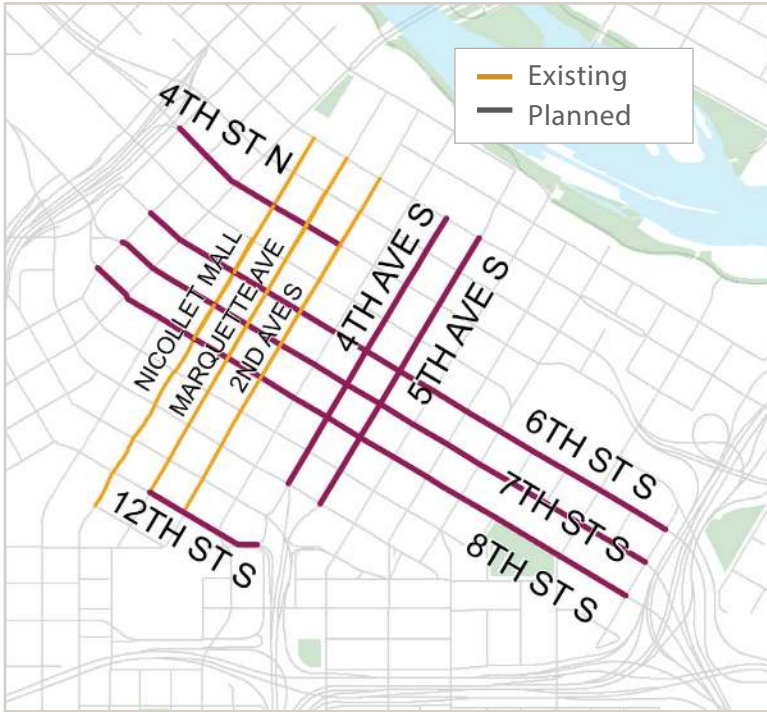


Figure 25: Mobility hub pilot



## A FOCUS ON DOWNTOWN OPERATIONAL CHANGES TO MOVE PEOPLE

Over 205,000 people work downtown.<sup>40</sup> Streets downtown play a huge role in the regional economy and how people decide to travel to work. The speed of transit, the safety of bike lanes and the space and comfort of the sidewalk all influence how people decide to travel to, from and through downtown. By focusing on operational changes to our street network – without waiting for a large capital project – we can open travel options in the densest area of the city where we can make the most impact most quickly.

Near term operational changes will largely be realized by making safety improvements to High Injury Streets identified in our Vision Zero efforts. These streets are identified because they have not had recent safety improvements and are not planned for near-term reconstruction. Near-term safety improvements on these streets will be done with changes in paint, additional bollards, or potential signal changes as outlined in the Vision Zero Action Plan.

### High Injury Streets downtown that we plan to make improvements to between 2020 and 2022 include:

**3rd Avenue South**  
between  
1st Street and  
12th Street

**11th Avenue South**  
between  
6th Street and  
Franklin Avenue

**9th Street**  
between  
Hennepin Avenue and  
Chicago Avenue

**7th Street**  
between  
2nd Avenue and  
11th Avenue South

**6th Street**  
between  
2nd Avenue and  
Chicago Avenue

**3rd Street**  
from  
5th Avenue South  
to Chicago Avenue

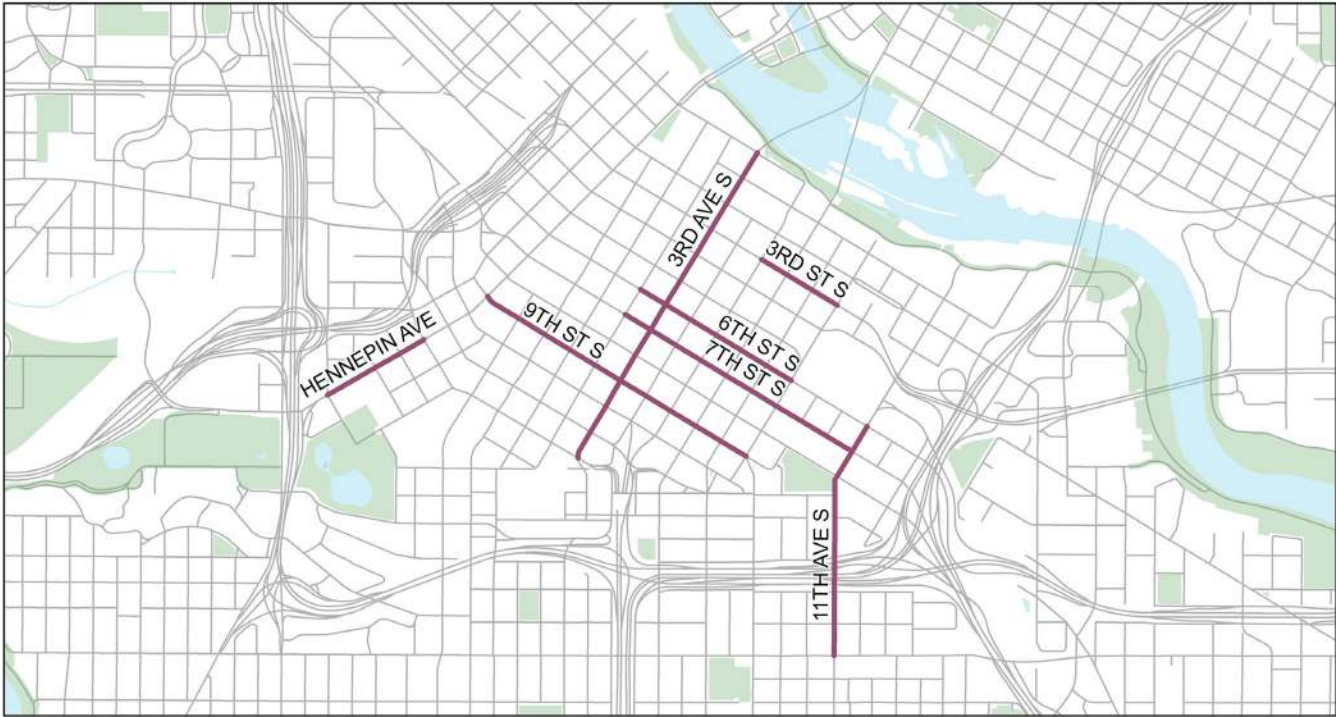
**Hennepin Avenue**  
between  
12th Street and  
16th Street

**Figure 26:** Paint and bollards improve conditions for people walking and bicycling; 11th Avenue and 2nd Street S



<sup>40</sup> <https://www.mplsdowntown.com/facts>

Figure 27: High Injury Streets in downtown



**Legend**

— High Injury Streets in downtown with planned improvements between 2020 and 2022





# HOW WE GET THERE

## Strategies and actions

Reaching our transportation goals requires strategic action. Listed in this plan are strategies and actions that we plan to undertake in the next 10 years. Each strategy is followed by several actions, detailing how we, along with our partners, will make tangible improvements on our streets.

**A strategy is a broad approach to reach an outcome that moves us toward achieving one of our six goals.**  
**An action is a specific step needed to accomplish the strategy.**

The transportation policies of Minneapolis 2040, from which the TAP strategies and actions build, support a multimodal network that prioritizes walking, biking and transit.

Each action identifies specific goals it supports and an estimated level of effort it will require to complete it – high, medium or low. This is meant to acknowledge that there are many factors which contribute to the success of a specific action – including support of agency partners, funding opportunities and alignment with advancements in technology and other industry changes. Identifying a scale of anticipated difficulty helps give perspective on when a specific action might be accomplished; the City will strive to complete all actions but acknowledges difficulties in predicting 10 years into the future.

The strategies and actions listed reflect major themes we heard through community engagement for the TAP specifically but also through the Minneapolis 2040 development process. For the TAP-specific engagement, we connected with thousands of people and heard the strong desire to continue to build walkable, bikeable, transit-oriented communities, with less dependence on cars. A full summary of engagement is found in Appendix A.

The strategies and actions were developed in partnership with workgroups on each of the topic areas, along with guidance from an Interagency Technical Advisory Team, Steering Committee and Policy Advisory Committee. Membership for those committees includes City staff, partner agency representatives and other stakeholders and are listed in Appendix B.

The strategies and actions in this action plan reflect a tension that exists in the street that results from competing uses for limited right of way. We must acknowledge this tension and take a context-sensitive approach to our work, recognizing there may be multiple ways to achieve similar outcomes. Similarly, when an idea is posited where further study or evaluation is needed, it indicates that we do want to achieve the outcome, but there may be more work to undertake before definitively stating we will pursue it.

When an action identified in one topic area is linked to an action in another, that relationship is noted, and the actions are linked. When a strategy or action applies to more than one topic or strategy, the action is referenced below the strategy as “see also action” in a different topic area.

**Actions are divided into two categories:** actions we will do and actions we will support. Actions we will do are preceded by **DO** and are colored in dark gray, and actions we will support are preceded by **SUPPORT** and are colored in light gray.

**Actions are anticipated as being undertaken in three distinct time periods:**

- 2020-2023 (YEARS 0-3)
- 2024-2027 (YEARS 4-7)
- 2028-2030 (YEARS 8-10)

The years may switch depending on changing conditions, partner support, staffing, funding levels and/or unforeseen social or other circumstances. Despite some natural uncertainty with predicting the future, together with the level of effort identified for each action, the pace of anticipated change is evident by the designated years for each action.



# WALKING

Promote a safe and inviting walking and rolling environment

Walking has the lowest negative carbon impact compared to other transportation modes while generating high returns in public health and equity. Everyone is a pedestrian at some point in their day because every trip begins and ends with walking. Walking is a key component of successful public transit, supports vibrant business districts and healthy people, reduces carbon footprint and contributes to safer neighborhoods by putting more eyes on the street.

Over 10% of trips in Minneapolis starting or ending in Minneapolis are less than one mile<sup>41</sup> – a distance that takes the typical person 15 to 20 minutes walking. Minneapolis has over 2,000 miles of sidewalk.<sup>42</sup> Unfortunately, pedestrians are overrepresented in the number of severe and fatal injuries on our street network, comprising nearly 1/3 of all total severe and fatal injuries.<sup>43</sup> As the number of people walking continues to increase, it is critical that it is formally recognized as a mode of travel, and made more welcoming, accessible and safer as a transportation option – which, without other conflicting modes, is inherently a safe activity.

2019 data shows people walk for 16% of their trips;<sup>44</sup> by 2030 our goal is to increase that number to 25%. We'll get there through a combination of improved conditions for people walking as well as land use and population growth trends that are shaped through the policies outlined in Minneapolis 2040.

Throughout the TAP 'walking' refers to people walking or rolling – using a wheelchair, stroller or other assistive mobility device – and 'pedestrian' as a person walking or rolling.

Figure 28: Crashes resulting in severe injury or death



Source: Vision Zero Crash Study (2018)

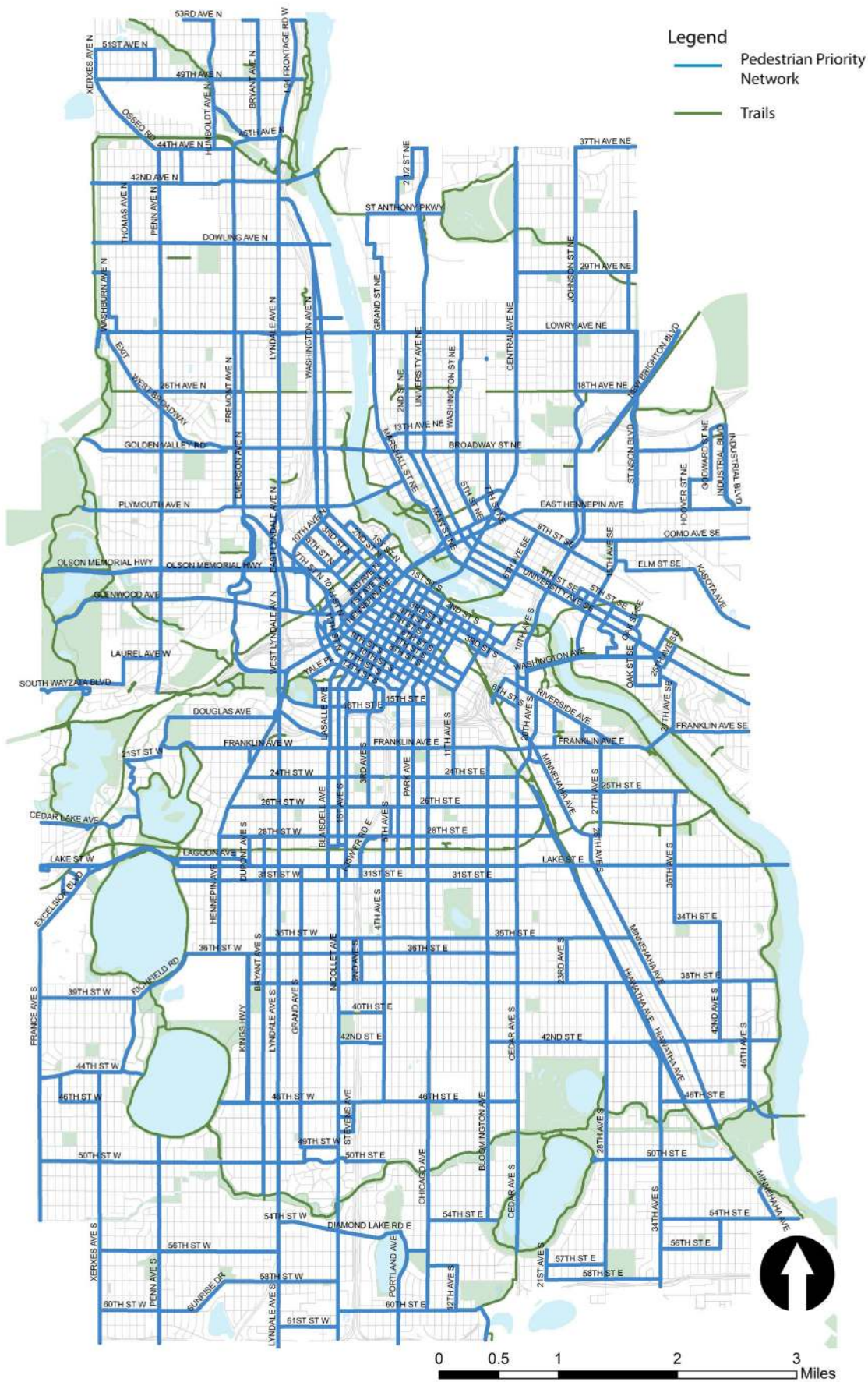
Because many improvements that prioritize pedestrians also do the same for those bicycling, the strategies and actions listed here often support or are linked to bicycle strategies and actions.

<sup>41</sup> Metropolitan Council's 2010 Travel Behavior Inventory, 10.6% of all trips.  
<sup>42</sup> City of Minneapolis Public Works  
<sup>43</sup> [City of Minneapolis Vision Zero Crash Study \(2018\)](#)  
<sup>44</sup> Metropolitan Council, Travel Behavior Inventory, 2019





Figure 29: Pedestrian Priority Network





## WALKING STRATEGIES

- 1** Focus pedestrian improvements along and across the Pedestrian Priority Network.
- 2** Prioritize visibility and safety of pedestrians at intersections and midblock crossings.
- 3** Improve street lighting to increase visibility for pedestrians on streets and to meet the City's energy goals.
- 4** Improve winter walking and rolling.
- 5** Ensure City's policies and practices support consistent access to the sidewalk network.
- 6** Create and improve pedestrian connections across freeways, highways, rivers and railroads.
- 7** Partner with developers, utilities, property owners, and agency partners to provide high-quality pedestrian and public realm improvements.
- 8** Set policies and practices to leverage, manage, monitor and design for new and emerging technologies that increase visibility and comfort of pedestrians.
- 9** Expand walking education and encouragement.

### SEE ALSO STRATEGIES:

- **Bicycling Strategy 3** — Prioritize a network of neighborhood greenways during the buildout of the All Ages and Abilities Network.
- **Street Operations Strategy 3** — Plan for efficient and practical operations of people walking, biking and taking micromobility or transit throughout the street design process.
- **Street Operations Strategy 4** — Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.
- **Street Operations Strategy 5** — Price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.
- **Street Operations Strategy 6** — Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.
- **Design Strategy 2** — Foster vibrant public spaces for street life





**STRATEGY 1**

**Focus pedestrian improvements along and across the Pedestrian Priority Network.**

The Pedestrian Priority Network is a grid of streets that represent where people frequently walk and will be used to focus investments to improve the ease, comfort and safety of people walking throughout the year. The network is 298 miles and will be the focus of planning, design, operations and maintenance improvements for pedestrians across the city, replacing all existing network maps.

The Pedestrian Priority Network was developed by studying numerous factors that influence where people walk, including transit services, high density areas, commercial activity, land use, connections to schools and High Injury Streets for pedestrians. Trails are also noted on the Pedestrian Priority Network; a large portion of trails are owned and managed by the Minneapolis Park and Recreation Board and provide important connections for the network as they are key walking places.

**Figure 30:** Typical street on Pedestrian Priority Network





## ACTIONS

Actions to focus pedestrian improvements along and across the Pedestrian Priority Network.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.1</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>            Prioritize citywide planning, design, operations and maintenance improvements for pedestrians on and across the Pedestrian Priority Network.</p>	Safety, Mobility	Medium
<p><b>DO ACTION 1.2</b>  <i>2020-2023 (YEARS 0-3)</i>            Review the 20 Year Streets Funding Plan metrics to identify and implement changes necessary to prioritize capital improvements along the Pedestrian Priority Network.</p>	Mobility	Low
<p><b>DO ACTION 1.3</b>  <i>2020-2023 (YEARS 0-3)</i>            Replace the Pedestrian Street Lighting Corridor with the Pedestrian Priority Network for project programming, design, maintenance and other purposes, and align funding to address the additional mileage; update the <a href="#">Street Lighting Policy</a> to reflect this change.</p>	Mobility	Medium





## STRATEGY 2

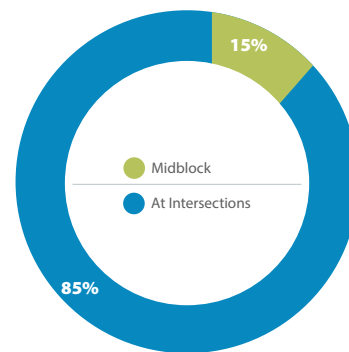


**Figure 32:** Conversion of slip lane intersection to community space

### Prioritize visibility and safety of pedestrians at intersections and midblock crossings.

85% of crashes involving pedestrians happen at intersections. Of these, 68% of crashes happen at signalized intersections, while 30% happen at unsignalized or stop-controlled intersections.<sup>45</sup> While midblock crossings are not the norm in Minneapolis, where they exist, it is important to prioritize treatments that slow motor vehicle speed and provide visual cues for drivers to look for people crossing, particularly because drivers may not be anticipating people crossing midblock.

**Figure 31:** Locations of pedestrian crashes



Source: [2017 City of Minneapolis Pedestrian Crash Study](#)

There are several operational improvements that help increase safety but may sometimes appear at odds with one another. Longer walk signals, for example, support walking speeds for those who have a slower pace, but shorter walk signals allow opportunities for people to cross more frequently. Assessing when and where to use these various treatments is important and most effective on a project by project basis.

<sup>45</sup> Minneapolis Pedestrian Crash Study, 2017. 2% are at no or unknown control.



Figure 33: Midblock crossing – Hennepin Ave between Lake and 31st St







## ACTIONS

### Actions to prioritize visibility and safety of pedestrians at intersections and midblock crossings.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b> 2020-2023 (YEARS 0-3)</p> <p>Modify traffic signal operation to give pedestrians a walk signal at signalized intersections without having to press a button except where doing so would provide greater benefit to pedestrians, bicyclists, transit and neighborhoods. Explore permanent sign modifications to indicate whether the button needs to be pressed to get a walk phase or longer walk phase. Note that the ADA requires pedestrian pushbuttons be installed to provide audio and vibrotactile information to pedestrians when activated.</p>	Safety, Equity, Mobility	Low
<p><b>DO ACTION 2.2</b> 2020-2023 (YEARS 0-3)</p> <p>Develop criteria for adding marked and/or raised crosswalks at unsignalized intersections and designated midblock crossings to reduce distances between formalized crossings. Widen existing crosswalk markings to accommodate pedestrian volumes.</p>	Safety, Mobility	Medium
<p><b>DO ACTION 2.3</b> 2024-2027 (YEARS 4-7)</p> <p>Adjust and restrict vehicle turns at intersections through street design and operational strategies based on street context and data. This includes strategies such as 'No Turn on Red', stop bars set back further from the pedestrian crossing, leading pedestrian intervals, pedestrian scrambles, left turn restrictions, lagging left turns, hardened centerlines, slow turn wedges and smaller turning radii to slow vehicle turns.</p>	Safety	Medium
<p><b>DO ACTION 2.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Restrict the installation of new slip lanes (unsignalized turn lanes at intersections) and convert existing slip lanes to community space. <i>See Design Strategy 2</i></p>	Safety	Medium
<p><b>DO ACTION 2.5</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Prioritize the implementation of curb extensions, pedestrian crossing medians, tabled crossings, interim painted curb extensions and related safety improvements along and across the Pedestrian Priority Network and High Injury Streets.</p>	Safety	Low



# ACTIONS (continued)

Actions to prioritize visibility and safety of pedestrians at intersections and midblock crossings.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.6</b>            2024-2027 (YEARS 4-7)            Implement pedestrian and bicycle improvements near or connecting to schools through the City’s Safe Routes to School program and other opportunities to encourage students to walk or bicycle to/from school.  <i>See Bicycle Strategy 2</i></p>	<p>Safety,            Mobility,            Active            partnerships</p>	<p>High</p>
<p><b>DO ACTION 2.7</b>            2020-2023 (YEARS 0-3); ON-GOING            Discontinue the use of vehicular level of service and/or vehicle counts as sole justification for the installation of traffic signals, and include pedestrian and bicycle counts in the evaluation of new traffic signal need. <i>See Street Operations Action 3.2</i></p>	<p>Safety,            Mobility</p>	<p>Medium</p>





## STRATEGY 3

### Improve street lighting to increase visibility for pedestrians on streets and to meet the City’s energy goals.

Lighting plays an important role in people’s comfort walking on city streets. In Minneapolis, having adequate lighting no matter the place within the city is important, especially when the sun rises as late as 7:45 am and sets as early as 4:30 pm during the winter. This strategy adjusts the City’s approach to street reconstruction projects so that pedestrian lighting is always included as part of the reconstruction project; previously, pedestrian lighting was only included as a project cost if the street was identified on the Pedestrian Street Lighting Corridor. The City typically installs 50 lights per year (3,000 feet) of standalone pedestrian scale lighting projects along a Pedestrian Street Lighting Corridor, not as a part of a street reconstruction project; these installations will now be focused on the Pedestrian Priority Network.

**Figure 34:**  
Wood pole streetlight



**Figure 35:**  
Pedestrian scale streetlight





## ACTIONS

Actions to improve street lighting to increase visibility for pedestrians on streets and to meet the City's energy goals.

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b>            2020-2023 (YEARS 0-3)            Update the Street Lighting Policy to include pedestrian lighting on all street reconstruction projects included as part of the capital project cost.</p>	<p>Safety,            Equity, Active            partnerships</p>	<p>High</p>
<p><b>DO ACTION 3.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Require the provision of pedestrian lighting in the public right of way with private development projects that meet size and location thresholds.</p>	<p>Safety, Active            partnerships</p>	<p>Low</p>
<p><b>DO ACTION 3.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Prioritize locations for standalone pedestrian scale lighting projects in areas of concentrated poverty with majority people of color with a focus on the Pedestrian Priority Network.</p>	<p>Safety, Equity</p>	<p>Low</p>





## STRATEGY 4

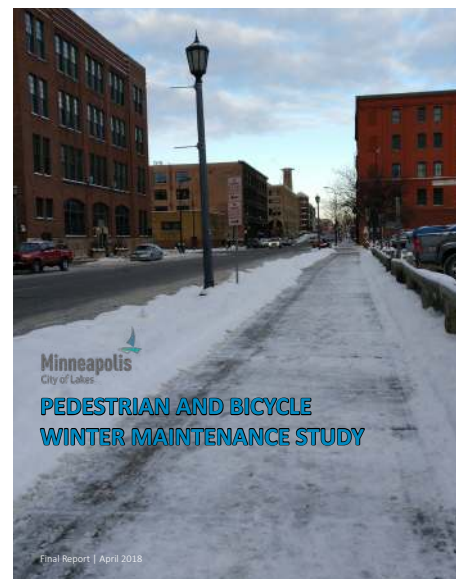
### Improve winter walking and rolling.

Maintaining winter access for people walking in the city is critically important. Minneapolis experiences an average of 54 inches of snow per year<sup>46</sup>, in addition to freeze and thaw cycles, and the system in place to ensure the sidewalks are kept clear and passable involves many people and institutions throughout the city. Currently, City ordinance requires property owners of duplexes and single-family homes to clear the public sidewalk abutting their property within 24 hours of snow ending, and all other property owners to clear their sidewalks within four daylight hours of the snow ending. Clearing corners to the gutter line are the responsibility of the corner lot property owner. There is a City-led corner clearing program that works to clear corners after large storms, post-ploving of the streets, until all corners are cleared citywide. Moving forward and in alignment with Walking Strategy, the City-led corner clearing program will move to align with the Pedestrian Priority Network.

The 2018 [Minneapolis Pedestrian and Bicycling Winter Maintenance Study](#) provides options to enhance the quality and consistency of clearing snow and ice from sidewalks and bikeways; many of those ideas are reflected in this strategy's actions.

Figure 36: Winter Maintenance Study

Figure 37: Snow-clearing timelines



<sup>46</sup> [https://www.dnr.state.mn.us/climate/twin\\_cities/snowfall.html](https://www.dnr.state.mn.us/climate/twin_cities/snowfall.html)





## ACTIONS

### Actions to improve winter walking and rolling.

Actions	Supports	Difficulty
<b>DO ACTION 4.1</b> 2020-2023 (YEARS 0-3) Expand education and awareness efforts for residents and businesses on City’s sidewalk snow and ice removal ordinance, related standards and responsibilities.	Safety, Equity, Mobility, Active partnerships	<div style="background-color: #669933; color: white; padding: 2px 5px; text-align: center;">Low</div>
<b>DO ACTION 4.2</b> 2020-2023 (YEARS 0-3) Collaborate with the Neighborhood and Community Relations Department to build and share a list of community resources for clearing sidewalks to help clear snow for those who are unable.	Safety, Equity, Mobility, Active partnerships	<div style="background-color: #669933; color: white; padding: 2px 5px; text-align: center;">Low</div>
<b>DO ACTION 4.3</b> 2020-2023 (YEARS 0-3) Work in partnership with Metro Transit to develop enhanced winter maintenance standards and enforcement for transit stops and stations. <i>See Transit Strategy 6</i>	Safety, Mobility, Active partnerships	<div style="background-color: #c07040; color: white; padding: 2px 5px; text-align: center;">Medium</div>
<b>DO ACTION 4.4</b> 2020-2023 (YEARS 0-3) Change 311 and related property reports language to more accurately communicate when issues are resolved in the computer system vs. on the street as snow and ice complaints are received and processed.	Mobility	<div style="background-color: #669933; color: white; padding: 2px 5px; text-align: center;">Low</div>
<b>DO ACTION 4.5</b> 2020-2023 (YEARS 0-3) Consider further streamlining inspection process by eliminating sending an Order to Correct and instead proceed with authorizing snow removal or ice mitigation.	Mobility	<div style="background-color: #c07040; color: white; padding: 2px 5px; text-align: center;">Medium</div>
<b>DO ACTION 4.6</b> 2020-2023 (YEARS 0-3) Consider adding financial penalties to properties out of compliance with snow and ice clearing responsibilities, with an emphasis on properties with repeat issues.	Safety, Equity, Mobility	<div style="background-color: #c07040; color: white; padding: 2px 5px; text-align: center;">Medium</div>
<b>DO ACTION 4.7</b> 2020-2023 (YEARS 0-3) Evaluate feasibility of changing <a href="#">City of Minneapolis Ordinance 445.20</a> for sidewalk clearing to require clearing the sidewalks earlier.	Equity, Mobility	<div style="background-color: #800000; color: white; padding: 2px 5px; text-align: center;">High</div>



## ACTIONS (continued)

### Actions to improve winter walking and rolling.

Actions	Supports	Difficulty
<p><b>DO ACTION 4.8</b> 2020-2023 (YEARS 0-3)</p> <p>Continue to pilot, evaluate and implement processes that improve winter conditions for people walking; focus on equitable outcomes through coordination, sidewalk inspections, corner clearing and a willingness to test new solutions to improve snow and ice clearance.</p>	Safety, Equity, Mobility	High
<p><b>DO ACTION 4.9</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Evaluate corner clearing program and pedestrian pushbutton design guidance to improve approach to better clear snow and ice adjacent to pedestrian pushbuttons. <i>See Design Strategy 1.</i></p>	Safety, Equity, Mobility	Medium
<p><b>DO ACTION 4.10</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Conduct review of Pedestrian and Bicycle Winter Maintenance Study on a biennial basis to evaluate and suggest changes to City-led snow and ice clearing, including evaluating City-led clearing of snow and ice on the Pedestrian Priority Network. <i>See Cycling Action 6.11.</i></p>	Safety, Equity, Mobility	Medium

### SEE ALSO ACTIONS:

- **Bicycling Action 6.9** — snow and ice removal on the All Ages and Abilities Network trails
- **Bicycling Action 6.10** — snow and ice removal on greenways
- **Street Operations Action 9.4** — snow and ice removal at construction sites



**STRATEGY 5**

**Ensure City’s policies and practices support consistent access to the sidewalk network.**

A variety of activities can cause temporary or permanent obstacles to accessing the over 2,000 miles of sidewalks in the city, including temporary closures due to street projects, utility work or private development projects, upheaving or other physical obstruction that makes a sidewalk inaccessible to people using wheeled devices to travel and lack of sidewalk for other reasons, including deferred maintenance.

City crews inspect sections of the city each year to determine where repairs are needed, and then work with property owners to fix the sidewalks – usually with a focus on broken or heaved sidewalks that hinder movement. Temporary patches are also deployed on an as-needed basis (typically complaint driven) until permanent fixes are secured.

**Figure 38:** Sidewalk in need of replacement



**Figure 39:** Sidewalk gap (left), interim pedestrian facilities (middle), and new sidewalk (right)







## ACTIONS

Actions to ensure City’s policies and practices support consistent access to the sidewalk network.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.1</b> 2024-2027 (YEARS 4-7) Complete a condition inventory of sidewalk, City-owned multiuse trails and street crossings. <i>See <a href="#">Bicycling Action 6.6</a></i></p>	Equity, Mobility	<b>High</b>
<p><b>DO ACTION 5.2</b> 2024-2027 (YEARS 4-7) Prioritize sidewalk repair locations by using a data-driven approach based on the sidewalk inventory data.</p>	Safety, Equity, Mobility	<b>Medium</b>
<p><b>DO ACTION 5.3</b> 2020-2023 (YEARS 0-3) Fund and implement proactive inspections of temporary pedestrian access routes adjacent to work zones to ensure access requirements are being met; issue fines for non-conforming or non-existent pedestrian access routes and consider withholding future permit approvals until non-compliant access routes are eliminated.</p>	Safety, Mobility	<b>Medium</b>
<p><b>DO ACTION 5.4</b> 2020-2023 (YEARS 0-3); <i>ON-GOING</i> Confirm location of and fill gaps in the sidewalk network and prioritize gaps near parks and other public destinations. <i>See <a href="#">Bicycling Action 6.6</a></i></p>	Safety, Prosperity, Mobility, Active partnerships	<b>Medium</b>
<p><b>DO ACTION 5.5</b> 2024-2027 (YEARS 4-7) Provide pedestrian crossings at all legs of legal intersections by default; retroactively work to install these where they do not exist.</p>	Safety, Mobility, Active partnerships	<b>Medium</b>
<p><b>DO ACTION 5.6</b> 2020-2023 (YEARS 0-3); <i>ON-GOING</i> Pursue quick-build interim solutions for widening narrow sidewalks or closing sidewalk gaps through interim designs until street is reconstructed.</p>	Safety, Equity Mobility	<b>Medium</b>

*continued on next page*



## ACTIONS (continued)

Actions to ensure City’s policies and practices support consistent access to the sidewalk network.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.7</b>            2020-2023 (YEARS 0-3); ON-GOING            Conduct review of the ADA Transition Plan for Public Works on a biennial basis to evaluate progress and suggest plan updates in pursuit of improved compliance.</p>	<p>Safety, Equity            Mobility</p>	<p>Medium</p>

### SEE ALSO STRATEGY:

- Street Operations Strategy 9 — street detours and Complete Streets



# STRATEGY 6

## Create and improve pedestrian connections across freeways, highways, rivers and railroads.

There are a number of natural and human-made obstructions that limit pedestrian movement across them – such as freeways, railroads and rivers. This strategy focuses on how to make existing overpasses or underpasses more attractive, inviting and part of a seamless pedestrian network.

This strategy focuses on reconnecting neighborhoods that have been destroyed by freeway construction during the latter half of the 20th century. Reconnecting across barriers will help address the historic injustices these neighborhoods experienced and continue to experience due to the regional infrastructure.

Figure 40: Existing underpass in Minneapolis



Figure 41: New 5th Street pedestrian bridge over I-35W



Figure 42: Underpass park in Toronto







## ACTIONS

Actions to create and improve pedestrian connections across freeways, highways, rivers and railroads.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.1</b> 2024-2027 (YEARS 4-7)</p> <p>Establish spacing guidelines for connections across freeways, rivers and railroads to identify locations for new pedestrian (and bicycle) bridges or underpasses. <i>See <a href="#">Bicycling Strategy 2</a></i></p>	Equity, Mobility, Active partnerships	Low
<p><b>DO ACTION 6.2</b> 2028-2030 (YEARS 8-10)</p> <p>Reestablish the street grid in places where streets do not exist through the creation of new pedestrian and bicycle connections. <i>See <a href="#">Street Operations Action 6.5</a></i></p>	Mobility	High
<p><b>DO ACTION 6.3</b> 2028-2030 (YEARS 8-10)</p> <p>Identify funding for connectivity, safety and aesthetic improvements for underpass or overpass improvement projects such as I-94 near the Farmer's Market and the I-94 viaduct through the North Loop.</p>	Mobility, Active partnerships	High
<p><b>DO ACTION 6.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Improve local street connections to freeway entrances and exits to improve pedestrian safety and comfort through enhancing signal operations and street design.</p>	Safety, Mobility, Active partnerships	High
<p><b>SUPPORT ACTION 6.5</b> 2028-2030 (YEARS 8-10)</p> <p>Identify opportunities and partnerships to design, fund and construct lids over highways to reconnect neighborhoods that have been bifurcated by freeway construction and to amend the resulting injustices faced by those neighborhoods, and over railroads. <i>See <a href="#">Street Operations Action 8.5</a></i></p>	Equity, Prosperity, Mobility, Active partnerships	High

### SEE ALSO ACTIONS:

- **Bicycling Action 2.2** — non-motorized bridge over Interstate 94
- **Bicycling Action 2.6** — new river crossings for Midtown Greenway and Great Northern Greenway
- **Street Operations Action 6.5** — eliminate gaps in street grid and reopen Nicollet Ave at Lake St



**STRATEGY 7**

**Partner with developers, utilities, property owners, and agency partners to provide high-quality pedestrian and public realm improvements.**

As population growth and development occurs, more demands and interruptions are imposed on the sidewalk system. In 2018, it was the third straight year in which over \$1.5 billion in building permits were granted, with 2019 exceeding more than \$2 billion. This strategy focuses on collaborating with developers, utility companies, and agency partners to minimize impacts to the right of way and to restore the asset to its original or better condition.

**Figure 43:** Protected bikeway and enhanced pedestrian realm near The Commons Park



**Figure 44:** Curb bump out



**Figure 45:** Greenway promenade





## ACTIONS

Actions to partner with developers, utilities, property owners, and agency partners to provide high-quality pedestrian and public realm improvements.

Actions	Supports	Difficulty
<p><b>DO ACTION 7.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Require right of way restoration and/or utility relocation by contractor, developer or utility companies to comply with latest ADA and City standards prior to issuing additional permits, certificates of occupancy or obtaining future site plan or other approvals.  <i>See Design Action 1.4</i></p>	Safety, Equity, Mobility, Active partnerships	<b>High</b>
<p><b>DO ACTION 7.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Change parking ramp exit requirements to include mirrors and messaging to prioritize pedestrians; rather than alerting pedestrians that a car is approaching, messaging should alert drivers that a pedestrian or bicyclist is approaching.</p>	Safety, Equity, Active partnerships	<b>Medium</b>
<p><b>DO ACTION 7.3</b>            2024-2027 (YEARS 4-7); ON-GOING            Improve driveway sightlines on high volume entrances and exits, particularly along High Injury Streets.</p>	Safety, Equity, Mobility	<b>Medium</b>
<p><b>DO ACTION 7.4</b>            2020-2023 (YEARS 0-3); ON-GOING            Work with developers to implement public realm improvements called for in the Street Design Guide including filling public sidewalk gaps in conjunction with approvals for building construction and site modification. <i>See Design Action 1.4</i></p>	Prosperity, Active partnerships	<b>Medium</b>
<p><b>DO ACTION 7.5</b>            2020-2023 (YEARS 0-3); ON-GOING            Secure transportation easements for public pedestrian walkways in coordination with development.</p>	Mobility, Active partnerships	<b>Medium</b>
<p><b>DO ACTION 7.6</b>            2020-2023 (YEARS 0-3); ON-GOING            Recognize the use of skyways as transportation routes by requiring convenient and easily accessible vertical connections between the skyway system and the public sidewalks, particularly along transit corridors and the Pedestrian Priority Network. Use the development review and permitting process in collaboration with the Department of Community Planning and Economic Development and continue to work with partners to update wayfinding and signage standards in the Minneapolis skyway system.</p>	Equity, Prosperity, Mobility, Active partnerships	<b>Medium</b>

*continued on next page*





## ACTIONS (continued)

Actions to partner with developers, utilities, property owners, and agency partners to provide high-quality pedestrian and public realm improvements.

### **SUPPORT** ACTION 7.7

2020-2023 (YEARS 0-3); ON-GOING

Coordinate with Minneapolis Park and Recreation Board's Neighborhood and Regional Park Capital Investment Projects to improve pedestrian safety and access to/from parks and parkway trails. *See Bicycle Action 2.4.*

Equity,  
Mobility, Active  
partnerships

Low

### SEE ALSO ACTIONS:

- **Street Operations Action 6.5** — eliminate gaps in street grid and reopen Nicollet Ave at Lake St
- **Design Action 2.6** — minimize curb cuts



**STRATEGY 8**

**Set policies and practices to leverage, manage, monitor and design for new and emerging technologies that increase visibility and comfort of pedestrians.**

This strategy outlines ways we can use technology to improve how people walking are detected on our streets, how they may access information about preferred walking routes based on real-time information like congestion (noise impacts, air quality impacts) and how infrastructure might physically change given their presence, such as through brighter lighting or LED crosswalks that recognize when a pedestrian is crossing a street.

Improvements for people who are blind or vision-impaired are also likely to be more readily available with new technologies, such as those accessed from smartphones or other devices. These technologies can detail real-time conditions (such as detours or unexpected obstacles in the path of travel) into a user’s ear.

**Figure 46: Pedestrian counter**



**Figure 47: LED light-up crosswalk**





## ACTIONS

Actions to set policies and practices to leverage, manage, monitor and design for new and emerging technologies that increase visibility and comfort of pedestrians.

Actions	Supports	Difficulty
<p><b>DO ACTION 8.1</b> 2024-2027 (YEARS 4-7) Assess digital wayfinding tools that provide real-time information on getting around the city by foot and integrate successful tools into the mobility hub network. <i>See Technology Action 3.1, Design Action 5.3</i></p>	Mobility	Low
<p><b>DO ACTION 8.2</b> 2024-2027 (YEARS 4-7) Explore emerging technology such as adaptive lighting which can brighten when pedestrians, bicyclists or other street users are detected or expected, enhancing visibility and comfort of all right of way users while aligning with the City's lighting and energy goals.</p>	Climate, Safety, Mobility	Medium
<p><b>DO ACTION 8.3</b> 2020-2023 (YEARS 0-3) Test new technologies related to pedestrian detection and data collection, including passive detection at traffic signals to expedite and lengthen the walk phase in response to pedestrian presence and demand. <i>See Technology Strategy 1</i></p>	Climate, Safety, Equity, Mobility	Medium
<p><b>DO ACTION 8.4</b> 2024-2027 (YEARS 4-7) Assess demonstrations of new applications that provide navigation assistance for people who are blind or low vision and the potential impact on City practices.</p>	Safety, Equity, Mobility	Low





## STRATEGY 9

### Expand walking education and encouragement.

Minneapolis partners with community organizations and public agencies on studies, events and educational campaigns to promote walking as a safe, convenient, and pleasant way to travel around and enjoy the city. This strategy expands on existing partnerships and explores new collaborations.

Figure 48: #WeWalkMpls social media campaign

**"I love to walk. I have to get to where I need to be."**

- Odessa, Hawthorne

**#WeWalkMpls**  
minneapolismn.gov/WeWalkMpls

**Minneapolis**  
City of Lakes

**our streets**  
MPLS





## ACTIONS

### Actions to expand walking education and encouragement.

Actions	Supports	Difficulty
<b>DO ACTION 9.1</b> 2020-2023 (YEARS 0-3) Partner with the University of Minnesota on an evaluation of pedestrian safety education and intersection treatments; make adjustments to future work based on study findings.	Safety, Mobility, Active partnerships	Low
<b>DO ACTION 9.2</b> 2020-2023 (YEARS 0-3); ON-GOING Promote walking with maps, educational materials and partnerships with community organizations and public agencies.	Mobility, Active partnerships	Low
<b>DO ACTION 9.3</b> 2024-2027 (YEARS 4-7); ON-GOING Install wayfinding along the Pedestrian Priority Network in partnership with the All Ages and Abilities Network to connect users to destinations, transit corridors and mobility hubs.	Prosperity, Mobility	Medium

### SEE ALSO ACTIONS:

- **Bicycling Action 2.4** — coordinate with Minneapolis Park and Recreation Board to improve bikeway connections
- **Bicycling Action 10.2** — ensure that Open Streets continues to evolve
- **Bicycling Action 10.5** —work with the Minnesota Department of Public Safety to improve the driver’s education curriculum



# BICYCLING

Increase the availability and safety of bicycling and micromobility travel



Over 30% of the trips we take in Minneapolis are less than three miles.<sup>47</sup> Sometimes these trips feel a little too far to walk. Bicycles and other low-power micromobility options, such as electric-assist bicycles and scooters, can be ideal for these short trips. As more people use these new transportation options, the demand for safe and comfortable places to ride, charge and park these vehicles will increase.

Over two-thirds of residents say they often or sometimes ride a bicycle to get to school, visit parks or run errands.<sup>48</sup>

And on average, over 4% of Minneapolis residents ride a bicycle to work (4.1%), which is one of the highest bicycle commuting rates in the country.<sup>49</sup>

Options are expanding with new types of bicycles and low-powered vehicles:

- Nice Ride bikeshare increases access to a bicycle and can be used for one-way trips and connections to transit
- Adaptive bicycles improve access for people with disabilities
- Electric-assist bicycles help people ride up hills or in windy weather, go farther or carry more weight
- Cargo bicycles help people carry kids and groceries
- Shared scooters have quickly proven to be popular for many and are effective first and last connections for transit access

The City's growing bikeway network has encouraged more people to bike and use micromobility vehicles. Even with this progress, many people in Minneapolis do not see riding a bicycle or scooter as a routine way to get around. Narrow bike lanes, lack of physical separation from motor vehicles, challenging intersection crossings and snow or ice are just some of the reasons why people do not feel comfortable.

<sup>47</sup> Metropolitan Council Travel Demand Model, 2010.

<sup>48</sup> [City of Minneapolis Resident Survey, 2016](#)

<sup>49</sup> [Means of Transportation to Work for Workers 16 Years and Older, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimate](#)



To make bicycling, in all its new forms, a real option for more people, the plan establishes an All Ages and Abilities Network to be constructed over the next ten years. This network will include protected lanes and trails that are physically separated from moving cars, trucks and buses, will feature improved intersection crossings and be accessible year-round. The goal for the All Ages and Abilities Network is for people on bikes to only share space with cars on quiet low-speed streets or on neighborhood greenways.

People biked for 3% of their trips in 2019; we've set a goal to increase that to 10% of trips taken by bicycle or micromobility by 2030.<sup>50</sup>

The terms 'biking', 'bicycling' and 'bikeways' broadly refers to people who use any type of bicycle or micromobility vehicle like scooters or electric-assist bicycles.

**Figure 49:** Adaptive vehicle types



**Greenspeed**

Micromobility includes various human-scale vehicles – like bicycles and scooters, which are typically shared and can be electric or human-powered.



**Handcycle**



**Ice trike**



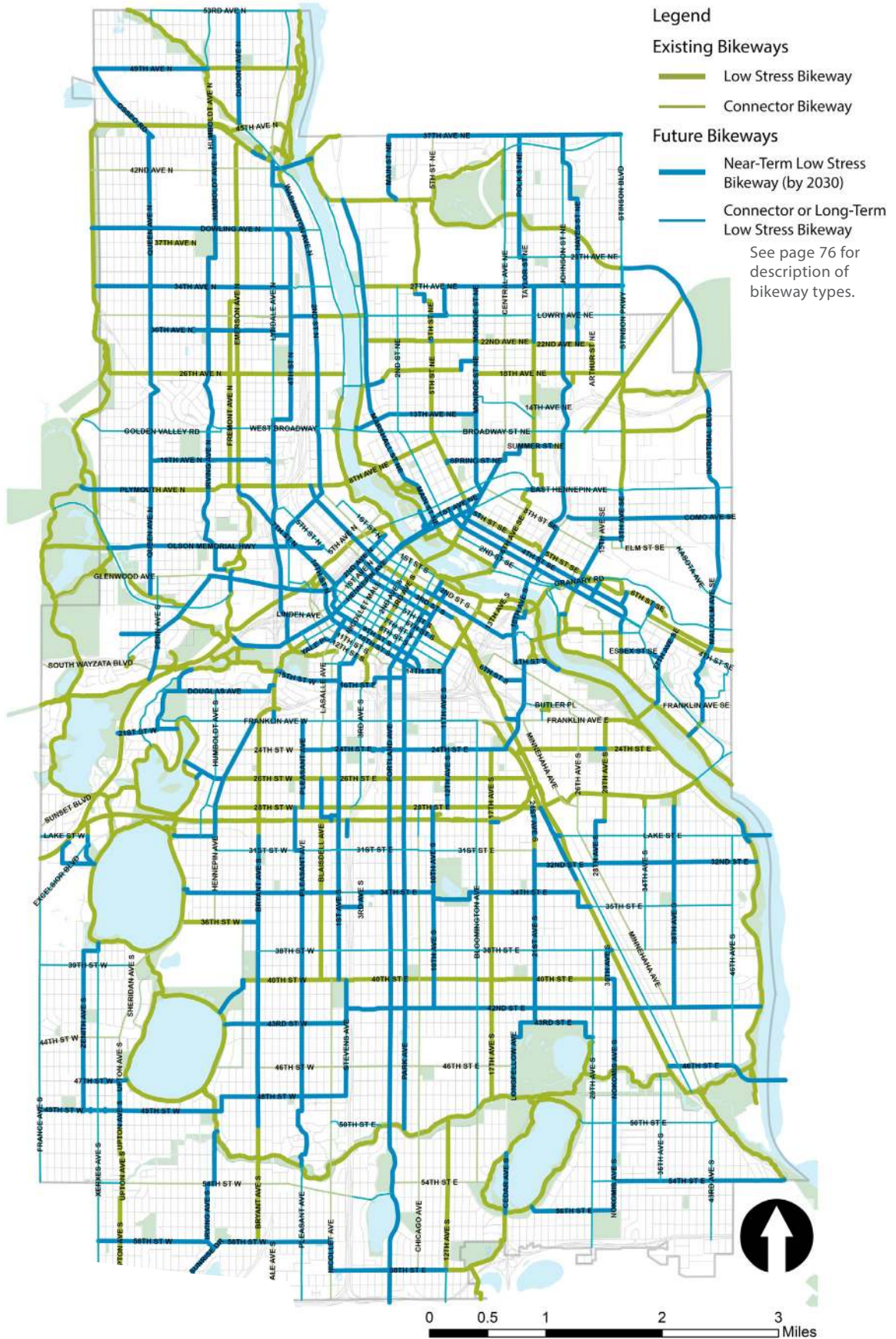
**Side by side**

Source: Twin Cities Adaptive Cycling

<sup>50</sup> Metropolitan Council, Travel Behavior Inventory, 2019.



Figure 50: All Ages and Abilities Network







## BICYCLING STRATEGIES

- 1** Complete the All Ages and Abilities Network.
- 2** Build bikeway connections that overcome significant physical barriers during the buildout of the All Ages and Abilities Network.
- 3** Prioritize a network of neighborhood greenways during the buildout of the All Ages and Abilities Network.
- 4** Enhance intersection design and safety during the buildout of the All Ages and Abilities Network.
- 5** Plan and implement bikeway connections to and between regional destinations and adjacent city networks.
- 6** Maintain the All Ages and Abilities Network to provide year-round access.
- 7** Provide wayfinding to help people navigate the All Ages and Abilities Network.
- 8** Design bikeways using best practices that reflect the community and serve as an asset to people who may not currently ride a bike or use micromobility.
- 9** Update bicycle and micromobility parking practices to support demand and diversity of vehicles to significantly expand bicycle racks in the right of way.
- 10** Expand safe biking and micromobility education and encouragement.
- 11** Measure biking and micromobility ridership levels and user comfort.

### SEE ALSO STRATEGIES:

- **Street Operations Strategy 3** — Plan for efficient and practical operations of people walking, biking and taking micromobility or transit throughout the street design process
- **Street Operations Strategy 4** — Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving
- **Street Operations Strategy 5** — Price and manage use of the curb to encourage walking, biking and using transit, and to discourage driving alone
- **Street Operations Strategy 6** — Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects





## STRATEGY 1

### Complete the All Ages and Abilities Network

The All Ages and Abilities Network will include three primary bikeway types:

- **Protected bike lanes:** routes on relatively busy streets with some form of physical separation from motor vehicle traffic, such as bollards, concrete curbs, parked cars and planters.
- **Trails:** non-motorized paths for pedestrians and bicyclists, typically more separated from the street than protected bike lanes, and are typically located near rivers, lakes, parkways and railroad corridors.
- **Neighborhood greenways:** routes that enhance local, low volume streets and give priority to people walking, biking and rolling. This will include removing or significantly limiting motor vehicles along sections of the street.

There is an additional type of bikeway highlighted on the All Ages and Abilities Network called connector bikeways which are standard bike lanes without physical separation from motor vehicles that may or may not meet the definition of an All Ages and Abilities bikeway depending on the context of the street (including volume, width and speeds).

The All Ages and Abilities Network was developed by studying numerous factors that influence where people bike, including transit, high density areas, commercial activity, land use, connections to schools and High Injury Streets for people biking.

**Figure 51:** Many types of vehicles in bike lane





# ACTIONS

## Actions to complete the All Ages and Abilities Network.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Build all low-stress routes identified on the All Ages and Abilities Network by 2030, which will include a total of 141 miles of new or upgraded bikeways, including:</p> <ul style="list-style-type: none"> <li>• 81 miles of protected bike lanes that provide a low-stress riding experience on high volume corridors.</li> <li>• 51 miles of new neighborhood greenways that manage motor vehicle volume and speed, improve safety at major crossings and reduce stopping at minor crossings. Start with the Northside Greenway and the Southside Greenway.</li> <li>• 9 miles of new trails that provide connections along the Mississippi River or along rail lines that could be converted to trails.</li> </ul>	Climate, Safety, Equity, Mobility	High
<p><b>DO ACTION 1.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Improve existing bollard protected bike lanes with more permanent separation, such as curb barriers and planters or other green infrastructure.</p>	Safety, Mobility	Medium
<p><b>DO ACTION 1.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Consider building bikeways not included on the All Ages and Abilities Network to respond to development opportunities and changing transportation demands.</p>	Safety, Mobility	Low
<p><b>DO ACTION 1.4</b>            2020-2023 (YEARS 0-3); ON-GOING            Use design to build projects that prevent blocked lanes or conflicts with loading and parked vehicles.</p>	Safety, Mobility	Medium



## STRATEGY 2

### Build bikeway connections that overcome significant physical barriers during the buildout of the All Ages and Abilities Network.

Bikeways work best in a connected network; the existing network will be added to and improved over the coming decade. The network is funneled into more focused corridors as major natural and manmade barriers are crossed, including rivers, railroads and highways. This strategy focuses on capitalizing on opportunities to partner with the Minnesota Department of Transportation, Hennepin County, Minneapolis Park and Recreation Board and others to ensure any crossing of a major barrier includes a high-quality facility for people traveling on bike or other micromobility vehicle, as well as for pedestrians. These opportunities are most obvious when a project is active, but the actions detailed here include efforts to retrofit existing bridges with facilities for increased safety and comfort for people biking and using micromobility options.

Like Walking Strategy 6, this strategy focuses, in part, on reconnecting neighborhoods that have been destroyed by freeway construction during the latter half of the 20th century. Reconnecting across barriers will help address the historic injustices these neighborhoods experienced and continue to experience due to the regional infrastructure.

Figure 52: Cyclists on Sabo Bridge



Figure 53: Protected bikeways







## ACTIONS

Actions to build bikeway connections that overcome significant physical barriers during the buildout of the All Ages and Abilities Network.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b> 2028-2030 (YEARS 8-10)</p> <p>Build protected bike lanes on existing motorized bridges over the Mississippi River, railroad corridors, freeways and expressways. <a href="#">See Walking Strategy 6</a></p>	Safety, Equity, Mobility	High
<p><b>DO ACTION 2.2</b> 2028-2030 (YEARS 8-10)</p> <p>Partner with the Minnesota Department of Transportation to build a new non-motorized bridge over I-94 between Lowry Avenue North and Dowling Avenue North, connecting North Minneapolis to the Mississippi River and helping to re-establish the community's connection to the waterfront that was severely limited by the construction of the interstate. <a href="#">See Walking Strategy 6</a></p>	Equity, Mobility	High
<p><b>DO ACTION 2.3</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Consider planning and securing funds for new crossings of <a href="#">Regional Bicycle Barriers</a> (as defined in the Metropolitan Council's Transportation Policy Plan) as project development opportunities arise.</p>	Safety, Equity, Mobility	Medium
<p><b>SUPPORT ACTION 2.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Coordinate with Minneapolis Park and Recreation Board's Neighborhood and Regional Park Capital Investment Projects to improve bikeway connections between parkway trails and City-owned bikeways. <a href="#">See Walking Action 7.7.</a></p>	Equity, Mobility, Active partnerships	Low
<p><b>SUPPORT ACTION 2.5</b> 2020-2023 (YEARS 0-3)</p> <p>Coordinate with the Minneapolis Park and Recreation Board to evaluate converting one-way trail operations to two-way, particularly around Bde Maka Ska, Lake of the Isles and Lake Harriet, taking into consideration safety, additional impervious surface, tree impacts and stormwater management.</p>	Equity, Mobility, Active partnerships	High

continued on next page



## ACTIONS (continued)

Actions to build bikeway connections that overcome significant physical barriers during the buildout of the All Ages and Abilities Network.

### **SUPPORT ACTION 2.6**

2028-2030 (YEARS 8-10)

Work with agency partners to evaluate opportunities to build new river crossings for the Midtown Greenway and Great Northern Greenway. *See Walking Strategy 6*

Equity,  
Mobility, Active  
partnerships

High

### SEE ALSO ACTION:

- **Street Operations Action 6.2** — Advance the All Ages and Abilities Network through bridge maintenance and repair



## STRATEGY 3

### Prioritize a network of neighborhood greenways during the buildout of the All Ages and Abilities Network.

The City published a [Greenways Study](#) in 2019. The most significant outcome of the Greenways Study was the introduction of the concept of neighborhood greenways, which replaces the term bicycle boulevard that was used in the 2011 Bicycle Master Plan.

Neighborhood greenways are similar to bicycle boulevards, in that they will be installed on low volume residential streets that connect neighborhood destinations and manage motor vehicle volume and speed. Neighborhood greenways differ from bicycle boulevards because they will optimize travel for pedestrians and bicyclists by eliminating or significantly reducing motor vehicle use. Neighborhood greenways will also greatly improve the walking environment throughout the city by limiting interactions with motor vehicles and improving the experience of crossing the street.

Neighborhood greenways will be linear and have logical beginning and end points, typically connecting to other bikeways on the All Ages and Abilities Network as they are installed. Each block will be unique based on the context of the neighborhood, technical analysis and community engagement. Some blocks may fully remove motor vehicle access, others may narrow the vehicular travel space by half and other blocks could primarily focus on intersection treatments such as curb extensions, median refuge islands and traffic circles. Neighborhood greenways can be installed with a street reconstruction or as an independent project, which could install a concrete barrier to provide space for the bikeway. All greenways will be designed and built to accommodate emergency vehicles. Neighborhood greenways may also be used for flooding and stormwater management mitigation.

Figure 54: Bicycle boulevard



Figure 55: Greenway





## ACTIONS

**Actions to prioritize a network of neighborhood greenways during the buildout of the All Ages and Abilities Network.**

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b> 2024-2027 (YEARS 4-7)</p> <p>Implement neighborhood greenways. In addition to building new greenways, this program should include improvements to 10 miles of existing neighborhood greenways (21 miles existing).</p>	Climate, Safety, Equity, Mobility	High
<p><b>DO ACTION 3.2</b> 2024-2027 (YEARS 4-7)</p> <p>Include greening and stormwater infrastructure elements, public art and public realm improvements as standard in all greenway projects.</p>	Climate, Safety, Equity, Mobility	High

### SEE ALSO ACTIONS:

- **Bicycling Action 8.2** — Medians and intersection improvements
- **Bicycling Action 8.3** — Greening and stormwater infrastructure



# STRATEGY 4



## Enhance intersection design and safety during the buildout of the All Ages and Abilities Network.

Minneapolis crash data shows that 80% of bicycle crashes happen at an intersection – 48% at signalized intersections and 32% at stop signs.<sup>51</sup> Focusing design strategies on the intersection to minimize exposure and risk from vehicles is key to improving safety and comfort for bicyclists. An added benefit is that improved conditions for bicyclists tends to increase comfort, reduce crossing distances and improve visibility for pedestrians. A key focus of this strategy is building protected intersections. Protected intersections better protect bicyclists traveling through the intersection through the inclusion of design treatments like vertical separation elements and turning wedges.

Figure 56: Protected intersections



Figure 57: Raised crossings



<sup>51</sup> [Minneapolis Vision Zero Crash Study](#) (2018).



## ACTIONS

### Actions to enhance intersection design and safety during the buildout of the All Ages and Abilities Network.

Actions	Supports	Difficulty
<p><b>DO ACTION 4.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Build protected intersections along the entire bikeway network, prioritizing the All Ages and Abilities Network and High Injury Streets as identified in the Vision Zero Action Plan.</p>	Safety, Mobility	High
<p><b>DO ACTION 4.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Build median islands, curb extensions, raised crossings, signals and/or reduce the number of travel lanes along the All Ages and Abilities Network on crossings of any street types other than low volume residential streets. <i>See <a href="#">Bicycling Action 8.2</a></i></p>	Safety, Mobility	High
<p><b>DO ACTION 4.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Install transit islands where appropriate to ensure compatibility of protected bikeways, transit operations and people walking, with careful consideration for accessibility. <i>See <a href="#">Design Strategy 5</a></i></p>	Safety, Equity, Mobility	High





# STRATEGY 5



## Plan and implement bikeway connections to and between regional destinations and adjacent city networks.

Connecting to the larger regional bike network is important as it allows regional commuters and other people living outside of Minneapolis to connect to destinations in the city. Coordinated regional connections also promote alternatives to driving for longer distances.

The actions below build upon several of our partner’s planning efforts. These include the Metropolitan Council’s long-term vision for the Regional Bicycle Transportation Network, which identifies regionally significant connections for bicyclists like the extension of the Midtown Greenway across the Mississippi River, as well as the Minneapolis Park and Recreation Board’s efforts to complete the Grand Rounds trail system, which will be a 50+ mile system of trails in Minneapolis.

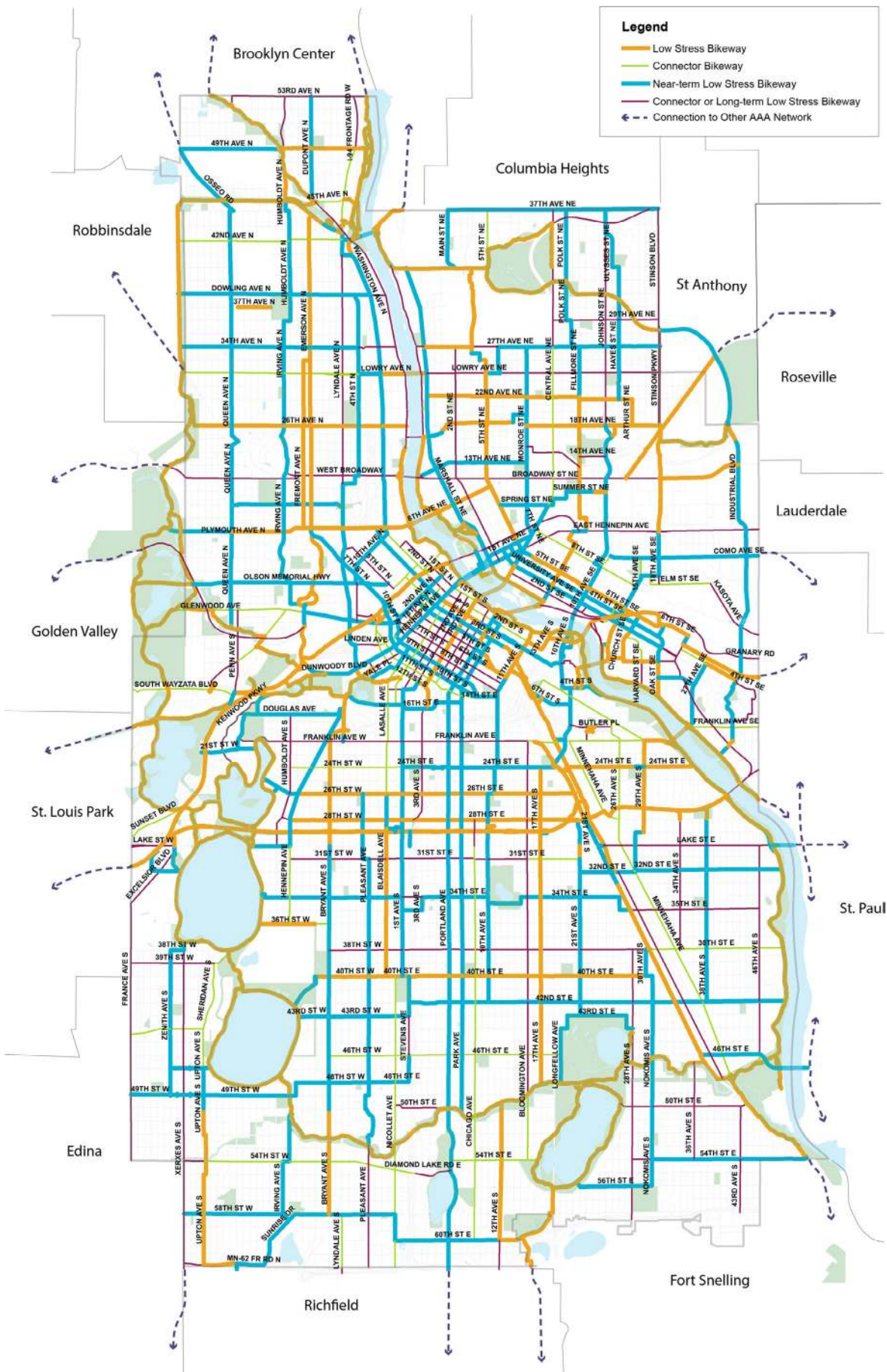
### ACTIONS

#### Actions to plan and implement bikeway connections to and between regional destinations and adjacent city networks.

	Actions	Supports	Difficulty
<b>SUPPORT</b>	<b>ACTION 5.1</b> 2020-2023 (YEARS 0-3) Partner with the Metropolitan Council to identify opportunities to implement the Regional Bicycle Transportation Network, prioritizing the All Ages and Abilities Network and considering where the Regional Bicycle Transportation Network crosses regional barriers and/or provides direct connections to adjacent city bicycle networks. Potential example includes extending the Midtown Greenway across the Mississippi River into St. Paul.	Safety, Mobility, Active partnerships	Low
<b>SUPPORT</b>	<b>ACTION 5.2</b> 2024-2027 (YEARS 4-7) Support and partner where appropriate with the Minneapolis Park and Recreation Board in completing the Grand Rounds Missing Link, connecting Northeast and Southeast Minneapolis.	Mobility, Active partnerships	Medium
<b>SUPPORT</b>	<b>ACTION 5.3</b> 2024-2027 (YEARS 4-7) Work with partners to support bikeway connecting South Minneapolis directly to Minneapolis-St. Paul Airport Terminal 1 and Blue Line Light Rail stations.	Prosperity, Mobility, Active partnerships	Medium



Figure 58: Regional network







## STRATEGY 6

### Maintain the All Ages and Abilities Network to provide year-round access.

Maintenance of the All Ages and Abilities Network includes sweeping, replacement of bollards, repainting street lines, snow and ice clearance, maintaining smooth pavement and providing the same quality of access when detours are required along parts of the network.

Bicycle lanes are often impacted by construction, utility activities and development. There are obstructions, both planned and unplanned, that put bicyclists and other users into general traffic lanes. Depending on the confidence of the rider, this experience ranges from acceptable but inconvenient, to unacceptable, to terrifying. To preserve a network where people of all ages and abilities feel comfortable riding, we need to put practices in place that manage the right of way for these users and maintain predictable comfort measures along the All Ages and Abilities Network.

Figure 59: Well maintained winter bicycle facility





Figure 60: Bollard not maintained



Figure 61: Detour difficulty for bike lanes



Figure 62: Curb separated bike lane prevents temporary parking in lane





## ACTIONS

Actions to maintain the All Ages and Abilities Network to provide year-round access.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.1</b> 2020-2023 (YEARS 0-3) Develop and implement a written All Ages and Abilities Network Maintenance Plan that is regularly updated.</p>	Safety, Equity, Prosperity, Mobility	Medium
<p><b>DO ACTION 6.2</b> 2020-2023 (YEARS 0-3); ON-GOING Require low-stress bikeway detours or temporary bike lanes in place of general travel lanes any time bike lanes are impacted due to construction closures and detours to ensure continuity, including during construction activities, utility projects and closures related to development projects; ensure restoration meets City standards. <i>See Street Operations Strategy 9</i></p>	Safety, Equity, Prosperity, Mobility	Medium
<p><b>DO ACTION 6.3</b> 2020-2023 (YEARS 0-3); ON-GOING Implement and fund proactive inspections of bikeway detour or temporary bike lane requirements around work zones and ensure compliance, issue fines for and eliminate non-conforming or non-existent bikeway detour or temporary bike lane routes. <i>See Street Operations Strategy 9</i></p>	Safety, Mobility	Medium
<p><b>DO ACTION 6.4</b> 2020-2023 (YEARS 0-3); ON-GOING Consider opportunities to improve the pavement condition of bikeways when selecting street maintenance projects.</p>	Safety, Equity	Medium
<p><b>DO ACTION 6.5</b> 2020-2023 (YEARS 0-3); ON-GOING Replace all missing bicycle bollards on protected bikeways each spring by June 1st.</p>	Safety, Equity, Mobility	Low
<p><b>DO ACTION 6.6</b> 2020-2023 (YEARS 0-3); ON-GOING Inspect and maintain trail and bike lane pavement condition in coordination with routine sidewalk and roadway pavement inventory cycle. <i>See Walking Action 5.1</i></p>	Safety, Equity, Mobility	Medium

*continued on next page*



## ACTIONS (continued)

### Actions to maintain the All Ages and Abilities Network to provide year-round access.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.7</b>            2020-2023 (YEARS 0-3); ON-GOING            Improve the pavement condition along the All Ages and Abilities Network with routine street and trail maintenance projects, including sealcoat and resurfacing projects.</p>	Safety, Equity, Mobility	Medium
<p><b>DO ACTION 6.8</b>            2020-2023 (YEARS 0-3); ON-GOING            Sweep the All Ages and Abilities Network once a week during spring, summer and fall.</p>	Safety, Equity, Mobility	Medium
<p><b>DO ACTION 6.9</b>            2020-2023 (YEARS 0-3); ON-GOING            Prioritize clearing snow and ice on the All Ages and Abilities Network, including trails and protected bikeways within 24 hours of a snow event.</p>	Safety, Equity, Mobility	Medium
<p><b>DO ACTION 6.10</b>            2020-2023 (YEARS 0-3); ON-GOING            Determine best way to ensure existing and future neighborhood greenways and standard bike lanes have the same quality of snow and ice clearance as trails and protected bikeways.</p>	Safety, Equity, Mobility	High
<p><b>DO ACTION 6.11</b>            2020-2023 (YEARS 0-3); ON-GOING            Conduct review of Pedestrian and Bicycle Winter Maintenance Study on a biennial basis to evaluate and suggest changes; focus on improvements to snow and ice clearance on standard bicycle lanes. <i>See Walking Action 4.10.</i></p>	Safety, Equity, Mobility	High
<p><b>DO ACTION 6.12</b>            2024-2027 (YEARS 4-7); ON-GOING            Increase lighting on the All Ages and Abilities Network by installing standalone lighting where bikeways are not adequately lit by pedestrian or roadway lighting. <i>See Walking Strategy 3</i></p>	Safety, Equity, Mobility	Medium

### SEE ALSO STRATEGY:

- **Street Operations Strategy 9** — Street detours and Complete Streets





## STRATEGY 7

### Provide wayfinding to help people navigate the All Ages and Abilities Network.

Bicycle wayfinding signage currently exists at several locations around Minneapolis, including the Midtown Greenway and at the newly installed mobility hub pilots. Providing a similar set of navigational wayfinding signs, designed for those using the All Ages and Abilities Network, will help provide direction to those on the network. An interconnected All Ages and Abilities Network with signage that shows users time or distance to certain destinations on a low-stress corridor will give users the ability to navigate the network, and the destinations it will serve, with assuredness.

Figure 63: Midtown Greenway wayfinding information



Figure 64: Mobility hub wayfinding signage



## ACTIONS

Actions to provide wayfinding to help people navigate the All Ages and Abilities network.

Actions	Supports	Difficulty
<p><b>DO ACTION 7.1</b>            2024-2027 (YEARS 4-7)            Develop a wayfinding plan for the All Ages and Abilities Network in the city and coordinate with neighboring jurisdictions and regional partners.</p>	<p>Mobility, Active partnerships</p>	<p>Medium</p>
<p><b>DO ACTION 7.2</b>            2024-2027 (YEARS 4-7); ON-GOING            Install wayfinding signs along the existing All Ages and Abilities Network and include signage as new projects are built.</p>	<p>Mobility</p>	<p>Low</p>
<p><b>DO ACTION 7.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Promote the All Ages and Abilities Network with maps, educational materials and partnerships with community organizations.</p>	<p>Mobility, Active partnerships</p>	<p>Low</p>

### SEE ALSO ACTION:

- **Technology Action 3.1** — Implement mobility hub network



## STRATEGY 8

**Design bikeways using best practices that reflect the community and serve as an asset to people who may not currently ride a bike or use micromobility.**

Bikeways provide clear benefits to the users of them, but often provide additional benefits to those who travel along the same corridor. Examples include traffic calming and reduced speeds of vehicles which lowers the risks and severity of crashes along those corridors. Including additional elements like greening along bikeways provides multiple benefits, like more protection to the bicyclists, helping to capture rainwater before it enters the stormwater system, creating habitat for birds and other small animals and providing visual interest for people traveling along the corridor, no matter the mode of travel.

Figure 65: 3rd Avenue bike planters

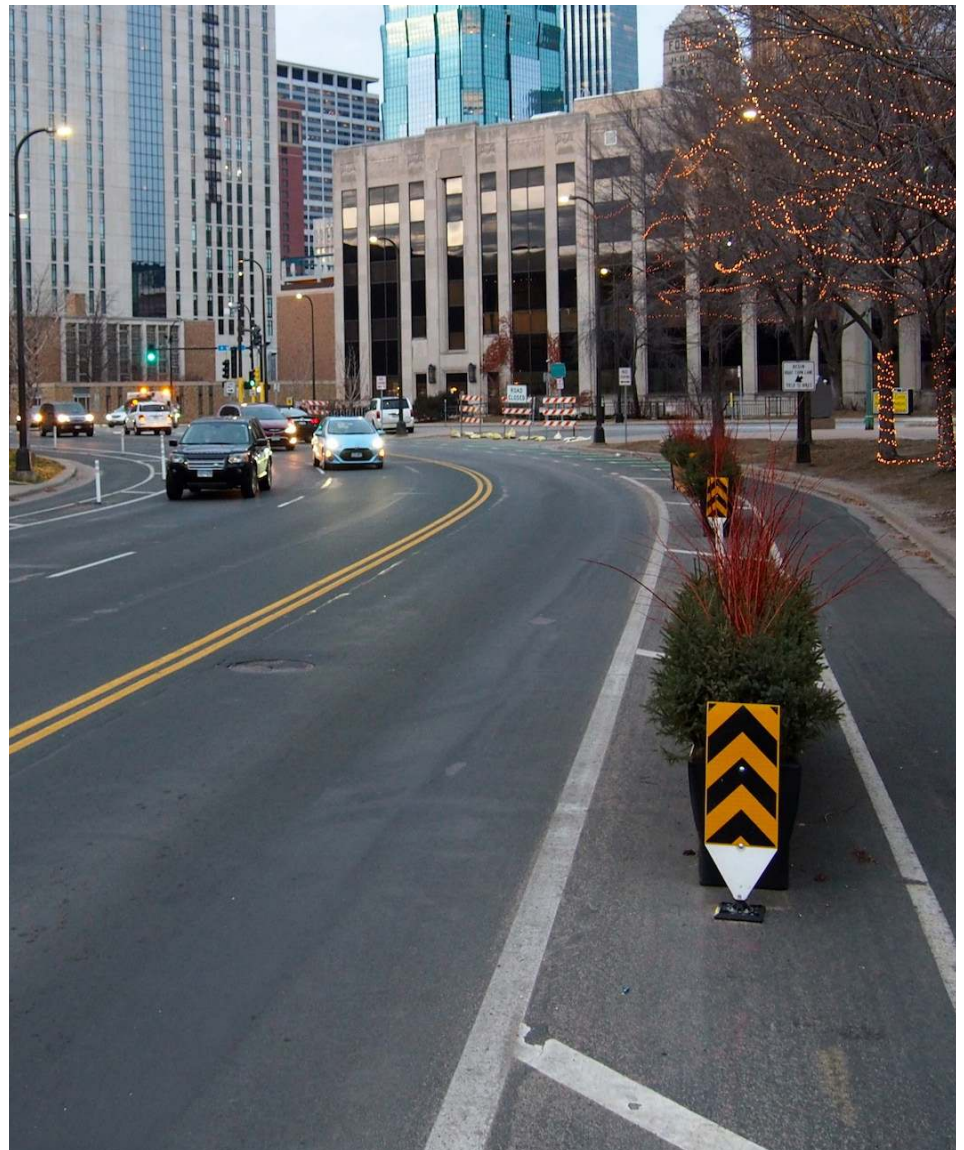


Figure 66: King Street jersey barriers





## ACTIONS

Actions to design bikeways using best practices that reflect the community and serve as an asset to people who may not currently ride a bike or use micromobility.

Actions	Supports	Difficulty
<p><b>DO ACTION 8.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Design protected bikeways to accommodate access to the curb for the mobility impaired, working directly with the Minneapolis Advisory Committee on People with Disabilities and the broader disability community to test and monitor designs.</p>	Safety, Equity, Mobility	<div style="background-color: #4CAF50; color: white; padding: 2px 5px; display: inline-block;">Low</div>
<p><b>DO ACTION 8.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Incorporate median islands and intersection treatments into protected bikeways and neighborhood greenways that benefit people walking as they cross streets. <i>See <a href="#">Bicycling Action 4.2</a></i></p>	Safety, Mobility	<div style="background-color: #C07040; color: white; padding: 2px 5px; display: inline-block;">Medium</div>
<p><b>DO ACTION 8.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Install greening and stormwater infrastructure elements along trails, protected bike lanes and neighborhood greenways. <i>See <a href="#">Design Strategy 4</a></i></p>	Climate, Prosperity, Mobility, Active partnerships	<div style="background-color: #C07040; color: white; padding: 2px 5px; display: inline-block;">Medium</div>
<p><b>DO ACTION 8.4</b>            2024-2027 (YEARS 4-7); ON-GOING            Integrate public realm or public art projects into bikeway features to reflect the community when appropriate.</p>	Prosperity	<div style="background-color: #C07040; color: white; padding: 2px 5px; display: inline-block;">Medium</div>

### SEE ALSO ACTION:

- **Bicycling Action 1.4** — Use design to prevent blocked lanes



**STRATEGY 9**

**Update bicycle and micromobility parking practices to support demand and diversity of vehicles to significantly expand bicycle racks in the right of way.**

The rise of different types of vehicles, including scooters, bikeshare and other new vehicle types increase the need for safe spaces to park these vehicles. The City currently operates five accommodations for bike and micromobility parking:

**Bike corral program**

The Bicycle Corral Cost Share Program is designed for businesses with high bicycle demand and limited space in the boulevard or sidewalk area. It is a low-cost method to provide bicycle parking in the same space occupied by an on-street parked car. Businesses are reimbursed up to 50% of the bike corral cost.

**Figure 68:** Bike corral



**Bike rack program**

The Bike Rack Cost Share program allows eligible businesses to be reimbursed up to 50% of the bicycle rack cost and 50% of the installation cost. Schools, libraries, parks and other eligible public facilities can request to receive racks at no cost.

**Bike lockers**

Public bike lockers are available to rent at Ramp A, Courthouse Ramp, the University of Minnesota and at Metro Transit stations and transit centers.

**Nice Ride station placement**

Nice Ride has both stations for docked bicycles and for dockless pedal-assist ebikes.



**Figure 67:** On street custom bike racks



Figure 69: Nice Ride hub



### Scooter parking zones

The City has created several on-street scooter parking zones to provide a designated space for scooters to be parked, out of the pedestrian clear zone and in a predictable manner for scooter users.

Figure 70: Scooter parking zone







## ACTIONS

Actions to update bicycle and micromobility parking practices to support demand and diversity of vehicles to significantly expand bicycle racks in the right of way.

Actions	Supports	Difficulty
<p><b>DO ACTION 9.1</b> 2020-2023 (YEARS 0-3) Develop approach and criteria to reserve curbside or furnishing zone space on all mixed-use block faces for seasonal on-street bicycle and micromobility parking at no charge. <i>See Technology Action 2.1, Street Operations Action 5.11</i></p>	Equity, Mobility	Medium
<p><b>DO ACTION 9.2</b> 2020-2023 (YEARS 0-3) Complete a citywide evaluation of bike rack installations and develop a process to identify locations to add bike racks across the city, including adding hitches to meter poles and stand-alone bike racks.</p>	Mobility	Medium
<p><b>DO ACTION 9.3</b> 2020-2023 (YEARS 0-3); ON-GOING Install bike and micromobility parking with all capital projects, consistent with the Street Design Guide. <i>See Design Strategy 1</i></p>	Equity, Mobility	Low
<p><b>DO ACTION 9.4</b> 2024-2027 (YEARS 4-7) Expand the existing bicycle rack cost share and bicycle corral programs to make free for businesses and residences within ACP50 areas.</p>	Equity, Mobility	Low
<p><b>SUPPORT ACTION 9.5</b> 2020-2023 (YEARS 0-3) Update the Zoning Code, which requires minimum bike parking for new developments, to accommodate increased demand and a range of vehicle types, including adaptive and cargo bicycles and electric charging needs. <i>See Technology Action 6.6.</i></p>	Equity, Mobility	Low



## ACTIONS

Actions to update bicycle and micromobility parking practices to support demand and diversity of vehicles to significantly expand bicycle racks in the right of way.

### **SUPPORT** ACTION 9.6

2020-2023 (YEARS 0-3); ON-GOING

Work with Metro Transit to implement secure and covered bicycle parking at transit stations.

*See Transit Strategy 5*

Safety,  
Mobility, Active  
partnerships

Medium

### SEE ALSO ACTIONS:

- **Technology Action 2.4** — Provide adaptive shared vehicles
- **Technology Action 6.2** — Electric charging infrastructure is compatible with bicycles and micromobility
- **Street Operations Action 5.1** — Develop curbside management policy



# STRATEGY 10

## Expand safe biking and micromobility education and encouragement.

The City of Minneapolis partners with Minneapolis Public Schools on Safe Routes to School projects and planning efforts. This strategy focuses on that partnership as well as broader education efforts for residents and businesses.

Figure 71: Open streets Minneapolis



Figure 72: Pop up event







## Actions to expand biking and micromobility education and encouragement.

Actions	Supports	Difficulty
<p><b>DO ACTION 10.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Provide on-site education for bikeway projects post-installation to help people understand changes to street operations, particularly when an All Ages and Abilities project is implemented. This can include temporary visual materials and pop-up engagement in the neighborhood.</p>	Safety, Active partnerships	Low
<p><b>DO ACTION 10.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Ensure that Open Streets Minneapolis continues to be a sustainable program and evolves. Explore different route types, lengths, frequency and repetition, including ideas like ‘car free Sundays’, low-programmed open streets, partnering with the Minneapolis Park and Recreation Board for events on parkways and finding other ways to encourage and give people the opportunity to envision Minneapolis streets in a different way.</p>	Safety, Prosperity, Active partnerships	Medium
<p><b>SUPPORT ACTION 10.3</b>            2024-2027 (YEARS 4-7)            Support education programs targeting people that currently don't feel comfortable riding a bicycle, including learn-to-ride classes, commuting tips, identifying safe and comfortable bike routes, bike maintenance, and more.</p>	Climate, Safety, Equity, Mobility, Active partnerships	Medium
<p><b>SUPPORT ACTION 10.4</b>            2028-2030 (YEARS 8-10)            Support Minneapolis Public Schools in their efforts to establish a universal bike education program for fourth and fifth grade students.</p>	Safety, Equity, Active partnerships	Medium
<p><b>SUPPORT ACTION 10.5</b>            2024-2027 (YEARS 4-7)            Work with the Minnesota Department of Public Safety to add more bicycle, scooter and other new mobility options to the driver’s education curriculum.</p>	Safety, Mobility, Active partnerships	High

### SEE ALSO ACTIONS:

- **Walking Action 2.6** — Use the Safe Routes to School program to encourage walking and biking
- **Technology Action 2.1** — Welcome and maintain bikeshare and micromobility option



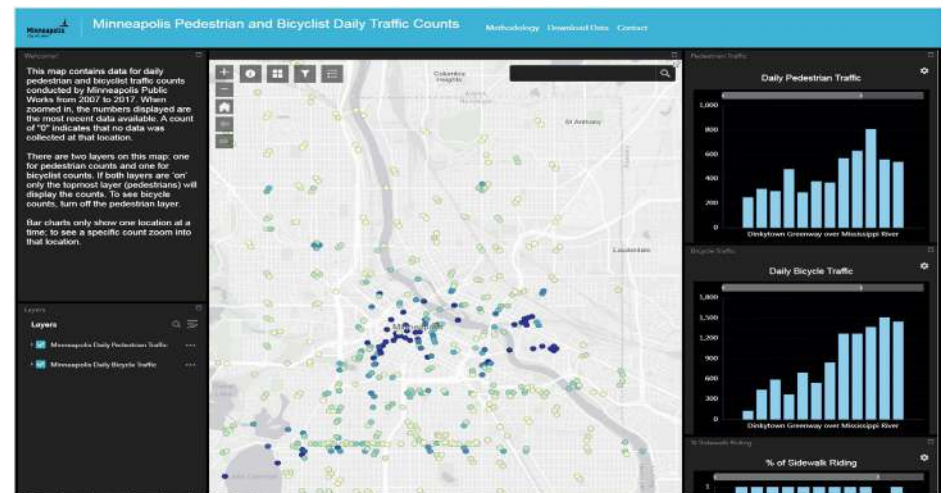
# STRATEGY 11

## Measure biking and micromobility ridership levels and user comfort.

Building out a safe and convenient bike network will require monitoring, including impacts of investments on perceptions and use patterns of existing and new riders. In so doing, we will be able to adjust our approach if needed in light of user preference and use patterns.

Being able to help public understanding of new micromobility options through data – including use data, crash data and travel behavior choices – will help the public better react to the changing mobility options as well as give people more information for their own journey.

Figure 73: Minneapolis of bike/walk counts program dashboard





## ACTIONS

### Actions to measure biking and micromobility ridership levels and user comfort.

Actions	Supports	Difficulty
<b>DO ACTION 11.1</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Expand use of automated counters to measure seasonal traffic variation and integrate biking and micromobility count data into traffic databases.	Mobility	Low
<b>DO ACTION 11.2</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Require data sharing from micromobility service providers to understand travel behavior and inform infrastructure and policy changes. <a href="#">See Technology Strategy 4</a>	Mobility, Active partnerships	Low
<b>DO ACTION 11.3</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Conduct a biennial survey in coordination with micromobility service providers to collect information on the perceptions of biking and micromobility including who is riding and the experiences of people riding. <a href="#">See Technology Strategy 4, Technology Action 7.4</a>	Mobility, Active partnerships	Low





# TRANSIT

## Define the Minneapolis Transit Network



Transit is a central component of Minneapolis 2040 and throughout the engagement process for the TAP, we repeatedly and clearly heard that people want reliable access to transit. Transit is a critical foundation for the City's multimodal transportation system while also contributing to economic competitiveness by attracting business, private investment and top talent to the city. Over 30,000 (16.5%) households in the city do not have access to or choose not to own a personal car, with the highest concentration of car-free individuals living in neighborhoods around downtown Minneapolis.<sup>52</sup> The comprehensive plan calls for more growth in population and jobs, focused along and near transit corridors.

To effectively plan for this growth, the City will partner with the Metropolitan Council to plan for and invest in a transit priority projects that aim to improve the coverage, speed and reliability of transit service. The Metropolitan Council provides a backbone of service and operation, and the City of Minneapolis, through this chapter of the Transportation Action Plan, defines a clear set of priorities, goals and actions for the city.

Transit must be convenient, reliable and frequent to effectively reduce trips made by single occupancy vehicles. In 2019 people took transit for 13% of their trips (including 2% by school bus). Our goal is to increase that to 1 in 4 trips (25%) by 2030.<sup>54</sup>

**Over 30,000 (16.5%) of households in the city do not have access to a vehicle, with the highest concentration of car-free individuals living in neighborhoods around downtown Minneapolis.<sup>53</sup>**

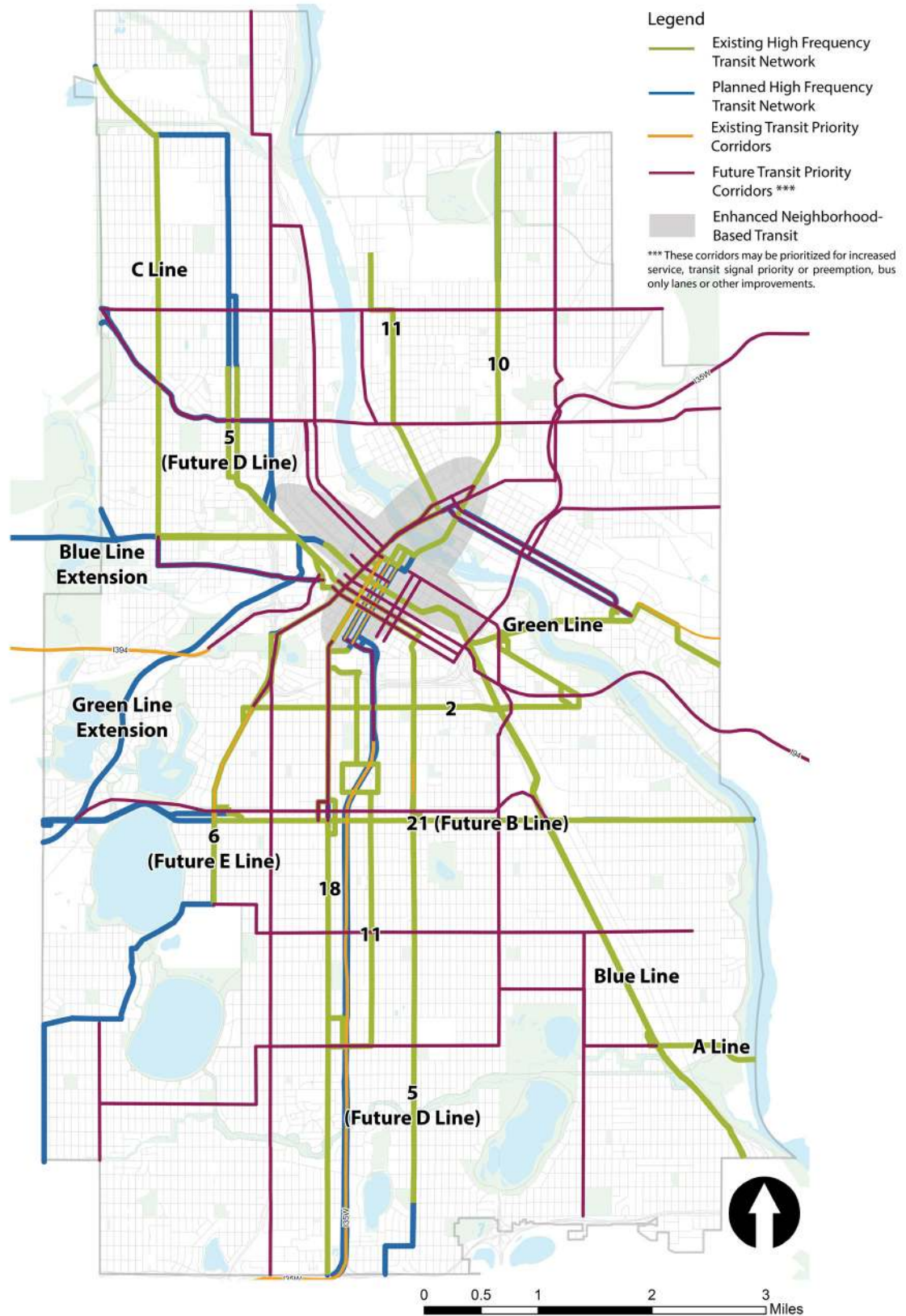
<sup>52</sup> Household Size by Vehicles Available, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

<sup>53</sup> Household Size by Vehicles Available, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

<sup>54</sup> Metropolitan Council Travel Behavior Inventory, 2019.



Figure 74: Transit Priority Projects





## TRANSIT STRATEGIES

- 1** Increase transit coverage so that 75% of city residents are located within a quarter mile and 90% of residents are located within a half mile of high frequency transit corridors.
- 2** Increase the speed and reliability of transit.
- 3** Increase available resources for transit and actively manage capital transit investments.
- 4** Partner with Metro Transit and other agencies to pursue new transit projects of high impact.
- 5** Expand multimodal access to transit.
- 6** Support efforts to ensure transit is a safe, comfortable and affordable option for all city residents.

### SEE ALSO STRATEGIES:

- **Street Operations Strategy 3** — Plan for efficient and practical operations of people walking, biking and taking micromobility or transit throughout the street design process.
- **Street Operations Strategy 4** — Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.
- **Street Operations Strategy 5** — Price and manage use of the curb to encourage walking, biking and using transit, and to discourage driving alone.
- **Street Operations Strategy 6** — Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.
- **Design Strategy 5** — Use street design to improve transit operations.





## STRATEGY 1

**Increase transit coverage so that 75% of city residents are located within a quarter mile and 90% of residents are located within a half mile of high frequency transit corridors.**

Minneapolis 2040 allows greater density of housing near existing and planned high frequency transit lines. The Transit Priority Projects map identifies corridors to improve frequency and reliability on existing routes and identifies where new crosstown services are needed.

High frequency transit corridors have service every 15 minutes during key weekday and Saturday hours. Currently, 47% of Minneapolis residents have a quarter mile access, or about a 5-minute walk, to high frequency transit. An additional 24% of people have access within a half mile, or about a 10-minute walk. The TAP sets a goal of 75% of city residents located within a quarter mile and 90% of residents located within a half mile walk of high frequency transit corridors. This strategy also looks to improve upon high frequency service from its current 15-minute interval to 10-minutes, in pursuit of even more improvement over time so that more people are able to rely on transit without the need to refer to a schedule for their everyday needs.

The current transit system undergoes minor service adjustments quarterly, with more major adjustments done through Metro Transit's Service Improvement Plan and when major capital projects come online. The last full Service Improvement Plan was completed in 2015 with an update report in 2017, and Metro Transit's Network Next will be looking at larger service adjustments systemwide in 2020. With many development and new population centers in Minneapolis, ensuring growth corridors are well served by transit is a focus of this strategy. Each of the strategies below will depend on upon the partnership with Metro Transit and should be coordinated with Network Next.



**Figure 75:** Hennepin Ave bus only lane pilot



Figure 76: Existing and planned high frequency transit routes

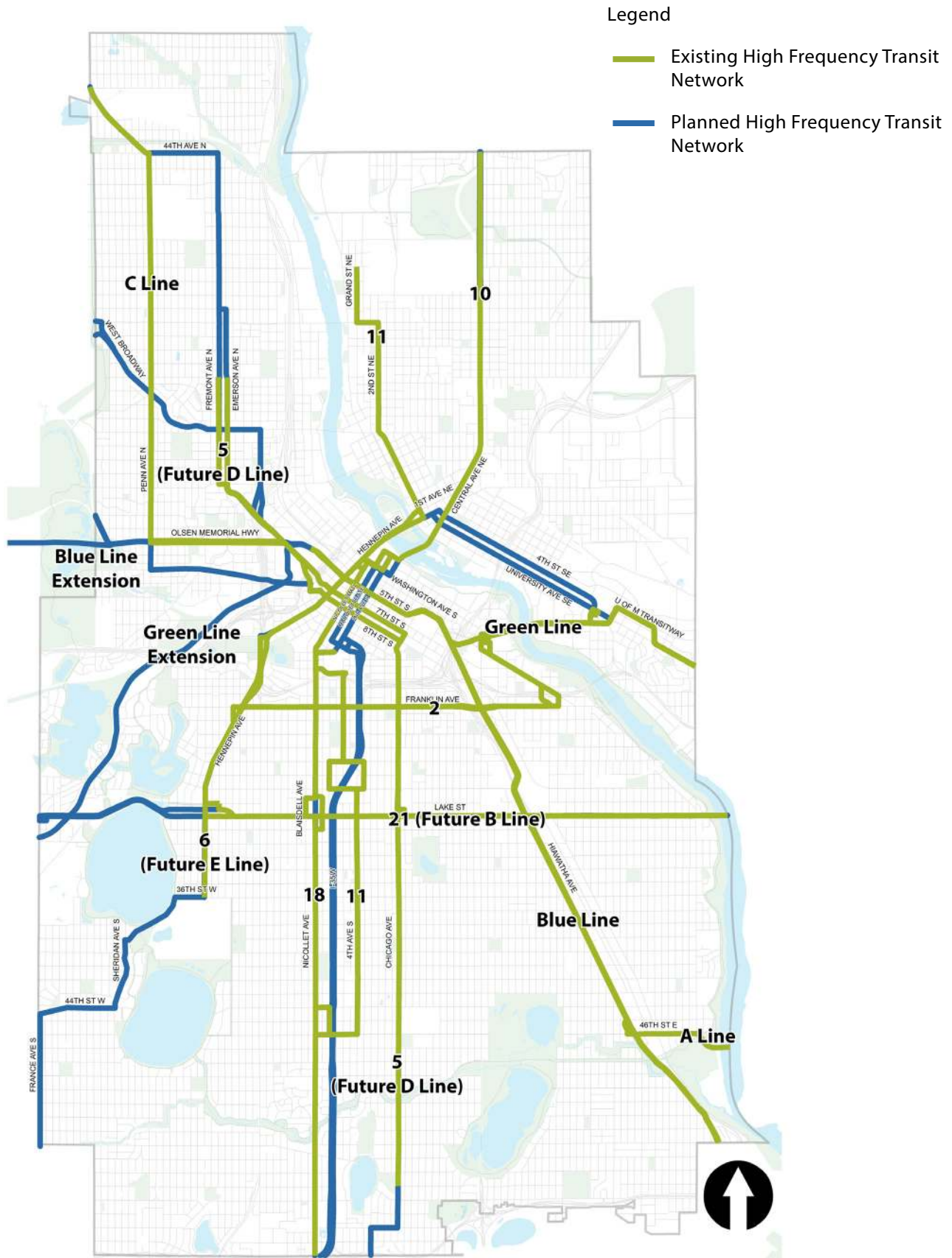
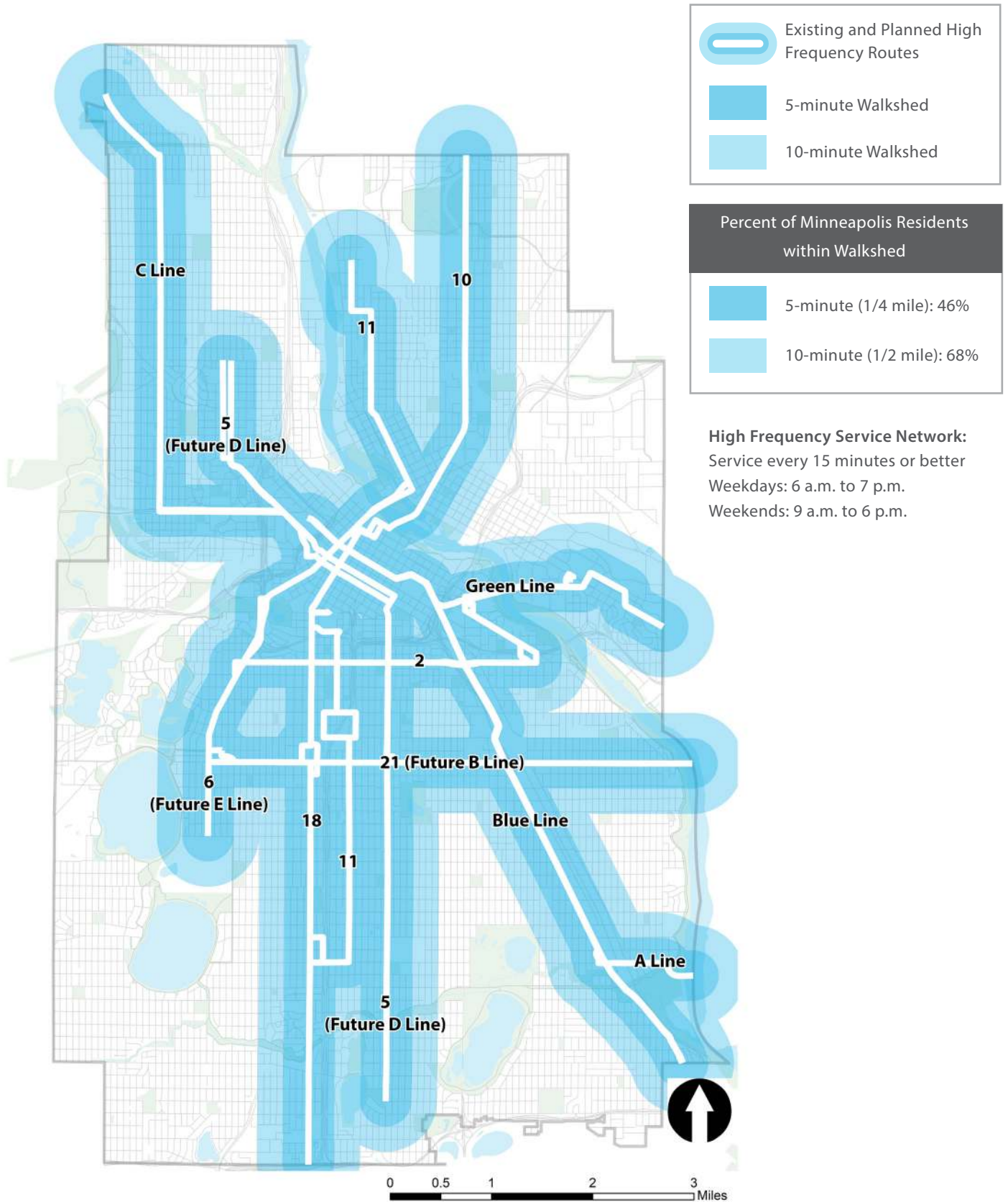




Figure 77: 5- and 10-minute walksheds to existing high frequency transit







## ACTIONS

### Actions to increase transit coverage and proximity to high frequency transit.

Actions	Supports	Difficulty
<b>DO ACTION 1.1</b> 2020-2023 (YEARS 0-3); ON-GOING Coordinate with Metro Transit’s <a href="#">Network Next</a> plan to reflect the strategies and actions in this plan.	Equity, Prosperity, Mobility, Active partnerships	<b>Medium</b>
<b>DO ACTION 1.2</b> 2024-2027 (YEARS 4-7) Establish enhanced neighborhood-based transit options, considering the use of new vehicle types, in growing neighborhoods to provide enhanced access and connections to housing, goods, services, employment and other destinations including existing high-frequency transit routes. Explore options along the downtown riverfront and North Loop first.	Prosperity, Mobility	<b>High</b>
<b>SUPPORT ACTION 1.3</b> 2020-2023 (YEARS 0-3); ON-GOING Expand the high frequency network.	Equity, Prosperity, Mobility, Active partnerships	<b>High</b>
<b>SUPPORT ACTION 1.4</b> 2028-2030 (YEARS 8-10) Increase the high frequency network from 15 to 10 minutes or better.	Equity, Prosperity, Mobility, Active partnerships	<b>High</b>
<b>SUPPORT ACTION 1.5</b> 2028-2030 (YEARS 8-10) Improve the quality and expand the high frequency network of local crosstown service, specifically from north to northeast Minneapolis and from south to southwest Minneapolis.	Equity, Prosperity, Mobility, Active partnerships	<b>High</b>

continued on next page



# ACTIONS (continued)

## Actions to increase transit coverage and proximity to high frequency transit.

<b>SUPPORT</b>	<p><b>ACTION 1.6</b> 2028-2030 (YEARS 8-10)</p> <p>Expand coverage to new or growing markets and improve transit service to areas that are currently underserved based on potential demand from population or development increases. Focus initially on:</p> <ul style="list-style-type: none"> <li>• Marshall St NE – between Broadway St NE and Lowry Ave NE</li> <li>• Lyndale Ave N – between West Broadway and northern city boundary</li> <li>• Lowry Ave – western city boundary to eastern city boundary</li> <li>• W Broadway Ave/Broadway St NE – extend from Lyndale Ave N to the eastern city boundary</li> <li>• Como Ave SE – between University Ave SE and eastern city boundary</li> <li>• 38th St – Bryant Ave S to 42nd Ave S</li> <li>• Xerxes Ave to 46th Street Station - traveling along 50th Street W, Bryant Ave S, 46th St E, Cedar Ave, 42nd St E, 28th Ave S, 46th St E</li> <li>• Lyndale Ave S – Hennepin/Lyndale merge near Loring Park to southern city boundary</li> <li>• Washington Ave – West Broadway to Cedar Ave continuing to 46th St</li> <li>• 2nd St N – Hennepin Ave to Dowling Ave N</li> <li>• Johnson St NE – Hennepin Ave to 37th Ave NE</li> <li>• Xerxes Ave – 44th St W to 54th St W</li> <li>• 28th Ave S – 38th St E to 58th St E</li> <li>• 4th St SE and University Ave SE – Central Ave to 27th Ave SE</li> <li>• Glenwood Ave/Penn Ave - N 10th St to Olson Memorial Highway</li> </ul>	<p>Equity, Prosperity, Mobility, Active partnerships</p>	<b>High</b>
<b>SUPPORT</b>	<p><b>ACTION 1.7</b> 2020-2023 (YEARS 0-3)</p> <p>Work with Metro Transit and Minneapolis Public Schools to ensure the transit system offers safe, reliable and convenient transit routes and service for high school students.</p>	<p>Climate, Safety, Equity, Mobility, Active partnerships</p>	<b>High</b>
<b>SUPPORT</b>	<p><b>ACTION 1.8</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Support reverse commute service connecting Minneapolis residents to suburban employment centers.</p>	<p>Climate, Prosperity, Mobility, Active partnerships</p>	<b>Medium</b>
<b>SUPPORT</b>	<p><b>ACTION 1.9</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Partner with Metro Transit to identify and secure bus layover locations, including restroom availability, that provide efficient access at the beginning of routes.</p>	<p>Mobility, Active partnerships</p>	<b>Medium</b>



## ACTIONS (continued)

### Actions to increase transit coverage and proximity to high frequency transit.

#### SUPPORT

#### ACTION 1.10

2028-2030 (YEARS 8-10)

Explore partnerships and opportunities with private companies and other organizations to subsidize and implement neighborhood or employer circulators.

Prosperity,  
Mobility,  
Active  
partnerships

Medium

### SEE ALSO ACTIONS:

- **Technology Action 1.6** — Research and integrate automated transit vehicles
- **Technology Action 6.7** — Siting of electric charging stations





## STRATEGY 2

### Increase the speed and reliability of transit.

Many improvements can be made to transit within City streets and by adapting the City’s practices. Bus priority lanes, adjustments to signal timing, curb extensions or in-lane transit stops and stop consolidation are all examples of using existing street right of way to improve speed and reliability. Large transit projects often take years to plan, design, fund and construct, and often involve multiple agencies – including city, regional, state, federal offices as well as transit operators. This 10-year action plan recognizes that while that process is valid and necessary for certain types of transit projects like light rail or bus rapid transit projects, there are other quick-build opportunities that we can identify and implement in the near term to make improvements sooner rather than later. We need to invest now in transit projects. The actions below focus on near-term opportunities to improve the transit in the city.

Transit accounts for 14% of all commuter trips. Over 200,000 employees work in downtown Minneapolis each day and 13.5% of commuter trips.<sup>55</sup> During busy commute times, bus service becomes unreliable due to congestion during peak travel hours. An added focus on downtown is included in this chapter due to the density of trips.

Figure 78: Painted bus lane



<sup>55</sup> 2018 American Community Survey 5-Year Estimates



Figure 79: Transit signal priority



**Bus-only lanes refer to using one travel lane for buses only, either for a select period of time or throughout the entire day depending on context.**



## ACTIONS

### Actions to increase the speed and reliability of transit.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Use full-time dedicated bus-only lanes or dynamic lanes (peak period operation) to improve the speed, frequency and reliability of transit on congested corridors.</p>	<p>Climate, Prosperity, Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 2.2</b> 2024-2027 (YEARS 4-7)</p> <p>Install a bus-only lane and/or other transit advantages on the following high priority corridors:</p> <ul style="list-style-type: none"> <li>• 4th Ave S between Washington Ave and 10th St S</li> <li>• 5th Ave S between Washington Ave and 10th St S</li> <li>• 6th St N/S between 1st Ave N and 13th Ave S</li> <li>• 7th St N/S between 1st Ave N and 13th Ave S</li> <li>• 8th St N/S downtown between 1st Ave N and 13th Ave S</li> <li>• 4th St from the freeway connections on the west to Marquette and 2nd Aves</li> <li>• 12th St S between I-35W and Marquette Ave S</li> </ul>	<p>Climate, Equity, Prosperity, Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 2.3</b> 2020-2023 (YEARS 0-3)</p> <p>Evaluate the potential for a bus-only lane and/or other transit advantages on the following corridors, considering partnerships with other jurisdictions.</p> <ul style="list-style-type: none"> <li>• Hennepin Ave between Washington Ave S and 12th St S</li> <li>• Hennepin Ave between Franklin Ave and 12th St S</li> <li>• West Broadway Ave from western city boundary to eastern city boundary</li> <li>• Central Ave from 3rd Ave bridge to northern city boundary</li> <li>• University Ave/4th St from Hennepin/1st Ave NE to eastern city boundary</li> <li>• 11th St South between Hennepin and Marquette</li> <li>• 12th St South between Hawthorne to 2nd Ave</li> <li>• Lake St (and Lagoon Ave) from the western city boundary to the eastern city boundary</li> </ul>	<p>Climate, Equity, Prosperity, Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 2.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Improve transit speed and reliability throughout downtown; focus on Nicollet Mall and Marquette/2nd Ave operations first.</p>	<p>Climate, Equity, Prosperity, Mobility, Active partnerships</p>	<p>High</p>

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## ACTIONS (continued)

### Actions to increase the speed and reliability of transit.

**DO**

**ACTION 2.5**

2020-2023 (YEARS 0-3); ON-GOING

Plan for transit during street reconstruction projects. Ensure that road reconstruction projects on high frequency transit corridors allocate dedicated space for bus-only lanes or other transit advantages, and if applicable, integrate bus rapid transit-ready station design. [See Street Operations Strategy 9](#)

Climate, Equity,  
Prosperity,  
Mobility, Active  
partnerships

High

**DO**

**ACTION 2.6**

2020-2023 (YEARS 0-3); ON-GOING

Prioritize the use of curb space for transit operations and passengers and allow for dynamic flexibility depending on the time of day. [See Street Operations Action 5.2](#)

Prosperity,  
Mobility, Active  
partnerships

High

**SUPPORT**

**ACTION 2.7**

2020-2023 (YEARS 0-3); ON-GOING

Support transit advantages on freeways, including direct connections into and out of downtown, that rely on lane conversions instead of expansions where technically feasible and with consideration of local impacts. Direct connections into downtown should connect to streets with transit-only facilities, including from:

- I-94 between downtown Minneapolis and downtown St Paul
- I-94 north of downtown
- I-35W north of downtown

Climate,  
Prosperity,  
Mobility, Active  
partnerships

High

**SUPPORT**

**ACTION 2.8**

2020-2023 (YEARS 0-3); ON-GOING

Increase enforcement of bus-only lane operation to ensure effectiveness on existing and future routes:

- Increase targeted parking enforcement strategies for vehicles blocking current and future bus-only lanes.
- Support the implementation of automated enforcement.

[See Street Operations Action 6.6](#)

Equity,  
Mobility, Active  
partnerships

High

**SUPPORT**

**ACTION 2.9**

2024-2027 (YEARS 4-7)

Increase the size of the traffic control agent workforce, assign traffic control agents in coordination with transit operators and ensure that traffic control agents are educated and focused on equitable outcomes that increase person throughput and prioritize the movement of transit vehicles over automobiles.

Climate,  
Prosperity,  
Mobility, Active  
partnerships

High



## STRATEGY 3

### Increase available resources for transit and actively manage capital transit investments.

Currently, the City contributes to transit improvements through partnerships with Metro Transit and funding from our cooperative project fund in the Capital Improvement Program. As the City prioritizes its role in making transit work more effectively, leveraging existing mechanisms to fund transit improvements is an important part of the work. Existing mechanisms include:

- cooperative project funding;
- partnering with private development to include transit amenities into building construction projects;
- land use controls through the Department of Community Planning and Economic Development including incentivizing transit through parking regulations;
- adjusting signal timing and including transit priority signalization along transit corridors; and
- redesigning streets to allow better transit facilities and interactions with other modes, particularly along the curb.

Actions below focus on adjustments to our existing tools to better recognize transit improvements as a prioritizing force within our capital program as well as to look creatively to leverage additional resources for transit improvements on city streets in coordination with regional partners.

**Figure 80:** Transit infrastructure on bridge at 46th St S over Interstate 35W





## ACTIONS

Actions to increase available resources for transit and actively manage capital transit investments.

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b> 2024-2027 (YEARS 4-7)</p> <p>Modify capital programs to support transit investments on corridors that have the highest ridership and lowest car ownership rates and allocate funds in a manner that advances citywide transit priorities.</p>	Equity, Mobility, Active partnerships	High
<p><b>DO ACTION 3.2</b> 2024-2027 (YEARS 4-7)</p> <p>Work with the Department of Community Planning and Development and other agency partners to convert excess right of way to development parcels; an example includes along Olson Memorial Highway (Highway 55).</p>	Mobility, Active partnerships	High
<p><b>DO ACTION 3.3</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Continue to leverage private development opportunities to implement or improve transit investments in the public right of way.</p>	Climate, Mobility, Active partnerships	Medium
<p><b>SUPPORT ACTION 3.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Support transit infrastructure improvements during freeway bridge maintenance and replacement projects along transit corridors.</p>	Climate, Mobility, Active partnerships	Low
<p><b>SUPPORT ACTION 3.5</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Support regional efforts to better operate transit through larger regional investments in high-impact locations in Minneapolis. Examples include exploring better operations for buses at the Washington Ave and I-35 W intersection.</p>	Climate, Prosperity, Mobility, Active partnerships	Medium

### SEE ALSO ACTION:

- **Street Operations Action 6.5** — Eliminate gaps in the street grid and reopen Nicollet Avenue at Lake St





## STRATEGY 4

### Partner with Metro Transit and other agencies to pursue new transit projects of high impact.

Light rail and bus rapid transit routes provide the major spines of the existing METRO transitway system in Minneapolis, along with one commuter rail line. Bus rapid transit service includes off-board fare payment, fewer stops compared to regular transit lines, enhanced shelters that include real-time vehicle information and longer buses that allow for all-door boarding. Light rail service is similar but runs along dedicated rail lines. The existing light rail has routinely exceeded ridership expectations and has spurred development along the corridors. High frequency transit serves about 3% of the region by land area, but the volume of development it is capturing is significant.<sup>56</sup>

Light rail and bus rapid transit are major capital investments; however, bus rapid transit projects are less costly to build and quicker to plan and construct than light rail projects, which require a larger scale of investment and time needed for implementation. Fifty percent of the funding for design and construction of light rail and bus rapid transit projects is historically provided by the federal government. We believe that expanding the METRO transitway network is an effort worth investing in. It will be critical with any new light rail developments in Minneapolis that provisions are in place to ensure that nearby residents benefit from the transit investment, including through preservation and construction of affordable housing.

Several projects in Minneapolis have gone through early environmental review processes and have a locally preferred alternative identified. The extents of these corridors are extended below in cases, reflecting the vision of increasing high frequency transit to more people throughout the city.



<sup>56</sup> Development Trends Along Transit: Regional growth near high frequency transit in the Twin Cities, 2019.



Figure 81: Neighborhood based transit corridors based on Locally Preferred Alternatives

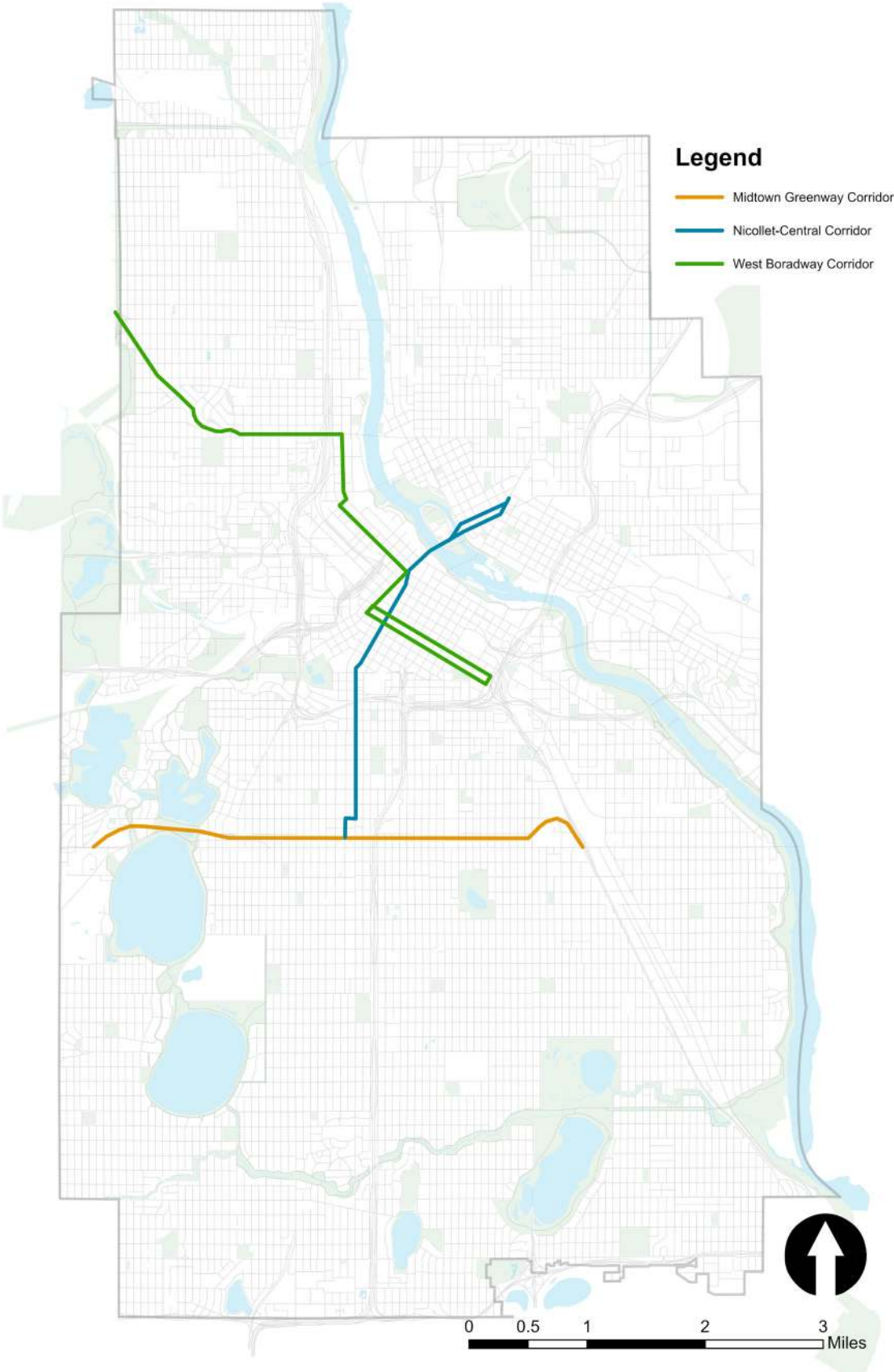




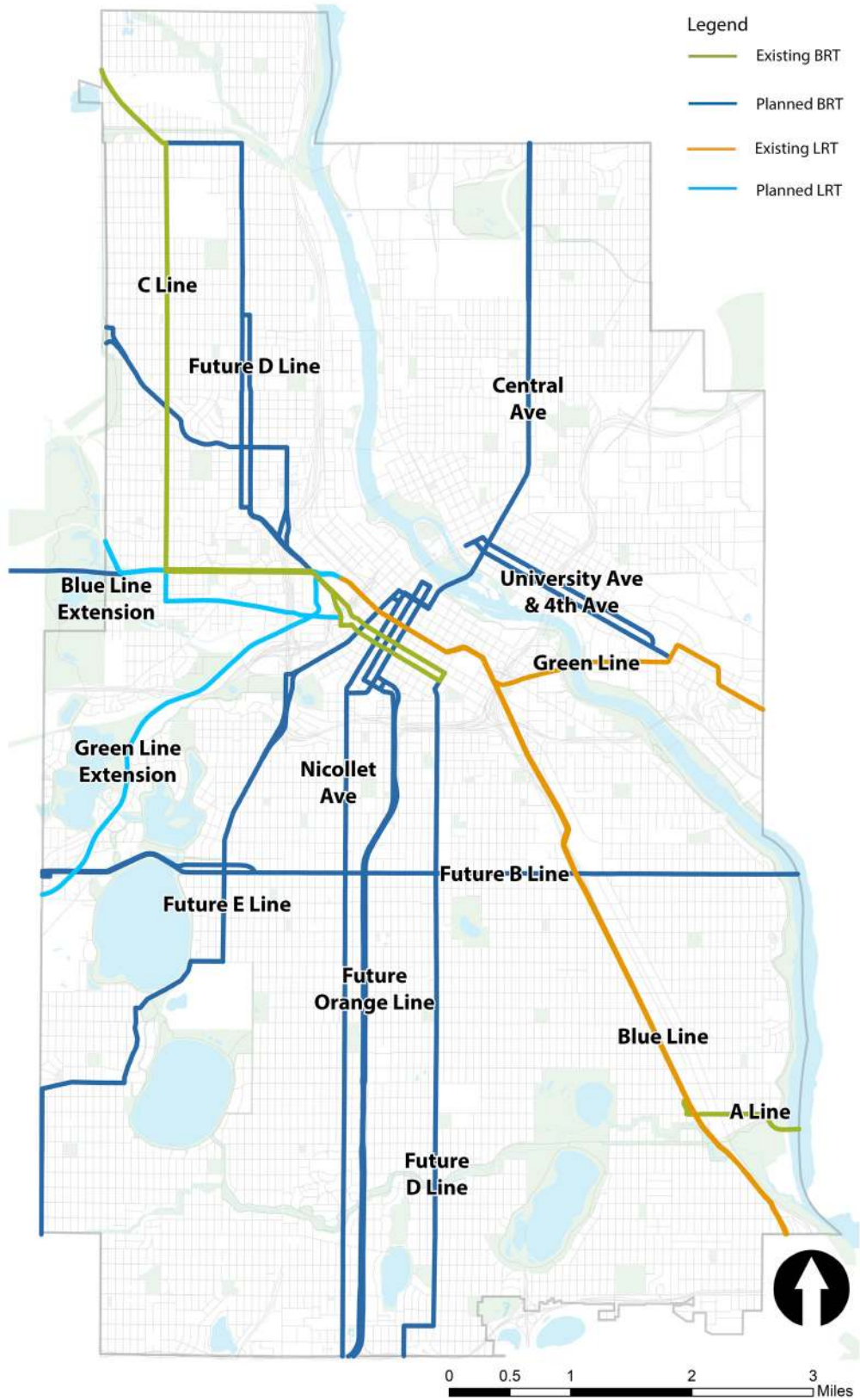
Figure 82: METRO transitways







Figure 83: Existing and Planned Bus Rapid Transit and Light Rail lines in Minneapolis





## ACTIONS

Actions to partner with Metro Transit and other agencies to pursue new transit projects of high impact.

Actions	Supports	Difficulty
<p><b>DO ACTION 4.1</b>  <i>2020-2023 (YEARS 0-3)</i>            Plan, design and construct high capacity, neighborhood-based transit along the Nicollet-Central corridor.</p>	Climate, Prosperity, Mobility, Active partnerships	High
<p><b>DO ACTION 4.2</b>  <i>2024-2027 (YEARS 4-7)</i>            Plan, design and construct high capacity, neighborhood-based transit within the dedicated right of way along the Midtown Greenway from West Lake Station on the METRO Green Line Extension to Lake Street Station on the METRO Blue Line.</p>	Climate, Prosperity, Mobility, Active partnerships	High
<p><b>DO ACTION 4.3</b>  <i>2028-2030 (YEARS 8-10)</i>            Plan, design and construct high capacity, neighborhood-based transit along the West Broadway corridor from downtown Minneapolis to the northwest suburbs.</p>	Climate, Prosperity, Mobility, Active partnerships	High
<p><b>SUPPORT ACTION 4.4</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>            Advocate and provide continued support for METRO B, D, and E Bus Rapid Transit lines, and work with Metro Transit to identify and pursue additional Bus Rapid Transit Lines in Minneapolis.</p>	Climate, Equity, Prosperity, Mobility, Active partnerships	Low
<p><b>SUPPORT ACTION 4.5</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>            Advocate and provide continued support for the METRO Blue Line Extension light rail project, connecting Minneapolis with the region's northwestern communities. As the transit service is reevaluated, ensure new routing alignments provide high-quality service for residents of North Minneapolis and safety improvements are made to the prior alignment along Olson Memorial Highway, bringing reduced speeds and more people-focused and urban scale improvements to the corridor.</p>	Climate, Prosperity, Mobility, Active partnerships	High



## ACTIONS (continued)

<b>SUPPORT ACTION 4.6</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Support bus rapid transit on Olson Memorial Highway (Highway 55) extending to the region’s western communities.	Climate, Prosperity, Mobility, Active partnerships	Low
<b>SUPPORT ACTION 4.7</b> <i>2024-2027 (YEARS 4-7)</i> Develop long-term operations plans for new transit services in partnership with Metro Transit and other partner agencies.	Climate, Mobility, Active partnerships	Medium
<b>SUPPORT ACTION 4.8</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Advocate for light rail and bus rapid transitways that provide direct connections to regional job centers and other destinations outside of the downtown core within Minneapolis, connecting Minneapolis residents with the regional rail system.	Prosperity, Mobility, Active partnerships	High
<b>SUPPORT ACTION 4.9</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Advocate for transitway alignments that are conducive to transit-oriented development and that would include preservation, maintenance and construction of housing at all levels of affordability.	Climate, Equity, Prosperity, Mobility, Active partnerships	Medium
<b>SUPPORT ACTION 4.10</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Continue to partner with the Hennepin County Regional Railroad Authority, Metro Transit, the Minnesota Department of Transportation and developers near Target Field Station to plan for the expansion of future commuter rail, inter-city passenger rail and/or high-speed rail projects and supporting facilities.	Equity, Prosperity, Mobility, Active partnerships	High
<b>SUPPORT ACTION 4.11</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Support statewide efforts to advance the Northern Lights Express connecting Minneapolis with Duluth via high speed rail.	Climate, Equity, Prosperity, Mobility, Active partnerships	Medium

### SEE ALSO ACTION:

- **Transit Action 6.8** — Integrate unique and interactive design on high impact transit projects





## STRATEGY 5

### Expand multimodal access to transit.

Ensuring that a connected multimodal system feeds into the transit network will expand people’s ability to rely on transit and lessen dependency on the automobile. Supporting technological advancements to integrate payment options and partner with shared mobility providers are key to increasing access to transit while reducing friction.

Figure 84: New vehicle type: autonomous shuttle



Figure 85: Mobility hubs bring transit and shared mobility services together



Figure 86: Mobility hub linked to transit stop



## ACTIONS

### Actions to expand multimodal access to transit.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.1</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Prioritize pedestrian improvements connecting residents to transit service, including completing missing links in the sidewalk network, safe crossings at high volume intersections and maintaining pedestrian access through construction zones. <i>See Walking Action 5.4</i></p>	Safety, Equity, Mobility, Active partnerships	Medium
<p><b>DO ACTION 5.2</b> 2024-2027 (YEARS 4-7)</p> <p>Explore partnership opportunities to implement and subsidize shared ride and other on demand mobility services targeting first and last mile transit options to connect people to transit stops and stations.</p>	Climate, Equity, Mobility, Active partnerships	Medium
<p><b>SUPPORT ACTION 5.3</b> 2024-2027 (YEARS 4-7)</p> <p>Work with Metro Transit to understand capacity constraints of front bike racks and identify solutions for increasing capacity.</p>	Equity, Mobility, Active partnerships	Low

### SEE ALSO ACTIONS:

- **Walking Action 4.3** — Winter maintenance at transit stops and stations
- **Bicycling Action 9.6** — Bike parking at transit stations
- **Technology Action 2.1** — Bikeshare and micromobility
- **Technology Action 3.1** — Implement mobility hub network
- **Technology Action 3.3** — Integrated payment technology



## STRATEGY 6

### Support efforts to ensure transit is a safe, comfortable and affordable option for all city residents.

We heard through our engagement that free transit fares, lower transit fares or more affordable transit was a desire for most people as current transit fares were considered a barrier for many individuals.

Transit fares (local bus and METRO/light rail) on Metro Transit currently are \$2.50 for rush hour rides (6:00-9:00 am and 3:00-6:30 pm Monday – Friday) and \$2.00 for non-rush hour rides. Reduced fares of \$1.00 are available for low-income individuals with valid documentation, seniors (65+), youth (6-12) and Medicare card holders during non-rush hours; express bus rides cost more. People with disabilities with valid documentation can ride the system (local bus, METRO and express bus) for \$1.00 at any time with the Transit Assistance Pass (TAP card). Metro Transit also has a partnership with Minneapolis Public Schools which offers Go To Cards to high school students who take the city bus to school for \$97/quarter.<sup>57</sup>

There is currently one example of a zone discount and two examples of free fares within the Metro Transit system:

- The downtown zone has a \$0.50 fare for rides within an established zone.
- Free rides between the Minneapolis Convention Center and the METRO Blue and Green lines on 5th Street in downtown Minneapolis via the Route 18, 10 or 59 along Nicollet Mall. This service is available 7 days a week between 5:00 am and 1:00 am.

Additionally, there are several times throughout the year that Metro Transit offers free rides, in partnership with others, to encourage safe travel behaviors. These days typically include afternoon/evening/night of St Patrick's Day, New Year's Eve and other days on occasion.

Feeling safe while riding or waiting for transit was another key theme we heard during engagement. There are many elements that contribute to real and perceived safety conditions at station locations and on transit vehicles – including the presence or lack of presence of other riders, lighting, security cameras, access to emergency phones, the cleanliness of vehicles and waiting areas and the conduct of fellow passengers or other people on the vehicle or at or near a stop. Special considerations during winter – like clear and passable paths from stations to vehicles for all users and at waiting areas are also important to make transit safe and comfortable.

Figure 87: High school students getting on the bus

<sup>57</sup> Metro Transit. <https://www.metrotransit.org/student-pass-admin>.





Figure 88: Well maintained transit stop



Figure 89: Metro Transit offers free fares along Nicollet Mall



Figure 90: TAP card benefit





## ACTIONS

Actions to support efforts to ensure transit is a safe, comfortable and affordable option for all city residents.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.1</b> 2024-2027 (YEARS 4-7) Study and assess the feasibility of free or reduced transit fares; evaluate the passage of programs citywide and/or within certain zones or based on trip distance.</p>	Equity, Mobility, Active partnerships	High
<p><b>DO ACTION 6.2</b> 2020-2023 (YEARS 0-3) Establish requirements for monthly transit pass participation for all new commercial, mixed-use and residential buildings within a half mile of a high frequency transit corridor.</p>	Climate, Mobility, Active partnerships	High
<p><b>SUPPORT ACTION 6.3</b> 2020-2023 (YEARS 0-3); ON-GOING Support Metro Transit initiatives tied to increased security of the transit system that address real and perceived safety issues while considering equity concerns.</p>	Safety, Equity, Active partnerships	Low
<p><b>SUPPORT ACTION 6.4</b> 2020-2023 (YEARS 0-3); ON-GOING Work with partner agencies to improve customer comfort through clean waiting areas and upgraded amenities such as shelters, lighting, seating, heat and real-time schedule information. <a href="#">See Technology Action 3.1</a></p>	Safety, Equity, Mobility, Active partnerships	Medium
<p><b>SUPPORT ACTION 6.5</b> 2020-2023 (YEARS 0-3); ON-GOING Work with Metro Transit to expand affordable fare programs and increase participation among eligible residents.</p>	Equity, Mobility, Active partnerships	High
<p><b>SUPPORT ACTION 6.6</b> 2020-2023 (YEARS 0-3); ON-GOING Support Metro Transit's work with Minneapolis Public Schools and other non-profit organizations to provide affordable fares for all program participants.</p>	Equity, Mobility, Active partnerships	Low

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## ACTIONS (continued)

Actions to support efforts to ensure transit is a safe, comfortable and affordable option for all city residents.

<b>SUPPORT</b>	<b>ACTION 6.7</b> 2020-2023 (YEARS 0-3); ON-GOING Work with Metro Transit to expand additional fare-free days throughout the year and fare-free routes in the city.	Equity, Mobility, Active partnerships	Medium
<b>SUPPORT</b>	<b>ACTION 6.8</b> 2020-2023 (YEARS 0-3); ON-GOING Encourage investment and design of integrated design elements to engage people and reflect the communities that transit serves through signage/wayfinding, public art, plaza/open spaces, streetscape, real-time traffic count displays and other creative or interactive design elements on major transit projects (light rail, bus rapid transit, etc.) <i>See Design Strategy 5</i>	Equity, Prosperity, Active partnerships	Medium
<b>SUPPORT</b>	<b>ACTION 6.9</b> 2020-2023 (YEARS 0-3); ON-GOING Support partner agency efforts to work with new immigrant and non-English speaking communities to educate and build familiarity with the transit system for prospective riders.	Equity, Mobility, Active partnerships	Medium

### SEE ALSO ACTIONS:

- **Walking Action 4.3** — Winter maintenance at transit stops and stations
- **Technology Action 3.3** — Integrated payment technology





# TECHNOLOGY

## Invite New Technology to Advance Transportation Options

It is difficult to know what changes will come to transportation in the next 10 years. If the past 10 years of significant technological advancement in transportation is any indication, to successfully meet our goals we will need to continue to build off our historical investment in the City’s core infrastructure. Rapid changes of the past 10 years were driven primarily by the market introduction of the smartphone and phone-based applications on top of improved cellular coverage. The technology paired with shared mobility business models allowed real-time access to widely distributed vehicles and modes. These emerging technology-enabled mobility options are what we are referring to as advanced mobility.

By proactively focusing on the ability of our systems, infrastructure, operations and staff to adapt to further change, we will make sure that these innovations happen with and for us, not to us. We are growing our planning capacity internally and externally by leveraging our community, public and private partnerships. Our vision is that all people in Minneapolis can travel safely, equitably and reliably through both public and private services.

This topic outlines how we will most thoughtfully integrate technology to help us meet our goals. This topic is most commonly defined by these four advancements in transportation, all of which are enabled by new business models and technology:

- Shared fleets (vehicles available to the public for temporary use)
- Electric vehicles (including transit, automobiles, scooters and bicycles)
- Connected infrastructure and connected people (the ability for vehicles, people and traffic systems to communicate through computer systems over wireless networks)
- Automation of transportation (vehicle technology that automates part of driving)



Technology improvements have attracted new business models and accompanying capital into the transportation market that are important for local government to understand and influence. The City will seek partnerships with those entities that share our values and will help us achieve our City goals, creating the right balance of regulation and support for innovation to enable new solutions. It is the City's role to communicate the challenges and set the rules for engagement, so that the private sector can develop the solutions successfully.

Numerous actions throughout this plan are influenced by new technology advancements. These are noted throughout the document as supporting strategies in this topic area.

**Shared mobility** refers to transportation services that are shared among users, either at the same time or one after another and accessed on as an-needed basis.

**Advanced mobility** describes an approach to maximizing travel opportunities through new and evolving technology in safe, equitable and reliable ways, through public and private services and collaboration.

Figure 91: Electronic ticketing

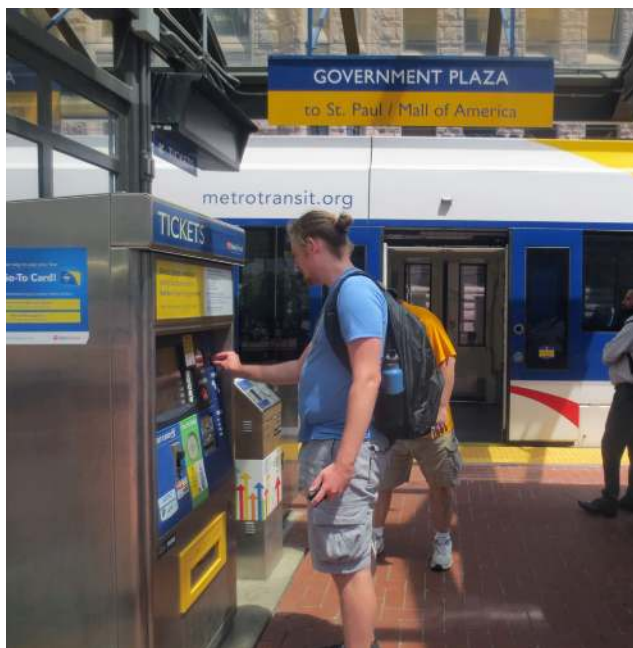
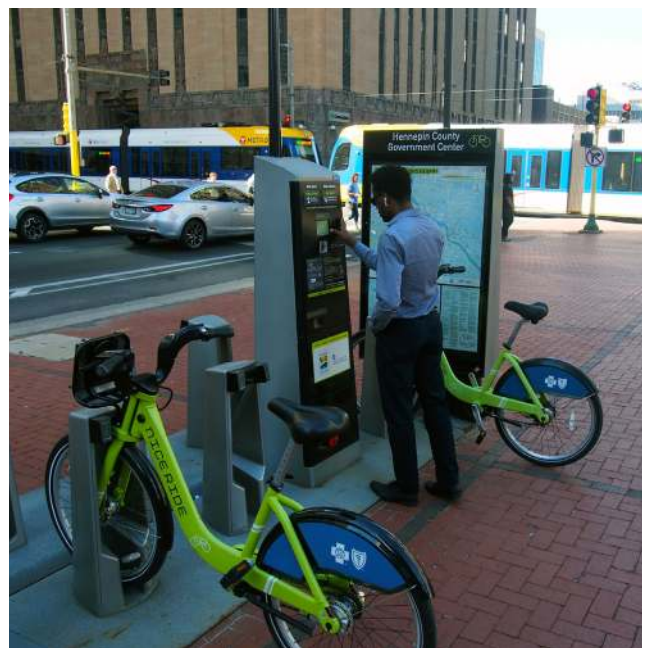


Figure 92: Nice Ride technology





## TECHNOLOGY STRATEGIES

- 1** Harness technological advancements for citywide benefits, ensuring newly adopted technologies support safe street operations and focus on human-centered design.
- 2** Increase access to shared mobility services by removing the barriers of physical ability, geographic placement, language, payment methods, income and technology and digital literacy.
- 3** Formulate public-private partnerships to implement innovative, ambitious and scalable pilots.
- 4** Require private shared mobility providers, including transportation network companies, to share data that supports the City's ongoing transportation planning and operations work, with a focus on equity and access for all and minimizing greenhouse gas emissions.
- 5** Build a culture of continuous improvement in knowledge, education and communications around new technologies that advance transportation options.
- 6** Encourage and support electric vehicles by developing public charging stations and incentivizing private off-street stations; incentivize power sources from renewable generated electricity.
- 7** Continue to develop internal resources capacity for advanced mobility initiatives.

### SEE ALSO STRATEGIES:

- **Street Operations Strategy 3** — Plan for efficient and practical operations of people walking, biking and taking micromobility or transit throughout the street design process.
- **Street Operations Strategy 4** — Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.
- **Street Operations Strategy 5** — Price and manage use of the curb to encourage walking, biking and using transit, and to discourage driving alone.
- **Street Operations Strategy 6** — Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.
- **Design Strategy 5** — Use street design to improve transit operations.





# STRATEGY 1

## Harness technological advancements for citywide benefits, ensuring newly adopted technologies support safe street operations and focus on human-centered design.

Increased pressure on our curb space, driven by an increase in land use density, e-commerce deliveries and new advanced mobility modes, is pushing us to manage our right of way in a more sophisticated manner. In order to serve changing customer needs and stay on track toward a low carbon future, we must price and allocate space based on our 2030 goals and priorities and the true value of the space.

The changes we are making to how our streets are designed and operated to accommodate these changes aims to encourage low carbon travel and keep a human focus on our streets. This strategy focuses on using technology to prioritize making walking, bicycling and taking transit easier and safer.

**Figure 93:** Transit Signal Priority provides transit a green first at the traffic signal, reducing delay



**When information is shared between vehicles, infrastructure and/or people, often through a device they carry, they are said to be “connected”.**

**Figure 94:** Repurposing space on 4th Street downtown



## ACTIONS

Actions to harness technological advancements for citywide benefits, ensuring newly adopted technologies support safe street operations and improve the safety and comfort of users.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.1</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Ensure newly adopted technologies and policies complement and enhance the existing public transportation system.</p>	Prosperity, Mobility	Medium
<p><b>DO ACTION 1.2</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Ensure that all emerging technology pilots adhere to the standards outlined in Technology Action 2.2. <i>See Technology Action 2.2</i></p>	Safety, Equity, Mobility	Low
<p><b>DO ACTION 1.3</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Convert street space for shared mobility services (either high occupancy motor vehicles or micromobility options) and other emerging technologies. These conversions should improve the quality of pedestrians or transit travel.</p>	Equity, Prosperity, Mobility	High
<p><b>DO ACTION 1.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Continue to offer Minneapolis as a testing ground for automated vehicle pilots and learn from other cities doing similar work. Pilots should only test a shared model of travel, such as shuttles, and adhere to Technology Action 2.2. <i>See Technology Action 2.2</i></p>	Mobility	Medium
<p><b>DO ACTION 1.5</b> 2024-2027 (YEARS 4-7)</p> <p>Evaluate impacts of automated vehicles on street design and signal operations and vice-versa, with specific emphasis on the safety of people walking, biking and taking transit, adjust guidance as necessary. <i>See Design Action 1.7</i></p>	Mobility	Medium
<p><b>DO ACTION 1.6</b> 2028-2030 (YEARS 8-10)</p> <p>Ensure traffic signal system compatibility with next generation communication systems through cellular or DSRC (dedicated short-range communication channels) and V2X (vehicle to infrastructure/vehicle/everything communications systems).</p>	Mobility, Active partnerships	High

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## ACTIONS (continued)

Actions to harness technological advancements for citywide benefits, ensuring newly adopted technologies support safe street operations and improve the safety and comfort of users.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.7</b> 2024-2027 (YEARS 4-7)</p> <p>Collaborate with partners to research and understand the feasibility of unmanned aerial vehicles (drones) operating in the urban context, including permitting, weather implications, data implications, privacy and local impacts such as noise pollution in federal regulatory decisions. <i>See Freight Action 7.1</i></p>	<p>Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 1.8</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Prepare for drones for delivery, as an inspection vehicle or for other means of advancing mobility in the city including removal of trips from the system. <i>See Freight Action 7.1</i></p>	<p>Safety, Prosperity, Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 1.9</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Incorporate elements in street reconstruction projects which support advanced mobility, such as electric vehicle charging infrastructure, protected micromobility lanes and designated spaces for pick up and drop off, including flex zones which change purpose by time of day, week or season.</p>	<p>Mobility</p>	<p>Medium</p>
<p><b>DO ACTION 1.10</b> 2020-2023 (YEARS 0-3)</p> <p>Implement Safe Vehicle actions from 2020-2022 Vision Zero Action Plan, focusing on:</p> <ul style="list-style-type: none"> <li>• Determining how advanced mobility options are shaping the safety of city streets and responding appropriately;</li> <li>• Piloting and managing emerging vehicle technologies with the potential to improve safety; and</li> <li>• Continuing to monitor safety on the City’s scooter share pilot and make adjustments to provider requirements, public education, or street design as appropriate.</li> </ul>	<p>Safety, Mobility</p>	<p>Medium</p>

*See Street Operations Action 2.1*

*continued on next page*





## ACTIONS (continued)

Actions to harness technological advancements for citywide benefits, ensuring newly adopted technologies support safe street operations and improve the safety and comfort of users.

### **SUPPORT ACTION 1.11**

2020-2023 (YEARS 0-3); ON-GOING

Support partners' research and develop recommendations for integrating and regulating privately operated, automated transit vehicles as well as employing them within government. [See Transit Strategy 1](#)

Safety, Mobility

Medium

### SEE ALSO STRATEGIES AND ACTIONS:

- **Walking Strategy 8** — Use technology to increase pedestrian visibility and comfort
- **Transit Action 2.8** — Effective bus-only lane operations
- **Freight Action 1.3** — Shared freight lockers
- **Freight Strategy 7** — Regulate new delivery technologies
- **Street Operations Strategy 5** — Price and manage the curb

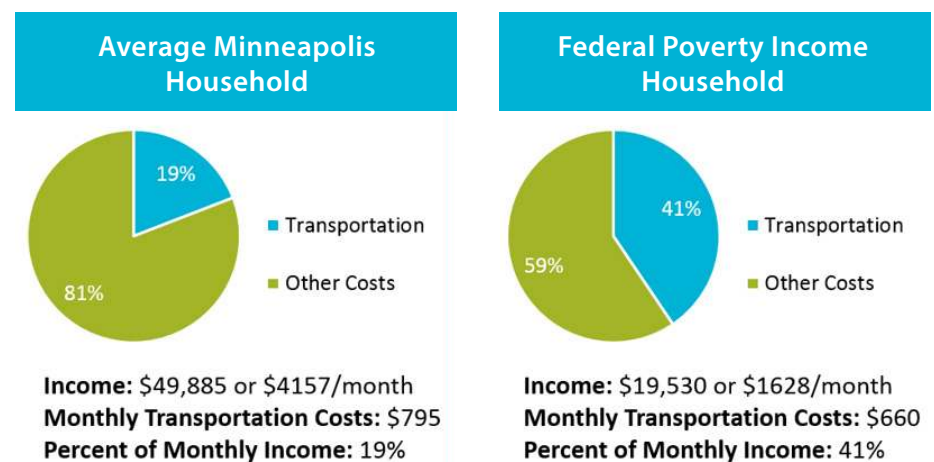


## STRATEGY 2

**Increase access to shared mobility services by removing the barriers of physical ability, geographic placement, language, payment methods, income and technology and digital literacy.**

Shared vehicles and services create options for people who do not have access to or choose not to have a private vehicle. Increasing access to shared fleets is important for shifting travel behaviors and maintaining affordability. The City is focused on ensuring full access to these shared mobility service options for those who could benefit most by removing barriers such as lack of a smartphone, bank account or a driver's license. By partnering with local organizations and other public agencies that are already working on access issues, we are leveraging resources to have the greatest impact.

Figure 95: Percentage of household income spent on transportation



Source: 2013 American Housing Survey; American Community Survey 2009-2013 (5 year estimates)

Figure 96: HOURCAR car sharing system







Figure 97: Nice Ride docked station







## ACTIONS

**Actions to increase access to shared mobility services by removing the barriers of physical ability, geographic placement, language, payment methods, income and technology.**

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Maintain and welcome an environment where bikeshare and micromobility options thrive and provide real mobility options and benefits. <i>See Technology Action 6.4, Bicycling Strategy 9</i></p>	<p>Climate, Equity, Prosperity, Mobility, Active partnerships</p>	<p>Medium</p>
<p><b>DO ACTION 2.2</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Include conditions in agreements with shared mobility service providers that require equitable access: low-price options, education and outreach about how to access services, geographic distribution with a focus in areas of concentrated poverty with majority people of color, non-English resources, non-smartphone access, ADA access to vehicles and services and multiple payment methods including options for the unbanked.</p>	<p>Equity, Active partnerships</p>	<p>Low</p>
<p><b>DO ACTION 2.3</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Work with public and private partners to standardize the low-income eligibility and registration process for shared mobility services.</p>	<p>Equity, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 2.4</b> 2024-2027 (YEARS 4-7)</p> <p>Work with shared mobility service providers to provide adaptive and different sized vehicles where possible and vehicles with additional storage and passenger capacity. <i>See Bicycling Action 9.1</i></p>	<p>Equity, Mobility, Active partnerships</p>	<p>Medium</p>
<p><b>DO ACTION 2.5</b> 2020-2023 (YEARS 0-3)</p> <p>Review existing validation requirements for alternatives to having a driver's license to operate shared mobility services where potentially feasible.</p>	<p>Equity</p>	<p>Medium</p>
<p><b>DO ACTION 2.6</b> 2024-2027 (YEARS 4-7)</p> <p>Evaluate the reintroduction of car sharing or similar model that allows for one-way trips and analyze city support for viability. <i>See Street Operations Action 5.8</i></p>	<p>Equity, Mobility, Active partnerships</p>	<p>High</p>



## ACTIONS (continued)

Actions to increase access to shared mobility services by removing the barriers of physical ability, geographic placement, language, payment methods, income and technology.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.7</b> <i>2024-2027 (YEARS 4-7)</i> Institute a process to consult with communities, grassroots coalitions and non-profits to evaluate existing services, envision and create new solutions to reduce barriers to shared mobility services that best suit the needs of low-income and underrepresented individuals.</p>	Equity, Prosperity Mobility, Active partnerships	<b>High</b>



## STRATEGY 3

### Formulate public-private partnerships to implement innovative, ambitious and scalable pilots.

Technology innovations in transportation are primarily being developed and deployed by the private sector; public agencies have the role of regulating and permitting their use on city streets as right of way managers. The partnerships with both the private sector and other public agencies are critical to our ability to deploy safe and successful pilots. All pilots are selected to help determine permanent advanced mobility implementations.

Mobility as a Service, the concept of a multimodal trip planning and payment as a subscription service through one virtual platform, presents a partnership opportunity. Working with regional partners such as Metro Transit, as well as private service and application providers, to enable the deployment of Mobility as a Service will help people take into account environmental, personal health, financial and time considerations when trip planning. Our approach allows for compatibility with mobility providers and utilizes open data to allow for multiple private platforms.

Financial incentives can change how people travel. This can benefit their health and the environment.

Another key opportunity for partnering regionally is to pilot and deploy mobility hubs. Mobility hubs are physical places where people can connect to multiple modes of transportation to make their trip as safe, convenient and reliable as possible. Most hubs are centered on transit connections, where multiple modes are available to extend the reach of transit. Bicycle and micromobility parking, car share vehicles and wayfinding and real time information are all potential components of mobility hubs.



Figure 98: Metro transit app on phone





Figure 99: Mobility hub visualization



Figure 100: Mobility hub



**Mobility hubs are places where people can connect to multiple modes of transportation to make their trip as safe, convenient and reliable as possible.**



## ACTIONS

Actions to formulate public-private partnerships to implement innovative, ambitious and scalable pilots.

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b> 2020-2023 (YEARS 0-3)</p> <p>Implement a network of mobility hubs in partnership with Metro Transit. Mobility hubs will be designed to connect transit with other shared mobility services such as bikeshare, scooter share and carshare. Mobility hubs will vary in scale based on context, space and viability and may have placemaking, vehicle charging and wayfinding features. <i>See Walking Action 8.1, Transit Strategy 5</i></p>	Mobility, Active partnerships	High
<p><b>DO ACTION 3.2</b> 2020-2023 (YEARS 0-3)</p> <p>Work with public and private partners and community-based organizations to evaluate future mobility hub locations and ensure that the geographic placement of mobility hubs prioritizes locations in ACP50 areas.</p>	Equity, Mobility, Active partnerships	Medium
<p><b>DO ACTION 3.3</b> 2024-2027 (YEARS 4-7)</p> <p>Collaborate with public and private partners to enable a virtual platform for accessing and paying for transit and shared mobility services, including a multimodal subscription package. <i>See Transit Strategy 5</i></p>	Equity, Prosperity, Mobility, Active partnerships	High
<p><b>DO ACTION 3.4</b> 2024-2027 (YEARS 4-7)</p> <p>Work with the Metropolitan Council and Metro Transit to expand app-based vanpool and carpool. <i>See Street Operations Strategy 4</i></p>	Climate, Prosperity, Mobility, Active partnerships	Medium
<p><b>DO ACTION 3.5</b> 2028-2030 (YEARS 8-10)</p> <p>Work with the Metropolitan Council and Metro Transit to pilot a microtransit service within Minneapolis and the greater Twin Cities region. <i>See Street Operations Strategy 4</i></p>	Equity, Mobility, Active partnerships	Medium

### SEE ALSO ACTIONS:

- **Transit Action 5.2** — On demand mobility services
- **Technology Action 7.3** — New technologies



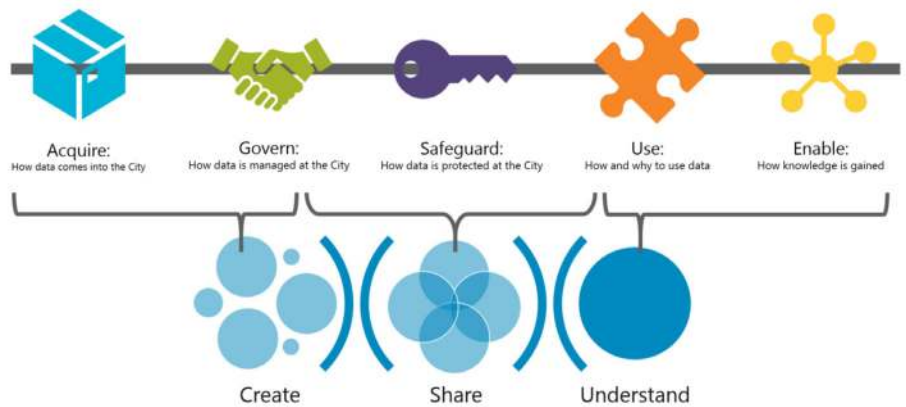
STRATEGY 4

**Require private shared mobility providers, including transportation network companies, to share data that supports the City’s ongoing transportation planning and operations work, with a focus on equity and access for all and minimizing greenhouse gas emissions.**

Access to trip and vehicle data can provide critical information for supporting management of the right of way and future planning of mobility options. Data can also support decision making around additional infrastructure and safety improvements and policy development to support mode shift and greenhouse gas reductions.

In line with the City’s Data Policy, the privacy and protection of user data is our top priority. In order to establish and communicate clear and consistent standards of data processing, the City developed a [Mobility Data Methodology and Analysis](#) that can be applied across mobility service providers. This allows the City to access, use and share data in a way which is safe, intentional and transparent.

Figure 101: City of Minneapolis data policy workflow







## ACTIONS

Actions to require private shared mobility providers, including transportation network companies, to share data that supports the City’s ongoing transportation planning and operations work, with a focus on equity and access for all and minimizing greenhouse gas emissions.

Actions	Supports	Difficulty
<b>DO ACTION 4.1</b> 2020-2023 (YEARS 0-3) Ensure that all data is fully aggregated and anonymized for the protection of users.	Equity, Active partnerships	Medium
<b>DO ACTION 4.2</b> 2020-2023 (YEARS 0-3) Require data from all shared mobility providers to further City goals that abides by the City’s Mobility Data Methodology and Analysis.	Active partnerships	Low
<b>DO ACTION 4.3</b> 2020-2023 (YEARS 0-3) Analyze data received to understand impacts to safety, trip behavior, equitable access and the environment.	Mobility, Active partnerships	Medium
<b>DO ACTION 4.4</b> 2024-2027 (YEARS 4-7) Work with public partners to establish a standardized process for data requests and a system to share data across agencies.	Active partnerships	Medium
<b>DO ACTION 4.5</b> 2024-2027 (YEARS 4-7) Create and publish fully anonymized and aggregated open data sets and public transparency dashboards. <i>See Technology Action 5.1</i>	Climate, Safety, Equity, Prosperity, Mobility, Active partnerships	Medium

### SEE ALSO ACTIONS:

- **Bicycling Action 11.2** — Requiring data sharing from micromobility service operators
- **Bicycling Action 11.3** — Survey of bicycle and micromobility users



# STRATEGY 5

## Build a culture of continuous improvement in knowledge, education and communications around new technologies that advance transportation options.

Many of the challenges in realizing greater adoption of shared fleets can be addressed through increased awareness and education of available services and how they work. Partnering with mobility service providers through requirements in agreements can help leverage more resources to increase awareness and understanding. Using feedback gathered through education and community engagement throughout our pilots will help us adjust our approach to planning and delivering mobility services.

**Figure 102:** Scooter safety Facebook/Instagram post from City of Minneapolis social media channel





## ACTIONS

Actions to build a culture of continuous improvement in knowledge, education and communications around new technologies that advance transportation options.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.1</b> 2020-2023 (YEARS 0-3)</p> <p>Create a City of Minneapolis webpage dedicated to new transportation technologies and systems, including information on shared, electric, connected and automated vehicle systems, as well as active pilots, projects and policies. The webpage should include an open data portal for information sharing. <a href="#">See Technology Action 4.5</a></p>	Mobility, Active partnerships	Low
<p><b>DO ACTION 5.2</b> 2024-2027 (YEARS 4-7)</p> <p>Partner with the public and private sector to develop a shared mobility curriculum, marketing and outreach programs for employers and employees to prioritize mode shift with transit as the backbone.</p>	Safety, Mobility, Active partnerships	Medium
<p><b>SUPPORT ACTION 5.3</b> 2020-2023 (YEARS 0-3)</p> <p>Utilize shared mobility operator partnership agreements to expand engagement and education efforts.</p>	Active partnerships	Low

### SEE ALSO ACTION:

- **Bicycling Action 10.4** — Adding bicycle and micromobility content to driver’s education





## STRATEGY 6

**Encourage and support electric vehicles by developing public charging stations and incentivizing private off-street stations; incentivize power sources from renewable generated electricity.**

While electric cars, trucks and buses will be important to reach climate goals, the adoption of electric vehicles alone will not get us to our goals. Prioritizing the shared element of advanced mobility is key to reduce dependency on automobiles and support walking, biking and transit.

Electric vehicle adoption is important to reduce greenhouse gas emissions, and we have seen hybrid and electric vehicles showing up in greater numbers on our streets – from electric buses, to personal cars, to shared scooters and bikes. It is estimated that by 2040, 55% of all new car sales will be electric.<sup>58</sup> Currently just 2.4% of the cars and trucks in Minneapolis area are hybrid or electric;<sup>59</sup> as this number grows, there is potential for transportation related greenhouse gas emissions to be reduced. Working in tandem with our vehicle miles traveled reduction goal and mode shift goal, this is an important part of meeting our overall climate goal.

**Figure 103:** Transit electric charging station – C Line



Source: Metro Transit

<sup>58</sup> Electric Vehicle Outlook: [2018 Bloomberg New Energy Finance](#) (2018)

<sup>59</sup> Driving Innovation, Auto Alliance (AA) (2018)



**Figure 104:** EV charging stations for bikes, scooters and cars

Source: Metro Transit





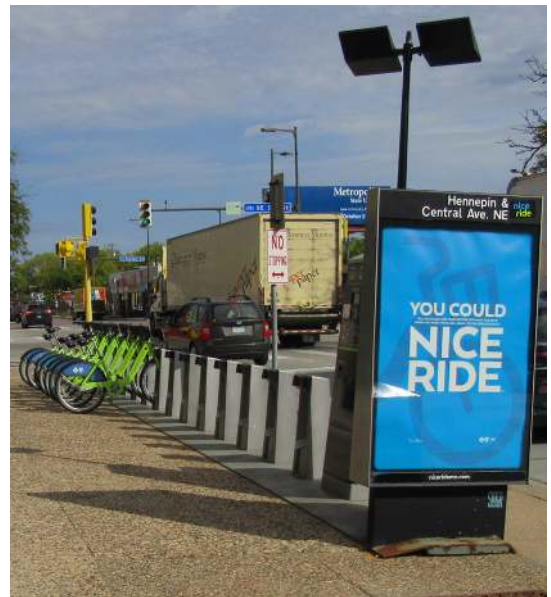
**Figure 105:** Electric vehicle charging stations in public right of way



**Figure 106:** City of Minneapolis electric fleet



**Figure 107:** Solar charging Nice Ride station





## ACTIONS

Actions to encourage and support electric vehicles by developing public charging stations and incentivizing off-street stations; incentivize power sources from renewable generated electricity.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.1</b> 2024-2027 (YEARS 4-7)</p> <p>Assess the projected demand and current supply of the electric vehicle charging network in the city and propose and implement additional charging locations in coordination with mobility hub locations.</p>	Climate, Mobility	Medium
<p><b>DO ACTION 6.2</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Ensure all public electric vehicle charging infrastructure is scalable to service multiple vehicle types – including shared cars, bicycles and scooters with minimal right of way space impacts; incentivize or support all private infrastructure to do the same. <i>See Bicycling Strategy 9</i></p>	Climate, Mobility	Low
<p><b>DO ACTION 6.3</b> 2024-2027 (YEARS 4-7)</p> <p>Implement renewable energy sourced charging stations (supplemental solar-powered) in place of hard-wired only electric charging stations.</p>	Climate	Low
<p><b>DO ACTION 6.4</b> 2020-2023 (YEARS 0-3)</p> <p>Encourage and incentivize the conversion of shared mobility fleets to electric in city agreements. <i>See Technology Action 2.1</i></p>	Climate	Low
<p><b>SUPPORT ACTION 6.5</b> 2020-2023 (YEARS 0-3)</p> <p>Partner with public and private entities for education and outreach campaigns which promote the benefits and operation of electric vehicles.</p>	Climate, Active partnerships	Low
<p><b>SUPPORT ACTION 6.6</b> 2020-2023 (YEARS 0-3)</p> <p>Work with the Department of Community Planning and Economic Development to require developers to build off-street electric vehicle charging stations in their developments if they include parking. <i>See Bicycling Action 9.5</i></p>	Climate, Active partnerships	Low





## ACTIONS (continued)

Actions to encourage and support electric vehicles by developing public charging stations and incentivizing off-street stations; incentivize power sources from renewable generated electricity.

**SUPPORT**

**ACTION 6.7**

2020-2023 (YEARS 0-3); ON-GOING

Support partner transit agencies as electric fleets are incorporated including expedited siting of charging locations. *See Transit Action 1.9*

Climate,  
Mobility, Active  
partnerships

Low

### SEE ALSO STRATEGY:

- Freight Strategy 4 — Transition fleets to zero-emissions technology



# STRATEGY 7

## Continue to develop internal resources capacity for advanced mobility initiatives.

The City is working actively to prepare for what may come. We work with public and private partners and cities around the world to adopt best practices and focus on being at the forefront of technological advancements occurring in transportation. In order to understand the new data and information that advanced mobility affords us, we are building internal capacity to ingest data, with dashboards, visualizations, new tracking tools and the digital mapping of the curb. We are committed to both stimulating innovation and maintaining control of the public right of way while increasing and protecting the safety and security of people using our streets.

Figure 108: Digital mapping of the curb





## ACTIONS

### Actions to develop internal resource capacity for advanced mobility initiatives.

Actions	Supports	Difficulty
<b>DO ACTION 7.1</b> 2020-2023 (YEARS 0-3) Develop a City multi-disciplinary team and funding mechanisms to facilitate advancing transportation technology and pilots in Minneapolis.	Mobility	Medium
<b>DO ACTION 7.2</b> 2020-2023 (YEARS 0-3) Launch a program to educate City staff, appointed and elected officials and stakeholders on advanced mobility topics.	Mobility, Active partnerships	Medium
<b>DO ACTION 7.3</b> 2024-2027 (YEARS 4-7) Create and publicize a refined process for businesses that want to test or deploy new technologies or services in the city.	Mobility, Active partnerships	High
<b>DO ACTION 7.4</b> 2028-2030 (YEARS 8-10) Implement a travel behavior study based upon shared mobility modes and seasonal impacts. <i>See Bicycling Action 11.3</i>	Climate, Mobility	Medium





# FREIGHT

## Manage Increased Freight Needs While Preserving the Street



As our city continues to grow and consumer choices continue to evolve, the demand for the movement and delivery of goods will also grow. In Hennepin County, freight tonnage is expected to increase by nearly 40% by the year 2040.<sup>60</sup> Additionally, the growth of e-commerce (purchases made online and delivered to homes and businesses) will continue to play an important role in the growing demands of goods movement. Nationally, package volume from the United States Postal Service has more than doubled in the past decade from 3.1 billion in 2010 to 6.2 billion in 2018.<sup>61</sup>

The increased demand for goods will also increase demands on our city streets. Technology plays a large role in how these goods are delivered; as cities and companies experiment with drones, delivery robots, delivery lockers and sophisticated algorithms to make deliveries more efficient, we will look to learn from and implement the best ideas. As the volume of freight moving through and to Minneapolis continues to grow, we need to be prepared to mitigate any negative impacts to safety, congestion and the environment.

Minneapolis 2040 established a freight policy which states the City will accommodate freight movement and facilities to support the local and regional economy.

**Nationally, package volume from the United States Postal Service has more than doubled in the past decade from 3.1 billion in 2010 to 6.2 billion in 2018.**

<sup>60</sup> [Hennepin County Public Works. Hennepin County Freight Study \(2016\)](#)

<sup>61</sup> [United States Postal Service \(2018\)](#). Includes Priority Mail, Priority Mail Express, First-Class Packages, Package Services, Parcel Return Service, and Parcel Select.

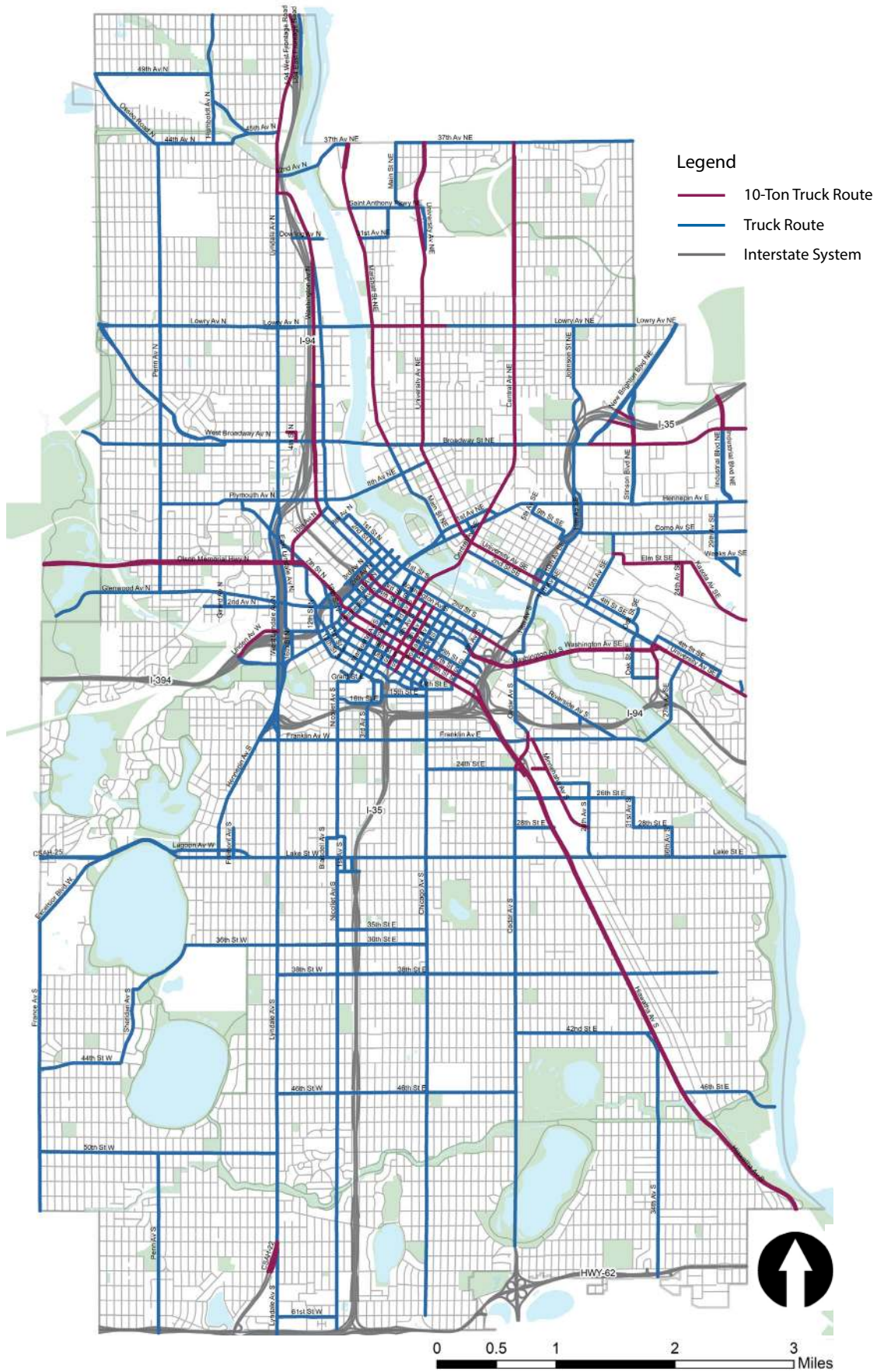
Figure 109: Types of freight







Figure 110: Truck route network







## FREIGHT STRATEGIES

- 1** Utilize land use tools to improve the efficiency of deliveries.
- 2** Improve the safety and efficiency of freight movements and integrate freight into the Complete Streets framework.
- 3** Provide freight operators with tools to better navigate the city.
- 4** Transition vehicle fleets to zero-emissions technology where technology allows.
- 5** Implement dynamic freight loading zones into citywide curbside management efforts.
- 6** Work with private sector and agency partners to guide and implement freight planning initiatives.
- 7** Regulate new delivery technologies that use the public right of way.
- 8** Develop a freight education program to educate the public and freight operators.

### SEE ALSO STRATEGY:

- Technology Strategy 6 — Develop and incentivize electric vehicle charging stations





## STRATEGY 1

### Utilize land use tools to improve the efficiency of deliveries.

Minneapolis 2040 outlined several important freight and land use actions including:

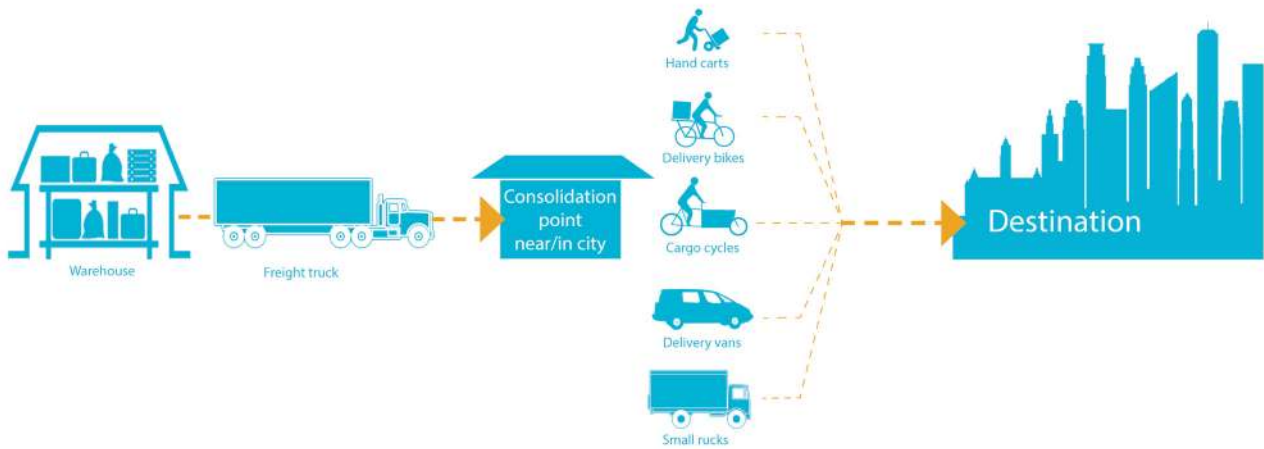
- A production and processing policy – which aims to expand and maintain areas for production, processing and distribution of products, services and ideas.
- Action items in that policy that link to transportation include:
  - Designate Production and Processing Areas that comprise large contiguous tracts of land historically used for industrial purposes, that are well-served by transportation infrastructure for both people and freight and that contain building stock suitable for production and processing businesses to expand access to higher wage job opportunities.
  - Prioritize use of land in Production and Processing Areas for production, processing and last mile distribution of products and services uses that have minimal or no air, water or noise pollution impacts and that provide quality living-wage jobs.
  - Improve transit, bicycle and pedestrian access to areas of employment, including Production and Processing Areas and Production Mixed Use Areas.
  - Develop guidance for future development in Production and Processing Areas and Production Mixed Use Areas served by regional transit lines in order to ensure a minimum level of development and job intensities.

The following actions further define land use tools that can be utilized to improve the efficiency of deliveries - through smaller loading zones, consolidating freight deliveries, minimizing time needed at the curb, better securing residential deliveries and linking delivery options with other transportation efforts like mobility hubs.

Figure 111: Delivery locker in street



Figure 112: Mini-consolidation center idea



## ACTIONS

Actions to utilize land use tools to improve the efficiency of deliveries.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.1</b> 2020-2023 (YEARS 0-3)</p> <p>Work with the Department of Community Planning and Economic Development to revise the Zoning Code to improve the efficiencies of onsite deliveries by updating onsite loading requirements for new developments.</p>	Prosperity, Mobility	Low
<p><b>DO ACTION 1.2</b> 2024-2027 (YEARS 4-7)</p> <p>Work with developers and property owners to develop small urban consolidation centers to break down loads and minimize the use of large vehicles for last mile deliveries, encouraging the use of low carbon modes like electric cargo bikes for final deliveries.</p>	Climate, Prosperity, Mobility, Active partnerships	Medium
<p><b>DO ACTION 1.3</b> 2020-2023 (YEARS 0-3)</p> <p>Pilot a shared locker system that can accommodate multiple e-commerce deliveries and is available to the public; focus on incorporating as component of mobility hub project. <i>See Technology Action 3.1</i></p>	Climate, Prosperity, Mobility, Active partnerships	Medium
<p><b>DO ACTION 1.4</b> 2024-2027 (YEARS 4-7)</p> <p>Use available tools and regulatory authority to coordinate delivery services for businesses in the same building or block, potentially including coordinating time of day, sharing delivery service providers and sharing use of loading dock space.</p>	Climate, Prosperity	High





## ACTIONS (continued)

### Actions to utilize land use tools to improve the efficiency of deliveries.

Actions	Supports	Difficulty
<b>DO ACTION 1.5</b> <i>2020-2023 (YEARS 0-3)</i> Coordinate with the Department of Community Planning and Economic Development to mandate that private developments design buildings to accommodate increased online package deliveries.	Prosperity, Active partnerships	Low
<b>DO ACTION 1.6</b> <i>2024-2027 (YEARS 4-7)</i> Investigate the feasibility of implementing a time restricted truck free zone, potentially through revisions to <a href="#">ordinance 486.50</a> , to create more restrictive requirements for large vehicle operations.	Climate, Equity, Prosperity, Mobility	High
<b>DO ACTION 1.7</b> <i>2020-2023 (YEARS 0-3)</i> Maintain and maximize the use of the existing commercial and residential alley network for deliveries, especially in commercial and business nodes.	Prosperity, Mobility	Low
<b>DO ACTION 1.8</b> <i>2020-2023 (YEARS 0-3)</i> Standardize a process to identify and mitigate loading and circulation impacts to nearby properties if an alley must be vacated.	Prosperity, Mobility	Low



## STRATEGY 2

### Improve the safety and efficiency of freight movements and integrate freight into the Complete Streets framework.

The City's Vision Zero Crash Study and subsequent analysis reviewed crashes that involved trucks between 2007 and September 2019. Data indicates that large trucks were involved in approximately 3.5% of severe and fatal crashes.<sup>62</sup> This strategy focuses on how we can more thoughtfully incorporate safety considerations into the systems that deliver goods throughout the city – through the planning and design of streets and better data collection. Through better data collection we can understand where and how often trucks of different sizes are using the system, so we can better accommodate and design appropriately along those streets as well as streets where there is not as much truck traffic. Understanding curbside space needs for loading and unloading goods and ensuring truck-related crashes on our system are well documented is an important action in pursuit of safe freight movements.

Several actions in this strategy focus on freight safety related concerns we heard through engagement for the TAP, specifically around carrying hazardous goods through the city. Currently, there are more than a dozen freight rail corridors that travel through the city. To date, there have been no crashes related to these corridors that have involved a car; data for crashes involving pedestrians or bicyclists is not available.

Figure 113: Truck unloading at curb



Figure 114: Truck unloading

<sup>62</sup> Minneapolis Public Works.



# ACTIONS

Actions to improve the safety and efficiency of freight movements and integrate freight into the Complete Streets framework.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b> 2020-2023 (YEARS 0-3)</p> <p>Add a section to the City’s Complete Streets Checklist regarding truck volumes and on-street loading data to evaluate and incorporate freight needs into street design process, without jeopardizing the safety and comfort of people walking, biking and taking transit. <i>See Street Operations Action 1.1</i></p>	Safety	Medium
<p><b>DO ACTION 2.2</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>In instances when the Truck Route Network overlaps with the All Ages and Abilities Network, the Street Design Guidance should focus on providing physical separation of the bikeway. <i>See Bicycling Action 1.2 and Design Strategy 1</i></p>	Safety, Mobility	Low
<p><b>DO ACTION 2.3</b> 2024-2027 (YEARS 4-7)</p> <p>Incorporate a data traffic count collection effort to gain insight into the volume of vehicle and non-vehicle freight activity occurring within the city; include commercial vehicles and classification by type.</p>	Safety, Mobility	Medium
<p><b>DO ACTION 2.4</b> 2024-2027 (YEARS 4-7)</p> <p>Advocate for revisions to Municipal State Aid rules (Sections 9936, 9941, 9946, 9951 in Chapter 8820) to allow greater flexibility for State Aid Cities to use smaller design vehicles in the designs of streets on the State Aid system. <i>See Design Action 6.2</i></p>	Safety	Medium
<p><b>DO ACTION 2.5</b> 2024-2027 (YEARS 4-7)</p> <p>Collaborate with the Minnesota Department of Transportation Rail Safety and Coordination Office to review freight rail risk factors data and crash data for all modes to identify rail grade crossing locations to improve.</p>	Safety, Active partnerships	Medium





## STRATEGY 3

### Provide freight operators with tools to better navigate the city.

A key part of this strategy is to update the 2002 Truck Route Network (Figure 110). The purpose of this network is to designate routes for trucks to travel based upon their trip purpose (across town or across the country) and serve as an input in future roadway redesigns. The network will be an overlay in the Street Design Guide so that designers are directed to consider freight demands when designing future roadway projects. The Truck Route Network will be updated in coordination with Minneapolis 2040 future land uses and freight truck volume data and comparing against routes established in the current Truck Route Map. The updated network will provide guidance to where trucks should travel unless otherwise impractical (typically for the last few blocks of a delivery).

Maintaining and updating the Truck Route Network as freight volumes change over time helps planners, designers and managers of the street network keep decisions and impacts to freight a key part of street design and operation conversations.

Figure 115: Street with truck traffic





## ACTIONS

Actions to provide freight operators with tools to better navigate the city.

Actions	Supports	Difficulty
<b>DO ACTION 3.1</b> 2020-2023 (YEARS 0-3) Adopt an update to the 2002 Truck Route Network; reduce the proportion of the network within areas of concentrated poverty with majority people of color to reduce disproportionate impacts in these neighborhoods.	Climate, Safety, Equity, Prosperity, Mobility	Medium
<b>DO ACTION 3.2</b> 2020-2023 (YEARS 0-3) Provide the Truck Route Network on the City's website; publish it through an API. <i>See Technology Action 4.5</i>	Prosperity, Mobility	Low
<b>DO ACTION 3.3</b> 2020-2023 (YEARS 0-3) Revise the <a href="#">Trucks and Truck Routes ordinance</a> to align with the planning goals of this action plan.	Climate, Safety, Equity, Prosperity, Mobility	Low
<b>DO ACTION 3.4</b> 2024-2027 (YEARS 4-7) Communicate live construction detour information affecting truck routes through the City's website, an API and other communications outlets. <i>See Technology Action 4.5</i>	Prosperity, Mobility	Low
<b>SUPPORT ACTION 3.5</b> 2024-2027 (YEARS 4-7) Support regional and statewide agencies in their freight planning efforts to install intelligent transportation systems (ITS) and other wayfinding or real-time signage information.	Mobility, Active partnerships	Low

An API stands for application programming interface; APIs are an interface that allows apps to take functionality and data from other apps.





**Figure 117:** Low emission zone

**Transition vehicle fleets to zero-emissions technology where technology allows.**

Transportation emissions account for 24% of the greenhouse gas emissions in the city.<sup>63</sup> Nationally, light-duty vehicles, which include passenger cars and light-duty trucks, account for 59% of greenhouse gas emissions from the transportation sector, while medium- and heavy-duty trucks account for 23%.<sup>64</sup>

Working to mitigate the impact of freight-related greenhouse gas emissions, including freight delivered via small vehicles is an important part of reaching our climate goals. Evaluating and working to make bicycles, delivery trikes and other small electric vehicles more attractive for deliveries is part of the work to lower greenhouse gas emissions coming from freight.

The current idling policy under Title 3 of the Minneapolis Code of Ordinances, Air Pollution and Environmental Protection, sets limits for idling in loading and unloading zones, exceptions to those limits, and associated penalties. Ensuring compliance with the policies we have in place is critical to minimizing air pollution and protecting air quality.

**Figure 116:** Cargo delivery bike



<sup>63</sup> City of Minneapolis Greenhouse Gas emissions data, Office of Sustainability.

<sup>64</sup> [EPA Office of Transportation and Air Quality](#)





# ACTIONS

Actions to transition vehicle fleets to zero-emissions technology where technology allows.

Actions	Supports	Difficulty
<b>DO ACTION 4.1</b> 2024-2027 (YEARS 4-7) Identify locations along the Truck Route Network to install electric charging stations.	Climate, Mobility	Low
<b>DO ACTION 4.2</b> 2024-2027 (YEARS 4-7) Evaluate the establishment of a Low Emission Zone(s) which would only allow trucks that meet certain emissions standards to enter.	Climate, Equity	High
<b>DO ACTION 4.3</b> 2020-2023 (YEARS 0-3) Evaluate the City’s idling policy for commercial vehicles ( <a href="#">ordinance 58.30</a> ) to reduce the current idling duration.	Climate, Equity	Medium
<b>SUPPORT ACTION 4.4</b> 2024-2027 (YEARS 4-7) Facilitate and expand bicycle, courier and small truck deliveries.	Climate, Prosperity	Low

## SEE ALSO STRATEGY:

- **Technology Strategy 6** — Develop and incentivize electric vehicle charging stations



# STRATEGY 5

## Implement dynamic freight loading zones into citywide curbside management efforts.

The loading and unloading of goods is a critical function in the city. Every business, whether it is a coffee shop, restaurant, small manufacturer or office – has deliveries. While some businesses have off-street parking lots, below ground loading docks or loading bays, many businesses rely on the curb in front or the alley behind their establishment to be able to receive goods. This demand for loading zones also applies to the personal delivery of packages from online vendors or food delivery services.

This strategy focuses on laying out a path to better understand freight-related curbside demands, experimenting with how to best accommodate them, and implementing mechanisms that better manage curbside freight demands in balance with other competing curbside demands.



Figure 120: Alley in commercial area for freight delivery

Figure 118: Truck unloading



Figure 119: Time restricted loading zone





## ACTIONS

Actions to implement dynamic freight loading zones into citywide curbside management efforts.

Actions	Supports	Difficulty
<b>DO ACTION 5.1</b> 2024-2027 (YEARS 4-7) Investigate freight loading zone demand and supply.	Prosperity	Medium
<b>DO ACTION 5.2</b> 2024-2027 (YEARS 4-7) Identify high intensity delivery zones in the city.	Prosperity	Medium
<b>DO ACTION 5.3</b> 2024-2027 (YEARS 4-7) Document all private loading bays and alleys within the city to assess where gaps in loading zones exist, supplementing existing curbside and private loading areas data. <i>See Street Operations Action 5.12</i>	Prosperity, Mobility, Active partnerships	Medium
<b>DO ACTION 5.4</b> 2028-2030 (YEARS 8-10) Procure and study e-commerce delivery data to supplement field collection efforts in partnership with others.	Prosperity, Mobility, Active partnerships	High
<b>DO ACTION 5.5</b> 2020-2023 (YEARS 0-3) Pilot multiple locations to implement dynamic curb pricing for on-street deliveries and other curbside needs. <i>See Street Operations Action 5.2</i>	Prosperity, Mobility	Medium





## STRATEGY 6

### Work with private sector and agency partners to guide and implement freight planning initiatives.

There are multiple partnership opportunities that will help advance the City’s work in this area. Opportunities include joining already established networks to collaborate regionally on what is a regional, state and national-scoped network. Supporting academic or state-sponsored freight research projects help tie City-specific concerns with the larger regional and interstate nature of freight goods movement.

Figure 121: Nighttime delivery zone



Figure 122: Amazon Prime delivery van





## ACTIONS

Actions to work with private sector and agency partners to guide and implement freight planning initiatives.

Actions	Supports	Difficulty
<b>DO ACTION 6.1</b> 2020-2023 (YEARS 0-3); ON-GOING Participate in the Minnesota Freight Advisory Committee to collaborate with regional partners to solve freight related issues.	Active partnerships	Low
<b>DO ACTION 6.2</b> 2024-2027 (YEARS 4-7) Partner with academic institutions, government agencies and private sector businesses to research freight urban logistics, including last mile connections and curb-to-door delivery.	Active partnerships	Medium
<b>DO ACTION 6.3</b> 2024-2027 (YEARS 4-7) Partner with academic institutions, government agencies and private sector businesses to assess the impacts of e-commerce deliveries in neighborhoods to determine if actions are needed to mitigate impacts.	Active partnerships	Medium
<b>DO ACTION 6.4</b> 2020-2023 (YEARS 0-3); ON-GOING Engage with independent freight owners/operators and unions to better plan for freight movement and solve potential freight related issues.	Prosperity, Active partnerships	Medium
<b>DO ACTION 6.5</b> 2020-2023 (YEARS 0-3) Evaluate the option of coupling a pricing mechanism with off-peak loading incentives.	Prosperity, Active partnerships	Medium
<b>DO ACTION 6.6</b> 2020-2023 (YEARS 0-3) Develop an off-hours delivery pilot to incentivize non-peak delivery times.	Prosperity, Active partnerships	Medium





## STRATEGY 7

### Regulate new delivery technologies that use the public right of way.

In cities around the country we've seen delivery robots, drone delivery and other creative, more efficient ways of redefining the delivery of goods to doorsteps, lockers or businesses. With more automation, delivery trucks full of packages could be out for delivery at any hour of the day or night. Planning for these new technologies and developing agreements with providers to ensure the operators are aligned with our transportation goals is critical. Managing the curb is another important part of how changing delivery options will operate on our streets.

Figure 123: Delivery bot uses public sidewalk to deliver goods



Figure 124: Autonomous delivery locker

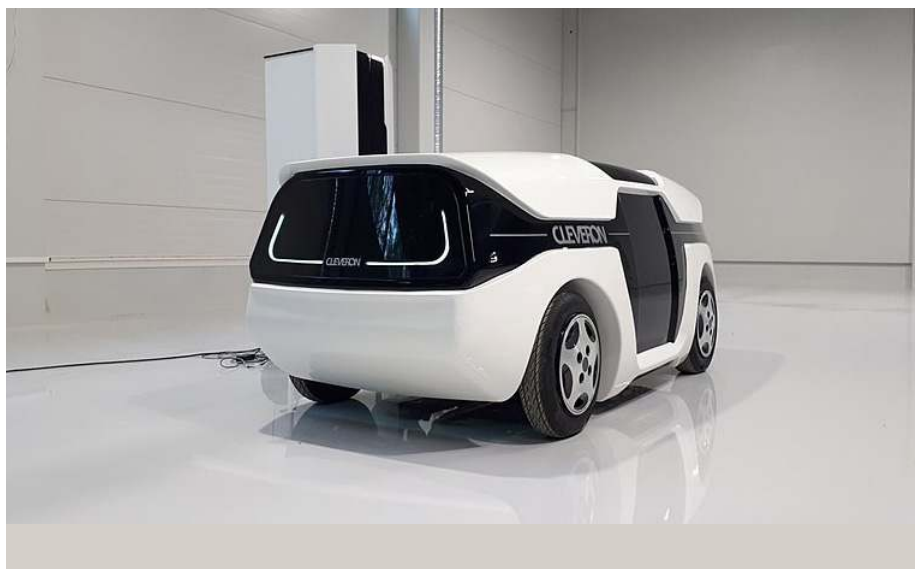


Figure 125: Delivery drone





## ACTIONS

Actions to regulate new delivery technologies that use the public right of way.

Actions	Supports	Difficulty
<p><b>DO ACTION 7.1</b> 2028-2030 (YEARS 8-10)</p> <p>Manage autonomous delivery in the right of way (vehicles, drones, sidewalk robots and other emerging technologies) by establishing agreements with service providers to ensure that their operations align with the City of Minneapolis transportation goals. <i>See Technology Action 1.2, Technology Action 1.4</i></p>	Prosperity, Active partnerships	Medium
<p><b>DO ACTION 7.2</b> 2028-2030 (YEARS 8-10)</p> <p>Expand standard data sharing requirements to all automated modes; write into regulation the creation of APIs for transmission of fleet data for delivery services. <i>See Technology Strategy 4</i></p>	Prosperity, Active partnerships	Medium
<p><b>DO ACTION 7.3</b> 2024-2027 (YEARS 4-7)</p> <p>Develop City policy and standards to ensure that technology-related guidance impacting freight movement, including autonomous vehicle, drones and delivery bots, integrate into city streets and align with City goals; work with agency partners to ensure compatibility across jurisdictions.</p>	Safety, Prosperity, Mobility, Active partnerships	Medium

### SEE ALSO ACTIONS:

- **Technology Action 1.7** — Research unmanned aerial vehicles (drones) permitting and local impacts
- **Technology Action 1.8** — Proactively prepare for freight drone activity



## STRATEGY 8

### Develop a freight education program to educate the public and freight operators.

Education about the Truck Route Network is essential for making it useful. Having an informed driver population that understands which streets are more accommodating to larger freight vehicles will help deliveries run more smoothly, and keep drivers and others using our streets know where to expect potential truck traffic. Thinking about how to develop and communicate an education program that explains the goals, rationales and expectations of freight delivery in the city is needed to better partner with freight operators and business owners.

On the public side, ensuring residents understand truck operating norms and limitations is helpful to promote safe behavior around large vehicles. Events like 'behind the big wheel' that has occurred at Open Streets helps bicyclists and pedestrians experience the vantage point from a large truck and where harder to see spots exist.

**Figure 126:** Truck navigates a local street alongside a bicyclist





## ACTIONS

Actions to develop a freight education program to educate the public and freight operators.

Actions	Supports	Difficulty
<b>DO ACTION 8.1</b> <i>2028-2030 (YEARS 8-10)</i> Develop an urban delivery handbook to help businesses and operators better understand the rules and regulations regarding the delivery of goods within the city.	Safety, Active partnerships	Medium
<b>DO ACTION 8.2</b> <i>2024-2027 (YEARS 4-7)</i> Collaborate with partners to educate truck drivers on City regulations, the Truck Route Network and online resources. <i>See Freight Action 3.1, Freight Action 3.2</i>	Safety, Active partnerships	Medium
<b>DO ACTION 8.3</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Partner with others to host demonstrations at public events such as Open Streets to educate the public about safety around large vehicles.	Safety, Active partnerships	Low





# STREET OPERATIONS

## Improve Street Operations and Address Competing Demands



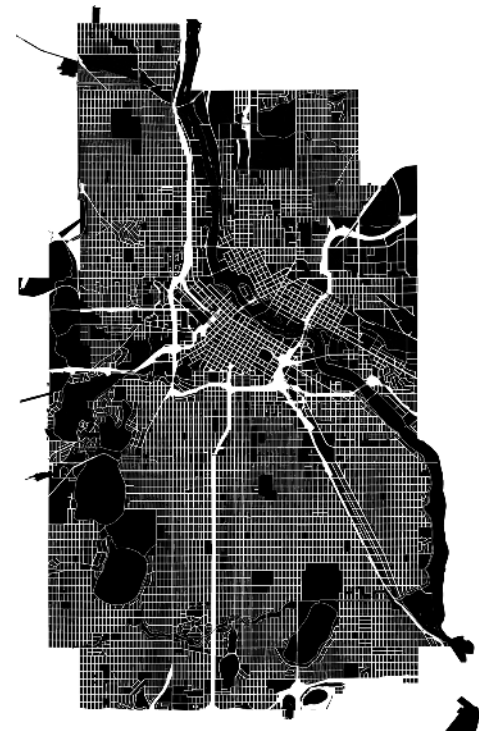
Minneapolis is experiencing record-setting growth; 2018 will be the seventh year in a row that the city has seen over \$1 billion in new development.

Figure 127: The public right of way comprises 22% of our land area and is held in trust for public benefit

The public right of way, often referred to as our streets, comprises almost a quarter of the land area in the city<sup>65</sup> and refers to what many people consider the street, boulevard and sidewalk up to the private property line. The City holds this land in trust for the public good. The public right of way on any one street is limited and planning for the safe and efficient movement of people and goods within this confined space requires balancing many demands.

As growth occurs throughout the city, there is increasing need for more walkable and livable communities. Minneapolis is experiencing record-setting growth; 2018 will be the seventh year in a row that the city has seen over \$1 billion in new development.<sup>66</sup> Adapting our streets to respond to this growth within limited right of way requires a future-flexible transportation system that embraces innovative and more efficient ways to move people and goods throughout the city.

A transportation system that works for everyone regardless of ability or income will offer multiple options for getting around safely and comfortably. Achieving this balance takes a people first approach. The Street Operations topic clarifies how the [Complete Streets Policy](#), commitment to [Vision Zero](#) and [climate goal](#) come together into daily operations and systems planning.



<sup>65</sup> City of Minneapolis Parcel, Parks, and Waterway Data

<sup>66</sup> Building Value of Work, City of Minneapolis Department of Community Planning and Economic Development (2018)



## STREET OPERATION STRATEGIES

- 1** Update the City's Complete Streets Policy.
- 2** Use quick-build tools to eliminate traffic related deaths and severe injuries on city streets.
- 3** Plan for efficient and practical operations of people walking, biking and taking micromobility options or transit throughout the street design process.
- 4** Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.
- 5** Price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.
- 6** Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.
- 7** Align traffic signal operations with the Complete Streets Policy.
- 8** Coordinate with agency partners who own, operate and manage infrastructure within the City to plan, build and operate at the City's standards.
- 9** Manage street detours in line with Complete Streets Policy.





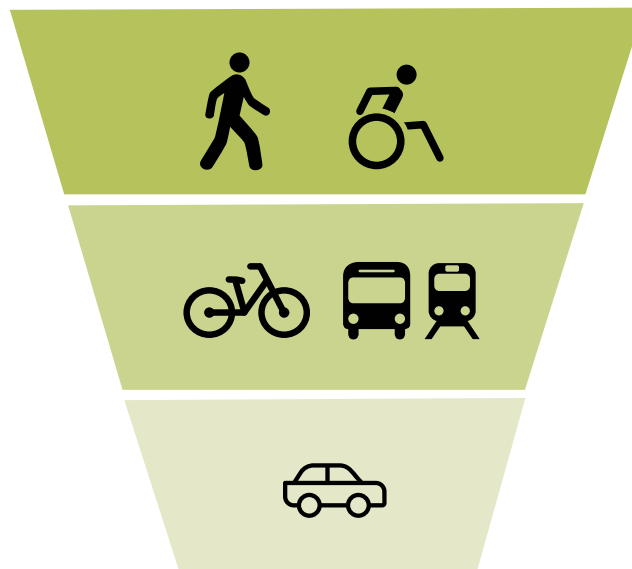


# STRATEGY 1

## Update the City's Complete Streets Policy.

The City adopted a [Complete Streets Policy](#) in 2016 that has successfully driven the design and operations of numerous streets in the city since its passage. Given the pace of change on our streets, we recognize the need to update the policy to incorporate more fully the complex and often competing needs within the right of way.

Figure 128: Complete Streets hierarchy



### ACTIONS

Actions to update the City's Complete Streets Policy.

Actions	Supports	Difficulty
<b>DO ACTION 1.1</b> 2020-2023 (YEARS 0-3) Incorporate freight, micromobility and green infrastructure into the City's existing Complete Streets Policy. <i>See Freight Action 2.1, Design Strategy 4</i>	Climate, Safety, Equity, Prosperity, Mobility, Active partnerships	<span style="background-color: #c48e3a; color: white; padding: 2px 5px;">Medium</span>





## STRATEGY 2

### Use quick-build tools to eliminate traffic related deaths and severe injuries on city streets.

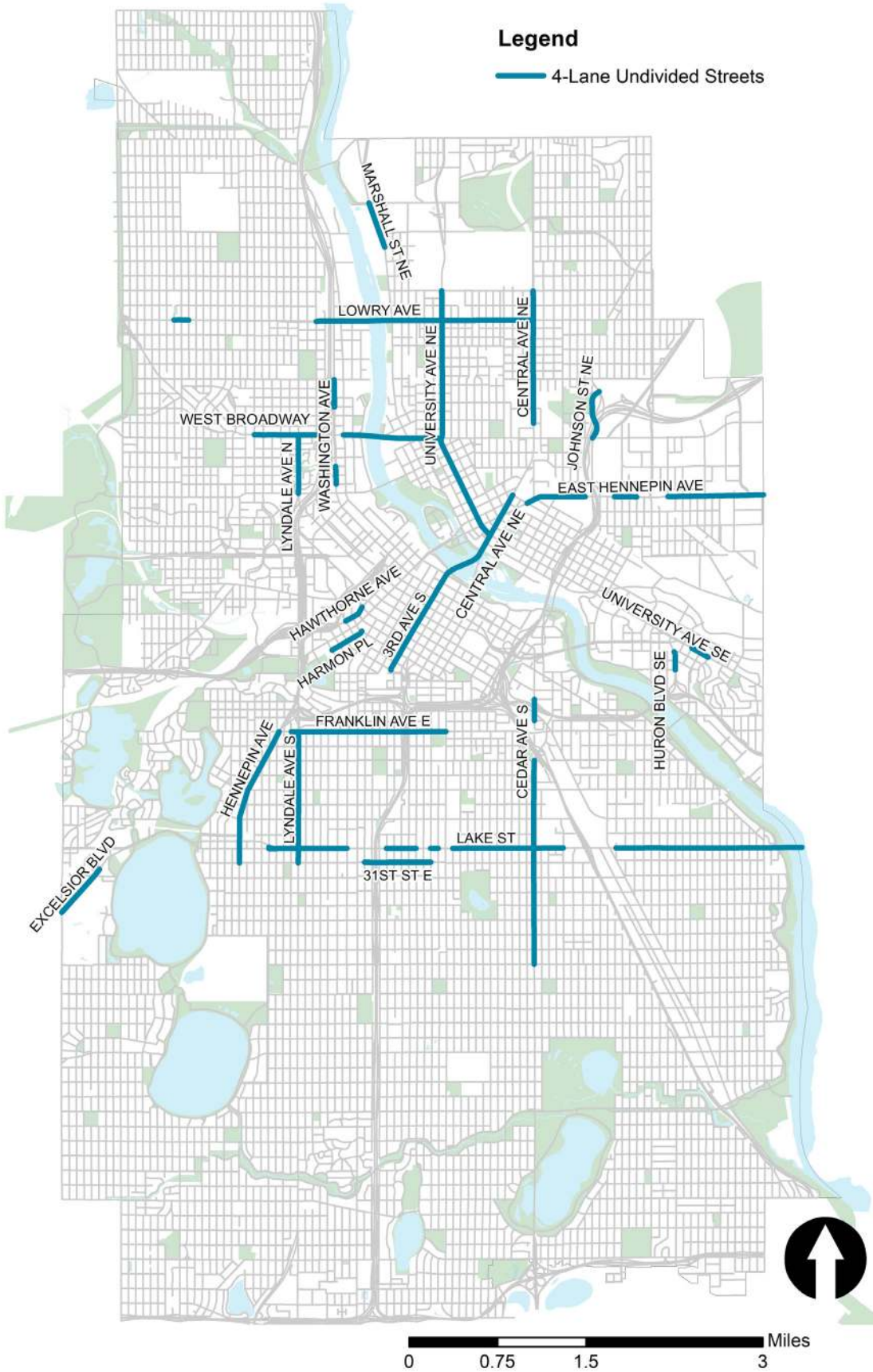
The City is committed to eliminating death and severe injuries on our streets by 2027. The City has a 2020-2022 Vision Zero Action Plan which outlines strategies and specific actions to get us closer to that goal. The way streets operate have a huge impact on safety for all modes; this strategy acknowledges the deep connection between street operations and Vision Zero without duplicating the Vision Zero Action Plan.

Figure 129: Reconfiguring space on W 15th Street near Loring Park





Figure 130: 4 lane undivided streets in Minneapolis





## ACTIONS

Actions to use quick-build tools to eliminate traffic related deaths and severe injuries on city streets.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b>            2020-2023 (YEARS 0-3)            Complete all Safe Streets strategies and actions in the Vision Zero Action Plan and any updates of the 2020-2022 plan, with a focus on reducing speeds, reconfiguring road space to support safer travel and encourage more people to walk, bike and take transit and install safety improvements at intersections along High Injury Streets.  <a href="#">See Technology Action 1.11</a></p>	Safety	High
<p><b>DO ACTION 2.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Prepare final evaluation of 4-lane undivided streets for safety conversions; potential design solutions include 4-to-3 lane conversions. Current 4-lane undivided streets for evaluation include:</p> <ul style="list-style-type: none"> <li>• Lyndale Ave N between Plymouth Ave and West Broadway</li> <li>• Hennepin Ave S between Franklin Ave and 31st St</li> <li>• 3rd Ave S between 1st St S and 12th St S</li> <li>• 31st St E between 1st Ave S and Park Ave</li> <li>• Harmon Pl between Spruce Pl and 10th St S</li> <li>• Johnson St NE between Broadway Ave NE and I-35W freeway entrance ramp</li> <li>• Huron Blvd SE between Fulton St SE and Delaware St SE</li> <li>• Hawthorn Ave from 8th St to 11th St</li> <li>• Lowry Ave N between Queen Ave N and Oliver Ave N and Lowry Avenue N and NE between 4th St N and Central Ave NE</li> <li>• Broadway Ave N and NE segments between Fremont Ave N and University Ave NE</li> <li>• Washington Ave N segments between 14th Ave N and 26th Ave N</li> <li>• Lyndale Ave S between Franklin Ave and 31st St</li> <li>• Cedar Ave S between 24th St and 38th St and between 7th St S and 9th St S</li> <li>• Franklin Ave between Aldrich Ave S and Chicago Ave</li> <li>• Lake St segments between Dupont Ave and West River Pkwy</li> <li>• Excelsior Blvd between France Ave and Abbott Ave S</li> <li>• University Ave SE segments between Oak St SE and St. Mary's Ave SE</li> <li>• Marshall St NE from 30th Ave NE to St. Anthony Pkwy</li> <li>• Hennepin Ave E segments between 8th St SE and 33rd Ave SE</li> <li>• Central Ave NE segments between 2nd St SE and 27th Ave NE</li> <li>• University Ave NE and SE between Central Ave and 27th Ave NE</li> </ul>	Climate, Safety, Equity, Prosperity, Mobility, Active partnerships	High





## ACTIONS (continued)

Actions to use quick-build tools to eliminate traffic related deaths and severe injuries on city streets.

Actions	Supports	Difficulty
<b>DO ACTION 2.3</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Evaluate the reconfiguration of 3-lane one-way streets to reduce travel lanes or add alternative uses.	Safety, Mobility	Low
<b>DO ACTION 2.4</b> <i>2020-2023 (YEARS 0-3); ON-GOING</i> Provide year-round maintenance for quick-build safety improvements, including replacement of bollards and striping.	Safety, Mobility	Medium

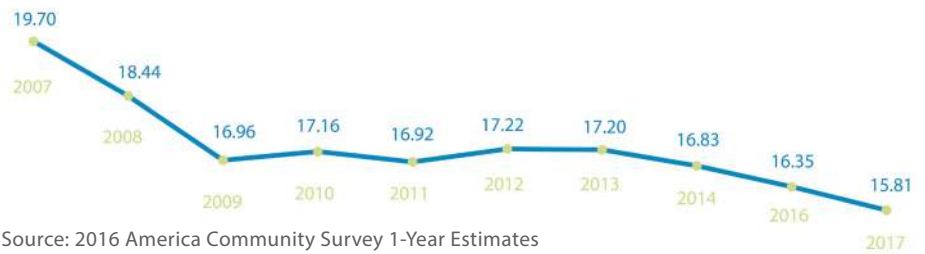


STRATEGY 3

**Plan for efficient and practical operations of people walking, biking and taking micromobility options or transit throughout the street design process.**

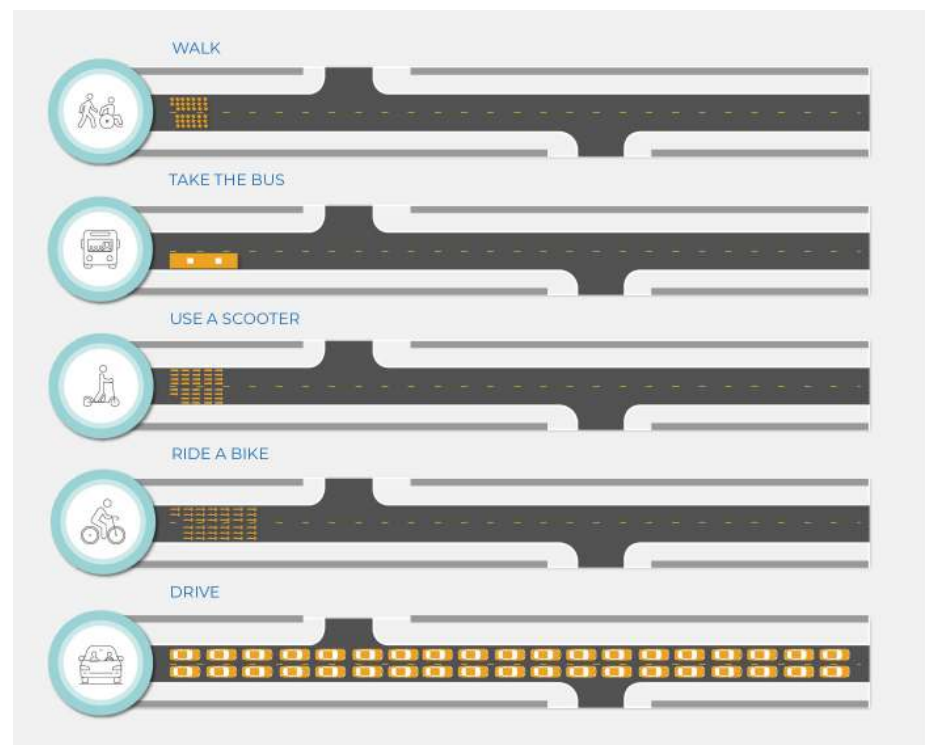
Minneapolis has a 2030 mode shift goal of getting to 35% of all trips walking, biking or micromobility, 25% transit (including school bus) and 20% each of multi-occupancy vehicle and driving alone. To get there we need to plan, design and construct streets that provide more options for people to travel more efficiently and make it more convenient for people to make those choices. By pushing back on pre-determined growth in vehicular trips when performing traffic analyses and measuring level of service from a motor vehicle point of view we can ensure a people first future versus continuing a car first approach. The approach in this strategy is to focus street operational and design decisions on daily people throughput without letting the peak vehicular travel hour drive decisions.

**Figure 131: Vehicle miles traveled per capita**



Source: 2016 America Community Survey 1-Year Estimates

**Figure 132: Street space needed for 38 people to travel 5 different ways**





## ACTIONS

Actions to plan for efficient and practical operations of people walking, biking and taking micromobility options or transit throughout the street design process.

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Plan and design for zero or decreasing motor vehicle trip growth and positive growth in other modes for trip forecasting for street projects where the City is the primary implementer. Work with project partners to encourage this approach in project planning when the City is a partner versus a lead.</p>	Climate, Mobility	Medium
<p><b>DO ACTION 3.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Discontinue the use of vehicular level of service except where necessary to meet funding, legislative or other jurisdictional requirements. <i>See Walking Action 2.7</i></p>	Mobility	Medium
<p><b>DO ACTION 3.3</b>            2020-2023 (YEARS 0-3)            Advocate to use potential for mode shift and non-motorized counts as evaluation measures in Regional Solicitation applications.</p>	Mobility, Active partnerships	Medium
<p><b>DO ACTION 3.4</b>            2024-2027 (YEARS 4-7)            Update the City's assessment policy for street projects to better reflect City policies on complete streets and equity.</p>	Equity, Prosperity, Mobility	High
<p><b>DO ACTION 3.5</b>            2020-2023 (YEARS 0-3); ON-GOING            Oppose freeway expansion within the city, to not repeat the historic harm it has caused in dividing communities and creating barriers, particularly for poorer neighborhoods and in communities of color.</p>	Climate, Safety, Equity, Prosperity, Mobility	Medium

Level of service is a traditional transportation engineering performance indicator that measures level of delay for motor vehicles through an intersection.





STRATEGY 4

**Leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.**

The actions listed in this strategy support the work of others in the region who work to promote mode shift to transit, walking and biking downtown in particular and beyond. The actions also speak to the City’s transportation demand management strategies which focus on helping people make the decision and use existing infrastructure to walk, bike or take micromobility or transit options.

Travel Demand Management Plans are tools that help to ensure new development accurately plans for travel patterns in line with City goals. Travel Demand Management Plans are required by ordinance for all non-residential development containing 100,000 square feet or more of new or additional gross floor area to address the transportation impacts of the development on air quality, parking and roadway infrastructure. Travel Demand Management Plans are reviewed by Public Works and the Department of Community Planning and Economic Development staff.

Figure 133: #MoveLikeABoss campaign by Move Minneapolis





## ACTIONS

Actions to leverage City resources and partnerships to promote, educate and encourage walking, biking and transit as alternatives to driving.

Actions	Supports	Difficulty
<p><b>DO ACTION 4.1</b> 2024-2027 (YEARS 4-7) Explore efforts to contract with Move Minneapolis to expand work on mode shift to include larger employment areas outside of downtown.</p>	Climate, Mobility, Active partnerships	Medium
<p><b>DO ACTION 4.2</b> 2020-2023 (YEARS 0-3) Update Travel Demand Management Plan requirements in the Zoning Code to apply to more development projects than they do currently, to address mode split goals and traffic growth rates, Metropass participation and mandatory self-reporting audits that occur every two years as well as any additional monitoring needed to improve safety.</p>	Climate, Safety, Mobility, Active partnerships	Medium
<p><b>DO ACTION 4.3</b> 2020-2023 (YEARS 0-3) Work with community and agency partners to enhance communication practices about the importance of walking, biking and using transit for citywide events.</p>	Mobility, Active partnerships	Low
<p><b>SUPPORT ACTION 4.4</b> 2020-2023 (YEARS 0-3) Partner with Move Minneapolis to recruit downtown employers and property owners to increase walking, biking and transit use among their employees and residents.</p>	Climate, Mobility, Active partnerships	Medium





**STRATEGY 5**

**Price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.**

During public engagement, we asked a question about ranking the importance of uses typically accommodated along the curb. The results show that people understand the multiple demands for curbside use beyond the typical parking uses. All these uses, and the careful consideration of the opportunity cost of the curb, are necessary to evaluate when implementing new ways of managing the curb.

Past decisions have rendered much of the public right of way available for the travel and storage of private vehicles at little cost, the increasing demands and opportunities for the space forces the City to reconsider how this space is allocated and accessed. How space is allocated, what access exists for who and at what cost, will guide the use of the City’s streets.

Minneapolis has 8,330 on-street metered parking spaces that are priced for at least part of the day.<sup>67</sup> Approximately 32 miles, or 3% of the miles in the city are metered. Comprehensively evaluating the opportunity to extend where and how curbs are priced through modernized ordinances is a specific action outlined below with a large potential to align practices more accurately with our transportation goals and Complete Streets Policy.

Cornerstone to this strategy is the development of a curbside management policy. The City will manage the curb in a way that reflects our goals and supports advancements in mobility. A concrete way this will happen is to create flexible curbside space for different uses, including loading and unloading of people (on transit or in shared or private cars) and goods, storage of all types of vehicles and mobility spaces (transit and bike lanes).



**Figure 136:** Curbside use reserved for bike corral

**Figure 134:** Parklets use curbside space to extend sidewalk



<sup>67</sup> Minneapolis Parking

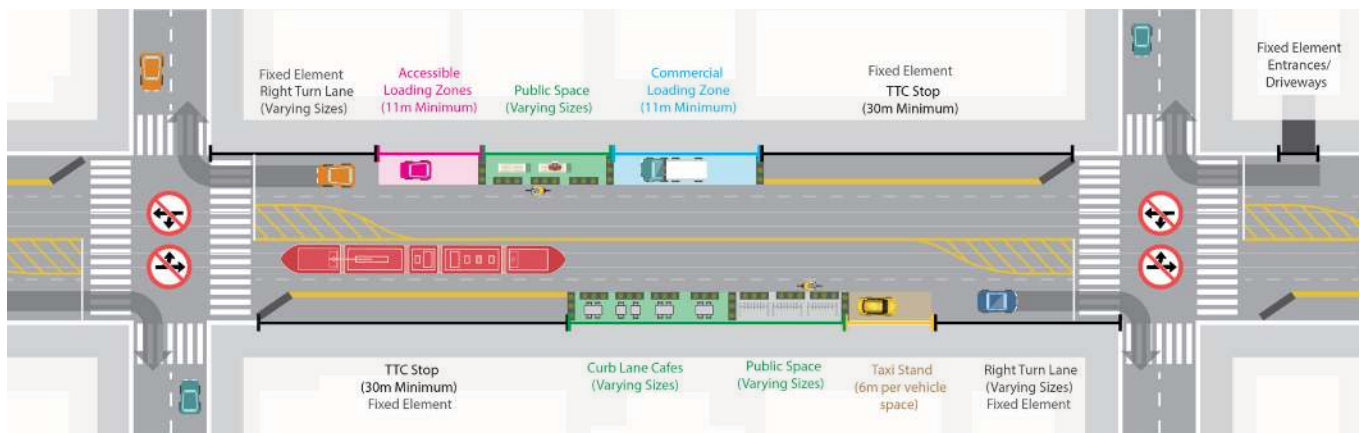
**Figure 135:** Curbside use activity ranking 190 participants ranked curbside uses in the following order:

- 1. Transit boarding**
- 2. Bike lanes**
- 3. Activation**
- 4. Stormwater**
- 5. Passenger drop-off**
- 6. Freight loading**
- 7. Parking**





Figure 137: Organizing the curb along King Street, Toronto



## ACTIONS

Actions to price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.1</b> 2020-2023 (YEARS 0-3)</p> <p>Adopt a strong curbside management policy that takes full advantage of a dynamic urban environment; prioritize the curb in alignment with the City’s Complete Streets Policy and value the competing demands for curb space.</p>	Mobility	Low
<p><b>DO ACTION 5.2</b> 2024-2027 (YEARS 4-7)</p> <p>Develop a multi-purpose dynamic curb zone pilot for multiple corridors to accommodate all users and develop a revenue structure which charges across modes for use of these zones. <i>See Transit Action 2.6, Freight Action 5.5</i></p>	Mobility	High
<p><b>DO ACTION 5.3</b> 2020-2023 (YEARS 0-3)</p> <p>Modernize ordinances to incentivize desired uses through pricing structure – for example, to encourage use of curbside for parklets and other street activation uses or shared, electric vehicles. <i>See Technology Strategy 1</i></p>	Prosperity, Mobility	Low
<p><b>DO ACTION 5.4</b> 2028-2030 (YEARS 8-10)</p> <p>Utilize technology along commercial corridors and within downtown and other commercial areas to manage all curbside uses. <i>See Technology Strategy 1</i></p>	Prosperity, Mobility	High

continued on next page



## ACTIONS (continued)

Actions to price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.

Actions	Supports	Difficulty
<b>DO ACTION 5.5</b> 2024-2027 (YEARS 4-7) Employ on-street and off-street parking strategies to support transit corridors (parking maximums for new developments, facilitated shared parking incentives, dynamic pricing, expanded metered parking).	Climate, Equity, Mobility	High
<b>DO ACTION 5.6</b> 2024-2027 (YEARS 4-7) Investigate implementation of a per trip fee for applicable curbside uses including delivery and shared mobility services.	Mobility	High
<b>DO ACTION 5.7</b> 2028-2030 (YEARS 8-10) Study congestion pricing with the intent to discourage single occupancy vehicle trips.	Mobility	High
<b>DO ACTION 5.8</b> 2020-2023 (YEARS 0-3); ON-GOING Pursue legislative changes and governmental support needed to make car sharing more attractive. <i>See Technology Action 2.6</i>	Mobility	High
<b>DO ACTION 5.9</b> 2020-2023 (YEARS 0-3); ON-GOING Price on-street parking meters to support multimodal street operations and mode share goals.	Mobility	Medium
<b>DO ACTION 5.10</b> 2020-2023 (YEARS 0-3); ON-GOING Evaluate whether meters or priced curb space should be expanded to more corridors.	Mobility	Medium
<b>DO ACTION 5.11</b> 2024-2027 (YEARS 4-7) Assign and mark typical block faces in downtown to flexibly assign space for activation or placemaking, on-street bicycle or scooter parking, passenger and freight loading, drop off/pick up and standard vehicular storage zones, where immediate adjacent curbside space is not used for bike or transit mobility. <i>See Bicycling Action 9.1</i>	Mobility	High

continued on next page



## ACTIONS (continued)

Actions to price and manage use of the curb to encourage walking, biking and using transit and to discourage driving alone.

Actions	Supports	Difficulty
<p><b>DO ACTION 5.12</b> 2020-2023 (YEARS 0-3)</p> <p>Continue the process of digitizing the activities on the curb (parking, loading, etc.), and plan for digital communication between the curb and vehicles.</p>	Mobility	High
<p><b>DO ACTION 5.13</b> 2028-2030 (YEARS 8-10)</p> <p>Utilize public-private partnerships to implement solutions when parking and mobility challenges arise, such as district parking, mobility hubs, carpool incentives, electric vehicle priority, stormwater retention, water filtration and others. <i>See <a href="#">Bicycling Strategy 9</a>, <a href="#">Technology Action 3.1</a>, <a href="#">Technology Strategy 6</a></i></p>	Active partnerships	Medium
<p><b>DO ACTION 5.14</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Manage off-street parking supply, demand and pricing in downtown. Partner with others in pursuit of City policies, including the reduction of single occupancy vehicle use.</p>	Climate, Equity, Active partnerships	Medium

**Congestion pricing is a tool to manage the volume of motor vehicles entering certain zones by charging a fee during a set period of the day or week.**

**Placemaking – or activation – refers to using street as shared public spaces for people.**





**STRATEGY 6**

**Induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.**

The way a street operates is driven by individual choice of how, where and how fast to travel, the physical space of the street including lane and striping, signal operations, surrounding land uses and how many other people are also using the same space.

The City has long prioritized all modes when delivering transportation projects; this strategy calls out specific actions that will help more quickly elevate options for walking, biking and transit improvements. Dedicating space proportional to planned travel patterns and mode shares in a systems-based approach will help to induce mode shift.

**Figure 138:** Bus only lane on Chicago Avenue, prioritizes transit travel



**Figure 139:** Dedicated space for bicycle travel



## ACTIONS

Actions to induce regional mode shift by prioritizing pedestrian, bicycle and transit facilities and operations into capital transportation projects.

Actions	Supports	Difficulty
<p><b>DO ACTION 6.1</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Allocate street space to support planned travel patterns and desired mode shares.</p>	Mobility	Medium
<p><b>DO ACTION 6.2</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Advance the All Ages and Abilities Network, transit improvements and emergency response infrastructure through the bridge maintenance and replacement process. <i>See <a href="#">Bicycling Strategy 2</a></i></p>	Mobility	Medium
<p><b>DO ACTION 6.3</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Pilot innovative street operations and designs in response to changing conditions, markets, travel patterns, demographics, mode shift goals and technology to more efficiently use the public right of way.</p>	Mobility	Low
<p><b>DO ACTION 6.4</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Capitalize on opportunities to benefit vulnerable users, such as restriping streets outside of the Capital Improvement Program, adding delineators or markings and enhancing signage or wayfinding.</p>	Safety, Equity, Mobility	Low
<p><b>DO ACTION 6.5</b> 2020-2023 (YEARS 0-3); ON-GOING</p> <p>Restore or eliminate gaps in the street grid when conducting planning or development activities. In particular, as soon as possible reconnect the street grid at Nicollet Ave and Lake Street. <i>See <a href="#">Walking Action 6.3</a></i></p>	Equity, Prosperity, Mobility, Active partnerships	High
<p><b>SUPPORT ACTION 6.6</b> 2020-2023 (YEARS 0-3)</p> <p>Support efforts to obtain legislative authority for automated enforcement and if granted, support its use to enforce vehicles blocking intersections, crosswalks, bicycle facilities and travel lanes.</p>	Safety, Mobility	High

### SEE ALSO ACTION:

- **Transit Action 2.8** — Effective bus-only operation



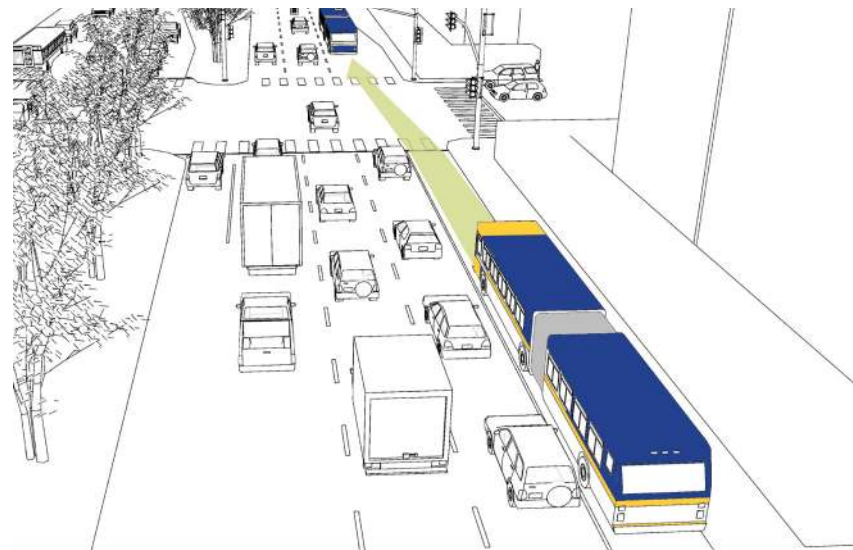
# STRATEGY 7

## Align traffic signal operations with the Complete Streets Policy.

Traffic signals are timed and coordinated citywide to promote safe and consistent travel times. The actions below do not include exhaustive adjectives like 'all' and 'every' because specific movements allowed by a traffic signal may have a negative impact for some other competing use; this approach does not indicate a lack of commitment to completing this strategy but rather realistically approaching its implementation. For example, longer walk times for pedestrians goes against shorter cycle lengths, which also have benefits for pedestrians. Automatic display of the WALK signal without having to push a button, may, in some cases extend the total cycle length, creating additional delay for pedestrians and transit vehicles. Transit queue jumps prioritize those traveling on bus or other transit, but elongate waiting times for pedestrians crossing that street – the same holds true for green arrows for specific turning time for vehicles.

The City is doing adjustments on most traffic signals in 2020 to align with new, lower speed limits. This adjustment is being done with recognition that a larger, citywide alignment of signals with Complete Streets will be done in the future.

**Figure 140:** Queue jump for transit lets transit vehicle surpass other vehicles after red light



Buses use the shoulder or parking lane to avoid traffic congestion during peak hours

**Results**

- Fewer bus delays
- Shorter commute times
- Reduced traffic congestion



**Figure 141:** Bike signal





Figure 142: Leading pedestrian interval



## ACTIONS

Actions to align traffic signal operations with the Complete Streets Policy.

Actions	Supports	Difficulty
<b>DO ACTION 7.1</b> 2020-2023 (YEARS 0-3) Identify locations where operation of traffic signals should be evaluated to prioritize pedestrian mobility, comfort and safety.	Safety, Equity, Mobility	Low
<b>DO ACTION 7.2</b> 2020-2023 (YEARS 0-3); ON-GOING Implement transit advantages along all high frequency transit corridors, through transit only lanes, transit signal priority, queue jumps and other treatments as appropriate.	Safety, Equity, Mobility	Medium
<b>DO ACTION 7.3</b> 2024-2027 (YEARS 4-7) Use traffic signals to increase efficiency of people biking. Include specific bike signals on the All Ages and Abilities Network, and time signals to reduce the need for people biking to stop.	Safety, Equity, Mobility	Medium
<b>DO ACTION 7.4</b> 2020-2023 (YEARS 0-3) Re-time traffic signal coordination to encourage vehicle speeds at or below the posted speed limit.	Safety, Mobility	Low



## STRATEGY 8

**Coordinate with agency partners who own, operate and manage infrastructure within the City to plan, build and operate at the City’s standards.**

Streets in Minneapolis are owned and operated by one of five agencies: the City of Minneapolis, Hennepin County, the Minnesota Department of Transportation, the Minneapolis Park and Recreation Board and the University of Minnesota. Typically, the systems and volumes increase from local to county to state systems – and design decisions are often influenced by accommodating an increasingly higher volume of street users.

While final responsibility and determination for design decisions for a particular street is held by the underlying jurisdictional owner, the design process is often collaborative between the overlapping jurisdictions and we work with our partners to reach design and operational decisions that reflect our values and goals while recognizing their underlying authority.

**Figure 143:** A County road in Minneapolis that was redesigned to better fit local context



**Figure 144:** Street at highway entrance

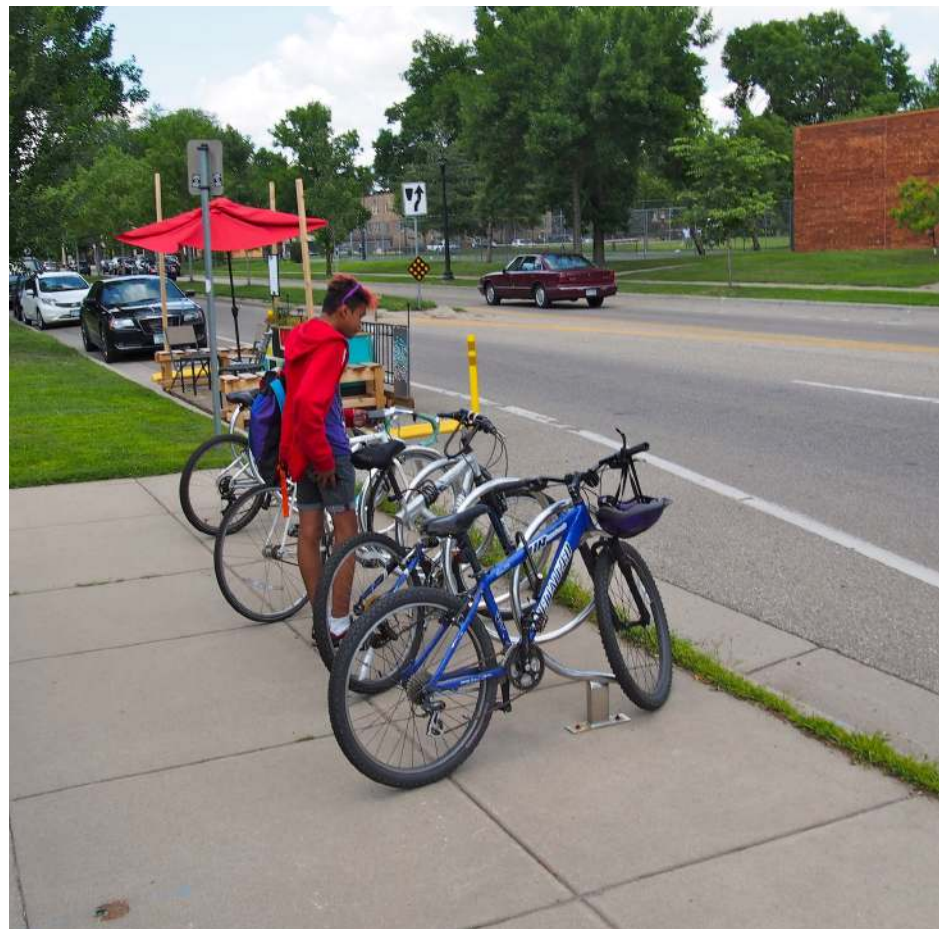




Figure 145: Existing raised I-94 viaduct in the North Loop







## ACTIONS

Actions to coordinate with agency partners who own, operate and manage infrastructure within the City to plan, build and operate at the City's standards.

Actions	Supports	Difficulty
<p><b>DO ACTION 8.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Manage vehicle traffic volumes and mobility on the regional system and local streets by allocating space efficiently for use throughout the day versus focusing on peak travel times.</p>	Mobility, Active partnerships	Medium
<p><b>DO ACTION 8.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Ensure that streets serving freeway connections reflect the Complete Streets Policy; maintain local street qualities as opposed to facilitating freeway movements at streets leading to or from freeway access ramps, where streets change character (from highway to arterial) or when streets change owner (from State or County to City). <i>See Design Strategy 6</i></p>	Mobility, Active partnerships	High
<p><b>DO ACTION 8.3</b>            2020-2023 (YEARS 0-3); ON-GOING            When partner agencies have authority over street design and use of the right of way, pursue changes that better align with the Street Design Guide, the Complete Streets Policy and Vision Zero.</p>	Safety, Mobility, Active partnerships	Medium
<p><b>DO ACTION 8.4</b>            2028-2030 (YEARS 8-10)            Study the viability of the following changes to the regional network:</p> <ul style="list-style-type: none"> <li>• Convert the I-94 freeway bridge connections via 3rd/4th Streets (North Loop viaduct) to MnPASS only, with the long-term goal of eliminating this and similar facilities.</li> <li>• Close or reconfigure Interstate 394 access at Washington Avenue N and 3rd Avenue N.</li> </ul>	Climate, Mobility, Active partnerships	High

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## ACTIONS (continued)

Actions to coordinate with agency partners who own, operate, and manage infrastructure within the City to plan, build and operate at the City's standards.

### **SUPPORT** ACTION 8.5

2028-2030 (YEARS 8-10)

Support efforts to convert street right of way to land for other uses, using public/private partnerships as appropriate. Ideas include:

- Develop lids or land bridges to reconnect communities.  
*See Walking Action 6.5*
- Identify alternatives for using the land on freeway embankments such as energy collection with solar panels or wind harvesting; water management and purposeful plantings; and as dedicated public transit corridors.

Prosperity,  
Mobility, Active  
partnerships

High

### SEE ALSO ACTIONS:

- **Transit Action 2.7** — Transit advantages on freeways through lane conversions
- **Design Action 6.1** — Changes to regional functional class system



## STRATEGY 9

### Manage street detours in line with Complete Streets Policy.

The actions listed here outline specific ways to improve the implementation of detours to maintain safe access for all street users. Ensuring clear passage for pedestrians should be the first priority, and bicyclists or those on micromobility vehicles should not be deposited into mixed traffic if they have otherwise been traveling in a separated facility. Ensuring that emergency responders can navigate the space is always a top priority during construction, and detours should be designed to accommodate.

Figure 146: Bikes may use full lane signage



Figure 147: Sidewalk closed





## ACTIONS

### Actions to manage street detours in line with Complete Streets Policy.

Actions	Supports	Difficulty
<p><b>DO ACTION 9.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Provide safe, direct and comfortable temporary facilities for non-motorized users during construction in accordance with the current and updated Complete Streets Policy.</p>	Safety, Equity, Mobility	Medium
<p><b>DO ACTION 9.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Price lane obstruction permits to reflect the Complete Streets hierarchy such that removal of pedestrian or bicycle access is more costly than general purpose travel lane closures.</p>	Equity, Mobility	Medium
<p><b>DO ACTION 9.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Reconstruct disturbed pedestrian, bicycle and transit facilities in accordance with planned future conditions, not existing, when altered by development or utility work, as documented in this plan and the Street Design Guide.</p>	Safety, Mobility	High
<p><b>DO ACTION 9.4</b>            2020-2023 (YEARS 0-3); ON-GOING            Inspect and enforce non-compliance at construction sites where pedestrian walkways are not being cleared of snow and ice. <a href="#">See Walking Strategy 4</a></p>	Safety, Mobility, Active partnerships	High

### SEE ALSO ACTIONS:

- **Walking Action 5.3** — Inspect pedestrian access requirements around work zones and ensure compliance
- **Bicycling Action 6.2** — Require low-stress bikeway detours
- **Bicycling Action 6.3** — Inspect bikeway detours and ensure compliance



# 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.

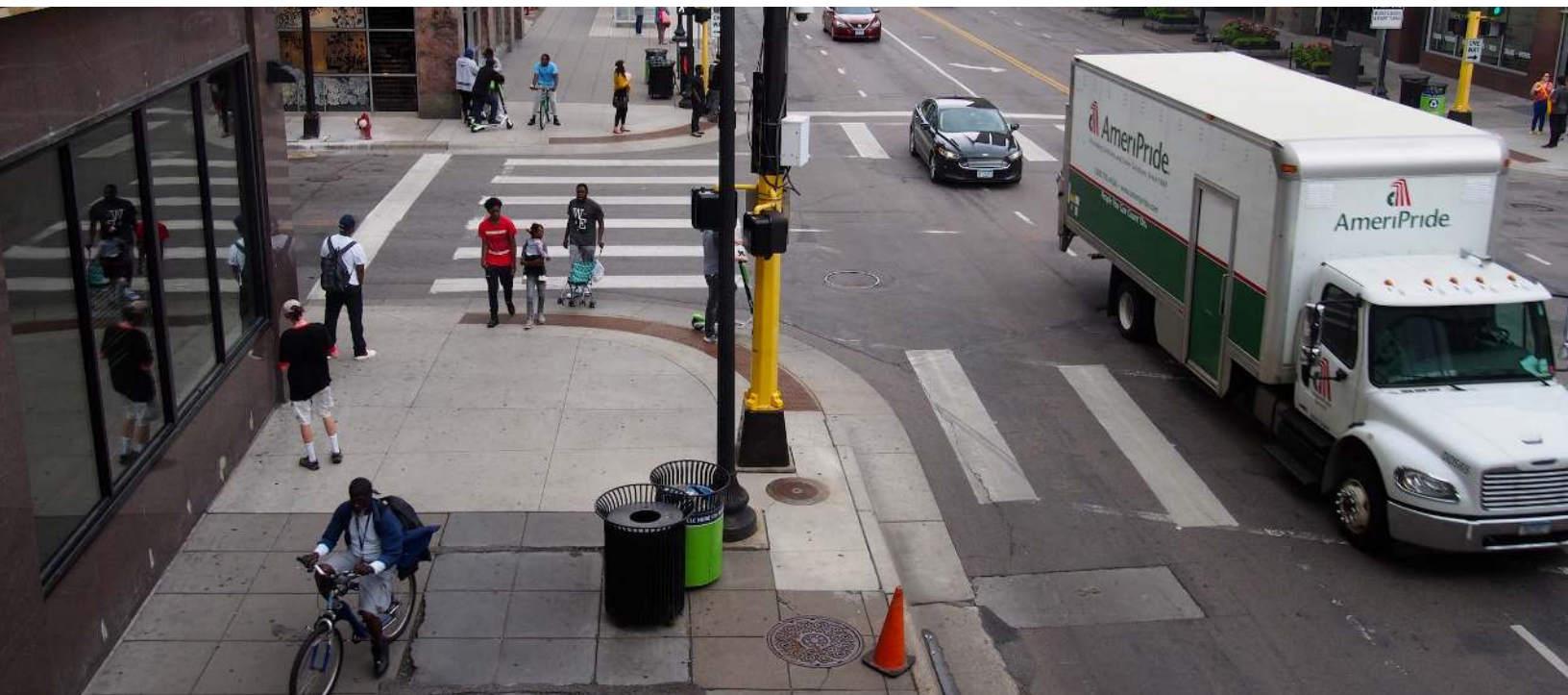


## DESIGN STRATEGIES

- 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.

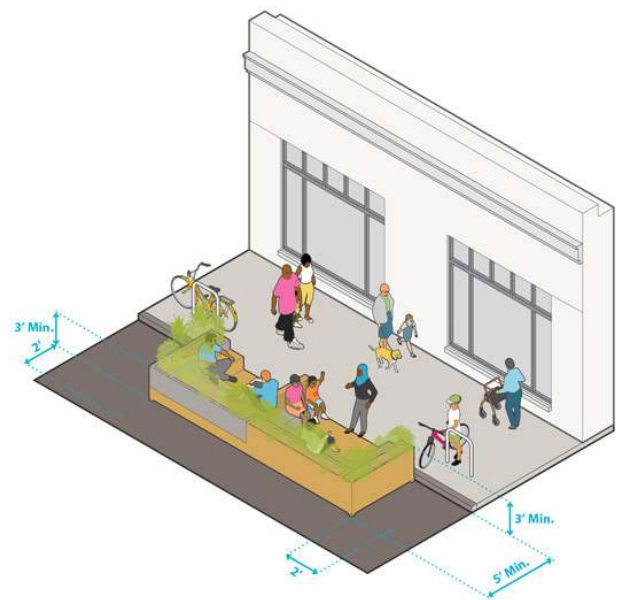
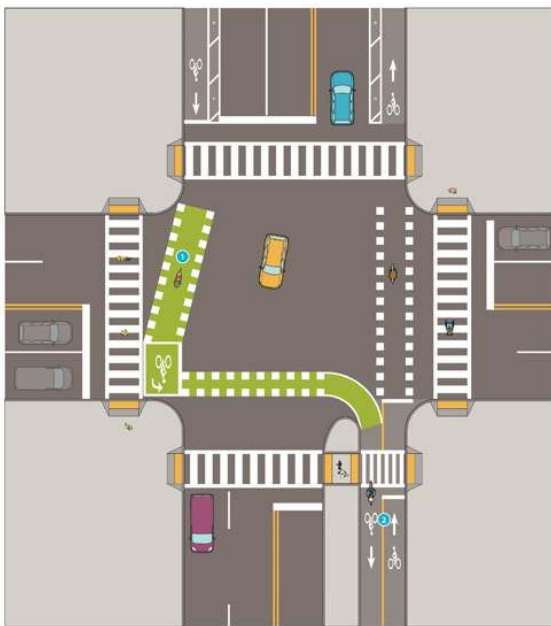




Figure 148: Typical street type in Street Design Guide



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><b>DO ACTION 1.</b> 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><b>DO ACTION 1.2</b> 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><b>DO ACTION 1.3</b> 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><b>DO ACTION 1.4</b> 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><b>DO ACTION 1.5</b> 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><b>DO ACTION 1.6</b> 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><b>DO ACTION 1.7</b> 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><b>DO ACTION 2.1</b> 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 <a href="#">Minneapolis Zoning Code</a>.</p>	Climate, Prosperity, Active partnerships	Medium
<p><b>DO ACTION 2.2</b> 2024-2027 (YEARS 4-7) Revamp the existing courtesy bench program (<a href="#">Minneapolis Ordinance 283</a>) and create a new request process for installing benches and potentially other street furniture.</p>	Equity, Prosperity	Medium
<p><b>DO ACTION 2.3</b> 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><b>DO ACTION 2.4</b> 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

*continued on next page*





# ACTIONS (continued)

## Actions to foster vibrant public spaces for street life.

Actions	Supports	Difficulty
<b>DO ACTION 2.5</b> 2024-2027 (YEARS 4-7) Explore opportunities for car-free streets, implement pilots, and make permanent improvements.	Climate, Safety, Prosperity, Mobility	High
<b>DO ACTION 2.6</b> 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
<b>DO ACTION 2.7</b> 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



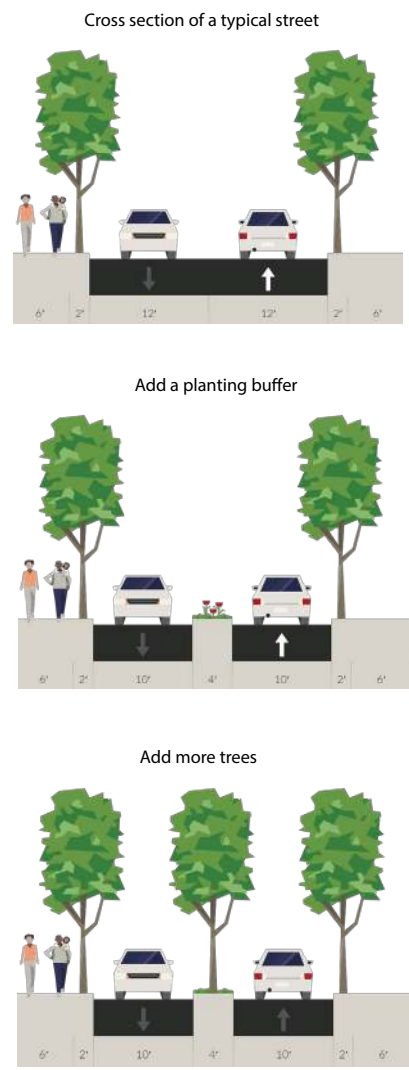


STRATEGY 3

**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
<p><b>DO ACTION 3.1</b>            2020-2023 (YEARS 0-3); ON-GOING            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.</p>	Climate	Low
<p><b>DO ACTION 3.2</b>            2020-2023 (YEARS 0-3); ON-GOING            Update the Street Design Guide to reflect evaluations and best practices related to environmental stewardship objectives.</p>	Climate	Low
<p><b>DO ACTION 3.3</b>            2020-2023 (YEARS 0-3); ON-GOING            Reduce the negative environmental impacts of street designs by decreasing the amount of asphalt or concrete in favor of increasing green space.</p>	Climate	Medium
<p><b>DO ACTION 3.4</b>            2020-2023 (YEARS 0-3); ON-GOING            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.</p>	Climate	Low



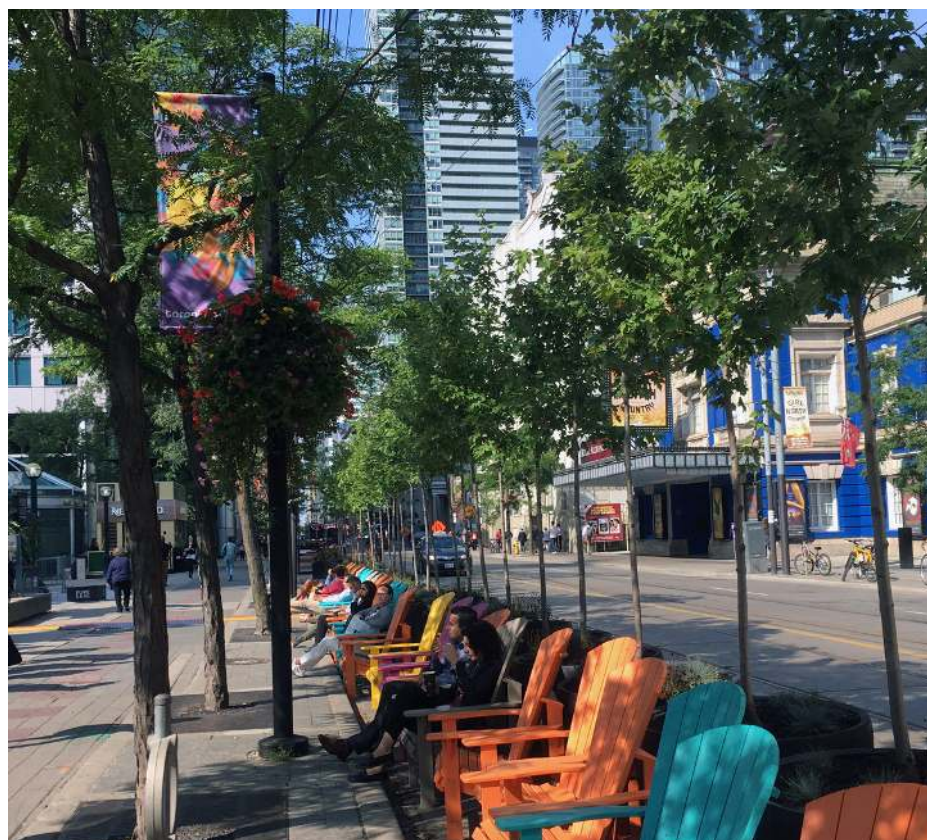


## STRATEGY 4

### 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.<sup>68</sup>

<sup>68</sup> "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><b>DO ACTION 4.1</b>  <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>	Climate, Active partnerships	Medium
<p><b>DO ACTION 4.2</b>  <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>	Climate	Medium
<p><b>DO ACTION 4.3</b>  <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>	Climate, Active partnerships	Medium

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## ACTIONS (continued)

### Actions to green the streets.

Actions	Supports	Difficulty
<b>DO ACTION 4.4</b> <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
<b>SUPPORT ACTION 4.5</b> <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><b>DO ACTION 5.1</b>            2020-2023 (YEARS 0-3); ON-GOING            Adapt street designs, signals, organization and operations as appropriate to support transit facilities and transit priority.</p>	<p>Climate, Safety,            Prosperity,            Mobility</p>	<p>High</p>
<p><b>DO ACTION 5.2</b>            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>	<p>Safety, Equity,            Mobility, Active            partnerships</p>	<p>High</p>
<p><b>SUPPORT ACTION 5.3</b>            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>	<p>Safety,            Mobility, Active            partnerships</p>	<p>Low</p>

## 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

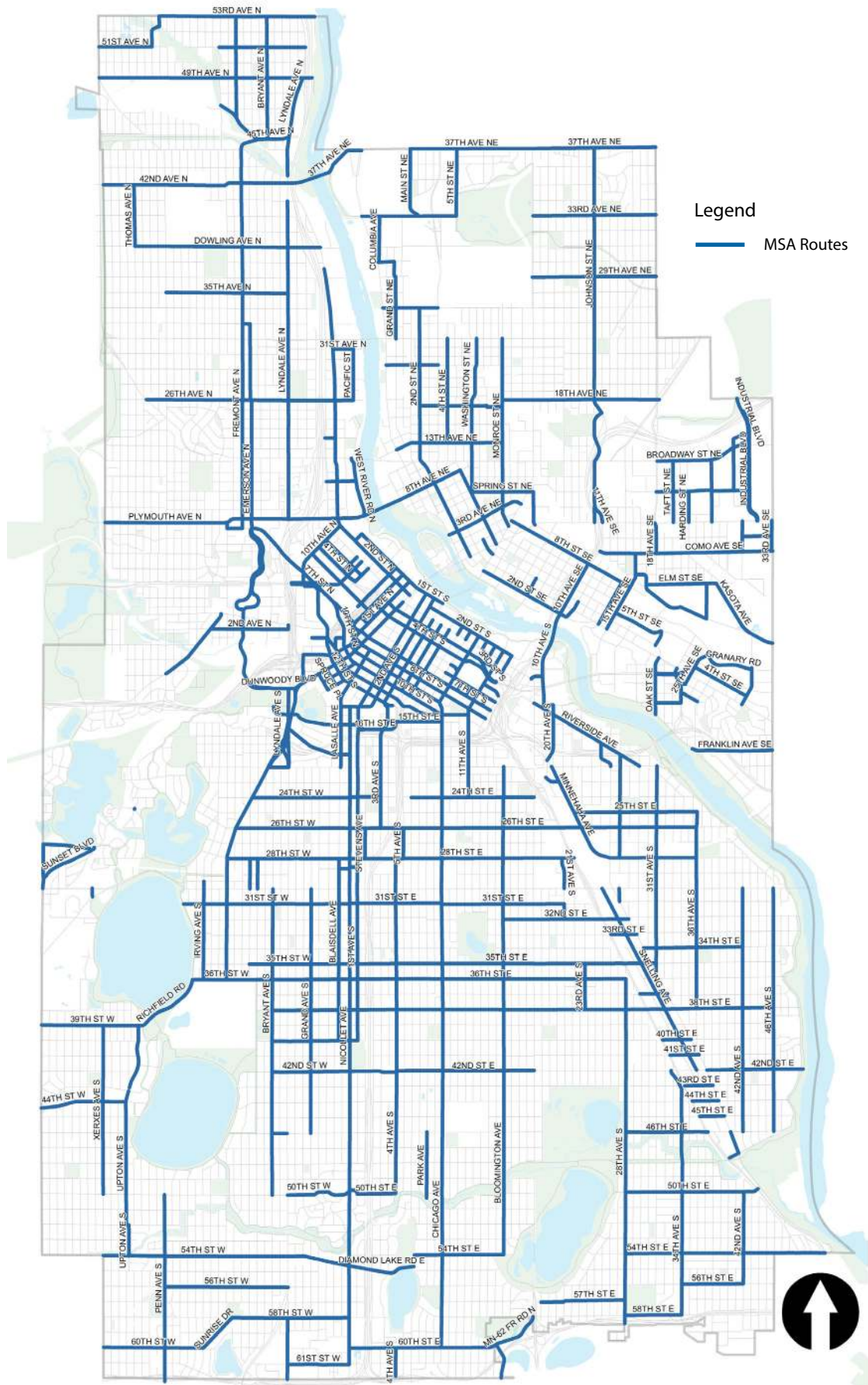
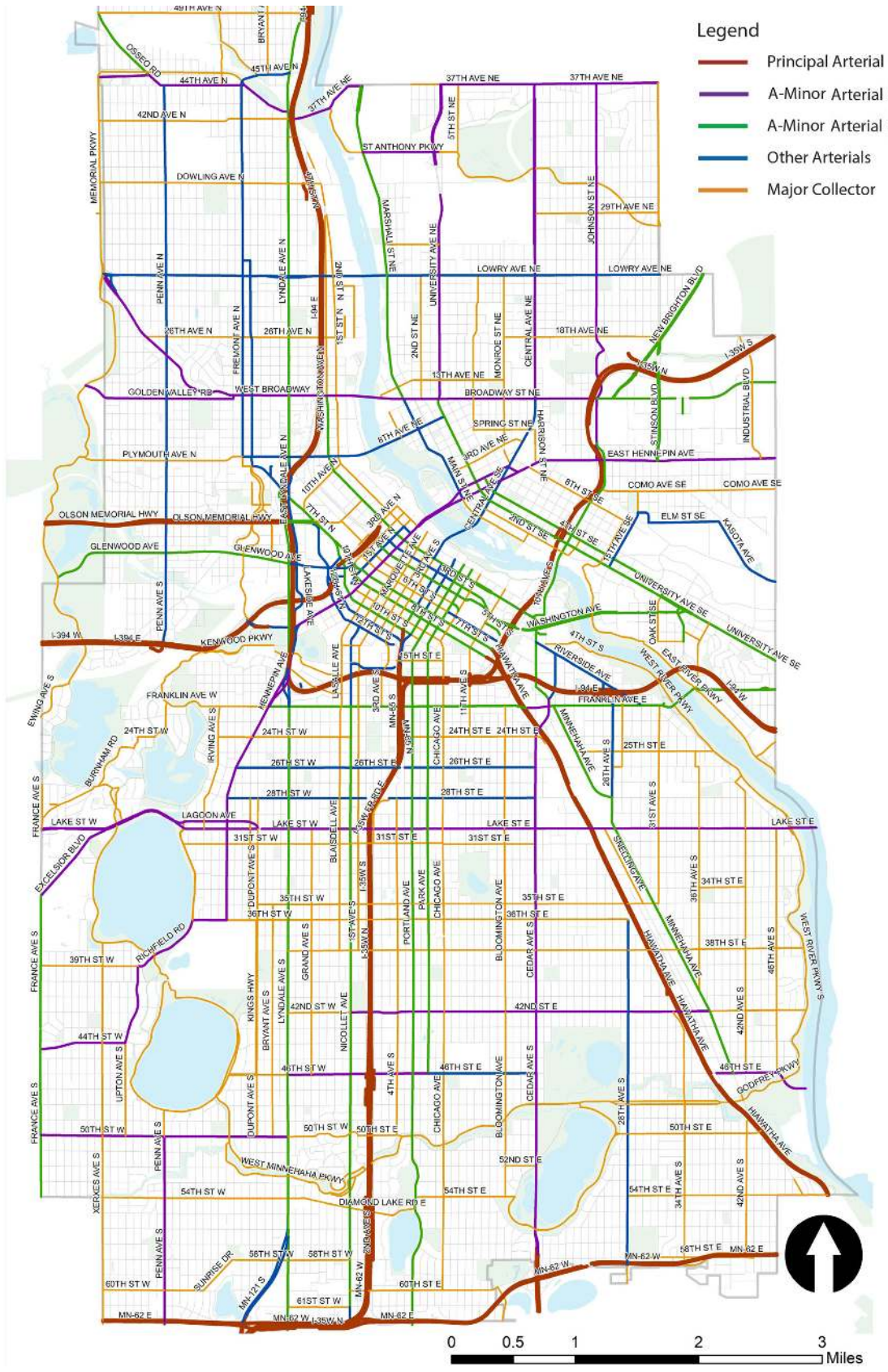






Figure 162: Functional classifications, in Minneapolis, as of 2020





# 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><b>DO ACTION 6.1</b> 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"> <li>• Add 3rd St N/S from 2nd Ave N to Portland Ave as an A-Minor Arterial on the regional functional classification system.</li> <li>• Add 6th St N/S from 2nd Ave N to 13th Ave as an A-Minor Arterial on the regional functional classification system.</li> <li>• 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.</li> <li>• Add Hawthorn Ave from I-394 entrance/exit to 10th St N as an A-Minor Arterial on the regional functional classification system.</li> <li>• Add 4th Ave S from Washington Ave S to 7th St S as an A-Minor Arterial on the regional functional classification system.</li> <li>• Add 5th Ave S from Washington Ave S to 7th St S as an A-Minor Arterial on the regional functional classification system.</li> <li>• Remove 5th Street S from Park Ave to Chicago Ave as an A-Minor Arterial on the regional functional classification system.</li> <li>• Remove Minnehaha Ave from 26th Ave to Cedar Ave as an A-Minor Arterial on the regional functional classification system.</li> <li>• 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.</li> <li>• Add Diamond Lake Rd from Lyndale Ave S to Portland Ave S as an A-Minor Arterial on the regional functional classification system.</li> <li>• 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.</li> <li>• Remove St. Anthony Pkwy NE from Marshall St NE to University Ave NE as an A-Minor Arterial on the regional functional classification system</li> <li>• Adjust other streets as appropriate.</li> </ul>	Active partnerships	Low
<p><b>DO ACTION 6.2</b> 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><b>DO ACTION 6.3</b>            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><b>DO ACTION 6.4</b>            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





# PROGRESS

**Making and monitoring progress on the action plan**

## MAKING PROGRESS

The Progress section has a series of strategies and actions to define a more intentional approach toward racial equity and justice in the plan. Additionally, an implementation framework outlines the ways we will measure progress made on the actions articulated throughout the plan.

### PROGRESS STRATEGIES AND ACTIONS

Three strategies and associated actions in the Progress section outline the ways in which the transportation work of the City will evolve over the next 10 years from a systems-level approach. The strategies cover developing a racial equity framework, using engagement to build trust in the community and achieve better outcomes, and evaluating our projects to ensure we are meeting the goals outlined in this plan and serving the public.

These strategies also acknowledge the moment we are in as individuals, as a city, and as a nation as we grapple with the compounding impacts of both COVID-19 and the pursuit of racial justice. By including these three strategies in the Transportation Action Plan, we hope to use transportation as way to bring opportunity, help repair, and create a stronger Minneapolis over the next decade.

### IMPLEMENTATION FRAMEWORK

The strategies and actions are followed by an implementation framework that will be used to measure and report on progress over the life of the plan.





## PROGRESS STRATEGIES

- 1** Implement a racial equity framework for transportation.
- 2** Build trust and achieve greater outcomes through equitable engagement.
- 3** Create transparent and accountable measures for evaluation of plans, programs and projects.



## STRATEGY 1

### Implement a racial equity framework for transportation.

The City of Minneapolis defines equity as fair and just opportunities and outcomes for all people, and defines racial equity as the development of policies, practices and strategic investments to reverse racial disparity trends, eliminate institutional racism, and ensure that outcomes and opportunities for all people are no longer predictable by race.<sup>69</sup> Work to define equity specific to transportation was advanced through the planning efforts of the 20 Year Streets Funding Plan (2016) and has been an on-going conversation and guiding force for transportation work in the City since that time.

In July 2020 the Minneapolis City Council declared racism a public health emergency.<sup>70</sup> The related resolution outlines citywide goals related to reversing hundreds of years of racist policies and practices in the city. The work will permeate throughout the enterprise; the work in our streets of planning, designing and building projects is a part of building an active, anti-racist culture in the City of Minneapolis.

Developing a racial equity framework for transportation will bring together pieces of work that already exist and bring new approaches related to goals, metrics, engagement and evaluation into one framework. Existing work to inform the framework include the Strategic Racial Equity Action Plan, Minneapolis 2040, Blueprint for Equitable Engagement, 20 Year Streets Funding Plan, and other parts of the Transportation Action Plan. The framework will be developed in partnership with community.

<sup>69</sup> City of Minneapolis Division of Race and Equity.

<sup>70</sup> Racism as a public health emergency legislative file.



# ACTIONS

## Actions to implement a racial equity framework for transportation.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.1</b> 2020-2023 (YEARS 0-3)</p> <p>Create a racial equity framework to tie the transportation work of Public Works to citywide efforts of eliminating racism and achieving racial equity; use the framework to guide the engagement and evaluation work of transportation plans, programs and projects.</p>	Equity	Medium
<p><b>DO ACTION 1.2</b> 2020-2023 (YEARS 0-3)</p> <p>Develop the racial equity framework with support and in collaboration with Minneapolis’s Black, Indigenous, and people of color communities and the Division of Race and Equity.</p>	Equity, Active partnerships	Medium
<p><b>DO ACTION 1.3</b> 2020-2023 (YEARS 0-3)</p> <p>Define and set racial equity goals relative to transportation, building from City Council’s definition of racial equity, City’s Strategic Racial Equity Action Plan and the methodology of the 20 Year Streets Funding Plan.</p>	Equity	Low
<p><b>DO ACTION 1.4</b> 2020-2023 (YEARS 0-3)</p> <p>Include acknowledgment of historic harms and transportation inequities in racial equity framework.</p>	Equity, Prosperity	Low
<p><b>DO ACTION 1.5</b> 2020-2023 (YEARS 0-3)</p> <p>Re-evaluate the use of the previous regional focus on areas of concentrated poverty with majority people of color (ACP50) areas as it relates to equity and transportation.</p>	Equity, Prosperity	Low
<p><b>DO ACTION 1.6</b> 2024-2027 (YEARS 4-7)</p> <p>Update metrics in the Transportation Action Plan to reflect a more nuanced approach to regional equity considerations that better reflect the updated regional approach as defined by the Metropolitan Council and racial equity framework.</p>	Equity, Prosperity	Low

*continued on next page*

## ACTIONS (continued)

Actions to implement a racial equity framework for transportation.

Actions	Supports	Difficulty
<p><b>DO ACTION 1.7</b>                      2024-2027 (YEARS 4-7)                      Adjust or reconfirm the methodology to the All Ages and Abilities Network and the Pedestrian Priority Network in the Transportation Action Plan to reflect updated approach to equity and transportation as defined in <a href="#">Progress Action 1.1</a>.</p>	Equity, Mobility	Low
<p><b>DO ACTION 1.8</b>                      2020-2023 (YEARS 0-3)                      Update criteria used in the 20 Year Street Funding Plan to reflect a more nuanced approach to regional equity considerations to better reflect the regional approach as defined by the Metropolitan Council and the racial equity framework developed in <a href="#">Progress Action 1.1</a>.</p>	Equity, Prosperity	Medium
<p><b>DO ACTION 1.9</b>                      2020-2023 (YEARS 0-3)                      Continue to advocate for the Metropolitan Council to more explicitly invest and award projects to promote racial equity within the Regional Solicitation framework and project selection process.</p>	Equity, Active partnerships	Low

## STRATEGY 2

### **Build trust and achieve greater outcomes through equitable engagement.**

Achieving the goals of the Transportation Action Plan requires using public engagement to build trust and leverage relationships for greater outcomes. Being intentional with the desire to want to build trust, deepen connections in the community, and create outcomes that resonate with people in the city who use the projects is an important piece of the work. We understand that connecting with those who may not have literacy in typical government engagement and processes, are burdened from a time, mental or physical barrier to participate, or those who do not see the importance of our work relative to other more pressing needs around housing, food, safety and health can create a disconnect between our projects and our goals.

By taking a closer look at the engagement practices and strategies employed with transportation projects and focusing on using engagement to advance racial equity, we can build capacity within the community to better serve community needs, foster partnerships and create opportunities for on-going feedback. The intent of engaging more diverse voices during project development is to achieve better outcomes, as we serve more needs through our transportation projects.





# ACTIONS

Actions to build trust and achieve greater outcomes through equitable engagement.

Actions	Supports	Difficulty
<p><b>DO ACTION 2.1</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Deepen the partnerships with other City departments, including the Health Department, Neighborhood and Community Relations, and Community Planning and Economic Development, to build internal capacity and better understand the intersecting goals of each department’s work with communities; advance key intersecting goals around racial equity, outcomes in public health, public safety, transportation and mobility, and climate change and resiliency.</p>	Equity, Active partnerships	Low
<p><b>DO ACTION 2.2</b>  <i>2020-2023 (YEARS 0-3)</i>                      Develop parameters and accountability measures for inclusive community outreach and engagement.</p>	Equity, Active partnerships	Low
<p><b>DO ACTION 2.3</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Increase opportunities to partner with communities through contracting to deepen the outreach related to transportation plans, programs and projects.</p>	Equity, Active partnerships	Medium
<p><b>DO ACTION 2.4</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Utilize outreach strategies that engage the most vulnerable of impacted community stakeholders.</p>	Equity, Active partnerships	Medium
<p><b>DO ACTION 2.5</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Implement an engagement approach that deepens community knowledge of transportation, by focusing on non-project specific relationship building with community and includes feedback with stakeholders post-project implementation.</p>	Equity, Active partnerships	High
<p><b>DO ACTION 2.6</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Support the work of All Boards and Commissions and the Division of Race and Equity to advance the Strategic Racial Equity Action Plan’s operational priority of engaging diverse communities by continuing to focus on diversifying the Pedestrian Advisory Committee and Bicycle Advisory Committee.</p>	Equity, Active partnerships	Medium



## STRATEGY 3

### **Create transparent and accountable measures for evaluation of plans, programs and projects.**

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Evaluation is a critical part of understanding the impacts of our work. Project processes and outcomes can both be evaluated. Building from our existing evaluation practices, this strategy outlines ways to better ensure we are using metrics that matter to people who are impacted by our work. Having robust and relevant evaluation measures allows the City to better align programmatic level resources to positively impact the people served by transportation projects.

# ACTIONS

Actions to create transparent and accountable measures for evaluation of plans, programs and projects.

Actions	Supports	Difficulty
<p><b>DO ACTION 3.1</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Continue to evaluate street improvement projects in the Capital Improvement Plan to be able to show cumulative effects of street projects on outcomes related to safety, equity and mobility.</p>	<p>Safety, Equity, Mobility</p>	<p>High</p>
<p><b>DO ACTION 3.2</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Continue to refine and measure the impact of capital programs on achieving safety, equity and mobility goals.</p>	<p>Safety, Equity, Mobility</p>	<p>Medium</p>
<p><b>DO ACTION 3.3</b>  <i>2024-2027 (YEARS 4-7); ON-GOING</i>                      Develop a process to gather feedback from communities after a project has been implemented, to develop qualitative, community-based metrics to reflect how well project process and outcomes improve equity in the eyes of those impacted; integrate these metrics into existing evaluation program.</p>	<p>Equity, Mobility, Active partnerships</p>	<p>High</p>
<p><b>DO ACTION 3.4</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Continue to partner and advocate for research to most accurately reflect equity-related outcomes of the transportation network and systems investment in Minneapolis; use research to adjust approach to delivering projects and planning for transportation in the city.</p>	<p>Safety, Equity, Mobility, Active partnerships</p>	<p>Medium</p>
<p><b>DO ACTION 3.5</b>  <i>2020-2023 (YEARS 0-3); ON-GOING</i>                      Report on the five tracking indicators and five key metrics identified in the Progress section of the Transportation Action Plan every two years.</p>	<p>Climate, Safety, Equity, Prosperity, Mobility, Active partnerships</p>	<p>Low</p>



## Making and monitoring progress on the action plan

### THE IMPLEMENTATION FRAMEWORK

#### THE PACE OF PROGRESS: IMPLEMENTATION STRATEGIES

The strategies and actions in this plan vary in complexity and scale. Some represent tangible projects that will be planned, funded, scoped, designed, constructed and exist out in the world – these are easier to plan and schedule. Others are about changing how we approach the work – the rationale for how decisions are made or which projects move forward. Given the various scale and complexity, including those that require contribution and collaboration with partner agencies, it is difficult to predict with precision when or how the actions will be completed.

#### REPORTING ON PROGRESS

Staff will report on the success and challenges of achieving the strategies and actions laid out in this plan through two venues: our annual Your City, Your Streets Progress Report and a more formal progress report on the plan every two years.

The Transportation Action Plan identifies strategies and actions for the next 10 years – from 2020 to 2030. But the pace of change in the transportation world – through technology, new ways of getting around, as well as increased attention and focus on the link between transportation choices and climate change – ensures that some focus areas in this plan will evolve over the next ten years. If major adjustments are needed, we will amend the plan to address those needs.

### TRACKING INDICATORS DEMONSTRATE INFLUENCE

We have identified five tracking indicators that over time will measure how our efforts influence broader change. The impacts of our transportation plans, projects and investments influence these indicators but are not solely responsible for their success. We know the City's transportation investments alone will not result in our reaching these goals, but they are important metrics for us to monitor.

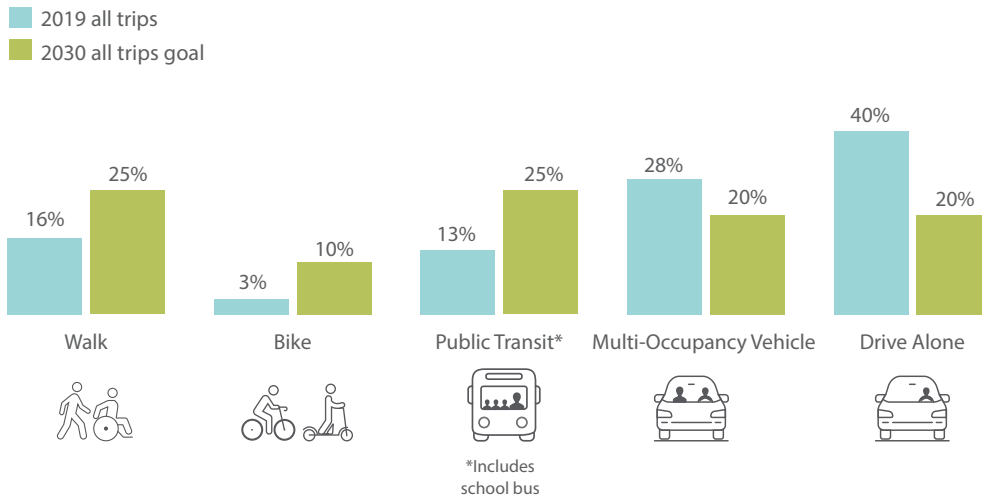
All the tracking indicators work toward a more inclusive transportation system that has equity at its core – by shifting people into more sustainable and affordable modes, protecting our most vulnerable street users, reducing pollution, connecting people to frequent and reliable transit and reducing the distance people travel to get to their daily needs. By pursuing the strategies and actions in the TAP we aim to advance the City of Minneapolis' work on advancing equity and racial equity.<sup>71</sup>

<sup>71</sup> [Minneapolis City Council definitions](#): Equity is defined as fair and just opportunities and outcomes for all people; racial equity is defined as the development of policies, practices and strategic investments to reverse racial disparity trends, eliminate institutional racism, and ensure that outcomes and opportunities for all people are no longer predictable by race.

### MODE SHIFT

Today, people driving alone make up 40% of all trips in Minneapolis.<sup>72</sup> To meet our goals we have set a mode split goal of reducing that number to 20%. Mode shift goals are for trips that start or end in Minneapolis only.

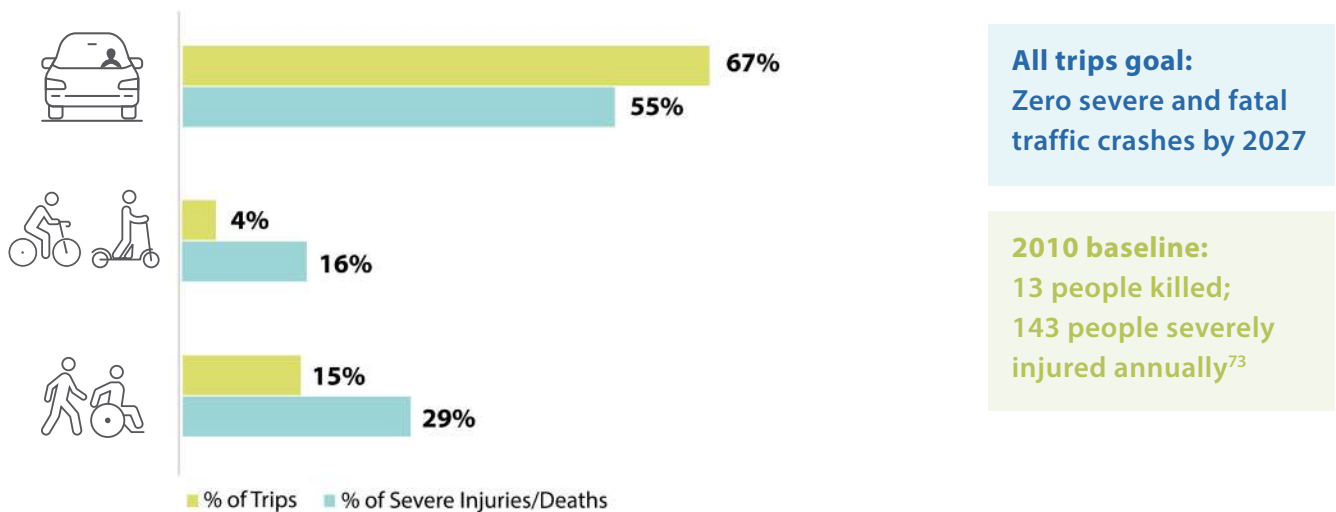
**Figure 163: Comparison of trips**



### SAFETY

The City committed to Vision Zero in 2017 with the goal of reaching zero traffic related fatalities and life-altering injuries within 10 years.

**Figure 164: People walking and on bikes are overrepresented in crashes that result in fatalities or severe injuries**



Source: Injuries/deaths from Vision Zero Crash Study, percent of trips from 2010 Met Council Travel Behavior Inventory. Automobile category includes cars, trucks, motorcycles, but not transit.

<sup>72</sup> Metropolitan Council, Travel Behavior Inventory, 2019.

<sup>73</sup> Crashes excluded from this include: 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.

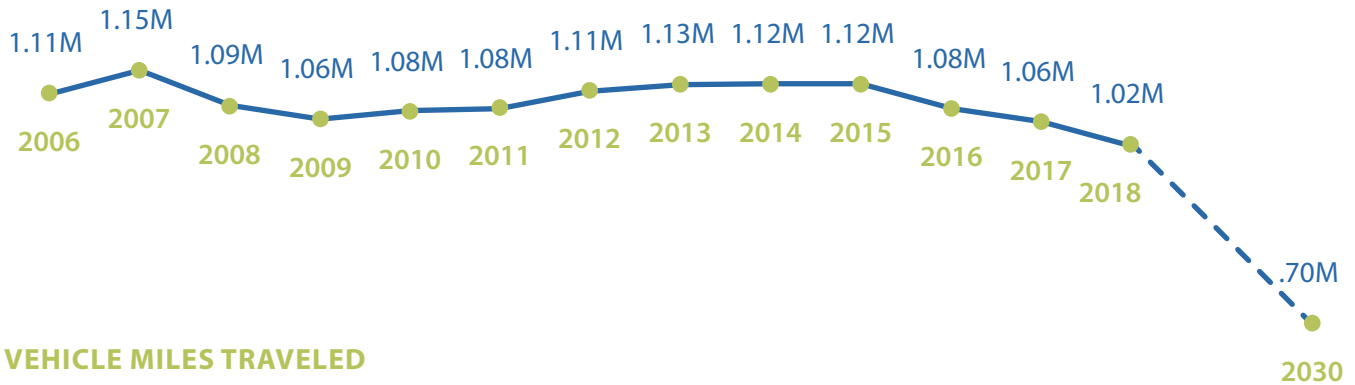
**GREENHOUSE GAS EMISSIONS FROM THE TRANSPORTATION SECTOR**

As of 2018, the transportation sector accounted for 24% of greenhouse gas emissions in Minneapolis.<sup>74</sup> The City has adopted a goal of an 80% reduction by 2050, starting from a 2006 baseline.

**Goal: 80% reduction by 2050 (from 2006 baseline); or 700,000 metric tons in 2030**

**2010 baseline: 1,019,144 metric tons**

**Figure 165:** Greenhouse gas emissions (metric tons) from transportation sector historically and projected to reach City's goal



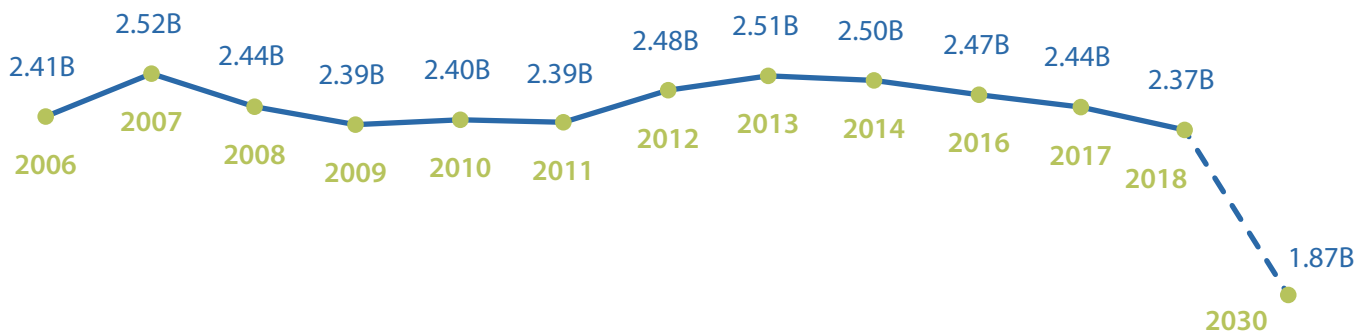
**VEHICLE MILES TRAVELED**

Currently, nearly 2.5 billion miles are driven on Minneapolis streets each year, or simply put, each resident drives 15 miles per day on average.<sup>75</sup> For the City to meet its greenhouse gas emissions goal of an 80% reduction by 2050, we need to reduce the average amount of driving per person. To support our 2050 greenhouse gas emissions goal, Minneapolis residents will need to drive four less miles per day on average, reducing their average daily driving to 11 miles per day, by 2030.<sup>76</sup>

**Goal: 500 million less vehicle miles traveled by 2030 (from 2018 baseline); 1,868,057,420 miles traveled in 2030**

**2018 baseline: 2,368,057,420 miles**

**Figure 166:** Vehicle miles traveled historically and projected forward



<sup>74</sup> Citywide Greenhouse Gas Emissions Inventory (2018)

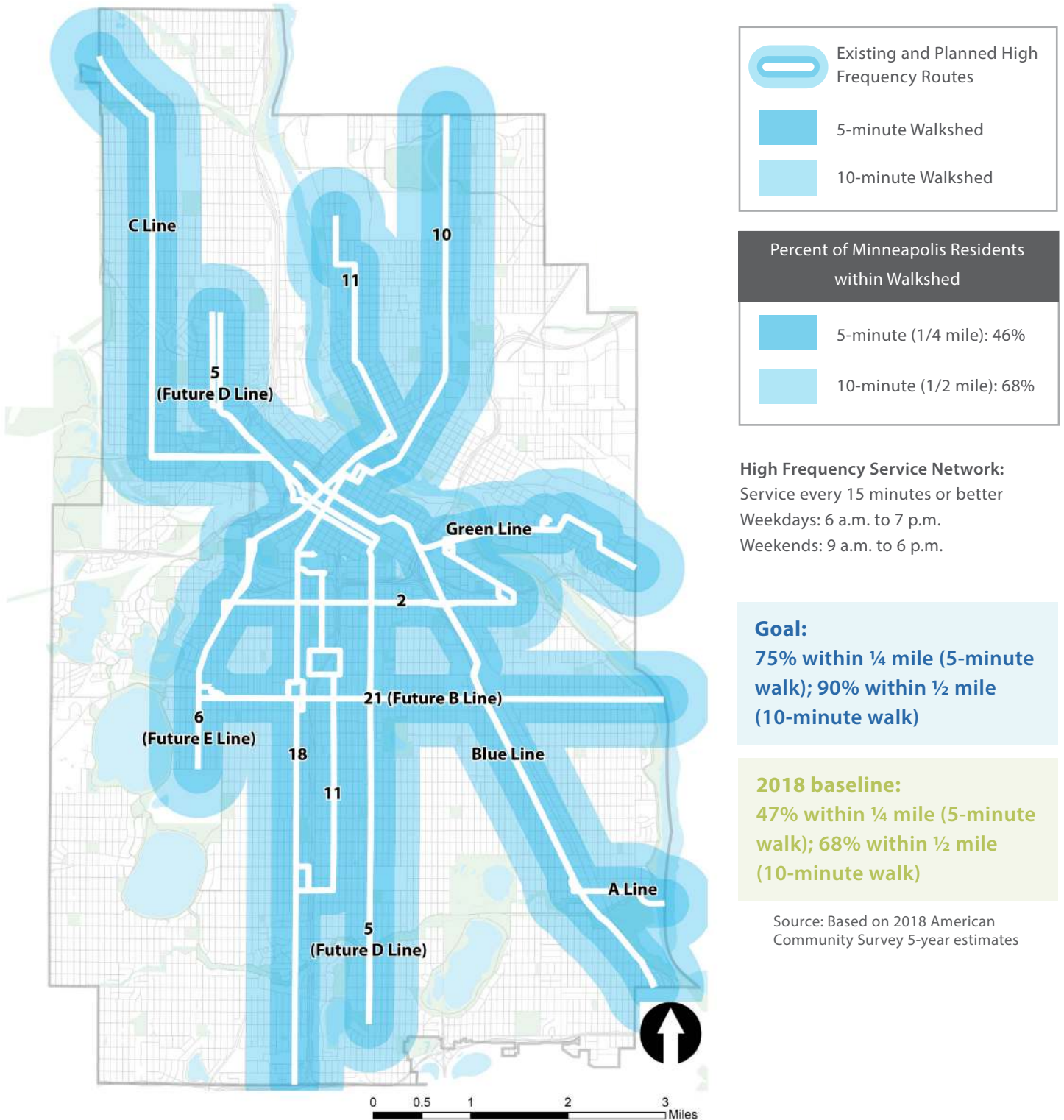
<sup>75</sup> Minnesota Department of Transportation and US Census, American Community Survey. Minnesota Department of Transportation vehicle miles traveled data is a collection of all vehicle miles traveled in the City of Minneapolis and does not solely represent vehicle miles traveled for Minneapolis residents. Current population and projected population estimates include all Minneapolis residents regardless of age and were used to calculate daily average mileage.

<sup>76</sup> Actual daily vehicle miles traveled reduction per person is 4.1 miles, assuming 2030 population forecasts.



Nearly one-half of people living in Minneapolis are within a five-minute walk of high frequency transit; the goal is to increase this number by over 50% over the next 10 years.

Figure 167: 5- and 10-minute current walksheds to high frequency transit



## MONITORING PROGRESS: KEY METRICS TO MEASURE PROGRESS ON OUR PLAN

This plan lays out specific strategies and actions that are intended to be completed over the next 10 years. The most basic way to measure progress is by documenting the completion of the actions laid out in this plan.

### EQUITY

The TAP details strategies and actions that will, if implemented, help to reverse racial disparity trends, eliminate institutional racism and ensure that outcomes and opportunities for all people are no longer predictable by race. The most affordable transportation options will be more widely available to more people and people will not be as burdened by the costs of daily travel.

There are four key metrics detailed below. The goal is to have each of them progress within ACP50 areas at a rate equal to or greater than the citywide rate. ACP50 areas are areas of concentrated poverty with more than 50% people of color.

## ACTIONS COMPLETED ACROSS TOPICS

Accomplishing these goals will require bringing in outside funding sources and seizing opportunities with development projects and other partners.

**Goal: 100% of actions completed or in progress by 2030**

**Baseline will be measured from 2020 moving forward**

There are 56 strategies and 304 actions across 7 topic areas and 3 strategies and 20 actions in the Progress section of the TAP. We will track progress on these strategies and actions as: completed, in progress, or not yet started. Our goal is to have 100% of the actions completed or in progress by 2030. We acknowledge that some are more difficult to accomplish than others and that conditions will change over the next 10 years. There will be some things we set out to do that will remain undone at the end of 10 years, due to changing priorities, lack of partnership opportunities or better ideas replacing what is laid out in this plan.

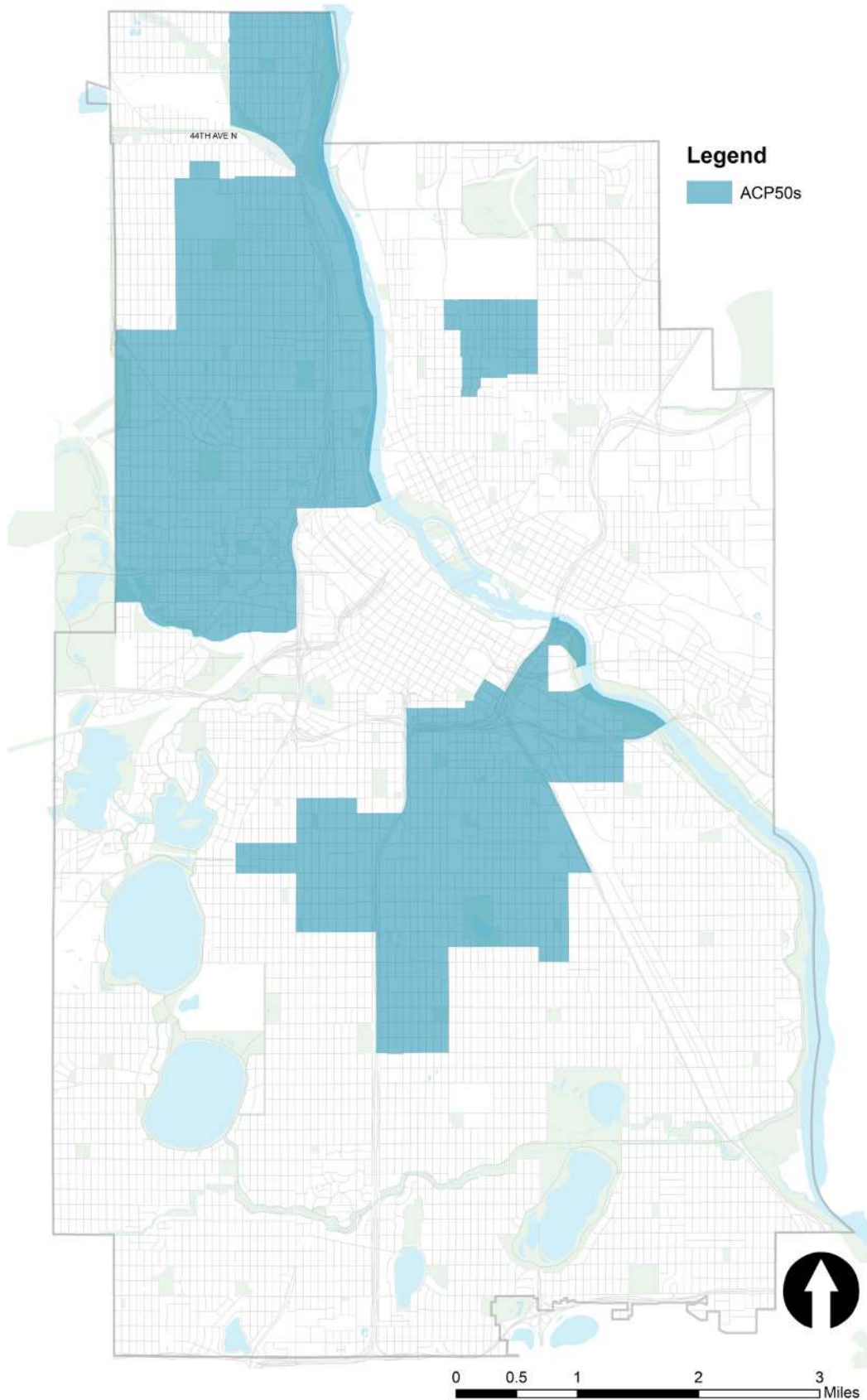
## PEDESTRIAN IMPROVEMENTS

**Goal: 100 miles of pedestrian realm improvements; 3,800 pedestrian intersection corner improvements**

**Baseline will be measured from 2020 moving forward**

To measure success in pedestrian improvements, we look to measure two separate but related metrics: miles of pedestrian realm improvements and number of pedestrian intersection improvements. Pedestrian realm improvements include sidewalk replacement or filling of gaps and installation of boulevards or pedestrian lighting. Pedestrian intersection improvements include the number of corners with curb extensions and ADA ramps.

Figure 168: Areas of Concentrated Poverty where 50% or more residents are people of color (ACP50s)





## MILES OF ALL AGES AND ABILITIES NETWORK COMPLETED

**Goal: 100% of the network, 286 miles**

**2019 baseline: 146 miles exist on the All Ages and Abilities Network**

The All Ages and Abilities Network consists of 286 miles. The goal is to complete the entire buildout of this network by 2030. 146 miles of this network already exist and 141 miles needs to be built, some of which will be upgrades from existing striped bike lanes<sup>77</sup>.

## NUMBER OF TRANSIT PRIORITY PROJECTS IMPLEMENTED

**Goal: All 25 corridors identified in the plan**

**Baseline will be measured from 2020 moving forward**

Many improvements to transit depend on operational and design changes on our streets that prioritize transit. Tracking and reporting on the number of corridors where transit priority improvements have been installed is a key metric to measure progress on the plan. The TAP identified 25 corridors for transit priority projects, including:

### **Bus-only lanes and/or transit advantages on 7 corridors:**

- 4th Avenue South between Washington Avenue and 10th Street South
- 5th Avenue South between Washington Avenue and 10th Street South
- 6th Street North/South between 1st Avenue North and 13th Avenue South
- 7th Street North/South between 1st Avenue North and 13th Avenue South
- 8th Street North/South downtown between 1st Avenue North and 13th Avenue South
- 4th Street from the west/freeway connections to Marq2
- 12th Street South between I35-W and Marquette Avenue South

### **New high frequency neighborhood-based transit on 3 corridors:**

- Nicollet-Central corridor
- Midtown Greenway from West Lake Station on the Green Line Extension to Lake Street Station on the Blue Line
- West Broadway from downtown Minneapolis to the northwest suburbs

**Transit priorities on 15 corridors.** These corridors may be prioritized for increased service, transit signal priority or preemption, a bus-only lane or other improvements.

- Marshall Street NE – between Broadway Street NE and Lowry Avenue NE
- Lyndale Avenue N – between West Broadway and northern city boundary
- Lowry Avenue – western city boundary to eastern city boundary
- West Broadway Ave/Broadway Street NE – extend from Lyndale Avenue N to the eastern city boundary
- Como Avenue SE – between University Avenue SE and eastern city boundary
- 38th Street – Bryant Avenue S to 42nd Avenue S
- Xerxes Ave to 46th Street Station - traveling along 50th Street W, Bryant Ave S, 46th St E, Cedar Ave, 42nd St E, 28th Ave S, 46th St E
- Lyndale Avenue S – Hennepin/Lyndale merge near Loring Park to southern city boundary
- Washington Avenue – West Broadway to Cedar Avenue continuing to 46th Street
- 2nd Street N – Hennepin Avenue to Dowling Avenue
- 50th Street W/Dupont Avenue S/46th Street E/42nd Street E – Xerxes Avenue to 46th Street Station
- Johnson Street NE – Hennepin Avenue to 37th Avenue NE
- Xerxes Avenue – 44th Street W to 54th Street W
- 28th Avenue S – 38th Street E to 58th Street E
- 4th Street SE and University Avenue SE – Central Avenue to 27th Avenue SE
- Glenwood Ave/Penn Ave - N 10th St to Olson Memorial Highway

<sup>77</sup> The actual lane miles of existing bikeways is 145.58 miles and was rounded to 146. The actual lane miles of planned is 140.59 miles and was rounded to 141. The sum of actual lane mileage of existing and planned bikeways is 286.17 and was rounded to 286.