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01 EXECUTIVE SUMMARY



02 Plan Purpose and Goals

The City of Burnsville, in partnership with Dakota County and with Statewide Health Improvement Partnership (SHIP) funds, embarked on creating a multi-modal plan in an effort to help the city continue along its path to a healthy, safe, and vibrant community. The purpose of the plan is to meet city-wide goals and policies to develop a safer and more inclusive transportation system for all users, especially for the most vulnerable users of the system.

The creation of the Multi-modal Plan is one of the success metrics for Burnsville's Transportation and Infrastructure Strategic Priority: Burnsville is committed to an effective, multi-modal transportation system that safely connects people and goods. Part of achieving this Strategic Priority is balancing transportation options including vehicle, bike, and pedestrians in a safe manner. The Multi-modal Plan also aligns with Burnsville's Belonging and Adaptability values, as well as supporting the Sustainability Strategic Priority.

TOP 5 NEEDS/PRIORITIES IN ORDER OF IMPORTANCE:

- 1. Safety of all users
- 2. Crossing comfort for walking/biking
- 3. Maintenance
- 4. Access to destinations for walking/biking & transit users
- 5. Network connectivity for walking and biking

03 Community Engagement

The public engagement process, aimed at understanding community needs and priorities, began in May of 2021 and will be completed after the final report is approved by council in Fall of 2021. Engagement activities were split between two phases:

Phase one focused on gathering information from the public on facility gaps, issues and opportunities, and funding priorities. It included two rounds of advertising and targeted engagement for historically underrepresented populations. This phase helped inform locations for improvement and identify metrics to help the study team prioritize recommendations.

Phase two engagement was focused on presenting the draft plan to stakeholders for review and refinement.

ENGAGEMENT BY THE NUMBERS



10 in-person events focusing on reaching underrepresented groups



Mobile-friendly website with approx. 800 visits



Approx. 500 fliers distributed in 3 languages



2 social media posts in 3 languages and 2 city newsletter advertisements



6 meetings with city council, commissions and stakeholder advisory committee

04 Community Context

CURRENT ACTIVE TRANSPORTATION NETWORK

The current active transportation network consists of facilities for biking, walking and transit. Trails and sidewalks are mainly located on major roadways. The walking network along major roadways is more complete than the biking network; however, there are significant gaps for both walking and biking.

MAJOR BARRIERS TO ACTIVE TRANSPORTATION

Major barriers to active transportation and accessing transit include multilane roadways, which are typically stressful for people walking and biking to cross, and limited street connectivity. Low stress, direct access to destinations is hampered by a circuitous street network and infrequent crossings of interstate highways.

EQUITY

Some Burnsville residents are likely to face more barriers to moving around the community than others. The equity analysis considered the following factors when assessing where active transportation improvements might be most needed:

- Areas of concentrated poverty
- Proportion with any disability
- Average land surface temperature on a hot summer day

- Proportion who do not identify as White, non-Latino
- Proportion who speak English less than "very well"
- Proportion with no vehicle
- Senior, supportive, and affordable housing developments

The areas of equity concern are generally located along Highway 13, I-35W, and around Burnsville Center.

DEMAND

Areas with high concentrations of destinations where people live, work, shop, take transit, enjoy parks and trails, go to school, and access services are areas where demand for active transportation is high. The areas around Highway 13, Nicollet Ave, McAndrews Rd, County Rd 42, and Burnsville Pkwy have the highest concentration of destinations.

05 Active Transportation Infrastructure

FUTURE NETWORK FOR ACTIVE TRANSPORTATION

Active transportation network development focused on three key infrastructure improvement types:

- Crossings of busy roadways
- · Facilities along busy roadways
- · Community connector trails

Recommendations were created based on public input, previous plans, crash history, capital improvement plans, and active transportation planning best practices. Recommendations are based on high-level planning analysis and may change based on factors such as engineering and future land development.

The long term network is comprised of on-street and off-street linear facilities and crossing improvements needed to create a connected, convenient network for active transportation. The long term network is shown in Figure 2.

Enhancing safety and connectivity within the Priority Areas (areas that are within both the Key Equity Area and the Key Demand Area) was the focus of the recommendations development process. Figure 1 shows the Key Demand Area, Key Equity Area, and their overlap, the Priority Areas.

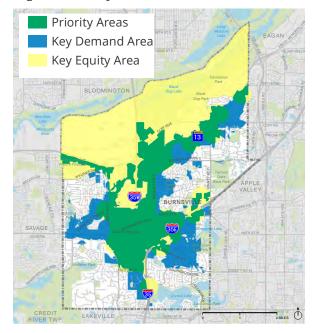
IMPLEMENTATION

The Implementation section identifies a potential implementation pathway for each recommended linear facility and crossing improvement. Implementation pathways are categorized into planned capital improvement projects, redevelopment projects, and projects that need further consideration by the relevant agencies. Options for accelerated implementation include rehabilitation plus projects, demonstration projects, and quick-build projects.

FUNDING

The funding section outlines the costs associated with building out the planned

Figure 1. Priority Areas



network. Potential funding sources include city funds, state and federal grants, and private funders.

MAINTENANCE

A well-maintained active transportation facility is safe and comfortable for people of all ages and abilities. The facility is accessible year round and free of debris, snow, and heaving or other obstacles, allowing people bicycling the maximum width of a street, bike lane, or shared use path. Maintenance goals include the following:

- Prevent falls and crashes.
- Provide clearly defined, year round facilities.
- Encourage facility use, leading to increased bicycling and walking and high return on investment.
- Prolong useful life of valuable infrastructure investments.

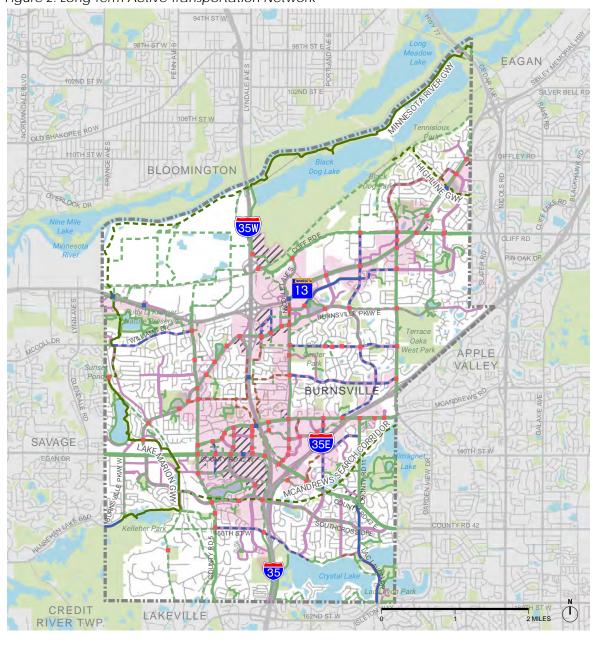


Figure 2. Long Term Active Transportation Network



CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY





Note: Recommendations are based on high-level planning analysis and may change based on factors such as engineering and future land development.

06 Electric and Shared Mobility

BIKE SHARE AND E-SCOOTER SHARE

Shared micromobility will be most successful in Burnsville if the City rapidly constructs a connected, low-stress network of active transportation facilities and encourages increased density of residences and destinations. Privately funded scooter and bike share programs are unlikely to be financially viable under the current land use and active transportation network conditions.

CAR SHARE

The City of St. Paul, City of Minneapolis, HourCar, and Xcel Energy are working together to create a network of EV charging hubs throughout the Twin Cities. The chargers would be public, but the service would also include a new, separate car sharing service called Evie. City staff could connect with HourCar to discuss the potential for expanding their services to Dakota County.

ELECTRIC VEHICLE (EV) CHARGING

Implementation strategies for EVs should focus on increasing access to EVs in underserved communities.

Recommended locations for City-installed EV stations include parking lots on public property, such as the Burnhaven Library,

at parks, and at supportive housing locations. Areas with mixed land uses and existing on-street parking (such as Heart of the City) should also be considered for on-street charging locations.

MOBILITY HUBS

Mobility hubs feature a collection of elements, such as bike share parking, e-scooters, wayfinding signage, and more, that improve accessibility for shared mobility and active transportation. Mobility hubs are often oriented around transit.

Recommended primary mobility hub locations are near or within the Priority Areas (areas of both high equity concern and high demand as established in Chapter 5) and connect Metro Transit and MVTA transit stops and stations with the active transportation network. Secondary mobility hubs are located at major trail and recreation destinations and co-located with proposed electric vehicle charging stations.



02 PURPOSE AND GOALS



Plan Purpose

The City of Burnsville, in partnership with Dakota County and with Statewide Health Improvement Partnership (SHIP) funds, embarked on creating a multi-modal plan in an effort to help the city continue along its path to a healthy, safe, and vibrant community. The purpose of the plan is to meet city-wide goals and policies to develop a safer and more inclusive transportation system for all users, especially for the most vulnerable users of the system.

Plan Goals

- Provide a blueprint for investments in walking, bicycling, and multi-modal network enhancements by identifying a multi-modal network that supports green infrastructure, shared mobility, transit, and non-motorized travel by people of all ages and abilities. This specifically includes people in underrepresented communities and communities likely to experience health disparities such as BIPOC (Black, Indigenous and People of Color), low-income, and senior citizens.
- Recommend action-oriented implementation strategies based on data-driven analysis and public input.
- Identify opportunities for new and shared mobility investments (e.g. bike/ scooter share stations and electric vehicle charging/car sharing stations).

Alignment with City Goals

CITY COUNCIL STRATEGIC VISION, VALUES, AND PRIORITIES

The creation of the Multi-modal Plan is one of the success metrics for Burnsville's Transportation and Infrastructure Strategic Priority: Burnsville is committed to an effective, multi-modal transportation system that safely connects people and goods. Part of achieving this Strategic Priority is balancing transportation options including vehicle, bike, and pedestrians in a safe manner. The Multi-modal Plan also aligns with Burnsville's Belonging and Adaptability values, as well as supporting the Sustainability Strategic Priority.

2040 COMPREHENSIVE PLAN

The 2040 Comprehensive Plan identifies 11 goals and policies to meet the needs of the city's transportation efforts. The Multimodal Plan supports each of the goals, but will primarily support the achievement of the following:

- Transportation Goal 3: Develop and advocate for a transportation system that efficiently and safely moves people and goods.
- Transportation Goal 4: Develop and advocate for an environmentally sensitive and sustainable transportation system.

- Transportation Goal 5: Work to integrate multiple methods of transportation into the existing and future transportation system that are safe and convenient.
- Transportation Goal 10: Account and plan for the assimilation of new transportation technologies.

The Comprehensive Plan states that identifying sidewalks for conversions to trails and constructing missing links in the sidewalk/ trail network to further improve the city's multi-modal network are priorities for the City.

SUSTAINABILITY PLAN

As an update to the 2009 Sustainability Guide Plan, the 2020 Sustainability Plan outlines an implementation framework to achieve citywide goals for sustainability, greenhouse gas reduction and climate adaption. The plan outlines specific strategies and actions that the city can take to achieve 2030 sustainability goals for the ten identified sector areas. The Multimodal Plan supports the following goals from the Sustainability Plan:

- Increase citywide walking/biking transportation 0.5% by 2030.
- Increase electric vehicle adoption to 10% of citywide vehicle share by 2030.
- Achieve a "Bicycle Friendly Community Bronze Level" by 2028.
- Improve multi-modal options to strengthen the health of the community and to increase accessibility to important destinations for vulnerable populations.



Burnsville residents sharing their ideas at a Multi-Modal Plan public engagement pop-up event

Performance Metrics

INVESTMENT

Track city-wide and for Multi-modal Plan Priority Area:

- Percent of projects in CIP that include improvements for people walking, bicycling, and accessing transit
- Number of <u>FHWA STEP safety counter-</u> <u>measures</u> included in roadway projects
- Number of road diets completed
- Number of trees planted along trails and sidewalks
- Total miles of on-street and off-street bicycle facilities and sidewalks
- Miles of new on-street and off-street bicycle facilities and sidewalks installed during the calendar year
- Percent of pedestrian and bicycle network completed
- Number of EV charging stations installed
- Number of mobility hubs created

OUTCOMES

- Number of crashes, injuries, and fatalities by mode
- Mode split of students walking or biking
- Percentage of people who walk or bike to work as their primary mode
- Transportation-related GHG emissions
- Rate of electric vehicle adoption
- Bicycle Friendly Community Award
- Walk Friendly Community Award

O3 COMMUNITY & STAKEHOLDER ENGAGEMENT



Introduction

The public engagement process, aimed at understanding community needs and priorities, began in May of 2021 and will be completed after the final report is approved by council in Fall of 2021. Engagement activities were split between two phases:

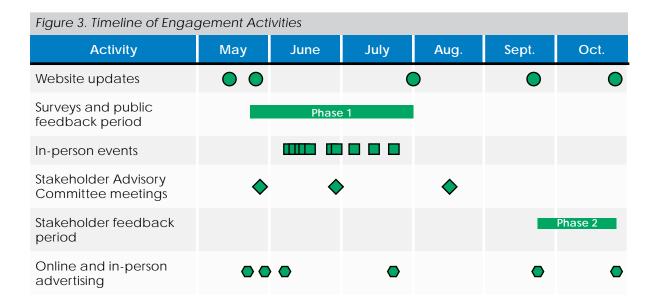
PHASE 1 – MAY THROUGH JULY 2021

Phase one focused on gathering information from the public on facility gaps, issues and opportunities, and funding priorities. It included two rounds of advertising and targeted engagement for historically underrepresented populations. This phase helped inform locations for improvement and identify metrics to help the study team prioritize recommendations.

PHASE 2 – SEPTEMBER 2021

Phase two engagement was focused on presenting the draft plan to stakeholders for review and refinement.

This chapter provides a summary of the feedback received during phase one. For complete survey and mapping results, see Appendices A and B of this report.



Phase 1

From May to July of 2021, engagement efforts resulted in over 1,500 clicks or conversations with community members and hundreds of location-based comments. This feedback helped in identifying areas for improvement and top priorities.

Engagement efforts combined online outreach with in-person pop-up events and in-depth stakeholder conversations to more fully understand how the multimodal network can better serve users.

Targeted outreach to people with disabilities, low-income residents, transit users, youth, seniors, and people with language barriers was conducted to strive for equitable outreach in the identification of needs and priorities.

FEEDBACK TECHNIQUES

- In-depth discussions or workshops with City Council, Planning Commission, Parks and Natural Resources Commission and the Stakeholder Advisory Committee
- Online and paper survey to understand priorities for investment
- Wikimap and physical maps for providing location based feedback

Engagement by the numbers



10 in-person events focusing on reaching underrepresented groups



Mobile-friendly website with approx. 800 visits



Approx. 500 fliers distributed in 3 languages



2 social media posts in 3 languages and 2 city newsletter advertisements



6 meetings/workshops with city council, commissions and stakeholder advisory committee



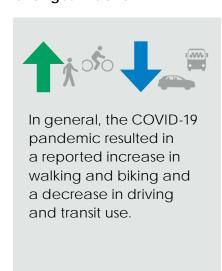
Mobile-friendly website with a custom domain at www.walkbikeridebville.com

The **Stakeholder Advisory Committee** was made up of a diverse group of 10 individuals representing different ages, racial and ethnic backgrounds, occupations, interests and abilities. This group received a greater level of information on the project to help provide a diverse sample of community feedback on things such as gaps in sidewalks and bike facilities, safety concerns, crossing barriers, accessibility and ways to prioritize funding for future projects throughout the city.

SURVEY RESULTS

The survey was open from May 24th to July 31st, 2021. During this time, 190 surveys were completed. Questions included topics such as the respondent's travel behavior, prioritization of needs and funding, factors that would increase use of multimodal options, and opinions on shared mobility and electric vehicle (EV) charging. Below is a summary of key results. See Appendix A for full details.

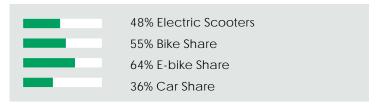
Changes in travel



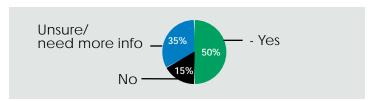
Top 5 needs/priorities in order of importance:

- 1. Safety of all users
- 2. Crossing comfort for walking/biking
- 3. Maintenance
- 4. Access to destinations for walking/biking and transit users
- 5. Network connectivity for walking and biking

41% of respondents expressed an interest in shared mobility. The interest by mode is shown below.



Should the city invest in more electric vehicle charging stations?



If you were given \$20 to invest in transportation projects, how would you distribute those funds to the following facilities types?



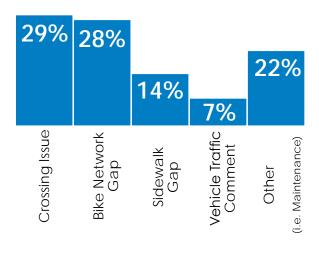
^{*}Shown as average proportion of dollars allocated by mode.

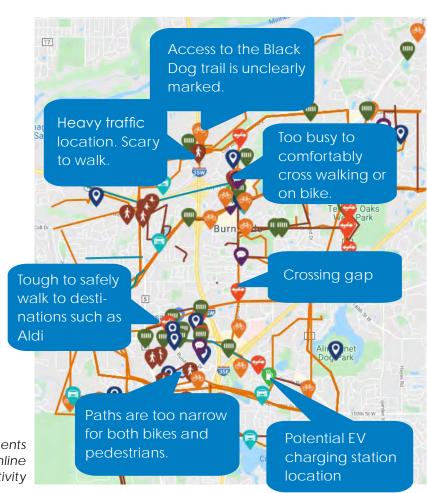
LOCATION-BASED NEEDS/ COMMENTS

190 location based comments were received during online and in-person events. Below is a summary of the feedback received. A full comments list can be found in Appendix B.

- Map comments are concentrated around Burnsville Center, Heart of the City, Highway 13, I-35W/Cliff Road and Terrace Oaks West Park.
- Most common concerns were about unsafe/ uncomfortable crossings, gaps in walking and biking facilities, sidewalks that are not wide enough, traffic signals that are not timed for pedestrians and high speed traffic.
- Most comments involved multi-lane roadways with three or more lanes. The two-lane and residential roads that also received comments included:
 - 130th St
 - 136th St
 - Judicial Rd
 - Greenwood Dr/ Frontage Rd
 - Williams Dr
 - Grand Ave S
 - · Lac Lavon Dr
 - Parkwood Dr

Location based comments by type (190 total)





Sample comments from the online mapping activity

WHO WE TALKED TO

During the first feedback period, outreach resulted in approximately 1,500 clicks or conversations with the community. Due to the COVID-19 pandemic and ongoing health concerns, engagement activities began virtually and moved to in-person events as conditions improved.

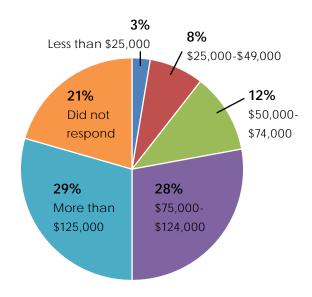
In-person events in June and July targeted historically underrepresented communities such as Black, Somali, and Hispanic residents, seniors, and people with disabilities. While only 6% of online survey respondents identified is non-white, approximately 30-40% of in-person participants were from communities of color.

Left images: Party on the Plaza event held July 22, 2021 Right image: Burnsville Farmers Market on July 15, 2021





Annual household income of survey respondents



Estimated percentage of participants from communities of color

Online survey

In-person events

6%

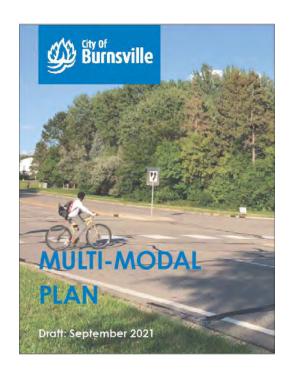
30-40%



Phase 2

The second phase of engagement focused on presenting the draft plan to stakeholders and providing an opportunity for review and refinement. This phase also included outreach to past participants and advertising on social and traditional media outlets to let the public know about the completion of the study and adoption of the Multi-Modal Plan.

Feedback from City, County and other agency staff helped to refine the plan before its final review by the City Council and Project Management Team.









Advertising methods included photobooth opportunity at pop-up events, paper and electronic fliers, social media posts, and peer outreach by SAC members.

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04 COMMUNITY CONTEXT



Introduction

This chapter presents the community context relevant to the development of the Multi-modal Plan's recommendations and implementation strategies. It summarizes the current active transportation networks in Burnsville, major barriers to active transportation, equity and demographic information, and demand for active transportation.

KEY FINDINGS

Current Active Transportation Network

The current active transportation network consists of facilities for biking, walking and transit. Trails and sidewalks are mainly located on major roadways. The walking network along major roadways is more complete than the biking network; however, there are significant gaps for both walking and biking.

Major Barriers to Active Transportation

Major barriers to active transportation and accessing transit include multilane roadways, which are typically stressful for people walking and biking to cross, and limited street connectivity. Low stress, direct access to destinations is hampered by a circuitous street network and infrequent crossings of interstate highways.

Equity

Some Burnsville residents are likely to face more barriers to moving around the community than others. The equity analysis considered the following factors when assessing where active transportation improvements might be most needed:

- Areas of concentrated poverty
- · Proportion with any disability
- Average land surface temperature on a hot summer day
- Proportion who do not identify as White, non-Latino
- Proportion who speak English less than "very well"
- Proportion with no vehicle
- Senior, supportive, and affordable housing developments

The areas of equity concern are generally located along Highway 13, I-35W, and around Burnsville Center.

Demand

Areas with high concentrations of destinations where people live, work, shop, take transit, enjoy parks and trails, go to school, and access services are areas where demand for active transportation is high. The areas around Highway 13, Nicollet Ave, McAndrews Rd, County Rd 42, and Burnsville Pkwy have the highest concentration of destinations.

Current Active Transportation Network

BIKING FACILITIES

The biking network is composed of bike lanes, roadside shared-use trails, and greenways as shown in Figure 4. The bike lanes are recently installed conventional on-street bike lanes (visually separated from vehicle traffic by a painted white line). Roadside trails are typically eight to 12 feet wide with a concrete or asphalt surface. The Dakota County Greenway syetem is made up of linear open space corridors that provide a walking and bicycling space separated from roadways, as well as improve water quality and habitat for plants and animals. When complete, greenways will run east-west across the City of Burnsville along the Minnesota River and south of CSAH 42 and I-35E, and north-south along the western edge of the city.

WALKING FACILITIES

The walking network in Burnsville is composed of sidewalks, roadside shared-use trails, and greenways as shown in Figure 5. The city has designated 20 recreational walking loops/routes on existing facilities ranging from one mile to 12 miles in length. Many residential streets do not have sidewalks, and there are also walking and bicycling facility gaps along major roadways.

TRANSIT FACILITIES

The City of Burnsville is served by suburban local transit and express transit, connecting riders to destinations locally and regionally as shown in Figure 6. The Minnesota Valley Transit Agency (MVTA) provides transit service through the city with express routes on Hwy 13 and I-35W. Proposed to be open in December 2021, Phase I of Metro Transit's Orange Line Bus Rapid (BRT) Transit route is planned to run along I-35W to provide service between downtown Minneapolis and Burnsville Pkwy. The proposed Orange Line Extension may extend BRT service south to CSAH 42 in the future.

MVTA local bus service is primarily located along CSAH 42, CR 5, Burnsville Pkwy, and McAndrews Rd. There are two park and ride facilities in northern Burnsville (Heart of the City Park and Ride and Burnsville Transit Station), and one just across the border with the City of Savage. MVTA provides Connect service, an on-demand public transit service operating in parts of Burnsville, Apple Valley, Rosemount and Savage. Riders can arrange a ride on MVTA Connect using RideMVTA, a smartphone-based app. Service is provided curb-to-curb to the rider's chosen pick-up and drop off locations within the service area. Since these services are on-demand, they do not appear in Figure 6, showing the existing and proposed transit facilities.

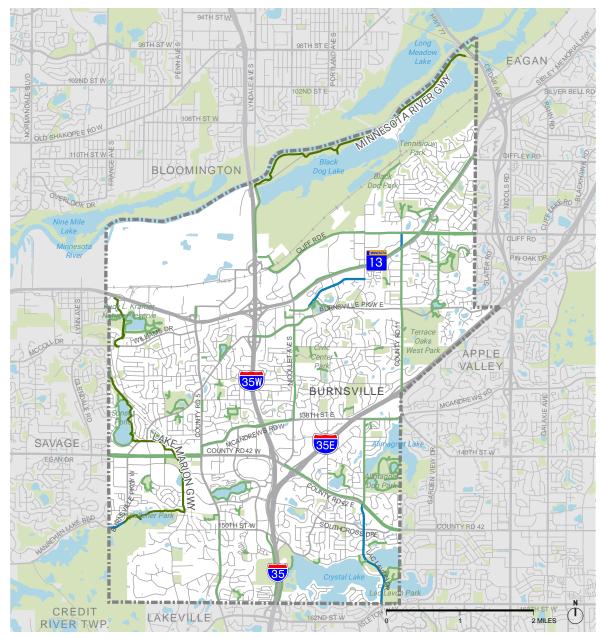


Figure 4. Current Biking Network

CURRENT BIKING NETWORK

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



BICYCLE FACILITIES

Existing Multi-Use Trail

Existing Bikelane

Existing Greenway

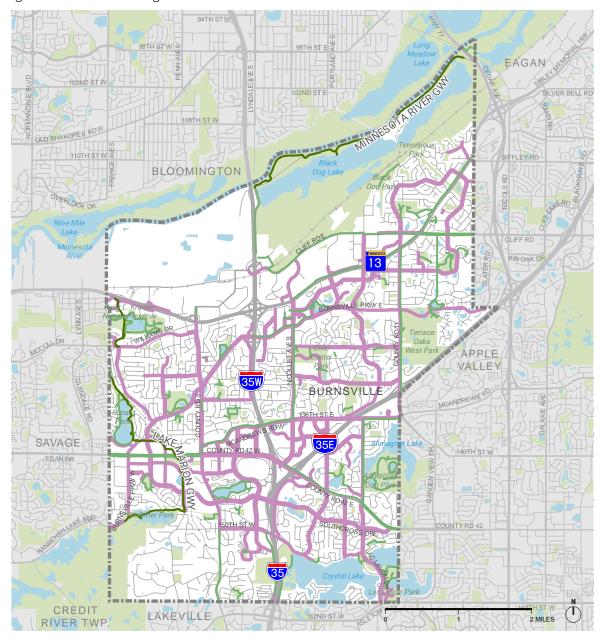


Figure 5. Current Walking Network

CURRENT WALKING NETWORK

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



WALKING FACILITIES

- Existing Sidewalk
- Existing Multi-Use Trail
- Existing Greenway

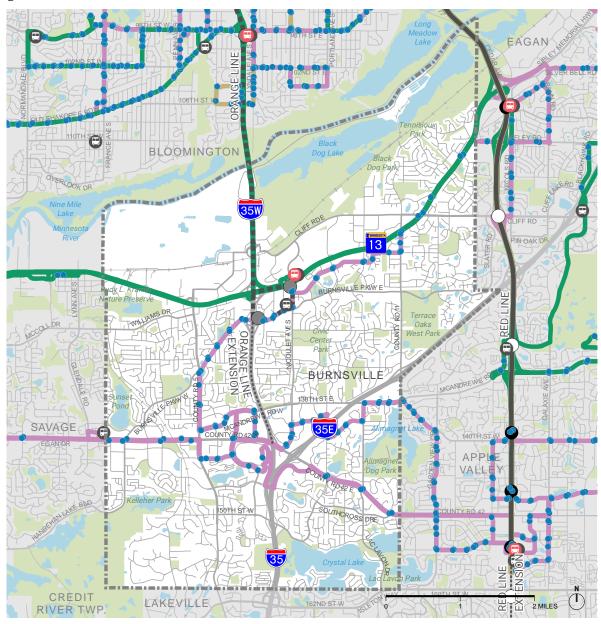


Figure 6. Transit Facilities

TRANSIT FACILITIES

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



TRANSIT STOPS AND STATIONS

Bus Stop

Park and Ride

Transit Center & Park and Ride

Bus Rapid Transit Station

Planned Bus Rapid Transit Station

Planned Bus Rapid Transit Station not Included in Metropolitan Council Transportation Policy Plan Current Revenue Scenario

TRANSIT ROUTES

Express

Suburban Local

Urban Local

Existing Bus Rapid Transit

■■■■ Planned Bus Rapid Transit

•••••• Future Bus Rapid Transit
Under Consideration

*As of Summer 2021. Routes impacted by COVID-19 Pandemic.

Barriers to Active Transportation

MULTILANE ROADWAYS

Multilane roadways, like Burnsville Parkway, Nicollet Avenue, McAndrews Road, CSAH 42, County Road 11, County Road 5, Cliff Road, and Highway 13, are major barriers to walking and biking in Burnsville. Multilane roadways (shown in Figure 8) typically have high volumes of vehicles traveling at high speeds. Crossings of multilane roadways, like the one shown in Figure 7, are often stressful for people walking and bicycling, with traffic signals timed to optimize traffic flow and many points of conflict with vehicles. Signalized crossings are infrequent, resulting in significant out of direction travel. Multilane roadways that lack

"I live on west side of McAndrews by Costco and have no safe crossings to let my kids walk to the library or mall area without a long detour up or down McAndrews." - Burnsville Resident

dedicated, separated bicycling and walking spaces are not usable for people bicycling and walking.

As shown in Figure 9, most of the 39 pedestrian-involved crashes and 23 bicyclist-involved crashes that occurred in Burnsville between 2016 and 2020 occurred on multilane roadways. Over 70% of the crashes occurred at intersections.

The pedestrian and bicycle related crashes make up only 1% of the 6,043 total crashes within the City of Burnsville, but account for 18.2% percent of the 77 total fatal and serious injury crashes within in the City.



Figure 7. Higher Stress Crossing of CSAH 42 at Burnhaven Drive

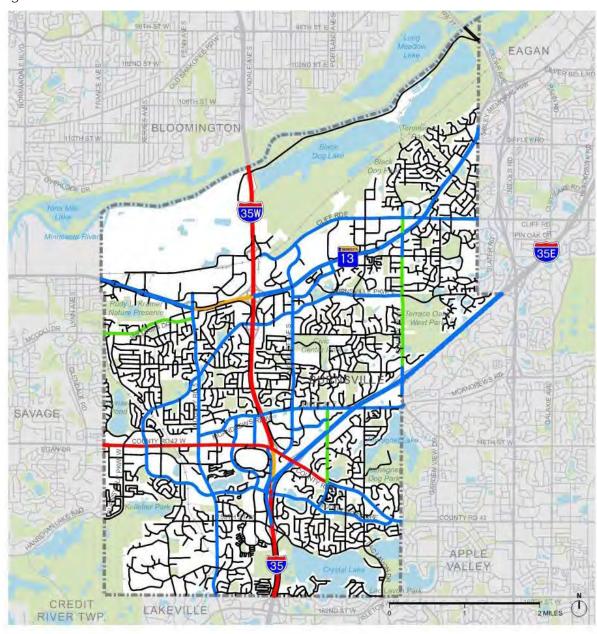


Figure 8. Number of Lanes

EXISTING NUMBER OF LANES

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



NUMBER OF LANES - 6 Lanes - 5 Lanes - 4 Lanes - 3 Lanes - 2 Lanes Data Source: 2020 City of Burnsville Comprehensive Plan

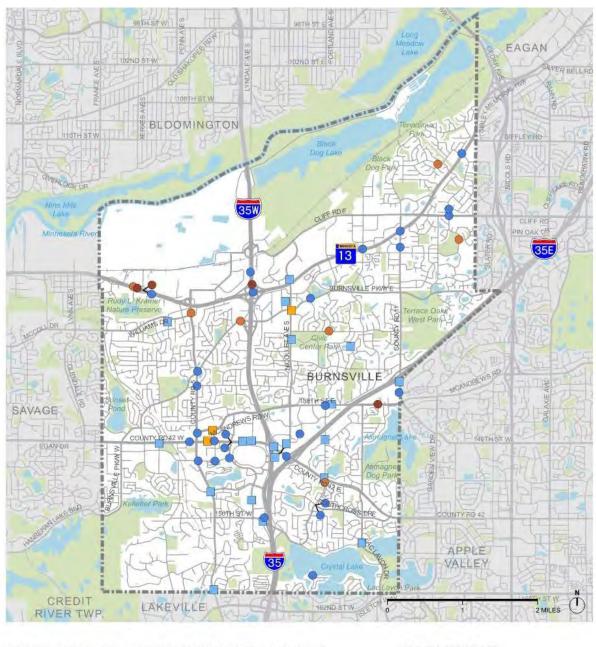


Figure 9. Pedestrian and Bicycle Crashes (2016-2020)

PEDESTRIAN AND BICYCLE CRASHES (2016-2020)

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY





STREET CONNECTIVITY

Burnsville's street network is hierarchical and circuitous. Rather than connecting across the city in a grid pattern, local streets typically end in a cul-de-sac, requiring people walking and biking to walk along arterial and collector roads to reach destinations. Short sidewalk or trail connections between roads, referred to in this plan as "community connectors," can provide more direct, lower stress routes for people walking and biking as shown in Figure 10. Some of these community connectors already exist in Burnsville, such as near Civic Center Park (highlighted in Figure 11).

I-35, I-35W and I-35E create major barriers to active transportation by cutting off local street connections. Opportunities for people walking and biking to cross the interstates are infrequent, typically require traveling along multilane roadways, and

Figure 11. Community Connector between 130th Street and Civic Center Parkway



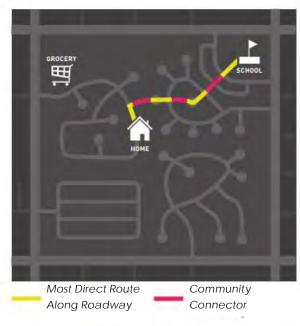
require crossing interstate on- and offramps. There are no crossing opportunities of I-35W between Burnsville Parkway and McAndrews Road (a distance of 1.25 miles), severely limiting east-west connectivity in the center of Burnsville.

The Minnesota River also impacts street connectivity. It is both a destination that attracts people walking and biking, and a barrier to traveling north into Bloomington.

Figure 10. Suburban Street Network Design Impact on Access to Destinations



Short trail segments or "Community Connectors" can have a dramatic effect on the connectivity of the network for people walking and biking.



IMPACT OF BARRIERS ON ACCESS TO DESTINATIONS

The absence of walking and biking facilities on multilane roadways, lack of low stress crossing opportunities on multilane roadways, and limited street connectivity limits walking and biking limit the ability of Burnsville residents and visitors to access destinations.

For example, residents of the West Apartments near Burnsville Center are cut off from access to the grocery stores, thrift store, home improvement store, bank, restaurants, and other destinations north of CSAH 42 due to lack of low stress crossing opportunities. Their access to Earley Lake is limited by the disconnected street network and lack of bicycling facilities on County Road 5. The area within a half mile of the West Apartments and significantly smaller area that is accessible by walking or biking a half mile on low stress facilities is shown in Figure 12.

West Apartments

Burnsville

Figure 12. Example Impact of Barriers on Access to Destinations



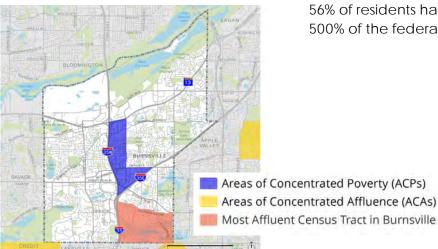




Equity

Understanding equity is important for the development of multi-modal transportation plans. The historical, social, and political dynamics in the United States have produced transportation infrastructure that is not evenly distributed across communities. These dynamics have also caused segregation of housing by race and income. Housing that is affordable to people with lower incomes is often located close to high traffic roadways that increase levels of noise and pollution and restrict options for active transportation. People with lower incomes are cost-burdened by car ownership and would benefit from access to transit and safer walking and biking facilities. People with higher incomes, privileges, and easier access to power, such as ability to speak English fluently and Whiteness, often have more transportation options, less exposure to high traffic roadways, and more access to green spaces.

Figure 13. Income Inequality



Equity was examined at the census tract level using 2019 American Community Survey data.

INCOME INEQUALITY

Figure 13 shows areas of concentrated poverty (ACPs) and areas of concentrated affluence (ACAs).

As defined by the Metropolitan Council, ACPs are census tracts where at least 40% of residents have incomes below 185% of the federal poverty threshold (about \$47,500 for a family of four). In Burnsville, there is an area of concentrated poverty located east of I-35W. 45% of residents in this ACP census tract have an income below 185% of the federal poverty threshold.

ACAs are census tracts where at least 67% of residents have incomes above 500% of the federal poverty threshold (about \$129,000 for a family of four). There are no ACAs within Burnsville. The nearest ACAs border Burnsville to the south. Within Burnsville, the area around Crystal Lake has the highest levels of affluence, where 56% of residents have an income above 500% of the federal poverty threshold.

ACCESS TO VEHICLES

Figure 14 shows the proportion of households in each census tract without a vehicle. The ACP census tract has a much greater proportion of households without a vehicle than other census tracts in the city. Nearly 28% of households in the ACP census tract do not have a vehicle, compared to 7% of households in Burnsville as a whole.

The census tracts north of Hwy 13 and adjacent to I-35 W and I-35 E have moderate proportions of households without a vehicle.

Renting is correlated with lack of vehicle access. Of the Burnsville households that do not have access to a vehicle, 88% are renting their homes. 16.5% of households that rent their homes do not have access to a vehicle, compared to 1% of households that own their homes.

DISABILITY

10% of Burnsville residents identify as having a disability. Figure 15 shows that the ACP census tract and the areas around Burnsville Center and Crosstown West Park have the highest proportions of residents with disabilities, with 14-18% of residents identifying as having a disability.

Disability is correlated with lower incomes. In Burnsville, the median income for people without disabilities who are working is about \$40,000, while the median income for people with disabilities who are working is about \$25,000.

Disability is also correlated with age. Over half of Burnsville residents age 75 and older say they have a disability.

LANGUAGE

8% of Burnsville residents speak English less than very well. As shown in Figure 16 the census tracts in the northern part of the city have the highest proportions of people who speak English less than very well. The areas with the highest proportion of white people also have the lowest proportion of people who speak English less than very well.

URBAN HEAT ISLAND

The urban heat island effect causes urban areas to experience higher surface temperatures throughout the day, and to retain heat into the night. This effect is primarily due to a higher area of impermeable, dark-colored surfaces like parking lots, roads, and roofs. As shown in Figure 17, the ACP census tract and the census tract around Burnsville Center have the highest average land surface temperature on a summer day at 93 and 96 degrees Fahrenheit, respectively. The area around Burnsville Center is 9 degrees hotter than the coolest census tract near Black Dog Lake.

Figure 14. Proportion of Households with No Vehicle

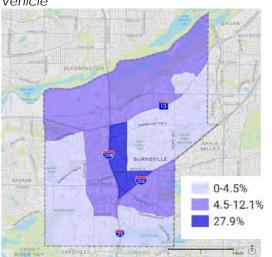


Figure 16. Proportion of Residents who Speak English Less than Very Well

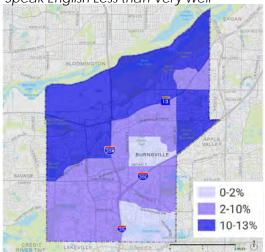


Figure 15. Proportion of Residents with Any Disability

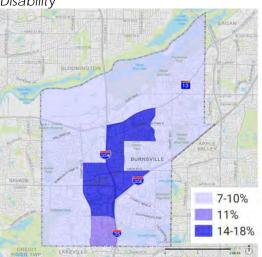
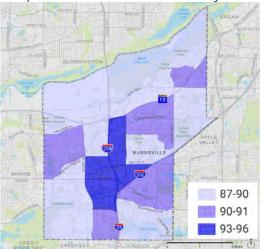


Figure 17. Average Land Surface Temperature on a Hot Summer Day



RACE & ETHNICITY

Figure 18 shows the proportion of residents who identify solely as white (not Hispanic or Latino) in each census tract. 69% of Burnsville residents identify as white alone (not Hispanic or Latino) and white people make up the majority in every census tract. The most affluent census tract in Burnsville (near Crystal Lake) also has a high proportion of residents identifying as white (82%). The area east of Nicollet near Civic Center Park has the highest proportion of White residents in the city at 83%.

Figure 19 shows the proportion of residents who identify as Hispanic of Latino in each census tract. 8% of Burnsville residents identify as Hispanic or Latino. The southwest area of Burnsville has the highest proportion of Hispanic/Latino residents at more than 15%.

Figure 20 shows the proportion of residents who identify solely as Black or African American (not Hispanic of Latino) in each census tract. 14% of Burnsville residents identify as Black or African American (not Hispanic or Latino). The census tracts near Black Dog Lake, Burnsville Center, and Alimagnet Lake have the highest proportion of Black or African American residents at more than 21%.

Figure 21 shows the proportion of residents who identify solely as Asian (not Hispanic or Latino) by census tract. 5% of Burnsville residents identify as Asian (not Hispanic or Latino). The census tract around Black Dog Lake and Sunset Pond as well as the most affluent census tract (near Crystal Lake) have the highest proportion of Asian residents at more than 7%.

Race and income are correlated. The median household income of Burnsville residents who identify solely as Black is about \$48,500. Hispanic/Latino household median income is about \$50,000. The median household income of Burnsville residents who identify solely as white alone or Asian is about \$77,500, about 1.6 times more than Black and Hispanic/Latino median household incomes.

Figure 18. Proportion of Residents who Identify as White alone, Not Hispanic or Latino

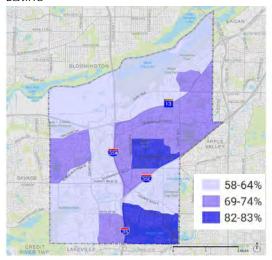


Figure 20. Proportion of Residents who Identify as Black or African American alone, Not Hispanic or Latino

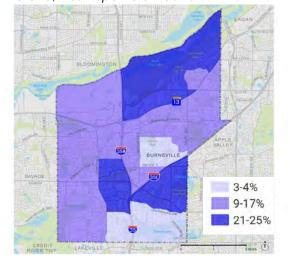


Figure 19. Proportion of Residents who Identify as Hispanic or Latino

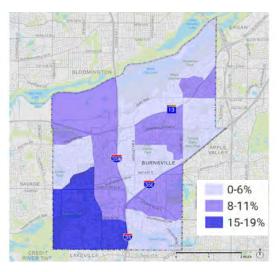
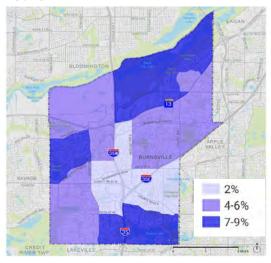


Figure 21. Proportion of Residents who Identify as Asian alone, Not Hispanic or Latino



DISCUSSION

The income inequality, urban heat island, disability, and vehicle access equity indicators point to the census tracts east of I-35W and near Burnsville Center as key areas where people may rely more heavily on modes of transport other than private car ownership.

The equity analysis points to the areas around Crystal Lake and east of Nicollet near Civic Center Park as areas where people generally have high access to personal vehicles, high levels of affluence, and fewer barriers to exercising political power. Due to these factors, it is anticipated that residents from these areas will provide feedback in greater proportion than other areas. Recommendation development for this plan should anticipate disproportionate engagement from residents in these areas.

Figure 22 shows the census tracts of greatest equity concern, those that are high in at least two of the following:

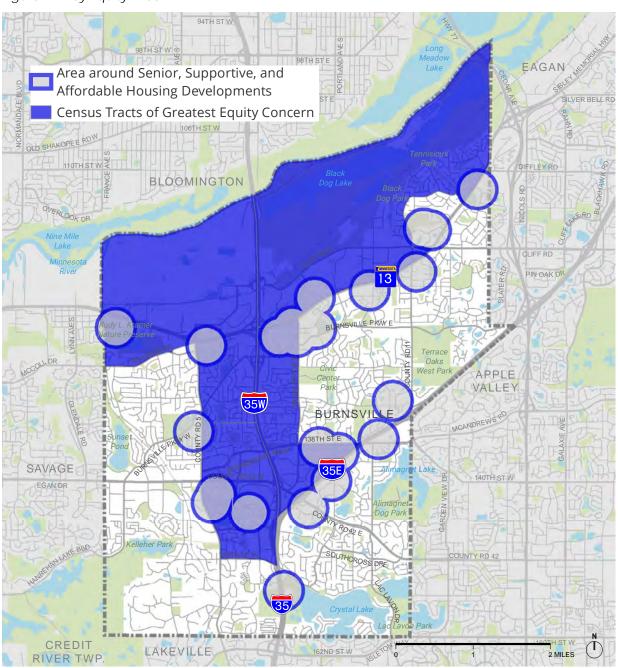
- · Area of concentrated poverty
- Proportion with any disability
- Average land surface temperature on a hot summer day
- Proportion who do not identify as White, non-Latino
- Proportion who speak English less than "very well"
- Proportion with no vehicle

The census tract-level analysis may overlook smaller areas where there are concentrations of people who rely heavily on modes of transport other than private car ownership. To add greater detail to the equity analysis, the quarter mile area around senior, supportive, and affordable housing developments was added to the census tracts of greatest equity concern to create the Key Equity Area.



The Key Equity Area shown in Figure 22 was used in combination with the Key Demand Area (discussed on the following pages) to create the Priority Areas used in the recommendations development process.

Figure 22. Key Equity Area



Demand

Count data of people walking and biking alone typically do not reflect demand for walking and biking due to the lack of adequate facilities to support active transportation. A lack of people walking and biking does not necessarily indicate a lack of demand, so evaluation of the concentration of destinations is used to understand where people want to walk and bike. The composite Live Work Play analysis conducted for this Plan combines six factors to determine areas where demand for walking and biking is likely to be high.

LIVE

Figure 23 shows concentration of residential destinations based on 2019 American Community Survey population data at the block group level. The highest population densities are found east of Nicollet Ave and south of Hwy 13; south of I-35E around County Rd 42; and west of I-35 and south of 150th St W.

WORK

Figure 24 shows concentration of jobs based on 2018 Longitudinal Employer-Household Dynamics (LEHD) data on all jobs at the block group level. The highest job densities are found north of the I-35 junction and around County Rd 42 west of County Rd 5.

SHOPPING

Figure 25 shows the concentration of shopping destinations based on 2018 LEHD data on retail jobs at the block group level. The highest retail job densities are found around the Burnsville Shopping Center.

TRANSIT

Figure 26 shows the concentration of transit stop and transitway stations. The highest transit densities are found along Nicollet Ave, McAndrews Rd, County Rd 42, Hwy 13, and Burnsville Pkwy.

PARKS AND TRAILS

Figure 27 shows the concentration of trail and Burnsville community park destinations, with parks given more weight than trails because of the greater variety of amenities available at parks. The highest park and trail densities are found around Alimagnet Dog Park, Sunset Pond, Kelliher Park, the Rudy L. Kramer Nature Preserve, Terrace Oaks Park, and Neill Park.

INSTITUTIONS

Figure 28 shows the concentration of institutional land uses, including destinations like schools, the library, post offices, hospitals, city hall, places of worship, and fire stations. The highest institutional land use densities are found north of the I-35 junction, around Civic Center Park, and north of Hwy 13 around Burnsville High School.

Figure 23. Concentration of Residential Destinations

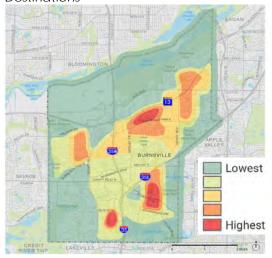


Figure 25. Concentration of Shopping Destinations

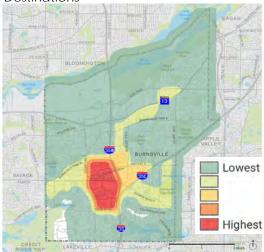


Figure 27. Concentration of Park and Trail Destinations

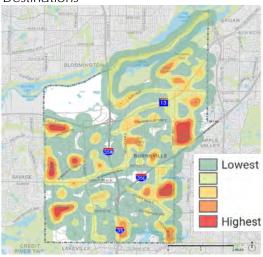


Figure 24. Concentration of Employment Destinations

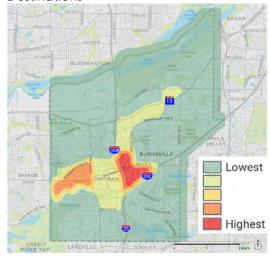


Figure 26. Concentration of Transit Destinations

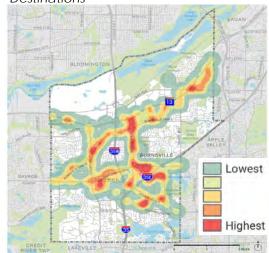
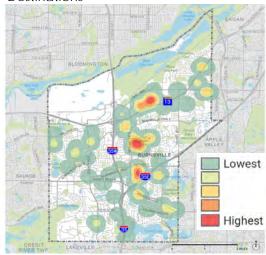
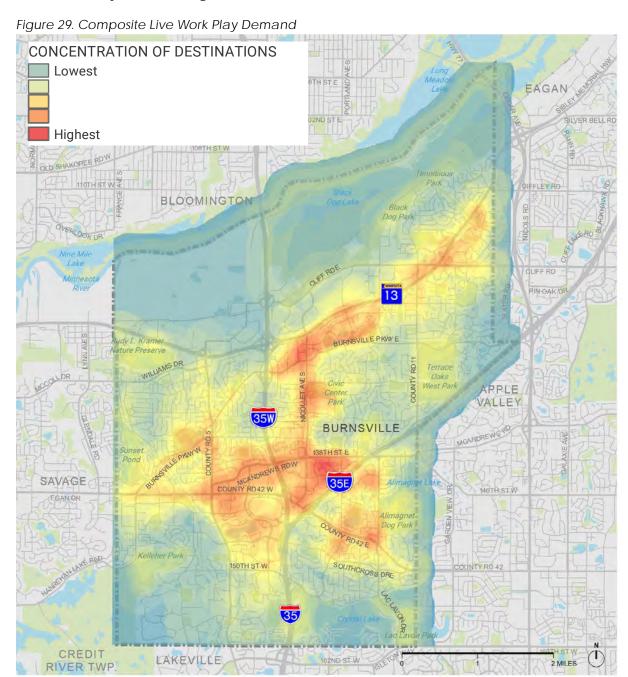


Figure 28. Concentration of Institutional Destinations

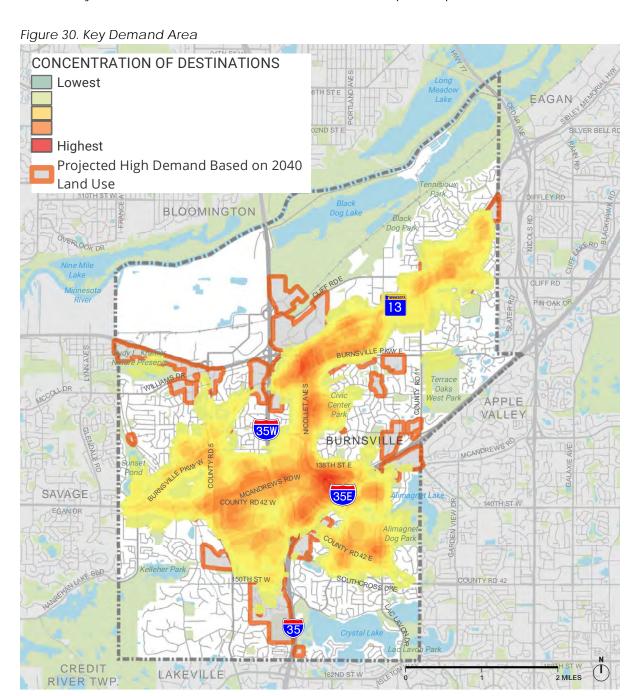


DISCUSSION

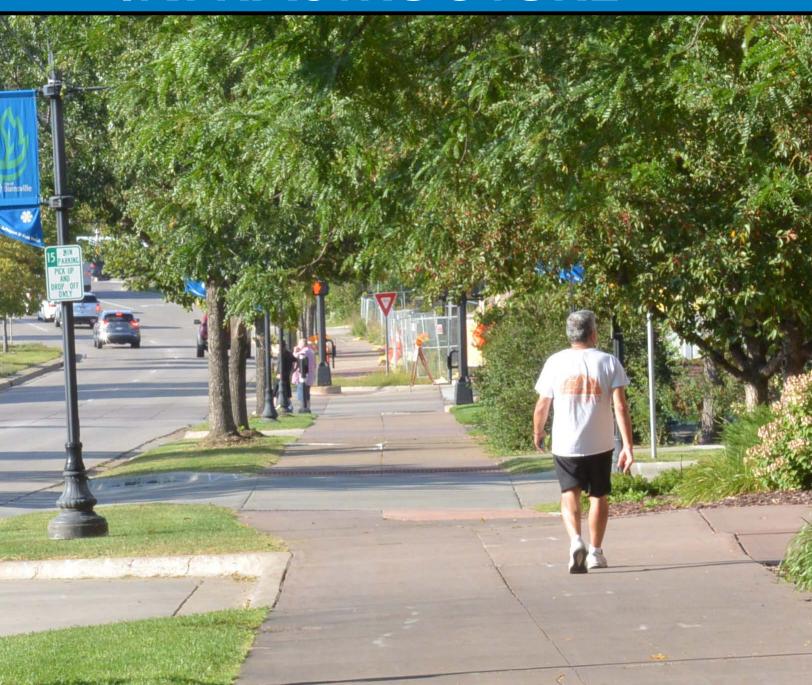
Figure 29 shows the areas with the highest concentrations of destinations where people live, work, shop, take transit, enjoy parks and trails, go to school, and access services. The areas around Highway 13, Nicollet Ave, McAndrews Rd, County Rd 42, and Burnsville Pkwy have the highest concentration of destinations.



To account for projected increases in demand associated with changing land use patterns, high demand future land uses were added to the areas with the highest concentration of current destinations to create the Key Demand Area shown in Figure 30. The Key Demand Area was used in combination with the Key Equity Area to create the Priority Areas used in the recommendations development process.



O5 ACTIVE TRANSPORTATION INFRASTRUCTURE



Introduction

This chapter presents active transportation network recommendations and implementation pathways for building out the network. It summarizes the costs associated with constructing linear facilities and crossing improvements, potential funding sources, and maintenance principles.

KEY IDEAS

Future Network for Active Transportation

Active transportation network development focused on three key infrastructure improvement types:

- Crossings of busy roadways
- Facilities along busy roadways
- Community connector trails

Recommendations were created based on public input, previous plans, crash history, capital improvement plans, and active transportation planning best practices.

The long term network is comprised of on-street and off-street linear facilities and crossing improvements needed to create a connected, convenient network for active transportation.

Enhancing safety and connectivity within the Priority Areas (areas that are within both the Key Equity Area and the Key Demand Area) was the focus of the recommendations development process.

Implementation

The Implementation section identifies a potential implementation pathway for each recommended linear facility and crossing improvement. Implementation pathways are categorized into planned capital improvement projects, redevelopment projects, and projects that need further consideration by the relevant agencies. Options for accelerated implementation include rehabilitation plus projects, demonstration projects, and quick-build projects.

Funding

The funding section outlines the costs associated with building out the planned network. Potential funding sources include city funds, state and federal grants, and private funders.

Maintenance

A well-maintained active transportation facility is safe and comfortable for people of all ages and abilities. The facility is accessible year round and free of debris, snow, and heaving or other obstacles, allowing people bicycling the maximum width of a street, bike lane, or shared use path. Maintenance goals include the following:

- · Prevent falls and crashes.
- Provide clearly defined, year round facilities.
- Encourage facility use, leading to increased bicycling and walking and high return on investment.
- Prolong useful life of valuable infrastructure investments.

Future Network for Active Transportation

NETWORK DEVELOPMENT PROCESS

Active transportation network development focused on three key infrastructure improvement types:

- Crossings of busy roadways
- Facilities along busy roadways
- · Community connector trails

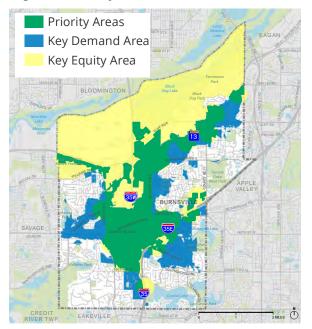
These types of infrastructure improvements align with the public priorities shared during community engagement:

- Safety for all users
- Crossing comfort for walking/biking
- Access to destinations for walking/biking and transit users
- Network connectivity for walking/biking

Recommendations were created based on public input, previous plans, crash history, capital improvement plans, and active transportation planning best practices.

Enhancing safety and connectivity within the Priority Areas (areas that are within both the Key Equity Area and the Key Demand Area, as shown in Figure 31) was the focus of the recommendations development process. The Priority Areas received most of the public comments and are the site of most pedestrian and bicycle crashes. Recommended future facilities and crossing improvements outside of the priority areas stem from previous plans, planned capital improvement projects, and public input.

Figure 31. Priority Areas



CONTINUITY WITH CITY AND REGIONAL PLANS

The improvements identified through previous planning efforts at the City, County, Metropolitan Council, and MnDOT are included in the future network.

Burnsville Trail Plan

The 2012 Burnsville Trail Plan identifies the highest priority trail segments to meet the city's goals to improve the trail network. These priority segments include:

- Northeast Connection: between the northeast communities with Eagan, Cedar Avenue pedestrian bridge, and the Minnesota Valley trails.
- Burnsville Loop Trail: Utilize the Parkway, Southcross and CR 11 to connect to many city parks, the Heart of the City, the Burnsville Center area, and other popular destinations. Part of this plan is to convert many existing sidewalks to 10-foot wide trails.
- Tennisioux Park: Implement a trail between Tennisioux Park with the north end of 12th Avenue.
- Burnsville Parkway (CR 11 to Kennelly and CR 42 to Savage)
- Black Dog Road
- Cliff Road (35W to 12th Ave)
- NSP Road
- Kelleher Park to Northview Park
- Crystal Lake Road (150th St to Portland)
- Minnesota Valley (Black Dog to Cliff Fen)

- Judicial Road (Williams to Burnsville Parkway; Recommendation superseded by Lake Marion Greenway Master Plan)
- County Road 5 (Hwy 13 to Cliff Rd)
- Embassy Road
- Lac Lavon Drive (since completed as bike lanes)

Burnsville Center Village Redevelopment Vision Plan

Key to the Burnsville Center Village Redevelopment Vision Plan is a grade-separated crossing for pedestrians and bicyclists under CSAH 42 between Aldrich Ave and Burnhaven Dr. This crossing will link the two areas of Center Village.

The plan envisions a new street hierarchy for the internal street network. Each of these roadways propose bicycle and pedestrian facilities as part of the cross section to provide safe multi-modal infrastructure throughout Center Village and beyond.

Dakota County Pedestrian and Bicycle Study

The study identifies several recommended strategies and practices for addressing the 34 miles of trail gaps and improving the pedestrian and bicycle facilities in the county. Among the Top 20 trail gaps, the following four gaps were identified within the City of Burnsville:

 #9 CSAH 42 – Burnsville Center: A 1.1 mile trail gap between CSAH 5 and Nicollet Ave.

- #15 CSAH 5: A 1.0 mile trail gap between 150th Street and CSAH 42.
- #17 (CSAH 42): A 0.5 mile trail gap between Portland Ave and CSAH 11.
- #20 (Cliff Rd/CSAH 32): 0.7 mile gap between Hwy 13 and Cinnamon Ridge Trail. (Under construction 2021)

Dakota County Trail Gap Map

The map highlights the locations of Dakota County's Top 20 Trail Gaps in the city and provides updates on projects soon to be constructed.

The map depicts additional segment gaps along Dakota County's systems:

- CSAH 5: Between 126th Street and CSAH 42, there are bicycle gaps on each side of CSAH 5.
- CSAH 38: Between CSAH 5 and CSAH 11, there is a bicycle gap on the south side of CSAH 38.
- CSAH 11: Between Hwy 13 and CSAH 38, there is a bicycle gap on the west side of CSAH 11.
- Cliff Rd/CSAH 32: Between 35W and Hwy 13, a pedestrian gap exists on the south side for most of the segment.
 Pedestrian and bicycle gaps exist on

the north side between S 12th Ave and Hwy 13.

Regional Bicycle Transportation Network

The Regional Bicycle Transportation Network (RBTN) is the Metro area's vision for bikeway planning and investment. RBTN alignments identify a specific roadway with existing or planned bikeways or consensus that the roadway should be part of the RBTN. Cliff Road E, 138th St E (CSAH 38), and Hwy 77 in the northeast corner of the city are designated as RBTN alignments.

RBTN corridors identify areas where alignments have not yet been identified, but there is existing or potentially high demand for bicycling. RBTN corridors are centered around Nicollet Ave S, CSAH 42, and the Minnesota River.

RECOMMENDED FACILITIES

The long term network maps show future linear facilities and crossing improvements needed to create a connected, convenient network for active transportation. The city-wide map (Figure 32) shows all improvements, with the maps on the following pages (Figure 33 to Figure 38) showing greater detail in the Priority Areas. Recommendations are based on high-level planning analysis and may change based on factors such as engineering and future land development.

The facility types shown represent the long-term vision for the network. In the short term, other facility types may be more feasible. For example, on a street with sidewalks but no bicycle facilities, an on-street bicycle facility may be feasible in the short term, but a trail would ultimately be installed. On a street with no sidewalks or bicycle facilities, a temporary on-street shared use path may be feasible in the short term, with a trail installed in the long-term.

The following text summarizes the facility and crossing types included in the

recommendations. Refer to the Burnsville Pedestrian and Bicycle Design Guidelines for details on linear facility and crossing improvements.

Off-Street Linear Facilities

The recommended off-street linear facilities include three types shared use paths:

- Trails are the most commonly recommended facility type in Burnsville's network. They are shared use paths running parallel to roadways and separated from traffic by a curb and/or a buffer.
- Community connectors are short shared use paths that create more direct connections to destinations for people walking and bicycling. They may cross parks or school grounds, run between parcels, cross parking lots, connect a cul-de-sac to a main roadway, or run along utility corridors.
- Greenways are linear open space corridors with shared use paths that are generally independent from the roadway network.



Existing community connector trail between a residential roadway and Sunset Pond trail

On-Street Linear Facilities

Bicycle boulevards are low-speed, low-volume roadways designed to create low-stress connections for people bicycling. Associated treatments include pavement markings, signs, and traffic calming features. Traffic calming on bicycle boulevards can also increase comfort for people walking.

On-street bike lanes designate an exclusive space for bicyclists through the use of pavement markings, signs, and visual and physical barriers. They include standard bike lanes, buffered bike lanes, and separated bikeways.

"I have to ride on sidewalks because there is no designated bike lane. I never ride on the streets because it's too dangerous."

-Burnsville Resident

Trees and green infrastructure are integral parts of both off-street and on-street linear facilities. On hot days, trees cool people walking and biking with evapotranspiration and shade. Trees provide shelter from precipitation. Trees and green infrastructure like rain gardens and bioswales contribute to community character, calm traffic, and help to manage stormwater. Planting trees and vegetation along linear facilities is especially important in the urban heat island areas around Burnsville Center and between I-35W and Nicollet Avenue.



Separated bike lane with bioswales, trees, and parking lane



Bicycle boulevard with flow-through stormwater planter in traffic-calming chicane

Crossing Improvements

The Long Term Network maps identify key crossing improvement locations. These crossings connect existing and planned active transportation facilities, allow transit riders to reach bus stops, and reduce out-of-direction travel for walking and biking.

Many roadway crossings in Burnsville include high-visibility crosswalks and curb ramps, features that are necessary for safe, comfortable crossings. For higher speed, multi-lane roadways, these features alone are not sufficient to create low stress crossings for people walking and biking. Signalized multi-lane roadway crossings without pedestrian refuge islands and traffic calming are likely to function as barriers due to multiple conflict points and the likelihood of insufficient crossing time.

Improvements at signalized locations could include ADA-compliant curb ramps, pedestrian refuge islands, signal timing that prioritizes people walking and biking, detection of bicyclists, single lane roundabouts, curb extensions, turn lane removal, road diets, bike boxes, two-stage turn boxes, and colored pavement and crossing markings.



Protected intersection with corner safety islands, pedestrian safety islands, high visibility crosswalks, and green bicycle crossing parkings

Improvements at unsignalized locations could include ADA-compliant curb ramps, pedestrian hybrid beacons, rectangular rapid flashing beacons (RRFBs), curb extensions, turn lane removal, road diets, pedestrian refuge islands, raised intersections, and raised crosswalks.

Grade-separated crossings are also included in the Long Term Network maps. These crossings are identified where many people walking and biking are likely to cross a road, but traffic volumes and speeds make walking and bicycling across the road hazardous. These include crossings of Highway 13 on the regional greenway network, crossing of Highway 13 at Nicollet Avenue in the Heart of the City, crossings of CSAH 42 and McAndrews Road in the Burnsville Center area, and crossing I-35W.



CSAH 42 underpass from the Burnsville Center Village Redevelopment Vision



Midblock crossing of multi lane roadway with RRFB and vegetated median refuge island

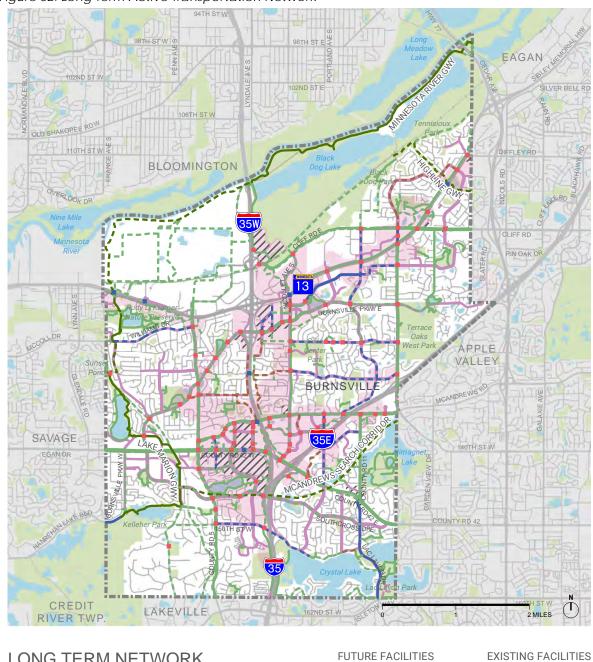


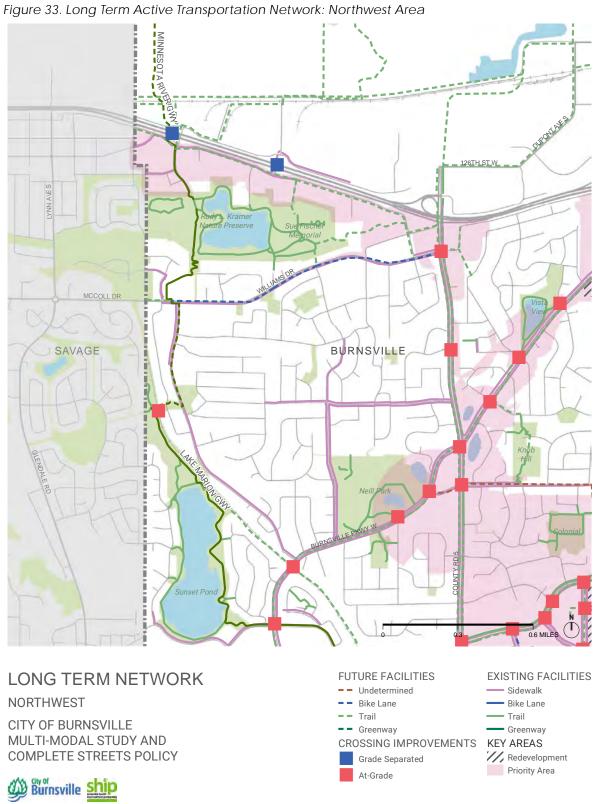
Figure 32. Long Term Active Transportation Network

LONG TERM NETWORK

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



Undetermined Sidewalk Bike Lane Bike Lane Trail Trail Greenway Greenway CROSSING IMPROVEMENTS KEY AREAS /// Redevelopment Grade Separated Priority Area At-Grade



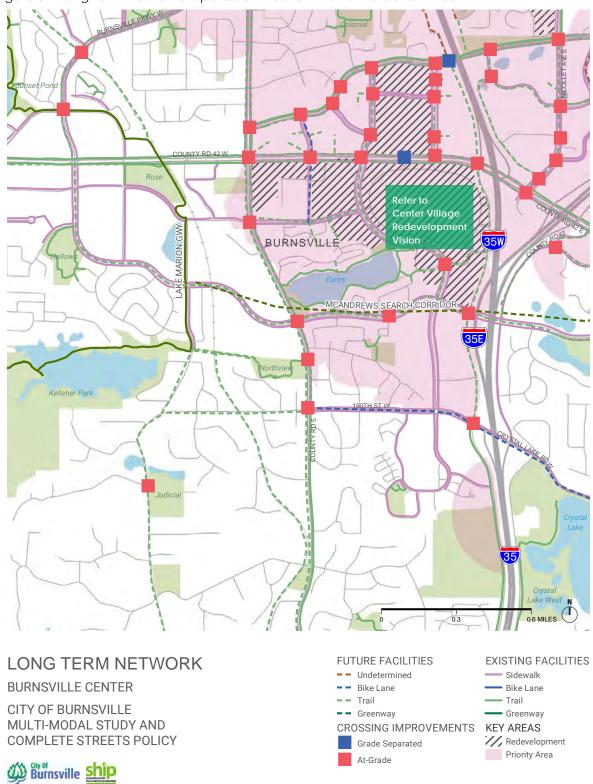


Figure 34. Long Term Active Transportation Network: Burnsville Center Area

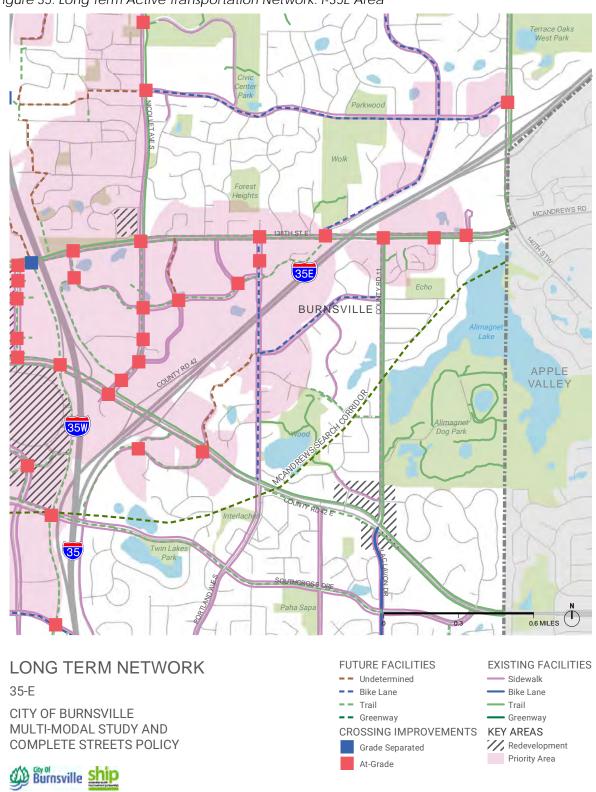


Figure 35. Long Term Active Transportation Network: I-35E Area

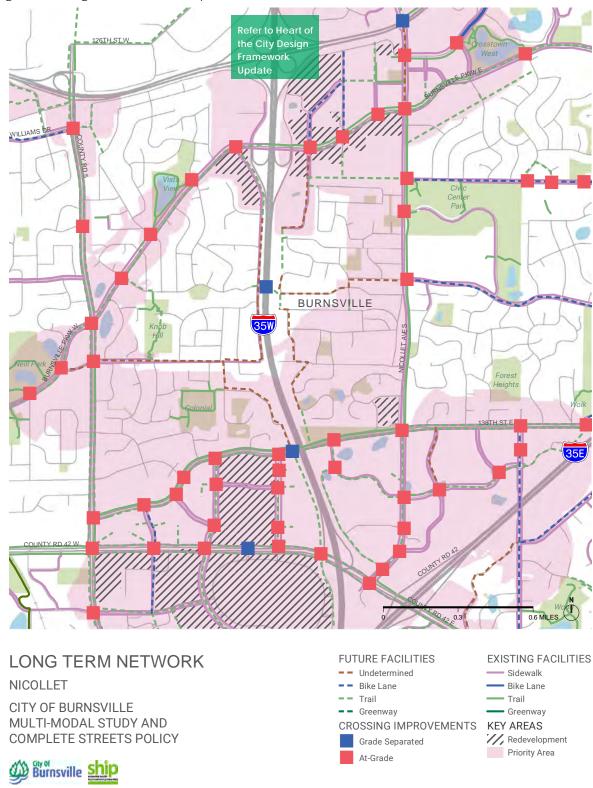


Figure 36. Long Term Active Transportation Network: Nicollet Area

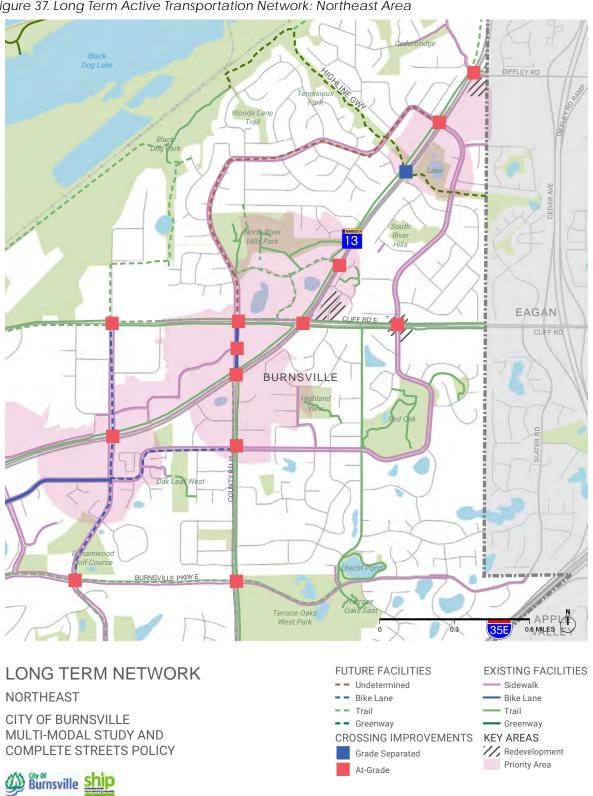


Figure 37. Long Term Active Transportation Network: Northeast Area

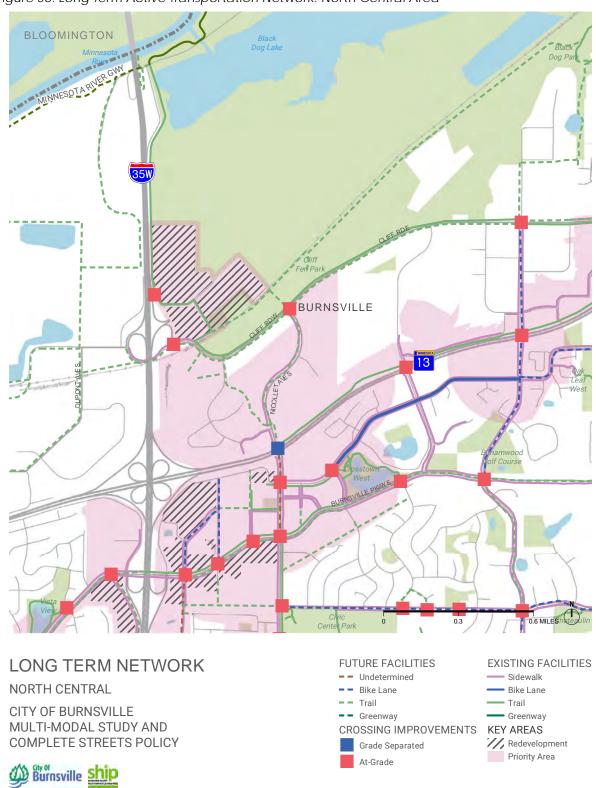


Figure 38. Long Term Active Transportation Network: North Central Area

Implementation Pathways

The Implementation maps (Figure 39) to Figure 45) show the recommended facility and intersection improvements, color-coded by implementation pathway. Improvements in cooler colors (green, blue, and purple) could be implemented via already planned reconstruction, rehabilitation, or redevelopment. Improvements in warmer colors (yellow and orange) need consideration by the city, county, or MnDOT. Some of these improvements may require coordination with private landowners or utilities. Timing of some improvements, such as those near Burnsville Center or in the northwestern corner of the city, will depend on redevelopment.

Within the Multi-modal Plan's priority areas, higher priority improvements may include those that:

- Can occur as part of already planned roadway projects and redevelopment
- Do not require significant right-of-way acquisition
- Are part of Safe Routes to School plans
- Fill a gap in the existing network
- Improve a location with safety issues

CAPITAL IMPROVEMENT PLANS

The future facilities were developed with reference to the current city, county, and MnDOT 5-year capital improvement plans (CIPs) to identify cost-effective opportunities to increase active transportation options. Upcoming rehabilitation and reconstruction projects should include crossing improvements and facilities for people walking, biking, and using assistive devices. Development of future CIPs should prioritize implementation of the active transportation network.

It may be possible to coordinate upcoming utility projects with the installation of motor vehicle, transit, bicycle, and pedestrian infrastructure within the same area or corridor. Oftentimes, utility projects will mobilize the same type of equipment required to construct transportation projects, resulting in the potential for a significant cost savings.

REDEVELOPMENT

Redevelopment of multiple parcels presents an opportunity to create a more connected, convenient active transportation network by creating shorter blocks and/or building community connector trails that require coordination with private landowners or utilities.

ACCELERATED IMPLEMENTATION OPTIONS

Rehabilitation-Plus Projects

Rehabilitation projects, which typically are focused on repaving and restriping the roadway, are opportunities to create curb extensions, build on-street protected active transportation lanes, plant trees, repair sidewalks and trails, and expand sidewalks to create trails. Rehabilitation-plus projects go a step beyond rehabilitation projects to repair or create active transportation facilities, helping to more quickly build out the active transportation network and achieve Complete Streets without waiting for reconstruction.

Demonstration Projects

Demonstration projects are short term, low-cost, temporary roadway projects used to pilot potential long-term design solutions to improve walking, bicycling and public spaces. Projects may include, but are not limited to, bicycle lanes, crosswalk markings, curb extensions and median safety islands.

Demonstration projects allow public agencies, community partners, and people walking, bicycling, taking transit, and driving to evaluate potential infrastructure improvements before potentially investing in permanent changes.

Benefits of using a demonstration project approach include:

 Test aspects of safety improvements before making further investments.
 Inspire action and build support for project implementation.

- Develop further public awareness of the potential issue and conceptual options.
- Increase public engagement by inviting stakeholders to try demonstration projects for active transportation.
- Increase understanding of active transportation needs in the community.
- Encourage people to work together in new ways and strengthen relationships between government agencies, elected officials, non-profit organizations, local businesses, and residents.
- Gather data from real-world use of streets and public spaces.

Increase collaboration between education, engineering, encouragement and enforcement from initial project steps through removal.



Demonstration project near Gideon Pond Elementary School

Quick-Build Projects

Quick-build puts bicycle, pedestrian or traffic safety improvements in place using low-cost materials that can be installed quickly. Quick-build projects are flexible and designed to be easily changed or even removed if necessary. Most quick-build projects can be constructed in mere days or weeks and can go from conception to reality within months. Quick-build projects are not pop-up or demonstration projects that are intended to be removed after a short period.

Quick-build allows the community to benefit immediately from walking and bicycling safety improvements, with flexibility for public feedback to impact the design while building enthusiasm and support for more permanent infrastructure. Once a project is accepted by a community, quick-builds can last for years if maintained, or rebuilt using more durable materials.

The goal is to offer a series of interim street improvements that create a complete, connected network of physically safe environments for people walking, bicycling, and using micromobility to get safely where they wish to go. Quick-build infrastructure is usually more than a bike lane quickly striped; it should create the kind of comfortable, protected, connected bikeways that have been proven to enable people of all ages and abilities to use active transportation.

Ideally quick-build projects will build off of existing plans that have already been approved and were created with community input. Quick-build becomes a way to implement previously recommended active transportation projects in a relatively short time frame. More extensive, and potentially permanent, improvements can be added over time as the project evolves, based on public input, interest, and use.



Quick-build bike lane with pre-cast concrete curb barriers

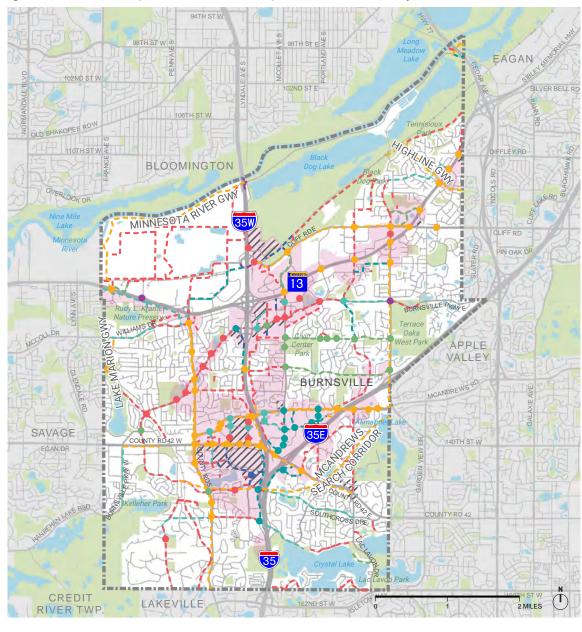


Figure 39. Active Transportation Network Implementation Pathways

IMPLEMENTATION - MnDOT or County Project Planned MnDOT or County Project Planned Needs Consideration by City & County/MnDOT Needs Consideration by City & County/MnDOT Needs Consideration by City CITY OF BURNSVILLE Needs Consideration by City - Redevelopment MULTI-MODAL STUDY AND Reconstruction or Rehabilitation - 2022-2024 Redevelopment COMPLETE STREETS POLICY Reconstruction or Rehabilitation - 2025-2029 Reconstruction or Rehabilitation 2022-2024 = = Reconstruction or Rehabilitation - 2030s Reconstruction or Rehabilitation - 2025-2029 Burnsville Ship **KEY AREAS** Reconstruction or Rehabilitation - 2030s // Redevelopment

LINEAR FACILITY IMPROVEMENTS

Priority Area

CROSSING IMPROVEMENTS

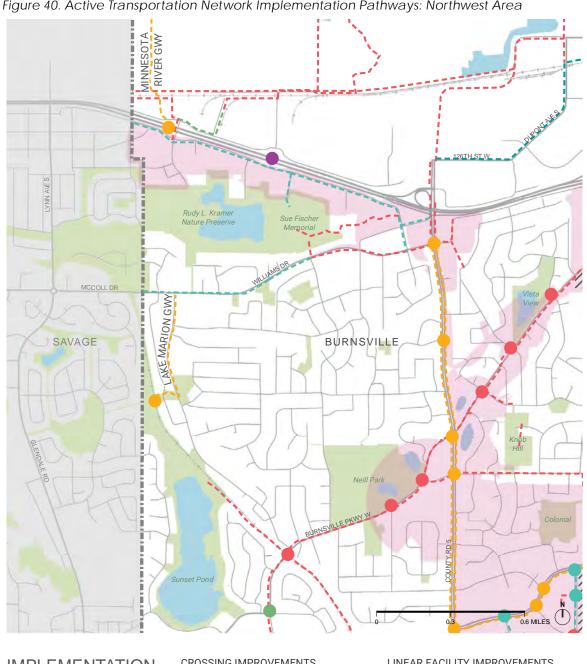


Figure 40. Active Transportation Network Implementation Pathways: Northwest Area

IMPLEMENTATION

NORTHWEST

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY





CROSSING IMPROVEMENTS

- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- Reconstruction or Rehabilitation 2030s

LINEAR FACILITY IMPROVEMENTS

- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- -- Needs Consideration by City
- - Redevelopment
- -- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- = = Reconstruction or Rehabilitation 2030s

KEY AREAS

/// Redevelopment

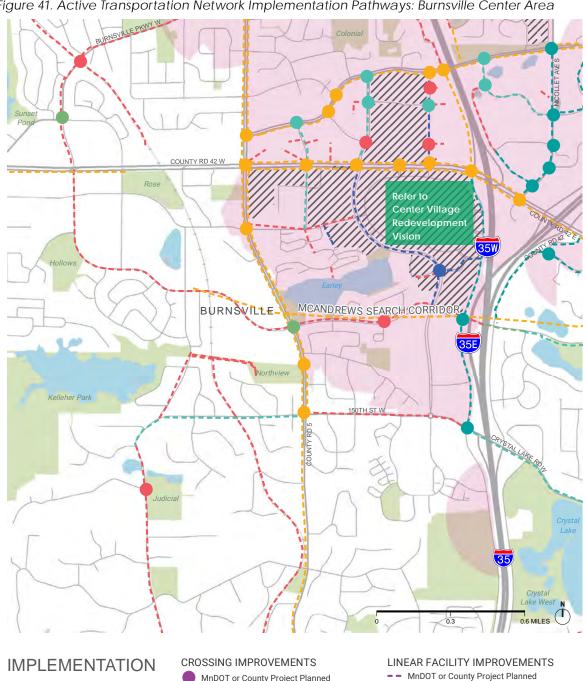


Figure 41. Active Transportation Network Implementation Pathways: Burnsville Center Area

BURNSVILLE CENTER

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY





- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- Reconstruction or Rehabilitation 2030s
- Needs Consideration by City & County/MnDOT
- -- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- = = Reconstruction or Rehabilitation 2030s

KEY AREAS

/// Redevelopment

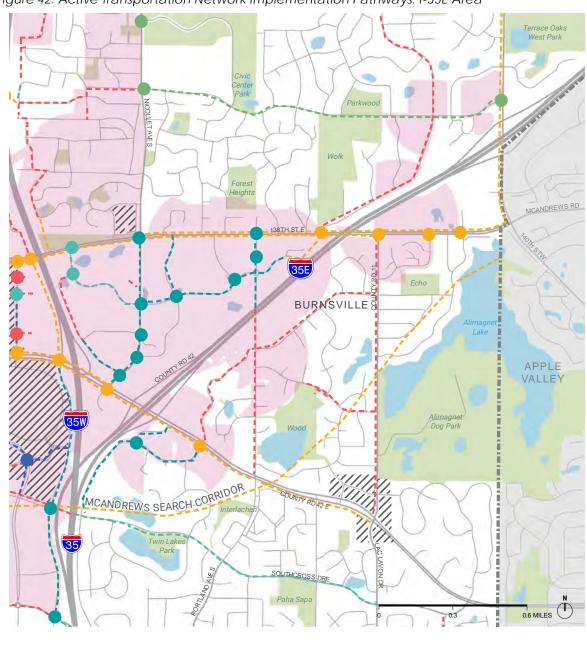


Figure 42. Active Transportation Network Implementation Pathways: I-35E Area

IMPLEMENTATION

35-E

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



CROSSING IMPROVEMENTS

- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
 - Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- Reconstruction or Rehabilitation 2030s

LINEAR FACILITY IMPROVEMENTS

- -- MnDOT or County Project Planned
- -- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- = = Reconstruction or Rehabilitation 2030s

KEY AREAS

///, Redevelopment

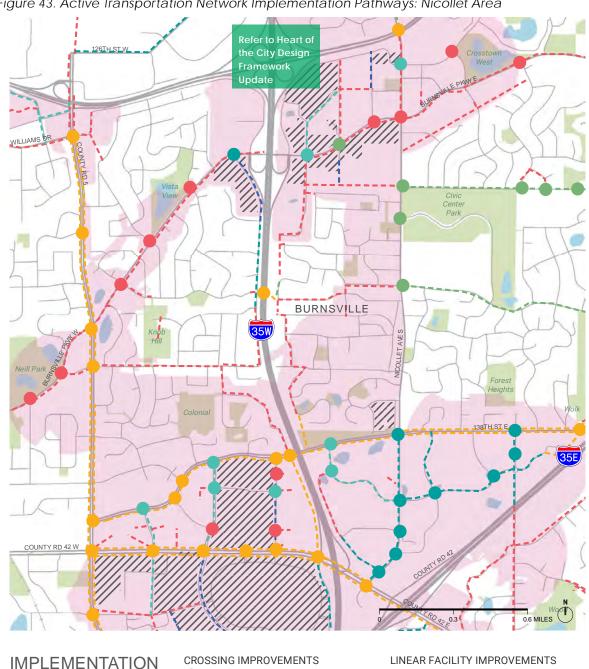


Figure 43. Active Transportation Network Implementation Pathways: Nicollet Area

NICOLLET

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- Reconstruction or Rehabilitation 2030s
- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- -- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- = Reconstruction or Rehabilitation 2030s

KEY AREAS

///, Redevelopment

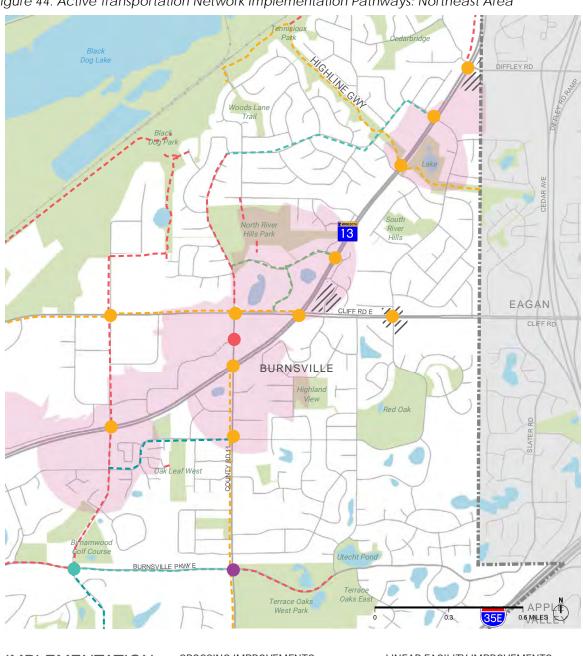


Figure 44. Active Transportation Network Implementation Pathways: Northeast Area

IMPLEMENTATION

NORTHEAST

CITY OF BURNSVILLE MULTI-MODAL STUDY AND COMPLETE STREETS POLICY



CROSSING IMPROVEMENTS

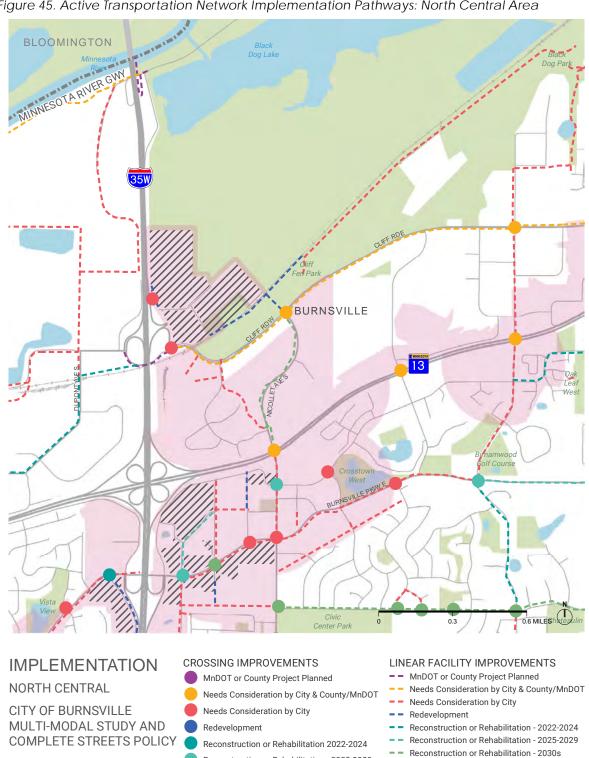
- MnDOT or County Project Planned
- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- Reconstruction or Rehabilitation 2030s

LINEAR FACILITY IMPROVEMENTS

- -- MnDOT or County Project Planned
- -- Needs Consideration by City & County/MnDOT
- Needs Consideration by City
- Redevelopment
- = Reconstruction or Rehabilitation 2022-2024
- Reconstruction or Rehabilitation 2025-2029
- = = Reconstruction or Rehabilitation 2030s

KEY AREAS





Reconstruction or Rehabilitation - 2025-2029

Reconstruction or Rehabilitation - 2030s

KEY AREAS

///. Redevelopment Priority Area

Burnsville Ship

Figure 45. Active Transportation Network Implementation Pathways: North Central Area

Funding

This section outlines the construction costs associated with building out the planned network. Potential funding sources are summarized, including city funds, state and federal grants, and private funders.

COST ESTIMATES

Costs of active transportation infrastructure can vary significantly based on site-specific factors and whether they are implemented alongside other roadway changes. The following tables include planning-level estimates of linear facility and crossing treatment construction costs.

Figure 46. Linear Facility Construction Costs

Strategy	Estimate
Bicycle Boulevards	\$5,000 to \$150,000 per mile depending on the extent of traffic calming devices used ¹
Green Infrastructure*	\$160,000 to \$570,000 per mile ²
On-Road and Buffered Bicycle Lanes	Varies depending on type of construction project ¹
Road Diet	\$25,000 to \$40,000 per mile ¹
Separated Bicycle Lanes	\$75,000 per mile for tube delineator separated; up to \$1,000,000 per mile for urban, two-way curb separated reconstruction ¹
Shared Use Paths	\$300,000 to \$600,000 per mile ¹
Sidewalks	\$8 per square foot of concrete sidewalk ¹
Trees	\$200 to \$600 ²

^{*} Includes shade trees, tree vault systems, bioswales/filter strips/stormwater planters, stormwater infrastructure, planted center medians, permeable paving, flow-through planters or rain gardens in curb extensions, and benches.

¹ Source: MnDOT Best Practices for Pedestrian and Bicycle Safety, 2021

² Source: MnDOT Statewide Pedestrian System Plan cost estimate for green infrastructure along roadways in suburban commercial areas, 2021

Figure 47. Intersection Treatment Construction Costs

Strategy	Estimate
Bicycle Boxes	\$1,0001
Crosswalk Lighting	\$10,000 per intersection to over \$40,000 ¹
Curb Extensions and Curb Radii	\$2,000-\$3,500 per corner; \$10,000 to \$20,000 with storm sewer impacts ¹
Curb Ramps	\$6,0001
Grade-separated crossings	\$1,800 per linear foot plus \$19,000 per end section ¹
Marked Crosswalks	\$3,000 1
Medians and Crossing Islands	\$25,000 to \$50,000 ¹
Pedestrian Hybrid Beacon	\$100,000 to \$170,000 ¹
Protected Intersections	\$100,000 to upgrade a signalized intersection ¹
Raised Crosswalks	\$7,000 to \$40,000 ¹
Rectangular Rapid Flashing Beacon	\$15,000 to \$100,000 ¹
Right Turn on Red Prohibition	\$200 per standard sign; \$3,000 LED blank-out sign ¹
Roundabouts	\$1,000,0001
Signal Timing Adjustment	Less than \$3,500 ¹
Traffic Signals	\$250,000 to \$500,000 ¹

¹ Source: MnDOT Best Practices for Pedestrian and Bicycle Safety, 2021

LOCAL, STATE AND FEDERAL FUNDING SOURCES

Dedicated City Funding for Pedestrian and Bicycle Projects

General funds can be used to develop and maintain pedestrian and bicycle projects Burnsville could establish a dedicated funding stream within the annual Capital Improvements Program budget specifically for the development and implementation of projects that improve connectivity, comfort, and safety of people walking and biking.

Local Bond Measures

Local bond measures, or levies, are usually initiated by voter-approved general obligation bonds for specific projects. Bond measures are typically limited by time, based on the debt load of the local government or the project under focus. Funding from bond measures can be used for right-of-way acquisition, engineering, design, and construction of pedestrian and bicycle facilities. Bond measures are often used by cities for local match in grant applications. Transportation-specific bond measures featuring a significant bicycle/pedestrian facility element have passed in other communities, such as Seattle's "Closing the Gap" measure.

Regional Solicitation

Every two years, the Metropolitan Council administers the Regional Solicitation and distributes federal transportation funds. Locally initiated projects are selected based on how each project meets regional transportation needs. Federal

funds are available for roadway, bridge, transit capital and operating, and bike and pedestrian projects.

Local Partnership Program (LPP)

MnDOT's Local Partnership Program (LPP) was created to provide statewide transportation partnership opportunities with local agencies and construct highway improvements that are mutually beneficial at locations that are not currently programmed on state highways. The Metro District LPP exists to help fund projects that deliver a benefit to both the local community and the trunk highway system. These funds can pay for Trunk Highway eligible construction costs and up to 8% of the construction engineering costs.

Local Road Improvement Program (LRIP)

The Local Road Improvement Program (LRIP) is a grant program administered by State Aid that provides funding assistance to local agencies for constructing or reconstructing local roads. The Trunk Highway Corridors account assists in paying for local roads impacted by a MnDOT trunk highway improvement project. The Routes of Regional Significance account provides grants for local road construction, reconstruction or reconditioning projects on roads that have statewide or regional significance. Items that are eligible for LRIP funds include reasonable elements associated with roadway construction, including basic landscaping and turf establishment.

Safe Routes to School (SRTS) Grants

MnDOT funding for SRTS includes planning assistance grants, Boost grants to fund non-infrastructure strategies, bicycle fleets, infrastructure grants, local coordinator grants, and mini-grants that help communities start or expand SRTS school programs like Walk to School Day.

Community Development Block Grants (CDBG)

Dakota County receives an annual allocation from Housing & Urban Development for various projects to help low- to moderate-income (LMI) areas. Available funds vary yearly.

Transit Funding

Transit agencies have access to several sources of federal transit funds. These funds are available for bus stop improvements which may include bicycle parking and pedestrian improvements such as crosswalks, curb extensions, and sidewalks.

DNR Local Trail Connections Program

The Local Trail Connections Program prpvodes grants to local units of government to promote relatively short trail connections between where people live and desirable locations, not to develop significant new trails.

Recreational Trails Program (RTP)

The RTP provides funds to States to develop and maintain recreational trails

and trail-related facilities for both non-motorized and motorized recreational trail uses. Each State administers its own RTP program and may set its own project eligibility requirements.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants

RAISE grants (formerly known as BUILD Transportation Grants) are awarded on a competitive basis for surface transportation infrastructure projects that will have a significant local or regional impact. The primary selection criteria are safety, environmental sustainability, quality of life, economic competitiveness, and state of good repair. The secondary selection criteria are partnership and innovation.

State And Community Highway Safety Grant Program (NHTSA 402)

The State and Community Highway Safety Grant Program, commonly referred to as Section 402, provides grants to states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. Funds may be spent in accordance with national guidelines for programs to reduce speeding, improve pedestrian and bicycle safety, improve enforcement of traffic safety laws, support school-based driver's education classes and teen driver programs, and more.

National Priority Safety Programs (NHTSA 405)

Under the FAST Act, Section 405 is the National Priority Safety Program, which provides grant funding to address selected national priorities to reduce highway deaths and injuries. There are multiple program tiers within Section 405, each with its own eligibility criteria. The programs include: occupant protection, state traffic safety information system improvements, impaired driving countermeasures, distracted driving, motorcyclist safety, state graduated driver licensing laws, and nonmotorized safety.

Land and Water Conservation Fund

The LWCF exists to safeguard natural areas, water resources, and the United States' cultural heritage, and to support recreation opportunities. LWCF state and local matching grants can be used to create and expand parks and recreation facilities and support local recreation planning.

National Park Service Federal Lands Access Program (FLAP)

The FLAP was established to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements state and local resources for public streets, transit systems and other transportation facilities, with an emphasis on high-use recreation sites and economic generators. Funds are intended for capital improvements, enhancements, surface preservation, transit, planning, safety, and research. Dakota County can apply for this funding in partnership with the Mississippi National River and Recreation Area.

PRIVATE FUNDING SOURCES

The Conservation Fund

The Conservation Fund provides loans for land acquisition to support the creation of bicycle and pedestrian facilities that also support environmental conservation. Their loan program offers flexible financing and sustained and expert technical assistance to organizations aiming to protect key properties in their communities.

PeopleForBikes Community Grants

PeopleForBikes is a coalition of bicycle suppliers and retailers that has awarded \$3.5 million in community grants and leveraged an additional \$775 million since its inception in 1999. The community grant program awards grants of up to \$10,000 for bicycle paths, lanes, trails, and bridges, mountain bicycle trails, bicycle parks, BMX facilities, and end-of-trip facilities such as bike racks, bike parking, bike repair stations and bike storage, as well as Ciclovias or Open Streets events.

America Walks Community Change Grant Program

The America Walks Community Change grant program provides support to the growing network of advocates, agencies, and organizations using innovative, engaging, and inclusive projects and projects to create change at the community level. Projects should increase physical activity and active transportation in a specific community, work to engage people and organizations new to the efforts of walking and walkability, and demonstrate a culture of inclusive health.

The Walmart Foundation Local Community Grants

The Walmart Foundation offers a Local, State, and National Giving Program. The Local Giving Program awards grants of \$250 to \$5,000 through local Walmart and Sam's Club Stores. Application opportunities are announced annually in February with a final deadline for applications in December. The State Giving Program provides grants of \$25,000 to \$250,000 to 501(c)(3) nonprofits working within one of five focus areas: Hunger Relief & Nutrition, Education, Environmental Sustainability, Women's Economic Empowerment, or Workforce Development. The program has two application cycles per year: January through March and June through August. The Walmart Foundation's National Giving Program awards grants of \$250,000 and more, but does not accept unsolicited applications.

Corporate Donations

Corporate donations are often received in the form of liquid investments (e.g., cash, stock, or bonds) and in the form of land. Employers recognize that creating places to bicycle and walk is one way to build community and attract a quality work force. Bicycling and outdoor recreation businesses often support local projects and programs. Municipalities typically create funds to facilitate and simplify a transaction from a corporation's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/or projects.

Public-Private Partnerships

A public-private partnership involves an agreement between a public agency and a private party, in which the private party delivers a public service or project to the public agency. Projects can be funded solely by the private party or through a collection of private monies and taxpayer dollars.

Volunteer Programs

Volunteer programs may be developed to substantially reduce the cost of implementing some routes, particularly shared-use paths. For example, a local college design class may use such a shared-use route as a student project, working with a local landscape architectural or engineering firm. Work parties could be formed to help clear the right of way for the route. A local construction company may donate or discount services beyond what the volunteers can do. And a challenge grant program with local businesses may be a good source of local funding, in which the businesses (or residents) can "adopt" a route or segment of one to help construct and maintain it.

Maintenance

A well-maintained active transportation facility is safe and comfortable for people of all ages and abilities. The facility is accessible year round and free of debris, snow, and heaving or other obstacles, allowing people the maximum width of a street, bike lane, sidewalk or shared use path. Maintenance goals include the following:

- Prevent falls and crashes.
- Provide clearly defined, year round facilities.
- Encourage facility use, leading to increased bicycling and walking and high return on investment.
- Prolong useful life of valuable infrastructure investments.

Well maintained networks are functions of flexibility, inter-agency coordination and balance of resources. Inter-agency cooperation and agreements are a crucial ingredient.

KEY CONSIDERATIONS

- Provide redundancy in the network to allow for options for people walking and biking.
- When planning new or improved active transportation facilities, default to higher levels of physical protection: User comfort increases with separation from motor vehicles.

- Avoid minimum widths: Minimum widths increase the difficulty of maintaining active transportation facilities.
- Design bicycle facilities for users beyond bicyclists: People using electric standing scooters, skateboards, and rollerblades will also use bikeways. People using wheelchairs and strollers may decide to use the facility in case of poor sidewalk maintenance or other obstructions.
- Collaborate between departments and staff during project scoping and design to understand and prepare for all opportunities and constraints to ensure the outcome is well maintained facilities once built. This includes staff time, equipment, grouping equipment (APS poles, etc.) to control scattered "clutter" to work around, and expectations/priorities. Set responsibilities for maintenance along bikeways of all jurisdictions.
- Local maintenance agreements and cost participation decisions among responsible agencies.
- Report back: Annually report on maintenance operations and progress toward maintenance goals.
- Consider current equipment and capabilities for maintenance when designing bikeways. Narrow separated bikeways may necessitate the procurement of additional equipment to maintain.

TYPES OF MAINTENANCE ACTIVITIES

Necessary maintenance activities vary significantly by the type of active transportation facility surfacing. Maintenance activities can generally be categorized into one of two types: 'routine maintenance' which is done annually or more frequently, and 'major' or 'capital maintenance' which involves more intensive activity at a less than annual frequency. A robust routine maintenance program may include any of the activities described in Figure 48.

Major or capital maintenance activities typically involve more intensive maintenance repairs such as pavement seal coating, pavement overlays, pavement reconstruction or other structural rehabilitations.

Figure 48. Routine Maintenance of Active Transportation Facilities

Routine Maintenance	Function	Frequency
Sweeping	Keep paved surfaces debris free.	Spring, after snow melt and as needed. Fall during leaf drop.
Litter and trash removal	Keep facility clean and of consistent quality.	Annually, or as needed.
Mowing of shoulders	Increases the effective width of the facility if bordered by grasses. Also helps encroachment of weeds.	As needed during the growing season.
Tree/ brush trimming	Eliminate encroachments into facility and to open up sight lines.	Annually, or as needed.
Weed abatement	Manage existence and/or spread of noxious weeds if present.	Annually
Snow removal	Keep facility clear and usable year round.	As needed
Sign and other amenity inspections	Identify and replace damaged infrastructure	Annually
Crack sealing and surface repair	Seal cracks in asphalt surfacing to reduce long-term damage	Annually

06 ELECTRIC AND SHARED MOBILITY



Introduction

The terms "new mobility" and "shared mobility" have gained prominence in the last decade, and especially the last five years. New mobility refers to transportation services that are enabled or defined by digital technology. Technologyenabled mobility services have expanded the suite of transportation options available and changed the nature of services operating in the right-of-way, accessing transit stops/stations, and operating in transit-limited areas. **Shared mobility** refers to mobility options involved in a shared publicly- or privately-owned fleet of vehicles or devices (e.g., bike share, e-scooters). New and shared mobility trends make car ownership less critical. Six key trends are shaping transportation systems (Figure 49).

The chapter summarizes the state of shared and new mobility trends and provides recommendations for initiating or expanding these services in Burnsville. The forms of transportation discussed in this chapter were selected for their ability to expand access to transit, reduce reliance on single occupancy vehicles (SOV), reduce reliance on gasoline-powered private cars, and/or encourage active transportation.

This chapter focuses on the following forms of shared and new mobility:

- Bike share and e-scooter share
- Car share
- Electric vehicle (EV) charging
- · Mobility hubs

Figure 49. Six key trends shaping transportation systems

MORE CHOICES



In addition to biking, walking, driving, and taking transit, many people have access to on-demand services such as private for-hire rides (e.g., taxis, Uber, and Lyft), scooter share, bike share, carsharing, and microtransit shuttles.



ELECTRIFICATION



Global trends toward electrification of vehicles, combined with locally-adopted goals for reduced greenhouse gas emissions, has increased demand for electric charging options as part of public infrastructure.



NEW PLAYERS



New business models have increased the role of the private sector in transportation and changed the nature of services operating in the public right-of-way.



E-COMMERCE



E-commerce is reducing personal trips to retail stores and restaurants and exponentially increasing the

volume of urban delivery and courier trips.



BEHAVIOR CHANGE



Trip-planning services are changing the way people make decisions about routes, mode, and cost to travel



CURB SPACE DEMAND



There is increasing demand for curb space for elements like transit services. rideshare, pick-up and drop-off, walkways, bikeways, and freight delivery.

KEY FINDINGS

Bike Share and E-Scooter Share

Shared micromobility will be most successful in Burnsville if the City rapidly constructs a connected, low-stress network of active transportation facilities and encourages increased density of residences and destinations. Privately funded scooter and bike share programs are unlikely to be financially viable under the current land use and active transportation network conditions.

Car Share

The City of St. Paul, City of Minneapolis, HourCar, and Xcel Energy are working together to create a network of EV charging hubs throughout the Twin Cities. The chargers would be public, but the service would also include a new, separate car sharing service called Evie. City staff could connect with HourCar to discuss the potential for expanding their services to Dakota County.

Electric Vehicle (EV) Charging

Implementation strategies for EVs should focus on increasing access to EVs in underserved communities.

Recommended locations for City-installed EV stations include parking lots on public property, such as the Burnhaven Library, at parks, and at supportive housing locations. Areas with mixed land uses and existing on-street parking (such as Heart of the City) should also be considered for on-street charging locations.

Burnsville could consider enacting requirements for private developments to pre-wire a certain percentage of parking spaces for EV charging, which significantly reduces the cost of installing charging stations later on and can help increase the supply of chargers in the long term. The City could also consider offering incentives for adding EV chargers near businesses and multifamily housing.

Mobility Hubs

Mobility hubs feature a collection of elements, such as bike share parking, e-scooters, wayfinding signage, and more, that improve accessibility for shared mobility and active transportation. Mobility hubs are often oriented around transit.

Recommended primary mobility hub locations are near or within the Priority Areas (areas of both high equity concern and high demand as established in Chapter 5) and connect Metro Transit and MVTA transit stops and stations with the active transportation network. Secondary mobility hubs are located at major trail and recreation destinations and co-located with proposed electric vehicle charging stations.

Bike Share and E-Scooter Share

BACKGROUND

Bike share provides users with on-demand access to bicycles (both non-electric and electric bikes) at a variety of pick-up and drop-off stations for one-way (point-to-point) or round trip travel. Most systems have some electric-assist bicycles in their fleet. Scooter share allows access to scooters in a similar manner.

System operators typically provide charging, maintenance, and in some cases, parking. Users typically pay a fee each time they use a scooter; some companies are starting to test monthly rentals. Burnsville City Council has indicated that private shared mobility companies should have a plan for e-scooter / bike parking so that vehicles sidewalks are kept clear for people walking. The responsibility of caring for shared bikes and scooters should be on private operators, not City staff.

Shared micromobility finances are similar to public transit; system ridership does not typically cover the operating cost. After a massive expansion in 2017 and 2018, private operators of North American dockless non-electric bike share systems removed their service from many American cities. Private operators removed these systems because they were not viewed as profitable from a financial cost-benefit perspective. The remaining systems are typically station-based, dockless, or hybrid systems. Hybrid

systems allow users to park at stations or to existing public bike racks.

Shared micromobility programs have opened in a wide range of suburbs and small cities. However, low stress bicycling facilities and proximate destinations are needed for operational success. Shared mobility usage in Burnsville would likely be low until a more connected network of bicycling facilities is created. One company that initially approached Burnsville has since declined to move forward with a scooter share program, citing lack of density between destinations.

RECOMMENDATIONS

Shared micromobility will be most successful in Burnsville if the City rapidly constructs a connected, low-stress network of active transportation facilities and encourages increased density of residences and destinations. Privately funded scooter and bike share programs are unlikely to be financially viable under the current land use and active transportation network conditions.

In addition to creating the conditions for shared micromobility viability, the City could discuss possibilities with Lyft/Nice Ride or an independent system. The City could consider monthly rentals rather than single ride rentals. The City could also explore opportunities for a County-wide shared mobility system to increase the potential shared mobility service area and allow users to make trips between neighboring communities. However, additional coordination and research would be needed to understand potential costs.

Car Share

BACKGROUND

Car share offers members access to vehicles by joining an organization that provides and maintains a fleet of cars, vans and/or light trucks. The organization typically provides insurance, gasoline, parking, and maintenance, and members typically pay a fee each time they use a vehicle.

There are three types of car sharing services: free-floating (Car2Go),

peer-to-peer (Getaround, Turo), and point-to-point (HourCar). Free-floating car sharing was available and widely used in many U.S. cities until 2019, when the two largest companies—Reach Now and Car2Go—merged and then ceased operations in North America. Peer-to-peer and point-to-point car sharing still exist in many U.S. Cities.

Cities want more EV car share programs for low-income communities, and it is speculated that free-floating car share (like Car2Go) may return to North America after its unexpected withdrawal in late 2019.





The Twin Cities Electric Vehicle Mobility Network





Through a unique partnership, car-sharing in the Twin Cities will be more convenient, affordable, and accessible than ever before. This means communities that experience excess auto emissions will see cleaner air and people who are car-less will have more options. There will also be charging available for privately owned electric vehicles.

What's Included in the new EV network?

Electric Vehicle Carshare Fleet + Public Curbside Charging Hubs

What is Car Sharing?

Car-sharing provides the benefits of car access without the burden of car ownership. By becoming a member of a car-sharing network, you have access to cars throughout a service area for short-term rental.



Twin Cities Electric Vehicle Mobility Network (Image source: City of Saint Paul)

The City of St. Paul, City of Minneapolis, HourCar, and Xcel Energy are working together to create a network of EV charging hubs throughout the Twin Cities. The chargers would be public, but the service would also include a new, separate car sharing service called Evie. Users would retrieve a car from a hub, drive it, and then park on a street within the service area. Members would not have to return the vehicle to a charging hub. Hubs are planned near neighborhood destinations such as bus stops and shopping areas. The program aims for affordability via small membership fees and a per-minute pricing structure.

Similarly, the Multifamily EV Car Share Pilot seeks to expand shared EV access in St. Paul and Minneapolis by adding EV charging points to multifamily housing. The program would also co-locate shared EVs for residents. Extra support is planned for low-income and mixed-income housing locations.

RECOMMENDATIONS

City staff could connect with HourCar to discuss the potential for expanding their services to Dakota County, particularly shared EV pilot programs.

In the event that privately funded free-floating car share returns to North America, areas of higher population and destination density with strong active transportation and transit networks and EV charging infrastructure will be best positioned to attract car share companies.

Electric Vehicle (EV) Charging

BACKGROUND

Electric vehicles (EVs), both personal and shared, are vehicles that use one or more electric motors or traction motors for propulsion. There are currently four charging stations in Burnsville, as shown in Figure 51. An EV may be powered through a collector system by electricity from off-vehicle sources, or may be self-contained with a battery, solar panels or an electric generator to convert fuel to electricity.

The benefits of EVs are well documented. However, a study from Portland State University found that electric-vehicle ownership is concentrated among white people and people with higher incomes. The three most common barriers to electric vehicle purchase are price, range, and infrastructure.

Prior to COVID-19, EV sales had been rapidly increasing nationwide especially with advances in technology related to charging range. Electrification is still an upward trend across all modes with new innovations in charging infrastructure, including e-scooter/e-bike docking stations, and an uptick in investments in equity-focused EV car sharing programs, including the Twin Cities EV Spot Network.

RECOMMENDATIONS

Most local implementation strategies for EVs have focused on supporting demand by increasing the availability of charging stations. Burnsville could consider enacting requirements for private developments to pre-wire a certain percentage of parking spaces for EV charging, which significantly reduces the cost of installing charging stations later on and can help increase the supply of chargers in the long term.

Implementation strategies for EVs should focus on increasing access to EVs in underserved communities. Installation of geographically distributed charging infrastructure is a key initiative, in addition to subsidies, outreach and education, and electric ride sharing programs.

Recommended locations for City-installed EV stations (shown in Figure 51) include parking lots on public property, such as the Burnhaven Library, at parks, and at supportive housing locations. The City could partner with MVTA to provide charging stations at park-and-ride locations, and with large employers and apartment complexes to provide chargers on private property. Areas with mixed land uses and existing on-street parking (such as Heart of the City) should also be considered for on-street charging locations.

The City could consider partnering with the Fairview Ridges Hospital to install charging stations. Medical campuses are well-suited to charging stations because they typically have a workforce that is largely car dependent. Shift workers at hospitals have fewer public transit options because they are traveling during off-peak hours.

The City could also consider offering incentives for adding EV chargers near businesses and multifamily housing, especially in the Priority Areas (areas of both high equity concern and high demand as established in Chapter 5).

Mobility Hubs

Mobility hubs feature a collection of elements, such as bike share parking, e-scooters, wayfinding signage, and more, that improve accessibility for shared mobility and active transportation. The key elements can be mixed and matched to create a mobility hub that is customized for the location. Potential elements included in mobility hubs, including transit and trip-making services, parking and charging services, priority access and amenities are shown in Figure 50.

Mobility hubs typically range in size, yet all combine multiple types of transportation at one location. Fundamentally, every mobility hub should create a safe, seamless, and comfortable experience. To do this, each location is expected to, at minimum, include:

- Access to two or more transportation services
- · Biking and walking access to the site
- A sense of place and human-centered design
- Locally-relevant and context sensitive programming and amenities

Figure 50. Mobility Hub Potential Elements

TRANSIT AND TRIP-MAKING SERVICES



Passenger pick-up and drop-off areas for ridehailing, microtransit, etc



Transit ticket and integrated payment kiosks



Bus, shuttle, or light rail stop



Real time transit information & other shared mode information



Freight loading/ unloading area

PARKING AND CHARGING SERVICES



Electric vehicle charging (including bicycles & scooters)



Short term bike parking



Long term bike parking



Bikeshare & scootershare parking



Carshare parking and access points

PRIORITY ACCESS



Prioritized walkways for all ages and abilities



Prioritized bike and micromobility access



Safe bicycle and pedestrian crossings

AMENITIES



Publicly accessible WiFi and phone charging



Community space



Complementary retail



Furnishing zone with lighting, seating, shelter and/or water fountains

- Fair and equitable access, including universal design
- Cohesive, intentional design
- Flexibility to adapt to evolving needs

Mobility hubs are often oriented around transit. For example, bike share and e-scooters may be found near a transit stop, along with wayfinding signage and benches.

Mobility hubs are not intended to serve every need of all transportation system users. Hub locations are not a replacement for all transit stops, stations, pick-up/drop-off zones, micromobility parking, charging infrastructure hubs, or other existing and future investments. Rather, they are combination of elements that can be applied strategically in prioritized areas when gaps or barriers to seamless transportation occur.

Connections to the region's current and future primary transportation corridors, such as I-35, and I-35W, I-35E, CR 42, and MN 13, are a priority. Improved access to high-capacity, high-frequency routes, such as Metro Transit Orange Line, is more likely to encourage multi-modal travel and contribute to regional mobility than connections to neighborhood-serving routes with lower frequency.

RECOMMENDATIONS

Recommended mobility hub locations are shown in Figure 51. Primary mobility hubs are near or within the Priority Areas (areas of both high equity concern and high demand as established in Chapter 5) and connect Metro Transit and MVTA transit stops and stations with the active transportation network. Secondary mobility hubs are located at major trail and recreation destinations and co-located with proposed electric vehicle charging stations. Mobility hub development in Burnsville should be coordinated with the ongoing Metro Transit Mobility Hub Planning Guide project.

Mobility hubs will be most successful when offering more than a utilitarian place of transfer. At each location, identify mobility hub features that will add value for the site's users and the surrounding community, whether electric vehicle charging, retail, new community space, or a Wi-Fi hub.

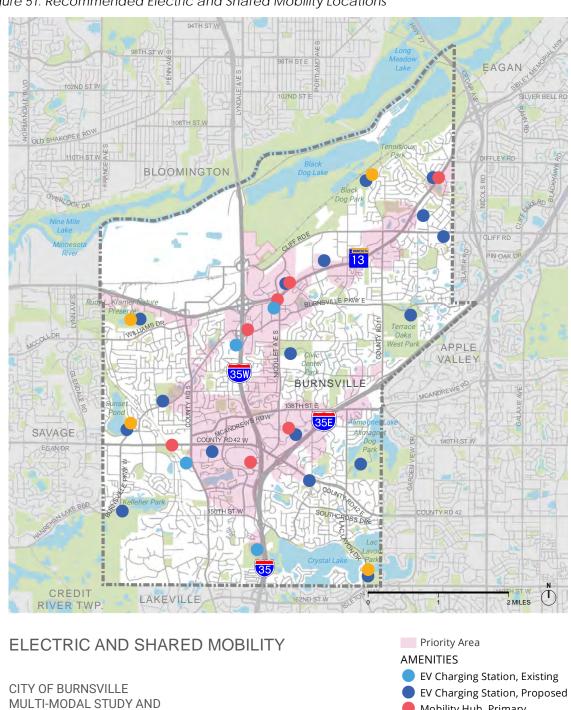


Figure 51. Recommended Electric and Shared Mobility Locations

COMPLETE STREETS POLICY

Burnsville Ship

Mobility Hub, Primary

Mobility Hub, Secondary





Appendix A: Survey Results

Appendix A

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Burnsville Multi-Modal and Complete Streets Study - Survey Results

Response Statistics

Date: May 24th through July 31st

Format: Alchemer desktop and mobile survey

Number of Questions: 16

Purpose: Understand modal use and investment priorities of respondents

Response Statistics:

	Count	Percent
Complete	183	96.3
Partial	7	3.7
Totals	190	

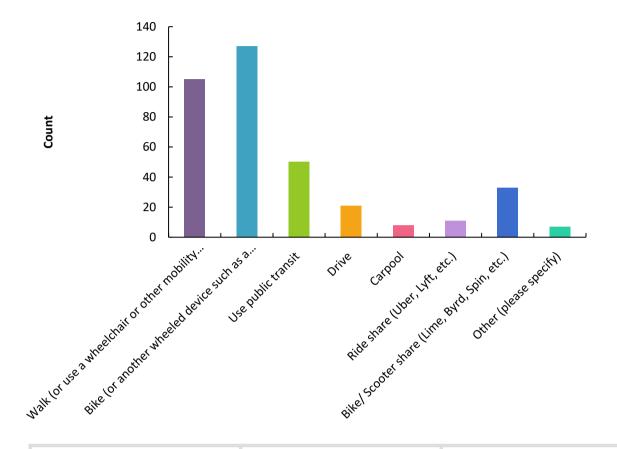
1. How often do you do the following on the sidewalks, trails or streets in Burnsville?

	Walk*	Bike or Scooter	Drive/ ride in a personal vehicle	Use public transit	Total Checks
Almost every day	117	29	147	5	298
A few times a week	74	62	72	3	211
Once a week	40	44	32	1	117
Once a month	34	34	29	3	100
A few times a year	32	36	25	26	119
Rarely or never	5	33	2	119	159
Total Checks	302	238	307	157	1004

2.Do you think the COVID-19 pandemic has impacted how often you have done the following over the past year?

	Walk*	Biker or Scooter	Drive/ ride in a personal vehicle	Use public transit	Total Checks
NO, I do this the same amount as before	100	94	92	38	324
I have done the following MORE often	89	39	16	0	144
I have done the following LESS often	13	7	76	54	150
N/A	5	26	7	57	95
Total Checks	207	166	191	149	713

3. Would you choose to do any of the following MORE OFTEN in the future if facilities and networks were improved or more available? (Please select all that apply)



Value	Percent	Response
Walk (or use a wheelchair or other mobility device)	59.7%	105
Bike (or another wheeled device such as a scooter or skateboard)	72.2%	127
Use public transit	28.4%	50
Drive	11.9%	21
Carpool	4.5%	8
Ride share (Uber, Lyft, etc.)	6.3%	11

Bike/ Scooter share (Lime, Byrd, Spin, etc.)	18.8%	33
Other (please specify)	4.0%	7
Total		362

Other (please specify)
None
Play pickleball
Run
Walk in other areas if safe.
car share
play pickleball if courts were located on west side of Burnsville

4. How important are the following needs when improving the multi-modal transportation system?

	Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Not Important	Total Checks
Safety of all users	157	15	3	2	4	181
Access to destinations for pedestrians, bicyclists, and transit users	121	41	7	6	5	180
Connectivity of walking and biking facilities	116	40	14	4	5	179
Safe and comfortable crossings for pedestrians and bicyclists	147	24	2	2	4	179
Reduced motor vehicle congestion	62	80	23	5	11	181
Reduced motor vehicle speeds	50	63	36	9	21	179
Walking and biking amenities (i.e. benches, bike parking, lighting, wayfinding signs, etc.)	77	67	27	3	4	178
Maintenance of pedestrian/ bicycle facilities (i.e. potholes, striping, snow/ice removal, etc.)	127	39	7	4	4	181

Landscaping (i.e. rain gardens, shade trees, plantings, etc.)	38	76	46	16	7	183
Transit stops (i.e. bus shelters, accessible stop locations, etc.)	40	55	48	13	23	179
Total Checks	957	503	213	64	88	1825

Other Needs Specified (qty):

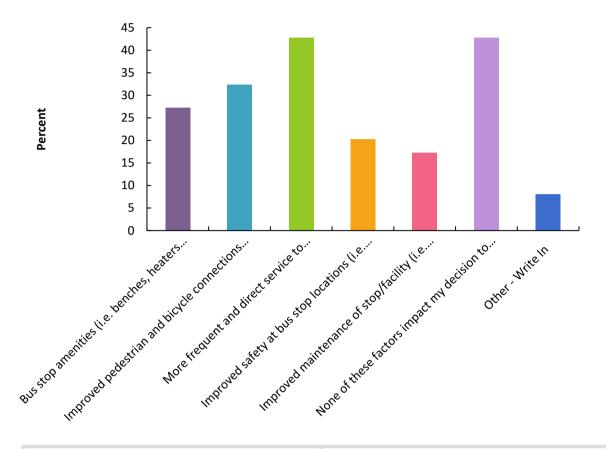
- Adequate transit accessibility in all areas of the city (1)
- Connectivity to school to allow safe pathways to schools (1)
- Density and Urban Development Patterns (1)
- Increased motor vehicle capacity (1)
- Less left turn arrows (1)
- Light rail (1)
- Low property taxes (1)
- More blacktop bike trails (1)
- More/better public transit (1)
- Multiple bike carriers (1)
- Paths that connect to other communities, that do not cross roadways and are kid safe (1)
- Provide maps of bike and walking trails (1)
- Safe paths and lanes in-street for biking (1)
- Safety rails on bike lanes where vehicle speeds cannot be reduced (1)
- Separation of different modes of transportation (1)
- Sidewalks throughout the city (1)
- Taxpayer costs and efficiency (1)
- Walkers/runners need to use sidewalks (1)
- Walking and biking options physically separated from vehicles (1)
- Wheelchair accessibility (1)
- In tune with nature (1)
- Sidewalks to all bus stops (1)
- Striped crossing areas at designated points beyond intersections (1)

5.If you were given \$20 to invest in transportation projects, how would you distribute those funds to the following facility types? (Dollar amount shown as average dollar amount allocated by mode)

Total responses: 142

Item	Average Dollar amount out of \$20
Walking	\$6.40
Biking	\$6.40
Transit	\$3.20
Driving	\$4.00
Total	\$20.00

6. Would improvements to any of the following amenities increase your likelihood of using public transit? Please check all that apply.



Value	Percent
Bus stop amenities (i.e. benches, heaters during winter, route information, bicycle parking, etc.)	27.2%
Improved pedestrian and bicycle connections to transit stops	32.4%
More frequent and direct service to destinations	42.8%
Improved safety at bus stop locations (i.e. lighting, emergency call boxes, etc.)	20.2%
Improved maintenance of stop/facility (i.e. snow and ice removal)	17.3%

None of these factors impact my decision to use transit	42.8%
Other - Write In	8.1%

Statistics	
Total Responses	173

Other - Write In

Bus stop near my home

Better route structure within Burnsville and nearby, I.e. from my house to grocery store and back

FIX CRIME

I have no need to use a bus at this time otherwise these would probably be an issue for me.

I prefer paths. Not biking in the streets Paths along the street but not in the streets

I think all of these things are good (though I don't bike or walk to transit park) and when I return to in-office work (in downtown Minneapolis) I will go back to using public transit every day I need to be in the office.

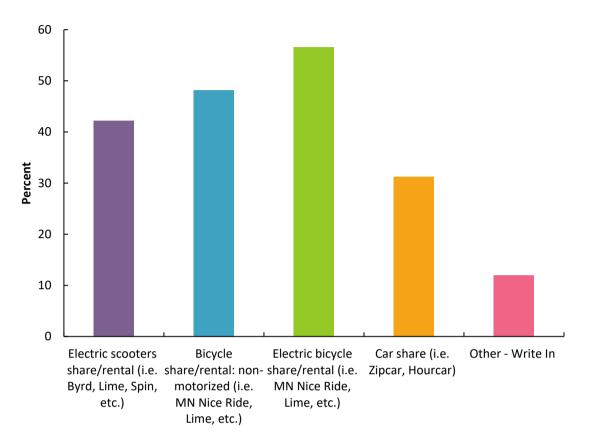
I would only take public transit if it were via Rail

Interconnectedness

Label bike lanes so pedestrian walkers don't use them, they need to use the side walk.

No fabric on seats so they can be thoroughly cleaned and disinfected
Not interested in public transit. Stop pushing it!!
Police on transportation we have too many gangs in Burnsville. Let's fix this first! Look up Burnsville issues at Dakota County.
Safety on bus.

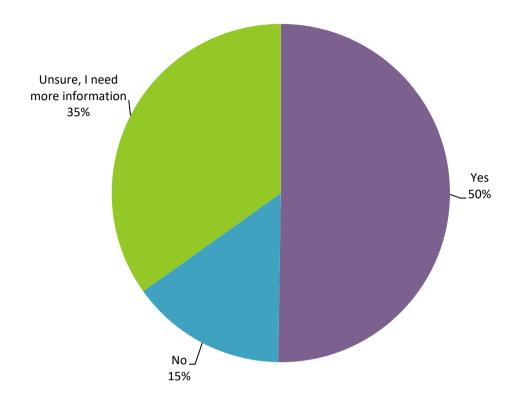
7.Are you interested in using any of the following shared mobility services? Please check all that apply.



Value	Percent	Responses
Electric scooters share/rental (i.e. Byrd, Lime, Spin, etc.)	42.2%	35
Bicycle share/rental: non- motorized (i.e. MN Nice Ride, Lime, etc.)	48.2%	40
Electric bicycle share/rental (i.e. MN Nice Ride, Lime, etc.)	56.6%	47
Car share (i.e. Zipcar, Hourcar)	31.3%	26

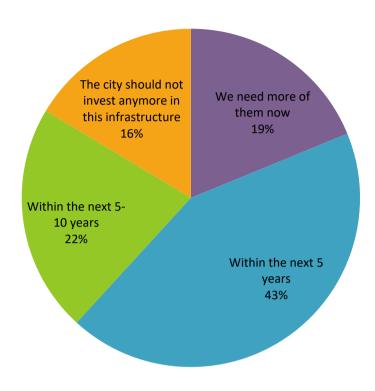
Statistics	Percent	Responses
Respondents who reported an interest in shared mobility	41%	78

8. The City of Burnsville has three electric vehicle charging stations in the Heart of the City. As electric vehicles become more accessible, should the city invest in more electric vehicle charging stations?



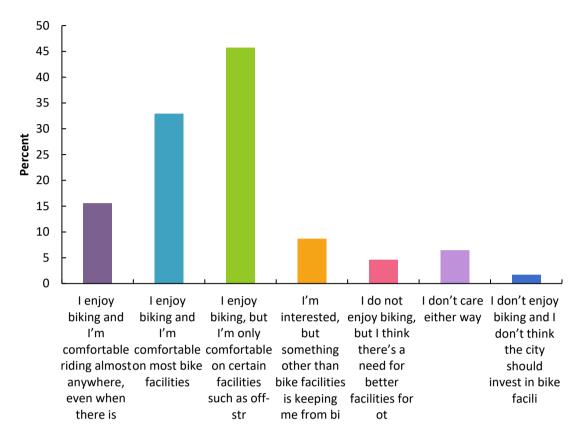
Value	Percent	Count
Yes	50.3%	88
No	14.9%	26
Unsure, I need more information	34.9%	61
	Totals	175

9. How soon should the city be investing in more electric vehicle charging stations?



Value	Percent	Count
We need more of them now	18.8%	31
Within the next 5 years	43.0%	71
Within the next 5-10 years	21.8%	36
The city should not invest anymore in this infrastructure	16.4%	27
	Totals	165

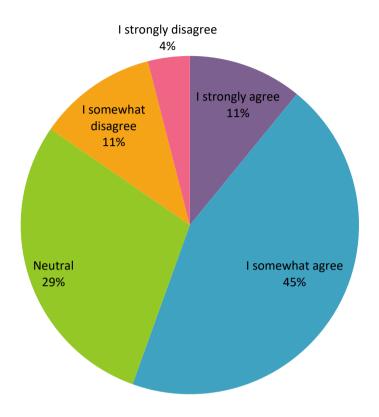
10. How would you describe your feelings about biking? Please check all that apply.



Value	Percent	Count
I enjoy biking and I'm comfortable riding almost anywhere, even when there is no dedicated bike facility	15.6%	27
I enjoy biking and I'm comfortable on most bike facilities	32.9%	57
I enjoy biking, but I'm only comfortable on certain facilities such as off-street trails	45.7%	79
I'm interested, but something other than bike facilities is	8.7%	15

keeping me from biking (i.e. access to a bike, physical ability, etc.)		
I do not enjoy biking, but I think there's a need for better facilities for other people	4.6%	8
I don't care either way	6.4%	11
I don't enjoy biking and I don't think the city should invest in bike facilities	1.7%	3

11. How well do you agree with the following statement, "The City of Burnsville is actively developing user friendly bike and walking trails that support recreational opportunities and link people to jobs and business locations."

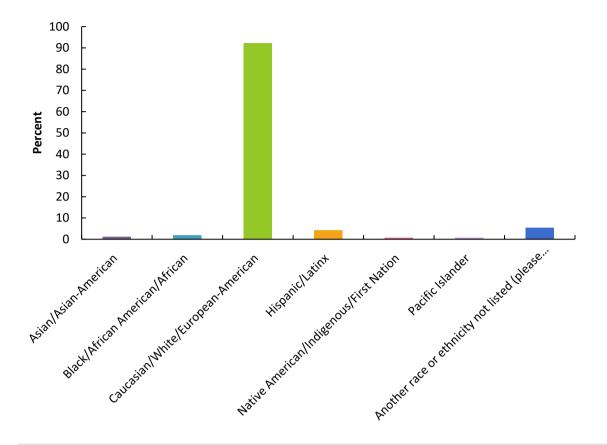


Value	Percent	Count
I strongly agree	10.9%	19
I somewhat agree	44.6%	78
Neutral	29.1%	51
I somewhat disagree	11.4%	20
I strongly disagree	4.0%	7
	Totals	175

12.Zip code

Zip Code	Responses
55419 - Minneapolis	1
55337 - Burnsville	128
55306 – Burnsville	40
55378 – Savage	2
55410 – Edina	1
55124 – Apple Valley	1
55379 – Shakopee, Eden Prairie, Prior Lake	1
55122 – Eagan	1
Total	175

13. How would you describe your race/ethnicity? Please select all that apply.

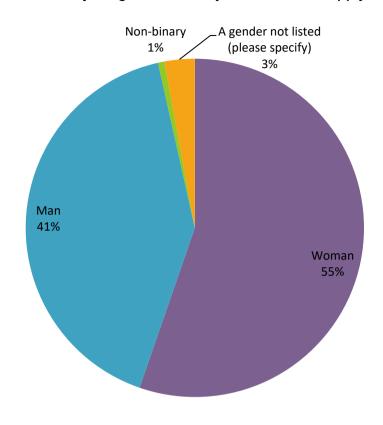


Value	Percent	Count
Asian/Asian-American	1.2%	2
Black/African American/African	1.8%	3
Caucasian/White/European- American	92.2%	153
Hispanic/Latinx	4.2%	7
Native American/Indigenous/First Nation	0.6%	1
Pacific Islander	0.6%	1

Another race or ethnicity not	5.4%	9
listed (please specify)		

Another race or ethnicity not listed (please specify)	Count
American	1
Ethnicity shouldn't matter. Disabilities should.	1
Human	1
Jewish	1
None of you business	1
None of your business	1
None of your business	1
Should not matter	1
Why is this about race?	1
Totals	9

14. How do you describe your gender identity? Mark all that apply

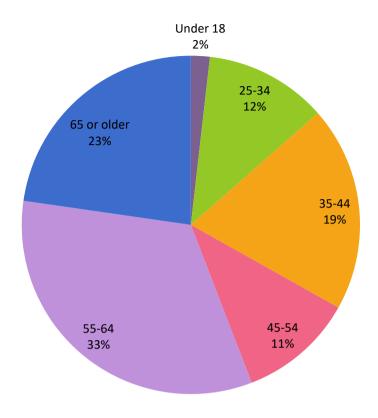


Value	Percent	Count
Woman	55.3%	94
Man	41.2%	70
Non-binary	0.6%	1
A gender not listed (please specify)	2.9%	5
	Totals	170

A gender not listed (please specify)	Count
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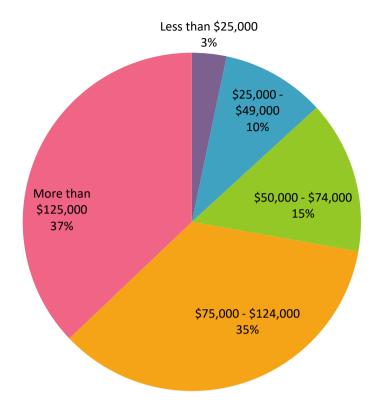
None of you business	1
None of your business	1
Please stop asking questions like this.	1
Seriously	1
Should not matter	1
Totals	5

15.What is your age?



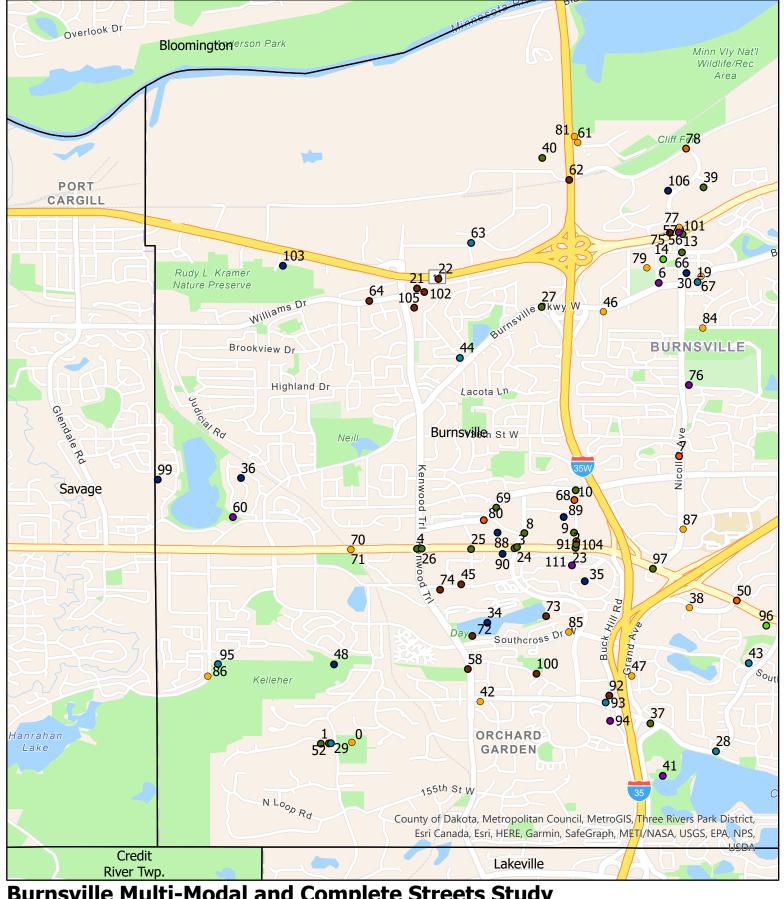
Value	Percent	Count
Under 18	1.8%	3
25-34	11.7%	19
35-44	19.6%	32
45-54	11.0%	18
55-64	33.1%	54
65 or older	22.7%	37
	Totals	163

16. What is your approximate household income?



Value	Percent	Count
Less than \$25,000	3.3%	5
\$25,000 - \$49,000	9.9%	15
\$50,000 - \$74,000	14.6%	22
\$75,000 - \$124,000	35.1%	53
More than \$125,000	37.1%	56
	Totals	151

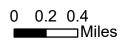
Appendix B: Wikimap Responses



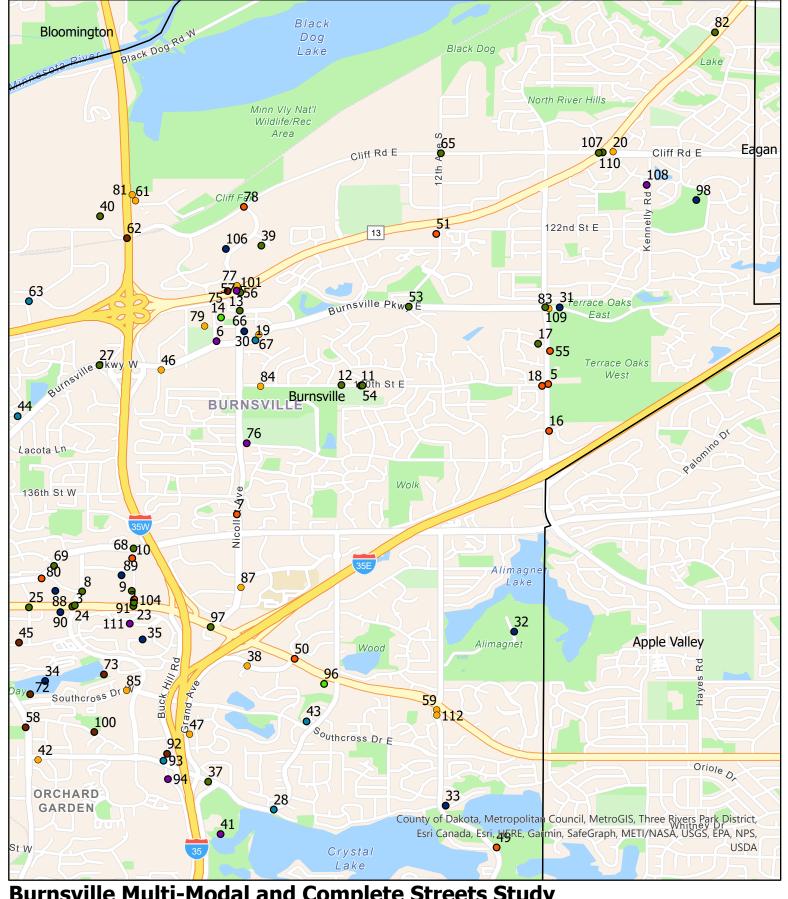
Wikimap comments - May 24-July 31, 2021

Comment Type

- Bike network gap
- Crossing gap
- EV charging station location
- Other comment
- Popular destination
- Sidewalk network gap
- Unsafe/uncomfortable crossing
- Vehicle traffic comment
- <all other values>







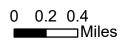
Wikimap comments - May 24-July 31, 2021

Comment Type

- Bike network gap
- Crossing gap
- EV charging station location
- Other comment
- Sidewalk network gap

Popular destination

- Unsafe/uncomfortable crossing
- Vehicle traffic comment
- <all other values>





Wikimap comments - May 24th through July 31st, 2021

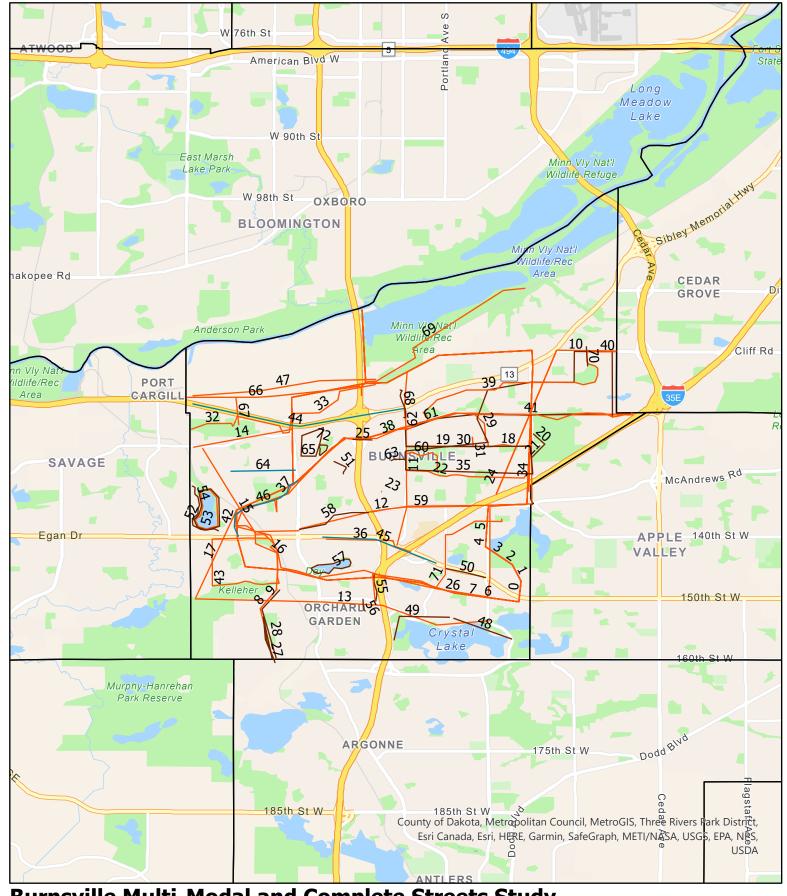
	_		
Comment ID		Comment Type	Comment
0		Bike network gap	
1		Unsafe/uncomfortable crossing	hard to see around trees coming out of valley view drive
2		Unsafe/uncomfortable crossing	
3		Unsafe/uncomfortable crossing	
4		Unsafe/uncomfortable crossing	
5	5/28/2021	Crossing gap	
			This would be a great location for a local, low cost trolley-type service that runs through bursville. Suggested stops: apartments and senior living, heart of the city, diamond head, Bville Center, Target/costco/the shopping area,
6	5/28/2021	Other comment	hospital, and main bus
7	5/28/2021	Crossing gap	
8	5/28/2021	Unsafe/uncomfortable crossing	
9	5/28/2021	Unsafe/uncomfortable crossing	
			I see a lot of people trying to cross here. More safety options need to be
10	5/28/2021	Crossing gap	implemented for safer crossing
11	5/28/2021	Unsafe/uncomfortable crossing	
12	5/28/2021	Unsafe/uncomfortable crossing	
13	5/28/2021	Unsafe/uncomfortable crossing	too busy to comfortably cross walking or on bike
14		EV charging station location	
15	5/28/2021	Bike network gap	would really be nice to be able to continue on this bike/walking path and connect to paths under 77 These neighborhoods are unable to safely cross Co. Rd. 11. The Terrac Oaks neighborhood (i.e. Great Oaks Drive) is particularly landlocked here. There is
16	5/30/2021	Crossing gap	no exit from the neighborhood other than Co. Rd. 11 @ Great Oaks Drive and no safe pedestrian crossi Speed limit on 11 makes this unsafe when crossing on foot or bike to get to Terrace Oaks. Especially when encountering cars are traveling from the
17	5/31/2021	Unsafe/uncomfortable crossing	north and going south. Would appreciate a curb cut to get on the sidewalk on the east side of 11
18	5/31/2021	Crossing gap	when crossing with a bike.
19	5/31/2021	Vehicle traffic comment	Because of the higher speed limit and congestion of Burnsville Pky, I only ride on the sidewalk. Sure would like to see lower speed limit (at least). This section needs a bike lane I see people on bikes but rarely use this
20	6/1/2021	Bike network gap	section due to the unsafe location and missing bike lane. No sidewalk, unsafe for people in disabled housing unit and for kids/elderly
21	6/3/2021	Sidewalk network gap	in apartments nearby. No sidewalk continues all the way down. Less used walking route but people do use it to bring their laundry to get cleaned at Metro Coin from around
22	6/3/2021	Sidewalk network gap	neighborhood
23		Unsafe/uncomfortable crossing	-
24		Unsafe/uncomfortable crossing	
25		Unsafe/uncomfortable crossing	
26	• •	Unsafe/uncomfortable crossing	
27		Unsafe/uncomfortable crossing	
28	6/4/2021	Vehicle traffic comment	Blind spot and a busy road. also cars going southbound are going down a hill. Intersection of Hidden Valley Drive and Judicial Road. Dangerous because of hilly terrain and narrow roads and blind curves. Especially dangerous
29	6/4/2021	Unsafe/uncomfortable crossing	because of extreme speeding, in both directions on Judicial Road.
30		Popular destination	Heart of the City
31		Popular destination	Terrace Oaks Park
32		Popular destination	Lake Alimagnet and park
33		Popular destination	Crystal Lake Beach, Keller Lake Park, Lac Lavon Park
34		Popular destination	Exsiting multi use trail around Earley Lake
35		Popular destination	Burnsville Center
36	• •	Popular destination	Sunset Pond, numerous existing trails
30	-, -, -,		,

		stripped bike lanes between Cty Dd F all the way east to Dortland
27	C/F /2024	stripped bike lanes between Cty Rd 5 all the way east to Portland. Portland
37	6/5/2021 Unsafe/uncomfortable crossing	could be marked as well.
		Grand Ave has new, large multi family housing developments. This includes
		senior living. The existing sidewalk is not adequate for the number of future
		residents. A multi use trail could connect with both the Cty Rd 42 trail
38	6/5/2021 Bike network gap	(existing) and the future
		Nicollet Ave and Hwy 13 is probably the worst pedestrian crossing in
39	6/5/2021 Unsafe/uncomfortable crossing	Burnsville
		There is no access to the MN River Trail from West of 35 W. Cliff Rd and
40	6/5/2021 Unsafe/uncomfortable crossing	35W interchange is extremely dangerous for pedestrians/bikes.
41	6/5/2021 Other comment	Another large, new multi family development
42	6/5/2021 Bike network gap	Existing multi use trail starts here and extends to Lakeville along Co Rd 5
72	0/3/2021 BIKE HELWOLK Bap	Entire length of Southcross would be inappropriate for on street bike lanes.
42	C/F/2021 Vahiala traffia agramant	
43	6/5/2021 Vehicle traffic comment	Too much traffic at too high of speeds.
		Entire length of Burnsville Parkway would be inappropriate for on street bike
44	6/5/2021 Vehicle traffic comment	lanes. Traffic too heavy and speeds too great.
		There is an existing sidewalk here. This is also a location that houses a large
		number of disabled individuals. The sidewalk cannot be maintained through
		the winter to accommodate wheelchair traffic. A wider trail would make for
45	6/5/2021 Sidewalk network gap	easier winter maintena
46	6/5/2021 Bike network gap	The Grand Loop or ""Burnsville Loop.""
		A multi use trail off of Grand Ave would connect the Southcross trail with
		existing trails in Crystal Lake Park West. A Grand Ave trail would also serve
		as a connection to the existing trail along Buck Hill Rd, thus accessing Buck
47	6/5/2021 Bike network gap	Hill Ski area.
.,	0, 0, 1011 Jime Hetmer M Bup	Newly completed trail connecting Judicial Rd and the Murphy Hanrehan Park
48	6/5/2021 Popular destination	area
49	6/5/2021 Crossing gap	Dangerous pedestrian crossing
50	6/5/2021 Crossing gap	Dangerous pedestrian crossing
51	6/5/2021 Crossing gap	Dangerous pedestrian crossing (Hwy 13 and Parkwood)
31	0/3/2021 Crossing gap	Judicial traffic makes it very unsafe to walk/run/bike. A bike path would be
F-2	C/11/2021 Vahiala traffia agramant	,
52	6/11/2021 Vehicle traffic comment	amazing!
53	6/19/2021 Unsafe/uncomfortable crossing	Very difficulty intersection for walker/bikers.
		Main crossing for kids getting to Gideon Pond- drivers do not stop and poor
		visibility of the crossing. Many parents will not allow their children walk
54	6/19/2021 Unsafe/uncomfortable crossing	because of this crossing point
55	6/19/2021 Crossing gap	Need a way to cross county rd 11 to get to this park!
56	6/27/2021 Unsafe/uncomfortable crossing	Parking at transit center and then walking to Heart of City is hazardous.
57	6/27/2021 Unsafe/uncomfortable crossing	
58	6/30/2021 Sidewalk network gap	Sidewalk just ends. No way to get to light at Southcross.
59	7/3/2021 Bike network gap	bike lane ends before intersection with 42, blind driveway into Speedway
		The parking lot is often full at peak times. Needs either more parking, or
60	7/4/2021 Other comment	easier means to get the pond without a vehicle.
61	7/6/2021 Bike network gap	Missing a way to get from 35W to MN River Crossing
62	7/6/2021 Sidewalk network gap	Heavy traffic location. Scary.
63	7/6/2021 Vehicle traffic comment	Visibility issues for all modes
64	7/6/2021 Sidewalk network gap	Sidewalk gap on north side of Williams Dr
65	7/6/2021 Unsafe/uncomfortable crossing	Uncomfortable/unsafe crossing and long signal/wait time for pedestrians
66	7/6/2021 Unsafe/uncomfortable crossing	Crossing Issues for pedestrians
67	7/6/2021 Bike network gap	Good facilities along Burnsville Parkway
68	7/6/2021 Bike Hetwork gap 7/6/2021 Unsafe/uncomfortable crossing	Signal timing is too short for pedestrians
	_	Difficult to cross near costco
69 70	7/6/2021 Unsafe/uncomfortable crossing	
70	7/6/2021 Bike network gap	Hard to cross along hwy 42
	-1-1	Either missing connection or missing wayfinding to connect Lake Marion
71	7/6/2021 Bike network gap	Greenway to Murphy Reserve
		Paths are too narrow for bikes and pedestrians. Low visibility and bikers
72	7/6/2021 Sidewalk network gap	come around the corners too fast.
73	7/6/2021 Sidewalk network gap	Steep drop-off. Needs railing
74	7/6/2021 Sidewalk network gap	Accessible apartments, need better winter maintenance to Hwy 42.

High traffic + freeway entrance. 150th/Crystal Lake Rd has room for

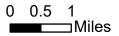
75	7/9/2021 Sidewalk network gap	there should be a safe way to get from the new orange line to the MVTA station.
76	7/0/2024 011	There should be a circle route around Burnsville that is wide enough to allow for bikers and walkers. There should be internal paths within the circle that
76	7/9/2021 Other comment	allow for short routes. Add mile makers for determining distance traveled. prefer to cross Nicollet to the north at River Ridge Ln (less car traffic), but no
77	7/16/2021 Bike network gap	sidewalk here to do that
78	7/16/2021 Crossing gap	No help to bikers or walkers looking to cross Cliff at T-intersection with Nicollet - connects to bike path that crosses the Minnesota River with I-35W
79	7/20/2021 Bike network gap	Gap between planned development to the west and Heart of the City Very few crossing points between residential on north/west side of McAndrews and south retail or services. McAndrews is high traffic and difficult/unsafe to cross between highway 5 and Aldrich Ave. Would a
80	7/23/2021 Crossing gap	pedestrian/bike overpass be a possibility, for e Access to the Black Dog trail and the river area, including the new 35w ped/bike crossing to Bloomington, is very unclearly marked. Crossing across traffic on bike to access the trail on the opposite side of the road always
81	7/23/2021 Bike network gap	feels unsafe, especially at hi Gap in multiuse path at corner of River Hills Drive and Hwy 13. Perhaps this
82	7/23/2021 Unsafe/uncomfortable crossing	has been fixed since last year, but bike traffic has to go off road through this small gap in the trail. Wide shoulder on Burnsville Parkway between 11 and Terrace Oak park
		could be painted as bike path, since sidewalk is available for pedestrians on
83	7/23/2021 Bike network gap	one side of road. 130th or 134th are great east/west connections from the multiuse paths on Nicollet. Wide shoulder could be marked for bikes, although Gideon Pond on 130th might be a hard workaround. Connections to both these cross streets
84	7/23/2021 Bike network gap	at Highway 11 to multiuse paths Southcross is a good south end connection to marked bike lanes on Lac Lavon Dr and further access to Lakeville/Apple Valley multiuse network via
85	7/23/2021 Bike network gap	Lac Lavon Drive. Would there be room to expand the north and south sidewalks on Southcross between Highway 5 Pinch point in shoulders on Burnsville Parkway near Cam Ram park. Would removing some of the concrete median open space for designated on street
86	7/23/2021 Bike network gap	bike lane around this corner? Popular passage from south Burnsville to Murphy Hannrehan off road bike trails.
		Link Nicollet multiuse path to County Road 42 multiuse path by expanding sidewalks to multiuse to complete access to County Road 42 multiuse
87	7/23/2021 Bike network gap	pathway, expanding access to Apple Valley pathway network via this route.
88	7/23/2021 Popular destination	Aldi
89	7/23/2021 Popular destination	Target
90	7/23/2021 Popular destination	Library
91	7/23/2021 Crossing gap	Hard to get from Chilis to destinations to the west
92	7/23/2021 Sidewalk network gap	No sidewalks
93	7/23/2021 Vehicle traffic comment	Overgrown bushes cause poor visibility
94	7/23/2021 Other comment	Overgrown bushes This park with the new boardwalk (Kelleher?) needs a bigger, safer parking lot. This is a common area for crime, I think, because I often see suspicious activity here. It feels unsafe but the new boardwalk is quite nice and is
95	7/24/2021 Vehicle traffic comment	becoming popular.
96 97	7/28/2021 EV charging station location 7/28/2021 Unsafe/uncomfortable crossing	
98	7/28/2021 Popular destination	Red Oak Park is a popular destination. The boulders are not safe for the kids, and would like to see rubber or safer materials at the playground.
98 99	7/28/2021 Popular destination 7/28/2021 Popular destination	Connections to Hidden Valley Elementary in Savage.
99 100	7/28/2021 Popular destination 7/28/2021 Sidewalk network gap	Hilly neighborhood and no sidewalks for kids walking and biking.
101	7/28/2021 Sidewalk network gap 7/28/2021 Other comment	Light cycle length too long for crossing 13.

		Sidewalk gap - Wheelchair users from Greenwood Apartments are in the
102	7/28/2021 Sidewalk network gap	street.
103	7/28/2021 Popular destination	Susan Ballparks are a popular destination.
104	7/28/2021 Unsafe/uncomfortable crossing	Test
		Need sidewalks near Pumpkin Patch childcare (seniors and persons with
105	7/28/2021 Sidewalk network gap	disabilities in this area)
		Many families walk from Studio 4 Dancers to Med Cruise Cafe, need better
106	7/28/2021 Popular destination	ped facilities.
107	7/28/2021 Unsafe/uncomfortable crossing	Long light cycle for bikes ingon Cliff want to cross 13
108	7/28/2021 Other comment	Need more parks in the area.
109	7/28/2021 Unsafe/uncomfortable crossing	Difficult and busy to cross.
110	7/28/2021 Unsafe/uncomfortable crossing	Need better crossings.
111	7/28/2021 Other comment	Too dangerous and hilly to bike in Burnsville. Prefer to go to Chaska.
112	8/11/2021 Bike network gap	Bike lane ends before intersection with 42



Wikimap comments - May 24-July 31, 2021





Burnsville Multi-Modal and Complete Streets Study Wikimap comments - May 24th through July 31st, 2021

Comment ID	Date C	reated	Route Type	Route Comment
Comment ID	Date	reated	noute Type	Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
(0 5	/26/2021	Bicycle route	Heart of the City could be.
		, -, -	.,	Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
	1 5	/26/2021	Bicycle route	Heart of the City could be.
	_	, = 0, = 0 = =	2.0,0.0.0.000	Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
;	2 5	/26/2021	Bicycle route	Heart of the City could be.
	_	, = 0, = 0 = =	2.0,0.0.000	Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
į	3 5	/26/2021	Bicycle route	Heart of the City could be.
	,	, _ = , _ = = =		Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
4	4 5	/26/2021	Bicycle route	Heart of the City could be.
			•	Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
!	5 5,	/26/2021	Bicycle route	Heart of the City could be.
				Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
(6 5,	/26/2021	Bicycle route	Heart of the City could be.
				Run parallel bike paths along secondary traffic routes and connect to
				major parks. Goal should be connectivity to recreational areas and non-
				congested retail. I.E Burnsville Center should not be a biking hub, but
-	7 5,	/26/2021	Bicycle route	Heart of the City could be.
				Dedicated bike / walk trail down Judicial road. Connect new Murphy trail
8	8 5,	/27/2021	Bicycle route	together.
Ç	9 5,	/27/2021	Walking route	Walk / bike trail down Judicial
				There is only one stretch of Cliff Rd without a walking/biking path. It is
				between Hwy 13 and Cinnamon Ridge Trail on the border of
				Burnsville/Eagan, along the north side of Cliff, The north side is the
10	0 5,	/27/2021	Bicycle route	residential side and is where many, many people
	_	10010001		
1:			Bicycle route	It would be helpful to have a bicycle route into The Heart Of The City area.
17			Bicycle route	Bike route along McAndrews would be helpful
13	3 5,	/28/2021	Bicycle route	A bike route across southern Burnsville is needed
				A bike route along McColl into Savage is needed to connect Burnsville to
4	, -	/20/2024	D'a de la la	the existing MN River trials along Highway 13 and the Bloomington Ferry
14	4 5,	/28/2021	Bicycle route	Bridge trail.
		/20/2024	Diamala was the	Improvements to an on-road bike route the entire length of Judicial Rd.
1!	-		Bicycle route	would be nice.
10	ס 5,	/28/2021	Bicycle route	An on-road bike route along the entire length of Judicial Rd. is needed
4.	7 -	/20/2024	Dicyclo route	An on-road bike lane along the entire length of the Burnsville Parkway,
17	, 5,	/20/2021	Bicycle route	similar to the one on Lac Lavon, is needed.

		Fast and distracted driving, does not stop for pedestrians, speeds around
		cars in no passing zone. How can we integrate some traffic calming
18	5/28/2021 Driving route	measures?
19	5/28/2021 Bicycle route	Add in an off sidewalk bike route, connect to Nicollet and 11 routes
20	5/28/2021 Walking route	add in some walking trails
	_	more walking routes/hiking/biking. lots of possible trail options all
21	5/28/2021 Walking route	through here
22	5/28/2021 Bicycle route	Suggestion: Add in bike lane and traffic calming measures
		We need a sidewall, on at least one side of 420th Church Late of the fire 0
		We need a sidewalk on at least one side of 136th Street! Lots of traffic &
22	5/20/2024 Malling moute	cars go fast but people still continue to walk/bike/strollers on the street!
23	5/29/2021 Walking route	People need better/safer access out of the neighborhood on foot
24	6/1/2021 Bicycle route	This gap in the path needs to be remedied. crossing the burnsville parkway bridge is unnerving due to no separation
25	6/3/2021 Walking route	from the consistent traffic.
26	6/5/2021 Bicycle route	Grand Loop or Burnsville Loop - all designated, off street multi-use trail
20	6/3/2021 Bicycle route	Judicial is a very ""unfriendly"" road to walk/run/ride bike. There are no
27	6/11/2021 Walking route	spacious shoulders.
27	0/11/2021 Walking Toute	A walking route is needed along judicial as there are lots of walkers along
		this road and there is a very narrow shoulder on the road here. It is very
		dangerous especially when 2 cars need to pass with a pedestrian. There
28	6/18/2021 Walking route	are curves to the road which m
20	5/ 15/ 2521 Walking Four	A main pathway to Gideon Pond school- the sidewalk becomes very
		overgrown making the path unsafe for kids on bikes/scooters/ect. The
29	6/19/2021 Bicycle route	alternative paths to Gideon Pond have no sidewalks for safety.
	,	·
		There is a utility pole with wires the crosses into the sidewalk path making
30	6/19/2021 Bicycle route	a narrow opening that is unsafe on bike (which kids use to bike to school).
31	6/19/2021 Bicycle route	Steep hill in poor repair is hard for kids biking to school
		power line trail that could go all the way to Shakopee. it would involve the
		city of Savage and Shakopee and power line company.
		Advantage would be to keep biker of the service rd yet be able to bike
32	6/25/2021 Bicycle route	between the river trail and conect with trails in Shak
		power line trail from Northern tool to the park behind Mcdonalds. make a
		trail that follows the power line to county rd 5 to wiliams rd back to the
33	6/25/2021 Bicycle route	power line then to the park and beyond.
34	6/25/2021 Bicycle route	this route needs upgrading and a better crossing at 35e and county rd 11
35	7/9/2021 Walking route	
		there should be a route for biking and walking that minimizes the need to
36	7/9/2021 Bicycle route	cross traffic lanes.
37	7/9/2021 Bicycle route	first leg of route. now move map and resume drawing.
38	7/9/2021 Bicycle route	Segment two. Moving map again.
39	7/9/2021 Bicycle route	Route segment three. moving map again.
40	7/9/2021 Bicycle route	Route continues in Eagan on Slater Rd. Then linking with Burnsville Pkwy.
41	7/9/2021 Bicycle route	Follow Burnsville Pkwy back to start on Steven Rd. Total loop is 12 miles.
42	7/9/2021 Bicycle route	Swamp Loop segment 1. Now move map.
43	7/9/2021 Bicycle route	Swamp Loop segment two. Route retraces back to start on Steven Rd.
44	7/12/2021 Driving route	To much congestion for drivers. This needs road improvements
45	7/12/2021 Driving route	This area is too congested for drivers. This needs road improvements
		This area has a speed limit of 35. The rest of Burnsville Parkway is 40.
46	7/12/2021 Driving route	Please make all of this 40mph.
		Connect to parks and savage
47	7/22/2021 Bicycle route	

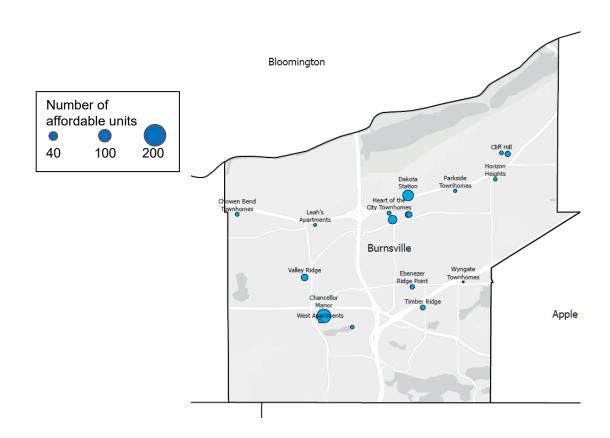
		The sidewalks become icy and ice-packed in the winter, making walking dangerous. I walk my dogs every day, and in winter we oftentimes have to
48	7/24/2021 Walking route	walk on the streets, since the sidewalks are not well-maintained
		Again, the sidewalks and the path through the woods near the boat
49	7/24/2021 Walking route	launch, are icy and snow-packed in winter, making them really dangerous. lack of sidewalks on this side is odd, considering there is a bus stop along
50	7/28/2021 Walking route	here
		No sidewalks on Fremont. Need a ""watch for children"" sign for speeding
51	7/28/2021 Walking route	cars.
52	7/28/2021 Bicycle route	Love to bike in the area.
53	7/28/2021 Walking route	Love to walk in the area.
		Daughter walks to Hidden Valley School - has to walk in the street on West
54	7/28/2021 Walking route	Preserve Blvd.
55	7/28/2021 Walking route	Sidewalk gap by dealerships.
56	7/28/2021 Walking route	Trees overgrowing and obscuring sidewalks
57	7/28/2021 Walking route	Love using the Early Lake Trails, but they get icy in the winter.
58	7/28/2021 Walking route	Need pedestrian crossing improvements across McAndrews
59	7/28/2021 Bicycle route	Need dedicated bike lanes, separate from pedestrians.
60	7/28/2021 Bicycle route	Need dedicated bike facilities, separate from peds.
61	7/28/2021 Bicycle route	Need dedicated bike facilities, separate from peds.
62	7/28/2021 Bicycle route	Need dedicated bike facilities, separate from peds.
		No sidewalks in the neighborhood and cars speeding from Nicollet into the
63	7/28/2021 Walking route	neighborhood.
64	7/28/2021 Driving route	Construction trucks ""racing"" down the roads.
65	7/28/2021 Walking route	No sidewalks in the neighborhood.
		Would love to see a bike path under the power lines that connects from
66	7/28/2021 Bicycle route	behind Northern Tool to Shakopee and the Susan ball parks.
67	7/28/2021 Bicycle route	Add trail connection to Susan ball parks from new trail under power lines.
68	7/28/2021 Walking route	Need ped improvements for people walking to area businesses. Need better wayfinding and pavement markings to connect to Black Dog
69	7/28/2021 Bicycle route	Trail (Multiple comments on this connection.)
70	7/28/2021 Walking route	Crossing Cliff from Red Oak Park.
	-	Bike from Echo Park and CR 11/Elementary school to Dealerships by Buck
71	7/28/2021 Bicycle route	Hill
72	7/28/2021 Walking route	Love Vista View Park! Ponds with ducks and shaded benches.
	-	

Appendix C: Targeted Pop-Up Engagement and Flier Distribution Locations

APPENDIX C: KEY LOCATIONS TARGETED FOR FLIER DISTRIBUTION AND POP-UP EVENTS

Affordable Housing Locations in Burnsville with Greater than 40 Units

City	Туре	Name	Number of units
Burnsville	Section 202 Housing	Ebenezer Ridge Point	42
Burnsville	Non-CDA Managed Tax Credit	Timber Ridge	45
Burnsville	Non-CDA Managed Tax Credit	Andrew's Pointe	56
Burnsville	Senior Housing	Eagle Ridge Place	60
Burnsville	Senior Housing	Park Ridge Place	60
Burnsville	Senior Housing	Valley Ridge	72
	Non-CDA Bond Financed		
Burnsville	Housing	Grande Market Place	106
	Non-CDA Bond Financed		
Burnsville	Housing	Dakota Station	113
Burnsville	Section 236 Housing	Chancellor Manor	163
	Non-CDA Bond Financed		
Burnsville	Housing	Wyngate Townhomes	228



Places of Worship

Casa de la señora de Burnsville Iglesia Cristiana Evangelica Dar-Us-Salam Mosque and Community Center Creativity Community Center International Outreach Church Iglesia Adventista del Séptimo Día Hispana de Burnsville Spirit of Truth Church

Businesses that cater to BIPOC and immigrant communities

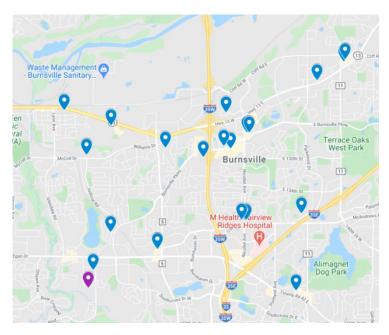
Soccer Blast Minnesota
Hidalgo Market
La Paz Market Llc
Metro Foods Halal Market
Medina Halal Market
Discount Halal Market
Halal Groceries
Tawakal Halal Market
Cliff Halal Market
Los Grandes Mexican Restaurant
Hidalgo Taqueria
Saigon Asian Food Market
Oriental Market
Asian Direct Oriental Market
Asian Mart

Community Organizations

SCORE Mentors South Metro

Other Locations

Burnsville Center Burnsville City Hall



Locations for BIPOC flier distribution and/or pop-up events