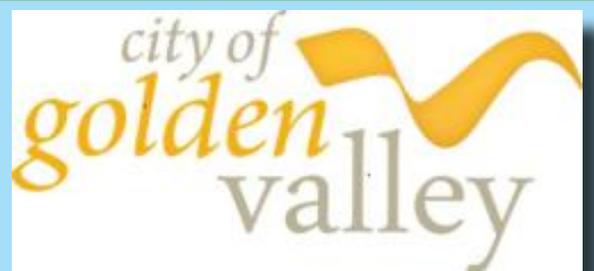


Creating a Golden Valley Bicycle Plan



Analysis & Recommendations



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Executive Summary



The city of Golden Valley, located just west of Minneapolis hosts a diverse mix of housing and employment. The built out suburban city is continuously looking to improve quality of life for those who live, work or play in Golden Valley. Looking to the future, the City of Golden Valley wants to improve transportation options and encourage active living habits. Currently, the Golden Valley bicycle network is missing connectivity, continuity and safety. Lack of investment and engagement has resulted in limited and outdated facilities. The future LRT stations as well as future bicycle investments from Three Rivers Park District makes this plan a timely project. Golden Valley is now in the position to build a strong bicycle network. It's important to note that this plan is focused on building a strong bicycle network for the city but there are many mentions of pedestrians and related facilities. While this is not a pedestrian plan, bike and pedestrian facilities are often inextricably linked especially when addressing road infrastructure and safety.

This plan was created by Masters of Urban and Regional Planning students at the University of Minnesota's Humphrey School of Public Affairs. The project was a part of the Transportation and Economic Development Capstone course and was developed over the course of one semester.

The plan process started with an analysis of the existing conditions in Golden Valley as well as the region. The analysis used demographic and economic data, stakeholder interviews, literature reviews, local best practices and a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis. The information in this diagnostic process illustrated the current position and perception of biking in Golden Valley.

Next, the plan fast forwards. A visioning process took the plan from existing conditions to imagining how this network impacts Golden Valley in 2036. Fictitious quotes from future Golden Valley residents illustrate how the bicycle plan has improved quality of life. People of all ages use the network for fun, transportation or a combination of both. The plan has made getting around the city easy and fun. As a result, this investment has generated a large amount of economic development.

To achieve that vision, the report outlines a series of recommended actions. These actions are derived from the following three guiding principles.

Connectivity

The plan aims to build a bicycle network that allows users of all ages to better access destinations within Golden Valley and beyond.

Safety

The Golden Valley Bicycle Plan should be designed with safety in mind. It will create a network where users of all abilities will feel comfortable using the network for recreation and transportation purposes.

Vitality

Intentional design and continued community engagement can transform the Golden Valley Bicycle Plan from a simple transportation network into a community amenity and city asset.

The actions recommended in the plan are suggestions for the City to evaluate. The recommendations focus on growing the bicycle network in the short and long term. Safe and intentional design will ensure that the plan is well received and heavily used. Public engagement and consistent outreach will create a plan that is reflective of the needs of the community. While the recommendations are grounded in real expertise about how bicycling are best served in suburban environments, it's important that any action taken comes from a process of public engagement.



Existing Conditions



Problem Statement

The current bicycle network in Golden Valley is lacking in connectivity, continuity and safety. This has resulted from the layout of the automobile dominated suburban landscape. The outdated infrastructure and prohibitive costs have contributed to the lack of bicycle facilities. Golden Valley has a great potential in their wide streets and active population. By upgrading their infrastructure, the City can encourage this active population and stimulate the local economy. Golden Valley's goal should be to create a safe, connected bicycle plan that promotes active living and economic development within the city.

About Golden Valley...

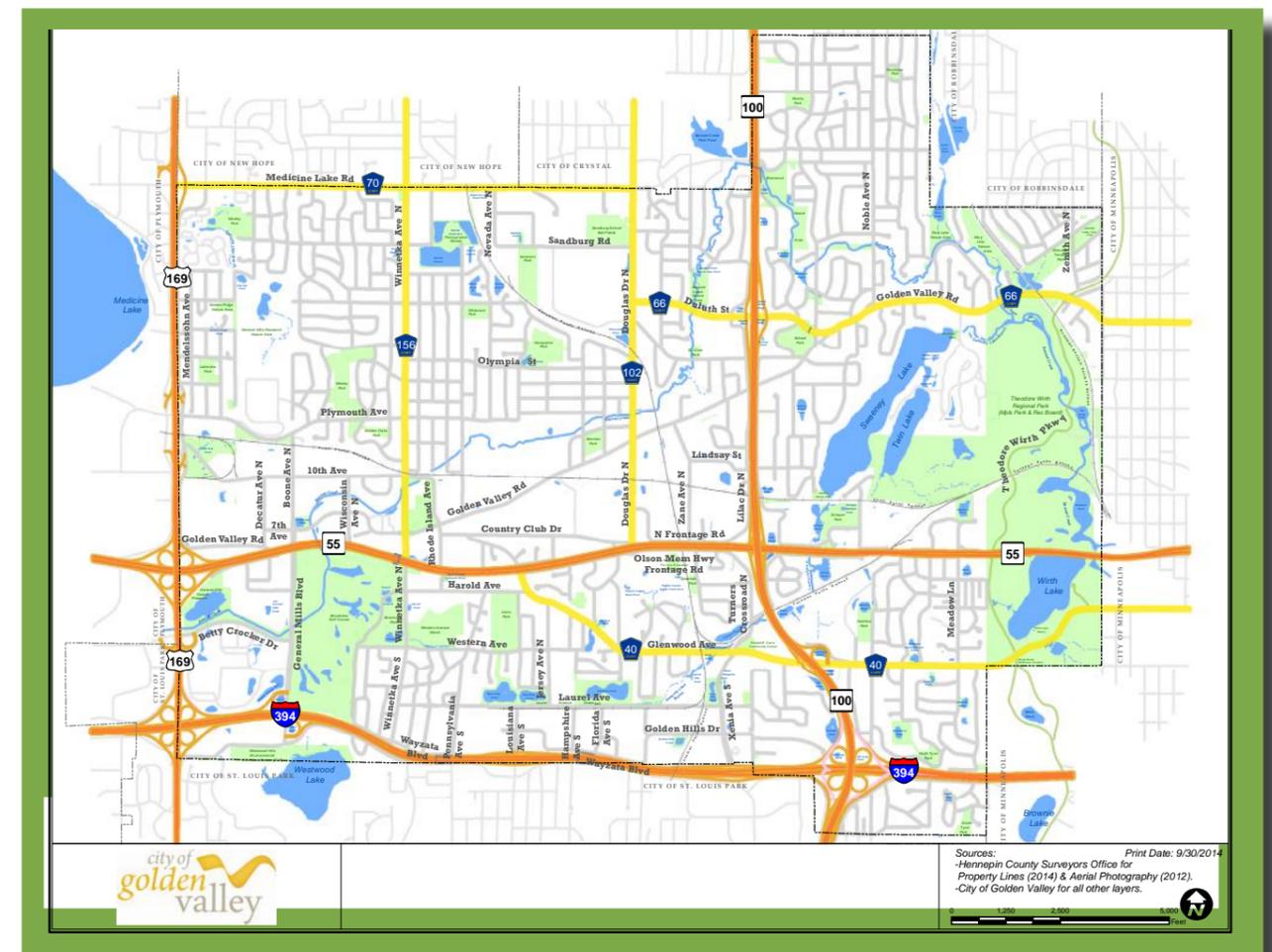
The suburb of Golden Valley is located within the Twin Cities Metropolitan Area in Hennepin County. The city was founded in 1886. In the 2010 Census, the city had a population of 20,371 people increasing at a little over 100 people a year. This city is a great place to start planning for the future. Golden Valley is 10.55 square miles with about 0.35 square miles of water. With few bodies of water to work around, making connections with the bike network will be easier.

A few highways run through Golden Valley providing connections to the rest of the metro. State Highway 100 runs North-South through the Eastern side of the city. State Highway 55 runs East to West through the center of the city. US Highway 169 creates the Western border and Interstate 394 creates the southern border. A small chunk of Golden Valley extends south of 394. A few county highways create smaller connections throughout the city itself. Because most of the highways are bordering avenues, there are only a few state highways to isolate as connection problems. Creating easy ways for bikes to cross these busy streets will improve the current network.

Education in Golden Valley is unique. Golden Valley does not have its own school district. The city belongs to the Robbinsdale and Hopkins School Districts. Golden Valley serves as the home for well known schools like The Breck School and Perpich Center for the Arts. Sprinkled throughout the city are several elementary and middle schools. If the City connects to these destinations, they can encourage active transportation from a young age.

Golden Valley is home to several large corporations. General Mills, Pentair and KARE have corporate campuses in Golden Valley. Other large employers like Tennant, Room & Board, Honeywell and UnitedHealth Group have locations in Golden Valley. These employers cause a large increase in the workday population. Within the greater downtown area there are many smaller businesses. These businesses have the potential to serve as great connections to the improved network. By encouraging active transportation from every aspect, the City can make sure the improved network serves all businesses and community members.

Map A. The City of Golden Valley



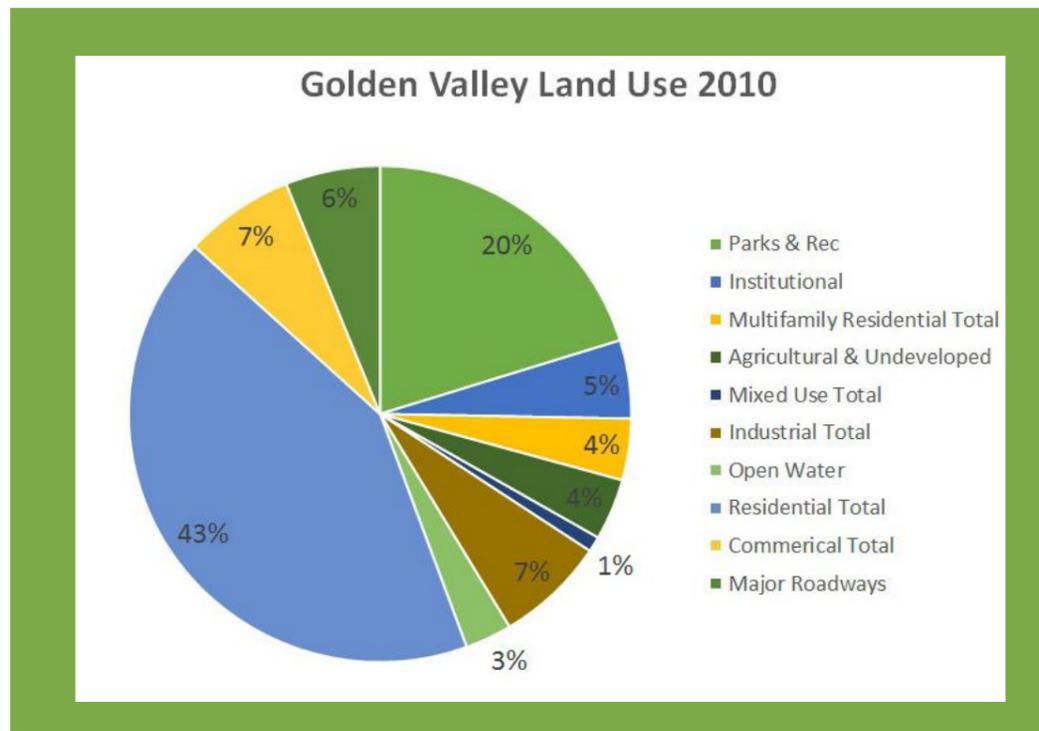
Existing Conditions



Land Use

Golden Valley borders the northwest edge of Minneapolis, and is well connected to the central city. The total area of Golden Valley is 10.5 square miles. Almost half of the total land area in Golden Valley residential development (42%). A vast majority of those developments are single family (90%). Golden Valley has about 500 acres of Industrial land and just under 500 acres of commercial land. The amount of land dedicated to mixed use development increased 53 percent from 2005 to 2010. This is an important way step in encouraging active transportation. Mixed use developments allow for destinations to be closer which makes walking and biking between them easier.

Figure 1: Golden Valley Land Use 2010

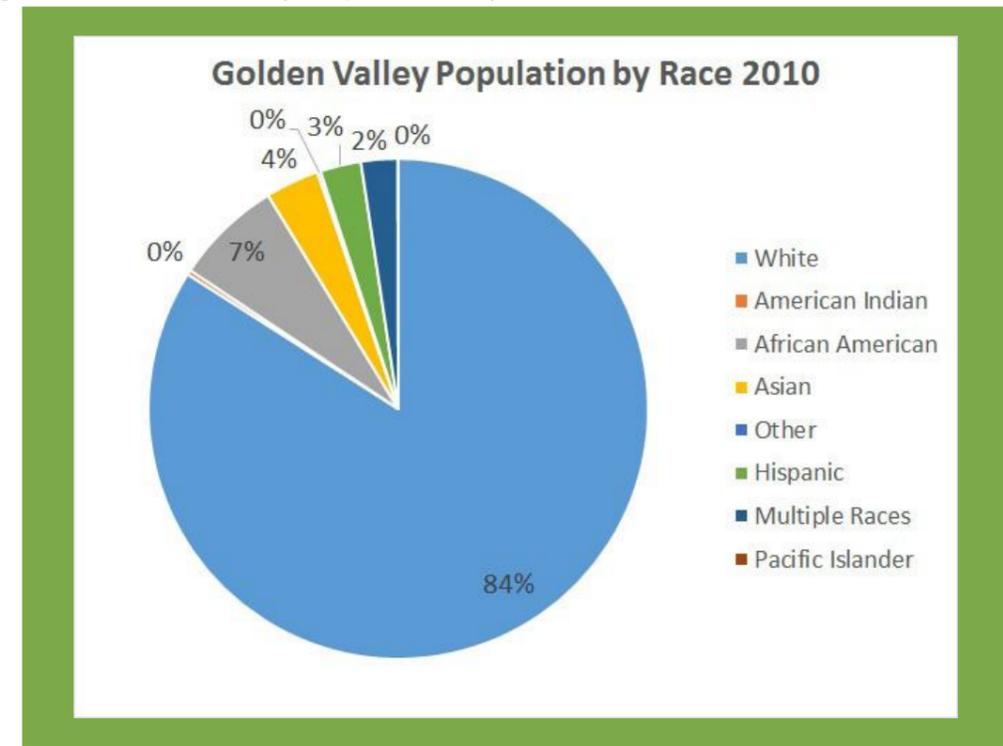


Golden Valley also currently has 1,335 acres of parks and recreation land within its city limits. Almost a third of which is golf courses. Recreational space offers great amenities for active transportation. The new network will highlight these recreational spaces to encourage active transportation.

Population

According to the Metropolitan Council, Golden Valley had a total population of 20,790 and a total of 8,940 households in 2014. Golden Valley residents identifying as White is the majority (84 percent). Those who identify as African American, Asian and Latino residents round out the population. Population is expected to reach 22,000 by 2030. Golden Valley is a home to many families and aging households. Currently, these families do not have strong access to safe bike facilities. Safe bike routes can help to encourage active living in people of all ages.

Figure 2: Golden Valley Population by Race 2010



Golden Valley boasts a high median household income with \$82,300 where the Minneapolis' median income is \$50,800. In 2014, 9.9 percent of Golden Valley residents were living below poverty level. Connecting the network to multi-family housing will ensure that all populations are able to use the network and connect to transit.

Charts on Pages 7-9 from <http://stats.metc.state.mn.us/profile/detail.aspx?c=02394924#employmentbyindustry>

Existing Conditions

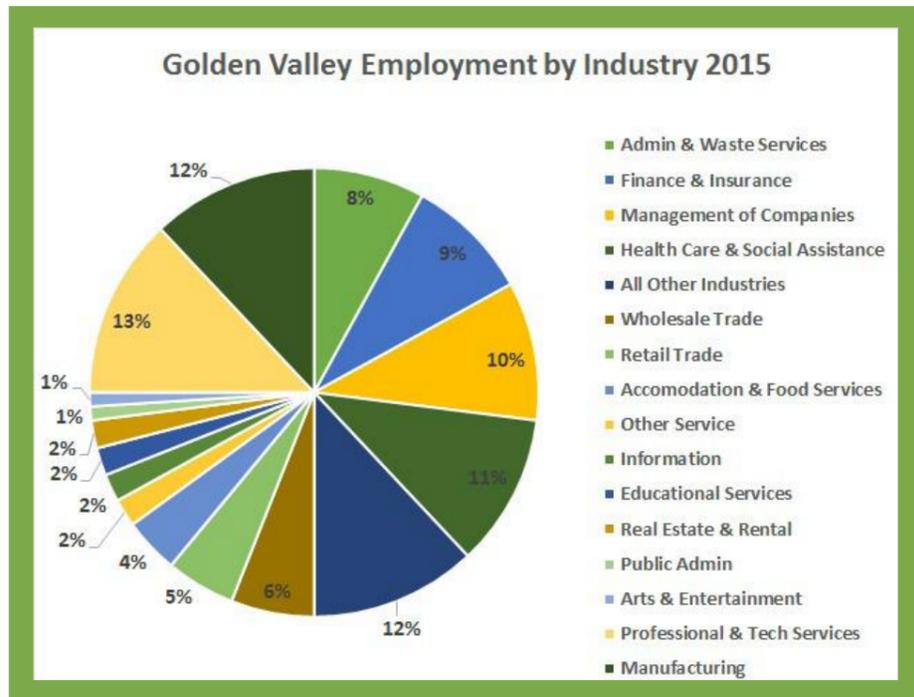


Employment

Golden Valley is unique in that it has many more jobs than residents within its boundaries. In 2014, Golden Valley was home to 35,118 jobs and just over 20,000 residents. Employment numbers in Golden Valley are projected to increase in the 38,900 employees in 2040. Employment is distributed across many industries in Golden Valley.

This includes professional and technical services (13 percent), manufacturing (12 percent), healthcare and social assistance (11 percent), management of companies (10 percent), and finance and insurance (9 percent). By partnering with these major industries the city can create active transportation resources for all employees. The healthcare industry has already expressed interest in participating. Businesses can help promote the new and improved Golden Valley Bike Plan.

Figure 3: Golden Valley Employment by Industry 2015



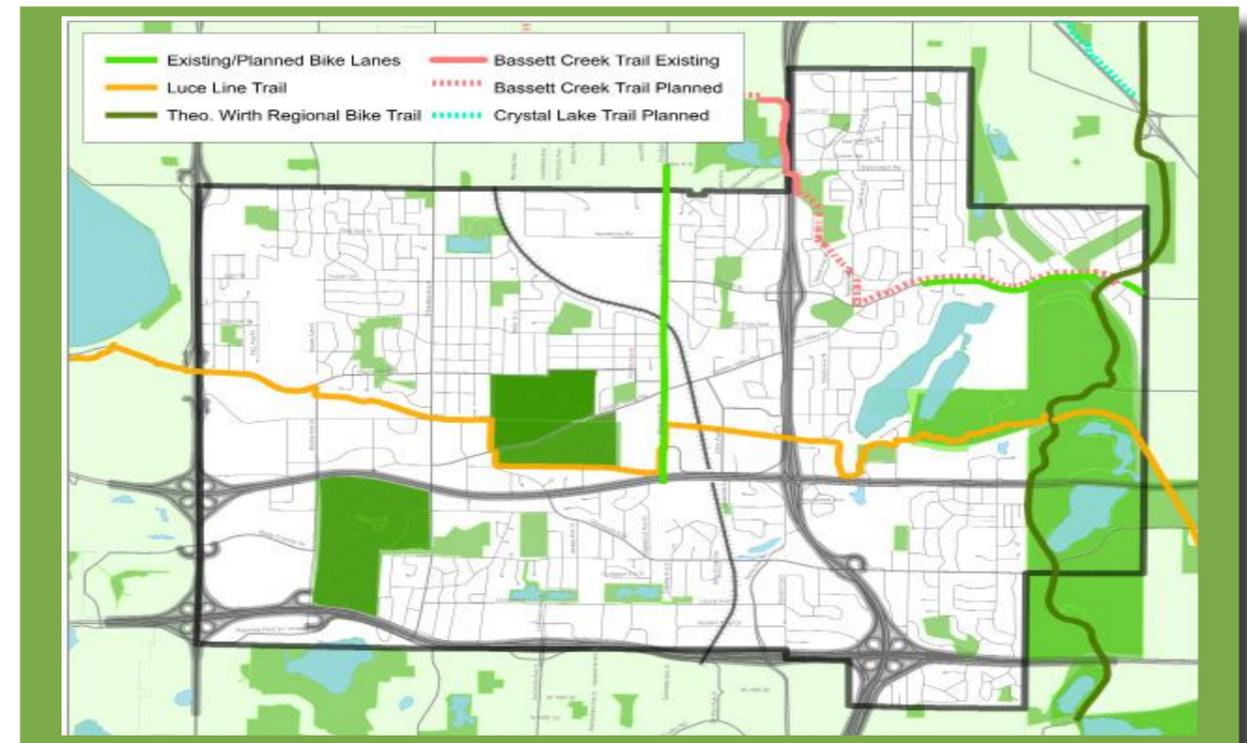
Existing Bicycle Network

Golden Valley presents great potential for bike-able roadways. Although there are few sidewalks, the city has wide roadways that great potential for bikers. City residents have expressed a need to create bike-able city streets as well as expand the current Improvements. On existing bike maps of the city, there are several roads that are listed as having 'bike-able' roadways, these are simply wide streets. By refurbishing wide shoulders as bike lanes the City can create bike friendly streets and

improve connections through Golden Valley. Hennepin County has experimented with adding 5 foot shoulders for biking on Golden Valley Road. This street does not have signage to alert drivers and bikers of this new addition, so cars may use this extra space to increase their speeds.

Golden Valley offers several bike trails, as shown in Map B, that connect to the Chain Of Lakes. The Luce Line runs through Golden Valley from East to West and provides great connection opportunities. Currently, this trail is not easy for bikers to maneuver, but it has great potential with investment. This makes Golden Valley a hot-spot for active transportation. There currently exists a Nice Ride station in Eastern Golden Valley that will help provide bike amenities for those that want to take advantage of bike infrastructure that do not have bikes themselves. Currently, this passage does not connect well from city to city. By building stronger connections there will be more bike traffic through the city to the Theodore Wirth Parkway. Grand Round signs are located throughout the Luce Line to direct people along their bike ride.

Map B. Golden Valley's Current Bike Network



Existing Conditions



Existing Plans & Policies

There are many types of plans and policies that influence the Golden Valley Bicycle Plan. City, regional and statewide plans were all used to inform the planning process for the Golden Valley Bike Plan. Many of the larger plans have investments or projects planned for the Golden Valley area and were taken into consideration when drafting recommendations. Below is a brief description of each plan that was considered throughout the planning process.

Golden Valley Comprehensive Plan 2008-2018 Adopted 2008

The Golden Valley Comprehensive Plan 2008-2018 is a planning document that addresses community-wide issues and desires. The transportation section of the Golden Valley Comprehensive plan speaks to the importance of bicycle and pedestrian improvements. The objectives of Goal 3: Implement Bicycle and Pedestrian Facilities touch on active living, modal choice validation and environmental conservation.

For more information: <http://www.goldenvalleymn.gov/planning/comprehensiveplan/>

Golden Valley City Sidewalk Policy

Golden Valley maintains sidewalks within city limits. Most of these are located along busy streets with heavy automobile and foot traffic. The City is responsible for maintaining these pathways using routine inspections and maintenance and improvement programs. The City Sidewalk Committee periodically reviews the current network and makes recommendations to the City Council regarding locations of new sidewalks.

For more information: <http://www.goldenvalleymn.gov/streets/maintenance.php> and <http://www.goldenvalleymn.gov/planning/comprehensiveplan/>

Hennepin County Active Living Policies and Partnership Adopted 2006

Hennepin County Active Living is a county-led partnership of nonprofits, cities and businesses focuses on increasing opportunities to become more active. Partners of the program are supported in this mission through the development and adoption of Complete Streets policies, active living resolutions, design guidelines and policies. Active Living Hennepin County also serves as a funding and technical support for Active Living projects.

For more information: <http://www.hennepin.us/your-government/projects-initiatives/active-living>

Hennepin County Complete Streets Policy Adopted 2009

Hennepin County is the first county in Minnesota to adopt a Complete Streets Policy. Complete Streets allows the county to see that every street under county jurisdiction is designed and operated in a manner that prioritizes safety and accessibility for all roadway users whether they are walking, biking, driving or using transit.

For more information: <http://www.hennepin.us/completestreets>

Hennepin County Transportation Systems Plan Adopted 2011

The 2030 Hennepin County Transportation Systems Plan is a document focused on the county's long-range transportation goals. The 2030 plan speaks to incorporating bicycle and pedestrian facilities that are interconnected and support trips of all purposes.

For more information: <http://www.hennepin.us/business/work-with-henn-co/transportation-planning-design>

Hennepin County Pedestrian Plan Adopted 2013

The Hennepin County Pedestrian Plan is a portion of the 2030 Hennepin County Transportation Systems Plan. This portion is also supplemental to the Hennepin County Complete Streets Policy.

For more information: <http://www.hennepin.us/~media/hennepinus/residents/transportation/biking-and-walking/pedestrian-plan.pdf?la=en>

Hennepin County Bicycle Plan Adopted 2015

The Hennepin County Bicycle Plan is a part of the 2040 Bicycle Plan developed by Hennepin County and Three Rivers Park District. This plan focuses on a safe, connected bicycle system that supports bicycling for recreational and commuting purposes. The plan will be updated as each city in Hennepin County develop and update their bicycle plans.

For more information: <http://www.hennepin.us/residents/transportation/biking>

Hennepin County Cool County Initiative

Hennepin County's Cool County Initiative works to lower the greenhouse gas emissions produced by county operations. All efforts to encourage and support practices that reduce transportation emissions will help the county reach the specific greenhouse gas emissions reduction targets by 2025 and 2050.

For more information: <http://www.hennepin.us/your-government/projects-initiatives/cool-county>

Existing Conditions



Existing Plans & Policies Continued

Three Rivers Park District Vision Plan

The Three Rivers Park District Vision Plan is a goal-oriented document in response to the anticipated environmental, economic and social changes in the future. Specifically, the Three Rivers Park District Plan suggests creating a sustainable funding for walking and bicycle trails as the importance of these trails will only increase in the future.

For more information: <https://www.threeriversparks.org/about/planning-and-construction/planning-projects.aspx>

Metropolitan Council Regional Parks Policy Plan Adopted 2015

The 2040 Regional Parks Policy Plan works in conjunction with the THRIVE MSP 2040 plan. This Regional Parks Policy Plan creates a vision for the parks in the region. The plan focuses on improving parks equity, multimodal access and works to expand the parks system in a manner that conserves and preserves natural resources while connecting communities and enhancing quality of life. Golden Valley's Regional Parks and Trails include: Theodore Wirth Regional Park, Bassett Creek Regional Trail, Luce Line Regional Trail.

For more information: <http://www.metrocouncil.org/Parks/Planning/Parks-Policy-Plan.aspx>

Metropolitan Council Transportation Policy Plan and Twin Cities Regional Bicycle System Study Adopted 2015

The Transportation Policy Plan is a set of policies and plans to guide the development of the Metropolitan Council's regional transportation system. The 2040 TPP is developed in conjunction with the Metropolitan Council's visioning and development plan, THRIVE MSP 2040. The TPP addresses investments for transit, pedestrians and bicycles. The TPP also contains the Regional Bicycle System Study.

The Bicycle System Study was completed in 2014. The purpose of the study was to examine bicycling in the region and work towards improving all types of facilities. The study proposes a potential bicycle network for the region as well as a framework for monitoring the system.

For more information: <http://www.metrocouncil.org/Transportation/Planning>

METRO Blue Line Extension Planning & Bike Study

The Blue Line Extension Planning process is well underway. The Blue Line Extension is in the project development stage, working on the design, engineering and environmental impact documentation. Through an extensive community engagement process with residents and businesses the public has provided a lot of input into this project. Golden Valley will have two Blue Line stations at Golden Valley Road and Plymouth Avenue. A decision of which streets was made based on review of environmental impact reports, engineering, and public input. Construction for the extension is projected to begin in 2018. Hennepin County is also lead a METRO Blue Line Extension Bike Study for all areas within three miles of stations.

For more information: <http://www.metrocouncil.org/Transportation/Projects/Current-Projects/METRO-Blue-Line-Extension/Route.aspx>

MnDOT Complete Streets Policy and Work Plan Adopted 2013

Similar to Hennepin County, MnDOT adopted a Complete Streets Policy. This policy requires Complete Streets designs to be considered and incorporated at each phase of MnDOT projects. Complete Streets helps MnDOT to implement and maintain infrastructure that is designed and operated in a manner that prioritizes safety and accessibility for all roadway users.

For more information: <http://www.dot.state.mn.us/planning/completestreets/>

MnDOT Statewide Bicycle System Plan

The Statewide Bicycle System Plan contains MnDOT's vision and goals for bicycle transportation in Minnesota. The plan presents specific implementation strategies, and performance measures to evaluate progress toward achieving this vision.

For more information: <http://www.dot.state.mn.us/bike/system-plan/index.html>

Existing Conditions



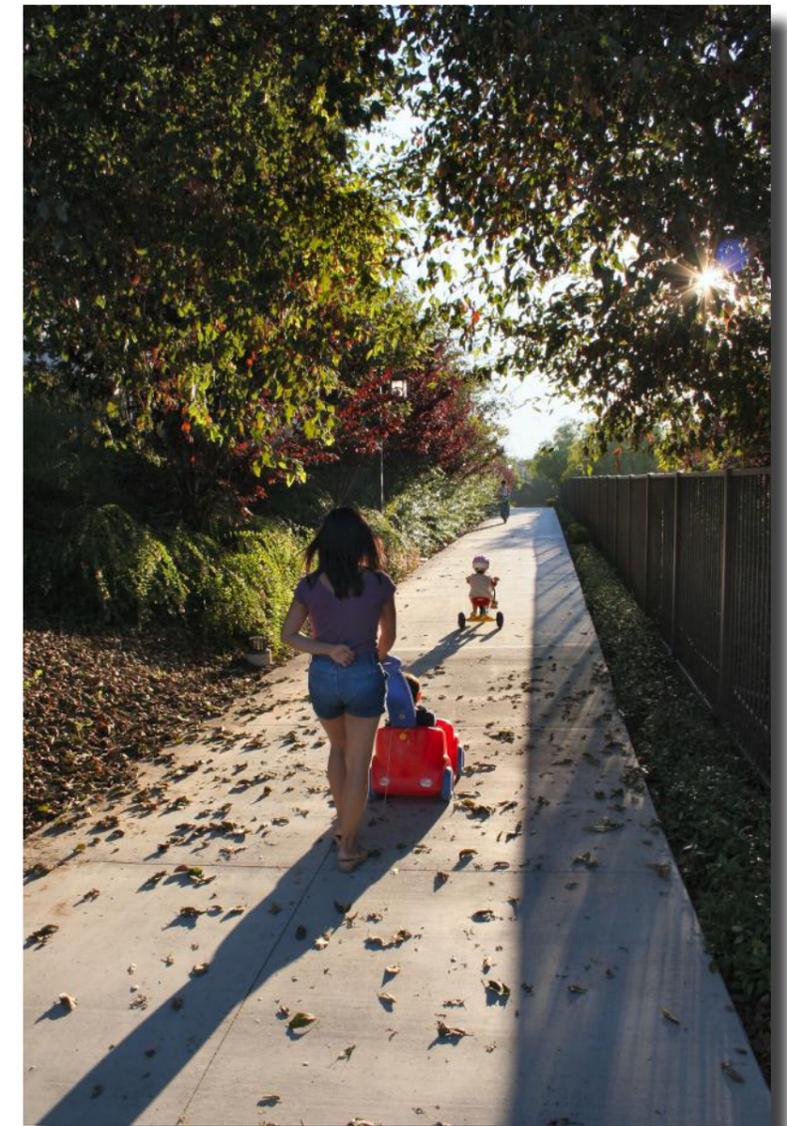
Existing Plans & Policies Continued

MnDOT Statewide Pedestrian System Plan

The Minnesota Department of Transportation (MnDOT) and Minnesota Department of Health (MDH) have partnered to design the Statewide Pedestrian System Plan. This partnership utilizes the professional strengths within each department to ensure the plan will positively impact communities across the state. This plan is expected to be completed in Spring of 2016.

For more information: <http://www.dot.state.mn.us/peds/plan/>

The City of Golden Valley's location within the seven-county metropolitan area makes coordination between various government levels essential in getting tasks accomplished. Understanding the level of planning on each of these levels will help the City better plan the updated bike network. The city, county, metropolitan area, and state all have different visions and goals. It is important to understand these various goals to ensure that the Golden Valley Bike Network will satisfy the goals on every level.



Existing Conditions



Literature Review

Much has been written about bicycle planning in recent years, as it has become apparent that personal automobiles pose a threat to the environment through emissions. It is becoming more and more important that cities incorporate alternate modes of transportation into their long-term plans. Investing in infrastructure that accommodates modes of transportation beyond automobiles will be increasingly important for urban areas that intend to see growth continue for generations to come. The following is a literature review of relevant research that was influential in the formation of the forthcoming recommendations.

Place Making at the Pedestrian Scale

Designing a place where people want to live and work is a complex task. Many elements are involved, and creating the right mix for the area is a complicated undertaking that is different for each case. Hank Dittmar emphasizes the importance of imaginative and creative design in the planning process (2004). Dittmar uses multiple examples to explain how the historical architecture of a city can be used as a starting point, but it is important to reinterpret these designs in a contemporary manner (2004). Going beyond the practices of traditional community design is often necessary in bicycle and pedestrian planning. Golden Valley's downtown area already has potential for updating on the human scale. Creating a contemporary network that enhances existing pedestrian amenities will increase active transportation within the city.

Bicycle and pedestrian planning is about connecting people to destinations in a safe manner. People will be more likely to travel without a car if there are multiple destinations in close proximity to one another. Places will also attract more people if they are designed for a variety of uses (Pryde et al. 2007). In addition to residential and retail development, it is important that attention is paid to creating public places that invite a variety of activities. People should feel that they are welcome to sit and enjoy the space, rather than just pass through (Forsyth & Jacobson, 2008). This requires design elements that are inviting, such as benches, vegetation, and public art. The best public spaces are able to combine features of this kind in a way that allows the space to be flexible (Forsyth & Jacobson, 2008). Designing public space for a variety of activities will increase use, making the space safer and increasing the sense of place (Forsyth & Jacobson, 2008).

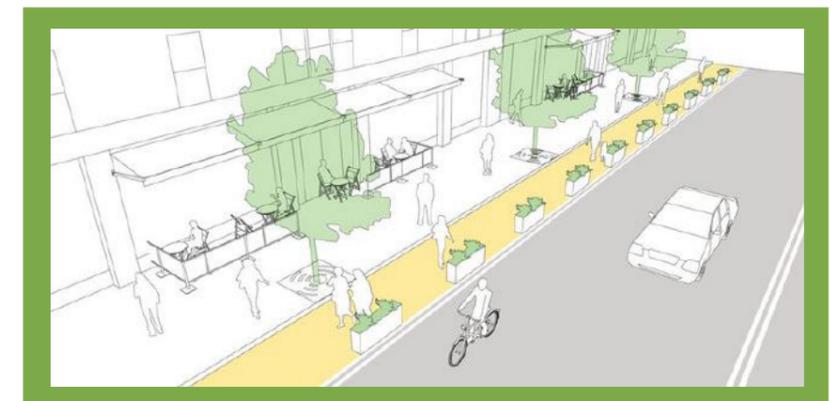
Golden Valley has many parks and recreational spaces that already offer these amenities. By increasing connections to these parks the City can take advantage of these enjoyable spaces. In order to create inviting places, design must be done at the human scale. If people are expected to walk around the area and dwell for a while, the place must be interesting and attractive at walking speed (Speck, 2013).

Architectural details and color schemes can be just as important as vegetation and street furniture (Forsyth & Jacobson, 2008). Creating guidelines for street level building design is very important. Retailers often do not want to give up shelf space in exchange for windows, but large windows create a nicer streetscape (Speck, 2013). Building facades have a great impact on the feel of a neighborhood, and should be designed in a way that is visually appealing and functional. Awnings can be an important element of building facades, offering shelter from rain and providing shade to sidewalk diners (Speck, 2013). By including Golden Valley businesses in the planning process they can see why these design aspects are important to making their businesses more accessible on a pedestrian scale.

Walkability

Creating environments that are pedestrian friendly is an essential element of designing urban areas that are meant to be accessible without a car. This concept goes far beyond the creation of visually appealing streetscapes and inviting public gathering spaces.

Figure 4: Walkability through Design



Safety needs to be a top priority in any bike or pedestrian plan. Pedestrian safety has become a concern for many communities, and many practices have been developed to address it. The National Association of City Transportation Officials

Image: National Association of City Transportation Officials. Urban Street Design Guide. Island Press.

Existing Conditions



Literature Review Continued

has compiled the best practices of street design in their book *Urban Street Design Guide*. This book offers guidance for all types of street design, paying special attention to the needs of pedestrians and cyclists. Many strategies for increasing pedestrian safety are incorporated into their design guidelines. Golden Valley can identify which of the guiding principles outlined in this book are applicable to their planning districts. Pedestrian safety starts with sufficient sidewalks. All streets should have sidewalks, and wider sidewalks offer greater opportunity for creating a more inviting pedestrian experience (Speck, 2013). Good sidewalks will have room that allows for outdoor seating for businesses, ample walking area, and some type of buffer between pedestrians and car traffic (i.e. benches, planters, trees). Beyond this buffer it is ideal to have a bicycle lane and another buffer before the street (cycle track), but space does not always allow for this type of design (NACTO). It is important that sidewalks are maintained throughout the year, ensuring unobstructed access for people of all ages and abilities. Although Golden Valley has some existing sidewalks, there are many residential

By increasing the number of sidewalks and making them safer for active transportation, Golden Valley can create a more inviting pedestrian experience.

Pedestrian safety must extend beyond the sidewalk and into the street. Creating good crosswalks is essential and entails more safety features than one might think. Many techniques have been developed to establish pedestrian priority, increase pedestrian visibility, and minimize the amount of time that pedestrians are in the street. Good signage and prominent street markings are a key component of safe crosswalks. Using more highly visible street markings, such as “zebra stripes” and stop lines that are set back farther from crosswalks, helps drivers notice the crossing and alerts them that pedestrians may be present. Golden Valley Public Safety identified this as a primary cause for bicycle accidents. A technique that has begun to gain popularity in recent years is priority signaling. This practice gives pedestrians a walk signal a few seconds before drivers get a green light. By doing this, pedestrians are able to establish themselves in the crosswalk before cars are allowed to turn. A final crossing strategy is to minimize the distance that pedestrians are in the street.

This can be done using “bulb outs”, which are sidewalk extensions that protrude into the street, typically as much as a parking lane. By installing bulb outs on each side of an intersection, the crossing distance is reduced significantly. To complement this feature, medians are often used as a midpoint in larger intersections, providing pedestrians with further refuge. Creating an area that is safe for pedestrians requires traffic calming measures. One of the most effective strategies for slowing traffic to a speed that is safe for the neighborhood is building narrower streets (Speck, 2013).

People often drive much faster on wide streets because the extra space allows them to do so in a manner that feels safe. This was a common concern among Golden Valley residents interviewed. This type of design makes the area less safe for other users. The concept of “street-diets” is widely discussed and when implemented, met with great resistance. This practice involves taking away a lane of traffic and repurposing it (NACTO). The reclaimed area can be used to extend the buffer zone of a sidewalk, create a bike lane, or make room for on-street parking. There are conflicting views regarding on-street parking in the literature. Some insist that it slows down traffic, and as such, makes the streets safer, while others feel that this space could be used for a better purpose (Speck, 2013).

A successful pedestrian network must have a high degree of connectivity. Smaller blocks are one of the most effective ways to increase accessibility within an urban area (Dittmar, 2004). Small blocks offer a higher number of possible routes to pedestrians.

By segmenting city blocks into smaller sections, more buildings will be oriented to the street, and greater opportunity for creative architecture and design exist (Dittmar, 2004). Smaller block sizes helps to ensure that the neighborhood is designed at a walkable scale. Downtown Golden Valley already has small blocks to create pedestrian amenities. Creating greater access throughout a commercial hub in this way is good for pedestrians and businesses.

Existing Conditions



Literature Review Continued

Public Participation

Public participation is an important aspect of almost all large-scale planning projects, and pedestrian projects are no exception. Developing a comprehensive public engagement strategy must be a priority for any city that is planning on making significant investments in bike and pedestrian infrastructure. An emphasis on public participation in the planning process is something that must happen early and continue through the different phases of the project. Public participation is an important part of developing a vision for the bike/pedestrian network that is in line with the goals and values of the community. The public must be kept involved in the planning process so that they can be informed partners in planning discussions (Forsyth & Jacobson, 2008). Golden Valley prides itself on engaging a diverse population through stakeholder analysis. Interviewing and engaging the public throughout the planning process will ensure that engagement aspects are being used to the fullest potential.

Community engagement can be difficult. The topic of how to integrate a new project into an existing community can be contentious (Dittmar, 2004). Because of the importance of this issue it is important that strides be taken to engage as much of the public as possible. It can be difficult to generate attendance at public engagement meetings for a number of reasons, but it is the responsibility of the people leading the project to make efforts to increase attendance. Offering meetings at different times of day, providing transportation, providing language translation, and providing on-site child care are all effective strategies for getting more people to public meetings (Bryson et al. 2013). The high cost of strategies like these add to the difficulty and complexity of designing effective participation processes (Dittmar, 2004). Regardless of how challenging it may be to engage the public in a meaningful way, it is an essential aspect of planning a successful pedestrian network that will fit well into the community. Properly taking time to identify stakeholders needs to be devoted to the beginning of the planning process. Golden Valley has worked this analysis into their planning timeline and will continue to engage the public through completion of the project.

By working on the pedestrian, the City of Golden Valley can attract a more active population that will stimulate local businesses by putting people physically on the doorstep of businesses. Making streetscapes more attractive and the walking environment safer, the Golden Valley population can thrive. Creating a more walkable and bikeable environment will encourage a healthier population while still maintaining traffic flow through the city.

Citizens and employees of Golden Valley are the most qualified people to give input on the status of current infrastructure. They are the public using the current network. Through engagement of the public the City can know which areas are of greatest concern and can address these areas first. It is important to keep the public engaged throughout the process to get constant feedback.



Existing Conditions



Best Practices

There are many cities close to Golden Valley that have already created intentional, effective and strong bike plans. The cities of Eden Prairie and Brooklyn Park will have some of the same challenges and general goals as Golden Valley. The City should use these neighboring communities as examples or models.

City of Eden Prairie, MN

The city of Eden Prairie received funding from Hennepin County and published a bike and pedestrian plan which will most likely be similar to the goals of Golden Valley. Eden Prairie aimed to create a “community where walking and biking are safe, comfortable, inviting and convenient everyday activities and where people choose to walk or bike to nearby destinations and to easily access the new SouthWest Light Rail Transit line and the SouthWest Transit bus system”.

Both cities are located on the proposed new LRT line and make comparable cities. The recommended On-Street Bike Lane Network that Eden Prairie suggests is predominately “New paved shared-use path”. They are recommending that at least one side of the street have sidewalks. They are making their best effort to improve connections within the city. They are focusing on how they can connect to the new LRT system through priority improvements and then upgraded long-term goals through shared-use paths and upgrading current conditions. Eden Prairie’s plan has a strong community engagement focus that ensures the plan is reflective of the needs of the community.

The City of Golden Valley is likely to have similar goals. The bike plan from Eden Prairie should serve as a great starting point for planning for bike amenities within Golden Valley. By learning from this ‘Sister City’ the city can hit the ground running in Golden Valley.

For more information on the Eden Prairie Bike Plan: <http://www.edenprairie.org/home/showdocument?id=5204>



City of Brooklyn Park, MN

The city of Brooklyn Park also received funding from Hennepin County. The Brooklyn Park Bicycle and Pedestrian Plan is outlined similarly to the Eden Prairie bike and pedestrian plan with similar goals, to connect the city through bike networks to the incoming Bottineau light rail transit.

One interesting partnership in Brooklyn Park through creating connections with businesses and colleges in the area. Golden Valley could benefit from looking into these sorts of connections. A lot of Brooklyn Park’s focus is on creating a more diverse sidewalk infrastructure throughout the city. They focus then on increasing connections of on-street bike amenities. Brooklyn Park identify several street crossing locations that can be improved as well, and implementation of signage for bikers. The plan also puts a priority in snow removal of existing and planned bike and sidewalk networks. Through lighting, improved crosswalks, and other safety related implementations, the Brooklyn Park outlines some great short term and long term goals for improving their active transit networks.

Similar strategies can be applied to Golden Valley. Implementation of signage and improving crosswalks among other things are a low-hanging fruit identified through Golden Valley stakeholder interviews.

For more information on the Brooklyn Park: <http://www.brooklynparkpedbikeplan.org/>



Existing Conditions



Stakeholder Analysis: Influence vs. Interest

In order to design and implement a bicycle plan that is reflective of the needs of Golden Valley, it's important to take stock of all of the stakeholders who would be impacted by this plan and process. Those who would be considered a stakeholder in the Golden Valley Bicycle Plan were organized into an influence versus interest grid. This analysis allows planners to understand two things about the related stakeholders. First, it shows the planners who is actively or passively a part of the planning process. Second, this analysis shows who will be advocating for certain outcomes and who will determine those outcomes.

A long list of stakeholders was drafted for the Golden Valley Bicycle Plan, the list consisted of broad groups as well as specific groups and individuals.

Golden Valley has many stakeholders. These stakeholders are not limited to the people who live within the city. In the context of the Golden Valley Bicycle planning process residents who live near (existing or potential) bike routes, the car community and future Bottineau LRT users were identified as stakeholders. These particular stakeholders were considered to be those who would have a low interest in the project and also a low amount of influence in the planning process.

Other stakeholders might have a higher amount of interest in the project but still have a low amount of power. Typically these are active citizen groups who advocate for certain outcomes. The bike community, local schools, Golden Valley small businesses and Nice Ride were identified as those who would be very interested in the project and related outcomes but hold minimal capital and political influence.



On the flip side, there are also community stakeholders who wield a lot of influence but may not have a strong interest in this project. In the case of Golden Valley this would be the many large employers who are located in Golden Valley. These businesses have the capital and influence to create large change but generally speaking projects like this appear to be low on their interest radar. However, if the large employers began to have an interest in the project they would have the power to seriously impact the outcomes of the project.

Finally there are community stakeholders who have high influence and high interest in the project. For the Golden Valley Bicycle Plan this is almost exclusively different government officials who are in charge of initiating, designing and implementing the project. Private developers were also identified as high interest and high influence as there is a lot of new housing developments happening in and around Golden Valley. These developers would have an interest in connecting the bike and pedestrian paths to their new projects.

Acknowledging the varying levels of interest and influence among community stakeholders is important to creating a bicycle plan that is reflective of the needs of the Golden Valley community. This analysis will help the City to engage effectively with all community stakeholders.



Existing Conditions



Stakeholder Interviews

The city of Golden Valley prides itself on engaging diverse communities in finalizing land use decisions. 15 interviews with stakeholders were conducted as part of the existing conditions analysis portion of the Golden Valley Bicycle Plan recommendations.

Hennepin County

Bob Byers, P.E., Hennepin County Public Works Senior Transportation Engineer

Nadine Chalmers, Hennepin County Active Living Planner

Kelley Yemen, Hennepin County Bicycle and Pedestrian Coordinator

Golden Valley

Eric Eckman, Golden Valley Public Works Specialist, Staff Liaison for Golden Valley Environmental Commission

Dave Kuhnly, Golden Valley Police Sergeant, Head of Golden Valley Bike Patrol

Jeff Oliver, Golden Valley City Engineer

Regional Stakeholders

Robert Ellis, Public Works Director, City of Eden Prairie

Kelly Grissman, Director of Planning, Three Rivers Park District, Hennepin County

Carol Hejl, Engineering and Facilities, Metro Transit

Cindy Sherman, City of Brooklyn Park Planning Director, Brooklyn Park

Paula Pentel, Former Golden Valley City Councilmember, Golden Valley Resident Coordinator and Advisor for Urban Studies Program at UMN

Antonio Rosell, Founder and Director of Community Design Group, Urban Planner, Civil Engineer, Adjunct Professor at UMN Humphrey School.

Golden Valley Residents

Billy Binder, Former Minneapolis City Hall Aide, Golden Valley Resident, Former Chair and Current Member of Minneapolis Bike Coalition, Member of Bike Walk Advisory Committee of the Transit for Livable Communities, Member of Bicycle Alliance of Minnesota Advocacy Committee

Scott Farrell, General Manager of Down in the Valley, Golden Valley, MN

Erik Haggstrom, Golden Valley Resident, Active Biker

Interviews with key stakeholders expressed feelings of concern across the active transportation sector. They spoke about the lack of connectivity of current bikeable streets and shoulders. Interviewees shared their concerns with safety in trying to share the road with automobiles in Golden Valley. Interviews with employees shared the hesitance that they have encountered in trying to get new infrastructure installed without a concrete plan in place. Interviewed parties shared the willingness of city residents to help in updating the current bike network. There is a demand for biking in Golden Valley, but in its current state, the network is viewed as unsafe and not ideal for bikers of any ability.



Existing Conditions



Stakeholder Interviews Continued

City Employees and Residents

The updated Golden Valley Bicycle Plan should seek to be accessible for all. Golden Valley has a great potential to be a hot-spot to live, work, and play. Some current residents and employees are displeased with the current bike situation. They feel unsafe trying to maneuver through zigzag streets with high speed limits and little visibility.

The residents recognize that Golden Valley has made efforts to improve infrastructure, but are anxious for more improvements. Residents Billy Binder, Erik Haggstrom, and Paula Pentel offered feedback on bike shoulders, "This is what the County likes to call a bike-able shoulder without signs and without symbols. You are on your own. We don't encourage people to ride it but it's there," said Billy Binder at his February 2016 interview, "The changes are all good. We have to finish it off with the right signs and stenciling. It's not good enough to just say that it's a bike-able shoulder. We want to encourage people to not just be on their own."

Creating signs to encourage and educate bikers was viewed as a common low-hanging fruit for most interviewees. Erik Haggstrom often bikes through Golden Valley and is frustrated at the bike trails not being well presented, "Golden Valley Road itself has bike trails. It's not very well marked. That's one bee in my bonnet." Paula Pentel also mentioned signage and striping as an important first step, "What are some of the strategies? One would be passing policies that make bikes first. Thinking about complete streets. Thinking about having good signage. Things of that nature. Building a sort of safe connecting network."

Several residents suggest education of the public as key in improving active transportation in Golden Valley. "You've got to educate, enforce, and empower people to ride their bikes. Figuring out a way to encourage schools," expressed Paula Pentel in her March 2016 interview. Dave Kuhnly offered similar remarks, "Education is always HUGE! Both ways...we try to tell whoever is complaining about the other side that bikers can be on the streets, but that bikers need to follow the rules just like cars do. Making sure bikers have reflectors and helmets."

We're huge on education. I would take it one step further and post bike laws. Make them easy to find on websites and stuff like that. Or the actual statutes. Something you can direct people to." If both bikers and drivers are aware of laws on both sides, there will be safer streets. Regardless of what new infrastructure is put into place, it will not improve connections if people do not know how to safely use it.

County Employees

Many of the streets identified to be improved through the diagnosis are county highways. In order for improvements to be made on these thoroughways, collaboration between was required government agencies. Communication and feedback from county employees will help gauge what improvements are feasible and also gain new ideas and perspective not seen on the city level. Kelly Grissman from Three Rivers Park District notices a lack of connections from Golden Valley to the Central Cities, "Current Golden Valley Trails are not well connected with downtown. There is no connection from trails to the downtown area." As a suburb with a great commuting trail opportunity, it is important that the trail system connects to hot-spots in other cities as well. A common suburban problem she identified was making bike facilities family friendly.

In their work with identifying goals for Golden Valley through public engagement, Hennepin County found that the public was uncomfortable with the current bike-ways. In her March 2016 interview, Kelley Yemen said that there was a "desire for more protection. More separation and more comfort is what the county heard from the public." She emphasized that it was important for the County to find a balance between recreation and transportation.

The interview process informed the formation of the following recommendations about other important balances that need to be met. Although this is a plan for bike biking and pedestrian traffic, it is important to note that these are not necessarily the same thing. Carol Hejl from Metro Transit stated in her interview that although it important to look at both bike and pedestrian traffic on the human scale, it is imperative to remember that they are not always the same thing. Improvements to the pedestrian network do not always improve the situation for bikes, and vice versa.

Existing Conditions



Stakeholder Interviews Continued

A large change like a bicycle plan needs input and support from the community. In order to gain community support of these new amenities and network structures, engagement is required. The more familiar the community is with a project the more likely they are to use the end product. Nadine Chalmers from Hennepin County recognizes community support as a key starting point for any network improvement. She identifies Bike Associations, County Parks and Recreation, Parks Boards, age-based groups, and local major employers as key resources for improving community involvement. If Golden Valley can include these partners on task forces, they can engage as many diverse groups as possible.

Neighboring Cities

Improving bike amenities is a growing demand for cities of all sizes. The Twin Cities serves as a great location for improving active transportation. The diagnosis portion of this report highlights several city documents that have been published in the Twin Cities already. Interviews with Eden Prairie Public Works Director, Robert Ellis, and Brooklyn Park Planning Director both emphasized the importance of a steering committee or task force to accomplish the goal of creating a bike plan. "Create an internal working group to provide maintenance, design, real estate perspectives," said Robert in his March 2016 interview. Cindy Sherman, the Planning Director of Brooklyn Park identified the same need. "Steering committees identified areas that needed help," she stated in her 2016 interview, "Create a plan aimed to include everyone in a recreational manner, having an active motivation." By using a task force comprised of city residents and employees, Golden Valley could gain insight on issues that press the current population. Constant feedback throughout the process will ensure that the City create a network safely be accessible to all.

Public Works and Consulting

In interviews with Public Works and Consulting companies emphasis was placed on taking advantage of what is already present. The City of Golden Valley has such a great amenity in its side streets and existing trail system. A railroad runs from north to south and new light rail transportation will be going into the East. Jeff Oliver identifies the railroad as an important potential passage for north-south movement within Golden Valley.

He is in favor of off-street bike networks and thinks that this railway serves as a great existing amenity but would be difficult to design and implement. Jeff notes that Glenwood Avenue also had great amenities but comes with network gaps that could be addressed through planning. Antonio Rosell from Community Design Group recognizes the importance of recognizing existing assets. Building off what you already have is key in reducing costs and making networks more familiar to residents. Antonio highlights existing side-paths as a specific Golden Valley asset.

Identifying network connections is important, but another important first step is identifying existing destinations that can benefit the bike and pedestrian improvements. The new developments in the West End near Interstate 394 and Xenia Avenue were identified by Eric Eckman from Golden Valley Public Works as a place that could improve connections to the rest of Golden Valley. The West End has great amenities for walking and biking, but connections to The West End could be stronger. By working with a task force to identify more areas like this, the City can drastically improve active transportation within Golden Valley.

These interviews will help the City of Golden Valley to consider multiple professional opinions in conjunction with the opinions and needs of the larger community. Many of the interviewees described resources for policy, design and engagement. These interviews will help the City of Golden Valley start to consider changes and the future of biking in Golden Valley.



Existing Conditions



Cursory Strengths, Weaknesses, Opportunities, and Threats

The historic, economic, geographic, demographic and political landscapes of Golden Valley are all important components when working to design an effective bicycle plan. A SWOT analysis is a good way to take these items and analyze how they can impact the project. A SWOT analysis delineates the strengths, weaknesses, opportunities and threats of a project. The results of this analysis will allow the Golden Valley Bicycle Plan to be efficient, focused and reflective of the community.

The city of Golden Valley has many strengths that will help with the design and implementation of this project. First, this project has been initiated by the city government. Second, a bicycle plan can capitalize on the the flat, relatively small geographical area with wide roads. Third, there is an active local bike community who uses the existing bike lanes and will advocate for this project. Finally, many suburbs have strong populations and multiple destinations but Golden Valley also has many large employers that have large numbers of employees who commute into Golden Valley each day. In the long term, the bicycle plan can serve as commuter connections for these employers.

When analyzing Golden Valley and it's potential for a strong bicycle plan many weaknesses were identified. The typical suburban components of Golden Valley create barriers for cyclers. The city layout is very auto centric, there are very few bicycle facilities and destinations placed very far apart. The high speed limits and lack of connections to regional trails limit those who would like to walk or bike either for commuting or recreation. In order to the necessary change for strong, connected bike facilities there needs to be a large amount of interest from the public. Historically, local big employers have expressed little to no interest in such projects.

There are existing and planned facilities that create many opportunities for a bicycle plan in Golden Valley. The existing transit within Golden Valley and the existing regional parks and trails that exist through and outside of Golden Valley provide many opportunities for the bicycle plan to strengthen the city's connection within and outside of city borders. There is a lot of development planned to take place within Golden Valley over the next few years. Private residence development and the Bottineau LRT provide many opportunities for implementing the bicycle plan into the construction of these new developments. Beyond infrastructure, Golden Valley has the opportunity to create and strengthen relationships with local employers as well as Nice Ride to enhance connectivity.

Finally, there are many realistic threats to consider when working to create a bicycle plan for Golden Valley. Most of the threats are those that threaten any planning process. The plan could fail or lose support due to time, funding or Not-In-My-Backyard (NIMBY) attitudes. There are also threats that are specific to a bicycle plan. Bicycle plans can be a sensitive topic in suburban areas and there is a threat of misinformation and clashing of auto-centric and bike-centric attitudes.

A SWOT analysis is a helpful technique when trying to understand the existing conditions of a issue or potential project. This SWOT analysis, while not exhaustive, shows that Golden Valley is in a strong position to create a bicycle plan now or in the near future. There are many opportunities for this plan with minimal threats. The plan can capitalize on the identified strengths as well as strengthen the weaknesses.



Existing Conditions



Bike Planning 101

Bike Planners often use terms that are hard for everyone to understand. To help readers understand terms used in the report the following is a section that covers basic bike planning terms. Listed are several types of on- and off-street bike lane examples. Example bike parking racks and an example sign are also included.

Right Of Way: The driveable/bike-able/walkable surface of the road, sidewalk, or trail.

Class I Shared- Use Path: Bikers and pedestrians share all parts of the path.

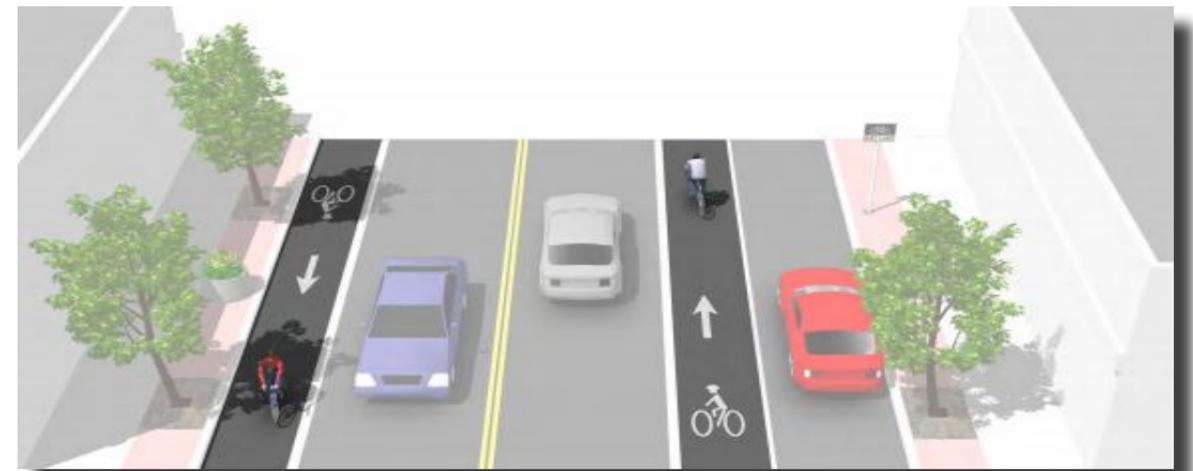
Figure 5: Class I Shared-Use Path



Class II Bike Lane: Example B. Shoulder stripes separate a space for bikers to travel alongside motorized vehicles.

On-Street Striping: Seen in Example B. Painted figures to distinguish bike lanes

Figure 6: Class II Bike Lane



Class II Buffered Bike Lanes: Similar to Bike Lanes, but an invisible wedge further separates bikers from automobiles.

Figure 7: Class II Buffered Bike Lanes



Existing Conditions



Bike Planning 101 Continued

Class III Bike Route: Bikes share the road with cars, but signing and striping educates motorists and bikers of shared space.

Sharrows: Seen in Figure 8. On-Street Painting that tells drivers and bikers that the space is shared.

Figure 8: Class III Bike Route



Class IV: Cycle Track or Protected Bikeway: Similar to a buffered bikeway, but physical place holders are located between bikers and drivers, such as potted plants or concrete pillars.

Figure 9: Class IV Cycle Track



Class IV Two Way Cycle Track: Physically separated pathway that allows bikers to travel in both directions.

Figure 10: Class IV Two Way Cycle Track



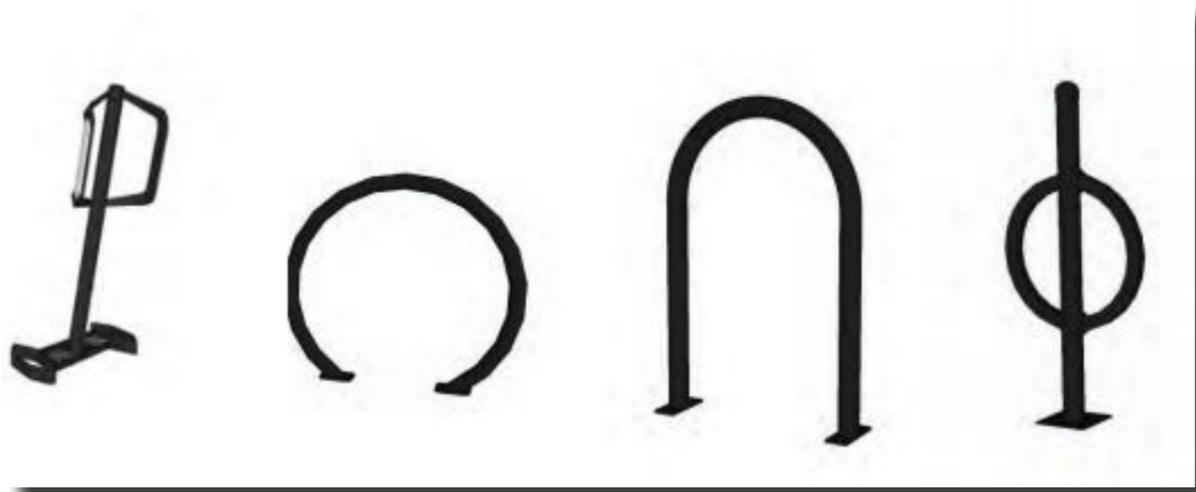
Existing Conditions



Bike Planning 101 Continued

Bike Parking Racks: Permanent and convenient structures for bicyclists to lock their bike.

Figure 11: Bike Parking Examples



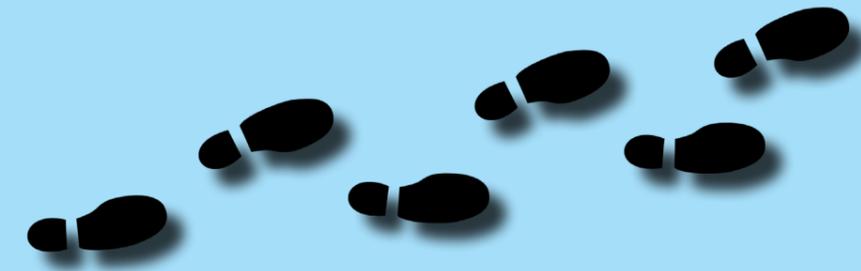
Adding bike infrastructure to a road has the potential to become very costly. Golden Valley is already very well equipped to increase bicycle amenities with the existing wide streets. This section can be utilized by Golden Valley when examining which facility will best serve specific areas and communicating these decisions to the public. The infrastructure options range from low to high cost depending on the needs of the road.

Wayfinding Sign: Example H. Signage that helps bikers navigate through bike routes and locate their destinations.

Figure 12: Wayfinding Sign



Vision



The Village of Golden Valley was incorporated in 1886. It will be the 130th anniversary of the Village/ now City of Golden Valley in 2016. What will people have to say about Golden Valley and its bicycle facilities on its 150th anniversary in 2036?

A high school senior in 2036 might say...
I've spent my entire life walking and biking to school. Sometimes I take the bus, if it's particularly cold out. But I can get pretty much everywhere I need to go on my bike. My parents like it because I don't depend on them for rides or a car. I like it because I didn't have to wait until I was 16 to get a job or have some more freedom.

Dave
@StayAtHomeDave

The bike lanes and paths in GV are the perfect way to wear the kids out on a summer day #freefun

Reply Retweet Favorite More

8:31 AM - 31 Mar 26 · Embed this Tweet

Sarah
@PinkFlamingIceCream

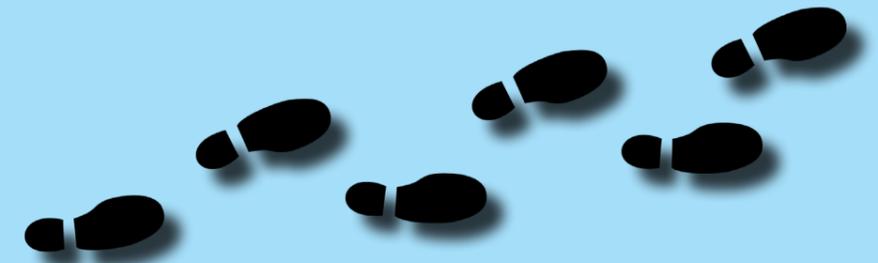
It so nice that we can walk from Mom's senior community to the library and ice cream shop w/ the kids. :)

Reply Retweet Favorite More

8:31 AM - 29 Mar 30 · Embed this Tweet

A Golden Valley senior citizen in 2036 might say...
I have lived in the Twin Cities my whole life, and I couldn't imagine leaving because I'm getting older. With the help of my children, I found a nice senior living facility in Golden Valley. One of the things that sold us on the location was how easy it seemed to walk to the different places I needed to go. I haven't been able to drive since my eyesight, so it is important that I am able to accomplish my daily tasks on foot, by myself. Crossing the busy streets is a breeze. After I push the button, the walk signals come on before the green light for cars to give me a head start, which I need more as the years go on. Running my own errands by walking allows me to feel independent, even though am I no longer able to drive my old Buick.

Vision



A Golden Valley Stay-at-Home-Dad in 2036 might say...

I have been a “full time” dad for about three years now with another on the way. I enjoy that I have an easy way to take my kids around Golden Valley without having to load up my car with car seats. That is such a hassle these days. I can hop on my bike and put Claire in the buggy on the back of my bike and we can go wherever her little heart desires. I feel safe taking my kids with me on my exercise rides every morning.

A Golden Valley bike commuter in 2036 might say...

I used to live in South Minneapolis near my job, but because recently relocated for family reasons. My wife and I try to cut down on gas, so I have an excuse to bike to work. I find the new trails so much easier to manage. The connections to city streets make biking to work safer, especially during rush hour.



Lydia
@SparklePony221



Never thought I could live in suburbs and still bike to work dt Mpls
#GoldenValleyForever

← Reply ↻ Retweet ★ Favorite ⋮ More

8:31 AM - 3 Apr 20 · Embed this Tweet



Hudson Ryan
@BananaIsAFruit



I don't need a gym, I can walk/run/bike anywhere I need to go #activeliving
#ThingsGoldenValleyiansSay

← Reply ↻ Retweet ★ Favorite ⋮ More

8:31 AM - 29 Mar 30 · Embed this Tweet

A local business owner: I have two locations for my coffee shop, one is in Golden Valley and the other is on the eastern side of the cities. I am so grateful for the bicycle connections to the downtown area in Golden Valley. That location is booming in the summer with families and kids. I've even expanded my Golden Valley location to include things like ice cream. The trails and safety amenities have made the downtown area a destination that is easy to access without a car.

Corporate Employee:

I've worked at my current job for about a decade now, and I'm so pleased with the “active living” culture they started to embrace some years back. I have noticed more people arriving by transit though ever since they started offering us health-care credit incentives. I've also noticed a lot more people using their lunch breaks for exercise; there are so many great trails in this area. It is a great way to get away from some of the stress from the office for awhile. One of the coolest things the company did was when they started this corporate bike-share program. They have about 50 bikes throughout the campus for people to use. I see people biking back from lunch a lot in the summer.

CONNECTIVITY



Vision Statement

Bicycle transportation and recreation plays a fundamental role in the health and wellness of Golden Valley residents. The city has great potential with wide streets and an active bike community. They can use new amenities to connect to economic activity within the downtown area. By leveraging these assets, particularly by partnering with existing schools and businesses, Golden Valley can become a leader in safety, connectivity, and vitality. Golden Valley is in a strategic position to communicate these advantages within the western suburbs to make this vision a reality.



The improvement of the bike network in Golden Valley will create new choices for commuting and recreation throughout the city. This will connect every neighborhood within Golden Valley increasing quality of life for each resident. With the Light Rail Transit coming to northeastern Golden Valley, the City can make multi-modal transportation a priority and stimulate the local economy by increasing visitors. Previous investments in new infrastructure within the city have come from many levels of government. The Twin Cities recognizes the importance of creating these improved connections in Golden Valley. The Metro Area sees the city as a real asset to the Metropolitan Area.

To fulfill the experiences outlined in the quotes above, there will need to be a change in how Golden Valley prioritizes active transportation. The improvement of trails and on and off road infrastructure can increase health and vitality of all residents and employees. It should create a positive change in social and economic conditions while connecting Golden Valley to the rest of the Twin Cities Metropolitan Area. While it may take time for the residents to get used to these changes, they will enjoy the increased options and more welcoming avenues. The action plan in the following pages highlights the importance of improving the following key aspects:

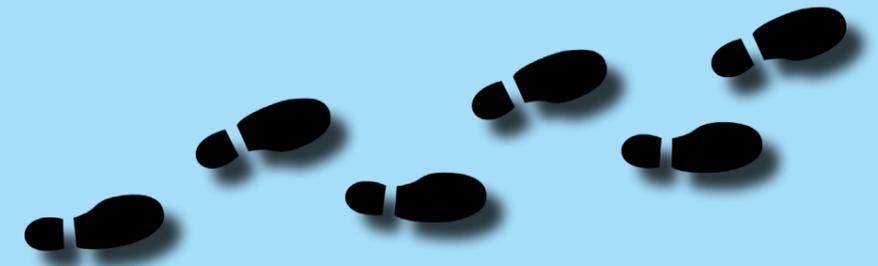
VITALITY



SAFETY



Vision



CONNECTIVITY

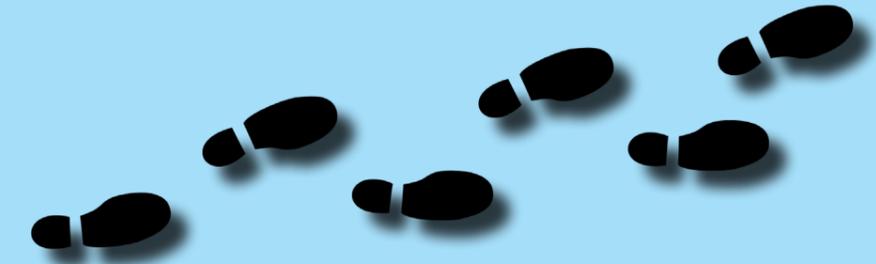
Connecting Golden Valley residents and visitors to destinations throughout the city is an essential aspect of the bike plan. One of the results of a car-dominated landscape, is the increased difficulty of navigating the area as a pedestrian or bicyclist. Suburbs often restrict travel for non-automobile traffic. Busy roadways make travel difficult and dangerous for cyclists. Citizens interviewed in our diagnosis process identified this as a primary concern. By focusing on specific locations where vital connections are lacking, the Golden Valley bike plan should improve access for everyone. These locations will increase access to many destinations within Golden Valley and throughout the Twin Cities. To identify these areas, the City should to research and rank areas for improvement. Stronger connections to regional trails within Golden Valley will improve the quality of life for residents and attract new people to the area. The City should envisions a network of connected attractions through city street and trails that improves access for all.



SAFETY

Safety of residents and employees is a top priority for upcoming infrastructure changes. Several residents interviewed expressed their hesitance to bike on Golden Valley streets. Among their concerns were high speed limits and visibility. Through the following actions, the City should create solutions for bikers. The City should suggest improvements for signage and striping to create more visible routes. Maintaining walking and biking surfaces will help increase safety and attractiveness of active transportation. Improving intersections to have better visibility and cleaner striping will also address resident concerns.

Vision



VITALITY

The Golden Valley Bicycle Plan will improve existing connectivity in Golden Valley. Even the most novice bicyclist will use the new safer pathways. New connections to local destinations and regional trails will allow residents and guests to live, work and play in an area where transportation at the human scale is a viable possibility. Landscaping and beautified pathways will create a more friendly environment.

Biking in Golden Valley also provides a valuable opportunity for businesses. Businesses can offer biking incentives to employees or patrons. Golden Valley should encourage these bicycle friendly incentives and programs. These incentives and other initiatives will help to generate more local economic development.

The continued diverse engagement of the Golden Valley community is key. Interviewed stakeholders identified engagement and education as important ways to improve bicycling culture in Golden Valley. Continued engagement will ensure that Golden Valley transforms from a typical automobile city to a multi-modal city that values active living.

CONNECTIVITY

SAFETY

VITALITY

Restructuring the bicycle environment in the current automobile dominated Golden Valley means making safety, connectivity, and vitality a priority. Creating networks on the human scale should create a more welcoming environment for current residents and employees. When trying to make active transportation a priority, the automobile landscape can still dominate the streetscape. By trying to create details that will place transportation on the human scale, Golden Valley can allow for safer movement for residents. This is the greatest benefit for city transportation. The following action plan by taking advantage of key resources already available within Golden Valley.

Action Plan



Connectivity

This action plan will increase non-motorized vehicle use within Golden Valley. This plan identified improvements in three goal areas: Connectivity, Safety, and Vitality. Each goal plays a crucial role in creating a safe bike network. This network is accessible for all Golden Valley residents and employees to use.

First, this action plan identifies gaps in the current bike network within Golden Valley. The plan contains recommendations for mending these gaps as well as strengthening the overall network.

Second, this section suggests solutions that take advantage of the wide Golden Valley streets to improve safety. This includes improvements on current bike infrastructure.

Finally, this section identifies ways in which a Golden Valley Bike Plan can generate local economic development. Creating a shared bicycle and transportation network will stimulate economic activity. Community engagement should ensure that Golden Valley can create a bicycle network used by a diverse range of riders from stay at home dad to bike commuter.

Each of these three goals should be relevant to Golden Valley and the City's future potential. Each goal outlines steps to reach this potential in both short-term and long-term capacity.

Safety



Vitality

Connectivity



Goal: A Golden Valley Bicycle Plan that identifies gaps in the current network and provides suggestions for improved connections within Golden Valley and beyond.

Golden Valley Significance

The primary goal in any thoughtful bike plan is increasing connectivity. This includes stronger connections to destinations within the community, as well as outside of the city's geographic boundaries. For Golden Valley, this means creating safe connections for people walking and riding bikes to various destinations through a variety of techniques.

The techniques used will vary depending on the specific settings. Improvements will include bike lane expansions, off-street trail extensions, shoulder striping, intersection treatments, and improve wayfinding/advisory signage. The result of these improvements will be a bicycle network that creates a system of main routes through the city. These routes will safely connect all potential users to the various destinations that have been identified in stakeholder interviews.



Action Plan: Connectivity

Action: What are the steps that should be taken to achieve this goal?

1) Creating a Golden Valley Bicycle Plan Task Force

The development of the Golden Valley Bicycle Plan relies on diverse and consistent community participation. A plan that is the most useful to the Golden Valley community has to be derived from the needs and desires of the community. The city will need the direction of those who live, work and play in Golden Valley.

Recommendation: Convening a task force consisting of Golden Valley residents, businesses and community advocates will create a necessary City-public-private partnership needed to create a network that is reflective of Golden Valley. Such a taskforce will create a bicycle and pedestrian network that is “a solution for us, by us”. The task force would last for the duration of the planning process and members could apply or be invited by the City of Golden Valley. The task force members will bring a variety of perspectives of biking in Golden Valley. The city could identify and invite families, young professionals, bike advocates, retirees, business owners/managers, commuters etc to apply to be a part of the taskforce. This would provide a diverse cross section of bicycling and pedestrian needs and desires.

Those who would be invited to join the task force would be seen that trusted community advocates in Golden Valley. Enlisting the help of people aren't employed by the City or County will help to make the project seem more accessible to the public. Task force members will serve as advocates for the project and reach out to their social and professional networks to generate public participation in the planning process.

Resources:

City of Edina: http://edinamn.gov/?section=bike_edina_mission

City of Shakopee: <http://www.shakopeemn.gov/city-government/boards-commissions/bicycle-advisory-committee>

It's important to note that Shakopee and Edina both have committees that are on-going. Given the nature of the work of Golden Valley and the prominence of other bicycle advocate groups in the Metro region, it is not necessary for the Golden Valley Bicycle and Pedestrian Task Force to become a permanent, ongoing committee.

2) City Sidewalking Biking Policy

Currently, the city of Golden Valley does allow adults to bike on the sidewalk. However, such a policy can create a crowded and potentially dangerous pedestrian network.

Minnesota State Statute, 169.222 OPERATION OF BICYCLE. (d) A person operating a bicycle upon a sidewalk, or across a roadway or shoulder on a crosswalk, shall yield the right-of-way to any pedestrian and shall give an audible signal when necessary before overtaking and passing any pedestrian. No person shall ride a bicycle upon a sidewalk within a business district unless permitted by local authorities. Local authorities may prohibit the operation of bicycles on any sidewalk or crosswalk under their jurisdiction.

City of Minneapolis Ordinance 490.140: Riding a bicycle on the sidewalk is prohibited in businesses districts in Minneapolis, including areas of downtown, uptown and the University of Minnesota campus

City of Edina Ordinance (Section 26-283) Biking on the Sidewalk:

- Ride at a speed no greater than is reasonable and prudent under the circumstances, and in no event at a speed greater than ten miles per hour.
- Slow to a walking pace when pedestrians are present.
- Slow to a walking pace upon approach to and when crossing a driveway or intersection; enter the driveway or intersection only when clear of traffic.
- Do not ride on sidewalks where the entrance or exit of a building abuts the sidewalk.
- Do not ride on the sidewalk where posted.

Recommendation: It is recommended that city staff, the city council and the project taskforce review the city's current policy. A decision should be made that determines if the city wants to encourage or discourage sidewalk biking in the long run. The decision should be widely publicized by the city in coordination with the Golden Valley Bicycle Plan. Creating a map of the current bike network (with or without sidewalks) and publicizing the decision will help to educate the public and provide an opportunity to discuss safety practices related to biking in Golden Valley.



Action Plan: Connectivity

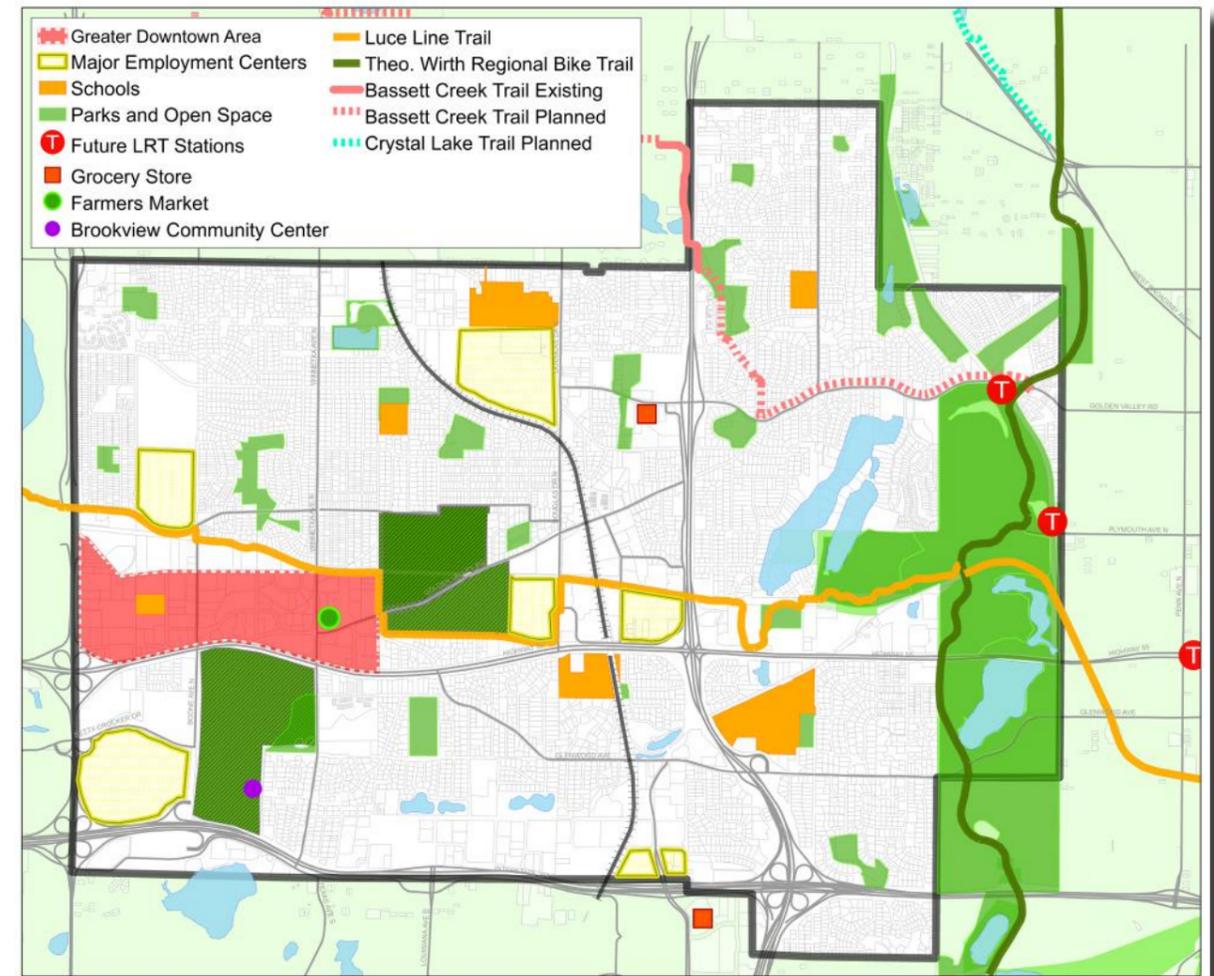
3) Connecting Residents to Destinations

The primary focus of the Golden Valley Bicycle Plan should be to build a network for efficient recreation. Creating stronger connections for bikers and walkers between the different areas of interest within Golden Valley, as well as beyond the city's borders should be the intended outcome of this plan. This will be achieved by deploying a set of improvements to existing bike and pedestrian infrastructure and adding new infrastructure.

Some of the high-priority destinations that have been identified include Golden Valley's "downtown area", Brookview Community Center, Hennepin County Libraries, grocery stores, the future Light Rail Transit stations, large employer campuses, schools, parks, and connections to existing regional trails. Map C highlights many of these destination areas within Golden Valley. These destinations include both work and leisure activities, with the hope that people will be more likely to utilize the bike and pedestrian system if they are able to incorporate it into multiple parts of their routine.

Recommendation: Prioritizing and creating stronger connections between a variety of destinations should allow people to comfortably commute to work, run errands, and enjoy various other neighborhood amenities in a more active and healthy manner. The use of strong community engagement techniques can be used to identify the top priority places people would like to access through walking or biking.

Map C. Greater Golden Valley Destinations and Planned and Existing Regional Trails





Action Plan: Connectivity

4) Addressing the Gaps

Map D show the barriers or gaps in the current Golden Valley Bicycle Network. The barriers identified could be due to infrastructure or natural features. There are also gaps created by major roads that create barriers for someone attempting to navigate the Golden Valley road network on a bike.

Infrastructure Gaps

One of the most significant barriers present in many bike networks are the gaps that exist in potential routes. Gaps come in all sizes and may only consist of a single block or intersection that is lacking a necessary facility.

Natural Feature Gaps

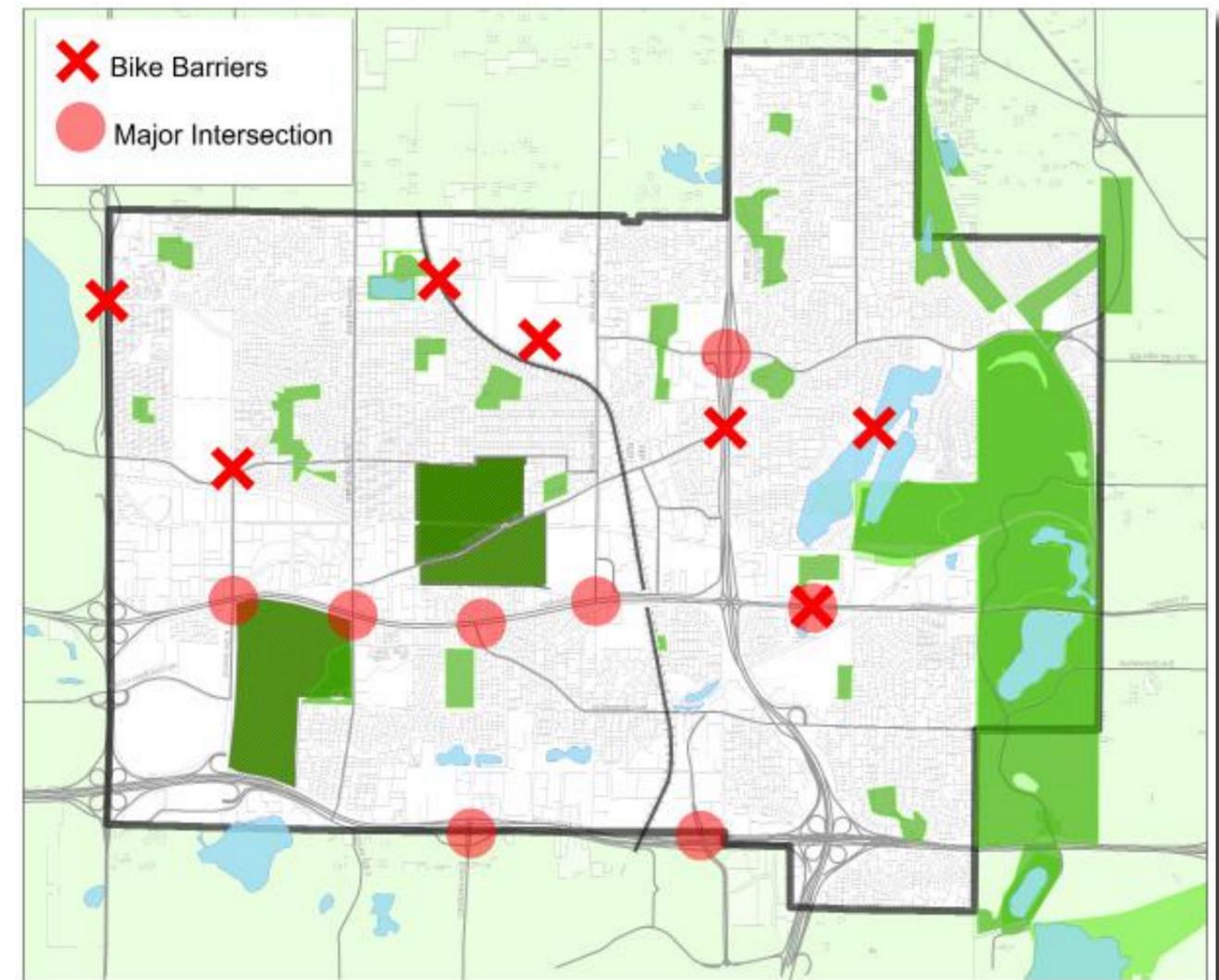
Other gaps are created by natural features, such as water and steep hills. Water gaps tend to disrupt a city's street grid system and can make some routes much longer. Going directly over or through natural gaps may not be feasible or necessary, so overcoming these types of obstacles will require making improvements to existing trails and roadways to guide the user around them.

Gaps Created by Major Roads

Large roads and highways are another major type of gap that are present in most cities. These large roads that do not accommodate bikes will often cut off routes that non motorized traffic use. These large roadways will create a sort of wall with very few crossings, making it extremely difficult to get from one section of the city to another. When highways do not completely cut off city streets, they often intersect in ways that can be very dangerous for non-motorized traffic. Since crossings are limited, these large intersections attract many cars that are either trying to cross or enter the highway. The fast speeds, wide roads, and complicated traffic signals can create a confusing and chaotic environment for users. Major crossings will need significant attention if all users are to feel safe navigating them.

Recommendation: Designing infrastructure in such a way that non motorized traffic can navigate around areas that are meant only for cars will be a necessary aspect of a successful bike plan. To accomplish this, bike routes must be planned so that riders are not put into situations where they occupy the same space as cars moving at excessively high speeds. The routes must also be designed so that non motorized vehicles are not tempted to take dangerous shortcuts. Navigating significant and dangerous obstacles such as highways should be made as simple and intuitive as possible.

Map D. Golden Valley Existing Network Barriers





Action Plan: Connectivity

5) Intersection Improvements

Although bikers are more aware of their surroundings in areas of higher car traffic, these areas can still create some unsafe biking conditions, especially near bike trails, at the bottom of hills, and where residential streets intersect with more busy streets. Clearly striping intersection crossings for cars, bikers, and pedestrians can increase awareness and reduce accidents. Intersections can also be equipped with bike sensors to give bikers priority crossing during certain hours. Golden Valley Public Works should gather information on intersections that will be able to be equipped with this technology as well as identify times that these priorities can be put into effect. 'Walk' signals should also be displayed at every green light, regardless of if the crossing button was pressed. The City should work to tighten curb geometries that currently accommodate large trucks which often decrease pedestrian and bike safety. Reducing the turn radius decreases the width of the intersection which will make drivers more aware of their surroundings.

These implementation strategies will require a lot of analysis on the part of Golden Valley Public Works. Traffic accident reports, as well as traffic flow patterns will need to be compiled and mapped to identify areas of concern. The City puts safety as a top priority, and analyzing these reports and identifying solutions, is the only way to accomplish this goal.

Recommendation: The City Public Works should analyze traffic counts and accidents with car, bicycle density uses determine problem intersections that need to be altered by signal timing, restriping, or changing curb geometries. Based on the findings, the City should use a prioritization methodology to implement these measures. The city should monitor for improvements through analyzing the reduction in accidents and feedback from residents and employees.

Identified Area A) Intersections Along Olson Memorial Highway

Olson Memorial Highway is a very important road for the movement of people in cars. This is the road that creates the most barriers for non motorized traffic in Golden Valley. There are several signaled intersections with pedestrian facilities, but these major crossings can be difficult for cyclists to navigate in the roadway. Below are the four intersections on Olson Memorial Highway where improvements could be made to make it a safer environment for cyclists. They have been identified because of their importance to the bicycle and pedestrian network.

Figure 13. Olson Memorial Highway at Douglas Drive



Figure 14. Olson Memorial Highway at General Mills Blvd



Action Plan: Connectivity



Figure 15. Olson Memorial Highway at Schaper Road

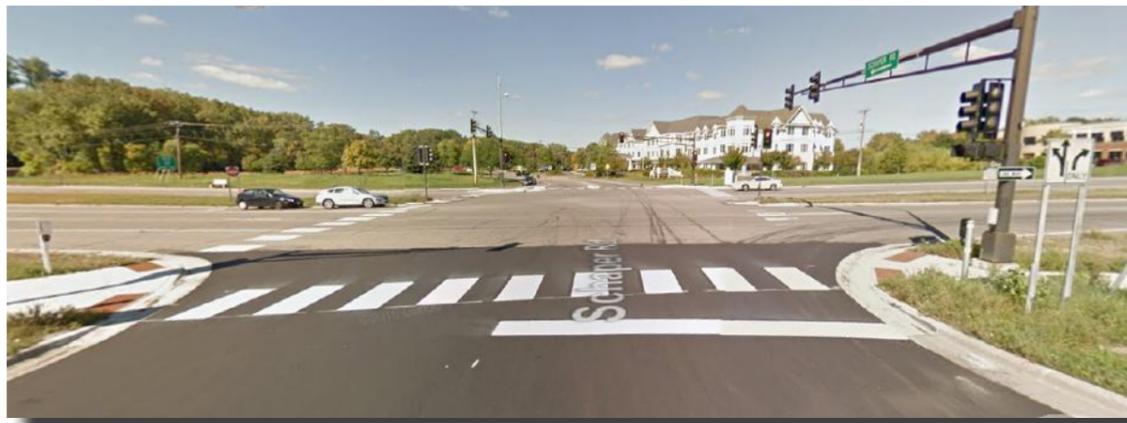


Figure 16. Olson Memorial Highway at Winnetka Avenue



Identified Area B) Intersections Along Highway 100

Highway 100 is another major barrier for cyclists in Golden Valley. This is a road that offers very few places for motorized and nonmotorized traffic to cross from east to west. Cars, bikes, and pedestrians must all share the space available at the few places there are to cross Highway 100. The intersection shown below is Duluth Street and Highway 100. This is an important crossing in the bicycle network as it is just to the west of a stretch of Golden Valley Road. Duluth Street and Golden Valley Road could be a major bike connection to Theodore Wirth Regional Bike Trail, Basset Creek Trail, and the future Light Rail Transit stations.

Figure 17. Highway 100 at Duluth Street



Identified Area C) Intersections Along Interstate 394

Interstate 394 is a major barrier to cyclists along the southern border of Golden Valley. The intersection at Xenia Avenue and Interstate 394 has been identified as an important crossing because of recent and future residential developments, as well as the location of the Cub Foods just south of the Interstate in Saint Louis Park.

Figure 18. I-394 at Xenia Avenue.





Action Plan: Connectivity

Identified Area D) Duluth Street Gap

Duluth Street has the potential to become a strong east-west bike route through the northern portion of Golden Valley. Bridging the gap between the two disconnected sections of Duluth Street by directing users with wayfinding signage to use Douglas Drive and potential recommended future trail along the Canadian Pacific rail tracks.

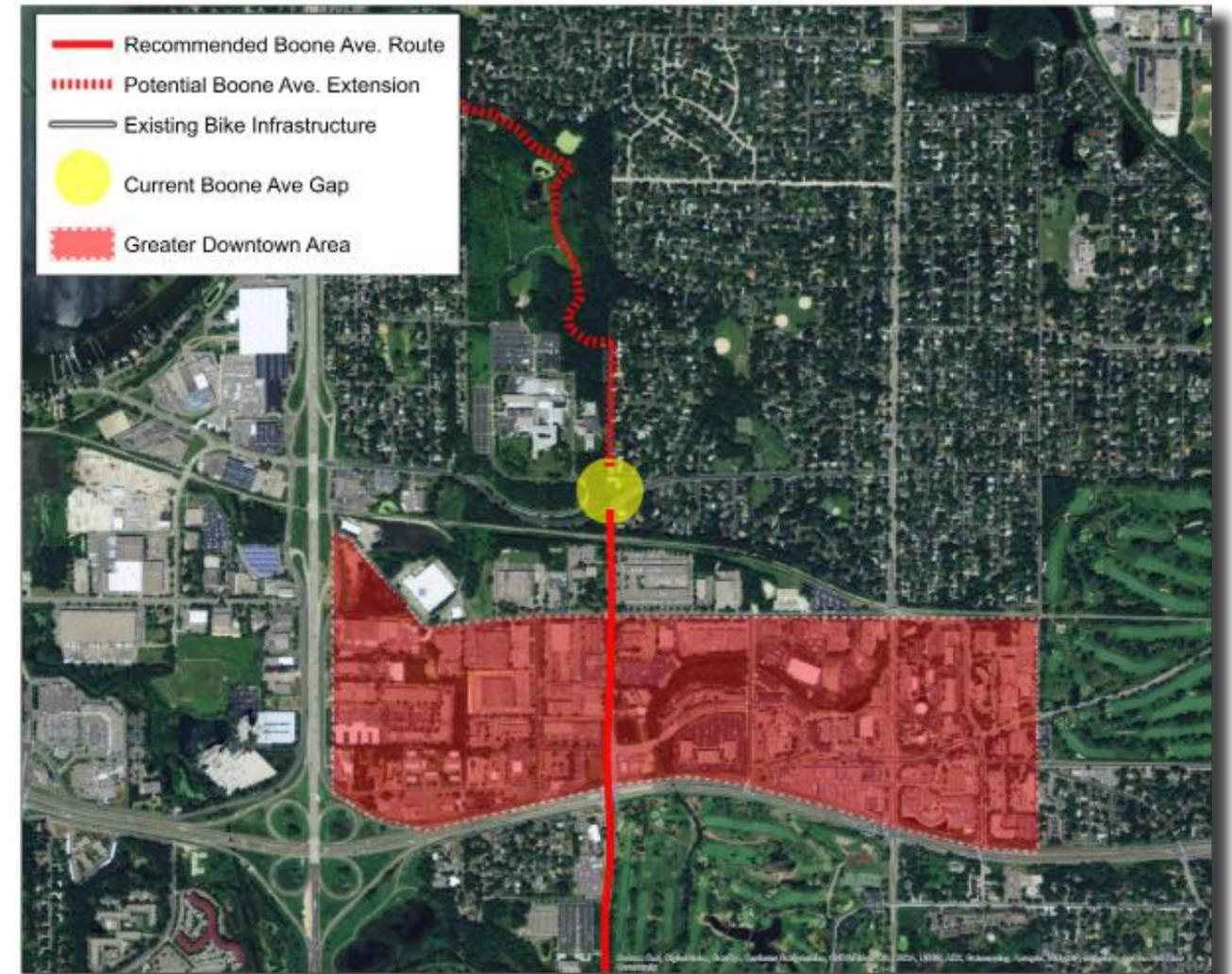
Map E. Duluth Street Gap



Identified Area E) Boone Avenue Gap

Boone Avenue has the potential to become a strong north-south bike route in the western portion of the Golden Valley. This route would serve the downtown area. Boone Avenue at Plymouth is a large barrier that would prevent bikers from connecting to the northern portion of the city.

Map F. Boone Avenue Gap





Action Plan: Connectivity

6) Specific Route Recommendations

A) Golden Valley Road & Duluth Street Route

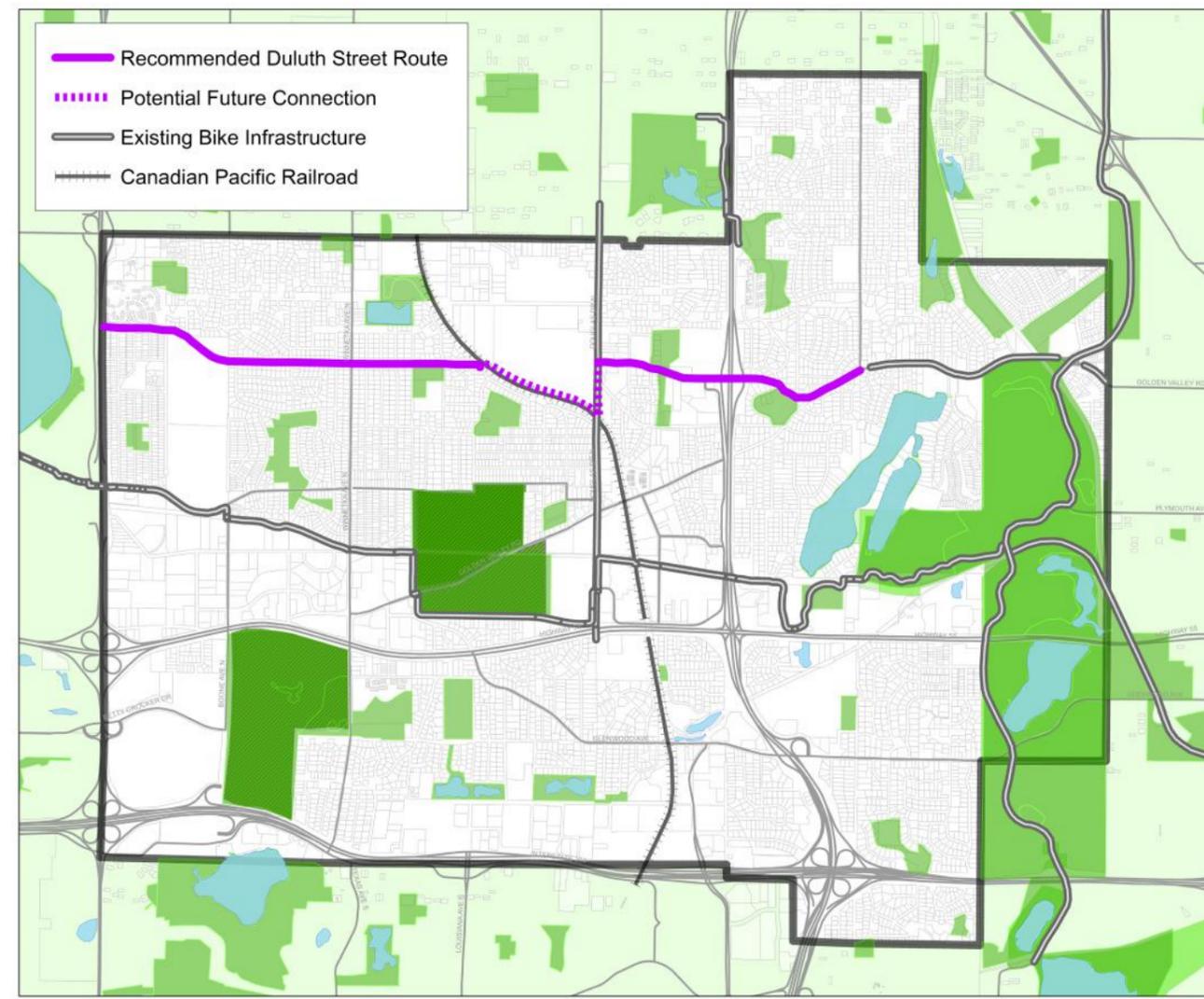
Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the Golden Valley Road and Duluth Street route.

Golden Valley Road and Duluth Street are a very important east-west thoroughfare in the northern half of the city. This route is shown in Map x as the purple line. The eastern end of Golden Valley Road has already been selected for bicycle infrastructure improvements. Given these planned improvements, and the fact that this road is one of the few that crosses Highway 100, it is recommended that the city consider additional bicycle infrastructure to make it a safe, comfortable, and convenient way to travel across the entire length of Golden Valley.

There is an existing gap in Duluth Street West of Douglas Drive. This gap in the network could potentially be solved by connecting into a future trail along the Canadian Pacific rail line. Part of this connection is already fairly strong due to the bike lanes on Douglas Drive that will be constructed by the end of 2017. Providing guidance to users through signage will help them navigate this connection and continue their trip on Duluth Street.

Building upon improvements that are already happening on Golden Valley Road and extending the route to the western portion of Duluth Street will serve a number of functions. This will provide a strong east-west connection across the entire northern half of the city. This improvement will strengthen connections to Theodore Wirth Regional Bike Trail, Bassett Creek Trail, and the potential trail along the Canadian Pacific Railroad. Adding bike facilities to this road will also increase access to the future light rail stations on the east end of the city.

Map G. Golden Valley Road/Duluth Street Route and Potential Connection





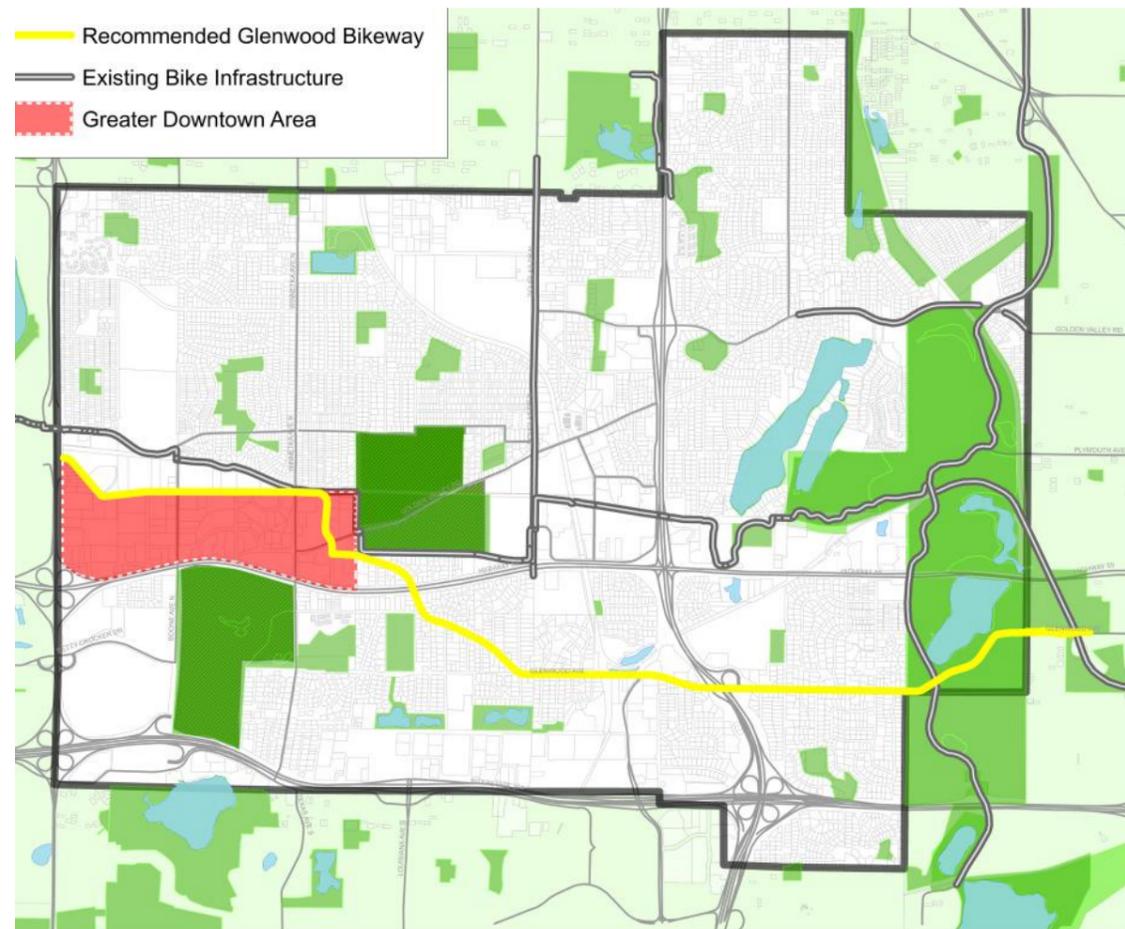
Action Plan: Connectivity

B) Glenwood Avenue Bikeway Improvements

Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the Glenwood Avenue route.

Glenwood Avenue, shown in yellow, is already an important part of the bicycle network. There are different types of bike infrastructure along Glenwood Avenue. Due to the existing conditions and space along Glenwood Avenue, it is a good candidate for a major bike facility. There are many sections of existing paths along Glenwood Avenue that could be connected to create a cohesive off-street bike and pedestrian route. This route would strengthen connections to the Theodore Wirth and the Luce Line. Improved bike facilities along Glenwood Avenue would increase bike access to the downtown area.

Map H. Glenwood Avenue Bikeway

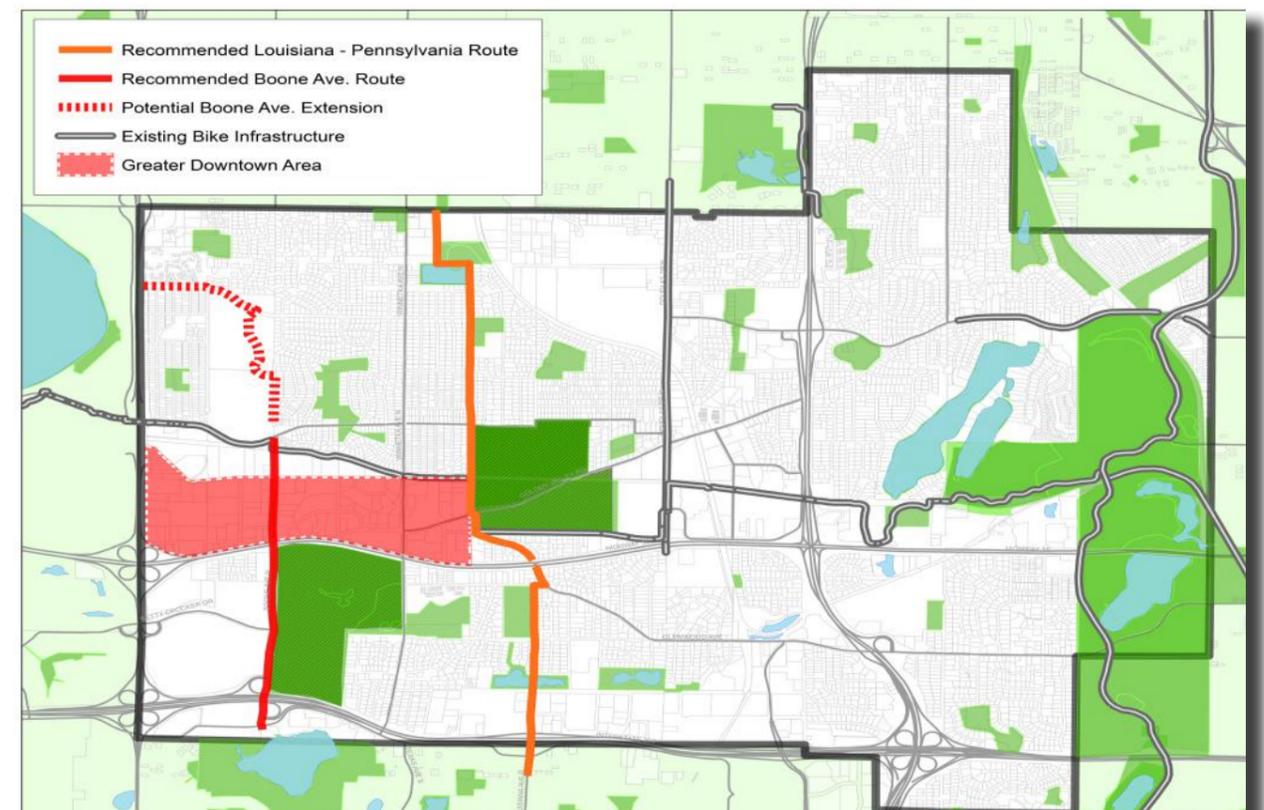


C) General Mills / Boone Avenue Route and Louisiana-Pennsylvania Avenue Route

Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the General Mills/Boone Avenue and Louisiana/Pennsylvania Avenue

Additional north-south routes are needed in Golden Valley. General Mills Blvd/Boone Avenue are shown as the red line in Map I below. These roads have space available to make major improvements for bikes. There is a small gap in the network where Boone Avenue meets the Luce Line trail. A connection to bridge this network gap should be explored, because it could extend the length of the route greatly. The orange line in Map X shows the Louisiana Ave / Pennsylvania Ave Route. This is already a fairly good route for biking, and improvements to this route could further strengthen connections to the Luce Line and the downtown area.

Map I. General Mills / Boone Avenue Route and Louisiana-Pennsylvania Avenue Route





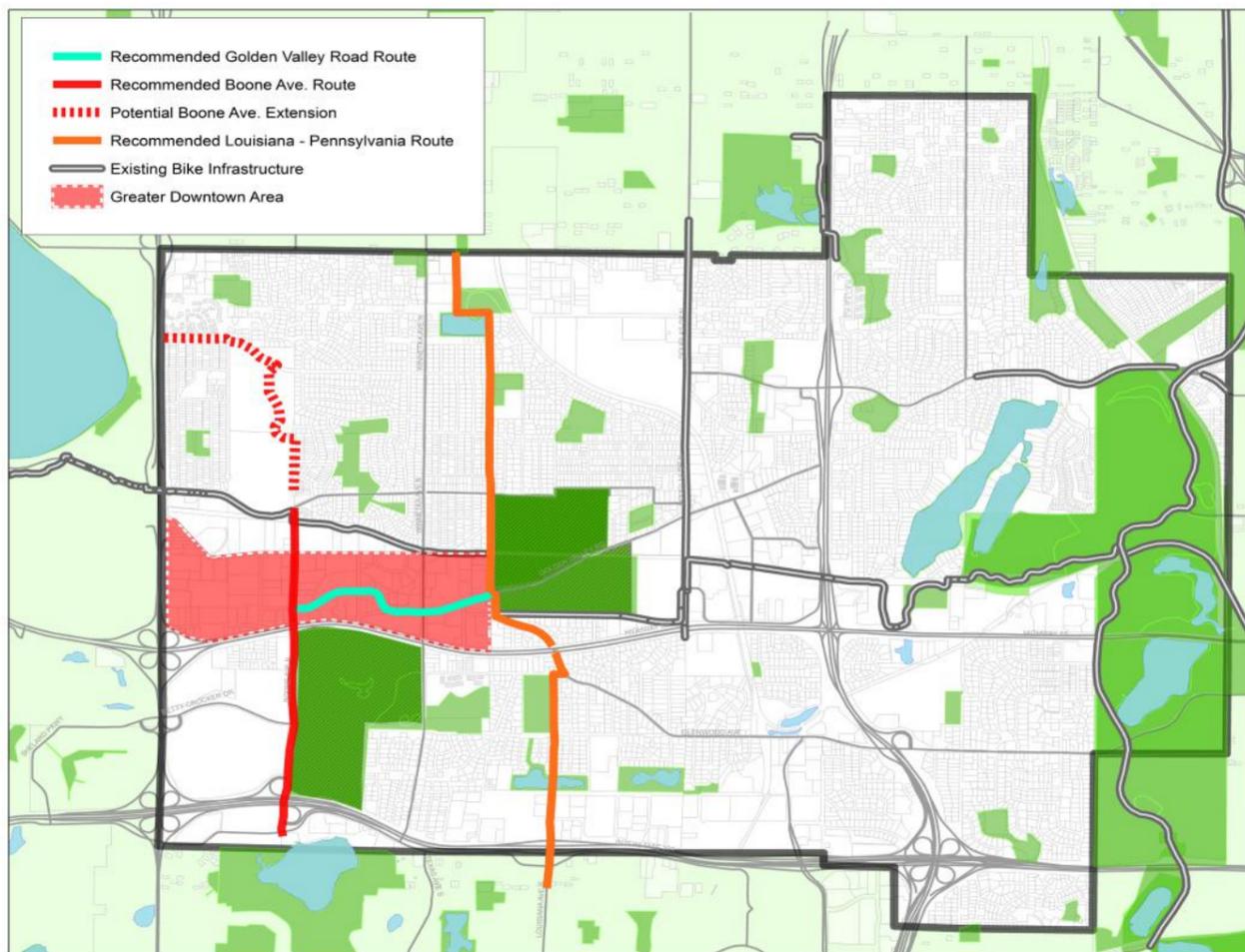
Action Plan: Connectivity

D) Golden Valley Road Downtown

Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the Greater Golden Valley Downtown Area

Golden Valley Road (shown in teal in Map J) offers a great potential connection between Boone Avenue and Pennsylvania Avenue. With connections to the downtown area being such a high priority, it is worth considering bike lanes for the entire length of Golden Valley Road between Boone Ave (shown in red) and Pennsylvania Ave (shown in orange). This connection would make it easier for bikers to get to all of the businesses and attractions in the downtown area, including the public library and the farmers market.

Map J. Golden Valley Road Through Downtown

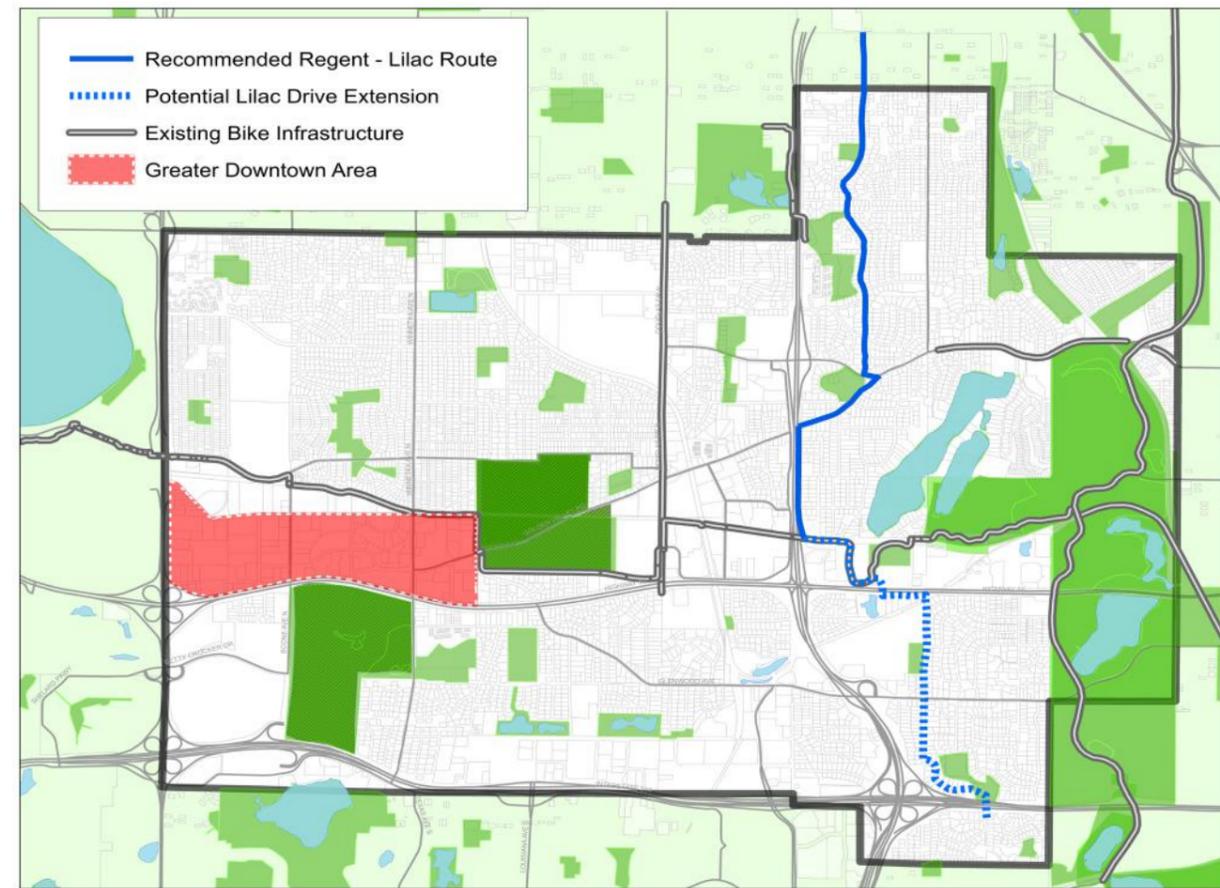


E) Regent / Lilac Route

Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the Regent Avenue and Lilac Drive route.

An additional north-south route is needed in the eastern half of the city. A route consisting of Regent Avenue, Golden Valley Road, and Lilac Drive would provide the needed connection. This potential route is shown as a blue line in the figure below. This route would offer a good connection to the Luce Line Regional Rail. Improvements could be made at Schaper Road to cross Olson Memorial Highway, extending this route to Golden Valley's southern border, creating connections to Breck School and the Glenwood Bikeway Route.

Map K. Regent & Lilac Route



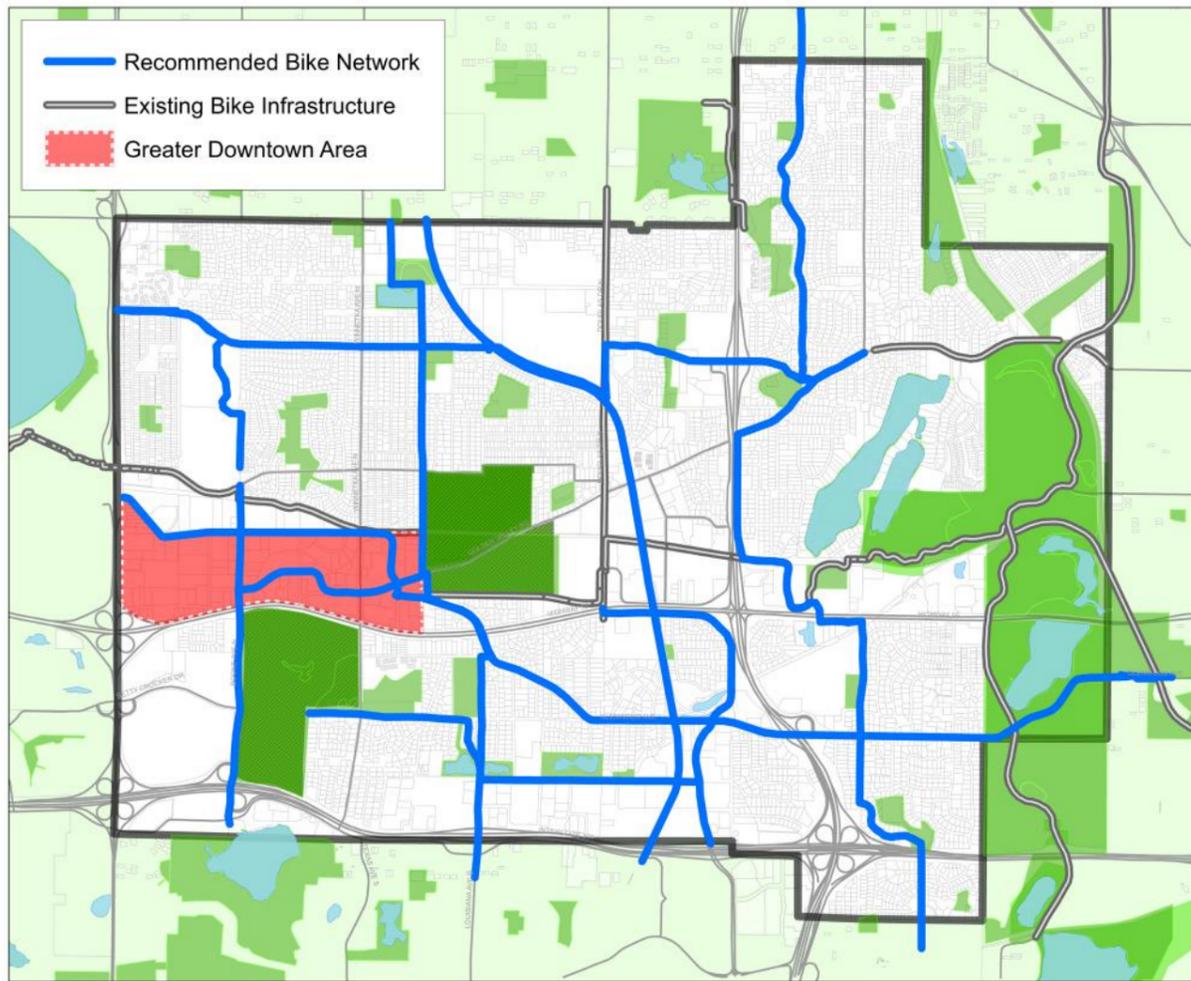


Action Plan: Connectivity

F) Recommended Bicycle Network

When put together, the routes that have just been discussed create a robust network of intentionally bike friendly roads. The routes that come together to form this network have been recommended for further analysis because of the favorable existing conditions and their ability to connect users to the predetermined destinations. Improvements made to the bike infrastructure along these recommended routes will strengthen several connections to regional trails as well as create easier bike access to the greater downtown area. Investing in bike infrastructure improvements on these routes will benefit current and future residents of Golden Valley for many years to come.

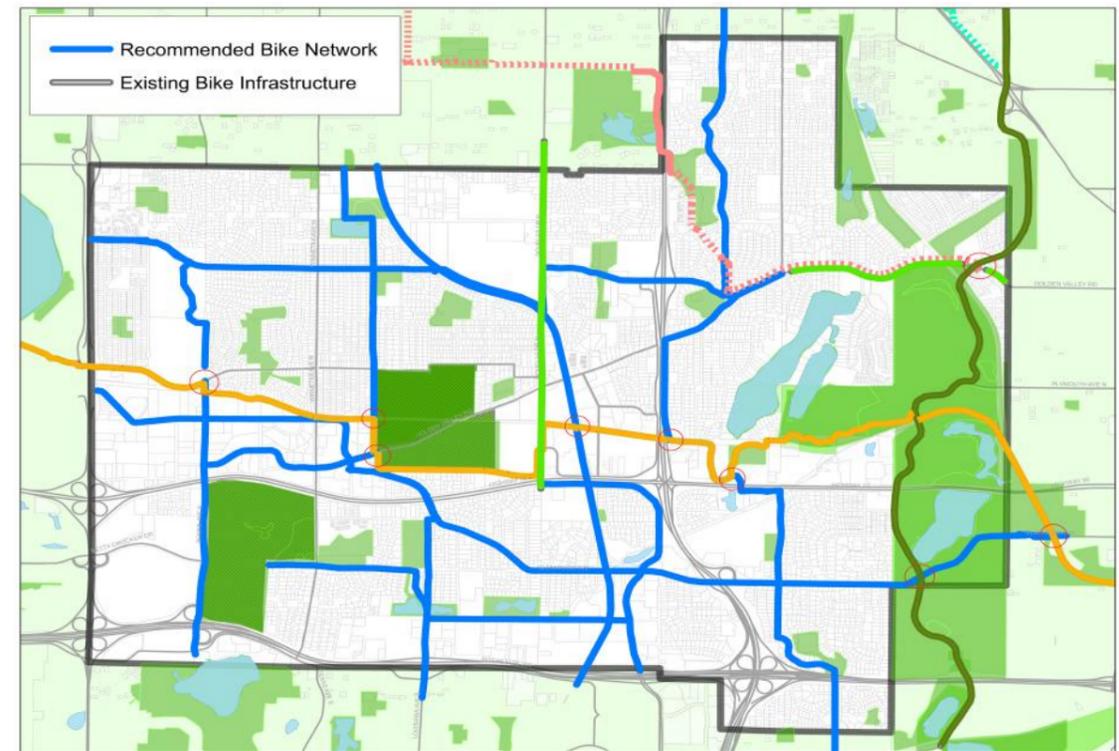
Map L. Recommended Bicycle Network



7) Strengthen Connections to Regional Trails

One of the major assets that currently exists within Golden Valley is the proximity to regional trails. The Luce Line Regional Trail is a 63-mile state trail that runs through four Minnesota counties and crosses through Golden Valley in an east-west direction. Creating stronger connections to the Luce Line will allow people to travel longer distances more efficiently. It will also be important to create stronger connections to the trails that run through Theodore Wirth Park on the eastern edge of Golden Valley. By strengthening the connections to these trails, riders will seamlessly be connected to the vast trail network of the Twin Cities. Making these connections simple and easy for users to understand should be a priority for the bike plan.

Map M. Regional Trail Connections



Recommendation: Building strong connections to the existing regional trails will help to encourage biking in Golden Valley and beyond. The proposed network of improvements will connect to the regional trail system in key places. The recommended bike network shown above in blue lines with connections to the regional trail system shown with red circles.



Action Plan: Connectivity

8) Prioritization of Roads

Identifying the weaknesses of an existing bicycle network and suggesting new infrastructure is easy. It's hard to determine when, where and how to fix and expand the network. Building a connected, safe and lively bicycle network is a large undertaking. It requires a variety of infrastructure and a significant amount of time. When investing in such a network it can be difficult to determine which tasks should be done immediately and which one should be a part of a longer term plan.

Recommendation: Creating a Prioritization methodology will help Golden Valley build a framework for identifying projects that have the highest needs as they relate to the overall goals of the plan. Such a methodology will ensure that the city is investing in an efficient and cost effective manner that continually enhances the bicycle and pedestrian network. The methodology for Golden Valley can be derived from the prioritization methodology created by Hennepin County. Hennepin County used the five categories of Network Connectivity, Overcoming Gaps & Barriers, Demand, Safety and Social Equity. The county determined separate criteria for each category. Each project was given a numerical score in each category. The projects with the highest score received top priority.

Given the scope of Golden Valley's bicycle network the prioritization methodology of Golden Valley would not have to be as robust as the methodology developed by Hennepin County. It would benefit Golden Valley to review prioritization methodologies used by other cities and adapt them to serve Golden Valley. The following are resources of municipalities that have utilized and documented their bicycle prioritization methodology.

Prioritization Methodology Resources:

Hennepin County 2040 Bike Transportation Plan

<http://www.hennepin.us/~media/hennepinus/residents/transportation/bike/bike-plan/Appendix%20H%20-%20Project%20prioritization%20methodology%20and%20results.pdf?la=en>

City of Seattle, Washington

http://www.seattle.gov/transportation/docs/bmp/SeattleBMPUpdate_FINALPrioritizationWhitePaper.pdf

City of Alexandria, Virginia

https://www.alexandriava.gov/uploadedFiles/tes/info/F_Methodology.pdf

Union City, California

<http://www.ci.union-city.ca.us/departments/economic-community-development/bike-and-ped-plan>

9) Golden Valley Grand Rounds

A long-term strategy for creating greater non-motorized connectivity within Golden Valley would be to design a type of "Grand Rounds" trail system. Grand Rounds projects differ from typical bicycle and pedestrian networks in that they almost exclusively use off-road facilities. Grand Rounds networks serve as a transportation network and connect to several types of destinations within the city, including natural features, parks, neighborhoods and access to retail and restaurants. The design of a Grand Rounds is typically one continuous trail which allows users to ride or walk without having to navigate. Custom Grand Rounds signage along the trail system will guide and inform trail users, as well as advertise the system to potential users that may see the signs while driving near the trails.

Grand Rounds trail systems create a different type of bicycling and pedestrian experience. This type of network emphasizes sustainable practices.

Recommendation: The implementation of a Grand Rounds will be visually pleasing and create a continuous network of open space which will improve quality of life in Golden Valley. Similar networks have already been created in some communities within the Twin Cities metro area, including both Saint Paul and Minneapolis, as well as plans for a future trail system in other suburban communities

Resources

City of St. Paul: <http://www.saintpaulgrandround.org/>

St. Paul Grand Rounds Consultants: <http://www.sehinc.com/>

City of Minneapolis: <https://www.minneapolisparcs.org>

Minneapolis Grand Rounds Consultants: <http://www.ddaforum.com/>

City of Eden Prairie: <http://www.edenprairie.org/home/showdocument?id=5204>

Eden Prairie Bike Plan Consultants: <http://www.c-d-g.org/>





Action Plan: Connectivity

10) Connectivity Engagement

Public engagement will be a very important aspect of this bike plan. It will be important to engage as much of the community as possible during the early stages of planning and designing the network. The community will be a valuable asset in determining both destinations and accessibility gaps that are present in the city. One of the most useful ways that communities can help to inform the bike planning process is through the use of WikiMaps. WikiMaps is a program that allows users to identify areas of interest or concern in certain areas. The program is relatively intuitive and easy for even novice technology users. After many users have participated in the mapping initiative, patterns will emerge that planners can use to develop a network of non-motorized vehicle infrastructure that will best meet the needs of prospective future users.

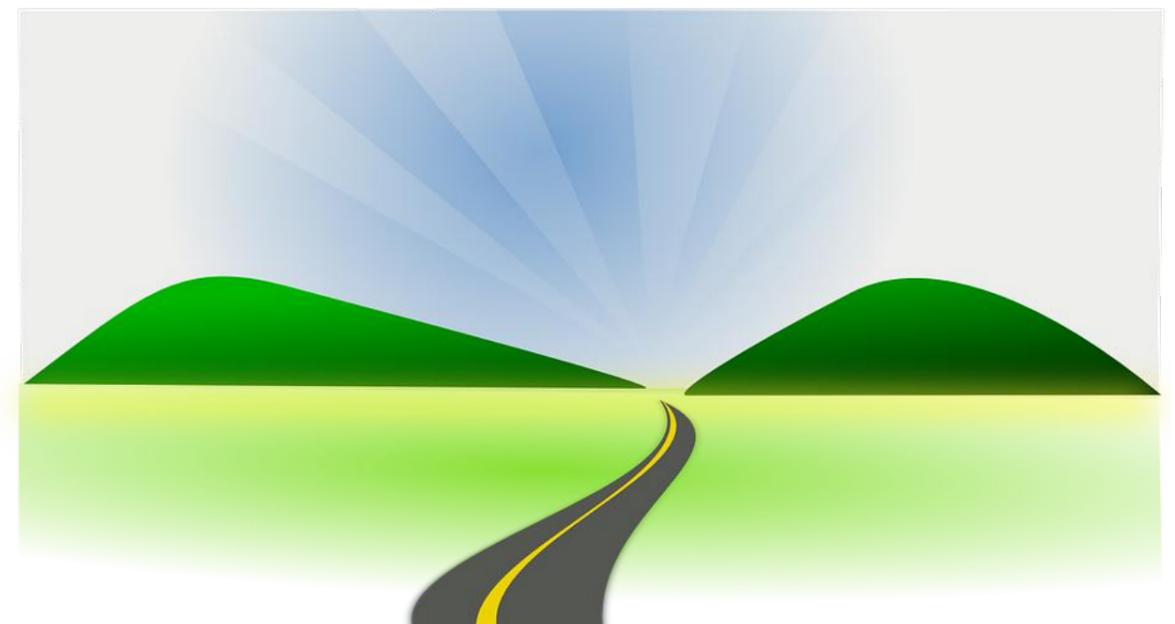
Another way to get engagement is through citizens physically experiencing the changed environment. One way to do this is through Tactical Urbanism. This involves the installation of temporary bike facilities on city streets, such as temporary bike lanes or traffic circles.

Recommendation: Utilize Tactical Urbanism is a great example of community engagement. These demonstrations will remain in place anywhere from a day to a couple of weeks. Installing these changes temporarily allows the community to see how proposed changes could look and function on their neighborhood streets. This approach can help ease fears that changes to the roadway configuration would have a negative effect on car traffic.



The recommendations in this sections are suggestions for the City of Golden Valley to consider when developing a bike plan. Designing and implementing a strong, continuous and connected bike network is crucial the vitality of this plan. The specific route recommendations were based on a basic analysis and will require more analysis in order to determine which type of facility will best serve the bicycle network. Additionally, all network route and infrastructure decisions need to be made by the professionals at the City of Golden Valley and the Golden Valley Community.

These recommendations will help to guide the City of Golden Valley through the bike network planning process as they create a strong bicycle network that is viewed as a community amenity.





Safety



Goal: A bicycle plan that informs the education of motorists and non-motorists alike of the safest methods and provides new and improved infrastructure giving non-experienced bicyclists confidence to bike throughout Golden Valley.

Golden Valley Significance

Safety is key in any new development or major improvement. The improvements being made are for the public's benefit. In order for the public to enjoy these new amenities, they need to feel safe using them. Ridership will not be high if these new amenities do not lessen the rate of perceived danger currently felt within Golden Valley. Through several efforts, the City should attempt to create an environment that is safer for active transportation within Golden Valley.

The goal of safety can met through several avenues. Golden Valley should work to improve awareness of bike amenities as well as how to safely use them. The City should work to maintain these amenities so that they will continue to be useful to Golden Valley residents and employees. The City should work to acquire more Right of Way, and improve current intersections to be more pleasant to use with active transit.



Action Plan: Safety

Action: What are the steps that should be taken to achieve this goal?

11) Advisory Signage

In order for new and existing bike amenities to be useful, drivers and bikers need to be aware of the amenities and know how to use them safely. Several local parties that were interviewed expressed a concern that drivers feel comfortable increasing their driving speeds on the roads with wider shoulders, despite the fact that these shoulders were meant to give bikers a safer biking experience.

Bike shoulders in Golden Valley are located along major commuting connections. Therefore, lowering driving speeds should be avoided, as this is not supported by all stakeholders. Advisory signage such as 'Bike Route', 'Share the Road', or 'Give 3 Feet When Passing Bikes' can inform drivers that bikers are welcome to use the shoulders and drivers should be aware. Advisory signs for bikers might be 'Wear a Helmet,' 'Legal to Bike on Sidewalk' or 'Signal your Turns'. If both parties are aware of biking and driving laws, Golden Valley can avoid confusion and increase safety on bikeways.

These advisory signs should be present on any streets that have speed limits over 30 mph, have blind curves or intersections, at intersections crossing the Luce Line or Theodore Wirth Parkway, streets that have schools, as well as streets that have striped shoulders appealing to bikers.

Recommendation: The City of Golden Valley should have at minimum a sign stating 'Bike Route' on all streets with bike-able shoulders, or that intersect the Luce Line or other bike trails. The City should create more specific signage to improve safety based on the needs of that road or intersection.



12) Wayfinding Signage

Good signage is an essential aspect of any successful bike and pedestrian plan. Wayfinding signage is a relatively low-cost way to increase usage of new or existing bike networks. By investing in wayfinding infrastructure, cities make themselves more inviting to new visitors. Wayfinding signage helps people navigate public spaces in a safe and efficient manner with as little confusion as possible. When non-motorized vehicle infrastructure is easy to understand and use, more people will be likely to use it because they will feel more comfortable and confident that they will reach their destinations in a reasonable amount of time.

Wayfinding signage should be simple and direct. The signage that will be needed should define the space as either being designated for or accommodating non-motorized traffic, it should orient users in terms of where they are located in the network, and it should offer directions to various destinations that include travel distance. The signage should be as simple as possible, while still conveying the necessary information. All of these signs should serve as guides to the bike and pedestrian network, and decrease the frustration and anxiety that new visitors or less experienced users may experience. Clear and concise signage will allow all users to navigate the infrastructure comfortably. A network that is easy to use and understand will increase the likelihood of users having enjoyable experiences, and will result in people wanting to visit these destinations more often.

Recommendation: On all public trails, wayfinding signs should be located every mile to direct bikers to destinations. Wayfinding signs should also be located downtown to direct bikers off of trails to local businesses.



Action Plan: Safety



13) Sidewalk and Path Maintenance Policies

Just like a new toy on Christmas, new infrastructure can be exciting for only a limited time. Once the new toy starts to become cracked or pieces start to fall off, the kids will lose interest. The same thing could happen with new bike infrastructure. With Minnesota winters expanding and contracting any pathway the City lays down, cracks and dents are inevitable. Sidewalk and Path Maintenance policies will be enforced to ensure bike tires are not going to be dented or bent when using Golden Valley pathways.

The City of Golden Valley should work with Public Works, Three Rivers Park District, as well as Hennepin County to ensure that bike trails and pathways are being plowed quickly and efficiently. The residents of Golden Valley should be made aware of sites where they can report potholes and dents in the road to Golden Valley Public Works, so that the City can coordinate the repair of these problems.

Recommendation: The City of Golden Valley should actively audit sidewalks and trails every spring to ensure safe walking and biking conditions. Residents of Golden Valley will be informed of ways they can report unsafe sidewalk and trail conditions.



14) Making the Most of Current Right of Way

Although Golden Valley has a great amenity in their pre-existing wide streets, some avenues are still too busy to allow on-street biking. Bike pathways will allow for safer commutes and family-friendly bike rides. For example, Douglas Drive and Winnetka Avenue are the only two streets that currently allow for cars and bikers to get from Olson Memorial Highway to the Northern suburbs. The City identifies these as primary connections through Golden Valley in the North-South direction. Both of these streets are owned by Hennepin County, so Golden Valley should work with the County to secure safer bike pathways on these connecting streets. Bikers will be separated from the cars increasing safety. Current sidewalks can be outfitted to be bike pathways. Bike signage on these streets will inform drivers as well as bikers about these existence and how to safely use them. Current plans for reconstruction on Douglas Drive include bike paths. Golden Valley Road bike paths are included in the Hennepin County 2040 Bike Plan.

Recommendations: The City of Golden Valley and Hennepin County will research the safest type of bike pathway will be safest and most efficient for that street using traffic counts, bicycle counts, pedestrian counts, etc. Some residential streets may just need a striped shoulder, while others will need separated bikeways. Regardless of type of bike pathway, advisory signage should be included in plans to inform both drivers and bikers about road uses. Examples of bike paths can be found in Bike Planning 101 Section.



Action Plan: Safety



15) Safety Engagement

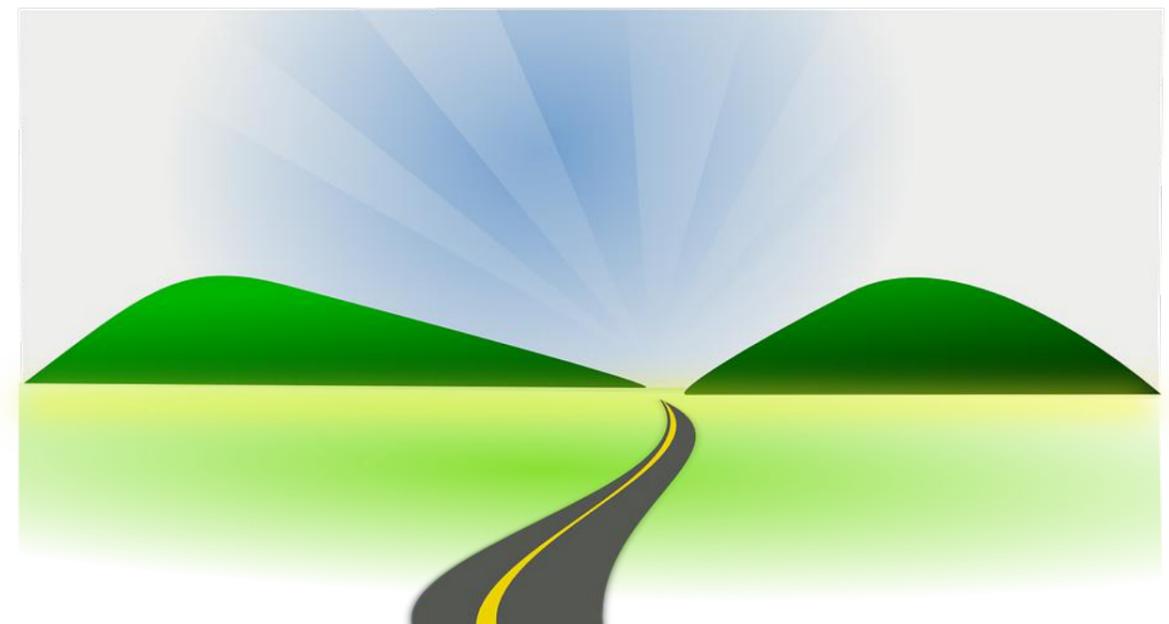
Golden Valley has identified several areas in which they can get feedback from the community on their non-motorized vehicle amenities. Education on safe biking, walking, and roadsharing are the most important way the Golden Valley Residents can learn about new infrastructure and safely partake in active transportation in Golden Valley. Families of school-age kids should be better informed about the Bike Rodeo. Businesses should be invited to have deals in conjunction with the Bike Rodeo, such as offering a discount to anyone who bikes to their business that week.

Informing families about the fun activities at the Bike Rodeo could get their kids excited about biking and bike safety. The kids could learn how to safely maneuver through the obstacles and learn about their brakes and helmets that allow them to safely travel around the city. Creating laws for adults in easy places that they can remind themselves about sharing the road is also recommended. The Public Safety department expressed a concern that they constantly have to direct drivers and bikers to the State Statute to remind them of road-sharing laws that they most likely have not seen since they took their driver's test.

Recommendation: Share and publicize safety information on the city website. Specifically a map of the Golden Valley Bike Network as it exists now and as it changes. The community will be able to easily access this important safety information as it pertains to biking, driving and walking in Golden Valley and the future changes.

The recommendations in this sections are suggestions for the City of Golden Valley to consider when designing and implementing bicycle infrastructure. Creating a network that is safe and comfortable for users of all ages and abilities is crucial to the success of the network. Implementing safety measures will create a network where all users feel safe using the network for recreation and transportation.

Specific locations for these safety measures need to be determined by officials at the City of Golden Valley and the Golden Valley community. Those determinations will allow Golden Valley's network to become a true transportation network.





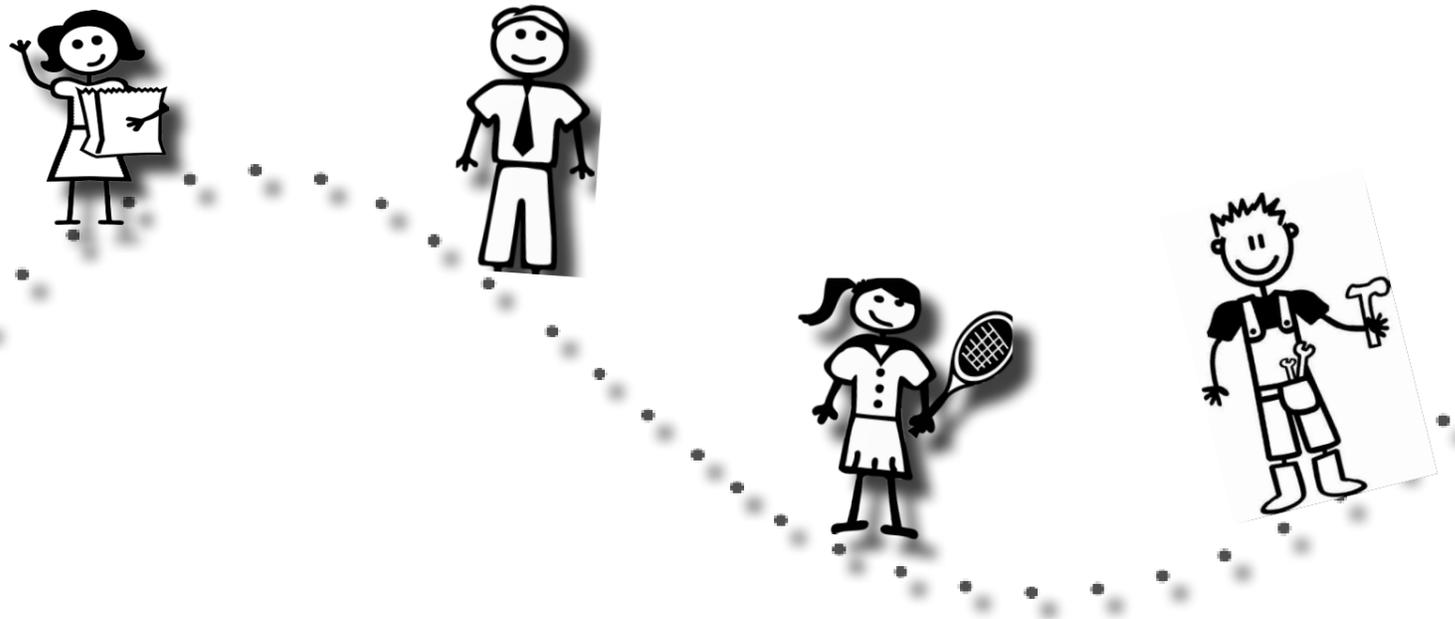
Vitality

Goal: A bicycle plan that improves the quality of life for those who live, work and play in Golden Valley.

Golden Valley Significance

It is easy for a city to stripe new lines on the street, add bike racks and some new sidewalks. The City of Golden Valley can create a new amenity for Golden Valley residents and visitors in the form of a strong bicycle network. Bicycle plans are attractive to all age groups from millennials to families to retirees. These networks provide a free, safe space for residents and visitors to play, exercise and get around. In order for this network to become a city amenity or asset, there needs to be strong community engagement throughout the planning and implementation process. When residents are engaged in the planning process, they feel a connection the plan and are more likely to use the network.

The creation of this plan is a great opportunity for the City of Golden Valley to strengthen relationships with Golden Valley businesses. As the network allows families and workers to easily get around on foot, rollerblade, scooter, or bicycle they are more likely to explore their city. It's important for the City of Golden Valley to recognize this opportunity for economic development. The City and Golden Valley businesses can capture those using alternative modes of transportation as customers if the businesses are properly engaged in the planning process.





Action Plan: Vitality

Action: What are the steps that should be taken to achieve this goal?

16) Continued Public Engagement

The Golden Valley Bicycle Plan will best serve residents and Golden Valley community members if it addresses the bicycle needs identified by residents and community members. A consistent and continuous public engagement strategy is necessary for the plan to create a product that meets the needs of Golden Valley. It's most beneficial to seek out a variety of perspectives in order to develop a plan that works for everyone, not just the bike savvy population.

Recommendation: The best way to engage a diverse cross section of residents to speak with people at pre-existing events. A booth for education and participation at farmers markets, school events, houses of worship and other community events will allow the city to speak with people who might be unaware of the project. It would also benefit the City to reach out to prominent community figures and use their connections to further engagement efforts. A Golden Valley Bicycle Task Force could serve as project ambassadors and educate the public on the project while engaging them in the process.

Bicycle friendly businesses will be crucial to the support the Golden Valley bicycle network and generate economic development. Meeting with business owners and the Twin West Chamber of Commerce during the planning, implementation and maintenance of the project will provide a necessary business perspective. This public and private partnership could prove to be useful in the future when looking to bridge connectivity or safety gaps on private property.



17) Pre-Opening & Post-Opening Events

Golden Valley Passport Event

Public engagement doesn't end once the plan is adopted or implemented. The City needs to generate excitement about this investment.

Recommendation: The City of Golden Valley should partner with the business community to create an engagement plan that will keep the public interested in this plan before and after it is opened. There are quite a few methods to be used that will get people using the network for relatively low cost.

In the short term, the City of Golden Valley can connect engaged residents and businesses through facilitating a one time Passport Program event during the implementation of the Golden Valley Bicycle Plan. Once a stronger network has been created the city can identify businesses and destinations that are easily accessible through the bicycle and pedestrian network. The public can then use the network to access these spots and will receive a stamp in their Golden Valley Bicycle Passport. A prize, certificate or coupon should be available for those who get all of the stamps. The event will allow the public to become familiar with the bicycle network and identify which businesses are accessible and bicycle friendly.

Golden Valley Helmet Discount

Looking for more long term strategies, the City of Golden Valley can connect with businesses that wish to capitalize on the growing bike community in Golden Valley and the greater Twin Cities area. Such businesses could be enticed to run special deals like a "Helmet discount" during the warmer months in order to draw bicyclists into their business. Such deals will help to facilitate economic development related the implementation of the plan. These deals also provide active living incentives for the public to choose non-motorized transportation.





Action Plan: Vitality

18) Conduct a “Bicycle Friendly Business” Audit

Building a bicycle network is a large investment for the City of Golden Valley. The City will use a great deal of time, manpower and funding to create a network that is intentional, accessible and safe. However, the City’s power is limited to the public areas. The bicycle network will lead to a retail area or big employer but the city has no power to ensure continuity to the buildings or bike parking. In order for the network to become truly connected there will need to be some investment from the private sector.

Recommendation: Conduct a Bicycle Friendly Business Audit. Businesses and property managers are likely unaware of the steps they can take to make their businesses bike and pedestrian friendly. The City of Golden Valley should conduct a simple audit workshop with property managers and businesses. The workshop can use tools like Google Maps to explore private property barriers like no bike parking or lack of pedestrian walkways. A simple workshop will educate and engage businesses on how they can help. Investments made to improve private property will help to ensure safety and connectivity for non-motorized travelers. Businesses will benefit from these investments through improved accessibility to new customers.

The City should then define the criteria of what it means for a business to be “bicycle friendly”. Those that meet the criteria would earn the “Bicycle Friend Business” designation from the city. The awarding process could be a formal or informal process.

More information on similar programs can be found:

<http://www.bikeleague.org/business>

<http://www.bikeleague.org/content/5-es>

<http://www.bikemn.org/collaboration/bicycle-friendly-programs/bicycle-friendly-business>

19) Business Employee Bicycle Program

The bicycle plan should be designed to serve all types of Golden Valley community members, not just residents. There are many ways to encourage Golden Valley businesses and their employees to utilize the Golden Valley bicycle network. There are many large employers in Golden Valley. While all of the employees don’t live in Golden Valley, a large portion of them are likely to live within a relatively short distance. Investing in creating new bicycle infrastructure that connects to larger regional trails offers employees a new commuting option. Larger employers can create employee bicycle programs that encourage their employees to use bicycling for their commute. The City of Golden Valley can act as a leader in this initiative by encouraging City staff to bike or walk to work. Dedicated, secure bike parking facilities, bike related events and repair stations will show how the City supports this active living choice. There are many program opportunities to generate excitement over biking or walking to work.

Recommendation: Encourage large employers to launch corporate bicycle programs. This strong employee program is comprehensive and supportive. Employees have access to showers, secured indoor bike parking and a repair station. These amenities make it easy for employees to bike to work. In exchange for offering these incentives to employees, the City of Golden Valley can offer a variance in the required amount of parking for businesses that employ and facilitate such programs. Businesses who partake in these initiatives will provide an attractive amenity to young, potential employees. These programs help to encourage all employees to take on an active living lifestyle. Similarly, rather than offering variances, the City of Golden Valley should continue to pass bicycle parking minimum for the city in certain areas.

Target’s Corporate Bicycle program is a great local example. The City could present the details of this program to other larger employers as a model of the possibilities and benefits associated with such a program.



Action Plan: Vitality

20) Pedestrian Overlay District

Golden Valley is very similar to other first ring suburbs in that the current layout and infrastructure is very auto-oriented. There are opportunities to enhance the pedestrian network in Golden Valley. The City can determine if increasing and preserving the pedestrian network is a priority. Looking for long term strategies, the City can encourage development and changes that enhance the pedestrian scale through the implementation of a pedestrian overlay district. The neighboring City of Minneapolis describes these districts as areas that “preserve and encourage the pedestrian character of commercial areas and to promote street life and activity by regulating building orientation and design and accessory parking facilities, and by prohibiting certain high impact and automobile-oriented areas.” Golden Valley can use this regulatory tool to discourage development that would discourage activity at the pedestrian level.

Recommended Policy: Create Pedestrian Overlay Districts. Pedestrian overlay districts in key Golden Valley areas can transform the nature of those destinations. The policy and subsequent changes and development will create an atmosphere that is more similar to a historic downtown rather than a strip mall. The popular places in Golden Valley will become an area for the public to stay rather than only run errands.

Potential Golden Valley Pedestrian Overlay Districts:

Golden Valley Downtown

- Area near Lunds & Byerlys
- Area near future LRT station
- Area near Breck School
- Area near Perpich

The regulations can be adapted to the specifics of each area. Golden Valley can examine and adapt the Pedestrian Oriented Overlay District from the city of Minneapolis.

21) Landscaping & Green Streets

Striping the street or adding new off-road paths create a network. However, Golden Valley needs a network that is viewed as an amenity. Landscaping, trees and strategically planted areas can improve the attractiveness of a bike-able and walkable area. Pedestrians benefit from tree coverage as protection from the sun and other natural elements when using bicycle and pedestrian networks. If the City acquires more right of way for on street or off street facilities, landscaping could be used as a physical barrier between cars and those using the bicycle and pedestrian network.

If Golden Valley were to adopt a Green Streets policy, the benefits of these investments would extend beyond aesthetics and safety. “Green Streets are an alternative to conventional street drainage systems designed to more closely mimic the natural hydrology of a particular site by infiltrating all or a portion of local rainfall events. A green street uses trees, landscaping, and related environmental site design features to capture and filter stormwater runoff within the right of way, while cooling and enhancing the appearance of the street.” Green Streets would help Golden Valley to act as a leader in environmental stewardship while improving the safety and attractiveness of the new bicycle and pedestrian network.

Recommended Policy: Adopt a Green Streets Policy. City of Golden Valley financed and approved transportation projects in Golden Valley should, where practicable, use trees, landscaping and related environmental site design features to capture and filter stormwater runoff within the right of way, in a manner appropriate to the function and context of the facility.

Resource: <https://www.mwcog.org>



Action Plan: Vitality



The recommendation in this section of the report present different ways for the city of Golden Valley to turn the bike plan into an opportunity to strengthen local economic development.

Partnerships with local businesses will help to get the community excited about the bike network and encourage mode change. This excitement and encouragement will help the City to promote active living choices. Similiarly these partnerships will help to attract more people to the greater downtown area.

However, these changes will be out of reach unless the City continually engages with Golden Valley residents, community members and businesses. This engagement will be vital to the design, implementation and overall success of the Golden Valley Bike Plan.



Recommended Policies

Connectivity

Creating a Golden Valley Task Force

Recommendation: Convening a task force consisting of Golden Valley residents, businesses and community advocates will create a necessary City-public-private partnership needed to create a network that is reflective of Golden Valley. Such a taskforce will create a bicycle and pedestrian network that is “a solution for us, by us”. The task force would last for the duration of the planning process and members could apply or be invited by the City of Golden Valley. The task force members will bring a variety of perspectives of biking in Golden Valley. The city could identify and invite families, young professionals, bike advocates, retirees, business owners/managers, commuters etc to apply to be a part of the taskforce. This would provide a diverse cross section of bicycling and pedestrian needs and desires.

City Sidewalk Biking Policy

Recommendation: It is recommended that city staff, the city council and the project taskforce review the city’s current policy. A decision should be made that determines if the city wants to encourage or discourage sidewalk biking in the long run. The decision should be widely publicized by the city in coordination with the Golden Valley Bicycle Plan. Creating a map of the current bike network (with or without sidewalks) and publicizing the decision will help to educate the public and provide an opportunity to discuss safety practices related to biking in Golden Valley.

Connecting Residents to Destinations

Recommendation: Prioritizing and creating stronger connections between a variety of destinations should allow people to comfortably commute to work, run errands, and enjoy various other neighborhood amenities in a more active and healthy manner. The use of strong community engagement techniques can be used to identify the top priority places people would like to access through walking or biking.

Addressing the Gaps

Recommendation: Designing infrastructure in such a way that non motorized traffic can navigate around areas that are meant only for cars will be a necessary aspect of a successful bike plan. To accomplish this, bike routes must be planned so that riders are not put into situations where they occupy the same space as cars moving at excessively high speeds. The routes must also be designed so that non motorized vehicles are not tempted to take dangerous shortcuts. Navigating significant and dangerous obstacles such as highways should be made as simple and intuitive as possible.

Intersection Improvements

Recommendation: The City Public Works should analyze traffic counts and accidents with car, bicycle density uses determine problem intersections that need to be altered by signal timing, restriping, or changing curb geometries. Based on the findings, the City should use a prioritization methodology to implement these measures. The city should monitor for improvements through analyzing the reduction in accidents and feedback from residents and employees.

Specific Route Recommendations

Recommendation: Conduct further analysis using traffic counts and road infrastructure among other resources to determine type of bicycle facility will best serve the future bicycle network.

Strengthen Connections to Regional Trails

Recommendation: Building strong connections to the existing regional trails will help to encourage biking in Golden Valley and beyond. The proposed network of improvements will connect to the regional trail system in key places. The recommended bike network shown above in blue lines with connections to the regional trail system shown with red circles.

Recommended Policies

Prioritization of Roads

Recommendation: Creating a Prioritization methodology will help Golden Valley build a framework for identifying projects that have the highest needs as they relate to the overall goals of the plan. Such a methodology will ensure that the city is investing in an efficient and cost effective manner that continually enhances the bicycle and pedestrian network. The methodology for Golden Valley can be derived from the prioritization methodology created by Hennepin County. Hennepin County used the five categories of Network Connectivity, Overcoming Gaps & Barriers, Demand, Safety and Social Equity. The county determined separate criteria for each category. Each project was given a numerical score in each category. The projects with the highest score received top priority.

Golden Valley Grand Rounds

Recommendation: The implementation of a Grand Rounds will be visually pleasing and create a continuous network of open space which will improve quality of life in Golden Valley. Similar networks have already been created in some communities within the Twin Cities metro area, including both Saint Paul and Minneapolis, as well as plans for a future trail system in other suburban communities.

Connectivity Engagement

Recommendation: Utilize Tactical Urbanism. These demonstrations will remain in place anywhere from a day to a couple of weeks. Installing these changes temporarily allows the community to see how proposed changes could look and function on their neighborhood streets. This approach can help ease fears that changes to the roadway configuration would have a negative effect on car traffic.

Safety

Advisory Signage

Recommendation: The City of Golden Valley should have at minimum a sign stating 'Bike Route' on all streets with bike-able shoulders, or that intersect the Luce Line or other bike trails. The City should create more specific signage to improve safety based on the needs of that road or intersection.

Wayfinding Signage

Recommendation: On all public trails, wayfinding signs should be located every mile to direct bikers to destinations. Wayfinding signs should also be located downtown to direct bikers off of trails to local businesses.

Sidewalk and Path Maintenance Policies

Recommendation: The City of Golden Valley should actively audit sidewalks and trails every spring to ensure safe walking and biking conditions. Residents of Golden Valley will be informed of ways they can report unsafe sidewalk and trail conditions.

Making the Most of the Current Right-of-Way

Recommendations: The City of Golden Valley and Hennepin County will research the safest type of bike pathway will be safest and most efficient for that street using traffic counts, bicycle counts, pedestrian counts, etc. Some residential streets may just need a striped shoulder, while others will need separated bikeways. Regardless of type of bike pathway, advisory signage should be included in plans to inform both drivers and bikers about road uses. Examples of bike paths can be found in Bike Planning 101 Section.

Safety Engagement

Recommendation: Share information on safety on the city website so that drivers can easily be directed to this important safety information.

Recommended Policies

Vitality

Continued Public Engagement

Recommendation: The best way to engage a diverse cross section of residents to speak with people at pre-existing events. A booth for education and participation at farmers markets, school events, houses of worship and other community events will allow the city to speak with people who might be unaware of the project. It would also benefit the City to reach out to prominent community figures and use their connections to further engagement efforts. A Golden Valley Bicycle Task Force could serve as project ambassadors and educate the public on the project while engaging them in the process.

Pre-Opening & Post-Opening Events

Recommendation: The City of Golden Valley should partner with the business community to create an engagement plan that will keep the public interested in this plan before and after it is opened. There are quite a few methods to be used that will get people using the network for relatively low cost.

Conduct a "Bicycle Friendly Business Audit"

Recommendation: Conduct a Bicycle Friendly Business Audit. Businesses and property managers are likely unaware of the steps they can take to make their businesses bike and pedestrian friendly. The City of Golden Valley should conduct a simple audit workshop with property managers and businesses. The workshop can use tools like Google Maps to explore private property barriers like no bike parking or lack of pedestrian walkways. A simple workshop will educate and engage businesses on how they can help. Investments made to improve private property will help to ensure safety and connectivity for non-motorized travelers. Businesses will benefit from these investments through improved accessibility to new customers.

Business Employee Bicycle Program

Example: Launch a Corporation Bike Commute Program. This strong employee program is comprehensive and supportive. Employees have access to showers, secured indoor bike parking and a repair station. These amenities make it easy for employees to bike to work.

Pedestrian Overlay District

Recommended Policy: Create Pedestrian Overlay Districts. Pedestrian overlay districts in key Golden Valley areas can transform the nature of those destinations. The policy and subsequent changes and development will create an atmosphere that is more similar to a historic downtown rather than a strip mall. The popular places in Golden Valley will become an area for the public to stay rather than only run errands.

Landscaping and Green Streets

Recommended Policy: Adopt a Green Streets Policy. City of Golden Valley financed and approved transportation projects in Golden Valley should, where practicable, use trees, landscaping and related environmental site design features to capture and filter stormwater runoff within the right of way, in a manner appropriate to the function and context of the facility.

Recommended Policies

Report Conclusion

The purpose of this report was to develop recommendations for the City of Golden Valley on how to best design, implement and maintain a successful bicycle network. An analysis of existing conditions, stakeholders, best practices and relevant literature led to these guiding principles:

Connectivity

The plan aims to build a bicycle network that allows users of all ages to better access destinations within Golden Valley and beyond.

Safety

The Golden Valley Bicycle Plan should be designed with safety in mind. It will create a network where users of all abilities will feel comfortable using the network for recreation and transportation purposes.

Vitality

Intentional design and continued community engagement can transform the Golden Valley Bicycle Plan from a simple transportation network into a community amenity and city asset.

While the recommendations in this report range from hyper specific to broad. The next steps in this planning process should heavily rely on the expertise of Golden Valley City staff and their analyses. Those analyses should be presented to the Golden Valley community for their input. This document can serve as a starting point for a planning process that should produce a bicycle network for the city of Golden Valley that is viewed as a community asset.

Recommendations for Golden Valley
Bike and Pedestrian Network

Connectivity Recommendations									
Task	Goal Fulfilled			Cost		Timeline			
	Connectivity	Safety	Vitality	\$	\$\$\$	Short Term	Long Term		
1. Creating a Golden Valley Bicycle Plan Task Force	x	x	x	x		x			
2. City Sidewalk Biking Policy	x	x	x	x		x			
3. Connecting Residents to Destinations	x		x		x		x		
4. Addressing the Gaps	x		x		x		x		
5. Intersection Improvements	x	x			x		x		
6. Specific Route Recommendations	x		x	x		x			
7. Strengthen Connections to Regional Trails	x		x		x		x		
8. Prioritization of Roads	x		x	x		x			
9. Golden Valley Grand Rounds	x		x	x		x			
10. Connectivity Engagement	x		x	x		x			
Safety Recommendations									
Task	Connectivity	Safety	Vitality	\$	\$\$\$	Short Term	Long Term		
11. Advisory Signage		x		x		x			
12. Wayfinding Signage	x	x	x	x		x			
13. Sidewalk and Path Maintenance Policies		x		x		x			
14. Making the Most of Current Right of Way	x	x	x		x		x		
15. Safety Engagement	x	x			x		x		
Vitality Recommendations									
Task	Connectivity	Safety	Vitality	\$	\$\$\$	Short Term	Long Term		
16. Continued Public Engagement			x	x		x			
17. Pre-Opening and Post-Opening Activities			x	x		x			
18. Conduct a "Bicycle Friendly Business" Audit			x	x		x			
19. Business Employee Bicycle Program			x	x			x		
20. Pedestrian Overlay District	x	x	x	x		x			
21. Landscaping and Green Streets	x		x		x		x		

References

"Active Living." Hennepin County, Minnesota, 2016. Web. 28 Apr. 2016.

"Biking." Hennepin County, Minnesota, 2016. Web. 28 Apr. 2016.

"Brooklyn Park Pedestrian & Bicycle Plan." Brooklyn Park. 2015. Web. 28 Apr. 2016.

Bryson, John M., et al. "Designing public participation processes." *Public Administration Review* 73.1 (2013): 23-34.

Buehler, Ralph. Pucher, John. 2012. *City Cycling*. MIT Press. Cambridge Mass.

"City of Eden Prairie Pedestrian and Bicycle Plan." Eden Prairie, MN 2014. Web. 28 Apr. 2016.

"Community Profile - Research Web Community Profiles." *Community Profile - Research Web Community Profiles*. Web. 28 Apr. 2016.

"Complete Streets." Hennepin County, Minnesota, 2016. Web. 28 Apr. 2016.

"Complete Streets in Minnesota." Minnesota Department of Transportation, 2016. Web. 28 Apr. 2016.

"Comprehensive Plan." City of Golden Valley, 2013. Web. 28 Apr. 2016.

"Cool County." Hennepin County, Minnesota, 2016. Web. 28 Apr. 2016.

Dittmar, Hank. Ohland, Gloria. 2004. *New Transit Town: Best Practices in Transit Oriented Development*. Island Press.

"Hennepin County Pedestrian Plan." Hennepin County, Minnesota, 2013. Web. 28 Apr. 2016.

Forsyth, Ann. Jacobson, Justin. 2008 *Seven American TODs: Good Practices for Urban Design in Transit-Oriented Development Projects*.

National Association of City Transportation Officials. *Urban Street Design Guide*. Island Press.

"Planning, Design, and Technology." Three Rivers Park District, 2016. Web. 28 Apr. 2016.

Pryde, Bright. Roberts, Danielle. Van der Hoff, Ruby. 2007. *Transit Oriented Development: Best Practices Handbook*. Calgary.

"Regional Parks Policy Plan." Metropolitan Council, 2015. Web. 28 Apr. 2016.

"Route: Connecting Brooklyn Park, Crystal, Robbinsdale, Golden Valley & Minneapolis." Metropolitan Council, 2013. Web. 28 Apr. 2016.

Shoup, Donald. 2005. *The High Cost of Free Parking*. Planners Press. Chicago.

Speck, Jeff. 2013. *Walkable City: How Downtown can Save America, One Step at a Time*. North Point Press.

"Statewide Bicycle System Plan." Minnesota Department of Transportation, 2016. Web. 28 Apr. 2016.

"Statewide Pedestrian System Plan." Minnesota Department of Transportation, 2016. Web. 28 Apr. 2016.

"Summer & Winter Street Maintenance." City of Golden Valley, 2013. Web. 28 Apr. 2016.

"Transportation Planning." Metropolitan Council. Web. 28 Apr. 2016.

"Transportation Planning and Design." Hennepin County, Minnesota, 2016. Web. 28 Apr. 2016.

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