

# MAKING THE CONNECTION: MIDTOWN GREENWAY TO LAKE STREET

DIVING DEEP ON COMMUNITY FEEDBACK,  
RECOMMENDATIONS, RESEARCH, AND DATA



A plan created through a partnership of Hennepin County, the City of Minneapolis, the Midtown Greenway Coalition, the Lake Street Council, and the Midtown Community Works Partnership

May 2016



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West side of the Sabo Bridge, near Little Earth Trail and Hiawatha Avenue



## 00. INTRODUCTION

Two decades ago, the Midtown Greenway was a derelict railroad trench. Now, each year people take more than a million trips on this unique, nearly car-free trail connecting the Mississippi River and the Chain of Lakes. A host of destinations lie along its 5.5-mile route, including thousands of new housing units and Lake Street, the thriving commercial corridor just a block and a half from much of the Greenway. Nevertheless, people who might want to exit the Greenway or get onto it face significant barriers, both physical and cultural. The resulting missed connections and lost opportunities limit the Greenway's effectiveness as a transportation route and neighborhood asset.

The Midtown Community Works partners — Hennepin County, the City of Minneapolis, the Midtown Greenway Coalition and the Lake Street Council — have conducted extensive research and community outreach to develop an in-depth understanding of these challenges in the context of the Greenway's overall success.

This plan purposely addresses those barriers. It is grounded in feedback from Greenway commuters, recreational users, underserved populations in the Midtown corridor, local business owners, and a variety of other stakeholders, who were consulted during the summer and fall of 2015. It outlines an array of recommendations, emphasizing new approaches to partnerships, diverse funding sources and "lighter, quicker, cheaper" design solutions. Physical improvements are also detailed,

as are possibilities for community programming and developing more effective engagement between local businesses and Greenway users.

Completing this plan is part of Hennepin County's efforts to wrap up the Midtown Community Works program, yet acting on its recommendations will require a shared and focused effort by all stakeholders in the Midtown corridor. This plan reveals tremendous opportunities to forge new connections and strengthen existing ones all along the Midtown Greenway. Tapping that potential can help ensure its success in the coming 20 years as a full-fledged community asset — one that better serves and is valued by nearby neighborhoods, businesses, and the larger community.



- Connection to key commercial and/or cultural destination
- Business district
- Access point



From Nicollet Avenue bridge looking west toward 1st Avenue



- Midtown Greenway
- Lake Street
- Existing on-street bikeway
- Existing off-street bikeway
- Planned on-street bikeway
- Planned off-street bikeway

# 01. PROJECT SCOPE

## HOW THE PLAN AREA WAS DETERMINED

The Midtown Greenway occupies a historic railroad bed stretching from the Mississippi River on its eastern edge to the city limits on its western border. It crosses north-south bicycle routes along its entire length and parallels one of the most iconic commercial corridors in Minneapolis, Lake Street. It passes through many neighborhood business districts and intersects major streets like Hennepin, Lyndale, Nicollet, Chicago, and Hiawatha.

The research area for this plan focuses on the Midtown Greenway from the Minneapolis Chain of Lakes Regional Park to the Mississippi Gorge Regional Park to the east; areas a few blocks north and south of the corridor are also considered as part of an effort to better understand the connections to the community and vice versa. The western portion of the corridor was analyzed during the West Lake Multimodal Transportation Study. See <http://tinyurl.com/hxk5kz5> for more details. In accordance with that study and conversations with participating agencies, this Midtown Connections plan offers wayfinding recommendations in the West Lake area.

## DESTINATIONS

Partners and policymakers helped identify key destinations along the corridor. These locations were reviewed at a planning level to understand the scale and density of nearby destination centers (see Appendix A, page 89). Detailed maps later in this report identify specific

destinations and businesses in the plan area, while the diagram above indicates business districts and parks in the corridor.

## CATEGORIES OF RECOMMENDATIONS

A wide-ranging list of possible improvements to the Greenway informed by public input, research, and data are included in this plan. To simplify and clarify, the implementable approaches were grouped into the four following categories:

- 

**CONNECTING TO THE TRANSPORTATION NETWORK**

Increasing the visibility of the Midtown Greenway and enhancing connections to nearby bike lanes and trails.



**PART OF THE NEIGHBORHOOD**

Welcoming neighbors and businesses to the Greenway via placemaking and programming.
- 

**GETTING TO KEY DESTINATIONS**

Improving orientation along the Midtown Greenway and connecting important destinations to Greenway access points.



**BICYCLIST AND PEDESTRIAN SAFETY**

Raising the visibility of all Greenway users and enhancing street crossings and streetscapes.



Community engagement activities at Nicollet Open Streets

## 02. UNDERSTANDING THE BARRIERS

The project team relied on several methods to identify and understand the barriers limiting the connections between the Greenway and the nearby businesses and communities, and to identify opportunities for improving these connections. This process was rooted in ongoing collaboration, analysis, and review by project partners as well as input from the community. This section provides a high-level summary of the methods and findings, highlighting the summer 2015 design experiments and community engagement efforts.

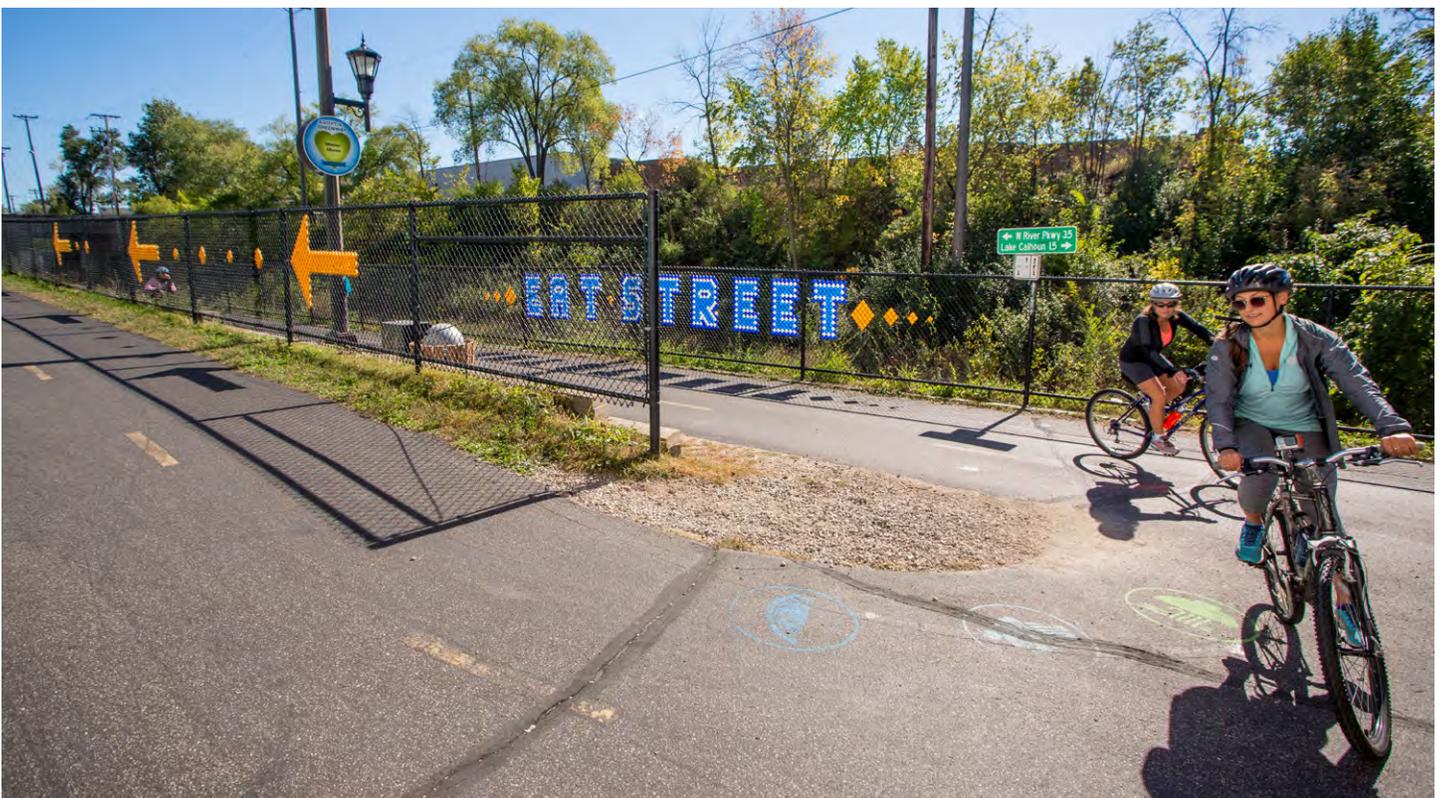
### **SITE REVIEW AND DATA ANALYSIS**

The initial stage of the study process included review and analysis of past, current, and future county and city Capital Improvement Plan (CIP) projects intersecting with the Greenway. In addition, the team summarized previous reports and planning studies as part of a review of relevant documents (see Appendix A, pages 96-97 for complete list of CIP projects and a summary of previous studies).

Project team members traveled the Greenway and the connections by foot and bike to catalog and verify existing conditions and physical barriers. The team also collected and analyzed existing data for the areas surrounding every access point along the Greenway. The team examined the conditions of the connections at each Greenway access point by evaluating interrelationships between multiple factors. The key factors and conditions included in the analysis are shown in the table on the following page.

## Site review and data analysis factors

Conditions/data	Description
Key destinations	Key commercial nodes, museums, shopping centers, parks, and cultural and community centers
Visibility/trail grade	Visibility of transportation network and neighborhood from Greenway (at grade or in the trench)
Accessibility	Trail access type (at grade, ramp, stairs, dirt path, none, private)
Present and planned bike network connections	Missing or unclear links between the Greenway and nearby existing/planned bikeways
Lake Street crashes	Vehicle crashes at Lake Street intersections involving people walking and biking from 2012 to June 2015. For more detail see Appendix A, pages 102-103.
Greenway crashes	Vehicle crashes at Greenway intersections involving people walking and biking 2007 to 2014
Bike parking	Counts of bike parking on and near Lake Street
Percent of population below poverty rate	2009-2013 American Community Survey 5 year estimates - Census block groups within 1/8 mile of the Greenway. For more detail see Appendix A, pages 98-99.
People of color as a percent of total population	2010 Census - census blocks within 1/4 mile of the Greenway. For more detail see Appendix A, pages 100-101.



Eat Street fence cups indicating access to Nicollet Avenue



Mural at Bloomington Avenue created by artist Bill Rebholz

## 2015 Street Design Experiments

Hennepin County Community Works and City of Minneapolis Urban Design staff tested strategies to make Greenway spaces more welcoming and friendly and encourage Midtown Greenway users to visit Lake Street and nearby commercial corridors and cultural designations. Together, the project partners implemented temporary low-cost design experiments at four access points along the Greenway in late summer and early fall 2015 and collected feedback from community members on the effectiveness of the design experiments.



Arrows created by artist Sam Homan lead to Midtown Global Market

### GREENWAY PLACEMAKING LOCATIONS

- Nicollet Avenue
- 10th/11th Avenues (Cepro green space)
- Bloomington Avenue
- 26th Avenue

### TYPES OF PLACEMAKING STRATEGIES INSTALLED

- Creative wayfinding signage on fences, bridges, and the trail
- Painted icons, arrows, stencils and other designs on the pavement
- Bike rack and fix-it stations
- Seating, shade umbrellas and games



Mural by artist Shawn McCann celebrates the Midtown Global Market

### FINDINGS

- 51% said the design experiments were very helpful in aiding them to better recognize specific entrances and exits on the Greenway.
- 1 in 4 said the design experiments encouraged them to change their route or destination
- 77% said experiments "positively" or "very positively" affected their Greenway experience

*I really like the EAT STREET fence cups! They help me know where I want to get off of the Greenway. I wish they could stay up because they've become important to my route navigation.*

--Trail user in person comment at access ramp

For more information on the design process, see the City of Minneapolis webpage on Urban Design "Greenway Placemaking": <http://www.minneapolismn.gov/cped/lrp/WCMS1P-148842>.

## Community Engagement

The project team intentionally incorporated a variety of integrated strategies to engage many and diverse stakeholders, including Greenway users, local businesses, and underserved communities within the neighborhoods that the corridor passes through. They also reviewed results from past community engagement efforts pertaining to the Greenway. Community engagement included four main strategies:

- Community surveys
- Tabling at community events
- Focus groups and other small group discussions
- Business surveys

Stakeholders are passionate about the Greenway and optimistic about strengthening its ability to connect diverse neighborhoods, residents and businesses. The results revealed broad support for creative elements that would make the Greenway more inviting and indicated a need for better wayfinding strategies in the corridor. A high-level description of the community engagement activities and findings follows.

## COMMUNITY SURVEYS AND EVENT TABLING

The project team tabled at the Midtown Phillips Festival and the East Lake Street and Nicollet Avenue Open Streets events in summer and fall 2015. Strategies included temporary sidewalk stencils, a prize wheel, a mapping activity in which people mapped their Greenway routes, and a visual preference voting board with photographs of creative wayfinding examples for people to respond to and vote on. Over 200 participants at these events provided feedback on potential wayfinding strategies and the temporary street design experiments that were installed in the late summer.

*I often bike with a general destination in mind, but signage would encourage spontaneous stops at new places, one of my favorite things about biking.*

--Survey participant

## PRELIMINARY SURVEY

The project team conducted two sets of surveys. The first was a pilot survey in August 2015 at the East Lake Open Streets event to gather preliminary information on barriers and preferences for wayfinding strategies. At the



event, the project team administered English and Spanish surveys and displayed posters with images of wayfinding examples for voting.

### FALL 2015 SURVEY

In fall 2015, the project partners conducted a second community survey to evaluate the design experiments and collect more community input on strategies to improve the Greenway's connection to Lake Street and other nearby destinations. The project partners collected 408 surveys through multiple methods: online, in person at Nicollet Open Streets, during four focus groups with people of color from the community, and intercepting Greenway users during peak travel hours near the design experiment project sites. For more detail on survey results, see Appendix B, pages 113-131.

### KEY FINDINGS FROM COMMUNITY ENGAGEMENT

- Traffic safety concerns on Lake Street and connecting streets were the most prominent barrier preventing people on the Greenway from going to Lake Street.

*[I wish] Lake Street wasn't so car-centric. I'll avoid getting off of a fabulous bike route to enter 'car world' unless I absolutely have to.*

--Survey participant

- Survey participants indicated lack of convenient access from the Greenway was one of the biggest obstacles to accessing Lake Street and other surrounding business districts.
- Wayfinding would encourage Greenway users to go to Lake Street and surrounding areas by sparking their interest in exploring and reminding people of where they are relative to the surrounding neighborhoods and business districts.
- The need for better and more secure bike parking was a common theme.
- Cyclist-oriented promotional efforts would strengthen the relationship between the Greenway, Lake Street, and the surrounding neighborhoods.



Map used to request feedback at events in summer 2015. Colored lines represent participants' hand-drawn routes.

## Focus Groups

The Greenway travels through one of the most ethnically and racially diverse communities in Minnesota. As the team sought public input through various engagement strategies described previously, it became clear these methods were not sufficiently providing a representative perspective from people of color in the nearby neighborhoods. The project team added a series of focus groups in fall 2015 to hear from these populations about their perspectives on the Greenway.

### K'MA GROUP SUMMARY AND FINDINGS

Kenya McKnight of the K'MA Group conducted three focus groups with African immigrants, African Americans, and American Indians. McKnight utilized a community-based participatory research approach to help the project team better understand how underrepresented communities experience the Midtown Greenway.

McKnight also referenced findings from the K'MA Group's work on an earlier effort, the Active Transportation study conducted earlier in 2015, which emphasized perspectives on the Greenway shared by Hispanic communities. The focus groups provided a wide range of diverse perspectives on the barriers to Greenway usage and opportunities for better connecting and engaging the area's diverse communities. The full K'MA Group report provides detailed findings and recommendations for more inclusive community engagement in active transportation. The report is available in Appendix B (pages 133-161 and at: [www.hennepin.us/midtown](http://www.hennepin.us/midtown)).

In general, the focus group participants had an interest in the Greenway and believed it could benefit their communities by supporting physical activity, jobs, better connections to cultural institutions, and programming.

*In essence the Greenway was built for everyone, but I don't feel very welcomed. I like to sit along the parkway and in green areas late in the evening, but if I am seen there at night the police may be called on me because I'm black.*

--Focus group participant



Visual voting at Nicollet Open Streets

### BARRIERS

- Community members from the three focus groups as well as the Hispanic community members from the earlier study indicated they often do not feel welcome on the Greenway because of racial biases and stereotypes directed towards them. In addition, many of these community members have concerns about being targeted by police as criminals for using the Greenway.
- The lack of convenient access points also prevents members of these communities from using the Greenway.
- Some potential users are deterred by perceptions of violence and criminal activity in the Greenway.



Map used for gathering community input at Open Streets

## RECOMMENDATIONS

- More inclusive opportunities for their communities to participate in active transportation planning processes are needed. The K'MA Group report provides detailed recommendations on strategies to make planning processes inclusive.
- Culturally relevant programs, events and public art would help underrepresented communities feel more welcome on the Greenway. All three focus groups recommended cultural images and historical information to create a sense of ownership and provide visitors and residents with insights into the communities living in the surrounding areas.
- Programs with community members working as ambassadors to the Greenway would help increase security and create a sense of welcome.
- Facilities to make pedestrians and families feel more welcome are also needed.

## RISEN CHRIST – LATINO YOUTH FOCUS GROUP SUMMARY AND FINDINGS

An additional focus group with Latino teens attending Risen Christ Jesuit School was conducted by project consultant Damon Farber.

- The Risen Christ focus group participants' experience of the Greenway is mostly limited to playing soccer at the adjacent Kix Field.
- The youth feel welcome on the Greenway, but have some personal safety concerns, particularly because of people sleeping and loitering on the Greenway.
- Students liked the design experiments.



This Lake Street business mural by artist Greta McLain adds vibrancy to the street



Many shoppers arrive by bus or car to local business Lake Plaza near 5th Avenue despite the Greenway being less than two blocks away

## Business Survey

The Lake Street Council conducted a survey of 24 businesses near Lake Street to better understand how businesses viewed bicyclists and the Midtown Greenway. Staff from the Lake Street Council visited businesses door-to-door or called by telephone. The survey focused on understanding the businesses' perspectives on the potential for attracting more cyclists as customers and assessing businesses' willingness to invest time and money into amenities for cyclists. See Appendix B, pages 164-167 for a sample of the business survey.

### FINDINGS

- Overall, businesses had a strong interest in learning how to better cater to bicyclists.
- 23 of the 24 of businesses believed it would be helpful to be better connected to the Greenway.
- 78% said that they would like to develop a plan for attracting more bicyclists to their business.
- 73% were willing to pay their portion for the cost of the City of Minneapolis bike rack cost share program to provide more bike parking for their customers.

### PARTICIPATING BUSINESSES

- Abi's Cafe
- Addis Ababa Ethiopian Restaurant
- Black Forest Inn
- Copper Hen
- Eastlake Brewery (Midtown Global Market)
- Gandhi Mahal
- Golden Horn Restaurant
- Ingebretsen's
- La Mexicana
- La Perla (Mercado Central)
- La Poblana
- Lake Coffee
- Le Town Talk
- Los Arcos Imports (Mercado Central)
- PC Doctor (Mercado Central)
- Produce Exchange (Midtown Global Market)
- San Miguel Panaderia
- Somali Museum of Minnesota
- Southpoint Community Accupuncture
- Super Mercado Morelia
- Taco Cat (Midtown Global Market)
- Taco Taxi
- Tacos de Primo (food truck)
- The Hub Bike Co-op

*My biggest problem as far as Lake Street businesses is knowing where they are in relation to the Greenway.*

*It would also be cool to have pop up stores, or restaurants/food trucks relating to Lake Street on the grassy right of way along the Greenway. Bring some of the Lake Street businesses to the Greenway on busy weekends.*

*--Survey participants*



CityKid Farm is run by Urban Ventures and located along the Greenway at Fifth Avenue

## 03. RECOMMENDATIONS TO INCREASE CONNECTIONS AND REDUCE BARRIERS

High-level corridor-wide maps illustrate how these recommendations can be implemented along the entire Greenway, and how they work together to build an improved Midtown Greenway that accommodates the needs of existing commuters, neighbors, businesses and visitors to the corridor. More details on the specific recommendations can be found on the pages immediately following the corridor-wide maps.

These recommendations represent preliminary designs and should not be mistaken for a construction-ready plan. Design details support cost estimation only and will change. A more complete design process, including some community engagement, will be necessary as individual elements of the plan move towards implementation. Many of the improvements shown

will need further development before they are ready for implementation, and many are proposed for the public right-of-way. Implementation will require coordination with Hennepin County Regional Railroad Authority (HCRRA), Minneapolis Park and Recreation Board (MPRB), Minneapolis Public Works, the Metropolitan Council, and other property owners.

Each of the following categories includes a section for near term recommendations that are accounted for in the cost estimates for this plan, as well as long-term recommendations that are not. This plan will require the efforts of community stakeholders to organize and advocate for solutions in order to move toward successful implementation.

## Barriers Analysis Key Findings

Residents, visitors, and businesses face a wide range of challenges when trying to connect to the Greenway. Four themes emerged in the barriers analysis process; they are described in detail on the following pages.



### CONNECTING TO THE TRANSPORTATION NETWORK

Greenway entrances are hard to find and gaps in bike and pedestrian-friendly routes to and from the Greenway make navigation challenging. Additional bike lanes and visual cues will improve connections making the Greenway easier to access. Bike friendly business initiatives will draw new customers to local businesses and destinations. (See pages 18-21.)



### PART OF THE NEIGHBORHOOD

Residents of adjacent neighborhoods, particularly people of color, are underrepresented in today's mix of Greenway users. Quality public spaces with attractive amenities at key locations will draw new users, while arts and cultural activities hosted by community partners will contribute to neighborhood identity and make everyone feel welcome. (See pages 22-27.)



Trail identification sign near the Midtown Greenway's intersection with 28th Street



Community mural near 4th Avenue



### GETTING TO KEY DESTINATIONS

Greenway users often report being disoriented to their surroundings, especially in the areas below street level. A wayfinding system throughout the Greenway will help people know where they are going, and orient visitors to destinations, bikeways, and community spaces. This system will include signage, map kiosks, and highly visible markers in a consistent color. (See pages 28-31.)

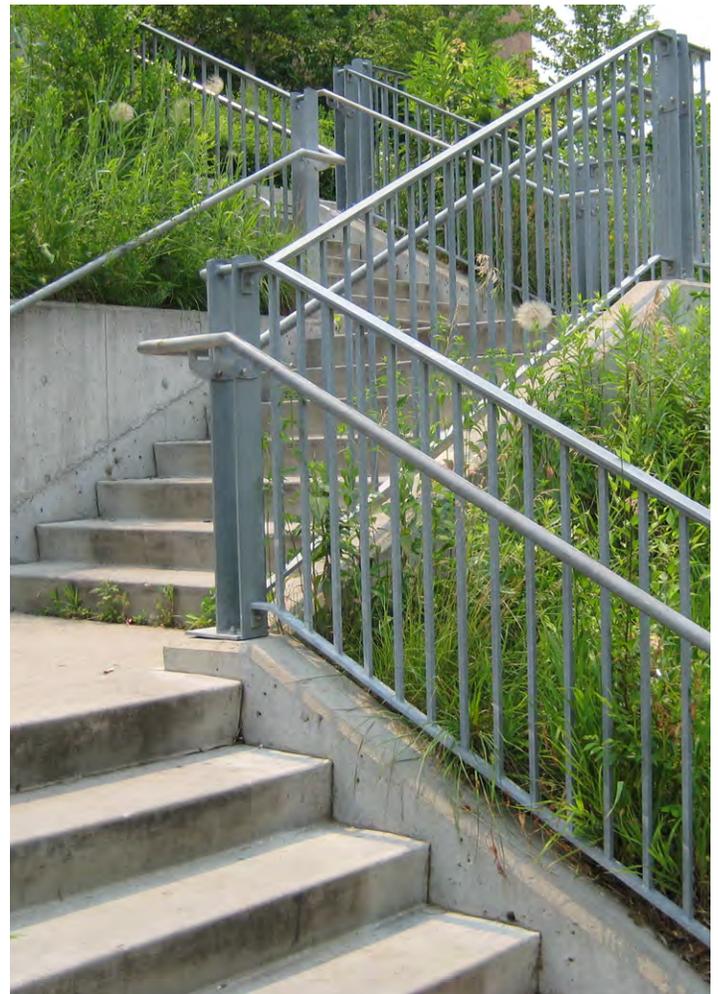


### BICYCLE AND PEDESTRIAN SAFETY

Survey respondents felt that many connections between Lake Street and the Greenway seem unsafe. This creates barriers for those who wish to access nearby destinations. Recommendations include upgraded crosswalks (painting and/or flashing lights), traffic calming, and signal adjustments, vegetation management, and new streetscaping with improved lighting. (See pages 32-37.)



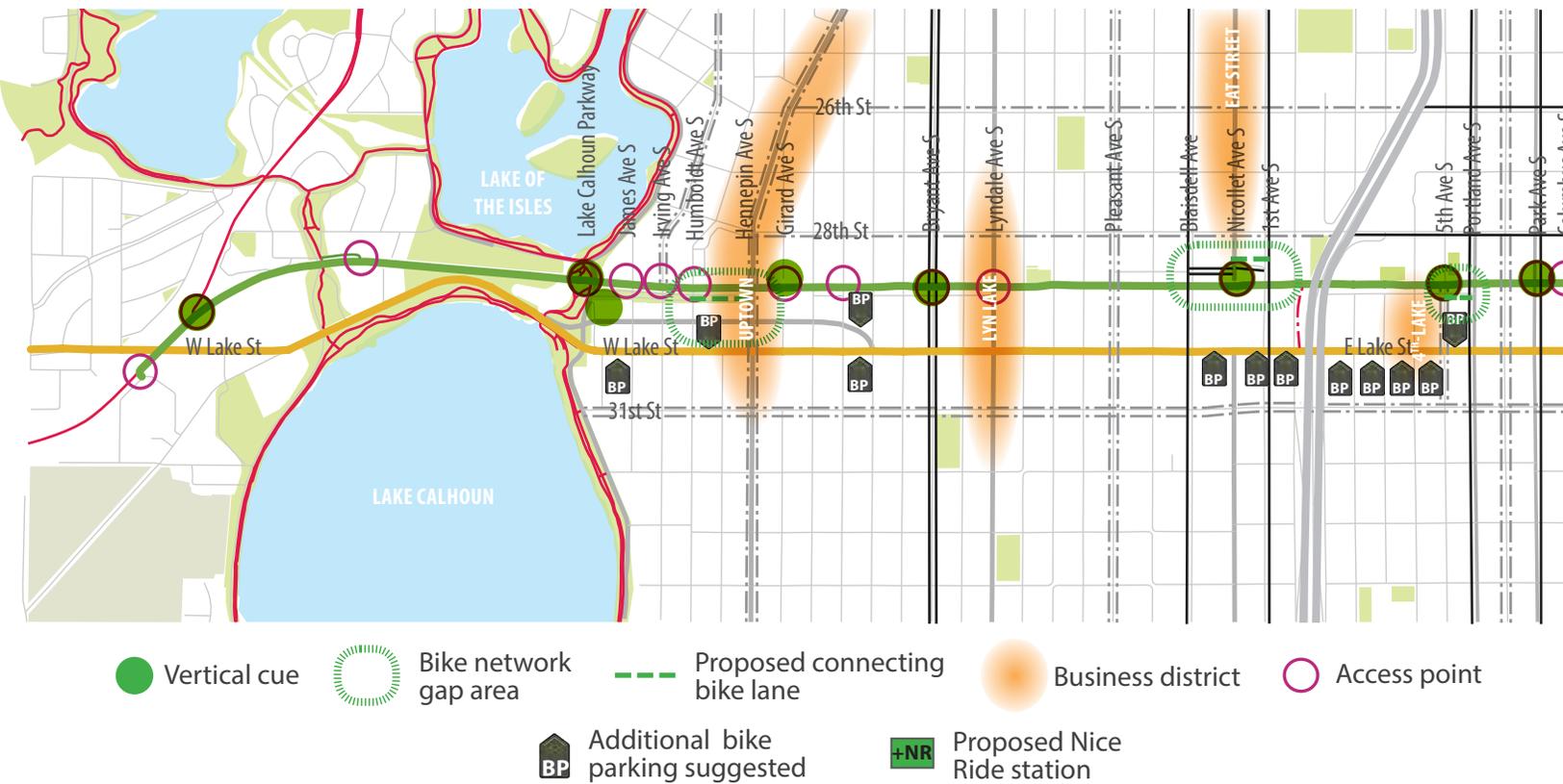
Existing wayfinding signage at Cepro near Midtown Global Market



Stairs at Chicago Avenue are obscured by vegetation

The way the Greenway doesn't connect directly to on street bike lanes is very frustrating (e.g., exit at 18th Avenue, but bike boulevard is on 17th, not 18th)! Also, 18th has no stoplight at Lake so it's not possible to cross there easily.

--Survey participant





# CONNECTING TO THE TRANSPORTATION NETWORK

Access points to the Greenway are difficult to find, as are routes between the Greenway and Lake Street commercial areas. This plan proposes additional connecting bikeways and visual cues at access points to enhance connectivity and visibility of the Greenway. Short bike-network gaps are addressed by recommending new bikeways to enhance connectivity between the Midtown Greenway and popular destinations or nearby bike boulevards. Encouraging bike friendly initiatives at businesses, such as installing bike racks and offering discounts for bicyclists, will encourage

and welcome all bike users. These strategic changes are intended to improve recognition of neighborhoods and destinations, while making the Greenway more welcoming and accessible.

*I want to see more bike access, there are very few places in south Minneapolis where we can get bikes.*

--Focus group participant



## BIKE NETWORK GAP IMPROVEMENTS

Filling short “gaps” in the existing bicycle network with striped bike lanes and/or shared lanes on city streets is critical to improving connections to nearby destinations. These gaps include connections from Humboldt to Hennepin, Nicollet to Blaisdell/First, Fifth to Portland and 18th to 17th Avenue.



21st Avenue was recently upgraded with bicycle facilities

*The Greenway is fantastic, but connection streets are still designed for vehicles -- bike traffic is secondary. The lack of safe connecting routes definitely deters me from biking with my children.*

--Survey participant

## BICYCLE-FRIENDLY BUSINESS STRATEGIES

Businesses along Lake Street are interested in better connections to the Greenway and want to attract more cyclist customers. Yet most do not have a plan for how to do so. Working with these businesses and local business associations to encourage more bicycle-friendly practices is an effective way to grow their cyclist customer-base. Providing location guidance for non-drivers on their websites and loyalty programs for cyclists are two simple and low cost strategies. Efforts that require more coordination, like business district signage or marketing campaigns can help raise awareness of the connections and emphasize the unique value of these local businesses. Sidewalk stencils, marketing events and other pop-up strategies are gaining popularity for attracting a wider range of customers. Business associations can (and do) support these efforts, but also have many competing priorities, so dedicated resources for implementation would be beneficial.

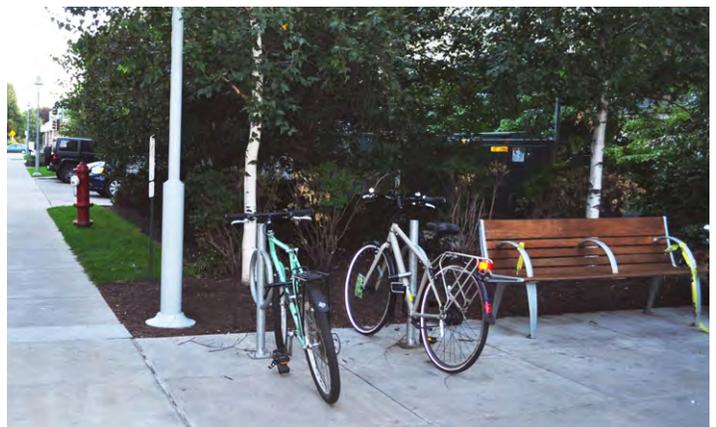
## VERTICAL CUES

Vertical cues are recommended at Midtown Greenway access points where visual connectivity is needed for trail access and identification. A vertical cue is a tall, slim metal post that serves as a beacon. At significant access points, the vertical cue could be a gateway structure.



## BIKE PARKING

Additional bike parking in secure and visible locations will make bicyclists more comfortable leaving their bicycles. Many businesses surveyed (73%) reported that they desired additional bike parking to attract more bicyclists. The City of Minneapolis cost-share program offers businesses bike racks with up to 50% of the cost absorbed by the city. Focused efforts should be made, with the Lake Street Council as a partner, to add bike parking at destinations where it currently does not exist or more is needed.



More bike racks are needed on the east side of the Global Market near the Greenway

*Bike racks would be better placed on the street near businesses. I worry about bike theft on Lake Street.*

--Survey participant

## NICE RIDE STATION EXPANSION

Nice Ride is conducting an analysis of their bike sharing network with a special emphasis on gaps in the Phillips and Cedar-Riverside neighborhoods. This plan recommends working with Nice Ride to secure funding for and identify two new Nice Ride stations on the Greenway (new stations indicated on the map near Bloomington Avenue and the Hiawatha LRT Trail intersection are placeholders for possible locations).



The Nice Ride station at 5th Avenue ranks in the top 25% of stations system-wide



## Long-term recommendations for Connecting to the Transportation Network

### MISSISSIPPI RIVER CROSSING

Many people and organizations, including the Midtown Greenway Coalition, support the idea of using the Mississippi rail bridge to build a stronger bike-pedestrian connection from the Greenway to St. Paul. However, the current bridge is used by the railroad, and trains run along the Greenway from the river to Hiawatha Avenue. If and when the railroad stops using it, the bridge could be studied for a bike and pedestrian crossing. Due to its age, the bridge's stability would need to be carefully assessed. If the bridge had to be removed for public safety, building a new one would pose a significant challenge.

### NEW ACCESS AT PILLSBURY OR PLEASANT AVENUES

The desire exists to build a new trail access along the north side of the Greenway between Pleasant and Pillsbury avenues, but this land is privately owned. The Whittier Alliance and Midtown Greenway Coalition have previously discussed this site; however, no funding has been identified. In 2009 and 2010 the Midtown Greenway Coalition conducted an Immigrant Engagement Project funded by the Minneapolis Foundation. Through this process, the Coalition learned that the Somali community desires better access to the Greenway at Pleasant and/or Pillsbury avenues. A ramp into the below-grade Greenway there would provide access to people coming and going from Karmel Square, Karmel Plaza, and Karmel Village, where Somali immigrants shop and live in large numbers.

## NICOLLET AVENUE REDEVELOPMENT AND STREETCAR

The City of Minneapolis is studying the possibility of re-opening Nicollet Avenue between 28th Street and Lake Street by reconfiguring the block, as well as adding streetcar service to Nicollet Avenue between downtown and Lake Street. The Nicollet Avenue streetcar environmental assessment is under Federal Transit Administration review, but should be publicly available later in 2016. These two projects have the potential to reconnect the neighborhood, support redevelopment, and improve safety and usability. Any future reconstruction that impacts the Nicollet Avenue bridge or trail access should take into consideration the opportunity to improve the narrow path conditions at the ramp bottom. For more information:

- Whittier neighborhood's visioning effort related to Nicollet Avenue: <https://sites.google.com/site/whittiernicolletlakevisioning/>.
- The city also has a webpage about this effort: <http://www.minneapolis.gov/news/special/NicolletandLake>





# PART OF THE NEIGHBORHOOD

## ENSURING THE GREENWAY IS WELCOMING FOR A WIDE RANGE OF GREENWAY USERS

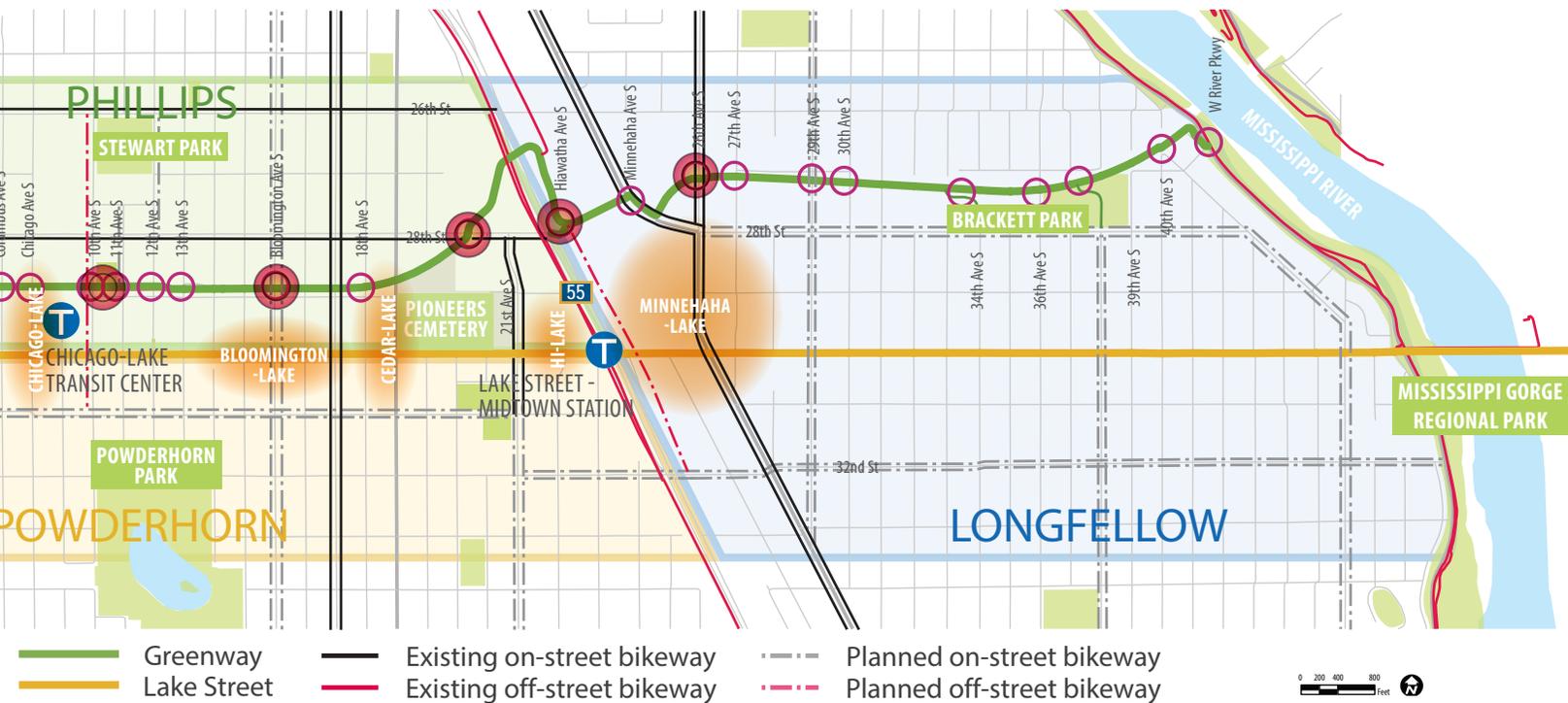
Response to the street design experiments in 2015 was positive, with broad support for eye-catching, artistic visual elements to guide people to and through the Midtown Greenway. Yet local communities of color currently do not feel welcome in the Greenway. They suggested that artistic elements with cultural references would encourage recognition of the diverse communities in corridor neighborhoods and that Greenway-centered programmatic outreach to their communities would make the Greenway more welcoming to a wider range of users.

*If community youth artists participated in the work then it would attract others to be a part of it.*

*There's not enough activities on the Greenway to attract our youth.*

*If we did group bike rides or walks, I would go more.*

--Focus group participants



### PLACEMAKING-SUPPORTIVE INFRASTRUCTURE

This plan identifies ten Greenway areas (see map on previous page) where there is sufficient space nearby for site amenities and other placemaking-supportive infrastructure in the Greenway, including Humboldt Avenue, Bryant Avenue, Soo Line Gardens, Nicollet Avenue, 5th Avenue, Cepro greenspace (between 10th and 11th Avenues), Bloomington Avenue, 28th Street, Hiawatha LRT Trail, and 26th Avenue.

Rather than programming each of these spaces with a prescriptive set of public amenities, collaboration with the project partners and nearby community and cultural organizations (see Appendix B, pages 170-171) will help determine the unique needs for each space. Since these sites are controlled by a range of partners, including the Hennepin County Regional Rail Authority, the Minneapolis Park and Recreation Board, the

Metropolitan Council, and others, their participation in the design of the site amenities will be critical as well. Modest investment in supportive infrastructure at each of these locations in accordance with the outcomes of a community-led design process will support long term community involvement.

*I would like to see more Native cultural arts.*

--Focus group participant

Examples of amenities that the community would welcome at these locations include: seating areas and rest stops, fitness zones, art installations, and performance spaces. These amenity areas can serve as opportunities for expressing the unique qualities of each neighborhood, business district, or cultural community, and increase Greenway user understanding of the nearby assets of these communities.



Existing seating area at Brackett Park and 38th Avenue Greenway access

### CREATIVE PLACEMAKING PARTNERSHIP WITH CITY

Across the country, underutilized public spaces are being transformed into active and valued community places using the techniques of creative placemaking. Creative placemaking creates connections between people and places and uses creativity and the arts to improve public spaces and the public realm. The City of Minneapolis recently developed the Creative City Road Map, a 10-year vision for how art and creativity can strengthen the city's economic and social development.

*Creative placemaking is an evolving field of practice that intentionally leverages the power of the arts, culture and creativity to serve a community's interest while driving a broader agenda for change, growth and transformation in a way that also builds character and quality of place. --Creative City Road Map*

*The Greenway is for everyone. I would like to have a picnic with my grandson, play, and relax.*

--Focus group participant

This plan recommends that the project partners collaborate with the city to intentionally develop two community amenity sites that will serve as models for collaboration and creative placemaking with the local arts community. One possible strategy includes the deployment of artists-in-residence through the city's Creative CityMaking program in order to help support stronger connections between the partners and community cultural and arts organizations in the co-development of design strategies with the city's urban design team. In this scenario, the county could provide the investment in hardscape or infrastructure in support of placemaking, while the city could support programmatic events and activities.



City of Minneapolis "Cedarside" placemaking and public engagement

## COMMUNITY USE OF GREENWAY SPACES

The Greenway already serves as a welcome home to a variety of community events, including the Greenway Glow, Powderhorn 24, charitable bike rides, and many others. However, expanding these moments of celebration to include cultural communities can help make some of these festivals more welcoming to a wider range of Greenway users.

## SEED FUNDING TO DEMONSTRATE THE POSSIBILITIES FOR ACTIVITIES AND EVENTS

Providing initial seed-funding and seeking additional grants-based support for a wide-range of community programming will help activate these new Greenway spaces. Many cultural and arts-based organizations in the corridor are already at capacity with existing programming activities. They will need some inspiration and a certain amount of financial support, at least in the near term, to see the benefits of expanding their programs down onto the Greenway. Having experienced the value of increased participation and audience from Greenway users, these organizations will ultimately seek the opportunity to do so on their own in the future.

Examples of the types of activities that could be supported include: Greenway orientation events for specific cultural communities, pop-up market opportunities to showcase local artists and businesses, night rides that demonstrate and promote safety, Greenway themed tours that highlight specific destinations (e.g., arts organizations, ethnic restaurants, etc.), culturally-specific celebrations (e.g., May Day or Eid al-Fitr post-Ramadan celebrations), youth rides connected to bike access

organizations, health-focused events that promote biking as part of a healthy lifestyle, better connections to nearby events that promote bicycle use and connect to the Greenway (like Open streets), etc.

*This is our neighborhood and we should be more involved on the Greenway.*

*Get people healthy through physical activity.*

--Focus group participants

## PERMITTING FOR COMMUNITY EVENTS

The goal of connecting neighborhoods and communities to the Greenway hinges on the Greenway's ability to host community events. Community, neighborhood, and other organizations, are encouraged to host routine community events on or along the Midtown Greenway. A permit is required whenever equipment will be brought in for the event, whenever noise from the event could disturb other Greenway users, or when there are risks to persons or property associated with event activities. Contact the Hennepin County Regional Railroad Authority regarding permits and more details about hosting events on the Greenway at [hccramail@hennepin.us](mailto:hccramail@hennepin.us) or 612-348-9260.

## ARBOR DAY COORDINATION

Since 2001, the Midtown Community Works Partnership has hosted an Arbor Day community planting event on the Midtown Greenway. Hundreds of volunteers have planted thousands of trees and shrubs, adding to the urban tree canopy, keeping the "green" in Greenway and promoting sustainability in the region. The event is also popular with neighborhoods and businesses along the Greenway, who see the long-term benefits. The ten sites identified for placemaking and site amenities in this plan are ideal locations for future Arbor Day activities, and a closer coordination with the Partnership, the Hennepin County Regional Railroad Authority and other participating community partners during the site selection process is recommended.



Free Zumba class at Cepro site placemaking event



Fall 2015 tree planting at Cepro site



## Long term recommendations for Part of the Neighborhood

### REVISING THE CULTURAL LANDSCAPE MANAGEMENT AND TREATMENT GUIDELINES

These guidelines are used by the Hennepin County Regional Railroad Authority to guide determinations of what is feasible and allowable in the corridor with regard to a wide-range of aspects of corridor improvement and maintenance, including structures, topography, vegetation, circulation/access, furnishings, public art and safety. The guidelines were intended to be advisory and provide room for interpretation, but in practice they have been more strictly observed, and they have not kept pace with the dramatic scale of redevelopment in the corridor. Additionally, MNDOT and the State Historic Preservation Office are currently studying the aptness of the historic designation, which should be resolved in 2016. Whether or not the historic designation remains in place, revisiting the guidelines with a range of partners to address the significant redevelopment that has happened in the corridor will help to balance both the need for historic preservation and community and economic development in the corridor.

### MIDTOWN GREENWAY YOUTH DEVELOPMENT

Feedback from the focus groups highlighted that youth employment in Greenway summer maintenance would provide necessary jobs and lead to increased feelings of ownership and higher rates of Greenway use by participants. Each year the city's Step-Up program offers youth the opportunity to learn job readiness skills and hold paid internships. In 2016, more than 500 applicants came from the zip codes contiguous to the Midtown Greenway. By collaborating closely with the Greenway's maintenance partner, Tree Trust, and the city, project partners can ensure local youth from these nearby neighborhoods serve specifically at Greenway locations. Through Step-Up, these youth will be introduced to the transportation and recreation opportunities the Greenway offers, while also learning valuable professional development skills and earning a paycheck.

The new directional arrows and signs from the Greenway through Cepro space is great! However, once you are at 10th Avenue, there are no signs directing you to Lake Street and the Global Market. If you are not from this area, you would not know where to go. I would hope that is part of this exciting initiative.

--Survey participant



- M Map kiosk
- D Directional sign
- Greenway access sign
- Lake St access sign
- Business district
- Access point

# GETTING TO KEY DESTINATIONS

This plan proposes a new wayfinding system throughout the Midtown Greenway to provide directional cues and orient visitors to destinations, bikeways and community spaces. Components include signage, map kiosks and highly visible markers in a consistent green color. Although locations are suggested, further development of the style, materials, messaging and branding will be necessary. Signage will emphasize the various neighborhoods that the Midtown Greenway transects, from Lake Calhoun through Uptown, LynLake, Whittier, Powderhorn, Phillips and Longfellow to the Mississippi River. Each area

has unique destinations and local businesses that stand to benefit from the sizable customer base the nearby Greenway could provide — with wayfinding to show those people where to go and how to get there.

Efficient placement of signage is critical to a simple and understandable wayfinding system. Too much can create visual clutter, while too little can lead to gaps in the system.



*Knowing what businesses are nearby and how to get to them would be helpful.*

--Survey participant

### DIRECTIONAL SIGNS

Directional signs are sign posts with words to describe a direction or point of interest, i.e., Walker Library, Midtown Global Market, East Lake Library, Minnesota Workforce Center, Lake Calhoun. The text placards on these signs will be located at street sign height. Generally, each directional sign indicator on the previous page represents a pair of signs, one at the top and one at the bottom of access ramps or stairs in the trench, and at on-grade crossings.



Directional sign concepts

*...when I do use the Greenway, I don't always know which streets to get off on and which streets have entrances. Better signage would help!*

--Survey participant

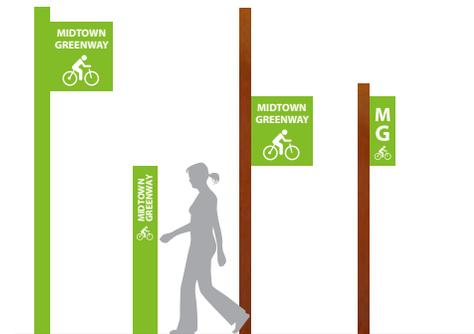
### LAKE STREET ACCESS SIGNS

Minneapolis Public Works has expressed support for Lake Street signage solutions that reduce sign clutter and integrate with the existing street signage on Lake Street signal mast arms. These signs would indicate Greenway access points (much as the current bike boulevards and lanes are indicated). Lake Street access signs would replace the existing small square "Midtown Greenway" signs.

### GREENWAY ACCESS SIGNS

Greenway access signs will provide guidance for accessing the Greenway from the north or south. These signs use a Midtown Greenway graphic or the words "Midtown Greenway" and are combined with an arrow indicating the direction to the trail. These are short, eye level signs in a consistent bright green color.

Locations include intersections along 26th, 28th, and 31st streets where other bikeways connect to the Greenway. Longer term, Greenway Access Signs should be added at new bike network connections and intersections, as new trails are added.



Access sign concepts

*I often get twisted around once exiting the Greenway. I can't figure out if I need to go left or right from where I exited once I get on Lake Street to get to the business I want to get to.*

--Survey participant

### MAP KIOSKS

Several large orientation maps with streets, current location marker, nearby landmarks and destinations will be installed throughout the full length of the Greenway from the Mississippi River to Lake Calhoun. Map kiosks will be designed to be either multi-lingual or rely on icons, so that language barriers can be reduced, and will be placed at the Greenway ends and access points near high traffic and site amenity/placemaking areas. Kiosk placement will be sensitive to trail width and access constraints by avoiding areas where traffic convergence makes stopping suddenly risky or inconvenient.



Map kiosk concepts



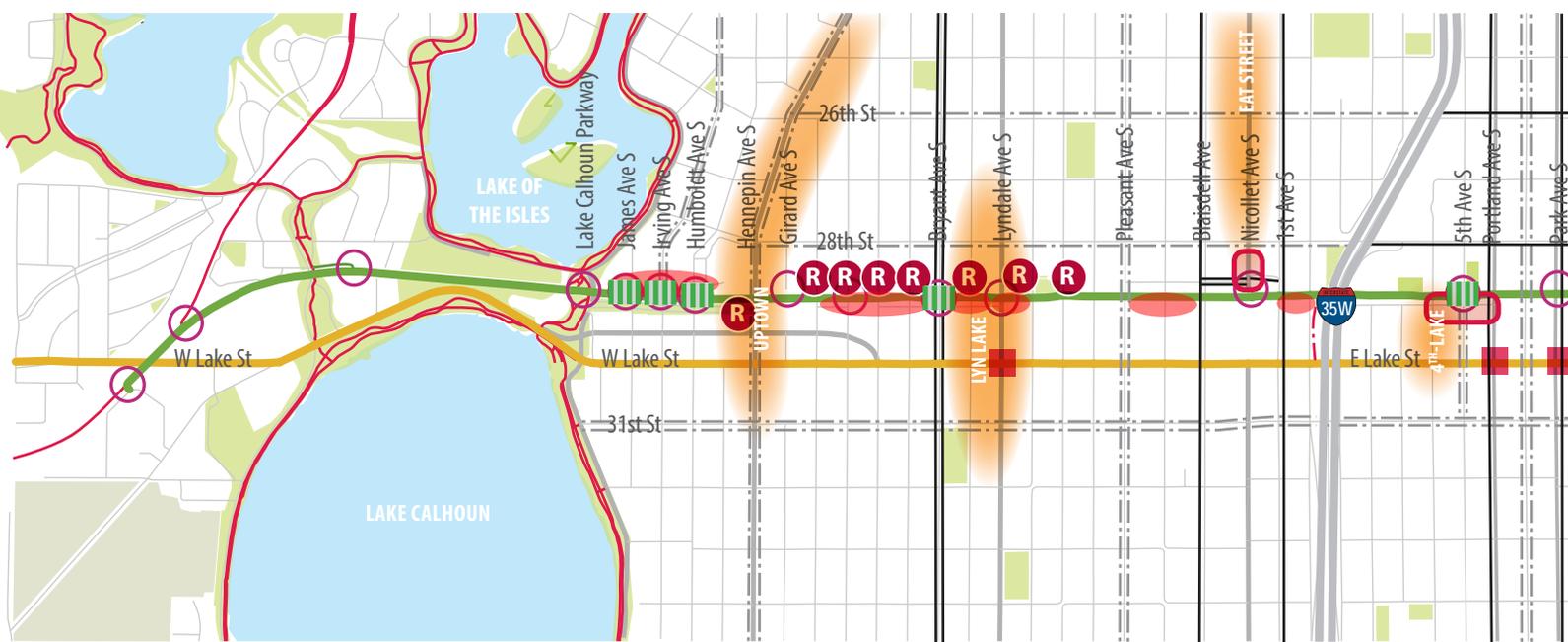
## Long term recommendations for Getting to Key Destinations

### TRANSIT IN THE GREENWAY

The Midtown Greenway is located in a former rail corridor that is owned by the Hennepin County Regional Railroad Authority and reserved by this agency for future transit use. The Metropolitan Council led an analysis of transit options, resulting in a recommendation for a rail line in the Greenway, combined with improved and enhanced bus service on Lake Street. These combined services would meet current and future travel needs, attract new riders, connect users with job centers and key destinations, and support environmentally sustainable growth and development. The next steps are dependent on funding, environmental assessment, regional priorities, etc., so there is no confirmed timeline for implementation. Project partners will work to ensure that connections to the Greenway are optimized as these new transit options are implemented in the corridor.

### COMMERCIAL SIGNAGE IN THE GREENWAY

The signage associated with the temporary design experiments completed as part of the outreach and prototyping efforts for this plan raised challenges with regard to signing explicitly for certain community landmarks. City signage codes were restrictive of off-site signage for places like the Midtown Global Market and Mercado Central, which were technically classified as "shopping centers" in the city's code. This plan recommends that the city reevaluate the commercial signage code to provide for signing significant community landmarks that include these kinds of destinations. Being able to accurately direct Greenway users to these important locations is crucial to better connecting the Greenway and encouraging Greenway users to invest in the local economy.



- R** Pedestrian ramp needed
- Proposed signal change (LPI)
- Business district
- Access point
- Beacon upgrade
- Crosswalk upgrade
- Streetscape improvement



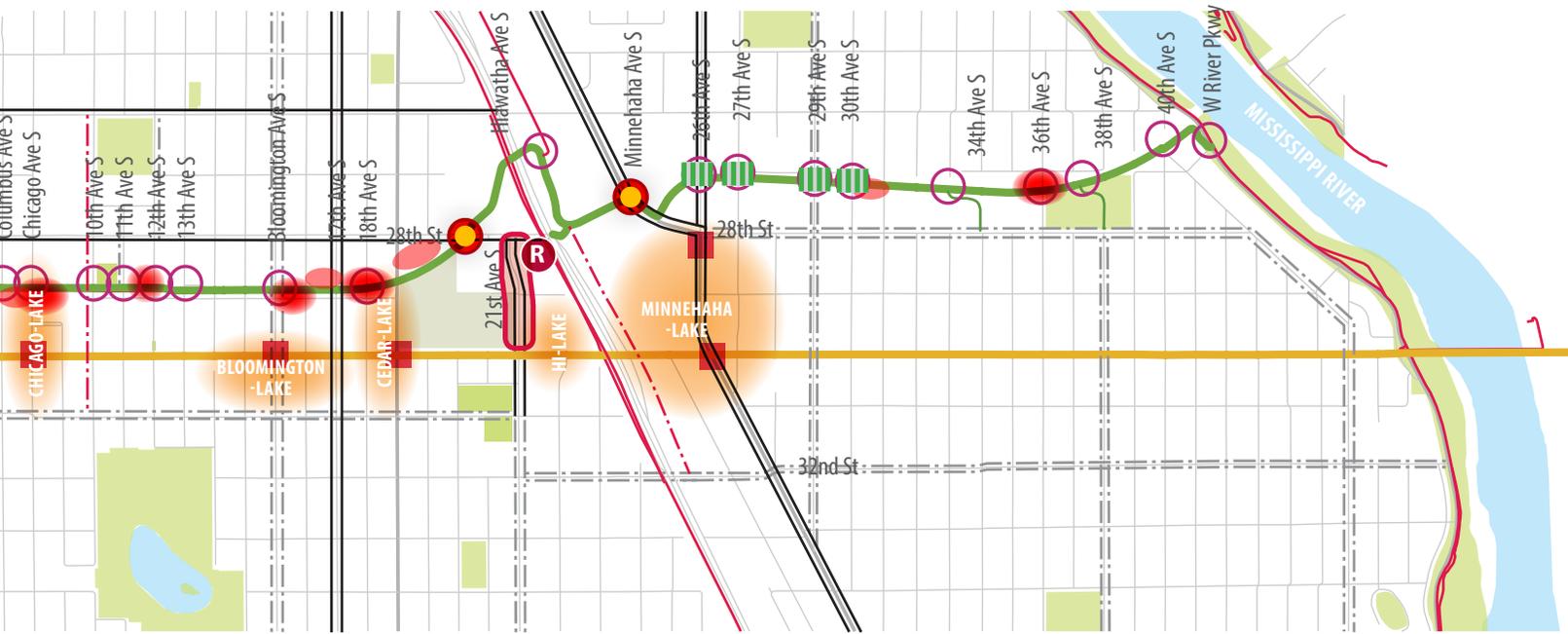
# BICYCLE AND PEDESTRIAN SAFETY

Addressing unsafe conditions will encourage more pedestrian and bicycle traffic between the Greenway and Lake Street. This plan recommends the county and city partner to improve safety across the corridor by implementing a number of features and enhancements. These include changes to street signals, street layouts, sidewalks and crosswalks, as well as flashing beacons and traffic-calming features such as curb bump-outs. Traffic signal modifications at key intersections will give pedestrians lead time to cross the street ahead of vehicles. More explicit management of vegetation near Greenway entrances will increase visibility and safety.

*Biking up or down Lake Street is taking your life in your hands.*

*The only thing that would make me want to go to Lake Street is to have it less hostile to people on bikes. I can get to Lake Street from the Greenway, I just don't want to go there because it feels so dangerous.*

--Survey participants



- Greenway
- Lake Street
- Existing on-street bikeway
- Existing off-street bikeway
- Planned on-street bikeway
- Planned off-street bikeway
- Priority vegetation management
- Secondary vegetation management





New crosswalk paint at 26th Avenue, part of 2015 street design experiments



Red-yellow flashing beacon crossing near U of M

### UPGRADE CROSSWALKS AT GREENWAY CROSSINGS

There are ten at-grade Greenway crossings, where the Greenway trail itself (as opposed to an exit ramp) crosses a city street at grade. Most of these crossings have crosswalk pavement markings, but many have worn away over time and are now barely visible. Improving the visibility of these crossings using better signage and colorful pavement markings can increase vehicle driver's awareness and prevent accidents on the trail. The city has adopted a new shared walking/biking trail standard for crosswalks that includes side-by-side white and green striping. This new standard was installed in 2015 during the street design experiments at 26th Avenue. These new crosswalks should be installed at all at-grade Greenway crossings that are currently missing or faded (including James, Irving, Humboldt, Fifth, 27th, 29th and 30th avenues), and replace the white paint only crossings at 28th and Minnehaha avenues in the future as they wear and fade. Additionally, the Greenway exit that crosses over Bryant Avenue would benefit from this treatment.

*I tried going to a restaurant on Lyndale and Lake Street recently and I took the Greenway. But, after exiting the Greenway it was nearly impossible to cross Lyndale to get to the restaurant with traffic so terrible.*

--Survey participant

### IMPLEMENT PASSIVE ACTIVATION FOR PEDESTRIAN CROSSWALK BEACONS

Two of the busiest Greenway intersections (28th and Minnehaha avenues) benefit from an overhead, on-demand pedestrian beacon that warns vehicle traffic when pedestrians and bicyclists wish to use the crosswalk. However, the location and position of the on-demand button, convenient for walkers, is awkward for bike riders. Most cyclists do not activate the light, and this causes confusion about whether or not the signals are functioning properly and when vehicle traffic needs to yield. Investing in passive activation of the signal, through a sensor or loop system, would increase driver compliance and keep cyclists safe at these busy crossings. The sensors would detect an approaching rider and begin flashing before the cyclist crosses.

*I don't feel safe on any connector streets between the Greenway and Lake Street. They all have poorly marked bike lanes that are consistently over run by dismissive or oblivious auto drivers.*

--Survey participant

### SUPPORT ADDITIONAL TRAFFIC CALMING MEASURES

Curb bump-outs shorten crossing distances and improve visibility of people trying to cross the street. Many (though not all) intersections along Lake Street already benefit from the way bump outs calm traffic and discourage speeding through intersections, while increasing pedestrian safety. Currently, the City of Minneapolis is evaluating adding curb bump-outs to Lake Street between Blaisdell and Fifth avenues, which would benefit Greenway users and nearby businesses by increasing public safety and the quality of the public realm. This plan supports curb bump outs at these intersections and others where bump outs do not yet exist. Additionally, this plan advocates for the installation of a traffic median at the Minnehaha Avenue Greenway crossing. Medians offer similar benefits to curb bump outs but additionally

provide a mid-crossing refuge for pedestrians and cyclists where they can safely stop and wait for vehicles to clear the intersection. The proposed Minnehaha median would provide similar safety and traffic calming benefits as the existing median at the 28th Street crossing.

#### **IMPROVE LAKE STREET CROSSINGS WITH PEDESTRIAN LEAD TIMES**

Safely crossing Lake Street is an oft-mentioned barrier for bicyclists and pedestrians in accessing commercial and cultural destinations along the busy commercial corridor. Lead pedestrian intervals (or LPIs) offer pedestrians more time to cross, while stopping cars on the cross streets only a few seconds longer. This can significantly improve the visibility and safety of pedestrians, while not drastically changing traffic patterns, and it can all be accomplished through reprogramming the existing signals without any additional cost impacts. The City of Minneapolis and Hennepin County identified seven intersections, where the use of LPIs on Lake Street can be tested, including Lyndale, Park, Portland, Chicago, Bloomington, Cedar, and Minnehaha avenues. Pending the results of the test, this plan strongly recommends LPI timing be implemented at all signal locations along Lake Street to improve and encourage walkability and make the street more pedestrian friendly.

#### **IMPROVE STREETSCAPES AND ADDRESS SIDEWALK GAPS**

Streetscape improvements can dramatically enhance the pedestrian experience and make Greenway users feel welcomed as they exit the trail and connect to nearby destinations. Sidewalk repairs, sidewalk gap infill, boulevard improvements, trees, lighting and other complete streets elements can help guide users on their way and encourage drivers to stay speed compliant, keeping Greenway users safer and increasing feelings of ownership and pride. This plan recommends streetscape improvements at three key locations where the public realm is considerably lacking or where improvements would facilitate safer and more amenable route connections. Nicollet Avenue is missing sidewalks and pedestrian ramps connecting the trail exit to the nearby sidewalk network, 21st Avenue needs additional lighting and tree replacement, and East 29th Street near 5th Avenue has no sidewalk on the north side and generally could be made more inviting. Sidewalks are also missing on 5th Avenue as it crosses the Greenway, and this should be remedied as soon as possible.



Example of a street in south Minneapolis with recent streetscape upgrades



Missing sidewalk on the east side of 5th Avenue near CityKid Farms

#### **PEDESTRIAN RAMP IMPROVEMENTS**

Americans with Disabilities Act regulations require pedestrian ramps that allow walkers, bicyclists, and others convenient sidewalk access. The City of Minneapolis ensures (through permit review) that developers include ramps where appropriate. Recently the inclusion of a mandatory “promenade” or public walking path above the Greenway in development plans neglected these ramps, so the promenade is not fully ADA-accessible in certain locations. The city has agreed to work with property owners along the promenade to ensure the missing ramps in Uptown and LynLake are added. Replacement pedestrian ramps are also recommended where they are in poor shape (at Hiawatha) or would support bicycle connectivity (on Hennepin Avenue near the Mall).

### RESTRICT PARKING CONSISTENTLY NEAR GREENWAY ACCESS POINTS

The locations where Greenway access ramps meet the street grid are extremely important spaces. Visibility is key in these areas for people wishing to access the Greenway from Lake Street or nearby destinations. Landing space at the top of a ramp helps people leaving the Greenway orient to their surroundings and decide the direction they wish to go. Yet many cars routinely park too close to these entrances, prohibiting visibility. Many exits from the Greenway are currently designated no parking on either side of the trail access point in recognition of this issue, but signage approaches are inconsistent, restricted distances vary, and some access points (for example, 10th and 18th avenues) do not have signed parking restrictions. Developing and enforcing a consistent parking approach at Greenway access points would enhance the ease of identifying entrances and improve the safety of Greenway users and drivers. Working with nearby property owners and Minneapolis Public Works, we can identify locations where new signage is needed and assess the feasibility of removing one or two on-street parking spaces where new designations take place.

*I find that cars are often surprised when I exit the Greenway even when I have lights on.*

--Survey participant

### SAFE ROUTES TO SCHOOLS COORDINATION

Youth outreach revealed that students from schools along the corridor often use the Greenway for safe transportation, school programs and recreational use. Coordination with the City of Minneapolis during 2017 implementation of Safe Routes to Schools along 11th/12th Avenues (connecting Powderhorn and Stewart parks with the Greenway and Andersen Community School) may provide additional opportunities to leverage program outcomes for other schools along the Greenway.

For more information on the Andersen School project, go to: <http://www.minneapolismn.gov/publicworks/saferoutes/WCMS1P-133513>.

### VEGETATION MANAGEMENT

The Greenway provides a much-valued green oasis in the heart of the city. Yet unregulated plant growth can overwhelm the trail, reducing visibility and public safety. The Hennepin County Regional Railroad Authority maintains the Greenway landscape and currently contracts with Tree Trust to provide vegetation management throughout the Greenway, including pruning, cutting, or occasional removal. Working with these partners, we can specifically prioritize those areas where vegetation sometimes screens access points and views down into the Greenway trench from nearby streets and bridge decks. This will help users better navigate these entrances, recognize available connections, and increase the safety of Greenway users.



Managed vegetation at Bloomington Avenue



Overgrown vegetation as seen from bridge deck



## Long term recommendations for Bicycle and Pedestrian Safety

### REMOVING STOP SIGNS AT GREENWAY CROSSINGS

Some of the at-grade crossings, where streets cross the Greenway at the same level, require Greenway users to stop and allow vehicle traffic to move freely without stopping. Others require traffic in all directions to stop, including the Greenway. This can create confusion and adds risk for Greenway users. Removing these stop signs on the Greenway, while adding or leaving existing stops for vehicles would increase Greenway user safety, improve Greenway traffic flow and increase drivers' awareness of trail crossings. This "stop sign reversal" was already implemented at the James Avenue crossing. Project stakeholders are seeking to implement this practice at all on-grade Greenway crossings, though political support is not consistent, and the co-location of an active freight rail line in the Longfellow neighborhood complicates this approach. This plan recommends that the project team continue to work with Minneapolis Public Works and other stakeholders to determine the feasibility of extending this practice to all at-grade crossings.



Stop sign for the Greenway at 30th Avenue

### CONSIDER RAISED CROSSWALK TABLES AT GREENWAY CROSSINGS

A more intensive approach to making Greenway crossings safer would include elevating the crosswalk several inches, in effect creating an elongated speed bump, so that vehicle traffic would have to slow down to cross over the trail. The ramp grade would need to be gradual for bikers and pedestrians on the trail, so it may need to be significantly wider than traditional raised tables. This traffic calming practice would increase pedestrian and cyclist safety and could potentially be done at all ten at-grade crossings. Raised tables would be especially effective in higher vehicle traffic locations such as 28th Street, Minnehaha and 26th avenues.

### SIGNALS AT BICYCLE NETWORK INTERSECTIONS

In addition to the pedestrian-oriented signalization changes outlined above, this plan recommends installing dedicated bike signals at intersections between the bike network and Lake Street. These bike signals would function similarly to the lead pedestrian interval signals and make it safer for bicyclists to cross this busy commercial street. However, unlike LPIs, they require additional equipment and programming, and potentially additional traffic studies. The University of Minnesota has a few bike signals installed (at Pleasant Street and University Avenue, for example), and these provide a strong model for bike lane crossings throughout the city. Near the Midtown Greenway, Blaisdell Avenue and West 28th Street will be an intersection of a southbound bike lane and a westbound protected bikeway. A bike signal could be added where these paths meet, as well as at all future bike network intersections.

### EVALUATE GREENWAY LIGHTING FOR CONSISTENCY

The Greenway has a variety of lighting styles along the trail. The city standard, approved by the State Historic Preservation Office for Greenway use, should be implemented with consistent spacing and light levels, so that during evening and nighttime hours, users can depend on good visibility of their surroundings. Project stakeholders should continue to advocate for a consistently well-lit Greenway. Implementation could include a lighting study of the entire corridor.



View from Stevens Avenue S bridge, looking east toward 1st Avenue bridge

## 04. DETAILED RECOMMENDATIONS

The following pages include detailed maps of the Greenway with site observations and recommended improvements. Observations (gray boxes) alternate with recommendations (green boxes). At a closer scale than the preceding corridor-wide maps, these detailed maps illustrate how the full range of interventions can be implemented at each access point.

### ANALYSIS AND PHYSICAL OBSERVATIONS

A bicycle tour of the entire corridor, paired with many site visits, and mapping routes to nearby destinations, yielded some important observations. A few aspects observed while riding the Greenway aligned with survey feedback, such as the fact that many users don't know exactly where they are along the whole length of trail at any given time. Despite small road signs and the recent addition of protected bike lanes nearby, finding the Midtown Greenway corridor from the surrounding community is challenging. There are other connectivity issues where trail access could be better connected to local bikeways. This occurs at the 18th Avenue access ramp, which is one block from the 17th Avenue bike boulevard. In a few places, stairs might be one block

from a ramp, but the stairs do not indicate this nearby accessible route. This is a barrier to accessibility because if someone in a wheelchair wants to get to the Greenway, they must know where a ramp is ahead of time. Once on the trail, the presence of nearby businesses and community destinations are not easily perceived. This is true near the Midtown Global Market, for example, where the many shops immediately adjacent to the Greenway would strongly benefit from better visibility on the trail.

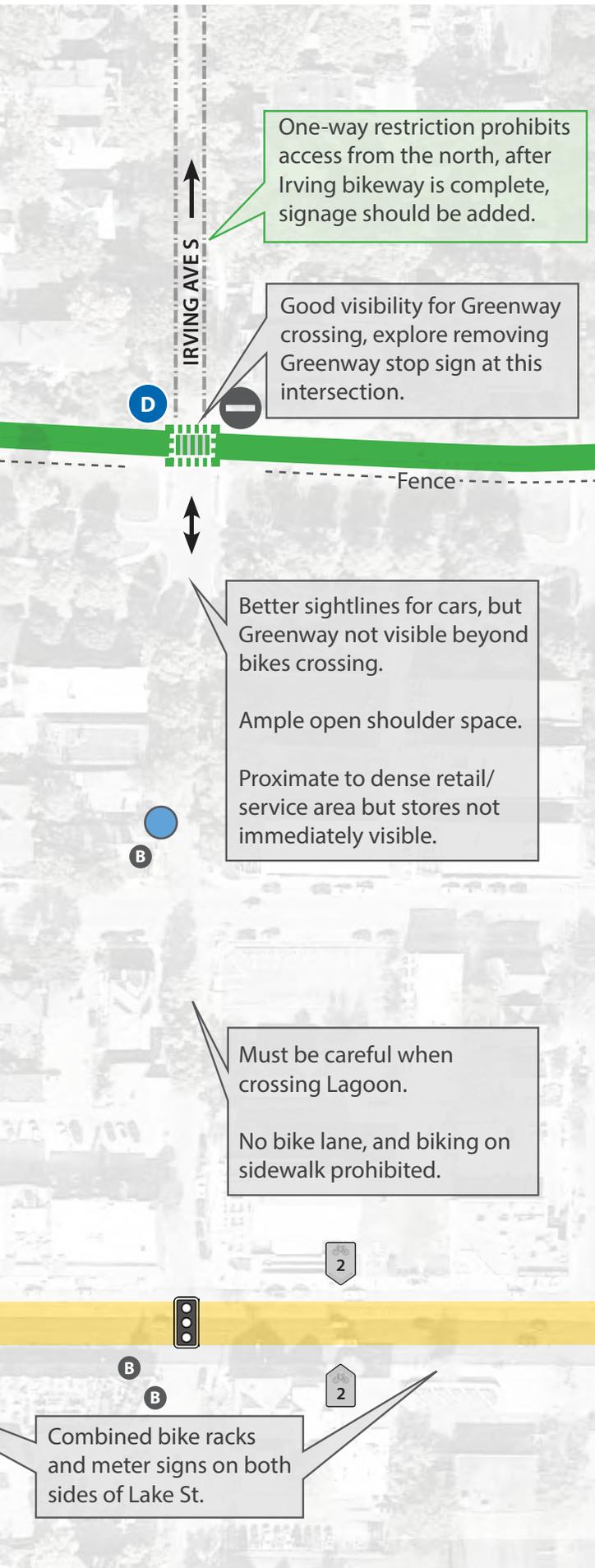
### RECOMMENDATIONS

While the observations indicate issues along the trail, recommendations describe how improvements can effectively increase the Greenway's connectivity. These recommendations were described in the previous section, as was guidance for how and where they would be located. These locations are approximate and will be revisited and confirmed during implementation. The precise locations of signage system elements will also need to be verified in the field.



# LAKE CALHOUN, JAMES, AND IRVING AVENUES S

## EXISTING INFRASTRUCTURE & OBSERVATIONS



	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

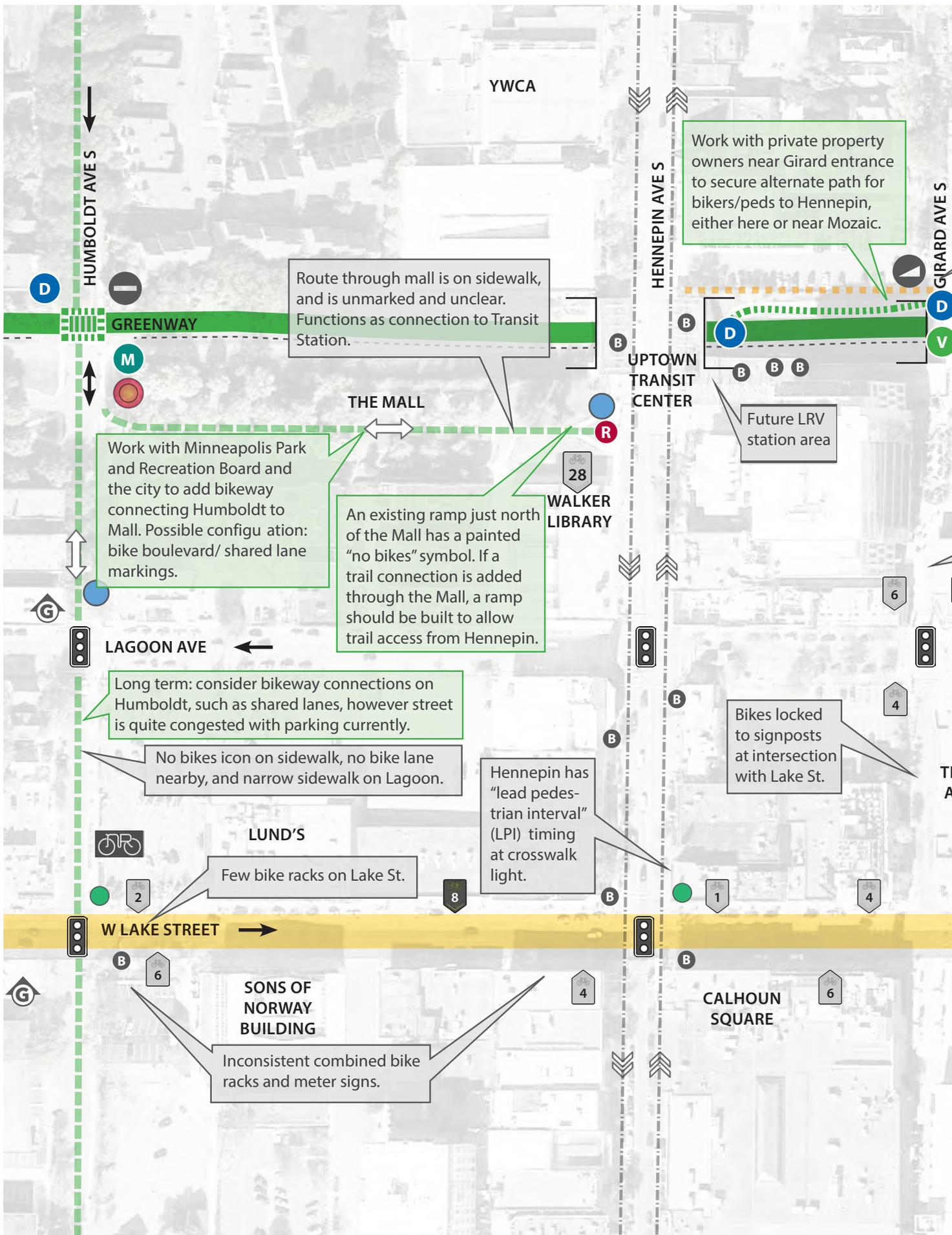
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

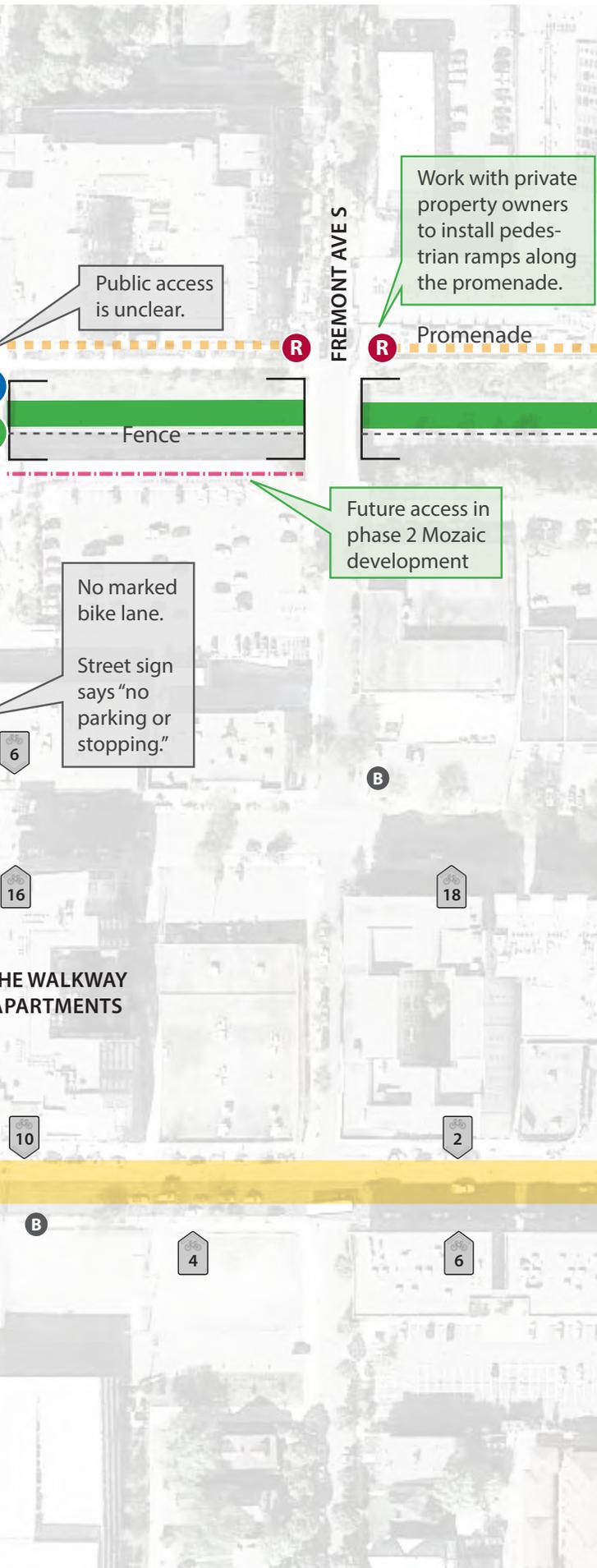
### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape		
	Pedestrian ramp		
	Crosswalk upgrade		Beacon upgrade
	Manage vegetation to improve visibility		
	Lead pedestrian interval (LPI) signal adjustment		



# HUMBOLDT, HENNEPIN, AND GIRARD AVENUES

## EXISTING INFRASTRUCTURE & OBSERVATIONS



	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

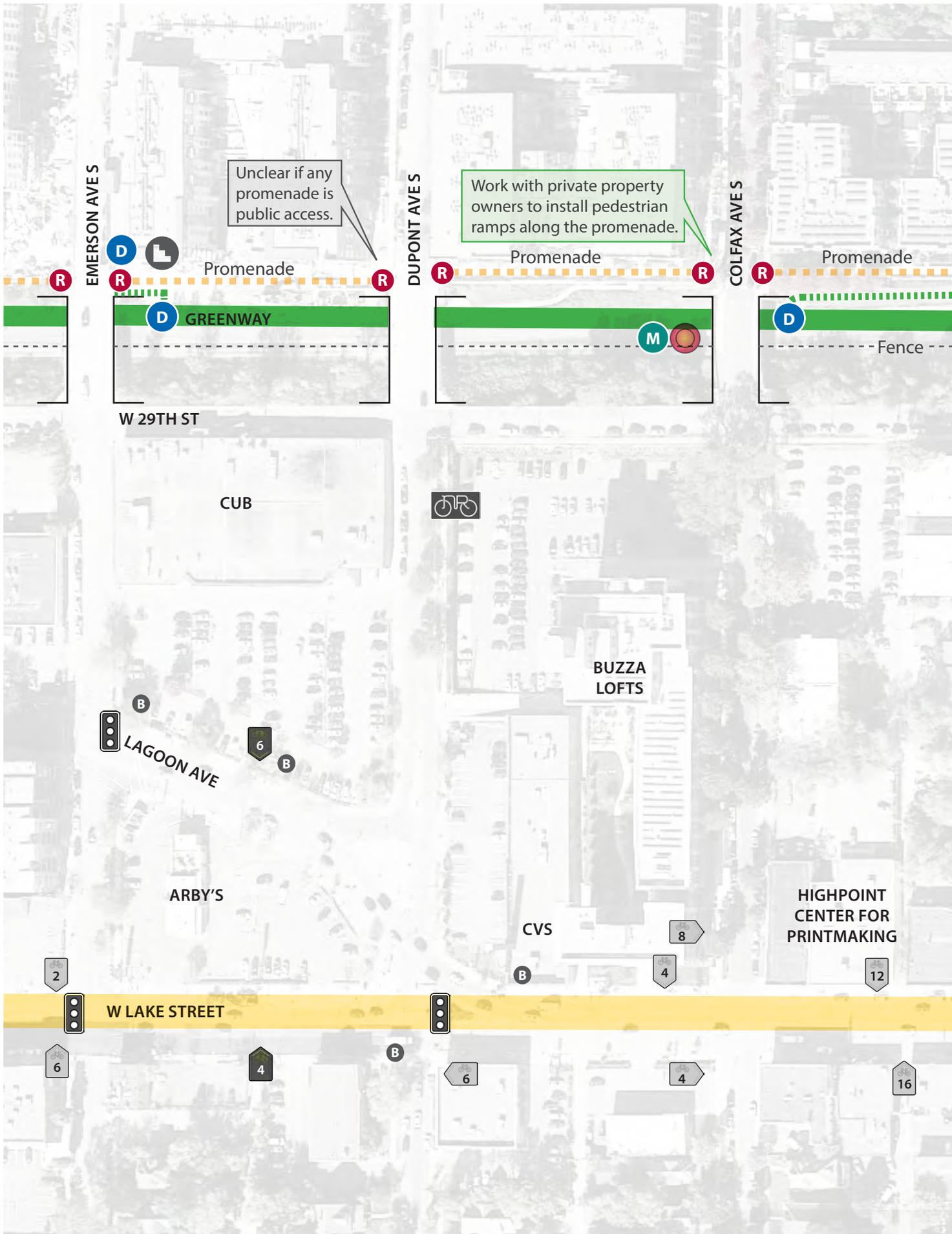
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape		
	Pedestrian ramp		
	Crosswalk upgrade		Beacon upgrade
	Manage vegetation to improve visibility		
	Lead pedestrian interval (LPI) signal adjustment		



# BRYANT AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

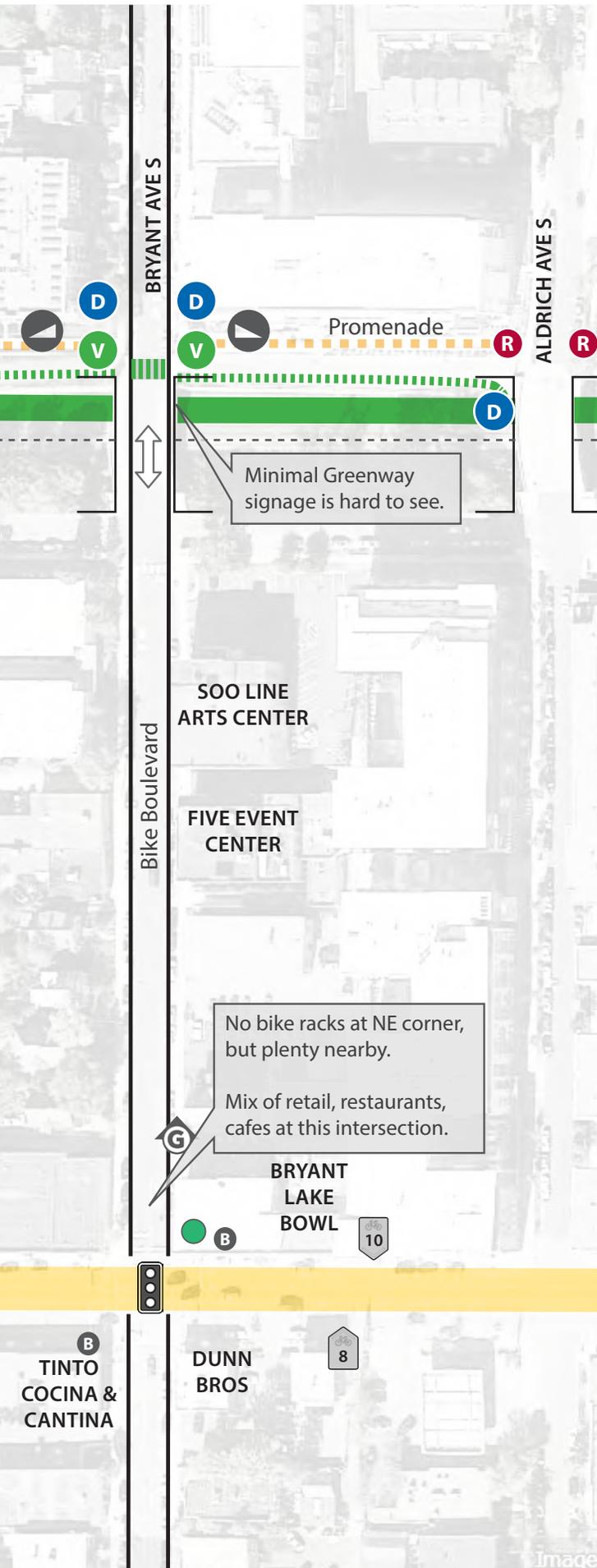
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

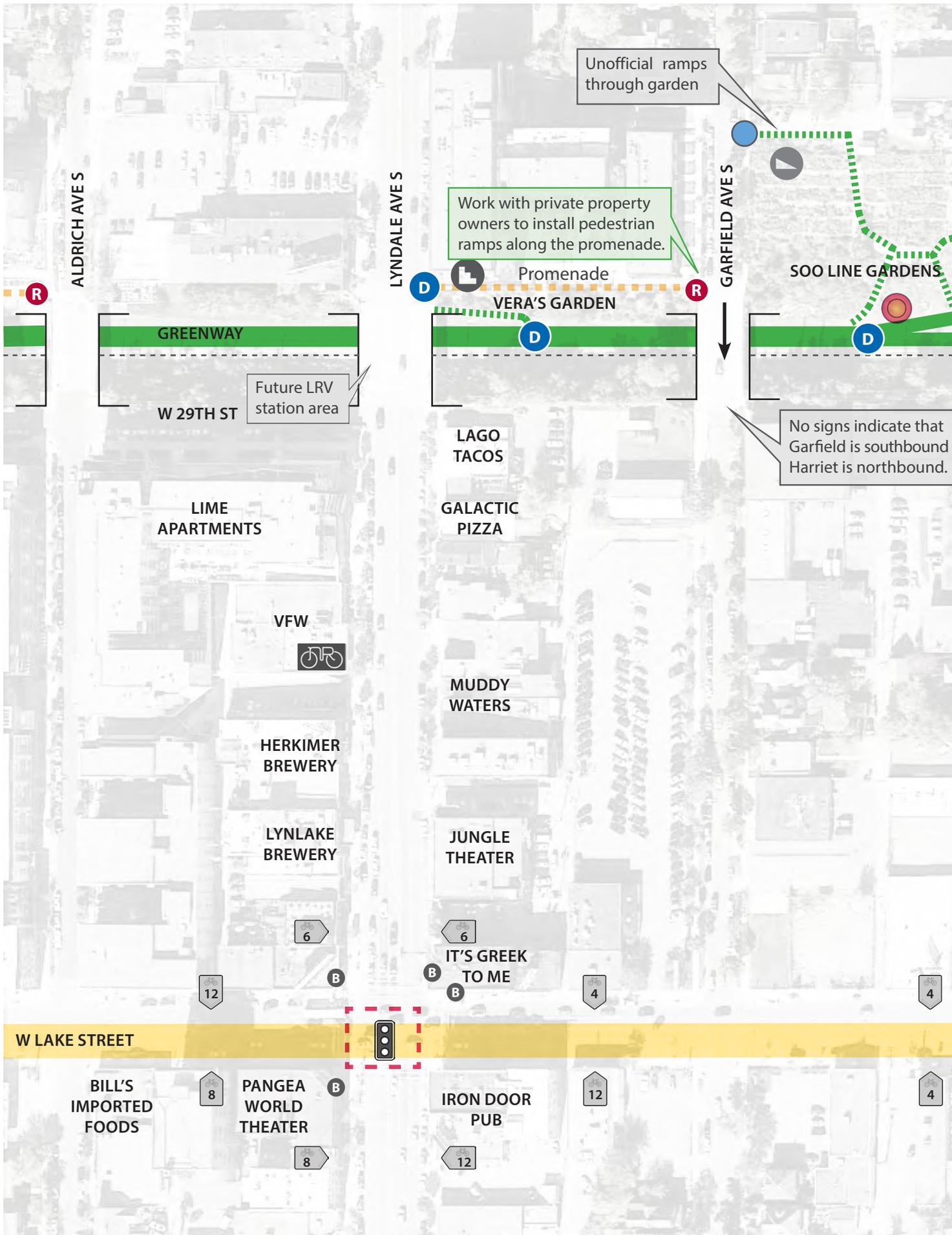
### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape		
	Pedestrian ramp		
	Crosswalk upgrade		Beacon upgrade
	Manage vegetation to improve visibility		
	Lead pedestrian interval (LPI) signal adjustment		





Unofficial ramps through garden

Work with private property owners to install pedestrian ramps along the promenade.

No signs indicate that Garfield is southbound Harriet is northbound.

ALDRICH AVE S

LYNDALE AVE S

GARFIELD AVE S

GREENWAY

Promenade  
VERA'S GARDEN

SOO LINE GARDENS

W 29TH ST

LIME APARTMENTS

LAGO TACOS

GALACTIC PIZZA

VFW

MUDDY WATERS

HERKIMER BREWERY

JUNGLE THEATER

LYNLAKE BREWERY

IT'S GREEK TO ME

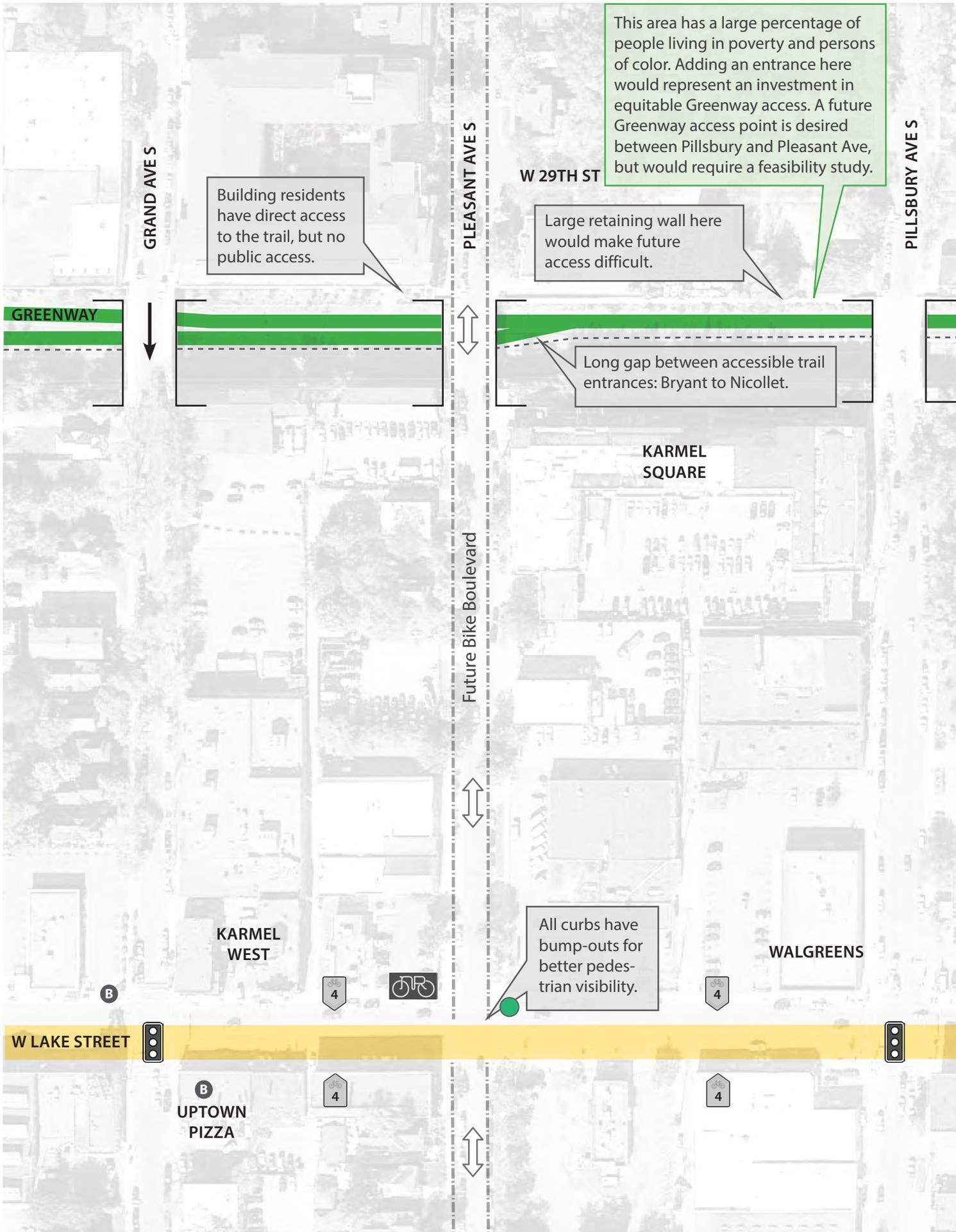
W LAKE STREET

BILL'S IMPORTED FOODS

PANGEA WORLD THEATER

IRON DOOR PUB





# PILLSBURY AND PLEASANT AVENUES

## EXISTING INFRASTRUCTURE & OBSERVATIONS



- Lake Street
- Greenway
- Signalized intersection
- Access point
- Bus stop
- Flat
- Bike lane direction
- Ramp
- Shared lane
- Stair
- One-way street
- Observation
- Nice Ride station
- Recommendation
- Existing Greenway sign (to be replaced)
- Existing on-street bikeway
- Existing off-street bikeway
- Existing bike parking (# indicates capacity not number of racks)
- Planned on-street bikeway
- Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

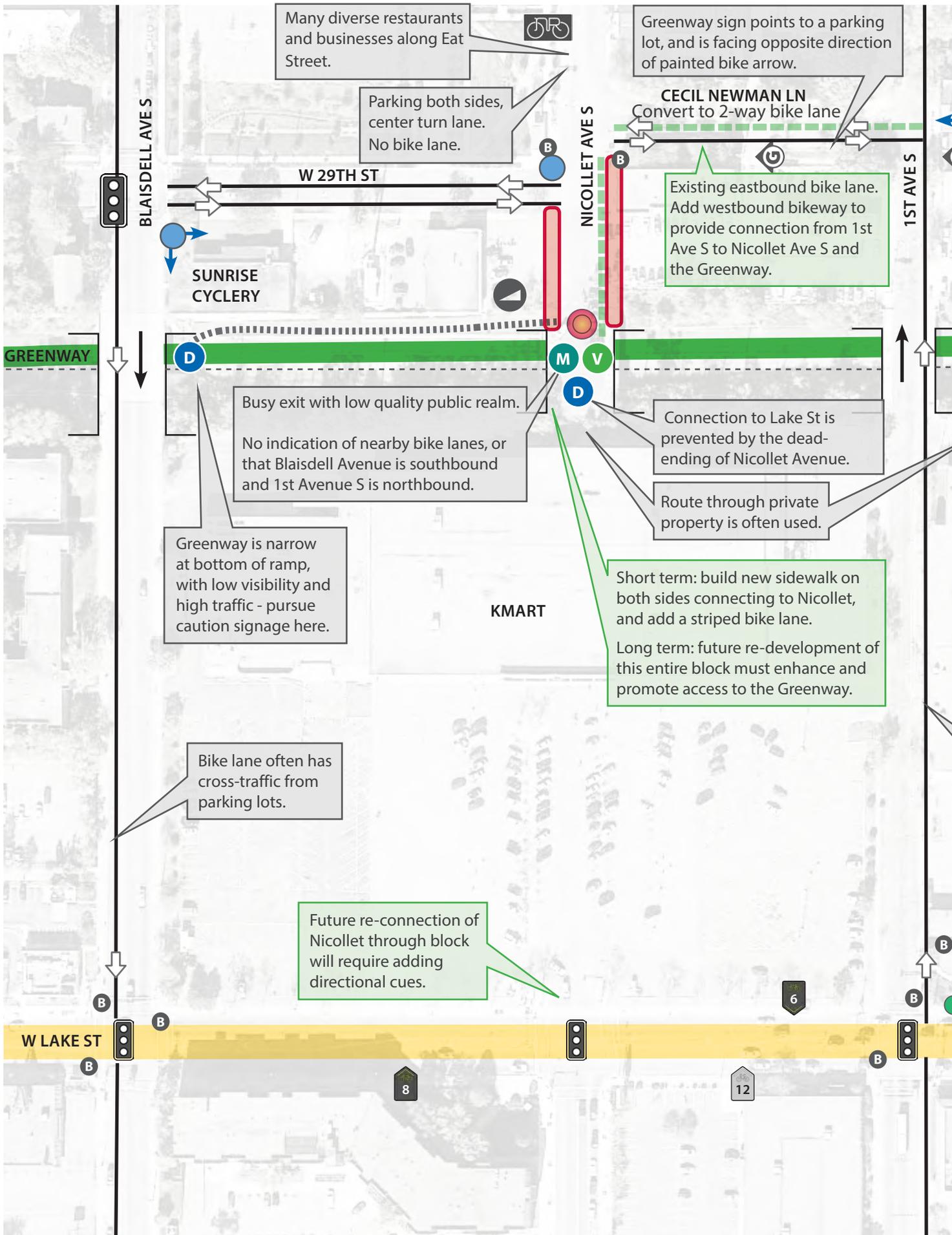
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

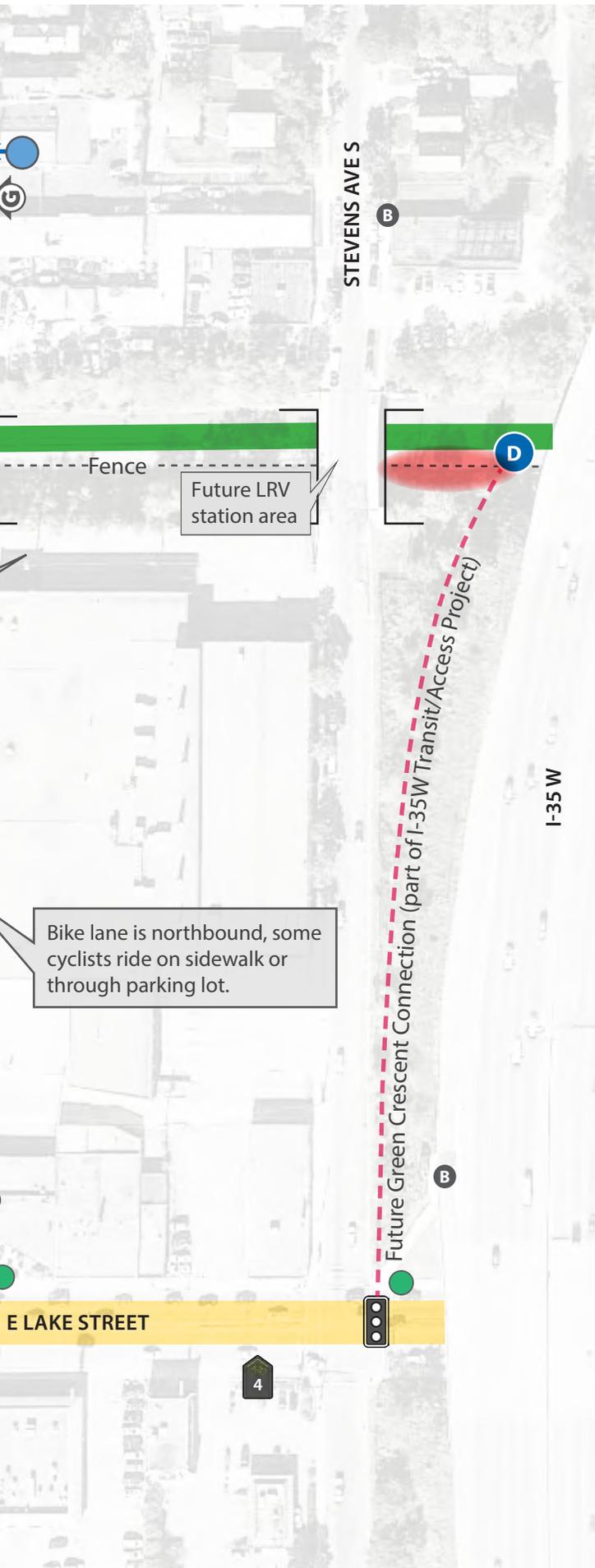
	Improve streetscape	
	Pedestrian ramp	
	Crosswalk upgrade	Beacon upgrade
	Manage vegetation to improve visibility	
	Lead pedestrian interval (LPI) signal adjustment	



# NICOLLET AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

-  Lake Street
-  Greenway
-  Signalized intersection
-  Access point
-  Bus stop
-  Flat
-  Ramp
-  Stair
-  Bike lane direction
-  Shared lane
-  Observation
-  One-way street
-  Recommendation
-  Nice Ride station
-  Existing on-street bikeway
-  Existing off-street bikeway
-  Existing Greenway sign (to be replaced)
-  Planned on-street bikeway
-  Existing bike parking (# indicates capacity not number of racks)
-  Planned off-street bikeway



## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

-  Map kiosk
-  Directional signage
-  Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

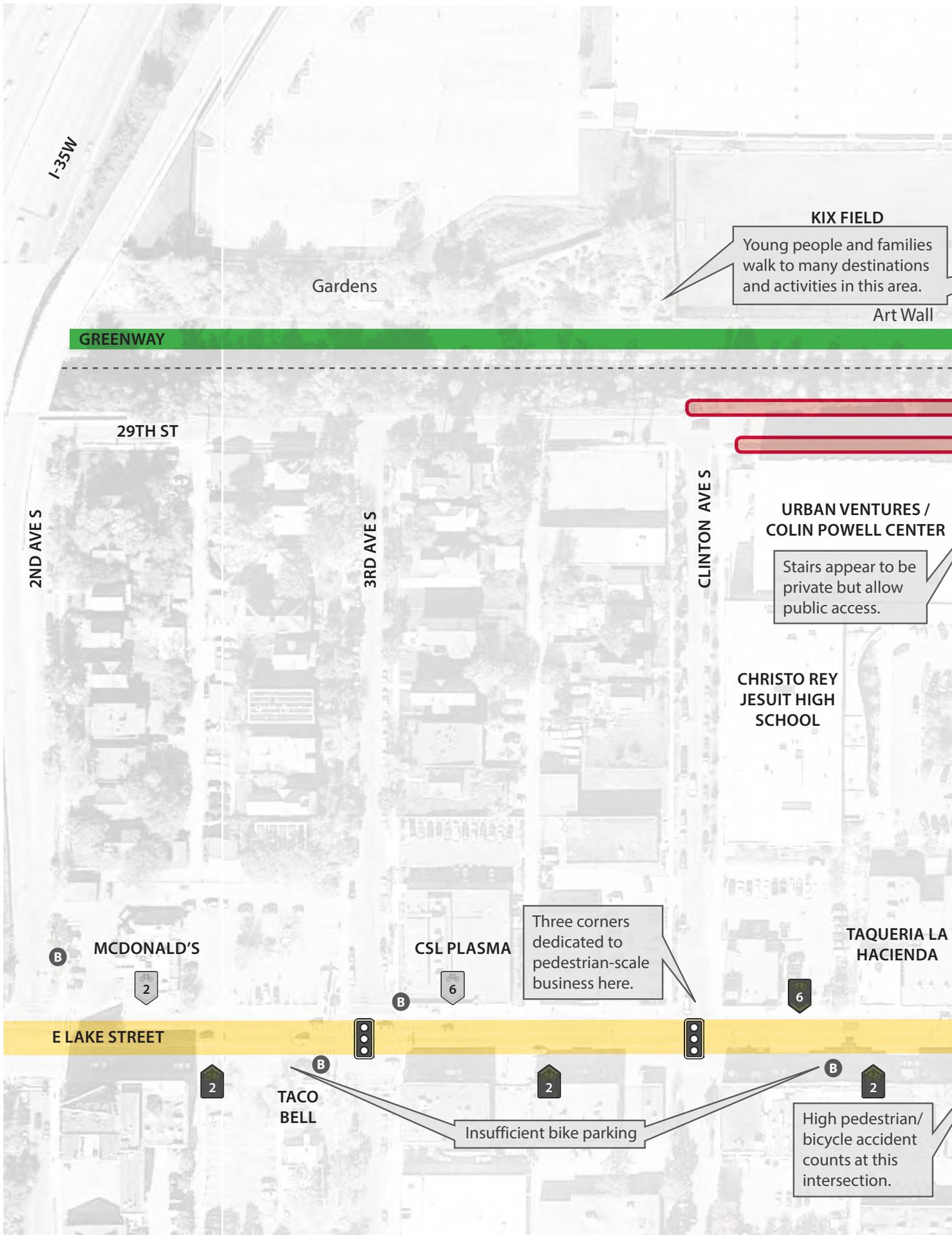
-  Lake St access sign
-  Vertical cue
-  Bike network gap (connecting bike lane)
-  Nice Ride - new station

### PART OF THE NEIGHBORHOOD

-  Infrastructure for site amenities and placemaking
-  Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

-  Improve streetscape
-  Pedestrian ramp
-  Crosswalk upgrade
-  Beacon upgrade
-  Manage vegetation to improve visibility
-  Lead pedestrian interval (LPI) signal adjustment



**KIX FIELD**

Young people and families walk to many destinations and activities in this area.

Art Wall

**GREENWAY**

29TH ST

2ND AVE S

3RD AVE S

CLINTON AVE S

**URBAN VENTURES / COLIN POWELL CENTER**

Stairs appear to be private but allow public access.

**CHRISTO REY JESUIT HIGH SCHOOL**

**MCDONALD'S**

**CSL PLASMA**

**TAQUERIA LA HACIENDA**

B

B

6

**E LAKE STREET**

**TACO BELL**

Insufficient bike parking

High pedestrian/bicycle accident counts at this intersection.

2

6

2

2

2

B

B

# I-35W TO 5TH AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

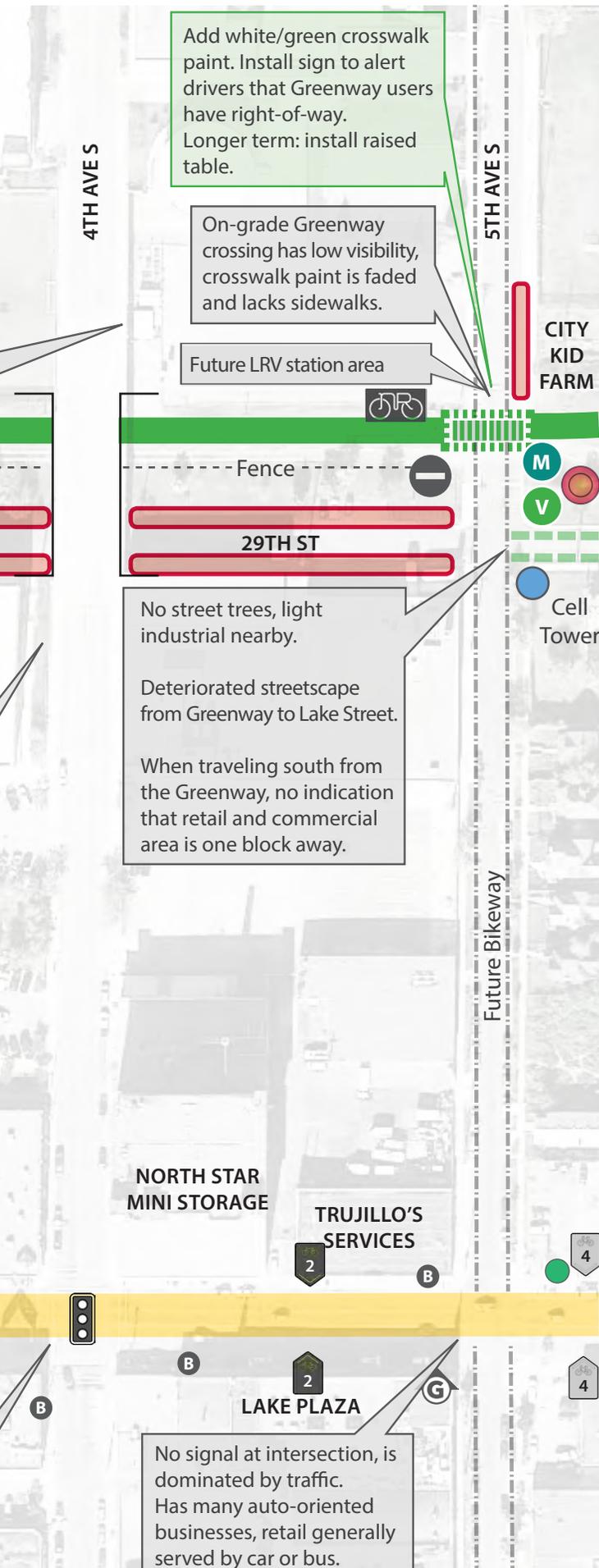
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

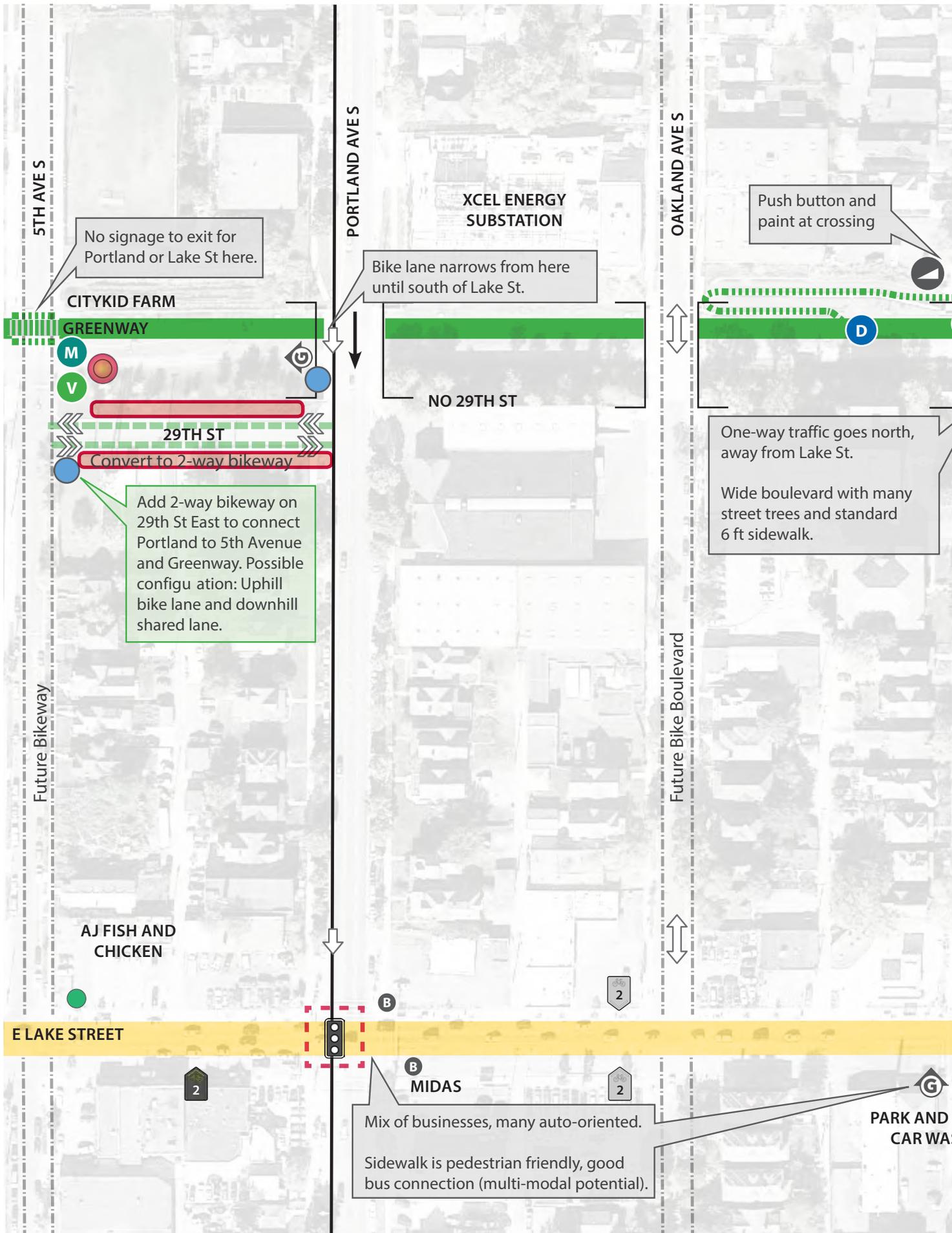
### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape
	Pedestrian ramp
	Crosswalk upgrade
	Beacon upgrade
	Manage vegetation to improve visibility
	Lead pedestrian interval (LPI) signal adjustment





# PORTLAND AND PARK AVENUES S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

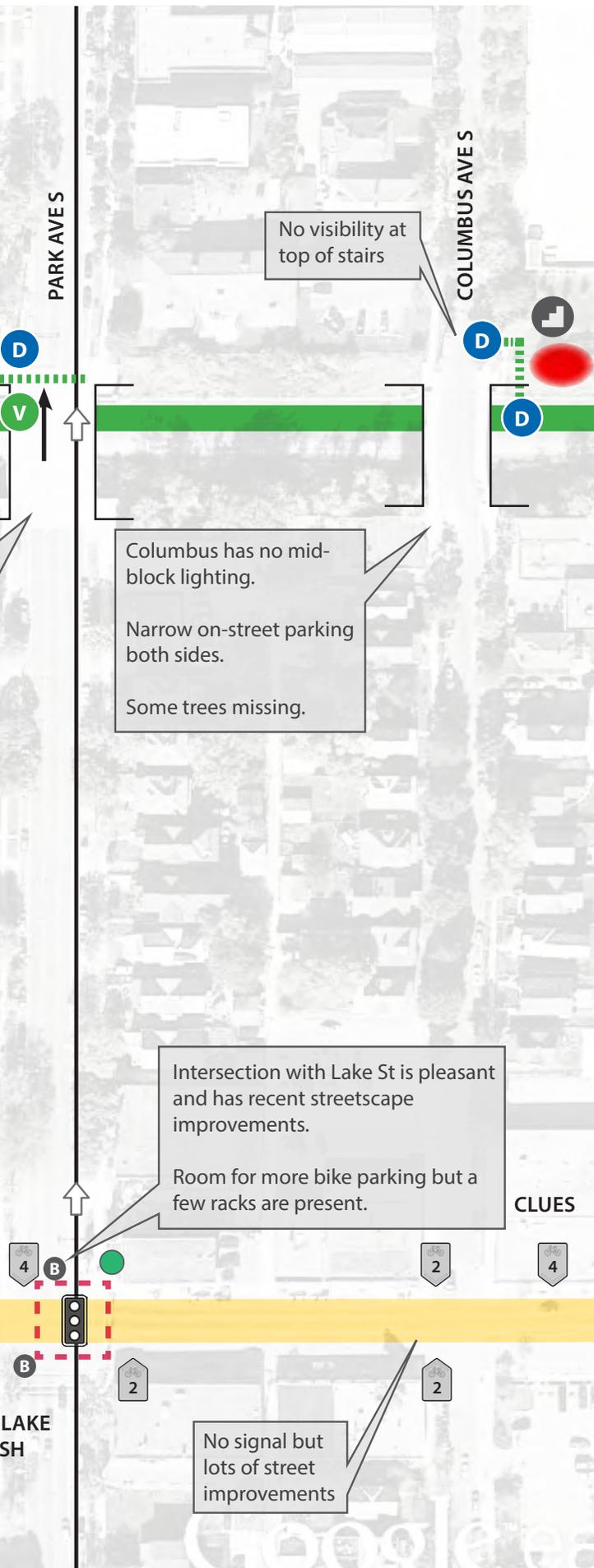
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

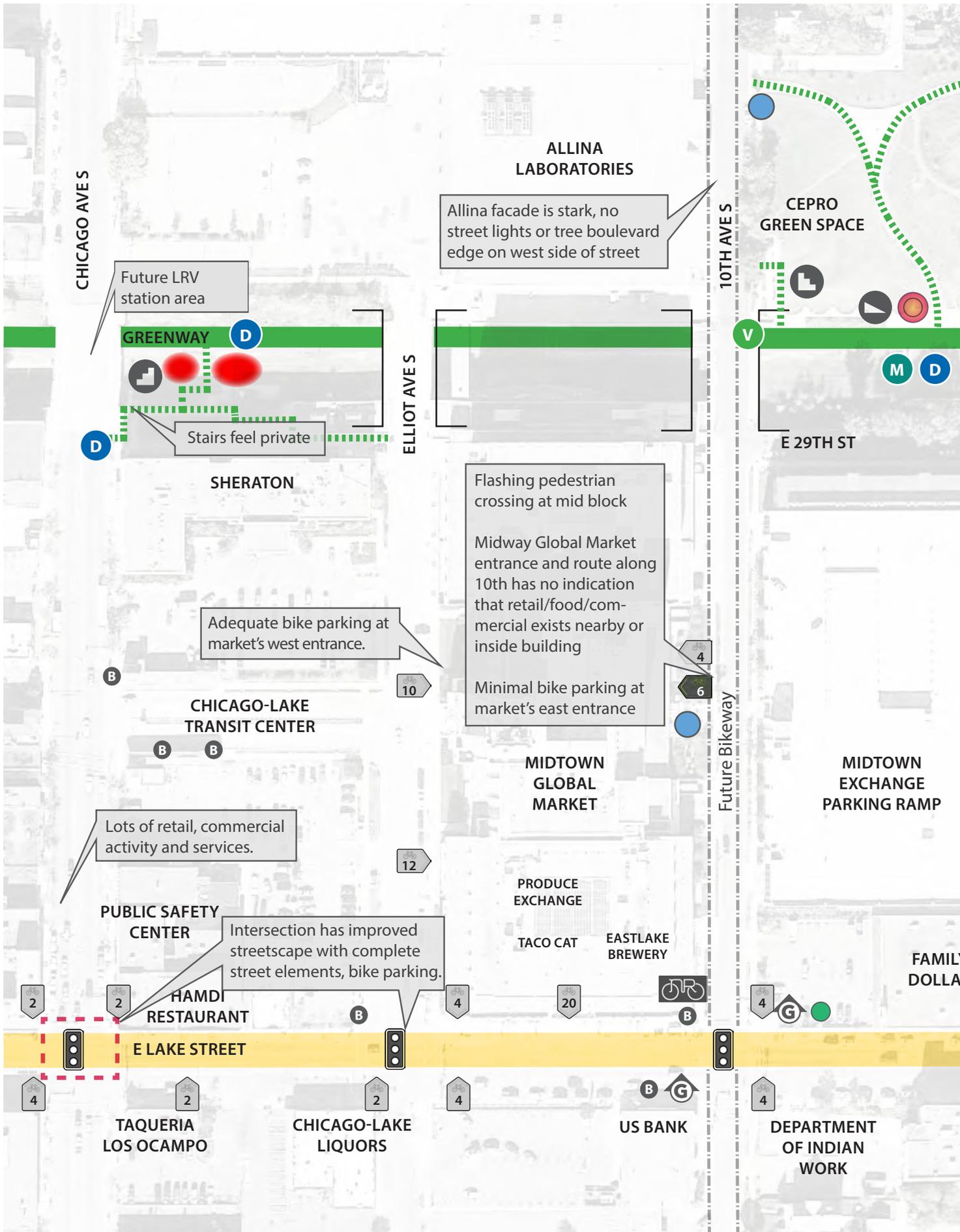
### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

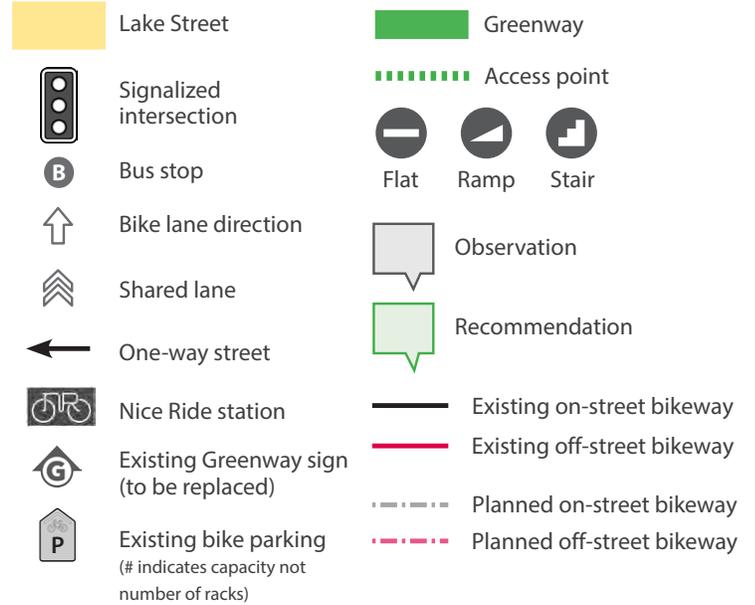
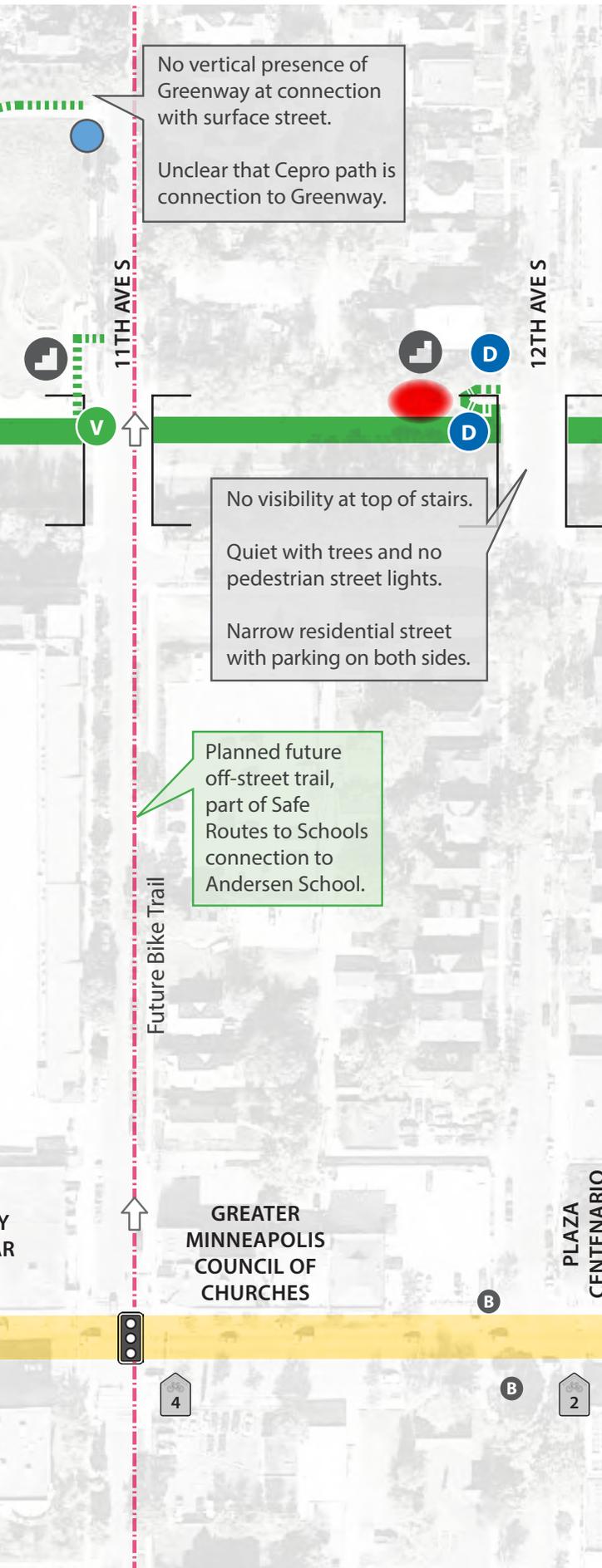
	Improve streetscape		
	Pedestrian ramp		
	Crosswalk upgrade		Beacon upgrade
	Manage vegetation to improve visibility		
	Lead pedestrian interval (LPI) signal adjustment		





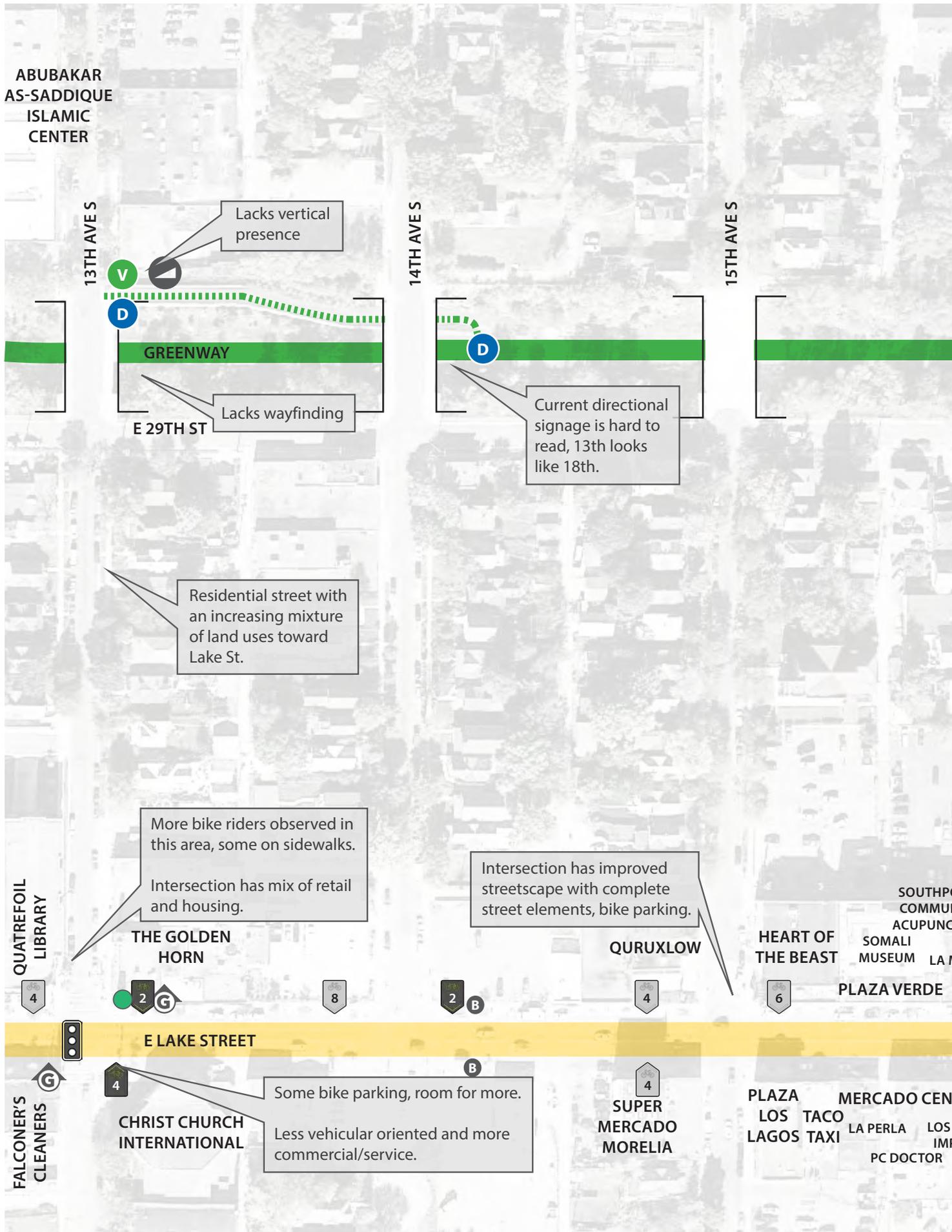
# CHICAGO AVE S, 10TH, 11TH, 12TH AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS



## RECOMMENDATIONS

GETTING TO KEY DESTINATIONS	
<b>M</b>	Map kiosk
<b>D</b>	Directional signage
<b>M</b>	Greenway access sign
CONNECTING TO THE TRANSPORTATION NETWORK	
<b>M</b>	Lake St access sign
<b>V</b>	Vertical cue
<b>---</b>	Bike network gap (connecting bike lane)
<b>+NR</b>	Nice Ride - new station
PART OF THE NEIGHBORHOOD	
<b>○</b>	Infrastructure for site amenities and placemaking
<b>8</b>	Bike parking (estimated quantity, via cost-share program)
BICYCLIST AND PEDESTRIAN SAFETY	
<b>○</b>	Improve streetscape
<b>R</b>	Pedestrian ramp
<b>    </b>	Crosswalk upgrade
<b>●</b>	Beacon upgrade
<b>●</b>	Manage vegetation to improve visibility
<b>□</b>	Lead pedestrian interval (LPI) signal adjustment



# 13TH AVE S AND BLOOMINGTON AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

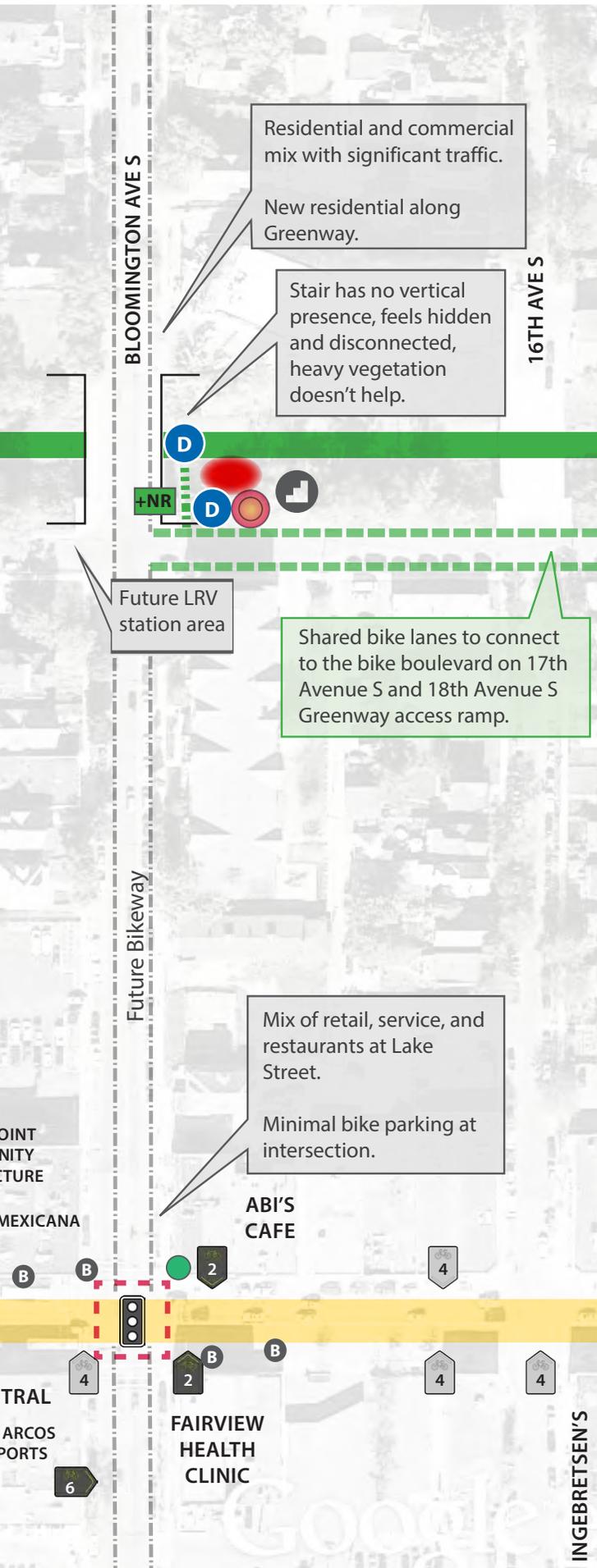
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

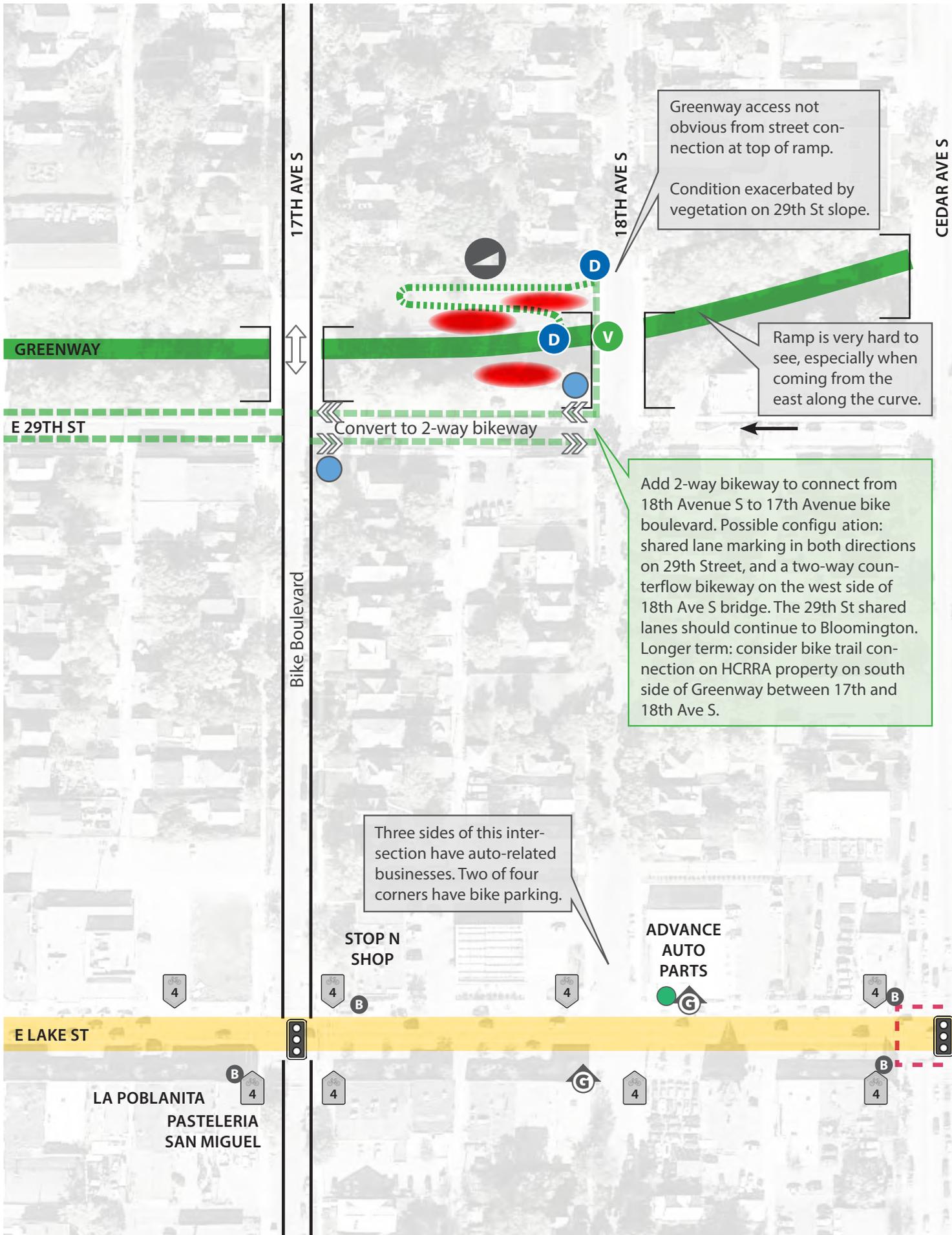
### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape
	Pedestrian ramp
	Crosswalk upgrade
	Beacon upgrade
	Manage vegetation to improve visibility
	Lead pedestrian interval (LPI) signal adjustment





# 18TH AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

PIONEERS AND SOLDIERS  
MEMORIAL CEMETERY

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

- Map kiosk
- Directional signage
- Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

- Lake St access sign
- Vertical cue
- Bike network gap (connecting bike lane)
- Nice Ride - new station

### PART OF THE NEIGHBORHOOD

- Infrastructure for site amenities and placemaking
- Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

- Improve streetscape
- Pedestrian ramp
- Crosswalk upgrade
- Beacon upgrade
- Manage vegetation to improve visibility
- Lead pedestrian interval (LPI) signal adjustment

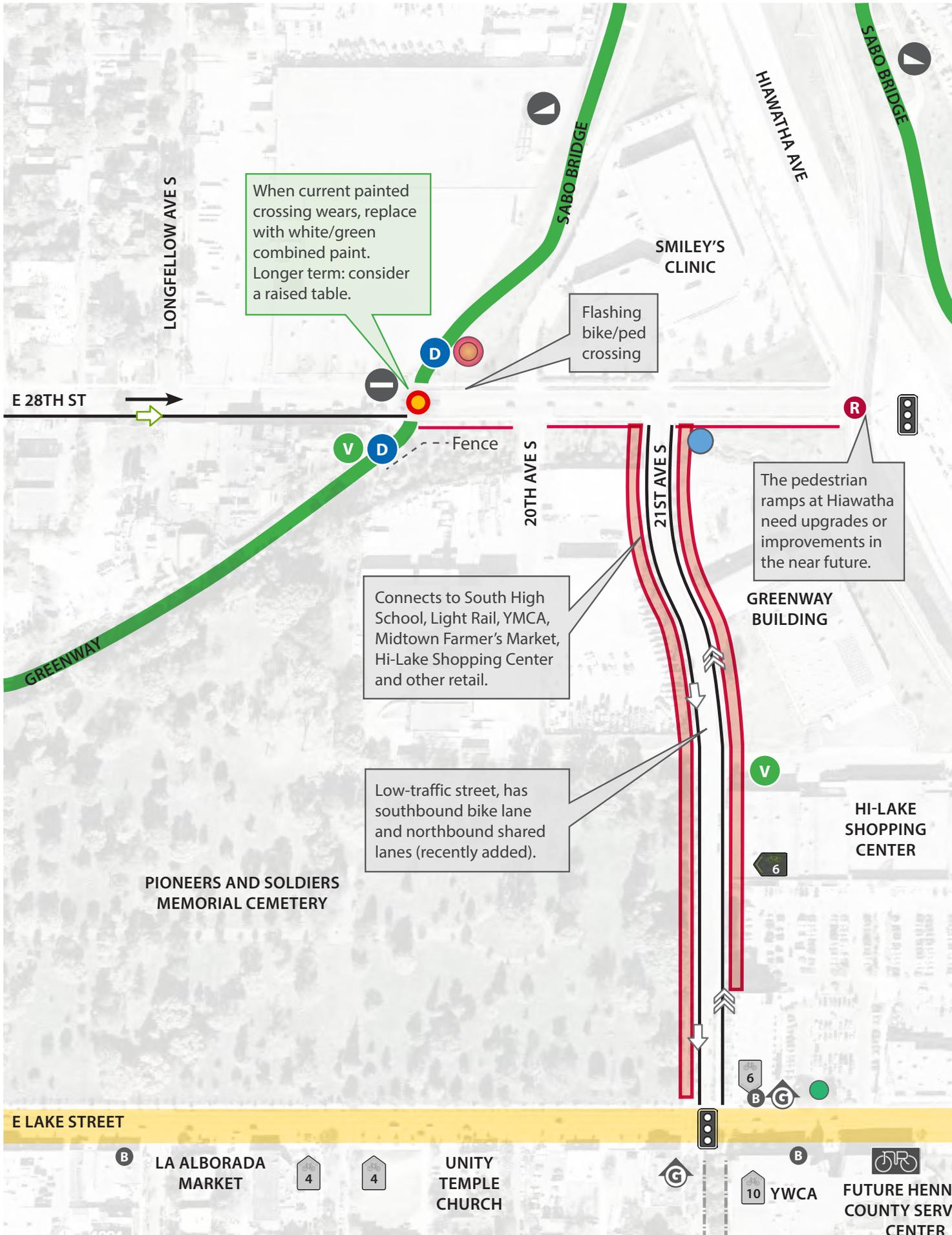
4 B

4

CITY  
MARKET

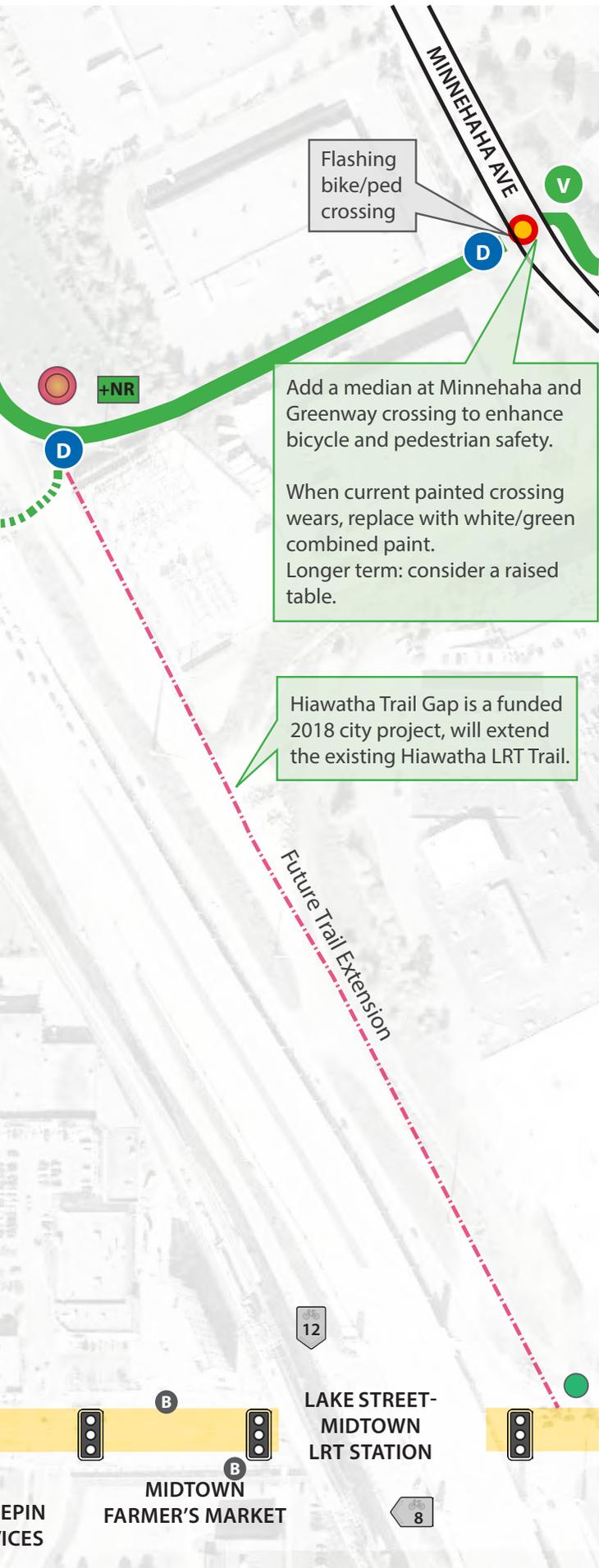
4

LITTLE  
BROTHERS  
FRIENDS OF  
THE ELDERLY



# MINNEHAHA / MIDTOWN LRT STATION

## EXISTING INFRASTRUCTURE & OBSERVATIONS



Flashing bike/ped crossing

Add a median at Minnehaha and Greenway crossing to enhance bicycle and pedestrian safety.  
When current painted crossing wears, replace with white/green combined paint. Longer term: consider a raised table.

Hiawatha Trail Gap is a funded 2018 city project, will extend the existing Hiawatha LRT Trail.

- Lake Street
- Greenway
- Signalized intersection
- Access point
- Bus stop
- Flat
- Bike lane direction
- Ramp
- Shared lane
- Stair
- One-way street
- Observation
- Nice Ride station
- Recommendation
- Existing Greenway sign (to be replaced)
- Existing on-street bikeway
- Existing off-street bikeway
- Planned on-street bikeway
- Planned off-street bikeway
- Existing bike parking (# indicates capacity not number of racks)

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

- Map kiosk
- Directional signage
- Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

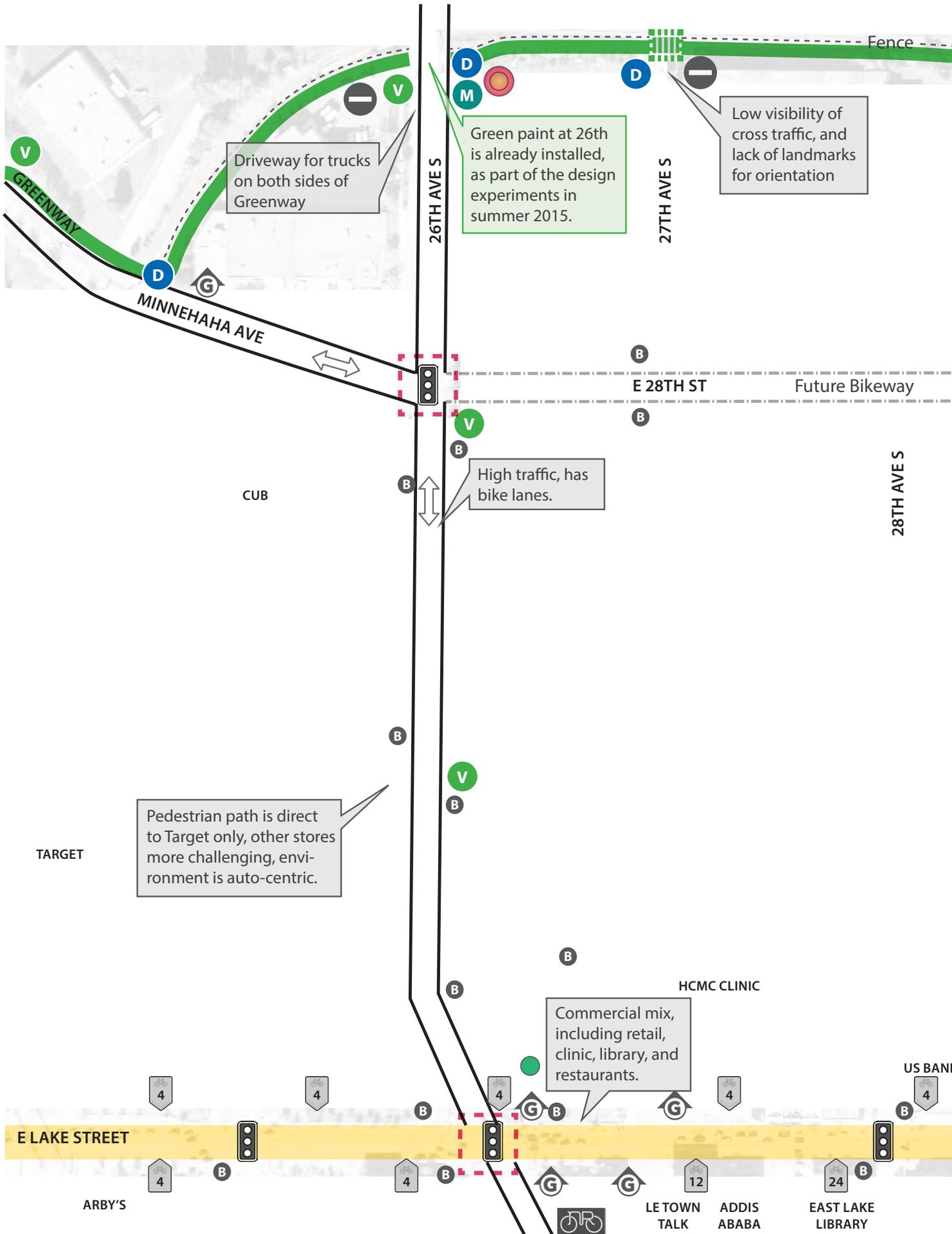
- Lake St access sign
- Vertical cue
- Bike network gap (connecting bike lane)
- Nice Ride - new station

### PART OF THE NEIGHBORHOOD

- Infrastructure for site amenities and placemaking
- Bike parking (estimated quantity, via cost-share program)

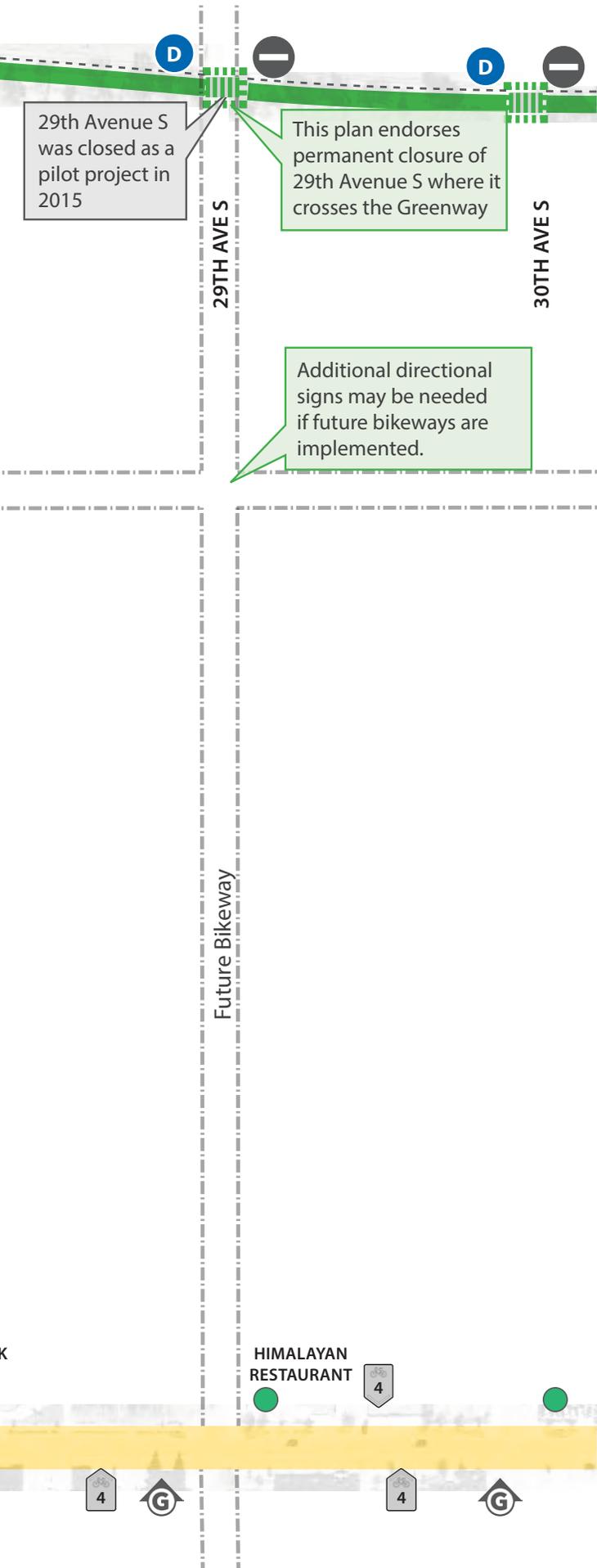
### BICYCLIST AND PEDESTRIAN SAFETY

- Improve streetscape
- Pedestrian ramp
- Crosswalk upgrade
- Beacon upgrade
- Manage vegetation to improve visibility
- Lead pedestrian interval (LPI) signal adjustment



# 26TH TO 30TH AVENUE S

## EXISTING INFRASTRUCTURE & OBSERVATIONS



- Lake Street
- Greenway
- Access point
- Signalized intersection
- Bus stop
- Bike lane direction
- Shared lane
- One-way street
- Nice Ride station
- Existing Greenway sign (to be replaced)
- Existing bike parking (# indicates capacity not number of racks)
- Flat
- Ramp
- Stair
- Observation
- Recommendation
- Existing on-street bikeway
- Existing off-street bikeway
- Planned on-street bikeway
- Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

- Map kiosk
- Directional signage
- Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

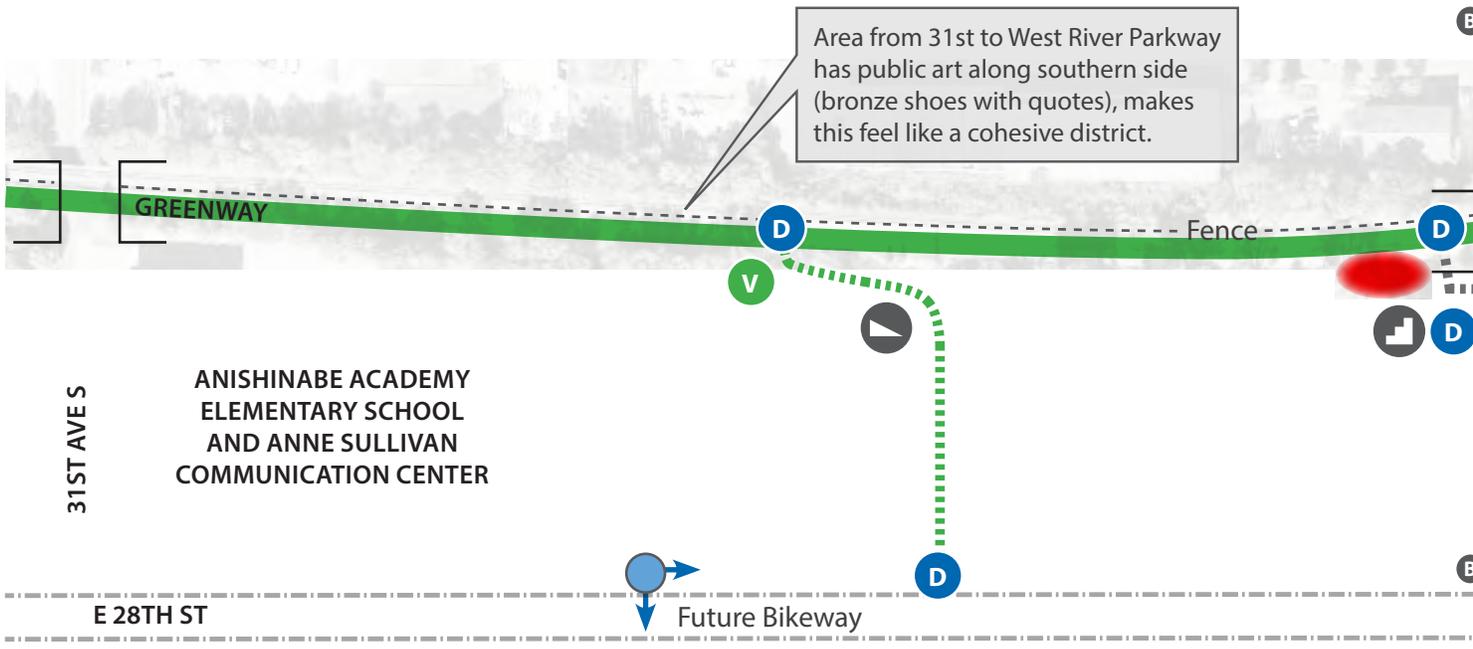
- Lake St access sign
- Vertical cue
- Bike network gap (connecting bike lane)
- Nice Ride - new station

### PART OF THE NEIGHBORHOOD

- Infrastructure for site amenities and placemaking
- Bike parking (estimated quantity, via cost-share program)

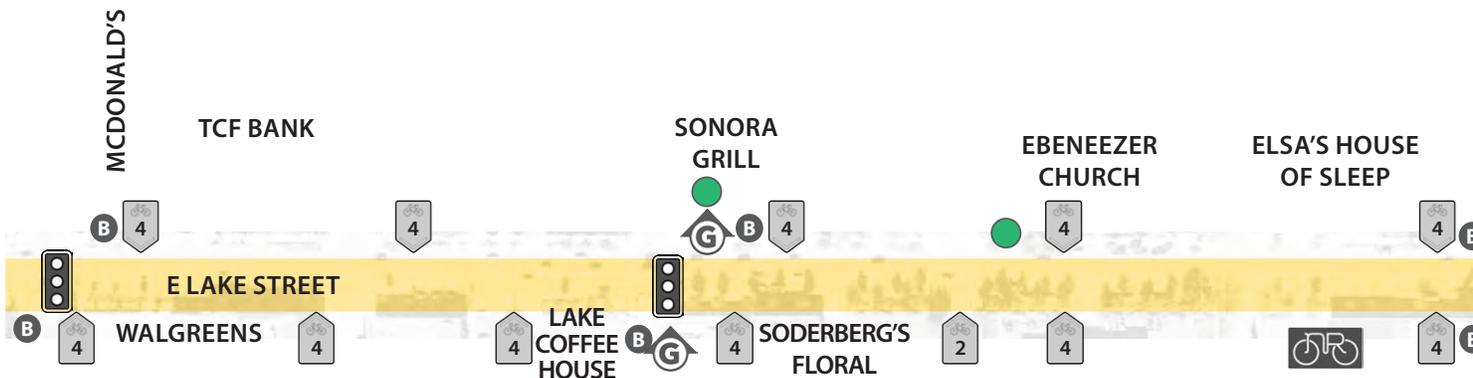
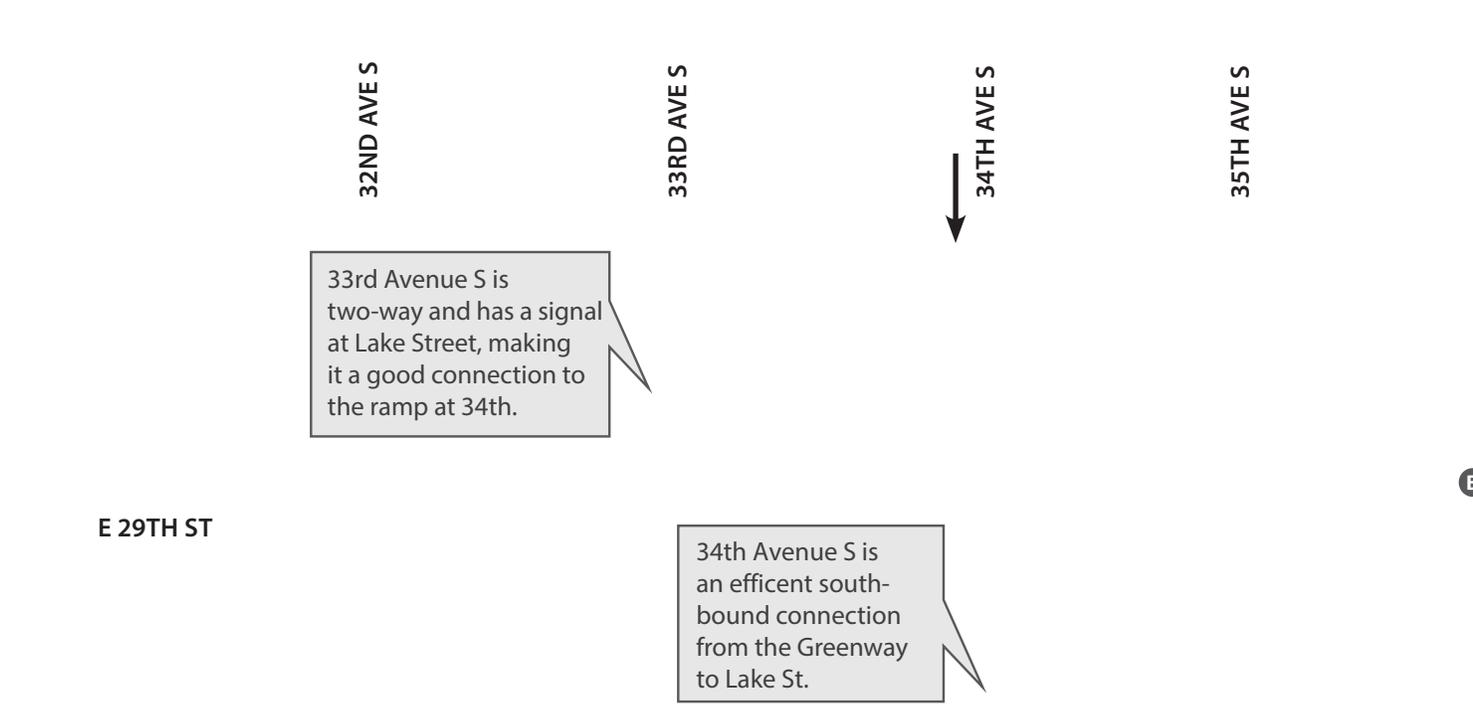
### BICYCLIST AND PEDESTRIAN SAFETY

- Improve streetscape
- Pedestrian ramp
- Crosswalk upgrade
- Beacon upgrade
- Manage vegetation to improve visibility
- Lead pedestrian interval (LPI) signal adjustment

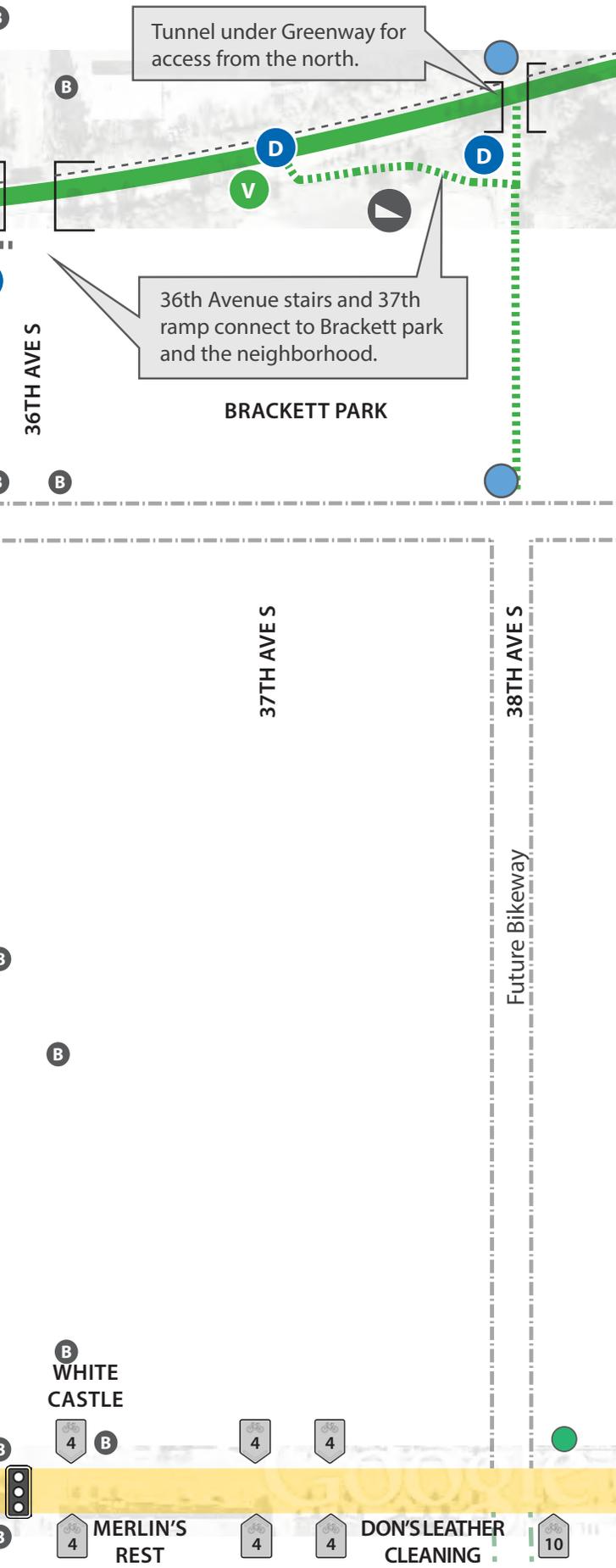


33rd Avenue S is two-way and has a signal at Lake Street, making it a good connection to the ramp at 34th.

34th Avenue S is an efficient south-bound connection from the Greenway to Lake St.



# 31ST TO 38TH AVENUE S



## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

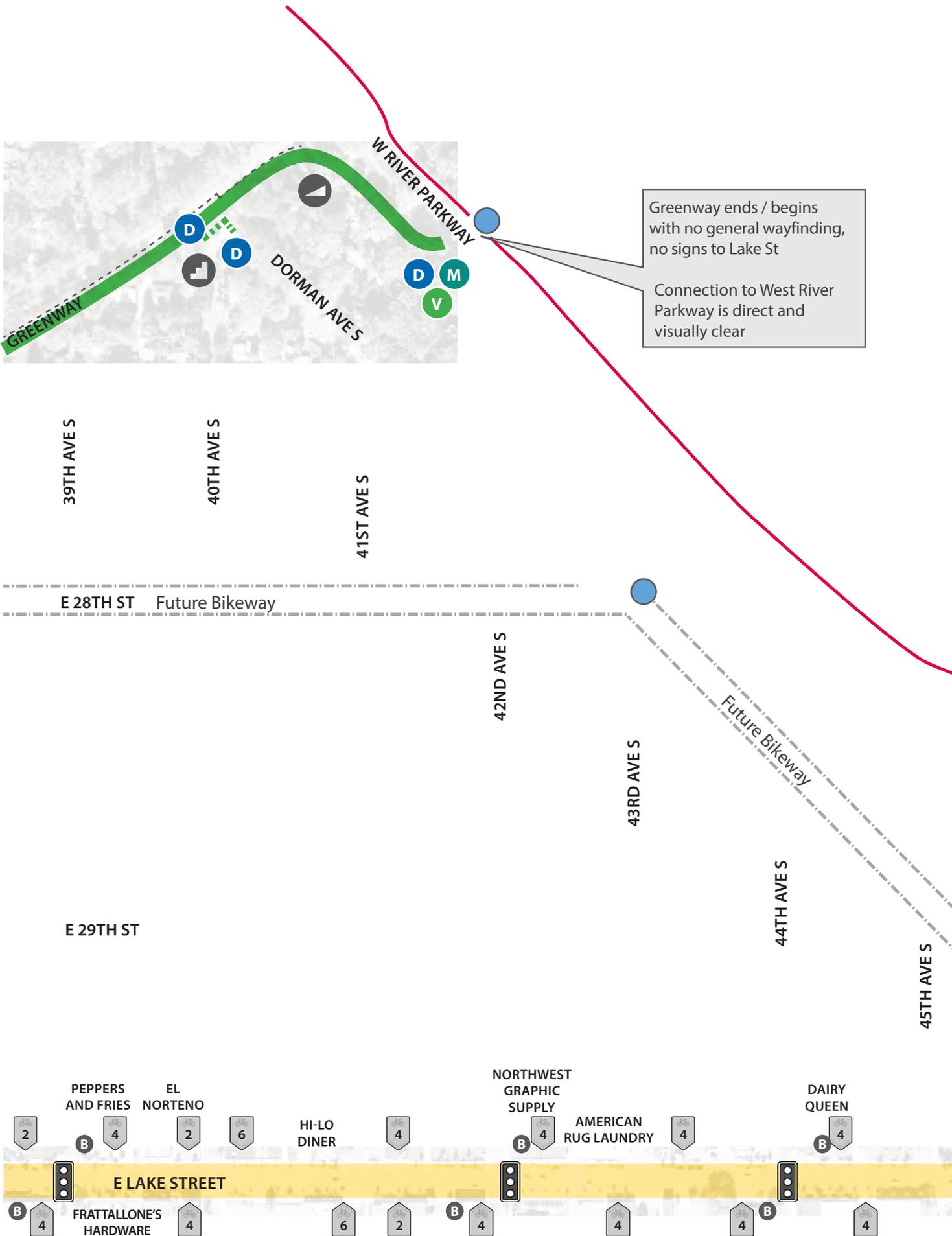
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape
	Pedestrian ramp
	Crosswalk upgrade
	Beacon upgrade
	Manage vegetation to improve visibility
	Lead pedestrian interval (LPI) signal adjustment



# 39TH AVENUE S TO W RIVER PARKWAY

## EXISTING INFRASTRUCTURE & OBSERVATIONS

	Lake Street		Greenway
	Signalized intersection		Access point
	Bus stop		Flat
	Bike lane direction		Ramp
	Shared lane		Stair
	One-way street		Observation
	Nice Ride station		Recommendation
	Existing Greenway sign (to be replaced)		Existing on-street bikeway
	Existing bike parking (# indicates capacity not number of racks)		Existing off-street bikeway
			Planned on-street bikeway
			Planned off-street bikeway

## RECOMMENDATIONS

### GETTING TO KEY DESTINATIONS

	Map kiosk
	Directional signage
	Greenway access sign

### CONNECTING TO THE TRANSPORTATION NETWORK

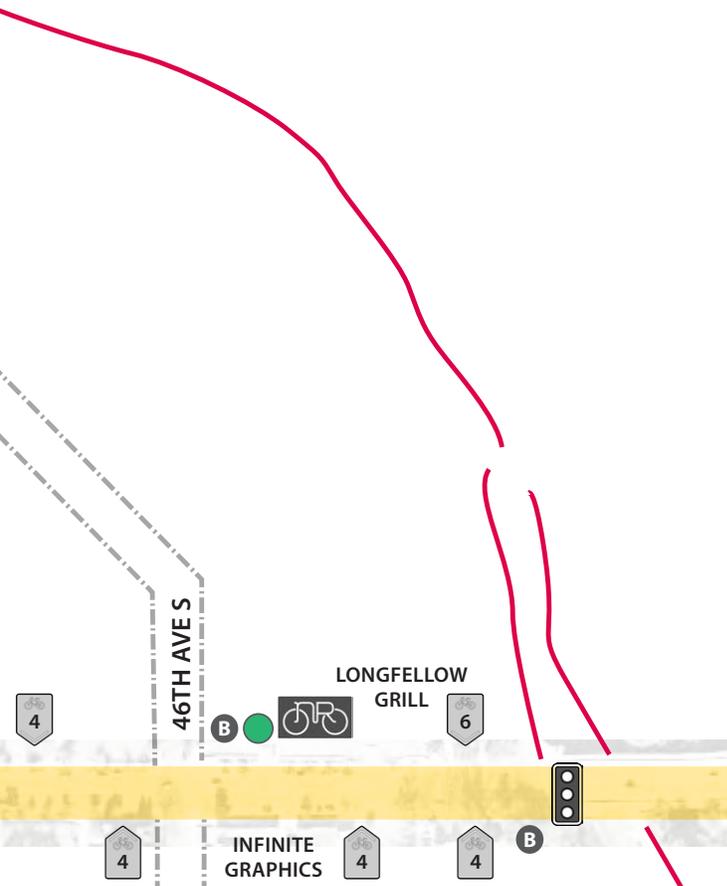
	Lake St access sign
	Vertical cue
	Bike network gap (connecting bike lane)
	Nice Ride - new station

### PART OF THE NEIGHBORHOOD

	Infrastructure for site amenities and placemaking
	Bike parking (estimated quantity, via cost-share program)

### BICYCLIST AND PEDESTRIAN SAFETY

	Improve streetscape		
	Pedestrian ramp		
	Crosswalk upgrade		Beacon upgrade
	Manage vegetation to improve visibility		
	Lead pedestrian interval (LPI) signal adjustment		





Midtown Greenway trailhead at West River Parkway

## **05. WHERE DOES THE MONEY COME FROM AND HOW DOES THIS WORK HAPPEN?**

As the primary stakeholders in the Midtown Greenway, Hennepin County, the City of Minneapolis, the Midtown Greenway Coalition, and the Lake Street Council, will continue to coordinate and lead efforts to implement the plan. Hennepin County and the City of Minneapolis are key partners for infrastructure funding, but this plan will require the participation of a wide variety of interested organizations and stakeholders if the vision is to become a reality.

The following breakdown of costs is organized around the four major themes to removing the barriers that exist to creating stronger connections between Lake Street, adjacent neighborhoods, and the Midtown Greenway.



## CONNECTING TO THE TRANSPORTATION NETWORK

The costs illustrated below depict improvements designed to better connect people to and from the Greenway via the existing and proposed network of sidewalks, bike lanes and trails. One overlapping recommendation is improved wayfinding and a critical element

is the introduction of vertical cues to signify Greenway access points. When vertical cues are recommended in the same location as directional signage, some efficiencies can be gained by combining those elements.

### COST ESTIMATE - CONNECTING TO THE TRANSPORTATION NETWORK DETAIL

CATEGORY	VERTICAL CUE			BIKE LANE IMPROVEMENTS			
	Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>SouthWest / West Lake LRT</b>			2	\$5,000		0	\$0
Chowen Avenue	\$3,500			\$0	\$10		\$0
West Lake Station	\$3,500			\$0	\$10		\$0
Burnham Trail/Kenilworth Trail	\$3,500	1		\$2,500	\$10		\$0
Calhoun Village	\$3,500			\$0	\$10		\$0
Dean Parkway	\$3,500			\$0	\$10		\$0
Lake Isles/Lake Calhoun Pkwy	\$3,500	1		\$2,500	\$10		\$0
<b>Uptown</b>			4	\$13,000		660	\$6,600
James Avenue	\$3,500	1		\$3,500	\$10		\$0
Irving Avenue	\$3,500	1		\$3,500	\$10		\$0
Humboldt Avenue	\$3,500	1		\$3,500	\$10	660	\$6,600
Hennepin Avenue	\$3,500			\$0	\$10	0	\$0
Girard Avenue	\$3,500	1		\$2,500	\$10	Long Term	\$0
Emerson Avenue	\$3,500			\$0	\$10		\$0
<b>Lyn / Lake</b>			2	\$5,000		0	\$0
Bryant Avenue	\$3,500	2		\$5,000	\$10		\$0
Lyndale Avenue/Vera's Garden	\$3,500			\$0	\$10		\$0
Soo Line Garden	\$3,500			\$0	\$10		\$0
<b>Whittier</b>			2	\$6,000		175	\$4,900
Pleasant/Grand avenues	\$3,500			\$0	\$10		\$0
Nicollet Avenue	\$3,500	1		\$2,500	\$28	175	\$4,900
35W "Green Crescent" Future	\$3,500	1		\$3,500	\$10		\$0
<b>Phillips West</b>			2	\$5,000		660	\$6,600
Fifth Avenue	\$3,500	1		\$2,500	\$10	660	\$6,600
Park Avenue	\$3,500	1		\$2,500	\$10		\$0
Columbus Avenue	\$3,500			\$0	\$10		\$0

## COST ESTIMATE - CONNECTING TO THE TRANSPORTATION NETWORK DETAIL

CATEGORY	VERTICAL CUE			BIKE LANE IMPROVEMENTS		
Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>Midtown Phillips</b>		3	\$7,500		0	\$0
Chicago Avenue / Midtown Sheraton	\$3,500		\$0	\$10		\$0
Freewheel	\$3,500		\$0	\$10		\$0
10th Avenue	\$3,500	1	\$2,500	\$10		\$0
11th Avenue	\$3,500	1	\$2,500	\$10		\$0
12th Avenue	\$3,500		\$0	\$10		\$0
13th Avenue	\$3,500	1	\$2,500	\$10		\$0
<b>East Phillips</b>		2	\$5,000		1901	\$39,000
Bloomington Avenue	\$3,500		\$0	\$20,000	2	\$40,000
18th Avenue	\$3,500	1	\$2,500	\$10	1900	\$19,000
East 28th Street	\$3,500	1	\$2,500	\$10		\$0
21st Avenue	\$3,500		\$0	\$10		\$0
Little Earth Trail (North)	\$3,500		\$0	\$10		\$0
Hiawatha LRT Trail (To LRT Station)	\$3,500		\$0	\$10		\$0
<b>Longfellow</b>		8	\$25,000		0	\$0
Hiawatha LRT Trail (North)	\$3,500		\$0	\$20,000	1	\$20,000
Minnehaha Avenue	\$3,500	1	\$2,500	\$10		\$0
26th Avenue South	\$3,500	3	\$9,500	\$10		\$0
27th Avenue South	\$3,500	1	\$3,500	\$10		\$0
29th Avenue South	\$3,500	1	\$3,500	\$10		\$0
30th Avenue South	\$3,500	1	\$3,500	\$10		\$0
34th Avenue South	\$3,500	1	\$2,500	\$10		\$0
36th Avenue South	\$3,500		\$0	\$10		\$0
<b>Cooper</b>		2	\$6,000		0	\$0
38th Avenue/Brackett Park	\$3,500	1	\$2,500	\$10		\$0
Dorman Avenue	\$3,500		\$0	\$10		\$0
West River Parkway	\$3,500	1	\$3,500	\$10		\$0
<b>Construction costs per type of improvement</b>		27	\$76,500		3396	\$97,100
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>			\$22,950			\$29,130
<b>Total per type of improvement</b>			\$99,450			\$126,230
<b>Overall estimated total for Connecting to the Transportation Network</b>						<b>\$225,680</b>



## PART OF THE NEIGHBORHOOD

The following breakdown of costs illustrate two important aspects of better connecting the neighborhoods to the Greenway. Close collaboration between land-owners, agencies, and neighborhood, arts-based and cultural organizations will be necessary to develop sustainable sources for programming these public spaces.

### COST ESTIMATE - PART OF THE NEIGHBORHOOD/SITE AMENITY INFRASTRUCTURE DETAIL

CATEGORY	SUPPORTIVE INFRASTRUCTURE FOR SITE AMENITIES AND PLACEMAKING		
Description	Unit Cost	Qty	Total
<b>SouthWest / West Lake LRT</b>			\$0
Chowen Avenue	\$0		\$0
West Lake Station	\$0		\$0
Burnham Trail / Kenilworth Trail	\$0		\$0
Calhoun Village	\$0		\$0
Dean Parkway	\$0		\$0
Lake Isles/Lake Calhoun Pkwy	\$0		\$0
<b>Uptown</b>		1	\$25,000
James Avenue	\$0		\$0
Irving Avenue	\$0		\$0
Humboldt Avenue	\$25,000	1	\$25,000
Hennepin Avenue	\$0		\$0
Girard Avenue	\$0		\$0
Emerson Avenue	\$0		\$0
<b>Lyn / Lake</b>		2	\$50,000
Bryant Avenue	\$25,000	1	\$25,000
Lyndale Avenue / Vera's Garden	\$0		\$0
Soo Line Garden	\$25,000	1	\$25,000
<b>Whittier</b>		1	\$25,000
Pleasant/Grand avenues	\$0		\$0
Nicollet Avenue	\$25,000	1	\$25,000
35W "Green Crescent" Future	\$0		\$0
<b>Phillips West</b>		1	\$25,000
Fifth Avenue	\$25,000	1	\$25,000
Park Avenue	\$0		\$0
Columbus Avenue	\$0		\$0

## COST ESTIMATE - PART OF THE NEIGHBORHOOD/SITE AMENITY INFRASTRUCTURE DETAIL

CATEGORY	SUPPORTIVE INFRASTRUCTURE FOR SITE AMENITIES AND PLACEMAKING		
Description	Unit Cost	Qty	Total
<b>Midtown Phillips</b>		1	\$25,000
Chicago Avenue / Midtown Sheraton	\$0		\$0
Freewheel	\$0		\$0
10th Avenue	\$25,000	1	\$25,000
11th Avenue	\$0		\$0
12th Avenue	\$0		\$0
13th Avenue	\$0		\$0
<b>East Phillips</b>		2	\$50,000
Bloomington Avenue	\$25,000	1	\$25,000
18th Avenue	\$0		\$0
East 28th Street	\$25,000	1	\$25,000
21st Avenue	\$0		\$0
Little Earth Trail (North)	\$0		\$0
Hiawatha LRT Trail (To LRT Station)	\$0		\$0
<b>Longfellow</b>		2	\$50,000
Hiawatha LRT Trail (North)	\$25,000	1	\$25,000
Minnehaha Avenue	\$0		\$0
26th Avenue South	\$25,000	1	\$25,000
27th Avenue South	\$0		\$0
29th Avenue South	\$0		\$0
30th Avenue South	\$0		\$0
34th Avenue South	\$0		\$0
36th Avenue South	\$0		\$0
<b>Cooper</b>		0	\$0
38th Avenue/Brackett Park	\$0		\$0
Dorman Avenue	\$0		\$0
West River Parkway	\$0		\$0
<b>Construction costs per type of improvement</b>		10	\$250,000
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>			\$75,000
<b>Total per type of improvement</b>			\$325,000
<b>Public art, community programming &amp; neighborhood activities on Greenway</b>			\$375,000
<b>Overall estimated total for Part of the Neighborhood/Site Amenity Infrastructure</b>			<b>\$700,000</b>



Since the inception of the Greenway, a comprehensive wayfinding system has been lacking to connect people to the Greenway but also to important community destinations outside the Greenway. The table below summarizes the costs of developing such a system.

## COST ESTIMATE - GETTING TO KEY DESTINATIONS DETAIL

CATEGORY	MAP KIOSK			ACCESS SIGNAGE			DIRECTIONAL SIGNAGE		
Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>SouthWest / West Lake LRT</b>		2	\$20,000		8	\$4,000		6	\$15,000
Chowen Avenue	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
West Lake Station	\$10,000		\$0	\$500		\$0	\$2,500		\$0
Burnham Trail / Kenilworth Trail	\$10,000		\$0	\$500		\$0	\$2,500	1	\$2,500
Calhoun Village	\$10,000		\$0	\$500		\$0	\$2,500		\$0
Dean Parkway	\$10,000	1	\$10,000	\$500	4	\$2,000	\$2,500	2	\$5,000
Lake Isles/Lake Calhoun Pkwy	\$10,000	1	\$10,000	\$500	3	\$1,500	\$2,500	2	\$5,000
<b>Uptown</b>		1	\$10,000		7	\$3,500		9	\$22,500
James Avenue	\$10,000		\$0	\$500		\$0	\$2,500	1	\$2,500
Irving Avenue	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
Humboldt Avenue	\$10,000	1	\$10,000	\$500	2	\$1,000	\$2,500	1	\$2,500
Hennepin Avenue	\$10,000		\$0	\$500	4	\$2,000	\$2,500	2	\$5,000
Girard Avenue	\$10,000		\$0	\$500		\$0	\$2,500	2	\$5,000
Emerson Avenue	\$10,000		\$0	\$500		\$0	\$2,500	2	\$5,000
<b>Lyn / Lake</b>		1	\$10,000		7	\$3,500		7	\$17,500
Bryant Avenue	\$10,000	1	\$10,000	\$500	4	\$2,000	\$2,500	4	\$10,000
Lyndale Avenue / Vera's Garden	\$10,000		\$0	\$500		\$0	\$2,500	2	\$5,000
Soo Line Garden	\$10,000		\$0	\$500	3	\$1,500	\$2,500	1	\$2,500
<b>Whittier</b>		1	\$10,000		8	\$4,000		3	\$7,500
Pleasant/Grand avenues	\$10,000		\$0	\$500		\$0	\$2,500		\$0
Nicollet Avenue	\$10,000	1	\$10,000	\$500	7	\$3,500	\$2,500	2	\$5,000
35W "Green Crescent" Future	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
<b>Phillips West</b>		0	\$0		7	\$3,500		6	\$15,000
Fifth Avenue	\$10,000		\$0	\$500	5	\$2,500	\$2,500	2	\$5,000
Park Avenue	\$10,000		\$0	\$500	2	\$1,000	\$2,500	2	\$5,000
Columbus Avenue	\$10,000		\$0	\$500		\$0	\$2,500	2	\$5,000

## COST ESTIMATE - GETTING TO KEY DESTINATIONS DETAIL

CATEGORY	MAP KIOSK			ACCESS SIGNAGE			DIRECTIONAL SIGNAGE		
Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>Midtown Phillips</b>		1	\$10,000		9	\$4,500		8	\$20,000
Chicago Avenue / Midtown Sheraton	\$10,000		\$0	\$500	2	\$1,000	\$2,500	2	\$5,000
Freewheel	\$10,000		\$0	\$500		\$0	\$2,000		\$0
10th Avenue	\$10,000	1	\$10,000	\$500	3	\$1,500	\$2,500	1	\$2,500
11th Avenue	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
12th Avenue	\$10,000		\$0	\$500	2	\$1,000	\$2,500	2	\$5,000
13th Avenue	\$10,000		\$0	\$500	1	\$500	\$2,500	2	\$5,000
<b>East Phillips</b>		0	\$0		10	\$5,000		7	\$17,500
Bloomington Avenue	\$10,000		\$0	\$500	2	\$1,000	\$2,500	2	\$5,000
18th Avenue	\$10,000		\$0	\$500	6	\$3,000	\$2,500	2	\$5,000
East 28th Street	\$10,000		\$0	\$500		\$0	\$2,500	2	\$5,000
21st Avenue	\$10,000		\$0	\$500	2	\$1,000	\$2,500	0	\$0
Little Earth Trail (North)	\$10,000		\$0	\$500		\$0	\$2,500		\$0
Hiawatha LRT Trail (To LRT Station)	\$10,000		\$0	\$500	0	\$0	\$2,500	1	\$2,500
<b>Longfellow</b>		1	\$10,000		13	\$6,500		9	\$22,500
Hiawatha LRT Trail (North)	\$10,000		\$0	\$500	1	\$500	\$2,500	0	\$0
Minnehaha Avenue	\$10,000		\$0	\$500	3	\$1,500	\$2,500	2	\$5,000
26th Avenue South	\$10,000	1	\$10,000	\$500	3	\$1,500	\$2,500	1	\$2,500
27th Avenue South	\$10,000		\$0	\$500		\$0	\$2,500	1	\$2,500
29th Avenue South	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
30th Avenue South	\$10,000		\$0	\$500	1	\$500	\$2,500	1	\$2,500
34th Avenue South	\$10,000		\$0	\$500	4	\$2,000	\$2,500	2	\$5,000
36th Avenue South	\$10,000		\$0	\$500		\$0	\$2,500	1	\$2,500
<b>Cooper</b>		1	\$10,000		7	\$3,500		5	\$12,500
38th Avenue/Brackett Park	\$10,000		\$0	\$500	4	\$2,000	\$2,500	2	\$5,000
Dorman Avenue	\$10,000		\$0	\$500	2	\$1,000	\$2,500	2	\$5,000
West River Parkway	\$10,000	1	\$10,000	\$500	1	\$500	\$2,500	1	\$2,500
<b>Construction costs per type of improvement</b>		8	\$80,000		76	\$38,000		60	\$150,000
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>			\$24,000			\$11,400			\$45,000
<b>Total per type of improvement</b>			\$104,000			\$49,400			\$195,000
<b>Overall estimated total for Getting to Key Destinations</b>									<b>\$348,400</b>



## BICYCLE AND PEDESTRIAN SAFETY

The safety of all users is paramount to this effort and safety concerns are frequent inhibitors to increased use of the Greenway. The following table summarizes the costs of a comprehensive approach to resolving real and perceived safety challenges.

### COST ESTIMATE - BICYCLIST AND PEDESTRIAN SAFETY DETAIL (1 OF 2)

CATEGORY	PEDESTRIAN RAMP			FLASHING BEACONS			GREEN CROSSWALKS			
	Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>SouthWest / West Lake LRT</b>			0	\$0		0	\$0		0	\$0
Chowen Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0
West Lake Station	\$1,000			\$0	\$0		\$0	\$0		\$0
Burnham Trail / Kenilworth Trail	\$1,000			\$0	\$0		\$0	\$0		\$0
Calhoun Village	\$1,000			\$0	\$0		\$0	\$0		\$0
Dean Parkway	\$1,000			\$0	\$0		\$0	\$0		\$0
Lake Isles/Lake Calhoun Pkwy	\$1,000			\$0	\$0		\$0	\$0		\$0
<b>Uptown</b>			9	\$1,000		0	\$0		1200	\$12,000
James Avenue	\$1,000			\$0	\$0		\$0	\$10	400	\$4,000
Irving Avenue	\$1,000			\$0	\$0		\$0	\$10	400	\$4,000
Humboldt Avenue	\$1,000			\$0	\$0		\$0	\$10	400	\$4,000
Hennepin Avenue	\$1,000	1		\$1,000	\$0		\$0	\$0		\$0
Girard Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0
Emerson Avenue	*	8		\$0	\$0		\$0	\$0		\$0
<b>Lyn / Lake</b>			2	\$0		0	\$0		0	\$0
Bryant Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0
Lyndale Avenue / Vera's Garden	\$1,000			\$0	\$0		\$0	\$0		\$0
Soo Line Garden	*	2		\$0	\$0		\$0	\$0		\$0
<b>Whittier</b>			0	\$0		0	\$0		0	\$0
Pleasant/Grand avenues	\$1,000			\$0	\$0		\$0	\$0		\$0
Nicollet Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0
35W "Green Crescent" Future	\$1,000			\$0	\$0		\$0	\$0		\$0
<b>Phillips West</b>			0	\$0		0	\$0		400	\$4,000
Fifth Avenue	\$1,000			\$0	\$0		\$0	\$10	400	\$4,000
Park Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0
Columbus Avenue	\$1,000			\$0	\$0		\$0	\$0		\$0

## COST ESTIMATE - BICYCLIST AND PEDESTRIAN SAFETY DETAIL (1 OF 2)

CATEGORY	PEDESTRIAN RAMP			FLASHING BEACONS			GREEN CROSSWALKS		
Description	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>Midtown Phillips</b>		0	\$0		0	\$0		0	\$0
Chicago Avenue / Midtown Sheraton	\$1,000		\$0	\$0		\$0	\$0		\$0
Freewheel	\$1,000		\$0	\$0		\$0	\$0		\$0
10th Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
11th Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
12th Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
13th Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
<b>East Phillips</b>		1	\$0		1	\$5,000		0	\$0
Bloomington Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
18th Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
East 28th Street	\$1,000		\$0	\$5,000	1	\$5,000	\$0		\$0
21st Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
Little Earth Trail (North)	\$1,000		\$0	\$0		\$0	\$0		\$0
Hiawatha LRT Trail (To LRT Station)	*	1	\$0	\$0		\$0	\$0		\$0
<b>Longfellow</b>		0	\$0		1	\$5,000		1200	\$12,000
Hiawatha LRT Trail (North)	\$1,000		\$0	\$0		\$0	\$0		\$0
Minnehaha Avenue	\$1,000		\$0	\$5,000	1	\$5,000	\$0		\$0
26th Avenue South	\$1,000		\$0	\$0		\$0	\$0		\$0
27th Avenue South	\$1,000		\$0	\$0		\$0	\$10	400	\$4,000
29th Avenue South	\$1,000		\$0	\$0		\$0	\$10	400	\$4,000
30th Avenue South	\$1,000		\$0	\$0		\$0	\$10	400	\$4,000
34th Avenue South	\$1,000		\$0	\$0		\$0	\$0		\$0
36th Avenue South	\$1,000		\$0	\$0		\$0	\$0		\$0
<b>Cooper</b>		0	\$0		0	\$0		0	\$0
38th Avenue/Brackett Park	\$1,000		\$0	\$0		\$0	\$0		\$0
Dorman Avenue	\$1,000		\$0	\$0		\$0	\$0		\$0
West River Parkway	\$1,000		\$0	\$0		\$0	\$0		\$0
<b>Construction costs per type of improvement</b>		12	<b>\$1,000</b>		2	<b>\$10,000</b>		2800	<b>\$28,000</b>
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>			<b>\$300</b>			<b>\$3,000</b>			<b>\$8,400</b>
<b>Total per type of improvement</b>			<b>\$1,300</b>			<b>\$13,000</b>			<b>\$36,400</b>
<b>Estimated subtotal for Bicyclist and Pedestrian Safety</b> (see next page for total of all six items in this category)									<b>\$50,700</b>

**BICYCLE AND PEDESTRIAN SAFETY****COST ESTIMATE - BICYCLIST AND PEDESTRIAN SAFETY DETAIL (2 OF 2)**

CATEGORY	STRIPED CROSSWALK			TRAFFIC CALMING & VEHICULAR SIGNAGE			IMPROVE STREETScape (INCLUDES: PAVEMENT UPGRADES, LANDSCAPING AND LIGHTING)			
	Description	Unit Cost	Qty	Total	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>SouthWest / West Lake LRT</b>			0	\$0			0		0	\$0
Chowen Avenue	\$24			\$0	\$0		\$0	\$100		\$0
West Lake Station	\$24			\$0	\$0		\$0	\$100		\$0
Burnham Trail / Kenilworth Trail	\$24			\$0	\$0		\$0	\$100		\$0
Calhoun Village	\$24			\$0	\$0		\$0	\$100		\$0
Dean Parkway	\$24			\$0	\$0		\$0	\$100		\$0
Lake Isles/Lake Calhoun Pkwy	\$24			\$0	\$0		\$0	\$100		\$0
<b>Uptown</b>			198	\$4,752			0		0	\$0
James Avenue	\$24	66		\$1,584	\$0		\$0	\$100		\$0
Irving Avenue	\$24	66		\$1,584	\$0		\$0	\$100		\$0
Humboldt Avenue	\$24	66		\$1,584	\$0		\$0	\$100		\$0
Hennepin Avenue	\$24			\$0	\$0		\$0	\$100		\$0
Girard Avenue	\$24			\$0	\$0		\$0	\$100		\$0
Emerson Avenue	\$24			\$0	\$0		\$0	\$100		\$0
<b>Lyn / Lake</b>			0	\$0			0		0	\$0
Bryant Avenue	\$24			\$0	\$0		\$0	\$100		\$0
Lyndale Avenue / Vera's Garden	\$24			\$0	\$0		\$0	\$100		\$0
Soo Line Garden	\$24			\$0	\$0		\$0	\$100		\$0
<b>Whittier</b>			0	\$0			0		300	\$30,000
Pleasant/Grand avenues	\$24			\$0	\$0		\$0	\$100		\$0
Nicollet Avenue	\$24			\$0	\$0		\$0	\$100	300	\$30,000
35W "Green Crescent" Future	\$24			\$0	\$0		\$0	\$100		\$0
<b>Phillips West</b>			66	\$1,584			1	\$1,500	1320	\$132,000
Fifth Avenue	\$24	\$66		\$1,584	\$1,500	1	\$1,500	\$100	1320	\$132,000
Park Avenue	\$24			\$0	\$0		\$0	\$100		\$0
Columbus Avenue	\$24			\$0	\$0		\$0	\$100		\$0

## COST ESTIMATE - BICYCLIST AND PEDESTRIAN SAFETY DETAIL (2 OF 2)

CATEGORY	STRIPED CROSSWALK			TRAFFIC CALMING & VEHICULAR SIGNAGE			IMPROVE STREETScape (INCLUDES: PAVEMENT UPGRADES, LANDSCAPING AND LIGHTING)		
Description	Unit Cost	Qty	Total	Unit Cost	Qty	Total	LF Unit Cost	Qty	Total
<b>Midtown Phillips</b>		0	\$0					0	\$0
Chicago Avenue / Midtown Sheraton	\$24		\$0	\$0		\$0	\$100		\$0
Freewheel	\$24		\$0	\$0		\$0	\$100		\$0
10th Avenue	\$24		\$0	\$0		\$0	\$100		\$0
11th Avenue	\$24		\$0	\$0		\$0	\$100		\$0
12th Avenue	\$24		\$0	\$0		\$0	\$100		\$0
13th Avenue	\$24		\$0	\$0		\$0	\$100		\$0
<b>East Phillips</b>		0	\$0					2640	\$132,000
Bloomington Avenue	\$24		\$0	\$0		\$0	\$100		\$0
18th Avenue	\$24		\$0	\$0		\$0	\$100		\$0
East 28th Street	\$24		\$0	\$0		\$0	\$100		\$0
21st Avenue	\$24		\$0	\$0		\$0	\$50	2640	\$132,000
Little Earth Trail (North)	\$24		\$0	\$0		\$0	\$100		\$0
Hiawatha LRT Trail (To LRT Station)	\$24		\$0	\$0		\$0	\$100		\$0
<b>Longfellow</b>		198	\$4,752		4	\$34,500		0	\$0
Hiawatha LRT Trail (North)	\$24		\$0	\$0		\$0	\$100		\$0
Minnehaha Avenue	\$24		\$0	\$30,000	1	\$30,000	\$100		\$0
26th Avenue South	\$24		\$0	\$0		\$0	\$100		\$0
27th Avenue South	\$24	66	\$1,584	\$1,500	1	\$1,500	\$100		\$0
29th Avenue South	\$24	66	\$1,584	\$1,500	1	\$1,500	\$100		\$0
30th Avenue South	\$24	66	\$1,584	\$1,500	1	\$1,500	\$100		\$0
34th Avenue South	\$24		\$0	\$0		\$0	\$100		\$0
36th Avenue South	\$24		\$0	\$0		\$0	\$100		\$0
<b>Cooper</b>		0	\$0		0			0	\$0
38th Avenue/Brackett Park	\$24		\$0	\$0		\$0	\$100		\$0
Dorman Avenue	\$24		\$0	\$0		\$0	\$100		\$0
West River Parkway	\$24		\$0	\$0		\$0	\$100		\$0
<b>Construction costs per type of improvement</b>		462	<b>\$11,088</b>		5	\$36,000		<b>4260</b>	<b>\$294,000</b>
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>			<b>\$3,326</b>			\$10,800			<b>\$88,200</b>
<b>Total per type of improvement</b>			<b>\$14,414</b>			\$46,800			<b>\$382,200</b>
<b>Overall total for Bicyclist and Pedestrian Safety</b>				(includes subtotal from previous table)					<b>\$494,114</b>

\* = cost to be assessed to adjacent property owner, therefore not included in this estimate

## Guidelines for Prioritizing Investment

A robust and purposeful wayfinding system will require a critical mass of investment for effective implementation in the corridor, but many other recommendations in this plan can be implemented opportunistically. The funding capacity of key partners and the alignment of these recommendations with related partner investments in adjacent areas will provide logical opportunities for implementation. However, there is also a desire to make recommendations for leadership about priority locations for investment where needs are greatest and investments can have more impact. In order to provide this additional guidance, the project team pursued a site-specific prioritization analysis for the recommendations in the plan. The tables below define these themes and the criteria for determining whether an area should be considered for priority investment. These factors were reviewed and analyzed by staff representing the multiple project partners. Additional data supporting these designations can be found in Appendix A on pages 98-103.

### SITE SPECIFIC PRIORITIZATION ANALYSIS

In addition to reviewing the communities' priorities and needs, data on multiple conditions surrounding each Greenway access point was reviewed. At each access point we analyzed the relationships between the different factors and identified our key themes to provide prioritization guidance: wayfinding, safety, access, and equity. The tables below define these themes and the criteria for determining whether an area should be considered for priority investment.

### TOTALS BY NEIGHBORHOOD

The table on the next page summarizes the total amount recommended for each access point and by neighborhood. Project soft costs, corridor-wide initiatives for wayfinding and placemaking, and annual maintenance are broken out separately at the end of the estimate.

THEME	FACTORS/CONDITIONS	CRITERIA FOR HIGH PRIORITY/NEED
<b>Access/Network Gap</b> ●	Trail accessibility, visibility and present and planned bike network connections	Trail access was flagged as a high priority for network gap improvement if there was a missing network connection or if visibility of the connection was limited. Additional considerations included if Greenway access was limited to stairs, dirt path, or non-existent in areas where network connections and key destinations were present.
<b>Equity</b> ●	% of population below poverty rate and people of color % of population	Top quartile within project area for the percent of people below 100% poverty or top quartile within the project area for the percent of people of color. For more detail see Appendix A, pages 98-101.
<b>Wayfinding</b> ●	Key destinations, visibility/trail grade, present and planned bike network connections	Key destinations were identified by project partners as business districts and major activity centers. Access points near key destinations where visibility was hindered and/or bike network connections were unclear were deemed a wayfinding priority.
<b>Safety</b> ●	Crashes at Lake Street and crashes at Greenway intersection/access points	Areas with 4 crashes or more at a Lake Street intersection or intersection neighboring the corresponding intersection or multiple crashes at the Greenway intersection/access point. For more detail see Appendix A, pages 102-103.

## Prioritization Guidelines and Cost Estimate

ACCESS POINT	PRIORITIZATION	TOTAL COST
<b>SouthWest / West Lake LRT</b>		0
*		
<b>Uptown</b>		<b>\$49,352</b>
James Avenue		\$5,584
Irving Avenue		\$5,584
Humboldt Avenue	● ● ●	\$37,184
Hennepin Avenue	● ● ●	\$1,000
Girard Avenue	●	\$0
Emerson Avenue		\$0
<b>Lyn / Lake</b>		<b>\$50,000</b>
Bryant Avenue	● ●	\$25,000
Lyndale Avenue / Vera's Garden	● ● ● ●	\$0
Soo Line Garden	● ● ● ●	\$25,000
<b>Whittier</b>		<b>\$59,900</b>
Pleasant/Grand avenues	● ● ● ●	\$0
Nicollet Avenue	● ● ● ●	\$59,900
35W "Green Crescent" Future	● ●	\$0
<b>Phillips West</b>		<b>\$170,684</b>
Fifth Avenue	● ● ●	\$170,684
Park Avenue	● ●	\$0
Columbus Avenue	●	\$0
<b>Midtown Phillips</b>		<b>\$25,000</b>
Chicago Avenue / Midtown Sheraton	● ●	\$0
10th Avenue	● ● ●	\$25,000
11th Avenue	● ● ●	\$0
12th Avenue	●	\$0
13th Avenue	● ●	\$0

ACCESS POINT	PRIORITIZATION	TOTAL COST
<b>East Phillips</b>		<b>\$226,000</b>
Bloomington Avenue	● ● ●	\$45,000
18th Avenue	● ● ● ●	\$19,000
East 28th Street	●	\$30,000
21st Avenue	● ● ●	\$132,000
Little Earth Trail (North)	●	\$0
Hiawatha LRT Trail (To LRT Station)	● ● ●	\$0
<b>Longfellow</b>		<b>\$106,252</b>
Hiawatha LRT Trail (North)	●	\$25,000
Minnehaha Avenue	● ● ●	\$35,000
26th Avenue South	● ●	\$25,000
27th Avenue South		\$7,084
29th Avenue South		\$7,084
30th Avenue South	●	\$7,084
34th Avenue South		\$0
36th Avenue South		\$0
<b>Cooper</b>		<b>\$0</b>
38th Avenue/Brackett Park	●	\$0
Dorman Avenue		\$0
West River Parkway		\$0
<b>Construction costs per type of improvement</b>		<b>\$687,188</b>
<b>Soft costs (design, engineering, surveying, management &amp; coordination)</b>		<b>\$206,156</b>
<b>Public art, community programming &amp; neighborhood activities on Greenway</b>		<b>\$375,000</b>
<b>Corridor-wide wayfinding &amp; signage system</b>		<b>\$447,850</b>
<b>Maintenance (\$15,000 per year over 10 years)</b>		<b>\$150,000</b>
<b>Cost estimate grand total</b>		<b>\$1,866,194</b>

\* Recommendations in the SouthWest/West Lake LRT area are included in corridor-wide wayfinding, see previous tables for costs at those access points

## Potential Funding Sources

This list of potential sources of additional funds is organized around the four major themes. For more detail on grant timelines and eligibility, see Appendix A, pages 104-109.

<b>Midtown Greenway/Lake Street Connections Funding Opportunities</b>	
<b>CONNECTING TO THE TRANSPORTATION NETWORK</b>	
Regional Trail Grant Program - through Minnesota Department of Natural Resources	<a href="http://www.dnr.state.mn.us/grants/recreation/trails_regional.html">http://www.dnr.state.mn.us/grants/recreation/trails_regional.html</a>
(DNR) Local Trails Connections Program (Minnesota DNR)	<a href="http://www.dnr.state.mn.us/grants/recreation/trails_local.html">http://www.dnr.state.mn.us/grants/recreation/trails_local.html</a>
Federal Transportation Alternatives Program (TAP)	<a href="http://www.fhwa.dot.gov/environment/transportation_alternatives/">http://www.fhwa.dot.gov/environment/transportation_alternatives/</a>
Highway Safety Improvement Program (HSIP)	<a href="http://safety.fhwa.dot.gov/hsip/">http://safety.fhwa.dot.gov/hsip/</a>
Bikes Belong	<a href="http://www.peopleforbikes.org/pages/community-grants">http://www.peopleforbikes.org/pages/community-grants</a>
Metropolitan Council Parks Funding & Finance	<a href="http://www.metrocouncil.org/Parks/Grants-Funding.aspx">http://www.metrocouncil.org/Parks/Grants-Funding.aspx</a>
Hennepin County Bikeway and Sidewalk Participation Programs	<a href="http://www.hennepin.us/business/work-with-henn-co/transportation-funding-programs">http://www.hennepin.us/business/work-with-henn-co/transportation-funding-programs</a>
<b>PART OF THE NEIGHBORHOOD</b>	
Art Place	<a href="http://www.artplaceamerica.org/">http://www.artplaceamerica.org/</a>
Southwest Airlines	<a href="http://www.pps.org/heart-of-the-community/">http://www.pps.org/heart-of-the-community/</a>
McKnight Foundation	<a href="https://www.mcknight.org/grant-programs/arts">https://www.mcknight.org/grant-programs/arts</a>
America's Historic Places	<a href="http://www.nps.gov/history/preservation.htm">http://www.nps.gov/history/preservation.htm</a>
MN State Arts Board	<a href="http://www.arts.state.mn.us/grants/">http://www.arts.state.mn.us/grants/</a>
NEA Our Town	<a href="https://www.arts.gov/national/our-town">https://www.arts.gov/national/our-town</a>
Metropolitan Regional Arts Council	<a href="http://www.mrac.org/grants">www.mrac.org/grants</a>
Center for Urban and Regional Affairs (CURA)	<a href="http://www.cura.umn.edu/NPI-main">www.cura.umn.edu/NPI-main</a>
Hennepin County Green Partners	<a href="http://www.hennepin.us/greenpartners">http://www.hennepin.us/greenpartners</a>
Bloomberg Public Art Prize	<a href="http://www.publicartchallenge.bloomberg.org">www.publicartchallenge.bloomberg.org</a>
BlueCross Blue Shield Center for Prevention Active Places Demonstration Projects	<a href="http://www.centerforpreventionmn.com/what-we-do/our-current-initiatives/active-places-demonstration-projects">http://www.centerforpreventionmn.com/what-we-do/our-current-initiatives/active-places-demonstration-projects</a>
Kresge Foundation	<a href="http://kresge.org/opportunities">http://kresge.org/opportunities</a>
Wells Fargo Community Grant	
<b>GETTING TO KEY DESTINATIONS</b>	
Parks & Trails Council of Minnesota grant list	<a href="https://parksandtrails.org/wp-content/uploads/2015/10/Grant-Guide-2015-Low-Resolution.pdf">https://parksandtrails.org/wp-content/uploads/2015/10/Grant-Guide-2015-Low-Resolution.pdf</a>
Federal Trail Program	<a href="http://www.dnr.state.mn.us/grants/recreation/trails_federal.html">http://www.dnr.state.mn.us/grants/recreation/trails_federal.html</a>
Regional Trail Grant Program	<a href="http://www.dnr.state.mn.us/grants/recreation/trails_regional.html">http://www.dnr.state.mn.us/grants/recreation/trails_regional.html</a>
Local Trails Connections Program (Minnesota DNR)	<a href="http://www.dnr.state.mn.us/grants/recreation/trails_local.html">http://www.dnr.state.mn.us/grants/recreation/trails_local.html</a>
City of Minneapolis Great Streets Business District Support and Technical Assistance Grants	<a href="http://www.minneapolismn.gov/cped/ba/cped_great_streets_home">http://www.minneapolismn.gov/cped/ba/cped_great_streets_home</a>

# Midtown Greenway/Lake Street Connections Funding Opportunities

## BICYCLIST AND PEDESTRIAN SAFETY

Federal Highway Administration - through Minnesota Department of Transportation (MNDOT)	<a href="http://www.grants.gov/web/grants/view-opportunity.html?oppld=281258">http://www.grants.gov/web/grants/view-opportunity.html?oppld=281258</a>
Safe Routes to School	<a href="http://www.saferoutesinfo.org/">http://www.saferoutesinfo.org/</a>
State of Minnesota	<a href="https://dps.mn.gov/divisions/ots/pedestrians-bicycles/Pages/default.aspx">https://dps.mn.gov/divisions/ots/pedestrians-bicycles/Pages/default.aspx</a>
Federal Bicycle and Pedestrian Safety Grants	<a href="http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm">http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm</a>
State of MN Pedestrian Safety Grant	<a href="https://dps.mn.gov/divisions/ots/Pages/traffic-safety-grants.aspx">https://dps.mn.gov/divisions/ots/Pages/traffic-safety-grants.aspx</a>

## Conclusion and future considerations

The recommendations proposed in this study seek to unite community and businesses through expanded access and connections to the Midtown Greenway. The Greenway is an important conduit of movement through neighborhoods, linking the community to vital regional destinations like the Chain of Lakes and the Mississippi River. Yet physical and cultural barriers are limiting the Greenway's economic and social impact.

If we can maximize the connections between Greenway users and local businesses, between neighborhoods and Greenway spaces, and between community and cultural destinations, we can deliver on the Greenway's extraordinary potential to serve and support all of the communities it travels through.

