

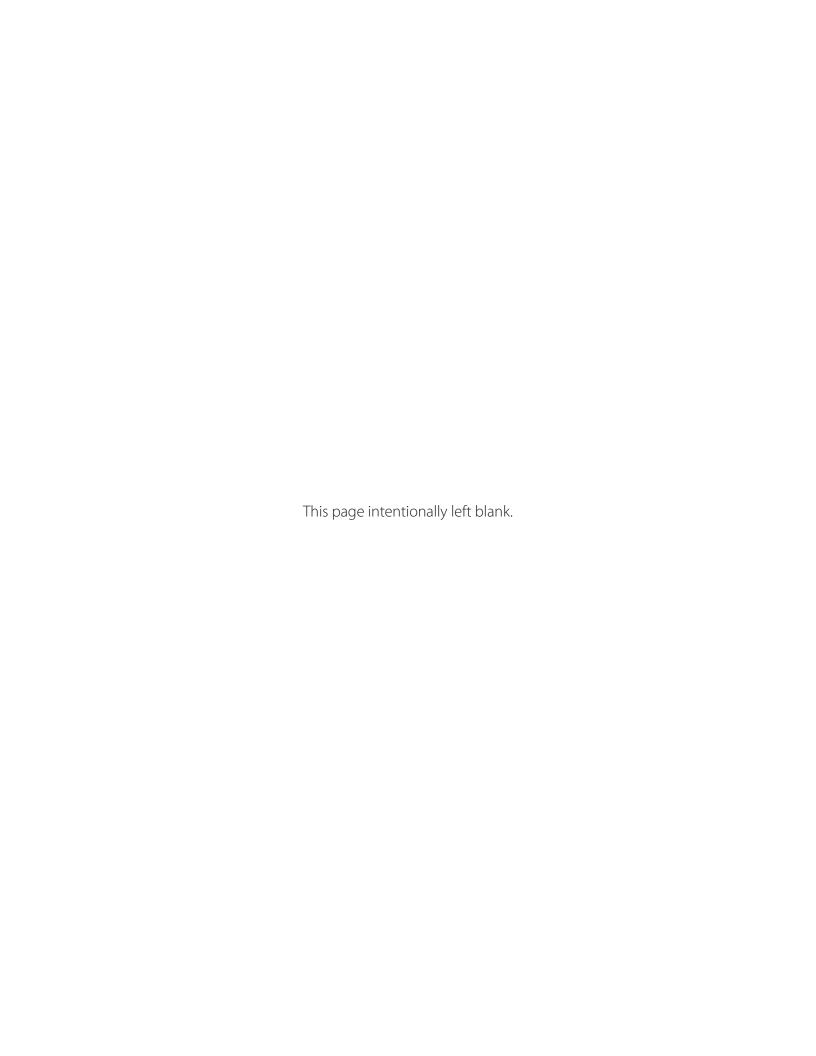
# Bottineau Wayfinding Plan HENNEPIN COUNTY

MINNESOTA









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# Introduction

### **Project Purpose and Intent**

The purpose of this plan is to facilitate bicycle and pedestrian navigation and maximize connections within the Bottineau Corridor along the proposed METRO Blue Line Light Rail Transit Extension (BLRT). Oriented around the planned BLRT, the Bottineau Corridor extends from Brooklyn Park through Crystal, Robbinsdale, Golden Valley and Minneapolis and then connects to the existing METRO Blue Line at the Target Field station. The study area is comprised of an approximate a 10-minute walk and 10-minute bicycle ride around each of the eleven planned stations along the BLRT.

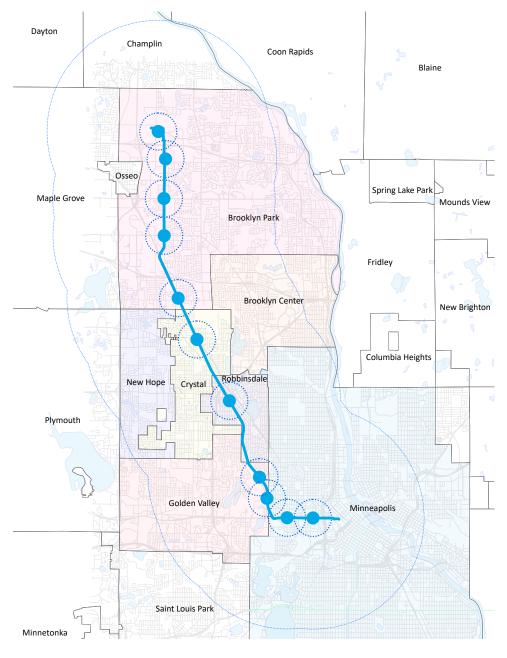


Figure 1 - Study area map

The introduction of light rail into this corridor provides a wonderful opportunity to increase transit options for the community, along with improved health benefits for corridor residents and new economic development opportunities. Yet, to fully realize the transit-oriented development benefits associated with the BLRT, enhanced wayfinding is needed to increase awareness of both the new station locations and community destinations A well-executed wayfinding system will allow pedestrians and bicyclists to easily, comfortably, and safely circulate between the BLRT, community destinations, other transit routes, and the broader Bottineau Corridor. More specifically, Hennepin County and partner corridor communities desire to achieve the following with the implementation of a corridor wayfinding system:

- Heighten station area visitors' awareness of the commercial, retail, and service providers; educational nodes; cultural centers; and recreational features in each station area
- Increase the economic activity in the station areas with commercial and retail uses
- Increase access and ridership of the BLRT
- Support walking, biking and other forms of non-motorized forms of transportation in the station areas
- Support and promote a distinct identity for the Bottineau Corridor
- Advance each city's racial equity goals in reducing inequitable access to commerce, education, and recreation assets in the city and throughout the metro
- Help better knit the BLRT service into the surrounding communities
  - o Feel safe and secure
  - o Easily and successfully find their destinations
  - o Understand where they are with respect to other key locations
  - o Orient themselves in an appropriate direction with little misunderstanding or stress
  - o Discover new places and services
- Provide an accessible and comprehensive system that serves a wide range of users, including people of all ages, and those with limited English language proficiency

## Process

### Stakeholder Engagement

The study started out by first meeting with representatives of the Bottineau Corridor communities, such as residents, employers, employees, students, city staff, and park and recreation providers, to learn about their needs first hand - and their vision for the future, the culture, and the desired Bottineau Corridor experience. Stakeholder engagement helped to identify the unique natural, cultural, and architectural characteristics that define the station areas, neighborhoods, cities, and the broader Bottineau Corridor community.

The stakeholder engagement process also helped identify barriers and issues surrounding wayfinding along the Bottineau Corridor, while also informing engagement participants about current wayfinding best practices and benefits of wayfinding improvements in the community.

### **Project Management Team**

A Project Team was established to help guide the development of the wayfinding plan. The Project Team consisted of the following representatives from each City within the study area, METRO Transit, the Blue Line Coalition, and the Hennepin County Project Managers for the Bottineau Corridor Branding Study and Cultivate Bottineau program.

### Project Team

Jim Voll	City of Minneapolis
Chris Kartheiser	City of Minneapolis
Jason Zimmerman	City of Golden Valley
Rick Pearson	City of Robbinsdale
Dan Olson	City of Crystal
Jennifer Jordan	City of Brooklyn Park

Alicia Vap	METRO Transit, Blue Line Extension
Joo Hee Pomplun	Blue Line Coalition
Ricardo Perez	Blue Line Coalition
Andrew Gillett	Hennepin County
Kyle Mianulli	Hennepin County
Kerri Pearce Ruch	Hennepin County

Over the course of the study, the Project Team met at key project milestones to review and discuss project deliverables and to provide direction on next steps.

Below is a brief summary of topics addressed at the Project Team milestone meetings:

### Meeting One

- Project introduction
- Wayfinding best practices
- Draft community engagement plan
- Selection of one station in each community to receive development of a detailed map and message schedule

### Meeting Two

Community engagement preliminary findings

### Meeting Three

- Community engagement wrap-up
- Draft wayfinding materials
  - o Sign typologies
  - o Maps identifying wayfinding sign locations and assigned typology
  - o First draft of detailed maps
  - o Options to address identified walking or biking barriers

### Meeting Four

• Draft report review

### **Bottineau Corridor Branding Study**

Concurrent with the development of the Wayfinding Plan, Hennepin County was also developing a Marketing and Branding strategy for the Bottineau Corridor. The goal of the branding study was to assist corridor communities in branding the corridor as a destination for people, business, development and investment. The consulting teams for the wayfinding and branding studies coordinated over the course of these studies. The corridor brand developed by the branding study is reflected in the design of the wayfinding signage and the mapping presented in this study.

# Community Engagement

Meeting with representative community stakeholders helped the project identify important community destinations and preferred travel routes near each of the proposed METRO Blue Line Extension stations. Engagement activities also provided the project team with opportunities to share the objectives of the Bottineau Corridor Wayfinding Project with a broad set of community stakeholders.



Figure 2 - Engagement event

This community engagement effort was designed to gather input from the residents and user groups who live and navigate through the Corridor. Engaging with a diverse set of residents who regularly use the Corridor helped the project develop a more comprehensive understanding of the community destinations that should be highlighted on Bottineau Corridor wayfinding. A priority for this engagement effort was to connect with a broad set of community stakeholders to better understand how potential users from a wide range of cultures, backgrounds, languages, ages and abilities navigate through the Corridor. The Bottineau Corridor Wayfinding Project facilitated 19 engagement events with representative groups of Bottineau Corridor stakeholders.

- 13 pop-up events across the Bottineau Corridor
- 2 community representative interviews
- 4 listening sessions with a collection of key stakeholders
- Engaged with 290+ residents about the Bottineau Corridor Wayfinding Project

A complete list of engagement activities and results from each activity can be viewed in the Appendix A.

### **Wayfinding Themes**

At each engagement event, staff asked for public input on four key questions to help inform the development of signage for the Bottineau Corridor Wayfinding Project.

We want to hear how you travel along the Bottineau Corridor!

# As a pedestrian, or bicyclist, how do you navigate to your destination? Use stickers to vote for the top two ways you navigate to your fer the top two ways you navigate. GPS / Online Maps Memory Landmarks Word of mouth Signage Cardinal Directions Draw, write, and add stickers on the map! What are important community destinations and places you go frequently? Please identify locations on the map or write them on the board.

Figure 3 - Community engagment board example

Themes that arose from community conversations included:

### 1. As a pedestrian, or bicyclist, how do you navigate to your destination?

- Respondents frequently reported using GPS or maps to navigate to new destinations.
- Respondents noted they often rely on memory to travel to well-known destinations.
- Destinations often identified within the Bottineau Corridor include Theodore Wirth Regional Park, Becker Park, North Memorial Hospital and North Hennepin Community College. Major destinations outside the Corridor that were often identified include downtown Minneapolis, the Mississippi River, the airport, the Mall of America, and St. Paul.

Navigation Options	Total
Maps / GPS	106
Memory	95
Landmarks	43
Word of mouth	13
Signage	32
Cardinal directions	8
Total votes	297

Table 1 - Summary of total votes received for the question "How do you navigate to your destination?"



Figure 4 - Project team enagaging community members

### 2. Where do you feel uncomfortable walking or biking?

- Respondents identified crossing major roadways as a significant pedestrian concern.
- A reoccurring concern about safe pedestrian crossing areas along the future METRO Blue Line Extension route.
- General comments from respondents that the corridor is designed for automobiles and is not easily accessible for pedestrians.

### 3. Do you have any general comments about wayfinding signage?

- Wayfinding maps should include "You are here" indicators.
- There should be a series of signage to help navigation (i.e. breadcrumb trails).
- It is helpful for Wayfinding to include distances and estimated travel times to community destinations.
- Wayfinding should help people connect to other modes of transportation (i.e. nearby bus routes, nice ride stations, first mile/last mile connections).
- Wayfinding should be well lit and use bright colors.
- Wayfinding should be designed to be accessible to all (i.e. translations and icons for non-English speakers and low enough to the ground so people in wheelchairs can easily read).

### 4. What are important community destinations and places you go frequently?

### Van White Memorial Boulevard and Penn Avenue Stations

- C-Line Bus route
- Lyndale Farmers Market
- Sumner Library
- Downtown Minneapolis
- Glenwood Avenue shops and restaurants

### Plymouth Avenue/Theodore Wirth and Golden Valley Road Stations

- Theodore Wirth Regional Park
- Minnesota African American Heritage Museum and Gallery
- North Memorial Hospital
- Connections to North Minneapolis (i.e. transit routes, pedestrian routes, first mile/last mile)

### Robbinsdale Station

- Robbinsdale Downtown
- Crystal Lake / Lakeview Terrace / Sanborn Park
- Robbinsdale Transit Center
- Robbinsdale City Hall

### Bass Lake Road and 63rd Avenue Stations

- Becker Park
- Target / Crystal Shopping Center
- 63rd Avenue Park and Ride
- Brooklyn Park Goodwill

### Brooklyn Boulevard and 85th Avenue Stations

- North Hennepin Community College
- Hennepin Technical College
- Brooklyn Park Library
- West Broadway Shops and Restaurants
- Starlite Transit Center

### 93rd Avenue and Oak Grove Parkway Stations

- Target Northern Campus
- Cub Foods and Hy-Vee Grocery Store

# Wayfinding Signage

### **Wayfinding Best Practices**

Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space.

Wayfinding is particularly important in complex environments such as urban centers and transportation facilities. As architectural environments become more complicated, people need visual cues such as maps, directions, and symbols to help guide them to their destinations. In these often high-stress environments, effective wayfinding systems contribute to a sense of well-being, safety, and security.

There are several best practices that need to be considered when developing a wayfinding and signage program. Many of these practices follow logic and others follow inclusion, such as color blindness and language barriers, and levels of communication. For the Bottineau project, the following best practice considerations were compiled based on the site and project parameters.

### Form Follows Function

The most important consideration when developing the wayfinding signage is that form must follow function, i.e. aesthetics come after function and needs. The wayfinding must be logical, and signage must connect places, allowing users to easily navigate to their destinations. Signage locations must be predictable and signage easy to read. Legibility best practices include using high-contrast colors and easy-to-read fonts. The signage must also be simple with easily understood information. This requires community input, use of the correct nomenclature, and consistent messaging and pictogram use.

### Levels of Communication

Levels of Communication guidelines simplify the experience for the first-time user; and create a positive and simple journey back for an ultimate experience. There are several considerations for this communication that would simplify the journey for the user.

- Pre-planning (by user at the beginning of the journey, done on website or cell phone app prior to travel)
- Mobile device app or website
- Multi-modal pathfinders
- Use of landmarks as wayfinding
- Primary direction signs
- Kiosks/maps that are easy to understand
- Consider path to the half mile station area
- Reverse directions are equally important: the path back to the primary corridor/BLRT– final memory of the experience

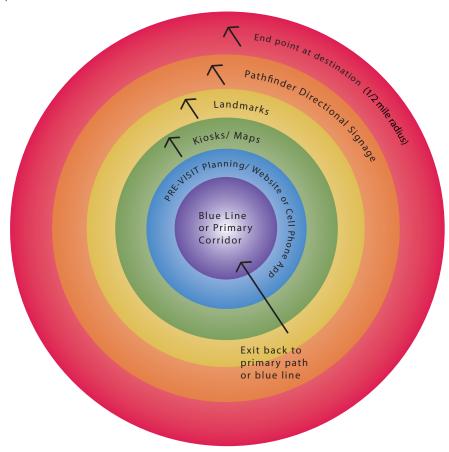


Figure 5 - Levels of communcation diagram

### **Decision Points**

Identify the most important areas of decision. Identify sign locations throughout the walkable area at points which users will need to make decision, i.e. continue the current route or change direction. Each of the signs must communicate information to help the user find their destination and reinforce the user is on the correct route.

### **Destinations**

Develop destinations with the community needs in mind. Input through community engagement gives insights into where people want to go. Destinations should also meet the basic needs of residents of all ages and abilities in addition to allowing users to explore the community.

### Multicultural/Multi-Language

Pictograms allow a wide range of users, including people of all ages, and those with limited English language proficiency to find destinations are on the map. International symbols should be used whenever possible. Dual language should be considered when possible.

### Maps

When developing the maps, orientation should use the 'heads up' philosophy, which means the map should be oriented so that when the user looks up, they are facing the same direction as the map. This orientation is more intuitive than 'north on top.' Simplify the information and colors. Use recognizable landmarks. Given that final map placement has not been determined for this project, maps were developed using 'north on top.'

### Digital and Smartphone

This plan does not develop any digital or smartphone presence. It is recommended that these platforms are taken into consideration at the time of implementation

- Hand-held Google Maps
- Website for a pre-experience and trip planning
- 3D icons or photos of major landmarks

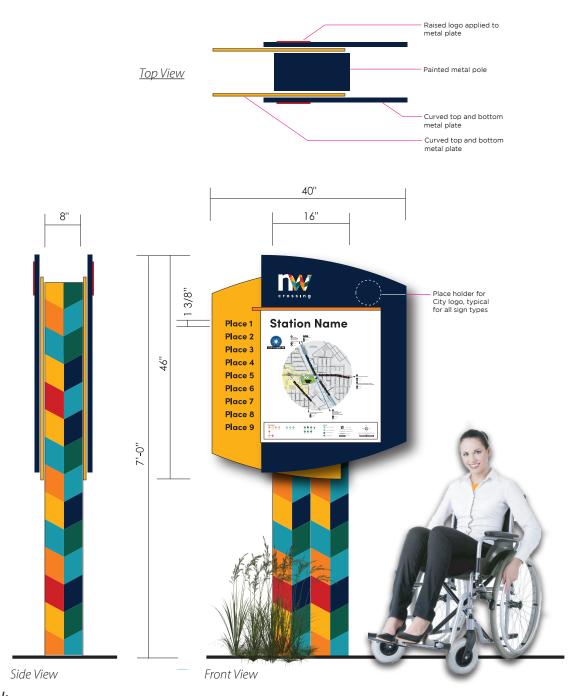
### **Wayfinding Approach**

For this study, wayfinding signage was primarily focused on the experience of corridor visitors. These are folks who are not familiar with the area. The goal is to help them orient themselves within the station area, help them navigate to desired destinations and other transit routes in a safe, comfortable and convenient manner, and to raise their awareness of other potential destinations within the station area to expand of their activities during this visit or to encourage them to come back to experience more of the station area. Additional signage located at key decision points will help visitors navigate to their desired destinations and confirm they are on the correct route.

For the purpose of developing wayfinding maps, it was determined to depict the 10-minute walk area, which is approximately a half mile radius from the planned METRO Blue Line Extension stations. Maps depicting the walking areas, allow for clear communication of station area features, landmarks, and street names to aid in walking navigation.

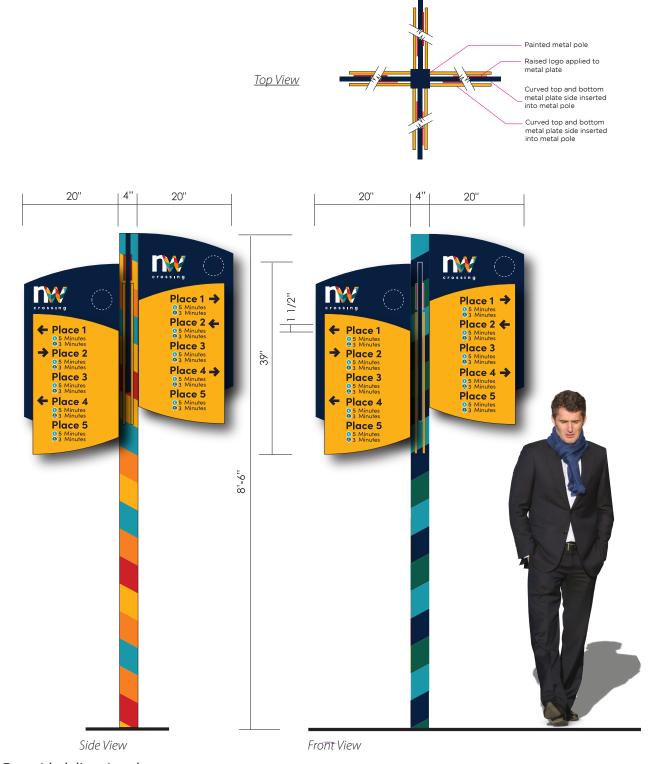
### **Sign Typologies**

Five different signage types are proposed to assist wayfinding for the BLRT station areas as described below.



### A1: Kiosk

This double-sided sign is a freestanding directory, map and informational kiosk. It is non-illuminated and contains the station identity, the city identity, an area map, and message panels that identify the priority destinations at this station. The map contains international pictograms of area amenities - from eating destinations to activities and destinations within walking distance. It also includes trails for biking/walking and connections to other LRT and BRT lines. Typically, there is one kiosk per station - this installation is at each METRO Blue Line Station for central orientation. Signage dimensions are 7'-0" to top of sign. The accessible viewing area is from 46" to 70". It is pedestal mounted and built of aluminum for durability.



### A2: Four sided directional

This primary directional has 'four (4) sides' with eight (8) message panels to direct to multiple areas. It is nonilluminated and identifies destinations, as well as distances to that destination, in walking/biking minutes for simple understanding. The directional sign contains "place" destinations (BRT, LRT, Shared Trails, and other key locations) - from eating destinations to activities and destinations within walking distance. It also includes trails for walking/biking and connections to other LRT and BRT lines. Key locations within the half mile perimeter of the station area are provided. This sign type is typically located within a one block walking distance from the station platform. The sign is 8'6" to the top and 4'9" to the bottom. Each flag is 20" wide. It is pole mounted and built of aluminum for durability. Refer to Sign Design page for detail information.



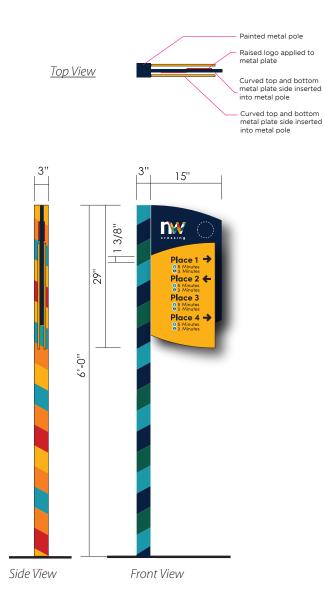
### A3: Directional informational wayfinder

This double-sided secondary directional is non-illuminated. This sign identifies destinations, as well as distances to that destination in walking/biking minutes, for simple understanding. The bottom map is simplified for the area and includes destinations and pictograms. It is similar to the A1(Kiosk) map. These are typically placed at key wayfinding decision points predominantly within, but at times outside, the station area. The sign is 8'0" to the top and 4'0" to the bottom. The flag is 20" wide. It is pole mounted and built of aluminum for durability. Refer to Sign Design page for detail information.



### A4: Assurance map sign

This 'assurance map' is single-sided and oriented for direction throughout the station areas. It is non-illuminated. The map contains international pictograms of area amenities - from eating destinations to activities and destinations within walking distance. It also includes trails for walking/biking and connections to other LRT and BRT lines. It is similar to the A1(Kiosk) map. These are typically placed at strategic locations to affirm navigation. The sign is 48" to the top and 36" to the bottom - appropriate for accessibility viewing. It is 20" wide. It is pole mounted and built of aluminum for durability. Refer to Sign Design page for detail information.



### A5: Station locator

This single-sided tertiary directional is non-illuminated. It identifies stations as well as distances to destinations in walking minutes for simple understanding. This sign is typically located midway between stations at key roadway crossings or at key intersections outside the station area. The sign is 6'0" to the top and 3'6" to the bottom. The flag is 18" wide. It is pole mounted and built of aluminum for durability. Refer to Sign Design page for detail information.

### Sign Placement

Final placement for each sign type to be determined on site. Signage at public roadways and intersections to be located to facilitate ease of access for pedestrian and bicycle users. All sign placement shall be in compliance with vehicular and trail clearance codes based on applicable state, county and city codes.

Sign vertical heights and clearance above ground to be assessed at each unique location for accessible and safe clearance for all pedestrians and bicyclists. While pole heights are recommended within the Sign Typologies, each site may require special pole heights to accommodate varying traffic patterns and user safety.

### **Detailed Station Area Maps**

Each station area will have a detailed station area map prepared to assist with orientation and navigation. For the purposes of this study, each project team member selected one station area within their community to have a detailed map created for it.

In order to provide context, institutions within the station areas were identified and labeled on the maps. These institutions include higher education schools (except for the Van White Education Corridor where high schools, middle schools, elementary, and early education schools are also labeled), parks, libraries, city halls, government service centers, hospitals, and retail districts (if named).

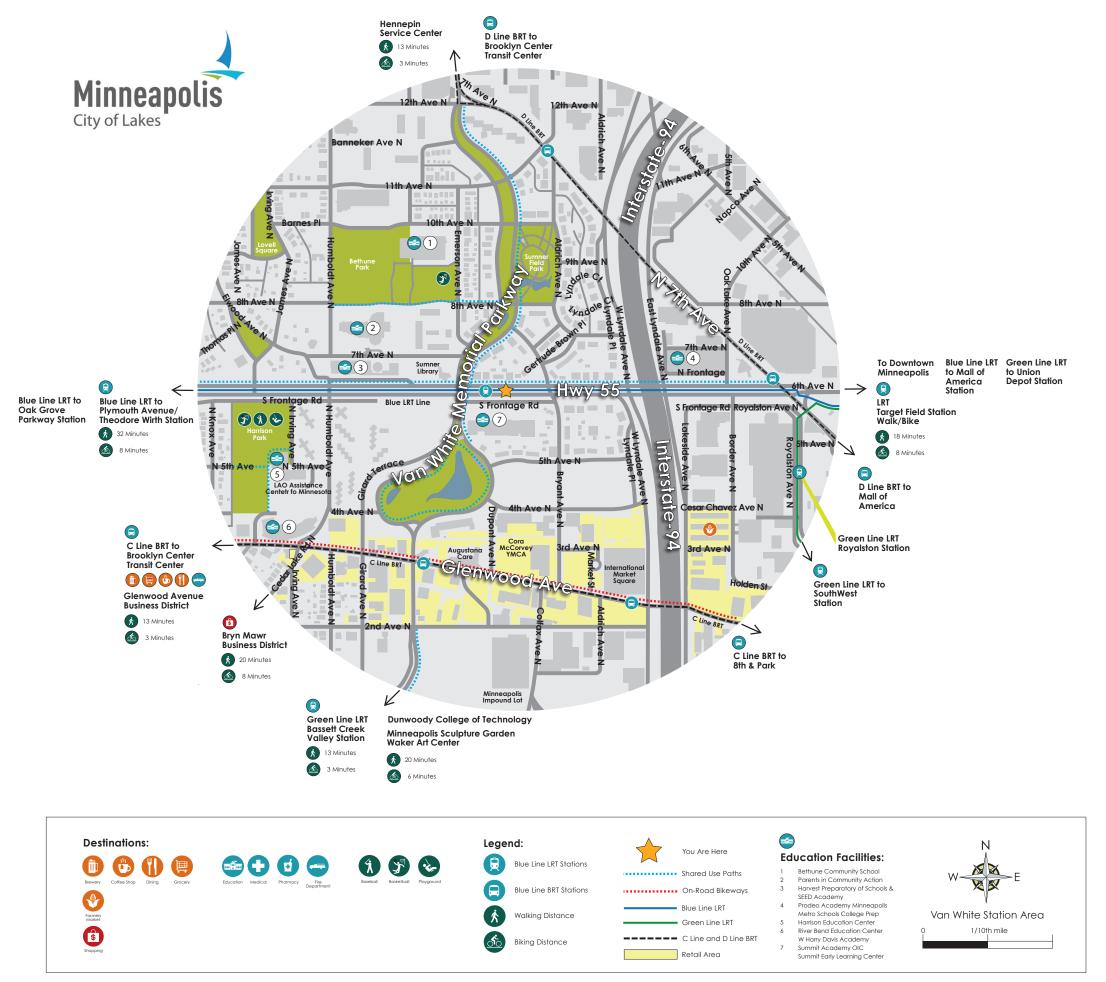
Major Metro Transit lines are also included on all the maps. These include Blue Line LRT, Green Line LRT, C Line bus rapid transit (BRT) and D Line BRT; as well as transit centers. The map graphics were based on existing data sources and were not field verified. Planned trails and roadways are only being shown if they are being built as part of the BLRT.

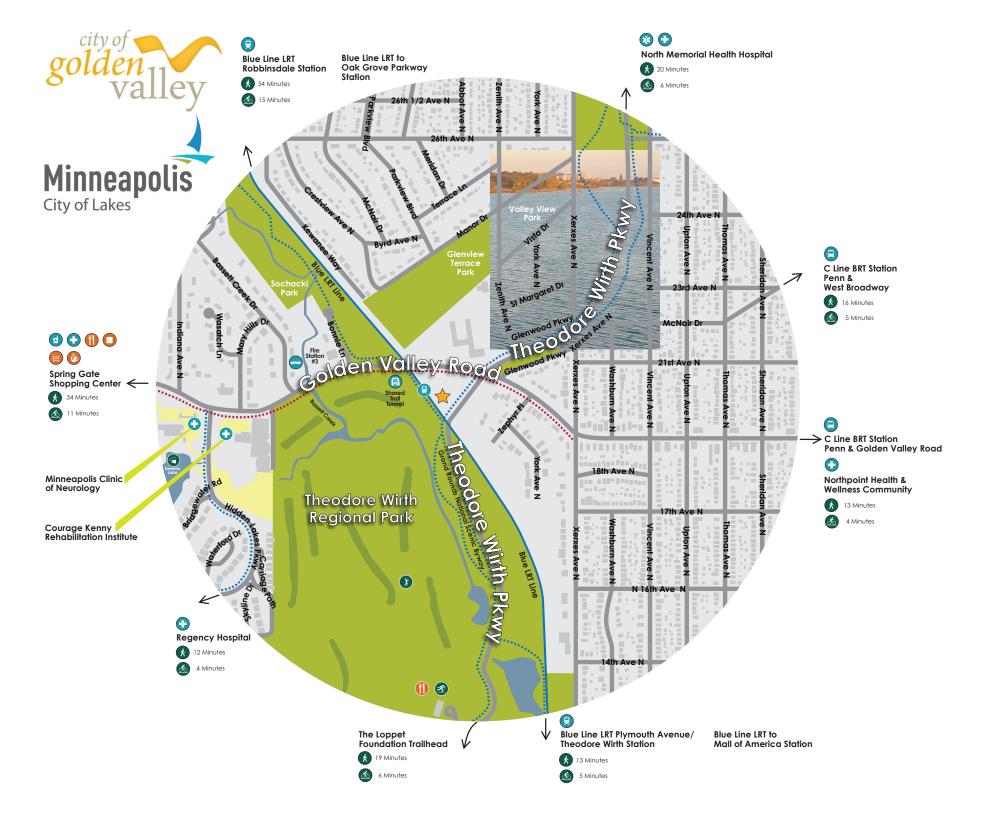
Beyond the standard institutions and transit locations, destinations and landmarks that were identified as part of the community engagement or by Project Team members were included on the maps. These destinations include, but are not limited to: Downtown Minneapolis, park recreation features, shops and restaurants, museums, and grocery stores. Since shops and restaurants tend to have a higher turnover rate, these destinations are not labeled with specific names but rather using universal icons, i.e. plate and fork for a restaurant. In areas with numerous destinations, the icons are placed in the general area where these destinations can be found. This reduces visual clutter on the maps while also encouraging users to explore the area and discover new destinations.

In addition to the destinations that are shown within the station area, each map also directs users to destinations outside of the mapped area. These destinations include, but are not limited to transit stations, colleges, commercial districts, community centers, and recreation destinations. Each of these destinations includes estimated walking and biking travel times.

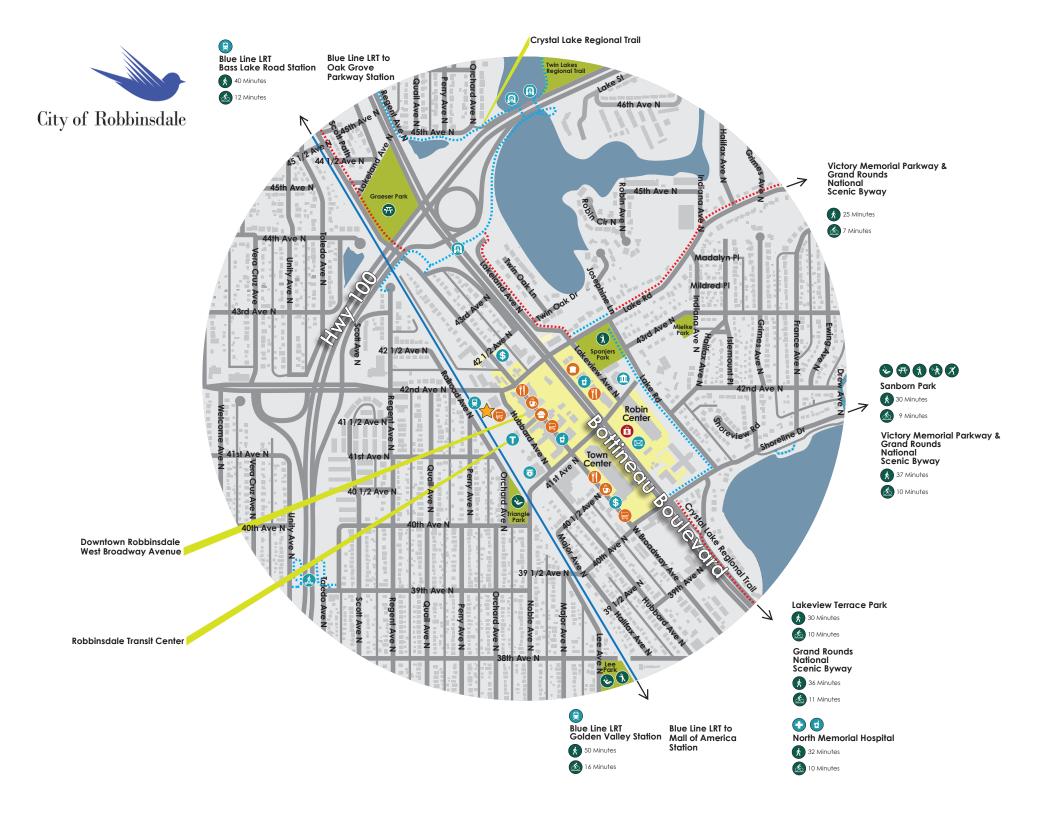
The representative detailed maps prepared for each of the Bottineau Corridor cities are presented below.

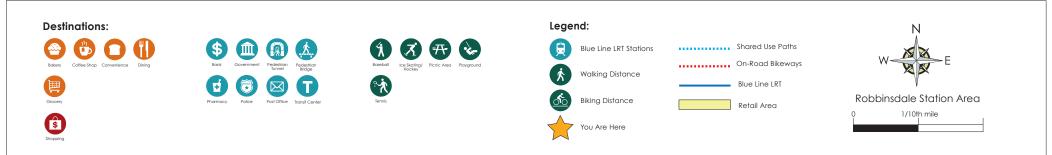
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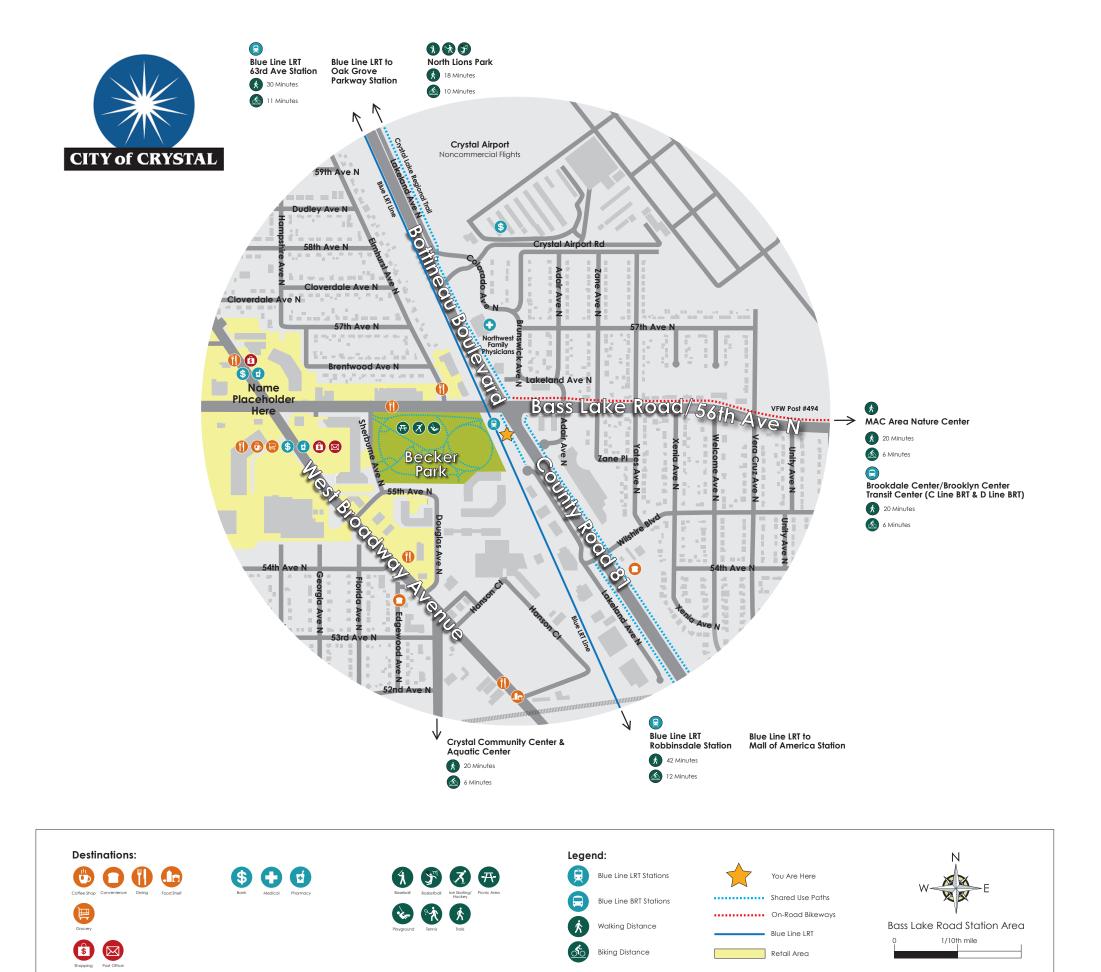


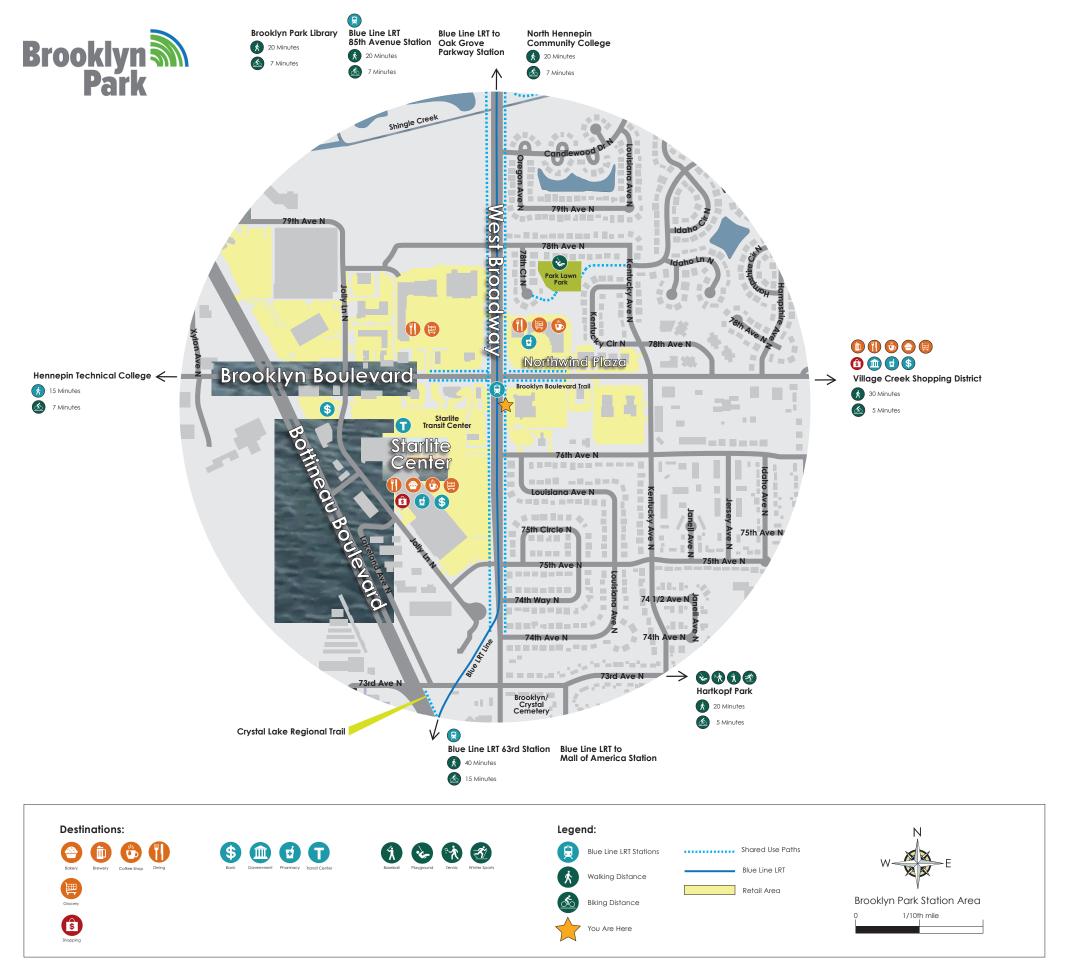












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### Signage Location Maps and Message Schedules

For each station area, a signage location map was developed that depicts the proposed locations for various sign typologies within the station area. Under each sign legend there is a tally of the quantity of each sign type within that station area. As there is overlap between the station areas, portions of the map are gray to indicate that signs within the gray areas are quantified as part of an adjacent station area. The first character in the location symbol denotes the sign type, e.g. A1, the second character uniquely identifies each sign, e.g. A1.1, and relates to the message schedule, described below.

When wayfinding implementation occurs, a message schedule will be developed that correlates to the signage location maps. This study included the development of five messages schedules, each of which corresponds to one station area in each corridor city. The message schedule identifies the key wayfinding information to be included on each sign shown on the signage location map. The first column of the message schedule identifies the station, the second and third columns, in combination, create the map code that identifies each sign on the signage location maps (e.g. A1.1). The next two columns describe the intersection the sign is placed at and the sign messages for each direction.

Actual distances and arrow placement to be shown on each sign will be determined after final sign locations have been determined. For those stations that had a message schedule developed, the message schedule is presented immediately after the corresponding sign location map.

Sign placement generally corresponds to the following approach:

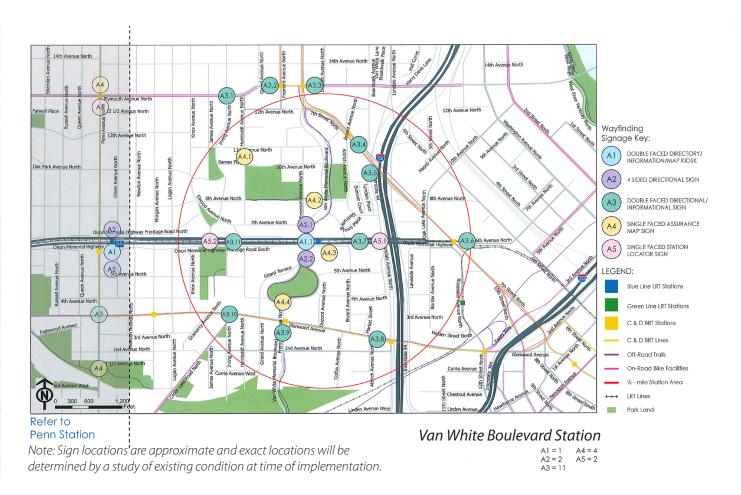
Sign Type A1 – Placed at Metro Blue Line LRT station platform

Sign Type A2 – Typically placed one block away from the station platform

Sign Type A3 – Typically placed at key wayfinding decision points predominantly within, but at times outside, the station areas

Sign Type A4 – Placed at strategic locations to affirm navigation

Sign Type A5 – Typically located midway between stations at key roadway crossings or at key intersections outside the station area.

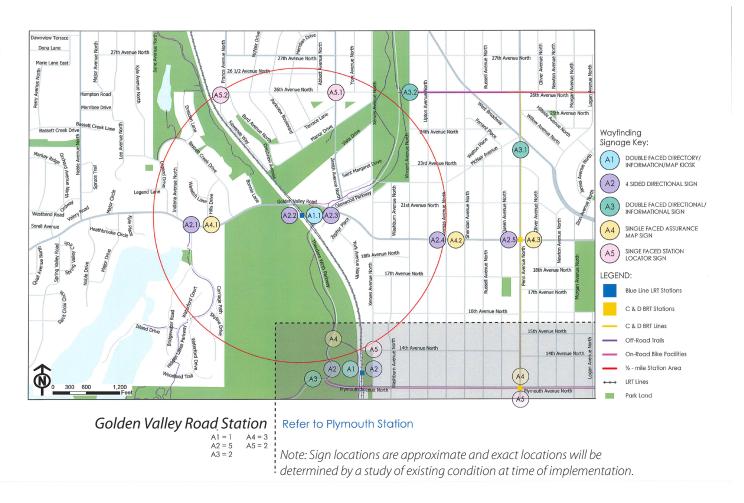


Station	Sign Type	Location	Intersection	Message
Van White Boulevard Station	A1	1	Van White Memorial Boulevard and Highway 55	Kiosk with Map (East and West Orientations)
Van White Boulevard Station	A2	1	Van White Memorial Boulevard and Highway 55	East Direction  * D Line BRT  * Green Line LRT - Royalston Station  * Farmers Market  West Direction  * Blue Line LRT - Penn Station  * Harrison Park  * Theodore Wirth Regional Park  * Grand Rounds National Scenic Byway  South Direction  * C Line BRT  * Green Line LRT - Bassett Creek Station  * Glenwood Avenue  * Minneapolis Impound Lot  North Direction  * D Line BRT  * Bethune Park  * Sumner Field Park

Van White	Boulevar	d Station <i>I</i>	Message Schedule, co	nt.
Station	Sign Type	Location	Intersection	Message
Van White Boulevard Station	A2	2	Van White Memorial Boulevard and Highway 55	East Direction  * D Line BRT  * Green Line LRT - Royalston Station  * Farmers Market  West Direction  * Blue Line LRT - Penn Station  * Harrison Park  * Theodore Wirth Regional Park  * Grand Rounds National Scenic Byway  South Direction  * C Line BRT  * Green Line LRT - Bassett Creek Station  * Glenwood Avenue  * Minneapolis Impound Lot  North Direction  * D Line BRT  * Bethune Park  * Sumner Field Park  * Plymouth Avenue Business District
Van White Boulevard Station	A3	1	Irving Avenue North and Plymouth Avenue North	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Penn Station  * C Line Station  * D Line Station
Van White Boulevard Station	A3	2	Fremont Avenue North and Plymouth Avenue North	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Penn Station  * C Line Station  * Grand Rounds National Scenic Byway
Van White Boulevard Station	A3	3	Emerson Avenue North and Plymouth Avenue North	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Penn Station  * C Line Station  * Grand Rounds National Scenic Byway
Van White Boulevard Station	A3	4	North 7th Street and Bryant Avenue North	Map  * Blue Line LRT - Van White Boulevard Station.  * Green Line LRT - Royalston Station  * C Line Station
Van White Boulevard Station	A3	5	North 7th Street and Lyndale Avenue North	Map  * Blue Line LRT - Van White Boulevard Station  * Green Line LRT - Royalston Station  * C Line Station  * D Line Station
Van White Boulevard Station	A3	6	North Seventh Street and 6th Avenue North	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Target Field Station  * Green Line LRT - Royalston Station  * C Line Station

Van White	Boulevar	d Station I	Message Schedule, co	nt.
Station	Sign Type	Location	Intersection	Message
Van White Boulevard Station	A3	7	Bryant Avenue North and Olson Memorial Highway	Map  * Blue Line LRT - Van White Boulevard Station  * Green Line LRT - Royalston Station  * C Line Station  * D Line Station
Van White Boulevard Station	A3	8	Lyndale Avenue North and Glenwood Avenue	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Target Field Station  * Green Line LRT - Royalston Station  * D Line Station
Van White Boulevard Station	A3	9	Van White Memorial Boulevard and Glenwood Avenue	Map  * Blue Line LRT - Van White Boulevard Station  * Green Line LRT - Royalston Station  * Green Line LRT - Bassett Creek  Valley Station  * D Line Station
Van White Boulevard Station	A3	10	Cedar Lake Road and Glenwood Avenue	Map  * Blue Line LRT - Van White Boulevard Station  * Green Line LRT - Bassett Creek  Valley Station  * Green Line LRT - Bryn Mawr Station  * C Line Station  * D Line Station
Van White Boulevard Station	A3	11	Elwood Avenue North and Olson Memorial Highway	Map  * Blue Line LRT - Van White Boulevard Station  * Blue Line LRT - Penn Station  * C Line Station  * D Line Station  * Glenwood Avenue Businesses
Van White Boulevard Station	A4	1	Humboldt Avenue North and Barnes Place	Мар
Van White Boulevard Station	A4	2	Van White Memorial Boulevard and 8th Avenue North	Мар
Van White Boulevard Station	A4	3	Dupont Avenue North and Van White Memorial Boulevard	Мар
Van White Boulevard Station	A4	4	4th Avenue North and Van White Memorial Boulevard	Мар
Van White Boulevard Station	A5	1	Lyndale Avenue North and Olson Memorial Highway	* Blue Line LRT - Van White Boulevard Station * Green Line LRT - Royalston Station * C Line Station * D Line Station
Van White Boulevard Station	A5	2	James Avenue North and Olson Memorial Highway	* Blue Line LRT - Penn Station  * Blue Line LRT - Van White Station  * Green Line LRT - Bassett Creek Valley Station  * C Line Station  * D Line Station

<sup>\*</sup> Arrow directional and distance in minutes to be determined after sign placement at site has been determined



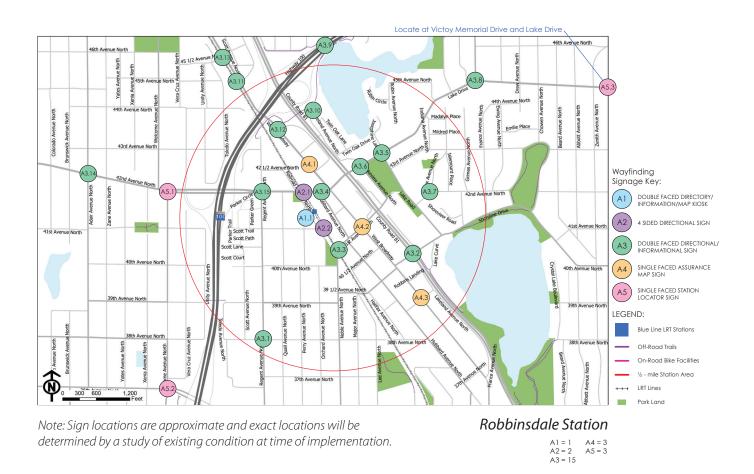
Station	Sign Type	Location	Intersection	Message
Golden Valley Road Station	A1	1	Theodore Wirth Parkway and Golden Valley Road	Kiosk with Map (North and South Orientations)
Golden Valley Road Station	A2		Hidden Lakes Parkway and Golden Valley Road	South Direction  * Courage Kenny Institute  * Minneapolis Clinic of Neurology  * Regency Hospital  East Direction  * Blue Line LRT - Golden Valley Station  * C Line BRT  * Grand Rounds National Scenic Byway  * C Line BRT Stations  West Broadway use McNair Avenue Penn Avenue at Golden Valley Road  West Direction  * Spring Gate Shopping Center (Three sided sign. North Direction info not required



Golden Valle	ey Road	Station M	essage Schedule, con	t.
Station	Sign Type	Location	Intersection	Message
Golden Valley Road Station	A2	2	Theodore Wirth Parkway and Golden Valley Road	North Direction  * Blue Line LRT - Robbinsdale Station  * North Memorial Hospital  * Grand Rounds National Scenic Byway  South Direction  * Blue Line LRT - Plymouth/Theodore Wirth Station  * Green Line LRT - Bryn Mawr Station  * Theodore Wirth Regional Park and Chalet  * Loppet Trailhead  East Direction  * C Line Stations  * Penn Avenue at Golden Valley Road  * West Broadway Businesses  West Direction  * Courage Kenny Institute  * Minneapolis Clinic of Neurology  * Spring Gate Shopping Center
Golden Valley Road Station	A2	3	Theodore Wirth Parkway and Golden Valley Road	North Direction  * Blue Line LRT - Robbinsdale Station  * North Memorial Hospital  * Grand Rounds National Scenic Byway  South Direction  * Blue Line LRT - Plymouth/Theodore Wirth Station  * Green Line LRT - Bryn Mawr Station  * Theodore Wirth Regional Park and Chalet  * Loppet Trailhead  East Direction  * C Line Stations  West Broadway use McNair Avenue  Penn Avenue use Golden Valley Road  * West Broadway Businesses  West Direction  * Courage Kenny Institute  * Minneapolis Clinic of Neurology  * Spring Gate Shopping Center
Golden Valley Road Station	A2	4	Thomas Avenue North and Golden Valley Road	West Direction  * Blue Line BRT - Golden Valley Station  * Grand Rounds National Scenic Byway North Direction  * West Broadway Businesses  * North Memorial Hospital  * Victory Memorial Drive East Direction  * North Commons Park  * North Point Family Clinic South Direction  * Blue Line BRT - Plymouth /Theodore Wirth Station  * Green Line LRT - Bryn Mawr Station  * Minnesota African American Heritage Museum and Gallery

Golden Vall	Golden Valley Road Station Message Schedule, cont.					
Station	Sign Type	Location	Intersection	Message		
Golden Valley Road Station	A2	5	Penn Avenue North and Golden Valley Road	West Direction  * Blue Line BRT - Golden Valley Station  * Grand Rounds National Scenic Byway  North Direction  * North Memorial Hospital  * Victory Memorial Drive  East Direction  * C Line BRT Station  * North Commons Park  South Direction  * Blue Line BRT - Penn Avenue Station  * Green Line LRT - Bryn Mawr Station  * Minnesota African American  Heritage Museum and Gallery		
Golden Valley Road Station	A3	1	Penn Avenue North and West Broadway North	Map  * Blue Line LRT - Golden Valley Road Station  * C Line Station  * North Memorial Hospital  * Grand Rounds National Scenic Byway		
Golden Valley Road Station	A3	2	Theodore Wirth Parkway and Vincent Avenue North	Map  * Blue Line LRT - Golden Valley Station  * Blue Line LRT - Robbinsdale Station  * C Line BRT  * North Memorial Hospital		
Golden Valley Road Station	A4	1	Mary Hills Drive and Golden Valley Road	Мар		
Golden Valley Road Station	A4	2	Thomas Avenue North and Golden Valley Road	Мар		
Golden Valley Road Station	A4	3	Penn Avenue North and Golden Valley Road	Мар		
Golden Valley Road Station	A5	1	Zenith Avenue North and 26th Avenue North	* Blue Line LRT - Golden Valley Road Station * Blue Line LRT - Robbinsdale Station * C Line BRT		
Golden Valley Road Station	A5	2	France Avenue North and 26th Avenue North	* Blue Line LRT - Golden Valley Road Station * Blue Line LRT - Robbinsdale Station * C Line BRT		

<sup>\*</sup> Arrow directional and distance in minutes to be determined after sign placement at site has been determined



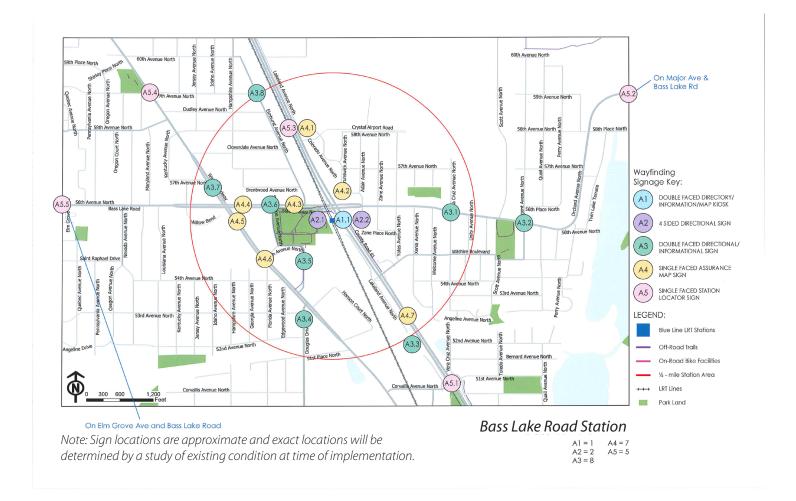
Station	Sign Type	Location	Intersection	Message
Robbinsdale Station	A1	1	Adjacent pedestrian walk connections to the BLRT platform	Kiosk with Map (North and South Orientations)
Robbinsdale Station	A2		Railroad Avenue North and 42nd Avenue North	East Direction  * Downtown Robbinsdale  * Robin Center  * Town Center  * Twin Lakes Beach Park  * Grand Rounds National Scenic Byway  West Direction  * Robbinsdale Historical Society  * Douglas Avenue Businesses  * Winnetka Avenue Businesses  North Direction  * Crystal Lake Regional Trail  * Graeser Park  South Direction  * Lakeland Park  * Lee Park  * North Memorial Hospital

Robbinsdal	e Statior	n Message	Schedule, cont.	
Station	Sign Type	Location	Intersection	Message
Robbinsdale Station	A2	2	Hubbard Ave N and 41 1/2 Ave N	East Direction  * Downtown Robbinsdale  * Robin Center  * Town Center  * Twin Lakes Beach Park  * Grand Rounds National Scenic Byway  West Direction  * Robbinsdale Historical Society  * Douglas Avenue Businesses  * Winnetka Avenue Businesses  North Direction  * Crystal Lake Regional Trail  * Graeser Park  South Direction  * C Line BRT  * Lakeland Park  * Lee Park  * North Memorial Hospital
Robbinsdale Station	A3	1	Regent Avenue North and 38th Avenue North	Map  * Blue Line LRT - Robinsdale Station  * Downtown Robbinsdale  * Town Center  * Robin Center  * North Memorial Hospital
Robbinsdale Station	A3	2	Lakeland Avenue North & 40th Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * Hwy 100 Tunnel Crossing
Robbinsdale Station	A3	3	Noble Avenue North & 41st Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * CR 81 Tunnel Crossing
Robbinsdale Station	A3	4	Hubbard Avenue North and 42nd Avenue North	Map  * Blue Line LRT - Robinsdale Station  * Downtown Robbinsdale  * Town Center  * Robin Center  * North Memorial Hospital
Robbinsdale Station	A3	5	Josephine Lane & Lake Drive	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * Hwy 100 Tunnel Crossing

Robbinsdale Station Message Schedule, cont.							
Station	Sign Type	Location	Intersection	Message			
Robbinsdale Station	A3	6	Lakeview Avenue North & Lake Drive	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			
Robbinsdale Station	A3	7	Halifax Avenue North & 42nd Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Hwy 100 Tunnel Crossing			
Robbinsdale Station	A3	8	France Avenue North & Lake Drive	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Highway 100 Tunnel Crossing			
Robbinsdale Station	A3	9	Highway 100 Tunnel and Twin Lake Trail	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			
Robbinsdale Station	A3	10	Lakeland Avenue North & Twin Boat Lake Launch	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			
Robbinsdale Station	A3	11	West Broadway Avenue and Lakeland Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			
Robbinsdale Station	A3	12	West Broadway Avenue and Lakeland Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			
Robbinsdale Station	A3	13	West Broadway and 45 1/2 Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing			

Robbinsdale Station Message Schedule, cont.								
Station	Sign Type	Location	Intersection	Message				
Robbinsdale Station	A3	14	Adair Avenue North and 42nd Avenue North	Map  * Blue Line LRT - Robbinsdale Station  * Downtown Robbinsdale  * Grand Rounds National Scenic Byway  * Twin Lake Regional Trail  * CR 81 Tunnel Crossing				
Robbinsdale Station	A3	15	Regent Avenue North & 42nd Avenue North	Map  * Blue Line LRT - Robinsdale Station  * C Line BRT  * Downtown Robbinsdale  * Town Center  * Robin Center  * North Memorial Hospital				
Robbinsdale Station	A4	1	West Broadway Avenue & 42 1/2 Avenue North	Мар				
Robbinsdale Station	A4	2	West Broadway Avenue & 41st Avenue North	Мар				
Robbinsdale Station	A4	3	West Broadway Ave & 39th Avenue North	Мар				
Robbinsdale Station	A5	1	Welcome Avenue North & 42nd Avenue North	* Blue Line LRT - Robbinsdale Station * Downtown Robbinsdale * Grand Rounds National Scenic Byway * Douglas Avenue Businesses * CR 81 Tunnel Crossing				
Robbinsdale Station	A5	2	Welcome Ave North & 36th Avenue North	* Blue Line LRT - Robbinsdale Station * C Line BRT * Downtown Robbinsdale * Grand Rounds National Scenic Byway * Hwy 100 Pedestrian Bridge				
Robbinsdale Station	A5	3	Victory Memorial Drive & Lake Drive	* Blue Line LRT - Robbinsdale Station * Downtown Robbinsdale * Grand Rounds National Scenic Byway * CR 81 Tunnel Crossing				

<sup>\*</sup> Arrow directional and distance in minutes to be determined after sign placement at site has been determined



1	Bottineau Boulevard and Bass Lake Road	Kiosk with Map (North and South Orientations)
1		Kiosk with Map (North and South Orientations)
1		
	Bottineau Boulevard and Bass Lake Road	East Direction  * C Line BRT  * MAC Area Nature Center  * Brookdale Shopping Area  West Direction  * Downtown Crystal Business District  * Crystal Shopping Area  * Becker Park  North Direction  * Crystal Airport  * Crystal Lake Regional Trail  * Lions Park  South Direction  * Crystal Community Center

Bass Lake R	Bass Lake Road Station Message Schedule, cont.								
Station	Sign Type	Location	Location	Message					
Bass Lake Road Station	A2	2	Bottineau Boulevard and Bass Lake Road	East Direction  * MAC Area Nature Center  * Brookdale Shopping Area  * C Line BRT  West Direction  * Downtown Crystal Business District  * Crystal Shopping Area  * Becker Park  North Direction  * Crystal Airport  * Crystal Lake Regional Trail  * Lions Park  South Direction  * Crystal Community Center and Aquatic Center					
Bass Lake Road Station	A3	1	Vera Cruz Ave North and Bass Lake Road	Map  * Blue Line LRT - Bass Lake Road Station  * Downtown Crystal  * MAC Area Nature Center  * Brookdale Shopping Area					
Bass Lake Road Station	A3	2	Regent Avenue North and Bass Lake Road	Map  * Blue Line LRT - Bass Lake Road Station  * Downtown Crystal  * MAC Area Nature Center  * Brookdale Shopping Area					
Bass Lake Road Station	A3	3	Lakeland Avenue North and 52nd Avenue North	Map  * Blue Line LRT - Bass Lake Road Station  * Becker Park  * Downtown Crystal  * Crystal Community Center and  Aquatic Center					
Bass Lake Road Station	A3	4	Douglas Drive North and West Broadway	Map  * Blue Line LRT - Bass Lake Road Station  * Becker Park  * Downtown Crystal  * Crystal Community Center and  Aquatic Center					
Bass Lake Road Station	A3	5	Douglas Drive North and 51st Avenue North	Map  * Blue Line LRT - Bass Lake Road Station  * Becker Park  * Downtown Crystal  * Crystal Community Center and  .Aquatic Center					
Bass Lake Road Station	A3	6	Sherburne Ave and Bass Lake Road	Map  * Blue Line LRT - Bass Lake Road Station  * Downtown Crystal  * Lions Park  * Crystal Community Center and  .Aquatic Center					

<sup>\*</sup> Arrow directional and distance in minutes to be determined after sign placement at site has been determined

Station	Sign	Location	ge Schedule, cont. Location	Message		
Station	Type	Location	Location	Message		
Bass Lake Road Station	A3	7	Broadway Avenue and 57th Avenue North	Map  * Blue Line LRT - Bass Lake Road Station  * Becker Park  * Downtown Crystal  * Crystal Community Center and Aquatic Center		
Bass Lake Road Station	A3	8	Bottineau Boulevard and 59th Avenue North	Map  * Blue Line LRT - Bass Lake Road Station  * Lions Park  * Downtown Crystal  * Crystal Community Center and Aquatic Center  * C Line BRT		
Bass Lake Road Station	A4	1	Colorado Avenue North and Crystal Airport Road	Мар		
Bass Lake Road Station	A4	2	Brunswick Avenue North and Colorado Avenue North	Мар		
Bass Lake Road Station	A4	3	Elmhurst Avenue North and Bass Lake Road	Мар		
Bass Lake Road Station	A4	4	West Broadway and Bass Lake Road	Мар		
Bass Lake Road Station	A4	5	West Broadway and Bass Lake Road	Мар		
Bass Lake Road Station	A4	6	West Broadway and 55th Avenue North	Мар		
Bass Lake Road Station	A4	7	Lakeland Avenue North and 53rd Avenue North	Мар		
Bass Lake Road Station	A5	1	Vera Cruz Avenue North and 51st Avenue North	* Blue Line LRT - Bass Lake Road Station  * Blue Line LRT - Robbinsdale Station  * C Line BRT  * Downtown Crystal  * Crystal Community Center and Aquatic Center		
Bass Lake Road Station	A5	2	Major Avenue and Bass Lake Road	* Blue Line LRT - Bass Lake Road Station * Downtown Crystal * MAC Area Nature Center * Brookdale Shopping Area * C Line BRT		
Bass Lake Road Station	A5	3	Elmhurst Avenue North and 58th Avenue North	* Blue Line LRT - Bass Lake Road Station  * Blue Line LRT - 63Road Avenue Station  * Downtown Crystal  * Becker Park  * Lions Park		
Bass Lake Road Station	A5	4	West Broadway and 59th Avenue North	* Blue Line LRT - Bass Lake Road Station  * Blue Line LRT - 63Road Avenue Station  * C Line BRT  * Downtown Crystal  * Becker Park  * Lions Park		
Bass Lake Road Station	A5	5	Elm Grove Avenue and Bass Lake Road	* Blue Line LRT - Bass Lake Road Station * Downtown Crystal * Becker Park * Lions Park		



#### 63rd Avenue Station

A1 = 1 A4 = 2A2 = 2 A5 = 2



Note: Sign locations are approximate and exact locations will be determined by a study of existing condition at time of implementation.

### Brooklyn Boulevard Station

A1 = 1 A4 = 5 A2 = 2 A5 = 3A3 = 6

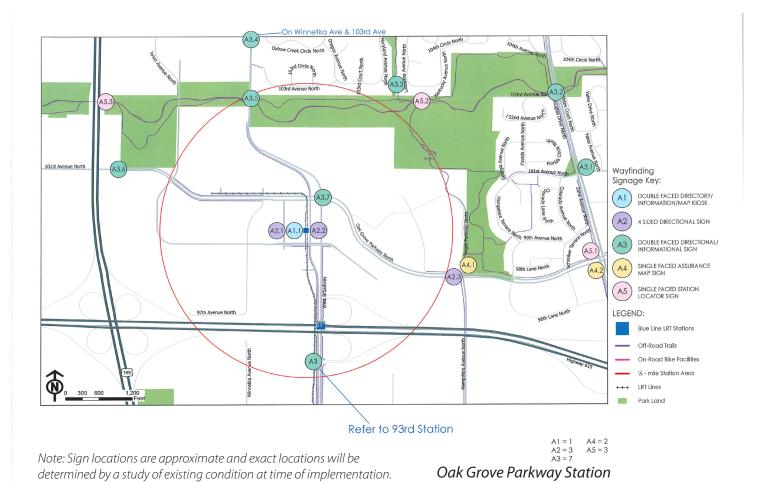
Brooklyn Boulevard	Brooklyn Boulevard Station Message Schedule								
Station	Sign Type	Location	Location	Message					
Brooklyn Boulevard Station	A1	1	West Broadway and Brooklyn Boulevard (North of intersection)	Kiosk with Map (North and South Orientations)					
Brooklyn Boulevard Station	A2	1	West Broadway and Brooklyn Boulevard	East Direction  * Village Creek Shopping District  West Direction  * Starlite Transit Center  * Hennepin Technical College  North Direction  * Brooklyn Park Library  * Shingle Creek Regional Trail  * North Hennepin Community College  South Direction  * Crystal Lake Regional Trail  * Hartkopf Park					
Brooklyn Boulevard Station	A2	2	West Broadway and Brooklyn Boulevard	East Direction  * Village Creek Shopping District West Direction  * Starlite Transit Center  * Hennepin Technical College North Direction  * Brooklyn Park Library  * Shingle Creek Regional Trail  * North Hennepin Community College South Direction  * Crystal Lake Regional Trail  * Hartkopf Park					
Brooklyn Boulevard Station	A3	1	Jolly Lane North and Brooklyn Boulevard	Map  * Blue Line LRT - Brooklyn Boulevard Station  * Starlite Transit Center  * Starlite Shopping Center					
Brooklyn Boulevard Station	A3	2	Bottineau Boulevard and Brooklyn Boulevard	Map  * Blue Line LRT - Brooklyn Boulevard Station  * Starlite Transit Center  * Starlite Shopping Center					
Brooklyn Boulevard Station	A3	3	Bottineau Boulevard and Brooklyn Boulevard	Map  * Blue Line LRT - Brooklyn Boulevard.Station  * Starlite Transit Center  * Starlite Shopping Center					
Brooklyn Boulevard Station	A3	4	Bottineau Boulevard and 76th Avenue North	Map  * Blue Line LRT - Brooklyn Boulevard Station  * Starlite Transit Center  * Starlite Shopping Center					
Brooklyn Boulevard Station	A3	5	Georgia Avenue North and Brooklyn Boulevard	Map  * Blue Line LRT - Brooklyn Boulevard Station  * Starlite Transit Center  * Starlite Shopping Center  * Village Creek Shopping District					
Brooklyn Boulevard Station	A3	6	Zane Avenue North and Brooklyn Boulevard	Map  * Blue Line LRT - Brooklyn Boulevard Station  * Starlite Transit Center  * Starlite Shopping Center  * Village Creek Shopping District					

Brooklyn Boulevard	Station N	Nessage S	chedule, cont.	
Station	Sign Type	Location	Location	Message
Brooklyn Boulevard Station	A4	1	Boone Ave North and Brooklyn Boulevard	Мар
Brooklyn Boulevard Station	A4	2	Jolly Lane North and West Broadway	Мар
Brooklyn Boulevard Station	A4	3	West Broadway and Brooklyn Boulevard (North of intersection)	Мар
Brooklyn Boulevard Station	A4	4	West Broadway and Brooklyn Boulevard (South of intersection)	Мар
Brooklyn Boulevard Station	A4	5	West Braodway and 75th Avenue North	Мар
Brooklyn Boulevard Station	A5	1	Bottineau Boulevard and 73rd Avenue North	* Blue Line LRT - Brooklyn Boulevard Station * Blue Line LRT - 63rd Avenue Station * Starlite Transit Center * Crystal Lake Regional Trail
Brooklyn Boulevard Station	A5	2	West Broadway and Candlewood Drive North	* Blue Line LRT - Brooklyn Boulevard Station * Blue Line LRT - 85th Avenue Station * Starlite Transit Center * Shingle Creek Regional Trail
Brooklyn Boulevard Station	A5	3	Boone Avenue and Brooklyn Boulevard	* Blue Line LRT - Brooklyn Boulevard Station * Blue Line LRT - 63rd Avenue Station * Starlite Transit Center * Crystal Lake Regional Trail

<sup>\*</sup> Arrow directional and distance in minutes to be determined after sign placement at site has been determined







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# Proposed Infrastructure Enhancements

As a part of the community engagement effort, input was gathered on locations within the study area where people feel uncomfortable and why. Eighteen specific areas of concern were identified through this process. The consulting team reviewed the 90 percent METRO Blue Line Extension (BLRT) Plans, Bottineau Community Works Infrastructure Advanced Planning study final deliverables, and METRO Blue Line Extension Station Area Plans to identify if these concerns were already addressed within these previously developed studies. Eight of the areas of concern were already addressed by the previous studies. The remaining concerns are addressed below.

## **Areas of Concern Addressed in Previous Study**

Location	Concern(s)	Previous Study That Addresses Concern(s)
Olson Memorial Highway (Highway 55)	No connections to Wirth Lake, unsafe for people walking and biking, and no good connections across Highway 55 near BNSF.	90 percent METRO Blue Line Extension (BLRT) Plans
Brooklyn Boulevard	Unsafe for bikes and pedestrians	Bottineau Community Works Infrastructure Advanced Planning-Project C: Brooklyn Boulevard
Brooklyn Boulevard and West Broadway Avenue	Difficult to navigate intersection	Bottineau Community Works Infrastructure Advanced Planning-Project C: Brooklyn Boulevard
Between Brooklyn Boulevard and 85th Avenue North	Poor pedestrian crossings	90 percent METRO Blue Line Extension (BLRT) Plans and METRO Blue Line Extension Station Area Plans
85th Avenue North from West Broadway Avenue to Hampshire Lane	Poor pedestrian crossings	90 percent METRO Blue Line Extension (BLRT) Plans and METRO Blue Line Extension Station Area Plans
63rd Avenue North	Bike on shoulder	Bottineau Community Works Infrastructure Advanced Planning-Project E: 63rd Avenue
63rd Avenue North and Bottineau Boulevard	Need improved safety features at intersections where pedestrian trails and roadways meet	90 percent METRO Blue Line Extension (BLRT) Plans and METRO Blue Line Extension Station Area Plans
71st Avenue North and West Broadway Avenue	Needs improved pedestrian crossings – need dedicated East/West crossing	90 percent METRO Blue Line Extension (BLRT) Plans and METRO Blue Line Extension Station Area Plans
Bass Lake Road at Bottineau Boulevard	Crossing Bass Lake Road to Becker Park	90 percent METRO Blue Line Extension (BLRT) Plans

# **Areas of Concern Not Addressed in Previous Study**

Location	Concern(s)	Potential Solutions
Theodore Wirth Parkway	Biking feels unsafe on Parkway	Traffic calming
Glenwood Avenue at Theodore Wirth Park	Crossing Glenwood is unsafe	Rapid flashing beacon, high visibility striping, provide ample lighting at crossing
41st Avenue North at West Broadway Avenue	Dangerous crossing	Bump outs
42nd Avenue North at McDonalds driveway	Too much vehicle traffic. Vehicles not paying attention to pedestrians	Narrow driveway to reduce pedestrian exposure and investigate feasibility of entrance only
59th Avenue at West Broadway Avenue	Uncontrolled crossing	Rapid flashing beacon
West Broadway Avenue (62nd Avenue to Bass Lake Road)	Inconsistent sidewalk segments and no bicycle facilities	Sidewalks both sides of roadway, on-street bicycle facilities, improve transit stops, improve park access
Hubbard Avenue North (42nd Avenue North to 41st Avenue North)	Vehicle/pedestrian conflicts	High visibility striping and crossing bump outs
Bottineau Boulevard at Wilshire Boulevard	Dangerous crossing	Remove free right turns, no right on red, add pedestrian refuge median, add leading pedestrian interval
Bottineau Boulevard at Brooklyn Boulevard	Difficult crossing for pedestrians	Remove free right turns, no right on red, add pedestrian refuge median, add leading pedestrian interval
Jolly Lane (near Target parking lot)	Unsafe for pedestrians – need dedicated East/West crossing	High visibility striping

Note: Additional study is required to determine appropriate modifications at these locations.

# Implementation

This study assumes that implementation of the wayfinding plan will not occur until the construction of the BLRT. The BLRT is currently on hold, therefore the exact timeline for implementation is currently unknown.

Implementation partners for the Bottineau Corridor wayfinding signage and infrastructure improvements may include the corridor cities; Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park or Hennepin County. METRO Transit is also a potential implementation partner since the type A1 kiosks would be placed near the station platforms. When a construction schedule is established for the BLRT, discussions should be reinitiated regarding potential funding sources and/or grant opportunities. Prior to implementation, final design will be required for the sign fixtures, along with creating/updating the detailed signage maps and message schedule for each station area. Additional site analysis will be needed to determine the exact locations for the placement of the signage.

Reconstruction of roadways within the station areas provide a good opportunity to incorporate infrastructure improvements for the areas of concern identified by area stakeholders. If the jurisdiction responsible for the roadways have a method to track noted improvements, this would better ensure that proposed infrastructure improvements are not missed during reconstruction. Grants, such as the regional solicitation, may also provide another option to make spot improvements that enhance pedestrian comfort and safety either now or when a construction schedule has been established for the BLRT.

#### **Costs and Maintenance**

Signage fabrication and installation budgets are identified on the implementation cost table. The aluminum construction and sign paint by Matthews Acrylic Polyurethane has a longevity that will exceed seven (7) years per the manufacturer. Use of quality materials should result in minimal or no operations or maintenance activity and costs unless a sign has been vandalized or damaged.

When a change occurs on a map, sign types A1, A3 and A4 would need updating. The panel with the maps will be easy to overlay. Costs for:

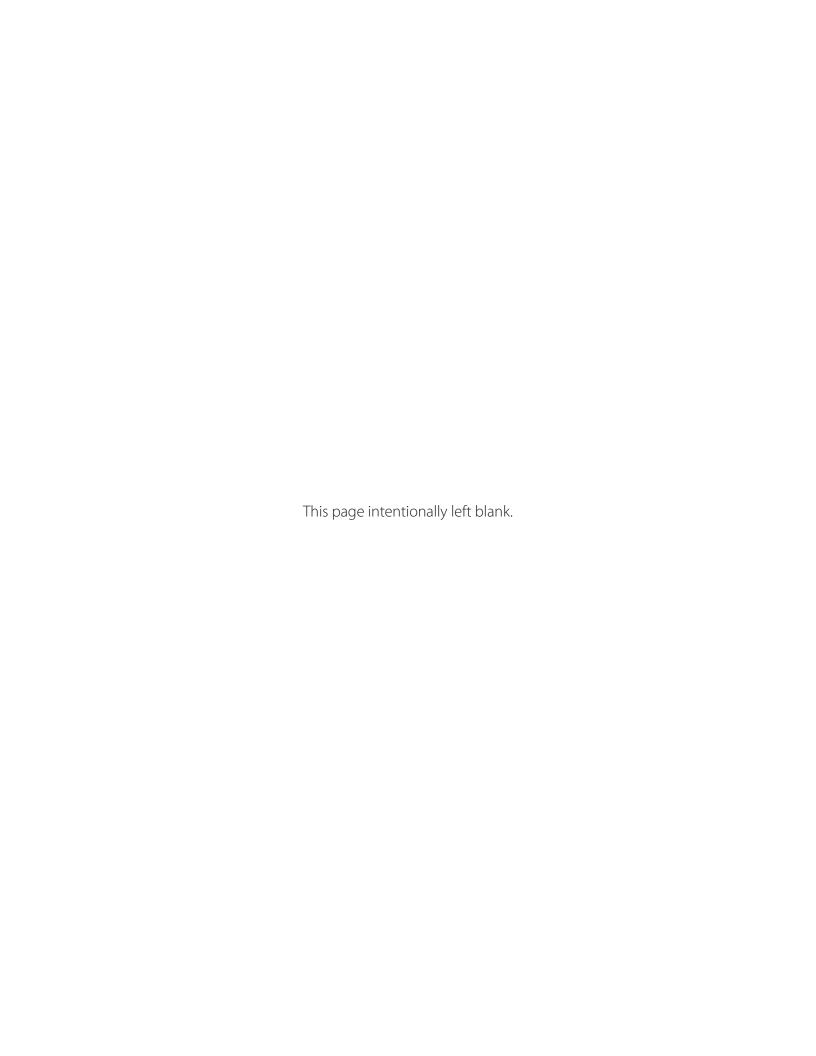
- A primary map for a kiosk (A1) panel would be approximately \$1,000 \$1,500 (2020 dollars) including design, fabrication and installation.
- If a directional name needs to be updated the panel background would again be overlaid. Each side of a panel would cost approximately \$1,000 to replace.

# **Table 4: Sign Type Hierarchy Budget Estimates** *Note: Estimated unit cost include fabrication and installation.*

-	SIGN TYPE A1			SIGN TYPE A2			SIGN TYPE A3		
Station	A1 Qty	A1 Unit Cost	A1 Extended Cost	A2 Qty	A2 Unit Cost	A2 Extended Cost	A3 Qty	A3 Unit Cost	A3 Extended Cost
Van White Boulevard Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	11	\$7,000	\$77,000
Penn Avenue Station	1	\$12,500	\$12,500	3	\$9,500	\$28,500	2	\$7,000	\$14,000
Plymouth Avenue Station	1	\$12,500	\$12,500	3	\$9,500	\$28,500	2	\$7,000	\$14,000
Golden Valley Road Station	1	\$12,500	\$12,500	5	\$9,500	\$47,500	2	\$7,000	\$14,000
Robbinsdale Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	15	\$7,000	\$105,000
Bass Lake Road Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	8	\$7,000	\$56,000
63rd Avenue Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	4	\$7,000	\$28,000
Brooklyn Boulevard Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	6	\$7,000	\$42,000
85th Avenue Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	5	\$7,000	\$35,000
93rd Avenue Station	1	\$12,500	\$12,500	2	\$9,500	\$19,000	6	\$7,000	\$42,000
Oak Grove Parkway Station	1	\$12,500	\$12,500	3	\$9,500	\$28,500	7	\$7,000	\$49,000
TOTALS	11		\$137,500	28		\$266,000	68		\$476,000

	SIGN TYPE A4				SIGN TYP	E A5	
Station	A4 Qty	A4 Unit Cost	A4 Extended Cost	A5 Qty	A5 Unit Cost	A5 Extended Cost	Station Total Cost
Van White Boulevard Station	4	\$3,000	\$12,000	2	\$4,500	\$9,000	\$129,500
Penn Avenue Station	5	\$3,000	\$15,000	1	\$4,500	\$4,500	\$74,500
Plymouth Avenue Station	3	\$3,000	\$9,000	1	\$4,500	\$4,500	\$68,500
Golden Valley Road Station	3	\$3,000	\$9,000	2	\$4,500	\$9,000	\$92,000
Robbinsdale Station	3	\$3,000	\$9,000	3	\$4,500	\$13,500	\$159,000
Bass Lake Road Station	7	\$3,000	\$21,000	5	\$4,500	\$22,500	\$131,000
63rd Avenue Station	2	\$3,000	\$6,000	2	\$4,500	\$9,000	\$74,500
Brooklyn Boulevard Station	5	\$3,000	\$15,000	3	\$4,500	\$13,500	\$102,000
85th Avenue Station	2	\$3,000	\$6,000	2	\$4,500	\$9,000	\$81,500
93rd Avenue Station	3	\$3,000	\$9,000	1	\$4,500	\$4,500	\$87,000
Oak Grove Parkway Station	2	\$3,000	\$6,000	3	\$4,500	\$13,500	\$109,500
TOTALS	39		\$117,000	25		\$112,500	

**Total Estimated Project Cost: \$1,109,000** 



# Appendix A

Community Engagement Summary of Findings



# **Memorandum**

SRF No. 12772

Bottineau Corridor Wayfinding Project **Subject** 

Community Engagement Summary of Findings

Date: November 12, 2019

Dan McNiel, Public Engagement Coordinator at SRF From:

### **Project Overview**

The Bottineau Corridor is the area near the planned METRO Blue Line Extension that will span from downtown Minneapolis to Brooklyn Park. Hennepin County Bottineau Community Works, in partnership with Metro Transit and the Cities of Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park, are preparing a wayfinding plan for the Bottineau Corridor. Project partners have dedicated significant time and resources to a community engagement effort designed to inform the creation of effective and representative wayfinding signage across the corridor.

#### What We Asked

Community engagement has helped Hennepin County identify important locations, themes, and pedestrian issues along the Bottineau Corridor (defined as a ½ mile area extending out from the proposed METRO Blue Line Extension). Project partners facilitated engagement events across the Corridor to connect with key stakeholders and gather public input. Each engagement event offered residents the opportunity to identify unique natural, cultural, and architectural characteristics that define the station areas, neighborhoods, cities and the broader Bottineau Corridor community. At each engagement event, staff asked for public input on four key questions to help inform the development of signage for the Bottineau Corridor Wayfinding Project.

- As a pedestrian, or bicyclist, how do you navigate to your destination?
- What are important community destinations and places you go frequently?
- Where do you feel uncomfortable walking or biking?
- Do you have any general comments about wayfinding signage?

#### What We Did

This community engagement effort was designed to gather input from the residents and user groups who live and navigate through the Corridor. Engaging with a diverse set of residents who regularly use the Corridor has helped the project develop a more comprehensive understanding of the community destinations that should be included on Bottineau Corridor wayfinding. A priority for this engagement effort was to connect with a broad set of community stakeholders to better understand how potential users from a wide range of cultures, backgrounds, languages, ages and

abilities navigate through the Corridor. The Bottineau Corridor Wayfinding Project facilitated 19 engagement events with representative groups of Bottineau Corridor stakeholders.

- 13 pop-up events across the Bottineau Corridor
- 2 community representative interviews
- 4 listening sessions with a collection of key stakeholders
- Engaged with 290+ residents about the Bottineau Corridor Wayfinding Project

Meeting with representative community stakeholders and facilitating pop-up engagement events in popular community locations has helped the project identify important community destinations and preferred travel routes near each of the proposed METRO Blue Line Extension stations.

Engagement activities also provided the project team with opportunities to share the objectives of the Bottineau Corridor Wayfinding Project with a broad set of community stakeholders.

All the public comments, areas of pedestrian concern and community destinations that were identified during engagement activities have been logged and are summarized in this memorandum. The rest of this memo will summarize important themes that arose from community conversations, highlight commonly referenced community destinations, and provide a detailed appendix that shares the location of each engagement event, the number of individuals engaged and the feedback that was received for all Bottineau Corridor Wayfinding Project engagement activities.

# **Reoccurring Themes from each Wayfinding Engagement Question**

- 1.) As a pedestrian, or bicyclist, how do you navigate to your destination?
- Respondents frequently reported using GPS or maps to navigate to new destinations.
- Respondents noted they often rely on memory to travel to well known destinations.
- Destinations often identified within the Bottineau Corridor include Theodore Wirth Regional Park, Becker Park, North Memorial Hospital and North Hennepin Community College. Major destinations outside the Corridor that were often identified include downtown Minneapolis, the Mississippi River, the airport, the Mall of America, and St. Paul.



Example of voting on a poster board at a pop-up event for the Bottineau Corridor Wayfinding Project.

	Total
Maps/GPS	106
Memory	95
Landmarks	43
Word of Mouth	13
Signage	32
Cardinal Directions	8
Total Votes	297

Table 1 - Summary of total votes received for the question "How do you navigate to your destination?"

#### 2.) Where do you feel uncomfortable walking or biking?

- Respondents identified crossing major roadways as a significant pedestrian concern. Major roadways identified include:
  - Olson Memorial Highway (State Highway 55)
  - W. Broadway Avenue (County State Aid Highways 130 and 103)
  - Bottineau Boulevard (County State Aid Highway 81)
  - Brooklyn Boulevard (County State Aid Highway 152)
  - 85th Avenue N (County State Aid Highway 109)
- A reoccurring concern about safe pedestrian crossing areas along the future METRO Blue Line Extension route.
- General comments from respondents that the Corridor is designed for automobiles and is not easily accessible for pedestrians.

#### 3.) Do you have any general comments about wayfinding signage?

- Wayfinding maps should include "You are here" indicators.
- There should be a series of signage to help navigation (i.e. breadcrumb trails).
- It is helpful for Wayfinding to include distances and estimated travel times to community destinations.
- Wayfinding should help people connect to other modes of transportation (i.e. nearby bus routes, nice ride stations, first mile/last mile connections)
- Wayfinding should be well lit and use bright colors
- Wayfinding should be designed to be accessible to all (i.e. translations and icons for non-English speakers and low enough to the ground so people in wheelchairs can easily read)

#### 4.) What are important community destinations and places you go frequently?

#### **Penn Ave and Van White Blvd Stations**

- C-Line Bus route
- Lyndale Farmers Market
- Sumner Library
- Downtown Minneapolis
- Glenwood Avenue shops and restaurants

#### Golden Valley Rd and Plymouth Ave/Theodore Wirth Stations

- Theodore Wirth Regional Park
- Minnesota African American Heritage Museum and Gallery
- North Memorial Hospital
- Connections to North Minneapolis (i.e. transit routes, pedestrian routes, first mile/last mile)

#### **Robbinsdale Station**

- Robbinsdale Downtown
- Crystal Lake / Lakeview Terrace / Sanborn Park
- Robbinsdale Transit Center
- Robbinsdale City Hall

#### 63rd Ave and Bass Lake Rd Stations

- Becker Park
- Target / Crystal Shopping Center
- 63<sup>rd</sup> Avenue Park and Ride
- Brooklyn Park Goodwill

#### 85th Ave and Brooklyn Blvd Stations

- North Hennepin Community College
- Hennepin Technical College
- Brooklyn Park Library
- W. Broadway Shops and Restaurants

#### Oak Grove Parkway and 93rd Ave Stations

- Target Northern Campus
- Cub Foods and Hy-Vee Grocery Store

#### **Conclusion**

Community engagement for the Bottineau Corridor Wayfinding Project was designed to be adaptable and respond to the needs of both the community and the project. Pop-up engagement activities provided effective opportunities to engage a representative cross-section of the community at popular locations and community events near proposed station areas. Focus group discussions allowed the project to have a more detailed conversation about each station area with specific stakeholder groups. Appendix A provides a brief description of each engagement activity and the feedback received. Appendix B provides a table of the key stakeholders identified at the outset of this project as well as the engagement outcomes for each stakeholder group.

### **Appendix A: Engagement Event Summaries**

#### **Pop-Up Events:**

#### Harrison Neighborhood Back to School Celebration - Pop-up event #1

- August 24<sup>th</sup> at Harrison Park (503 Irving Ave N, Minneapolis, MN 55405)
- Engaged with 16 residents
- What we heard:
  - <u>Destinations</u>: International Market Square, Lyndale Farmers Market, Bethune Park,
     Theodore Wirth Park, Mary's Place, Harrison Park, Cuppa Java
  - <u>Pedestrian Concerns</u>: Hwy 55 is unsafe for bikers and pedestrians, enhanced crosswalks are needed, there is no connection across Hwy 55 to Wirth Lake, no good bike connections across Hwy 55 along BNSF tracks.
  - o <u>General Comments</u>: Concerns that the Blue Line Extension won't effectively serve North Minneapolis residents, bus stations are too close to Hwy 55.

#### 63rd Ave Park and Ride - Pop-up event #2

- August 28<sup>th</sup> at 63<sup>rd</sup> Ave Park and Ride (7000 63rd Ave N, Minneapolis, MN 55428)
- Engaged with 60 residents
- What we heard:
  - Destinations: North Hennepin Community College, Goodwill, Wagner's Drive-in, Arbor Lakes Shopping Mall, Theodore Wirth Regional Park, 63<sup>rd</sup> Avenue Park and Ride, Elm Creek Park, Downtown Minneapolis, Minnehaha Falls, State Capitol
  - Pedestrian Concerns: Unsafe intersection for bicyclists/pedestrians at 63<sup>rd</sup> Avenue
     N. and Bottineau Boulevard
  - o <u>General Comments</u>: Please coordinate with Metro Mobility to ensure no issues with access at station areas

#### Theodore Wirth Park Grand Rounds Trail - Pop-up event #3

- September 6<sup>th</sup> intersection of Golden Valley Road and Theodore Wirth Parkway
- Engaged with 15 residents
- What we heard:
  - O Destinations: Theodore Wirth Regional Park, Downtown Robbinsdale, Travail, Fire Station, St. Margaret Mary's Church, Utepils Brewery, The Loppet, Mountain Biking Trails, North Memorial Hospital, Courage Kenny Institute, Cedar Lake Trail, Sledding Hill/Overlook at Theo Wirth Parkway and N. 26<sup>th</sup> Ave.
  - <u>Pedestrian Concerns</u>: Biking feels unsafe on Theo Wirth Parkway, Crossing Glenwood Avenue/Theodore Wirth Parkway is unsafe, Broadway Avenue is always unsafe to cross
  - General Comments: This is the only light rail stop in the Twin Cities that would have mountain biking trails!

#### West Broadway Open Streets - Pop-up #4

- September 14<sup>th</sup> Lyndale Avenue North Minneapolis,
- Engaged 34 residents
- What we heard:
  - o <u>Destinations</u>: Theodore Wirth Park, neighborhood parks, Downtown Minneapolis, Minnesota African American Heritage Museum and Gallery, C-line transit connections
  - o Pedestrian Concerns: N/A
  - o General Comments: It would be helpful for wayfinding to identify roads with dedicated bike lanes, connectivity between transit options is important, please have multiple signs guiding people to destinations, signs should have bright colors, wayfinding should have lighting, identify bike share and scooter locations, wayfinding should include maps with "you are here".

#### Market in the Valley - Pop-up #5

- September 15<sup>th</sup> Golden Valley Farmers Market (7800 Golden Valley Rd.)
- Engaged with 22 residents
- What we heard:
  - o Destinations: Robbinsdale Transit Center, C-line, Becker Park (Crystal), Target (Crystal), Downtown Robbinsdale, Brookview Park, Wuollets Bakery, Nonna Rosas, Travail, Theodore Wirth Regional Park, Luce Line Trail, Lions Park
  - o <u>Pedestrian Concerns</u>: Improved safety features at intersections where pedestrian trails and roadways meet
  - o General Comments: Include maps to help orientate yourself, important to consider first mile/last mile transit connections from light rail, this light rail would be great for us!, the light rail would help congestion, we love taking our bikes down to Minneapolis (the light rail would be great!)

#### Summit Café - Pop-up #6

- September 23<sup>rd</sup> Summit Academy OIC (935 Olson Memorial Hwy, Minneapolis, MN 55405)
- Engaged with 19 residents
- What we heard:
  - o <u>Destinations:</u> Farwell Park, Sumner Field, Glenwood Avenue shops and restaurants, Transit connections (C-line, 22, 7), connections to Downtown Minneapolis, St. Paul, Mall of America, Community Emergency Assistance Program (Brooklyn Center), International Market Square, North High School, Kenwood neighborhood, Bryn Mawr neighborhood, bike trails, walking paths, grocery stores, senior housing south of Summit Academy
  - o <u>Pedestrian Concerns:</u> Safe crossing locations at future light rail stops

o General Comments: Out of towners often ask where major landmarks are (Mall of America, St. Paul, Downtown), How will this project help residents and businesses along Penn Avenue?

#### **UROC Community Days - Pop-up #7**

- September 26<sup>th</sup> Urban Research and Outreach-Engagement Center (2001 Plymouth Avenue N.)
- Engaged with 16 residents
- What we heard:
  - o <u>Destinations:</u> Hennepin County Library, Summit Academy OIC, Utepils Brewery, Minnesota African American Heritage Museum and Galley, Northpoint health and wellness center, Disciples Ministry Church/ Pastor Paul's Food Shelf, North High School, Theodore Wirth Regional Park, North Mississippi Co-op, Minneapolis Urban League, Capri Theater, Cookie Cart (Northside Achievement Zone), Breaking Bread, Aldi's, North Memorial Hospital
  - o Pedestrian Concerns: N/A
  - o General Comments: Partner with Nice Ride, Broadway Avenue is a high bike/ped corridor—how do you connect with the LRT?, Station Area planning should include entire node at Emerson/Plymouth

#### Crystal Art on the Strip Crystal - Pop-up #8

- September 28<sup>th</sup> City of Crystal (6438 Bass Lake Road, Crystal, MN)
- Engaged 8 residents
- What we heard:
  - o <u>Destinations</u>: Tony's restaurants, Aldi's, Target, Buffalo Wild Wings, Becker Park, Wicked Wart (Robbinsdale)
  - o Pedestrian Concerns: Lack of sidewalks on local roads, crossing Bass Lake Road to Becker Park, traffic calming to reduce speeding
  - o General Comments: Need more paths in Crystal for running and biking, add Bike/Ped signage to help cars see pedestrians, it's easier to drive than walk in this area

#### North Hennepin Community College - Pop-up #9

- September 30<sup>th</sup> NHCC Campus Center (7411 85th Ave N, Brooklyn Park, MN 55445)
- Engaged 13 residents
- What we heard:
  - o <u>Destinations</u>: Brooklyn Park Public Library, North Hennepin Community College, Hennepin Technical College, Arbor Lakes Shopping Mall, Shopping areas along W. Broadway, Park Center High School, Brooklyn Park City Hall, Grocery Stores, Park and Rides, Tessman Park, College Park, Hamilton Park

- o <u>Pedestrian Concerns</u>: Difficult to navigate intersection of Brooklyn Boulevard and Bottineau Boulevard, poor pedestrian crossings near North Hennepin Community College – specifically the intersections at 85th Avenue & W Broadway Avenue and Brooklyn Boulevard & Bottineau Boulevard
- o General Comments: NHCC is a commuter college with lots of car traffic, but not a lot of biking or walking nearby

#### **Cedarwood Apartments - Pop-up #10**

- October 10<sup>th</sup> Cedarwood Apartment Community Lunch (5450 Douglas Drive N, Crystal, MN)
- Engaged with 11 residents
- What we heard:
  - o Destinations: 63<sup>rd</sup> Avenue Park and Ride, West Broadway bus routes (721), Becker Park, Schools (North Port Elementary, Government buildings (Douglas/42<sup>nd</sup>), Shingle Creek Park, Twin Lakes Trails, Crystal Community Center, Crystal Shopping Center, Pizza Ranch, Aldi's, Willow Bend Shopping Area, Fire Station, Police Station
  - o <u>Pedestrian Concerns</u>: We use the bus or cars to travel short distances in the community because of auto-centric development; Intersection at Bottineau Boulevard near Holiday Station is a scary intersection (it would be nice to have ped overpass or improved crosswalk); concerns about pedestrian safety at future light rail crossings.
  - o General Comments: Helpful for wayfinding to have maps with "you are here"; wayfinding is confusing without a series of signs guiding you to destinations, have good lighting at wayfinding locations, include approximate distance and travel time to destinations, consider non-English speakers when designing wayfinding.

#### Robbinsdale Transit Center - Pop-up #11

- October 22<sup>nd</sup> Robbinsdale Transit Center (4145 Hubbard Avenue North, Robbinsdale,
- Engaged with 15 residents
- What we heard:
  - o <u>Destinations</u>: Target (Crystal), Robbinsdale Transit Center, Connections to Brooklyn Center, Downtown Robbinsdale, Hy-Vee, Crystal Shopping Center, Crystal Community Center, DMV, City Hall, Public Library, Goodwill, Downtown New Hope, Connections to bus transit, 63<sup>rd</sup> Avenue Park and Ride, Becker Park
  - o Pedestrian Concerns: Streets around Robbinsdale Transit Center have lots of vehicle traffic and foot traffic interaction without designated crossings (Hubbard Ave. N.), 59th Avenue pedestrian crossing is uncontrolled and sidewalk is only on one side of the road, sidewalk only on one side of W Broadway Avenue between 62<sup>nd</sup> & Bass Lake Rd.

 General Comments: Bus service at Robbinsdale Transit Center is limited at night and on weekends, wayfinding should identify major landmarks, wayfinding should have maps with "you are here"

#### Starlite Transit Center - Pop-up #12

- October 23<sup>rd</sup> Starlite Transit Center (Brooklyn Boulevard, Brooklyn Park, MN)
- Engaged with 8 residents
- What we heard:
  - <u>Destinations:</u> North Memorial Hospital, Fire Department, Mr. Car Wash, Target, Cub Foods, Goodwill, W. Broadway restaurants and fast food, downtown Minneapolis, golf course, Zanewood Recreation Center, Zanewood Park, Robbinsdale Transit Center, Starlite transit center, connections to Brooklyn Center
  - O Pedestrian Concerns: West Broadway Avenue needs safer pedestrian crossing areas, cars drive 10 20 mph over the speed limit along W Broadway Avenue, W Broadway Avenue is worse while Bottineau is under construction, 71<sup>st</sup> and West Broadway Intersection (near Mr. Car Wash) is terrible for pedestrian crossings—need dedicated East/West crosswalk, Jolly Lane (near Target) is unsafe need dedicated East/West pedestrian crosswalk
  - o <u>General Comments</u>: It would be helpful for signs to have connections to Downtown, Brooklyn Center and communities surrounding the Corridor.

#### **Broadway Court Senior Apartments - Pop-up #13**

- October 28<sup>th</sup> Broadway Court Apartments (4600 41<sup>st</sup> Ave. N. Robbinsdale, MN)
- Engaged with 13 residents
- What we heard:
  - O Destinations: Mall of America (Landmark), Banks, Drug Stores, Walgreens, Walmart, Robbinsdale Transit Center, Robbinsdale City Hall, Brooklyn Center DMV, Rockford Road Public Library, Robbinsdale Art Galleries, Robbinsdale Historic Society, Crystal Lake, Sanborn Park, Hackenmuller Meats, Woullets Bakery, Nonna-Rosas Restaurant, Travail, Wicked Wart, Lakeview Elementary School, Robbinsdale Middle School, Sacred Heart Church and School, Cootie (Public Art in downtown Robbinsdale), Robbinsdale Clock Tower
  - O Pedestrian Concerns: Intersection of 41<sup>st</sup> Ave N and W. Broadway Avenue is always dangerous to cross, helpful to have well lighted walking paths, unsafe sidewalk on 42<sup>nd</sup> Avenue near McDonalds (cars don't see pedestrians), general concern about increase in car traffic and parking when light rail arrives, general concern about safety with increased traffic due to light rail. It would be nice to have police patrol, safety stations (push for help).
  - o <u>General Comments</u>: Wayfinding should be low enough for wheelchair users, wayfinding should have good lighting, use bright colors, icons and images are helpful for non-English speakers, wayfinding should identify important landmarks.

#### **Community Representative Interviews:**

#### **Ricardo Perez - The Alliance TC**

La Asamblea de Derechos Civiles was a member of the Blue Line Coalition and an organization identified early in the engagement process as a key stakeholder in the Bottineau Corridor Wayfinding Project. Due to circumstances beyond this Project's control, the engagement team was unable to facilitate an engagement session with the Blue Line Coalition. Ricardo Perez, from the Alliance TC, offered to help build connections with La Asamblea representatives and share his perspectives engaging with underrepresented and non-English speaking communities. Ricardo noted:

- o It is important to consider how non-English speakers can use and interact with signs. Are translations provided on the signs? Are translation services easily accessible? Do signs use images and iconography to effectively convey meaning?
- o Engagement opportunities should be easily accessible to non-English speakers in order to gain valuable insights. Building connections with community advocates is an effective way to gather meaningful input from underrepresented communities. It is important to translate engagement materials and be available at common community destinations.
  - o Facilitating a visual preference survey is an easy way to advance inclusive engagement.
  - o Connect with Media Outlets that are specific to cultural communities— Diverse Community Media Directory https://www.health.state.mn.us/communities/rih/ethnicmedia.pdf
- o Wayfinding has the opportunity to create space for non-English speaking communities by providing translations that are clearly visible and identifying cultural destinations on maps/signs.

#### **Lao Assistance Center of Minnesota**

Joo Hee Pomplun encourage the engagement team to connect with the Lao Assistance Center of Minnesota to better understand Lao-American community destinations along the Bottineau Corridor. The Executive Director of the Lao Assistance Center, Sunny Chanthanouvong, was happy to have a brief conversation about the Bottineau Corridor Wayfinding Project and share his perspectives about community destinations, areas of concerns for pedestrians and general comments about wayfinding.

#### • What we heard:

o Destinations: Parks, Hospitals, Clinics, Police stations, Churches, Non-profits, Sumner Library, Lyndale Farmers Market, Festival Foods (Brooklyn Park), Dragon Star Supermarket (Brooklyn Park), Daycare, Schools, Coffee Shops, Hair Salons, Restaurants, Large corporations, Bus routes, Transit Centers, Public Assistance Buildings, Brooklyn Park Court House, DMV, Olson Townhomes, Hmong Federal Services, Lao Assistance Center, La Donna Cervica Brewery, International Market Square

- o <u>Pedestrian Concerns</u>: Olson Memorial is a busy road that is difficult to cross, walking in the community needs to be safe (more police patrols), safe crosswalk locations.
- o General Comments: The Lao Assistance Center would like to partner with Hennepin County to help educate community about Wayfinding and how to use new signs, signs should have good lighting, signs should easily indicate what direction to travel, use bright colors and common symbols.

#### **Focus Group Listening Sessions:**

#### Business Advisory Committee/Community Advisory Committee - Listening Session #1

- September 23<sup>rd</sup> Blue Line Extension Offices (5414 West Broadway Avenue Crystal, MN)
- Engaged with 9 members of the BAC/CAC as well as Hennepin County and Blue Line Extension staff
- Community destinations identified at light rail stations across the Bottineau Corridor
  - o Penn Avenue / Van White Boulevard Stations: Utepils Brewery, Venture North Coffee/Bike Shop, Theodore Wirth Park, Summit Academy OIC,
  - o Golden Valley / Plymouth Road Stations: Homewood studios, Loppet Trailhead, Theo Wirth Chalet, North Memorial hospital, Theodore Wirth Park golf course, Theodore Wirth Park cross country skiing, Sweeny Lake fishing, Prince's childhood
  - o Robbinsdale Station: North Memorial Hospital, Pedestrian bridge (39th Ave North and Hwy 100), Downtown Robbinsdale, Robbinsdale Library, Art galleries, Lee Park, Sanborn Park, Lakeview Terrace, Crystal Lake trail
  - o Bass Lake Road Station: Becker Park, bike path along 81, Target, Fast Food, Caribou Coffee, Gs Stations,
  - o 63rd Avenue Station: Park and Ride, Zanewood Community Center, Crystal Airport, Lions Club Park, 63<sup>rd</sup> Avenue bike trail, transit connections along 63<sup>rd</sup> Avenue.
  - o 85th Avenue / Brooklyn Boulevard Station: Brooklyn Park Library, City Hall, North Hennepin Community College, Target, Shingle Creek trail, Parks, 85th Avenue shops and restaurants
  - Oak Grove Parkway / 93<sup>rd</sup> Avenue Station: Target Northern Campus, business parks, hotels, restaurants, Hy-Vee, Cub foods, future commercial and housing developments expected, public parks, fitness facility, future amphitheater

#### **Brooklyn Bridge Youth Alliance - Listening Session #2**

- September 30<sup>th</sup> The Brooklyn Youth Council (6301 Shingle Creek Pkwy, Brooklyn Center,
- Engaged with 24 Brooklyn Park and Brooklyn Center youth
- The Brooklyn Youth Council met to discuss the Bottineau Corridor Wayfinding Project. Youth focused on identifying locations near the last for station areas along the Bottineau Corridor.

- o 85th Avenue / Brooklyn Boulevard Station: Walmart, Cub Foods, Target, Walgreens, Family Dollar, Brunswick, Brooklyn Park Library, North Hennepin Community College, Panda Express, Dollar Tree, Burger King, Target, Park Center High School, Central Park, Park Haven Apartments
- o Oak Grove Parkway / 93<sup>rd</sup> Avenue Station: Target Northern Campus, Cub Foods, Brooklyn Park elementary school, Hy-Vee, Cub foods, Oak Grove Park, Cemetery, Hampton Inn Hotel

#### **Bike Advocacy - Listening Session #3**

- October 24<sup>th</sup> Venture North Bike Shop (1830 Glenwood Avenue Minneapolis, MN)
- Engaged with 6 representatives from Venture North Bike Shop and Hennepin County Bike Advocacy Committee
- What we heard:
  - o Penn Avenue / Van White Boulevard Stations: Royal Foundry, La Dona Cerveceria, International Market Square, Sumner Library, Laundromat, Venture North Bike and Coffee Shop, Luce Line Trail, Cedar Lake Trail, Connections to Downtown (Glenwood Ave), Connections to the Mississippi River (Broadway and Glenwood Avenue), bus routes, impound lot, Riverbend School, Lao Assistance Center, Harrison Neighborhood Association, Summit Academy OIC
  - o Golden Valley / Plymouth Road Stations: North Memorial Hospital, Courage Kenny Institute, Lakes/Rivers, Connections to North Minneapolis, Minnesota African American Heritage Museum & Gallery, Minneapolis Urban League, Loppet Trailhead, Humane Society, North Commons Park/Recreation Center, High Schools, Murals/Public Art (Prince Mural Whittier). Theodore Wirth Regional Park (highlight different parts of the park—golf, swimming, hiking, etc.), Golden Valley Road, Sledding Hills
  - o Robbinsdale Station: Biking infrastructure on Lowry Avenue North in Robbinsdale, Downtown Robbinsdale, North Memorial Hospital, Crystal Lake, Sanborn Park, Grocery Stores, Robbinsdale City Hall, Post Office, Robbinsdale Transit Center
  - o Bass Lake Road Station: Target Shopping area, Impound lot, Crystal Airport, W. Broadway Commercial District, Brooklyn Center Government Center, Library near Shingle Creek Park
  - o 63<sup>rd</sup> Avenue Station: Crystal Airport, 63<sup>rd</sup> Ave Park and Ride, Brooklyn Center Transit Center, Cub Foods / Grocery Stores, Shingle Creek Parkway, Shingle Creek Park, Palmer Lake
  - o 85th Avenue / Brooklyn Boulevard Station: Brooklyn Park Library, Transit centersouth of Target Campus near Highway 169, Hennepin Technical College, North Hennepin Community College
  - Oak Grove Parkway / 93<sup>rd</sup> Avenue Station: Target Northern Campus, Park and Ride, Three Rivers Park District (Elm Creek Park), Trailhead Bike Shop

#### General Comments:

- Van White Boulevard Station will be a connection point to SWLRT
- Identify Lime Scooter and Nice Ride Bike Stations
- Include cardinal directions on the wayfinding signs and on the ground as public art
- Point towards landmarks (the Mississippi River, Downtown, Brooklyn Center) to help people orientate themselves
- Include effective and safe Bike Parking at light rail station areas
- Consider drop-off/pick-up lanes at Light Rail stations, especially helpful when Connected and Automated Cars arrive.
- Helpful for signs to include both cardinal directions and popular landmarks
- Include connections to Bus Routes helps to include Route # and Direction
- Pair with Metro Transit app- -- text # to find a route?
- Include the name of community neighborhoods (work with Neighborhood Associations to identify)
- Work with local artists to create creative iconography, images and logos
- Highlight Bike Fix-it stations on wayfinding signage across the corridor
- Note Nice Ride and Lime Scooter stations on wayfinding across the corridor
- Note the location of dedicated on-street bike lanes on wayfinding across the corridor
- General concern about impacts the METRO Blue Line Extension could have on gentrification
- Important to consider Non-English speakers, include Spanish, Hmong and Arabic on signs. Emphasize icons and images. Make Wayfinding welcoming.

#### **Parks and Recreation Listening Session #4**

- November 4<sup>th</sup> Crystal Community Center (4800 Douglas Drive 55429 Crystal, MN)
- Engaged with 5 Parks and Recreation representatives from Crystal Parks and Recreation, Three Rivers Park District and Golden Valley Parks and Recreation
- What we heard:
  - O Penn Avenue / Van White Boulevard / Golden Valley / Plymouth Road Stations: Theodore Wirth Regional Park, Loppet Trailhead, Grand Rounds, MPRB / Three Rivers Kiosk at Golden Valley Road station area, Sochacki Trail, Sochacki Park, Fire Department (Golden Valley Rd.), Courage Kenny Institute, Sweeney Lake (limited access), Twin Lake (limited access), Sumner Library, Wirth Lake swimming area, Tubing Hill (Theodore Wirth), Dog Park / Off Leash area (Sochacki / Basset Creek), Bathrooms and water, Food and Restaurants (near Golden Valley Rd and Highway 100), Scheid Park, North Commons Park (North Minneapolis), YMCA (North Minneapolis), Basset Creek Park
  - Robbinsdale Station: Robbinsdale City Hall, Sochacki Park, Shingle Creek Regional Trail (connections to Regional Trail facilities – Twin Lakes), North Memorial Regional Hospital, Victory Memorial Parkway, Crystal City Hall/Police Station, Sanborn Park, Robbinsdale Middle School, Twin Lake Boat Launch
  - o <u>Bass Lake Rd / 63<sup>rd</sup> Avenue Stations:</u> Becker Park, CP Rail Regional Trail (trailhead at Becker Park and future connection with New Hope), Crystal Lake Regional Trail, Kiosk

for Crystal Lake Regional Trail along County Road 81 (includes a system kiosk, regional trail kiosk, and directional sign), Potential links between Bass Lake Park (Trail) and Becker Park, Crystal Community Center, Business District (Target, Adult Learning Center, temporary Police Station), Crystal Cove Aquatic Center, Cavanagh Park, Crystal MAC Park (navigate to the park via Regents Avenue), Downtown Robbinsdale, Art on the Strip (event) and community mural, Rockford Road Library, Police Station (42<sup>nd</sup>/Douglas), New Hope Ice Arena, Twin Lake, Community Garden (Crystal), Nompeng Academy, North Lions Community Park, Crystal Lake Regional Trail (no wayfinding – waiting to coordinate with this project), Shingle Creek Regional Park, Prairie Seeds Academy, Wagner's Restaurant, Crystal Lake Regional Trail passes under Interstate 94

o 85<sup>th</sup> Avenue / Brooklyn Boulevard / 93<sup>rd</sup> Avenue / Oak Grove Parkway: Target Northern Campus, Rush Creek Regional Trail, Brooklyn Park Operations and Maintenance Facility, Mississippi Gateway Regional Park (aka. Coon Rapids Dam Regional Park), Oak Grove Walking Trail, Highway 610 Housing Apartments, Cub Foods, Park and Ride

#### o Pedestrian Concerns

- O Sochacki Trail (route under Golden Valley Road), Sochacki Park connections to Crystal Lake Regional Trail via June Ave. N and 36th Ave. N (off June Ave N. and South of Lee Park)
- O Discussion about the best way to route pedestrians from Robbinsdale Station area to Crystal Lake Regional Trail (crossing Bottineau Boulevard), but 42<sup>nd</sup> Ave N. or 40<sup>th</sup> Ave N. are better pedestrian crossings than 41<sup>st</sup> Ave. N.
- o Potential pedestrian links between Bass Lake Park (Trail) and Becker Park
- o Walk Evaluation showed Douglas and W Broadway intersection is an unsafe
- o It is easier to route pedestrians to Crystal MAC Park from 63<sup>rd</sup> Ave station area, rather than Bass Lake Road Station area
- o 63<sup>rd</sup> Avenue has bike lanes and sidewalks for pedestrian use. 63<sup>rd</sup> Avenue is a connection to Shingle Creek Regional Park
- o 93<sup>rd</sup> Avenue southside of 93<sup>rd</sup> Avenue has a community trail with connections to Osseo

#### o General Comments

- O Coordinate with Brooklyn Park about Xylon Avenue N. extension near the Oak Grove Parkway Station area
- o Three Rivers emphasized importance of wayfinding that shows the Rush Creek Regional Trail and connections to the trail from Oak Grove Parkway Station
- o Lots of land near Oak Grove Parkway Station areas is owned by Park Board (Three Rivers)
- o Three Rivers is happy to share GIS files of trail maps
- o Amanda Fong from Three Rivers worked with Teen Council to develop wayfinding standards, opportunity to follow up and learn more

## **Appendix B: Stakeholder List and Engagement Outcomes**

The following table list of stakeholders were identified by the Project Team as potential candidates for community engagement, along with engagement achieved through this study.

Stakeholder	City/Agency	Target Station Area	Engaged	Outcome		
Blue Line Coalition	All	All	No	Unable to coordinate meeting		
Blue Line Corridor  Management  Committee	All	All	No	Not active during project timeline		
Blue Line Extension Community Advisory Committee	All	All	Yes	Focus Group		
Blue Line Extension Business Advisory Committee	All	All	Yes	Focus Group		
Blue Line Young Adult and Youth Research Team	All	All	No	Not active during project timeline		
Corridor Cities (Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park)	Corridor Cities	All	Yes	Focus Group / Pop-up events		
Parks and Recreation Departments	Three Rivers Park District, Corridor Cities	All	Yes	Focus Group		
La Asamblea / Spanish Language Business Community	Golden Valley, Robbinsdale, Brooklyn Park	85 <sup>th</sup> , Brooklyn Blvd, Robbinsdale	No	La Asamblea disbanded / Unable to meet with Blue Line Coalition / Interview with The Alliance TC		
Chambers of Commerce, Major Employers, and Commercial Districts	Corridor Studies	All	Yes	Did not engage stakeholder group / hosted Listening Session with BAC - CAC		
Congregations	Corridor Cities	All	No	Redeemer Center representatives attended Bike Advocacy listening session		
Schools	Corridor Cities	Plymouth Ave, Penn Ave, Van	No	Engaged youth at Focus Group and Pop-up		

		White Blvd, Target Field, Golden Valley, 63 <sup>rd</sup> , 85 <sup>th</sup>		engagement events
Transit Riders	Corridor Cities	All	Yes	Pop-up events
Brooklyn Bridge Alliance for Youth	Brooklyn Park, Brooklyn Center	63 <sup>rd</sup> , Brooklyn Blvd, 85 <sup>th</sup>	Yes	Focus Group
ACER	Brooklyn Park	Oak Grove, 93 <sup>rd</sup> , 85 <sup>th</sup> , Brooklyn Blvd	No	Unable to meet with Blue Line Coalition
Senior Centers	Brooklyn Park, Crystal	85 <sup>th</sup> , Bass Lake Rd	Yes	Pop-up events
North Hennepin Community College	Brooklyn Park	85 <sup>th</sup>	Yes	Pop-up events
Hennepin County Library	Brooklyn Park	85 <sup>th</sup>	No	Did not engage with libraries
Appetite for Change	Minneapolis	Van White Blvd, Golden Valley	No	Connected with Appetite for Change at UROC Pop-up
Bicycle Advocacy Groups / Venture North / North Minneapolis Bike Advocacy Council	Corridor Cities	All	Yes	Focus Group
Juxtaposition Arts	Minneapolis	Target Field, Van White Blvd, Penn Ave, Plymouth Ave, Golden Valley	No	Did not engage Juxtaposition Arts / Pop -up event at West Broadway Open Streets
City of Lakes Community Land Trust	Minneapolis	Penn Ave	No	Did not engage with Land Trust
Accessibility Advocacy Groups/ Courage Kenny Rehabilitation Institute	Corridor Cities	All	No	Reached out, but unable to engage with Courage Kenny/ Accessibility Advocacy Groups
Harrison Neighborhood Associations/ Near North/ Olson Townhomes	Minneapolis	Target Field, Van White Blvd, Penn Ave, Plymouth Ave, Golden Valley	Yes	Pop-up Event
Lao Assistance Center	Corridor Cities	All	Yes	Community Representative Interview

# Appendix B

Map Pictogram Summary









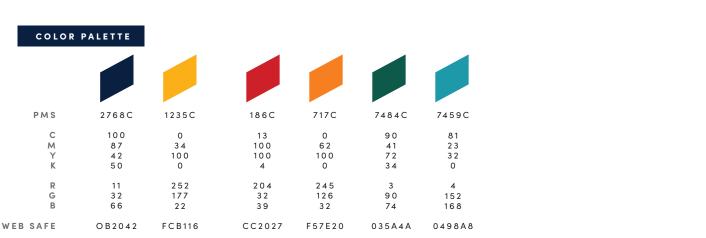
Grocery

PMS ORANGE 718C

Food Shelf

Farmers Market

Dining



**PICTOGRAMS**