

To: Andrew G. Gillet, Community Works Project Coordinator
Community Works | Hennepin County Public Works

From: Jo Ann Olsen, Associate

Date: October 9, 2018

Subject: Bottineau Community Works Infrastructure Advanced Planning Study – Shared Mobility Recommendations

Introduction

The Bottineau Community Works Infrastructure Advance Planning Study included researching Shared Mobility Feasibility and defining how shared mobility can increase connectivity to key destinations from LRT stations along the METRO Blue Line extension. Three LRT stations were identified by Hennepin County for the focus of this task based on location and station area characteristics. The three selected LRT stations, and a brief description of each station area, are described below:

- **Golden Valley Road Station**, located in the City of Golden Valley and near to the City of Minneapolis western municipal boundary:
 - High concentrations of light industrial, mixed use, and office uses along corridors throughout the city. Potential to access concentrated job centers located within two to three miles of the station.
- **85th Avenue Station**, located in the City of Brooklyn Park:
 - North Hennepin Community College located adjacent to the station and Hennepin Technical College (sister campus) is located within two miles of the station. Potential to link the two campuses and improve access to surrounding uses.
- **93rd Avenue Station**, located in the City of Brooklyn Park:
 - Predominantly light industrial and warehouse uses on large sites with limited pedestrian access are adjacent to the station. Potential to provide connection to the station and improve access to neighborhoods outside of the half-mile radius of the station (i.e. City of Osseo).

The first phase of this task provided a description of Shared Use Mobility and Shared Mobility Hubs, along with a summary of Mobility Hub Features. Research included review of national best

practices and case studies on shared use mobility, and interviews with representatives from the cities of Golden Valley and Brooklyn Park, and Metro Transit.

The second phase of this task included review of the proposed infrastructure and design layout for the three transit stations (referencing the Blue Line LRT Extension station site plans 90 percent design documents), review of proposed bus operation plans, and application of findings from the first phase to identify shared mobility strategies that can be implemented at each station.

The purpose of this memo is to provide a summary of findings and define a series of highest priority shared mobility recommendations to implement at each station. The following sections provide a summary of findings on

- Shared Mobility/Shared Mobility Hubs
- Shared Mobility Hub Features
- Metro Transit Service
- Golden Valley Road Station/85th Avenue Station/93rd Avenue Station:
 - Summary of station area
 - Shared mobility recommendations and implementation

Shared Mobility/Shared Mobility Hubs

For the purposes of this task Shared Mobility is defined as short-term transportation solutions enabling users to access various shared vehicles, bicycles, or other low speed modes of transportation. Shared Mobility Hubs are defined as transportation centers that seamlessly connect different modes of travel, such as:

- Walking
- Biking
- Bikeshare
- Carshare
- On-Demand rideshare services
- Vanpool
- Microtransit
- Taxi
- Autonomous Vehicles

Shared mobility continues to evolve at a rapid pace and is on the rise. It has been shown that the more people use shared modes, the more likely that they are to use transit, own fewer cars and spend less on transportation. People who use multiple shared modes report greater transportation cost savings and own half as many cars as people who use transit alone. Shared mobility plays a key role in equity by increasing transportation choices for residents, employees, visitors, and those who cannot afford, or choose not to own, a vehicle. Additional benefits include decreasing dependence on the private automobile, reduced traffic congestion, first and last mile solutions, reduced transportation costs and reduced pollution.

Shared Mobility Hub Features

Shared Mobility Hub features include transit, pedestrian, bike and motorized amenities, and technology. Ideally, these features are located together within a mobility hub to provide seamless connection between modes. The following provides a brief description of these Shared Mobility Hub features.

Transit Amenities

Transit Amenities are in the immediate transit station area and provide a safe and comfortable space for passengers to wait for transit or shared mobility ride. Safe connections are provided between a transit stop and the adjacent mobility network (bikeshare, etc.) along with fare payment and interactive trip planning kiosks, real-time arrival information and designated curb space for use by a wide variety of shared mode services.

Pedestrian Amenities

Pedestrian Amenities are located within a one-mile walkshed around a transit station and include wide sidewalks with landscaping and lighting, and crossing with signal timing, curb extensions and pedestrian beacon.

Bike Amenities

Bike Amenities are located within a three mile bikeshed around a transit station and include bikeways, bike parking, and bikeshare. Bikeways encourage cycling to, from, and within a mobility hub, are safe and comfortable for all ages and abilities, and provide access to transit and other nearby destinations (work, shopping, recreation). Bike parking options are highly visible, secure and convenient. Bikeshare provides convenient, affordable, on-demand access to bikes, and is attractive to those who rather not own a bike. Bikeshare can be subsidized for students and lower income populations. There is also potential for joint transit-bikeshare passes.

Bikeshare Case Study: Golden Valley, MN and LimeBike, 2018

Golden Valley was the first city to adopt dockless bike sharing. Up to 500 dockless bikes were deployed in April 2018 (including three speed and electric assist bikes). Riders use a smartphone app to locate, unlock and pay for a bike. Once the trip is over, the rider can lock it at a bike rack or in a visible public area. There are discounts for students and lower-income residents. These bikes could be used by commuters from the Golden Valley LRT station.

Motorized Service Amenities

Motorized Service Amenities include carshare, on-demand rideshare and microtransit. Carshare provides access to vehicles 24 hours per day/seven days a week with dedicated parking for carshare vehicles at transit stations. On-demand rideshare (Uber/Lyft, etc.) allows a rider to request a ride in real-time, or prescheduled, using a mobile app. There can be partnerships with local governments, transit agencies and employers to sponsor rides that connect employees from transit to work. There should be designated on-demand pick-up/drop-off areas with wayfinding at transit stations. Microtransit targets peak period commute travel with on-demand service for small groups of people.

Riders order service through a mobile app and passengers are matched with a vehicle traveling in the same direction. It is a convenient alternative to where high frequency transit isn't warranted. There should be a dedicated location and wayfinding at, or adjacent to, transit stations for easy transfer.

Carshare Case Study: Metro Transit, Minneapolis and St. Paul and HOURCAR

Provide users with one transportation account to pay for bus and light rail and to access HOURCAR's carshare fleet. The program enables users to use their Metro Transit Go-To Cards to unlock reserved vehicles by swiping the Go-To card on the reader. Around 90 percent of HOURCAR members use transit, according to a HOURCAR survey. Around a third of members also said they began using transit more after joining the car-sharing service.

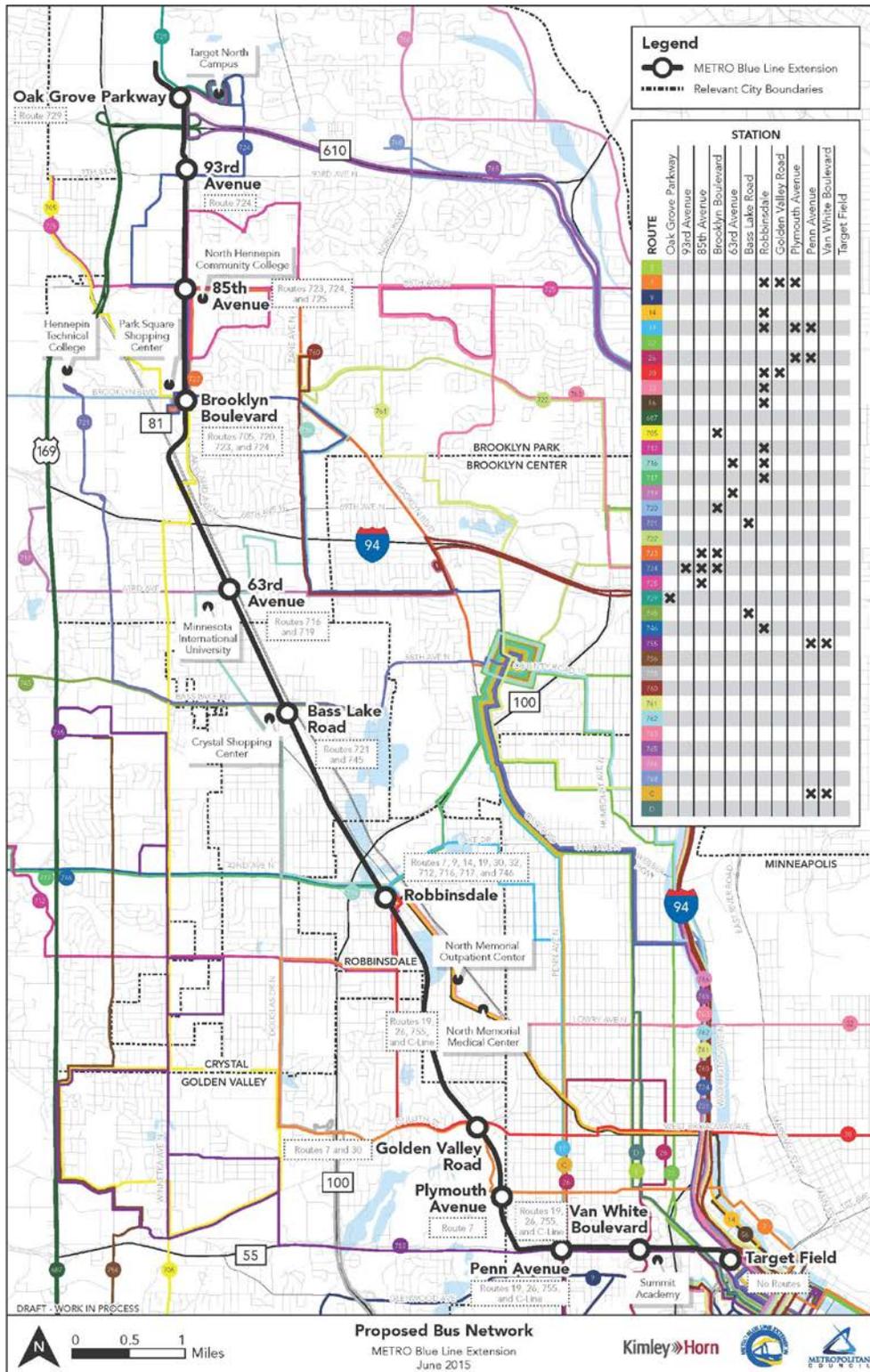
Support Service Amenities

Support Service Amenities are located within walk, bike and drive sheds and within the transit station. Amenities include wayfinding, integrated payment solution, package delivery and ease of finding, accessing and paying for transit, shared mobility services, electric vehicle charging, etc.

Metro Transit Service

Metro Transit staff were interviewed to discuss bus operation plans for the METRO Blue Line extension and any specific information on scenarios for local bus service connectivity to the three identified stations. As part of the 2040 ridership modeling the Blue Line Project Office requested an update of the 2040 bus network. Figure 1 provides the METRO Blue Line Bus Map 2040. This is the version that has been seen by both the public and the FTA and is an optimistic version of how things will look in 2040. Metro Transit has developed some concepts for opening day of service, but these have yet to be vetted with policymakers or presented to the public. There will be extensive public outreach process two to three years prior to opening MERO Blue Line. This public outreach and presentations to policymakers will be used to vet opening day bus service concepts.

Figure 1 METRO Blue Line Bus Map 2040



Source: Metro Transit

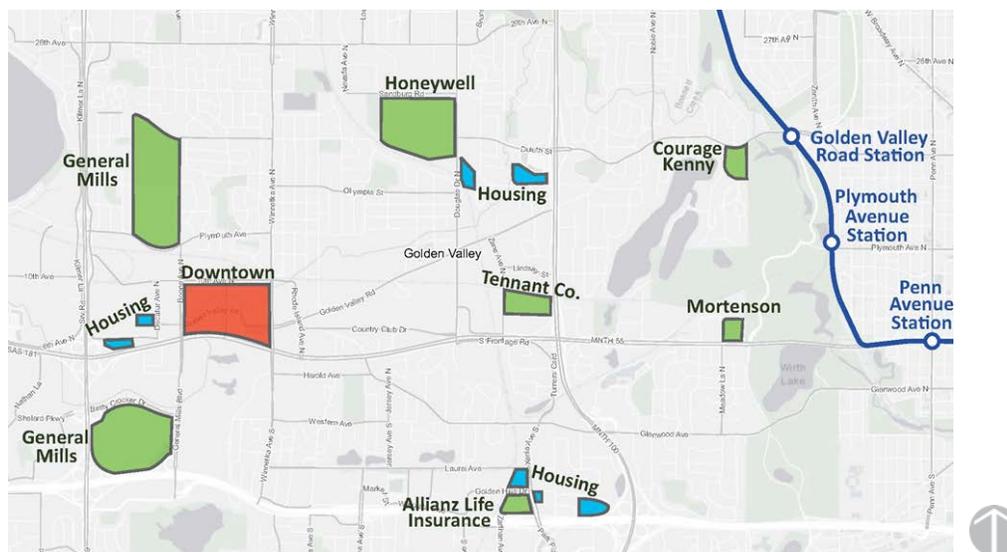
Golden Valley Road Station

Staff from the City of Golden Valley were interviewed at the beginning of this task to understand current and future land use within the city, identification of key destinations for connectivity to the LRT transit station, and overall goals/interest in pursuing shared mobility at the Golden Valley Road transit station. Interviews were held with Metro Transit to understand proposed Metro Transit bus operation plans and how this service connects to, or supports, the Golden Valley Road transit station. Review of the Golden Valley Road Station site plan (90 percent design) was performed to determine capacity at, or near, the station to accommodate addition of mobility hub features.

Station Area Characteristics

The Golden Valley Road Station area mainly consists of low density residential development with Theodore Wirth Park to the southwest. This type of land use does not provide for a lot of walkup users of the station. There is a high daytime population (employees) at nearby employment centers that are located further than walking distance to the station. City staff identified Honeywell, General Mills, Tennant, Allianz, Mortenson and Kenny Rehab as employers who have shown an interest in connecting to the LRT Station and providing alternative transportation for their employees. Downtown Golden Valley is also adding downtown shopping opportunities, along with areas of concentrated housing, that will benefit with connectivity to/from the LRT Station. Figure 2 illustrates the employment centers, downtown area and housing concentrations in relation to Golden Valley Station.

Figure 2: Golden Valley Major Employers, Housing Concentration and Downtown



Station Area Components

The station area plan for the Golden Valley Transit Station (Figure 3) includes an LRT station, park-and-ride, two bus stops (on Golden Valley Road), passenger drop-off (2 stalls), trailhead/kiosk, and bike racks. The LRT station and local bus service are connected by a plaza and sidewalk system. The proposed passenger drop off has the potential to be shared with other motorized services such

as Uber/Lyft. Bikeshare (LimeBike) could be in the same area as the proposed bike racks. The area designated as the Golden Valley Road LRT entrance is a preferred location for interactive trip planning kiosks and real-time arrival information. Beyond these features, there may be limited capacity for additional shared mobility features within the station area. City staff suggested that the Church of St. Margaret Mary property, located just south of Golden Valley Station, may be developed in the future. This could provide an opportunity to pursue integration of shared mobility features within a defined shared mobility hub as part of a redevelopment plan.

Figure 3: Golden Valley Road Station



Source: Blue Line LRT Extension 90% Submittal Layout



Metro Transit Service

In discussion with Metro Transit staff it was confirmed that Metro Transit Route 14G currently serves the station area. An extension of Route 7 to the station area is being considered, but not yet confirmed. Route 30 will be extended to Golden Valley Road station from the intersection of Golden Valley Road and Xerxes, where it currently terminates.

Priority Shared Mobility Recommendations for Golden Valley Road Station

The following are the recommended next steps to promote shared mobility at the Golden Valley Road Station.

1. Golden Valley staff identify and document employers, businesses, housing complexes, etc. that would be interested in participating in shared mobility programs. As part of this step, determine the extent of their interest, such as financial, promotional and partnership. This

step will provide potential number of users, scheduling, etc. that can be used to support pursuit of the next two steps.

2. Golden Valley staff discuss with Metro Transit what conditions will warrant consideration of circulator service, or as an alternative, setting up a microtransit pilot program to serve the employment centers, downtown area and housing concentrations.
3. Golden Valley staff contact Transportation Network Company (TNC) staff representing the Twin Cities region to discuss the potential for, and what is required, to enter into a contract to provide microtransit on-demand service in a designated area within Golden Valley city limits. Staff should also reach out to Carshare companies active in the Twin Cities region, such as HOURCAR, to understand what conditions warrant providing carshare availability at the Golden Valley Station.
4. Golden Valley staff work with the Blue Line Project Office to permit the passenger drop off to include TNC vehicles, determine if the bike storage area can also accommodate bikeshare (Limebikes/scooters), and identify a location and infrastructure for interactive trip planning kiosks. Staff should also work with Metro Transit to determine if microtransit vehicles can share the proposed bus stop off areas. If it is determined that the Golden Valley Road station site cannot accommodate the addition of these recommended shared mobility features then Golden Valley staff should pursue the potential to integrate a shared mobility hub, with the identified features, into any future redevelopment proposals for the St. Margaret Mary site.

85th Avenue Station

Station Area Characteristics

The predominant land use at the 85th Avenue Station is public institutions. North Hennepin Community College (NHCC) occupies most of the eastern half of the station planning area and the new Hennepin County Brooklyn Park Branch Library is located on the northwest corner of West Broadway Avenue and 85th Avenue. Other land uses include a small commercial area and low-and medium- density residential. No redevelopment of existing housing is anticipated. NHCC is a big generator for ridership and is currently updating their campus master plan. Hennepin Technical College (HTC) is considered a sister campus of NHCC and is located within two miles to the southwest. Figure 4 illustrates the 85th Avenue Station area.

Figure 4: 85th Avenue Station/NHCC/Hennepin County Library



Source: Blue Line LRT Extension 90% Submittal Layout



Station Area Components

The station area plan for the 85th Avenue Transit Station (Figure 5) includes an LRT station, Metro Transit bus shelters, and bike racks. The station platform is in the center of the street and the bus shelters/bike racks are located along the street curb. Passengers transferring between local bus service and LRT will have to cross West Broadway Avenue at the designated crosswalks. Hennepin County does not allow on street drop off on county roads which then prohibits use of curb space for shared mobility features such as on-demand rideshare on West Broadway Avenue and 85th Avenue.

Figure 6: 85th Avenue Station/Tradition Senior Housing/City Hall Campus



Metro Transit Service

Currently Routes 724 and 760 serve West Broadway. In discussions with Metro Transit staff it was confirmed that there is a proposed Route 725 that is an express feeder route connecting to 85th Avenue Station.

Priority Shared Mobility Recommendations for 85th Avenue Station

The following are the recommended next steps to promote shared mobility at the 85th Avenue Station.

1. Brooklyn Park staff discuss with North Hennepin Community College and Hennepin County Library the potential for inclusion of a shared mobility hub on their property. The shared mobility features would include drop off area for on-demand ride share, potential parking for carshare, bikeshare storage, interactive trip planning kiosk, and package delivery.
2. Brooklyn Park staff work with NHCC and HTC to define a need for shuttle service between campuses. If a scope of service is defined, discuss with Metro Transit and TNCs what conditions will warrant consideration of circulator/shuttle, or microtransit, service between campuses. The discussion with TNC staff should also cover what is required to enter into a contract to provide on-demand service in a designated area to connect identified key destinations with 85th Avenue Station.
3. Brooklyn Park staff reach out to Carshare companies active in the Twin Cities region, such as HOURCAR, to understand what conditions warrant providing carshare availability at the 85th Avenue Station.

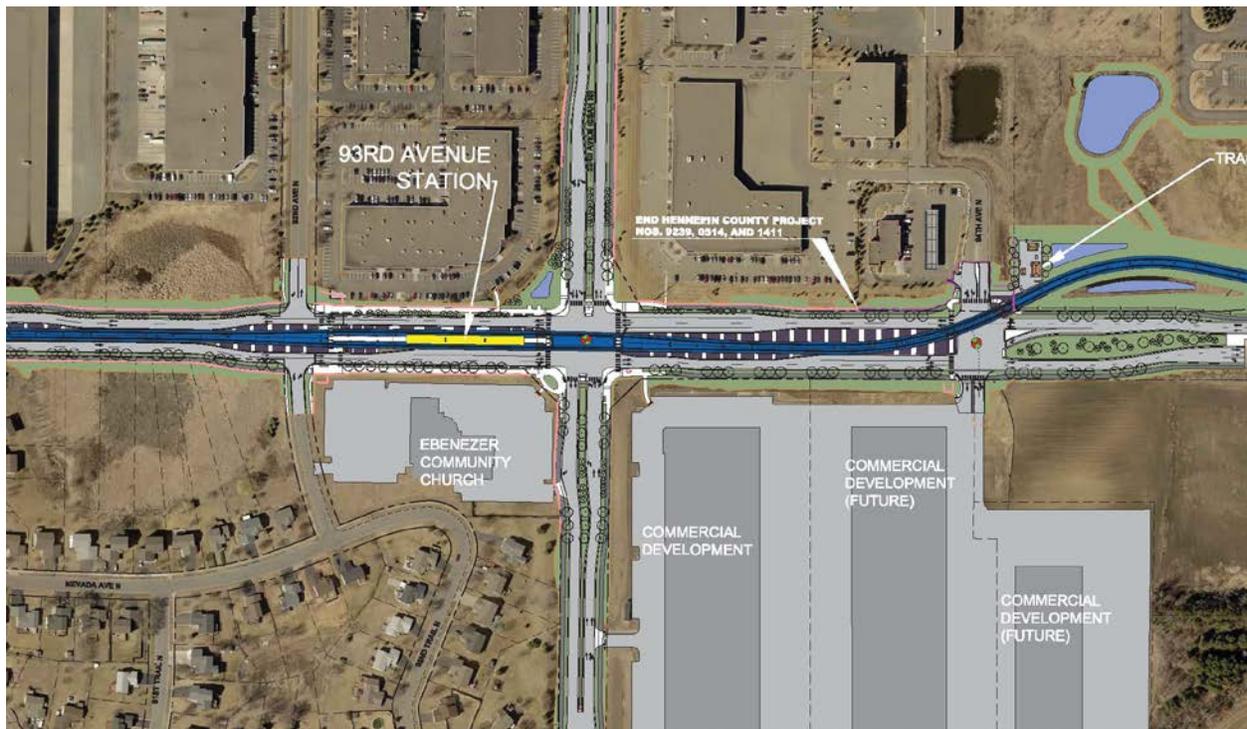
4. Brooklyn Park staff work with the Blue Line Project Office to determine capacity within the 85th Avenue Station area to accommodate shared mobility hub features such as bikeshare and interactive trip planning kiosks.

93rd Avenue Station

Station Area Characteristics

The 93rd Avenue Station is surrounded by low density residential, light industrial and warehouse uses (Figure 7). The primary land use within a ½ mile of 93rd Avenue Station is business park. There is a high concentration of jobs in the station area (Design Ready Controls, Biomerics, Photo Labs, Cirtec Medical Systems, Sterns Custom Interiors), but limited pedestrian accessibility to the station. Staff also noted the potential to work with Ebenezer Community Church, directly adjacent to the station, to consider locating a shared mobility hub on their property. There are large tracts of future commercial development near the station that provide another opportunity for consideration of a shared mobility hub as part of their development plans.

Figure 7: 93rd Avenue Station Area Characteristics



Source: Blue Line LRT Extension 90% Submittal Layout



Station Area Components

The station area plan for the 93rd Avenue Station (Figure 8) includes an LRT station, Metro Transit bus stop and bike racks. The station platform is in the center of the street and the bus shelters/bike racks are located along the street curb. Passengers accessing the LRT station will have to cross West Broadway Avenue at the designated crosswalks. Hennepin County does not allow on street drop off on county roads which then prohibits use of curb space for shared mobility features such as on-demand rideshare on West Broadway Avenue and 93rd Avenue.

Figure 8: 93rd Station Area Components



Source: Blue Line LRT Extension 90% Submittal Layout

The location of the LRT station at the center of a street right-of-way and limitation of curb space use is not conducive to supporting a mobility hub. There is potential to add individual mobility hub features such as bikeshare to proposed bike rack areas and accommodate interactive trip planning kiosks in plaza areas. But there is not the opportunity to locate other mobility hub features within the station area plan, such as on-demand rideshare or carshare.

Downtown Osseo has transit service provided by Maple Grove Transit (MGT) and city staff noted a desire to have MGT service connection to the station to provide connection to this key destination.

Metro Transit Service

There is one existing route that will serve the station. Route 724 (reverse commute) runs on 93rd Avenue.

Priority Shared Mobility Recommendations for 93rd Avenue Station

The following are the recommended next steps to promote shared mobility at the 93rd Avenue Station.

1. Brooklyn Park staff discuss with Ebenezer Community Church the potential for locating a shared mobility hub on their property or consider shared mobility hub as part of future commercial development plans.
2. Brooklyn Park staff identify employers, businesses, housing complexes, etc. that would be interested in participating in shared mobility programs. As part of this step, determine the extent of their interest, such as financial, promotional and partnership. This step will provide potential number of users, scheduling, etc. that can be used to support pursuit of the next step.
3. Brooklyn Park staff discuss Maple Grove Transit's interest in extending transit service from Osseo to 93rd Avenue Station. Also discuss with Metro Transit and TNCs what conditions will warrant consideration of circulator/microtransit between employment concentrations and 93rd Avenue station, and potentially Osseo if Maple Grove Transit cannot provide this service.
4. Brooklyn Park staff work with the Blue Line Project Office to determine capacity within the 93rd Avenue Station area to accommodate shared mobility hub features such as bikeshare and interactive trip planning kiosks.

Twin Cities Shared Mobility Coalition

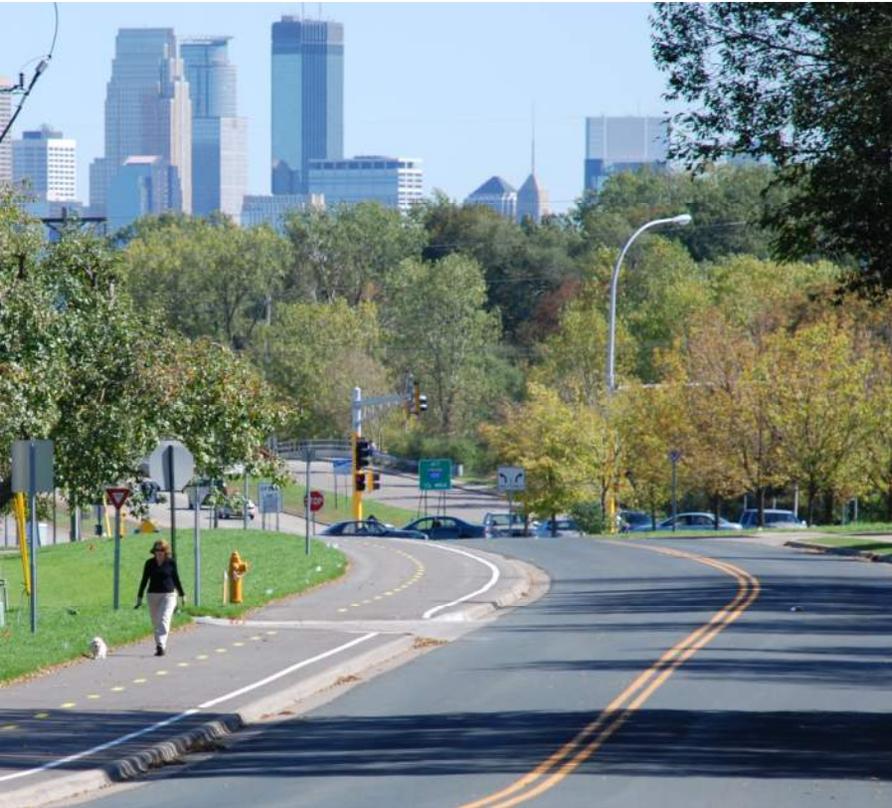
A Twin Cities Shared Mobility Coalition was initiated in 2018. There is a Mobility Hub sub-committee and Public/Private Partnership sub-committee. It would be beneficial for Hennepin County and staff from Golden Valley and Brooklyn Park to stay in contact with these sub-committees. They are working on developing policies and best practices that are applicable to implementing shared mobility at the LRT stations. Below are contacts for each of those sub-committees.

Mobility Hub sub-committee contact: Josh Johnson, Joshua.johnson2@minneapolismn.gov

Public/Private Partnerships sub-committee: Bill Dosset, bdossett@niceridemn.org

Attachments

1. Bottineau Community Works Infrastructure/Advanced Planning: Shared Mobility Feasibility Presentation dated March 20, 2018
2. Bottineau Community Works Infrastructure/Advanced Planning: Shared Mobility Feasibility Presentation dated April 17, 2018



Bottineau Community Works Infrastructure Advanced Planning: Shared Mobility Feasibility

Hennepin County

Shared Mobility Introduction

- This first phase of the Shared Mobility Feasibility focused on research to:
 - Define Shared Mobility and Shared Mobility Hubs
 - Identify Shared Mobility Hub features
 - Summarize findings; including benefits, where it works and partnerships
 - Select case studies to identify current best practices
- These findings can be used in the overall review of each transit station's infrastructure along with specifically identifying strategies that can be implemented at the following stations along the METRO Blue Line Extension:
 - Golden Valley Road Station
 - 85th Avenue Station
 - 93rd Avenue Station



Golden Valley Road Station



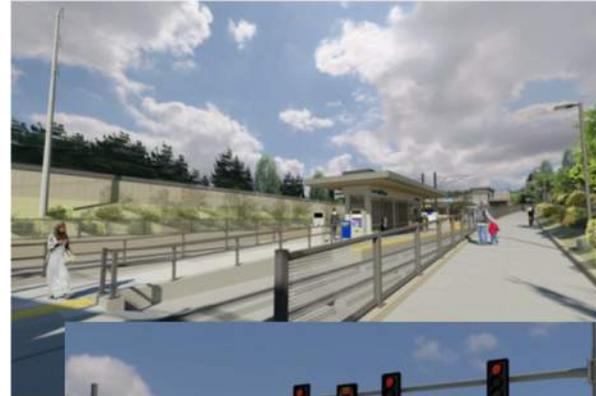
85th Avenue Station



93rd Avenue Station

Shared Mobility Introduction

- The following phase of this work will:
 - Review proposed station area components, existing and proposed public transit service, for the three identified stations
 - Identify shared mobility enhancements
 - Define a series of recommendations for shared mobility practices that will increase connectivity to key destinations from the three identified stations



Golden Valley Road Station



85th Avenue Station



93rd Avenue Station

Shared Mobility/Shared Mobility Hubs

- Shared Mobility is comprised of short-term transportation solutions enabling users to access various shared vehicles, bicycles, or other low-speed modes
- Shared Mobility Hubs are transportation centers that seamlessly connect different modes of travel, such as:
 - Walking
 - Biking
 - Carshare
 - On-Demand rideshare services
 - Vanpool
 - Microtransit
 - Taxi
 - Future: Autonomous Vehicles



- 1 Enhanced bus stops with real-time information
- 2 Designated bus lanes and priority signals
- 3 Secure bike parking
- 4 Bike parking
- 5 Car sharing
- 6 Off-street bike path
- 7 Public art
- 8 Transit and community information kiosk

Boulder, CO



Shared Mobility Hub Features

- Shared Mobility Hub Features include:



Transit Amenities



Motorized Amenities



Pedestrian Amenities



Technology



Bike Amenities

Shared Mobility Hub: Transit Amenities



- Located in the immediate transit station area
 - Enhanced Transit Waiting Areas
 - Passenger Loading Zones
 - Real-Time Travel Information
 - Flexible curb space
 - Complimentary WiFi
 - Electric Vehicle Charging



Mobility Hub, Boulder, CO



Real-Time Information



Electric Vehicle Charging



Transit Waiting Area

Shared Mobility Hub: Transit Amenities



- Provide a safe and comfortable space for passengers to wait for transit or shared mobility ride
- Safe connections between a transit stop and the adjacent mobility network
- Fare payment and interactive trip planning kiosks, real-time arrival information
- Designated curb space for use by a wide variety of shared mode services
 - Consider hierarchy for multiple services



Germany



Shared Mobility Hub: Pedestrian Amenities



- Located within a one mile walkshed around transit
- Walkways
 - Sidewalk widening and improved landscaping/lighting
- Crossings
 - Signal timing
 - Curb extensions
 - Pedestrian beacon



Pace, Chicago



Fulton Street, Chicago

Shared Mobility Hub: Bike Amenities



- Located within a three mile bikeshed around transit
- Bikeways
 - Encourage cycling to, from, and within a mobility hub
 - Safe and comfortable for all ages and abilities
 - Access to transit and other nearby destinations (work, shopping, recreation)



Stone Arch Bridge, Minneapolis



Minneapolis Protected Bikeway Plan

Shared Mobility Hub: Bike Amenities



- Bike Parking

- Variety of bike parking options, highly visible, secure and convenient
- Alternative to bringing bikes onto transit
- Bike repair stand, electric bike charging station, cycling supply vending machine



Bike Repair Stand, Univ. of Washington



4 Varsity Bike Dock, UC Davis



Charging station



Secure Group Parking Seattle LRT Station, Alta Planning

Shared Mobility Hub: Bike Amenities



- Bikeshare

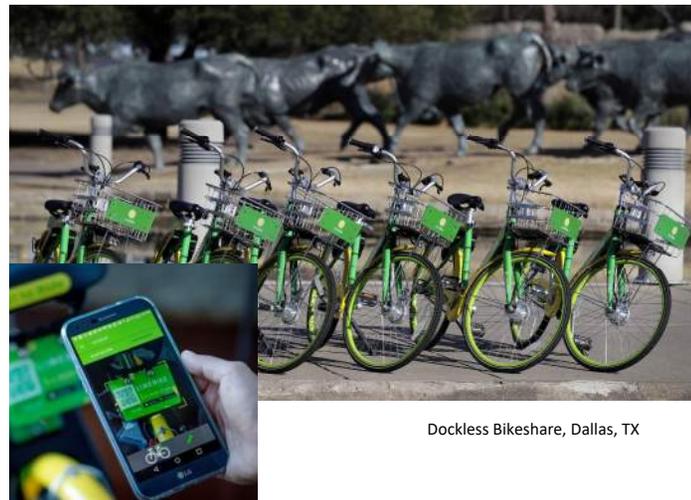
- Convenient, affordable, on-demand access to bikes
- Accommodate commute trips
- Subsidize for students and lower income populations
- Attractive to those who rather not own a bike
- Highly visible with signs
- Include adaptive bikes
- Joint transit-bikeshare passes



Nice Ride Bike Share, MN



General Motors Bike Share for Employees



LimeBike's App

Dockless Bikeshare, Dallas, TX



Peer-to-Peer Bikeshare

Spinlister - Spinlister is a bike rental marketplace that allows you to find a great bike to rent or list your bike to earn cash.

Shared Mobility Hub: Motorized Service Amenities



- Carshare

- Access to vehicles 24 hours a day, seven days a week
- Provide dedicated parking at transit station
- Consider fare discounts to people who use both transit and carshare for trips
- Integrate real-time carshare information into transit app
- Clear wayfinding between transit and carshare services
- Not currently servicing cities outside Mpls/St. Paul area
- Future: evolve to self driving network



Zipcar, Minneapolis



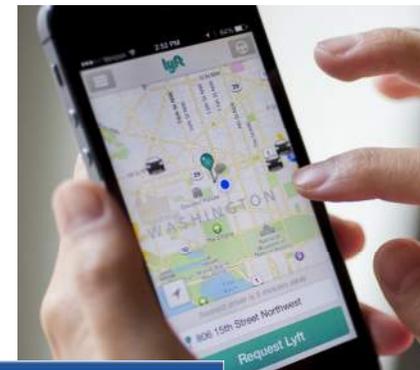
HOURCAR, Twin Cities

Shared Mobility Hub: Motorized Service Amenities



- On-Demand Rideshare

- Request a ride in real-time, or pre-scheduled, using a mobile app
- Partnerships with local governments and transit agencies
- Employers may sponsor rides to connect employees from transit to work
 - Lyft for Work/Uber for Business
- Designate on-demand pick-up/drop-off areas with wayfinding
- Future: shared autonomous vehicles



Shared Mobility Hub: Motorized Service Amenities



- Microtransit
 - Targets peak period commute travel with on-demand service for small groups of people
 - Convenient where high frequency transit isn't warranted
 - Provide a dedicated location adjacent to transit stations for easy transfer
 - Order service through mobile app and passengers are matched with a vehicle traveling in the same direction



Southwest Transit Prime



Sacramento Regional Transit



Via, Microtransit

Shared Mobility Hub: Support Services & Amenities



- Located within walk, bike and drive sheds and within the mobility hub
- Wayfinding
 - Maps/directions to points of interest, transit schedules, availability of mobility services
 - Participation from public/private entities and local jurisdictions
 - Comprehensive strategy
 - Branding identity for area; work with transit agency for compatibility
 - Fully accessible



LinkNYC, high-tech interactive kiosks



Las Vegas, NV



Digital Wayfinding: Wayfinder Software

Shared Mobility Hub: Support Services & Amenities



- Mobility as a Service (MaaS) Model
 - Integrated payment solution for a wide variety of mobility services
 - Single interface with a single payment mechanism
 - Find, access and pay for transit, parking, shared mobility services, EV charging, etc.



Shared Mobility Hub: Support Services & Amenities



- Package Delivery

- Secure lockers for online orders
- Convenient at transit stations
- Save an extra trip by car; support alternative to driving alone
- Consolidate drop off location versus individual locations
- Incorporate privacy and security features
- Policies that govern for profit business in public right of way
- Potential partnership with transit agencies for pick up while on transit



Amazon Lockers, ULCA, CA



UPS, Univ. of Arkansas



Parcel Pending

Amazon/Transit – future?

Shared Mobility Summary Findings

- Shared mobility continues to evolve at a rapid pace and is on the rise
- Emerging public private partnerships
- Increase public space for shared options
- Champion, coordinator of shared mobility policies/practices
- Proven role in equity
- The more people use shared modes, the more likely they are to use transit, own fewer cars and spend less on transit (TCRP Report 188)
- People that use 3+ shared modes (“supershares”) report greater transportation cost savings, and own half as many cars as people who use transit alone (TCRP Report 188)

Shared Mobility: Benefits

- Increased transportation choices for residents, employees, visitors, and
 - those who cannot afford – or choose to not own – a vehicle
- Decrease dependence on the private automobile
- Reduced traffic congestion
- First and last mile solutions
- Improve efficiency
- Reduce pollution
- Reduce transportation costs

Shared Mobility: Where it Works

- Bikeshare works best as first/last mile transportation
- Carshare works best in dense neighborhoods with low auto-ownership and high transit service
- Ridesourcing works best in walkable neighborhoods in high to moderate-density areas
- Private shuttles work best as last mile connections to fixed rail for employment center

Source: SUMC Shared Use Mobility Reference Guide, December 2015

<http://sharidusemobilitycenter.org/research/shared-use-mobility-reference-guide/>

Shared Mobility: Partnerships

- Partner to reinforce transit's strengths
 - Shared mobility creates opportunities for more flexible planning by public agencies; reallocate savings to improve service elsewhere
 - Share data
 - Complement fixed route transit
- Leverage agency-controlled assets
 - Public sector controls valuable assets (parking, street right of way) that can be used to negotiate (contracted service, access to data, geographical coverage)
 - Agencies can subsidize customer trip using shared mobility to achieve desired outcomes (increased vehicle occupancy, increased first or last mile transit transfers)

Source: Private Mobility, Public Interest – Transit Center, September 2016

<http://transitcenter.org/wp-content/uploads/2016/10/TC-Private-Mobility-Public-Interest-20160909.pdf>

Shared Mobility: Partnerships

- Plan for a streamlined user experience
 - Enable more rapid innovation toward streamlined customer trip-planning and payment systems (real-time transit data, technology standards)
 - Integrated fare payment system implementation
- Be open to new ways of providing useful transit
 - Proactively collaborate with shared mobility providers (restrictive procurement processes, work rules, etc.)
 - Targeted pilot programs to service paratransit and other markets expensive to serve using fixed route transit
 - Share lessons learned

Source: Private Mobility, Public Interest – Transit Center, September 2016

<http://transitcenter.org/wp-content/uploads/2016/10/TC-Private-Mobility-Public-Interest-20160909.pdf>

Current Case Studies: Ride Hailing

- Pickup by Capital Metro (Austin, TX), 2017
 - Austin’s transit agency, Capital Metro, partnered with ride-hailing company Via to launch Pickup, a door-to-door, on-demand public transportation service
 - Riders, in a designated area, use the Pickup app to hail a pooled ride from one of two nine-passenger vans.
 - Operated by Capital Metro with back-end support provided by Via
 - First time that Via’s on-demand transit technology will be deployed in a public transit context



<https://www.capmetro.org/pickup>

Current Case Studies: Carshare

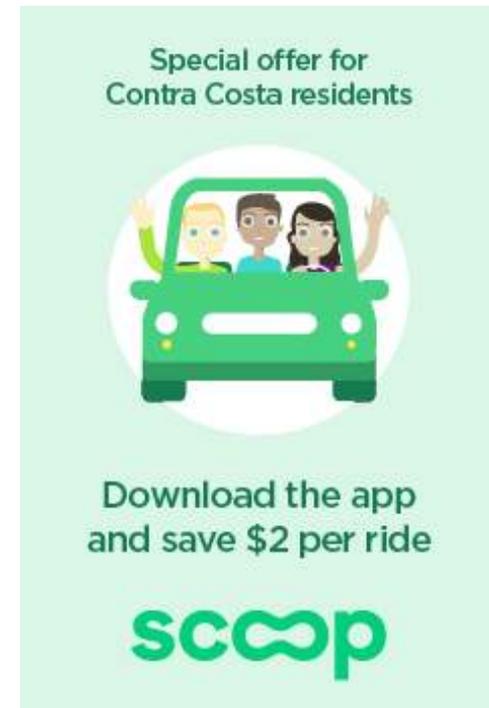
- Metro Transit (Minneapolis–St. Paul) and HOURCAR
 - Provide users with one transportation account to pay for bus and light rail and to access HOURCAR’s carshare fleet
 - Enables users to use their Metro Transit Go-To Cards to unlock reserved vehicles by swiping the Go-To card on the reader
 - Around 90 percent of HOURCAR members use transit, according to a recent HOURCAR survey. Around a third of members also said they began using transit more after joining the car-sharing service



<https://www.metrotransit.org/go-to-cards-provide-hourcar-access>

Current Case Studies: Carpooling

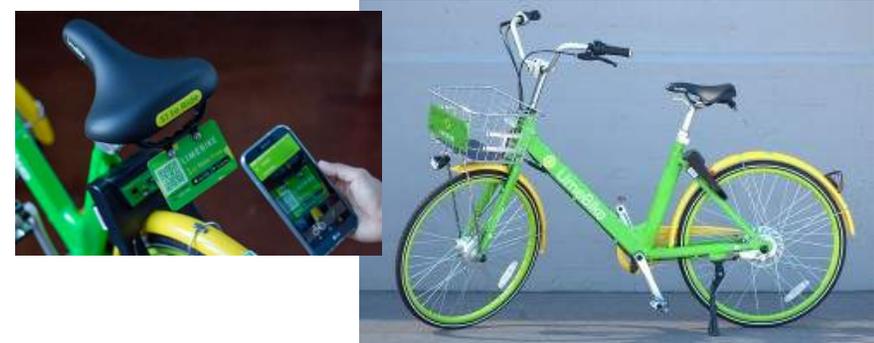
- Scoop and Contra Costa Transportation Authority (CCTA) Partnership (Contra Costa, CA) 2017
 - CCTA and Scoop Technologies pilot program to encourage carpooling
 - CCTA leverages transportation demand management (TDM) 511 Contra Costa funding to subsidize Scoop carpool rides
 - Passengers download Scoop app and schedule their ride; Scoop app matches them with another commuter driving along a similar route



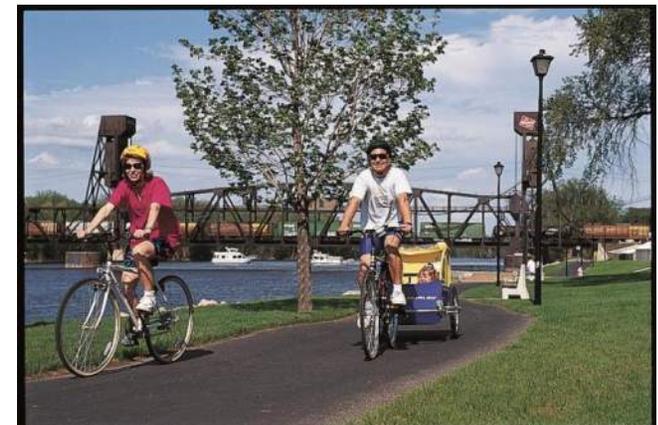
<https://511contracosta.org/tag/scoop/>

Current Case Studies: Bikeshare Dockless

- Golden Valley, MN and LimeBike, 2018
 - First city in MN to adopt dockless bike sharing.
 - Up to 500 dockless bikes deployed in April 2018 (including three speed and electric-assist)
 - Riders use smartphone app to locate, unlock and pay for a bike; once the trip is over, they can lock it at a bike rack in a visible public area
 - Discounts for students and lower-income residents
 - Bikes could be used by commuters from LRT stations
- Hastings, MN and Zagster Bikeshare Program
 - Free rental
 - One bike rack location
 - Partnerships with City of Hastings, Regional Hospital, United Way and Allina Health



<http://www.goldenvalleymn.gov/newsarchive/index.php/2018/03/10/golden-valley-considers-innovative-limebike-program/>



<http://www.hastingsmn.gov/visitors/things-to-do/biking>

Current Case Studies: Adaptive Bikeshare

- Portland OR Adaptive Bikeshare Pilot, 2017
 - Pilot to integrate adaptive bicycling options to complement the city's 1,000-bike Biketown bikeshare system
 - Residents with disabilities have access to a variety of bikes; hand-cycles, trikes and tandems at a local bike shop (Kerr Bikes)
 - Short-term (1 to 3 hours) adaptive bike rental, bike helmet rental, and storage of a user's mobility device or service animal during rental time
 - 2017 pilot season successful, but now closed. Announcement of 2018 season dates soon



<https://www.portlandoregon.gov/transportation/73371>

Current Case Studies: Microtransit

- Free Ride Everywhere Downtown (FRED), San Diego 2016
 - Riders hail a car through the mobile app; complimentary rides within the Downtown Community Parking District boundaries
 - If shuttle is available, the ride is accepted and the rider is picked up and delivered directly to the destination
 - Promotes park once and connections to and from major transit stations
 - All electric vehicles (six)
 - Recently granted renewed funding to grow its fleet to 30 by 2020



<http://www.thefreeride.com/san-diego.php>

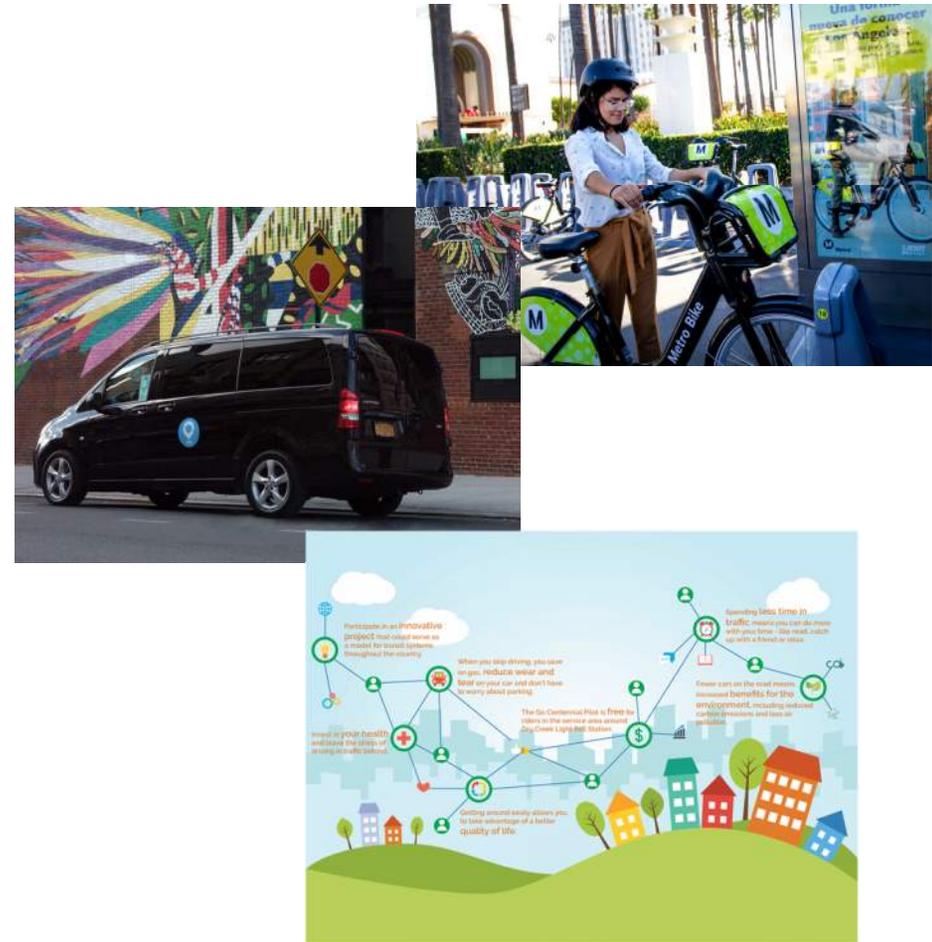
Case Studies: Role in Equity

- San Mateo County Transit District (SamTrans): Mobility Ambassador Program
 - Volunteers who help older adults and people with disabilities with transportation related issues
 - Planning a trip using public transit, learning about alternative to driving such as community shuttles.
 - http://www.samtrans.com/Planning/Strategic_Development/Mobility_Ambassador_Program.html
- City of Los Angeles: EV Carsharing Pilot for Disadvantaged Communities
 - Focused on low-income communities
 - <https://www.bluela.com/>



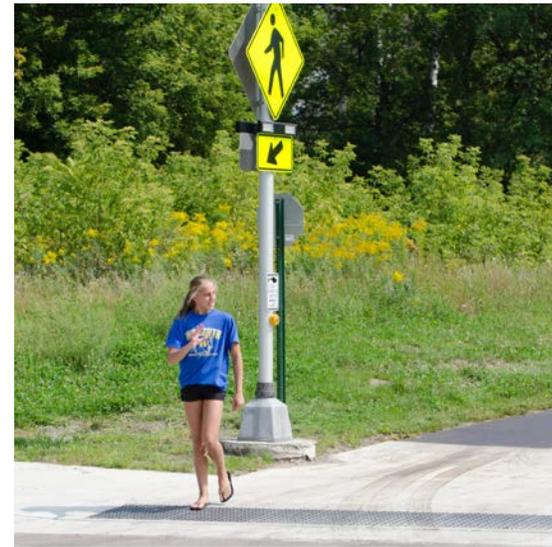
Current Case Studies: Mobility as a Service (MaaS)

- MaaS can enhance public transit and reduce drive-alone trips
 - LA Metro owns and operates a bikeshare system that can be accessed with their transit fare card (TAP); seamless transition from transit to bike <https://bikeshare.metro.net/>
 - LA Metro partnered with Via to provide on-demand microtransit service connect commuters to and from select Metro stations https://www.metro.net/news/simple_pr/metro-and-join-forces-shared-rides-and-select-tran/
 - City of Centennial in CO partnered with Xerox and Lyft to provide commuters with an integrated application to book a free Lyft ride to light rail stations <http://go.centennialco.gov/>
- Advancement of public-private partnerships and convergence of shared mobility services makes MaaS more of a reality



Discussion

- Thoughts on Mobility Hub Feasibility:
 - Features
 - Policies
 - Partnerships
 - Future



Bottineau Community Works Infrastructure Advanced Planning: Shared Mobility Feasibility

Shared Mobility: Station Focus

- This phase of work:
 - Review proposed station area components, existing and proposed public transit service, for the three identified stations
 - Identify shared mobility enhancements
 - Define a series of recommendations for shared mobility practices that will increase connectivity to key destinations from the three identified stations



Golden Valley Road Station



85th Avenue Station



93rd Avenue Station

Shared Mobility: Station Focus

Golden Valley Road Station



85th Avenue Station

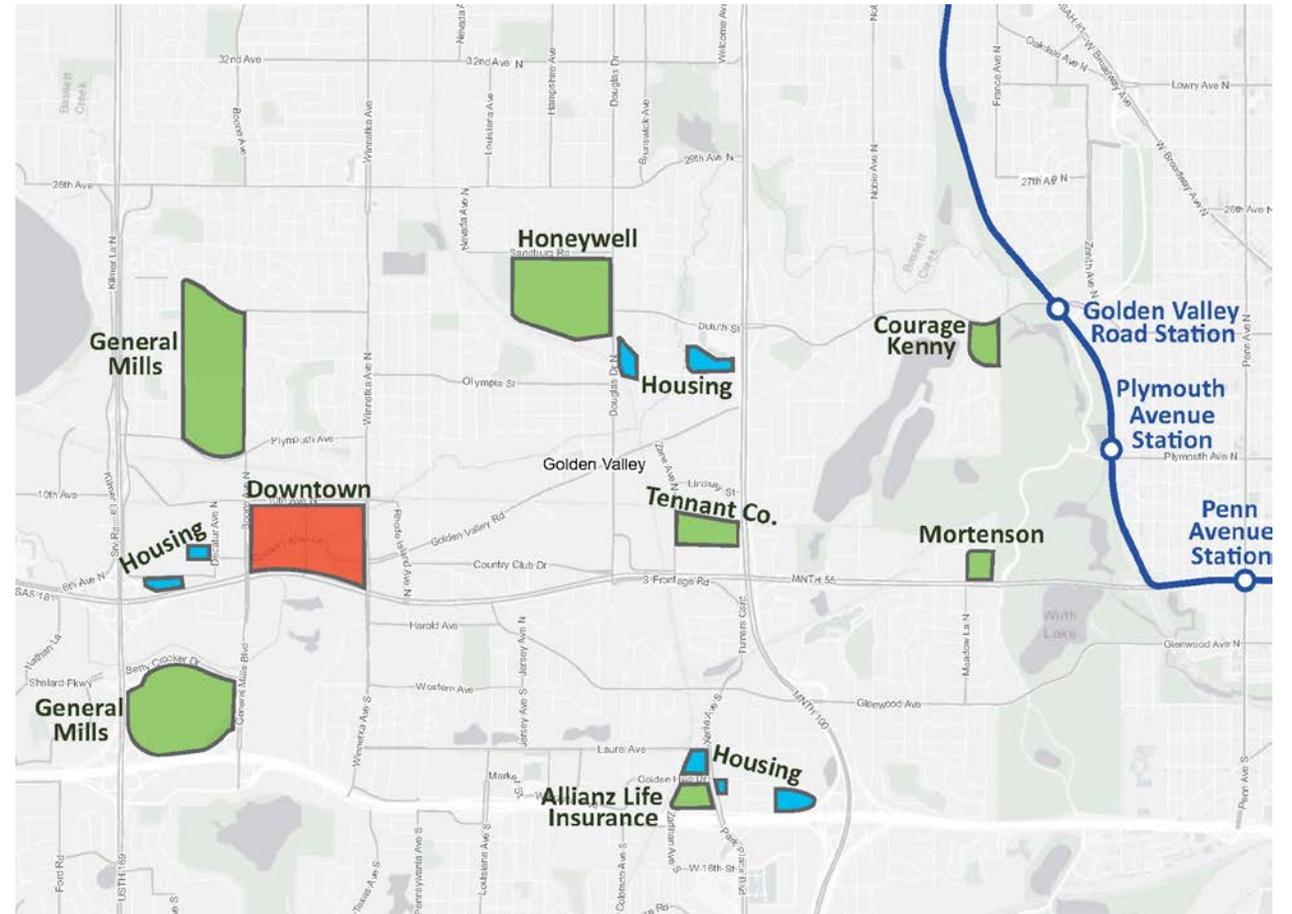


93rd Avenue Station



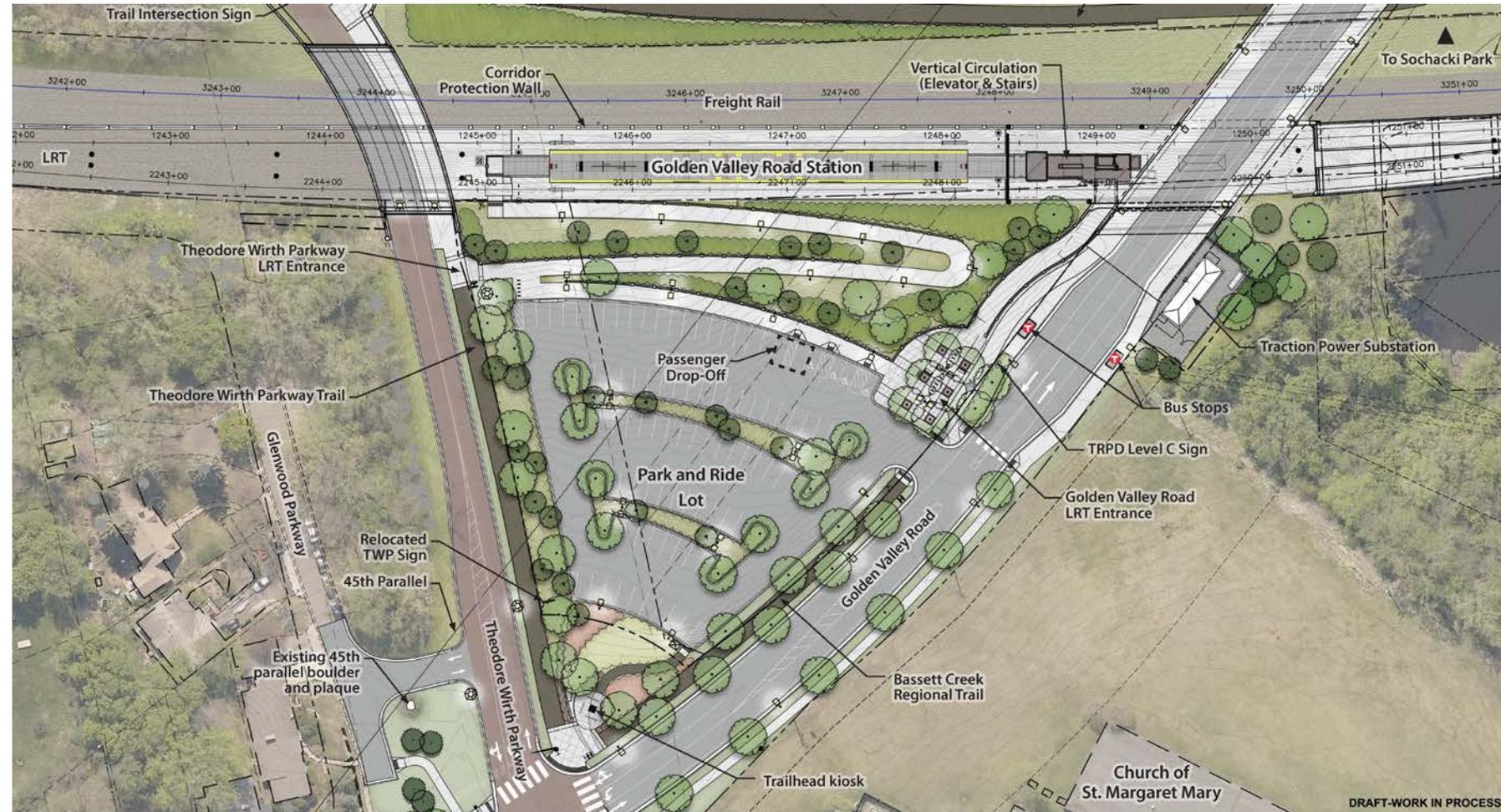
Golden Valley Road Station: Area Characteristics

- Station area mainly consists of low density residential development with Theodore Wirth Park to the southwest
 - Potential for future redevelopment of Church of St. Margaret Mary property to the north (senior housing)
- Not a lot of walkup users
- Higher daytime population
- Need for connection to:
 - Employment Centers: Honeywell, General Mills, Tennant, Allianz, Mortenson, Kenny Rehab
 - Interested in connecting to LRT Station and alternative transportation for employees
 - Downtown: adding more housing and shopping
 - Housing: concentrations near Highway 100, west of downtown, near West End, and Douglas Drive.



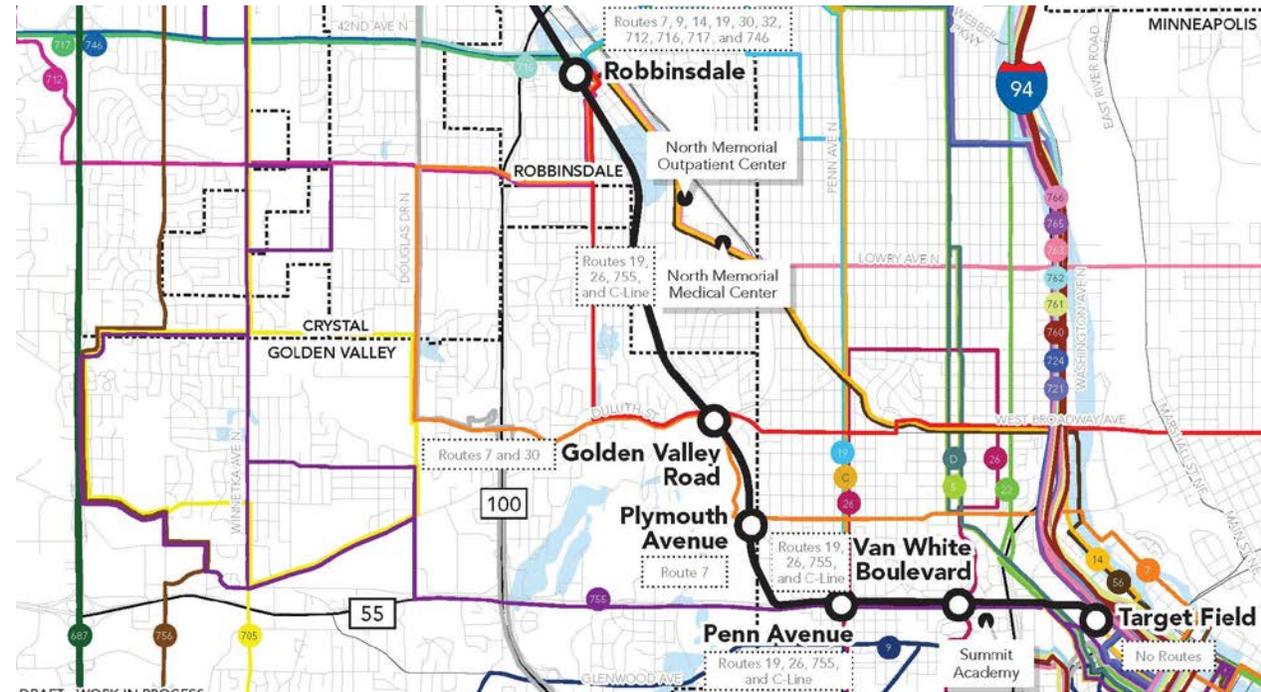
Golden Valley Road Station: Station Area Components

- LRT Station
- Park-and-Ride
- Two bus stops (Golden Valley Road)
- Passenger Drop-off (2 stalls)
- Trailhead/kiosk
- Bike racks



Golden Valley Road Station: Metro Transit Service

- Existing: Route 14G
- Proposed:
 - Route 7: Extension is not confirmed. Currently ends at Plymouth
 - Route 30: Extended to station from G.V Road and Xerxes
- Circulator not planned for
 - More realistic is a bus feeder plan
- All stations:
 - Blue Line not replacing service so not a pool of funds to apply to new service
 - There will be an extensive public outreach process 2-3 years prior to opening to gather input on the bus plan



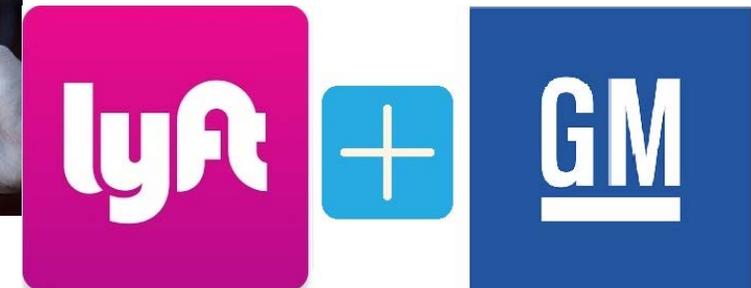
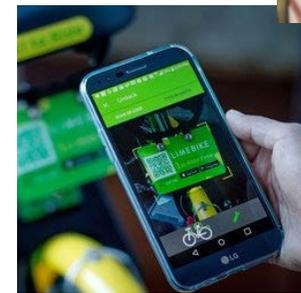
Golden Valley Road Station: Shared Mobility Opportunities

- Circulator connecting employment, downtown and housing concentration
- Microtransit service to provide connection to places of employment and other identified concentration areas
- LimeBike station
- Designated area for carshare, rideshare, TNC, microtransit, etc.
- Integrated payment solution for a wide variety of mobility services



Golden Valley Station: Next Steps

- Discuss with Metro Transit:
 - What conditions would warrant consideration of circulator service
 - Potential for microtransit pilot at this station
 - Development of mobility app
- Discuss with TNCs:
 - Potential for partnership to provide on-demand service in a designated areas
 - Development of mobility app



Golden Valley Station: Next Steps

- Discuss with Carshare companies:
 - What conditions warrant expanding carshare availability to Golden Valley station area
- Determine:
 - Capacity for shared mobility features at Golden Valley LRT Station, including LimeBike storage
- Pursue potential:
 - Integration of shared mobility hub into site should St. Margaret Mary choose to redevelop
- Identify:
 - Employers, businesses, housing complexes interested in participating in shared mobility programs



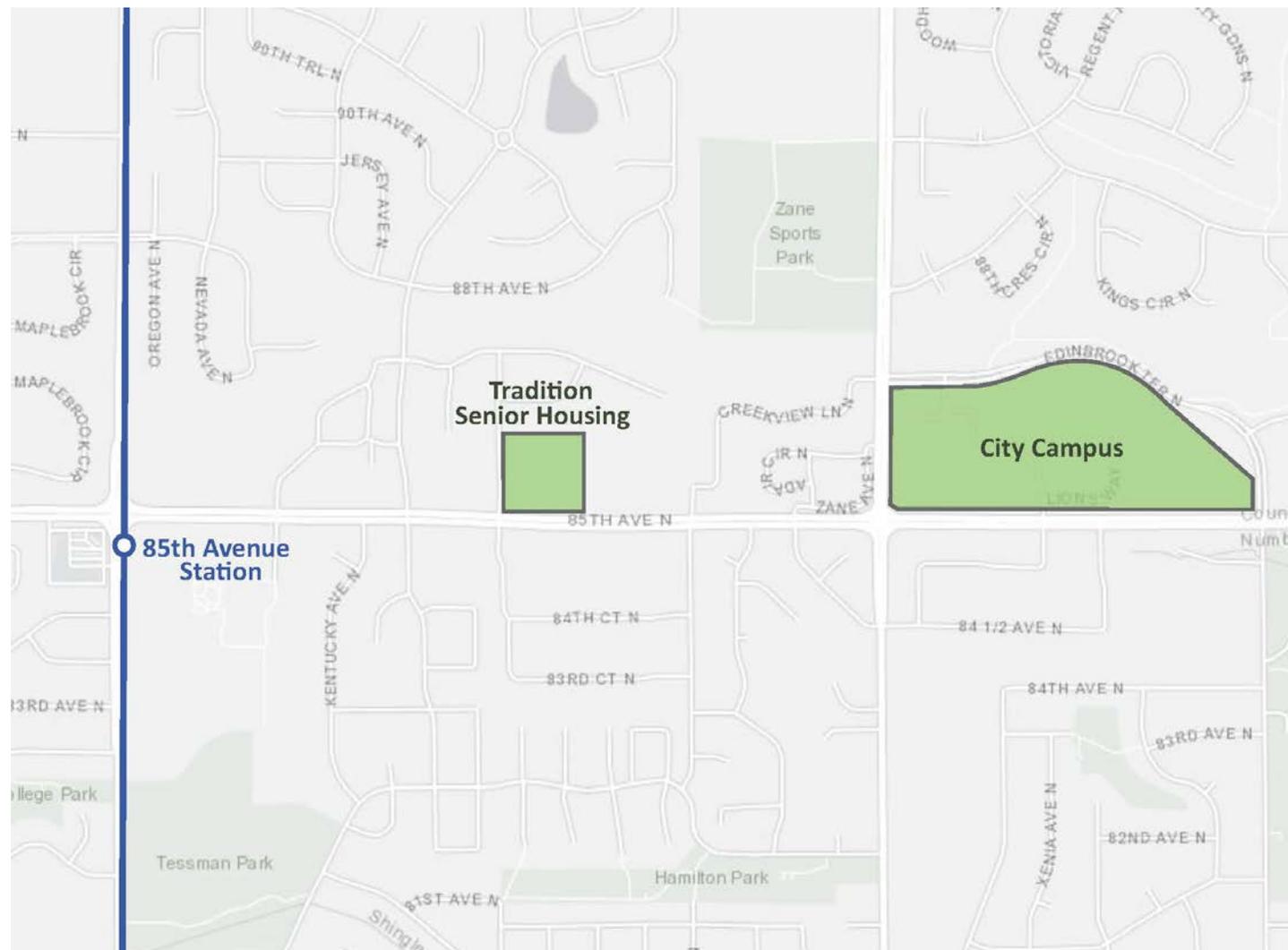
85th Avenue Station: Area Characteristics

- North Hennepin Community College (NHCC) is located immediately adjacent to the LRT station
 - Big generator for ridership
 - Updating Master Plan
 - Opportunity for shared mobility site
- Hennepin Technical College (HTC) is considered a sister campus of NHCC and is located within two miles to the southwest
 - Need for shuttle between campuses
- Public Plaza at Library site
 - Opportunity for shared mobility features



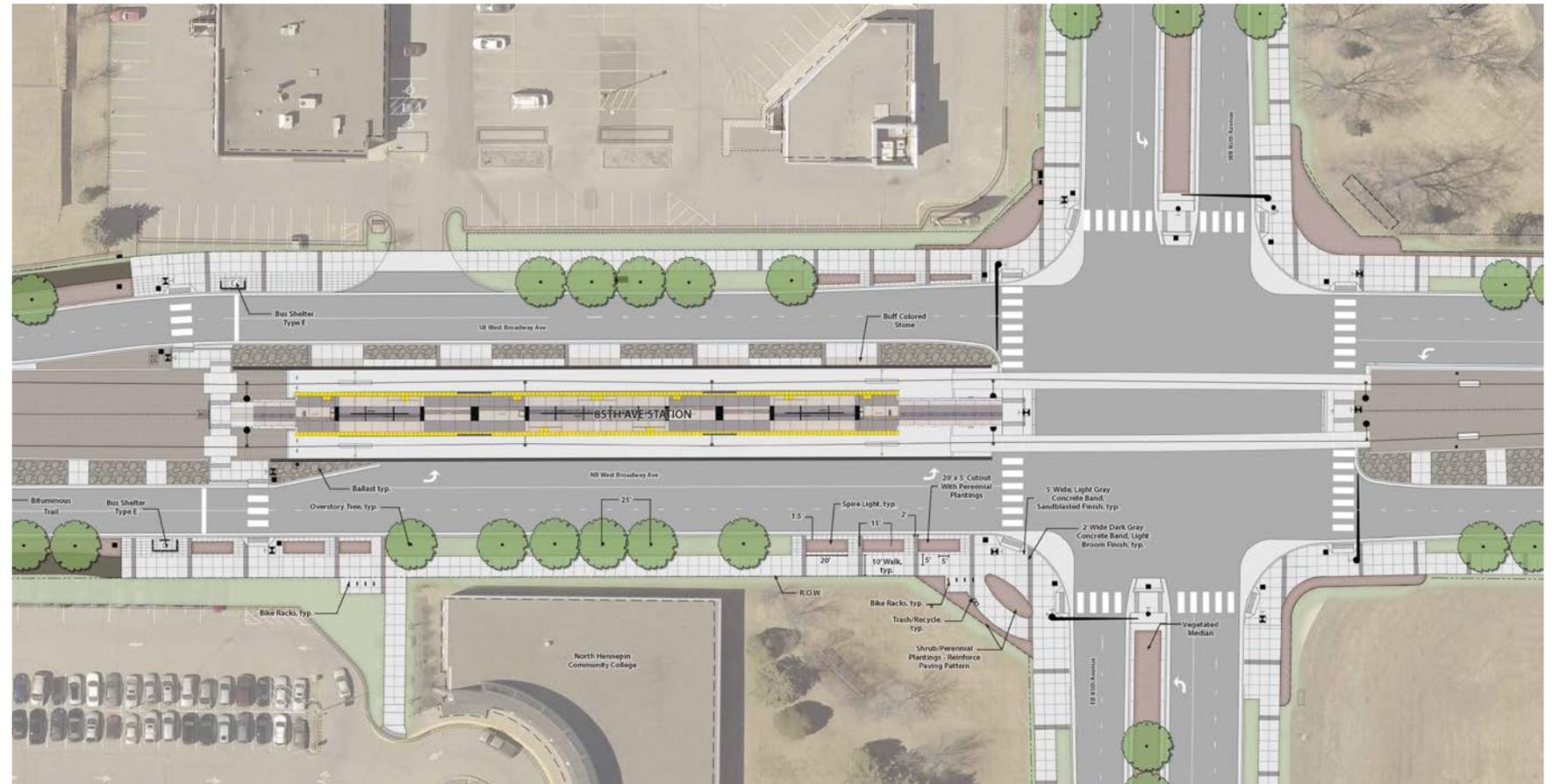
85th Avenue Station: Station Area Characteristics

- Tradition Senior Housing, City Campus, active park and other uses east of the station
 - LRT Station not easily accessible



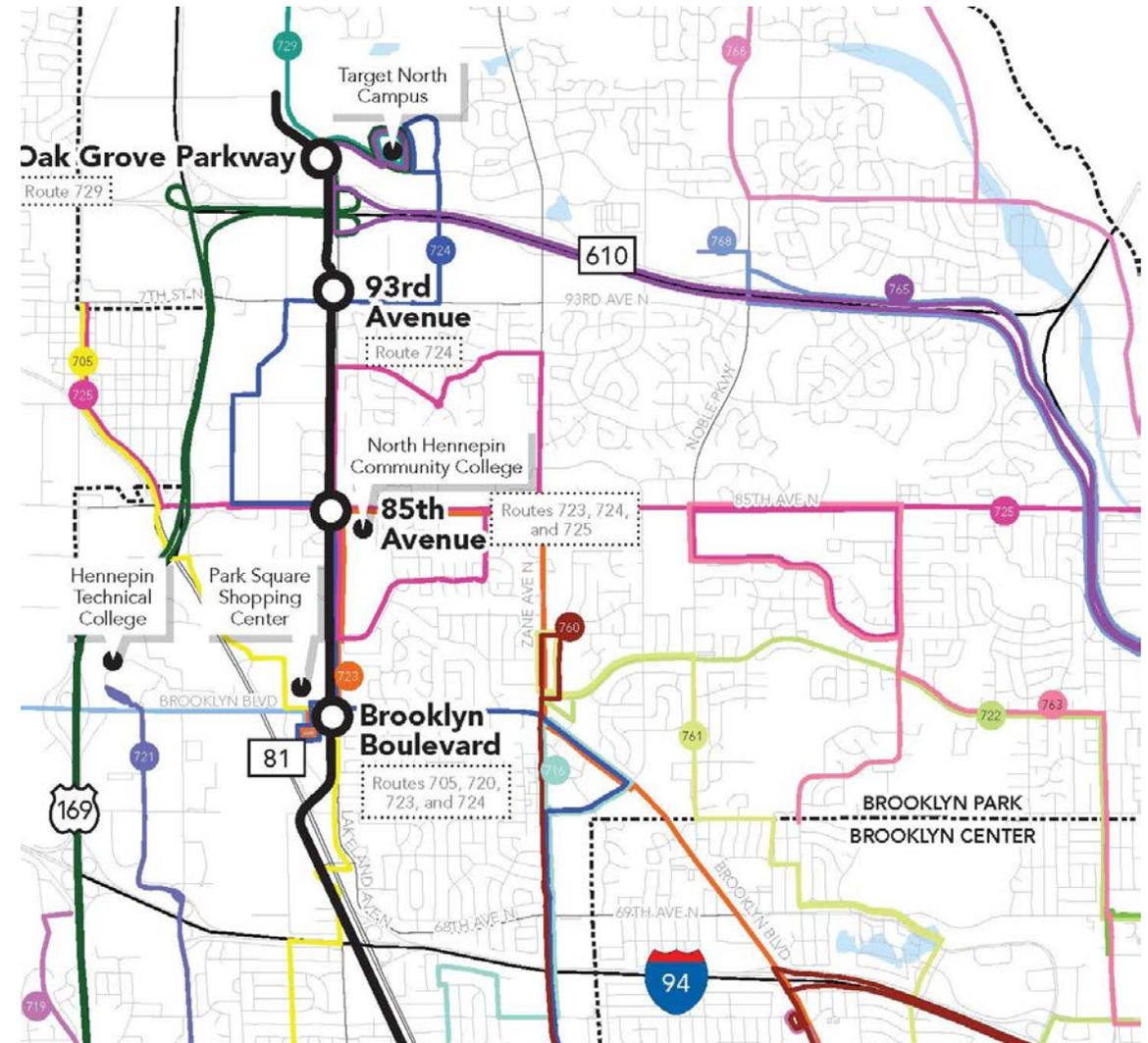
85th Avenue Station: Station Area Components

- LRT Station
- MT bus shelters
- Bike racks
- No on-street drop off on County Roads
- Prevent park and hide



85th Avenue Station: Metro Transit Service

- Existing routes:
 - 723: Ends at 85th and Zane just west of Tradition Senior Housing, City Campus and park
 - 724 and 760: On West Broadway
- Proposed 725:
 - Express with feeder route connecting to 85th Station



85th Avenue Station: Shared Mobility Opportunities

- Microtransit/circulator/shuttle service to provide connection between colleges, and on-demand service to housing concentrations, City Campus (uses to the east)
- Carshare/Rideshare to provide first/last mile connection to LRT station
- Bikeshare



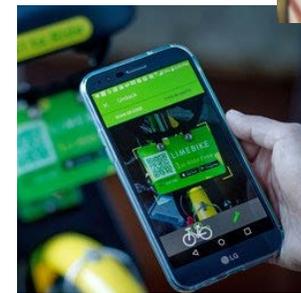
85th Avenue Station: Shared Mobility Opportunities

- Designated area for carshare, rideshare, microtransit
- Integrated payment solution for a wide variety of mobility services
 - Single interface with a single payment mechanism
 - Mobile App
 - Kiosk



85th Avenue Station: Next Steps

- Discuss with Metro Transit:
 - What conditions would warrant consideration of circulator/shuttle service between campuses
 - Potential for microtransit pilot at this station
 - Development of mobility app
- Discuss with TNCs:
 - Potential for partnership to provide on-demand service in a designated areas
 - Development of mobility app



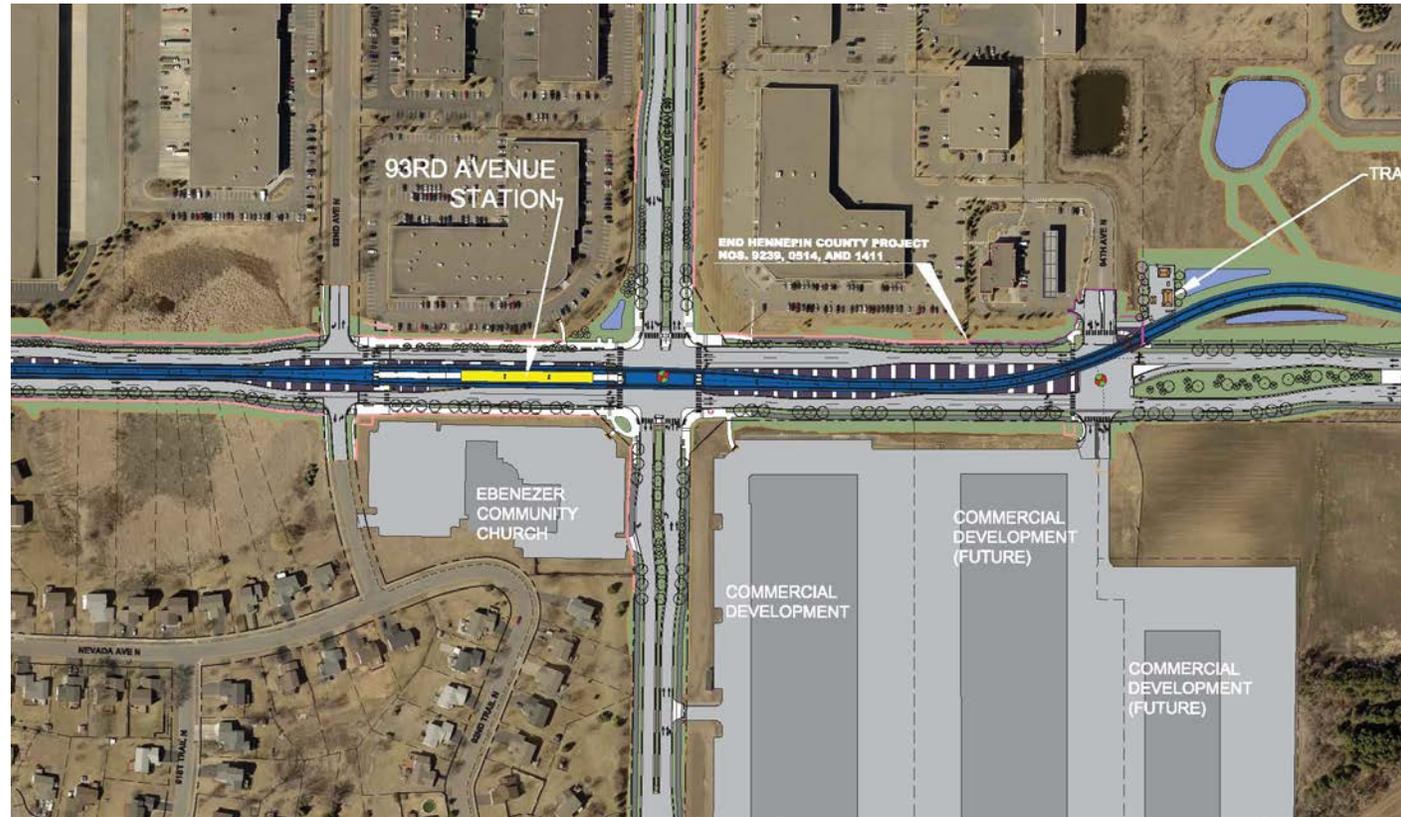
85th Avenue Station: Next Steps

- Discuss with carshare companies:
 - What conditions warrant expanding carshare availability to 85th Avenue station area
- Discuss with NHCC:
 - Potential for shared hub as part of campus improvements.
- Discuss potential of:
 - Shared mobility features included in Public Library plaza area
- Identify:
 - Employers, businesses, housing complexes interested in participating in shared mobility programs
- Bikeshare:
 - Determine Brooklyn Park's interest



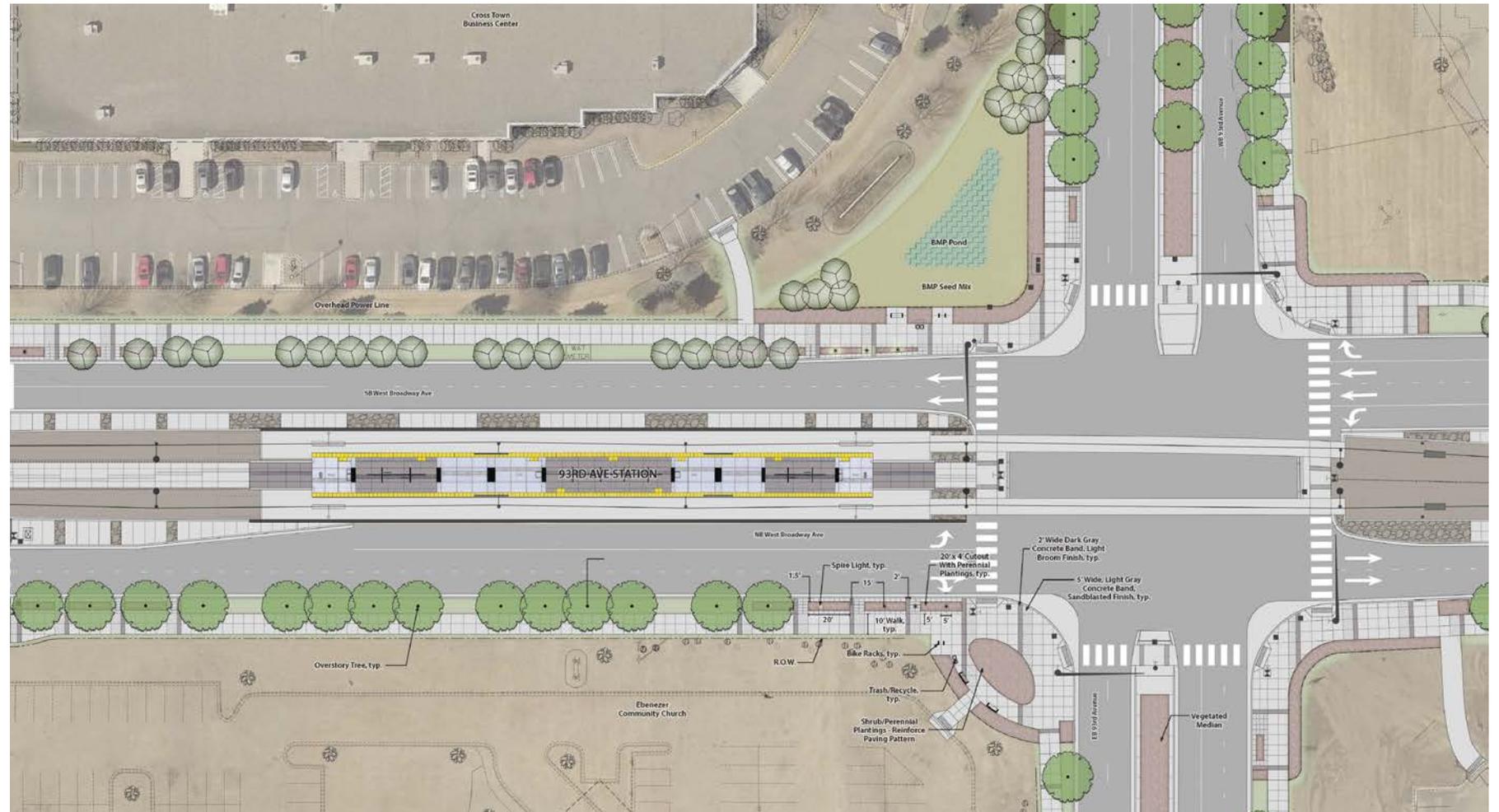
93rd Avenue Station: Area Characteristics

- Low density residential, light industrial and warehouse uses
- High concentration of jobs in the station area, but limited pedestrian accessibility
 - Design Ready Controls
 - Biomerics
 - Photo Labs
 - Cirtec Medical Systems
 - Sterns Custom Interiors
- Large future development
- Ebenezer Community Church
- Downtown Osseo connection
- No on-street drop-off on County Roads
- Prevent park and hide



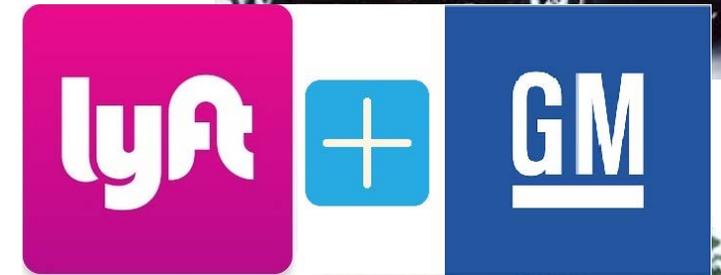
93rd Avenue Station: Station Area Components

- LRT Station
- Bike racks
- Existing bus stops



93rd Avenue Station: Shared Mobility Opportunities

- Microtransit service to provide shuttle service between LRT Station and Downtown Osseo and on-demand service to employment concentrations
- Carshare, rideshare to provide connection to LRT station
- Opportunity for shared mobility hub at Ebenezer Community Church
- Bikeshare



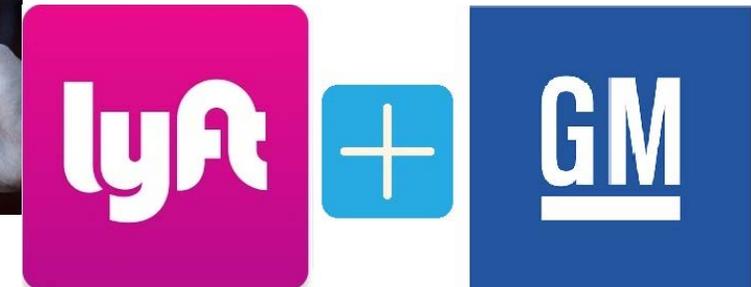
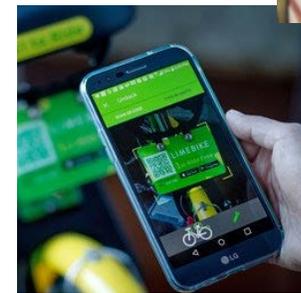
93rd Avenue Station: Shared Mobility Opportunities

- Designated area for carshare, rideshare, microtransit
- Integrated payment solution for a wide variety of mobility services
 - Single interface with a single payment mechanism
 - Mobile App
 - Kiosk



93rd Avenue Station: Next Steps

- Discuss with Metro Transit:
 - What conditions would warrant consideration of circulator/shuttle service between Osseo and employment concentrations
 - Potential for microtransit pilot at this station
 - Development of mobility app
- Discuss with Maple Grove Transit:
 - MG Transit to provide circulator/shuttle service between Osseo
- Discuss with TNCs:
 - Potential for partnership to provide on-demand service between Osseo and employment concentrations
 - Development of mobility app



93rd Avenue Station: Next Steps

- Discuss with Carshare companies:
 - What conditions warrant expanding carshare availability to 93rd Avenue station area
- Discuss with Ebenezer Community Church:
 - Potential shared mobility hub on their property
- Consider shared mobility hub as part of future commercial development
- Identify:
 - Employers, businesses, housing complexes interested in participating in shared mobility programs
- Bikeshare:
 - Determine Brooklyn Park's interest

