

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.

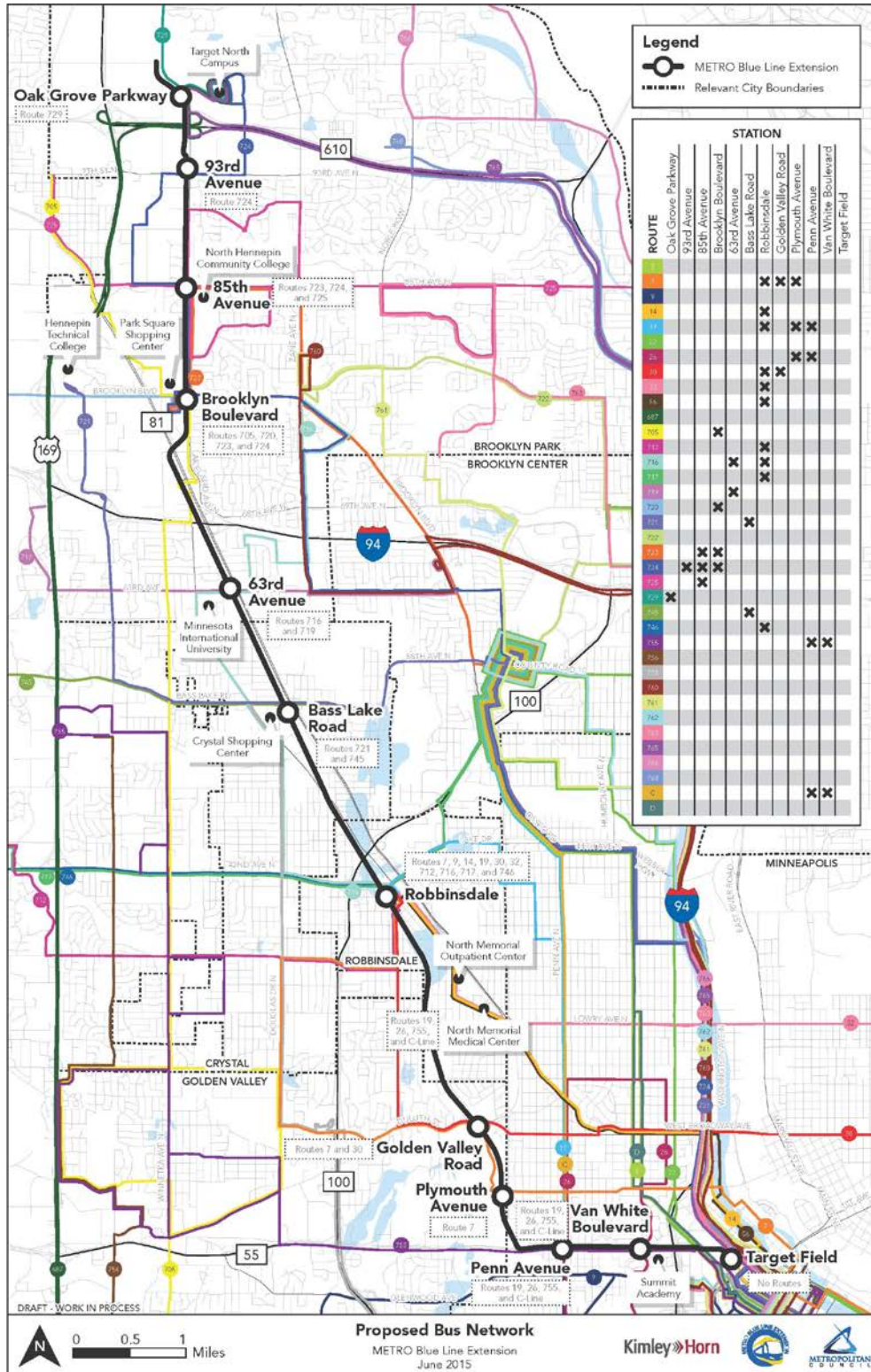
Support Service Amenities

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

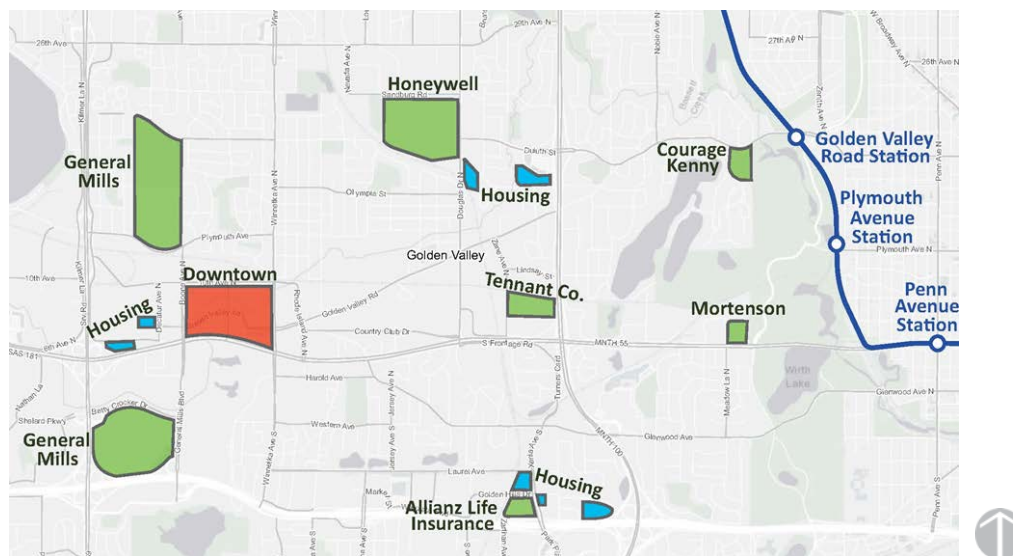
Golden Valley Road Station

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

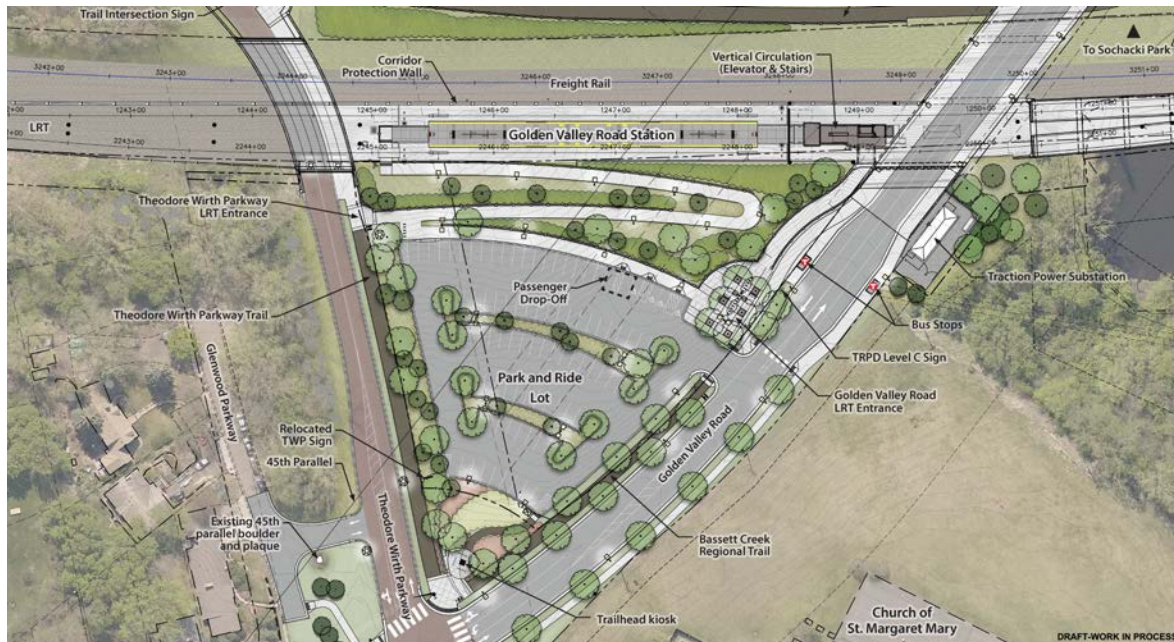


Station Area Components

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



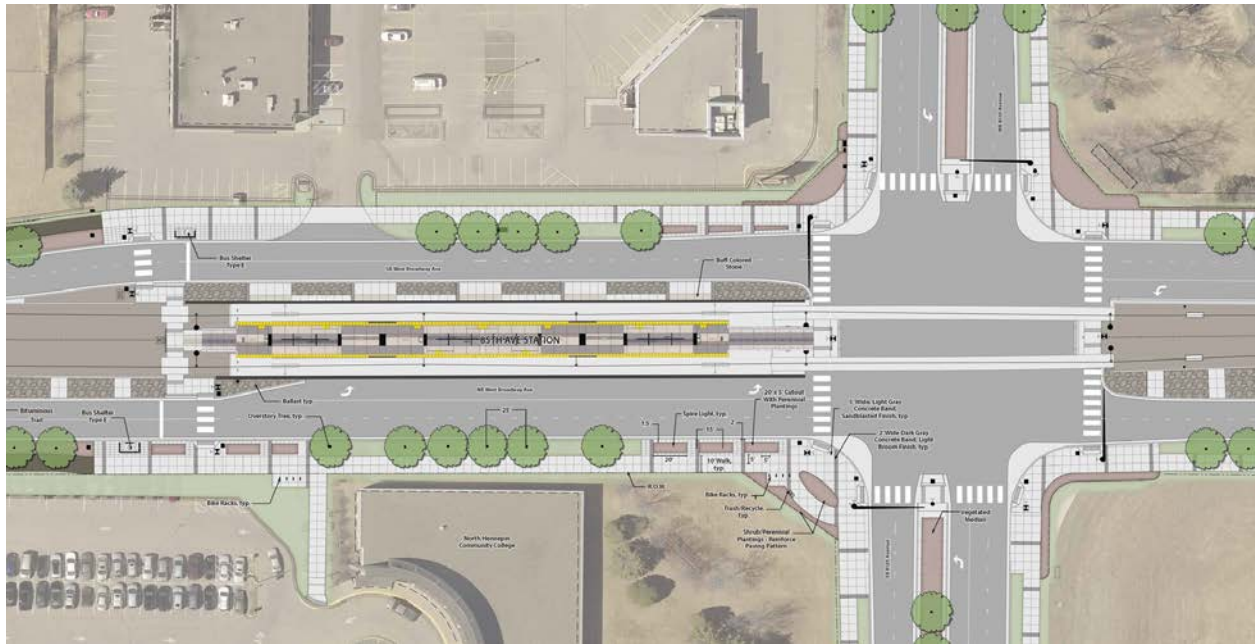
Source: Blue Line LRT Extension 90% Submittal Layout



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 5: 85th Avenue Station Area Plan



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 could be 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.

During interviews with city staff it was mentioned that there is a need for a shuttle between the HTCC and NTC campuses. In addition, it was stated that there are key destinations along 85th Avenue (Figure 6), such as the City Hall campus and a senior housing complex that are too far for some to walk, and there is not pedestrian or bike infrastructure supporting safe access from these key destinations to the 85th Avenue Station. If a shuttle service, or microtransit, is developed to service the campuses and key destinations, it could not be accommodated within the station area. HTCC is planning for campus expansion and this provides an opportunity to work with the college to identify a site for a shared mobility hub within their campus with direct access to the 85th Avenue Station. The Hennepin County Brooklyn Park Branch Library public plaza site was mentioned by city staff as another potential location for a shared mobility hub.

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.

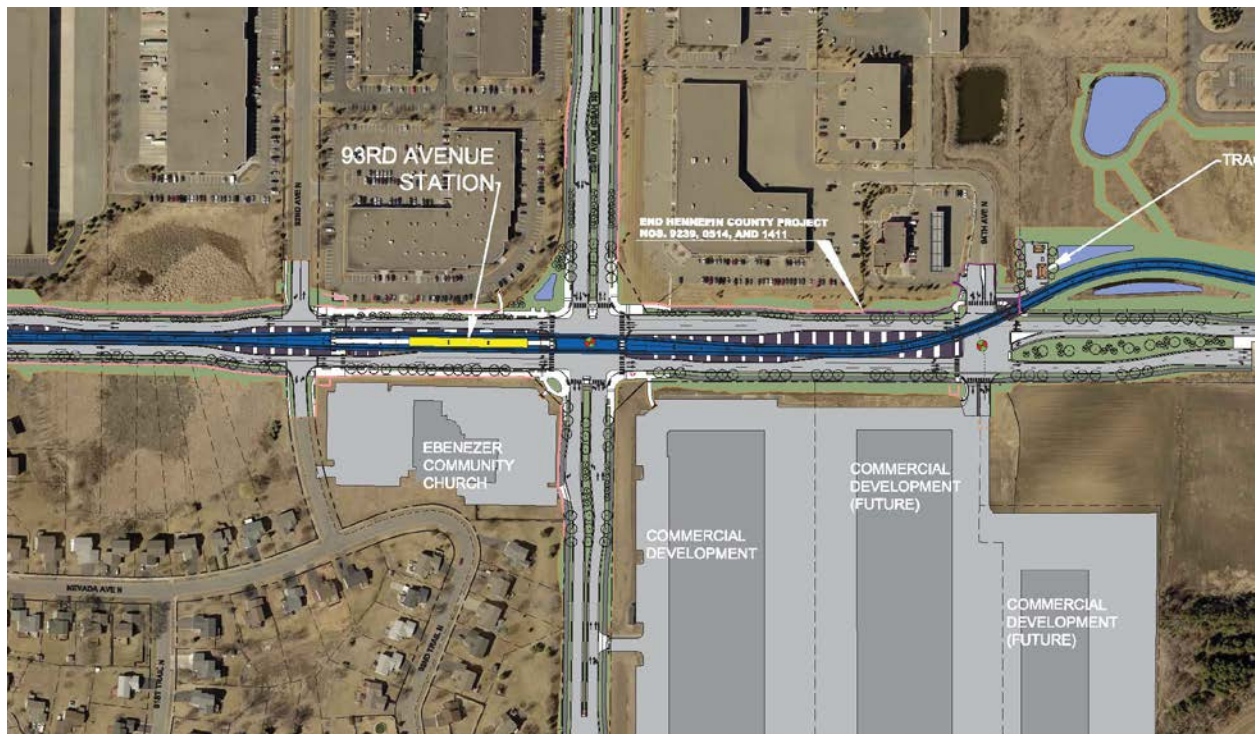
4. Brooklyn Park staff work with the Blue Line Project Office to determine capacity within the 85th Avenue Station area to accommodate shared mobility hub features such as bikeshare and interactive trip planning kiosks.

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 93th 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