



Tracking the Blue Line Extension

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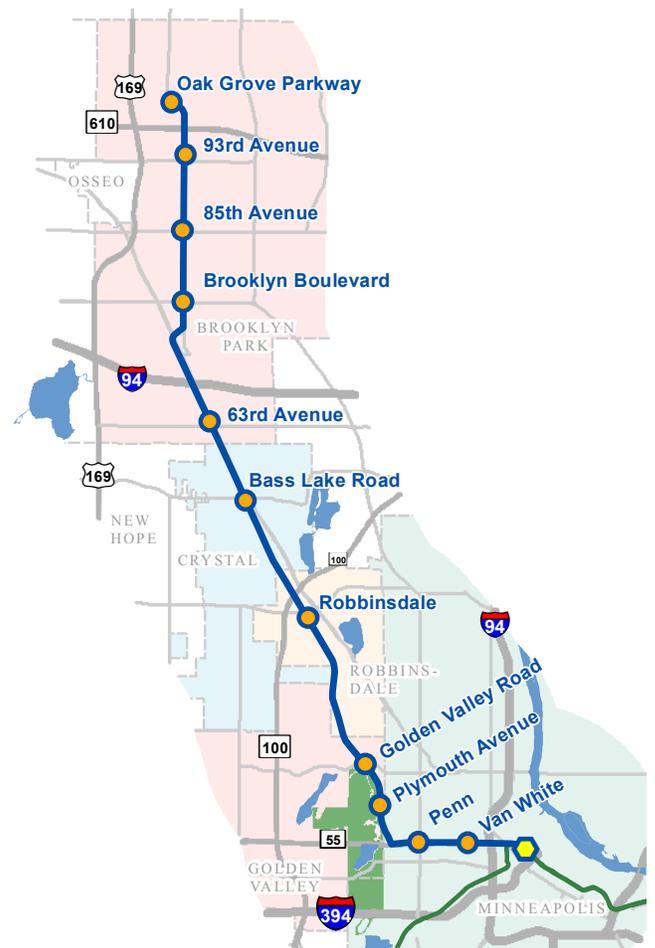
www.BlueLineExt.org

Upcoming open houses will set stage for preliminary design plans

People who want to influence decisions about stations, parking and pedestrian/bicycle access for the planned METRO Blue Line Extension LRT line should attend one of five upcoming open houses.

Engineers will use feedback from the July-August open houses to refine the project design and make scope recommendations to the Corridor Management Committee and the Metropolitan Council. The outcome of these recommendations will allow engineers to prepare preliminary design plans for municipal consent review by Hennepin County and the five corridor cities starting in late 2015.

“These meetings are really all about getting us set for the final push for design,” Project Director Dan Soler said. “We’re seeking input on what we should recommend in the fall for our scope and cost estimate.”



July–August open house schedule

Each open house will run from 5:00–6:00 p.m. and 6:30–7:30 p.m., with presentations from 6:00–6:30 p.m.

July 27: Crystal Community Center, A&B Meeting Rooms, 4800 Douglas Drive N., Crystal, MN 55429

July 28: Robbinsdale Middle School, 3730 Toledo Ave. N., Robbinsdale, MN 55422

July 29: Harrison Recreation Center, 503 N. Irving Ave., Minneapolis, MN 55405

Aug. 11: North Hennepin Community College CBT Grand Hall, 7411 85th Ave. N., Brooklyn Park, MN 55445

Aug. 12: Golden Valley City Hall, 7800 Golden Valley Rd., Golden Valley, MN 55427

Note: The previously announced Golden Valley open house on July 30 has been canceled. Please plan to attend the open house on Aug. 12 instead.

Anyone who needs assistance should contact Blue Line Extension Community Outreach Coordinator Juan Rangel at Juan.Rangel@metrotransit.org or 612-373-5338. Requests for special assistance should be made at least five business days in advance of the scheduled open house.

For those who cannot attend and want to share their thoughts, meeting materials and a comment form will be posted on the project website at www.BlueLineExt.org.

OPEN HOUSES *continued*

General topics for July-August open houses

Minneapolis

Target Field Station connection to current and planned LRT lines, Northstar commuter rail, local and express bus routes

Design of Seventh Street intersection with Highway 55 (preliminary rendering of design concept shown at right)

Roadway, LRT and pedestrian improvements on Highway 55

Transition for LRT trains from the center of Highway 55 to the BNSF Railway corridor

Golden Valley

Station at Plymouth Avenue and/or Golden Valley Road

Freight rail coordination

Access at Plymouth Avenue Station

Parking and park-and-rides

Robbinsdale

Robbinsdale Station park-and-ride ramp

LRT at-grade crossing of 42nd Avenue

Possible closure of 39½th Avenue crossing of BNSF Railway

Crystal

West Broadway Avenue crossings

Bass Lake Station park-and-ride

Location of Bass Lake Station in relation to LRT tracks

Brooklyn Park

Operations and maintenance facility location, size

West Broadway Avenue reconstruction

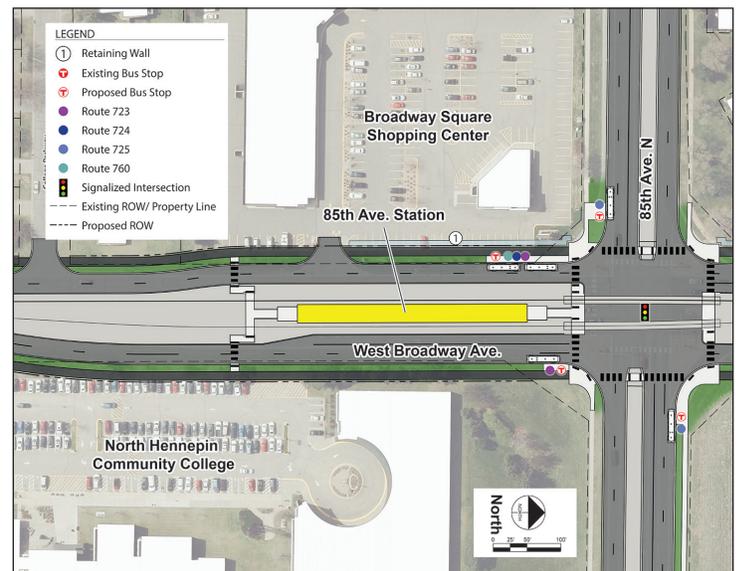
Station configurations on West Broadway

63rd Avenue park-and-ride

73rd Avenue and County Road 81 (Bottineau Boulevard) LRT crossing



A design concept rendering showing possible light rail routing through the intersection of Seventh Street and Highway 55 in Minneapolis.



The 85th Avenue Station in Brooklyn Park would be located near the North Hennepin Community College campus and Broadway Square shopping center.

Cost uncertainty decreases as engineering and environmental work progress

As LRT projects progress through the engineering and environmental process and into construction, the cost uncertainty decreases as the design is refined.

An example of this occurs as more is learned about underground environmental conditions in the areas where tracks, stations, the operations and maintenance facility and structures, such as bridges, will be built.

Breakdown by phases

At the end of the Draft Environmental Impact Statement (Draft EIS) phase, the project is at a one percent level of detail. This is when the general route and general station locations are identified. Aerial mapping is the only survey work done to date because the cost of additional engineering and environmental work is not eligible for the federal match until later. Cost estimate of \$1.002 billion at this phase has a lot of uncertainty given all that remains to be learned through engineering and environmental analysis. The project has 34 percent of the cost estimate (or roughly \$340 million) set aside as contingency to cover project risks, such as unforeseen circumstances during engineering and construction. Contingency is not available during project development, the phase before engineering.

When a project seeks municipal consent, the project is at a 15 percent level of detail. The footprint and number of stations, the location and length of the track and the footprint of the operations and maintenance facility are known. The cost estimate will be updated to reflect this higher level of design detail and any new information uncovered through the field work as well as reflecting costs for any scope

changes. Municipal consent is expected to begin at the end of 2015.

At the end of the project development phase, the project is at an approximately 30 percent level of detail. Technical field work and preliminary soils analysis are done. At this stage, engineers will know the biggest challenges facing the project, and the cost estimate is updated accordingly. At this point, though, the project will not have a final right-of-way figure from BNSF Railway to build LRT track for eight miles on the east side of the freight railroad's property and to reconstruct the freight tracks. The project should have a ballpark refined estimate but will not have a signed right-of-way permanent easement in hand. The project must receive the FTA's acknowledgement that it has completed environmental reviews by the end of August 2016.

As the engineering phase begins, station types are identified, and the details of facilities and structures are determined. Electrical and communications systems are designed. Final soils analysis is done. Engineering is expected to begin in 2017.

When the construction bid packages are advertised, the project is at 90 to 100 percent level of detail. The exterior color and texture of facilities are chosen, and construction methods and mitigation measures are identified.

Next steps

The project's next steps are reviewing and updating the cost estimate and refining the project scope.

The project office is being proactive in reviewing what is in the Draft Environmental Impact Statement (DEIS) cost estimate and advising project partners



A testing crew takes a soil boring along freight rail tracks near Golden Valley Road.

when scope items are not included in the DEIS cost estimate. Staff established a process and schedule for updating the project cost estimate and is communicating it to project partners to set expectations.

In late 2015, the project's cost estimate will be updated to reflect the higher level of detail developed in the last year and any new information uncovered through field work, such as soil borings, as well as reflecting costs for any scope changes.

Q3 2015: Review DEIS cost estimate and scope with advisory committees, project partners and the Council.

Q4 2015: Refine project scope for municipal consent and update cost estimate.

Q3 2016: Prepare project budget for request to enter engineering.

What's included and what's not included in the Draft EIS cost estimate?

The Blue Line Extension project's Draft EIS includes a cost estimate of \$1.002 billion, covering construction activities from 2016–2018.

	Included in Draft EIS cost estimate	Not included in Draft EIS cost estimate
Guideway and Track	<ul style="list-style-type: none"> • Five new bridge structures • Modifications to the Highway 55 bridge over Interstate 94 • Ballasted track 	<ul style="list-style-type: none"> • LRT bridges over/under 42nd and 73rd Avenues that have been suggested by project partners • Embedded track
Stations	<ul style="list-style-type: none"> • 10 stations 	<ul style="list-style-type: none"> • Plymouth Avenue Station and stair/elevator towers • Replacement of Plymouth Ave. bridge
Operations and Maintenance Facility	<ul style="list-style-type: none"> • Facility for routine maintenance • Storage space for 26 light rail vehicles 	<ul style="list-style-type: none"> • Roadway realignment to accommodate facility • Space and equipment for major repairs
Site Work	<ul style="list-style-type: none"> • Partial reconstruction of Highway 55 • Minor modifications to four bridges • Reconstruction of all at-grade crossings • Approximately 1,500 new park-and-ride spaces in two new ramps and one modified ramp • Relocation of 14 Xcel Energy electrical transmission towers 	<ul style="list-style-type: none"> • Full reconstruction of Highway 55 • Park-and-rides at Golden Valley Road and Bass Lake Road • Grade-separated pedestrian crossings
Right-of-Way	<ul style="list-style-type: none"> • Full acquisition of 17 properties • Partial acquisition of 56 properties • Acquisition of 50 feet of BNSF Railway right-of-way 	<ul style="list-style-type: none"> • Acquisition of land for additional park-and-rides
Vehicles	<ul style="list-style-type: none"> • 26 light rail vehicles with 15 percent spare ratio 	<ul style="list-style-type: none"> • Vehicles for 20 percent spare ratio and gap train
Construction Years	<ul style="list-style-type: none"> • 2016–2018 	<ul style="list-style-type: none"> • 2018–2020

Reaching agreement with BNSF is a top project priority

With eight of the 13 miles of the proposed line following an existing freight rail corridor, one of the top project risks is reaching agreement with BNSF Railway on right-of-way acquisition and engineering elements of the project. The Draft Environmental Impact Statement (DEIS) cost estimate includes purchasing a 50-foot width of BNSF property and reconstructing the freight track within the remaining right-of-way. The project office is meeting regularly with BNSF personnel to discuss issues and coordinate design.

Other risks include relocating Xcel Energy electrical transmission towers, avoiding floodplains, addressing poor soils, mitigating wetland impacts, cleaning up contaminated sites, market conditions at the time of construction bids, right-of-way costs, schedule delays and unforeseen conditions during construction

The project office is actively working to minimize these risks by conducting environmental/soil testing (which is over half complete), advancing its engineering work on the project and coordinating with project partners.



Environmental technicians are testing soil along the Blue Line Extension route for possible contamination.

The resolution of project risks informs the amount of contingency necessary to be included in the project cost estimate.

Contingency is not available during project development, the phase before engineering. However, it can be used during engineering and construction to cover the costs associated with risks or unforeseen conditions.

Brooklyn Park officials tour Green Line operations and maintenance facility

Brooklyn Park city leaders took a peek at the future recently when they toured the METRO Green Line between downtown Minneapolis and downtown St. Paul.

Mayor Jeff Lunde, members of the City Council and several top administrators joined project staff to ride the Green Line and tour the operations and maintenance facility in Lowertown St. Paul. The building received special attention because the planned Blue Line Extension's facility is to be located in Brooklyn Park north and west of the Target North campus near Highway 610.

During the tour, Brooklyn Park city leaders asked Blue Line Extension Project Director Dan Soler about the size and location of the operations and maintenance facility planned for their city. Soler reassured them that the engineers and designers would look for ways to make the building a good fit with the surrounding area.



Brooklyn Park city leaders learned about activities at the METRO Green Line Operations and Maintenance Facility.

OMF TOUR continued on page 6

OMF TOUR from page 4

Brooklyn Park city leaders' tour also looked at station features, access

The Brooklyn Park city leaders' tour of the Green Line also stopped at the Prospect Park Station and the Fairview Avenue Station to show what different types of station platforms look like in various settings. The Prospect Park Station is in a neighborhood with apartments and single-family homes. This station has a center platform, allowing passengers to access trains going in either direction by stepping to one side of the platform or the other.

Fairview Avenue Station is a split station, with two platforms both on University Avenue to the west of Fairview Avenue, but facing each other across the LRT tracks. The Episcopal Homes senior housing complex, which includes 174 new units that opened in 2014, is located just across from the station.

The group also took a short walk to Iris Park Commons, using a mid-block crossing from the Green Line tracks. Deb Veit, Episcopal Homes' director of community relations, met the group in the park and told them that the Green Line

is popular with residents, who use the line regularly. Complaints have been few, and the residents view the line as an asset, connecting them to the two downtowns, the airport and the Mall of America.



Blue Line Extension project manager Dan Soler (center) and members of the Brooklyn Park group rode the Green Line.

About the Blue Line Extension Operations and Maintenance Facility

How was the site chosen?

In the Blue Line Extension's Draft Environmental Impact Statement, two potential sites were studied for the line's operations and maintenance facility. They were a site near 93rd Avenue North and West Broadway Avenue in Brooklyn Park, which is being developed with an office/warehouse facility, and the currently planned site near West Broadway and 101st Avenue.

The site near 101st Avenue in Brooklyn Park was chosen because of the undeveloped land there that's owned by the city of Brooklyn Park. Also, unlike the site near West Broadway and 93rd Avenue, the 101st Avenue site has less potential noise and visual impacts to existing adjacent residential neighborhoods.

How big will it be?

The site would encompass about 14 acres, with room to store, service and maintain 26 light rail vehicles. In addition to the building, the site would have surface parking

for employees and visitors, and loop tracks to circulate the trains in and out of the building.

What kind of work will be done there?

The facility would be equipped to perform daily cleaning and repair activities on LRVs, along with scheduled service and maintenance inspections.

The maintenance and cleaning work would be done indoors, and outside noise will be minimal. The LRT trains are not coupled outside, so there are no clanging sounds like those heard near freight rail yards.

And because the trains run on electricity, there are no fumes. The trains are clean and quiet.

Stations being designed to share platforms in center of tracks

The METRO Blue Line Extension LRT's 10 or 11 stations are being designed to share platforms in the center of the tracks for passengers' ease and cost effectiveness.

Earlier designs for several station platforms utilized split stations, meaning there would have been separate platforms for trains running in opposite directions. But Metro Transit operations staff and county and city staff expressed a preference for center stations.

The benefits of center stations include allowing customers to walk to one platform to board trains headed in both directions. Customers won't find themselves at the wrong platform for the direction they want to go, which would necessitate a walk back across the intersection.

Center-platform stations are more cost-effective to build because they share a roof, ticket kiosks and other elements.

Only the Golden Valley Road station will have something besides a center-platform station. The Golden Valley Road site is being designed for a station with platforms on opposite sides of the tracks. That design works best with the available space and the route passengers will take to walk to the station from the bridge over the tracks.

Stations with center platforms can also help minimize service disruptions, such as planned maintenance. LRT trains sometimes operate on one track in an alternating fashion. In those instances, passengers at center stations don't need to worry whether they're at the right platform to board their train.

First responders answering an emergency call don't have to worry about whether they're going to the correct LRT platform with the center-platform design.

Metro Transit's cleaning and maintenance crews also prefer center platforms because their work is consolidated in one location.

Split-platform stations were built at several intersections on the Green Line LRT between downtown Minneapolis and downtown St. Paul. The split design allows for a narrower footprint and provides additional room for left-turn lanes for vehicles without having to take private property.

Along the planned Blue Line Extension, though, the station locations provide enough width to have left-turn lanes for auto traffic at the intersections, even with the presence of center-platform stations.



Prospect Park Station on the METRO Green Line (top) is an example of the center-platform design. A single platform (above) serves trains traveling in both directions.

There are also unique benefits to individual stations. For example, at West Broadway and 85th Avenue, engineers are proposing a center-platform station on the south side of the intersection nearest North Hennepin Community and Technical College. This would minimize noise impacts to residents in the Maplebrook townhomes on the north side of the intersection by providing more distance between the station and the homes but still providing convenient access to the station at the intersection.

LRT 101

Light rail trains run more frequently, cost less to ride than commuter rail

They differ in many other ways as well. Here are some...



Light rail trains, like the METRO Green Line train on the left above, are smaller than commuter rail trains and offer more frequent service. They operate on dedicated light rail tracks, which may be located along streets or in the center of streets in urban areas.



Northstar commuter rail trains, like the one shown on the right above, are pulled by large diesel-electric locomotives and operate over longer distances with fewer stops. Commuter rail trains share track with freight rail service.

Fares

Current fares for LRT and local non-express buses cost \$1.75 (\$2.25 peak period) compared with Northstar fares that range from \$3 to \$6 depending on the station.

Frequency

Light rail trains operate frequently 21 hours a day, with trains running every 10 minutes during peak periods. Northstar trains operate only in the morning and evening rush hours, with special trains added for events, such as Minnesota Twins games.

Route and Stations

Unlike the 40-mile Northstar line with seven stations from downtown Minneapolis to Big Lake, the proposed Blue Line Extension would have 10 or 11

People familiar with Northstar commuter rail may be surprised to know that the planned METRO Blue Line Extension LRT would be quite different.

stations and 13 miles of double track, with stops about every mile.

One-seat rides

Since the line would be an extension of the Blue Line, riders could stay on the same train all the way to Minneapolis-St. Paul International Airport or the Mall of America. At any of the downtown Minneapolis stations, they would be able to transfer to the Green Line,

proposed Southwest LRT (METRO Green Line Extension), Northstar and buses.

Power

While diesel-electric locomotives pull Northstar trains on BNSF Railway tracks shared with freight trains, LRT trains operate on their own tracks by drawing electricity from overhead wires.



A center-platform station on the METRO Blue Line. Bus stops at stations connect light rail passengers with the metropolitan bus network.



Safety railings near stations prevent pedestrians from walking onto the light rail tracks.

About the project

The planned METRO Blue Line Extension (Bottineau) light rail transit project will operate about 13 miles northwest from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal and Brooklyn Park, drawing riders northwest of Brooklyn Park. The proposed alignment will have 10 or 11 new stations in addition to Target Field Station where it will continue as the METRO Blue Line, providing one-seat rides to Minneapolis-St. Paul International Airport and the Mall of America. It will connect Minneapolis and the region's northwest communities with existing LRT on the METRO Green Line, future LRT on the METRO Green Line Extension (Southwest LRT), bus rapid transit on the METRO Red Line, the Northstar commuter rail line and local and express bus routes.

The Metropolitan Council will be the grantee of federal funds and is charged with building the line in partnership with the Minnesota Department of Transportation. The Blue Line Extension Corridor Management Committee, which includes local officials from Golden Valley, Robbinsdale, Crystal, Brooklyn Park and Minneapolis, provides advice and oversight. Funding is provided by the Federal Transit Administration, Counties Transit Improvement Board (CTIB), state of Minnesota and Hennepin County Regional Railroad Authority (HCRRA).

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