



METRO Green Line Extension: Virtual Town Hall City of Minneapolis

March 16, 2022



EDEN PRAIRIE | MINNETONKA | EDINA | HOPKINS | ST. LOUIS PARK | MINNEAPOLIS

Today's topics

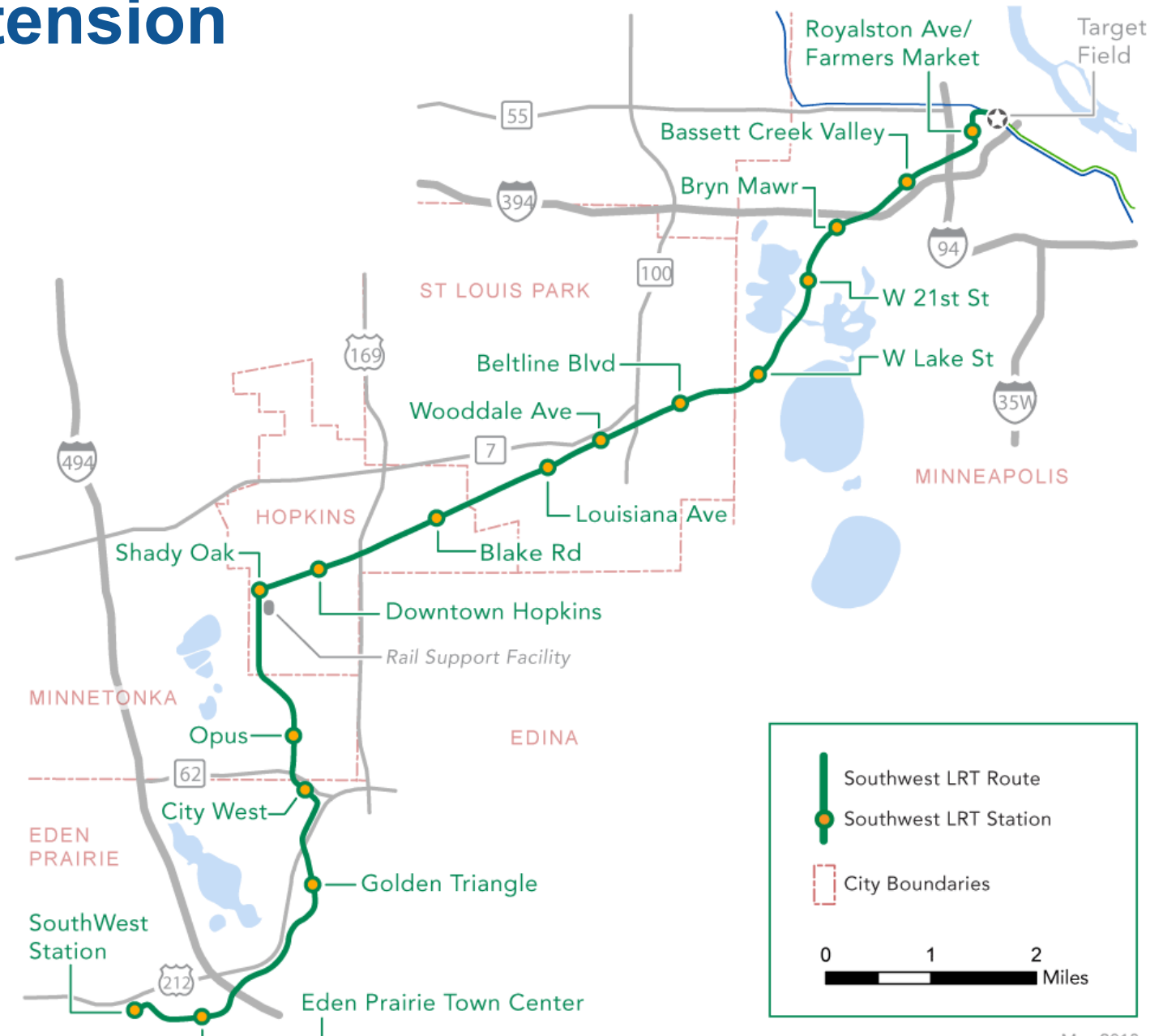
- Project Overview
- Project Update
- 2021 Construction Recap
- 2022 Construction Highlights
- Systems Overview
- Communications & Outreach



Project Overview

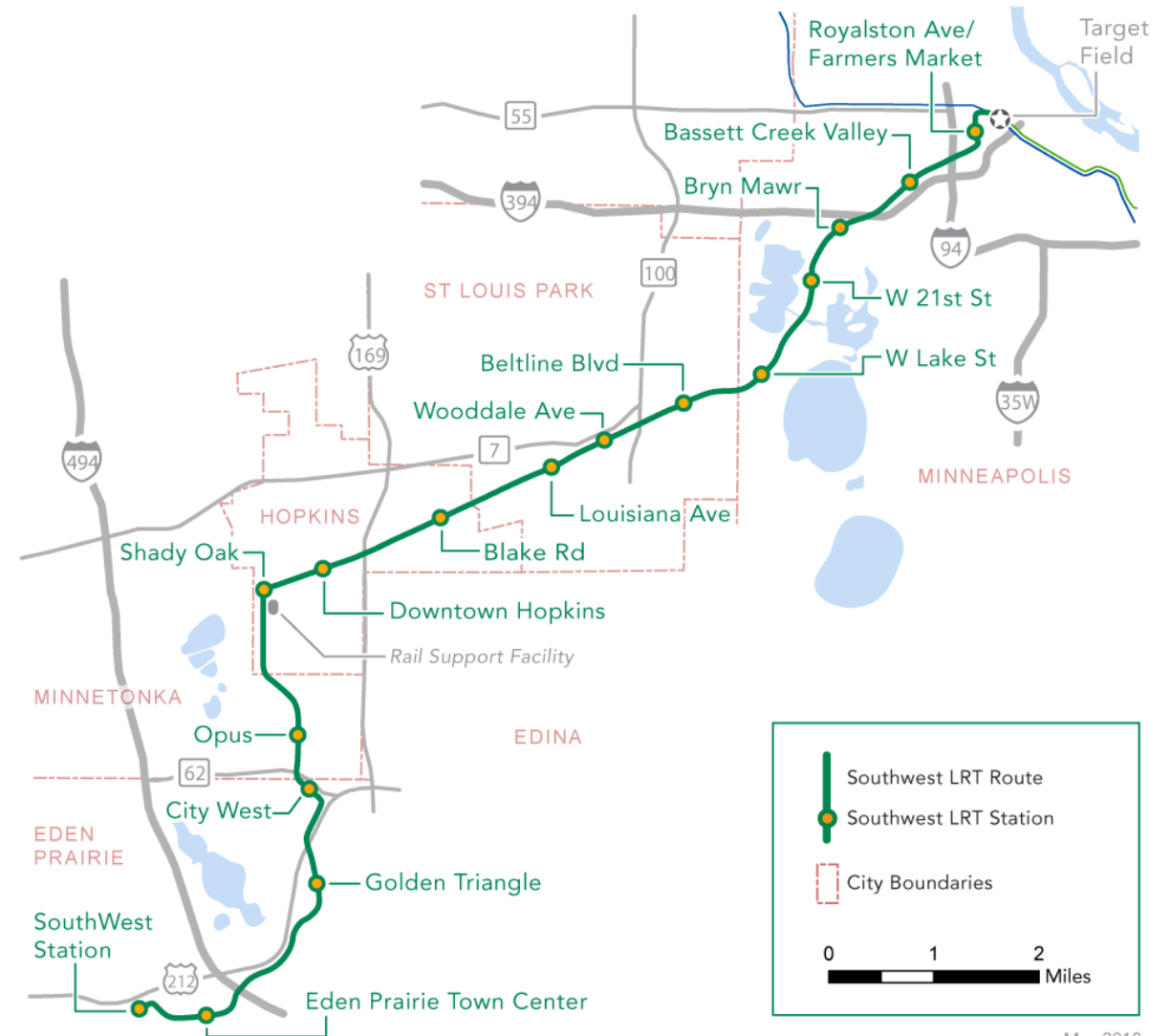
METRO Green Line Extension

- Extends the Green Line with 14.5 miles of new LRT
- 16 new stations
- One seat ride from Eden Prairie to Downtown St. Paul
- Direct service to Downtown Minneapolis, U of M, stadiums
- Connections to rail and bus routes
- Downtown Minneapolis to Eden Prairie: ~35 minutes



METRO Green Line Extension Scope

- 16 new stations
- 44 structures
 - 29 new bridges: LRT, pedestrian, roadway, freight
 - 7 existing bridges with modifications
 - 6 pedestrian tunnels
 - 2 cut and cover tunnels:
 - TH 62 582 ft., Kenilworth 2,236 ft.
- 15 at-grade LRT crossings
 - Includes 5 shared crossings w/freight rail
- 127 retaining walls
- Track: ~182,000 TF
- 7.8 mi shared LRT and freight rail corridor



May 2018

Project Update

LRT Construction Sequencing and Status

✓ Done!



Utilities

- Excavation
- Relocation / installation

✓ Done!



Site Prep

- Clear buildings
- Establish work zones, detours

60% Complete



Structures, track, stations

- Track beds
- Track
- Buildings
- Roadwork
- Trails

Initiated



Systems

- Overhead catenary
- Safety & security
- Ticket vending

Prior to revenue service



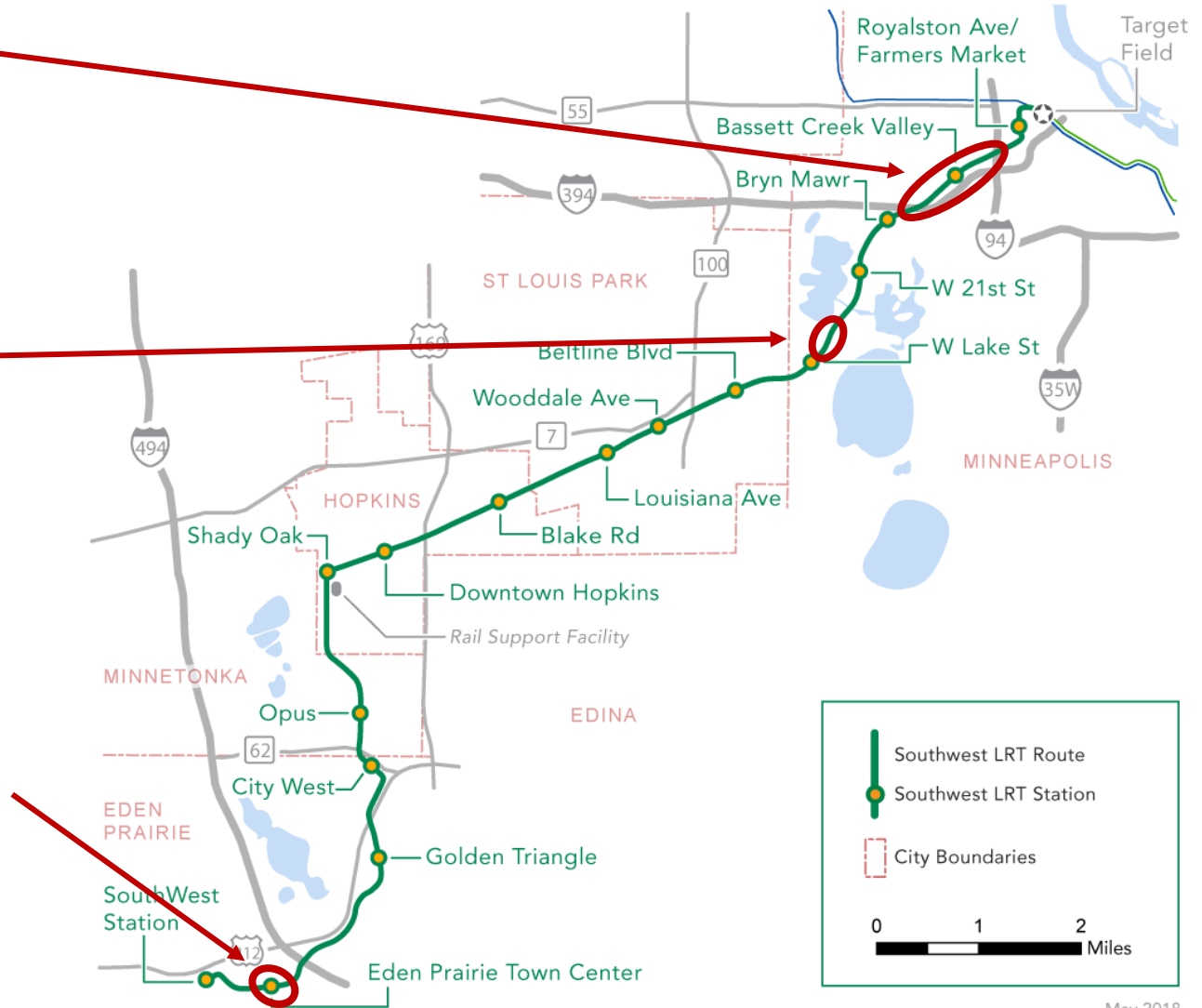
Testing

- Safety
- Comms
- Operator training

Outreach & Communications

Civil construction challenges: Key issues

- **Corridor protection wall**
 - Added to the civil construction contract by change order
 - Adds significant time to the construction schedule in Minneapolis
- **Secant pile (retaining) wall**
 - Unforeseen soil conditions (settling during initial tunnel construction) necessitated an alternative construction method
 - This was a major change that sets the overall completion of civil construction due to complexity of construction involved
- **Eden Prairie Town Center Station**
 - Added to the civil construction contract by change order



May 2018

Civil construction schedule and cost

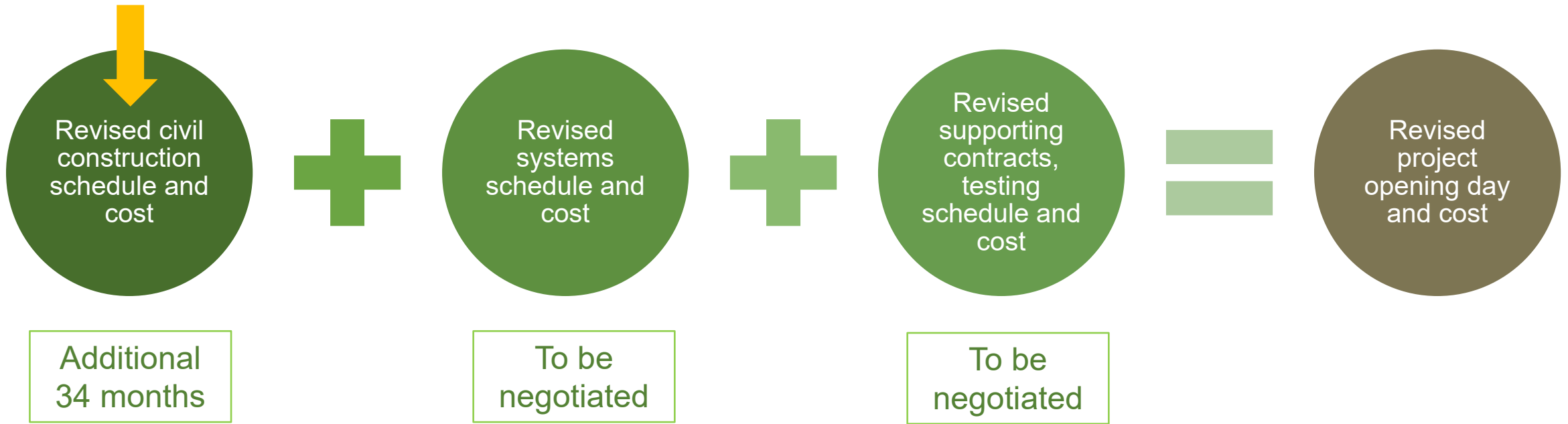


Revised project schedule and cost process: Current step

- Taken together, these issues impact:
 - Other Green Line Extension contracts
 - Staffing, supplies, overhead, etc.
 - Overall project schedule and cost



Revised project schedule and cost process



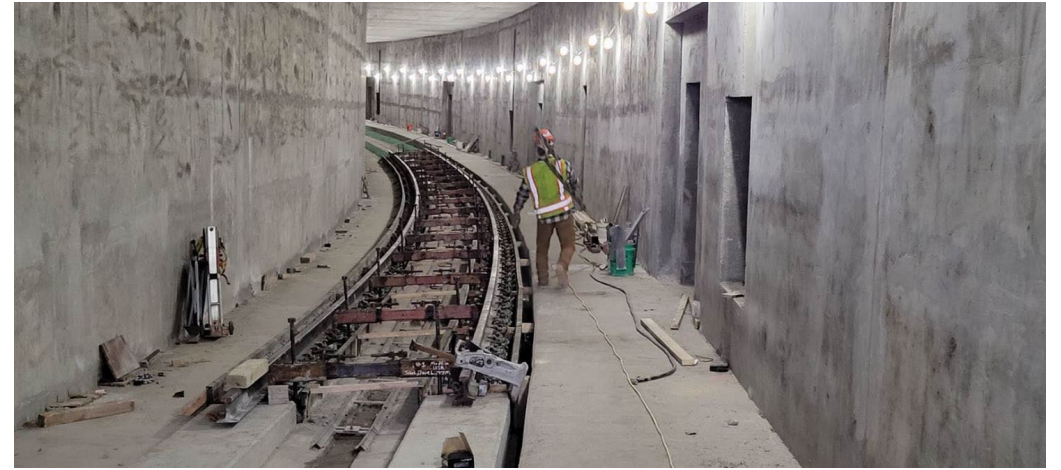
- Estimated project cost: \$2.65B - \$2.75B
- Revised costs will be known when all agreements are finalized
- Project opening day: 2027

Project budget

- The Green Line Extension has undergone cost cutting measures already, we are building a well-constructed line that meets the needs of our communities
- With the project 60% complete meaningful reductions are not available
- Additional funding will be needed to complete the project
 - We are working with partners to identify available funding solutions
 - We will not be asking city partners to contribute more
 - Stopping the project would be more costly

How Do Costs Compare?

- Compared to our peer group of metropolitan areas including Seattle, Portland, and Houston, our costs are currently at or below their similar projects
 - Previous Green Line Extension: ~\$152 million per mile
 - Revised Green Line Extension: \$180 million to \$190 million per mile
 - Peer projects: between \$200 million and \$500 million per mile



LRT track in the Highway 62 LRT tunnel



LRT track at the Downtown Hopkins Station

National Comparisons

LRT Project	Length in Miles	Number of Stations	Cost Per Mile
Twin Cities METRO Green Line Extension	14.5	16	\$180 - \$190 million
Pittsburgh: North Shore	1.2	3	\$560 million
Seattle: U-Link	3.2	2	\$511 million
Seattle: East Line	13.9	10	\$259 million
Portland: Orange Line	7.3	10	\$243 million
Los Angeles: Expo Line Phase 2	6.6	7	\$225 million
Houston: Green Line	3.2	7	\$223 million

Source: Eno Center for Transportation, "A Blueprint for Building Transit Better"

\$2+ Billion in Permitted & Planned Community Development

Elevate At SouthWest Station, Eden Prairie



The Moline at Downtown Hopkins Station



Minnetonka Station at Opus Station



Beltline Station Development, St. Louis Park

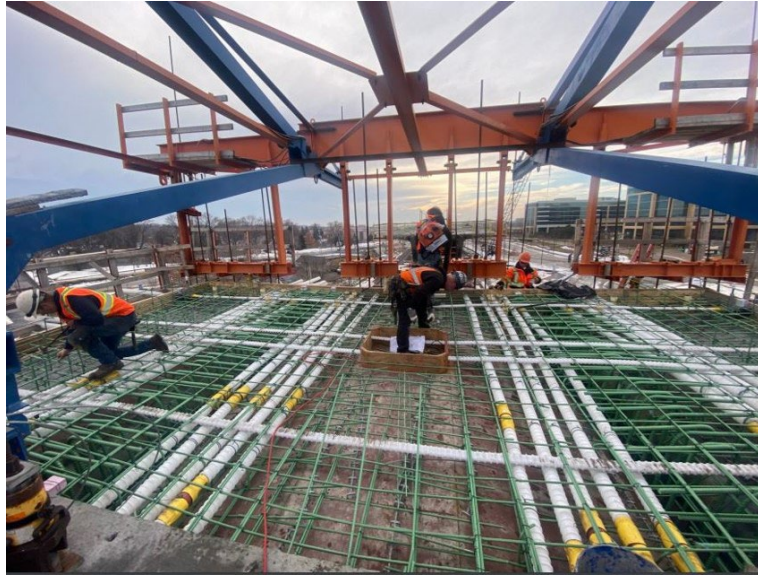


Disadvantaged Business Enterprise

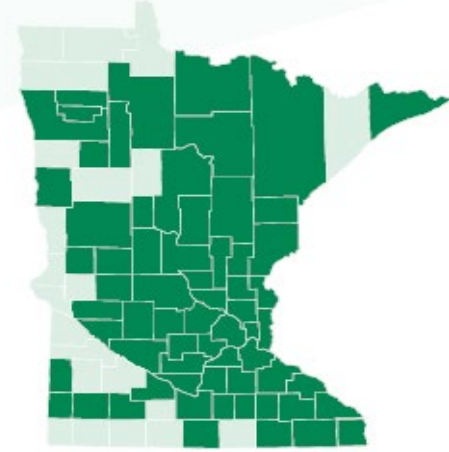
Construction Contract Description	DBE Billed to Date	DBE Percentage Achieved*
Civil: 16%	\$139.0 Million	21.0%
Systems: 12%	\$11.5 Million	16.2%
Franklin OMF: 15%	\$7.6 Million	18.9%
OVERALL ACHIEVEMENT: 15%	\$163.4 Million	20.3%

**As of December 31, 2021*

Green Line Extension = Statewide Jobs



\$53,170,758
IN PAY GOING TO
65 of the **87** MINNESOTA COUNTIES
SO FAR



**As of July 2021*

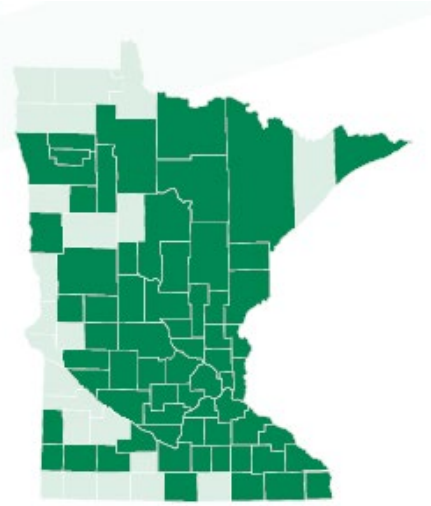


Statewide economic benefits

- Putting people to work:
 - More than 1.8 million hours worked
 - Paychecks for Minnesotans worth more than \$53.1 million and growing
 - Employing folks from 75% of counties statewide
 - \$134 million billed by Disadvantage and Business Enterprise companies (20.9%) for civil construction activities, exceeding the goal of 16%
 - Project will support 7,500 construction and construction related jobs and \$350 million in payroll to be reinvested in communities throughout the Twin Cities and the state

65 of 87

Minnesota counties have someone bringing home a Green Line Extension paycheck



2021 Construction Recap

Construction highlights: 2021

- Civil construction: 60% complete
- Under construction:
 - 25 bridges completed or underway out of 29
 - 8 tunnels underway out of 8
 - 114 retaining walls completed or under construction out of 131
- 95% of 946 private utilities completed
- 75% of nearly 1,300 public utilities completed
- Completed all 15 building demolitions
- Systems contractor mobilized and in design and procurement
- Franklin Operation & Maintenance facility modifications are nearly complete
- 26 of 27 Light Rail Vehicles delivered

LRT stations underway

- 11 stations underway of 16
 - When complete will allow a stress-free commute from Eden Prairie to downtown Minneapolis
 - Consistent commute time, unimpacted by traffic
 - Improved connections to regional destinations such as Minneapolis Grand Rounds, Methodist Hospital, Downtown Hopkins, UnitedHealth Group's Optum corporate campus, Eden Prairie Center



West 21st Street Station



Beltline Boulevard Station

Kenilworth LRT Tunnel



Corridor Protection Barrier, Bryn Mawr



LRT Bridge over 5th Avenue and 7th Street



2022 Construction Highlights

2022 Minneapolis Construction Activity Map



- LRT Station
- Road Closure
- ◆ Laydown and Staging Areas
- LRT Alignment
- Truck Hauling
- ◆ Pile Driving/Sheeting/Vibration Activity
- Tunnel
- Secant Wall
- ◆ Building Activities

Minneapolis, West Lake Street to West 21st Street: 2022 Construction Highlights

- Stations
 - West Lake Street Station: advance station, vertical circulation structures
 - West 21st Street Station: advance station work
- Bridges and Tunnel
 - Kenilworth LRT Tunnel: secant wall construction, tunnel construction to both east and west
 - Cedar Lake Channel LRT Bridge: set beams and advance fencing, railings
 - Cedar Lake Channel Pedestrian Bridge: demolition and construction, pile-driving
 - WPA wall construction: begins fall 2022
- Traffic Impacts
 - Long-term closure of Cedar Lake Parkway





Cedar Lake Channel LRT bridge to be completed this year

Cedar Lake Parkway Closure

Minneapolis - Cedar Lake Parkway Closure | Overview



-  LRT Station
-  LRT Alignment
-  Tunnel
-  Road Closure
-  Construction Area for Cedar Lake Parkway Closure

2022 Minneapolis Construction Activity Map



Minneapolis, Bryn Mawr to Target Field: 2022 Construction Highlights

- Stations
 - Bryn Mawr Station: advance station, pedestrian bridge, retaining walls
 - Bassett Creek Valley Station: advance station, Luce Line overpass construction
 - Royalston Avenue/Farmers Market Station: advance station construction
- Structures
 - Corridor Protection Wall: continue concrete panel construction
 - Glenwood Avenue bridge: advance retaining walls, abutment construction and setting of bridge beams
 - 5th Avenue/7th Street LRT bridge: advance pier construction and setting of beams



Glenwood Avenue Bridge

Minneapolis, Bryn Mawr to Target Field: 2022 Construction Highlights (cont.)

- Traffic Impacts
 - Impacts to Border Avenue and Holden Street for roadway and sidewalk reconstruction from spring through fall.
 - 5th Avenue and 7th Street: impacts for overhead bridge construction
 - Potential closure at Wayzata Boulevard at Penn Avenue for roadway reconstruction



Corridor Protection Wall

Communications and Outreach

2021 Communications

- Construction updates: 16,600+ subscribers; 46% open rate
- Hotline: 60+ calls from “Minneapolis” residents
 - 612-373-3933
- Hundreds more non-hotline calls and emails from community members to outreach staff
 - Email: david.davies@metrotransit.org
- Construction Information Workgroup meetings: 11
- Public Walking Tours: 5



Kenilworth Walking Tour, June 2021

Upcoming Community Outreach

- Public construction tours
 - Running spring, summer, fall as weather allows
 - Efforts to connect with schools and youth groups
 - Virtual tours
- Pop-up events
- Continued weekly/bi-weekly construction updates



Louisiana Ave in St. Louis Park



Prairie Center Drive in Eden Prairie

MORE INFORMATION

Website: GreenLineExt.org

Email: swlrt@metrotransit.org

Twitter: [@GreenLineExtMN](https://twitter.com/GreenLineExtMN)

Instagram: [@GreenLineExtMN](https://www.instagram.com/GreenLineExtMN)