

James Mockovciak March 10, 2022











Today's topics

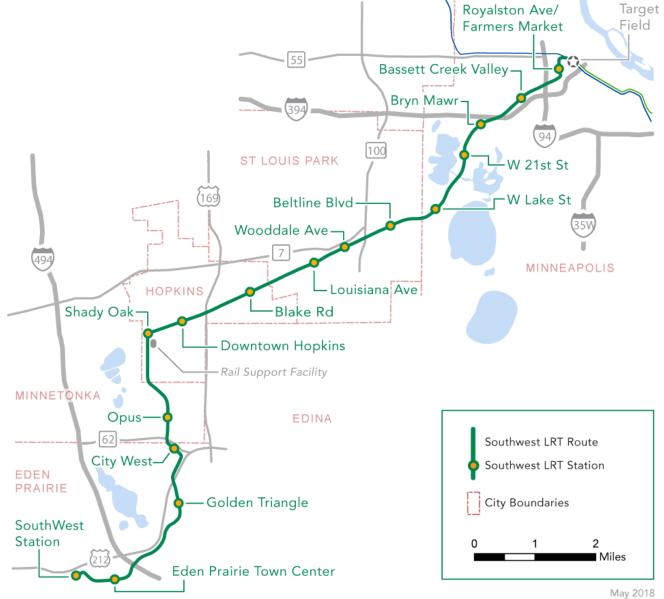
- Project Overview
- Project Update
- 2021 Construction Recap
- 2022 Construction Highlights
- Systems Contract Work
- Safety and Security
- Communications & Outreach



Project Overview

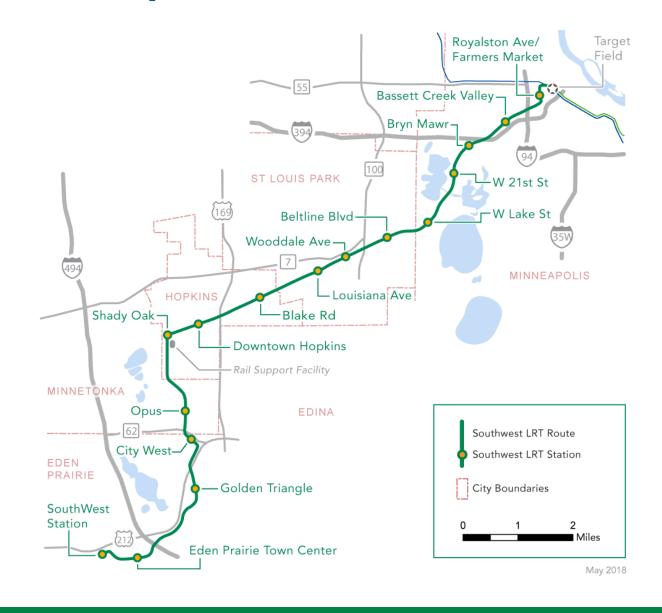
METRO Green Line Extension

- 14.5 miles
- 16 stations
- Single seat trips to downtown Minneapolis, U of M, St. Paul
- Connections to Airport and Mall of America via Blue Line



METRO Green Line Extension Scope

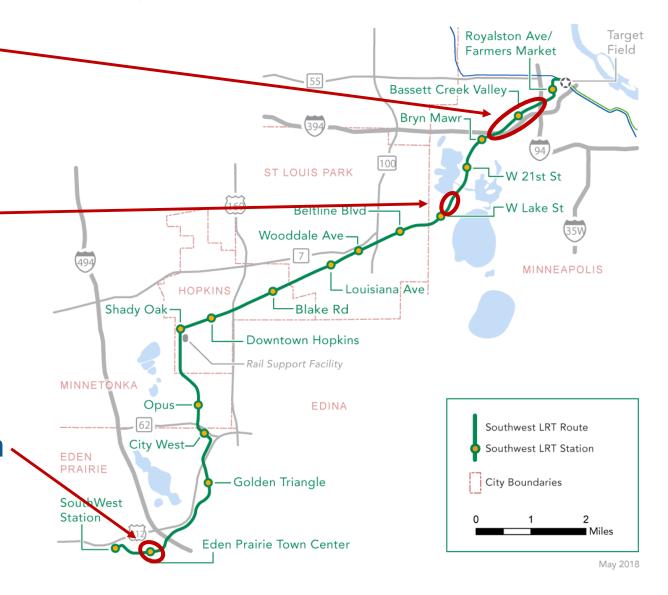
- 16 new stations
- 44 structures
 - 29 new bridges: LRT, pedestrian, roadway, freight
 - 7 existing bridges with modifications
 - 6 pedestrian tunnels
 - 2 cut and cover tunnels:
 - TH 62 582 ft., Kenilworth 2,236 ft.
- 15 at-grade LRT crossings
 - Includes 5 shared crossings w/freight rail
- 127 retaining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



Project Update

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

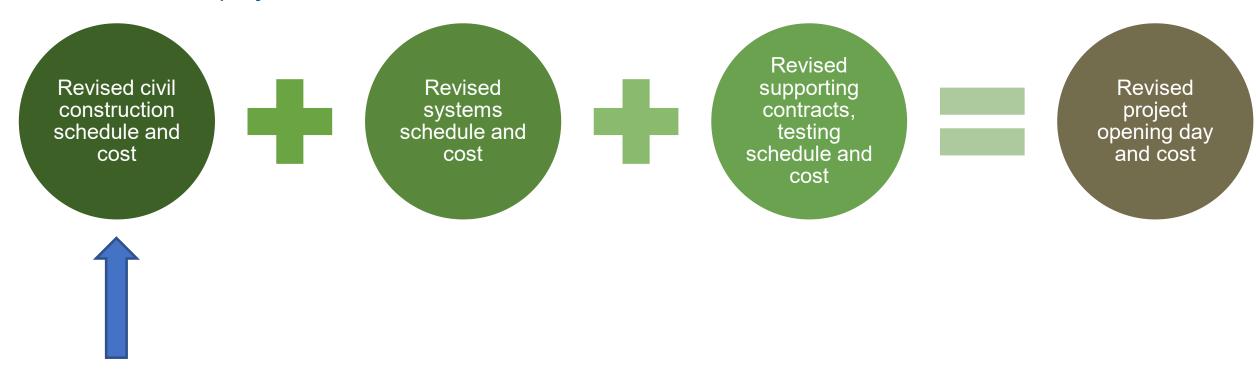


Civil construction cost and schedule

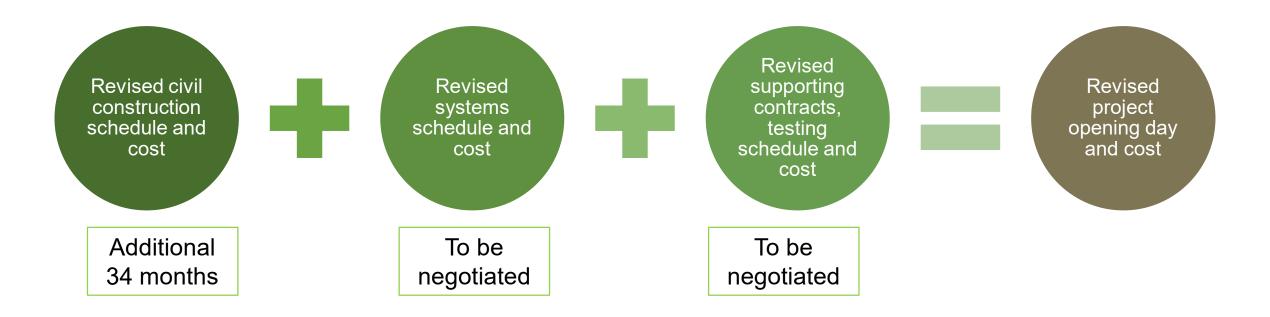


Revised project schedule and cost process: Current step

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



Project costs & schedule



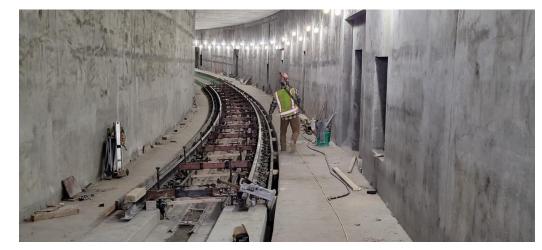
- Revised project costs will be known when all agreements are finalized
- Project opening day in 2027

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 identity 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
Pittsburg: 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



Minnetonka Station at Opus Station



The Moline at Downtown Hopkins Station



Beltline Station Development, St. Louis Park

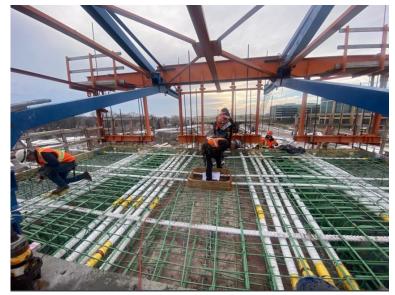


Disadvantaged Business Enterprise

Construction Contract Description	DBE Billed to Date	DBE Percentage Achieved*
Civil: 16%	\$134.2 Million	20.9%
Systems: 12%	\$10.9 Million	16%
Franklin OMF: 15%	\$7.5 Million	19.1%
OVERALL ACHIEVEMENT: 15%	\$152.8 Million	20.4%

^{*}As of November 30, 2021

Green Line Extension = Statewide Jobs



53,170,758
IN PAY GOING TO
65 of the 87 MINNESOTA COUNTIES











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

Accomplished by end of 2021: LRT construction sequencing

✓ Done!

✓ Done!

60% Complete

~2% Complete

Prior to revenue service



Utilities

- Excavation
- Relocation / installation



Site Prep

- Clear buildings
- Establish work zones, detours



Structures, track, stations

- Track beds
- Track
- Buildings
- Roadwork
- Trails



Systems

- Overhead catenary
- Safety & security
- Ticket vending



Testing

- Safety
- Comms
- Operator training

Outreach & Communications

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



Shady Oak Station

Downtown Hopkins Station



SouthWest Station



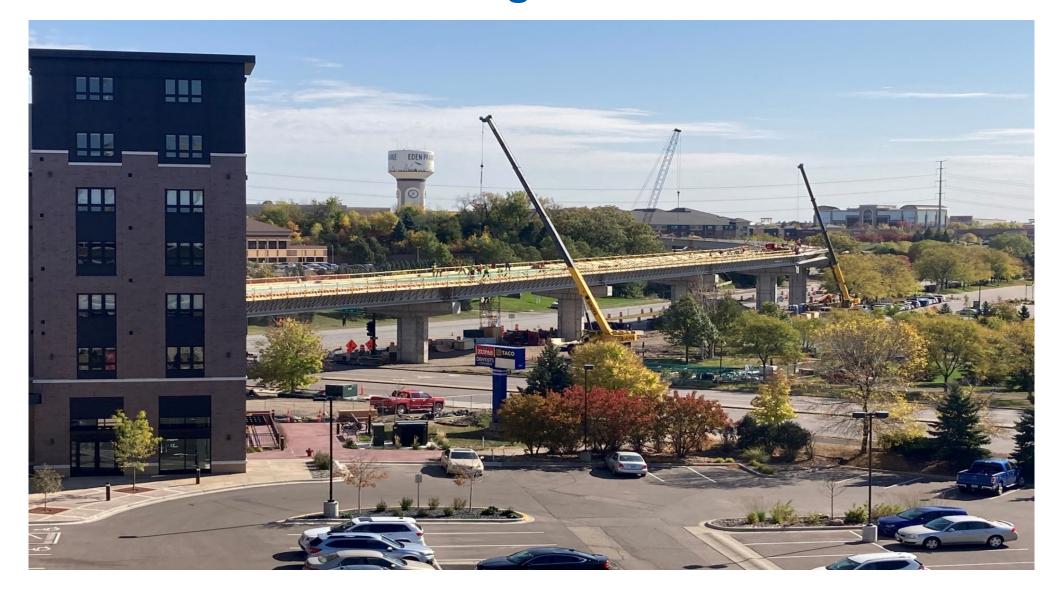
Looking east: construction of the parking ramp, station & waiting area

Looking east: pile supports for bus loop

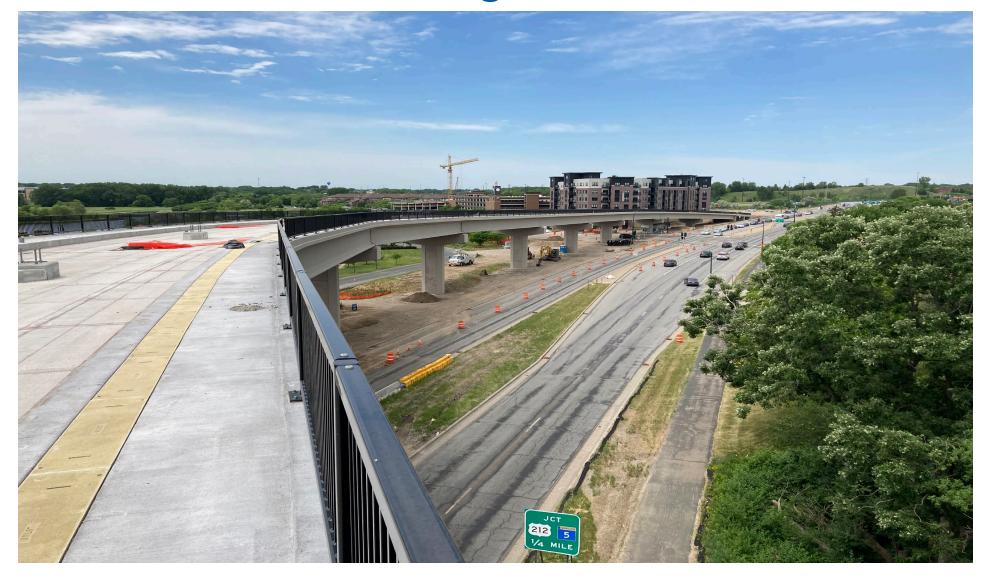
SouthWest Station



Prairie Center Drive LRT Bridge



Prairie Center Drive LRT Bridge



Prairie Center Drive LRT Bridge



Eden Prairie Town Center Station



Eden Prairie Town Center Station



Town Center Place Road





Valley View Road LRT Bridge

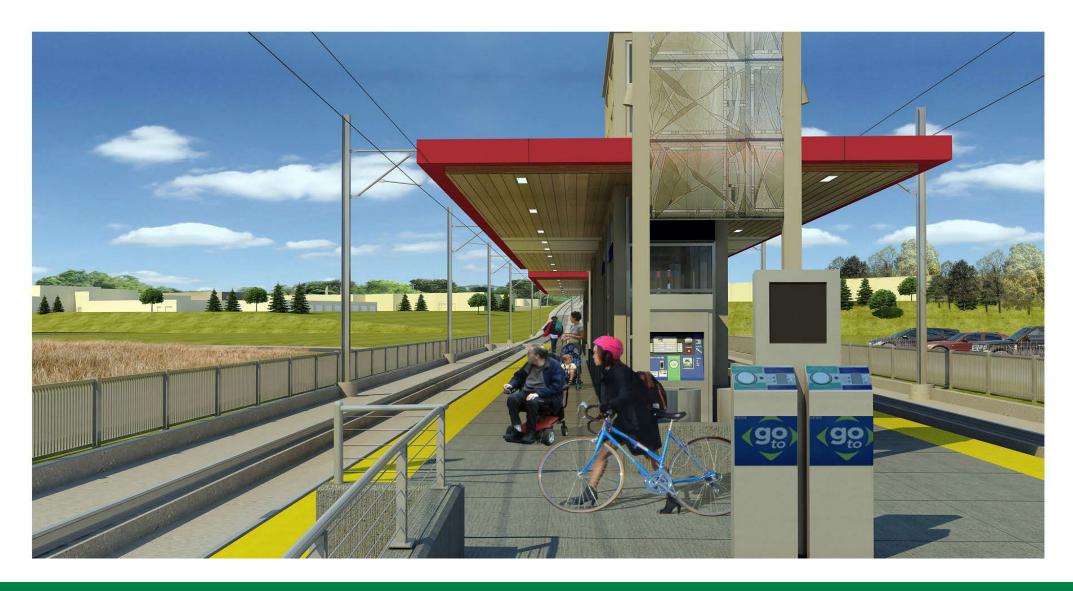


Golden Triangle Station





Golden Triangle Station



TH212/Shady Oak Road LRT Bridge





City West Station



City West Station

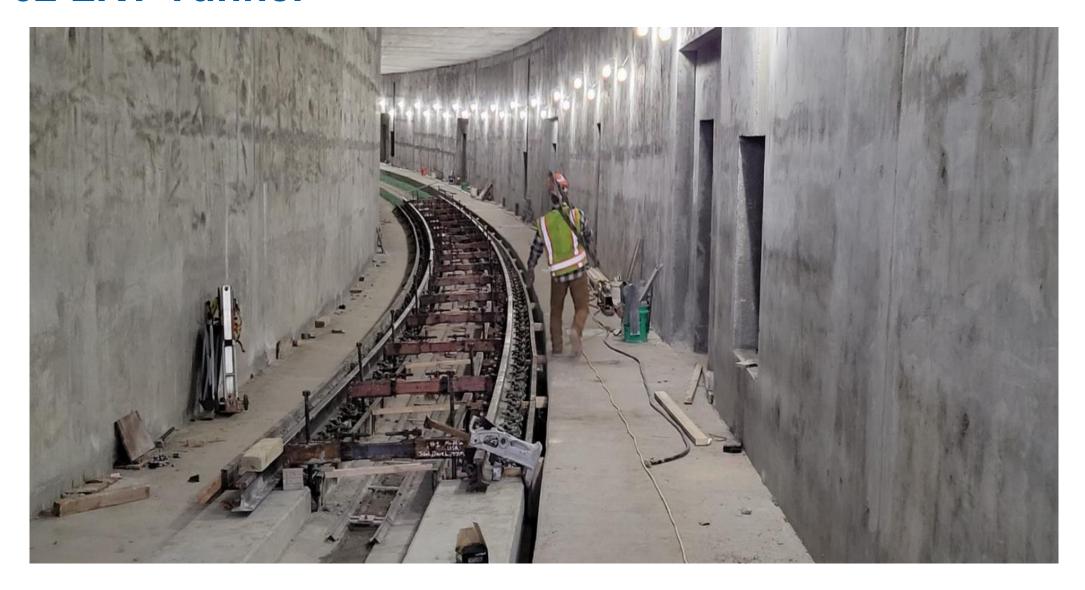


TH 62 LRT Tunnel



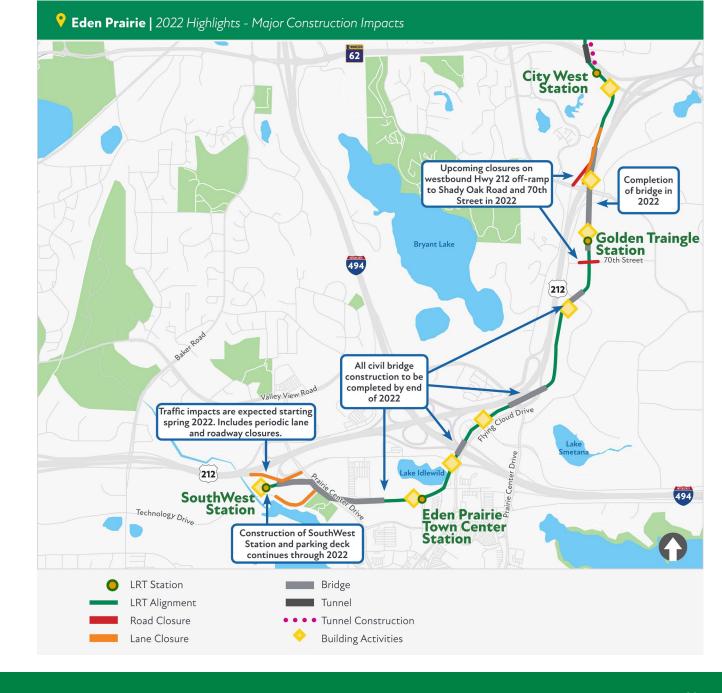


TH 62 LRT Tunnel



2022 Construction Highlights

2022 Eden Prairie Construction Activity Map



Eden Prairie: 2022 Construction Highlights

Stations

- Southwest Station: finish piling, advance station/parking ramp
- Town Center Station: advance station construction, fixtures, track
- Golden Triangle Station: advance station construction, fixtures, track
- City West Station: advance station construction, fixtures, track

Bridges

- Prairie Center Drive LRT bridge: deck/track work, finishing details
- I-494 LRT bridge: deck/track work, finishing details
- Valley View Road LRT bridge: deck/track work, finishing details
- Nine Mile Creek LRT bridge: deck/track work, finishing details
- Highway 212/Shady Oak Rd bridge: deck/track work, finishing details

Trackwork

Trackwork will continue between Valley View Bridge and City West Station

Eden Prairie: 2022 Construction Highlights

Traffic Impacts

- Eastbound Highway 212 off-ramp to Prairie Center Drive will be closed for 4-8 weeks (summer)
- West 70th Street will be closed to install track infrastructure (summer)
- WB Hwy 212 off-ramp to Shady Oak Road will close for the season (spring)
- LRT track crossings at Technology Drive and Viking Drive intersection with Flying Cloud Drive will experience temporary lane closures to complete trackwork
- Periodic lane closures on Hwy 212 between Shady Oak Bridge and Hwy 62 to complete overhead bridgework



Prairie Center Drive LRT Bridge

Eden Prairie: 2022 Construction Highlights

- Systems (Electrical) Work
 - Systems contractor will continue constructing foundations for Traction Power Substations (TPSS)
- Completion Milestones
 - The Prairie Center Drive, Valley View Road, Nine Mile and Shady Oak-212 LRT bridges will be substantially completed this year
 - The relocation of SouthWest Transit to the permanent indoor waiting area is expected to occur by the end of the year



SouthWest Station, Eden Prairie

Systems Contract Work

Systems Contractor

- Aldridge Parsons Joint Venture (APJV)
- Project Team Management ≈ 25
- Project Craft Workers ≈ 40-50
- Subcontractors ≈ 25







Foundation work for Traction Power Substation (TPSS)



Finished TPPS Stations



Inside a TPSS Station





Safety and Security

GLE Safety and Security



- MTPD is made up of 141 sworn full-time transit police officers, and about 50 part-time officers
- Metro Transit facilities are staffed 24 hours a day and cover security for all bus and rail routes, including transit centers, stations and platforms
- Officers work closely with law enforcement partner agencies in the communities in which we provide service

GLE Safety and Security

- GLE has been working closely with local law enforcement and emergency services to ensure well planned safety and security coordination
- GLE will conduct safety education outreach a year before revenue service begins, including wide-spread communication and community presentations





GLE Safety and Security

- During Green Line Extension/GLE design and engineering, the Southwest Project
 Office added the following measures to ensure passenger, pedestrian and trail user
 safety:
 - Site designs follow Crime Prevention Through Environmental Design (CPTED) best practices
 - Safety lighting and cameras on all station platforms, and pathways to station platforms
 - Emergency blue light phones on all station platforms
 - Safety lighting and cameras at all park and ride lots
 - Public address (PA) system at all station platforms
 - Accommodations for Metro Transit Police Department parking at stations
 - Modified station-waiting areas to better accommodate people in assisted mobility devices
 - Designated pedestrian and bike crossings at all at-grade LRT tracks

Communications and Outreach

2021 Communications

- Construction updates: 16,600+ subscribers; 46% open rate
- Hotline: 31 calls from Eden Prairie residents
 - 612-373-3933
- Hundreds more non-hotline calls and emails from community members to outreach staff
 - Email: James.Mockovciak@metrotransit.org
- Construction Information Workgroup meetings: 4
- Public Walking Tours 3



West Metro Home Remodeling Fair, Feb. 27

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

Instagram: @GreenLineExtMN