











Legislative Commission on Metropolitan Governance

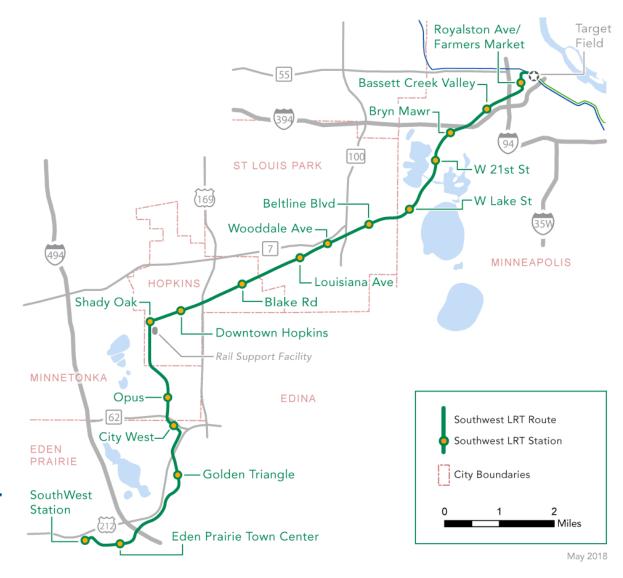
Presenters:

Charlie Zelle, Metropolitan Council Chair Nick Thompson, Metro Transit Deputy General Manager - Capital Programs

January 26, 2022

Project scope

- 14.5 miles of LRT, 16 new stations
- 44 significant structures:
 - 29 new bridges: LRT, pedestrian, roadway, freight
 - 7 existing bridges with modifications
 - 6 pedestrian tunnels
 - 2 cut and cover tunnels:
 - Highway 62: 582 feet
 - Kenilworth: 2,236 feet
- 15 at-grade LRT crossings; including 5 shared crossings with freight rail
- 131 retaining walls
- 7.8 mi shared LRT and freight rail corridor
- Major regional trail reconstruction



Project benefits

- Fast, frequent, oneseat ride serving the communities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Minneapolis and St. Paul
- Building stronger communities:
 - \$2 billion in permitted economic development along the line, with more on the way

Elevate at SouthWest Station



The Moline at Downtown Hopkins Station



Minnetonka Station at Opus Station

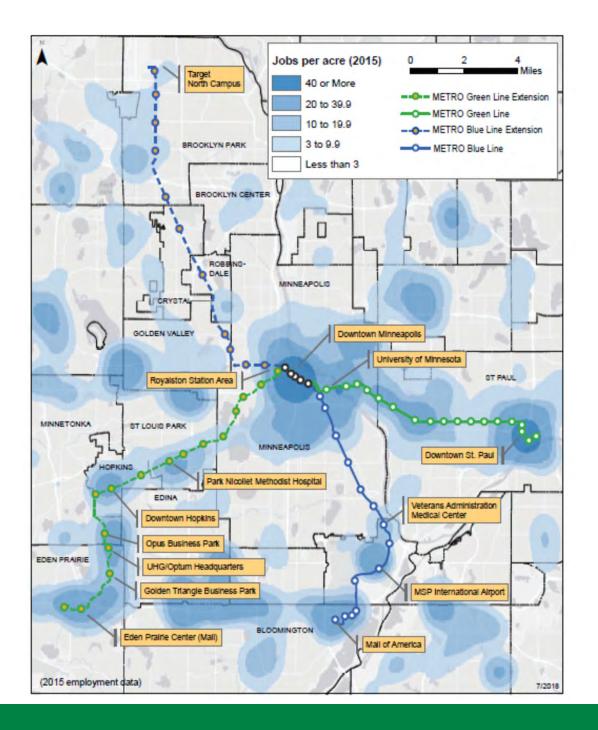


Root District at Royalston/Farmers Market Station



Project benefits

- Connecting the region and providing access to jobs, educations and regional activities
 - Nearly 56,000 people live within a half mile – or approximately a 10-minute walk – of the project corridor
 - People traveling to and within the corridor will access nearly 81,000 jobs, in addition to the 145,000 jobs in downtown Minneapolis
 - Nearly 36,000 residents who live downtown will have easier access to job opportunities in the southwest metro and other communities connected by our region's transit system



Local project partners

- Hennepin County/Hennepin County Regional Railroad Authority
- Cities of Eden Prairie, Minnetonka,
 Hopkins, St. Louis Park, Minneapolis
- Three Rivers Park District,
 Minneapolis Park Board
- Riley Purgatory, Nine Mile,
 Minnehaha, and Bassett Creek
 Watershed Districts
- MnDOT
- SouthWest Transit



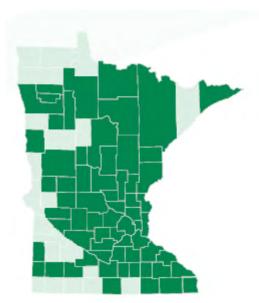


Statewide economic benefits

- 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





Crews pour the Kenilworth tunnel leveling slab

Building tomorrow's workforce today

- The Council, through the Building Strong Communities program, has partnered with local unions and training programs to provide the training for those seeking placement as carpenters, cement masons, iron workers, plumbers, operators, laborers and sheet metal workers
- This program offers individuals the opportunity to receive unionendorsed training, exposure, and a "foot in the door" to an apprenticeship and the start of a career in the trades



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



SouthWest Station Eden Prairie



Excelsior Boulevard LRT Bridge in Hopkins

Stations underway

- 11 LRT 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 Mall



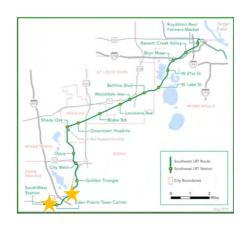
Golden Triangle Station in Eden Prairie & Opus Station in Minnetonka



Beltline Boulevard Station in St. Louis Park & West 21st Station in Minneapolis

Construction Highlights: Eden Prairie

Prairie Center Drive LRT Bridge & Nine Mile Creek LRT Bridge







Construction Highlights: Minnetonka

Highway 62 LRT Tunnel & Minnetonka – Hopkins LRT Bridge

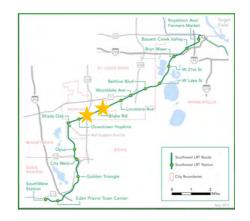






Construction Highlights: Hopkins

Excelsior Blvd. LRT Bridge & Blake Road Regional Trail Underpass



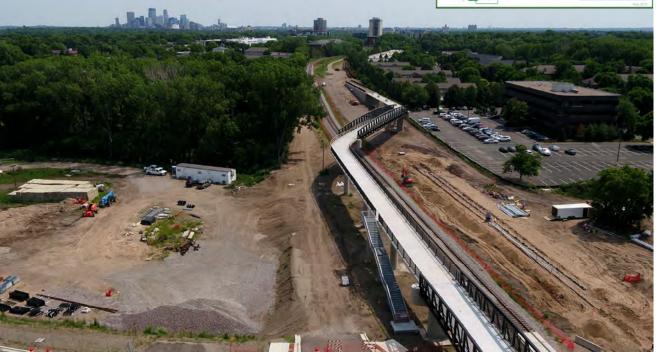




Construction Highlights: St. Louis Park

Southerly Freight Rail Connector & Beltline Regional Trail Bridge





Construction Highlights: Minneapolis

Cedar Lake Channel LRT Bridge & Glenwood Avenue LRT Bridge







LRT construction sequencing

60%

~2% Complete

Prior to revenue service

✓ Done!

✓ Done!

Complete



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

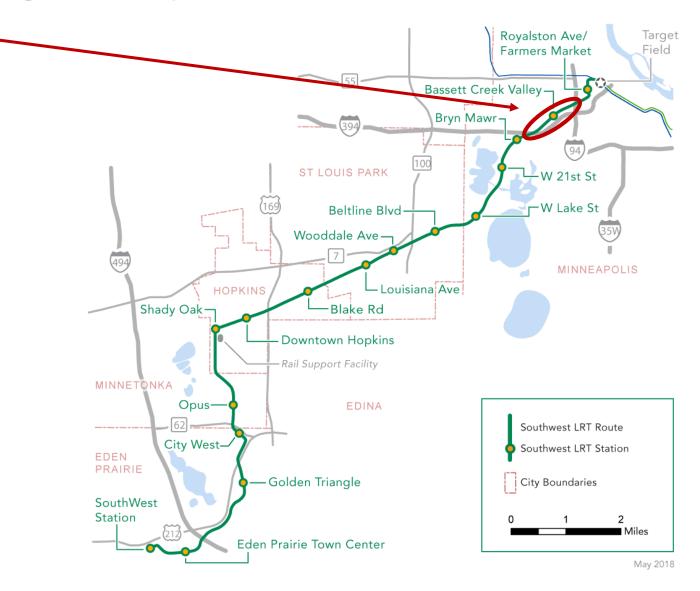
- Comms
- Operator training

Outreach & Communications

Civil construction challenges: Key issues

Corridor protection wall

- Required per BNSF agreement
- Required environmental clearance which was completed after civil construction contracting
- Added to the civil construction contract by change order



Corridor protection wall, Minneapolis



Civil construction challenges: Key issues

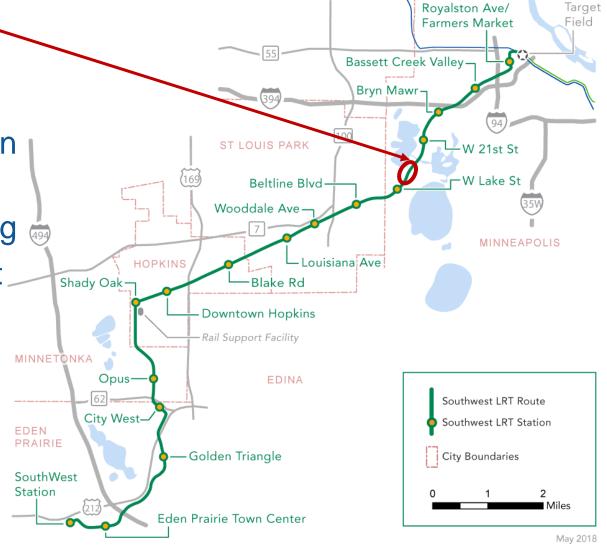
Secant pile wall

 Unforeseen soil conditions (settling during initial tunnel construction) necessitated an alternative construction method

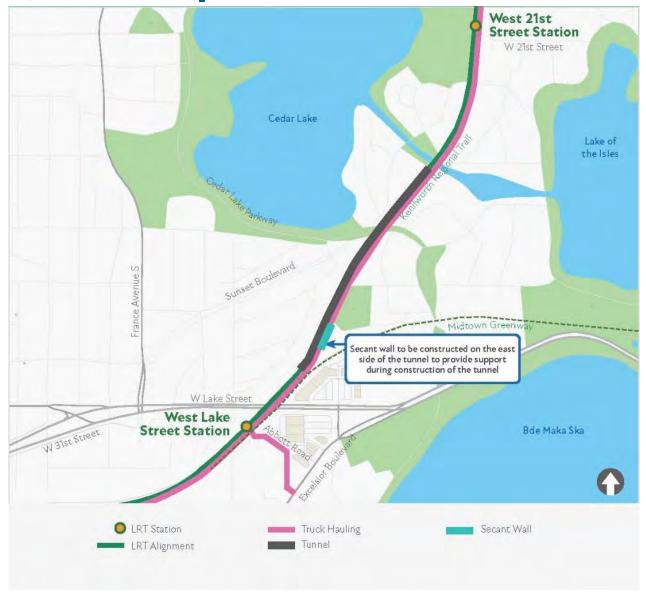
Impacts tunnel construction sequencing

 Added to the civil construction contract by change order

 The Kenilworth tunnel was already a critical path item, one of last civil construction items to be completed, even before the addition of the secant wall



Secant pile wall, Minneapolis



Kenilworth LRT Tunnel, Minneapolis

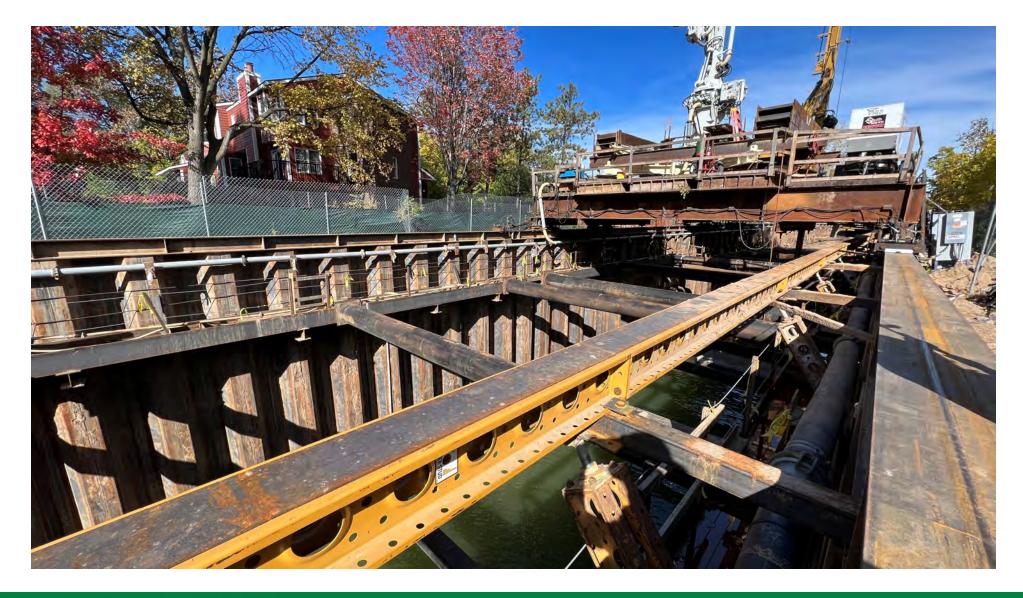


- Tunnel excavation north of secant pile wall (left)
- Secant pile installation (below)





Green Line Extension Video

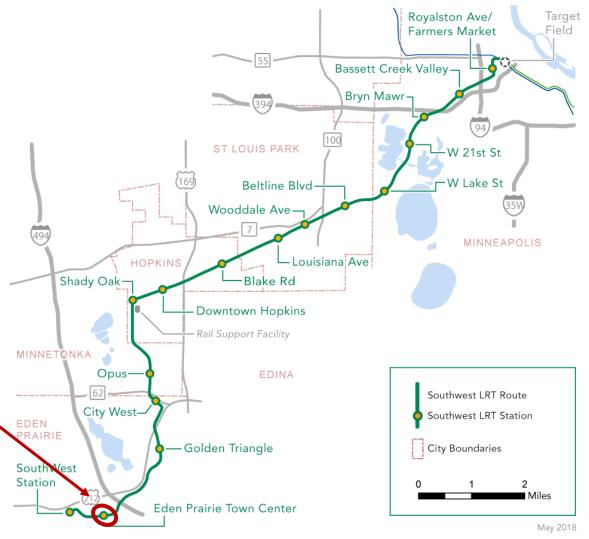


Civil construction challenges: Key issues



Eden Prairie Town Center Station

 Added to the civil construction contract by change order



Civil construction challenges: Unexpected conditions

- It is not unusual to discover unexpected conditions during construction, especially on a project of this magnitude
 - It is not always possible to know conditions until shovels go in the ground and soil moves
 - Significant design work went into the project to minimize the unknowns before construction
- The civil construction team acted expeditiously to find solutions whenever issues arrived, keeping corridor neighbors at the heart of decisions



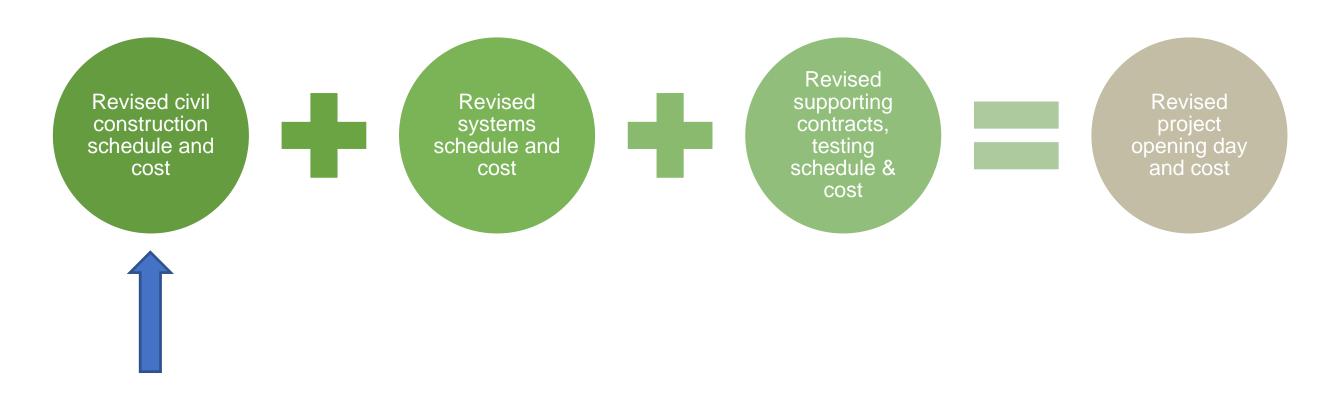
Kenilworth LRT tunnel excavation

Civil construction cost and schedule

- 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: Current step



MORE INFORMATION

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