



Metropolitan Council Meeting

Presenters:
Jim Alexander and Nick Thompson

January 26, 2022



Today's topics

- Background: civil construction challenges
- Civil construction settlement agreement process and framework
 - Agreement framework
 - Schedule
 - Budget and funding implications
- Council action

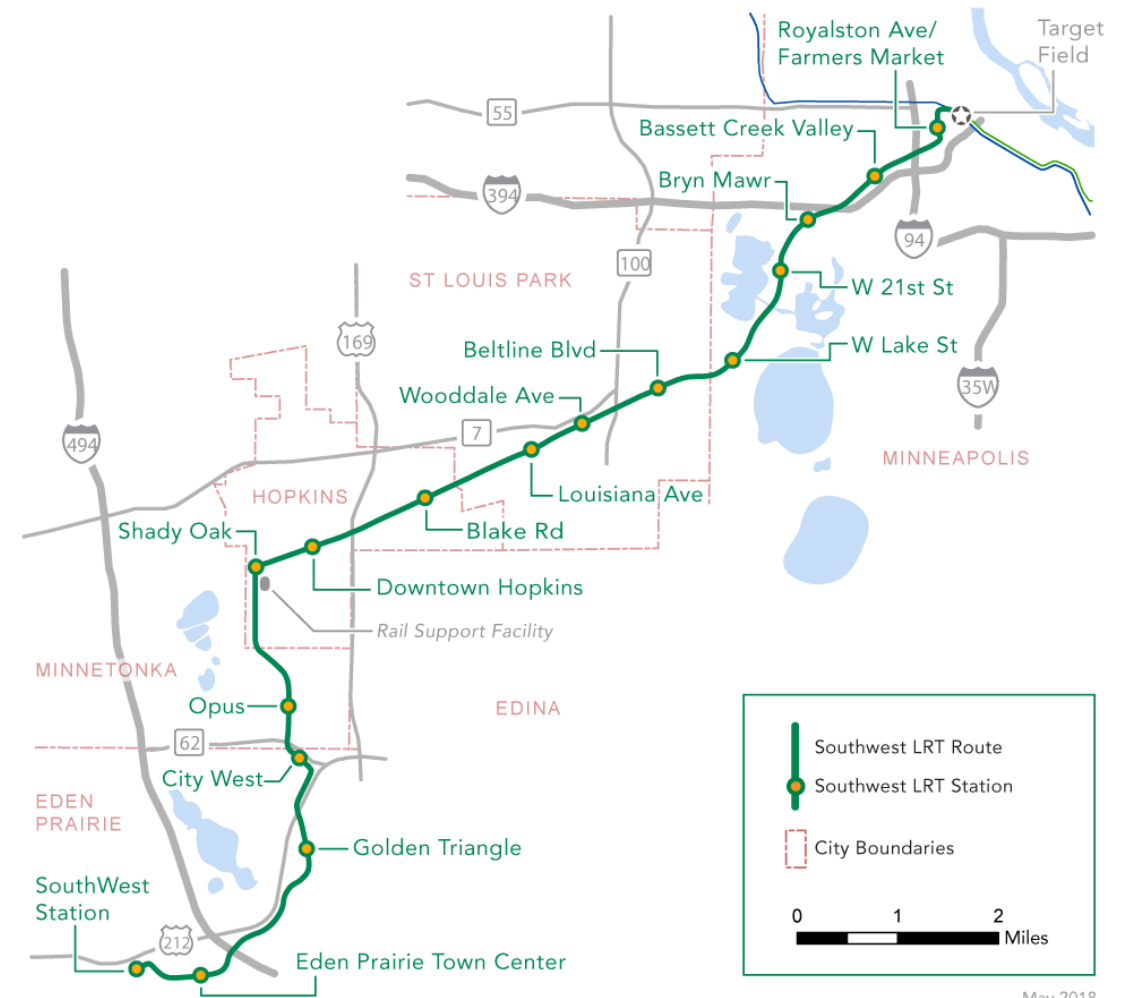


Project Construction Background

Jim Alexander
Green Line Extension Project Director

Project scope

- 16 new LRT 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
- Track: ~182,000 TF
- 7.8 mi shared LRT and freight rail corridor
- Trail reconstruction

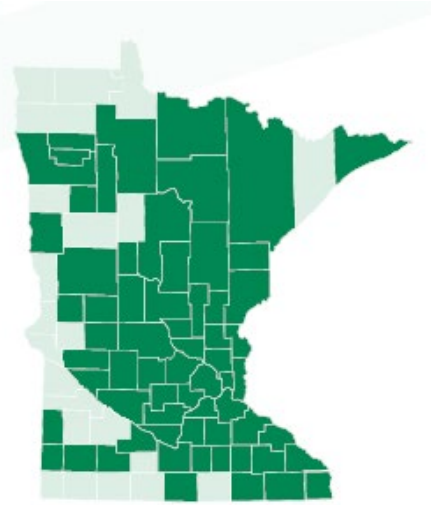


Statewide economic benefits

- 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



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



LRT construction sequencing

✓ 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

~2%
Complete



Systems

- Overhead catenary
- Safety & security
- Ticket vending

Prior to
revenue
service



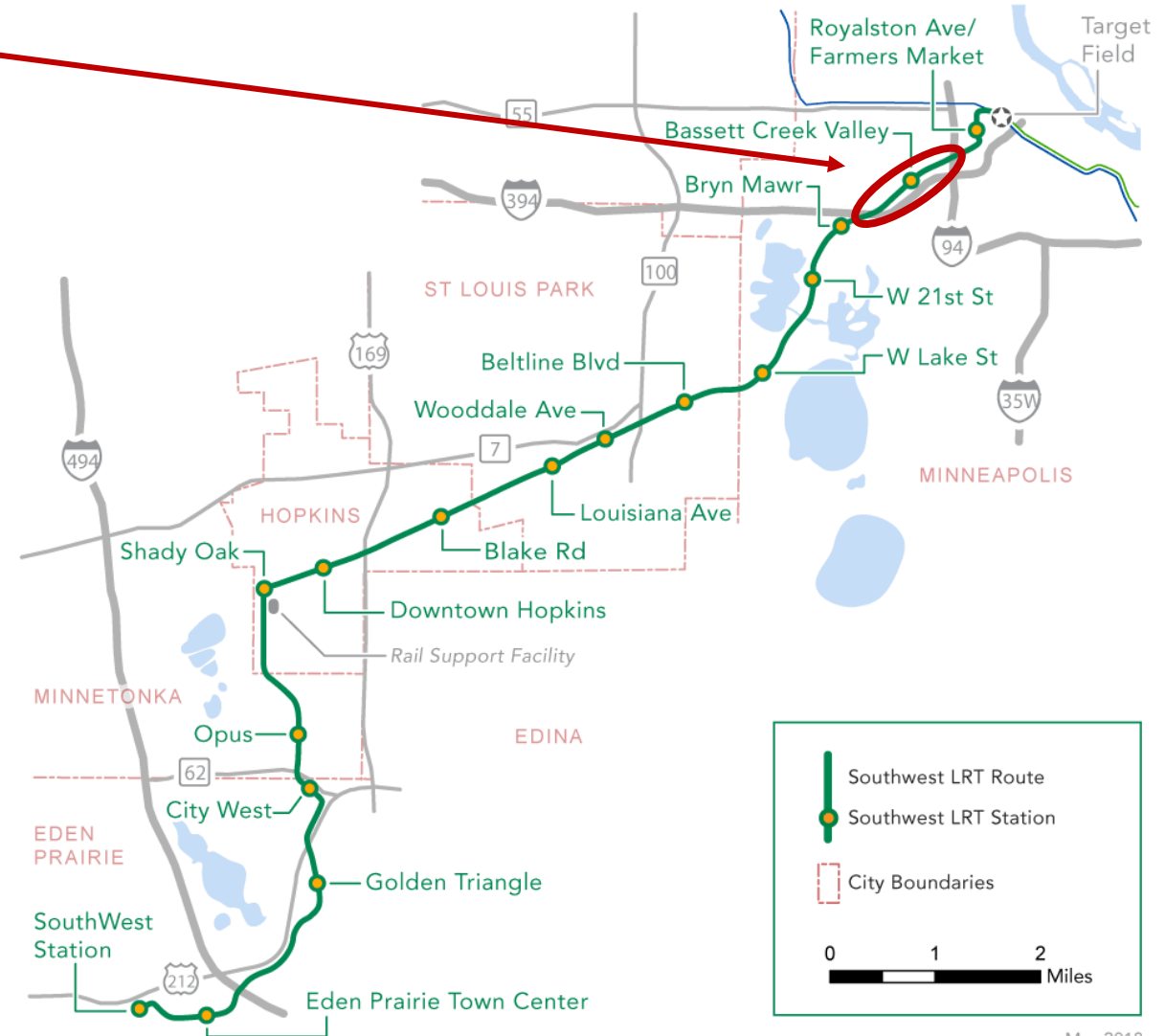
Testing

- Safety
- Comms
- Operator training

Outreach & Communications

Civil construction challenges: key issues

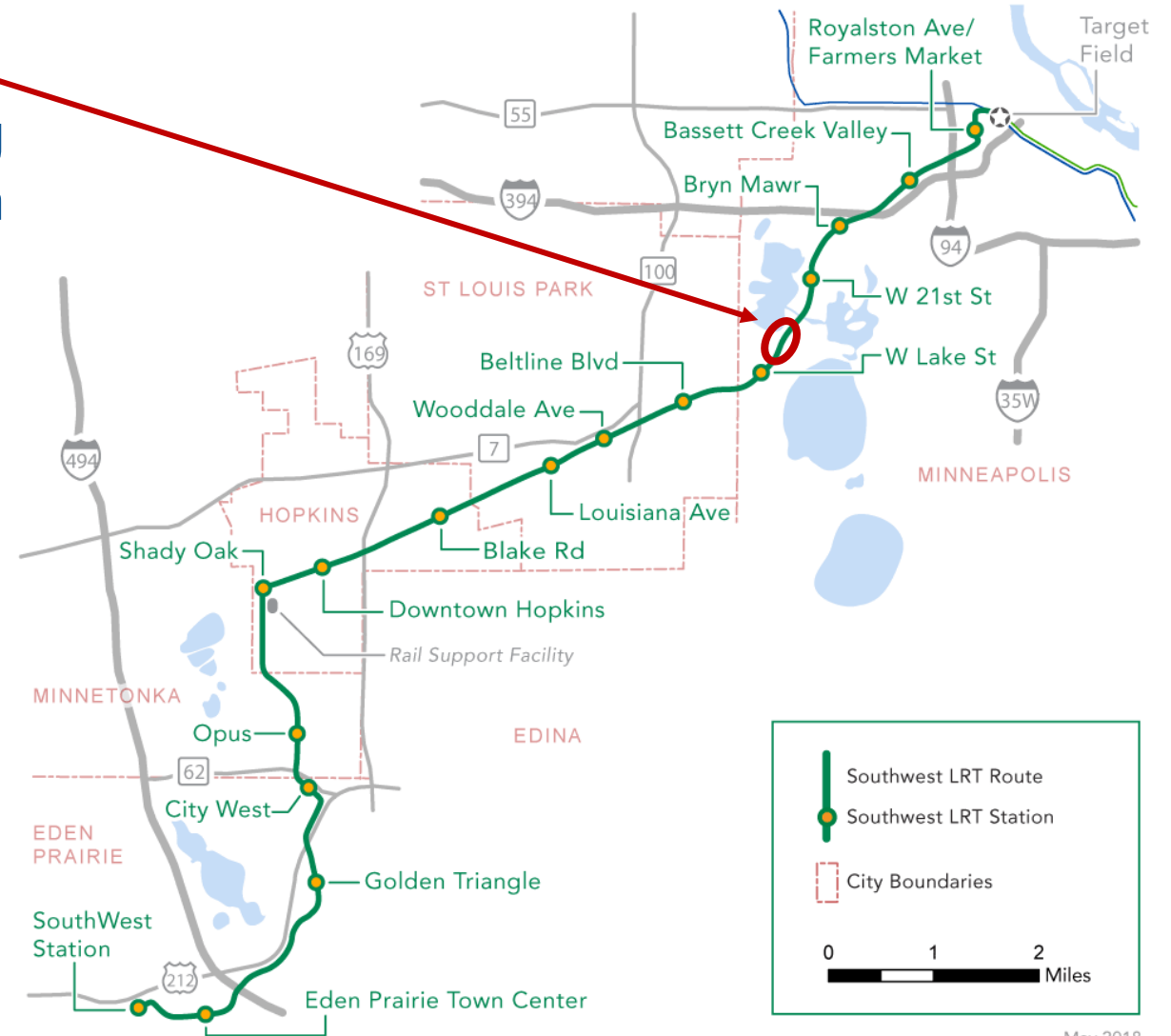
- Corridor protection wall
 - Required per BNSF agreement
 - Required environmental clearance which was completed after civil construction contracting
 - Added to the civil construction contract by change order
 - Adds significant time to the construction schedule in Minneapolis



May 2018

Civil construction challenges: key issues

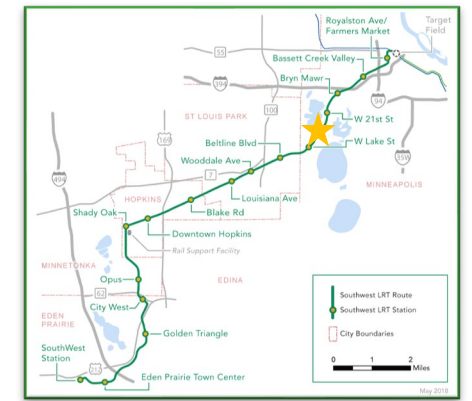
- Secant pile (retaining) wall
 - Unforeseen soil conditions (settling during initial tunnel construction) necessitated an alternative construction method
 - Impacts tunnel construction sequencing
 - Added to the civil construction contract by change order
 - The Kenilworth tunnel was already one of last civil construction items to be completed, even before the addition of the secant wall
 - This was a major change that sets the overall completion of civil construction due to complexity of construction involved



Kenilworth LRT tunnel, Minneapolis



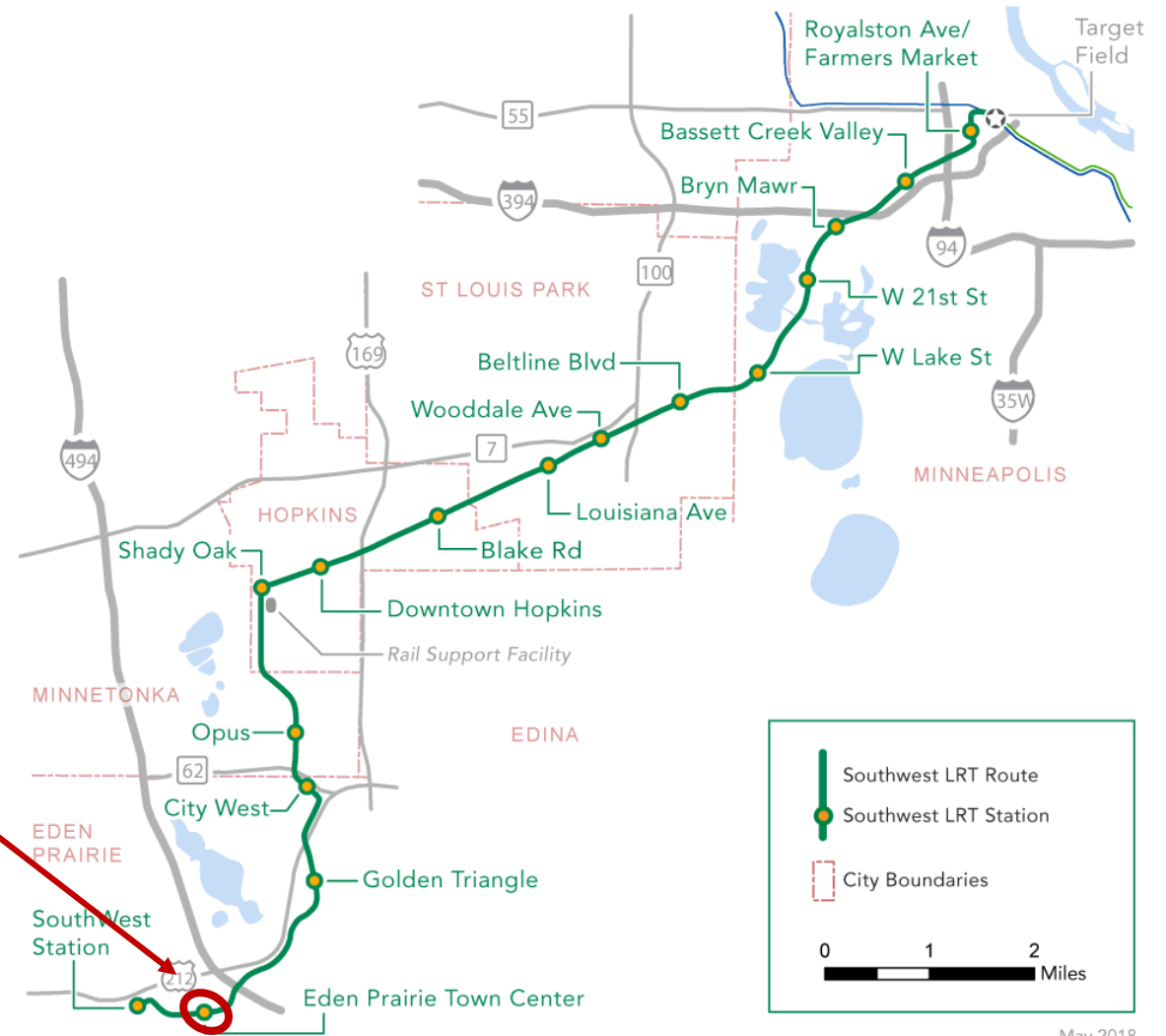
- Tunnel excavation north of secant pile wall (left)
- Secant pile installation (below)



Civil construction challenges: key issues



- Eden Prairie Town Center Station
 - Added to the civil construction contract by change order
 - Delayed construction elements in the west



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 acts expeditiously to find solutions whenever issues arrive, keeping corridor neighbors at the heart of decisions



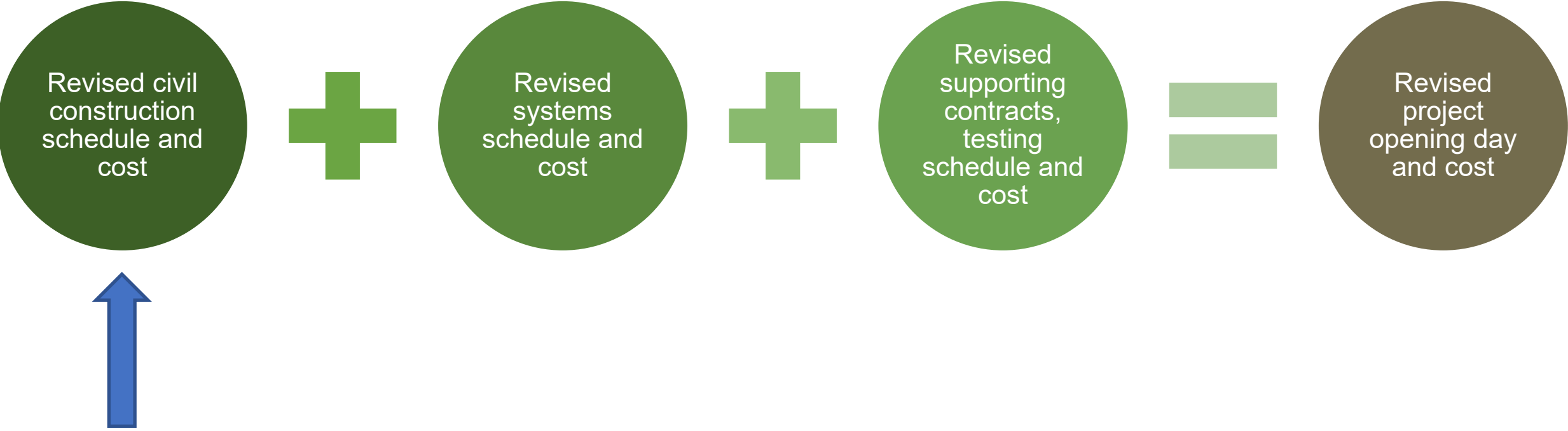
Kenilworth LRT tunnel excavation

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



Civil Construction Process and Settlement Agreement Framework

Nick Thompson
Deputy General Manager, Capital Programs

Civil agreement framework: process

- With the introduction of these civil construction issues the project team took proactive measure to address construction challenge
 - Hired independent experts to verify costs and assist in settlement negotiation

Civil agreement framework: overview

- Council will be asked to authorize the execution of the agreement
- Key principles in agreement framework
 - Establishes a dispute resolution process
 - Ensures disputes are resolved quickly to keep construction moving forward
 - Ensures costs are properly vetted and documented
 - Helps constrain costs and schedule
 - Establishes a new civil construction schedule
 - Defines a payment schedule for costs
 - Avoids potential litigation

Civil agreement framework: sequencing

- Establishes a completion date for civil construction
- Realigns the sequence for which construction segments are completed and turned over to the systems contractor
 - Avoids delay by turning over segments of the project to the systems contractor as they are completed
 - Allows much of the systems work and some testing on other segments of the project to be completed while these major scope additions are under construction

Civil agreement framework: schedule

- 34 months will be added to the civil construction schedule
- Kenilworth LRT tunnel will be the last item completed



Crews pour the Kenilworth tunnel leveling slab

Civil agreement framework: cost

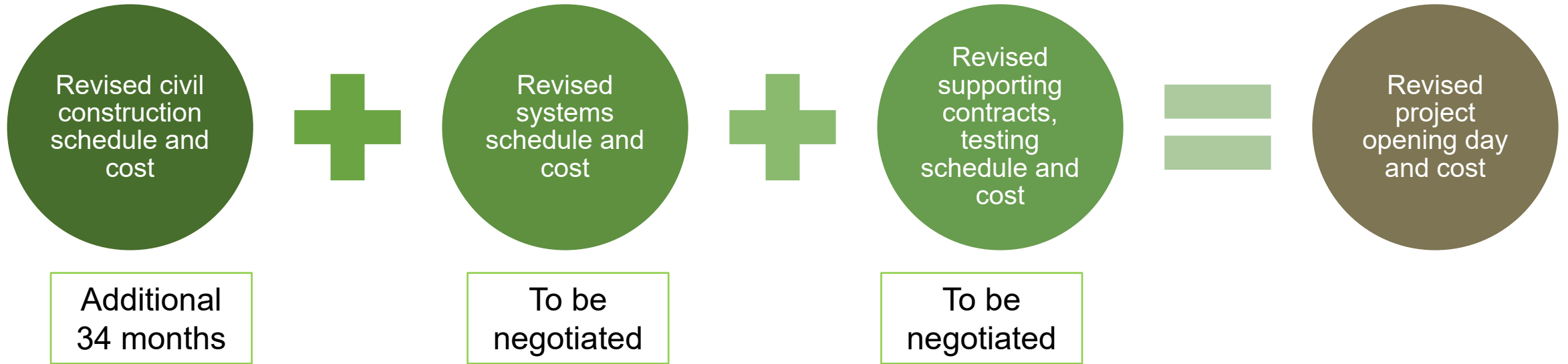
- The Council and contractor will utilize the dispute resolution process to resolve costs in the following categories:
 - Extended performance costs
 - Costs the contractor incurs because they are on the job longer than anticipated
 - Labor and material escalation
 - Subcontractor costs
 - Close out known change orders
 - Impacts to the productivity of the work performed to date

Council Action

Nick Thompson

Deputy General Manager, Capital Programs

Project costs & schedule



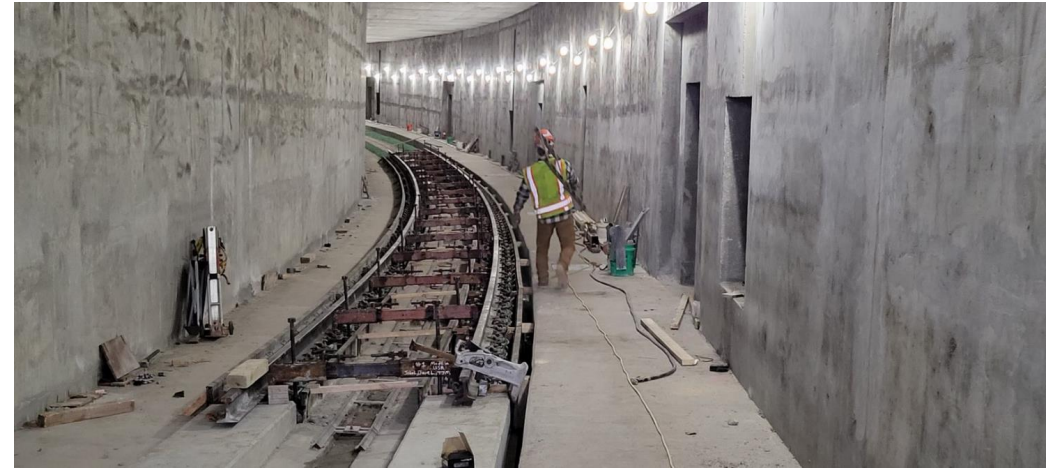
- Revised project costs will be known when all agreements are finalized
- Project opening day in 2027

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 identify available funding solutions
 - 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 to \$190 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

Business item

- Negotiate and execute a settlement agreement
- Council and LMJV will enter a zero-cost change order to establish construction completion dates and to extend the civil contract time
- Make payments in an amount not to exceed \$40,000,000 within 60 days of execution
- Resolve disputed matters through negotiations or an evaluative mediation process in an amount not to exceed \$210,000,000 inclusive of the \$40,000,000 payments
 - Costs are within the current project budget
- Make future payments as defined in the agreement

Next steps after Council action

- The settlement agreement will proceed to the Executive Change Control Board on January 28 to advance the final stages of the settlement process
- At a future meeting, the Executive Change Control Board will review and approve the final negotiated settlement agreement and the use of \$210,000,000 in contingency

MORE INFORMATION

Website: GreenLineExt.org

Email: swlrt@metrotransit.org

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

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