Northgate Link Extension Overview

EnoMAX Site Visit

August 8, 2019







Project Overview

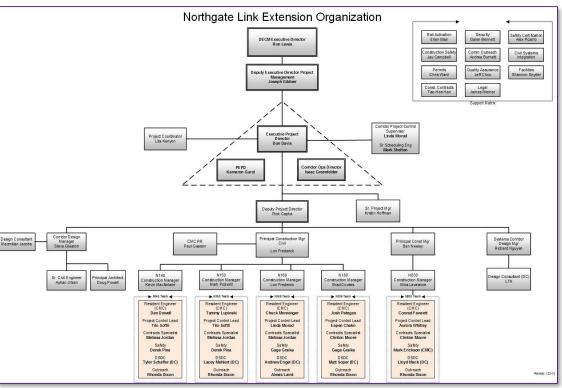


- ➤ 4.3 mile extension from UW to Northgate
- ➢ 3 light rail stations & 1 parking garage
- Fast and reliable service in congested I-5 corridor (14 minutes from Northgate to Downtown)
- Estimated over 60,000 weekday boardings (2030)
- Serves academic facilities (North Seattle College, Roosevelt High School and UW)
- Serves active business districts at Northgate, Roosevelt and U District
- TOD projects are moving ahead at all three station sites



Project Organization

- Integrated Sound Transit Team:
 - ~25 dedicated ST staff
 - ST support staff
 - Design consultants
 - Construction management consultants
 - 11 separate construction contracts (5 of which are still currently active)

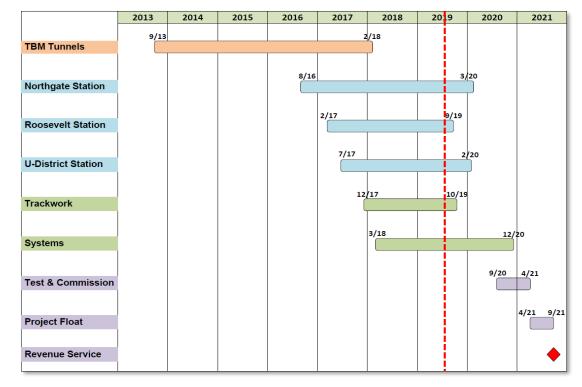




Project Budget & Schedule

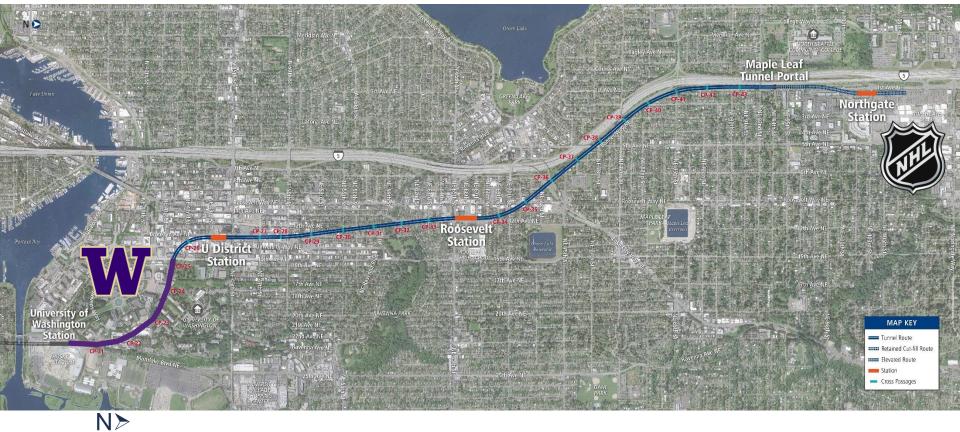
- > \$1.9B Budget
- Construction Schedule:
 - Started 2013
 - ➤ Currently 85% complete
 - Scheduled to open for Revenue Service in September 2021

4.5 million labor hours to-date!





Project Alignment





N125 – TBM Tunnels UW Station to MLP

Contract Overview:

- Design-Bid-Build contract with JCM Northlink LLC
- Scope of Work: portal structure, 2 station box excavations, 3.5 miles twin 18-ft 10-in tunnel, 23 cross passages, tunnel invert, walkway & raceways, tunnel lighting and dry standpipe
- Contract Amount: \$500m
- Construction Start: September 30, 2013
- Construction Complete and Warranty Inspections Complete







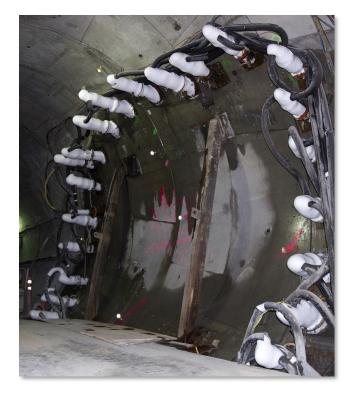
N125 – TBM at Roosevelt Station



N125 – TBM Removal at UWS



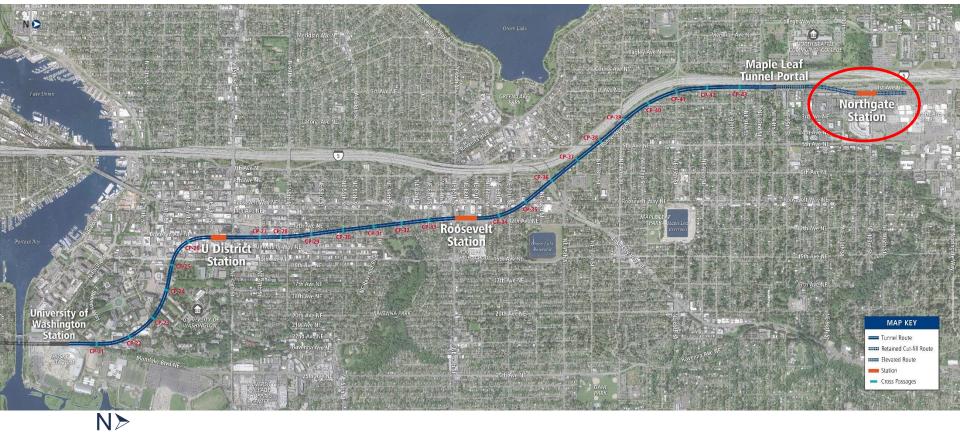
N125 – Cross Passage Construction







Project Alignment





N160 - Northgate Station, Guideway, Garage

Contract Overview:

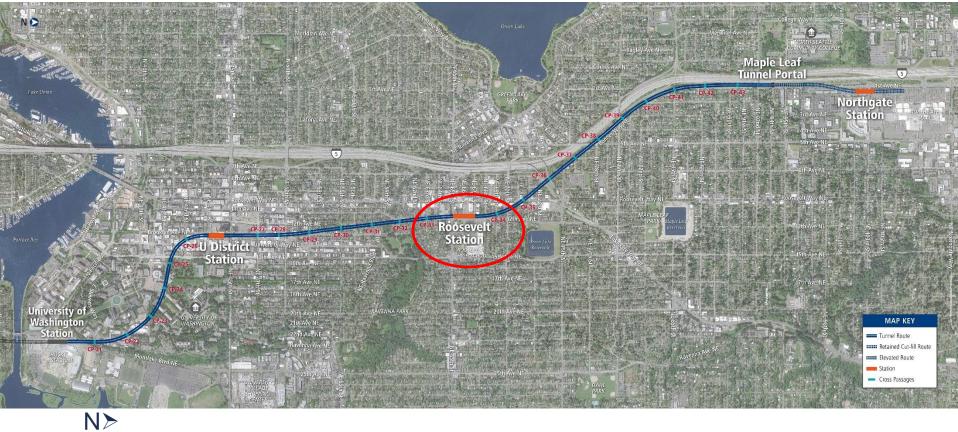
- Design-Bid-Build contract with Absher Construction
- Scope of Work: 0.7 mile elevated guideway, elevated station, 450-stall parking garage
- Contract Amount: \$184m
- Construction Start: October 18, 2016
- Scheduled Completion: Q2 2020
- Construction 77% Complete







Project Alignment

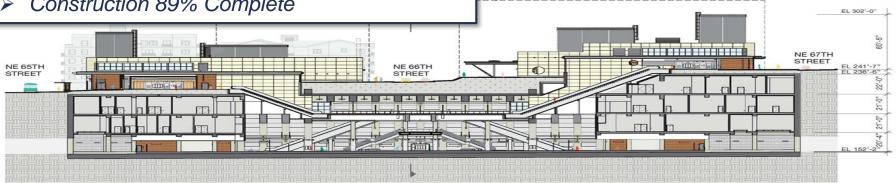




Contract Overview:

- GC/CM contract with Hoffman Construction
- Scope of Work: 90-ft deep, 480-ft long, 4-level underground station; 2 head houses
- Contract Amount: \$160m
- Construction Start: February 2017
- Scheduled Completion: Q4 2019
- Construction 89% Complete





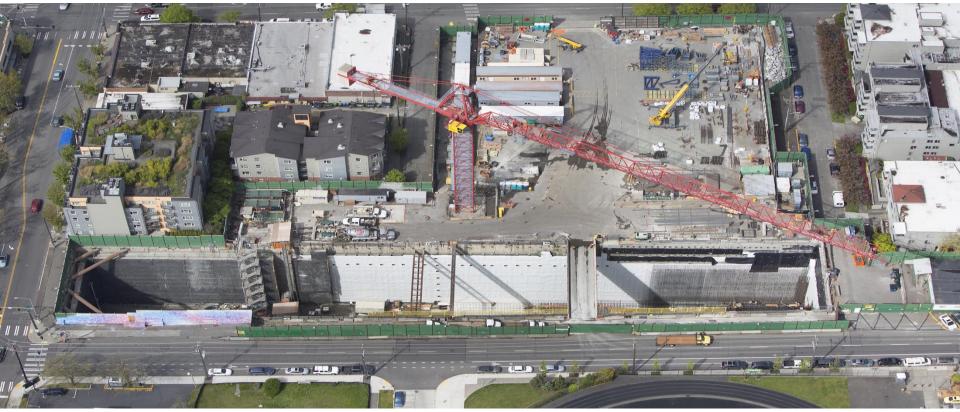




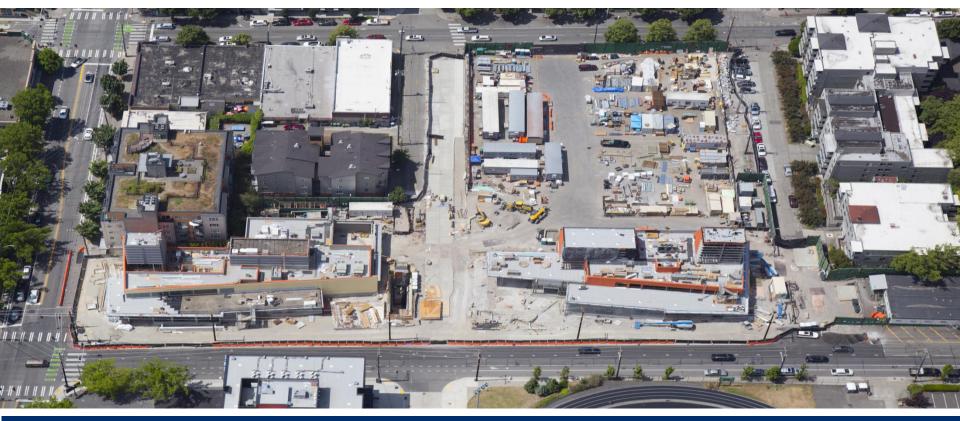






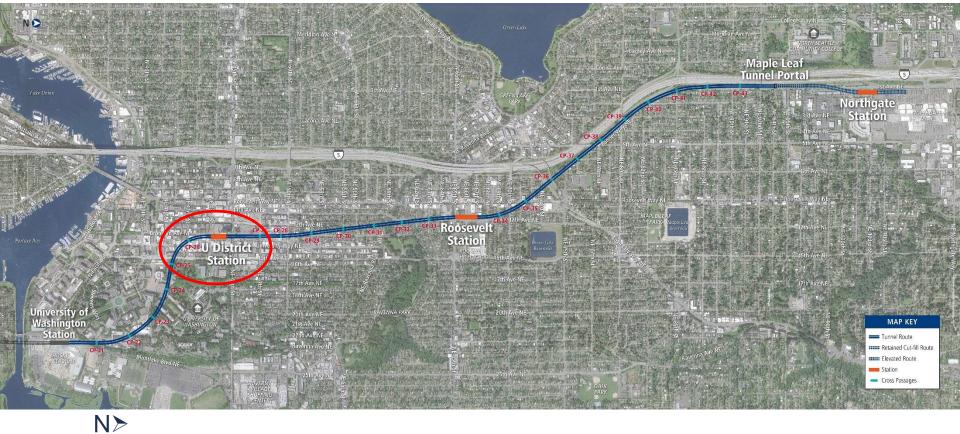








Project Alignment

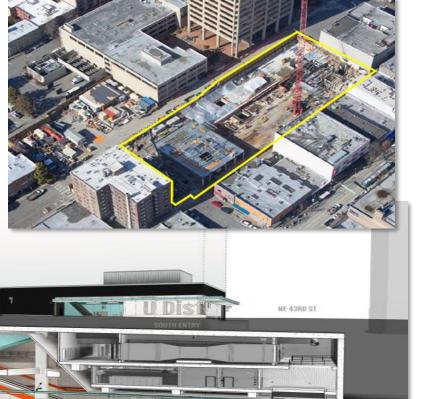




N140 - U District Station

Contract Overview:

- ➢ GC/CM contract with Hoffman Construction
- Scope of Work: 80-ft deep, 400-ft long, 4-level underground station; 2 head houses
- Contract Amount: \$164m
- Construction Start: July 2017
- Scheduled Completion: Q2 2020
- Construction 76% Complete





N180 - Trackwork

Contract Overview:

- Design-Bid-Build contract with Stacy and Witbeck
- Scope of Work: Trackwork (plinth + rail) for \geq alignment; 5 Hz & 16 Hz floating slabs

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- Contract Amount: \$75m \geq
- Construction Start: August 2016
- Scheduled Completion: Q4 2019

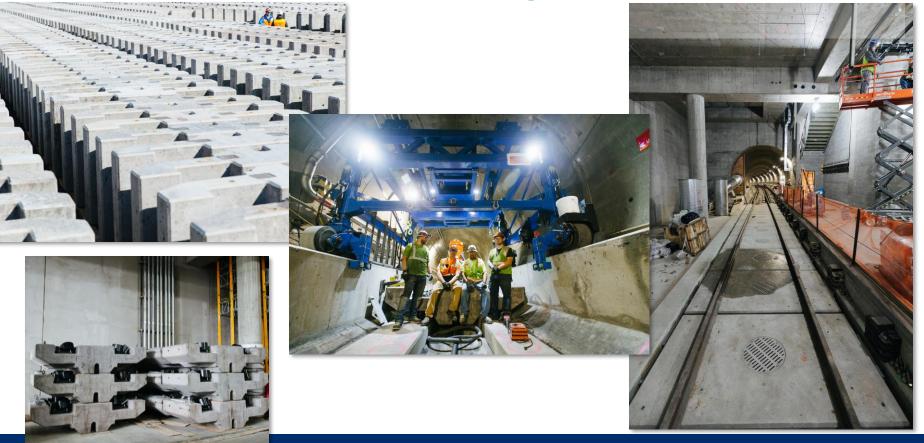
District Station

Construction 95% complete





N180 – Trackwork – Floating Slabs

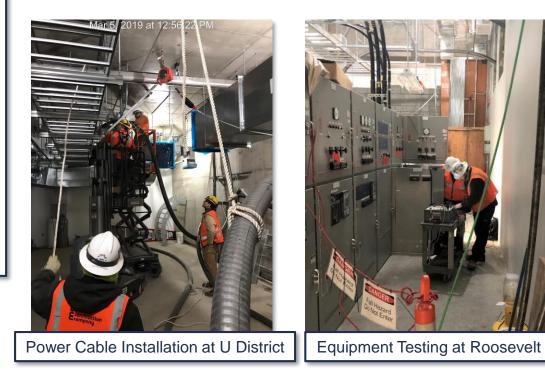




N830 - Systems

Contract Overview:

- Heavy Civil GC/CM contract with Mass Electric (MEC)
- Scope of Work: Traction Power, Communications, Signaling
- Contract Amount: \$105m
- Construction Start: Q2 2018
- Scheduled Completion: Q4 2020
- Construction 39% complete





Construction Contract <u>Procurement</u>

- 3 construction contract delivery methods currently used by Sound Transit:
 - Design-Bid-Build (8 Northgate Link Contracts)
 - GC/CM (3 Northgate Link Contracts)
 - Design-Build (not used on Northgate Link)



Construction Contract <u>Management</u>

- Safety Risks and Challenges
 - Construction from elevations Aerial Guideway
 - Subcontract Coordination
 - Work on trackway
 - Site Security
 - Complacency



Coordinated Installation Plan (CIP)
> 26 major interface points between 6 Contracts

Contractually mandated meetings between interfacing contractors:

- Safety "Care and Custody"
- Schedule
- Spatial Planning



Construction Contract Transition to Operations (T2O)

- > Early engagement of Operations and Facilities
- > Tracking of Issues
- > Issue Resolution
- Lessons Learned







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