



Traction Power Substation Modernization Project

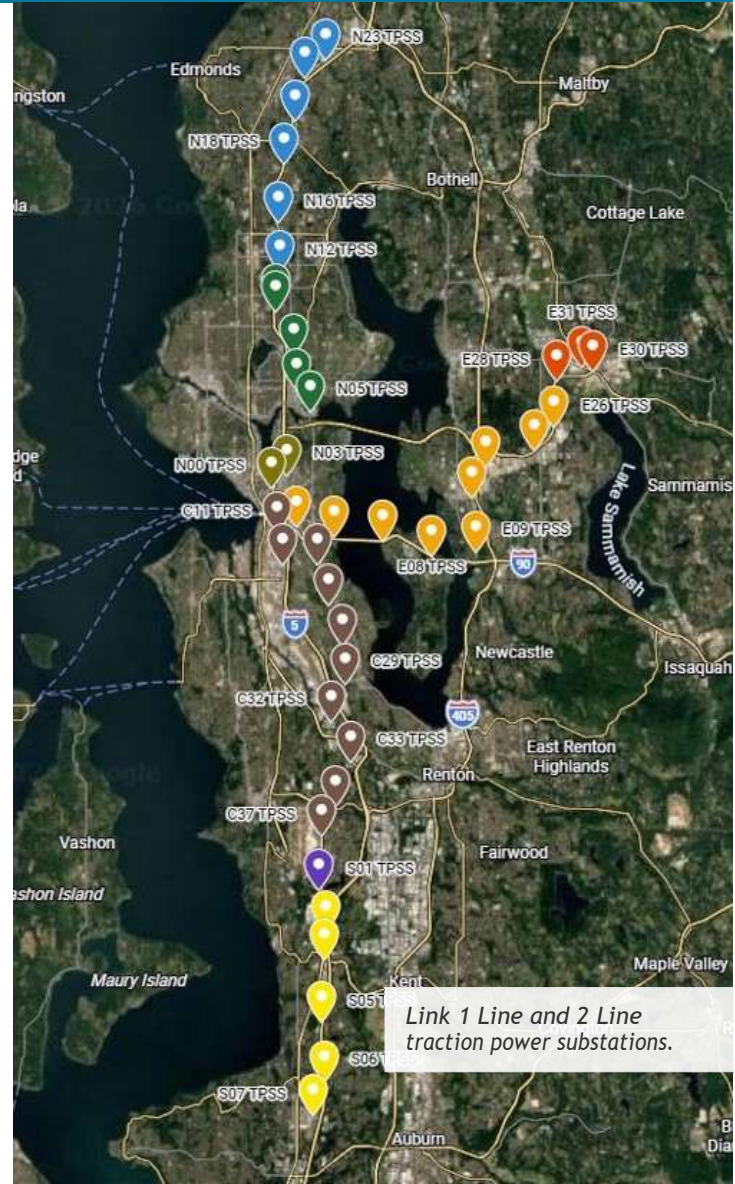
September 2026

About the project

The Traction Power Substation Modernization Project will modernize, standardize, and fully integrate all traction power substations (TPSSs) in the Link light rail system as part of Transit Operation's asset management program.

Project scope:

- Install local control and monitoring system (LCMS) cabinets where needed.
- Install rail to ground (R2G) cabinets where needed.
- Install smoke and heat detection where needed.
- Upgrade existing LCMS human machine interface to industrial PC.
- Upgrade LCMS programmable logic controllers (PLC).
- Add hot spare PLC.
- Provide continuous monitoring, recording, and reporting of R2G voltage and current.
- Upgrade AC protection relay devices.
- Upgrade DC protection relay devices.
- Upgrade legacy Profibus network to Profinet based architecture with Layer 3 routing capabilities.
- Integrate modernized systems with the existing Supervisory Control and Data Acquisition (SCADA) system.
- Install roof conduit racks.
- Re-design and install Fire Control Center Emergency Trip Switch (FCC-ETS) buttons.
- Relocate outdoor communications cabinet inside TPSS.
- Upgrade communications cabinets
- PLC programming.



**Estimated contract cost (all phases):
\$40 million to 50 million**

Target project timeline

WE ARE HERE



PLANNING
2026



DESIGN
2027

BUILD
2031



**UPGRADES
COMPLETE**



2031

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Industry input

Sound Transit is seeking feedback from the design and construction industry to help refine the project scope, procurement approach, contract requirements, and schedule. Input received during market outreach will be considered as the procurement strategy is developed.

We encourage interested firms to provide feedback on:

- ✓ Market interest.
- ✓ Delivery and procurement strategy.
- ✓ Market capacity, equipment, and schedule.
- ✓ Risk, pricing, and owner-furnished information.

Substation sites

Sound Transit has 45 existing TPSSs of varying ages that will be included in the project. These include substations along the 1 Line and 2 Line, and at two maintenance facilities.



Submit your feedback

Help us refine project scope, procurement approach, requirements, and schedule.

Contact:

Michele Ko, Project Manager

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Disclaimer: This information is provided for market outreach purposes only. Project scope, schedule, and procurement approach are subject to change.



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