

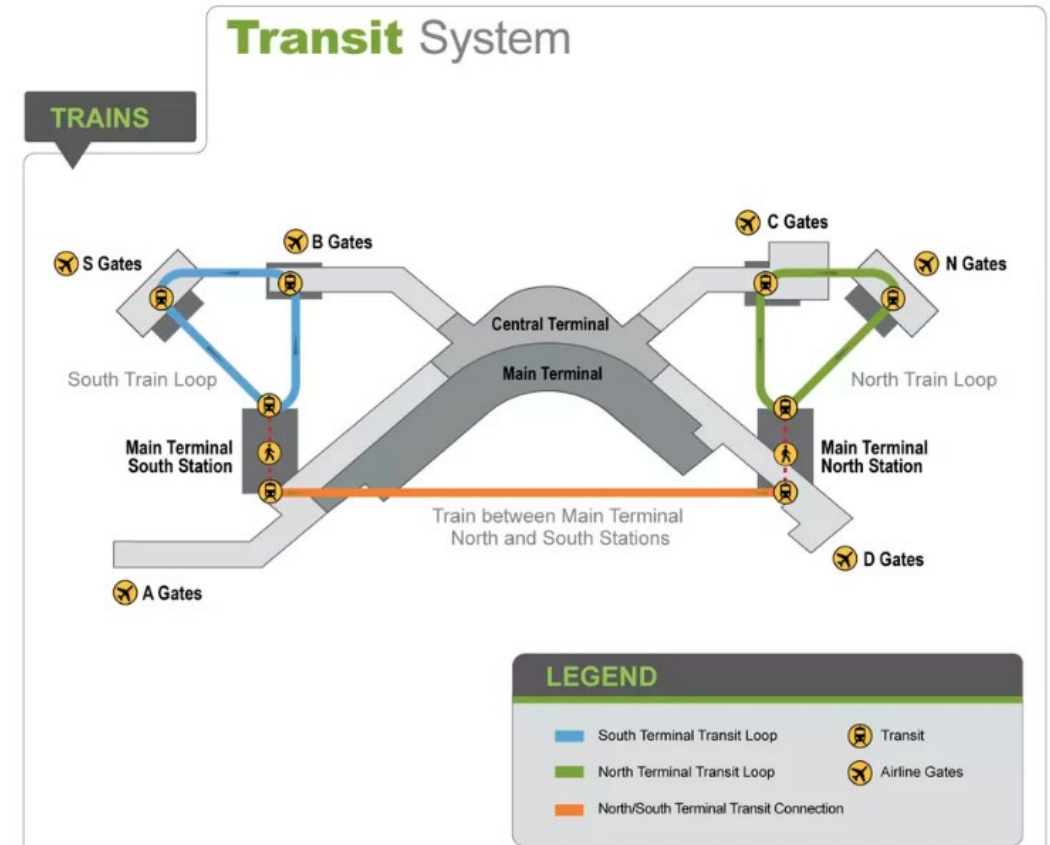
Satellite Transit System (STS) Controls Renewal and Replacement Procurement and Construction Authorization

Seattle-Tacoma
International Airport



The STS Moves Public to Airport's N & S Satellites

- Design and construction: 1969 - 1972
- Last major upgrade: 1999 - 2003
- 2nd Airport APM in the World
- 6 Stations with 1.7 Miles of track
- Carried 28 Million Passengers in 2019
- Replacement System needed by 2034



Project Purpose

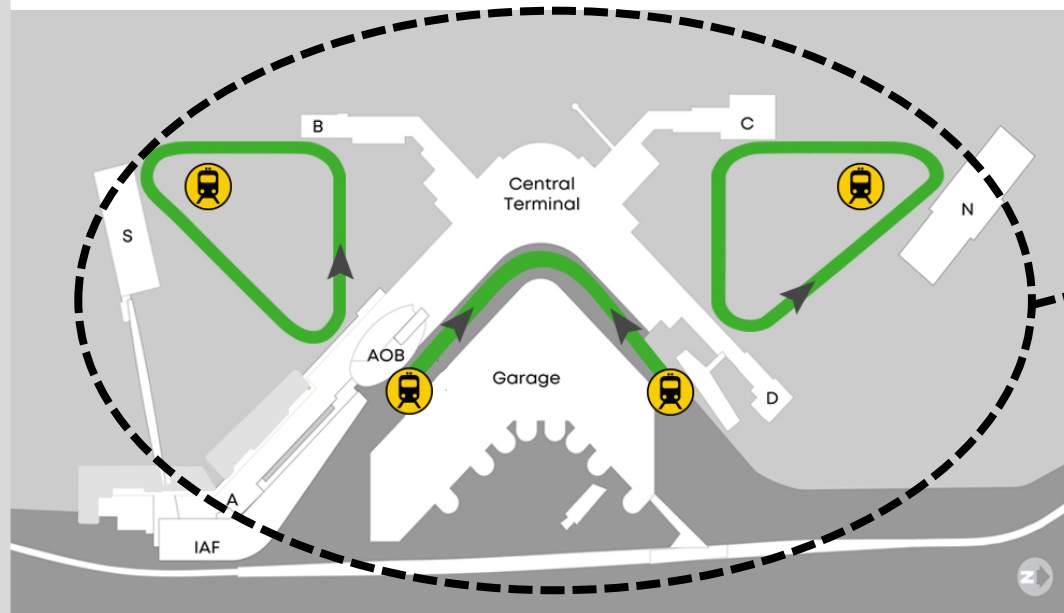
Renewal and replacement project for the STS's Automatic Train Control (ATC) sub-system and associated software, hardware & networks

- Reduces risk by replacing critical 20-year-old end of life & obsolete components
- Optimizes STS system capacity by allowing increased passenger throughput
- System recovery time improved



STS Controls Project – Scope

Construction Phase I

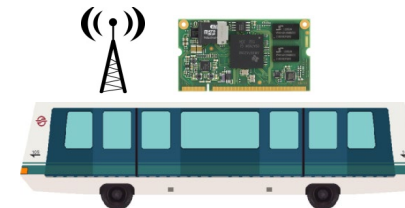


Fiber/ Electrical Infrastructure

Goods & Services Phase 2



- ATC System
- Software
- Hardware
- Network
- Radios
- Certification



VATC X 21 Cars

Customer Experience

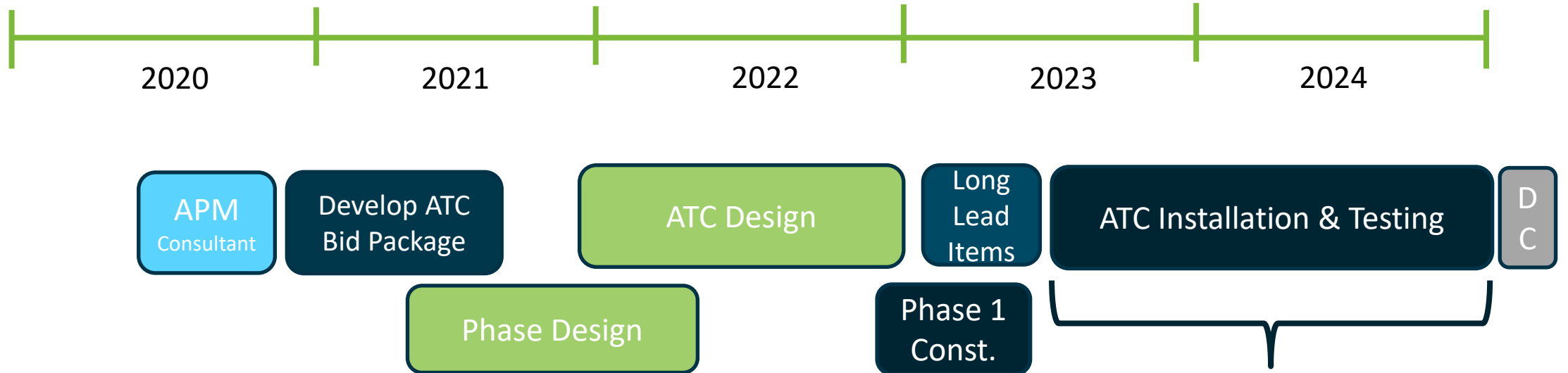
- Planning for STS shutdowns from 11PM to 5 AM
- Dedicated Wayfinding Staff
- Contracted Bus Support



Risks and Operational Impacts

RISK	DESCRIPTION	PROBABILITY	IMPACT	MITIGATION PLAN
Safety	Safety is the utmost priority. An exposed 600V power rail, limited working area and driverless moving train cars pose significant dangers to workers within the STS tunnels.	Low	High	Both vendors and contractors will be required to adhere to stringent safety protocol for access and working within the STS tunnels.
Extended STS outages	Major impacts to Satellite operations with extended STS outages	Medium	High	Busing will be provided for STS outage periods. The current controls system will remain in place until the new system is completely tested and certified for passenger service.
Procurement method (single supplier negotiations)	The Controls System is proprietary to the STS Manufacture. Staff issued a sources sought RFI to determine that only Bombardier Transportation could provide the replacement controls.	Medium	Medium	The Port is utilizing a Specialist Automated People Mover Consultant to develop scope and pricing documents to evaluate pricing. Staff is analyzing recent Controls Upgrades from other Public Owners.

Project Timeline



Commission Authorizations

APM Consultant / Design	July 2020
Goods & Services/ Construction	July 2021

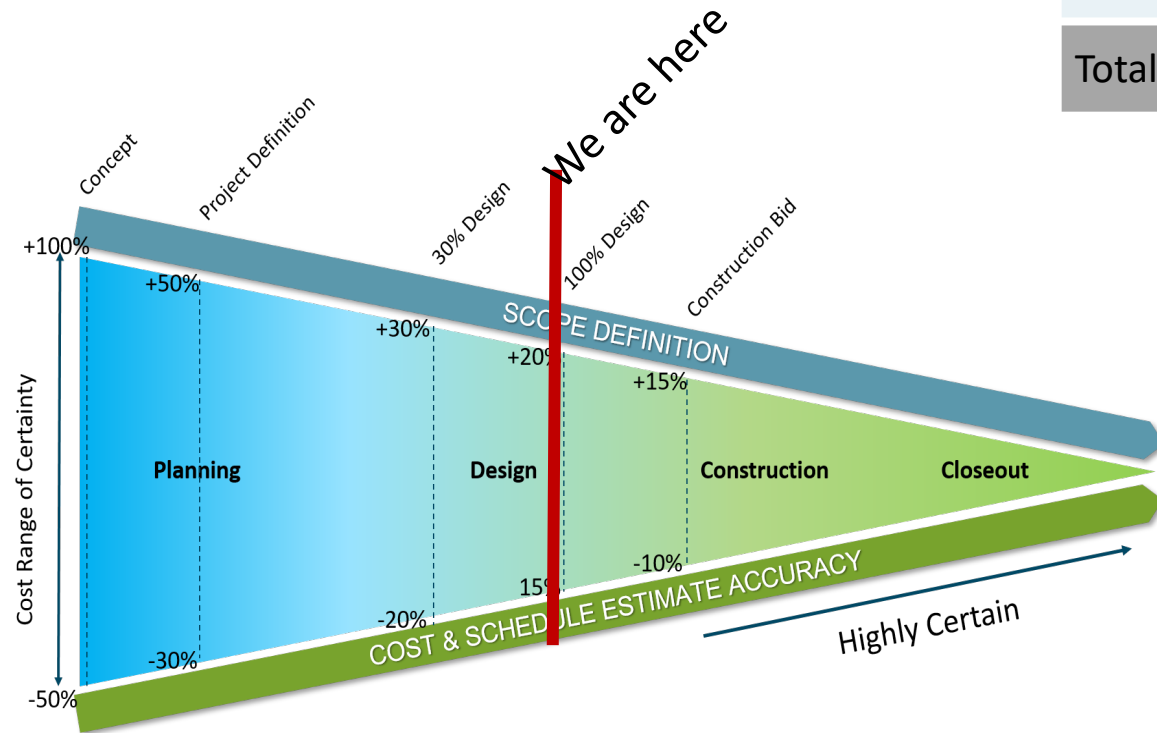
Phase 1
 1 to 2 months
 Satellite Tunnel Impacts
 Nightly Busing Operation

Phase 2
 12 to 15 months
 Satellite Tunnel Impacts
 Nightly Busing Operation

D
C

Authorization

Cost Breakdown	This Request	Total Project
Design	\$0	\$9,000,000
Construction	\$7,740,000	\$7,740,000
Equipment Procurement	\$58,500,000	\$58,500,000
Support Services	\$3,000,000	\$3,000,000
Total	\$69,240,000	\$78,240,000



Cost Range: \$67M - \$95M

STS Asset Management - Long Term

Renewal or Replacement to the Satellite Transit System will be required in the next 10 to 15 years.

- Requires study to evaluate alternatives and implementation (Q4 2021 Start)
- \$600M - \$800M for a new APM system
- Evaluate alternate technologies
 - Autonomous vehicles
 - High-speed moving walkways
- Alternate passenger movement to Satellites
 - Busing
 - Tunnel / bridge

Questions?