Item No.: 9a_Supp Meeting Date: December 11, 2018 Corrected: December 13, 2018 (slide 15)

Capital Improvement Projects

Third Quarter Report 2018



100 Capital Improvement Projects <u>Overall Status of Projects</u>

- 100 Total Projects in report (87 CDD, 13 ICT)
- 47 Projects are within or ahead of target schedule and budget
- 46 Projects have either target schedule or budget off with 11 new Reportable Variances for this Quarter.
- 7 Projects have both target schedule and budget off with 2 new Reportable Variances for this Quarter.
- 3 Projects are Substantially Complete

CDD Projects by Status, by Quarter



Two new red and 10 new amber

CDD Projects by Dollar Value



Two new projects off schedule & budget; 9 new projects off schedule and 1 off budget

Overall Construction Cost Index (January 2009 = 100)





High Growth	 Electrical Systems (5.7%) Gypsum Board Systems (5.0%) 	
Moderate Growth	 Deck Formwork (2.8%) Earthwork (2.6%) HVAC Systems (1.1%) 	
Flat	 Entrances/Storefronts Struct. Steel/Metal Decking Plumbing Systems Electric Traction Elevators Steel Framing/Erection Finish Carpentry/Millwork 	 Roofing Systems Fire Protection Systems Flooring/Carpeting Unit Masonry Reinforcing Steel Cast-in-Place Concrete
		 Cast-in-Place Concrete 4.7% of the index) declined -0.29

Electrical Systems (5.7%) and Gypsum Board Systems (5.0%) experienced particularly strong growth in the latest quarter compared to just one quarter ago.

Mortenson Seattle Building Component Trends

Mega Project Commission Updates

- International Arrivals Facility
 - Last Update to Commission: September 25, 2018
 - Document Set Link <u>here</u>
 - Total Budget: \$968.4M
 - Expected Project Completion: Q4 2020
- North Star / North Satellite
 - Last Update to Commission: November 27, 2018
 - Document Set Link <u>here</u>
 - Total Budget: \$672.1M
 - Expected Project Completion: Q3 2021
- Baggage Optimization
 - Last Update to Commission: October 23, 2018. Next update: January 22, 2019
 - Document Set Link here
 - Total Budget: \$445M
 - Expected Phase 1 Completion: Q4 2019

Mega Project Updates

Aviation Project Summary – OLD VARIANCES

Projects with OLD Schedule and Budget Variances:

- IWS Segregation Improvements
- Electrical Utility SCADA
- Emergency Generator Controls

Projects with OLD Schedule or Budget Variance

- 160th GT Lot
- Highline School Insulation
- GSE Electrical Charge Stations
- Security Lane Exit Phase 2
- Checked Bag Recap Optimization
- Construction Logistics Expansion
- C3 Holdroom Expansion
- Concourse B and C Roof Replacement
- North Terminal Utilities Upgrade
- Concourse C New Power Center
- Auburn Mitigation Road Removal
- North East Redevelopment Area Program

- Concourse B Holdroom
- Concourse D Hardstand Terminal
- SSAT Structural Improvements
- GBAS Upgrade
- ADR Kiosk Expansion Project
- Terminal Security Enhancements
- Delta Inflight Services TRA
- Central Terminal Enhancements
- Automated Screening Lanes Checkpoint Conversions
- Flight Corridor Safety Program Phase 1
- Flight Corridor Safety Program Phase 2 and 3

List of Projects with Old Variances

Aviation Project Summary

- Two projects with a new budget and schedule variance:
 - Wi-Fi Enhancement for Ramp and Terminal Delivery method evaluation impacting budget and schedule
 - Telecommunications Meet Me Room Coordination with IAF causing delay and potential budget increase
- One project with a new budget variance:
 - Passenger Loading Bridges (PLB) Renew and Replace Phase 2 In-ground utilities requiring modifications to support PLB Locations

Two projects with budget/schedule variance; One with a budget variance

Aviation Project Summary

- Eight projects with a new Schedule variance:
 - Lora Lake Apartment Remediation Lake fill re-design not approved for construction to start in 2018
 - Air Cargo Road Safety Improvements Design on schedule, but construction anticipated to take longer than originally planned
 - Central Terminal Infrastructure Upgrade Project is currently 90 days behind schedule, which may affect substantial completion; schedule being monitored for recovery
 - Concourse B Holdroom Holdroom is in use; Signage installation taking longer than expected
 - Safedock Upgrade and Expansion Scope change
 - ARC Flash Hazard Mitigation Delays due to resource constraints concerning consultant design
 - Parking Revenue Infrastructure RFP Technical document review taking longer than anticipated; Schedule being monitored for recovery
 - RCF Pavement Remediation Early works on time, but design has been delayed.

Aviation Projects Substantial Completion





Concourse B & C Roof Replacement

Aviation Projects Substantial Completion



South 160th St GT Building

Aviation Project Focus

Reconfiguration of Taxiways A/B/L/Q

- Currently Within Budget & Schedule
 - \$47.5M
 - Completion expected December 2018
- Approximately 80% Complete
- Acceleration Utilized Where/When Appropriate to Maintain Schedule
- Weather Continues to be the Major Risk



Taxiway Q



Taxiway A/B Reconfiguration

Taxiway Improvements

Aviation Project Focus

Renovate existing and build new restrooms

- Within Budget & Schedule
 - \$38.4M
- Split among five phases
 - Phase 1 Enabling Work Complete
 - Phase 2 Design Complete
 - Phase 3 FAA review underway
 - Advertise for Phase 2 construction in Q2 2019
- FAA review could take longer than anticipated



Concourse B, C, D Restroom Upgrades

Seaport Project Summary – OLD VARIANCES

Projects with OLD Schedule and Budget Variances:

- Shilshole Bay Marina Paving
- Shilshole Tenant Services Building

Projects with OLD Schedule or Budget Variance

- Fishermen's Terminal Redevelopment Phase 1
- FT Net Sheds 3,4,5 and 6
- Argo Yard Truck Roadway
- Terminal 46 Permit Mitigation
- East Marginal Way Grade Separation

Seaport Project Summary

One project with a new schedule variance:

• P69 Solar Panel is behind schedule due to Shoreline Master Use permit variance requirement by the City.

ICT Projects by Status, by Quarter



13 Projects – All on or under budget

ICT Project Summary – OLD VARIANCES

Projects with OLD Schedule or Budget Variance

- Parking System Replacement
- Vessel Moorage System
- Remote Data Center Business Continuity
- Airport Data Network Switch Upgrade
- Checkpoint Wait Time
- SEA Smartphone App

List of Projects with Old Variances

Information & Communication Technology Project Summary

- One project with a new schedule variance
 - Project Delivery System Functionality will be delivered every few months starting in Q3 2018 but features for optimum business value will not be completed until Q1 2019.

Information & Communication Technology Substantial Completion





Airport Communications Network Upgrade