

# Baggage Optimization

Fourth Quarter Briefing and  
Project Update



# AGENDA

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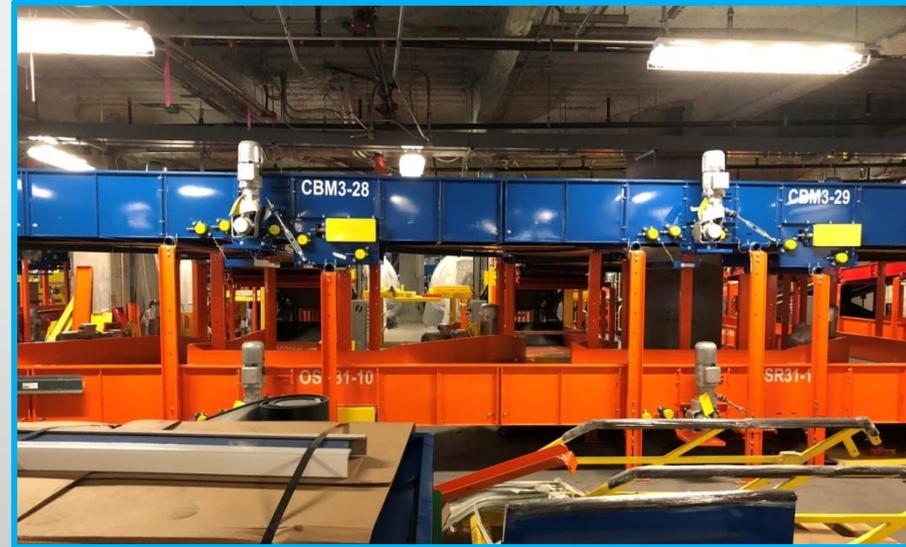
- Project Overview
- 2018 Quarter 4 Update
- Budget
- Schedule
- Challenges
- Accomplishments
- Progress
- Sustainability

# PROJECT OVERVIEW

- Replaces six individual baggage screening systems with a centralized system that optimizes the operation and functionality of the checked baggage system

## Key elements:

- 60 Million Annual Passengers (MAP)
- Reliability
- Redundancy
- Security

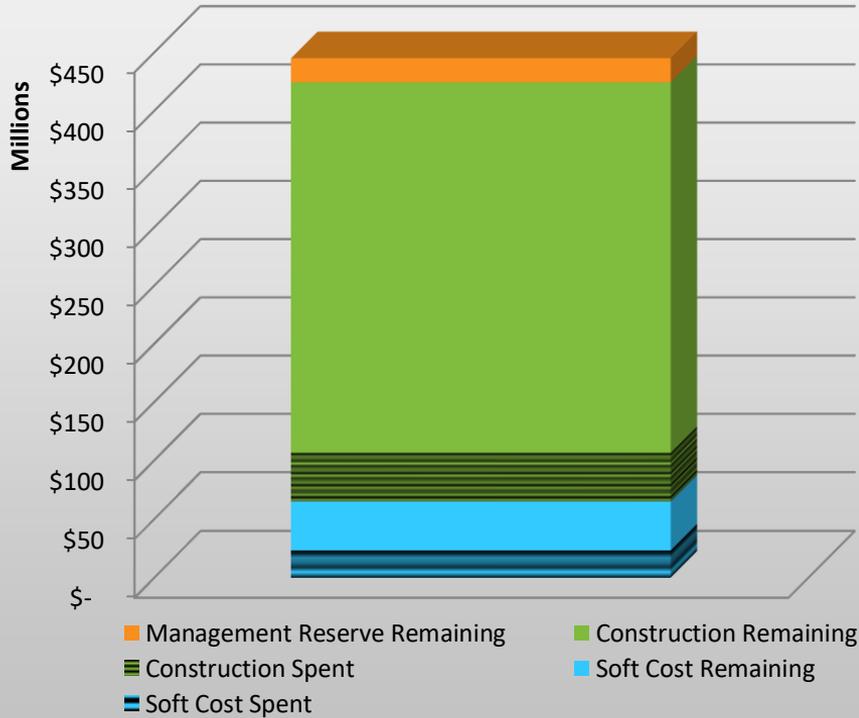


# 2018 Q4 Update

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- **Schedule**
  - Contractor Fell Behind on Submittals and Fabrication
- **Phase 1:**
  - Contractor Maintaining Two Work Shifts (Mon. through Sat.)
  - Conveyor Installation is ongoing (Critical Path)
- **Phase 2:**
  - 100% Design Documents completed
  - Permit set has been submitted to Building Department
  - Developing Phase 2 Bid Documents & estimate

# FINANCIAL PROGRESS REPORT

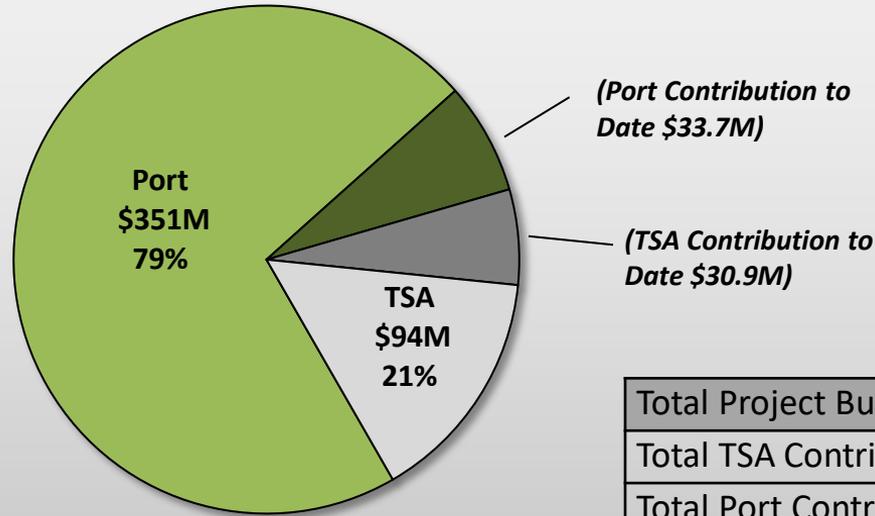


Authorization Summary	Capital	Expense	Total
Current Budget	\$444.90 M	\$0.15 M	\$445.05 M
Current Authorization	\$136.16 M	\$0.15 M	\$136.31 M
Amount Remaining to be Authorized	\$308.74 M	\$0 M	\$308.74 M

## Total Project (Capital + Expense)

	Budget	Spent to Date	Forecast at Completion	Variance
Soft Cost	\$64.99 M	\$23.20 M	\$64.99 M	\$0 M
Construction	\$359.43 M	\$41.41 M	\$359.43 M	\$0 M
Management Reserve	\$20.63 M	\$0 M	\$20.63 M	\$0 M
	<b>\$445.05 M</b>	<b>\$64.62 M</b>	<b>\$445.05 M</b>	<b>\$0 M</b>

# FUNDING CONTRIBUTION



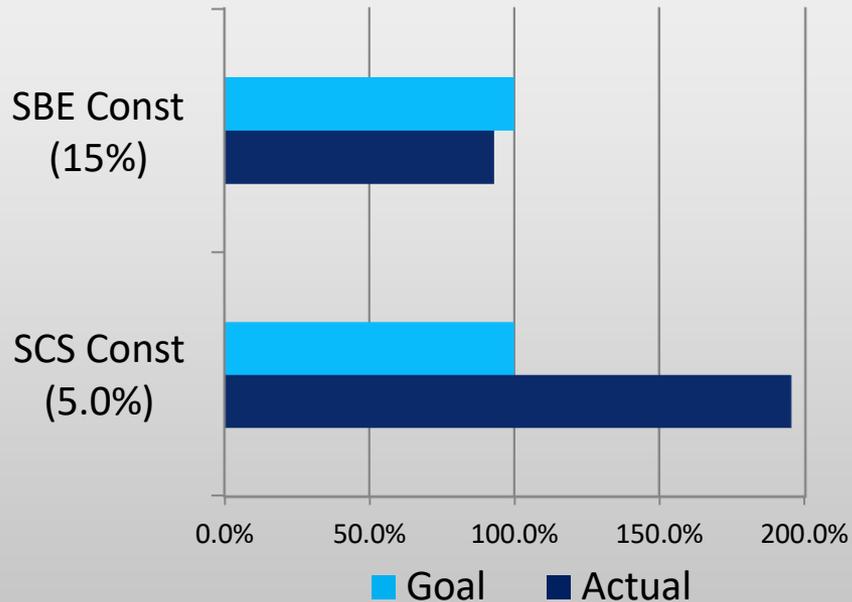
Total Project Budget	\$445,050,000
Total TSA Contribution	\$94,043,296
Total Port Contribution	\$351,006,704
<b>Amount Spent to Date</b>	<b>\$64,621,035</b>
<b>TSA Reimbursement to Date</b>	<b>\$30,899,397</b>

# SCHEDULE

			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
			Q1	Q3	Q1	Q3	Q1	Q3	Q1	Q3	Q1	Q3
<b>Baggage Optimization Schedule</b>												
<b>Phase 1 Construction</b>	<b>03/02/17</b>	<b>08/10/19</b>	Phase 1 Construction									
<b>Phase 1 Contractor Delay</b>		<b>02/15/20</b>	Contractor Delay									
Factory Acceptance Test (FAT) - Failed		08/31/18	◆ 8/31/18									
Quarterly Commission Briefing		10/23/18	◆ 10/23/18									
BHS Control Room Complete		10/23/18	◆ 10/23/18									
FAT Retest		11/30/18	◆ 11/30/18									
CT Bump-out Complete		12/20/18	◆ 12/20/18									
Phase 2 Ready to Bid Docs Complete		03/07/19	◆ 3/7/19									
<b>Phase 2 Construction (Original)</b>	<b>08/11/19</b>	<b>06/30/22</b>	Phase 2 Construction									
<b>Phase 2 with Delay</b>	<b>02/2020</b>	<b>01/2023</b>	Phase 2 Revised									
<b>Phase 3 Construction (Original)</b>	<b>07/01/22</b>	<b>02/28/25</b>	Phase 3 Construction									
<b>Phase 3 with Delay</b>	<b>01/2023</b>	<b>08/2025</b>	Phase 3 Revised									

# SMALL BUSINESS/APPRENTICESHIP UTILIZATION

## SCS/SBE



## APPRENTICESHIP



# CHALLENGES

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Phase 1 Construction Schedule



Baggage Handling/Steel Market Conditions for Phase 2 Bid



Operational Impacts Through Construction



IAF Coordination - Must be operational prior to Phase 2 SSAT construction



Project Coordination – Have coordinated with 60+ projects so far

# COST INCREASES SINCE 2013 ESTIMATE



- 15% Increase (Adjusted for Inflation) in Domestic Baggage Projects (Estimate from Baggage Designer)
- Material Cost of Structural Steel and Metals Increased 25% in 2018, as a Reaction to the Tariffs
- Construction Market Escalation Averaged 5% per year since 2013 (Approximately 25% Over 5 Year Period)

# ACCOMPLISHMENTS

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- ✓ All conveyor equipment delivered and stored at warehouse.
- ✓ Phase 2 permit set has been submitted to Building Department.
- ✓ Structural steel on Central Terminal bump out has been completed.
- ✓ Purchased and received baggage handling network equipment.
- ✓ Conveyor Factory Acceptance Retest conducted and successful.
- ✓ Continued construction on conveyors, utilities and infrastructure.

# SUSTAINABILITY

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## Energy Conservation

Optimized system is projected to result in up to 30% energy savings



## Water Conservation

No opportunity



## Working Environment

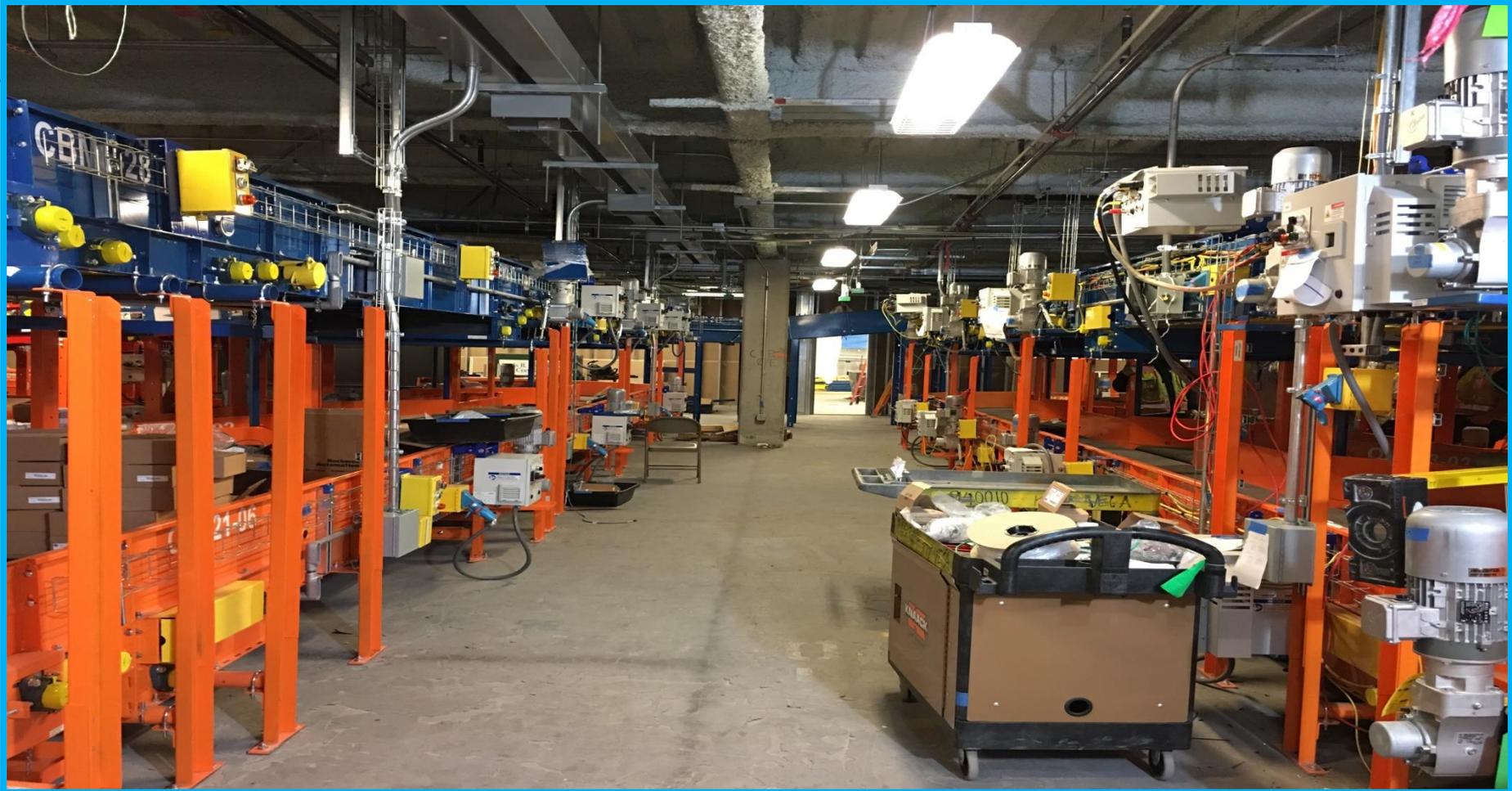
Improved ergonomics



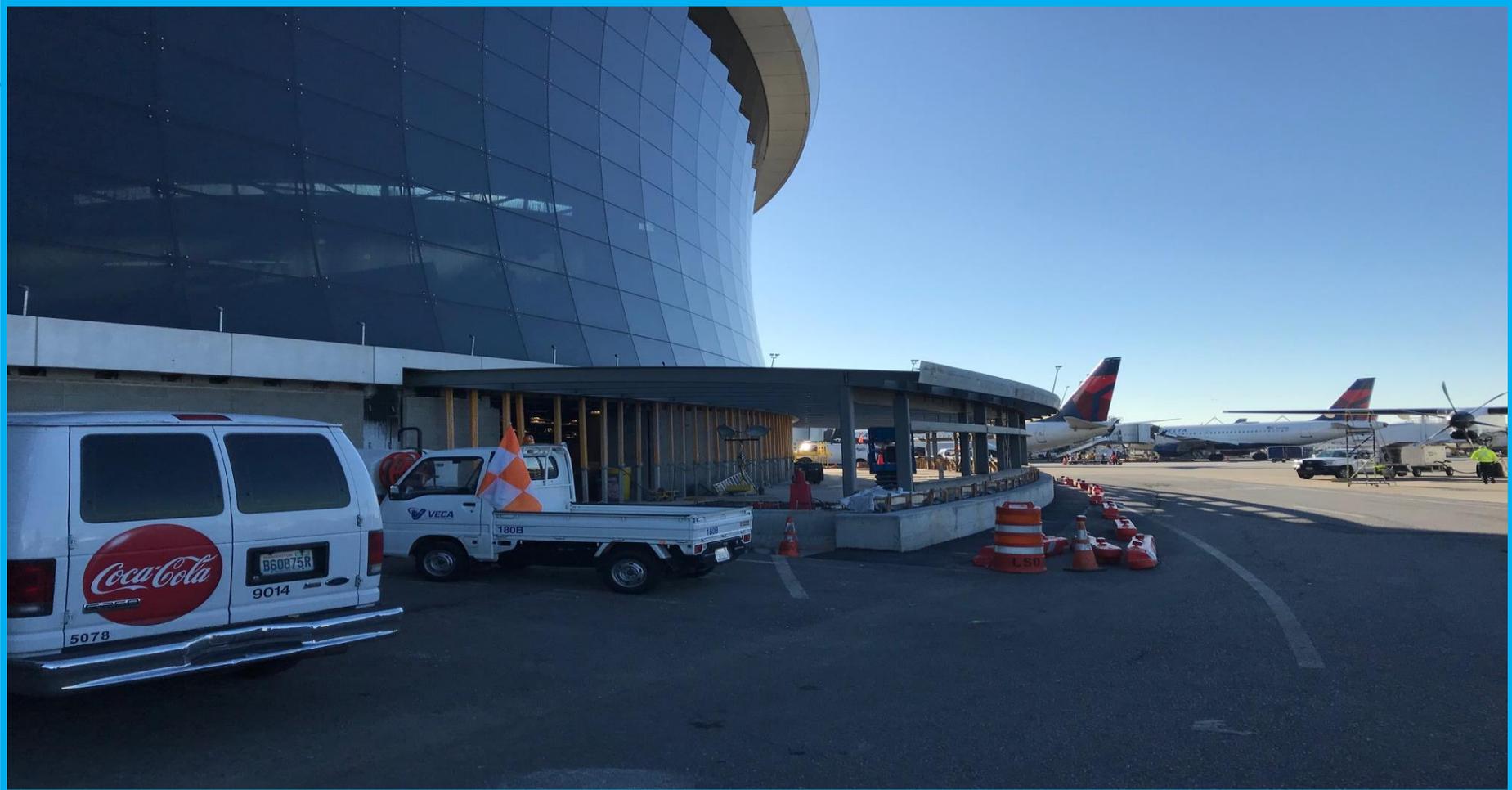
## Waste Reduction

Contractual requirement to recycle demolished material when possible





New Conveyor Sections



Structural steel on Central Terminal Bump Out



Factory Acceptance Testing Facility– Detroit, MI