



DEN TSA RECAPITALIZATION AND BAGGAGE HANDLING SYSTEM MODERNIZATION EFFORTS

AUGUST 24, 2022

JIM STARLING, CHIEF CONSTRUCTION AND
INFRASTRUCTURE OFFICER
MICHAEL SHEEHAN
SENIOR VICE PRESIDENT, SPECIAL PROJECTS

- Implementing Vision 100
- City Council Request
- Contract Overview
- TSA Recapitalization Scope
- BHS Modernization & Controls Scope
- Project Summary & Timeline
- DBE Project Approach
- Project Benefits
- Q&A



100 MILLION ANNUAL PASSENGERS

- SUSTAINABILITY & RESILIENCY • EQUITY, DIVERSITY & INCLUSION
- CONTINUOUS STAKEHOLDER INPUT/FEEDBACK • ENHANCING THE CUSTOMER EXPERIENCE

PILLAR 1



**POWERING
OUR PEOPLE**

PILLAR 2



**GROWING OUR
INFRASTRUCTURE**

PILLAR 3




**MAINTAINING
WHAT WE HAVE**

PILLAR 4



**EXPANDING OUR
GLOBAL CONNECTIONS**

- The efficient processing of bags is a critical operational need for DEN and directly correlates to enhancing customer experience.

				<h2>GUIDING PRINCIPLES</h2>			
SUSTAINABILITY & RESILIENCY		EQUITY, DIVERSITY & INCLUSION		CONTINUOUS STAKEHOLDER INPUT/FEEDBACK		ENHANCING CUSTOMER EXPERIENCE	
We want to become the greenest airport in the world.		We are better when everyone has a seat at the table and when we respect and listen to all viewpoints.		DEN is bigger than just us. We must all work together to be successful!		This is our core business, and we have to exceed the needs and desires of travelers.	

- Approve a contract with PCL Construction Services, Inc. for \$500,000,000 and five (5) years to design and build the Transportation Security Administration (TSA) Recapitalization and Baggage Handling System Modernization project at Denver International Airport in Council District 11 (202262907).

Master Baggage Handling System (BHS) Design-Build, Capacity-Based Contract

- Contract terms: 5-year duration, not to exceed \$500,000,000 contract capacity
 - Guaranteed Maximum Price (GMP) proposals will be requested per scope of work and approved through separate task orders under this contract
 - TSA funded recap scope and FAA-funded modernization scope will proceed upon contract execution – additional work scopes will be advanced as funds become available
 - Source of funds: CIP, TSA Other Transaction Agreement, and FAA grant(s)
- DEN conducted a competitive RFP (202262907) for design/build services
 - RFP was issued on BidNet April 22, 2022
 - Four responsive proposals were received May 19, 2022
 - Selection panel recommended PCL Construction Services, Inc. for award
- Selected contractor: PCL Construction Services, Inc.

TSA RECAPITALIZATION SCOPE



- Replaces 31 existing inline CTX explosive detection screening (EDS) machines with 25 new, more advanced EDS machines
 - New equipment will screen 674 bags per hour vs 400 bags per hour today
- Modifies two Checked Baggage Inspection System (CBIS) modules to include additional capacity (3,000 bags), bag routing to EDS equipment, and new fail-safe locations



DEN's Existing EDS Equipment

BHS MODERNIZATION & CONTROLS SCOPE



- Replaces end-of-life BHS equipment like high-speed diverters, transport conveyors, power turns, merges, motors and gearboxes, automatic tag readers, and other equipment that is past the life expectancy (20 years)
- Upgrades the control system across entire BHS allowing continuity and supporting standard operating procedures
- Adds Intelligent Power Savings (IPS) functionality by programming implementations
- Implements new BHS interfaces along with essential monitoring capabilities



DEN TML Level 3 – Existing High-Speed Diverter

PROJECT SUMMARY



TSA Recapitalization	Total Cost
Project Cost (Estimated)	\$130,840,000
TSA Funding Commitment (Other Transaction Agreement)	-\$55,860,361
DEN CIP Contribution	\$74,979,639

BHS Modernization & Controls Upgrade	Total Cost
Project Cost (Estimated)	\$97,000,000
FAA Funding Requested (2022 BIL FAA Funding Opportunity)	\$77,600,000
FAA Funding Commitment (2022 BIL FAA Funding Opportunity)	-\$60,000,000
DEN CIP Contribution	\$37,000,000

PROJECT OUTCOMES

51%

Overall project budget funded by federal grants

100%

Replacement of TSA's existing baggage screening equipment

80%

Replacement of BHS components past the 20-year life expectancy

FUTURE PROJECT SUMMARY



Curbside Conveyor Replacement/Controls Upgrade	Total Cost
Project Cost (Estimated)	\$47,000,000
FAA Funding Requested (2022 BIL FAA Funding Opportunity)	\$37,600,000
DEN CIP Contribution	\$9,400,000

Baggage Claim & Feed Conveyors Replacement	Total Cost
Project Cost (Estimated)	\$74,000,000
FAA Funding Requested (2022 BIL FAA Funding Opportunity)	\$59,200,000
DEN CIP Contribution	\$14,800,000

BHS Inbound/Outbound Lifts Replacement	Total Cost
Project Cost (Estimated)	\$72,000,000
FAA Funding Requested (2022 BIL FAA Funding Opportunity)	\$57,600,000
DEN CIP Contribution	\$14,400,000

PROJECT TIMELINE



Finalize Vendor

Contract:
Q2 2022

Finalize Project
Funding:
Q4 2022

Construction:
Q2 2023 – Q4 2026



2022

2023

2024

2025

2026

DEN project
approvals:
Q3 2022

Preconstruction
& Design:
Q4 2022 – Q2 2023

DBE Goal commitment = 9%

PCL Construction Services, Inc. has identified the following DBE Partners



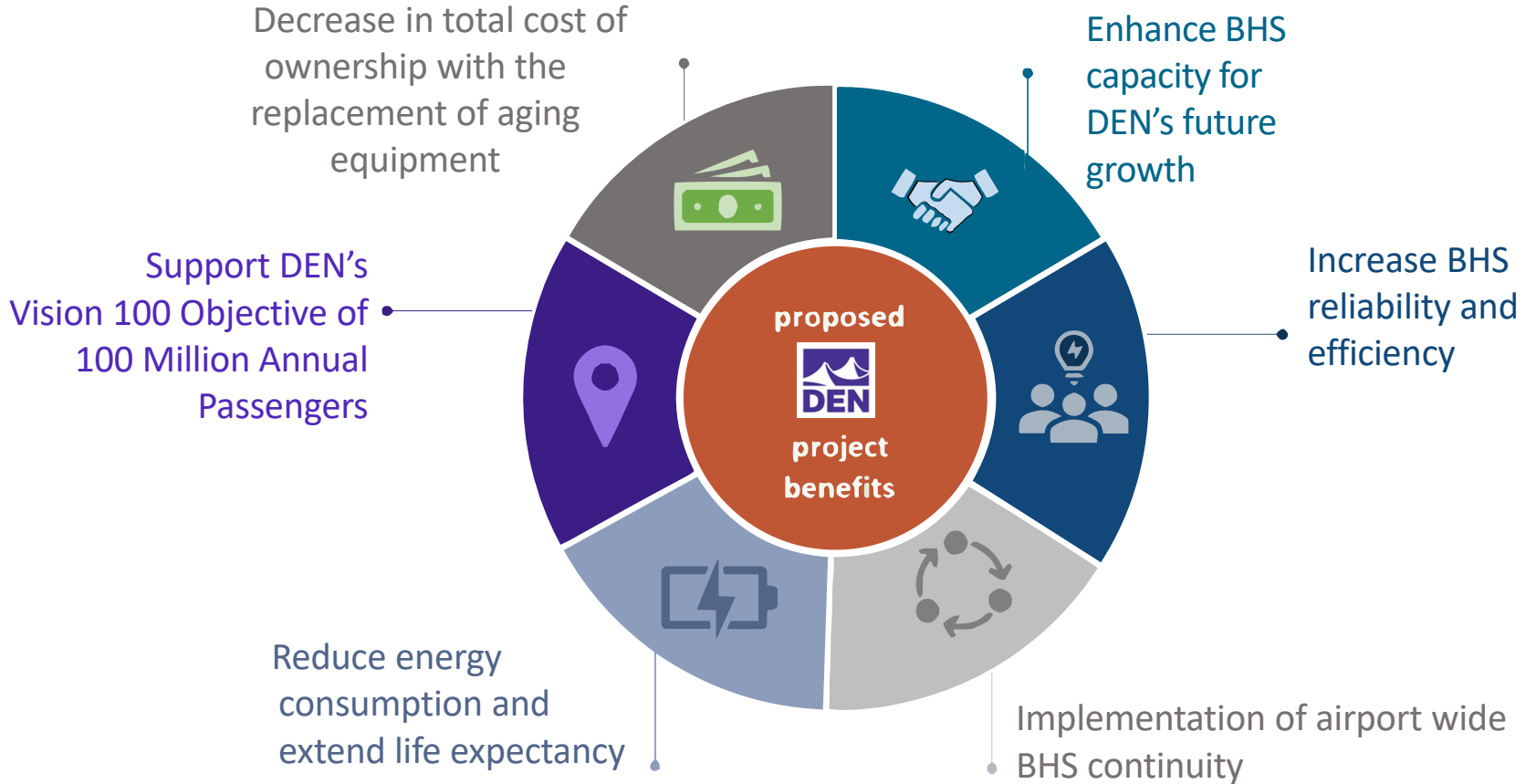
DBE PARTNERS	
Firm	Role
Burgess Services (PCL Protégé)	Design and Construction Integration
Iron Horse Architects	Architect of Record
ZANN, Inc.	DBE Coordinator
HCL Engineering	Structural Engineering
Civil Technology	Field QA/QC
Shrewsberry & Associates, LLC	Project Quality Management (PQM)
Group 14	Commissioning
Ramirez, Johnson & Associates Engineering	Mechanical & Plumbing Engineering
PK Electrical	Electrical Engineering
Digital Building Services	BIM Scanning Support
Motion Design	BHS/CADD Support

PROJECT BENEFITS

- Enhance baggage screening capacity to meet our airline partners' future growth and assist in achieving DEN's Vision 100 strategic plan
- Increase reliability and efficiency of the BHS meaning fewer impacts to our stakeholders
- Airport-wide continuity with upgrades/replacements reducing total cost of ownership
- IPS functionality to extend life expectancy and reduction of energy consumption



PROJECT BENEFITS



QUESTIONS?

