

#### ALLEGHENY COUNTY AIRPORT AUTHORITY

# PITTSBURGH INTERNATIONAL AIRPORT ALLEGHENY COUNTY AIRPORT

# Architectural and Engineering (A/E) Landside Design Pre-Proposal Meeting & Discussion September 13, 2018



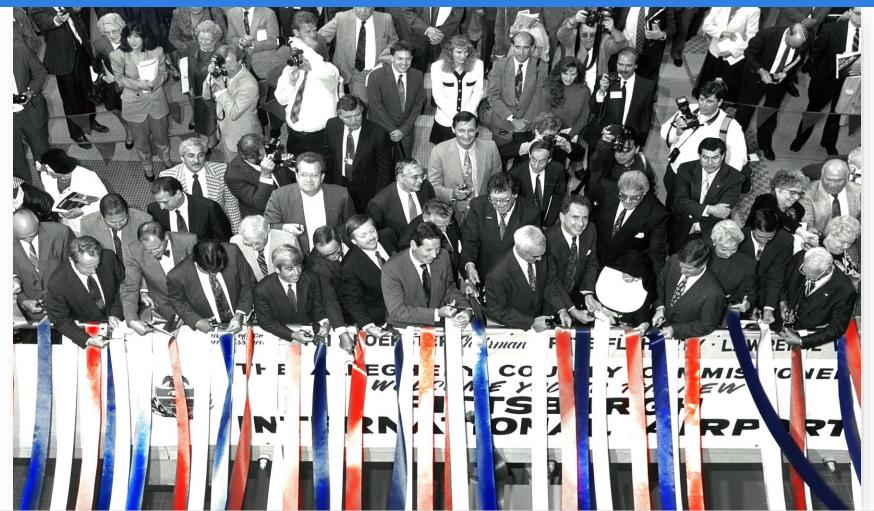
# **Greater Pittsburgh International Airport May 31, 1952**







# PIT Midfield Construction October 1, 1992







"You can't go back and change the beginning but you can start where you are and change the ending." - C.S. Lewis



# PITTSBURGH, PENNSYLVANIA A Transformation Story







### Pittsburgh's Image Has Been Transformed



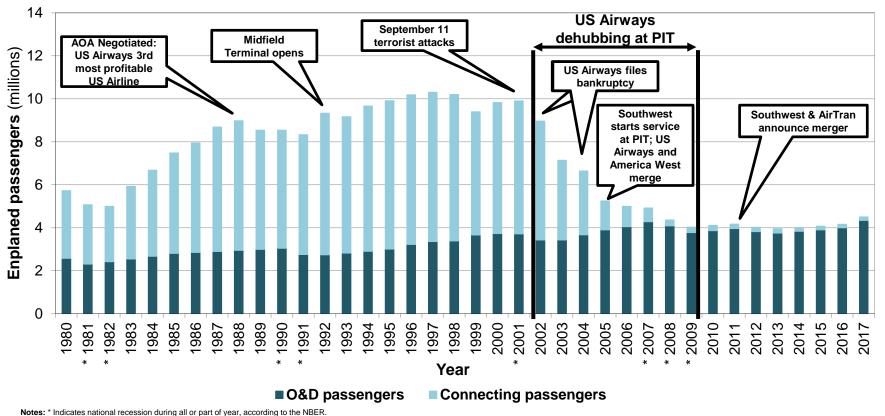
## A Snapshot of Pittsburgh International

- Opened October 1992
- Built for 32 million passengers
- Operated by the Allegheny County Airport Authority
- Strategic Location





## **Changing Traffic Patterns Accelerated the Need to Modernize**



The O&D/connecting split was estimated for 2011-2017

Sources: Allegheny County Airport Authority actual (1980-2017) & estimates (2014-2017);

Leigh Fisher estimates (1980-2013); US DOT T-100, O&D Survey & ACAA Monthly Traffic Reports





# **PIT Today**





### The Current Landside Terminal is not Flexible







# **But the Airside Terminal mostly Works**







# A Massive Cultural Change in Only Three Years

- Communication
- Collaboration
- Engagement
- Innovation

#### **BUILT MOMENTUM!**





# Physical Transformation is Built on Cultural Change



**DEMOLITION** 

**INNOVATION** 

SITE PREPARATION

**BREAKING OF BAD HABITS** 

**PLANNING & DESIGN** 

ANALYSIS & CHANGE MANAGEMENT STRATEGY



# The Approval of our Terminal Modernization is the Result of some Major Wins

KEY PERFORMANCE INDICATOR	2014	2015	2016	2017	3-Yr % Inc/Dec
Employee Engagement	N/A	N/A	3.72	4.12	10.75%
Total Passengers	7,998,970	8,128,187	8,309,754	8,988,016	12.36%
Year-End Non-Stop Destinations	37	50	68	73	97.30%
Non-Aero / Non-Op Revenue	\$97,334,680	\$99,422,897	\$104,457,649	\$116,283,934	19.47%
ASQ Passenger Overall Satisfaction	4.06	4.23	4.31	4.36	7.39%
Cost per Enplaned Passenger (CPE) <sup>1</sup>	\$13.91	\$12.89	\$12.86	\$12.70	-8.70%

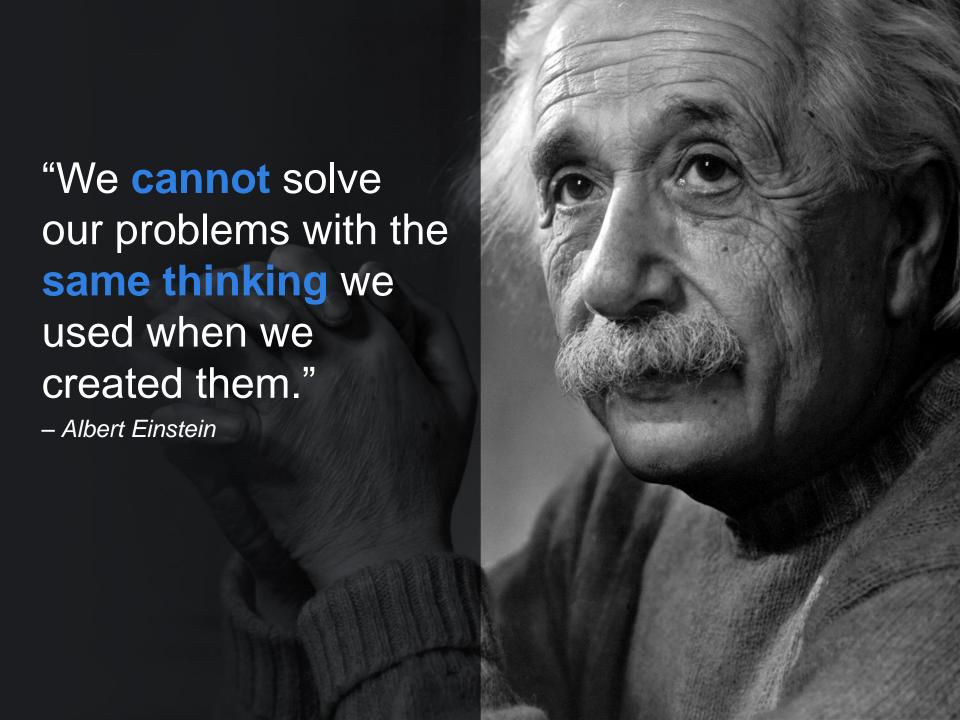












# So Starting Here...





### www.PITTransformed.com







# TMP - Taking our Success to a Whole New Level







### www.PITTransformed.com





# Design Process Input to Ensure The Best Airport for Pittsburgh

#### Program Advisory Working Group

- Ambassadors and advocates for the Airport and the TMP
- Monthly Meetings

#### Peer Review Team

- Industry professionals who will provide a high level review of plans
- Input at key milestones

#### Best Practice Working Groups

- Local, National, and International experts to ensure design sets standards in the industry
- Meeting frequency based on focus area



### Integration During the Design Process

- Partnering with local, national, and international expertise
- Benchmarking with other airports and industries
- Providing input during project scoping
- Continuing at key points in the design process
- Resulting in the best airport for Pittsburgh

### The Best Airport for Pittsburgh

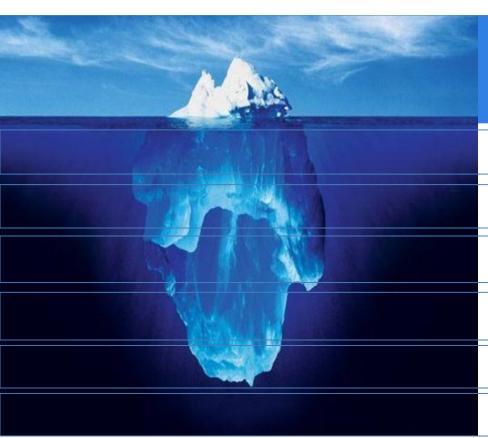
#### **Best practice focus areas:**

- Accessibility
- Arts and Culture
- Building Systems/BIM
- Concessions
- Customer Experience
- Gardens and Landscaping

- Ground Transportation & Parking
- Safety and Security
- Sustainability
- Technology



# The Completed Terminal is Only Part of our Objective



#### **The Terminal**

Quality

**Best Practices** 

Input from Stakeholders

Integration with ACAA

On Budget

On Time



# The Team



"Innovation happens when people are given the freedom to ask questions and the resources and power to find the answers."

- Richard Branson



# Assembling a team of experts to build the Airport that Pittsburgh deserves

- Program Director / Owner's Representative Onboarding
  - Program Governance
  - Executive PMO
  - Internal Staffing and Staff Augmentation
  - Oversight Committee Assignments and Training
- Terminal A/E Design Procurement
- PM Team Procurement
- Landside Projects A/E Team RFP and Procurement
- CM Teams RFP and Procurement





# Terminal A/E Partner – Gensler+HDR in Association with luis vidal + architects

Joint Venture between Gensler & Associates (architects) and HDR (engineering) with luis vidal + architects as a sub-consultant

Gensler + HDR added luis vidal + architects, a world-renowned firm, to provide international best practice assistance during concept and schematic development.

vidal has completed terminal projects for Heathrow (Terminal 2),
 Madrid-Barajas, and others. This brings another level of international experience to the team and will give Pittsburgh the best opportunity to once again have a terminal at the forefront of aviation.

Contract Approved by ACAA Board at July 20th Meeting



#### **Gensler + HDR Sub-Consultants**

- AirProjects\*
- American Geotechnical & Environmental Services (A.G.E.S.), Inc.\*
- Advantus Engineers\*
- Architecture Innovations\*
- BNP Associates, Inc.
- Bright Tree Studios\*
- Burns Engineering, Inc.
- BuroHappold
- Cerami
- Chrysalis
- Crawford Consulting Services, Inc.\*
- ED3 Consultants, Inc.\*
- Faithful+Gould
- Fisher Marantz Stone (FMS)
- Illustrate My Design\*

- luis vidal + associates
- Larson Design Group
- LCM Architects
- Monaloh Basin Engineers\*
- Monmade
- Office of James Burnett/ (OJB) Landscape Architect
- Raudenbush Engineering, Inc.
- Renee Piechocki
- Sci-Tek Consultants, Inc.\*
- Sigma
- Simpson, Gumpertz, Heger (SGH), Inc.
- Thornton Tomasetti
- UpStudio Landscapes\*
- Wade Trim
- Zensors

red indicates local firm/local presence

\* indicates certified DBE in PA





### Gensler+HDR Overall Scope of Work

Full Architectural/Engineering Design and Construction Phase services includes the following TMP components:

- New landside terminal
- Renovation of the existing airside terminal
- Roadways
- Wayfinding
- Site design, including oversight of landscape design
- Modification to the Central Utility Plant
- Infrastructure design including roadways, bridges, and various surface lots
- Demolition of infrastructure
- Decommissioning of the existing Automated People Mover
- Others to be identified



### Gensler+HDR Initial Scope of Work

Gensler+HDR in association with luis vidal + architects Initial Concept Design Phase September, 2018 through January, 2019

Key Design work will encompass developing and refining 3 overall TMP campus and component concepts for ACAA consideration:

- PDD-based Concept
- Alternative Concept 1
- Alternative Concept 2

Final Product will be one TMP concept to move into Schematic Design in February, 2019



### **Jacobs Project Management Company – PM Team**

- Ranked #2 Aviation Engineering News Record
- Successfully delivered 20 major airport programs, totaling \$40B in past 20 years
- 74,000 Employees / 400 locations, including Pittsburgh / 40+ countries
- Aviation Management Projects:
  - Abu Dhabi International Airport (AUH)
  - Changi International Airport (SIN)
  - Chicago O'Hare Modernization Program (ORD)
  - Dallas Fort Worth International Airport (DFW)
  - Hartsfield Jackson Atlanta International (ATL)
  - La Guardia International Airport (LGA)
  - London Heathrow International Airport (LHR)
  - Los Angeles International Airport (LAX)
  - Melbourne International Airport (MEL)
  - Mexico City International Airport (NAICM)
  - Mumbai International Airport (BOM)
  - Philadelphia International Airport (PHL)
  - Tampa International Airport (TPA)



### **Jacobs Sub-Consultants**

- CDM
- Clarence F. Curry
- KORYAK\*
- Pascal + Watson
- Rhea Engineers & Consultants, Inc.\*
- Ridley
- Ricondo & Associates, Inc.

- Ross & Baruzzini
- Sheesley & Associates, LLC.\*
- Skanska
- Pascal + Watson
- Studdiford Technology Solutions, LLC.
- TE Kennedy, Inc.

Red indicates local firm/local presence

\*Indicates certified DBE in PA





# Jacobs Project Management Company Services

Contract Services over the course of the program may include, but are not limited to, the provision of:

- Program management and project support services;
- Development and implementation of program/project management plans;
- Cost management and analysis;
- Project and program scheduling;
- Document control;
- Bid packaging and award of contracts;
- Configuration control change management;
- Invoice review and management;
- Airport operations liaison;
- Support for public outreach and marketing and communications activities;
- BIM Management;
- ORAT Initiation; and
- Administrative and management oversight of work by other consultants and contractors.



# **TMP Elements**

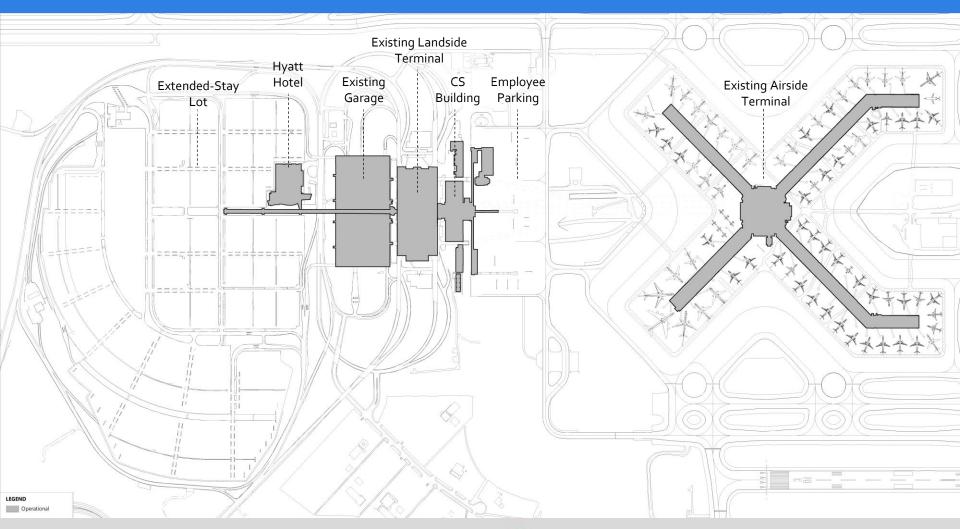


"Things don't happen. Things are *made* to happen."

– John F. Kennedy



## **Existing Conditions**







## **Terminal Modernization Program**

**Conceptual Rendering** 



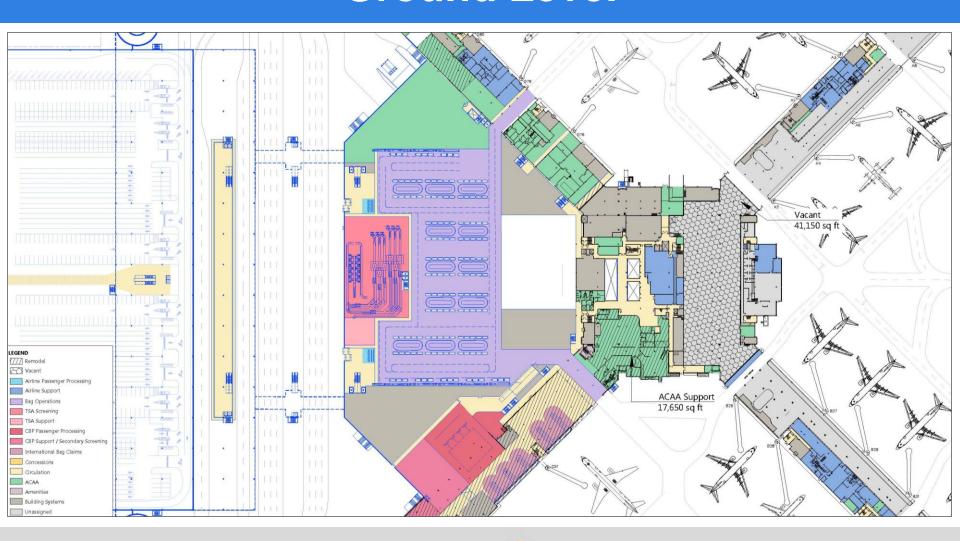




#### Site Plan

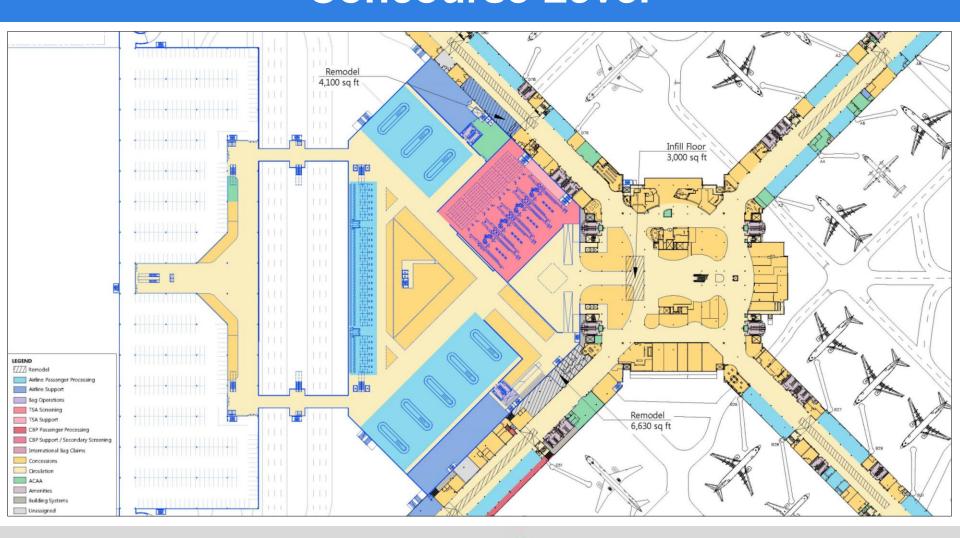


## Main Terminal Addition Ground Level



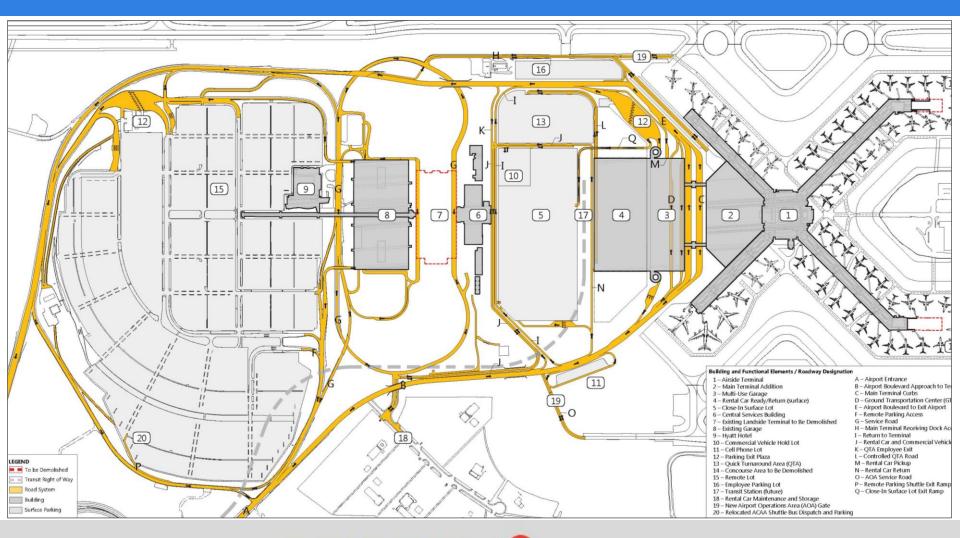


## Main Terminal Addition Concourse Level

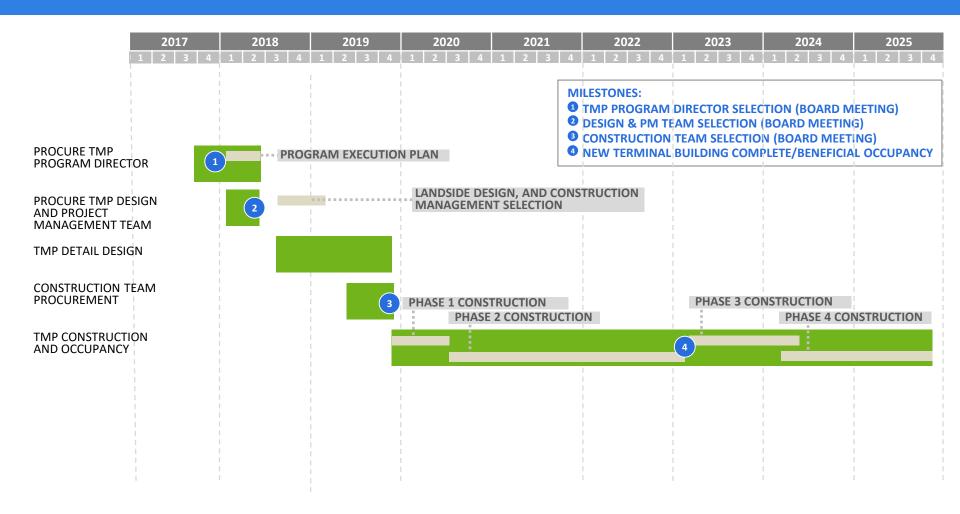




## **Roadway Layout**



### Terminal Modernization Program Schedule





### **Budget Overview**

- Direct Costs (Construction) ≈ \$900M Total Program
  - Terminal
  - Roads
  - Multi-Purpose Garage/Parking/GTC/ConRAC
  - Concourse Renovations
  - Demolitions
- Direct Costs (Construction) ≈ \$250M Landside projects
  - Multi-Purpose Garage/Parking/GTC/ConRAC



## Landside A/E Design Team



# Landside Project A/E Design Team Scope of Work

Gensler/HDR JV Architectural/Engineering Design and Construction Phase services *does not* include – beyond the schematic design phase the following TMP components:

- Parking garage, including ingress and egress
- Close-in, long-term surface parking lot
- Commercial vehicle surface parking lot
- Ground Transportation Center (GTC)
- Rental car ready return parking lot
- Rental car Quick Turn Around (QTA) facility

The Landside Projects A/E Design Team will be responsible for the Design and Construction Phase services for these components



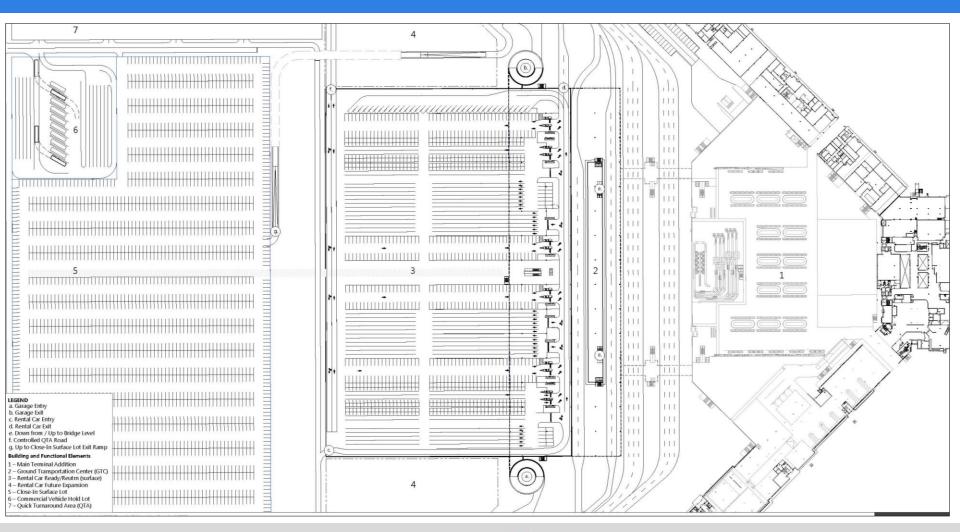
## **Design Team Work Scope Boundaries**



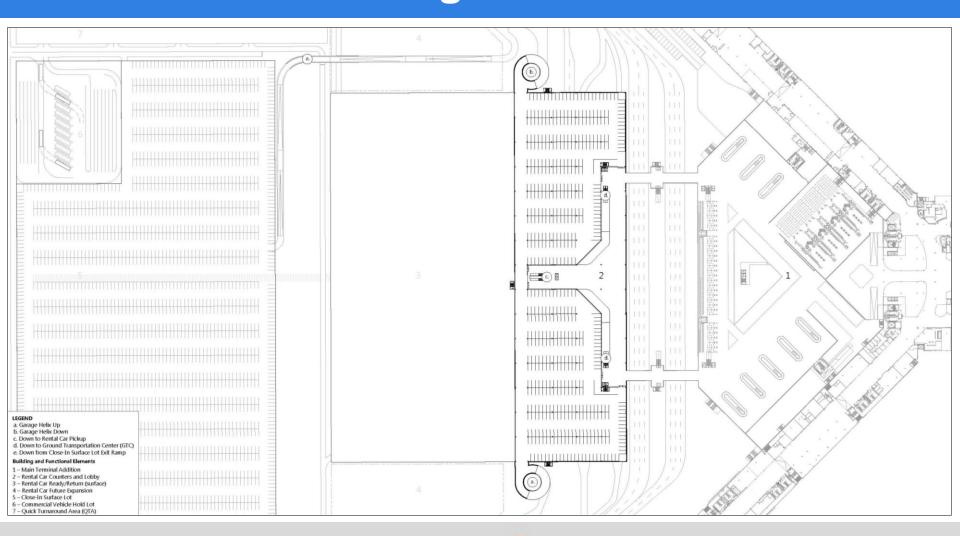




## Multi-Use Garage Ground Level

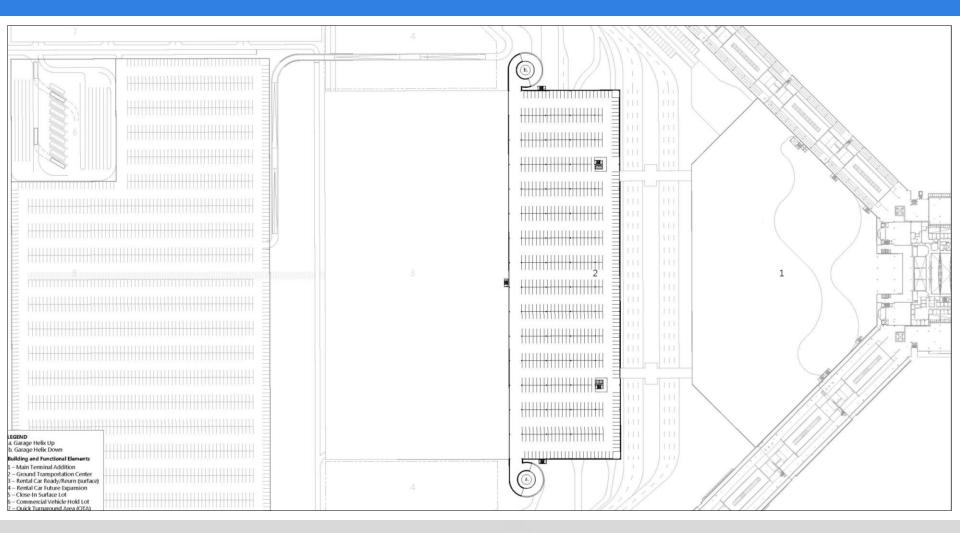


## Multi-Use Garage Bridge Level



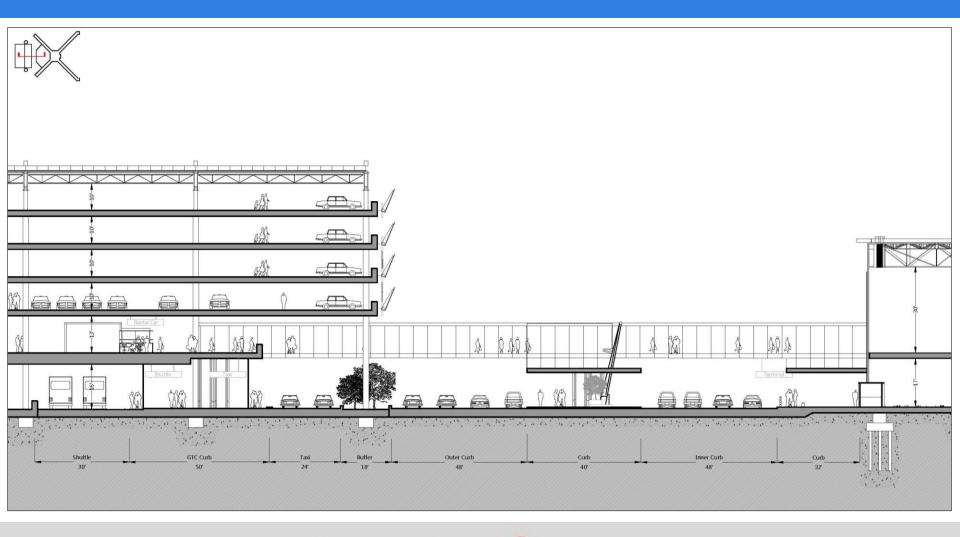


## Multi-Use Garage 3rd Level (Typical)

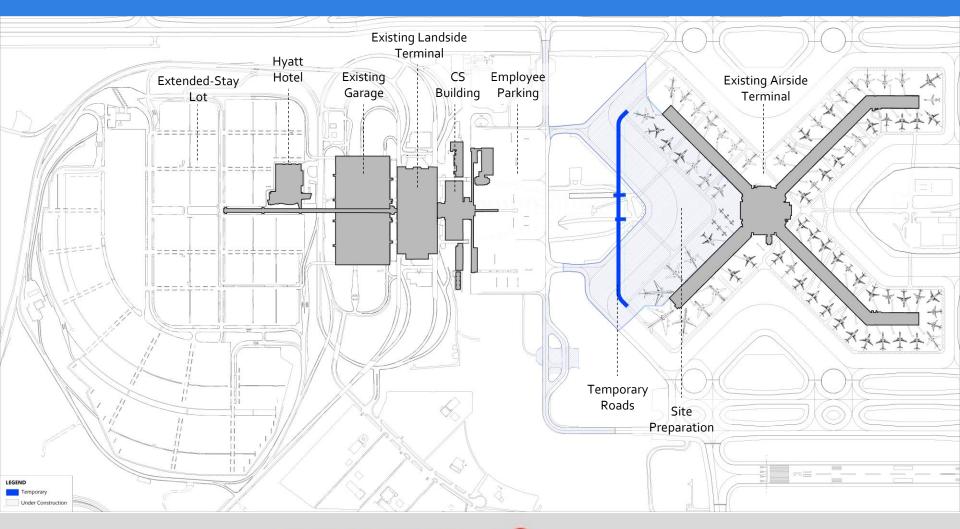




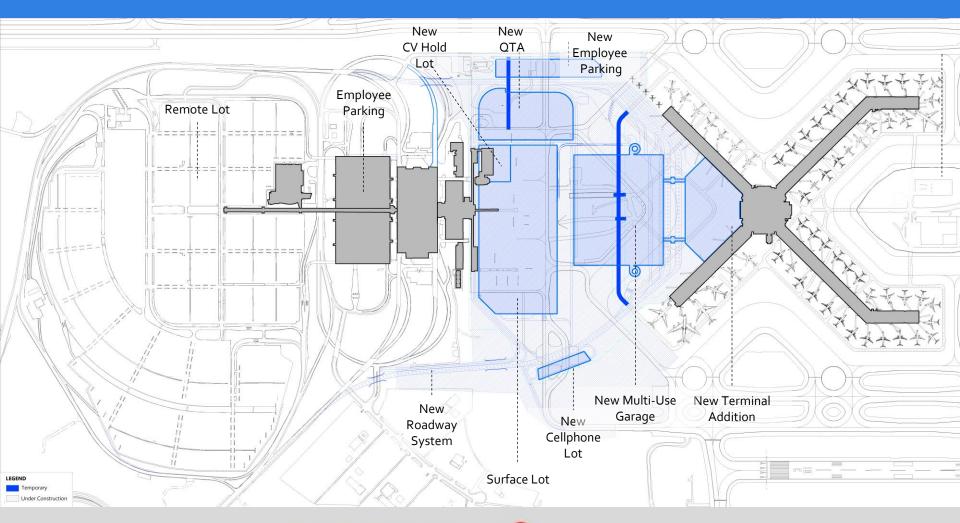
#### **Section thru GTC and Terminal Curbs**



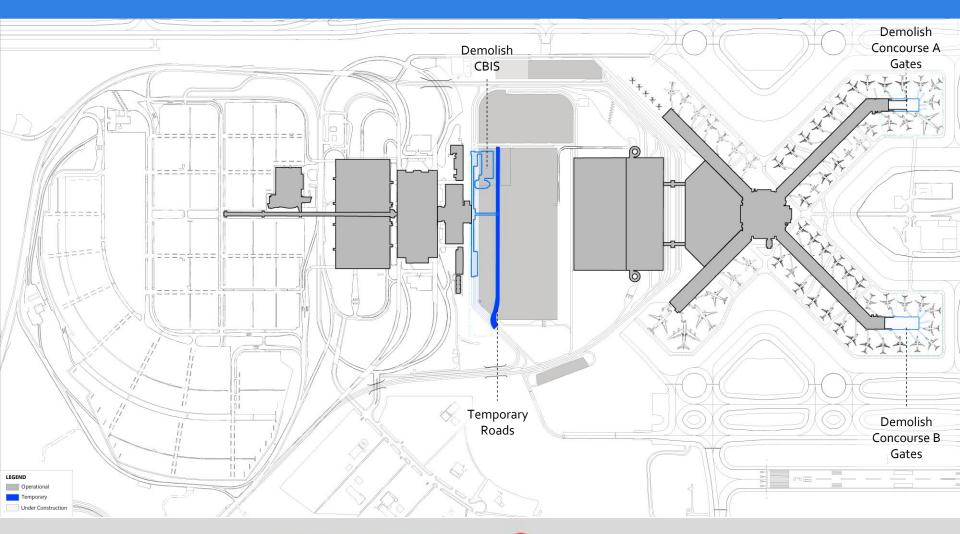




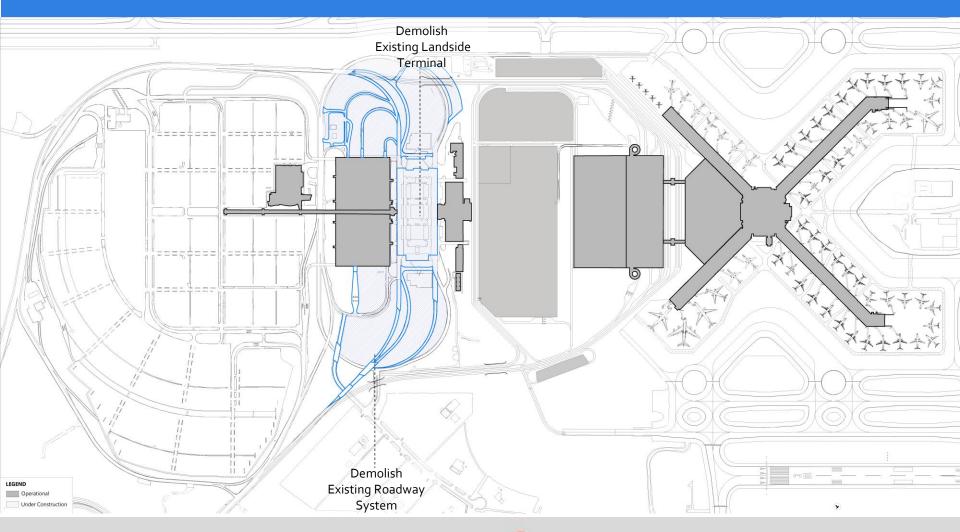














## **Proposed Construction Delivery Method**

- PA Separations Act requires traditional delivery method for vertical construction
- As of today, we are projecting to use traditional,
   D-B-B method for all work

## **RFP Overview**



## Landside Project A/E Design Team Selection Criteria

- Design Team Qualifications & Relevant Experience
- A/E Team Composition & Organization
- Design & Management Approach
- Approach to Controlling Costs
- Familiarization with BIM and COBie
- Key Staff Experience



## Maintaining Transparency in the Q&A Process

- Submit questions to the pittransformed.com website under Business Opportunities
- Deadline to submit is 9/17/18 by 4:00 PM EDT
- Questions and replies will be posted to the pittransformed.com website on or about 9/26/18
- Today's presentations will also be posted to the pittransformed.com website



## **Key Date for Proposal Process**

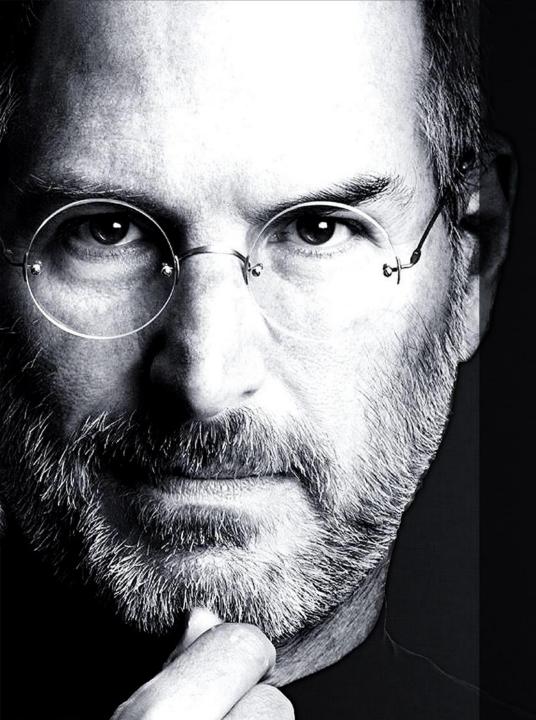
Step	Date(s)
Last Date for ACAA to receive questions on RFP	September 17, 2018 4:00 PM Eastern Time
Answers to submitted questions posted	On or about September 26, 2018
Proposals Due	October 12, 2018 by 4:00 PM Eastern Time
Interview notifications	October 19, 2018
Tentative Interview Dates	November 6-9, 2018
Anticipated Selection and Negotiations	November-December, 2018
Anticipated ACAA Board Approval	January, 2019
Anticipated Contract Start	February, 2019



#### Questions

Submit on www.pittransformed.com by September 17, 2018





"Innovation distinguishes between a leader and a follower."

- Steve Jobs

### **Preview of the Rest of Day**



#### 9:30 AM to 11:30 AM

Small, Local, Veteran-Owned Business and DBE, WBE & MBE Session

- Meet
- Interact
- Build that Perfect Team



