

#### ALLEGHENY COUNTY AIRPORT AUTHORITY

### PITTSBURGH INTERNATIONAL AIRPORT ALLEGHENY COUNTY AIRPORT

# Airport Modernization Program ACEC/PA Fall Conference – BFD Competition November 20, 2019





#### **VISION**

To transform Pittsburgh's airports to reflect and serve the community, inspire the industry, and advance the region's role as a world leader.



# Why Modernize? PIT was Built for a Different Time and Purpose

- Built for 32 million passengers
- Primarily connecting traffic
- Designed and built for US Air
- Aging, inflexible, incorrectly configured systems: Checkpoints/ Baggage/ Underground Train/ Intl Arrivals
- Need consistent and predictable airline costs
- Need to provide a world-class passenger experience reflective of the region



#### **Building Through Collaboration – Expert Input**

- Program Advisory Working Group
- Peer Review Board
- Working Groups:
  - ~ Accessibility
  - ~ Arts & Culture
  - Ground Transportation & Parking
  - Passenger Experience
  - Sustainability & Landscape
  - ~ Technology





#### **Building Through Collaboration – Community & Vendors**

- Community Outreach / Surveys
- Industry Days
- Vendor Product Pitch Fair
- Involving Front Line Staff in Design Decisions





#### **Our Future**





#### **Terminal Modernization Program – Two Parts**

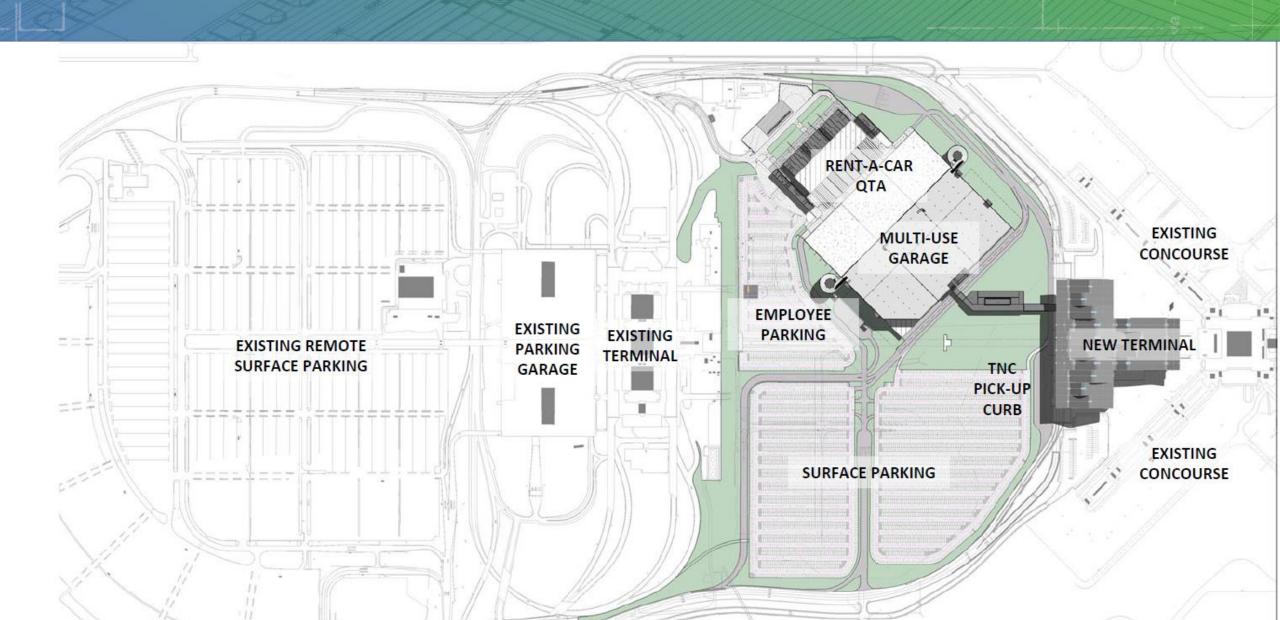
- New Terminal A new terminal facility that consolidates landside and airside operations with more efficient technology and services
- New Multi-Modal Complex (MMC) A new ground transportation center (with rental car services), parking garage, parking lots and roadways







#### **New Terminal and Multi-Modal Complex Layout**



#### An Improved Traveler Experience from Curb-to-Gate

- Shorter walking distances and security wait times
- Improved wayfinding
- Additional services and amenities
- Better technology
- An improved sense of Pittsburgh: Local restaurants, shops and artwork
- More efficient baggage handling
- Improved parking options
- No local tax dollars used





#### Where We Are in the Program

**Concept Design** 

Schematic Design

**Design Development** 

**Construction Documents** 

**Bidding & Negotiation** 

**Construction Administration** 

Big Ideas + Possibilities

30% Design Completion

More Detailed Information about Systems, Materials + Relationships

**July 2019 – January 2020** 

Detail Development + Continued Coordination Between Engineers

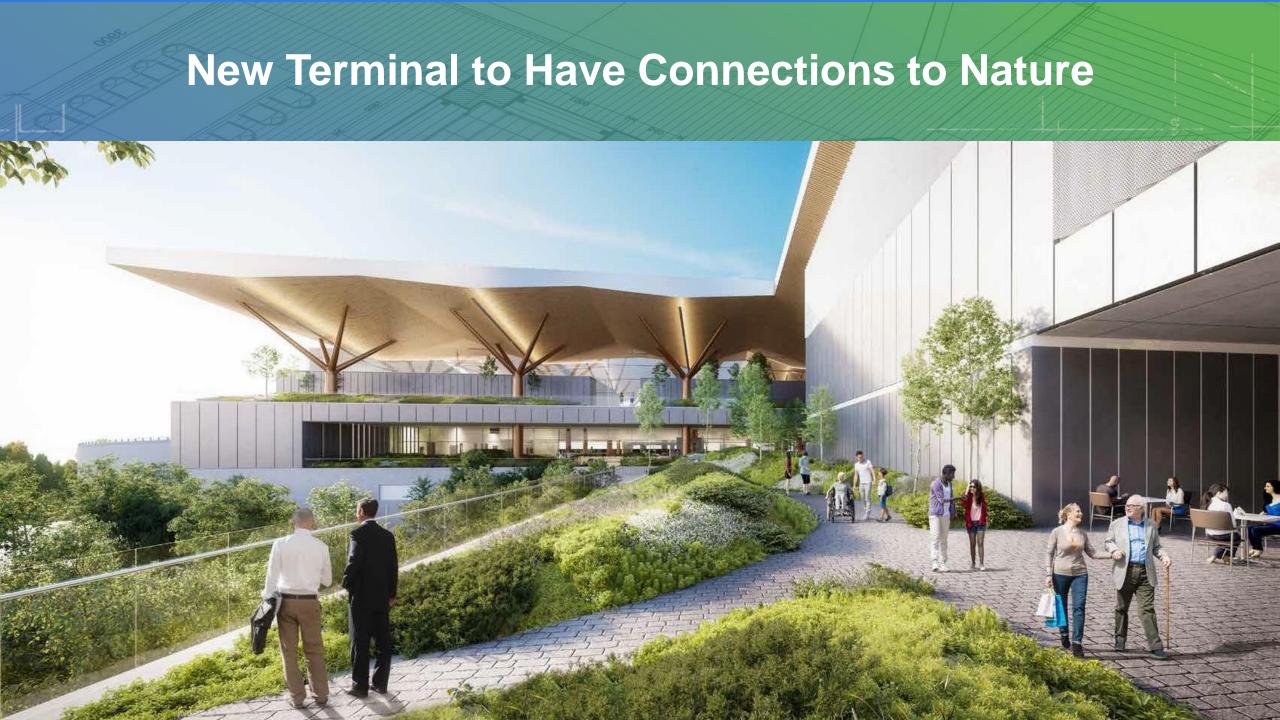
Spring 2020

Construction + Implementation

Mid-2020 – Summer 2023

#### Ticketing Hall with View to Baggage Claim Area Below





#### **Building a Smarter Airport Extends Beyond TMP**

- Airport Innovation Campus /
  Neighborhood 91 will make the airport
  corridor a center for additive
  manufacturing and support organizations
- Emphasis on building the region's capability as a cargo logistics center because of close proximity to runways and highways





#### Microgrid and Neighborhood 91 Are Global Firsts





- First airport in the world to be entirely powered by its own microgrid
- Increased power reliability
- No cost to the airport; reduce utility costs for the airport and its tenants











- Additive Manufacturing cluster strategy
- Courting international tenants
- A game-changer: scalability, profitability















## Pittsburgh Airport Innovation Campus: Enabling Scalability and Profitability in the AM/3D Industry

### First-ever condensed and connected ecosystem for PRODUCTION on airport property provides:

- Powder, parts, post-production, testing & analysis
- Communal powder storage facilities
- Competitive energy costs, resiliency
- Reduced costs for Argon, other noble gases
- Efficiencies in production/post-production & delivery (63-day process shrunk down to 13)
- Tenants' clients realize cost savings from reduction of expensive unused inventory, print as needed
- Reduced transportation costs
- Airport access: Products, people, "students/teachers"

PITTSBURGH AIRPORT

#### **INNOVATION CAMPUS**





#### Why Pittsburgh for Additive Manufacturing?

- Rich history and tradition in manufacturing
- The PA-OH region is world-renowned for additive manufacturing
- University of Pittsburgh: Research & Development and "New Collar" Workforce Development
- Carnegie Mellon University's advanced manufacturing development activities are complemented by the PAIC/Production
- Robert Morris University, and other institutes of higher education in our region, eager to educate and train this "new collar" workforce





#### Why Pittsburgh International Airport?

- Available land
- Microgrid: Competitive costs, resiliency
- Proximity to highways, railways, 3 rivers
- People, products, students/teachers anywhere in the world in 24 hours or less
  - Qatar Cargo: Doha, PIT, Chicago, Luxemburg
  - FedEx: Worldwide
  - UPS: Worldwide
  - British Airways: London
  - Condor Airlines: Frankfurt
  - Alaska Airlines: Seattle
  - American Airlines: Extensive NA network





#### **TMP Economic Impact**

Will deliver long-term economic impact to the region, including:

- Generating about \$1.66 billion in economic activity
- \$710 million in direct labor income \*
- \$908 million in gross regional product / value \*
- Generating more than \$28 million in state and local income tax





<sup>\* 2017</sup> values

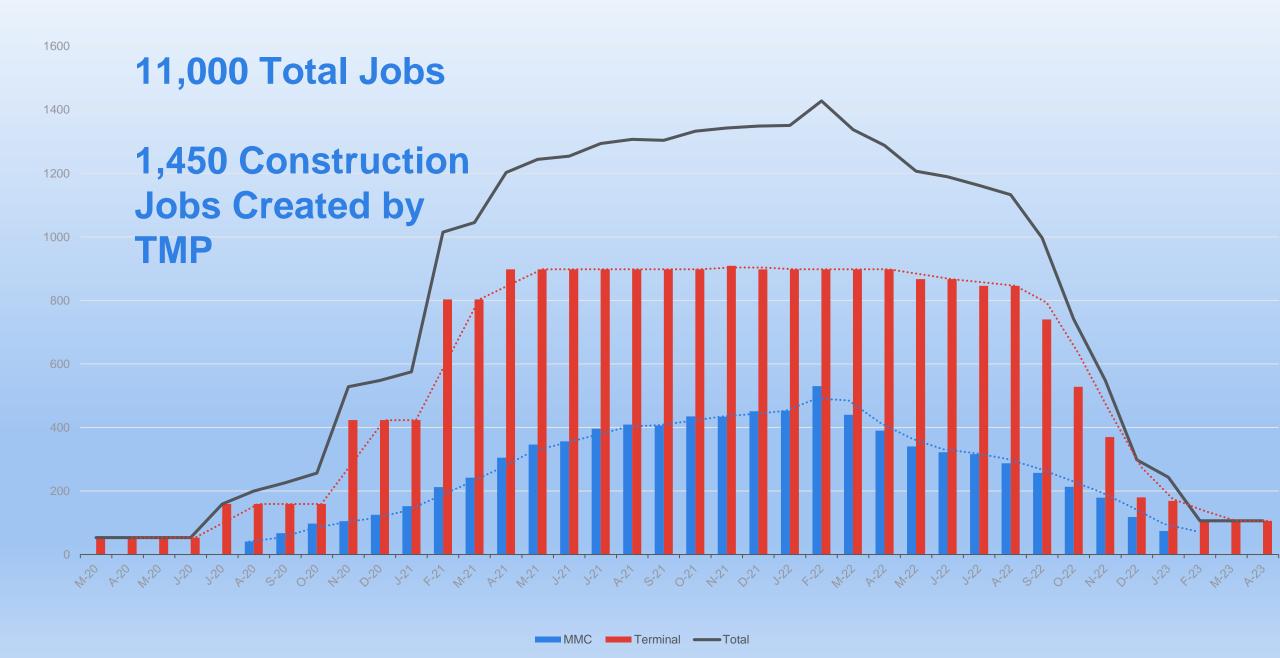
#### **TMP Construction Jobs**

- Expected addition of nearly 11,000 direct and indirect jobs
- Creation of more than 6,000 direct temporary design and construction jobs
  - Almost 600 jobs in the pre-construction design phase (2018 – 2019)
  - Over 5,500 jobs during the construction phase (2020 – 2023)





#### **AVERAGE PERSONNEL BY MONTH**



#### What's Next?

- Design Development (July 2019 January 2020)
- Early Site Preparation Packages
   (October 2019 Spring 2020)
- Bond Financing (Early 2020)
- Construction Documents Development / Multiple Prime Contractors Selected (Spring 2020)
- Heavy Construction (Summer 2020 Summer 2023)
- Grand Opening (2023)





#### Pittsburgh International Airport's Midfield – October 1, 1992

