TAC Meeting #1

Airport Master Plan
Remaining Elements

April 24, 2019
Meeting Agenda

- Master Plan Process
- Role of TAC
- Facility Requirements
- Environmental Constraints
- Meeting Goals
- World Café Process
Master Plan Update

- Define feasible and flexible development plans to accommodate forecasted demand over a 20 year period
- FAA defined process to provide framework for development
- Tools for Airport to react to uncertainties by examining industry trends, technology improvements, and regional economic development variables
- No runway lengthening or realignment is being considered; concepts within existing property
- All proposed projects still require NEPA process
Master Plan Process

- Inventory
- Forecasts of Demand
- Stakeholder and Public Involvement
- Demand/Capacity Facility Requirements
- Alternatives Development and Evaluation
- Phasing and Financial Strategy
- Environmental Overview and Considerations
- Master Plan Report
- ALP Set

Requires FAA Approval
Role of the Technical Advisory Committee (TAC)

• Comprised of representatives from local, state and federal governmental agencies, airlines, concessions and private businesses

• Seek out, understand, and consider the various community, operational and technical views

• Ensure expertise and input from stakeholders is captured

• Advisory input to alternatives development and implementation strategy
Forecast Summary and Planning Activity Levels (PAL)

Total Annual Aircraft Operations

72,000 -> 89,000

Annual Enplanements

1.9 m -> 3.7 m

PMAD Peak Hour Enplanements

708 -> 1,335

PMAD International Arriving Passengers

252 -> 488

Working Draft Concepts – Preliminary
Forecast versus Actual Activity

Planning Activity Level (PAL) Tracker

- Actual
- TAF Jan 2018
- TAF Feb 2019
- Master Plan Enplanements Forecast
- Enplanements Tracking Forecast

2005 high enplanement level of 2,879,602
Facility Requirements Process

- Planning Activity Levels (PALs)
- Demand versus Capacity
- Determine requirements
  - Airfield
  - Terminal
  - Roadways/Ground Access
  - Cargo/GA/Corporate
  - Support Facilities

Figure 20—PVD Distribution of Daily Scheduled Aircraft Operations

Sources: Official Airline Guide, WSP Analysis, Compiled by WSP.
Airside Facility Needs (Station #1)

• Runways:
  • Runway wind coverage
  • Both runways remain ADG IV:
    • Runway-taxiway separation
    • Runway shoulders
    • Runway exit taxiway
    • Runway blast pad length/width
    • Runway safety areas/object free areas
    • Runway protection zones
  • Runway 5-23 upgraded to ADG V:
    • Runway-taxiway separation
    • Runway holdlines
    • Runway shoulders
    • Runway blast pad length/width

• Taxiways:
  • Parallel taxiway
  • Taxiway design
  • Taxiway geometry
  • Nomenclature
  • Lighting

• Other:
  • Pavement condition
  • Hardstand/RON apron
  • VOR
  • Control Tower line-of-sight
Terminal Facility Needs (Station #2)

- **Current Terminal Deficiencies**
  - Aircraft parking positions/gate
  - Outbound baggage makeup
  - Hold rooms
  - Domestic baggage claim area
  - Concessions (post security)

- **During the 20-year Planning Period**
  - Most major functional areas will exceed capacity
  - Checked baggage system will handle the demand
  - Check-in and FIS meet demand by standard calculation, but the geometry does not allow for optimal throughput
Landside Facility Needs (Station #3)

• Roadway Network
  • Circulation and functional improvements
  • Overall access/gateway – Consider City planning

• Parking and TNC/Taxi Needs
  • Short-term needs
  • Cell Phone Lot
  • Trends to consider:
    • TNC hold areas; impact on parking needs
    • Potential Autonomous Vehicle (AV) variability
  • Garage considerations to shrink footprint
  • Transit factors
  • Long-term needs

• Terminal Frontage Roadway
  • Arrivals curbside
Cargo/GA/Support Facility Needs (Station #4)

- **Cargo Development**
  - No immediate needs determined
  - Consider areas for expansion
  - Building and aircraft parking positions
  - Avoid operations with GA aircraft if possible

- **GA – FBO, Corporate, Flight Training**
  - Resolve north ramp congestion
  - Conventional hangar demand
  - Itinerant aircraft hangar and parking positions
  - Consider more efficient use of north area

- **Support Facilities**
  - Fuel supply deficiencies
  - ARFF facilities – age and Group V considerations
  - Maintenance Facility needs
  - Deicing area needs
Environmental Constraints

Historic Property Identifiers
1. Rhode Island State Airport Terminal
2. Hangar No. 2
3. Millgrove State Airport Historic District (Proposed)
4. Double L Site
5. Top Flight Site
6. WRIC 91, known as the Kensington Lot
7. WRIC 28, known as the Porter Freeman Lot

*WHD: Warwick Historic Cemetery*
Meeting Goals

• Provide input to the development and evaluation of concepts

• Obtain diverse review of input:
  • Engineering (design and construction phasing)
  • Operational (efficiency and traffic flow)
  • Environmental (impact and permitting)
  • Financial (cost and phasing)
  • Feasibility (implementation)

• Result will inform the full development of alternative concepts and the selection of a preferred development concept
World Café Process

- Station #1 – Airside
  - Lead: Eliane Grayer

- Station #2 – Terminal
  - Lead: Scott Tumolo

- Roaming – Environmental
  - Carol Lurie

- Station #3 – Landside
  - Lead: Dave Macedonio

- Station #4 – Cargo/GA
  - Lead: Jake Shurer

- Roaming – Facilitator
  - Marc Champigny
Station Report Outs

• Station 1 – Airside
• Station 2 – Terminal
• Station 3 – Landside
• Station 4 – Cargo/GA
Post TAC Meeting

• Summarize Input from workshop and TAC meetings (April)
• RIAC buy-in on alternatives to be fully developed (April/May)
• Develop and evaluate alternatives, select preferred (May/June)
• Display draft preferred development at public workshop (Late June)
• Summarize public involvement, analyze cost and implementation (July/August)
• Finalize draft working paper and financial plans and TAC Meeting #2 (Sept/October)