T.F. Green Airport (PVD)
Master Plan Update

Technical Advisory Committee (TAC)
Meeting #2
Preferred Alternatives

September 2019
Introduction and Status

- Working Draft Paper Completed
- Current Effort
- Pending Start Up

- Demand/Capacity Facility Requirements
- Alternatives Development and Evaluation
- Phasing and Financial Strategy

Stakeholder and Public Involvement

- Inventory
- Forecasts of Demand

Requires FAA Approval

Master Plan Report
ALP Set
Requires FAA Approval

Green Airport
WELCOME!

T. F. Green Airport (PVD) Master Plan Update Public Workshop

TUESDAY, JUNE 25TH
4pm-8pm
THE CROWNE PLAZA HOTEL
801 Greenwich Ave, Warwick, RI 02886

WEDNESDAY, JUNE 26TH
4pm-8pm
WYNDHAM PROVIDENCE HOTEL
1850 Post Rd, Warwick, RI 02886

PLEASE SIGN IN HERE
Public Workshops – June 25th and 26th

- Excellent presentation – Great idea to keep public informed with the latest information of improving TF Green.

- I want to thank you for the noise reduction work on 44 Palace Ave. We appreciate the excellent workmanship.

- Flight path over hospital which is most important building in area, 3000+ people and needed in emergency.
Activity Forecast Tracking

Planning Activity Level (PAL) Tracker

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

Year:
- 2022 PAL 1
- 2027 PAL 2
- 2037 PAL 3

Enplanements:
- 2008 to 2037

Year:
- 2008 to 2037

Values:
- 0 to 4,000,000
Develop Preferred Concepts and Alternatives

• Assess stakeholder inputs on preliminary development concept(s).

• Evaluate airfield, terminal, landside, and cargo/general aviation concepts for:
  • Engineering (design and construction phasing)
  • Operational (efficiency and traffic flow)
  • Environmental (impact and permitting)
  • Financial (cost)
  • Feasibility (implementation)

• Conclude with preferred alternatives and FAA approved Airport Layout Plan (ALP).
Evaluation of Alternatives

• Each criterion qualitatively analyzed using a ranking system.

• Ranking will result in a preferred alternative.

• Preferred alternatives will be combined to create airport-wide development plan.
Airfield Alternatives

- The following conclusions were reached:
  - No runway extensions or realignments required.
  - The critical aircraft remains a C-IV, with future critical aircraft considerations for C-V (500 or more annual operations).
  - Airfield geometry improvements are required to meet FAA design standards and maximize safety.
  - Airfield lighting improvements are required to enhance safety.
Airfield Alternatives

The following airfield issues were reviewed and evaluated:

1. Runway 16-34 Design Code
2. Runway 16-34 to Taxiway C Separation
3. Runway 16-34 Parallel Taxiways
4. Runway 5-23 Exit
5. Direct Access from North Apron to Runway 23
6. Runway 5-23 to Taxiway M Separation
7. Other Runway/Taxiway Improvements
Airfield Alternatives
Runway 16-34 Design Code
## Airfield Alternatives
### Runway 16-34 Design Code

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1 - CIII</th>
<th>Alternative 2 - BII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td></td>
<td>No Aircraft Larger than B-II</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Add shoulders</td>
<td>Remove Pavement; Relocate Signage, Lighting and Markings</td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td>Significant Runway Closures</td>
</tr>
</tbody>
</table>

- **Preferred Alternative**: ✓

- **No or minimal impacts**
- **Moderate impacts**
- **Significant impacts**
Airfield Alternatives

Taxiways

[Diagram showing alternative taxiways with labels for Alternative 1: Do Nothing (Keep Modification to Standards) and Alternative 2: Increase Separation to 400 feet. The diagram includes a legend for property line, existing buildings, existing airfield pavement, NAVAID, proposed taxiway, and proposed pavement demo.]
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alt 1</th>
<th>Alt 2</th>
<th>Alt 3</th>
<th>Alt 4</th>
<th>Alt 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td>Need MOS</td>
<td>Full Parallel Txwy C</td>
<td>Partial Parallel Txwy C</td>
<td>Full Parallel Txwy B</td>
<td>Partial Parallel Txwy B</td>
</tr>
<tr>
<td>Operational</td>
<td>Occasional Restrictions</td>
<td>Wetlands</td>
<td>Limited Use, Glide Slope</td>
<td>Wetlands, Noise</td>
<td>Relocation</td>
</tr>
<tr>
<td>Environmental</td>
<td>Runway 34 End Access During Construction</td>
<td>Relocation</td>
<td>Relocation</td>
<td>Relocation</td>
<td>Relocation</td>
</tr>
<tr>
<td>Feasibility</td>
<td>Runway 34 End Access During Construction</td>
<td>Relocation</td>
<td>Relocation</td>
<td>Relocation</td>
<td>Relocation</td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- No or minimal impacts
- Moderate impacts
- Significant impacts
Airfield Alternatives
Runway 5-23 Exit

Legend
- Property Line
- Existing Buildings
- Existing Airfield Pavement
- NAVAID
- Proposed Taxiway

Runway 5-23 to Taxiway M separation is insufficient to accommodate a high-speed exit (minimum of 427' required)
# Airfield Alternatives
## Runway 5-23 Exit

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1 Do Nothing</th>
<th>Alternative 2 Stub Taxiway</th>
<th>Alternative 3 High Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td>No or minimal impacts</td>
<td>Insufficient Rwy-Twy Separation</td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td>Occasional High ROT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>Stormwater BMB</td>
<td>Stormwater BMB</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td>Runway/Taxiway Closures During Construction</td>
<td>Runway/Taxiway Closures During Construction</td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **No or minimal impacts**
- **Moderate impacts**
- **Significant impacts**
Airfield Alternatives
Direct Access from North Apron to Runway 23 End
## Airfield Alternatives
Direct Access from North Apron to Runway 23 End

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1 Do Nothing</th>
<th>Alternative 2 Shift A South</th>
<th>Alternative 3 Remove A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
</tr>
<tr>
<td>Operational</td>
<td></td>
<td>Longer taxi routes, apron bottlenecks</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

- **No or minimal impacts**
- **Moderate impacts**
- **Significant impacts**
Airfield Alternatives
Runway 5-23 to Taxiway M ADG V Separation 400’ to 500’
## Airfield Alternatives
### Runway 5-23 to Taxiway M ADG V Separation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop MOS</td>
<td>Shift Txwy M</td>
</tr>
<tr>
<td>Design Standards</td>
<td>MOS for when Visibility is &lt; ½ SM (1.1% of the Time) <strong>AND</strong> ADG V is Landing</td>
<td><strong>No Access to Portions of Runway 5-23</strong></td>
</tr>
<tr>
<td>Operational</td>
<td>Occasional Restrictions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Occurrence</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td><strong>✓</strong></td>
</tr>
</tbody>
</table>

Legend:
- **Green**: No or minimal impacts
- **Yellow**: Moderate impacts
- **Orange**: Significant impacts

Preferred Alternative: ✓
Airfield Alternatives
Other Runway/Taxiway Improvements (no alternative analysis)

**ADG IV**
- Increase length of Rwy 23 End Blast Pad
- Widen Twy C1 shoulders
- Implement consistent taxiway lighting
- Upgrade taxiway fillets and shoulders to TDG 5

**ADG V**
- Upgrade EMAS Bed
- Widen Rwy 5-23 shoulders 10’
- Widen/lengthen Rwy 23 End Blast Pad
- Widen Rwy 5 End Blast Pad
- Upgrade taxiway fillets and shoulders to TDG 5
Preferred Airfield Layout – ADG V

Legend:
- Property Line
- Existing Buildings
- Existing Airfield Pavement
- NAVAID
- Proposed Shoulders
- Proposed Pavement Demo
- Proposed Taxiway
- Potential Terminal Area
- Potential GA/Cargo Area
- Proposed Blast Pad
- Proposed Hold Line Relocation
- Proposed Taxiway Lighting Improvements

Note: Upgrade taxiway shoulders and fillets to Taxiway Design Group 5 standards where necessary.
Terminal Alternatives Evaluation

• Design Standards – accommodates long-term passenger and aircraft facility demands. Enhance the passenger experience through amenities, convenience, ease of movement, and technology.

• Operational – improves operational efficiency of airport and tenants, and improves aircraft circulation around the terminal/concourse.

• Environmental – compares level of new construction vs. incorporation and reuse of existing facilities and pavements.

• Financial – maximizes financial return on investment. Ability to facilitate enhanced concessions and revenue potential throughout the terminal facility.

• Feasibility – Ability to implement in an incremental manner. Impact of relocating or not relocating the VOR.
Terminal Alternative 1

Possible to expand apron area for ADG-IV aircraft parking positions at concourse extension or RON positions.

Approximately 7-8 ADG-III net new gates.

4 new ADG-III RON positions.

Fuel farm to remain.

Processing expansion, as needed.

Loading dock expansion.

Airfield geometry - to be determined.

Aircraft Legend:
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions
Terminal Alternative 2

- Loading dock expansion
- Processing expansion, as needed

- Possibility to expand concourse for additional gates or RON positions

- Approximately 3-4 ADG-III net new gates

- New ADG-III, ADG-IV, and ADG-V aircraft parking positions

- Future terminal expansion beyond the planning horizon

- Airfield geometry - to be determined
Terminal Alternative 3

- Loading dock expansion
- Processing expansion, as needed

Airfield geometry - to be determined

Aircraft Legend:
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions
Terminal Alternative 4

Processing expansion, as needed

Loading dock expansion

Approximately 4.5 ADG-III net new gates

Airfield geometry - to be determined

Aircraft Legend
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions
Terminal Alternative 5

- Possible to expand apron area for ADG-IV aircraft parking positions at concourse extension or RON positions
- Processing expansion, as needed
- Approximately 10-11 ADG-III net new gates
- Loading dock expansion

Aircraft Legend:
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions

Airfield geometry - to be determined
Terminal Alternative 6

Processing expansion, as needed

Loading dock expansion

Aircraft Legend
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions

Approximately 7 acres of developable land
Approximately 17-18 ADG-II set new gates

Airfield geometry - to be determined

Green Airport
## Terminal Alternatives Evaluation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
<th>Alternative 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
</tr>
<tr>
<td>Operational</td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td>Environmental</td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td>Financial</td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
<td><strong>Better</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td>Feasibility</td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
<td><strong>Best</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

### Legend
- **Orange**: Good
- **Yellow**: Better
- **Green**: Best
Terminal Preferred Alternative
Terminal Alternative 2, Phase 1

Phase 1, Level 2
Draft Concept Layout
Terminal Alternative 2, Phase 1

Figure X.2
Preferred Terminal Alternative-PH1, LVL1

Building Legend
- Concession storage
- CBP processing
- CBP offices
- Sterile processing
- TBD

Aircraft Legend
- Existing aircraft parking positions
- New ADG-III aircraft parking positions
- New ADG-IV aircraft parking positions
- New ADG-V aircraft parking positions

Source: GHD Engineers, Inc.

Phase 1, Level 1
Draft Concept Layout
Cargo/General Aviation Evaluation

- Design Standards – accommodates aircraft and airspace safety.

- Operational – improves operational efficiency of tenants, and improves aircraft circulation around the north ramp. More ramp space is highest operational need.

- Environmental – compares level of new construction vs. incorporation and reuse of existing facilities and pavement.

- Financial – maximizes financial return on investment. Although most of these alternatives would require third-party investment.

- Feasibility – Ability to implement in an incremental manner.
North Side Cargo/GA Alternative 1
North Side Cargo/GA Alternative 3
South Side Cargo/GA Alternative 1

Legend:
- Property Line
- Existing Buildings
- Proposed Buildings
- Existing Airfield Pavement
- Proposed Pavement
- NAVAD

Source: CAS Engineers, Inc.
South Side Cargo/GA Alternative 2

Legend
- Property Line
- Existing Buildings
- Proposed Buildings
- Existing Airfield Pavement
- Proposed Pavement
- NAYAD

Potential Cargo Facility
- $55,000 SF
- 146 FT x 365 FT

(2) Potential ADG
- V Hardstands

Reserved for Potential Future Aeronautical Expansion

Source: SAS Engineers, Inc.
South Side Cargo/GA Alternative 3
## Cargo/GA Alternative Evaluation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>North Alternative 1</th>
<th>North Alternative 2</th>
<th>North Alternative 3</th>
<th>South Alternative 1</th>
<th>South Alternative 2</th>
<th>South Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td>Good</td>
<td>Better</td>
<td>Best</td>
<td>Good</td>
<td>Better</td>
<td>Best</td>
</tr>
<tr>
<td>Operational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **North Alternative 1**
- **North Alternative 2**
- **North Alternative 3**
- **South Alternative 1**
- **South Alternative 2**
- **South Alternative 3**

**Legend**:
- Green: Good
- Yellow: Better
- Green: Best
Fuel Farm Improvement Alternative

Legend:
- Property Line
- Existing Buildings
- Proposed Buildings
- Existing Airfield Pavement
- Proposed Pavement
- Proposed Fence
- Proposed Fence Demolition

- Existing Access Gate to be Decommissioned
- Potential Future Access Gate
- Truck Circulation Route
- (3) Potential Fuel Tanks 50,000 Gallons Each
# Landside Alternatives

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 1</td>
<td>Airport Loop Road Sight Distance</td>
<td>PAL 1</td>
</tr>
<tr>
<td>Issue 2</td>
<td>Airport Loop Road Wayfinding</td>
<td>PAL 1</td>
</tr>
<tr>
<td>Issue 3</td>
<td>Pedestrian Connectivity &amp; Wayfinding</td>
<td>PAL 1</td>
</tr>
<tr>
<td>Issue 4</td>
<td>Airport Loop Road Wayfinding</td>
<td>PAL 1</td>
</tr>
<tr>
<td>Issue 5</td>
<td>Curbside Congestion</td>
<td>PAL 1</td>
</tr>
<tr>
<td>Issue 6</td>
<td>Curbside Dwell Times</td>
<td>PAL 2</td>
</tr>
<tr>
<td>Issue 7</td>
<td>Redundant Circulation</td>
<td>PAL 2</td>
</tr>
<tr>
<td>Issue 8</td>
<td>Airport Loop Road at Evans Road Future Capacity</td>
<td>PAL 3</td>
</tr>
<tr>
<td></td>
<td>Future Parking Capacity</td>
<td>PAL 3</td>
</tr>
</tbody>
</table>
Landside Alternatives
Issue #1 – Airport Loop Road Sight Distance
Landside Alternatives
Issue #1 – Airport Loop Road Sight Distance
Landside Alternatives
Issue #2 – Airport Connector Wayfinding
Landside Alternatives
Issue #3 – Pedestrian Connectivity & Wayfinding to Post Road

- Improve Lighting, Signage, and Marking
Landside Alternatives
Issue #4 – Airport Connector Road Wayfinding

- Add Redundant or Relocate Signal Heads, Recalibrate
- Add Signage, Striping, and Pavement Markings
• Add Overhead Signage
Landside Alternatives
Issue #6 – Curbside Dwell Times

• Alternative 1 – Do Nothing
• Alternative 2 – Optimize Targeted Enforcement
• Alternative 3 – Relocate Cell Phone Lot Adjacent to Lot D
• Alternative 4 – Relocate Cell Phone within Lot E Adjacent to Roadway
• Alternative 5 – Relocate Cell Phone west of Belly Cargo Building
Landside Alternatives
Issue #6 – Curbside Dwell Times – Alt 3
Landside Alternatives
Issue #6 – Curbside Dwell Times – Alt 4
Landside Alternatives
Issue #6 – Curbside Dwell Times – Alt 5
## Landside Alternatives

### Issue #6 – Curbside Dwell Times

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
</tr>
<tr>
<td>Operational</td>
<td>Moderate impacts</td>
<td>Moderate impacts</td>
<td>Moderate impacts</td>
<td>Moderate impacts</td>
<td>Moderate impacts</td>
</tr>
<tr>
<td>Environmental</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
<td>No or minimal impacts</td>
</tr>
<tr>
<td>Financial</td>
<td>Enforcement costs</td>
<td>Alternative 4 would be most expensive</td>
<td>Alternative 4 would be most expensive</td>
<td>Alternative 4 would be most expensive</td>
<td>Alternative 4 would be most expensive</td>
</tr>
<tr>
<td>Feasibility</td>
<td>No or minimal impacts</td>
<td>Coordinate new access with RIDOT</td>
<td>Reduce Lot E capacity</td>
<td>Reduce Lot E capacity</td>
<td>Reduce Lot E capacity</td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Landside Alternatives
Issue #8 – Airport Loop Road at Evans Road Future Capacity & Expand Airport Parking

- Alternative 1 – Do Nothing
- Alternative 2 – Move Signalized Intersection and Increase Capacity
Landside Alternatives
Issues #7 and #8 – Airport Loop Road at Evans Road Future Capacity & Expand Airport Parking

Alt 2
Landside Alternatives
Issue #8 – Airport Loop Road at Evans Road Future Capacity & Expand Airport Parking
Landside Alternatives
Issue #8 – Airport Loop Road at Evans Road Future Capacity & Expand Airport Parking
## Landside Alternatives

**Issue #8 – Airport Loop Road at Evans Road Future Capacity & Expand Airport Parking**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td>Existing issues remain</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>Potential drainage impacts</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td>Cost to expand existing surface parking</td>
</tr>
<tr>
<td>Feasibility</td>
<td></td>
<td>Magnitude of construction impacts substantial</td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td></td>
<td>✅</td>
</tr>
</tbody>
</table>

Legend:
- **Green**: No or minimal impacts
- **Yellow**: Moderate impacts
- **Orange**: Significant impacts
Landside – Preferred Alternatives
Environmental Overview

- Developed Environmental Constraints Mapping
- Held Environmental Workshop
- Matrix of Environmental Considerations
- Assessed Based Upon Preliminary Alternatives
  - Development Area
  - Likely Federal Permits/Approvals
  - Likely State Permits/Approvals
  - Likely Municipal Permits/Approvals
  - Potential Resource Impacts
- Refine and Address for Preferred Development Program
Key Next Steps

• September
  • TAC Meeting #2 input
  • Select preferred development concept

• October
  • Refinements and final documentation review
  • RIAC Board briefing
  • Complete work on financial and implementation plan

• November and December
  • Complete draft Master Plan
  • Submittal to FAA for review of draft final document and Airport Layout Plan