



T.F. Green Airport EIS Inter-Agency/Tribal Coordination Group Meeting

October 3, 2005



Agenda



12:30 – 12:45 Welcome/Introductions

12:45 – 1:00 Status Update on Progress

1:00 – 1:45 Overview of Purpose and Need

1:45 – 3:10 Discussion on P&N/
Technical Reports

3:10 – 3:30 Next Steps



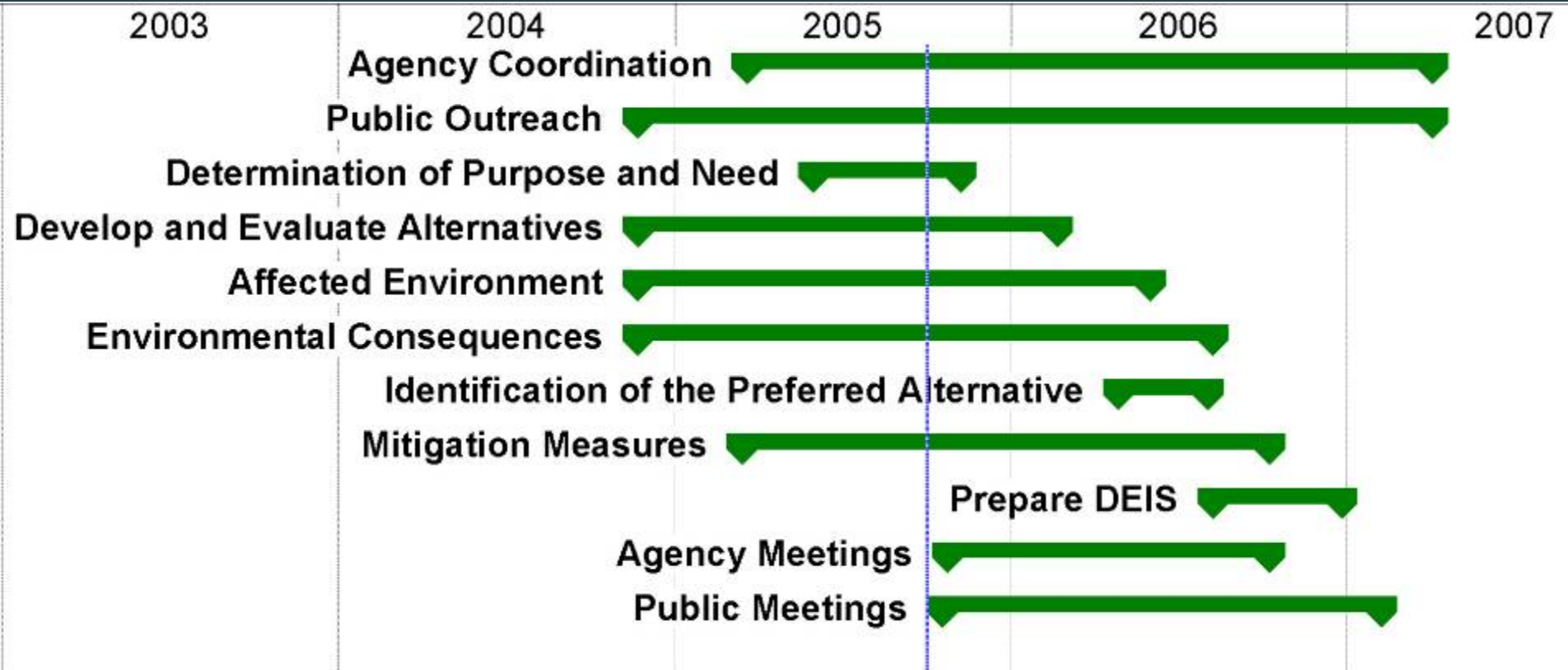
Overview



- ▶ Status of the EIS process
 - Schedule
 - Draft P&N
 - Existing Conditions
- ▶ Coordination Agreement
 - Coordination Agreement - signed
 - City MOA
 - October 3 – First Meeting on P&N
 - November 8 – Sign off on P&N
- ▶ Public Meetings on P&N
 - October 19 – Warwick
 - October 20 – Cranston
- ▶ Public Outreach
- ▶ Agency Meetings



Project Schedule





Responsibilities - FAA



- ▶ Statutory and regulatory oversight responsibilities with respect to the airport infrastructure development process
 - Administers grants to publicly-owned airports issued under the Airport Improvement Program
 - Approves changes to the Airport Layout Plan - required to allow any new facilities or other physical changes at the Airport
- ▶ Aviation/Airport Safety
- ▶ Air Traffic Control
- ▶ Aviation Rulemaking



Responsibilities - FAA



- ▶ FAA's EIS provides context for decisions required in connection with the proposed improvements as required under NEPA and various implementing regulations



Responsibilities – RIAC



Rhode Island Airport Corporation

- ▶ Define, develop, maintain and operate the physical infrastructure of the Airport
- ▶ Ensure that Airport functions effectively and efficiently as Rhode Island's primary commercial passenger airport
- ▶ Conduct planning efforts to identify facility needs and improvements
- ▶ Follow and implement all FAA and TSA rules and regulations as they pertain to airport facilities and operations
- ▶ Rent facilities and land to airport tenants



Responsibilities – RIAC



- ▶ U.S. and most foreign airlines have a basic right of access to serve public airports that are within the federal AIP program
- ▶ RIAC has no control over airline price, route or service decision made by airlines and has responsibility to provide appropriate facilities
- ▶ RIAC, as sponsor of airport receiving Federal funding has responsibility to meet grant assurances and to keep airport open for public use



Purpose and Need



- ▶ Role of T.F. Green
 - Rhode Island, Regional, National
- ▶ Industry Trends
- ▶ Forecast Update
- ▶ Airport Facility Needs
 - Safety
 - Efficiency
- ▶ Purpose and Need Statement



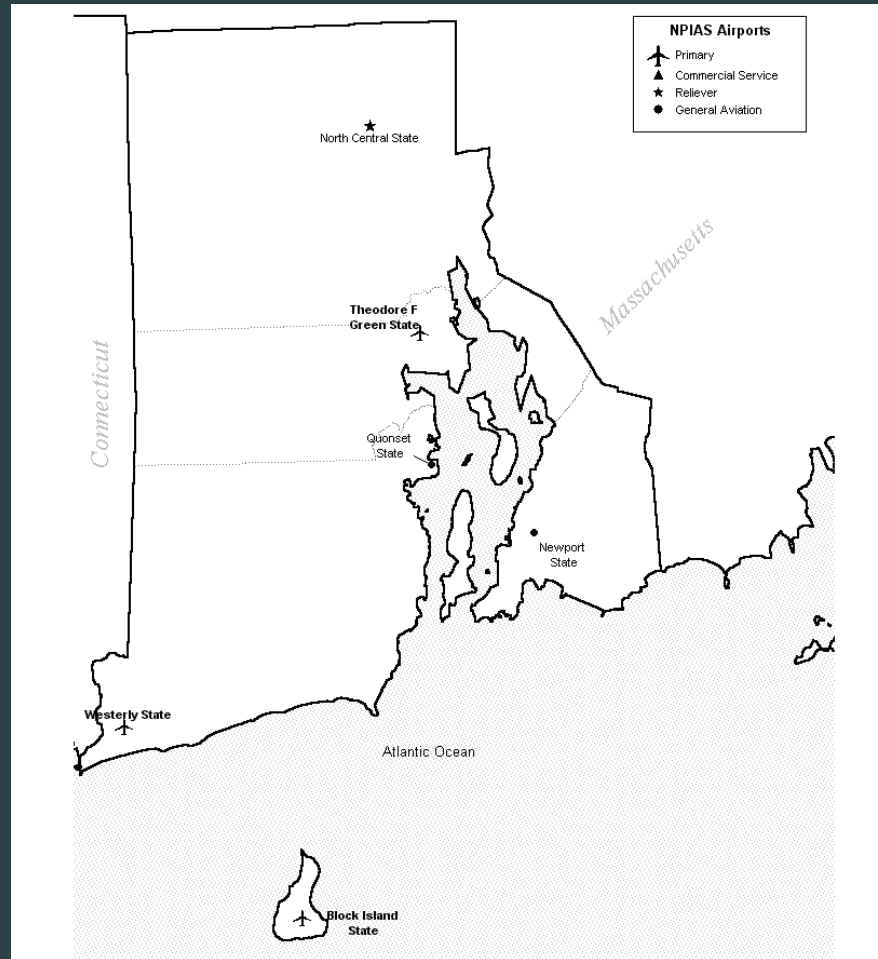
Role of T.F. Green



- ▶ Medium-hub commercial service airport
- ▶ Serves over 5 million annual pax. with over 300 daily operations
- ▶ Fulfills state, regional and national demands of business and leisure travel, and air cargo capacity for SE New England
- ▶ T.F. Green Airport is the largest economic generator in the State of Rhode Island
 - \$1.3 billion in economic activity and \$388.7 million in earnings (2001)
 - 1,400 jobs directly
 - Airport-related employment - hotels, rental car agencies, parking facilities, gas stations, other travel-related businesses



Rhode Island Role



- ▶ Primary commercial passenger airport in State
- ▶ Part of state-wide airport system
 - Quonset Airport
 - North Central Airport
 - Block Island Airport
 - Westerly Airport
 - Newport Airport





Regional Role



- ▶ One of 3 major airports serving the eastern New England region
 - Boston-Logan International – primary international/domestic gateway
 - T.F. Green / Manchester – secondary
- ▶ Overlapping market areas - attract different shares of the southeastern New England aviation market
- ▶ T.F. Green provides relief and alternative air transportation options in New England that will ease the burden on Logan Airport

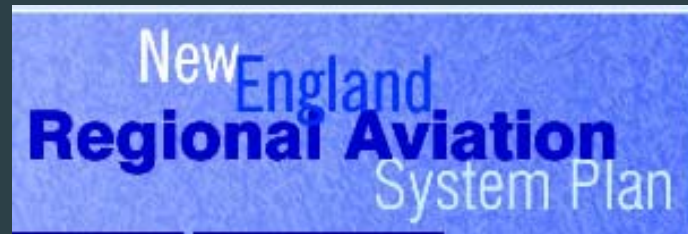


New England Regional Aviation System Plan (NERASP)



- ▶ Sponsored by FAA, in conjunction with 10 New England airports
- ▶ Goal is to expand and improve current regionalization efforts to better accommodate future air travel demands through effective and efficient utilization of all the airport facilities available in New England
- ▶ Update regional aviation forecasts and identify travel patterns in the region

www.nerasp.com/





National Role



- ▶ National Plan of Integrated Airport Systems (NPIAS)
 - Identifies more than 3,700 airports significant to the nation's air transportation system
 - One of 37 medium-hub commercial service airports in the United States (enplanes 0.025% - 1% of national air passengers)
 - One of 566 airports which currently have scheduled commercial airline service

**National Plan
of Integrated
Airport Systems
(NPIAS)**



Industry Trends – Pax. Demand



- ▶ **Passenger demand at T.F. Green will continue to grow, despite recession and security issues due to:**
 - Growth of low air fares throughout the industry
 - Increases in the New England population (LCC and legacy)
 - Growth in the Providence-Warwick metropolitan area
 - PVD is just recovering (2005) to pre-9/11 levels (4-5 years)
- ▶ **Implications for T.F. Green:**
 - Continue to play a key role in serving its market area
 - Maintaining its existing passenger levels - not losing passengers to other regional airports
 - Provide appropriate facilities to accommodate the anticipated demand



Industry Trends – Long-Haul



- ▶ **Growing demand in long-haul domestic and international markets**
 - Low-cost carriers focusing on long-haul domestic operation (moving into previously unexploited routes served by legacy airlines)
- ▶ **Implications for T.F. Green**
 - Need for longer runway to accommodate payload



Industry Trends - Flexibility



- ▶ **Airlines require operating flexibility**
 - Airlines have specific facility, aircraft fleets requirements and operating constraints
 - Operating flexibility wrt. time of day is critical to domestic and international charter flight operators
 - Operating fees are important to LCCs
- ▶ **Implications for Green**
 - Airside and landside facilities need to accommodate demand
 - Attractive due to low landing fees and flexible schedules
 - Need to expand terminal facilities



2004 Operations



- ▶ 5,509,186 air passengers
- ▶ 121,428 operations

| | Air Carrier | Air Taxi | General Aviation | Military | Touch & Go | Total |
|---------------|-------------|----------|------------------|----------|------------|---------|
| Yearly Total | 53,764 | 30,957 | 31,055 | 301 | 5,351 | 121,428 |
| Average Daily | 147 | 85 | 85 | 1 | 15 | 333 |



2003 – 2004 Trends



- ▶ From 2003 – 2004:
 - Total operations **decreased** by 8% from ~132,500 to ~121,500
 - Total commercial passenger enplanements and deplanements **increased** by 6% from ~5,176,000 to ~5,500,000
- Attributable to larger aircraft in the fleet, higher load factors



Forecasts



- ▶ 2004 Existing Conditions
- ▶ Base Case – Future No-Action
(no runway extension)
- ▶ Forecast consistent with previous
– but different fleet mix
- ▶ Forecast consistent with TAF and
NERASP



Forecast Assumptions



- ▶ Economic growth will continue, but at somewhat lower rates than those expected
- ▶ Fuel prices will remain volatile
- ▶ Airlines strive for aircraft technical efficiencies
- ▶ Both legacy and low cost carriers will continue to increase their service at T.F. Green
- ▶ Growing congestion and delays at other airports, particularly Logan, will not be a significant factor in the growth of traffic at T.F. Green



Forecasting Approach



- ▶ Forecast covers following elements:
 - Scheduled/charter passenger traffic
 - Scheduled aircraft operations by destination and aircraft type
 - Charter aircraft operations
 - General aviation aircraft operations
 - Military aircraft operations
 - Cargo – freight and mail



Future No-Action: Air Service Assumptions



| Destination | Rationale |
|-----------------|-----------------------------------------------------------------------------------------------|
| Pittsburgh | Anticipated new destination by Southwest |
| Raleigh-Durham | Recently discontinued service by American Eagle (suggests that route has long-term prospects) |
| West Palm Beach | Conspicuous gap in the Florida market |
| Houston | Would restore service that previously operated in 2000 |



Forecasts - Passengers



Forecast Annual Passengers^{1, 2}

| Year | Passengers | |
|------|------------|-------------------|
| | Total | Percentage Change |
| 2004 | 5,509,186 | |
| 2012 | 6,991,992 | 26.92% |
| 2015 | 7,714,419 | 10.33% |
| 2020 | 8,990,897 | 16.55% |

- 1 Enplaned plus Deplaned
2 With Existing Facilities (Future No-Action)



Forecasts - Operations



Forecast Annual Operations^{1,2}

| Year | Total | Operations | |
|------|---------|------------|-------------------|
| | | | Percentage Change |
| 2004 | 121,428 | | |
| 2012 | 137,853 | | 13.52% |
| 2015 | 143,824 | | 4.33% |
| 2020 | 153,162 | | 6.49% |

- 1 Either a landing or a take-off
- 2 With Existing Facilities (Future No-Action)



Non-Quantifiable Forecast Factors



- ▶ Higher levels of service and passengers possible due to:
 - Unexpected level of passenger demand in response to the introduction of new low fare service
 - Impact of competitive responses by airlines following the introduction of new flights by another carrier



Facility Needs Assessment



- ▶ Improvement Program Projects
 - MPU Needs Assessment
 - Supplemental Analysis (Runway Focus)
 - 10-year CIP

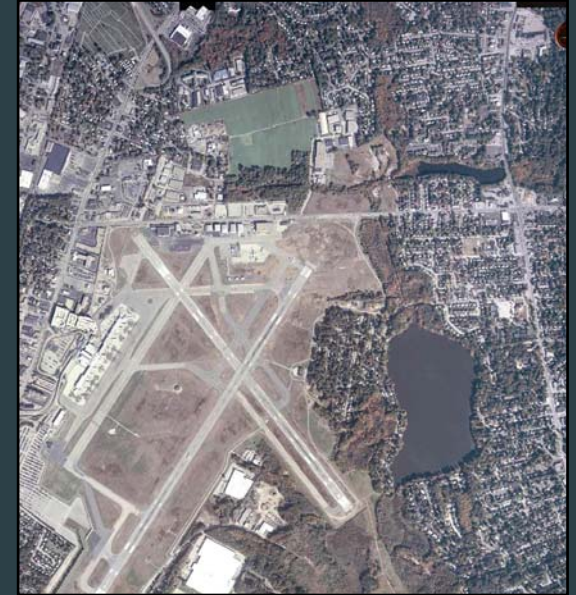


Needs Assessment



- ▶ Safety Conformance
 - Runway 16-34 RSAs
 - Taxiway C
 - Hangar 1 - Obstruction

- ▶ Efficiency Needs
 - Terminal Concourse/Gates
 - Belly Cargo
 - Integrated Cargo
 - Roadways/Parking
 - Support – GSE/Fuel Farm
 - Runway 5/23 Length
 - ARFF



Safety Needs



Hangar No. 1

- Obstruction to Air Navigation

Aircraft Rescue and Fire Fighting Facility

- Potential for Airport's Response Time to Increase with Runway Extension

Runway 16-34

- Runway Safety Areas Do Not Meet FAA Design Standards

- Pavement Deficiencies

Taxiway C

- Deficient Lateral Separation from Runway 16-34



Safety Enhancement Needs



▶ Runway 16-34 Assessment

- Last resurfaced in 1978. Pavement overlay project provided a short-term fix in 2004
- Runway Safety Areas (RSAs) are not in compliance with FAA's design criteria.
 - RSA currently extend 180ft and 200ft at the threshold ends of Runway 16 and 34, respectively. Required length is 1000ft.



Safety Needs



▶ Taxiway C Assessment

- Separation between Runway 16-34 and Taxiway C does not meet the safety and design standard
 - Separation between centerline of Runway 16-34 and centerline of Taxiway C currently 300 feet, instead of required 400ft



Runway 16-34 RSAs

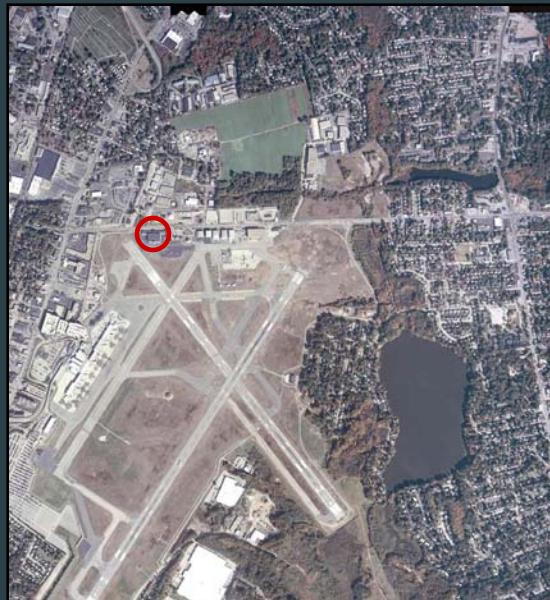


Safety Needs



► FAR Part 77 Assessment

- Hangar No. 1 currently penetrates the Airport's FAR Part 77 primary and transitional surfaces



Efficiency Needs



Terminal Complex

Four Gates Needed Now

Four More Gates Needed to Address Future Demand

Additional Concourse Width Needed to Accommodate Passenger Processing

Central Heating and Cooling Plant Will be Unable to Service and Expanded Concourse

Roadways and Parking

Terminal Loop Roadway Experiences Excessive Peak Hour Delays

Long-Term Parking Area will be Unable to Meet Projected Growth

Additional Employee Parking Needed



Efficiency Needs



Cargo Needs

Belly Cargo Facility will be Demolished for Terminal Expansion ●

Space Deficiency for Intergrated Cargo ●

Support Facilities

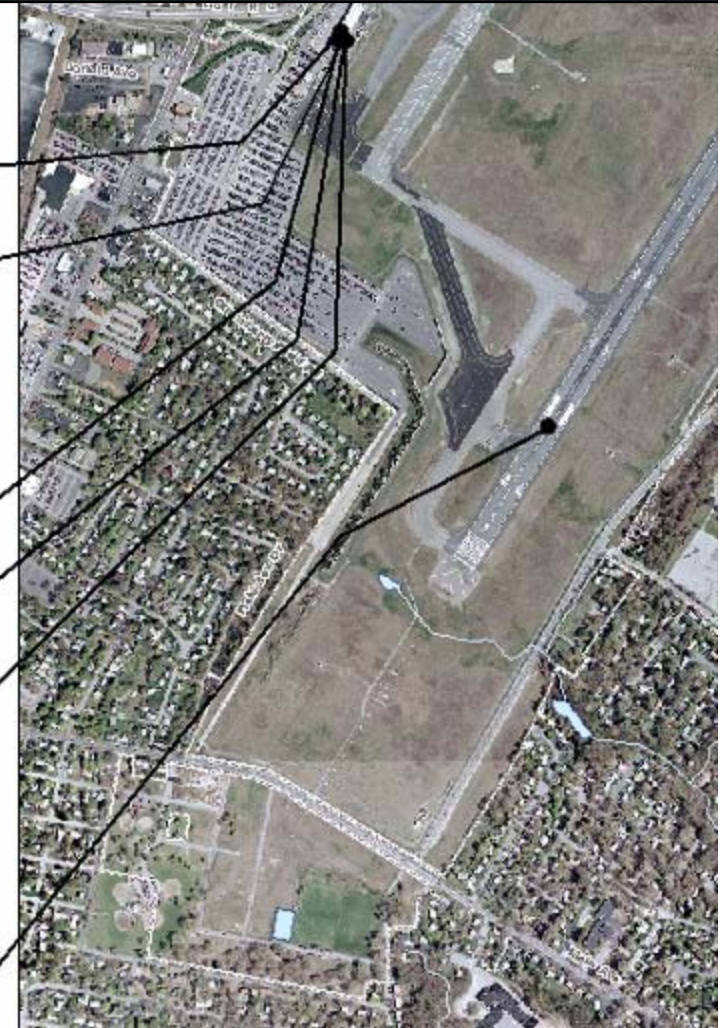
GSE will be Demolished for Terminal Expansion ●

Space Deficiency for GSE Maintenance Facility ●

Fuel Farm Storage Capacity Inadequate ●

Airfield

Current Runway Length is Inadequate for Non-Stop, Long-Haul Service ●



Efficiency Needs - Terminal



► Concourse Assessment

- Spatial deficit of ~40% due to:
 - increased operating load factors to ~80%
 - Changing fleet mix (larger aircraft requiring additional areas for parking & maneuvering)



► Passenger Gate Assessment

- Currently 22 passenger gates
- Need 4 gates immediately
- Expected total gate requirements to meet increased demand:
 - 30 by 2010 (total of 8)
 - 40 by 2020



Efficiency Needs - Air Cargo



► Belly Cargo Assessment

- Insufficient capacity due to:
 - Increased Airport activity
 - Shift in aircraft fleet mix
 - Presence of GSE maintenance operations in the same building



Efficiency Needs - Air Cargo



▶ Integrated Cargo Assessment

- Current facility has a ~30,000 SF deficiency, and lacks appropriate freight operations and vehicular maneuvering areas



- FedEx projected a need for 50,000 ft² of building space to accommodate cargo loads through 2010



Efficiency Needs - Roadway Access



► Terminal Loop Roadway Assessment

- Currently experiences peak hour congestion
 - Level of Service (LOS) estimated at LOS E (unstable traffic flow, traffic demand approaching or at roadway capacity)
 - By 2010, LOS estimated at LOS F (heavily congested flow, traffic demand exceeds roadway capacity)



Efficiency Needs - Parking



▶ Short-term Parking

- Increased security requirements has decreased short-term parking availability

▶ Long-term Parking

- Unable to meet projected growth

▶ Employee parking

- Occupying long-term lot
- Dedicated area needed



Efficiency Needs - Support / GSE



▶ GSE Maintenance Facility Assessment

- Currently shared with Belly Cargo
- Provides no dedicated, sheltered storage areas
- Continued GSE maintenance growth is expected due to:
 - anticipated new entrant air carriers
 - the addition of terminal gates
 - and increased daily departure activity



Efficiency Needs – Support / Fuel Farm



▶ Fuel Farm Deficiencies



- Current capacity (250,000 gallons in five 50,000 gallon tanks) not meeting 3 day reserve standard
- RIAC considering holding 5 to 7 day reserve
- Additional capacity needed to support forecast increases in aircraft operations



Efficiency Needs - Runway

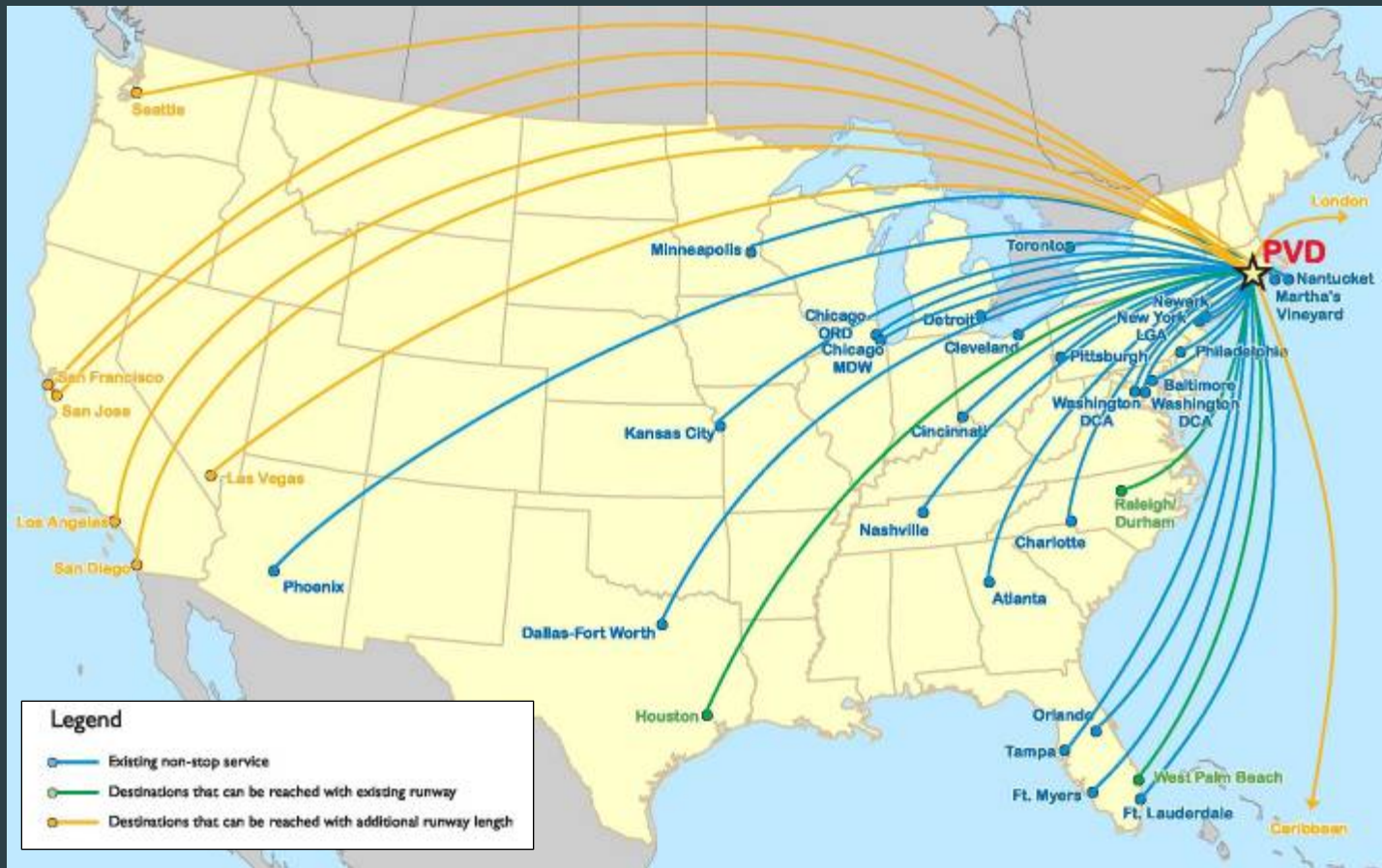


▶ Runway 5-23 Assessment

- Conducted study of the current most popular destinations from T.F. Green
- There is a significant unmet need for non-stop, long-haul service to West Coast, London and Caribbean
- T.F. Green is losing passengers to Logan because service is not provided



Unmet Demand



Efficiency Needs -Runway



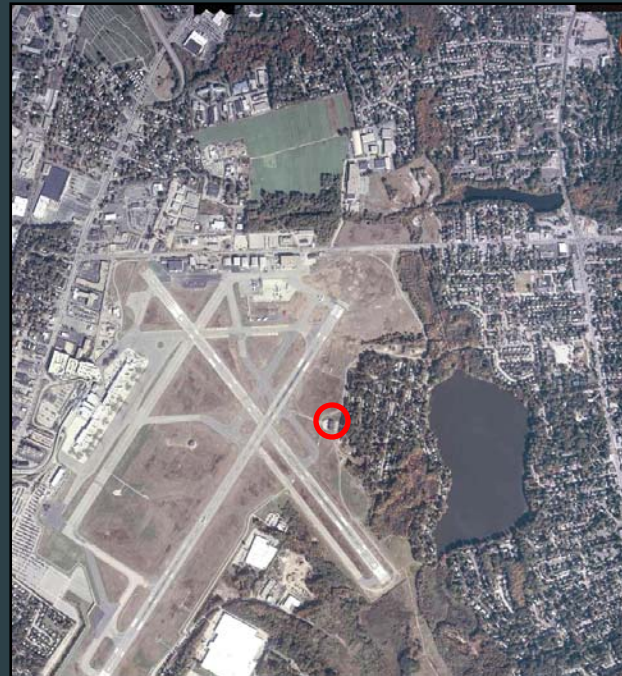
- ▶ Existing runway length cannot accommodate long-haul, non-stop flights to West Coast, Western European or Caribbean destinations
- ▶ T.F. Green is not fulfilling its role in the New England regional aviation system as a public transportation utility by serving its own market area, or as an alternative airport to Logan



Efficiency Needs - Support / ARFF



- ▶ Aircraft Rescue and Fire Fighting Facility (ARFF) Assessment
 - Additional facility may be required depending on configuration of RW 5-23 extension



Purpose



The **purpose** of the T.F. Green Airport Improvement Program is to:

- ▶ **Enhance safety** by improving the runway safety areas and taxiways and removing obstructions.
- ▶ **Enhance the efficiency** of the Airport and the Regional Airport System, and meet future demand for aviation services by improving airfield and other airport facilities



Benefits



- ▶ Aviation System
 - Enhanced safety
 - Expand and develop facilities to meet anticipated demand
 - Meet frequently changing demands of the airlines and expectations of the traveling public

- ▶ Regional
 - Critical to growth of Rhode Island's economy
 - Job creation
 - Movement of goods and people
 - Connection to the rest of the country and international trading partners



Benefits



- ▶ Local and Rhode Island
 - Serve transportation need for public and business
 - Provide significant financial contributions as an economic generator
 - Job creation
- ▶ Traveling Public
 - Assortment of flight destinations and schedules
 - Competitive ticket pricing
 - Non-stop travel options
 - Reduction in travel time to an airport, driving time, expenses and parking fee
 - Increases in traveler convenience and level of service



Benefits



► Environmental

- Modifications to roadway would improve motorist safety and reduce emissions of air pollutants from vehicles
- Upgrading fuel farm could incorporate enhanced spill protection and water quality measures
- Terminal building improvements could be designed to include sustainability measures that could reduce energy consumption



Discussion

- ▶ Coordination Group Feedback
- ▶ Purpose and Need Statement
- ▶ Technical Memos



Next Steps



- ▶ Draft e-mailed by end of week
- ▶ Comments by November 4
- ▶ Next Meeting – November 8
 - Comments
 - Consensus Point
- ▶ Public Meetings 10/19 and 10/20
- ▶ Begin Alternatives Screening Process
- ▶ Continue Existing Conditions Analysis

