

T. F. Green Airport Master Plan Update and Environmental Impact Statement

Study Resource Committee (SRC) Meeting

Forecasting

July 25, 2001

5:30 p.m.



Rhode Island Airport Corporation



Landrum & Brown Team

Master Plan/EIS Elements

- **Master Plan**

- Charrettes/Scoping
- Guiding Principles
- L&E Contract
- Inventory/**Forecasts**
- Facility Requirements
- Alternative Concepts
- Fiscal Impact Analysis
- Airport Plans
- Financial Planning

- **EIS**

- Purpose and Need
- Alternatives Analysis
- Affected Environment
- Envir. Consequences
- Cumulative Impacts
- Mitigation Measures
- Draft EIS
- FAA Review
- Record of Decision



Summary of Inventory

- **T.F. Green is a Large and Complex Facility**
 - **Important Public Air Transportation Resource in the Region**
 - **Airlines and General Aviation = People using Aircraft for Business and Recreational Travel**
 - **Provides Employment and Income to Region's Economy:**
 - 16,600 jobs statewide (1,500 on-airport)
 - Annual Economic Impact of \$1.0 Billion
 - **Substantial Airport Infrastructure and Investment**
 - **Aviation is a Heavily Regulated Industry**
 - **Pilots, Airlines, ATC, Airport Design, Emergency Services, Security, etc.**
 - **Improvements Made over the Years to Accommodate Activity**
 - **Recognized Environmental Impacts of Aviation Activity**



Why Forecasts Are Needed

- **To provide a basis from which to plan the future**
- **To provide guidance for the need or timing of facility development to meet demand**
- **To identify a range of factors which may indicate future changes in air travel demand**



Forecasting Questions

- **How many people will use T.F. Green?**
 - Terminal Facilities and Landside Facilities
- **How many, and what type of aircraft will use T.F. Green?**
 - Airfield Facilities and Support Facilities
- **What elements need to be forecast?**
 - Passengers and Operations
 - Cargo and General Aviation
 - Aircraft Types
 - Peak Period Activity

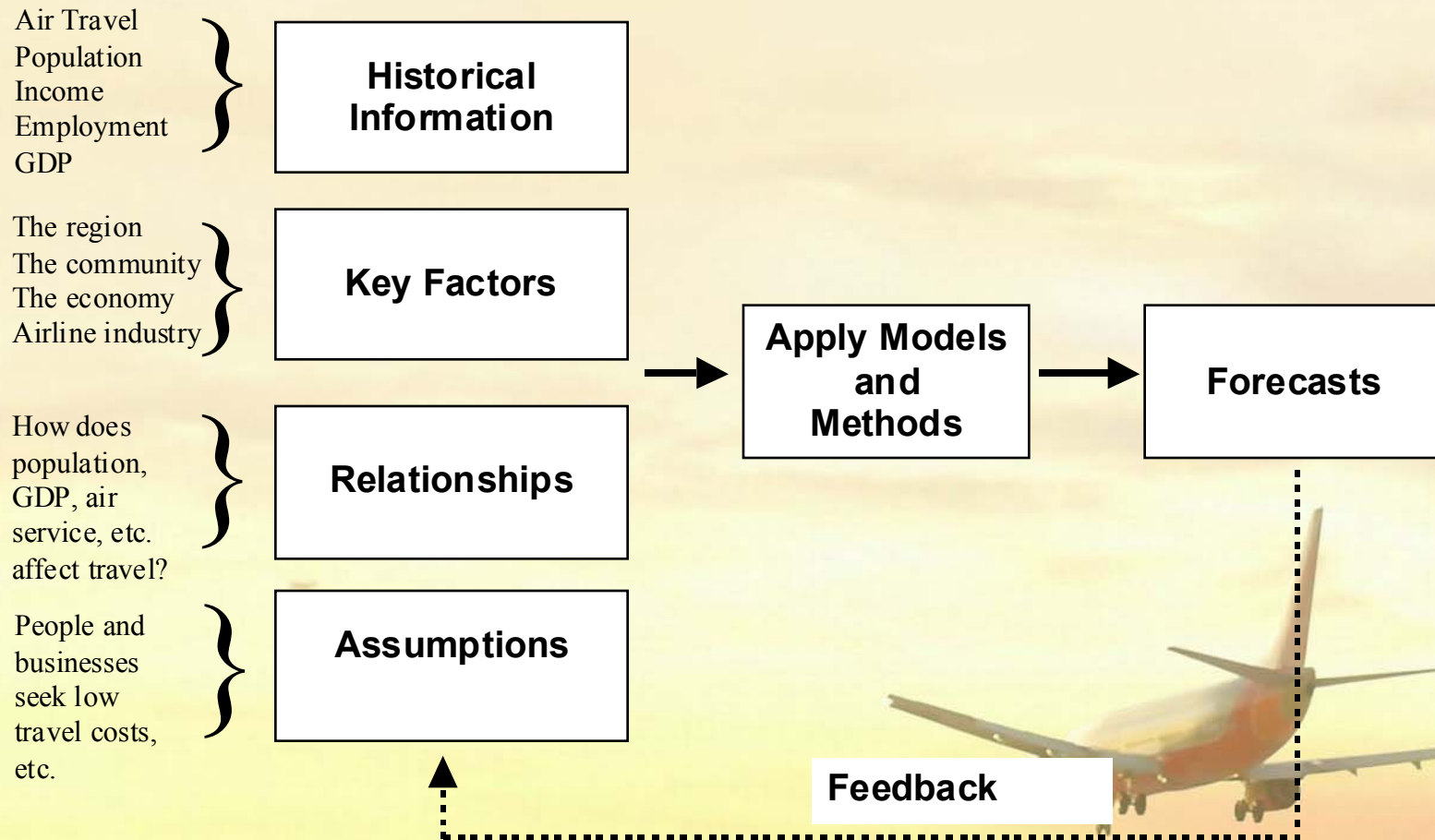


Products of the Master Plan Forecasts

- **Market-Driven Forecast:**
 - **If facilities and services are in place to accommodate a travelers' choice of airport within the "service area", how many passengers and aircraft would there be in 5, 10, 20 years?**
- **Capacity-Constraint Forecast:**
 - **At what activity level does the airport's facilities fail to provide a positive travel experience to the "service area" population without "growing the fence"?**



The Forecasting Process



Historical Information

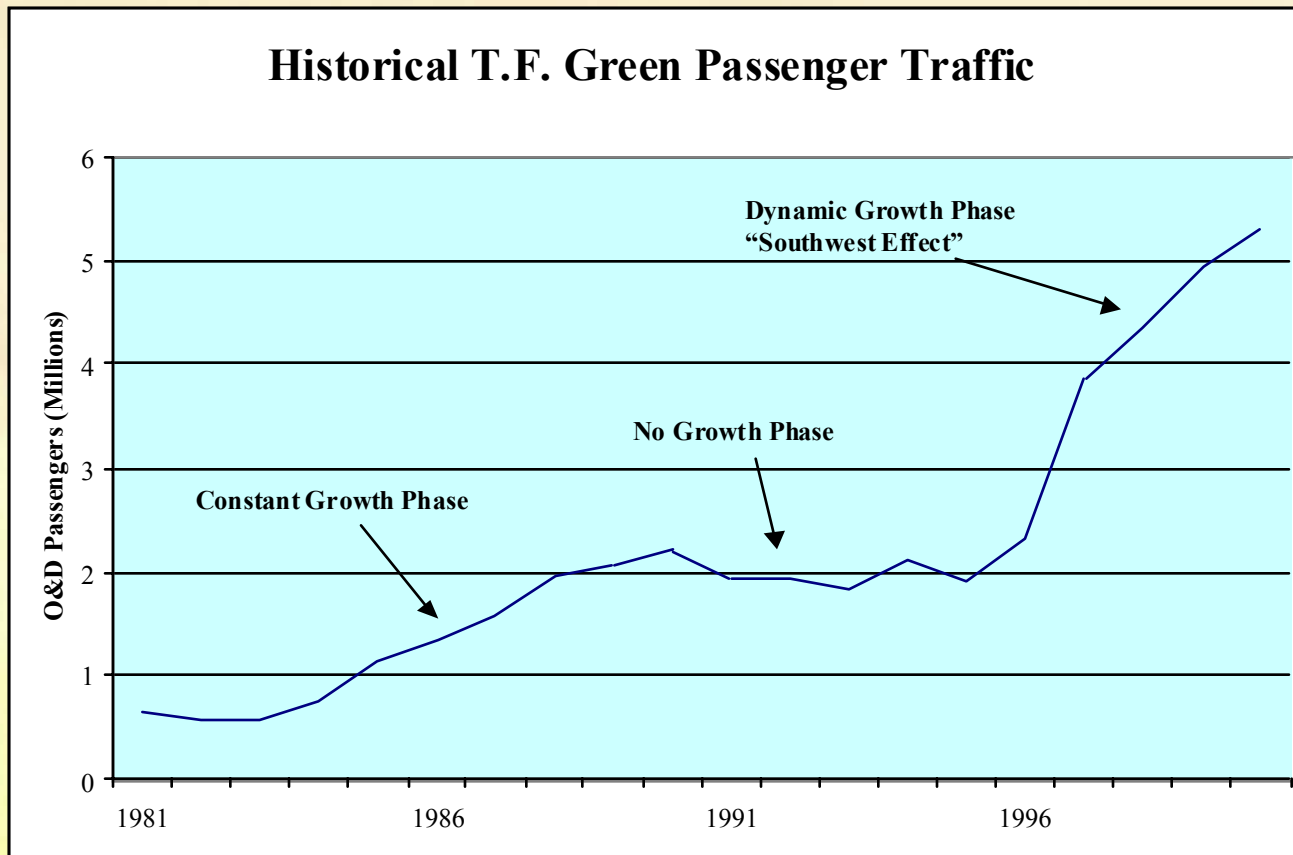


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Historical Air Travel Demand at T. F. Green



Source: US DOT, Origin-Destination Survey 1981-2000



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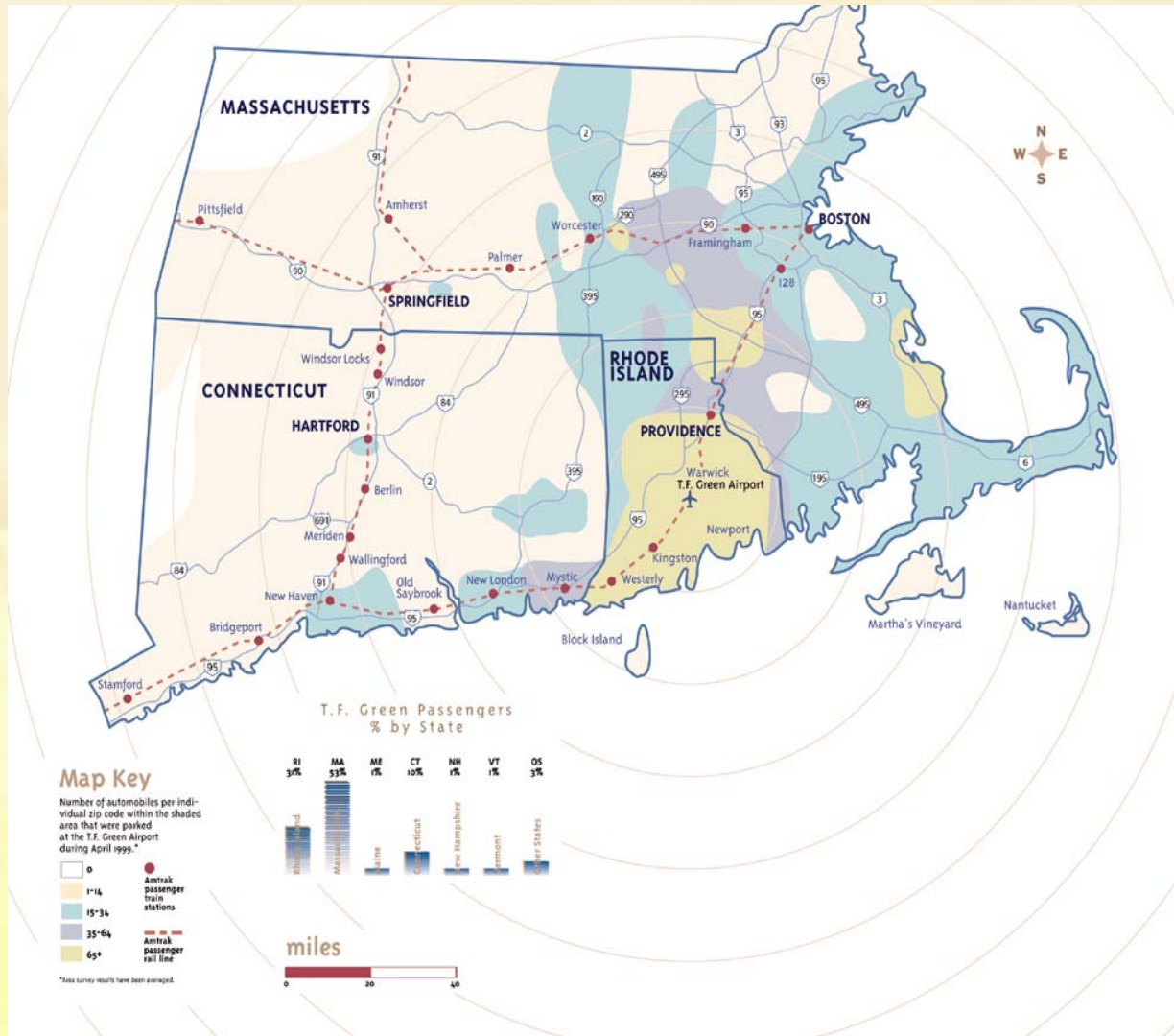
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Air Service Area

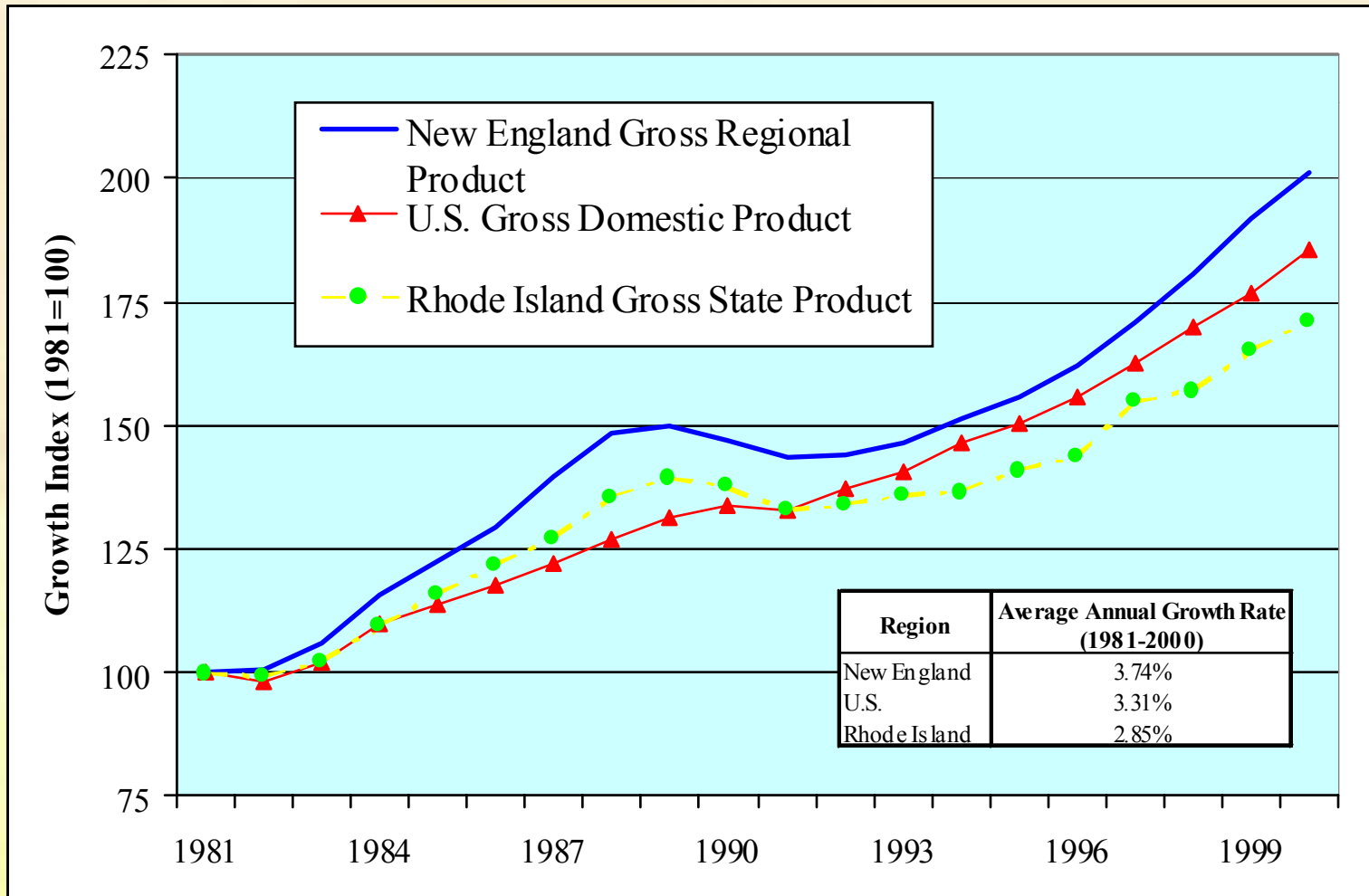
- **Rhode Island, Southeastern Massachusetts, and Connecticut comprise primary air service area**
 - **Strong Economy in the 1990s**
 - **Boston-Logan Congestion**
 - **Population and Employment Shifts**
 - **Near-Even Split between Business and Recreational Travel on an annual basis**



Air Service Area



Economic Conditions in the Air Service Area



Source: Bureau of Economic Analysis



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Key Factors

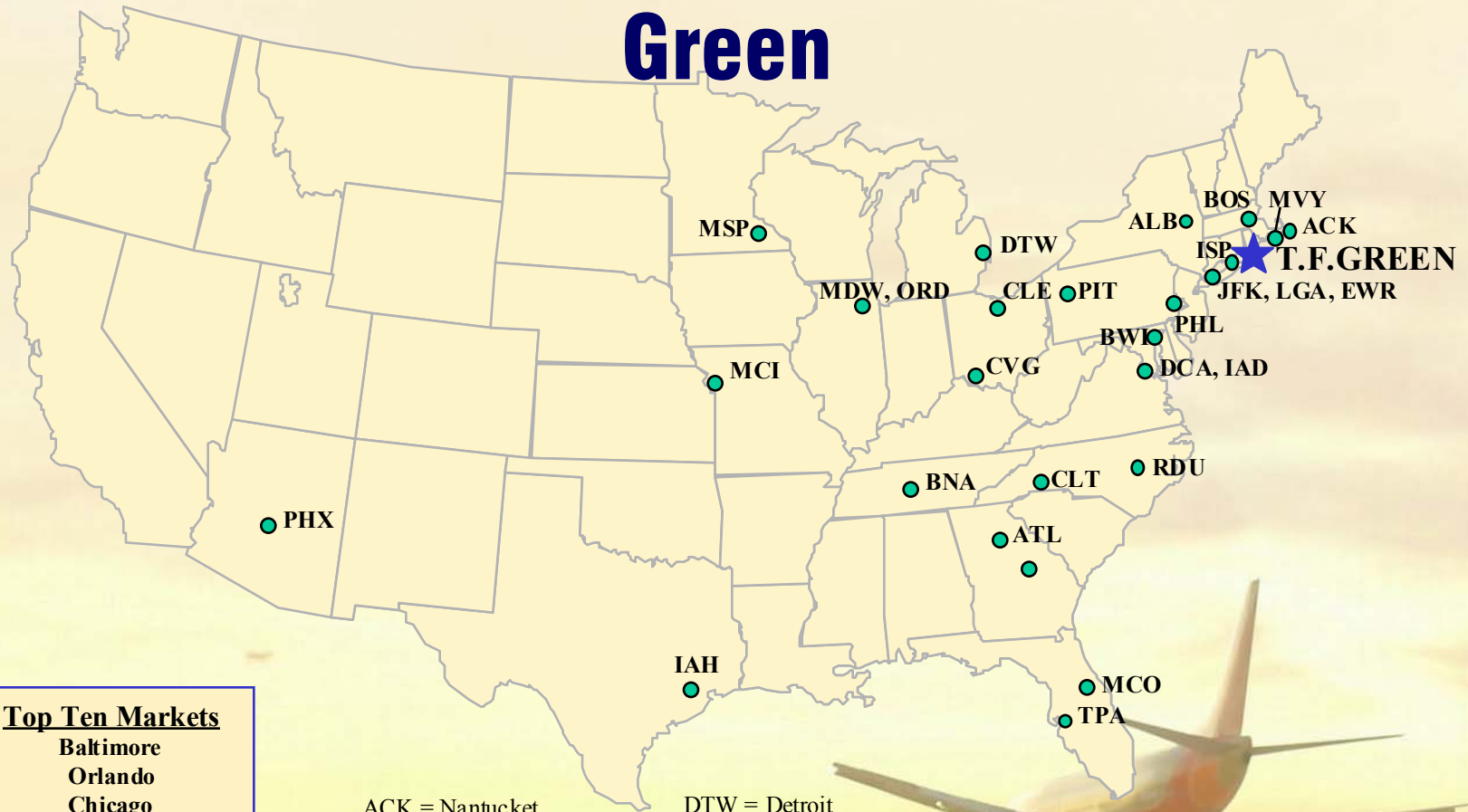


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Destinations Served Nonstop from T.F. Green



Top Ten Markets

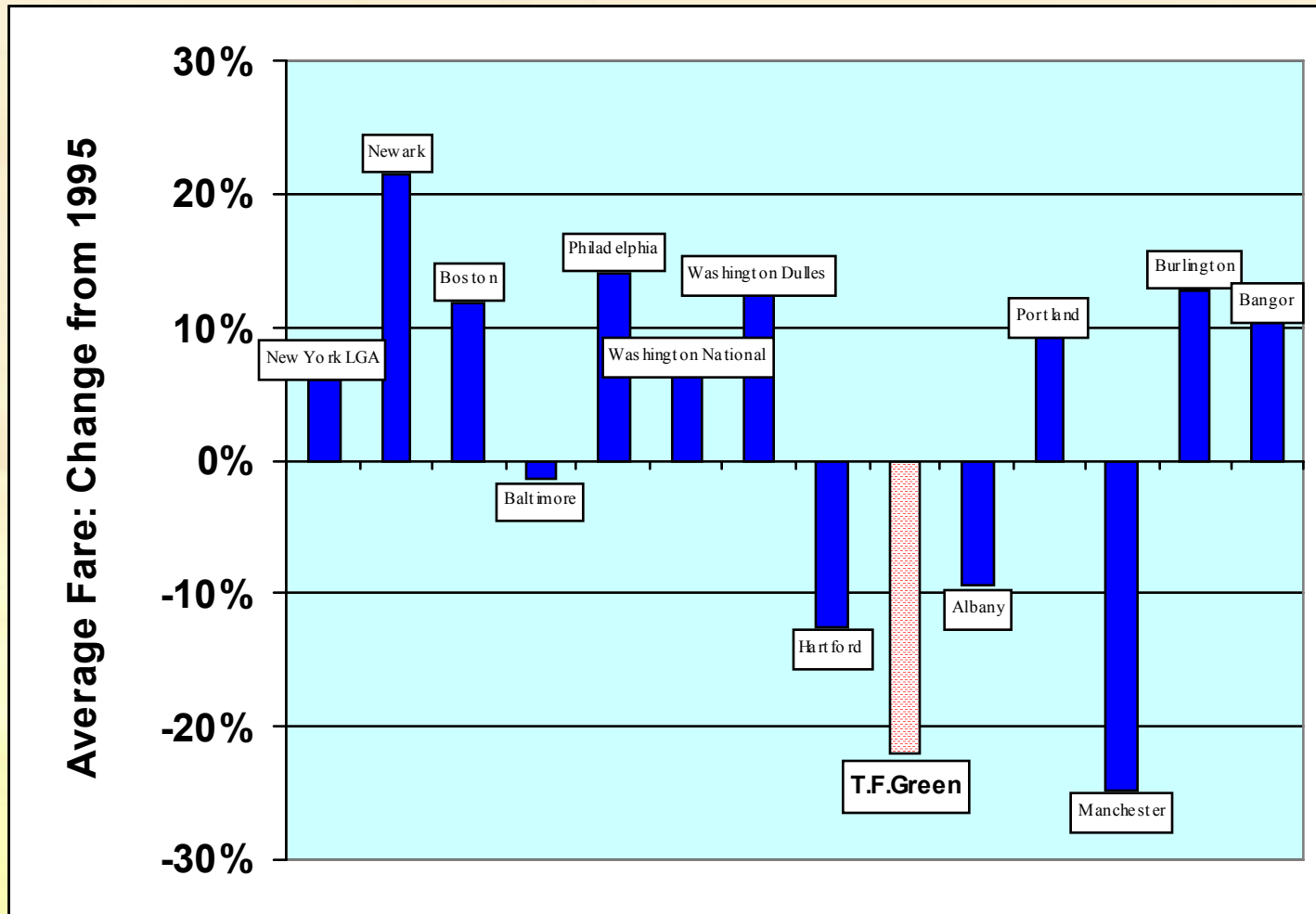
- Baltimore
- Orlando
- Chicago
- Tampa
- Los Angeles
- Washington
- Ft. Lauderdale
- San Francisco
- Phoenix
- New York

- ACK = Nantucket
- ALB = Albany
- ATL = Atlanta
- BOS = Boston
- BWI = Baltimore
- CLE = Cleveland
- CLT = Charlotte
- CVG = Cincinnati
- DCA = Washington, D.C.

- DTW = Detroit
- EWR = New York
- IAD = Washington, D.C.
- IAH = Houston
- ISP = Long Island-Macarthur
- JFK = New York
- LGA = New York
- MSP = Minneapolis
- MCI = Kansas City

- MDW = Chicago
- MVY = Martha's Vineyard
- ORD = Chicago
- PHL = Philadelphia
- PHX = Phoenix
- PIT = Pittsburgh
- RDU = Raleigh Durham

1995-2000 Airfare Trend



Source: US DOT Origin-Destination Survey, Years Ending December 31 1995,2000



Typical Assumptions of Market Driven Forecasts

- **Choice of Airport**
 - Airlines
 - Passengers
- **Competition**
 - Airlines
 - Communities
- **Rhode Island and the Southern New England Community**
 - Population
 - Economic Base
 - Tourism
 - Propensity to Travel
- **National Trends**
- **Airline Industry Developments**



Choice of Airport

- **Airlines**
 - **Air Service Area**
 - **Business/Leisure travel**
 - **Capacity constraints/ground congestion**
 - **Market strategies**
- **Passengers**
 - **Location**
 - **Services/Price**
 - **Ease of Access**



Competition

- **Airlines**
 - **Level of Service**
 - **Pricing**
 - **Efficiency**

- **Communities**
 - **Compete for Economic Benefits**
 - **Jobs and Spending**
 - **Investment**



Rhode Island and the Southern New England Community

- **States becoming more connected and interdependent**
- **Regional shifts from manufacturing to financial services and technology-based economies**
- **Logan Airport, currently 4th in the U.S. for air travel delay, will face growing congestion, which will continue to expand domestic demand at satellite airports**
- **Most international services at Logan**



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Forecasts of Variable Factors

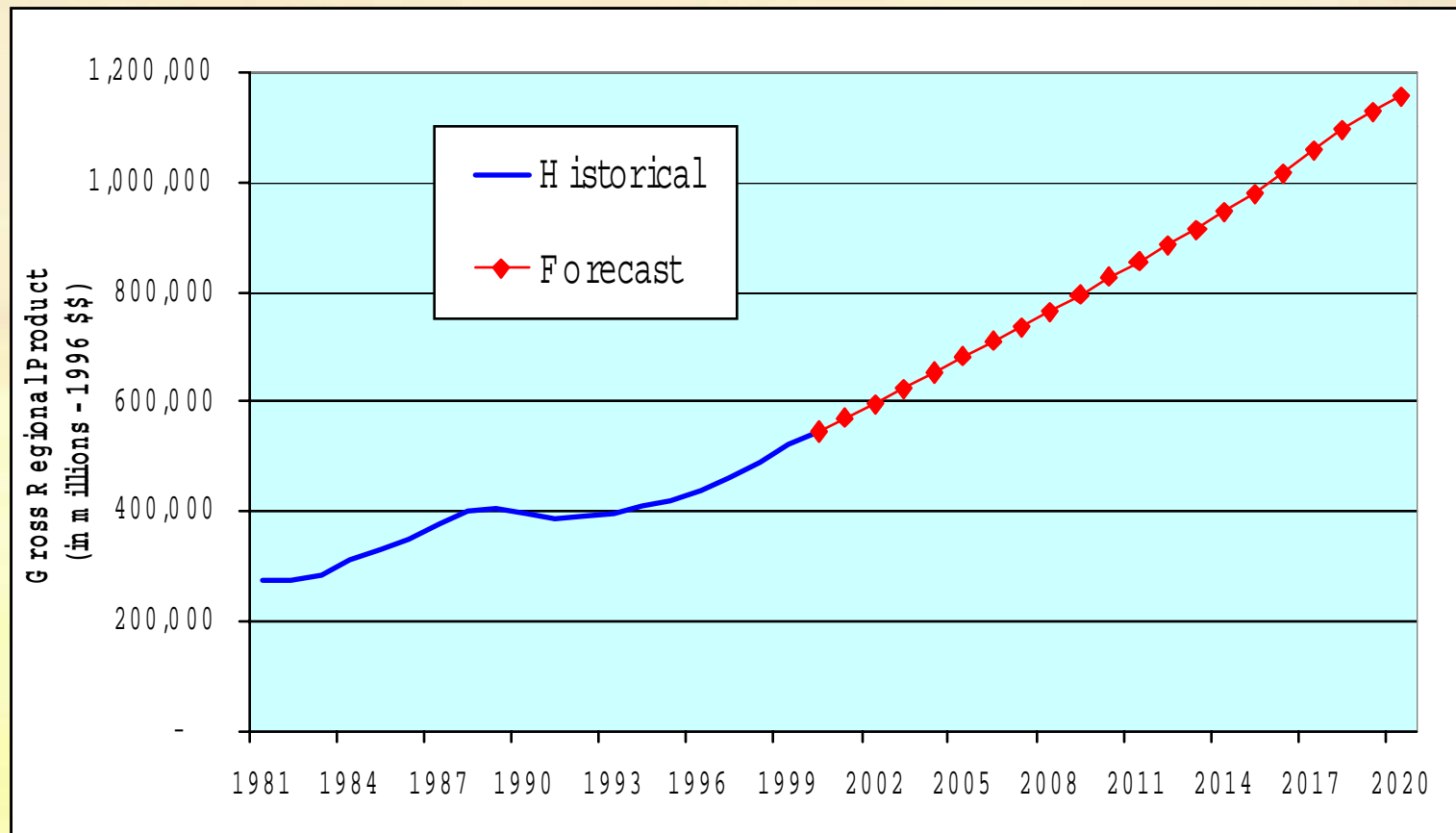


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Projected New England Gross Regional Product



Source: Bureau of Economic Analysis, DRI-WEFA and EK Analysis

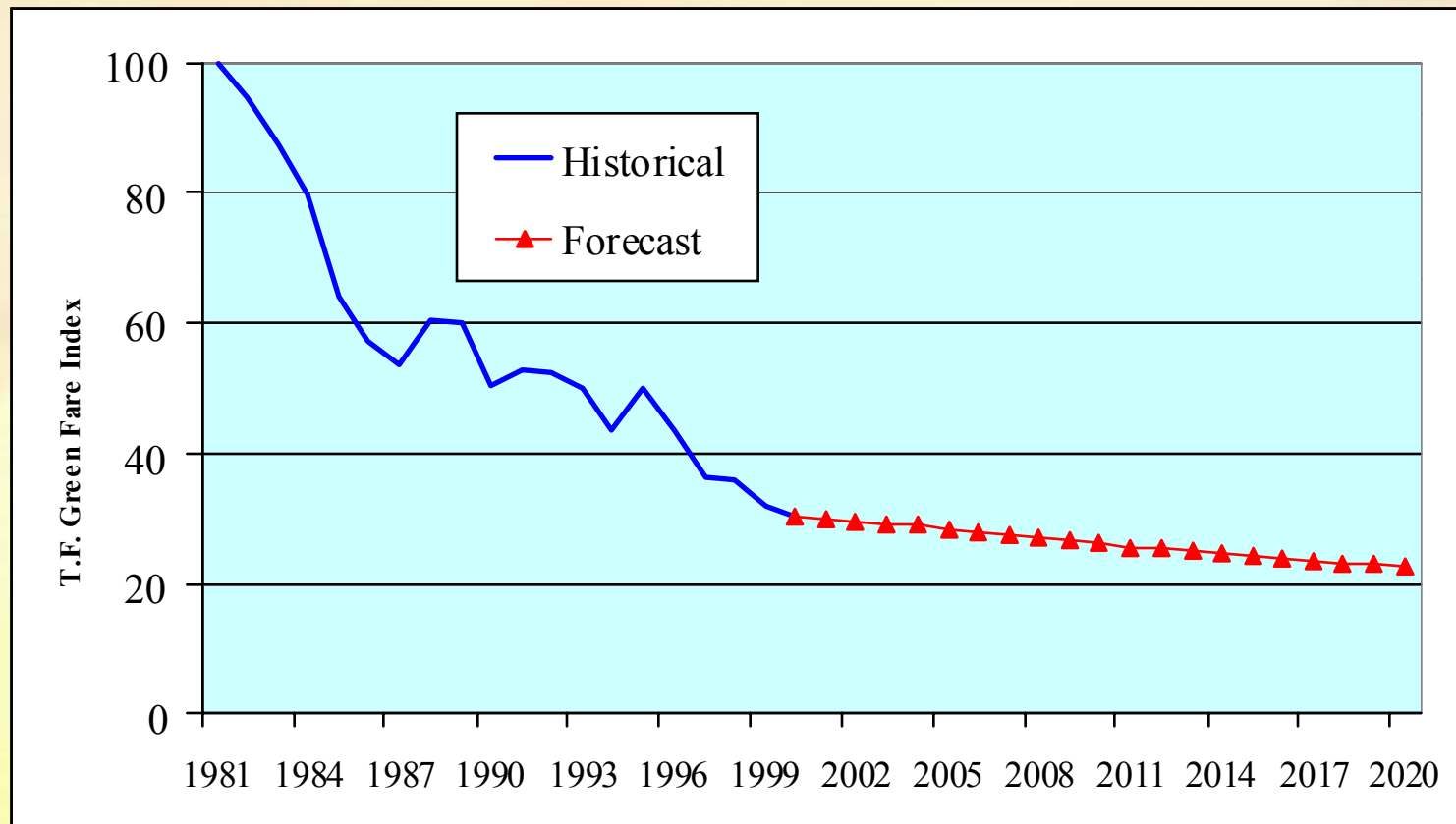


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Projected T. F. Green Average Annual Fare Index



Source: US DOT Origin-Destination Survey, 1981-2000, FAA and EK Analysis



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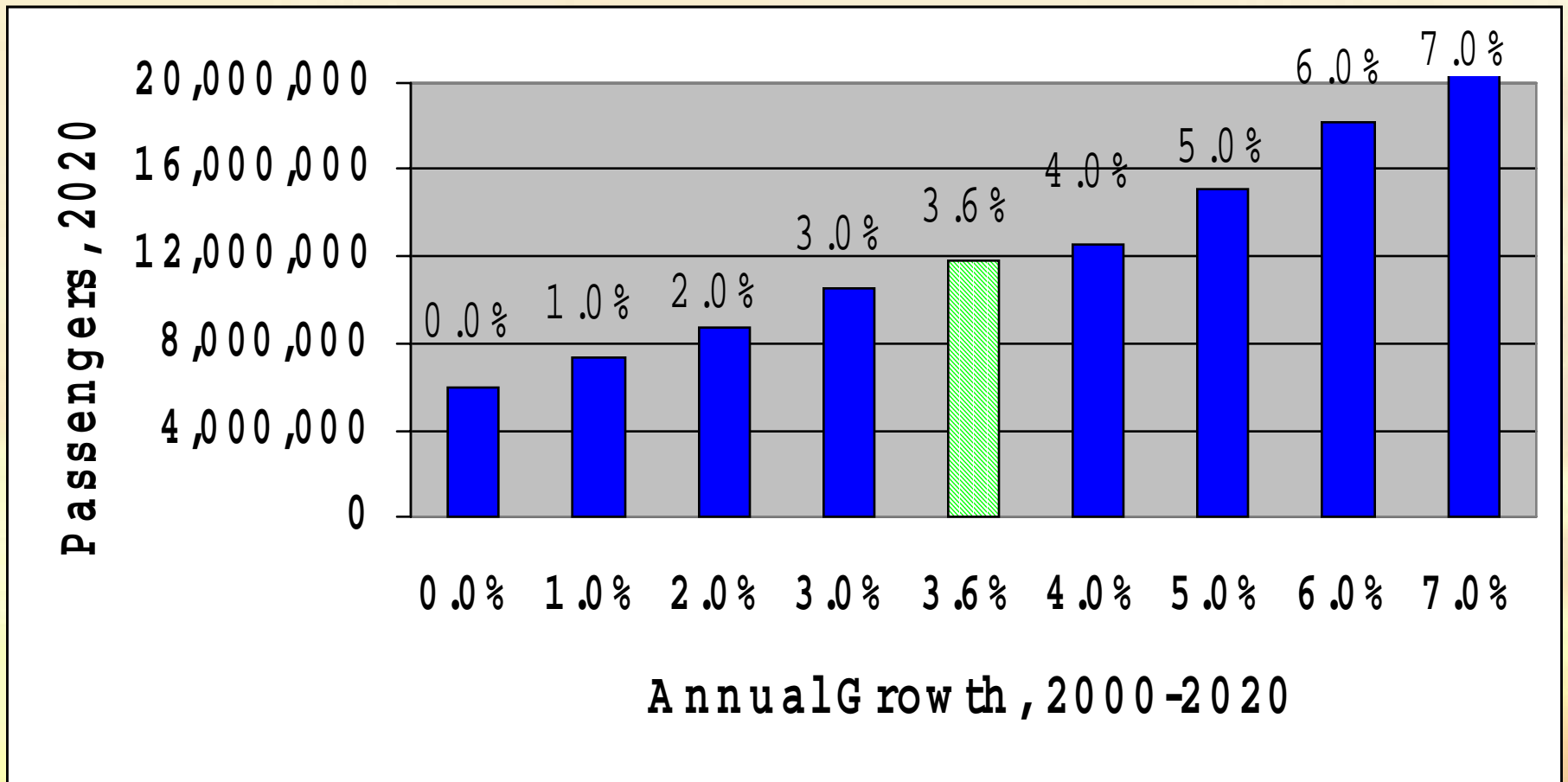
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Economic and Industry Trends

- **New England economy will continue to grow through expansion of finance/services/high tech sectors.**
- **Rhode Island economy will gain from growth in entire metropolitan area and tourism**
- **FAA predicts steady growth in region's air travel demand**
- **Average fares at T.F. Green will increase along with increasing airline costs**
- **T. F. Green will continue to offer convenient services**



Hypothetical Passenger Forecasts at Various Annual Growth Rates



The FAA has forecast a 3.6% annual growth in nationwide domestic enplanements, 2000-2012



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What Factors Could Cause Air Travel Demand to be Higher or Lower Than Expected?

- **Slower/faster local and regional economic growth**
- **Slower/faster growth of airline service at T. F. Green**
- **Airline mergers**
- **Higher air fares**
- **Changes in passenger choice of airport**
- **Higher use of alternative travel modes**
- **Increase in e-commerce**



Assumptions on Airline Industry Developments

- **Industry Structure**
 - Continued merger activity/higher air fares
 - Labor agreements lead to higher fares
 - Few new entrants
- **Airline Service at T.F. Green**
 - An end to double digit growth
 - Continued airport of choice over Boston-Logan for certain domestic markets
 - Carriers will make orderly increases in schedule
 - International activity remains modest
 - primarily charters



The Breakout Sessions

- **Discussion of forecast factors and assumptions**
 - Local and regional population and economy, air service area, markets served, fares, etc.
- **What other factors could be important?**
- **What potential impact do they have to the forecasts?**
- **How will the community change in the future? How will this affect air traffic?**

