

**T. F. Green Airport  
Master Plan Update**

**Feedback to the SRC on Input Received on  
September 10, 2001 Draft Forecasts of Aviation Demand**

**February 22, 2002**

The September 10, 2001 draft of Master Plan Chapter II, *Forecasts of Aviation Demand*, was distributed and the SRC was briefed at the January 24, 2002 meeting. Several SRC comments were received at the meeting. Input from Mr. Bill DePasquale, City of Warwick, reiterated requests from the City of Warwick that were contained in a letter received by RIAC on September 24<sup>th</sup>. This letter was addressed in RIAC's response to the City of Warwick, which is included with this package.

Three sets of comments were received: a letter from Mr. Mark Carruolo, Planning Director for the City of Warwick, and emails from Mr. Raleigh Jenkins, C.A.N. and Reverend Duane Clinker, Cranston citizen representative.

Additional comments have also been received that are unrelated to the forecast chapter. Feedback to these comments will be provided as part of the regular SRC process.

**January 24, 2002 SRC Meeting:**

Input	Feedback
<p>RIAC should add community impacts to the list of criteria for build out decisions regarding Master Plan components.</p>	<p>Many community impacts, such as noise, air quality, and landside impacts, will be used as evaluation factors in the Master Plan alternatives analysis and will be further considered in the EIS.</p>
<p>If Runway 16-34 were shortened and would not be usable by commercial jets, it would have some effect on airline seats offered, because some carriers could refuse to service a single runway airport.</p>	<p>Further analysis of the Runway 16-34 analysis in Section II.5.2, <i>Reduce Facilities</i>, was completed based on this comment and discussions with the airlines were held to better understand how the airlines might deal with this situation. The forecast scenario was revised accordingly.</p>
<p>The six-minute delay threshold used to estimate how passenger behavior would be affected by delay creates a bias in the evaluation towards passengers over airport neighbors. Is there a similar threshold for noise?</p>	<p>The six-minute delay level is used to determine at what point the unconstrained demand would probably no longer be served on the runway system. It is not used to define an acceptable level of passenger service. Rather, this threshold is used to predict the reaction of the traveling public and the airlines in response to increasing levels of delay and what the resulting future activity levels might be.</p> <p>The 65 Day-Night Sound Level (DNL), a noise measure used to describe the sound level over a 24-hour period, is the threshold used by the FAA to determine if a noise impact is significant enough to meet federal standards for mitigation. Noise contours will be developed as part of the EIS.</p>
<p>Shortening Runway 16-34 will increase the frequency and/or risk of runway incursions by forcing small aircraft in certain weather conditions to the main runway.</p>	<p>Text was added to the Runway 16-34 scenario in Section II.5.2, <i>Reduce Facilities</i>, to reflect this.</p>

## January 24, 2002 SRC Meeting, Continued:

Input	Feedback
Reducing passenger delay does not necessarily favor passengers over neighbors. Delayed airplanes with idling airplanes can adversely affect neighbors as well as passengers.	The applicable portions of Section II.5, <i>Capacity Constrained Scenarios</i> , were revised to reflect this. The EIS will quantify emissions from all aircraft, including delayed aircraft on the taxiways.
Traffic delays from the four-year construction project on the Washington Bridge should be factored into the forecasts.	The landside portion of Section II.5.3, <i>No New/Additional Facilities</i> , was revised to reflect this.
The SRC could benefit from more information about the Part 161 studies done elsewhere.	The ongoing Part 161 documents are not finalized yet and as a result are not public documents. More information can be obtained about the Part 161 process by accessing the Federal Aviation Administration's (FAA) website ( <a href="http://www.faa.gov">www.faa.gov</a> ) or the FAA's Part 161 home page ( <a href="http://www.faa.gov/arp/app600/14cfr161/161guid.htm">http://www.faa.gov/arp/app600/14cfr161/161guid.htm</a> ).
Would like to see written corrections to forecast from these and future comments.	RIAC has solicited comments from the SRC and has provided feedback to those received to date. RIAC will continue to do so for the remainder of the Master Plan process. The EIS will have a comment process as well, including a public hearing.
Is it possible to show what growth would be accommodated by what expansion activities?	This will be included in the next chapter of the Master Plan: Chapter III, <i>Demand/Capacity and Facility Requirements</i> . This chapter will evaluate the demand/capacity relationship of all airport facilities to determine at what point capacity is met. This chapter will then determine what level of facilities would be required in the future to accommodate the RIAC-selected forecast scenario.

January 24, 2002 SRC Meeting, Continued:

Input	Feedback
<p>The small reduction in traffic that would result from shortening Runway 16-34 seems counter intuitive.</p>	<p>Airlines make business decisions about how to respond to market conditions including a reduction in the length of a crosswind runway. Despite the fact that it is impossible to know what would actually happen in the future, RIAC decided that it would be useful for purpose of the analysis to attempt to predict what might happen. Additional research was done in response to the comment and the chapter was revised accordingly (the projections of growth with this scenario were slightly reduced).</p>
<p>Why would the shortening of Runway 16-34 to a length that would make it usable only by general aviation aircraft result in fewer general aviation operations?</p>	<p>This scenario results in a loss in general aviation operations due to the congestion and delay that would result from the shifting of the Runway 16-34 commercial activity to the main runway (5R-23L). The general aviation activity that would be “lost” would likely be transient activity, not aircraft that are based at T. F. Green.</p>
<p>Comparing limiting airport traffic to limiting highway traffic is not meaningful because new highways are <u>not</u> always built, even when demand exists.</p>	<p>The interstate highway example used during the presentation to the SRC was intended to illustrate that airports are public transportation facilities that accommodate a wide range of users (commercial versus private, passenger versus freight, in- and out-of-state, etc.), much of it representing interstate commerce. Just as a community or entity would need to follow a government process in order to attempt to regulate or restrict traffic on an interstate highway, the same general principle applies to attempts to restrict aviation.</p>

**Mr. Mark Carruolo, Planning Director, City of Warwick (February 7, 2002 letter):**

Input	Feedback
<p>1 – Amend all pertinent sections of Chapter II entitled “<i>Forecasts of Aviation Demand</i>” (to reflect the September 11<sup>th</sup> terrorist attacks’ impact on aviation)</p>	<p>The events of September 11<sup>th</sup> have indeed had a profound impact on the aviation industry. A review of the forecast was prepared to determine how the longer-term forecasts may change. This review evaluated industry-wide trends over the last 40 years, local and nationwide trends since September 11<sup>th</sup>, and the strength of the airlines. Please see Appendix C of the Master Plan for the findings of this analysis.</p> <p>Additionally, the forecasts of aviation demand at T. F. Green have been revised to reflect the latest economic data that is currently available. (These data were prepared after September 11<sup>th</sup>.)</p>
<p>2 – Develop a “Scenario 5” Infrastructure Growth Scenario (that would forecast passenger growth with facility improvements)</p>	<p>The Scenario 5 described in the City of Warwick’s letter will be included in the next chapter of the Master Plan: Chapter III, <i>Demand/Capacity and Facility Requirements</i>. This chapter will evaluate the demand/capacity relationship of all airport facilities to determine at what point capacity is met. This chapter will then determine what level of facilities would be required in the future to accommodate the RIAC-selected forecast scenario.</p>

**Mr. Mark Carruolo, Planning Director, City of Warwick (February 7, 2002 letter), Continued:**

Input	Feedback
<p>3 – Amend Forecasts to Include Impact of New Service to “Hot Markets” as well as International Service.</p>	<p>The potential for service to new destinations was incorporated in the Existing Role forecasts. It is expected that Boston will remain the international gateway for the New England region so significantly increased international service is not likely. However, the Augmented Market Share scenario did consider the potential for increased international charter service at T. F. Green.</p> <p>Three forecast scenarios were prepared for the Master Plan. The Existing Role forecast considers future demand if the airport role of T. F. Green remains the same. The Augmented Market Share scenario considers the potential for T. F. Green to capture a greater share of the region’s traffic. The capacity constrained scenarios consider the level of activity that would likely result under various facility constraints. In addition, the Existing Role forecasts include low, medium, and high growth cases to reflect different economic forecasts. This range of forecasts was prepared to provide a full range of potential future scenarios.</p>
<p>4 – Amend II.2-1 Census 2000 Catchment Area Population by County (to reflect shift in catchment area away from Boston Logan)</p>	<p>There are a variety of reasons that passengers may have shifted from Boston Logan to T. F. Green over the last few months. These include seasonal variations, a tendency to shift from the network carriers to low-fare carriers, and the drop in corporate travel due to the economy. Regardless of the reason for this short-term (three month) trend, it is important to keep in mind that the Master Plan forecasts predict demand over a 20-year period. It would not be prudent to say that the experience of only three months of data, for such an unusual and difficult period, is any indication of a permanent and long-term trend that will materially change everything 20 years into the future. That said, a review of the post-September 11 validity of the forecasts is contained in Appendix C.</p>

**Mr. Mark Carruolo, Planning Director, City of Warwick (February 7, 2002 letter), Continued:**

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<p>5 – Amend II.2-5 Recent T. F. Green Activity by Airline (to address how a bankruptcy by a major airline would impact T. F. Green)</p>	<p>The 20-year Master Plan forecasts do not attempt to predict the level of traffic for each individual carrier. Rather, the forecasts predict the number of people who will want to fly based on historical traffic patterns and future economic forecasts. The forecasts assume the airlines will provide air service to meet the identified demand.</p> <p>Bankruptcy by one of the major carriers is certainly possible. However, it is virtually impossible to predict such an occurrence in the Master Plan. If one of T. F. Green’s carriers were to declare bankruptcy, passenger traffic could decline then the trigger points identified in the Master Plan might not be reached, or might be reached at a later date. In that case, RIAC would likely defer or cancel the projects that make up the Master Plan. Another potential outcome could be that one of the other carriers would use a bankruptcy as a way to increase its own market share. This is something that Southwest has done at T. F. Green and elsewhere since September 11<sup>th</sup> – as other carriers cut service, Southwest maintained its service and increased its market share.</p> <p>Bankruptcy by T. F. Green’s largest carrier, Southwest, would have the greatest impact on the future activity levels. However, this is very unlikely given that 2001 was Southwest’s 29<sup>th</sup> consecutive year of profitability. If this were to happen and activity did not recover, projects would be deferred or canceled.</p>
<p>6 – II.3.1 Forecasts of Comparative Growth, U.S. and New England – <i>The Boston Market</i> (to reflect the new issues of flight delays related to security after September 11)</p>	<p>The potential for RIAC to capture an increased share of air traffic in New England is considered in the Augmented Market Share scenario (Section II.4).</p> <p>Additional flight delays at other airports (Boston) and other post-September 11<sup>th</sup> issues were considered in the September 11<sup>th</sup> review contained in Appendix C.</p>

**Mr. Raleigh Jenkins, C.A.N. (February 7, 2002 email):**

Note: Most of Mr. Jenkins comments relate to the EIS or SRC process, however, four of his points pertain to the forecasts and are addressed below.

Input	Feedback
Consider planned construction at intersection of U.S. 195 and Providence	The landside access section of the capacity constrained forecasts (Section II.5.3) has been revised to consider the impact of this construction on activity levels at the airport.
Include the historical society, the Department of Environmental Management (DEM), and the Environmental Protection Agency (EPA) in advance of a forecasting model being adopted by the RIAC Board and the FAA.	Environmental representation in the planning process currently includes SRC membership of DEM, and the state legislature’s consultant on environmental matters. Prior to the EIS, the master plan process will include a public workshop, and SRC meetings are open to all interested parties. An Airport Layout Plan (ALP) depicting the 20-year plan for the airport will be developed based on the Master Plan analysis. Ultimately, the ALP’s approval by the FAA is conditional upon further environmental review. Projects that are likely to be implemented in the next five years will be evaluated in the EIS. The EIS is conducted by the FAA. The FAA is the agency that is delegated the responsibility and they follow the National Environmental Policy Act (NEPA) process. The agencies mentioned will be contacted during agency and public scoping for the EIS. They will also have the opportunity to comment on the Draft EIS document. Should EPA be interested, RIAC welcomes their participation on the SRC.
Pursue a “no-growth” position	RIAC will consider the full range of growth options, including the no growth scenario (one of the four scenarios the consultants analyzed), prior to adoption of a forecast scenario.

**Mr. Raleigh Jenkins, C.A.N. (February 7, 2002 email), Continued:**

Note: Most of Mr. Jenkins comments relate to the EIS or SRC process, however, four of his points pertain to the forecasts and are addressed below.

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Do not carelessly promote or encourage growth through the planning process.	The forecasts represent predictions of traffic levels over a 20-year period. They will not make growth happen that would not otherwise occur. Rather, the forecasts and subsequent planning in the Master Plan provide RIAC with a tool to plan for growth that may occur.

**Reverend Duane Clinker, Cranston citizen representative (February 13, 2002 email):**

Note: These comments were received after the February 7, 2002 closure of the comment period. There was not sufficient time to provide individual feedback to each of Mr. Clinker’s points. However, his comments have been summarized and feedback is provided.

<b>Input</b>	<b>Feedback</b>
Not enough detail is provided on any of the no growth scenarios (Part 161, peak pricing, etc.) or in the analysis in general.	The 26 page capacity constrained analysis was intended to provide an overview of the possibilities so that RIAC and the SRC could explore the potential options.
The capacity constrained analysis uses poor scientific methodology	The capacity constrained analysis is not held out to be a scientific analysis. It builds on the projections of demand, which are an estimation of what future demand is likely to be (i.e. a “professional judgement”). The constrained analysis then provides an overview of options that might lead to some measure of reduction of the potential growth. The analysis follows sound planning standards but is subject to FAA review and acceptance before planning can commence.
The Runway 16-34 scenario fails to consider the real impact of adverse weather and repair conditions on flight delays and the subsequent potential rescheduling or ultimately elimination of flights and certainly the potential for slowing growth in terms of new airlines and routes.	The Runway 16-34 scenario was investigated further and the results have been revised in the updated chapter.
The report states, "there is an upper limit of delays at which point airlines will adjust their service in response. . . ." (II-113). In other words, if one chooses to retard growth in the interest of quality of life, it ultimately can be accomplished. It is possible to limit growth. The real issue is how soon and how much.	The capacity constrained analysis in the forecast chapter concludes that the airlines and passengers will at some point have a reaction to increasing delay levels. Table II.5-15 shows that under some scenarios, growth would indeed likely be less. These scenarios, however, represent a very congested, high-delay condition, which is not necessarily desirable from a quality of life standpoint.

**Reverend Duane Clinker, Cranston citizen representative (February 13, 2002 email), Continued:**

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The draft does not consider a scenario in which multiple strategies are used for a combined affect.	A new analysis " <i>Entire Airport</i> " was added to Section II.5.3 in order to address how the combination of no new airfield, terminal, or landside facilities would impact future activity levels. In addition, Section II.5.5, <i>Combined Scenario</i> , was added to the chapter to address this comment.