ACRP Problem Statement 17-03-03

Best Practices in Building Air Service through Air Service Incentive Programs

ACRP Staff Comments

The proposed research could build on previously completed ACRP research, including ACRP Report 121: Assessing and Implementing Innovative Revenue Strategies; and ACRP Synthesis 19: Airport Revenue Diversification.

TRB Aviation Committee Comments

AVIATION ECONOMICS AND FORECASTING: Strong support for this problem statement. It has established good research objectives that can benefit airports and stakeholders. The case studies of best practices would be useful. However, the efficacy of these programs should also be examined. This would be valuable research for airports and policymakers, though as with the development of any database, who is going to maintain it? Nonetheless, more specifics on building an air service incentive program database are needed, since this is a challenging task that involves collecting and cleaning the data from different sources. The project may need more than 18 months to complete.

Review Panel Recommendation and Comments

Recommended. The idea has value but requires a slightly altered objective: enhancing case study approaches (positive and negative), addressing tools and techniques plus measures for indicating success, emphasis on a broad-scale approach that ultimately has applicability to more than one airport. The critical contribution of this effort should be to examine sufficient case studies to understand success and failure experience, to draw out factors that might be viable in an otherwise very limited environment.

AOC Disposition

This problem statement received an average rating of 3.4 points out of a possible 5 points among voting AOC members. This area of research is of interest to small communities, and there is limited information on long-term outcomes of incentives. The research efforts for 17-03-01 and 17-03-03 were combined, approved, and funded at $400,000 as ACRP Project 03-44.
Best Practices in Building Air Service through Air Service Incentive Programs

Background

Growing air service is a near-constant goal of municipal planners and airport operators. Dating back to the inception of municipal airports in the 1920s, air service was linked to the economic health of a city and region (Bednarek 2001). The link between air service and economic development lives on today: in 2015, Airport Cooperative Research Program (ACRP) Report 132 documented the extensive impact of airports on the U.S. economy (Economic Development Research Group, Inc. et al. 2015). From 1980 to the early 2000s the FAA and U.S. airports aggressively sought airport expansions to grow air traffic, serve a growing demand base, and maintain airport hubs and the economic development that follows (Ryerson and Woodburn 2014). However, the 2000s saw six major airlines consolidate into three during a period of large variations in fuel price and an economic recession. The newly merged airlines consolidated their networks and hub operations and established fewer, more concentrated airline hubs (Ryerson and Kim 2013). Major hub airports situated in the nation’s largest cities saw their air service strengthen while airports in smaller metropolitan areas and communities lost significant service. In the new era of “capacity discipline” – with airlines reducing service in marginally profitable markets and being highly reluctant to take on the risk of launching new service, all while newly expanded airport capacity goes unused – airport operators find themselves looking for a new mechanism to grow air service.

Despite the critical urban and regional economic role of airports, the tools in an airport’s toolbox to build air traffic are quite limited. While small airports are eligible for federally-funded airline route subsidy programs such as Essential Air Service (EAS) and Small Community Air Service Development Grants (SCASDG) (Wittman 2014), airports classified as large and medium hubs by the FAA have generally relied on their one tool to build traffic: airport expansions. In 1999 and again in 2010 their toolkit expanded when the FAA published initial and revised guidance documents on the FAA’s policy on the use of airport revenue and the design of airline incentive programs (Federal Aviation Administration 1999; Federal Aviation Administration 2010). In these guidance documents, the FAA authorized and provided guidance to airports looking to use non-aeronautical airport revenue or other non-airport municipal monies to incentivize air carriers to launch new service at their airports. In general, the incentives offered can be one or a suite of possible options, including load factor guarantees (or revenue guarantees), reduced or waived fees levied on airlines for use of the airport (typically the fees that airports charge airlines on a per-flight basis for use of the airfield termed “landing fees” and use of the terminal termed “facility fees”), and guaranteed marketing support for the new service.

Incentive programs are a powerful tool in attracting new service. Overall, they reduce an airline’s risk in launching new service in a market by allowing an airline to test demand with waived fees (Malina, Albers, and Kroll 2012). For international flights, carriers’ risk of entering new markets is even further reduced by the emergence of antitrust immunity Joint Ventures partnership between airlines. However, despite their large potential to help airports attract new air service, documentation of Air Carrier Incentive Programs at U.S. airports are highly limited.
Ryerson (2016) published the first comprehensive publicly available documentation of Air Service Incentive Programs; however, the analysis is limited due to the detailed and labor-intensive data collection required to document these programs. The recently published study includes the parameters of 81 Air Service Incentive Programs from large and medium hubs active from 2012-2015Q1; the author collected data on all new flights launched in this time period; and manually matched all newly launched flights to air service incentive program parameters to see if such flights would have been incentivized. While this database is a useful starting point towards understanding the use of air service incentive programs, a more comprehensive database of such programs, as well as a deeper dive of the use and resulting outcomes of the programs may be of great benefit to airports in need of enhancing air service.

Objective
The objective of this study is to 1) design a database containing all data related to active and recently active Air Service Incentive Programs including the number of flights brought in under incentive programs, the airlines and the destinations of flights, and if these flights were retained and 2) document best practices for the design and deployment of Air Service Incentive Programs to build new, high-impact, sustainable air service at small, medium, and large hub airports.

Proposed Tasks
The proposed tasks are as follows:

1. **Literature Review**: Review the literature on airport economic development, airline route planning, airport revenue diversion, and air service incentive programs.

2. **Design and develop the “Air Service Incentive Program Database”:** Following the methodology in Ryerson (2016), build a comprehensive Air Service Incentive Program Database that covers all incentive programs starting with 1999. This database will include the number an exact flights that were incentivized, the duration of the incentive, and if they were retained after the incentive period.

3. Choice and Execution of **Air Service Incentive Program Case Study Airports**: From the Air Service Incentive Program Database, as well as deep discussion with airport directors, choose 6 case study airports in which to a deep dive case study analysis of their incentive programs. Some categories of airports could include:
   a. A large hub airport with an active incentive program bringing in many flights (Dallas Forth Worth TX is a good example)
   b. A mid-sized airport/aviation market with a successful incentive program (Austin TX and San Diego CA are good examples)
   c. A mid-sized airport without an incentive program
   d. A smaller aviation market with an active air service incentive program (Milwaukee WI is a good example)
   e. A smaller aviation market that is at the beginning of building air service with an incentive program (Columbus OH is a good example)

4. **Definition of best practices**: From the case studies and data analysis from the Database, define best practices and the parameters under which these best practices fall. Conclude
and generalize best practices for different categories of airports and cities.

Estimated Funding

We estimate the funding to be $350K. This would involve researcher time; the design and hosting of an Air Service Incentive Program Database; and researcher travel to the 6 case study airports.

Estimated Research Duration:

We anticipate that this research will take 18 months. This involves 3 months of literature review and documenting the structure of incentive programs; 5 months of collecting data on incentive programs; 6 months of conducting case studies; and 3 months defining best practices. Three months are reserved for ACRP panel review.

Related Research


Process Used to Develop the Problem Statement

In 2015, Professor Megan Ryerson (hereafter, I) became interested in the role of Air Service Incentive Programs in building domestic and international traffic at airports at large, medium, and small hub airports. When diving into this research, I found no database and very piecemeal information about Air Service Incentive Program. Because airports engage in peer group learning, and best practices and case studies are so critical for airports, I became motivated to
build a database of Incentive Programs and study why some programs are more successful than others. I authored two studies of Air Service Incentive Programs: one is published in *Transportation Research Record* and one is under review in *Journal of the American Planning Association*. Professor Seth Young is a longtime colleague and he expressed interest in collaborating with me on this problem statement because of his deep knowledge of airport management, finance, and operations and his interest in helping airports build airports in a sustainable way.

**Person Submitting Problem Statement and Date**

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