

Creating Industry Market Sizes and Fares

Introduction

- Market sizes and fares data are a critical part of the forecast process
 - **Market Sizes:** the number of passengers flown by all carriers between two points on a Per Day Each Way (PDEW) basis (the O&D)
 - **Industry Fares:** The net O&D passenger revenue based on ticket value. This revenue does not include any money collected from ancillary fees (e.g., checked baggage, preferred seat, etc.)
- Market sizes and fares need to be as accurate as possible so we can have a reasonable expectation on how a flight will perform before it operates
- This package provides a high-level view of the Market Size and Fare creation processes

The Input Data Sources

- Market Size
 - Department of Transportation (DOT) DB1B O&D traffic (40% ticket sample for US based carriers) created monthly
 - DOT T100 (US and Foreign carrier reported nonstop traffic)
 - Internal Data
 - Marketing Information Data Transfer (MIDT) Travel agent booking from Global Distribution Systems (GDS) like Sabre, Amadeus
- Industry fares
 - DOT DB1B O&D revenue
 - Internal Data

The End Product

- The files created and used by forecasting models have the following attributes for each O&D market:
 - Passengers PDEW, by Point-of-Origin (POO)
 - Create both average and high / medium / low fare traffic values
 - Using high / medium / low fare traffic values allow for the forecast tools to be more selective when “spilling” passengers
- Files are created on a monthly, multiple-month, and annual average for traffic and fare data

Creating Industry Market Sizes

Market Size – Modifying the input data

- Neither DB1B nor MIDT represent full population traffic. As a result, DOT's T100 onboard traffic is used to grow both DB1B and MIDT to 100%.
 - For International-International markets where T100 does not exist, use a monthly load factor (LF), by airline to estimate an onboard traffic
- DOT uses “circuitry” in their O&D trip break methodology rather than travel times and mileage to create O&Ds
 - Circuitry can 1) break trips into O&Ds where it should not , or 2) not show stopover type traffic accurately)
- Therefore, applying a trip-break logic to the DB1B data using MIDT's time-on-the-ground rules rather than circuitry is needed
- In addition to the above, extensive auditing of the data and making data modifications are required.

Market Size – Building the Files

- Market sizes are created for domestic, domestic-international, and international-international entities
 - Due to the limitations of the various data sources, different processes are required for each entity type
- For domestic markets, the DB1B and MIDT data are fully populated. We blend the two together to create the estimated O&D market size.
- For international markets, only the grown MIDT data is used
 - DB1B isn't useful since it only represents US-based airlines

Creating Industry Fare Files

Market Size – Modifying the Input Data

- Correct for differences in how Frequent Flyer passengers are treated
 - “Zero” fare passengers are given an average fare for that market
- Both Domestic and International taxes and fees are removed to create a “net” fare

Industry Fares – Building the Files

- If the industry O&D market size is less than 1 passenger PDEW, use a by-entity, by-mileage, yield curve to calculate the average fare
- In international-international markets, where no fare information is available, create mileage base yield curves to estimate the fare value

Building Market Growth Files

- In addition to the Base market size file, which represents the most recent reported industry data, you can build a future year based on assumed traffic and capacity growth
- Using the schedule information and the historical relationship trends between capacity and traffic, a model estimates what the market sizes should be with the new capacity

Building Fare Growth Files

- Based on published macro yield projections for the next growth year, by entity
- These “growth” estimates are applied uniformly to the B
- base fare values, by entity

Building Other Files

- Convert to Day-of Week Market Sizes and Fares
 - Create DOW factors to build Day of week files
- Include ancillary fees in the passenger average fare values
 - Airlines now include an “a la carte” pricing strategy, it has become important to include all the individual components that passengers pay for (e.g., checked baggage, preferred seat, etc.)

Next Step

- Create Multiple Fares and Passengers
- Create low, medium and high fare levels and corresponding passenger levels by O&D POO
- Apply these levels to the Average Fares and Average Market Sizes generated during input creations
- The process to create multiple fares will be presented in a separate presentation