



**Publication Alert July 2007 –  
Population size and related propensities for air travel are most  
important for the likelihood of a major air passenger market locating  
in any given metropolitan area.**

**The likelihood of a major air passenger market locating in any given metropolitan area is primarily determined by the metropolitan area's (MA) population size and overall propensity for air travel. The propensity to fly in a given MA market is a function of a number of social and economic indicators, including employment share in the information sector, in professional, scientific and technical services and in the finance, insurance, and real estate sector. This was a conclusion of a research study carried out by the Department of Geography of the University of North Carolina, Greensboro, for the US domestic market.**

Domestic US air traffic is expected to grow considerably in the next decade; the number of passengers for domestic airlines will increase from 498.8 million in 2003 to 738.4 million by 2014. Good candidates to answer this market growth tend to be cities that have many point-to-point routes on different carriers and areas that have populations with a high propensity to fly. This propensity is mainly a function of specific socio-economic and demographic characteristics, including education level, employment mix, income levels, city function, transportation infrastructure levels, plus recreation and cultural attractiveness. Climate seems to be a less significant determinant, although weather is the greatest cause for delay in air traffic.

This article purposes to disentangle the most influential metropolitan-based characteristics in determining the locations of major air passenger markets in the US. The authors investigate the relationships between market locations and the current socio-economic, demographic and weather conditions of major MA's. They also developed a regression model to determine the most influential metropolitan traits in predicting the locations of likely future air passenger markets.

The main question the authors try to answer is why some MA's have a major air traffic market while others have smaller or minor markets?

**Results**

An air traffic market is defined as a geographic area based on the percentage of total US passengers enplaned in that area. 36 major US air passenger markets are identified in the research. In this way, it is possible to reveal geographical differences between MA's with significant air passenger markets and those with less significant air passenger market demand.

The research shows that, on average, major air passenger markets have a larger population, more people in the workforce, higher income per capita, a higher percent of people living in urban areas, more convention facilities, and a higher percentage of the workforce in information technology, employment in finance, insurance and real estate (FIRE), workforce in professional scientific and technical (PST) services and management activities. Minor markets have higher values than their major counterparts in only three variables: unemployment rate, number of sunny days in a year, and frozen precipitation. The study shows also that some of these independent variables are highly correlated with each other, such as total population by MA with people in the workforce, total population with the number of convention facilities and workforce population with the number of convention facilities.

**Source:**

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