

SUMMARY OF WORKSHOP SESSION 5  
Perspectives from Canada

William T. Tucker, Air Transport Canada,  
Moderator

A number of factors identified as important determinants of air travel demand fell into four major groups: non-aviation industry economics, aviation industry trends, consumer characteristics and behavior, and the political and economic environment outside North America. Specific examples of these factors included:

- \* Fuel--price and availability (crude oil levels and refinery output)
- \* Fares--elasticity (price sensitivity), inflation rates, discretionary (real) income growth rates, currency exchange rates
- \* Capacity supply--airline profitability and cash flow
- \* Alternative consumer opportunities to air travel (changing destination interests, new choices of how to use their leisure time or money)
- \* Political instability that would be disruptive of travel (such as in the Middle East or in certain parts of the Caribbean)
- \* International migration, international trade (stimulus to travel)
- \* Market maturity levels

Concerning these factors, jet fuel availability and prices seemed to be of major importance in affecting travel to and from Canada. Jet fuel prices during the 1980s are likely to rise faster than inflation rates but there should be adequate crude oil supply through the year 2020. Even though aviation organizations use about 5 percent of total fuel in Canada, the impact of a supply shortfall on air travel can be quite large if governments assign a low priority to fuel supplied to aviation users in difficult times.

A novel study that looked at "factors affecting demand for international travel to and from Australia" used a combination of factors that proved helpful in assessing consumer preferences, market behavior, and different levels of fares and convenience. A value matrix was developed for various fares and different types of passengers so that business and nonbusiness models could be estimated. Air travel demand for leisure (non-business) travel was dependent upon fares, real incomes, exchange rates, and the percentage of Australians who were born in the country of destination. Business travel was dependent upon fares, international trade with the country of destination, and time spent in travel. This report looked specifically at point to point travel patterns (Australia to Canada, for example) and appears to provide some measure of price sensitivity that incorporates the value of time spent in travel.

Air fare elasticity (sensitivity) was discussed and it was concluded that forecasters must proceed with caution in using historical values for future price elasticity since present air fares are substantially higher than when the price elasticity values were measured several years ago.

The international air traveler (especially leisure or tourist) is affected by three cost components: the air travel fare, the cost of travel and accommodations in the country of destination, and the exchange rate. The air travel fare portion

can be quite time sensitive. A low fare to the Canadian Prairies (for example, Saskatchewan) in February would be much less effective in stimulating air travel than in July when weather is more moderate.

There are many parallels between United States and Canadian travel trends but one difference is important. The Canadian-United Kingdom traffic did not have a recent "travel surge" as did the United States-United Kingdom market, due to the lower Canadian availability of low fares and the exchange rate differentials. An important similarity is that both Canada and the United States represent a good buy for the foreign traveler, suggesting relatively strong growth of European travel to Canada and the United States for the next few years.

An example of the relative purchasing power between Germany and the United States points out the relative increased cost of travel to Europe. Comparing the average per capita income of Americans and foreign residents at home and in Germany for the years 1968 and 1978, one panelist concluded that the average American's purchasing power in the United States increased 27 percent in the ten year period, but his purchasing power in West Germany dropped about 30 percent. Conversely, the average German resident has experienced increased purchasing power of 69 percent at home versus 200 percent in the United States. Similar patterns, although less dramatic, were found for other pairs of North American and European countries.

Panelists also discussed the shift in destinations for many Canadian air passengers. Recent information shows strength in the domestic market and a tendency for Canadians to travel to the "sunspots" (destinations where warm, sunny climates prevail) rather than to Europe. This has implications for future travel, particularly in forecasting seasonal changes. Travelers may fly to the Caribbean or Florida in the winter instead of going to Europe in the summer. These shifts, if they continue, will make it necessary for airlines, inspection services, and ground facilities to adjust for the new patterns of growth and slack at different times than in the past.

The workshop session identified five topics as "Possible Areas for Research." These are as follows:

1. To what degree (if any) are small carriers more vulnerable than large carriers in an era of high "spot market" prices for aviation fuel?
2. Further research into air fare "fences."
  - The term "fences" is used to refer to fare characteristics such as prepurchase, minimum stay, stopover privileges, etc. From the consumer's viewpoint, the question is "What is their value (or cost)?" e.g., discount required before willing to prepay, or acceptable fare premium for stopover privileges. The carrier is interested in the effectiveness of the "fences" in attracting new traffic while avoiding undue fare dilution.
3. Further research into the quantification of level of service variables and their effect on demand.
  - What is the effect of new aircraft (e.g., Concorde and B747SP) and of new (interior) North American gateways on total trip time, and hence on demand? Can increased load factors (and perhaps reduced in-

- flight service) be quantified as a lower level of service and can the effect on demand be quantified?
4. Seasonal variations in price elasticity of demand.
    - It is generally agreed that price elasticity of demand is a useful concept in aviation forecasting. However, it may be useful to consider seasonality in the application of this concept. For example, North Americans would likely show a greater reaction to a southern market fare discount in the winter than in the summer or to a corresponding discount to Europe in the winter.
  5. Research on "The availability and use of perfect information" (re: fares, routes, etc.) or "The trip decision process."
    - The analyst generally assumes that travelers react rationally to accurate information, e.g., real fare increases, total trip cost, etc. It is more relevant to consider the traveler's true decision-making process. Perhaps the traveler reacts to nominal air fare increases (or gasoline prices). Factors considered probably include: time (of year, of week, or even of day), trip duration, destination, fare, other trip costs, ground package availability and cost, etc. When are the various component decisions made during the process and how important is each factor? Mr. A. T. Wiley of Air Canada indicated a willingness to provide input to research in this area.

#### MODERATORS AND PANELISTS

##### Workshop Session 1: Energy and Jet Fuel Availability and Price

Moderator: Roderick Heitmeyer, International Civil Aviation Organization

##### Panelists

John B. Brackbill, Boeing Commercial Airplane Company  
 Kathy Arjiropoulos, Air Transport Association of America  
 Neville Small, Mobil Oil Corporation  
 David E. Raphael, SRI International

##### Workshop Session 2: Policy Implications

Moderator: George H. Sarames, Lockheed California Company

##### Panelists

Bruce Cunningham, Pan American World Airways, Inc.  
 Bruce Kutzke, Northwest Airlines, Inc.  
 Robert Cohn, Butler, Binion, Rice, Cook and Knapp  
 Peter Reveley, Dade County Aviation Department  
 William Messecar, McDonald Douglas Corporation

##### Workshop Session 3: Factors Affecting Airports

Moderator: Adib Kanafani, University of California, Berkeley

##### Panelists

Laurence A. Schaefer, Port Authority of New York and New Jersey  
 George Bean, Hillsborough County Aviation Authority  
 Philip H. Agee, Air Transport Association of America  
 Geoffrey Gosling, University of California, Berkeley

##### Workshop Session 4: Perspectives From New York

Moderator: George Howard, Port Authority of New York and New Jersey

##### Panelists

Johannes Augustinus, Port Authority of New York and New Jersey  
 J. Casson, American Express  
 George Sarames, Lockheed California Company  
 Edward Barrol, Olgivy and Mather

##### Workshop Session 5: Perspectives From Canada

Moderator: William Tucker, Air Transport Canada

##### Panelists

R. B. White, National Research Council, Canada  
 Andrew Smith, International Civil Aviation Organization  
 A. T. Wiley, Air Canada  
 Andrew P. Elek, Peat, Marwick and Partners, Canada

#### SPONSORSHIP OF THIS CIRCULAR

##### GROUP 1--TRANSPORTATION SYSTEMS PLANNING AND ADMINISTRATION

Leon M. Cole, Congressional Research Service, Library of Congress, chairman

##### Committee on Aviation Demand Forecasting

David W. Bluestone, Silver Spring, Md., chairman  
 Gene S. Mercer, Federal Aviation Administration, Secretary

Michael R. Armellino, G. R. Besse, Cecil O. Brown, Michael A. Duffy, Dan G. Haney, George Howard, Adib Kanafani, Dal V. Maddalon, William R. Nesbit, Terrence Lee Parker, Earl M. Peck, David E. Raphael, Laurel A. Smith, Edward C. Spry, Martin M. Stein, Nawal K. Taneja, William T. Tucker, Kenneth R. Velten.

Herbert J. Guth, Transportation Research Board, Staff Representative