The effects of three possible changes are explored: (1) strengthen connections between U.S. and international airports, (2) increase air cargo transported through U.S. airports, and (3) decrease airfares for personal travelers.

Connectivity and air cargo analyses are based on:
- 20 sample U.S. metropolitan regions that contain 26 commercial airports
- Detailed regional economic data
- 15 major international airports
- The years 1995, 2000, 2005, and 2010

Findings are extrapolated to national levels for illustrative purposes.

Direct Economic Impact in the National Economy ($ impacts in 2010 millions)

<table>
<thead>
<tr>
<th>Changes in Impacts Generated By:</th>
<th>Jobs</th>
<th>Labor Income</th>
<th>Output</th>
<th>Value Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% Improvement in Connectivity Variables</td>
<td>13,000</td>
<td>$795</td>
<td>$3,043</td>
<td>$1,507</td>
</tr>
<tr>
<td>1% Increase in Air Cargo Tonnage</td>
<td>5,100</td>
<td>$403</td>
<td>$2,103</td>
<td>$742</td>
</tr>
<tr>
<td>1% Decrease in Air Fares</td>
<td>1,400</td>
<td>$162</td>
<td>$553</td>
<td>$249</td>
</tr>
</tbody>
</table>

Total Economic Impact in the National Economy ($ impacts in 2010 value)
(including multiplier effects)

<table>
<thead>
<tr>
<th>Changes in Impacts Generated By:</th>
<th>Jobs</th>
<th>Labor Income</th>
<th>Output</th>
<th>Value Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% Improvement in Connectivity Variables</td>
<td>38,900</td>
<td>$2.3 B</td>
<td>$7.4 B</td>
<td>$4.0 B</td>
</tr>
<tr>
<td>1% Increase in Air Cargo Tonnage</td>
<td>22,700</td>
<td>$1.4 B</td>
<td>$5.4 B</td>
<td>$2.5 B</td>
</tr>
<tr>
<td>1% Decrease in Air Fares</td>
<td>5,800</td>
<td>$0.4 B</td>
<td>$1.3 B</td>
<td>$0.7 B</td>
</tr>
</tbody>
</table>

Notes: Values for connectivity represent the average of 11 variables. “Total” includes “direct” role and “indirect” and “induced” economic multiplier effects. B = Billions. Jobs are rounded to the nearest hundred. Calculations used IMPLAN, LLC national model, Version 3, 2012.

This research tests multiple ways of measuring airport and regional connectivity:
- Number of aircraft departures,
- Number of nonstop destinations,
- Frequencies (number of daily flights) of departures and destinations, and
- The percent of the world’s wealth connected to an airport.

Greater connectivity allows a traveler or a firm to save resources or expand activity.

Details of the economic analyses can be found at: www.TRB.org/main/blurbs/172110.aspx.
Key Findings

Economic Role of Airports in the U.S.

$768 Billion in Value Added

<table>
<thead>
<tr>
<th>Impacts (2010 dollars)</th>
<th>Direct</th>
<th>Total (including multiplier effects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs (millions)</td>
<td>2.17</td>
<td>7.63</td>
</tr>
<tr>
<td>Labor Income (billions)</td>
<td>$147.6</td>
<td>$452.5</td>
</tr>
<tr>
<td>Output (billions)</td>
<td>$637.0</td>
<td>$1,600.0</td>
</tr>
<tr>
<td>Value Added (billions)</td>
<td>$247.4</td>
<td>$768.4</td>
</tr>
</tbody>
</table>

2.17 Million Direct U.S. Jobs

Research Questions:

- What is the national economic role of U.S. airports?
- Do improvements in the connectivity of airports lead to improved productivity of U.S. industries?
- What is the interrelationship between air cargo and the U.S. industrial base?
- How do changes in the cost of air travel affect the national economy?

Answered in Complementary Approaches

1. National Economic Role of U.S. Airports

How do these findings compare with other economic analyses?

Estimates Airports’ Additions to the National Economy through:

- On-airport commerce
- International cargo (brings income to the United States from other countries)
- Spending of international visitors who arrive by air

Does not include redistribution among regions, including:

- Domestic air cargo
- Off-airport spending of domestic air visitors
- Civil aviation—aircraft manufacturing and parts

2. Changes in aviation affect economic impacts

Brochure developed under ACRP Project 03-28 by the following:

Economic Development Research Group
In association with:

Dr. David Gillen    KRAMER aerotek, inc.
ICF International   Mead & Hunt, Inc.