Air Service Development & Economic Impacts of Aviation

Steven Landau
Economic Development Research Group, Inc.
slandau@edrgroup.com
www.edrgroup.com
Critical Understanding

Understand the difference between measuring the economic benefit of an airport and the role of an airport in a local/regional economy

- Uniqueness of communities/regions, business mix, local GA airports and projects
Economic Impact/Economic Benefit

• Economic Impact
  – Mechanical Exercise
    • Surveys, model package...AND
    **BOOM** - Direct, indirect & induced benefits

• Economic Benefit
  – Impacts plus how an airport helps the competitiveness of a city and region
  – Contribution of an airport to economic development
How Airports Affect Communities & Regions

Characteristics of Airport Setting
Available land, land use patterns, ground access, specialization of surrounding business activity

Airport Activity
Based aircraft, passengers, volumes of freight & mail

Characteristics of Local/Regional Economy
Employment, population, gross domestic product

Business Activity
Jobs, wages, sales & demand for building space

Airport Function
Commuter, corporate, reliever, hub, gateway, military, aircraft maintenance
### Economic Impact and Economic Development Tells the Full Story

<table>
<thead>
<tr>
<th>Airport Administration</th>
<th>Airport Dependent Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport Tenants</td>
<td></td>
</tr>
<tr>
<td>o Retail</td>
<td>o Cargo</td>
</tr>
<tr>
<td>o Aviation Services</td>
<td>o Business Travel</td>
</tr>
<tr>
<td>o Aircraft sales/repairs</td>
<td></td>
</tr>
<tr>
<td>o Avionics</td>
<td>Business Related Based Aircraft</td>
</tr>
<tr>
<td>o Government Agencies (i.e., FAA, TSA)</td>
<td></td>
</tr>
<tr>
<td>o Airlines</td>
<td>Aerospace Industries</td>
</tr>
<tr>
<td>Pilots and Visitors</td>
<td>Non-aviation Tenants</td>
</tr>
<tr>
<td>o Off Airport Spending</td>
<td>o Airport as industrial/Office Park</td>
</tr>
<tr>
<td>Military</td>
<td></td>
</tr>
</tbody>
</table>

- Off Airport Spending
- Government Agencies (i.e., FAA, TSA)
- Airlines
- Business Related Based Aircraft
- Aerospace Industries
- Non-aviation Tenants
  - Airport as industrial/Office Park
Aircraft Maint.

High-Tech Park

Int. Tech Park

Waterfront

Commerce

Industry

Freight

Business centre

Commerce
Airports Contribute to Economic Health

Reliance on air travel is due to:

- Delicate and time-sensitive products need to be shipped by air
- Productivity requirements of just-in-time deliveries
- Global trade partners
- Business & professional services with clients worldwide
- Business with international satellite and corporate offices
Airports Serve Industrial Base

- Dependence on “just-in-time” deliveries
- Consume aviation services
  - Integrated aviation into daily operations
  - Viability a going concern depends on timeliness of deliveries of air freight
- Adequate airport capacity, ground access to plant for timely flights and deliveries
- Annual productivity losses due to air cargo delays
  - $4 million to plant
  - $40 million to home company
Impacts of Just-in-Time Delivery at Auto Plant – Rock County WI

1993: 1.5 Mill pounds of air cargo

1994: JIT Introduced

1999: 3.9 Mill pounds of air cargo
Industry Reliance on Aviation

- **Above Average**
  - Freight forwarders
  - Computer equipment
  - Business services
  - Insurance
  - Computer & data proc
  - Electrical equipment
  - Scientific instruments
  - Finance
  - Educational services
  - Legal services
  - Restaurants
  - Repair services
  - Stone & clay products
  - Retail trade
  - Radio/TV broadcast
  - Real estate
  - Construction
  - State & local govt
  - Agric products

- **Average**

- **Below Average**

Economic Development Research Group
Rates of Employee Air Travel

Average annual air passenger trips per employee
Support for Local Industry

- Auto Industry
- Advanced Logistics
- Creative Industries
- Life Sciences
How to Assess Airport Role in Economic Development

• Local Regional Economy
  – Industry mix

• Connectivity
  – Distance to a vibrant commercial airport
  – Distance to a major cargo airport

• Commodity Flows
  – Intermodal Connections
Trends...
Changing Freight Patterns

• Higher value/weight
• Higher time sensitivity
• Overnight delivery
• Small package delivery trucks
• Air & Marine port dependence on rail & hwy
• Rail & truck companies focus on long-hauls
How to Assess Role in Economic Development – Key GA Indicators

• Based Aircraft
  – Business ownership/use
  – Efficient Business Travel
• Just-In-Time Shipments and Deliveries
Assessing Economic Contributions of Airports

- **Model Inputs:**
  - *Airport Activity*: based aircraft by type; number ops; freight volumes; commercial passengers;
  - *Airport Function*: commuter, corporate, reliever, destination, hub, gateway, aircraft maintenance
  - *Airport Capabilities/Constraints*: critical aircraft type; weight and range limits for critical aircraft; lighting and navigation aids;
  - *Regional/Local Economic Characteristics*; and
  - *The Regional Setting*: tourism, developable sites; supporting infrastructure; distance/connections to interstate highways, urban centers, market area.
Results and Sensitivity of Improvements

• **Model Output:**
  – *Business Activity*: jobs & business output by type of business
  – *Regional Economy*: income and gross regional product generated
    • *Business savings/efficiencies*
    • *New/expanded economic activities*
    • *Additional Household Spending*
  – *Multi-modal Implications*: supporting trucking, rail
  – *Fiscal*: potential tax consequences
To Summarize...Where We Started

On Airport Economic Impact
+ Economic Development Role of Airport
= The Contribution of an Airport to a Regional/Local Economy
Most Importantly

DATA SETS ARE BLIND

MODELS ARE ONLY A TOOL

TALK TO PEOPLE
Thank You

Steven Landau
Economic Development Research Group, Inc.
slandau@edrgroup.com