7th National Aviation System Planning Symposium Asilomar Conference Center May 5, 2009

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

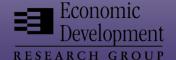


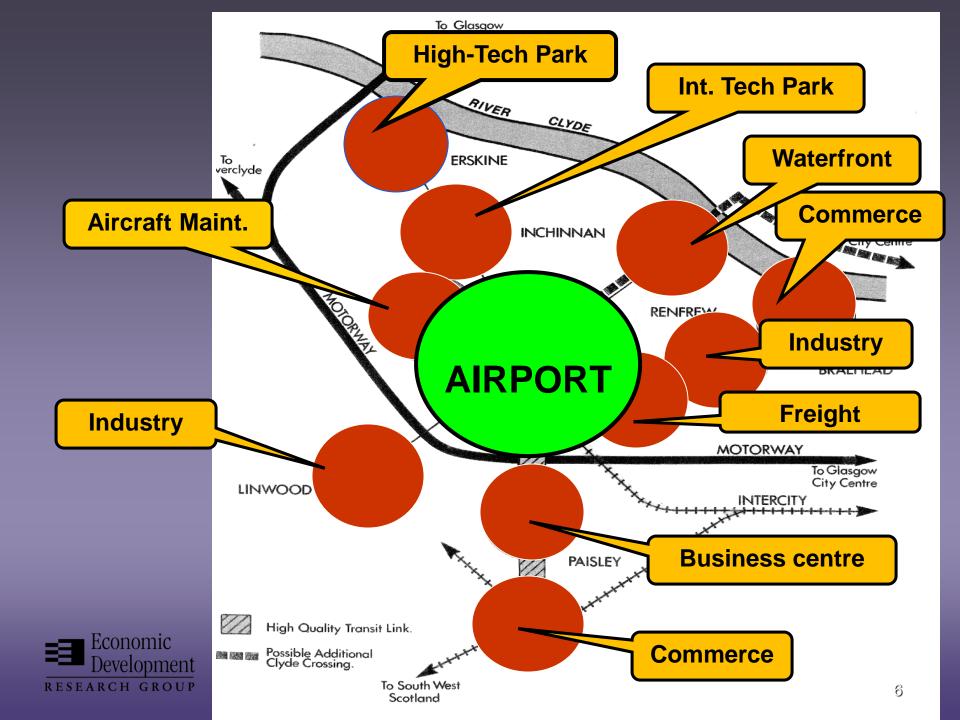
Economic Impact and Economic Development Tells the Full Story

- Airport Administration
- Airport Tenants
 - Retail
 - Aviation Services
 - Aircraft sales/repairs
 - Avionics
 - Government Agencies (i.e., FAA, TSA)
 - Airlines
- Pilots and Visitors
 - Off Airport Spending
- Military



- Airport Dependent Business
 - Cargo
 - Business Travel
- Business Related Based Aircraft
- Aerospace Industries
- Non-aviation Tenants
 - Airport as industrial/Office Park

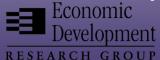




Airports Contribute to Economic Health

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

Operations

1993: 1.5 Mill pounds of air cargo



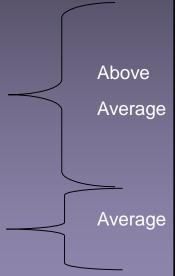
1994: JIT Introduced



1999:3.9 Mill pounds of air cargo

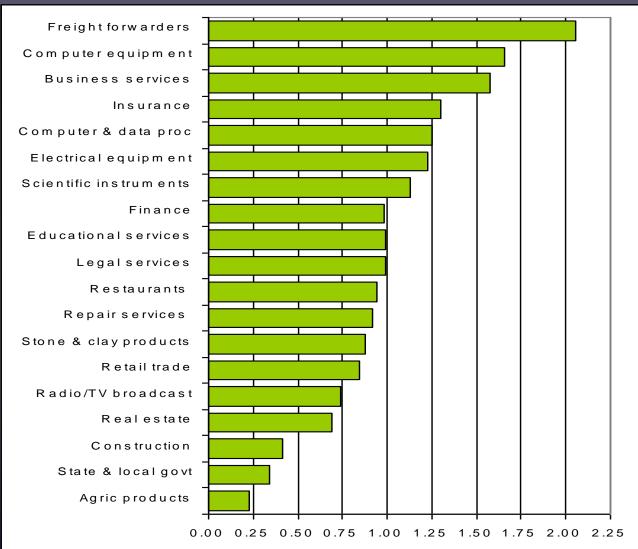


Industry Reliance on Aviation

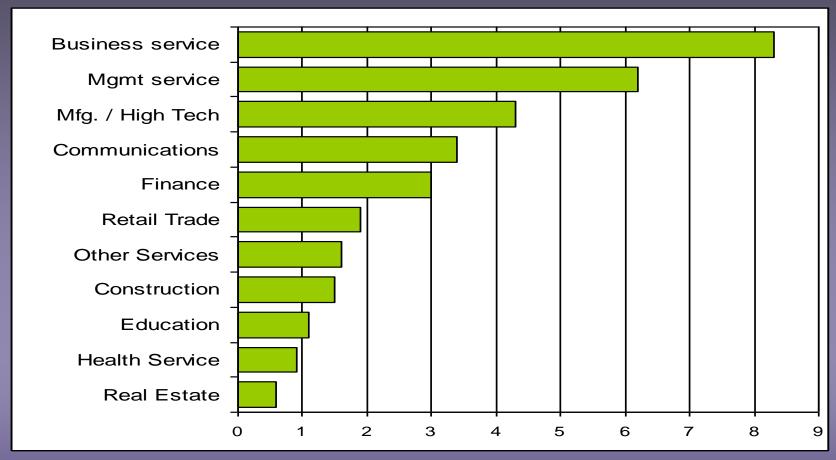


Below Average





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





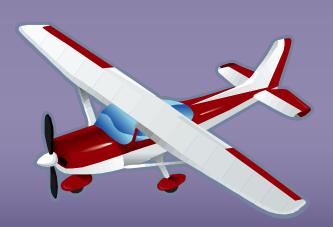
How to Assess Role in Economic Development – Key GA Indicators

- Based Aircraft
 - Business ownership/use
 - Efficient Business Travel



Just-In-Time Shipments and Deliveries



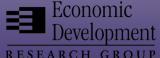




Assessing Economic Contributions of Airports

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 Airportto 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

