

Measuring the Economic Significance of Aviation
TRB Workshop , January 2007

Towards Broader Views of Airport Economic Significance:

Intermodal Perspectives

Glen Weisbrod
Economic Development Research Group

Economic Significance of Airports

Standard Studies

- Airport Econ Activity
- Air Service Support
- Aviation Dependent
(visitor spending)
- Supplier /Responding
(multiplier effects)



Economic Significance of Airports

Standard Studies

- Airport Econ Activity
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Newer Studies

- Intl Trade Role
- Mfg Supply Chain Role
- Universities, R&D, Finance, Business Serv.
- Econ Devel Role
- Urban Devel Role

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(1) Int. Trade Significance

- Air Freight Accounts for 1% of export tons
- But 34% of export value
- And 55% of overseas export value (up from 42% in 1990)



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Maine Study: Export Destinations

- 1 Canada
- 2 Malaysia
- 3 China (Mainland)
- 4 Japan
- 5 Korea, Republic Of
- 6 China (Taiwan)
- 7 United Kingdom
- 8 Singapore
- 9 Netherlands
- 10 Germany



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Maine Export Flows

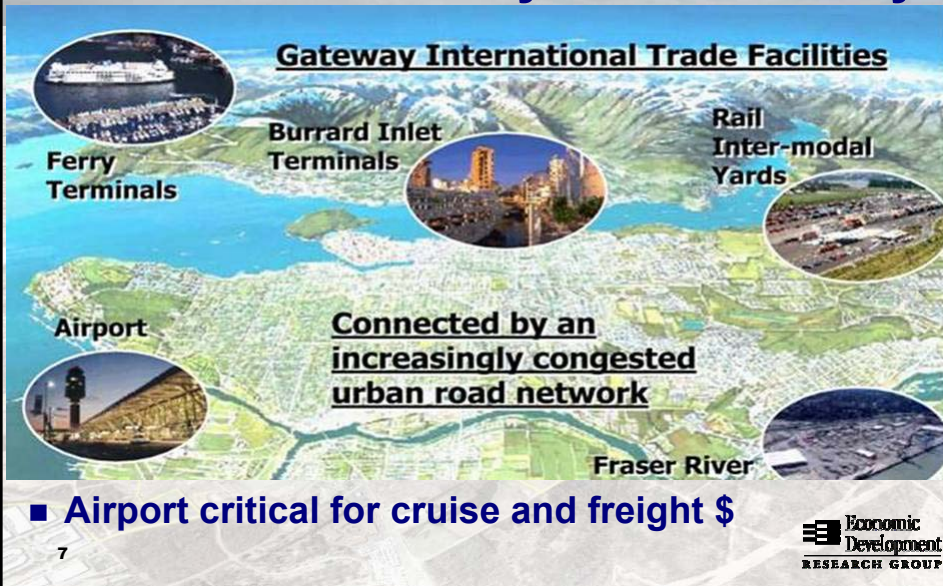
Maine Exports via

- 1 Calais, ME
- 2 JFK Airport
- 3 Jackman, ME
- 4 Buffalo, NY
- 5 Derby, VT
- 6 Eastport, ME
- 7 Logan Airport



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Vancouver Gateway Council Study



Portland Business Council Study

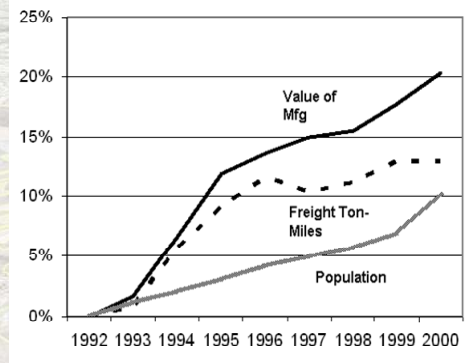
- Airport critical for JIT shipments to Asia
- Intel: 2-hour shift for shipping chips due to congestion getting to airport



(2) Supply Chain Significance

Changing Trends

- Longer distances
- Higher value/weight
- Higher time sensitivity
- Overnight delivery
- Small package delivery
- Air dependence on hwy access

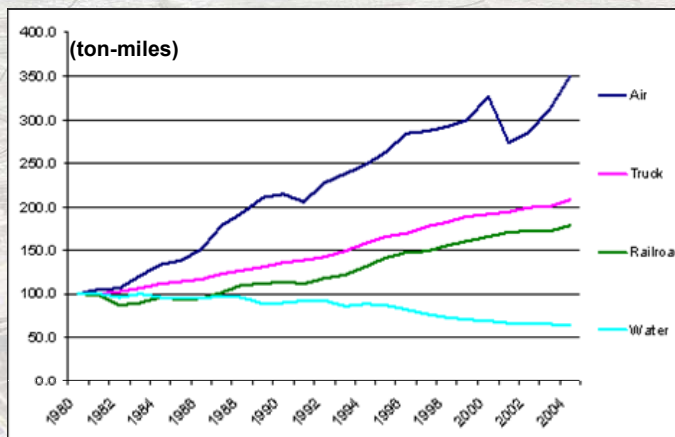


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Supply Chains: Air Freight Growth

- Air Freight has highest growth rate



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Products Dependent on Air Cargo

- Electronics & elec. equipment
- Chemicals, plastics, pharma
- Ind. machinery/vehicle parts
- Printing & publishing
- Industrial bldg construction



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Janesville (Rock Co. Airport)

Regional automotive mfg cluster

- Auto Mfg – GM, Chrysler
- Parts Mfg –to SC (BMW), Mexico & MI (Ford), ONT & MO (Chrysler)
- Reliance on just-in-time mfg
-- *for air & truck reliability*
- Potential loss of jobs to Mexico or Canada



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(3) Business Travel Significance

Industries Dependent On Passenger Air Travel

- *Engineering & consulting services*
- *Banking, finance, business services*
- *Legal services*
- *Government, Public Administration*
- *Universities and R&D centers*
- *Medical Services*



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New England Council: Boston Logan

Critical roles for:

- *Biotech industry*
- *Computer R&D*
- *Hospital Cluster*
- *Research Universities*
- *International Visitors & Trade*

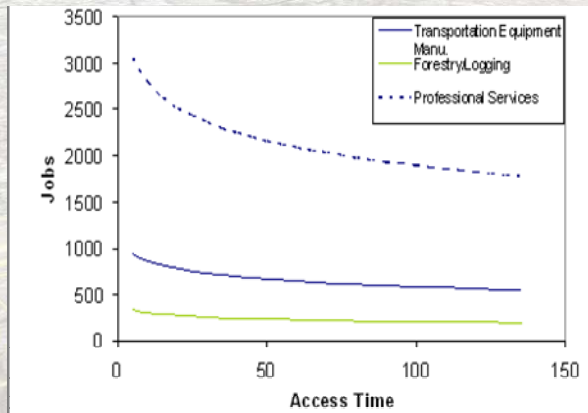


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(4) Economic Devel Significance

- ***Business attraction depends on proximity or access time to airport***

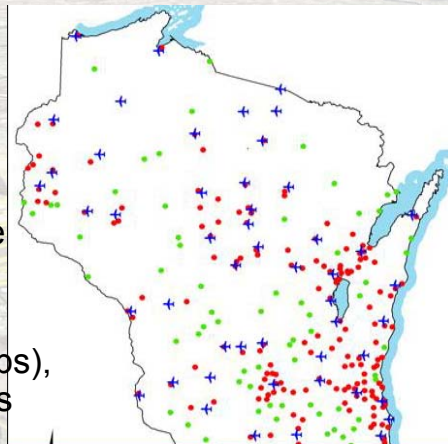


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Econ Roles of GA Facilities

- Increase of air freight, courier
- Growing technology and multi-location industries
- Increasing use of corporate & fractional ownership
- Wis. study: 702 new and expanding firms (34,064 jobs), 85% located within 15 miles of jet-capable airport



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Appalachian Regional Commission

- Intl. Exports: Vehicles, Machinery, Food, Electronics
- Appalachian Development Hwy System – linking to airports
- Essentially all air freight depends on trucks to/from airport



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St. Cloud, MN

Value of Air Service for Business Retention

- Community marketing campaign to support service (\$100 bonus to travel agents)
- Guarantee service to airlines
- Measure \$ impact on business retained and attracted



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(5) Urban Devel Significance

- Air Ind. Parks
- Warehousing
- Hotel, Convention
- Recreation
- Office, Retail
- Mixed Use Devel

Las Colinas Near DFW



Airpark Business Ctr (BNA)



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Schiphol Area Devel Co.

- Logistics facilities
- Warehouses
- Hi-tech office
- Fashion/Creative Industries



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Kansai Airport – Rinku Town

- Airport Business Services
- Airport Hotels
- Meeting Facilities
- Shopping
- Amusement Park
- Office, Retail
- Hwy & Rail Links



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Viewing Economic Significance

Different Perspectives

- National: International Trade
- Regional: Economic Development
- Local: Urban Growth
- Industry: Supply Chains, Clusters

Different Tools

- Wisconsin ABC System: State vs. Local Econ Significance
- TREDIS: Multimodal Joint Effects
- Keeping Econ Significance separate from Benefit/Cost

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Future Economic Significance?

Actual Photo of UFO Landing Zone on the A27 Highway in the Netherlands



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For Further Information

EDRG Web Download Library
www.edrgroup.com/articles-transport.htm

TRB Econ Devel Committee Links
www.tedcommittee.com

Economic Development Research Group, Inc.
2 Oliver Street, Boston, MA 02109 USA
1.617.338.6775 www.edrgroup.com



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