Airports and Their Impact

COMTO
June 2018
What is an Airport?

• The land based access to air travel routes
• We help move people and goods efficiently over long distances
• Major job centers for aeronautical and related business
• Assets to our communities
How Aviation Affects the Economy

The air transport industry and its economic impacts

Direct (within the industry):
- Airlines
- Passenger carriers
- Air cargo carriers
- Airline ticketing
- General aviation
- Airport & services
  - Civil airports
  - General aviation airports
  - Handling & catering
  - Freight services
  - Aircraft maintenance
  - Fueling on-site
- Air navigation
  - Service providers

Indirect/induced (industry supply chain):
- Suppliers
  - Off-site fuel suppliers
  - Food & beverage
  - Construction
- Manufacturing
  - Computers/electronics
  - Retail goods
- Business services
  - Call centres
  - Accountants
  - Lawyers, banks
  - Computer software

Catalytic effects (impacts on other industries):
- Trade
- Tourism
- Location/investment
- Labour supply
- Productivity/
  - Market efficiency
- Consumer welfare/
  - Social
- Congestion/
  - Environmental

Air transport industry
Civil aerospace sector
Aviation sector

Source: OEF, 2005
Airports in Texas

- Approximately 400 airports in the State
- The Texas System’s 25 commercial airports enplaned 67.7 million passengers in 2010.
- Dallas-Fort Worth International Airport is the 4th busiest airport in the nation with more than 27 million passenger enplanements
- George Bush Intercontinental Airport in Houston is the 7th busiest airport in the nation
- More than 7.8 billion pounds of cargo landed at Texas airports in 2010
- Texas has almost 51,000 certificated pilots
- In 2009 there were over 19,400 active aircraft in Texas, 2nd highest total in the nation
Economic Impact

• **General Aviation Activities:**
  – Output $14,582,332,000
  – Labor Income $3,127,309,000
  – Jobs 56,635

• **Commercial Activities:**
  – Output $44,928,225,000
  – Labor Income $20,103,760,000
  – Jobs 714,720

• **Total Aviation Activities:**
  – Output $59,510,557,000
  – Labor Income $23,231,069,000
  – Jobs 771,355

• Sources: UNT Center for Economic Development and Research, Wilbur Smith Associates, and IMP LAN
## Economic Impact

<table>
<thead>
<tr>
<th>Airport</th>
<th>Impact</th>
<th>Output</th>
<th>Labor income</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas Love</td>
<td>Commercial</td>
<td>$2,341,640,837</td>
<td>$1,079,122,813</td>
<td>38,863</td>
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<tr>
<td></td>
<td>GA</td>
<td>$480,351,680</td>
<td>$167,845,5680</td>
<td>2,220</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$2,821,992,517</td>
<td>$1,246,968,381</td>
<td>41,083</td>
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<tr>
<td>DFW</td>
<td>Commercial</td>
<td>$15,626,379,766</td>
<td>$7,373,325,519</td>
<td>267,597</td>
</tr>
<tr>
<td></td>
<td>GA</td>
<td>$75,075,408</td>
<td>$26,931,636</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$15,701,455,174</td>
<td>$7,400,257,155</td>
<td>267,918</td>
</tr>
</tbody>
</table>

*TDOT Economic Impact – 2011 General Aviation in Texas*
Positive Benefits to Cities

• “boarding per capita, passenger originations, and the presence of a major airline hub have a significantly large influence on population growth. In fact, hub cities grew between 9% and 16% faster than non-hub cities between 1990 and 2000.”
Airports are Good,

Now What?
Guess What’s not Cheap?

- Per Airport Council International annual survey:

<table>
<thead>
<tr>
<th>Airport Category</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2017-2021</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large hub</td>
<td>12,627</td>
<td>13,502</td>
<td>13,778</td>
<td>10,929</td>
<td>9,539</td>
<td>60,375</td>
<td>60.5%</td>
</tr>
<tr>
<td>Medium hub</td>
<td>2,376</td>
<td>2,766</td>
<td>2,545</td>
<td>1,953</td>
<td>2,078</td>
<td>11,718</td>
<td>11.7%</td>
</tr>
<tr>
<td>Small hub</td>
<td>1,748</td>
<td>1,871</td>
<td>1,713</td>
<td>1,485</td>
<td>1,665</td>
<td>8,483</td>
<td>8.5%</td>
</tr>
<tr>
<td>Non-hub</td>
<td>1,068</td>
<td>1,084</td>
<td>1,100</td>
<td>1,117</td>
<td>1,134</td>
<td>5,504</td>
<td>5.5%</td>
</tr>
<tr>
<td>Other*</td>
<td>2,677</td>
<td>2,717</td>
<td>2,757</td>
<td>2,799</td>
<td>2,841</td>
<td>13,790</td>
<td>13.8%</td>
</tr>
<tr>
<td>Total</td>
<td>20,496</td>
<td>21,940</td>
<td>21,895</td>
<td>18,283</td>
<td>17,256</td>
<td>99,869</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Note: “Other” includes non-commercial service airports and 8 proposed airports based on FAA NPIAS report (2017-2021).
The Real Challenge

• “Give the City Council a briefing and recommendation”
• Translation:
  “Somehow summarize hundreds of pages of documents, plans, and legal documents and countless man-hours spent on planning, feasibility studies, programming considerations, and passenger & financial forecasts into a 30-minute briefing with 25 slides”
Light Reading
Key Documents for New Garage

- Program Development agreement
- Airline Lease agreement
- Financial Feasibility report
- Master Plan
- Other legal and financial
- Total pages
  - 81 pages
  - 129 pages
  - 185 pages
  - 3 volumes – >350 pages
  - Over 500 pages
  - A Gazillion

LOVE EVOLUTION
LOVE FIELD MODERNIZATION PROJECT
Planning Challenges

• Needs always outweigh resources
• Eat the elephant one bite at a time
  – Listen to your consultants
  – Don’t listen to your consultants
• A plan is just that, not an order
  – If you have to modify, don’t be afraid to do it
  – Mistakes happen, better to admit them and move on
Airport Development
FY 19 Construction Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWY B Phase III</td>
<td>$15.7M</td>
</tr>
<tr>
<td>TWY B Phase IV</td>
<td>$23.8M</td>
</tr>
<tr>
<td>Garages A &amp; B</td>
<td>$3.0M</td>
</tr>
<tr>
<td>Misc Drainage</td>
<td>$1.0M</td>
</tr>
<tr>
<td>Entry Road Enhancements</td>
<td>$6.0M</td>
</tr>
<tr>
<td>Taxi Queue Parking Lot</td>
<td>$0.5M</td>
</tr>
</tbody>
</table>
FY 20 Design Projects

- TWY C from RWY 13R to TWY C4: $3.9 M
- North Entry - Design Development: $2.0 M
- DAS Planning Support: $1.0 M
- Crossfield Taxiways: $1.7 M
FY 21 Construction Projects

- TWY C from RWY 13R to TWY C4: $14.6 M
- Crossfield Taxiways: $36.5 M
- Drainage Master Plan: $17.8 M
- DAL Major Maint: $0.5 M
- DEA W side project payback: $3.5 M
- DEA Project - TBD: $2.0 M
FY 21 Design Projects

- Airfield Pavement Evaluation $1.5 M
- TWY C from RWY 31L to TWY C2 $1.4 M
- DAS Planning Support $1.0 M
Background

In the Master Plan Update (2015) three intersection alternatives were developed to mitigate congestion at Mockingbird Lane and Cedar Springs/Herb Kelleher Way.

- Compressed Conventional Urban Diamond Interchange
- Diverging Urban Diamond Interchange
- Direct Ramp Interchange

Preferred Alternative Rationale:

- Least amount of tunneling due to unknown underground utility and obstructions in the interchange area.
- More conventional roadway design that requires less right-of-way
- Least Expensive Alternative
- Does not encroach upon the FAA U.S. Standard for Terminal Instrument Procedures (TERPS) and 14 CFR Part 77, Objects Affecting Navigable Airspace
Preliminary Concept Layout

Mobility Solutions, Infrastructure & Sustainability
June 1, 2018
ConRAC Site Location Options

Site 1
Site 2
Site 3
Site 4
Site 5
Thank You