

Economic Impact of Aviation in Arizona

Presented by:



Arizona Department of
Transportation
Aeronautics Division

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Aviation Contributes \$38.5 Billion to the Arizona Economy

PRIMARY IMPACT

Economic Activity
\$18.2 Billion

Employment
228,561

Payroll
\$7.0 Billion



INDUCED IMPACT

Multiplier Effects
Realized as Spending
by suppliers and
users of aviation
circulates in
Arizona's
economy

TOTAL IMPACT

Economic Activity
\$38.5 Billion

Employment
470,708

Payroll
\$14.7 Billion



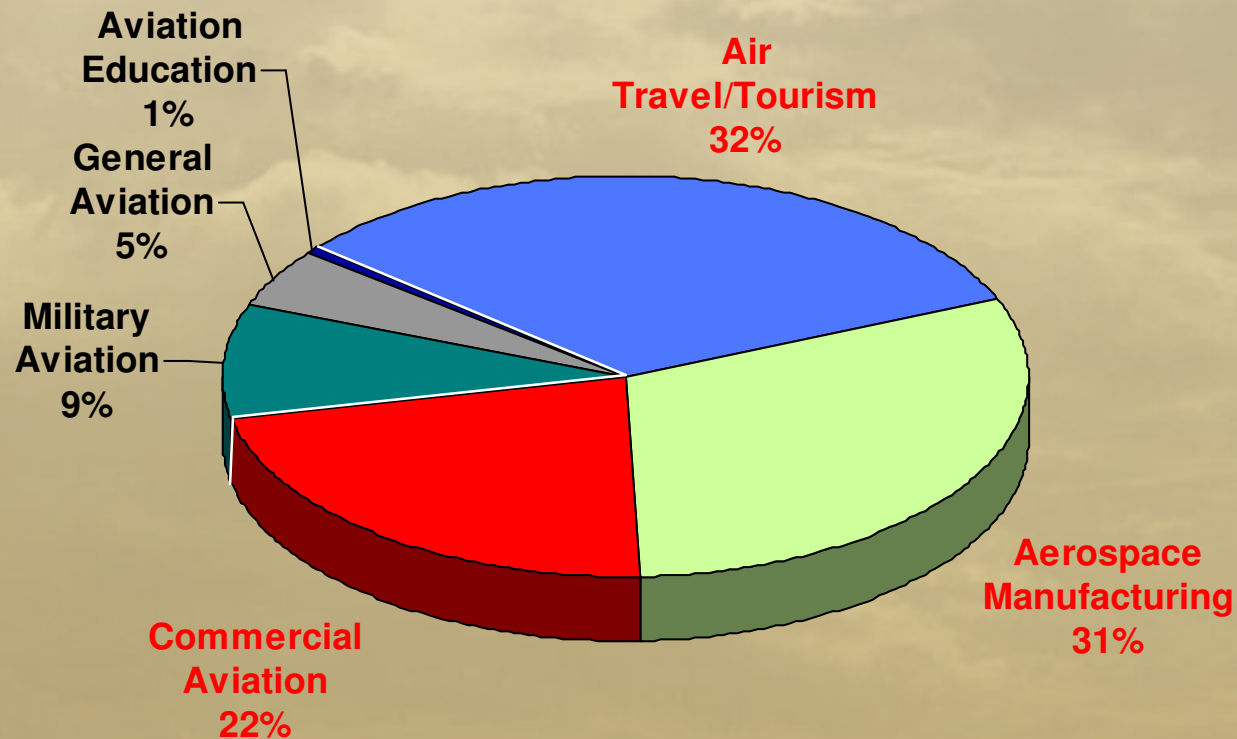
Primary Economic Impacts of Aviation in Arizona, 2002

- Over 228,000 Jobs
- \$7 Billion in Wages and Benefits
- \$18.2 Billion in Economic Output

| Aviation Sector | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------|------------|--------------------------|-------------------------------------|
| Commercial Aviation | 39,487 | \$1,454 | \$4,071 |
| General Aviation | 9,821 | \$362 | \$842 |
| Aviation Education | 1,230 | \$46 | \$110 |
| Aerospace Manufacturing | 28,768 | \$1,777 | \$5,628 |
| Military Aviation | 28,497 | \$989 | \$1,678 |
| Air Travel/Tourism | 120,757 | \$2,419 | \$5,910 |
| Total | 228,561 | \$7,047 | \$18,240 |

Air Visitors, Aerospace and Commercial Aviation Account for 85% of the Primary Economic Impacts

Primary Economic Output by Aviation Sector



Change in Primary Economic Impacts, 1998 to 2002

- **+ 61,000 Jobs**
- **+ \$2.3 Billion in Wages and Benefits**
- **+ \$1.7 Billion in Economic Output**

| Aviation Sector | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------|------------|--------------------------|-------------------------------------|
| Commercial Aviation | 10,055 | \$478 | \$74 |
| General Aviation | (773) | \$33 | (\$259) |
| Aviation Education | (94) | \$4 | \$6 |
| Aerospace Manufacturing | 1,832 | \$271 | \$735 |
| Military Aviation | 6,611 | \$360 | \$243 |
| Air Travel/Tourism | 43,605 | \$1,113 | \$890 |
| Total | 61,237 | \$2,260 | \$1,689 |

The Commercial Aviation Sector Generated \$4.1 Billion in Primary Economic Output in 2002

- 39,000 Jobs
- \$1.5 Billion in Wages & Benefits
- \$4.1 Billion in Economic Output
- Airlines Contribute 57% of Primary Economic Output
- Air Cargo and Courier Agents Contribute 18%

| | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------------------|---------------|--------------------------|-------------------------------------|
| Airlines (on airport) | 13,954 | \$656 | \$2,148 |
| Airline Ticket Agents (off airport) | <u>2,551</u> | <u>\$71</u> | <u>\$173</u> |
| Subtotal Airlines | 16,505 | \$727 | \$2,321 |
| Air Cargo and Courier Agents | 9,449 | \$307 | \$765 |
| Airport Businesses | 5,913 | \$146 | \$429 |
| Ground Transportation | 2,599 | \$62 | \$122 |
| Government Services | 1,879 | \$60 | \$80 |
| Airport Administration | 719 | \$49 | \$120 |
| Airport Construction | 2,424 | \$102 | \$235 |
| Total | 39,487 | \$1,454 | \$4,071 |

Change in Primary Economic Impacts of Commercial Aviation, 1998 to 2002

- + 10,000 Jobs
- + \$478 Million in Wages and Benefits
- + \$74 Million in Economic Output

| | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------------|---------------|--------------------------|-------------------------------------|
| Airlines (on and off airport) | 1,442 | \$121 | (\$619) |
| Air Cargo and Courier Agents | 7,822 | \$256 | \$618 |
| Airport Businesses | (1,323) | \$6 | (\$37) |
| Ground Transportation | 191 | \$1 | (\$26) |
| Government Services | 1,291 | \$30 | \$5 |
| Airport Administration | (294) | \$5 | \$9 |
| Airport Construction | 927 | \$59 | \$124 |
| Total | 10,055 | \$478 | \$74 |

The General Aviation Sector Generated \$842 Million in Primary Economic Output in 2002

- 10,000 Jobs
- \$362 Million in Wages & Benefits
- \$842 Million in Economic Output
- Aircraft Sales & Service Account for 63% of Primary Economic Output
- Aerial Services are 23%

| | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|----------------------------|--------------|--------------------------|-------------------------------------|
| Non-scheduled Carriers | 635 | \$27 | \$64 |
| Aircraft Sales and Service | 5,920 | \$223 | \$528 |
| Aerial Services | 2,456 | \$82 | \$195 |
| Government Services | 260 | \$11 | \$13 |
| Airport Administration | 297 | \$9 | \$18 |
| Airport Construction | 253 | \$11 | \$24 |
| Total | 9,821 | \$362 | \$842 |

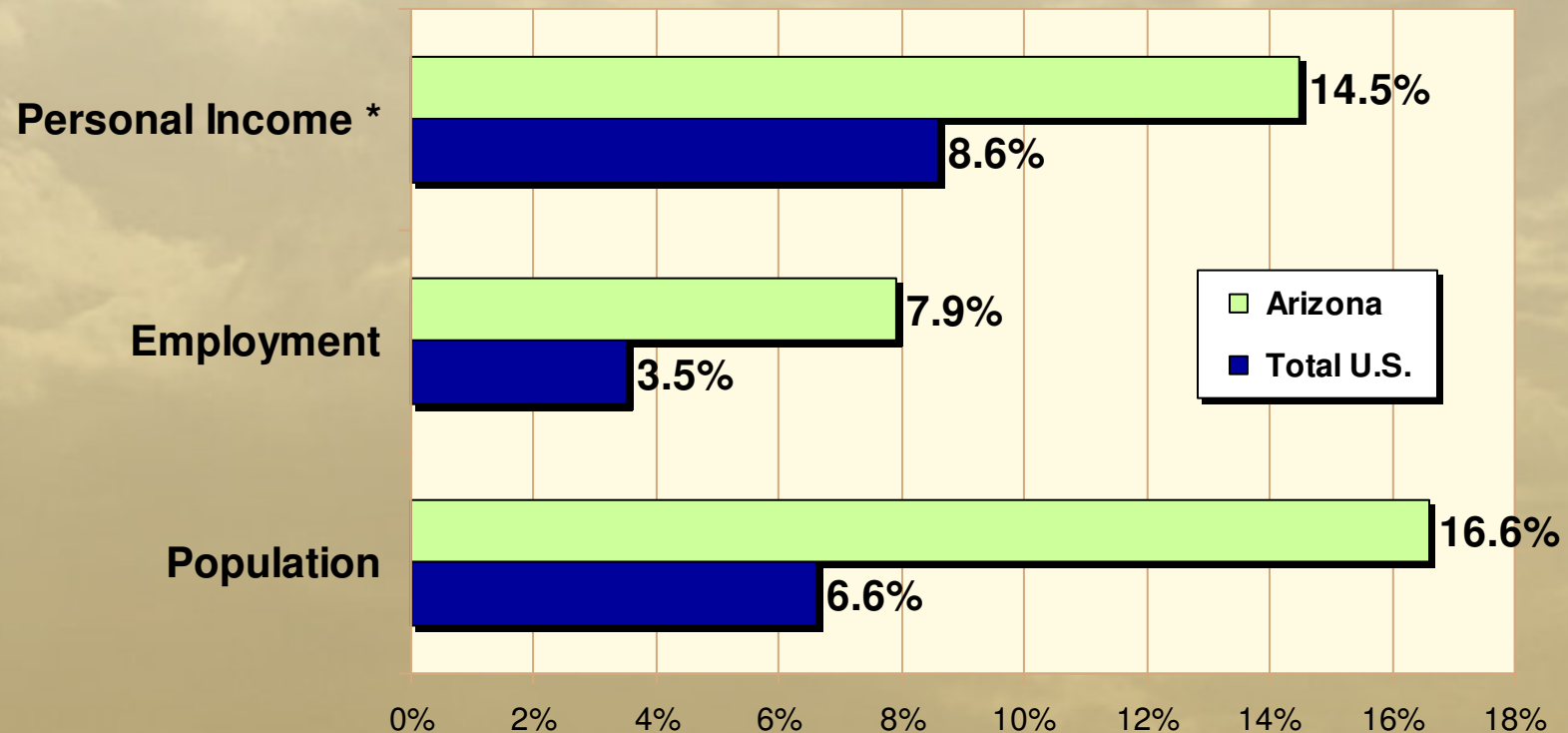
Change in Primary Economic Impacts of General Aviation, 1998 to 2002

- - 800 Jobs
- + \$33 Million in Wages and Benefits
- - \$259 Million in Economic Output

| | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|----------------------------|------------|--------------------------|-------------------------------------|
| Non-scheduled Carriers | (477) | (\$12) | (\$106) |
| Aircraft Sales and Service | (2,379) | (\$29) | (\$291) |
| Aerial Services | 1,960 | \$69 | \$147 |
| Government Services | 12 | (\$1) | (\$15) |
| Airport Administration | 79 | \$1 | (\$2) |
| Airport Construction | 32 | \$4 | \$7 |
| Total | (773) | \$33 | (\$259) |

Arizona Experienced Above Average Growth in Key Economic Measures

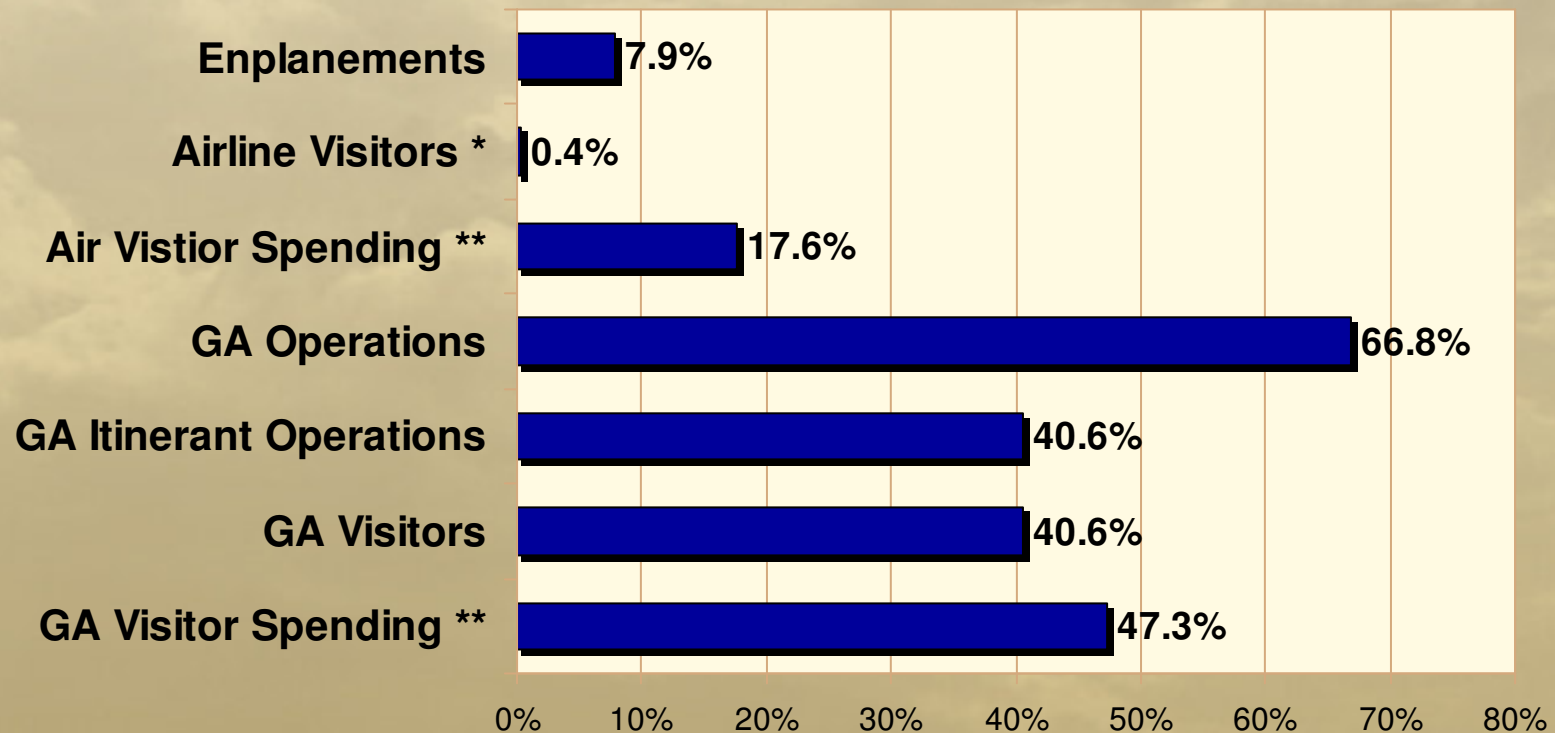
Percent Change, 1998 – 2002



Source: US Bureau of Labor Statistics, US Bureau of Economic Analysis, and US Census Bureau.

Commercial and General Aviation Activities Also Increased from 1998 to 2002

Percent Change, 1998 – 2002



* Reflects a methodological change in calculating the number of air visitors.

** Percent change in constant dollars

Other Aviation Sectors Contributed \$13.3 Billion in Primary Economic Output to Arizona's Economy

- 179,000 Jobs
 - \$5.2 Billion in Wages & Benefits
 - \$13.3 Billion in Economic Output
- Impacts Principally from Air Visitor Spending and Aerospace Manufacturing

| Aviation Sector | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------|----------------|--------------------------|-------------------------------------|
| Air Travel | 120,757 | \$2,419 | \$5,910 |
| Aerospace Manufacturing | 28,768 | \$1,777 | \$5,628 |
| Military Aviation | 28,497 | \$989 | \$1,678 |
| Aviation Education | 1,230 | \$46 | \$110 |
| Total | 179,252 | \$5,231 | \$13,326 |



Change in Primary Economic Impacts of Other Aviation Sectors, 1998 to 2002

- + 52,000 Jobs
- + \$1.7 Billion in Wages and Benefits
- + \$1.9 Billion in Economic Output

| Aviation Sector | Employment | Payroll (\$ Millions) | Economic Output (\$ Millions) |
|-------------------------|---------------|--------------------------|-------------------------------------|
| Air Travel | 43,605 | \$1,113 | \$890 |
| Aerospace Manufacturing | 1,832 | \$271 | \$735 |
| Military Aviation | 6,611 | \$360 | \$243 |
| Aviation Education | (94) | \$4 | \$6 |
| Total | 51,954 | \$1,744 | \$1,874 |

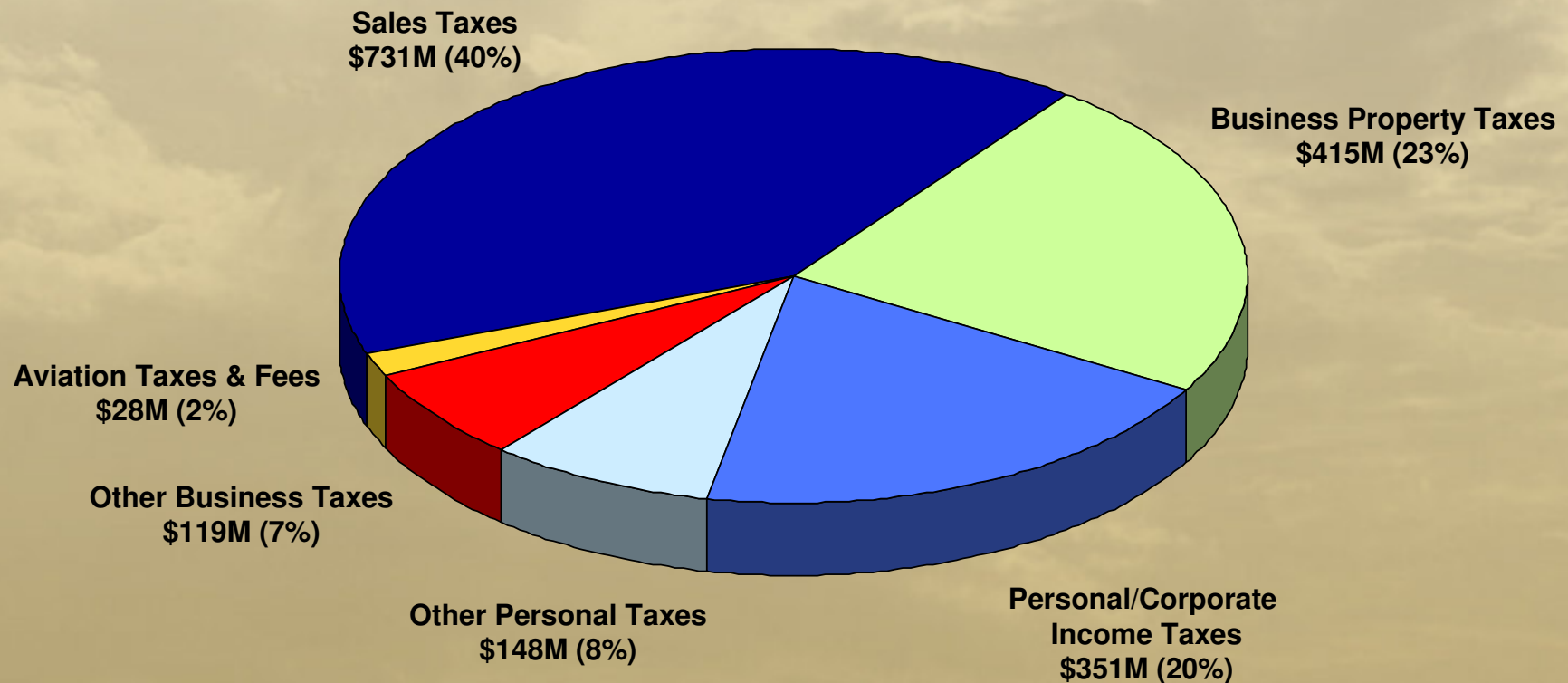


Other Key Difference from 1998 Economic Impact Study

- **Government Services:** Increased Employment due to TSA
- **Commercial Airport Administration:** Less Employment Reported per Airport Manager Surveys
- **Airport Construction:** Increases Reported per Airport Manager's Survey
- **Travel Agents:** A Decline in Statewide Travel Agent Employment
- **Aerospace Manufacturing:** An Increase in Statewide Employment
- **Military:** An Increase in Statewide Employment (based on Maguire Associates Study)
- **Air Sightseeing and Air Ambulance Services:** Increase Due to a Change in Reporting
 - Now included in Aerial Services, but formerly included in GA Airport Administration

Aviation Generates \$1.8 Billion in Annual Tax Revenue for Arizona

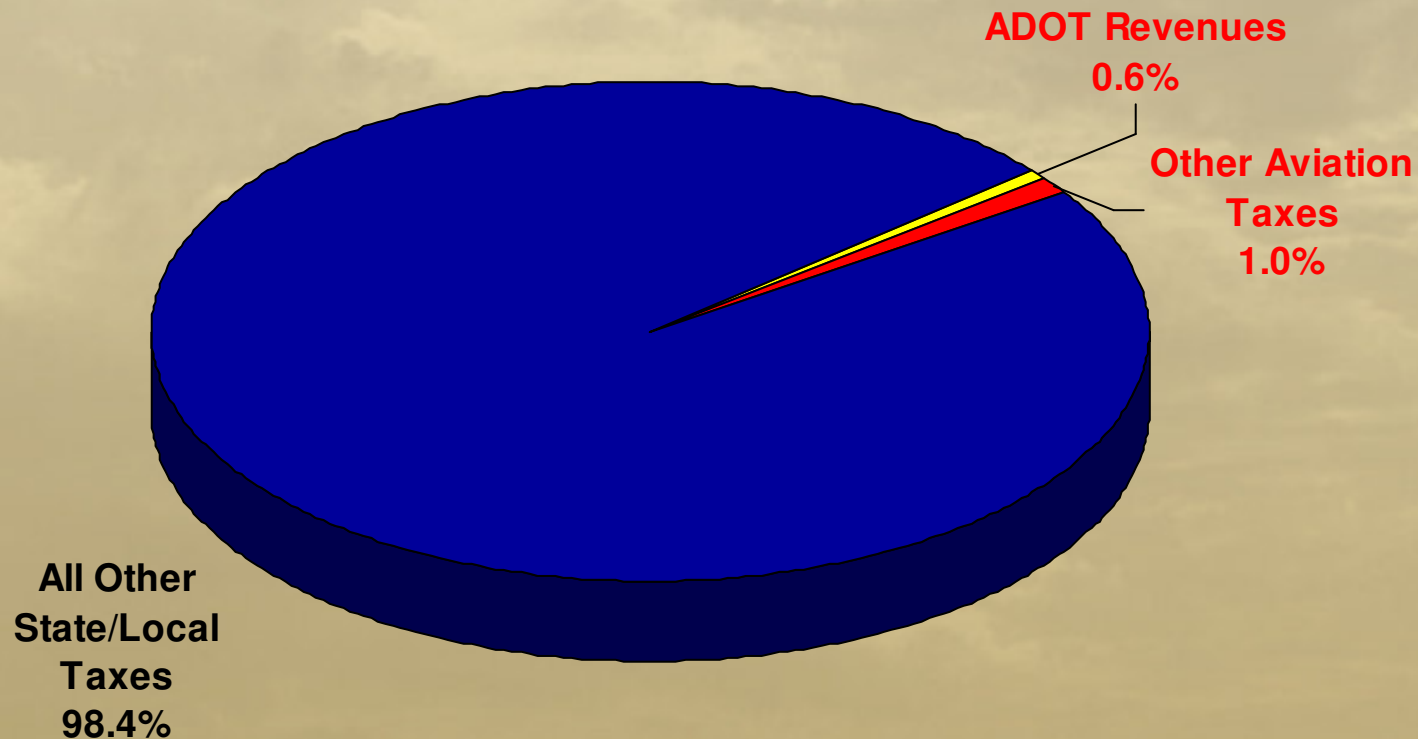
State and Local Tax Revenues Generated by Aviation Activities and Multiplier Impacts



Note: State and local tax revenues. Includes multiplier effects.

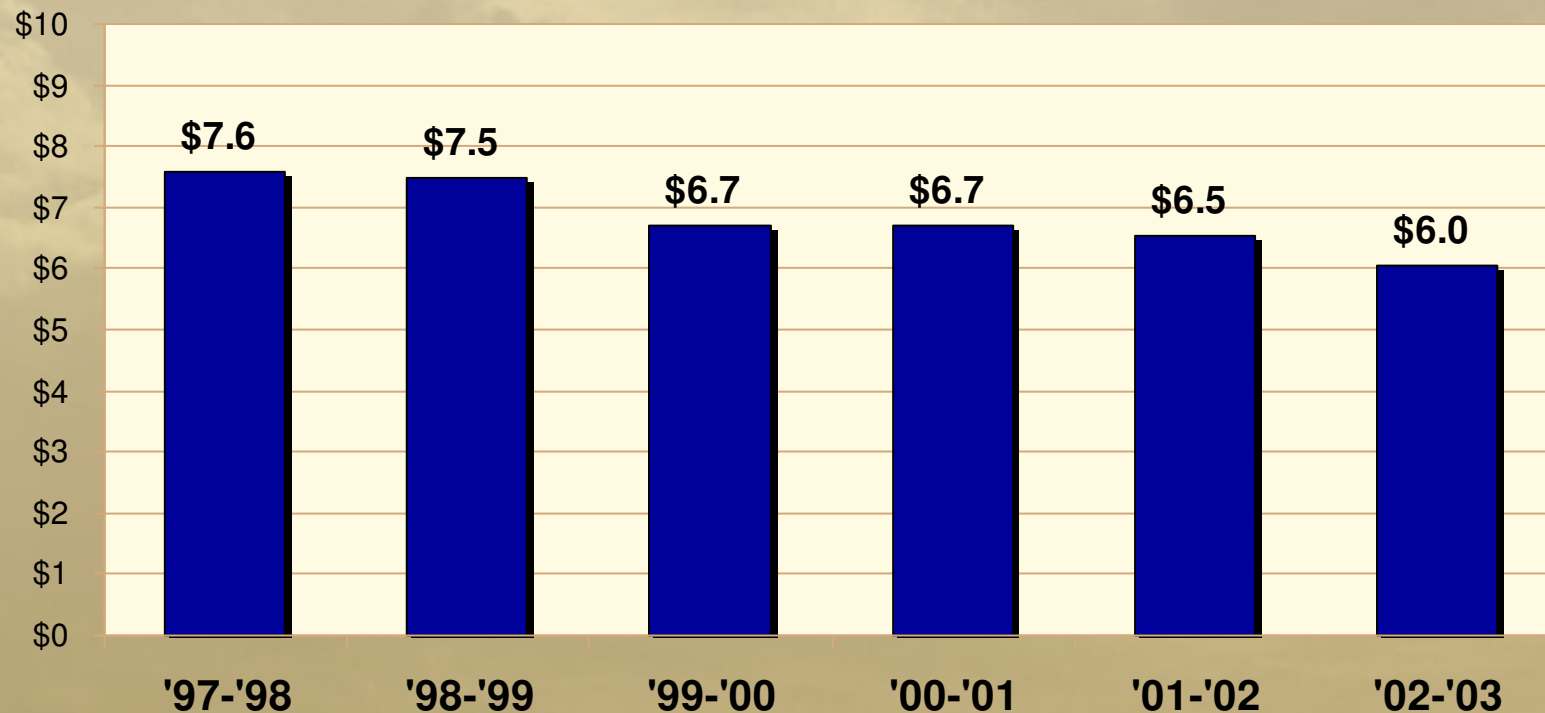
Less than One Percent of the Total Taxes Generated by Aviation are Allocated to the Aeronautics Division

State and Local Tax Revenues Generated by Aviation Activities and Multiplier Impacts



Since 1997, the State Aviation Fund Has Suffered a Cumulative Loss of \$41 Million Due to the Flight Property Tax Diversion

Flight Property Tax Revenues Diverted to the State General Fund, (*millions*)



If the Diverted Flight Property Taxes were Used for Airport Development...

- **Arizona would have realized \$90.4 million in cumulative economic benefits (including the multiplier effects)**
- **The diverted flight property taxes would have created an additional 65 aviation jobs per year, at an average salary of \$45,200**
- **And would have supported a total of 157 jobs per year (including the multiplier effects) at an average salary of \$38,800**