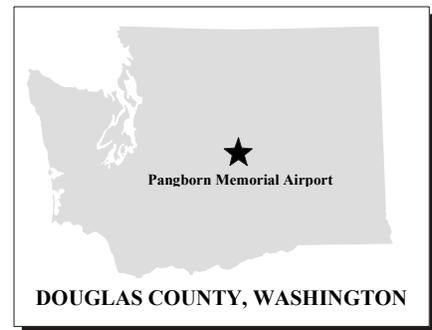




AIRPORT: Pangborn Memorial (EAT)
ASSOCIATED CITY: Wenatchee
ARC: B-III
Region: North Central

AIRPORT DATA AND FACILITIES

Pangborn Memorial Airport is located four miles east of Wenatchee in Douglas County. The Airport has 111 based aircraft, including 87 single-engine aircraft, 16 multi-engine piston-powered aircraft, 3 turboprops, and 5 turbojets. The latest available data indicate that Pangborn Memorial Airport had a total of 58,000 annual operations. In 1998, 53,149 passengers were enplaned at the Airport, classifying it as a primary commercial service airport. Cargo carriers serving the Airport include FedEx; Methow, who provides feed for United Parcel Service; Airpac; Ameriflite; and Felts Field Aviation.



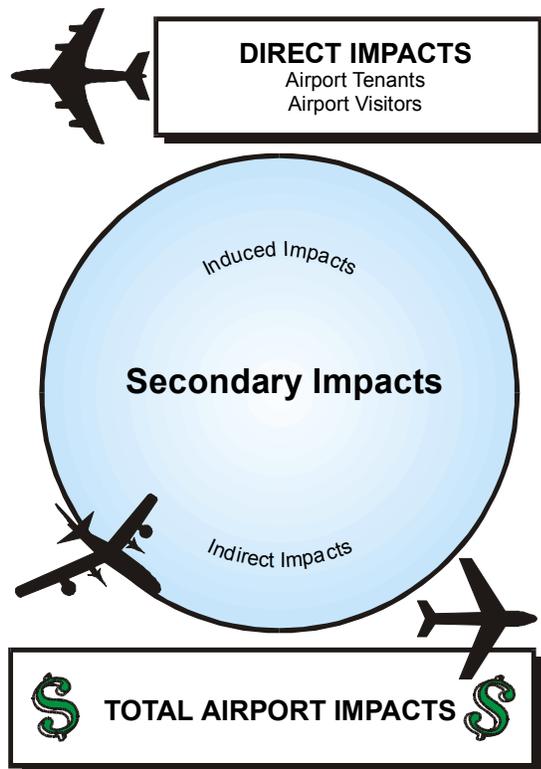
The Airport has two runways. Runway 12-30 is 5,500 feet long, 150 feet wide, has an asphalt surface, and is equipped with medium intensity runway lights. Vertical guidance to Runway 12 is provided by precision approach path indicators, while visual approach slope indicators provide this to Runway 30. Guidance to Runway 30 is enhanced by omni-directional approach lights. Runway 7-25 is 4,461 feet long, 150 feet wide, and has an asphalt surface. VOR/DME or GPS and VOR or GPS non-precision approaches provide guidance to the Airport, but not to a specific runway end.

ECONOMIC IMPACTS

The economic impacts of Washington’s airports were calculated using a methodology, which has evolved over the past decade and is nationally recognized as the standard for conducting economic impact studies of airports. The methodology is consistent with analytical models used by the Federal Aviation Administration (FAA), and employs the use of direct survey information and an input/output model (IMPLAN) as developed by the U.S. Department of Commerce to determine multipliers specific to the state of Washington for “secondary” economic impacts.

Types of Economic Impact - This study identified and examined those aviation activities at the public use airports in Washington that created economic impacts. These impacts are generated in three ways: **1) Direct**, **2) Indirect**, and **3) Induced Effects**. Combined, the three impact types yield the total economic impacts of an airport, as described below:





DIRECT ECONOMIC IMPACTS

These economic impacts occur as a consequence of providing aviation services. These impacts usually occur at the airports, and comprise the financial expenditures by firms which carry passengers (air carrier, air charter or air taxi) or cargo; firms which serve the air carrier and general aviation functions (airport tenants); governmental agencies which support aviation; ground transport firms; and others. In every instance, the impacts include only expenditures where the recipient is located within each airport's service area.

In addition to Airport staff, there were two aviation-related tenants at the Airport in 2000: Wings of Wenatchee and Executive Flight. There were 16,200 visitors to the Airport as a result of general aviation operations, and 21,260 visitors as a result of commercial aviation. The total combined direct output of on-airport tenants and general aviation

and commercial service visitors was \$34,360,831. These first-round expenditures were responsible for 449 jobs, which generated wages of \$9,312,086.

INDIRECT ECONOMIC IMPACTS (Secondary Impact)

These economic impacts occur as a result of the use of aviation service. They include the regional expenditures made by air passengers who visit the region (at hotels, restaurants, ski facilities, etc.); expenditures by the region's residents associated with their use of aviation; and expenditures by firms having economic activity which is dependent on the airport. Non-aviation tenants at the Airport included Apple Shoppe Café & Gifts. These indirect impacts accounted for output of \$7,066,123, approximately 91 jobs and wages of \$2,395,149.

INDUCED ECONOMIC IMPACTS (Secondary Impacts)

The "indirect" and "direct" impacts represent increases in regional final demand. Such increases do not represent total economic impact; there is also a "multiplier" effect. This multiplier effect comprises the local value of money as it circulates through the local economy and as individuals or firms associated with airport business buy goods and services in the local economy. Induced impacts accounted for output of \$6,310,232, approximately 90 jobs and wages of \$2,004,216. Each airport's total economic impact is the sum of the three types of impacts.





**Washington State
Department of Transportation
Aviation Division**

**Pangborn Memorial Airport
Douglas County, Washington**





TOTAL ECONOMIC IMPACTS

The total economic impact across the state was quantified by adding together the direct, indirect and induced impacts for each airport, and interpreting, comparing, and presenting the results.

The output of the IMPLAN model enabled the presentation of total economic impacts by airport in terms of three economic impact measures: 1) jobs (employment); 2) earnings (payroll), and; 3) economic activity (output). Each of these was determined based on individual multiplier per industry categories. In each case, total impacts include the aviation sector itself, as well as the "multiplier effect" of the aviation sector. The impacts were estimated using Year 1998 data.

All three indicators of economic impact are useful; however, the monetary measures should not be added together, as discussed below:

- **Jobs (Employment)** - The number of employees who are employed in the aviation industry, plus the aviation-oriented share of those that are employed in sectors that support the air passenger (hotels, restaurants, etc.) plus those employed in the industries included in the multiplier effect impacts. The number of jobs attributable to an industry is always greater than simply those in the industry itself, due to the "re-spending" of money. Total employment impact was approximately 633 jobs.
- **Labor Earnings (Payroll)** - The sum of the wages and salaries to all employed persons that the aviation industry pays, directly or indirectly, to deliver the output of final aviation demand. Earnings Impacts are always included in the Economic Activity totals, so they should not be summed with the Economic Activity impact. Earnings are a very conservative proxy for "value added." Earnings may be greater or less than the Direct and Use values depending on the industry type. Total earnings impact was \$313,711,450.
- **Economic Activity (Sales Output)** - The value of the aviation final demand (aviation or airport service), plus the "multiplier" effect (the sum of all of the intermediate goods and services needed to produce the aviation final demand, plus the induced impacts of increased household consumption). Total economic activity equals the sum of intermediate demands; consumption demand, government demand, investment demand, and net export demand. Economic Activity is always larger than both the Direct and Use values because it includes the multiplier effect. Total economic activity impact equaled \$47,737,185.





| | Direct Impacts | + Indirect Impacts | + Induced Impacts | = Total Impacts |
|--|--|--|--|--|
| Jobs (Employment)  | Number of Jobs Supported | Number of Jobs Supported | Number of Jobs Supported | Total Number of Jobs Supported |
| | 449.0 | 91.2 | 90.2 | 632.6 |
| Labor Earnings (Payroll)  | Annual Salary Supported | Annual Salary Supported | Annual Salary Supported | Total Annual Salary Supported |
| | \$9,312,086 | \$2,395,149 | \$2,004,216 | \$13,711,450 |
| Economic (Sales Output)  | Contribution to Economy (Dollars) | Contribution to Economy (Dollars) | Contribution to Economy (Dollars) | Total Contribution to Economy (Dollars) |
| | \$34,360,831 | \$7,066,123 | \$6,310,232 | \$47,737,185 |

SUMMARY

On an annual basis, Pangborn Memorial Airport’s tenants and its visitors in Douglas County, Washington contributed the following total annual economic benefit:

**Jobs
(Employment)**



Total 632.6

**Labor Earnings
(Payroll)**



Total \$13,711,450

**Economic Activity
(Sales Output)**



Total \$47,737,185

