

# ***JUNEAU INTERNATIONAL AIRPORT ECONOMIC IMPACT STUDY***

*Prepared for:*

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Juneau, Alaska***

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# Study Highlights

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**Juneau International Airport (JIA) is much busier than airports for most comparably sized cities. It has 10 times as many total operations per capita as the national average, including:**

- 5 times as many air carrier (scheduled commercial) operations.
- 69 times as many commuter and air taxi operations.
- 4 times as many general aviation (private) operations.
- 3 times as many military and local operations.

**JIA is a major employer, creating 523 direct and 244 induced jobs in the Juneau area with a total direct and induced payroll of \$23.5 million.**

- Airport operations and airport-based businesses employ the equivalent of 523 full-time workers with a total payroll of \$17.2 million. By comparison, the University of Alaska Southeast employs 359 and Juneau's largest private sector employer, Greens Creek Mining Company employs 266.
- Juneau residents working at JIA earn an average of \$38,900 per employee, 20% more than Juneau employees on average.
- In addition to the 523 direct jobs, spending by JIA and its related businesses creates an additional 244 induced jobs and \$6.3 million in payroll in Juneau.

**Local JIA-related purchases result in nearly \$18 million in additional direct and induced impacts, for a total impact of payroll, purchases, capital improvements and taxes estimated at \$41.4 million for 1999, not including visitor and other indirect transportation benefits.**

- Direct JIA-related purchases of goods and services produced in the Juneau area are approximately \$9.5 million. Induced purchases are estimated at another \$8.4 million.
- Under the JIA Master Plan, impacts from JIA operations are projected to increase to between \$55 and \$60 million by 2015.
- Between 2000 and 2015, an additional \$143 million in economic impact is projected from capital expenditures associated with the JIA Master Plan.

**Juneau's key industries depend heavily on JIA.**

- More than 16.5 million pounds of mail passed through JIA in 1999, not including the many documents and small packages handled by private air couriers such as UPS and FedEx.
- Air freight is fundamental to the local seafood industry. For example, a single processor shipped more than 300,000 pounds of fresh halibut from Juneau by air.
- Tourism depends on an estimated 214,000 visitor-days resulting from air arrivals, according to a Juneau Convention and Visitors Bureau study, as well as airport and non-airport-based flight-seeing excursions.
- State and federal government agencies could not function at current levels without dependable air links with both metropolitan areas and regional communities.
- Businesses depend on air shipment for time-sensitive inventory, supplies and equipment.

**JIA and its resident businesses pay more than \$620,000 per year in local taxes.**

- The airport does not pay property tax, since it is owned by the City and Borough. However, airlines and air support services at the airport pay at least \$320,000 in real estate and personal property taxes.
- Airport businesses pay more than \$300,000 in local sales tax.

## **Focus and Limitations of the Study**

This economic impact study examines the impact Juneau International Airport and the businesses located at the airport have on the local economy. "Economic impact" means the effects of airport and airport-business spending on the Juneau area. This includes the number of jobs created and the payroll and local purchasing that result from those jobs. The study also discusses the role of the airport in key Juneau industries, particularly the visitor industry. However, it does not attempt to estimate the economic value of the airport as transportation infrastructure.

The reader should note that an economic impact study is not the same as an assessment of what would happen if JIA were suddenly to cease operations. Clearly, Juneau's regional economy and the quality of life of its residents would be profoundly different without JIA. Juneau's current function as a government, business and cultural center would be unimaginable without frequent, reliable air service.

## **Scope of JIA Community Services**

As a regional center and state capital without road access, Juneau depends heavily on its airport. JIA provides residents with transportation, shipping, mail, medical, visitor, business and other services. In addition to its role in the economy, JIA contributes to the safety, convenience, and quality of life of Juneau residents and visitors and those of surrounding smaller communities.

JIA is a key element in Juneau's role as the state capital. State government relies particularly heavily on air travel. Many of the 4,200 state employees stationed Juneau fly regularly on state business, both around Alaska and to other states and countries.

Juneau's airport is an extremely busy one. Compared with airports in similar-sized cities around the nation in 1998, JIA had 5 times as many air carrier operations, 4 times as many general aviation operations, and 12 times as many total operations, including military and local operations. The number of commuter and air taxi operations is much larger than average (69 times), reflecting both the active Juneau visitor industry and reliance of surrounding communities on small carriers for passenger, cargo and mail service.

Freight enplaned at JIA is 5 times the average for comparably sized cities, according to US DOT statistics. In part, this reflects JIA's vital role in the fresh seafood market. However, the importance of JIA's freight activities is not fully captured in the US DOT measures. Substantial additional seafood and other freight is carried by charter flights, which are not regularly tracked. A charter service may carry 80,000 pounds of freight per year or more to a single small community. This additional freight activity is discussed in the body of the report.

## **Overall Economic Impact Summary**

The total economic impact of JIA in 1999 is estimated to have been \$41.4 million. This includes the direct impacts of airport payroll and purchases plus the induced economic effects of the direct spending.

### **Jobs and Payroll**

JIA and the businesses located on JIA property employ the equivalent of 523 full-time workers earning an estimated \$17.2 million in payroll in 1999. There is an additional induced payroll of \$6.3 million (244 jobs) created in other Juneau businesses as a result of direct airport employment and spending. Total local payroll generated by airport activities is therefore \$23.5 million.

### **Business Purchases and Capital Investments**

JIA and the businesses located on JIA property also made an estimated \$14.6 million in purchases relating to airport business in 1999. Approximately \$5.9 million of these purchases remained and re-circulated in the local economy. They include purchases of locally produced goods and services and the markup charged when products made outside Juneau, for example fuel and equipment, are sold here. The remainder of the purchases flow quickly out of the Juneau area. Capital projects by the airport and airport-related businesses averaged an additional \$3.6 million per year in direct local purchases over the past five years. Together, operations and capital purchasing and taxes resulted in total, direct local purchasing of approximately \$9.5 million.

These direct purchases by JIA businesses result in an additional \$8.4 million in induced economic activity (including taxes paid), for a total impact from purchases and capital investments of \$17.9 million.

### **Visitor Spending**

Spending by visitors using JIA is estimated to create an additional 647 local jobs representing \$9.3 million in payroll as well as \$32 million in additional purchases of local goods and services. This economic activity is not attributable solely to the airport, since JIA is not, in itself, the reason for visitor spending in the Juneau area. However, the airport enables much of this travel to occur; without regular air service undoubtedly much of it would not. To reflect this dichotomy, visitor spending is not added to the direct and induced impacts of airport operations and businesses in the economic impact calculations. Rather it is presented as a separate indicator of the role JIA plays in the regional economy.

### **Airport Fees**

In 1999, JIA rentals, sales, user fees and permits totaled \$3,340,100. This exceeded JIA's 1999 operating expenditures of \$3,230,300. JIA's revenue from users, together with a small amount of other revenues, permitted JIA to contribute \$225,900 to retained earnings for the year.

In addition to the above operating revenues, JIA received \$773,852 in passenger facility charges (PFC's) collected by air operators in 1999. These funds, among those from other sources, are dedicated to airport capital improvements.

## Impacts of the JIA Master Plan

### Operations

Based on projections in the JIA Master Plan, economic impacts of JIA and related operations in 2015 are estimated to be roughly 25 - 50 percent greater than the level in 1999, depending on the impact measure — jobs, payroll, or local business purchases.

Under a low-growth scenario, JIA is projected to create 939 jobs (664 direct and 272 induced) in 2015. Total direct and induced payroll is projected at \$29.6 million and total direct and induced purchases (including taxes) at \$24.8.

Under a high-growth scenario, the number of direct jobs is projected to increase to 706 and the number of induced jobs to 290. Total payroll and local purchasing and taxes under the high-growth scenario are projected at \$32.1 million and \$27 million respectively.

Under its high-growth scenario, the JIA Master Plan shows the CBJ operating budget for JIA growing from its 1999 level of \$3.2 million to \$7.1 million in 2015 (in 1999 dollars). The low-growth scenario shows operating revenues growing from \$3.2 million in 1999 to \$5.7 million by 2015.

### Capital Improvements

The capital improvements planned for JIA over the next 15 years will create additional economic impacts. These include an average of 50 local jobs per year. If all the capital improvements projected in the JIA Master Plan take place, the total payroll generated over the 15-year period is estimated to be \$27 million. Spending for capital purchases is estimated at an additional \$115 million.

## Other Economic Impacts of JIA

JIA plays vital roles in the area's economy that are not readily measured in a study of this kind. Because of Juneau's relatively isolated location, the number of economic activities facilitated by reliable air service is extremely large. For example:

- Quick evacuation of critical care patients by air is a key service of Bartlett Regional Hospital that would not be possible without JIA.
- Many Juneau area businesses rely on JIA to obtain inventory, parts and supplies quickly. Local industries, such as Greens Creek Mining Company, are able to operate without unmanageably large inventories and warehouses because they can receive shipments quickly by air. Manufacturers like the Alaskan Brewing Company avoid costly shut downs by using air freight for emergency equipment and parts. Construction firms and fishermen also benefit from "just in time" air freight service.
- The capacity to export large volumes of fresh fish is a key to Juneau's role as a regional seafood hub. Local processors say additional air freight service would allow for further expansion of the industry.
- Finally, while some visitor impacts have been estimated in the study, the role of JIA in supporting the area's intricate network of visitor industry products is undoubtedly larger than figures indicate.

## Purpose and Scope

The purpose of this study is to measure the economic impact of the Juneau International Airport (JIA) on Juneau and the surrounding area. For this study, JIA is defined as airport operations and the airport-related activities of businesses and government or other agencies located on airport property. The study does not include the impacts of air operations that are not based at the airport, for example, float plane operations based at the downtown harbor and helicopter operations based at the ERA facility on North Douglas.

The study measures the economic impact on the Juneau area of:

- Passenger and cargo operations of airlines.
- Sales of fuel, repairs and maintenance, and other services in support of air operations.
- Services provided by government agencies such as CBJ, FAA, and U.S. Customs and Immigration in operation of the airport.
- Construction at the airport.

The study documents, but does not attempt to quantify, the broader role JIA plays in the Juneau and regional economy.

The study offers a snapshot of JIA's economic impact for 1999. The study also evaluates the anticipated impacts of the 1999 JIA Master Plan, including scheduled construction.

## Need to Estimate Economic Impact

Special studies of economic impact are often necessary because an activity such as airport operations cuts across categories used for government economic statistics. There are no government employment or payroll figures that encompass all the economic activity at an airport. Employment associated with an airport includes such categories as air transportation, retail sales, various business services, government, and construction.

## Areas Not Covered by the Study

The reader should note that the study is an economic impact study, not a transportation benefits study. It gauges economic impact in terms of the local employment, payroll and local purchasing associated with the airport. It does not measure benefits provided to users of the airport. User benefits are mainly time saved and costs avoided by use of air transportation and air freight. These are clearly substantial, but are beyond the scope of this study.

Air transportation provides other benefits such as increased travel safety, prompt diagnosis and treatment of medical conditions, and the Air National Guard station. It can also stimulate the location and conduct of commercial and other activities in the community. The study does not attempt to render any of these benefits in economic terms.

The study also quantifies the economic impact of scheduled airport improvements and projected air traffic. It does not compare benefits to the costs of providing them as in a benefit/cost analysis.

## Methodology

### Data Collection

Firms and agencies associated with the airport were surveyed by mail or interviewed in person or by telephone to collect the data for the study.

Study data has been grouped for analysis as follows:

- **CBJ airport staff** consists of CBJ employees engaged in airport operations.
- **FAA, security and Customs** consists of FAA tower and other FAA personnel, airport security, and the U.S. Customs and Immigration Service.
- **Airlines** include major air carrier and commuter airlines, as well as air taxis operating helicopters or fixed-wing aircraft.
- **Shippers** includes air cargo carriers and freight forwarders — mainly small parcel delivery services.
- **Air support services** include aviation fuel sales, maintenance and repair, aircraft storage and other services, many of which are provided on-site at the airport by fixed-base operators (FBOs).
- **Passenger services** include car rental agencies and gift, food, and beverage concessionaires at the airport.
- **Users** consists of a handful of businesses and organizations that base occasional flights from JIA, but are not commercial airlines, for example, the Air National Guard and the US Fish and Wildlife Service.
- **General Aviation** covers use of private aircraft.

Not all surveyed firms and agencies supplied information. The study team estimated impact data for non-responding airport tenants based on discussions with airport personnel and other tenants familiar with non-responding tenants' operations. The team used Alaska Department of Labor and Workforce Development data to assist with estimates and to verify employment information provided by businesses.

## **Types of Economic Impact Measured**

Economic impact is represented in the study by three types of measures:

- Jobs* - The number of jobs created by airport-related activities.
- Payroll* - The payroll created by airport-related activities.
- Purchases* - The impact caused when airport-based businesses purchase goods and services from other Juneau businesses. This includes the markup charged by local businesses when they purchase products produced outside Juneau and re-sell them to airport-based businesses. "Purchases" also includes locally paid taxes as part of the purchase amount.

## **Methods of Measuring Economic Impact**

JIA economic impacts consist of two elements:

- **Direct impacts** – the spending that happens during the course of airport operations and the operations of airport-based businesses. For example, the payroll of airport-based businesses is a direct impact, as are local purchases of operating supplies and services such as legal and accounting services.
- **Induced impacts** – additional spending throughout the Juneau economy that occurs as a result of JIA direct spending. For example, local purchases of food, clothing and other goods by airport employees result in additional jobs for the businesses supplying these items. These jobs are an induced impact.

### ***Direct Impacts***

Direct impacts include employment, local purchasing of goods and services, and local spending related to capital construction by the airport and airport-based businesses. Most of these direct activities occur at the airport. Some occur partly or wholly off-site, such as the pick-up and delivery of express parcels, and equipment repair or maintenance.

Whether on- or off-site, the direct impacts are closely tied to aviation services at JIA. Direct impacts do not include aviation activities that take place elsewhere, such as floatplanes at the downtown cruise vessel port or the heliport on Douglas Island. However, they do include support services for those activities, if those support services occur at the JIA.

Direct impacts include spending by individuals at JIA — the impacts of the car rental, food, beverage, and gift concessionaires. By including in-airport spending and on-site user activity, direct impacts provide a complete picture of JIA's contributions as an employer to the local economy.

### ***Induced Impacts***

In addition to direct spending impacts, the study estimates the induced impacts, or "ripple effects" of the direct spending. Induced impacts are those created when earnings and other money from JIA activities are re-spent in the community, for example when JIA employees purchase consumer goods.

Induced impacts include only the portion spent on locally produced goods and services. For example, when a JIA employee uses his or her earnings to purchase a car, the induced impact is limited to the additional mark-up added by the local car dealership. It does not include the full value of the car, since most of that “leaks” from the local economy and goes immediately to the car manufacturer.

“Leakage” is the term used by economists to describe the rate at which dollars move from local purchases to purchases outside the community. A portion of the money earned at JIA goes round and round in the local economy until it has all “leaked out” in taxes or in purchases outside Juneau.

The re-spending of income within the Juneau economy results in an additional economic impact over and above direct spending. The ratio of the total impact to the direct impact is called an economic multiplier.

### **Economic Multipliers**

This study estimates induced impacts using economic multipliers from the University of Alaska, Institute of Social and Economic Research’s (ISER) Alaska Input-Output Model (Goldsmith, 1998). This model provides regional Southeast Alaska economic multipliers. The ISER model is an adaptation of the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS II).

The ISER model reflects the peculiarities of Alaska’s regional economies better than RIMS II. In particular, it factors in a major source of leakage of spending from Alaska regional economies — non-resident earnings.

### **Visitor Impacts**

Because JIA is particularly integral to the visitor industry, the study estimates the impact of visitors arriving in Juneau by air. “Visitors” includes non-residents of Alaska and Alaska residents from outside the region; it consists of both business and pleasure travelers.

The study does not classify visitor impacts in the same way as direct and induced impacts because this economic activity is less directly associated with JIA. Visitors do not travel to Juneau simply because the community has an airport. Rather, the airport, like hotels, restaurants and other visitor services, functions as a component — albeit a key one — of the visitor industry.

### **Long-term Economic Effects**

JIA undoubtedly has contributed to the maturing of the Juneau economy in the past and will continue to do so. Air transportation can increase production efficiency, get customers to and from Juneau, and place Juneau goods and services in outlying areas. Over time these advantages may lower costs or increase demand enough that goods or services that were formerly purchased outside Juneau can now be provided locally. However, they may also facilitate competition by outside products. For example, lower transportation costs allowed Lower 48 milk producers to destroy Juneau’s dairy industry, though not without benefit to consumers.

The study does not attempt to measure long-term "development impacts." They tend to occur slowly, but can be dramatic over time. For example, Juneau has become a leading regional exporter of fresh fish largely because of better access to air transport compared to other regional ports. This important role of JIA in enabling other area businesses to operate, or operate better, is treated only qualitatively. It does not fall within the definition of "economic impact" as applied in this type of study. In any event, it would be impossible to estimate this role accurately in terms of dollars.

# ***Description of Juneau International Airport***

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Airport operations statistics and traffic flows in and out of JIA are not used to calculate the airport's economic impact. However, an overview of operations is helpful in understanding the broader role of the airport in the regional economy.

## **Overview of Airport Operations**

JIA is the primary transportation link for Alaska's capital city. Located 570 air miles Southeast of Anchorage and 970 air miles northwest of Seattle, Juneau has no road or rail access. Without JIA, the only access to Juneau would be by boat or floatplane. Thus, the airport provides a critical transportation service for Juneau residents.

Juneau also serves as a transportation hub for the northern portion of Southeast Alaska. JIA plays a crucial role in providing access to state and national transportation systems for those in outlying communities. If not for air transportation, most of these communities would, like Juneau, have only water transport to rely on.

JIA is also a major gateway to Juneau and Southeast Alaska for visitors from outside the region. The visitor industry has been the fastest growing sector of Juneau's and many other Southeastern economies.

JIA has passenger service from one air carrier, Alaska Airlines, certified under FAR Part 121. Alaska Airlines is classified as a major air carrier by virtue of having operating revenues in excess of \$1 billion. There are 17 air taxi services operating at JIA, certified under FAR Part 135. These also provide passenger service. They include:

Air Excursions	Haines Air
Air North	LAB
Alaska Coastal	North Star Trekking
Alaska Seaplanes	Skagway Air
Coastal Helicopters	Summit Air
ERA	Tal Air
Fjord Flying	TEMSCO
Fowler Aviation	Ward Air
	Wings of Alaska

Five of the air taxis—Alaska Seaplanes, Haines Air, LAB, Skagway Air and Wings of Alaska—are also certified under FAR Part 401 to carry mail, as is Alaska Airlines. Alaska Airlines and the air taxis also carry freight. Two air cargo carriers certified under FAR Part 91—Evergreen International and Alaska Central Express—serve JIA. Alaska Central Express carries freight and mail. Evergreen carries only mail.

Juneau International Airport is owned and operated by the City and Borough of Juneau. JIA occupies 653 acres with an assessed value of \$74.2 million as of January 1, 2000.

\$62.1 million of the assessed value is tax-exempt property. The tax-exempt assessed value includes \$2.6 million of possessory interest in CBJ property held by taxable persons or businesses. Possessory interests are exclusive or preferential rights that are held by taxable private persons to beneficial uses of tax-exempt publicly owned real property. Possessory interests include tenants' leases of space in the JIA terminal building or land at the airport. The taxable assessed value of airport property that consists of possessory interests plus property owned in fee simple by taxable parties, such as hangar structures, was \$14.7 million as of January 1, 2000<sup>1</sup>

The airport has one paved runway, 8,456 feet in length, and one floatplane basin measuring 4,800 feet in length. There is a helicopter pad on airport property, southeast of the terminal.

### Comparative Operations

On a per capita basis, JIA has ten times as many total air operations as the United States as a whole. It has five times as many air carrier operations, four times as many general aviation (private) operations and 69 times as many air taxi and commuter operations. The huge 69-times multiple for commuters/air taxis reflects the growth of the cruise ship industry and an associated boom in flight-seeing. From 87,358 in 1982,<sup>2</sup> cruise ship passengers increased to 596,000 in 1999. During the same time period, air taxi/commuter flight operations increased from 7,601 to 107,069.<sup>3</sup>

**Table 1  
Aircraft Operations**

	Air Carrier	Air Taxi & Commuter	General Aviation	Military and local <sup>4</sup>	Total Operations	Operations per Capita
JIA	7,585	107,069	19,469	16,941	151,064	5.0
Alaska	178,067	1,028,205	812,995	682,121	2,701,388	4.0
U.S.	14,350,370	13,944,039	44,874,819	50,667,735	123,836,963	0.5

Sources:

- Terminal Area Forecasts, Fiscal Years 1999-2015, FAA-APO-99-7, Federal Aviation Administration, U.S. Department of Transportation, Washington, DC: December 1999.
- ST-99-3 State Population Estimates and CO-99-8 Country Population Estimates, Population Estimates Program, U.S. Census Bureau.

<sup>1</sup> City Assessor's Online Database, City and Borough of Juneau Alaska, at <http://sana.juneau.lib.ak.us/assessordata/assessor.asp> accessed on 8/16/00.

<sup>2</sup> Juneau Convention and Visitors Bureau.

<sup>3</sup> Terminal Area Forecasts, Fiscal Years 1999-2015, U.S. Department of Transportation, Federal Aviation Administration, FAA-APO-99-7, Washington, DC: December 1999.

<sup>4</sup> Local operations are general aviation or military operations practicing landing approaches within 20 miles of the airport.

JIA also has more based aircraft per capita than the rest of Alaska, and much more than the U.S. average.

**Table 2**  
**Based Aircraft 1998**

	<b>Based Aircraft</b>	<b>Based Aircraft per Thousand Residents</b>
JIA	357	12
Alaska	5,717	9
U.S.	187,892	1

Sources:

- Terminal Area Forecasts, Fiscal Years 1999-2015, FAA-APO-99-7, Federal Aviation Administration, U.S. Department of Transportation, Washington, DC: December 1999.
- ST-99-3 State Population Estimates and CO-99-8 Country Population Estimates, Population Estimates Program, U.S. Census Bureau.

## **Passenger Activity**

Final enplanement figures for 1999 were not yet available at the time of this writing. Enplanements in 1998 were approximately 240,000 for large carriers, 80,000 for commuter carriers and 63,000 for air taxi and charter operators. These numbers include both scheduled and unscheduled flights.

Table 3 shows the top 20 domestic points of origin and destination for JIA passengers. Anchorage and Seattle each command large shares of the market in and out of Juneau. The next five largest markets are all regional neighbors: Sitka, Ketchikan, Hoonah, Haines and Skagway.

West Coast points predominate in the traffic outside Alaska. The data does not include international destinations.

**Table 3**  
**JIA Passengers**  
**Top 20 Domestic Origins and Destinations 1999\***

Arriving Juneau from	Passengers	Departing Juneau to	Passengers
Seattle, WA	48,290	Seattle, WA	49,060
Anchorage	42,700	Anchorage	43,180
Sitka	13,862	Sitka	13,136
Ketchikan	12,449	Ketchikan	12,396
Hoonah	8,511	Hoonah	8,171
Skagway	6,639	Haines	7,839
Haines	6,540	Skagway	6,921
Portland, OR	5,090	Portland, OR	5,130
Gustavus	6,217	Fairbanks	4,920
Fairbanks	4,860	Gustavus	3,751
Petersburg	2,661	Petersburg	3,525
Los Angeles, CA	3,280	Phoenix, AZ	3,280
Phoenix, AZ	3,160	Los Angeles, CA	3,160
San Francisco, CA	2,680	San Francisco, CA	2,650
Yakutat	2,150	Take	2,256
Las Vegas, NV	2,220	Las Vegas, NV	2,250
Spokane, WA	2,070	Spokane, WA	2,120
Angoon	2,136	Angoon	2,099
Take	2,073	Yakutat	1,890
San Diego, CA	1,830	San Diego, CA	1,810

Source: Back Information Services report dated August 8, 2000, from U.S. Department of Transportation OD1A Database, Version 2.3. Numbers based on a 10 percent sample survey.

\* Does not include charter flights.

JIA enplanements are on par with airports serving much larger communities. For example, JIA enplanements in 1998 were more than the airports serving the following cities with populations 3 to 7 times Juneau's:

**Table 4**  
**Cities with Comparable Enplanements**

City	1998 Population <sup>5</sup>	1998 Enplanements <sup>6</sup>
Juneau	30,143	383,118
Eugene, Oregon	128,240	369,634
Akron, Ohio	215,712	344,219
Chattanooga, Tennessee	147,790	287,024
Lincoln, Nebraska	213,088	245,679
Peoria, Illinois	111,148	221,765
Montgomery, Alabama	197,014	213,472

<sup>5</sup> *Population Estimates for Cities with Populations of 100,000 and Greater: July 1, 1998 (SU-98-1)*, Population Estimates Program, U.S. Census Bureau, Washington DC: Internet Release Date: June 30, 1999.

<sup>6</sup> *Enplanement and All-Cargo Statistics*, Federal Aviation Administration, Office of Airports, U.S. Department of Transportation, Washington, DC: November 1999, accessed at <http://www.faa.gov/arp/A&D-stat.htm>.

JIA enplanements were much higher than airports serving similar-sized populations.

**Table 5**  
**Enplanements at Cities of Comparable Size**

City	1998 Population <sup>7</sup>	1998 Enplanements <sup>8</sup>
<b>Juneau</b>	<b>30,143</b>	<b>383,118</b>
Lewiston, Idaho	30,363	59,416
Texarkana, Texas	31,485	35,381
Bullhead City, Arizona	28,152	26,921
Walla Walla, Washington	28,721	24,194
Clovis, New Mexico	32,394	3,296

## Cargo Activity

Communities without road access rely on air delivery for time-critical or perishable items. This dependence on air freight magnifies cargo activity at JIA. JIA has 12 times the U.S. average mail enplaned per capita. Freight enplaned is also far above average — 5 times the rest of the country — according to U.S. Department of Transportation statistics.

Table 6 is based on U.S. Department of Transportation (USDOT) data showing air freight shipments to and from JIA on regularly scheduled flights. Carriers include major carriers (Alaska Airlines) and commuter carriers. The table does not include freight shipped on charter flights, because this data is not regularly reported.

Charter flights are an important method of shipping in Southeast Alaska. A main component of un-recorded freight is fresh seafood shipped to Juneau by buyers and processors in Excursion Inlet, Hoonah, Elfin Cove and elsewhere. Charters also carry a significant amount of day-to-day supplies to communities with infrequent or no ferry service.

In an attempt to provide a more complete picture of JIA freight services than that available from the USDOT data alone, the study team contacted the commuter carriers operating at JIA. Carriers were asked to estimate shipments of seafood and other freight on scheduled and non-scheduled flights. For the most part, the carriers were unable to provide these estimates. The study team also contacted eight fish processors with facilities located in the smaller communities around Juneau. Responses were not complete enough to allow an estimate of the total shipments sent by charter flights. Amounts for individual processors and communities are not reported for reasons of confidentiality.

<sup>7</sup> *Population Estimates for Cities with Populations of 10,000 and Greater: July 1, 1998 (SU-98-3)*, Population Estimates Program, U.S. Census Bureau, Washington DC: Internet Release Date: June 30, 1999.

<sup>8</sup> *Enplanement and All-Cargo Statistics.*

The table shows that freight traffic is heaviest from Seattle-Tacoma and Anchorage to Juneau. The 4.1 million pounds of freight arriving from these two cities is approximately double the 2.1 million pounds shipped to them. For almost all of the rest of the communities served by large carriers or commuters, the amount of freight shipped to the communities greatly exceeds the amount shipped out. These figures reflect JIA's role as distribution center for Southeast and the fact that the region is highly dependent on imported goods.

**Table 6**  
**JIA Freight (Lbs.) Origins & Destinations**  
**Total Airline Carriers (except Charter Operators) 1999**

Arriving From	Pounds	%		%	Pounds	Departing To
Seattle-Tacoma	2,503,369	45.0%		19.4%	1,169,518	Seattle-Tacoma
Anchorage	1,791,970	32.2		18.4	1,111,455	Anchorage
Ketchikan	452,666	8.1		15.8	954,788	Ketchikan
Sitka	261,405	4.7		9.8	588,078	Yakutat
Yakutat	117,985	2.1		9.6	581,328	Sitka
Petersburg	84,014	1.5		4.9	293,092	Skagway
Hoonah	71,996	1.3		4.4	264,477	Hoonah
Haines	66,881	1.2		4.4	263,387	Haines
Wrangell	44,834	0.8		2.6	159,598	Petersburg
Skagway	38,006	0.7		2.0	122,927	Gustavus
Kake	37,492	0.7		1.9	112,480	Kake
Cordova	28,219	0.5		1.4	86,516	Wrangell
Pelican	18,922	0.3		1.4	82,673	Angoon
Angoon	14,611	0.3		0.9	53,048	Cube Cove
Gustavus	11,228	0.2		0.8	47,453	Pelican
Elfin Cove	6,427	0.1		0.7	44,602	Cordova
Tenakee	5,516	0.1		0.6	36,897	Tenakee
Fairbanks	2,982	0.1		0.5	28,136	Excursion Inlet
Excursion Inlet	2,540	0.0		0.3	15,702	Hobart Bay
Cube Cove	2,447	0.0		0.2	12,585	Elfin Cove
Hobart Bay	1,071	0.0		0.0	965	Fairbanks
Funter	20	0.0		0.0	791	Funter
<b>Total</b>	<b>5,564,601</b>	<b>100.0%</b>		<b>100.0%</b>	<b>6,030,628</b>	

Source: Back Information Services report dated August 8, 2000, from U.S. Department of Transportation Commuter Database, Schedule T1 - Commuter Origin and Destination Data.

Note: Freight shipments do not include charter flights and for some communities are understated. Please see the explanation in the text above.

In addition to freight consigned directly through the various airlines, a number of shipping services operate through JIA. These include:

- United Parcel Service (UPS)
- Lynden Air Cargo
- Evergreen International
- Alaska Central Express
- Federal Express
- DHL Airways
- Western Parcel Express/Air Data
- ADX Freight Services
- Juneau Courier/Service by Air/Airborne Express

## **Mail**

Alaska Airlines, five air taxi services, and two cargo operations carry mail in and out of JIA. In 1999, JIA received approximately 6.5 million pounds of mail and shipped more than 10 million pounds. Evergreen International carried the most mail to and from Juneau. Alaska Airlines was next with a total in- and out-bound of 2.7 million pounds. Together, the five small carriers certified to carry mail totaled even more than Alaska Airlines, approximately 3 million pounds.

These figures refer only to official US mail. An unknown number of documents and small packages are moved in and out of JIA by shipping services such as UPS, Federal Express, DHL Airways and others.

Commuter airlines deliver more than twice as much mail as they pick up for smaller Southeast communities. This reflects these communities' dependence on imported goods and the fact that lack of road connections means a large proportion of mail moves by air. Some mail is also carried by the Alaska Marine Highway System.

# Analysis of JIA Economic Impacts

## JIA Total Economic Impact

The total local economic impact attributable to JIA is shown in Table 7, below. This includes JIA payroll and local business purchases (including taxes and capital improvements) together with the multiplier effects as those expenditures "ripple" through the economy. Direct impacts are equal to the local portion of actual spending by JIA and JIA-related businesses. Induced impacts are the multiplier effects.

JIA accounted for 767 jobs in Juneau in 1999. Of these, 523 were provided directly by JIA operations and the businesses located on JIA property. The other 244 jobs were "induced" in other Juneau businesses as a result of spending by JIA and JIA-based businesses and their employees. Together, this was 4.6% of the total 1999 Juneau employment of 16,682. Total payroll was \$23.5 million out of a total Juneau payroll of \$538 million in 1999.

In addition to the direct and induced jobs and payroll created by the airport, purchases of local goods and services by airport-based businesses amounted to an additional \$17.9 million in total economic impact. The direct portion of the purchasing impact was \$9.5 million; the induced was \$8.4 million. These impacts include the impacts of taxes. Total economic impacts of JIA from all sources, including payroll, purchases, capital spending and taxes is estimated at \$41.4 million for 1999.

**Table 7**  
**Direct, Induced and Total JIA Economic Impacts, 1999**  
*(Including Impacts of Both Operations and Capital Spending)*

	Jobs	Payroll	Purchases	Total Impacts
Direct Impacts	523	\$ 17,190,000	\$ 9,519,000	\$ 26,709,000
Induced Impacts	244	6,295,000	8,390,000	14,685,000
Total Impacts	767	\$ 23,485,000	\$ 17,909,000	\$ 41,394,000

## Jobs and Payroll

### JIA- Related Employment

Payroll and employment information was provided by most businesses through the survey. This data was verified using ADOL records of reported payroll for 1999. Where businesses did not supply information, payroll totals were obtained directly from ADOL. The types of jobs created by non-respondents were estimated based on information from airport personnel familiar with the companies' activities. Average wages for non-respondents were developed based on ADOL data using average annual wages reported by industrial classification.

Of the 523 direct jobs, approximately 413 were held by Juneau residents. The 110 jobs held by non-residents of Juneau were primarily seasonal, lower-paying jobs. Wages for the 413 resident jobs are estimated at \$16.1 million. The number of non-resident jobs and the associated payroll were estimated using AKDOL statistics by industry classification. (Hadland and Landry, 2000). Non-residents include Alaskans who do not live in the immediate Juneau area.

The average wage of the 413 JIA resident jobs was \$3,233 per month, 20% higher than the average Juneau wages, \$2,687. Because it typically is seasonal, non-resident employment produces much lower annual wages. Assuming that non-residents worked an average of 6 months of the year, average monthly wage would be \$1,710.

### Induced Employment Impacts

The spending of earnings by employees and owners of JIA-related businesses and the businesses from which they buy creates additional jobs, payroll, and local purchasing. JIA-related earnings and spending in 1999 induced an estimated 244 other jobs with a payroll of \$6.3 million in Juneau. Induced purchasing impacts are shown under "Local Purchases of Goods and Services," below.

The categories used in Tables 8, 9 and 10 are described in the Methodology section on page 7.

**Table 8**  
**Jobs and Payroll of JIA and JIA-based Businesses**

	Jobs	Payroll
CBJ airport staff	20	\$ 837,720
FAA, security & Customs	78	4,024,021
Airlines	297	9,438,306
Shippers	30	586,105
Air Support Services	26	765,491
Passenger Services	70	1,519,905
Users	<u>2</u>	<u>19,300</u>
<b>Total Direct Employment</b>	<b>523</b>	<b>\$17,190,848</b>
<b>Induced Employment</b>	<b><u>244</u></b>	<b><u>6,295,000</u></b>
<b>Total Employment Impact</b>	<b>767</b>	<b>\$23,485,848</b>

Seasonal employment is significant. There were 37% more jobs at the airport and its related businesses during the peak season of May through September than during the rest of the year.

**Table 9**  
**Seasonal Employment**  
**in full-time equivalents (FTEs)**

	Peak Season (May-Sep)	Off Season (Oct-Apr)
CBJ airport staff	18	20
FAA, security & Customs	80	78
Airlines	421	269
Shippers	29	33
Air Support Services	35	25
Passenger Services	87	65
Users	3	3
<b>Total</b>	<b>673</b>	<b>493</b>

## Local Purchases of Goods and Services

Estimates of local purchases by JIA and JIA-based businesses were developed from survey responses and from JIA records. Not all airport businesses supplied purchasing information. In particular, information from shipping, rental car and some airline businesses was not reported. In most cases the study team estimated unreported spending based on available information for similar businesses. Approximately 20% of total airport-related spending was estimated in this way.

None of the three rental car agencies based at JIA provided purchasing data for the study. As a result, purchasing by these businesses could not be estimated and is not included in the calculations. (Payroll was estimated based on ADOL figures and is included.) In addition to the local mark-up on vehicle and fuel purchases, maintenance services are likely the major local purchase by rental car companies.

Purchases include operating purchases, taxes paid and capital expenditures. The impact of capital expenditures is shown in the Table 10 as a separate line item. The total economic impact of local capital and operating purchases by JIA and its related businesses is estimated to be \$17.9 million for 1999.

### **Total purchases by JIA and related businesses**

Business spending includes professional services, maintenance & repair, inventory, marketing, utilities, communications, fuel, insurance and other spending, including charitable contributions. The table below shows purchasing by JIA and airport-related businesses. The first column shows \$16.4 million total business spending. The second column shows the portion of business spending associated with the airport (\$14.6 million). The third column shows the portion of airport-related spending that directly impacts the local economy (\$5.9 million). For simplicity, capital spending is shown only in the third column. The figure represents the estimated local portion of capital spending.

### **General Aviation**

Part of the impacts shown in Table 10 represent those from general aviation activities (private aircraft) at JIA. There were approximately 300 general aviation (GA) aircraft based at Juneau International Airport in 1999. Total spending related to these GA aircraft is estimated to be about \$2.7 million for the year—an average of a little over \$8,900 per plane. The spending includes costs for tie-downs, fuel, maintenance, and insurance. There is no CBJ property tax on aircraft if they are not used in commercial service.

The spending estimate is conservative in that any spending associated with transient GA aircraft is not included. Transient GA aircraft are those arriving at JIA that are based somewhere besides Juneau. These include business people, tourists and shoppers from other Southeast Alaska communities and elsewhere who arrive in their own planes.

**Table 10**  
**Direct Local Purchases by JIA and**  
**JIA-based Businesses**

	Total Purchases	Portion Related to JIA Business	JIA Portion net of Imports and Transactions between JIA Businesses
CBJ airport staff	\$604,043	\$604,053	\$483,500
FAA, security & Customs	0*	0*	0*
Airlines	9,436,472	8,178,473	3,538,000
Shippers	409,095	409,095	266,400
Air Support Services	1,982,215	1,462,350	164,800
Passenger Services	1,244,820	1,186,479	534,300
General Aviation	2,700,000	2,700,000	900,000
Users	<u>71,500</u>	<u>60,758</u>	<u>37,000</u>
<b>Total Operations</b>	<b>\$16,421,359</b>	<b>\$14,574,413</b>	<b>\$ 5,924,000</b>
<b>Capital Expenditures</b>			<b><u>3,595,000</u></b>
<b>Total Direct Purchases</b>			<b>\$9,519,000</b>
<b>Induced Purchases</b>			<b><u>8,390,000</u></b>
<b>Total Purchasing Impact</b>			<b>\$17,909,000</b>

\* Federal agencies reported no local purchasing

### **Adjusting for JIA-related business activities**

Total Juneau purchases reported by JIA and related businesses were \$16.4 million. Some airport related firms also conduct business that does not involve JIA, for example, air services based in Juneau Harbor. \$1.8 million of the total purchase amount reported by JIA businesses was identified as spending associated with non-airport business. This was deducted to give total JIA-related spending of \$14.6 million.

### ***Adjusting for purchases made between airport businesses***

Total JIA-related spending was then adjusted to eliminate counting of purchases between one airport business and another and between airport businesses and CBJ airport management. Business purchases made by airport entities from Juneau businesses that are *not* on the airport inject money into the local economy. However, purchases between one airport business and another simply move money to different airport entities. Until the money leaves the airport and moves to other businesses in Juneau, there is no local impact.

These intra-airport purchases consist mainly of rental payments from airport tenants to the airport and purchases of aircraft fuel. The impact of rental payments is measured when JIA spends its income for wages and other local purchases. Aircraft fuel impacts are reflected in the payroll and purchasing of the fuel service. Another instance of intra-airport purchases is expenditures for air cargo between one airport business and another. Again, economic impacts of cargo services are reflected in the expenditures of the company providing the service. To also count the payment made by the company purchasing the service would double count the value of the cargo service.

### ***Adjusting for purchases of imported products***

The bulk of aircraft fuel purchases is not a local economic impact, and must be excluded from the impact calculation. This is because fuel vendors in Juneau must purchase fuel from outside the region. As a result, most of the money paid by local airlines for fuel leaks immediately out of the local economy. The portion of fuel purchases that stays in the local economy is the difference between what the fuel supplier collects from the airline and what it pays its wholesaler outside Juneau. This impact is represented in the study calculations not by airline purchases, but by the payroll and purchases of the local fuel suppliers. The estimated local purchases by fuel suppliers are shown in the table as part of "air support services."

## **Off Site Airport Users**

JIA plays an important role in many businesses and agencies that are not directly related to airport operations or the airport site. This section provides a brief, qualitative discussion of these impacts.

The method for estimating visitor impacts is described below. The study team also conducted executive interviews with a sample of off-site users to get a sense of the value of JIA to their businesses. While the sample is small, the issues raised are an indication of how JIA affects other businesses and industries in the Juneau area.

### **Government**

Government provides more jobs in Juneau than any private industry sector. It generates approximately 40% (6,800 in 1998) of local jobs and more than half the total Juneau wages. One-quarter of all Juneau jobs are related to state government; the remaining government jobs are federal and municipal.

Although specific travel statistics are not available, Juneau government employees depend heavily on air links with other regional centers to conduct federal, state and municipal business. These links are especially critical in view of Juneau's role as the state capital.

## Visitor Impacts

Visitors do not travel to Juneau because it has an airport. However, the visitor industry is directly dependent on JIA. Many visitors would not consider Juneau as a destination if it were not accessible by air. Because of this integral relationship, the study provides an estimate of the impacts of spending by visitors arriving by air. The estimate includes spending by visitors arriving by air for all purposes including business, pleasure, vacation, visiting friends & relatives and personal reasons.

The scope of this study did not include a detailed estimate of the impacts of air visitors on the local economy. Visitor impacts were estimated based on past studies of local spending by visitors conducted by the McDowell Group and the Juneau Convention and Visitors Bureau (JCVB)

Visitors arriving by air contributed an estimated 647 Juneau jobs and an estimated \$41.3 million in economic impact. This includes direct spending on local goods and induced impact estimated using multipliers from the ISER Alaska Input-Output Model.

## Calculation of Visitor Impacts

The study team considered two estimates of visitor spending:

- According to a JCVB weekly survey of hotel occupancy conducted during 1999, approximately 76% of all visitors who spend at least one night in a Juneau hotel or bed & breakfast (B&B) arrive by air. The JCVB study estimated spending by hotel and B&B guests at \$54.5 million in 1999. The portion of this spending attributable to air visitors is, therefore, \$41.5 million.
- A 1996 McDowell Group study of Juneau businesses serving the visitor market estimated the amount of spending in Juneau by independent and convention visitors at \$56.4 million in 1994. Adjusting this to 1999 dollars and assuming 76 % of these visitors arrive by air produces estimated 1999 spending of \$47.1 million in Juneau.

Both of these estimates fail to capture a portion of air visitor spending. The JCVB study does not include visitors who travel to Juneau and either do not overnight or stay with friends or relatives or, for example, in a vacation home or on a boat. The McDowell study measured only visitors who live outside Alaska, and so, does not reflect spending by visitors to Juneau who live elsewhere in the state.

No readily available basis exists for determining the missing portion of either of the two estimates. The higher of the two, \$47.1 million, was used as a conservative proxy for local spending by air visitors.

A national study by the US Department of Commerce<sup>9</sup> (estimates that 59% of visitor spending remains in the community. This implies that air visitors had a direct economic impact of approximately \$27.8 million. Using the ISER Alaska Input-Output Model, the study estimates that the additional induced impacts are approximately \$13.6 million. The total visitor impact is, therefore, just over \$41 million.

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<sup>9</sup> 2. *Estimating the Regional Economic Significance of Airports*, Butler, Stewart E. and Kiernan, Laurence J., Federal Aviation Administration, U.S. Department of Commerce, Washington D.C., September 1992.

## **Seafood Processing**

Juneau has recently become the largest port for halibut in Southeast Alaska for the primary reason that fresh halibut fillets can be flown quickly to markets outside Alaska. This type of fresh seafood market provides the highest value to local processors and fishermen. In 1999 one Juneau processor shipped approximately 300,000 lbs. of halibut by air freight from JIA. More halibut would have been shipped by air had there been more air freight capacity available. Without JIA, halibut must be shipped frozen in containers via barge or ferry. Air freight (Federal Express) is also used to ship high value smoked seafood products to customers outside of Juneau.

## **Mining**

JIA plays a key role in reducing the need for local industry to maintain costly inventory and warehouse space. In the case of the Greens Creek Mining Company a prolonged shutdown of its mining or milling process could adversely impact both the economic viability and environmental compliance of the mine. It is vital to the company that replacement or spare parts can be quickly air freighted to Juneau. Other local businesses, such as the Alaskan Brewing Company, construction firms, fishermen and many other types of businesses, benefit in similar fashion.

## **Health Care**

While difficult to quantify it is clear that JIA has played a key role in saving lives in Southeast Alaska. Juneau area residents rely on Bartlett Regional hospital for most of their critical health care needs. In life threatening and critical care situations patients may be flown to Seattle by special arrangement with the hospital. Without JIA it would be very difficult to transport patients for emergency treatment.

Southeast Alaska Regional Health Consortium (SEARHC) also relies on JIA to transport patients. In 1999 SEARHC patients made approximately 475 round trips from JIA; most went to Sitka or Anchorage for treatment. Travel for FY 2000 was significantly greater — approximately 740 round trips — due to changes in SEARHC guidelines regarding where patient services are provided.

The airport also provides a means for rapid transport of patients from surrounding communities to Juneau for treatment or for continued travel to Seattle and Anchorage hospitals. Neither Bartlett Memorial Hospital nor SEARHC maintains a count of the number of patients who arrive by air.

## **Transshipment**

Businesses in communities around Juneau rely on JIA as a hub for transshipment of items appropriate for air freight. These are often smaller shipments of perishable seafood. But they may also include things like indigenous arts and crafts destined for markets outside the region. The study has not attempted to identify the precise nature of these small, transshipment-dependent businesses. However, the study team's hypothesis is that access to outside markets through the Internet will make the ability to ship products by air from relatively remote communities more and more important in the future.

# Operating Revenues and Taxes

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## JIA Operating Revenues

In 1999, JIA receipts from rentals, sales, and user fees and permits totaled \$3,340,100. This exceeded JIA's 1999 operating expenditures of \$3,230,300. JIA's revenue from users, together with a small amount of other revenues, permitted JIA to contribute \$225,900 to retained earnings for the year.

JIA's 1999 operating revenue from users consisted of:

**Table 11**  
**JIA Sources of Operating Revenue**

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<u>User Fees</u>	
Taxi, Bus Access Fees	\$ 24,700
Landing Fees	973,400
Tiedown Fees	124,600
Vending	15,700
Fuel Flowage Fees	47,000
Total	1,185,400
<u>Rentals &amp; Sales</u>	
Land Leases	269,000
Parking Leases	365,500
Building Leases	1,456,200
Advertising	37,300
Miscellaneous	26,700
Total	2,154,700
Grand Total	\$ 3,340,100

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In addition to the above operating revenues, JIA received \$773,852 in passenger facility charges (PFC's) collected by air operators for 1999. These funds, among others, are dedicated to capital improvements. Beginning in 2000, passengers on small air carriers (under 60 seats) will be exempt from paying PFC's.

## Airport-Related Taxes

The amounts of taxes shown in the table are based on survey responses. Due to missing or incomplete responses, the amounts shown should be considered a minimum threshold of the amounts paid by JIA-related businesses.

### Local Taxes

Part of the economic impact of JIA consists of taxes paid by JIA-related businesses. The tax payments are presumed to be spent in the year paid and are a proxy for the value of the government services they fund. No multiplier effect is associated with the tax payments when estimating economic impact. The impact of taxes is reported in this study as a portion of the impact of local purchases of goods and services.

Shown in the table below are local business taxes reported paid by JIA-related businesses in 1999. Property and sales taxes go to the City and Borough of Juneau. Sales tax is not charged on airline tickets. The total sales and property taxes paid in 1999 was approximately \$620,000.

**Table 12**  
**JIA Generated Local Taxes**

	Real Estate Property Tax	Personal Property Tax	Sales Tax Collected
CBJ, security, FAA, US Customs*	\$ 0	\$ 0	\$ 0
Airlines	88,000	191,000	60,400
Shippers**	0	0	0
Air Support Services	33,700	5,900	188,200
Passenger Services	0	0	48,700
Users	0	600	3,200
<b>Total</b>	<b>\$ 121,700</b>	<b>\$ 197,500</b>	<b>\$ 300,500</b>

Source: McDowell Group survey

\*Tax exempt

\*\* Data not provided

An estimate of the total value of taxable real and personal property related to JIA activity is \$24,926,000. This includes:

- The taxable portion of the \$74.2 million total assessed value of JIA land and buildings. According to CBJ records this was \$13,631,000 as of Jan. 1, 2000.
- \$2,055,000 taxable real property related to JIA, but located off-site, as reported on survey responses (incomplete). This primarily consists of shipping offices and facilities for fuel storage.
- \$8,161,881 taxable personal property related to JIA activity, as reported on survey responses (incomplete).

## **State Taxes**

Approximately \$0.04 per gallon is paid to the State of Alaska on purchases of aviation fuels (there is a slight difference between tax rates for jet fuel and avgas). These payments by air carriers help to support the airport and the community in that a portion of the collected tax -- roughly \$80,000 annually -- is returned to the Airport through a State revenue sharing arrangement. This amount is included in the Airport operating budget and contributes to the economic impacts addressed elsewhere in this report.

## **Federal Taxes**

A very significant part of taxes paid by air carriers (big and small) is through excise taxes to the federal government, which are paid into the Aviation Trust Fund. These taxes are paid on ticket sales, cargo shipment fees, and fuel sales. The total amount of the excise taxes collected through JIA operations is not available from government reports. However, it is estimated to be at least several million dollars annually. The Aviation Trust Fund is used by the federal government to support airports nationwide, as well as to fund a wide range of FAA activities.

Funds from the Aviation Trust Fund are used at JIA to fund Airport capital improvements and to pay for FAA salaries and operations. A major portion of the economic impacts of the excise taxes is accounted for in this study by measuring the impacts of JIA's capital expenditures. In addition, expenditures by the FAA for purchases and salaries that may be funded by these excise taxes were considered in previous sections covering salaries and purchases. As a result, the study did not seek to compile a complete accounting of individual excise taxes paid by JIA-related businesses.

Passenger excise taxes are charged for scheduled air travel and some unscheduled service at the rate of 7.5% of the fare. Among the flights not subject to the tax are local helicopter flight-seeing trips and most charter flights. Federal excise taxes on fuels differ somewhat for jet fuel and avgas, but are approximately \$0.20 per gallon.

## ***Impacts of JIA Master Plan***

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The JIA Master Plan provides a basis for projecting the future economic impacts associated with JIA. Total impact estimates include impacts for both the annual operations of JIA and related businesses, and for their capital improvement programs. Dollar impacts are stated in 1999 dollars.

### **JIA Operations**

The JIA Master Plan projects the CBJ operating budget for JIA to grow from its 1999 level of \$3.2 million to \$7.1 million in 2015 (in 1999 dollars). This represents a 5.0 percent annual average rate of growth. However, the Master Plan projects operating revenues to grow from \$3.2 million in 1999 to only \$5.7 million by 2015. The revenue growth is 3.6 percent annually. The revenue estimates are based on current rates and charges, but assume construction of the recommended capital improvements.

This study estimates future impacts of JIA operations under both high and low growth scenarios. The high-growth scenario reflects the JIA Master Plan budget projection; the low-growth scenario reflects the lower JIA Master Plan revenue projection. This recognizes that funding may be the effective limit on growth of the CBJ airport budget. The same scenarios cover federal airport agency spending as well.

The high- and low-growth scenarios are applied to the JIA operating budget only. Under both high- and low-growth scenarios, growth in the impacts attributable to other JIA-related activities — airlines, shipping, air support services, passenger services, general aviation, and on-site users — is projected to be the same as that expected for total aircraft operations — 0.9 % per year, or 16% overall.

Applying the high and low scenarios to 1999 economic impacts produces the levels of impacts for the year 2015 shown in the table below. Note that these are operations impacts only. Jobs, payroll and purchasing are presented in the table net of capital investment effects. Capital investments are addressed below.

**Table 13**  
**Projected JIA Operations Impact in 2015**  
**under Two JIA Master Plan Growth Scenarios**  
**(in \$ millions)**

JIA Operations Impact (including multipliers)	1999 Current	2015 Low Growth	% Increase	2015 High Growth	% Increase
Jobs	737	936	27%	996	35%
Payroll	\$22.4	\$29.7	32%	\$32.1	44%
Local Purchasing	\$17.6	\$24.8	41%	\$27.0	53%
<b>Total Impacts</b>	<b>\$40.0</b>	<b>\$54.5</b>	<b>36%</b>	<b>\$59.1</b>	<b>48%</b>

Projected impacts are given in 1999 dollars.  
Includes direct and induced impacts of operations only.  
Does not include capital investments.

## Capital Improvement Programs

The JIA Master Plan recommends \$103.7 million in capital improvements at JIA. The improvements are designed to address current deficiencies and the projected growth in aircraft operations.

The first five years of CBJ capital expenditures under the JIA Master Plan's schedule call for \$43.3 million of projects. JIA has already completed a minor portion of these projects. There have been changes in the timing or amount of some projects' costs. The JIA Master Plan's schedule, however, is still representative of the amount of capital improvement project (CIP) expenditures expected over the near-term.

In addition to CBJ improvements, survey data indicate airport businesses expect to spend \$4,775,000 in capital expenditures over the next five years. The combination of CBJ and private projects would total \$48.1 million over the next five years. This would be an average of \$9.6 million per year for CIP.

The planned CIP spending would create an average of 65 jobs, \$2.4 million of annual payroll, and \$7.9 million of local purchasing annually during the next five years. On average over the next 15 years, 50 jobs and \$9.5 million in payroll and other spending would occur each year.

**Table 14**  
**Future JIA Capital Improvement Impacts**  
**(Including Multiplier Effects) 2000-2015**  
**(in \$millions)**

	Jobs	Payroll	Purchases	Total Impacts
<b>Average per Year</b>				
2000-2005	65	\$ 2.4	\$7.9	\$ 10.3
2006-2010	36	1.3	4.2	5.5
2011-2015	49	1.8	5.6	7.3
Average for 2000-2015	50	1.8	7.7	9.6
Total for 2000-2015		\$ 27.6	\$115.7	\$ 143.3

## Outlook Summary

Future plans for JIA indicate that it will remain one of the community's largest employers. Capital and operations spending will continue to grow. New construction at the airport will add a significant number of jobs and additional local purchasing.

JIA's role as a vital component of the visitor, seafood and other industries is likely to grow, as well. The introduction of more frequent, faster ferry service over the next 5 to 10 years may mean that some freight and passenger business to nearby communities will shift from air to ferries. However, overall passenger and freight demand for air services is projected to grow regardless.

## Bibliography

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**Butler, Stewart E. and Kiernan, Laurence J.** (1992), *Estimating the Regional Economic Significance of Airports*. Federal Aviation Administration, U.S. Department of Commerce, Washington D.C.: September 1992.

**Bureau of Economic Analysis** (1992 and 1997), *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II)*. U.S. Department of Commerce, Washington, D.C. Second Edition: May 1992. Third Edition: March 1997.

**Fried, Neal and Keith, Bryan** (1999), "Transportation" in *Alaska Economic Trends*. Alaska Department of Labor and Workforce Development, Juneau: November 1999.

**Goldsmith, Scott** (1998), *The ISER Input-Output Model*. Institute of Social and Economic Research, Anchorage: January 26, 1998.

**Hadland, Jeff and Landry, Gerry** (2000), *Nonresidents Working in Alaska-1998*. Alaska Department of Labor and Workforce Development, Juneau: January 31, 2000.

**Juneau Convention and Visitors Bureau** (2000), *Overnight Commercial Lodging Guests 1999 Survey Results*. Juneau: April 2000.

**The McDowell Group in association with Sheinberg Associates** (1996), *Juneau's Visitor Industry, An Economic Impact Study*. Prepared for the City & Borough of Juneau: March 1996.

**The McDowell Group** (1999), *Alaska Visitor Industry Economic Impact Study, 1999 Update*. Prepared for the Alaska Division of Tourism, Juneau: May 1999.

**The McDowell Group** (2000), *Expenditure Impacts of the 1999 Juneau Convention and Meeting Market*. Prepared for the Juneau Convention and Visitors Bureau, Juneau: February 2000.

**Matt, Rosemary and Widman, Mike** (1996), *The Economic Contribution of the Juneau International Airport*. Prepared for Juneau International Airport by the School of Business & Public Administration, University of Alaska Southeast: May 1996.

**Robertson, Guy** (1998), "Employment Impact Multipliers and the Economic Role of Timber in the Small Forest Communities of Southeast Alaska", in *Global Concerns for Forest Resource Utilization, Sustainable Use and Management*, Selected Papers from the International Symposium of the FORESEA MIYAZAKI 1998. Kluwer Academic Publishers, Boston.

**USKH** (1999), *Juneau International Airport, Airport Master Plan*. Juneau: March 1999.