

# **The Economic Contribution of the Alaska International Airport System to Alaska's Economy in 2017**

*A component of the*

## **Alaska Aviation System Plan**

*Prepared for:*

**Alaska Department of Transportation and Public Facilities**

*Prepared by:*

Northern Economics, Inc  
800 E Dimond Boulevard, Suite 3-300  
Anchorage, AK 99515  
(907) 274-5600

*As subconsultants to:*

DOWL  
4041 B Street  
Anchorage, Alaska 99503  
(907) 562-2000

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# Acronyms

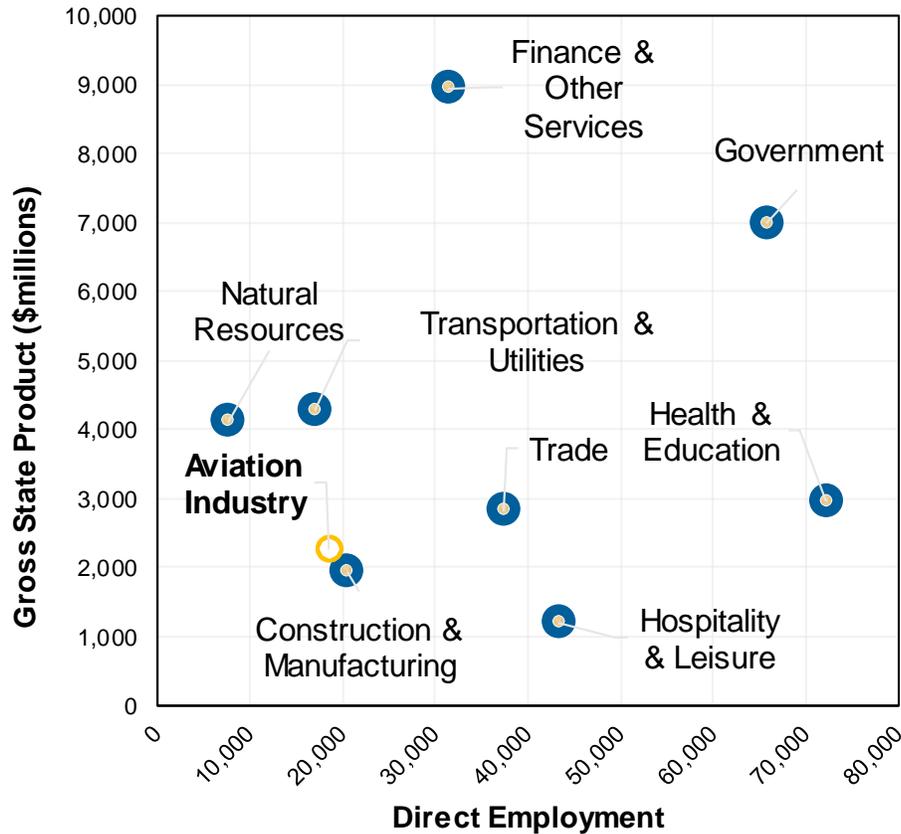
AASP	Alaska Aviation System Plan
AIAS	Alaska International Airport System
AIP	Airport Improvement Program
BTS	Bureau of Transportation Statistics
DOT&PF	Alaska Department of Transportation & Public Facilities
ETOPS	Extended-range Twin-engine Operational Performance Standards
FAA	Federal Aviation Administration
FAI	Fairbanks International Airport
FY	Fiscal year
GSP	Gross State Product
JNU	Juneau International Airport
KTN	Ketchikan International Airport
LHD	Lake Hood
M&O	maintenance and operations
MOA	Municipality of Anchorage
OME	Nome Airport
ANC	Ted Stevens Anchorage International Airport

The preparation of this document was supported in part with financial assistance through the Airport Improvement Program from the Federal Aviation Administration (AIP Grant Number 3-02-0000-023-2017) as provided under Title 49 USC § 47104. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

# Executive Summary

The Alaska International Airport System (AIAS) is a subset of Alaska’s aviation network. It includes Ted Stevens Anchorage International Airport (ANC)—including Lake Hood Seaplane Base (LHD)—and Fairbanks International Airport (FAI). An extensive survey effort was conducted in the fall of 2018 to collect information on the airports and the tenants operating within them. These surveys gathered information on operating and capital expenses, as well as the level of employment at each airport. Using this information, a study team conducted an analysis to estimate the total economic contribution of the airports.

In 2017 the airports contributed more than 26,000 jobs and about \$2.3 billion in economic output. Of the \$2.3 billion, about \$1.3 billion was spending from on-site entities and \$980 million was from off-site spending. Of the 26,000 jobs, about 1,300 are directly employed by the airports and about 17,000 are employed by leaseholders and other government organizations operating at the airports. The remaining 7,700 jobs represent off-site employment. The total contribution of the airports relative to other industry sectors is shown in Figure ES-1.



**Figure ES-1. Economic Contribution of the AIAS and other Job Sectors to Anchorage and Fairbanks**

Source: Northern Economics, Inc. estimates, 2018 derived from Bureau of Economic Analysis data.

Note: BEA sectors represent GSP and employment in the combined Fairbanks and Anchorage Metropolitan Areas

In total, more than 26,000 jobs were generated by the AIAS airports, their leaseholders, and supporting businesses and agencies. Of the 18,500 on-site jobs, about 15,500 were located in Anchorage (ANC and LHD) and 3,000 were located in Fairbanks (FAI). These on-site jobs represent 10.3 percent of total employment in Anchorage (1 in 10 jobs), and 7.8 percent of the total employment in Fairbanks (1 in 13 jobs) (ADOLWD 2018). Including off site jobs, jobs at ANC make up 14.6 percent of total employment in Anchorage (one in seven jobs) and jobs at FAI make up 11.4 percent of total employment in Fairbanks (one in nine jobs).

Spending by employees, aviation suppliers, and vendors at the airports created nearly 8,000 off-site jobs across the state in 2017. This spending also generated further off-site effects. In 2017, on-site payroll for those employed at the airports was about \$780 million. \$640 million went to

employees working at ANC and LHD, making up about 7.6 percent of total payroll in the MOA. \$140 million went to Fairbanks employees, making up about 7.4 percent of total payroll in the Fairbanks North Star Borough (ADOLWD 2018).

Table ES-1 and Table ES-2 show the enplanements and freight volume for ANC and FAI during 2017. In total, the airports helped transport nearly 3.3 million passengers and over 6 billion pounds of cargo. About 62 percent of that cargo was in-transit cargo that passed through Alaska. The airports are critical for the passage of international freight from Asia to North America. Considering the relatively small size of the communities surrounding ANC, LHD, and FAI, the airports are truly unique.

**Table ES-1. Summary of Passenger Movements for FAI and ANC for 2017**

Facility	International				Domestic				Total
	Enplaned	Deplaned	In-Transit	Total Int'l	Enplaned	Deplaned	In-Transit	Total Domestic	All Passengers
FAI	21,225	9,652	1,608	32,485	563,954	569,629	24,367	1,157,950	1,190,435
ANC	35,349	34,064	1,340	70,753	2,688,064	2,687,863	20,908	5,396,835	5,467,588

Source: AIAS Certified Activity Reports, 2018

**Table ES-2. Summary of Cargo Movements for FAI and ANC for 2017**

Facility	International				Domestic				Total
	Enplaned	Deplaned	In-Transit	Total Int'l	Enplaned	Deplaned	In-Transit	Total Domestic	All Cargo
Thousands of Pounds									
FAI	288	683	181	1,152	32,405	6,911	321	39,636	40,788
ANC	482,297	661,912	3,106,403	4,250,613	664,486	420,634	684,841	1,769,961	6,020,574

Source: AIAS Certified Activity Reports, 2018

# Introduction

Aviation is more important in Alaska than perhaps anywhere else in the United States. The Alaska International Airport System (AIAS)—comprised of ANC, which includes LHD, and FAI—serves a critical role in the transport of people and materials, and in the global cargo transport network. The airports have unique infrastructure designed to serve passenger, cargo and general aviation aircraft of all sizes.

The following sections of this report provide information on the contribution of the airports to

Alaska's economy, describe the importance of Alaska's international airports and the aviation industry to its citizens and communities, and compare the importance of the airports with similar airports in the western United States. The information presented in the following sections is based primarily on surveys of ANC, FAI, and LHD airport managers, leaseholders located at the airports, and nearly 800 Alaska residents. More detailed information on the survey and analytical methods employed in this project and summaries of interviews are presented in the appendices.

## Economic Contribution of The Airports to the Local and State Economy

This section discusses the economic contribution of the airports to the state economy. The economic contribution of the airports is measured in terms of the value of economic activity (or output) and the number of jobs generated from airport activity in 2017. This study shows that the airports contributed about \$2.3 billion in economic output and supported over 26,000 jobs statewide in 2017.

This study defines 'the airports' as all the businesses and organizations located at ANC, FAI, and LHD. These entities, which include the air carriers, airport concessions, air freight companies, and even government and civic organizations, are collectively referred to in this report as "on-site entities." Not included in this study are the other aviation-related businesses that are not located at these airports (e.g., off-site air freight companies, off-site visitor industry or off-site aircraft parts manufacturing companies),

but which depend on the airports and benefit from their operations.

The measure of the total economic contribution is comprised of the *direct* (or on-site) *effects* and the *multiplier* (or off-site) *effects*<sup>1</sup>. The on-site effects result from the aviation expenditures injected into the state economy through payroll, maintenance and operations, and capital spending by on-site entities. The off-site effects result from the spin-off spending as aviation employees and other businesses that support the on-site entities buy goods and services from the local vendors. For example, if an airport employee spends his wages on food, utilities, and clothing, this second round of spending creates the off-site effects on the economy.

On-site spending and employment at the airports were estimated using primary data from surveys of ANC, FAI, and LHD airport managers and leaseholders located at these airports. The study team used secondary data to supplement

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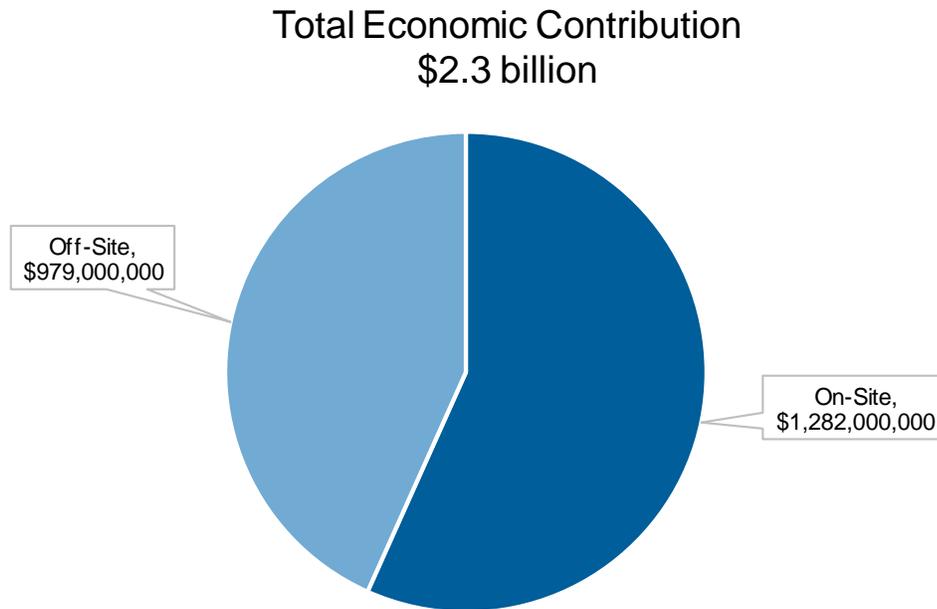
<sup>1</sup> Off-site or multiplier effects may also be referred to as indirect and induced effects.

information not available from the survey data. The off-site effects are based on an input-output analysis of the survey and secondary data using the IMPLAN software program and database. For additional information on data collection and input-output analysis, refer to the Methodology section beginning on page 24.

## Economic Activity

Total spending by on-site entities in fiscal year 2017 amounted to nearly \$1.3 billion—this is the value of the economic activity generated by

operations of airports and the businesses and agencies operating within the airport premises. Local spending generates further economic activity and creates off-site effects in other sectors of the economy. The airports' in-state spending includes payroll, capital expenditures, and other operating and maintenance expenditures. On-site spending by the airports and businesses located at the airports in turn created off-site effects of \$980 million in 2017. Figure 1 shows the breakdown of the on-site and off-site effects of the airports on the state economy.



**Figure 1. Alaska International Airport System Airports Estimated Economic Contribution to Statewide Economic Activity, 2017**

Table 1 shows the estimated Maintenance and Operations (M&O) expenditures (including payroll) and capital expenditures by each airport and by on-site businesses and organizations, respectively. In-state spending for airport operations contributed about \$216 million to the state's economy (Table 1) in fiscal year (FY) 2017.

Spending by the businesses and agencies that are located at the airports also generated on-site economic effects valued at about \$1.1 billion. Combined, total on-site aviation spending in 2017 amounted to nearly \$1.3 billion; again, this is the value of the economic activity generated by operations of on-site entities—the airports and the businesses and agencies operating within the airport premises.

*Table 1. Total Economic Contribution of Operations of Businesses, Agencies, and Organizations Located at The Airports, 2017*

Category	Airports	Leaseholders	Total
	(\$ Millions)		
<b>On-Site M&amp;O Expenditures</b>			
<b>ANC</b>	121.3	801.1	922.4
<b>FAI</b>	36.4	163.1	199.5
<b>On-Site M&amp;O Expenditures Subtotal</b>	<b>157.7</b>	<b>964.1</b>	<b>1,121.9</b>
<b>On-Site Capital Expenditures</b>			
<b>On-Site Capital Expenditures</b>	58.4	101.7	160.1
<b>On-Site Capital Expenditures Subtotal</b>	<b>58.4</b>	<b>101.7</b>	<b>160.1</b>
<b>Off-Site Activity</b>			
<b>Additional Business Activity</b>	85.3	240.2	325.5
<b>Additional Household Activity</b>	44.7	608.7	653.5
<b>Off-Site Subtotal</b>	<b>130.1</b>	<b>848.9</b>	<b>979.0</b>
<b>Total On-Site and Off-Site</b>	<b>346.2</b>	<b>1,914.8</b>	<b>2,261.0</b>

Source: NEI estimates, based on survey results, 2018.

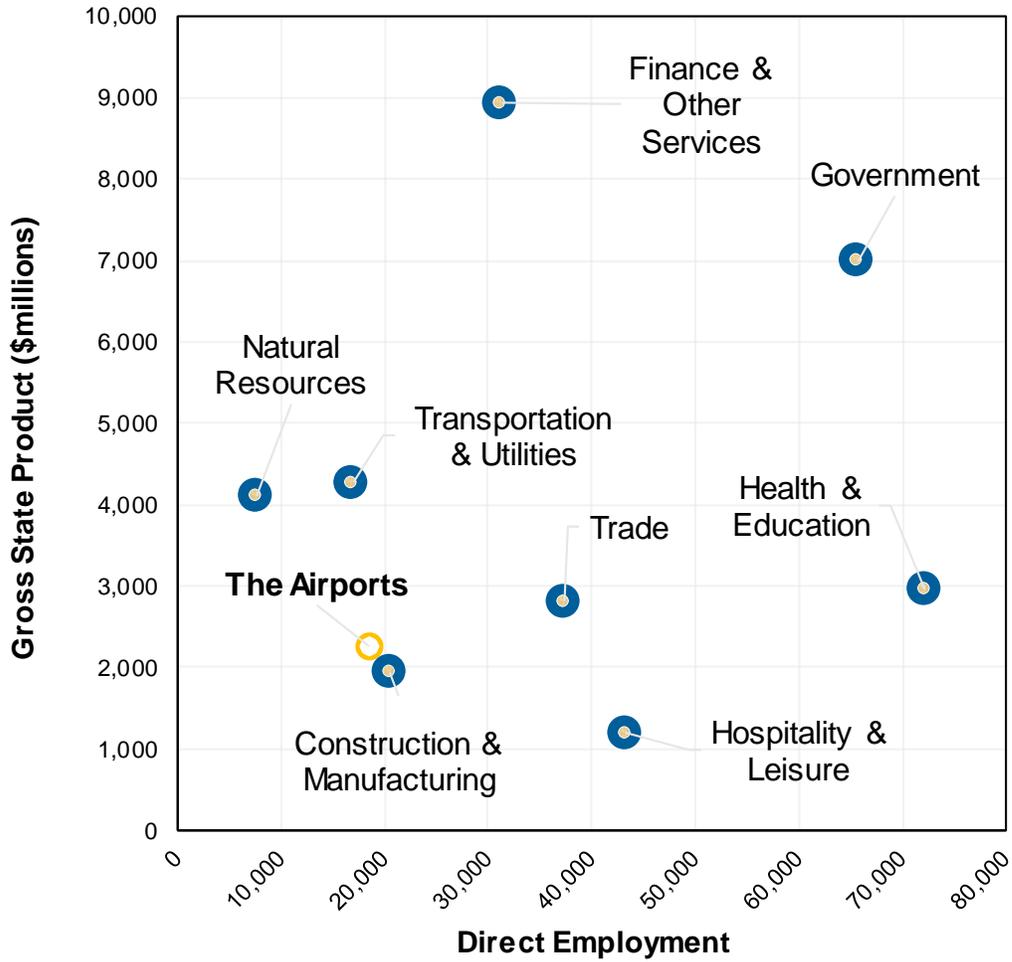
Employee spending generated an additional \$1 billion in economic activity in other sectors of the economy. Capital expenditures and other operations spending at the airports generated further off-site effects.

In total, the airports generated more than \$2.2 billion in economic activity throughout Alaska—an amount equal to 4.2 percent of the State’s \$52.8 billion gross state product (GSP) in 2017 (BEA 2018).<sup>2</sup> The aviation industry accounted for 5.1 percent of national gross domestic product in 2014 (Federal Aviation Administration 2017). The AIAS alone contributes nearly the same portion of economic output to the state, without accounting for the numerous other airports in Alaska.

The businesses, agencies, and organizations that are located on-site at AIAS airports and comprise Alaska’s aviation industry are a crucial component of Alaska’s economy. They are drawn from the primary sectors of the economy (i.e., those sectors that are reported by governmental agencies) such as government, trade, transportation and utilities, and hospitality and leisure.

Figure 2 shows the relative contribution of the aviation industry in terms of GSP and total employment. If the economic contribution of the AIAS were a primary economic sector, it would be larger contributor to the GSP than the construction and manufacturing, and hospitality and leisure sectors.

<sup>2</sup> GSP is the value of all of the goods and services produced by the economy, less the cost of goods used in production.



**Figure 2. The Airports Contribution to Alaska’s Economy Compared to Primary Economic Sectors, 2017**

Source: Northern Economics, Inc. estimates, 2018 derived from Bureau of Economic Analysis data.

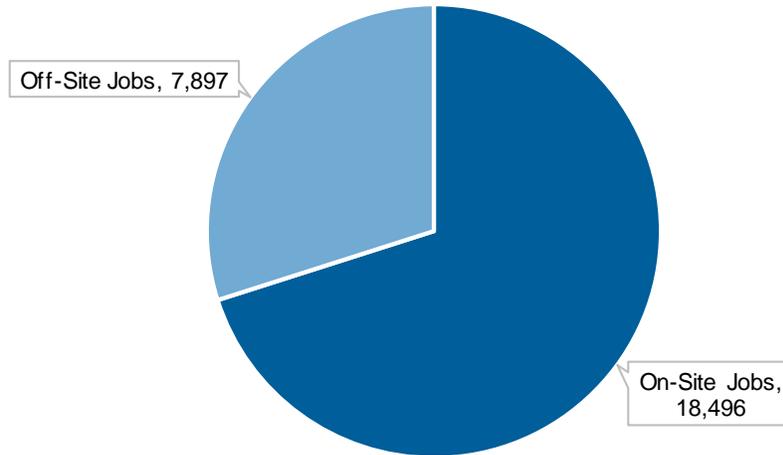
Note: BEA sectors represent GSP and employment in the combined Fairbanks and Anchorage Metropolitan Areas

## Employment

In 2017, the AIAS aviation industry supported more than 26,000 on-site and off-site jobs across the state. Alaska’s aviation industry jobs are

spread throughout the state, but the largest concentrations are found at the state’s AIAS airports. More than 18,000 on-site jobs and more than 7,000 off-site jobs were created by the airports during 2017 (see Figure 3).

AIAS Total Employment Contribution 26,392



**Figure 3. On-site and Off-site Employment Associated with Alaska International Airport System, 2017**

Source: Northern Economics, Inc. estimates, 2018.

Table 2 shows the job contribution of the AIAS airports and of businesses and organizations operating at the airports. The on-site total includes over 16,000 jobs created by on-site businesses, organizations, and government agencies operating at the AIAS airports in 2017. These businesses include commercial air carriers, fixed-base operators, fuel distributors, caterers, air taxis, charter operations, general aviation services, state agencies, and other public agencies such as the U.S. Post Office.

Nearly 1,000 jobs were directly related to capital expenditures projects, with additional jobs created off-site. In total, nearly 8,000 additional jobs were generated through off-site activity. These jobs are created when M&O spending is used to purchase goods and services, or when aviation employees spend their money in various sectors of the economy. Off-site jobs can be created in the retail, trade, entertainment, or other economic sectors.

Table 2. Total Employment of Operations of Businesses, Agencies, and Organizations Located at The Airports, 2017

Category	Airports	Leaseholders	Total
	Jobs		
<b>On-Site M&amp;O Jobs</b>			
<b>ANC</b>	1,204	13,075	14,279
<b>FAI</b>	72	2,773	2,845
<b>LHD</b>	2	397	399
<b>On-Site M&amp;O Jobs Subtotal</b>	<b>1,278</b>	<b>16,245</b>	<b>17,523</b>
<b>On-Site Capital Jobs</b>			
<b>On-Site Capital Jobs</b>	259	712	972
<b>On-Site Capital Jobs Subtotal</b>	<b>259</b>	<b>712</b>	<b>972</b>
<b>Off-Site Activity</b>			
<b>Additional Business Activity</b>	1,255	2,117	3,372
<b>Additional Household Activity</b>	417	4,108	4,525
<b>Off-Site Subtotal</b>	<b>1,671</b>	<b>6,225</b>	<b>7,897</b>
<b>Total On-Site and Off-Site</b>	<b>3,208</b>	<b>23,183</b>	<b>26,392</b>

Source: NEI estimates, based on survey results, 2018.

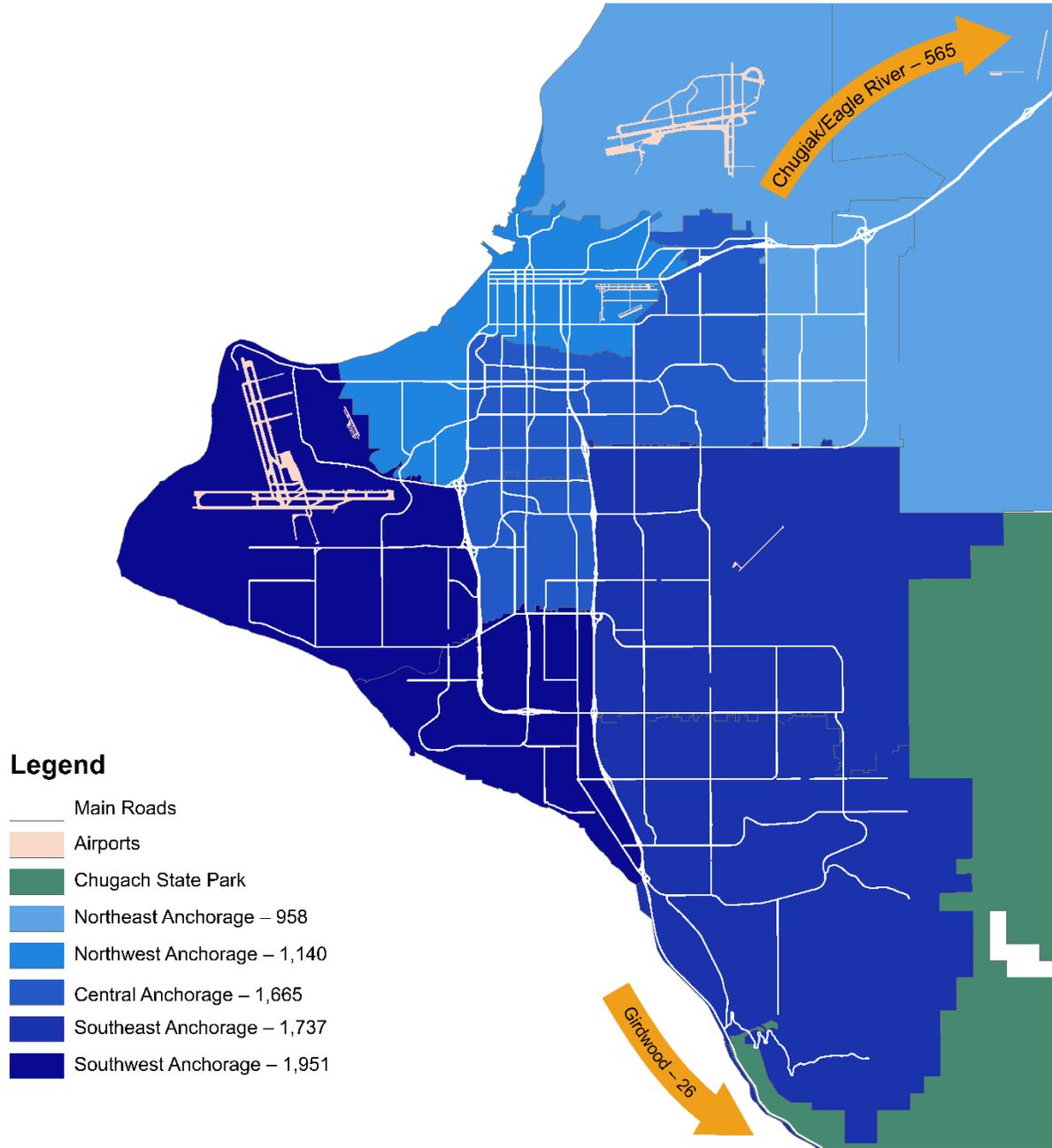
Table 3 shows the place of residence for badged employees at ANC, and Figure 4 shows the boundaries of the community residences. Badged employees have access to secure areas of the airport, including the terminal beyond TSA screening and the tarmac. In total, there are

nearly 9,500 badged employees at ANC, about 85 percent of whom live within the Municipality of Anchorage (MOA). About 11 percent of badged ANC employees live elsewhere in Alaska and 3 percent live outside the state.

Table 3: ANC Badged Employee Count by Area of Residence

Community Area of Residence	Count
<b>Anchorage</b>	<b>7,451</b>
Northwest Anchorage	958
Northeast Anchorage	1,665
Central Anchorage	1,951
Southwest Anchorage	1,737
Southeast Anchorage	565
<b>Other</b>	<b>2,030</b>
Chugiak/ Eagle River	565
Girdwood	26
Matanuska Susitna Borough	904
Other Alaska	182
Outside Alaska	324
Zip Code Unknown	29
<b>All Badged ANC Employees</b>	<b>9,481</b>

Source: Ted Stevens Anchorage International Airport Staff



**Figure 4. Anchorage Areas of Residence Boundary Map**

Source: DOT&PF

Table 4 shows the off-site jobs generated by aviation industry employee spending in 2017. These jobs are created when employees of on-site entities spend their wages on goods and services within the state. Spending by employees and aviation suppliers and vendors created nearly 8,000 off-site jobs across the state in 2017. Spending throughout the industry generated

further off-site effects. In 2017, on-site payroll for AIAS employees was about \$780 million. \$640 million went to employees working at ANC and LHD, making up about 7.6 percent of total payroll in the MOA. \$140 million went to FAI employees, making up about 7.4 percent of total payroll in the Fairbanks North Star Borough (ADOLWD 2018).

**Table 4. Total Number of Off-site Jobs Associated with Alaska International Airport System in Alaska, 2017**

Spending Source	Off-site Jobs Output
Maintenance and Operations	3,171
Capital Expenditures (construction)	688
Employee Spending	4,038
<b>Total</b>	<b>7,897</b>

Source: Northern Economics analysis, 2018.

Note: Off-site effects are based on industry multipliers provided by IMPLAN. Direct inputs to the model are based on expenditure estimates derived from the surveys, and ANC financial statements.

In total, more than 26,000 jobs were generated by the AIAS airports, their leaseholders, and supporting businesses and agencies. Of the 18,500 on-site jobs, about 15,500 were located in Anchorage (ANC and LHD) and 3,000 were located in Fairbanks (FAI). These on-site jobs represent 10.3 percent of total employment in Anchorage (1 in 10 jobs), and 7.8 percent of the total employment in Fairbanks (1 in 13 jobs) (ADOLWD 2018). Including off site jobs, jobs at ANC make up 14.6 percent of total employment in Anchorage (one in seven jobs) and jobs at FAI make up 11.4 percent of total employment in Fairbanks (one in nine jobs).

Table 5 shows the number of jobs per landing and per million dollars of revenue at both ANC and FAI. Direct employment, employment induced through household spending and M&O spending are used as the basis of the calculations. Capital expenditures are specifically excluded from the analysis, since large capital projects are constructed based on long term demand and trends. The estimates presented here represent the effects of small changes in aviation activity and does not account for differences in wage rates, skill level, or required experience for the supported jobs.

**Table 5. Marginal Job Contributions per Landing and Revenue by Airport, 2017**

Category	Anchorage (ANC)	Fairbanks (FAI)
Direct and Induced Tenant Employment	17,745	3,764
Landings	79,828	19,999
Jobs per Landing	<b>0.22</b>	<b>0.19</b>
Direct and Induced Airport Facilities Employment	2,336	396
Total Revenues	\$130,150,462	\$11,673,343
Jobs per \$1 Million Revenue	<b>18</b>	<b>34</b>

Sources: FAA, 2018d; BTS, 2018; Northern Economics, Inc. Analysis 2019

Note: Marginal job effects due to additional landings and revenue are assumed to be linear. Although estimates are presented as marginal effects, it is unlikely that an additional flight or small increases in airport revenue will generate immediate additional jobs.

The job contribution per landing is based only on leaseholder employment, the jobs supported through spending by leaseholders, and spending by leaseholder employees. Flights that land at ANC or FAI will contribute to job growth by generating income for businesses located at the airports. Passengers in the terminal will purchase goods and services at retailers and restaurants, rent vehicles, as well as support the airline companies through ticket fares. Many airline support companies and transportation companies also benefit when additional cargo flights land at the airports. The number of supported jobs per landing at Anchorage is slightly higher at 0.22, compared to Fairbanks at 0.19.

Jobs per million dollars of revenue is based only on airport employment, and the jobs supported through spending by the state including household spending of airport employees. Revenues are generated at the airports through a variety of fees that can include terminal facility leases, cargo landing fees, fuel flowage taxes, rental car fees, and other fees. Together, these revenues are used to pay employee wages and fund M&O at the airports. The marginal job contribution of revenues is presented as jobs per \$1 million collected. At ANC, each \$1 million of revenue represents 18 direct and indirect jobs. The job contribution of revenue is higher in Fairbanks than in Anchorage, at 34 jobs per \$1 million of collected revenue.

# Airport Activity

Airports in the AIAS are unique because they provide critical passenger and mail service to Alaska’s urban and rural communities while also facilitating the passage of international passengers and international cargo between Asia and the U.S. The study team compared aviation activity in the AIAS (specifically ANC and FAI) to other international airports using FAA-reported data, U.S. Census population data, and economic output estimates from published reports on international airports. In addition, the team compiled information on airport activity from the Alaska resident phone survey and the airport managers’ survey.

## Regional Specialization

The AIAS plays an important role in the movement of both cargo and people around the globe. Figure 5 presents monthly international passenger movements for ANC and FAI. Most international flights occur at ANC with smaller numbers of international flights at FAI. International travel is highly seasonal, with peak activity in the summer months. Alaska’s tourism industry is a key driver of international passenger activity in the state.

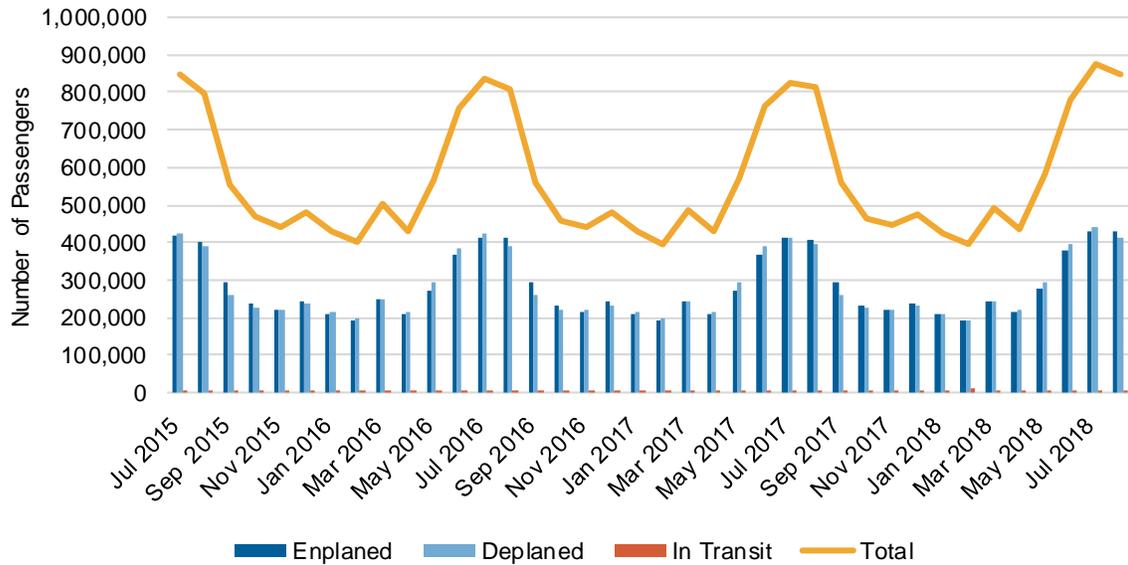


Figure 5. Passenger Activity at ANC and FAI

Source: AIAS Certified Activity Reports, 2018

Table 6 summarizes the number of enplanements for ANC and FAI in 2017. Anchorage has about five times the number of enplanements that FAI does, at about 2.7 million. Enplanements are used by the FAA to determine Airport Improvement Program (AIP) funding and hub classifications. These classifications are discussed in greater detail later in this report. Table 7 summarizes the cargo activity at ANC and FAI in 2017. Air carriers report their cargo volumes to AKDOT&PF, who compile the data for forecasting and revenue purposes. A large portion of AIAS cargo activity is in-transit cargo, which passes through ANC on its way to final destinations across the U.S. and Asia. In total ANC and FAI saw over 6 billion pounds of cargo in 2017.

ANC and FAI play different roles in the statewide airport system. ANC is the primary gateway to Alaska for passengers and cargo. ANC is also a critical refueling stop for international cargo flights; ranked number two in the country for landed cargo weight, following Memphis International Airport which is the primary hub airport for Federal Express (FAA 2018). FAI primarily serves a local and northern Alaska aviation passenger and cargo market, with a niche international tourist industry.

**Table 6. Summary of Passenger Activity for FAI and ANC for 2017**

Facility	International				Domestic				Total
	Enplaned	Deplaned	In-Transit	Total Int'l	Enplaned	Deplaned	In-Transit	Total Domestic	All Passengers
<b>FAI</b>	21,225	9,652	1,608	32,485	563,954	569,629	24,367	1,157,950	1,190,435
<b>ANC</b>	35,349	34,064	1,340	70,753	2,688,064	2,687,863	20,908	5,396,835	5,467,588

Source: AIAS Certified Activity Reports, 2018

**Table 7. Summary of Freight for FAI and ANC for 2017**

Facility	International				Domestic				Total
	Enplaned	Deplaned	In-Transit	Total Int'l	Enplaned	Deplaned	In-Transit	Total Dom	All Cargo
Thousands of Pounds									
<b>FAI</b>	288	683	181	1,152	32,405	6,911	321	39,636	40,788
<b>ANC</b>	482,297	661,912	3,106,403	4,250,613	664,486	420,634	684,841	1,769,961	6,020,574

Source: AIAS Certified Activity Reports, 2018

### Ted Stevens Anchorage International Airport (ANC)

ANC serves as a gateway to tourism throughout the state. Recently, there has been an increase in tourism from cruise ships in Alaska. Cruise vacations typically involve marine travel for one-half of the journey and air travel for the other half, so most cruise visitors pass through ANC on their way to or from Alaska. These large numbers of tourists help contribute to ANC's number 6 ranking in North America for retail and concessions sales per passenger (Airport Revenue News 2018).

While ANC is the starting and ending point for many vacations in Alaska and is a major passenger airport, it has an outsized role in the movement of cargo. ANC serves as an important refueling stop for cargo movement between Asia and North America. Figure 6 shows monthly international cargo weights for ANC. Transit cargo represents cargo onboard planes that stop for refueling, where it may be unloaded during a sort, but ultimately is transported to a final destination which is not ANC. Cargo that is loaded (enplaned) or unloaded (deplaned) is recorded separately. In 2017, transit cargo made up about 73 percent of international cargo activity at ANC.

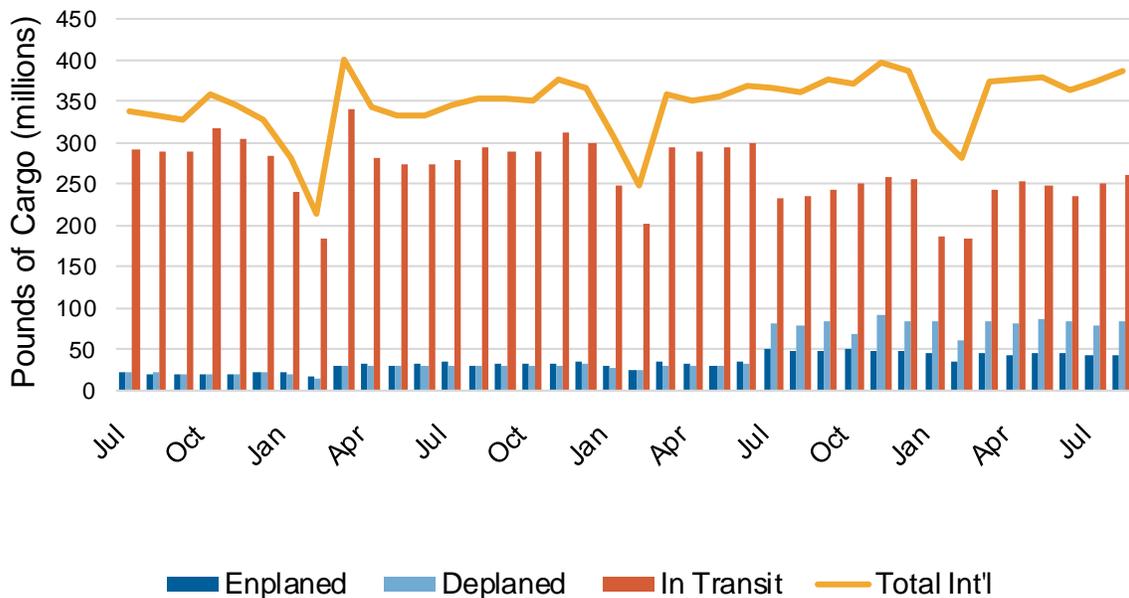


Figure 6. Monthly International Cargo Weight at Ted Stevens Anchorage International Airport

Source: Day, 2018

### Fairbanks International Airport

Fairbanks International Airport plays an important role in regional tourism. While there are few direct international flights to Fairbanks, there are many international flights that pass through Anchorage or Seattle on their way to a Fairbanks destination. One unique aspect of the Fairbanks tourist industry is a niche market of winter tourism related to aurora borealis activity. During the late winter months when the tourism industry is quiet in most of the state, Fairbanks is supported by Japanese visitors. Figure 7 presents the number of Japanese enplanements to (destination) and from (origin)

Fairbanks. Note that a steep decrease in the number of Japanese visitors from 2014 to 2015 is related to the USD-Yen exchange rate. When the purchasing power of the Yen decreases, fewer Japanese tourists fly to Fairbanks.

The same data are represented as monthly average enplanements in Figure 8. There is some activity in the late fall that might be considered normal tourism. But the large number of enplanements in January, February, and March is a unique instance of a winter tourism industry in Alaska.

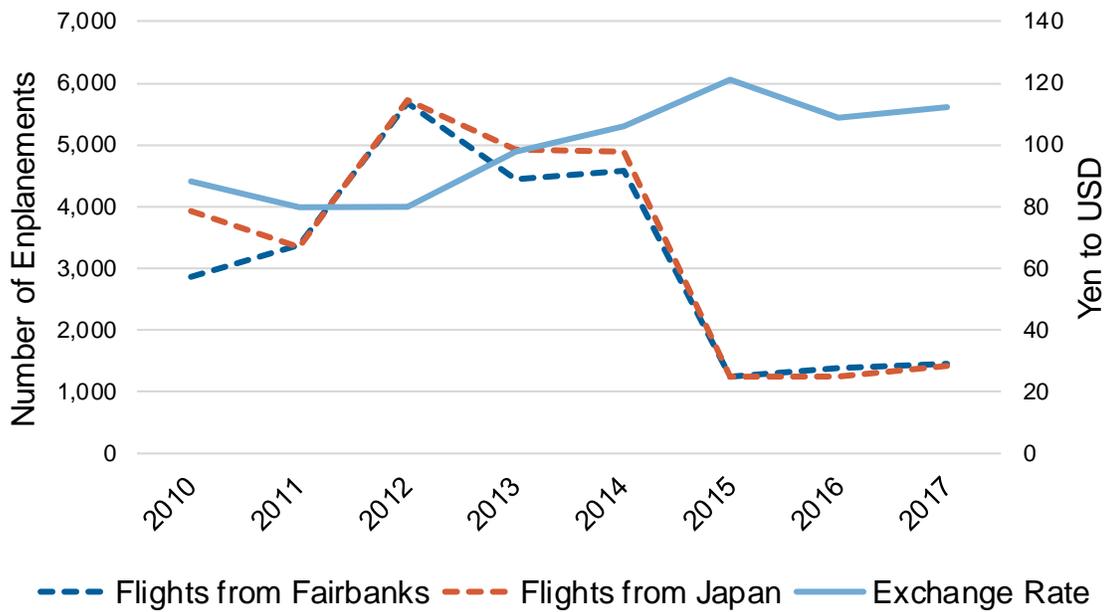


Figure 7. Annual Japanese Passengers to and from Fairbanks (FAI)

Source: Northern Economics, Inc. estimates derived from Bureau of Transportation Statistics, 2018; FED foreign exchange rates, 2018

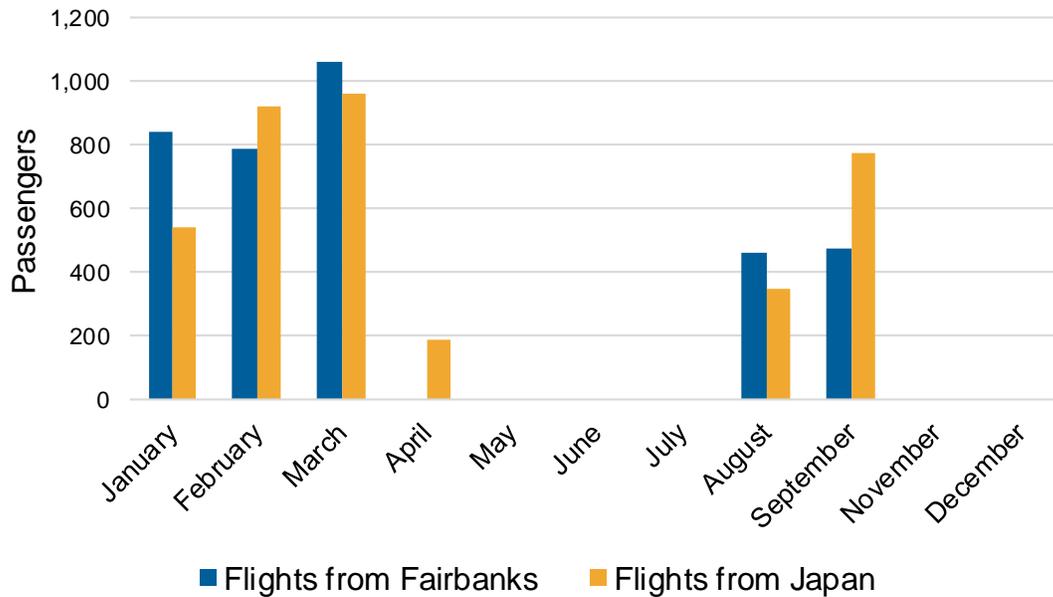


Figure 8. Monthly Average Japanese Passengers to and from Fairbanks (FAI), 2010-2017

Source: Northern Economics, Inc. estimates derived from Bureau of Transportation Statistics, 2018

### Lake Hood

LHD falls under the jurisdiction of the Ted Stevens Anchorage International Airport and is included in this study as part of the AIAS. LHD is the busiest seaplane base in the world, and there is a roughly 10-year waiting list for slips on the lake (DOWL 2017). At LHD there are 999 single engine planes and 33 multi engine planes, for a total of 1,032 aircraft. Table 8 contains FAA estimates for flight operations at LHD for a 12-month period. The airport manager survey

revealed that operations had increased in 2017 to 74,000 flights. Most operations at LHD are general aviation flights by local users. About 24 percent of flights are operated by air taxi companies, representing a large portion of the sightseeing tourist-related activity in the state. Tourist activities include general sightseeing bear viewing, fly-out fishing and hunting trips, glacier landings, and more.

**Table 8. Estimated Operations by Type for LHD from June 1, 2015 to May 31, 2016**

Operation Type	Number of Operations	Share of total (%)
<b>Total</b>	61,900	100
<b>Air Carrier</b>	400	0.6
<b>Air Taxi</b>	15,000	24.2
<b>General Aviation Local</b>	45,000	72.7
<b>General Aviation Itinerant</b>	1,500	2.4

Source: Federal Aviation Administration, 2018b

### Airport Activity Comparison

To be classified as a hub, an airport must have at least 0.05 percent of the total United States commercial service enplanements each year.

classifications are used to distribute funding and are a metric for comparisons of commercial service airports.

Table 9 summarizes the requirements for all primary airport classifications. Hub

**Table 9. FAA Primary Airport Hub Classifications by Percentage of Enplanements**

Hub Type	Minimum Requirement	Maximum Requirement
<b>Large</b>	1% of Commercial Service Total	NA
<b>Medium</b>	0.25% of Commercial Service Total	1% of Commercial Service Total
<b>Small</b>	0.05% of Commercial Service Total	0.25% of Commercial Service Total
<b>Primary Nonhub</b>	10,000 passengers	0.05% of Commercial Service Total

Source: Federal Aviation Administration, 2018a

ANC is classified as a Medium hub airport, with 0.3 percent of the total United States commercial service enplanements in 2017. Most Medium hub airports have a much smaller volume of cargo activity than ANC. Anchorage is a relatively small urban population relative to the economic contribution of its airport, so there are few lower 48 airports with comparable economic

contributions and levels of aviation activity. Essentially, ANC is a unique airport and very few have a similar combination of passenger and cargo activity. FAI serves about 90 rural communities, and with 0.06 percent of the commercial service enplanements, FAI is classified as a small hub airport.

*Table 10. ANC and FAI Commercial Service Enplanement Ranking, 2017*

	Number of Enplanements	Share of Commercial Service Total (%)	Rank by Enplanements
<b>ANC</b>	2,556,188	0.30	56
<b>FAI</b>	543,839	0.06	118

Source: Federal Aviation Administration Statistics, 2018c

The study team compared ANC and FAI to other U.S. airports with similar metropolitan populations and hub classifications. Table 11 and Table 12 show the comparisons for ANC and FAI, respectively. The team selected airports with similar surrounding population size based on U.S. census metropolitan statistical areas. The team then compiled FAA enplanements and aircraft landed weights for each of the selected airports. Similarly, the team selected airports with a similar hub classification and then collected U.S. census population data.

ANC is a particularly unique airport, with no apparent rival among airports with similar population and hub classification. Communities with similar population to Anchorage have only about 3 percent of the landed weight reported at ANC and have fewer enplanements. Airports

with similar hub classification have a surrounding metropolitan population that is at least twice as large as ANC's. Those same airports also have far less cargo activity.

For FAI, Huntsville International Airport in Alabama is a reasonable comparison airport with a similar population, enplanements, and hub classification. FAI does however have substantially more cargo activity. Bozeman International Airport is another small hub airport with similar population and enplanements, but it is primarily a passenger airport. Many lower 48 cities with similar populations to Fairbanks have little to no cargo activity because cargo can be moved by truck and train.

Table 11. Comparison of Anchorage (ANC) to Similar Communities by Population, Enplanements, and Landed Weight

	2017 Population	2017 Enplanements	2017 Pounds of Landed Weight
<b>Communities with Similar Population</b>			
Reno, NV	464,593	1,952,977	553,310,545
Spokane, WA	448,150	1,698,420	470,113,311
Anchorage, AK	<b>400,888</b>	<b>2,556,188</b>	<b>17,213,425,877</b>
Green Bay, WI	320,050	283,823	-
Lubbock, TX	316,983	460,212	363,743,489
<b>Communities with Similar Hub Classification</b>			
Windsor Locks, CT	1,210,259	3,164,629	817,966,700
Jacksonville, FL	1,504,980	2,701,855	414,939,220
Anchorage, AK	<b>400,888</b>	<b>2,556,188</b>	<b>17,213,425,877</b>
Albuquerque, NM	910,726	2,412,293	562,896,132
Buffalo, NY	1,136,856	2,348,463	283,906,303

Sources: American Community Survey, 2018; Federal Aviation Administration, 2018c

Table 12. Comparison of Fairbanks (FAI) to Similar Communities by Population, Enplanements, and Landed Weight

	2017 Population	2017 Enplanements	2017 Pounds of Landed Weight
<b>Communities with Similar Population</b>			
Bozeman, MT	107,810	598,706	-
Grand Forks, ND	102,414	117,520	7,844,617
Kalispell, MT	100,000	272,271	-
Fairbanks, AK	<b>99,703</b>	<b>543,839</b>	<b>109,946,749</b>
Huntsville, AL	86,912	518,998	419,594,598
<b>Communities with Similar Hub Classification</b>			
Hilo, HI	200,381	664,790	197,871,700
Harrisburg, PA	571,903	582,287	363,446,474
Fairbanks, AK	<b>99,703</b>	<b>543,839</b>	<b>109,946,749</b>
Huntsville, AL	86,912	518,998	419,594,598
Columbia, SC	825,033	510,186	402,908,533

Sources: American Community Survey, 2018; Federal Aviation Administration, 2018c

## Economic Output

The study team collected economic impact report analyses for ten international airports around the U.S., including the number of direct and total jobs and total economic output for each of the airports. Table 13 compares these estimates to the results of the input-output analysis for ANC and FAI. FAI is similar in output

and employment to several regional airports in Montana. ANC is more similar to passenger hub airports like Seattle or Portland; however, considering the size of the communities around those airports, ANC has significantly more cargo activity and economic output on a per capita basis than these other international airports.

Table 13. Comparison of Economic Output for Selected International Airports

Airport	Report Source	Direct Jobs	Total Jobs	Total Airport Output (\$)
Ted Stevens Anchorage International Airport (incl LHD)	NEI estimates, 2018	15,559	22,080	1,877,421,000
Fairbanks International Airport	NEI estimates, 2018	2,936	4,311	383,757,000
Phoenix Sky Harbor International Airport	McPheters, 2011	32,754	64,045	38,700,000,000
Denver International Airport	Colorado Department of Transportation, 2013	46,083	269,580	10,806,797,000
Portland International Airport	Drumm, 2013	20,005	-	-
Seattle international Airport	Port of Seattle, 2013	18,353	32,791	-
Tuscon International Airport	University of Arizona, 2012	13,003	34,570	-
Casper/Natrona County International Airport	Wyoming Department of Transportation, 2013	1,002	-	-
Billings Logan International Airport	Kiedel-Adams et. al., 2017	-	3,265	408,762,000
Bozeman Yellowstone International Airport	Kiedel-Adams et. al., 2017	-	7,024	717,384,000
Great Falls International Airport	Kiedel-Adams et. al., 2017	-	2,123	252,945,000
Missoula International Airport	Kiedel-Adams et. al., 2017	-	4,492	537,927,000

Sources: as noted in table

## Alaska Resident Airport Use

Alaska Survey Research conducted a telephone survey of nearly 800 Alaska residents in the spring of 2018, 323 of whom lived in Anchorage and 106 in Fairbanks. Three-quarters of respondents reported flying one or more times in the last 12 months. ANC was the primary airport for 428 respondents and FAI for 74. Respondents who had flown one or more times were asked to estimate the number of flight trips they had

taken in the past 12 months. The number of trips by trip purpose is shown in Table 14.

On average, Fairbanks households make one more trip per year than Anchorage households. Fairbanks residents travel more often than Anchorage residents for each type of trip except for work trips.

Table 14. Phone Survey Trips by Airport Used Most

	ANC Mean Trips	FAI Mean Trips	All Alaska Airports
Total Trips	4.17	5.06	4.73
Work Trips	1.56	1.27	1.67
Personal Trips	2.20	2.75	2.40
School or Church Trips	0.10	0.36	0.14
Medical Trips	0.19	0.43	0.38
Other Trips	0.13	0.25	0.14

Source: Alaska Survey Research, 2018

## Diversion Airports

The role of diversion airports is critical to the efficient operation of the airports and carriers operating in Alaska. Diversion airports allow the ANC and FAI to safely function, providing jobs and economic activity as described earlier in this report.

Extended-range Twin-engine Operational Performance Standards (ETOPS) require that airplane travel routes fall within certain minimum travel times to the nearest ETOPS-

certified diversion airport. The regulations are meant to ensure that a plane can make it to a large enough airport in the event of an engine failure. The AIAS supports Cold Bay and Sitka Airport(s) financially to ensure that these airports are viable locations for diverted flights. Flights to and from Alaska rely on these airports in the event of an emergency. The airports must be prepared to receive planes in an emergency. While engine failures and other aircraft malfunctions are uncommon, these ETOPS certified airports must remain prepared.

# Looking Ahead

The aviation industry in Alaska faces some obstacles, but there are also many areas for potential growth and new opportunities. To gain additional insight on the unique aspects of the airports, the study team spoke with airport managers at ANC and FAI. A few of these topics are discussed below.

## Future Challenges and Opportunities

International passenger travel through Lower 48 West Coast gateways is at capacity with little room to expand. With plenty of excess capacity, Ted Stevens Anchorage International Airport may have an opportunity to relieve some of the international traffic burden from the Lower 48. ANC is currently number one in on-time performance for airports of similar size. The strategic position of ANC between the Lower 48 and Asia presents an opportunity to open direct flights from China and Japan. This would decrease stress on West Coast international airports and present opportunities to increase tourism and aviation traffic in Alaska. This could lead to a boost in U.S. Customs and Border Protection employment and payroll. To the extent that these travelers would spend time in Alaska or layover as part of their trip, it could also bring additional revenue to the state through bed taxes, car rental taxes, airline ticket fees, and airport concession fees.

Another opportunity to improve retail sales and revenue at ANC would be a change in regulations that would allow international passengers to deplane rather than wait on their plane on the tarmac. The 'transit without visa' regulation was suspended in 2003 but, if reinstated, would allow international passengers to leave their plane and use ANC's facilities without a U.S. visa. These passengers could use the restrooms, purchase food or retail goods, and then continue to their final destination outside the U.S.

One area for continued improvement at Alaska airports is the increased utilization of passenger planes for 'red-eye' flight times. Alaskans are accustomed to late night flights, which allow

them to make daytime connections in Seattle or other hub airports. In the Lower 48, passenger planes are under-utilized at night. Alaska is an attractive place for passenger carrier companies to operate because they can increase plane utilization during off hours.

ANC is a critical airport for the movement of cargo and freight. One area for improvement of cargo operations at the airport would be a 'quick turn' cargo facility. A secure facility on or near the tarmac would allow companies to store cargo short term, when it needs to move between planes. This would allow companies more flexibility in planning and logistics, as well as improving efficiency.

The seafood industry is important to the livelihood of many individuals in Alaska. One emerging seafood market is the transport of live king crab to Asia. The challenge with transporting live crab is that the animals only survive out of water for about 15 hours. That creates some logistical problems when trying to send crab by direct flight from remote regional airports like Adak. At ANC, there may be an opportunity to build new infrastructure that helps process live king crab shipments for direct flights to Asia. There are companies outside the airport that can 'refresh' the crabs in large water tanks. However, a full-scale operation may require additional infrastructure at ANC to handle big shipments of live crab.

## Airport Grades and Improvements Needed

The phone survey of Alaska residents was also used to assess passenger satisfaction with Alaska airports on a letter grade (A-F) scale. Table 15 contains the survey respondents' average 'grade' for their most-used airport on a variety of subjects. Both Anchorage and Fairbanks passengers are most satisfied with the ease of travel at the airport. The lowest grade for both ANC and FAI was the quality of concessions and amenities. The overall grade for both airports was a B.

Table 15. Phone Survey Satisfaction by Airport Used Most

	Anchorage Mean Grade and GPA		Fairbanks Mean Grade and GPA		All Airports Mean Grade and GPA	
	Grade	GPA	Grade	GPA	Grade	GPA
Ease of Travel	B+	(3.71)	B+	(3.85)	B+	3.84
Transportation to and from Airport	B	(3.51)	B	(3.39)	B	3.68
Concessions and Amenities	B-	(3.20)	C	(2.65)	B	3.46
Availability of Parking at Airport	B-	(3.23)	B	(3.36)	B	3.19
Overall Airport Grade	B	(3.55)	B	(3.51)	B-	3.01

Source Alaska Survey Research, 2018

Survey respondents were also asked to comment on how the airport could be improved. Most respondents were content with the status of the airport and thought that no improvements were needed. The number one improvement requested by residents who used ANC was better parking availability. ANC passengers thought that parking was generally congested, too far away, or difficult to find open spaces. The

number one requested improvement by FAI passengers was food concessions. Respondents thought that the airport could benefit from having more food options and having them spread out across the airport. Table 16 summarizes the responses of ANC and FAI passengers. Attachment D contains the full comments for Anchorage and Fairbanks travelers.

Table 16 Phone Survey Suggested Improvements by Airport Used Most

	Anchorage Count	Share (%) of Total	Fairbanks Count	Share (%) of Total
Parking	83	18	9	13
Food	65	14	16	24
Concessions/Amenities	32	7	4	6
Crowds/Traffic	20	4	2	3
Lower Prices for parking/amenities	17	4	5	7
Security	14	3	2	3
Lounge/Seating	10	2	1	1
All Other	69	15	10	15
No Improvement Needed	147	32	19	28
Total	457	100	68	100

Source Alaska Survey Research, 2018

Note: Totals may not add due to rounding

## Future Travel

The resident phone survey also asked about future levels of travel. Respondents were asked if and how their travel habits might change in the future. Most respondents felt that their current level of travel would not change in the next 12 months. About 21 percent of respondents in both Anchorage and Fairbanks felt that they would

travel more. In Anchorage, 6.7 percent felt they would travel less, and in Fairbanks 2.1 percent felt they would travel less. Overall, most Alaska residents felt that their travel habits would remain about the same or increase somewhat in the future.

*Table 17. Phone Survey Future Travel by Airport Used Most*

Changes to Travel Pattern	Anchorage	Fairbanks
	(%)	
Travel More	20.7	20.8
Travel Less	6.7	2.1
Travel the Same	71.7	75.9
Not Sure	0.9	1.2

Source Alaska Survey Research, 2018

# Methodology

This report is a component of the continuing Alaska Aviation System Plan (AASP), which is being prepared by Statewide Aviation Division of the DOT&PF; and a study team led by DOWL, with funding by Federal Aviation Administration (FAA). This economic analysis was prepared by Northern Economics, Inc. as a subcontractor to DOWL.

This AASP document was conducted in accordance with FAA Advisory Circular 150/5070-7: The Airport System Planning Process. The economic analysis described in this report was conducted pursuant to Section 101.a(3) of that document. This report provides an estimate of the economic contribution of Alaska International Airport System to the state's economy in 2017, and a discussion of the importance of the industry to the state by comparing it to similar communities in the Lower 48. The estimate is based on a large survey and interview effort conducted in the fall of 2018. This report supports the position that state planning efforts, capital investment, and operational spending are supportive of a healthy aviation system and industry in Alaska.

The AIAS, as defined in this economic impact analysis, includes all the businesses and organizations located at Ted Stevens Anchorage International Airport (ANC), Fairbanks International Airport (FAI), and Lake Hood airport (LHD). This report refers to those businesses as “on-site entities.” Spending by these firms and organizations results in other jobs and income—the “off-site effect”—for businesses located elsewhere. This report presents information for both on-site and off-site economic activity. Subsequent studies may expand the definition of “aviation industry” to include other aviation-related businesses not located at airports (e.g., off-site air freight companies or off-site aircraft parts manufacturing companies) and some portion of expenditures by visitors and other persons traveling on air transportation services and through airports.

## Aviation Activity Data

Three separate data sources were used to evaluate the level of passenger and freight activity at Alaska's airports. The FAA collects and publishes data on landed weight and passenger enplanements at commercial service airports. Landed weight is a manufacturer's rating of the maximum aircraft landing weight, which includes the weight of an aircraft and its maximum cargo capacity. It is not a measure of actual cargo movement, but it does capture some information about the relative size of aircraft landing at airports. This information is used by the FAA to determine funding, and it can be used as a general indicator of airport activity.

Analysis of actual aviation cargo movement must rely on aircraft carrier reported data. Carriers report to both the U.S. Department of Transportation (USDOT) and state level DOTs. At large airports like ANC and FAI, cargo and passenger data are collected to determine fees and taxes that must be paid to the airport for using its infrastructure and services. These data are carefully collected and compiled to generate forecasts and observe industry trends. Cargo weight is recorded either as enplaned, deplaned, or transit cargo. When international flights stop at ANC for refueling, most of the plane's cargo does not leave the aircraft. This is recorded as transit cargo. If cargo is removed from the plane (deplaned) or loaded (enplaned) it is recorded separately. When possible, the study team evaluated ANC and FAI's cargo and passenger activity with data provided by DOT&PF.

Broader analysis of Alaska cargo and passenger movement must rely on a separate source of carrier reported data. The Bureau of Transportation Statistics (BTS) compiles carrier-reported data that are submitted to USDOT. The data are reported for both market analysis and as segmented data. Segmented data report total passenger and cargo volume for each individual flight segment. Market data report enplaned passengers at each departure point for multi-segment trips. The study team conducted the airport activity analysis with only market data. Airport collected data are generally more reliable than BTS data, but most rural airports do

not collect data from carriers. The statewide analysis uses BTS market data to comment on general aviation trends like seasonality due to tourism and the effect of fuel prices on cargo movement.

## Survey Methodology

### DOT&PF Business/Leaseholder Survey

The study team conducted a mail/internet survey of DOT&PF leaseholders. Appendix A contains the complete survey instrument DOT&PF provided its leaseholder list for the AIAS, which contained 390 leaseholders with 690 agreements. We received 36 responses, of which 17 were functionally complete. This amount equals a raw response rate of 9.2 percent while the functionally complete response rate was 4.4 percent. The responses did not include some major leaseholders, so the study team made follow-up e-mails and phone calls to collect information for selected leaseholders.

Each leaseholder received a letter asking them to participate in an internet-based survey. The survey asked the leaseholders to:

- Identify their business type within a pre-identified group of categories
- Estimate the number of full-time and part-time positions held in an average month in 2017 by direct and contract employees
- Estimate the amount spent on direct and contract employee salaries in 2017
- Estimate their capital and operating expenditures, including the in-state portion, in 2017

Many AIAS leaseholders operate at both ANC and FAI. The study team distributed the estimated employment and expenditures of AIAS leaseholders using a proportion of flight activity at the airports. Because ANC and FAI are the two largest airports in the state, most air carriers and ground service companies have business operations at both airports. To estimate the contribution at each airport, the study team compared the number of enplanements at each airport. Of the enplanements at ANC and FAI,

about 17.5 percent of enplanements are attributed to FAI. The study team divided the estimated employment and expenditures using the same proportion, with FAI contributing 17.5 percent and ANC contributing 82.5 percent.

### Airport Manager Survey and Interviews

The team sent an email inviting the airport managers at ANC, FAI, and LHD to participate in an online survey (see Appendix B for survey instrument). The survey asked each manager for four pieces of information:

- The number of full-time and part-time positions in an average month in 2017
- The total amount spent on maintenance and operations in 2017
- The percentage of maintenance and operations expenditures that were spent in-state
- The total amount spent on capital expenditures in 2017

The survey also asked qualitative questions about the role of the airport in the community and state, as well as questions about AIAS-specific topics.

Following the survey effort, the team interviewed the ANC and LHD airport managers by phone to ask clarifying questions and collect additional information. The team asked AIAS managers to provide additional information on leaseholders at the airport to supplement the loss of some data resources and the low response rate in the leaseholder survey. The team also asked AIAS managers some open-ended questions about the future of the airport system to help tell the story of international airports in Alaska.

### Phone Survey

An Alaska firm conducted a phone survey of 786 Alaska residents about their travel patterns in the last 12 months. Three-quarters of respondents (591) reported flying one or more times in the last 12 months. The sample frame included residents in 28 communities throughout the state, which were identified using the respondent's self-reported ZIP code,

including 323 from Anchorage and 106 from Fairbanks. The survey instrument is included in Appendix C.

## Input-Output Analysis

The economic impacts of the aviation industry to the state economy were quantified using input-output (I-O) analysis. I-O analysis is an economic tool used to measure the effects or impacts of an economic activity and is typically used to evaluate the benefits of a project, an entity, or an industry to the local, regional, and state economy. The analysis is based on a model of the inter-industry transactions within a community, a region, or a state. The I-O model is a matrix that tracks the dollar flow between the industries within a specified economic region of interest. The model can measure how many times a dollar is re-spent in, or “ripples” through, a community (or a larger economic region) before it leaks out.

The I-O model yields multipliers that are used to calculate the indirect and induced effects on jobs, income, and business sales/output generated per dollar of spending on various types of goods

and services in the study area. To evaluate the economic effects to the state or a particular region, only the “local” (i.e., within the state or within the region) expenditures are used in the model; the rest are considered leakages. More leakages mean smaller multipliers; and the larger the local expenditures, the greater the multiplier effects. The multipliers for any given industry in any given location are unique, based on industry composition and geographic area.

IMPLAN™ software was used to develop the I-O model for the Alaska economy. IMPLAN is a widely used software package used for economic impact assessments, and Northern Economics has used the software for decades in Alaska. IMPLAN uses specific data on what inputs are needed to produce the goods or services for over 500 industries. IMPLAN also has borough-specific data on what industries are available locally from which to purchase those inputs. The study applied the most recent IMPLAN data (2017 data) on multipliers for all the economic sectors in the Alaska I-O model. Figure 9 illustrates conceptually how the total economic impacts or benefits are determined.

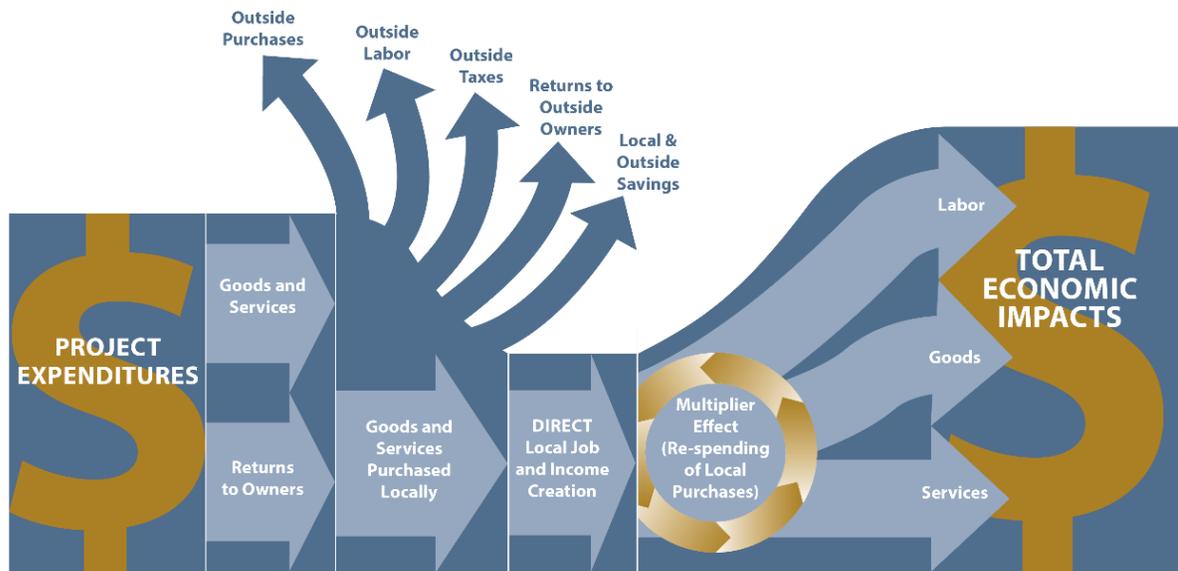


Figure 9. Framework for Evaluating the Total Economic Effects of Local Spending

Source: Northern Economics, Inc. 2015

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# Appendices

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# Appendix A:

## DOT&PF Leaseholder Survey Instrument

Introduction

Welcome to the 2018 Alaska Aviation System Plan Leaseholder Survey!

The Alaska Department of Transportation and Public Facilities (DOT&PF) and a consultant team lead by DOWL are updating the economic contribution study for the Alaska Aviation System Plan. The updated study will provide a quantitative estimate of the state's public and private airports' combined contributions to Alaska's economy. In order to generate this estimate, Northern Economics, Inc. of Anchorage is conducting this web survey of businesses and government agencies with leases located at the state's DOT&PF-operated airports. The survey should take approximately 10-20 minutes to complete, depending on your lease locations and how much you have to say in response to our questions. The answers to these questions will allow the consultant team to estimate the number of direct and indirect jobs attributable to businesses located at Alaska's airports.

All responses will be confidential and aggregated together. We will not share individual responses and will summarize or combine survey responses as needed to ensure confidentiality.

You'll be able to take the survey for multiple leases operations within the statewide rural aviation system as a group. Any leases within the Alaska International Airport System (AIAS) will be reported separately. Please note that AIAS includes Ted Stevens Anchorage International Airport, Fairbanks International Airport, and Lake Hood Seaplane Base.

We have received some requests to provide information from the last AASP economic contribution survey, conducted 2007-2008. If you completed that survey and think you would benefit from having access to the information you provided last time, please contact Northern Economics to see if that information is available.

Thank you in advance for participating in the survey. We greatly appreciate your efforts on behalf of this project.

If you have questions or comments about the survey, please contact Mike Fisher at Northern Economics (907-274-5600). Please complete your survey by Friday, June 15, 2018.

\* 1. Please enter the Survey ID code contained in your invitation letter. (The code is located approximately half-way down the page and is a four or five digit number. e.g., 56789)

SurveyID Code

\* 2. Please enter the name of your business or government agency as it appears on your ADOT&PF lease. If you are unsure about how it appears on your lease, please enter the name your business or agency uses in its daily course of business (e.g., Northern Economics, Inc.)

3. Do you have a lease at a non-AIAS airport?

Yes

No

Non-AIAS Activity: About Your Business, Organization, or Government Agency

In the following questions, please tell us about which operation(s) you are reporting for in this survey and what category best describes your lease operations. At this point, we are interested in your operations at non-AIAS airports. We'll ask you about AIAS airports later.

4. Please tell us the name of the airport (or its code) where this lease is located. If you have leases or operations at more than one non-AIAS airport, please enter "Statewide".

5. Please select the category that best describes the primary business type of your lease(s).

- |  |  |
|--|--|
| <input type="radio"/> Federal Government Agency                      | <input type="radio"/> Passenger Concession: Rental Car |
| <input type="radio"/> State Government Agency                        | <input type="radio"/> Passenger Concession: Restaurant |
| <input type="radio"/> Aircraft Services (e.g., fueling, maintenance) | <input type="radio"/> Passenger Concession: Retail     |
| <input type="radio"/> Airline, Passenger                             | <input type="radio"/> Passenger Concession: Other      |
| <input type="radio"/> Airline, Cargo or Freight                      | <input type="radio"/> Other Not Specified              |
| <input type="radio"/> Passenger Concession: Non-Air Tour Operator    |  |

Non-AIAS Activity: Direct Employment

In the following questions, please describe the average monthly number of direct-employment positions that you employed in 2017 at non-AIAS locations.

Please do not include contract positions or employees. They are covered in the next section of the survey.

6. In 2017, what was the average monthly number of persons you employed directly in full-time positions in your business at this airport (or airports)? If it is a fractional amount, please round your answer and add a comment in the appropriate space below. If you are reporting for multiple leases, please enter the total for all of your leases at non-AIAS locations.

Average Monthly Full-Time Positions in 2017

7. In 2017, what was the average monthly number of persons you employed directly in part-time or seasonal positions in your business at this airport (or airports)? Please enter this as a monthly average, so if it is seasonal work for 1/3 of the year, each person would contribute an average of 1/3 position. If it is a fractional amount, please round your answer and add a comment in the appropriate space below. If you are reporting for multiple leases, please enter the total for all of your leases at non-AIAS locations.

Average Monthly Part-Time or Seasonal Positions in 2017

8. If you need to provide additional information about your answers to the two preceding questions, please do so here.

Non-AIAS Activity: Contract Hires

In the following questions, please describe the average monthly number of persons hired by you at your on-airport operation in contract positions in 2017. Contractors would be persons directly employed by another firm but working in your on-airport lease operations through a contract arrangement.

Please do not include individuals you have already reported under the direct hire section of the survey. Also be sure to only include information for non-AIAS locations.

9. In 2017, what was the average monthly number of contractors you employed in full-time positions in your business at this airport (or airports)? If it is a fractional amount, please round your answer and add a comment in the appropriate space below. If you are reporting for multiple leases, please enter the total for all of your leases at non-AIAS locations.

Average Monthly Full-Time Contract Employees in 2017

10. In 2017, what was the average monthly number of contractors you employed in part-time or seasonal positions in your business at this airport (or airports)? Please enter this as a monthly average, so if it is seasonal work for 1/3 of the year, each person would contribute an average of 1/3 position. If it is a fractional amount, please round your answer and add a comment in the appropriate space below. If you are reporting for multiple leases, please enter the total for all of your leases at non-AIAS locations.

Average Monthly Part-Time Contract Positions in 2017

11. If you need to provide additional information about your answers to the two preceding questions, please do so here.

Non-AIAS Activity: Gross Expenditures and Sales

In the following questions please tell us about your expenditures for the lease operations you are reporting on in this survey. At this point, only include information for non-AIAS locations.

PLEASE NOTE: THE SURVEY FORM DOES NOT ACCEPT COMMAS, \$ signs, OR % symbols. Enter whole numbers only.

12. Approximately how much money did your business at this airport (or airports) spend in each of the following categories in 2017? If you are reporting for multiple leases or airports, please enter the total for all of your leases at non-AIAS locations.

Please enter a positive number without a comma, decimal, or \$ sign.

Direct Employment Salaries and Benefits

Contract Employment Salaries and Benefits

Capital Project Expenditures

All Other Operating Expenditures

13. Approximately what percentage of your expenditures in the following categories was purchased from vendors located in the State of Alaska?

Please enter a positive number without the % sign.

Capital Project Expenditures

All Other Operating Expenditures

14. Approximately how much did your business or businesses generate in gross sales in 2017? Please exclude business activity at AIAS locations.

Please enter a positive number without a decimal, comma, or \$ sign.

2017 Gross Sales

AIAS Locations

15. Do you have a lease at an AIAS location? This would include Anchorage International, Fairbanks International, and Lake Hood.

Yes

No

AIAS Activity: About Your Business, Organization, or Government Agency

In the following questions, please tell us about which operation(s) you are reporting for in this survey and what category best describes your lease operations. At this point, we are interested in your operations at AIAS airports.

16. Please select the AIAS location of this lease. If you have leases or operations at more than one AIAS airport, please select the appropriate combination from the list.

	AIAS Airport Name
Select the airport where the business is located	<input type="text"/>

17. Please select the category that best describes the primary business type of your lease(s).

- |  |  |
|--|--|
| <input type="radio"/> Federal Government Agency                      | <input type="radio"/> Passenger Concession: Rental Car |
| <input type="radio"/> State Government Agency                        | <input type="radio"/> Passenger Concession: Restaurant |
| <input type="radio"/> Aircraft Services (e.g., fueling, maintenance) | <input type="radio"/> Passenger Concession: Retail     |
| <input type="radio"/> Airline, Passenger                             | <input type="radio"/> Passenger Concession: Other      |
| <input type="radio"/> Airline, Cargo or Freight                      | <input type="radio"/> Other Not Specified              |
| <input type="radio"/> Passenger Concession: Non-Air Tour Operator    |  |

AIAS Activity: Direct Employment

In the following questions, please describe the average monthly number of direct-employment positions that you employed in 2017 at AIAS locations. If you did not operate at a specific location or did not have employees of a particular type, please enter 0 for those questions.

Please do not include contract positions or employees. They are covered in the next section of the survey.

18. In 2017, what was the average monthly number of persons you employed directly in full-time and part-time positions in your business at Anchorage International Airport?

Average Monthly Full-Time Positions in 2017

Average Monthly Part-Time Positions in 2017

19. In 2017, what was the average monthly number of persons you employed directly in full-time and part-time positions in your business at Fairbanks International Airport?

Average Monthly Full-Time Positions in 2017

Average Monthly Part-Time Positions in 2017

20. In 2017, what was the average monthly number of persons you employed directly in full-time and part-time positions in your business at Lake Hood?

Average Monthly Full-Time Positions in 2017

Average Monthly Part-Time Positions in 2017

AIAS Activity: Contract Hires

In the following questions, please describe the average monthly number of persons hired by you at your on-airport operation in contract positions in 2017. Contractors would be persons directly employed by another firm but working in your on-airport lease operations through a contract arrangement. Please include information only for individuals working at AIAS locations. If you did not operate at a specific location or did not have contractors of a particular type, please enter 0 for those questions.

Please do not include individuals you have already reported under the direct hire section of the survey.

21. In 2017, what was the average monthly number of contractors you employed in full-time and part-time positions in your business at [Anchorage International Airport](#)?

Average Monthly Full-Time Contract Employees in 2017

Average Monthly Part-Time Contract Employees in 2017

22. In 2017, what was the average monthly number of contractors you employed in full-time and part-time positions in your business at [Fairbanks International Airport](#)?

Average Monthly Full-Time Contract Employees in 2017

Average Monthly Part-Time Contract Employees in 2017

23. In 2017, what was the average monthly number of contractors you employed in full-time and part-time positions in your business at [Lake Hood](#)?

Average Monthly Full-Time Contract Employees in 2017

Average Monthly Part-Time Contract Employees in 2017

AIAS Activity: Gross Expenditures and Sales

In the following questions please tell us about your expenditures for the lease operations you are reporting on in this survey. At this point, only include information for AIAS locations.

PLEASE NOTE: THE SURVEY FORM DOES NOT ACCEPT COMMAS, \$ signs, OR % symbols. Enter whole numbers only.

24. Approximately how much money did your business at Anchorage International Airport spend in each of the following categories in 2017? If you are reporting for multiple leases or airports, please enter the total for all of your leases at AIAS locations.

Please enter a positive number without a comma, decimal, or \$ sign.

Direct Employment Salaries and Benefits

Contract Employment Salaries and Benefits

Capital Project Expenditures

All Other Operating Expenditures

25. Approximately how much money did your business at Fairbanks International Airport spend in each of the following categories in 2017? If you are reporting for multiple leases or airports, please enter the total for all of your leases at AIAS locations.

Please enter a positive number without a comma, decimal, or \$ sign.

Direct Employment Salaries and Benefits

Contract Employment Salaries and Benefits

Capital Project Expenditures

All Other Operating Expenditures

26. Approximately how much money did your business at Lake Hood spend in each of the following categories in 2017? If you are reporting for multiple leases or airports, please enter the total for all of your leases at AIAS locations.

Please enter a positive number without a comma, decimal, or \$ sign.

Direct Employment Salaries and Benefits

Contract Employment Salaries and Benefits

Capital Project Expenditures

All Other Operating Expenditures

27. Approximately what percentage of your expenditures in the following categories, at all AIAS locations, was purchased from vendors located in the State of Alaska?

Please enter a positive number without the % sign.

Capital Project Expenditures

All Other Operating Expenditures

28. Approximately how much did this business or these businesses generate in gross sales in 2017? Please include all AIAS locations.

Please enter a positive number without a decimal, comma, or \$ sign.

2017 Gross Sales

Future Challenges

Please note that neither your name nor business name will be linked to your responses. However, if you would like us to follow up with you about a response, you can add a note (e.g., CONTACT ME) at the beginning of your response.

29. What do you see as the greatest challenges in the coming years for your business and for aviation-related businesses in Alaska? (e.g. finding quality labor, business conditions, changing fuel or input prices, etc.)

30. Compared to 5 years ago, how has your business changed? What changes have you seen in revenues, expenses, employees, contract works, and your business environment?

31. Looking 5 years into the future, how do you anticipate your business will change? Again, we're interested in your expectations about revenues, expenses, employees, contract works, and your business environment.

32. What trends do you see affecting your business, including but not limited to changes in the fleet, technology, and/or traveler preferences.

33. What are the primary drivers of your business's activity and success? (The state's economy? Your local economy? The Bypass Mail Program? Essential Air Service? Other state or federal programs?) Please describe the primary drivers you think affect your business.

Your Business's Role in Specific Sectors

For this study update, we are using case studies to illustrate the role that aviation plays in specific sectors and types of activity. Please review the topics shown below and share, where applicable, something interesting about your business's role in it.

Please note that neither your name nor business name will be linked to your responses. However, if you would like us to follow up with you about a response, you can add a note (e.g., CONTACT ME) at the beginning of your response.

34. Medical and Healthcare

35. Tourism and Remote Access (including recreation, lodges, hunting/fishing, birding, etc.)

36. Cargo

37. Other

Thank You

This concludes the survey.

We extend our *sincere thanks* for your time spent completing this survey.

All of the individual information you provided will be held in confidence by Northern Economics and will not be shared with anyone. We will aggregate the data across all survey respondents so that no single respondent is identifiable, and modify open-ended responses as needed so that they are not identifiable.

Again, if you have any questions or concerns about this survey, please contact Mike Fisher at Northern Economics (907-274-5600).

# Appendix B:

## Public Airport Survey

Introduction

Welcome to the 2018 Alaska Aviation System Plan Public Airport Survey!

The Alaska Department of Transportation and Public Facilities, working with a consultant team led by DOWL, is updating the Alaska Aviation System Plan. A key component of the plan is a quantitative estimate of the state's public and private airports' combined contributions to Alaska's economy. Northern Economics, Inc. of Anchorage is conducting this web survey of public airports to gather information about the activities and employment taking place at each.

In addition to collecting quantitative information, we also have several questions that are more qualitative in nature. We thank you in advance for your thoughtful responses and appreciate your efforts on behalf of this study.

We know that some airport managers oversee multiple airports. If you manage multiple airports, please complete this survey for each airport that you manage.

Please complete your survey by Friday, June 15, 2018. If you have questions or comments about the survey, please contact Mike Fisher at Northern Economics (907-274-5600).

\* 1. Please enter the Survey ID code contained in your invitation e-mail. (The code is a four or five digit number. e.g., 56789)

SurveyID Code

\* 2. Please enter your name.

3. Please select the name of the airport for which you are providing information. **If your airport is not listed, please use the next question to provide a response.** (If you manage multiple airports, please repeat this survey for each airport you manage.)

4. If your airport is not in the list above, please enter it here.

Airport Name

About Your Airport

We would like to ask you about employment, spending, and trends at your airport.

If you don't have information on employment and spending, please use the appropriate space below to let us know so we can collect it from someone else or another source.

5. In an average month in FY 2017, how many persons employed, or contracted, by the State of Alaska worked full-time, part-time, or seasonal jobs at this facility?

NOTE: THE SURVEY FORM DOES NOT ACCEPT COMMAS, \$ signs, OR % symbols. Please enter whole numbers only.

Full-time Employees in FY 2017

Part-time Employees in FY 2017

Seasonal Employees in FY 2017

6. Please use the space below to provide any additional information about employment at this airport that you think is relevant.

7. How much did the State of Alaska spend on maintenance and operations and on capital improvements at this airport in FY 2017?

NOTE: THE SURVEY FORM DOES NOT ACCEPT COMMAS, \$ signs, OR % symbols. Please enter whole numbers only.

Maintenance and Operations Spending

Capital Improvements Spending

8. Please use the space below to provide any additional information about spending at this airport that you think is relevant.

9. Roughly what percentage of the maintenance and operations spending, not including payroll and benefits, was spent in-state?

NOTE: THE SURVEY FORM DOES NOT ACCEPT COMMAS, \$ signs, OR % symbols. Please enter whole numbers only.

In-state percentage of M&O spending

10. How has your airport changed over the last 5 years? Please describe the changes you have seen. We're interested in changes you have observed such as in the number of operations, number of passengers, amount of cargo (inbound and/or outbound), number of air carriers serving the airport, number and types of leaseholders or businesses at the airport, number of employees, airport revenues, airport spending, etc.

11. What are the greatest challenges your airport faces today?

12. What are the greatest opportunities your airport faces today?

13. How will your airport look in five years? What challenges, opportunities, changes, and trends do you see? What are your airport's greatest needs for the future?

14. What impact has annual AIP funding had on your airport? What are some of the projects that have affected your airport?

15. We have some additional questions for you if you are at an AIAS airport. If you are at a non-AIAS airport, check No below and click Next to proceed to the next section.

- No, I am not at an AIAS airport.
- Yes, I am entering information for an AIAS airport (Anchorage, Lake Hood, or Fairbanks).

Additional Questions for AIAS Airports

This update of the Alaska Aviation System Plan's report, "The Economic Contribution of the Aviation Industry to Alaska's Economy," features AIAS airports, which were not included previously. Please respond to these additional questions to the extent you are able. The consulting team will work to answer these questions, but your initial thoughts will contribute to the process.

16. What is the importance of the AIAS to the economy of the State of Alaska?

17. What is the importance of your airport to the economy of your respective community?

18. What is the impact on jobs from additional flights and additional revenue generated at your airport?

19. What external influences are important to your airport's economic impact?

20. What is the importance of the AIAS to the U.S. economy?

21. How does ETOPS (Extended-range Twin-engine Operational Performance Standards) at Cold Bay and Ketchikan impact AIAS?

The Role of Your Airport in its Community

Next, we'd like to ask you about your operations and the role of your airport in the community.

22. How would you describe the role of your airport in its community? How does it affect daily life, health and safety, movement of goods and mail, and residents' and visitors' travel to and from the community?

23. What role does your airport serve in the economy and economic development of its community? Are there any businesses that are dependent on what your airport offers? Are there opportunities that your airport generates for local or regional businesses?

24. What is your airport's role in its region? Does it serve as a hub or, if it is a satellite, what hub serves it? Please consider passengers, cargo, and mail activities in your response.

25. What is the role of and impact to your airport of bypass mail and essential air service? If you have specific numbers to share for FY 2017, please do so.

26. Do you have any other thoughts you would like to share about the economic contribution of your airport individually, or of airports in Alaska in general?

Thank You

That concludes the survey.

Thank you very much for taking the time to provide this information. Your input will be valuable for the Alaska Aviation System Plan.



# Appendix C:

## Resident Phone Survey



**STATEWIDE PUBLIC OPINION SURVEY**

Hello, my name is \_\_\_\_\_ and I'm calling for Alaska Survey Research, an Alaska public opinion research firm. We are conducting a public opinion survey today in communities all over Alaska.

IF CELLPHONE RESPONDENT... We'd like to get your input to the survey as a cellphone respondent. We've deliberately called you on the weekend so that hopefully we're not using up your minutes, and we'd like to ask if you can safely respond to the survey where you are right now.

IF LANDLINE RESPONDENT... Is this a residential telephone? IF "YES", CONTINUE... If they are available, I'd like to speak with the youngest male aged 18 or older in your household. (IF AVAILABLE, SWITCH AND REPEAT INTRO. IF NOT AVAILABLE...) How about the youngest female aged 18 or older? (IF AVAILABLE, SWITCH AND REPEAT INTRO. IF NOT AVAILABLE, CONTINUE WITH RESPONDENT.)

All phone numbers used for this survey were randomly generated. We don't know your name, but your opinions are important to us, and we'd appreciate your participation if that's OK with you. Of course, your responses will be completely confidential.

S1. What is the zipcode where you live?

ZIPCODE 99-xxx \_\_\_\_\_ zip-  
DON'T KNOW... (PROBE FOR LEANING).998  
REFUSED.....999

IF ZIP IS REJECTED, SAY "XXXXX is not a valid Alaska zip code. Are you sure that's what your zip is?" ENGAGE WITH RESPONDENT TO DETERMINE CORRECT ZIP

S2. You live in \_\_\_\_\_ (INSERT ZIP COMMUNITY), is that correct?

IF YES, CONTINUE...

IF NO, "XXXXX is the zip code for \_\_\_\_\_ (INSERT ZIP COMMUNITY). Are you sure that's what your zip is?" ENGAGE WITH RESPONDENT TO DETERMINE CORRECT ZIP

1A. This survey concerns air travel you've done in the last 12 months. First of all, I'd like you to think back over the last 12 months and estimate how many total trips you took by air, either within Alaska, or originating in Alaska and going Outside. Please count round trip travel as one trip. How many total trips would you say you made the last 12 months?

Total trips.....20-  
 ZERO.....SKIP TO 4A  
 DON'T KNOW.....TERMINATE  
 REFUSED.....TERMINATE

1B. (IF ONE OR MORE) OK, now let's break these (INSERT TOTAL) trips down into five categories. The categories are work related trips, vacation, family or personal business trips, school or church trips, trips for medical purposes and trips for other reasons. OK, let's consider \_\_\_\_\_ (INSERT CATEGORY) trips first.

How many of your (INSERT TOTAL) trips were primarily(INSERT CATEGORY)?

Trips in category.....20-

(IF ONE OR MORE) And how many total passengers in your household travelled on these (INSERT CATEGORY) trips combined?

Travelers in category.....20-

Work related trips.....20-  
 Family, personal business and vacation trips.....21-  
 School or Church trips.....22-  
 Trips for medical purposes.....24-  
 Trips for other reasons.....23-

1C. (IF ONE OR MORE) How much would you estimate you spent on air travel in the last 12 months for yourself individually?

AMOUNT \_\_\_\_\_ oe-  
 DON'T KNOW (PROBE!).....98  
 REFUSED.....99

2A. Which Alaska airport did you use most in the last 12 months?

ANCHORAGE.....01  
 FAIRBANKS.....02  
 JUNEAU.....03  
 BETHEL.....04  
 KETCHIKAN.....05  
 KENAI.....06  
 KODIAK.....07  
 SITKA.....08  
 OTHER (SPECIFY) \_\_\_\_\_  
 DON'T KNOW.....98 103-

REFUSED.....99

2B. On a scale of A, B, C, D or F, what grade would you give (INSERT AIRPORT) Airport on the following dimensions?

4	3	2	1	0	8
A	B	C	D	F	DON'T KNOW

Ease of travel through the airport.....29-

Transportation to and from the airport.....30-

Concessions and amenities in the airport.....31-

Availability of parking at the airport.....32-

Overall airport grade.....23-

2C. What improvement would you most like to see to (INSERT AIRPORT) Airport that would most improve your experience of using the airport?

IMPROVEMENT \_\_\_\_\_ oe-

DON'T KNOW (PROBE!) .....98

REFUSED.....99

3A. How much do you think you will travel by air in the next 12 months and into the future? Do you think you will probably travel by air more, travel less by air, or do you think you will travel by air just the same?

TRAVEL MORE.....1

TRAVEL LESS.....2

TRAVEL THE SAME.....3

DON'T KNOW.....8

REFUSED.....9

103-

3B. (IF LESS, THEN ASK...) If you travel less by air in the next 12 months, do you think you will travel more using other modes of transportation, or do you think you will travel less altogether?

MORE WITH OTHER METHODS.....1

LESS ALTOGETHER.....2

DON'T KNOW.....8

REFUSED.....9

103-

3C. (IF MORE WITH OTHER METHODS, THEN ASK...) Which other methods of transportation do you think you'll travel more using in the next 12 months? (CHECK ALL THAT APPLY)

ROAD.....1

RAIL.....2

MARINE HIGHWAY/FERRY.....3

BOAT.....4

SNOWMACHINE.....5

OTHER (SPECIFY) \_\_\_\_\_

DON'T KNOW.....8

REFUSED.....9

103-

The following questions are for statistical purposes only.

- 4A. (IF LANDLINE, THEN ASK...) Do you use a cellphone?
- |                                       |   |      |
|---------------------------------------|---|------|
| YES.....                              | 1 |      |
| NO.....                               | 2 |      |
| DON'T KNOW... (PROBE FOR LEANING) ... |   |      |
| REFUSED.....                          | 8 | 105- |
|                                       | 9 |      |
- 
- 4B. (IF CELLPHONE, THEN ASK...) Do you have a landline telephone in your home?
- |                                       |   |      |
|---------------------------------------|---|------|
| YES.....                              | 1 |      |
| NO.....                               | 2 |      |
| DON'T KNOW... (PROBE FOR LEANING) ... |   |      |
| REFUSED.....                          | 8 | 106- |
|                                       | 9 |      |
- 
- 4C. (IF YES TO EITHER 3A OR 3B, THEN ASK...) On which line do you conduct most of your day-to-day telephone communication, your landline or your cellphone?
- |                                       |   |      |
|---------------------------------------|---|------|
| LANDLINE.....                         | 1 |      |
| CELLPHONE.....                        | 2 |      |
| DON'T KNOW... (PROBE FOR LEANING) ... |   |      |
| REFUSED.....                          | 8 | 107- |
|                                       | 9 |      |
- 
5. In what year were you born?
- |                 |    |      |
|-----------------|----|------|
| YEAR BORN _____ |    | 124- |
| REFUSED.....    | 99 |      |
- 
6. Are you married or single?
- |              |   |      |
|--------------|---|------|
| MARRIED..... | 1 |      |
| SINGLE.....  | 2 |      |
| REFUSED..... |   |      |
|              | 9 | 127- |
- 
7. How many total people live in your household, including both adults and children?
- |               |   |      |
|---------------|---|------|
| NUMBER _____  |   | 112- |
| NOT SURE..... |   |      |
| REFUSED.....  | 8 |      |
|               | 9 |      |

8. Which one of the following best describes your race?

- White.....1
  - Black/African American.....2
  - Asian.....3
  - Native Hawaiian or other Pacific Islander.....4
  - American Indian or Alaska Native.....5
  - Combination of two or more races.....6
  - Some other race.....7
  
  - DON'T KNOW.....8
  - REFUSED.....9
- 129-

9. GENDER...

- MALE.....1
  - FEMALE.....2
  
  - REFUSED.....9
- 131-

That completes the survey. I have a telephone number for Alaska Survey Research that you can call with any comments, compliments or complaints. Would you like the number?

Thank you very much for your help. Goodbye.

# Appendix C:

## Resident Survey Airport Improvement Comments

Concessions and amenities in the airport:

		SATISFACTION - CONCESSIONS AND AMENITIES:	
		Count	%
A		213	35.9%
B		222	37.4%
C		86	14.6%
D		30	5.0%
F		21	3.5%
Not sure		21	3.6%

Mean = 3.008

2C. What improvement would you most like to see to (INSERT AIRPORT) Airport that would most improve your experience of using the airport?

**ANCHORAGE**

Parking - 83

- Parking x40
- Parking availability/Available parking/More parking/More spaces x20
- Better parking/Improved parking x7
- Hard to find parking x2
- Better parking for long term/Long term parking x2
- Another parking level
- Congested parking
- Fix parking
- Better signs for parking
- More parking areas
- Parking issues
- Parking situation
- Parking, and overnight option, improve the area for sleeping
- Closer parking for luggage
- Nicer to have closer long term parking
- Probably ease of parking
- Path from parking garage to check-in less messed up

Food - 65

- More/better food options/choices x15
- More restaurants/restaurant options/food places/eating places x10
- Better food/Improve food x8
- More/better food variety x7
- Better restaurants/food places x6
- Dining options/Better dining options x3
- Better restaurants & better to eat at
- More restaurants and bars
- Have a food court
- Higher quality eating businesses
- Variety of foods and drinks
- Healthier food
- Different variety of coffee shops and restaurants
- Eating establishments in the main concourse of Alaska Airlines
- More options for drinks available

More options for food and drinks  
More complete restaurants  
If they were more places to eat more restaurants  
Places to eat and options  
More diversity in terms of restaurants and things inside of the airport  
Maybe more beer and whiskey available to us  
More snacks at the airport

Concessions/Amenities - 32

Concessions/Better concessions x16  
Amenities/Better amenities x4  
More stores x3  
More concessions x2  
Have more concession stands  
Have better variety at concessions  
More amenities  
More choices on amenities  
Quality concessions  
Nicer amenities  
More opportunities

Crowds/Traffic/Getting in and out - 20

Traffic/Car traffic x2  
Crowd control/Regulation of crowds x2  
Too many people  
Too many people at arrivals  
Too many people causing traffic  
Ease of drop off and pick ups  
Easier access for drop offs and pick ups  
Bringing passengers into and out of facility  
Faster load out time  
The pick up and drop off area needs some work  
Line of cars, solve the long line of cars  
Loading and unloading zones need to be bigger  
If all the flights didn't leave at the same time  
Not enough flights leaving Anchorage, Anchorage is a bottleneck  
Pick up bags to direct the traffic  
The traffic when you go to pick somebody up  
The entrance  
The arrival pick up curve needs to be monitored better

Prices - 17

Parking rates/Lower parking rates/prices x4  
Affordable parking x3  
Cheaper prices at their stores at the airport  
Cheaper shops to shop in while you're waiting  
Decrease price points for amenities  
Make prices more affordable  
The biggest thing is how expensive it is  
Reasonable prices at the gift shop  
Price of the food needs to go down  
Lower prices on the food available in the airport  
Affordable food  
The cost of parking is ridiculous

Security/TSA - 14

Faster security lines/Faster security/Faster TSA x4  
Access to screening  
The security were quite rude, they treated me like cattle  
Shorter security wait times  
Get rid of the TSA and get back to private air screening  
Get rid of TSA  
Improve security  
Probably TSA  
More efficiency with security  
Probably some better way to checked off for security  
On the federal side, they need to stop hiring children to work TSA

Lounge/Seating - 10

Better lounges x3  
Better seating for long term layovers  
Comfortable seating, lounge chairs  
Make lounge area bigger  
Lounge area  
More quiet areas  
More seating for lounge  
Seating arrangement

Transportation - 8

Getting to the airport, public transportation, it is fairly expensive  
Open the rail to locals  
More public transport  
More transportation options  
Open train transportation from my house to the airport they need to open that up, we paid for it  
Train going to and from airport from downtown  
Transportation  
Some sort of good transport to the airport from the Valley and back

Hours - 8

Have more food available at late hours  
If they were more things open  
Increasing the number of hours places are open to eat  
More services open later at night  
Food open later  
More flights at better hours  
More flights during the day  
Flight times

Outside security - 7

Services past check in  
Services past gate  
Instate flights outside of security  
To see a few more restaurants or better food places before the security gate  
More concessions on the outside of security  
I guess more restaurants outside the gate, before you go in, so you can have dinner with somebody before you go to the gate  
Have more concessions beyond gates

Getting around - 6

Don't have the flat escalators  
Shorter distances to terminals  
We got one big wing of gates and it's just a long walk from one end to the other we need continuous escalators  
Less walking  
Think it would be putting in more of the mechanical walkways  
Less distance from gates that are far away from TSA

Space - 5

Wider terminals x2  
Make it bigger  
More space in terminals  
Widen check points

Airlines/Planes/Flights - 4

747 to carry passengers  
Airlines and everything needs to be cheaper  
More airlines  
More staff for the airlines

Time - 4

I hate the waiting, it needs to get better  
Make more lanes for faster checkout  
Faster check-in  
Shorter wait

Miscellaneous - 31

Beds  
Cleaner  
Fire all police department they all are dipshits  
Free luggage cart  
Frozen yogurt  
Fitness lounge place to work out  
Designated bag attendant  
I guess a hotel I can stay or a place to rest  
I don't travel enough anymore I don't really think of it that way they do a wonderful job  
Having a wheel chair accessible area when I first get to the airport  
Less cops  
Open back up Yogurtland  
They need to have more use of carts  
More kiosks for checking in  
Stuff for young people  
They need to combine the 2 terminals  
Overall improve area  
Less changing of dates  
Make sure the luggage goes with the people  
More charging ports at the gates  
More gates, vendors  
Put a dispensary in  
More interaction movement  
The ice on the entryway on the way out in the winter

Better beautification  
Nicer people when you exit the garage  
More check-in lanes or the use of them because they have a few of them  
When you go to the airport and they have CNN on TV it's annoying  
Rental service  
Options for travelers inside the plane  
They should not have everybody swap at the same time getting on to a plane  
  
Not sure/Can't think of anything/Nothing/None/No complaints/Satisfied/Great airport x147

**FAIRBANKS**

Food - 16

More restaurants x2  
Food x2  
Better food options x2  
Better food service  
Spread out food stands  
The food stands  
More choices of food  
Open more food places  
On the lower level more places to eat  
Another restaurant and bar area  
Better restaurants  
Having a decent restaurant there so while you're waiting for flights you can have some decent food to eat  
I would like to see the bar open late at night

Parking - 9

Better parking x4  
Parking x3  
More parking-long term  
Parking next to luggage

Prices - 5

Cheaper drinks  
Cheaper food  
Lower parking fees  
Parking fees too high  
Pricing

Concessions - 4

Concessions/More concessions/Open more concessions x3  
More options for concessions

Congestion - 2

Drop off and pick up is congested  
Probably less congestion at the drop off and pick up point

Security - 2

Open more TSA  
Security

Airlines - 2

More airlines  
More airlines in and out of the airport

Miscellaneous - 9

Bigger terminals  
Having more shuttles  
More baggage handlers  
Improve service at checkout  
Later hours for traveling out of town  
Less of required time to wait  
Massage chairs  
More things to do while we wait  
Television

Not sure/None/Nothing/It's fine/No improvements needed/Satisfied x19