

Formerly McDowell Group

TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT Economic Impact Study

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PREPARED FOR:

Anchorage Economic Development Corporation

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Summary of Key Findings

The Ted Stevens Anchorage International Airport (ANC) plays a critical role in Alaska's transportation network, connecting the state to the Lower 48 and hundreds of communities not accessible by road to Anchorage. Located just **9.5 hours from 90% of the industrialized world**, the airport is also part of a global supply chain bringing goods from international markets into the United States.

Connecting Alaska

In addition to serving Alaskans traveling throughout the state and bringing cargo to rural communities, ANC is a primary gateway to Alaska for visitors and to the North American market for international goods.



In 2021, 93,269 commercial aircraft landings took place at ANC, including 54,864 (59%) all-cargo aircraft and 38,405 (41%) all-passenger or passenger/cargo combination landings, a 5% increase in traffic over average annual traffic prior to the COVID-19 pandemic.

ANC was the **4**th **busiest cargo airport in the world** in 2021, with 3.7 million metric tons of cargo enplaned, deplaned, or transited through the airport. Cargo flown via ANC is shipped to 83 communities across Alaska, 42 destinations in the Lower 48, and 16 international countries. ANC is an important stop for cargo planes bringing goods from Asia to North America. In 2021, 51% of cargo flown from Asia to North America transited ANC, originating in Hong Kong, Seoul, Shanghai, and Taiwan, among many other Asian cities.

In 2021, 4.5 million passengers enplaned, deplaned, or transited ANC. About one-third of passengers departed to or arrived from other communities in Alaska. Two-thirds of passengers traveled elsewhere in the United States. Scheduled flights departing ANC link Alaska to 38 destinations, including 18 Alaska communities and 20 communities elsewhere in the U.S. The highest volume of departing passengers traveled to Seattle in 2021, followed by Fairbanks, Minneapolis, and Chicago.

Generating Economic Activity

ANC has significant economic impacts on the Anchorage economy in addition to its critical role in Alaska's air transportation and global supply chain infrastructure. About **285 businesses and agencies** operate at ANC, including cargo and passenger airlines, ground transportation, retail and dining opportunities, security, and many others.



ANC and other businesses on-site at the airport directly employed 10,820 people in 2021, with **\$876.6 million in earnings**. Cargo airlines, such as FedEx and UPS, and major passenger airlines, such as Alaska Airlines, employ the highest share of these workers, including Anchorage-based flight crews. Of badged employees at ANC, **90% live in Anchorage or the Mat-Su**.



\$114 Million Operating Revenue





Spending by businesses and agencies located at ANC supports additional economic activity in Anchorage. Accounting for all direct, indirect, and induced spending, those operating at ANC supported a **total of 19,070 jobs** and **\$1.2 billion in earnings** in the Anchorage economy in 2021, or one in every seven Anchorage jobs.

ANC is managed by the State of Alaska Department of Transportation and Public Facilities, and is part of the Alaska International Airport System, an enterprise of the State of Alaska that also includes the Fairbanks International Airport. With the exception of limited federal funding provided to meet Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) safety requirements, ANC operations are **self-funded** through revenue generated by the airports. In Fiscal Year (FY) 2021, ANC generated \$114 million in operating revenue.

Businesses that operate at ANC paid at least **\$4 million** in property tax to the Municipality of Anchorage in FY2021. Workers employed at ANC also contribute to Municipal revenue through residential property tax, paying an estimated **\$35 million** in FY2021.

ANC is an important part of Alaska's visitor industry infrastructure, **connecting nonresidents** to communities across the state and facilitating transportation of cross-gulf cruise passengers to and from Southcentral Alaska cruise ports such as Seward and Whittier. Visitors contribute to the Anchorage economy as they stay at local hotels, dine at restaurants, shop for souvenirs, and participate in experiences such as flightseeing. These visitors also contribute to the Municipality of Anchorage budget through car rental and lodging taxes.



ANC is a critical **transportation hub for Alaska's work force**. Every day, passengers travel through ANC on their way to work in Alaska's industries. For example, workforce travel includes seafood industry workers travelling to the Aleutians or Bristol Bay, oil and gas industry workers travelling to the North Slope, and visitor industry workers travelling to locations throughout Alaska.

Introduction and Methodology

The Anchorage Economic Development Corporation (AEDC) contracted with McKinley Research Group to conduct an economic impact analysis of the Ted Stevens Anchorage International Airport - hereafter referred to as ANC. The airport plays a critical role in Alaska's transportation network and is an important economic hub in Anchorage.

This analysis describes the impact of business, organizations, and agencies located at ANC, including air carriers, airport concessions and other leaseholders, air freight companies, airline support services, and government and civic organizations. This analysis includes the activity associated with ANC's North and South Terminals and runways. Impacts related to the Lake Hood Seaplane Base and Lake Hood Strip general aviation are assessed in a companion report.

Methodology

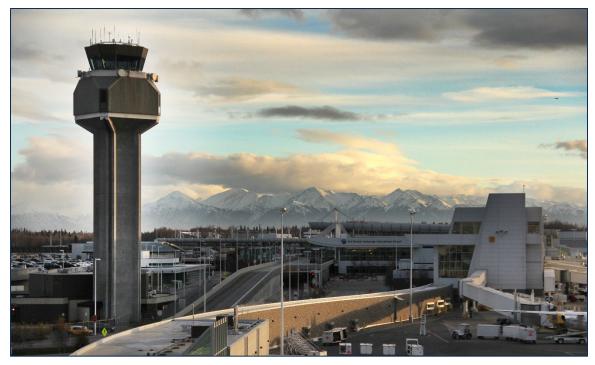
A variety of data sources were used to assess economic activity related to the airport. ANC provided airport employment, payroll, goods and services, and other budget data directly to McKinley Research Group. Data on airport tenants with an ongoing presence at ANC and the number of badged employees working at the airport were also provided.

The Alaska Department of Labor and Workforce Development (DOLWD) provided summary data on annual average employment at the airport for tenants/leaseholders whose Anchorage employees are based solely at ANC. For those tenants/leaseholders with employees located at ANC and other locations in Anchorage, businesses confidentially provided employment data directly to McKinley Research Group. ANC and the U.S. Bureau of Transportation Statistics (BTS) provided statistics related to passenger and cargo volume, and traffic between ANC and other airports. IMPLAN, an industry-standard input-output economic modeling tool, was used to assess the multiplier impacts of economic activity at ANC on the Anchorage economy.

Where possible, data in this report reflect transportation statistics, employment, and economic activity in calendar year 2021. The COVID-19 pandemic significantly impacted transportation services and demand in 2020 and 2021. While some economic impacts of the pandemic on passenger travel and cargo supply chains had improved in 2021, continued COVID variants, supply chain constraints, and other impacts are reflected in this analysis.

Overview of ANC

ANC plays a critical role in Alaska's transportation network, connecting the state to the Lower 48 and hundreds of communities not accessible by road to Anchorage. Located just 9.5 hours from 90% of the industrialized world, the airport is also part of a global supply chain bringing goods from international markets into the United States. As Alaska's busiest airport, ANC encompasses 4,837 acres, including three primary runways more than 10,500 feet long (the longest is 12,400 feet). The ANC property also includes the adjacent Lake Hood Seaplane Base and Lake Hood Strip general aviation airports connected to ANC by a taxiway.¹ The airport has two terminal buildings. The South Terminal serves passenger air carrier operations spread across three concourses, with restaurants, gift shops, and other services. The South Terminal is connected to a Rental Car Center and the Alaska Railroad Train Depot. The North Terminal also serves passengers and is undergoing extensive renovations.



Source: Ted Stevens Anchorage International Airport.

¹ See McKinley Research Group, *Lake Hood Seaplane Base Economic Impact Study*, 2022.

Tenants

About 285 businesses or agencies lease or sublease space at ANC. Businesses with a presence at the airport range from large operations (e.g., Federal Express) to small businesses (e.g., a popcorn concession). These tenants serve airport and airline operators and provide goods and services to passengers. Airport tenants include:

- Airport operations and support (about 75 companies offering passenger transportation services within the airport, fueling, in-flight food service, and aircraft cleaning)
- Car rental and parking (about 16 companies including those centrally located in the Rental Car Center)
- Federal government offices, including U.S. Transportation Security Administration (TSA), U.S. Postal Service, U.S. Customs and Border Protection (CBP), and the Federal Aviation Administration (FAA)
- Logistics and freight forwards (about 14 companies)
- Passenger and cargo airlines (about 45 large carriers) •
- Regional air carriers linking Anchorage to other Alaska locations via chartered and • scheduled services (more than 20 carriers)
- Retail stores and dining (at least 50 companies) ٠
- State government, including Alaska Department of Transportation and Public Facilities • (DOT&PF)
- Visitor services such as Visit Anchorage and the Alaska Railroad Corporation •

ANC Aviation Activity

ANC is a primary cargo and passenger gateway in Alaska. More than 93,000 commercial aircraft landings occurred at ANC in 2021, transporting 4.5 million passengers and 3.7 million metric tons of cargo.

Table 1. ANC Aviat	ion Activity Summary, 2021	
		2021 Activity
	Enplaned passengers	2.3 million
	Deplaned passengers	2.2 million
Passenger Activity	Passengers in transit	34,114
	Total passenger volume	4.5 million
	Passenger landings	38,405
Cargo Activity	Onloaded/offloaded cargo	2.0 million metric tons
	Transited Cargo	1.7 million metric tons
	Total cargo volume	3.7 million metric tons
	Cargo landings	54,864

Table 1. ANC Aviation Activity Summary, 2021

Source: Ted Stevens Anchorage International Airport.

Landings

Of the 93,269 commercial aircraft landings in 2021, 54,864 (59%) were all-cargo aircraft and 38,405 (41%) were all-passenger or passenger/cargo combination landings. This level of aviation activity represents a 5% increase in aircraft traffic over average annual traffic of about 88,500 landings prior to COVID-19-related distributions in 2020. A significant increase in cargo landings in 2021 offset the drop in passenger traffic caused by travel restrictions, lack of Cross Gulf cruise ship traffic, and other pandemic-related factors.

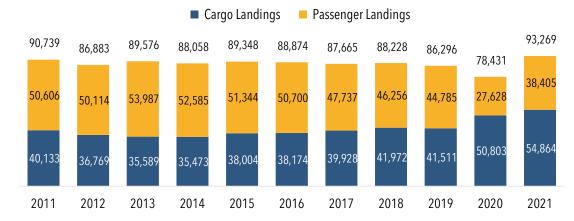
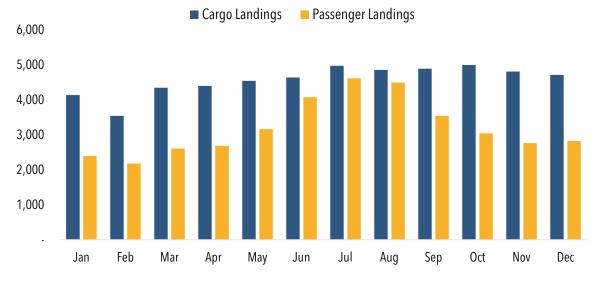


Figure 1. Total Annual ANC Air Transportation Landings, 2011 – 2021

Source: Ted Stevens Anchorage International Airport.

Landings at ANC generally peak in summer months given the airport's role in Alaska's visitor industry, which has the highest volume in June, July, and August. Passenger landings continued to show this seasonal trend in 2021, while cargo traffic has less seasonal variation.





Source: Ted Stevens Anchorage International Airport.

Cargo Activity

ANC has long been among the nation and world's busiest airports in terms of air cargo throughput (including loaded and unloaded freight and mail). Air cargo throughput at ANC was the fourth highest in the world and second in the nation in 2021.

Global Ranking		U.S. Ranking	
Airport	Volume (metric tons)	Airport	Volume (metric tons)
Hong Kong	5.02 million	Memphis, Tennessee	4.48 million
Memphis, Tennessee	4.48 million	Anchorage, Alaska*	3.56 million
Shanghai, China	3.98 million	Louisville, Kentucky	3.05 million
Anchorage, Alaska*	3.56 million	Los Angeles, California	2.69 million
Incheon, Korea	3.33 million	Chicago, Illinois	2.54 million

Table 2. To	o Five Air	Cargo Air	ports.	Global and	U.S.	Rankings.	2021
			ports,		0.5.	Kankings,	2021

Source: Airports Council International, 2021.

Historical Air Cargo Volume

More than 3.7 million metric tons of cargo enplaned, deplaned, or transited ANC in 2021. Cargo transiting ANC accounted for 46% of total volumes.

Cargo volumes increased by 40% between 2012 and 2021. Volume averaged about 2.0 to 3.0 million metric tons each year between 2011 and 2019 and increased in the last two years to a peak of 3.7 million metric tons in 2021. This peak can largely be attributed to an increase in non-transit cargo volumes, which increased from a low of 630,813 metric tons in 2017 to a high of 2.0 million metric tons in 2021.

Transited Cargo

Figure 3. ANC Air Cargo Transit and Non-Transit Volume, 2011 – 2021 (Millions of Metric Tons)

Enplaned or Deplaned Cargo



Source: Ted Stevens Anchorage International Airport.



Source: Ted Stevens Anchorage International Airport.

2021 Air Cargo Volume

Cargo volume through ANC is relatively steady month-over-month, averaging 304,529 metric tons per month in 2021. Cargo enplaned or deplaned at ANC accounts for the slight seasonal variation in volume.

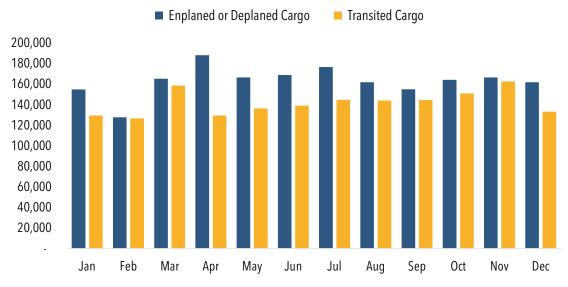


Figure 4. Total ANC Freight Volume by Month, 2021 (Metric Tons)

Source: Ted Stevens Anchorage International Airport.

ANC is a hub for incoming international freight entering North America. International freight accounted for three-quarters of incoming freight to ANC and one-quarter of outgoing freight in 2021. Three-quarters of cargo departing ANC travels to Lower 48 destinations.

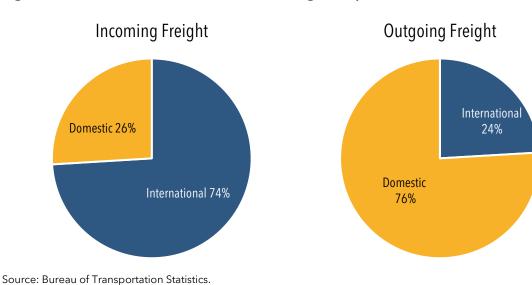


Figure 5. ANC Domestic and International Freight Proportions, 2021

Passengers

A total of 4.5 million passenger enplaned, deplaned, or transited ANC in 2021. Most passenger volume at the airport is related to travelers enplaning or deplaning at ANC (4.5 million in 2021), with a limited number of passenger transiting (34,000 in 2021).

Passenger volume through ANC increased between 2011 and 2019, adding about 680,000 passengers, a 13% increase over the decade. In 2020, efforts to mitigate the spread of COVID-19, such as travel restrictions, no cruise ship sailings, and changes in personal demand for travel, cut passenger traffic through ANC by more than half. While travel restrictions eased and Alaska saw renewed non-cruise visitation in 2021, continued impacts of the pandemic on travel demand contributed to passenger volume remaining below the 2019 level at ANC.

Historical Passenger Volume

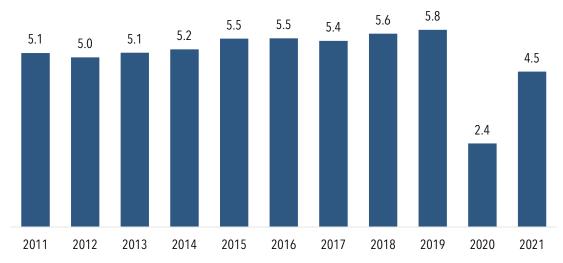


Figure 6. ANC Total Passengers, 2011 – 2021 (Millions)

Source: Ted Stevens Anchorage International Airport.

2021 Passenger Volume

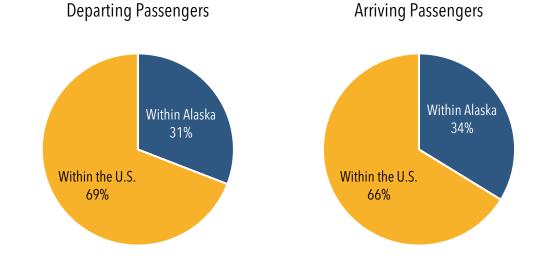
Passenger volume at ANC is highly seasonal, with high summer volume coinciding with Alaska's summer visitor season. Despite lower statewide visitation in 2021, passenger volume through ANC continued this seasonal trend and peaked in July with 678,000 passengers. The lowest monthly volumes in 2021 were in January and February, related both to typical seasonal variation at ANC and the spread of COVID-19.



Figure 7. Total ANC Terminal Passenger Volume, by Month, 2021

The proportion of passengers traveling within the U.S. and within Alaska vary little between arriving and departing passengers. About one-third of passengers traveling through ANC came from, or departed to, other Alaska communities. Two-thirds arrived from or departed to other U.S. destinations. Due to ongoing impacts of the COVID-19 pandemic, no scheduled service was provided between ANC and international destinations in 2021.

Figure 8. ANC Departing and Arriving Passenger Volumes, by Type, 2021



Source: Bureau of Transportation Statistics.

Linking Anchorage

ANC plays a critical role in linking Alaskans throughout the state to the Lower 48 and to international air cargo supply chains. This section describes the origins and destinations served by flights through ANC.

Passenger Travel Linkages

In 2021, more than 2.2 million passengers boarded direct flights originating in Anchorage. Direct connections from Anchorage include 38 different "first stop" destinations, taking passengers to locations throughout Alaska and the U.S.

Top Alaska Destinations

Scheduled flights from ANC connect Anchorage to 18 locations in the state, making ANC a major air transportation hub for Alaskan communities. In 2021, passengers most frequently traveled to Fairbanks, with 138,382 enplanements on five airline carriers offering scheduled service. Juneau was the second most frequent destination, with 82,285 enplanements. Other common destinations include Kodiak, Deadhorse, Bethel, Kenai, and Nome.



Figure 9. Top ANC Passenger Alaska Destinations with Scheduled Service

Source: Bureau of Transportation Statistics and McKinley Research Group

Destination	Total Scheduled Segment Enplanements	Number of Scheduled Carriers
Fairbanks	138,382	5
Juneau	82,285	1
Kodiak	63,144	1
Deadhorse	60,898	3
Bethel	57,482	2
Kenai	54,339	3
Nome	33,782	1
King Salmon	26,280	5
Utqiaġvik	24,971	1
Kotzebue	20,353	1

Table 3. Top 10 ANC Scheduled Passenger Alaska Destinations, 2021

Source: Bureau of Transportation Statistics.

Note: Table does not include data on unscheduled air service from ANC.

Other Passenger Destinations





Source: Bureau of Transportation Statistics and McKinley Research Group

TOP U.S. DESTINATIONS

Scheduled flights from ANC operate between Anchorage and 20 destinations in the U.S. outside of Alaska. Seattle was the top destination, with 814,493 passengers traveling to the city via four carriers with scheduled service. Other common destinations include Minneapolis, Chicago, Portland, Denver, and Phoenix.

Destination	Total Scheduled Segment Enplanements	Number of Scheduled Carriers
Seattle, WA	814,493	4
Minneapolis, MN	116,087	3
Chicago, IL	90,111	3
Portland, OR	70,740	2
Denver, CO	65,828	4
Phoenix, AZ	54,341	2
Los Angeles, CA	45,848	2
Salt Lake City, UT	38,818	1
Dallas/Fort Worth, TX	35,295	1
Atlanta, GA	31,229	1

Table 4. Top 10 ANC Scheduled Passenger U.S. Destinations Outside of Alaska, 2021

Source: Bureau of Transportation Statistics.

TOP INTERNATIONAL DESTINATIONS

Due to continuing impacts of the COVID-19 pandemic, no schedule service was provided to international destinations in 2021. International flights have slowly resumed scheduled service after the COVID-19 pandemic prompted widespread cancellations and international travel bans, and international flights are expected to resume in 2023.

For reference, Anchorage connected 41,417 passengers on scheduled service to 7 international destinations in 2019. In 2019, top international destinations included Vancouver (24,378 passengers), Frankfurt (10,151), and Reykjavik (5,630). Prior to the COVID-19 pandemic, these three destinations accounted for 90% of international passenger enplanements at ANC.

Table 5. Top 5 ANC Passenger Global Destinations, 2019

	-	
Destination	Total Scheduled Segment Enplanements	Number of Scheduled Carriers
Vancouver, Canada	24,378	1
Frankfurt, Germany	10,151	1
Keflavik/Reykjavik, Iceland	5,630	1
Tokyo, Japan	415	1
Toronto, Canada	380	1

Source: Bureau of Transportation Statistics.

Cargo Linkages

In 2021, 2.8 million metric tons of cargo departed ANC to 17 countries, including cargo enplaned in Anchorage and cargo transiting the airport from other cities. About three-quarters of this cargo was transported to destinations within the United States. Other countries with high volumes of cargo linkages include South Korea, Hong Kong, and Japan.

Destination	Total Departures	Total Cargo Volume (metric tons)
United States	37,982	2,086,527
South Korea	4,099	173,136
Hong Kong	2,387	160,663
Japan	3,049	145,830
Taiwan	1,706	97,296
China	1,710	64,002
Mexico	241	26,308
Canada	16	635
Philippines	27	344
Thailand	14	231
Costa Rica	5	213
Russia	2	129
Singapore	6	44
Brunei	1	35
United Kingdom	1	34
Vietnam	14	21
Germany	1	8
Total	51,261	2,766,917

Table 6. All ANC Cargo Destination Countries, 2021

Source: Bureau of Transportation Statistics.

Cargo Linkages within Alaska

ANC is the state's primary air cargo hub, with over 50,000 metric tons of freight shipped from the airport to 83 communities across Alaska in 2021. The highest volume of cargo was transported to Bethel, with 1,943 departures carrying over 7,000 metric tons of freight. Other communities in the state receiving substantial cargo volumes include Utqiagvik with 4,770 metric tons, Nome with 4,547 metric tons, and Kotzebue with 4,172 metric tons.



Figure 11. Top ANC Cargo Alaska Destinations



Destination	Number of Carriers	Total Departures	Total Cargo Volume (metric tons)
Bethel	8	1,943	7,339
Utqiaġvik	3	467	4,770
Nome	4	835	4,547
Kotzebue	5	885	4,214
Juneau	2	773	4,172
Fairbanks	11	819	3,755
Dillingham	9	1095	2,890
Red Dog	2	188	2,327
King Salmon	10	890	1,976
Kodiak	7	1,555	1,938

Table 7. Top 10 ANC Cargo Destinations within Alaska, 2021

Source: Bureau of Transportation Statistics.

Other Cargo Linkages



Figure 12. Top ANC Cargo U.S. and International Destinations

Source: Bureau of Transportation Statistics and McKinley Research Group

CARGO LINKAGES TO OTHER U.S. DESTINATIONS

Of the 2.0 million metric tons of cargo delivered to 42 destinations in the Lower 48 from ANC, 96% is transported to the top 10 destinations shown in the following table. Chicago alone accounts for 28% of all cargo volume, at 557,365 metric tons. Other top cargo destinations include Los Angeles, Louisville, New York, and Cincinnati.

Destination	Number of Carriers	Total Departures	Total Cargo Volume (metric tons)
Chicago, IL	21	5,768	557,365
Los Angeles, CA	18	3,174	315,039
Louisville, KY	6	2,978	275,355
New York, NY	14	2,114	207,495
Cincinnati, OH	6	1,390	142,184
Miami, FL	10	1,209	121,030
Memphis, TN	4	1,695	120,085
Dallas/Fort Worth, TX	14	1192	107,437
Atlanta, GA	9	572	55,088
Indianapolis, IN	3	428	30,023

Table 8. Top 10 ANC Cargo Destinations to U.S. Locations outside of Alaska, 2021

Source: Bureau of Transportation Statistics.

CARGO LINKAGES TO ASIA

ANC serves as an air transportation hub for cargo moving between Asia and North America. About 47% of U.S. to Asia air cargo and 63% of Asia to U.S. air cargo transited ANC in 2021.

Cargo volumes from Asia to the U.S. are more than double the cargo volumes traveling from the U.S. to Asia. In 2021, 1.4 million metric tons traveled from the U.S. to Asia, and 3.2 million metric tons traveled from Asia to the U.S.

	Departures	% of All Cargo Departures	Total Cargo (millions of metric tons)	% of Total Cargo
ANC to Asia	12,951	36%	0.64	47%
U.S. tonnage bypassing ANC enroute to Asia	23,185	64%	0.72	53%
Total U.S. to Asia	36,136	100%	1.36	100%
Asia to ANC	21,385	51%	1.99	63%
Asia to U.S. bypassing ANC	20,217	49%	1.19	37%
Total Asia to U.S.	41,602	100%	3.18	100%

Table 9. ANC Transpacific (US-Asia) Cargo Activity, 2021

Source: Bureau of Transportation Statistics.

Note: Asia includes China, Hong Kong, Japan, Korea, and Taiwan.

ANC to Asia Destinations

Of the 12,951 departures from ANC to Asia carrying 640,877 metric tons of cargo, most went to Seoul, South Korea. More than 4,000 departures from ANC went to Seoul in 2021, carrying 173,112 metric tons of freight through 12 carriers. Other top destinations include Hong Kong (160,643 metric tons), Taipei, Taiwan (97,282 metric tons), and Tokyo, Japan (86,877 metric tons). Cargo in transit from ANC accounted for 40% of freight volume traveling from the U.S. to South Korea, and 93% of freight volume traveling from the U.S. to Hong Kong.

(See table on next page.)

Destination	Number of Carriers	Number of Departures from ANC	Total ANC to Asia Cargo (metric tons)
Seoul, South Korea	12	4,097	173,112
Hong Kong, Hong Kong	7	2,387	160,643
Taipei, Taiwan	6	1,706	97,282
Tokyo, Japan	8	1,541	86,877
Osaka, Japan	5	1422	54,487
Shanghai, China	4	635	30,750
Changsha, China	2	207	15,001
Guangzhou, China	1	423	12,287
Shenzhen, China	1	381	5,473
Kitakyushu, Japan	1	17	1,722
Nagoya, Japan	2	52	1,668
Other Asia	8	83	1,574
Total	23	12,951	640,877

Table 10. Total Cargo from ANC to Asia Destinations, 2021

Source: Bureau of Transportation Statistics.

Note: Asia includes China, Hong Kong, Japan, Korea, and Taiwan.

Asia Cargo Departures to ANC

The largest volume of cargo traveling from Asia to ANC originated from Hong Kong (511,002 metric tons), accounting for a quarter of all Asia to ANC cargo. The second largest volume of cargo came from Seoul (431,441 metric tons). Although second to Hong Kong in terms of cargo volume, Seoul had a higher number of departures arriving in ANC (5,440 versus 4,844).

Origin	Number of Carriers	Number of Departures to ANC	Total Asia to ANC Cargo (metric tons)
Hong Kong, Hong Kong	10	4,844	511,002
Seoul, South Korea	14	5,440	431,441
Shanghai, China	14	2,555	245,928
Taipei, Taiwan	9	2,525	237,669
Tokyo, Japan	11	1,354	119,221
Osaka, Japan	6	1,371	101,876
Shenzhen, China	4	543	64,498
Zhengzhou, China	2	353	36,747
Wuhan, China	3	259	28,759
Chongqing, China	1	242	27,292
Other Asia	15	1,899	181,819
Total	28	21,385	1,986,252

Table 11. Asia to ANC Cargo by City of Origin, 2021

Source: Bureau of Transportation Statistics.

Capacity Utilization

Cargo flights from Asia to the U.S. use substantially more capacity than cargo flights from the U.S. to Asia. Flights from Asia to ANC operate at an average of 73% of total capacity, while flights from ANC to Asia average 44%. This represents an opportunity for future growth in ANC's already important role in international cargo transportation.

	Total Cargo (millions of metric tons)	Total Capacity (millions of metric tons)	Percent of Capacity Utilized
ANC to Asia	0.64	1.45	44%
U.S. tonnage bypassing ANC enroute to Asia	0.72	2.10	34%
Total U.S. to Asia	1.36	3.55	38%
Asia to ANC	1.99	2.71	73%
Asia to U.S. bypassing ANC	1.19	1.73	69%
Total ASIA to U.S.	3.18	4.43	72%

Table 12. ANC Transpacific (US-Asia) Cargo Capacity, 2021

Source: Bureau of Transportation Statistics.

Note: Asia includes China, Hong Kong, Japan, Korea, and Taiwan.

CARGO LINKAGES FROM ANC TO OTHER INTERNATIONAL DESTINATIONS

Of the nearly 700,000 metric tons of international freight that travels from Anchorage to international destinations, 4% is destined for destinations outside China, Hong Kong, Japan, Korea, and Taiwan. Of that 4%, the majority traveled to Mexico City (16,728 metric tons), followed by Guadalajara (9,603 metric tons) and Toronto (528 metric tons). All other destinations on the top 10 list each received less than 500 metric tons of cargo transiting ANC in 2021.

Location	Number of Carriers	Number of Departures	Total Cargo Volume (metric tons)
Mexico City, Mexico	3	146	16,728
Guadalajara, Mexico	1	95	9,603
Toronto, Canada	4	11	528
Luzon Island, Philippines	1	23	326
Bangkok, Thailand	3	14	231
San Jose, Costa Rica	1	5	213
Cold Lake, Canada	1	1	90
Khabarovsk, Russia	1	1	68
Petropavlovsk-Kamchatsky, Russia	1	1	61
Singapore, Singapore	3	8	44

Table 13. Top 10 ANC to Other International Destinations (Outside Asia), by Cargo Volume, 2021

Source: Bureau of Transportation Statistics.

Economic Impacts

ANC has significant economic impacts on the Anchorage economy in addition to the airport's critical role as part of Alaska's air transportation and global supply chain infrastructure. This section describes the jobs, payroll, and multiplier effects related to ANC.

Direct Employment and Earnings

About 10,820 jobs were supported by ANC in 2021, direct ANC employment and employed by other businesses or entities located at the airport. In total, these employees earned \$876.6 million in labor income (wages and salaries plus employer-paid benefits) in 2021.

Cargo transportation and handling activity accounts for the highest share of jobs at the airport largely due to staffing needs at major FedEx and UPS sorting facilities. Major passenger airlines, such as Alaska Airlines, are the next largest source of private employment, followed by airport support operations and regional air and cargo service providers. Public sector employees account for about 2,130 employees at ANC, including federal agencies such as TSA, CBP, and FAA.

Outside of airlines, other passenger-oriented employers such as food service and car rental companies accounted for about 440 employees in 2021. These sectors were significantly impacted by reduced passenger volume through ANC due to COVID-19 pandemic-related travel restrictions and changes in demand in 2020 and 2021.

Type of Activity	Employment	Earnings (\$millions)
Cargo Airlines/Express Delivery (incl. FedEx/UPS)	2,970	\$284.1
Passenger Airlines (such as Alaska Airlines)	1,900	\$139.3
Federal Government	1,750	\$194.5
Airport Support Operations	1,700	\$88.7
Regional Air and Cargo Service	1,430	\$92.6
Local and State Government	380	\$41.0
Airport Retail Outlets	280	\$9.1
Construction	200	\$17.5
Car Rental, Parking and Ground Transit	160	\$7.8
Logistics and Local Freight Services	50	\$2.1
Total	10,820	\$876.6

Table 14. Direct Employment and Payroll at ANC, 2021

Source: Direct employment estimates provided by individual employers, Alaska Department of Labor and Workforce Development and McKinley Research Group. Indirect/induced employment are McKinley Research Group estimates.

Employee Residency

Based on security badge data used by ANC and tenant employees to access the airport, more than 80% of employees live in Anchorage. Another 10% live in the Mat-Su Borough, and about 2% live elsewhere in Alaska. Only 4% of badged employees live outside the state.

Location	% of Total
Northwest Anchorage	12%
Northeast Anchorage	11%
Central Anchorage	18%
Southwest Anchorage	19%
Southeast Anchorage	18%
Chugiak/Eagle River	6%
Girdwood	0.3%
Mat-Su Borough	10%
Total Anchorage and Mat-Su	94%
Other Alaska	2%
Outside Alaska	4%
Total Employee Count	100.0%

Table 15. Residency of ANC Badged Employees, 2022

Source: Ted Stevens Anchorage International Airport.

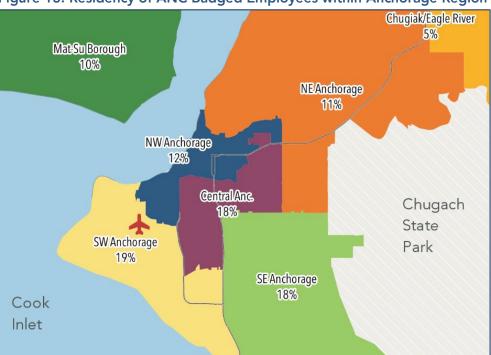


Figure 13. Residency of ANC Badged Employees within Anchorage Region

Source: Ted Stevens Anchorage International Airport and McKinley Research Group. Note: Totals do not add to 100% due to excluded badge holders living outside the Anchorage/Mat-Su.

Spending on Goods and Services

ANC spent a total \$45.7 million on goods and services to support operating costs and capital projects in 2021, excluding personnel costs previously described. Alaska's private sector provides a wide range of goods and services to ANC, including construction services, utilities, construction and other materials, fuel, security services, and many others. Based on the top 50 vendors providing service to ANC, the following table provides a breakout of ANC's operating and capital expenditures by sector. These data include only direct spending by the airport and do not include spending by ANC tenants.

Sector	Spending (\$millions)	% of Total
Construction	\$8.2	21.0%
Manufacturing (e.g., airport equipment)	\$7.1	18.0%
Professional and Technical Services	\$6.6	16.8%
Utilities	\$5.8	14.8%
Wholesale and Retail Trade	\$5.4	13.7%
Fuel	\$2.2	5.5%
Security and Maintenance	\$2.3	5.7%
Transportation Services	\$1.6	4.0%
Other	\$0.2	0.5%
Total	\$39.4	100.0%

Table 16. ANC Private Sector Spending by Sector, 2021

Source: Ted Stevens Anchorage International Airport.

Note: Totals may not sum due to rounding.

Many of the firms providing goods and services to ANC are located in the Anchorage area, representing more than half of all ANC private sector spending in 2021. ANC contracted with these Anchorage firms for utilities, engineering services, construction materials, and security services. Many firms headquartered outside Alaska provide on-site services at ANC, including parking management, construction, and other services that are performed on-site in Anchorage. Most of these firms employ local staff at ANC or other locations in Anchorage.

Table 17. ANC Private Sector Spending by Vendor Location, 2021

Vendor Primary Location	Spending (\$millions)	% of Total
Anchorage	\$20.8	52.9%
Other Alaska	\$4.0	10.3%
Outside Alaska	\$14.5	36.8%
Total	\$39.3	100.0%

Source: Ted Stevens Anchorage International Airport. Note: Totals may not sum due to rounding.

Total Economic Impacts

ANC is a hub of employment and economic activity in Anchorage, with additional links to the local economy. This study measures the full impact of the airport on the Anchorage economy at three levels: direct, indirect, and induced. Collectively, these are known as "multiplier effects" and describe the full measure of ANC's economic impacts.



Combined, activity at ANC supported an estimated 19,070 jobs and \$1.2 billion in labor income in the Anchorage economy in 2021. About one in seven jobs in Anchorage are directly or indirectly related to ANC operations, capital expenditures, and tenants.

Table 18. Total Economic Impacts of ANC, 2021

	Employment	Earnings (\$millions)
Direct	10,820	\$876.6
Indirect and Induced	8,250	\$372.7
Total	19,070	\$1,249.3

Source: Direct earnings estimates provided by Alaska Department of Labor and Workforce Development and McKinley Research Group. Indirect/induced employment are McKinley Research Group estimates.

Table 19. Total Economic Impacts of ANC by Activity, 2021

Type of Activity	Total Employment	Total Earnings (\$millions)
Cargo Airlines/Express Delivery (incl. FedEx/UPS)	5,210	\$378.9
Passenger Airlines (such as Alaska Airlines)	3,720	\$223.3
Airport Support Operations	2,960	\$149.4
Regional Air and Cargo Service	2,800	\$148.4
Federal Government	2,730	\$241.4
Local and State Government	560	\$50.8
Airport Retail Outlets	370	\$14.4
Construction	350	\$26.1
Car Rental, Parking and Ground Transit	280	\$13.9
Logistics and Local Freight Services	90	\$2.7
Total Airport Impact	19,070	\$1,249.3

Source: Direct earnings estimates provided by Alaska Department of Labor and Workforce Development and McKinley Research Group. Indirect/induced employment are McKinley Research Group estimates.

Airport Public Infrastructure Construction

Between FY2019 and FY2021, about \$170 million was spent on capital projects for ANC public infrastructure. Rehabilitation of the north/south runway and related work to accommodate the latest cargo planes accounted for much of this expenditure.

In FY2021, publicly funded construction projects at ANC supported an estimated 350 annual equivalent jobs and \$26.1 million in payroll in Anchorage, including all direct, indirect, and induced effects.

Table 20. Economic Impact of Construction Spending at ANC, FY2021

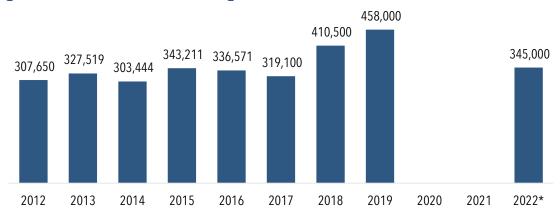
	Employment	Payroll (\$millions)
Direct	200	\$17.5
Indirect and Induced	150	\$8.6
Total Impact	350	\$26.1

Source: Ted Stevens Anchorage International Airport and McKinley Research Group estimates.

These construction-related economic impacts do not include the impact of privately funded construction efforts. Construction employment at private airport projects could increase over the next several years based on timing of several private cargo and logistics projects at various stages of development at ANC. Collectively, these projects are valued at \$820 million and include a commitment by FedEx to construct a new cargo sorting facility servicing in-state Alaska cargo at ANC at an estimated cost of \$200 million.

Visitor Industry Impacts

As previously described, ANC is a critical component of Alaska's visitor industry infrastructure; most out-of-state visitors entering or exiting Southcentral Alaska will do so through ANC. These visitors include cruise passengers on ships sailing from Southeast Alaska across the Gulf of Alaska, known as "cross-gulf" cruises. ANC facilitates the movement of these cross-gulf cruisers between Anchorage and the principal Southcentral cruise ports of Whittier and Seward. The Alaska Railroad Depot at the airport is one of many ways these passengers travel between Anchorage and these cruise destinations.





Source: McKinley Research Group estimates and calculations. Note: 2022 passenger volume is preliminary and based on ship capacity and average utilization at 75%.

ANC is also clearly important to non-cruise visitors' access to visitor opportunities throughout Alaska. These visitor impacts are felt statewide as nonresidents using ANC as a starting or ending point (or both) for their travel across Alaska to visitor attractions such as the Denali National Park.

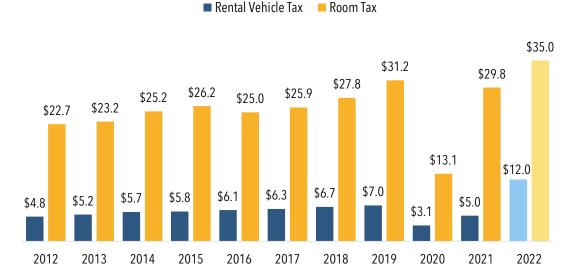
Nonresident visitors to Alaska are important to the Anchorage and statewide economy. Data on the total volume of nonresident visitors using ANC and traveling to Southcentral Alaska in 2021 are not available due to significant industry changes throughout the COVID-19 pandemic. However, the most updated data illustrates the magnitude of visitor spending in a typical year not impacted by the pandemic. In 2017, visitors to Alaska spent a total of \$2.2 billion in Alaska, including \$960 million in Southcentral (44% of the total). This spending is spread across

Southcentral Alaska's restaurants, hotels, gift shops, tour and sightseeing companies, rental car agencies, and other sectors.² Visitor spending also contributes to landing fees, fuel purchases, airline employee wages, and other purchases associated with ANC operations.

Visitor Industry Revenue Impacts

Visitor spending generates revenue for the Municipality of Anchorage through the municipal room rental and car rental taxes. The Municipality levies a 12% tax on room rentals from lodging businesses including hotels/motels, bed and breakfasts, and vacation rental services such as AirBnB and VRBO. The room tax revenue totaled nearly \$30 million in 2021. Car rental tax of 8% is also levied by the Municipality, generating \$5 million in tax revenue in 2021. Nearly all room and car rental taxes can be attributed to visitor spending, including visitors from elsewhere in Alaska who often arrive in Anchorage via ANC.

Figure 15. Municipality of Anchorage Room Tax and Vehicle Rental Tax Collections, Actual 2012 – 2021 and Projected 2022, \$ Millions



Source: Municipality of Anchorage Tax Summary Reports. Projected 2022 based on Anchorage Economic Development Corporation 2022 *Three Year Economic Outlook Report*.

² McDowell Group. *Economic Impact of Alaska's Visitor Industry 2017.* November 2018. This total spending excludes spending by visitors on airfare to travel to/from Alaska.

Government Revenues

Alaska International Airport System

The Alaska International Airport System (AIAS) is an enterprise of the State of Alaska which includes operations of ANC and the Fairbanks International Airport (FAI). AIAS is managed by DOT&PF. With the exception of limited federal funding provided to meet FAA and TSA safety requirements, AIAS operations are self-funded through revenue generated by the airports.

International Airport Revenue Fund

The International Airport Revenue Fund (IARF) funds AIAS operations. Total IARF operating revenue fell from \$141.3 million to \$122.0 million between FY2019 and FY2021 due to the impacts of COVID-19 on airport operations, a 14% decline in revenues.

In FY2021, ANC revenues accounted for \$113.8 million (93%) of total IARF operating revenue. Landing fees paid by airlines to ANC accounted for nearly half (46%) of all ANC operating revenue, followed by fuel flowage fees (21%), and terminal and land rents (16%). ANC also generated passenger facility charges, used primarily to fund debt service on terminal projects.

Source	Anchorage	Fairbanks	Total Revenue
Landing fees	\$52,082,765	\$1,040,752	\$53,123,507
Fuel flowage fees	\$24,044,469	\$191,557	\$24,236,026
Terminal/land rents	\$18,224,758	\$3,280,407	\$21,505,165
Concessions	\$7,649,690	\$1,877,427	\$9,527,117
Aircraft parking	\$6,584,773	\$394,687	\$6,979,460
Vehicle parking	\$4,846,522	\$1,147,829	\$5,994,351
Other	\$364,172	\$247,747	\$611,919
Total Operating Revenue	\$113,797,149	\$8,180,406	\$121,977,545
Passenger facility charge	\$3,550,416	\$1,105,972	\$4,656,388

Table 21. Revenue by Airport, FY2021

Source: State of Alaska International Airports System.

Local Government Revenue

Property taxes are a crucial source of funding for the Municipality of Anchorage. These taxes support K-12 education (25% of municipal operating expenses), police and fire services (21%), and other general government functions. Property taxes paid by commercial and residential

taxpayers to the Municipality of Anchorage totaled \$613 million in FY2021, representing half of all Municipality revenues.³

While ANC does not directly pay property tax, businesses that operate at ANC do pay real property tax to the Municipality. In FY2021, ANC tenants collectively paid an estimated \$4.0 million in real property taxes.⁴ About 83% of ANC workers live in the Municipality of Anchorage, and a portion of these employees pay residential property tax. Based on average residential assessed values (\$348,000) and home ownership rates in Anchorage (62%), employees working at ANC paid an estimated \$35 million in property tax to the municipality in 2021. Employees indirect supported by ANC-related activity also contribute to Anchorage property tax through home ownership.

³ Municipality of Anchorage 2021 Annual Comprehensive Financial Report.

⁴ Based on FY2021 Municipality of Anchorage property tax data for 121 parcels owned by 73 ANC tenants.

The Future of ANC

ANC has long been an important part of global air supply chains. Robust Asia-to-North America cargo volume and bottlenecks along other transportation routes related to the impacts of the COVID-19 pandemic contributed to strong cargo volumes transiting ANC in recent years. Given the airport's strategic location and the expectation of continued strong air cargo volumes, significant interest exists in expanded cargo and logistics capacity at ANC. As of 2022, various companies are pursuing three such projects at the airport. The combined project value of these investments is an estimated \$820 million. While at varying stages of development, construction of any one of these facilities could increase employment at ANC by hundreds of new operating jobs.

The airport also features in new models of cargo movement between Asia and the Lower 48, leveraging the speed of air freight from Asia to Anchorage and waterborne backhaul opportunities between the Port of Alaska and Tacoma, Washington. Known as the ANC Pacific Air to Sea Service (Alaska PASS), this transportation concept is still in the demonstration phase.



Source: Ted Stevens Anchorage International Airport.

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