# STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES



## **LANDING FEE REPORT**

December 2013

### **HB 65 Legislative Intent**

"It is the intent of the legislature that the department evaluate the impacts of instituting landing fees at state owned and operated primary FAA certificated airports and provide a report to the 28<sup>th</sup> Alaska Legislature by January 15, 2014."

### **Executive Summary**

In accordance with HB 65, the Department of Transportation and Public Facilities (DOT&PF) investigated the potential impacts of implementing a landing fee structure at the State's primary Part 139 certificated airports.

### Analysis indicates:

- Locations where landing fees could be implemented include: Barrow, Bethel, Cordova, Deadhorse, Dillingham, Gustavus, Homer, King Salmon, Kodiak, Kotzebue, Nome, Petersburg, Sitka, Unalaska, Valdez, Wrangell, and Yakutat.
- Potential revenue generated through a conventional, weight-based landing fee structure at Alaska's 17 state-owned primary certificated airports could approach \$6.2 million annually, based on 2012 airport operations data.
- With the exception of Deadhorse, where most aviation activity is industry driven, the residential population would likely bear the majority of the burden associated with any air carrier business model changes resulting from a landing fee structure.
- Approximately 49% of the operating costs at 17 airports could be recovered through a combination of leasing revenue and landing fee revenue.

DOT&PF performed the analysis using publically available airport operations data as well as previous studies and reports performed on the subject in the past. Using Alaskan airports with current landing fee structures in place as an example, scenarios were generated assuming 2012 operations. Comparison analysis was performed and consideration given to which stakeholders are most likely to bear the burden of any fee structure imposed.

DOT&PF engaged as many stakeholders as possible, including Division of Statewide Aviation personnel, leasing specialists, air carriers, airport managers, maintenance and operations personnel, and the general public. Stakeholder input was considered throughout the analysis and every effort was made to provide objective data. Much of the historical data came from the 1989 Pavish Rates & Fees Recommendation Report, which provided recommendations on a variety of rate and fee options available to DOT&PF.

### **Background**

Most airports in the United States are structured to be financially independent. Airport operators charge airlines for the use of runways and other facilities, as well as rent for terminal space. Airports can also charge tenants and service providers, such as restaurants and shops, parking and shuttle services, and rental car companies for the space they occupy and/or the right to provide services on airport property. Revenue generation is fundamental to self-sustaining operations.

Landing fees another means of generating revenue and are regulated by the Federal Aviation Administration (FAA) and federal law. Alaska DOT&PF receives capital funding for its airports primarily through FAA's Airport Improvement Program (AIP) grants and, in turn, DOT&PF agrees to operate and maintain those airports according to the FAA's 39 "grant assurances," which detail the conditions and restrictions as to how the airports will be managed. , The FAA and U.S. DOT have additional regulations which are prescriptive as to how airport operations can be managed and financed.

### History of Landing Fee Initiatives in Alaska

While almost all airports nationwide are on the road system and function in a cash-based economy, 82% of Alaska's communities are not connected to the road system and, in many cases, have subsistence-based economies. Generating any type of revenue at Alaska's rural airports has always been challenging, and revenue generated at DOT&PF-managed airports comes almost exclusively from land rent.

Landing fees have been occasionally studied at DOT&PF's rural airports for over 25 years. In July 1988, DOT&PF released the Rural Airport Rates and Fees Report which presented a comprehensive set of proposals to increase revenue generated by the state's Rural Airport System. The Report included a landing and departure fee proposal, and DOT&PF conducted 24 public hearings at locations throughout the state to receive public comments on the proposed fees and regulations. Of all the rates and fees proposed, the landing and departure fee drew the largest volume of testimony, with almost all of the feedback decidedly negative. In August 1991, DOT&PF adopted a landing fee on the rural certificated airports of \$.40 per one thousand pounds certified maximum gross takeoff weight (CMGTW) for aircraft with CMGTW of 6,000 pounds or more. In September 1991, a lawsuit was filed challenging the landing fees as penalizing operators of larger and multi-engine aircraft, thereby giving advantage to small carriers not subject to the fee. DOT&PF's landing fee program was terminated by court order in March 1993, citing that DOT&PF did not comply with requirements to adopt the fees as a regulation under the Alaska Administrative Procedures Act. DOT&PF refunded the fees received. During the twenty-first legislative session in 1991, Senate Bill 148 "An Act imposing

landing fees at state owned and operated airports" was introduced but ultimately not adopted. In 2013, the 28<sup>th</sup> Alaska Legislature requested that DOT&PF evaluate the impacts of instituting landing fees at its seventeen rural primary certificated airports, providing the impetus for this report.

Two types of landing/departure fees exist. The conventional landing fee structure is based on the gross weight of the aircraft. The other type of landing/departure fee structure is generally a flat rate imposed on every landing and/or take-off conducted at an airport regardless of aircraft size. A conventional landing fee structure is generally considered the most equitable form of revenue generation.

Advantages of a conventional landing fee system include:

- 1) A landing fee system could potentially offset some operating costs at Part 139 certificated airports
- 2) The fee system could be implemented by DOT&PF within the scope of the department's existing authority (no new legislation needed).
- 3) The fee system would be easier for DOT&PF to administer and enforce than the proposed landing and departure fees because fewer airports and less data collection would be involved.

Disadvantages of this conventional landing fee system include:

- 1) Implementation of a landing fee system could lead to an increase in air carrier ticket/cargo prices. This could further increase the cost of living in communities where Alaskans already deal with significantly higher costs of living than urban areas.
- 2) Implementation of a landing fee system could be viewed as discouraging economic opportunities in affected communities.
- 3) Public discontent with raising fees.
- 4) A conventional landing fee would only apply to aircraft that use Part 139 rural airports, which comprise only 17 of the 253 state-owned and operated airports statewide.

### **Analysis**

A landing fee rate of \$2.00 per 1,000 lb CMGTW was selected for use in calculating theoretical landing fee revenue at DOT&PF's 17 primary certificated rural airports. This rate is based on a rounded average of the landing fee charged at comparison airports Juneau International, Ketchikan International, and Kenai Municipal. At this rate, average annual landing fees theoretically generated at the 17 airports amount to approximately

\$6.2 million (based on calculations for calendar years 2007-2012). Total actual operating expenses for these 17 airports average approximately \$18 million annually. Leasing revenue (actual revenue) alone recovers an average of 16% of these operating costs. With the implementation of landing fees, an additional 33% cost recovery is theoretically achievable.

A total of 41 individual air carriers reported landing activity in the 2007-2012 time period, but a much smaller number of carriers would pay a majority of the landing fees. Alaska Airlines would pay nearly half the total landing fees annually. Over 90% of total landing fee revenue would be collected from just ten (10) carriers – Alaska Airlines, Northern Air Cargo, PenAir, Everts, Hageland, Era Aviation, Lynden Air Cargo, Bering Air, Grant Aviation, and Alaska Central Express (ACE).

### Financial Estimations – Proposed Landing Fee Calculation Using Historic Airport Landing Activity

This exercise calculates theoretical landing fee revenue generated based on a proposed landing fee rate and historic airport landing activity (Calendar Years 2007-2012). This narrative details the following activities:

- A. Establish landing fee rate
- B. Calculate theoretical landing fees collected at proposed landing fee rate
- C. Compare theoretical landing fee revenue with actual operating costs and leasing revenue
- D. Consider impact to individual air carriers
- E. Consider impact of Alaska Airlines Q400s' entry into the fleet mix
- F. Examine the economic generator/industrial support airports specifically
- G. Cost to DOT&PF to implement landing fee tracking and collection

### A. Establish the proposed landing fee rate for the DOT&PF's Primary certificated rural airports

Principles used to determine the proposed landing fee rate:

- Rate should be commensurate with landing fee rate charged at airports of similar size and purpose. Juneau International, Ketchikan International, and Kenai Municipal airports were used as comparison airports for this exercise that considered the DOT&PF's 17 Primary certificated rural airports.
- Rates were based on "fairness and reasonability" as required by Federal legislation.

The landing fee rate proposed for the DOT&PF's 17 Primary certificated rural airports is \$2.00 per 1,000 lbs. certified maximum gross take-off weight (CMGTW).

Juneau International Airport Rates & Fees Regulation (a regulation of the City & Borough of Juneau, dated 7/01/12) specifies that landing fees be based on maximum take-of weight as certified by the FAA, for all types of aircraft whether empty or loaded. Fees are as follows:

- Signatory Carriers
  - o Under 12,500 lbs. No Fee
  - $\circ$  12,500 lbs. and over \$2.18 per 1,000 lb. (for each 1,000 lbs. or any

fraction thereof)

- ➤ Non-Signatory Carriers
  - o Under 12,500 lbs. No Fee
  - o 12,500 lbs. and over \$2.73 per 1,000 lb. (for each 1,000 lbs. or any

fraction thereof)

Ketchikan International Airport aircraft landing fees (published on the airport web site, September 2013) are based on maximum gross take-off weight. Fees are as follows:

➤ All Aircraft

Under 6,001 lbs. \$5.00 (flat rate)
 6,001 - 12,500 lbs. \$11.25 (flat rate)
 12,500 lbs. and over \$2.20 per 1,000 lb.

Kenai Municipal Airport landing fees (effective 6/1/13) are based on certified gross take-of weight. Fees are as follows:

- Signatory Carriers
  - o Under 4,000 lbs. No Fee
  - o 4,000 lbs. and over \$1.53 per 1,000 lb. (for each 1,000 lbs. or any

fraction thereof)

- ➤ Non-Signatory Carriers
  - o Under 4,000 lbs. No Fee
  - o 4,000 lbs. and over \$2.00 per 1,000 lb. (for each 1,000 lbs. or any

fraction thereof

#### B. Calculate theoretical landing fee revenue

Theoretical landing fee revenue (Table 1) was calculated based on Calendar Year 2007-2012 landing activity data at the 17 Primary certificated rural airports and the proposed rate of \$2.00 per 1,000 lbs. CMGTW. Historic landing activity data is available from the Bureau of Transportation Statistics database Air Carrier Statistics (Form 41 Traffic), T-100 Segment (All Carriers). Additionally, Shared Services Aviation activity is reported separately through the Airport Frequency Report requested from and provided directly by Shared Services Aviation. This data provides the number of landings at each airport and

the aircraft types. Average annual landing fees theoretically generated at the 17 airports amount to approximately \$6.2 million.

Table 1: Theoretical Landing Fee Revenue at 17 Primary Certificated Rural Airports						
	CY2007	CY2008	CY2009	CY2010	CY2011	CY2012
Barrow	\$386,522	\$389,742	\$412,753	\$417,661	\$417,241	\$440,397
Bethel	\$924,258	\$996,031	\$952,723	\$977,812	\$1,007,143	\$998,692
Cordova	\$233,920	\$239,177	\$249,313	\$243,191	\$258,982	\$247,994
Deadhorse	\$758,217	\$684,597	\$707,610	\$691,507	\$761,902	\$794,705
Dillingham	\$279,219	\$302,564	\$271,182	\$261,888	\$252,064	\$246,580
Gustavus	\$ 36,575	\$ 31,092	\$ 27,235	\$ 47,888	\$ 50,409	\$ 49,054
Homer	\$150,816	\$164,617	\$147,557	\$143,244	\$140,083	\$140,469
King Salmon	\$328,381	\$302,617	\$292,595	\$294,079	\$278,204	\$274,531
Kodiak	\$389,064	\$408,790	\$363,029	\$373,283	\$377,274	\$366,625
Kotzebue	\$698,256	\$683,420	\$634,484	\$677,686	\$652,254	\$693,812
Nome	\$683,848	\$659,411	\$636,993	\$639,109	\$639,423	\$668,071
Petersburg	\$211,397	\$212,620	\$195,534	\$215,608	\$213,444	\$218,479
Sitka	\$542,392	\$544,149	\$553,290	\$539,695	\$532,997	\$514,176
Unalaska	\$129,475	\$119,522	\$114,733	\$119,347	\$130,185	\$134,893
Valdez	\$ 53,489	\$ 51,333	\$ 47,795	\$ 59,558	\$ 63,695	\$ 62,262
Wrangell	\$212,543	\$210,399	\$213,740	\$216,518	\$217,112	\$222,623
Yakutat	\$209,061	\$216,119	\$224,355	\$220,420	\$221,065	\$220,818
TOTAL	\$6,227,433	\$6,216,198	\$6,044,920	\$6,138,496	\$6,213,478	\$6,294,179

Note: Neither Gustavus nor Cold Bay were primary airports in 2012 with 9,509 and 9,463 enplanements respectively. Gustavus was a primary airport in 2011 with 11,537 enplanements, though Cold Bay only had 9,463 enplanements and did not qualify for primary status. For comparison purposes, both airports are included in the landing fee analysis.

### C. Compare theoretical landing fee revenue with actual reported operating costs and leasing revenue

The theoretical landing fee revenue and actual reported leasing revenue were compared with actual reported operating expenses for 2007-2012. Figure 1 and Table 2 show the annual actual operating costs for the 17 airports and the actual leasing revenue, theoretical landing fee revenue, and theoretical unmet operational costs with the landing fees imposed.

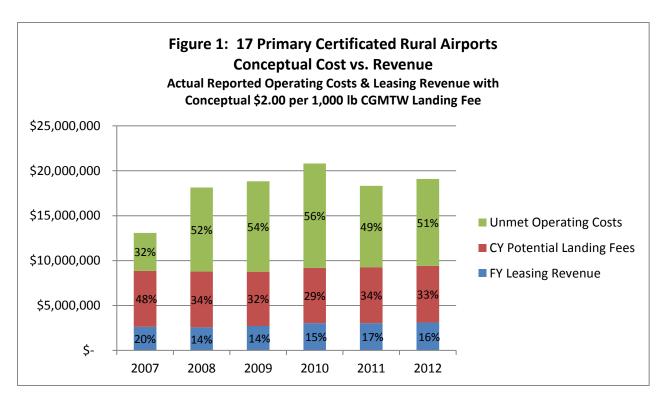
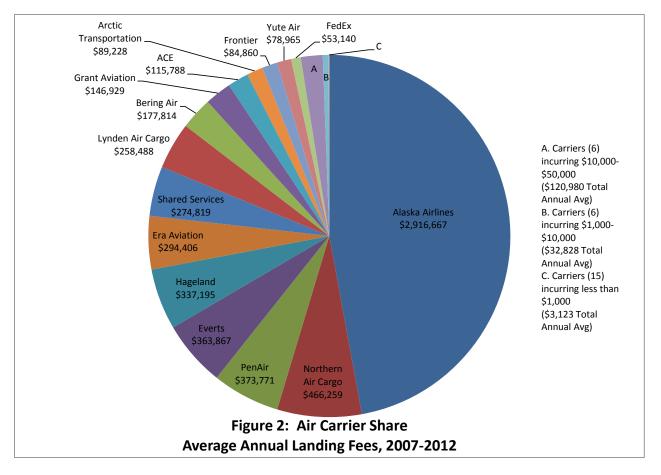


Table 2: Actual Operating Costs versus Actual Leasing Revenue & Theoretical Landing Fee Revenue								
	2007	2008	2009	2010	2011	2012		
FY Operating Costs	\$13,083,207	\$18,133,447	\$18,833,467	\$20,810,236	\$18,317,634	\$19,083,587		
FY Leasing Revenue	\$2,626,361	\$2,563,646	\$2,720,968	\$3,043,889	\$3,044,507	\$3,118,295		
CY Landing Fee Revenue	\$6,227,433	\$6,216,198	\$6,044,920	\$6,138,496	\$6,213,478	\$6,294,179		
Unmet Operational Costs	\$4,229,413	\$9,353,603	\$10,067,579	\$11,627,851	\$9,059,649	\$9,671,113		

Note: Please note that the landing fee revenue is based on calendar year (CY) landing activity, while the leasing revenue and operating expenses are reported by Alaska state fiscal year (FY). This difference was considered immaterial for purposes of this exercise.

#### Consider impact to individual air carriers

A total of 41 individual air carriers reported landing activity in the 2007-2012 time period. Some of these carriers are no longer in service and some have merged to operate under a single parent company. Neither of these conditions is factored into Figure 2 below, which shows average annual landing fees theoretically paid by each reporting carrier.



Alaska Airlines would pay nearly half the total landing fees annually as a result of the high number of landings Alaska Airlines conducts at the primary certificated airports and the high CMGTWs of its Boeing 737-series aircraft fleet.

### D. Potential impact of Alaska Airlines introduction of Bombardier Q400 into fleet mix

Alaska Airlines has announced that the Bombardier Q400 will be utilized on flights between Fairbanks, Anchorage, and Kodiak. The aircraft will be used in place of the 737-400 on select flights. Initial service from Anchorage to Kodiak will be seasonal, with one of the two all-passenger configured 737 flights being replaced by a Q400 flight from October through March/April. The airline indicates that use of the Q400 could be expanded to other routes over time, but to date has not shared future plans.

The CMGTW of the Bombardier Q400 is 65,200 lb., compared to the 143,500 lb. CMGTW of the 737-400.

The potential impact to landing fees is presented using Kodiak as a case study. Assuming Alaska Airlines replaces one ANC-ADQ 737-400 flight daily between October and April with the Q400, 212 flights each year would utilize the smaller, lighter aircraft. At the

assumed \$2.00 per 1,000 lb. CMGTW, the revenue generated by 212 737-400 flights equals \$60,844. The revenue generated by 212 Q400 flights equals \$27,645. The difference is \$33,199.

In Calendar Year 2012, total potential landing fee revenue calculated for the Kodiak airport (using actual reported landings and fleet mix) equaled \$366,625. If 212 Alaska Airlines 737-400 flights had instead been flown by a Q400 that year, the difference of \$33,199 translates to an approximate 9% decrease in landing fee revenue.

It is difficult to predict the future of the Q400 fleet in Alaska. While Alaska Airlines may ultimately utilize the aircraft for other routes in the future, it is difficult to predict how any further adjustment to flight operations might impact a potential landing fee structure.

#### E. Economic generator / industrial support airports

The 17 primary certificated airports considered in this exercise display a wide variety of sizes and uses across rural Alaska. Most airports primarily serve to provide basic access to rural communities, but a select few fill significant roles in the industrial sectors. Deadhorse airport has always provided critical support to the oil and gas industry, while the Barrow airport is emerging as another industry enabler. Unlike most other certificated airports, any landing fees paid at these airports would be covered, in large part, by the industrial sector rather than by the residential population. The theoretical landing fees, actual leasing revenue, and actual operating costs for Deadhorse and Barrow airports are depicted in Table 3.

Table 3: Deadhorse & Barrow Operating Costs versus Leasing Revenue & Landing Fee Revenue							
Deadhorse	2007	2008	2009	2010	2011	2012	
FY Operating Costs	\$1,100,626	\$1,987,096	\$2,305,301	\$2,648,133	\$1,947,695	\$1,643,088	
FY Leasing Revenue	\$970,689	\$1,020,731	\$1,158,742	\$1,371,007	\$1,317,917	\$1,394,094	
CY Landing Fee Revenue	\$758,217	\$684,597	\$707,610	\$691,507	\$761,902	\$794,705	
Unmet Operational Costs	(\$628,280)	\$281,768	\$438,949	\$585,619	(\$132,124)	(\$545,711)	
Cost Coverage							
Leasing Only	88%	51%	50%	52%	68%	85%	
Cost Coverage							
Leasing & Landing Fees	157%	86%	81%	78%	107%	133%	
Barrow							
FY Operating Costs	\$781,469	\$1,151,036	\$1,191,005	\$1,422,761	\$1,277,430	\$1,775,413	
FY Leasing Revenue	\$143,645	\$141,240	\$143,057	\$137,788	\$143,214	\$145,358	
CY Landing Fee Revenue	\$386,522	\$389,742	\$412,753	\$417,661	\$417,241	\$440,397	
Unmet Operational Costs	\$251,302	\$620,054	\$635,195	\$867,312	\$716,975	\$1,189,658	
Cost Coverage							
Leasing Only	18%	12%	12%	10%	11%	8%	
Cost Coverage							
Leasing & Landing Fees	68%	46%	47%	39%	44%	33%	

#### F. Cost to DOT&PF to implement landing fee tracking and collection

DOT&PF currently administers its leasing program revenue collection via Revenue Accounting System (RAS), which is linked to both the Alaska International Airport System (AIAS) and the Alaska Statewide Accounting System (AKSAS). A new program to collect leasing revenue is expected to come online in 2014, which would also have the capability to track a multitude of fees collected at airports. Additional operating cost required to implement and collect landing fees would be minimal, if any.

#### **Conclusions**

The implementation of landing fees could have a potentially significant impact on aviation stakeholders statewide. It is likely that the residential population would bear most of the burden of any carrier business model changes adopted as a result of landing fee implementation. Several airports (Nome, Kotzebue, King Salmon, Bethel, Dillingham, and Barrow) serve regions representing the highest unemployment in the state<sup>2</sup>.

The Department of Transportation & Public Facilities' mission is to "Keep Alaska moving through service and infrastructure." With 82% of Alaska's communities inaccessible by the highway system, the local airport provides the only practical year-round access to transportation and essential services for many of these locations. The implementation of a landing fee structure could negatively impact flight schedules and frequency to specific communities, dramatically reducing the only transportation access that many rural Alaskan communities have.

Many of the airport amenities and service providers found at airports in the lower-48 do not exist at Alaska's certificated airports, such as terminals, parking garages, rental car facilities, aircraft hangars, etc. Because of this, many carriers have invested their own capital into these rural certificated airports, including construction and maintenance of facilities that serve support functions for their operations. Airport revenue is collected on these facilities through leases and permits. Landing fees may be viewed as charging carriers to use the very infrastructure they helped develop.

Understanding and assessing a landing fee structure at the State's certificated airports requires weighing any potential revenue generation with any potential downstream impacts to affected stakeholders. The Department of Transportation & Public Facilities will continue to provide the highest possible levels of service and efficiency in operations at its certificated airports.

### **Appendices**

<sup>1</sup>Rural Airport Rates & Fees Project, Recommendation Report, March 9, 1989. (Pavish Report)

<sup>&</sup>lt;sup>2</sup>"Unemployment rate at 6.5 percent in August," State of Alaska, Department of Labor and Workforce Development press release, September 20, 2013.