

## **Exhibit 14**

# commercial aviation





For nearly 50 years,  
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as the industry's leading  
provider of fleet  
solutions with our  
families of innovative 37  
to 130-seat jets.

Yet our mission isn't just to build the

... our mission isn't just to build the world's most efficient airplanes in their category. It's also to help airlines to increase profitability. It's an approach born from decades of experience listening to our customers, learning from them, and supporting their day-to-day operations.

We're continually analyzing advancements in technology to ensure our aircraft deliver the efficiencies and economic benefits that keep our customers competitive and profitable.







## E-JETS E2

The next generation of E-Jets is already here. Three new E-Jets with the highest aspect ratio wings in the single aisle market, new ultra-high-bypass ratio geared-turbofan PW engines, new

# **Exhibit 15**

# Will United Airlines Order New Jets From Bombardier or Embraer?

Two smaller aircraft manufacturers are fervently hoping that United will decide to add smaller jets to its mainline fleet.



Adam Levine-Weinberg (TMFGemHunter)  
Apr 1, 2017 at 10:10AM

From late 2014 through 2015, there was growing speculation in industry circles that airline heavyweight **United Continental** ([NYSE:UAL](#)) would order jets in the 100-seat size class from either **Bombardier** ([NASDAQOTH:BDRBF](#)) or **Embraer** ([NYSE:ERJ](#)). This would have filled a gap between its largest regional jets, which have 76 seats, and its smallest mainline plane, the 126-seat **Boeing** ([NYSE:BA](#)) 737-700.

Instead, United went the "safe" route, ordering 65 more 737-700s from Boeing in early 2016. However, United's fleet plan and priorities have changed in the past six months. This again raises the possibility that United Airlines could order Bombardier's CSeries jets or Embraer's E2-series E-Jets in the next year or so.

## United mulls an order for smaller jets

In late 2014, United Continental began having serious discussions with Bombardier and Embraer about buying either the CS100 or some of Embraer's larger jet models.



UNITED IS REVISITING THE IDEA OF BUYING SOME CSERIES JETS. IMAGE SOURCE: BOMBARDIER.

Adding jets in the 100-seat range would allow United to better match capacity to demand on certain routes. Furthermore, United's pilot contract allows it to [expand its fleet of 76-seat regional jets](#) if it also adds smaller mainline planes like the CS100 or E195. This would help United retire most of its fleet of cramped, inefficient 50-seat regional jets.

By late 2015, officials at both Bombardier and Embraer were cautiously optimistic that they could get an order from United. But ultimately, both manufacturers got shut out.

### Back and forth

In early 2016, United Airlines ordered 65 737-700s, with deliveries scheduled to start in late 2017 and wrap up in 2019. This was surprising, given that the 737-700 has been around for nearly two decades and is much less fuel-efficient than the state-of-the-art models that Bombardier and Embraer were offering.

Price was the deciding factor. Boeing offered United Airlines huge discounts on end-of-line 737s, mainly to block Bombardier from gaining a foothold there. (It was also probably hoping to push United back toward an [all-Boeing narrowbody fleet](#).)



UNITED AIRLINES ORDERED 65 737-700S LAST YEAR BEFORE QUICKLY REVERSING COURSE. IMAGE SOURCE: UNITED AIRLINES.

However, United Continental CEO Oscar Munoz revamped his executive team last year. The company's new leaders concluded that even at a bargain price, it didn't make sense to buy outdated planes like the 737-700.

As a result, in November, the company effectively canceled the 737-700 order. It converted the four planes scheduled for delivery in 2017 to the larger 737-800 model. It deferred the other 61 orders indefinitely and plans to convert them to some of the larger variants of Boeing's new 737 MAX family.

### Back to square one

United plans to [keep some 50-seat jets around](#) longer to fill the gap created by the 737-700 order deferral. However, that's only a short-term solution. As these small regional jets age, rising maintenance costs will make it increasingly uneconomical to keep them flying.

Meanwhile, the scope clause restriction in its pilot contract means that United can't expand its 76-seat regional jet fleet any further. Thus, now that United Continental no longer plans to load up on 737-700s, it is likely to look at the C-Series and E-Jet E2 aircraft families again.

At the moment, United Continental is in the midst of a thorough fleet review. This will cover the question of whether it should add planes in the 100-120 seat range, according to CFO Andrew Levy. The fleet review is likely to conclude within the next few months.

### High stakes

If United decides to buy planes in the 100-120 seat range, Bombardier and Embraer are the only realistic contenders for winning the order. Both companies will be highly motivated.



EMBRAER IS EAGER TO LINE UP MORE ORDERS FOR ITS NEW E190-E2. IMAGE SOURCE: EMBRAER.

Bombardier secured big CSeries orders from **Delta Air Lines** and Air Canada last year, but it still ended the year with only 353 firm orders. Forty of those are from bankrupt regional airline Republic Airways and will be canceled. There are big holes in Bombardier's CSeries order book beginning in 2020.

Given that Bombardier has sunk more than \$5 billion into developing the CSeries family, it needs to sell a lot more planes. Getting another marquee order from an airline like United would be a big help in that regard.

Unlike the troubled CSeries development program, Embraer's less ambitious E2 program is still in line with its modest \$1.7 billion development budget and ahead of schedule. The E190-E2 began flight tests last year, and the larger E195-E2 had its first flight just last week. Both variants appear to be performing well.

However, order activity has been disappointing thus far. Embraer ended 2016 with 275 firm orders, but only 125 of those are really solid. That represents barely more than a year of production.

Thus, Embraer needs a big win almost as badly as Bombardier. Both aircraft manufacturers -- and their long-suffering shareholders -- are eagerly awaiting United's decision.

[Adam Levine-Weinberg](#) owns shares of Boeing, Delta Air Lines, and Embraer-Empresa Brasileira. The Motley Fool recommends Embraer-Empresa Brasileira. The Motley Fool has a [disclosure policy](#).

## **Exhibit 16**



The Buzz

# United buying 40 new 737-700s to upgrade fleet

by Paul R. La Monica @lamonicabuzz

January 21, 2016: 12:00 PM ET

Recommend 22K



5 stunning stats about airlines

Good news for United frequent fliers. The airline is buying 40 new Boeing 737-700 airplanes to replace some of the smaller, older planes operated by its regional carriers.

United (UAL), which has ranked near the bottom of several airline customer satisfaction indexes for several years, said the new planes will enter its fleet in mid-2017. United did not say how much it would cost to purchase the new planes.

According to a price list on the Boeing (BA) web site, the average price for a 737-700 in 2015 was \$20.6 million. Based on that, United could be spending more than \$3.2 billion for the new

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United's current 737-700 aircraft seat 118 passengers, with 12 first class seats and 40 Economy Plus seats. United said it plans to replace more than half of the 50-seaters in its fleet by 2019.

"Our customers have a preference for an improved travel experience, including first class seats, Economy Plus, and Wi-Fi. These aircraft are an efficient way to meet those needs," said Gerry Laderman, United's acting chief financial officer.



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Brexit began to bite



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settlement

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year since 2013



It wasn't all good news for United though, which announced the 737-700 purchase in its latest earnings report on Thursday.

Even though United reported a record profit for the fourth quarter of \$934 million, earnings and revenues missed Wall Street's forecasts.

The stock was flat in late morning trading. Shares of United have fallen 20% so far this year. And that follows a nearly 15% decline in 2015.

United said that currency fluctuations hurt its results. The strong dollar has been a problem for many U.S. companies that have a significant international presence.

Rival Delta ([DAL](#)) said the soaring greenback was a concern when it reported its earnings earlier this week.

United Vice Chairman Jim Compton added during a call with analysts that demand for transatlantic flights took a hit shortly after the terrorist attacks in Paris in November.

The dramatic plunge in energy prices also seems to be both a blessing and a curse for United.

#### Related: Delta saved \$5.1 billion on fuel in 2015

United did save nearly \$4.2 billion on jet fuel costs in 2015. But United indicated that the pain in the oil patch led to a decline in travel from corporate customers "impacted by declining oil prices" for the second consecutive quarter.

During the call with analysts, Compton said United was seeing particular weakness out of its Houston hub. Texas is home to many big U.S. oil companies.

United, Delta and fellow major carrier American ([AAL](#)) are also dealing with tough competition from low cost airlines like Southwest ([LUV](#)), JetBlue ([JBLU](#)) and Spirit ([SAVE](#)). They have put some pressure on the big airlines to keep fares low.

Southwest also reported its latest earnings Thursday and they were pretty solid. Profits and revenues matched consensus forecasts.

But United has a somewhat unique challenge in the airline industry. It has faced significant merger integration pains as a result of its purchase of Continental in 2010.

There also has been turmoil (and medical drama) in the company's executive suite.

Former CEO Jeff Smisek stepped down last September in the wake of a federal corruption investigation. United has been accused of trying to curry favor with the Port Authority of New York and New Jersey.

#### Related: United CEO Oscar Munoz heads home after heart transplant

Smisek's replacement, Oscar Munoz, was only on the job for a few weeks before he was hospitalized following a heart attack.

But Munoz received a heart transplant earlier this month and was released from the hospital last week.

Munoz spoke to analysts on the company's conference call Thursday. He thanked everyone at United for their well wishes.



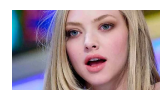
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Top bank announces 1.30% savings account, no fees

# **Exhibit 17**

[Myanmar](#)[Venezuela](#)[Net Neutrality](#)[The Trump Effect](#)[North Korea](#)[Moments of Innovation](#)[Media](#)

## #MARKET NEWS

NOVEMBER 15, 2016 / 11:35 AM / A YEAR AGO

## Boeing shares fall as United Airlines cancels 737 order

Alwyn Scott



SEATTLE, Nov 15 (Reuters) - Boeing Co shares dropped on Tuesday after United Continental Holdings said it will cancel orders for 61 Boeing 737 jetliners worth nearly \$5 billion at list prices, and buy newer 737 models for delivery in later years.

## SPONSORED

The decision called into question Boeing's plans to increase production of one of its biggest money makers over the next two years, and its ability to generate more cash for investors.

"737 output is their only realistic way to increase cash flow," said Richard Aboulafia, an aerospace analyst at the Teal Group in Virginia. Boeing is already cutting production of the 777, its other cash cow, and 787 output is due to remain steady.

"Now it looks like 737 output will not grow as planned," he said.

Boeing shares were down 1.4 percent at \$147.86 in morning trading on the New York Stock Exchange.

Boeing had planned to increase 737 production to 57 a month in 2019, up from 42 a month currently, with interim step-ups to 47 and 52 a month along the way.

On Oct. 26, Boeing Chief Executive Dennis Muilenburg said the company was on track to raise 737 output as planned and signaled demand remained strong for the jet even at higher production rates. “Importantly,” he said, “even at the 57 per month rate, we continue to be over sold.”

United said it will cancel orders for 61 Boeing 737-700 planes originally due in the next two years and will replace them with newer 737 MAX planes at undetermined dates. Orders for four other 737-700s will be converted to larger 737-800s due for delivery in 2017, United said.

The moves reduce United’s capital spending by \$1.6 billion through 2018. (Reporting by Alwyn Scott; Editing by Meredith Mazzilli)

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## **Exhibit 18**

**Exhibit is Not Susceptible to  
Non-Confidential Summarization**

## **Exhibit 19**



**Declaration of Gregory A. May**

I, Gregory A. May, hereby declare as follows:

1. I make the statements in this declaration on personal knowledge or after acquainting myself with the facts by consulting the relevant company records and discussing these matters with current Delta Air Lines, Inc. ("Delta") employees.
2. I am the Senior Vice President for Fleet & Supply Chain Management at Delta.
3. I am aware of a proposed transaction by which Airbus will partner with Bombardier in the manufacture and sale of the Bombardier C Series aircraft.
4. My understanding is that one result of this partnership between Airbus and Bombardier is that C Series aircraft will be manufactured at Airbus' manufacturing site in Mobile, Alabama.
5. In light of this development, Delta is [  
  
  
  
  
].
6. Under the terms of the 2016 Purchase Agreement, Delta was to take deliveries [  
  
  
].
7. The terms of the [  
  
  
  
  
].
8. [  
  
  
  
  
].
9. Delta welcomes the opportunity to take delivery in the United States of CS100 aircraft manufactured in the United States. This transaction will expand aircraft manufacturing

capability in the United States, which will in turn benefit U.S. airlines by giving them additional options for purchasing American-made aircraft, and create new manufacturing jobs for American workers.

10. Delta understands that more than 50 percent of the content of the CS100, including the engines, are already sourced from US based suppliers. Adding additional US manufacturing and assembly will only further increase the US content and the benefit to U.S. workers and customers.

I declare under penalty of perjury that the forgoing is true and correct.



Gregory A. May

Date: November 6, 2017

## **Exhibit 20**

### Declaration of Daniel J. Pietrzak

I, Daniel J. Pietrzak, hereby declare as follows:

1. I make the statements in this declaration on personal knowledge or after acquainting myself with the facts by consulting the relevant company records and discussing these matters with other Delta employees.
2. I am the Managing Director – Aircraft Transactions at Delta Air Lines, Inc. (“Delta”).
3. All other things being equal, Delta has a strong preference for taking delivery of aircraft we purchase at a Delivery Location in the United States rather than in a foreign country. This preference is driven by a variety of factors, including that there are substantial cost savings to Delta when we take delivery at a U.S. point.
4. For example, Delta is currently taking deliveries of A321 aircraft we have purchased from Airbus at two separate Airbus manufacturing facilities: one in Hamburg, Germany, and the other in Mobile, Alabama. It is significantly less expensive for Delta to take these deliveries in Mobile than in Hamburg.
5. One major cost difference arises from the need to ferry the aircraft from the Delivery Location to Delta’s maintenance facility [
6. As reflected in the attached Exhibit 1 (“A321 Ferry to MSP Mission Summary”) [
7. The attached Exhibit 2 (“A321 Delivery Cost Estimates”) reflects Delta’s estimated costs for fuel, engine maintenance, and landing/navigation fees attributed to each ferry flight

segment from both Delivery Locations. As reflected in this Exhibit, the direct fuel, engine maintenance, and landing/navigation fee costs to ferry an aircraft from delivery at Mobile to our [

]

8. In addition, Delta must deploy its own flight crew to the Delivery Location to operate these ferry flights. As reflected in the attached Exhibit 3, the total out of pocket costs attributable to the use of these flight crews for this purpose are approximately [ ] less when the Delivery Location is Mobile than when it is Hamburg. This differential does not include the lost opportunity cost we suffer as a result of those pilots being unavailable for the operation of commercial flights for a four day pilot rotation (required for the Hamburg ferry flights) versus a one day pilot rotation (which is all that is required for the ferry flight from Mobile).
9. In addition, Delta provides a significant amount of Buyer Furnished Equipment ("BFE") to the manufacturer [

]

Location	Total Freight cost	Aircraft	Average Cost per Aircraft
Mobile	\$ [ ]	[ ]	\$ [ ]
Hamburg	\$ [ ]	[ ]	\$ [ ]

10. Taking delivery at a domestic location also significantly reduces the cost and complexity of the logistics for Delta employees involved in managing the aircraft inspection, acceptance, contract closing, quality assurance, FAA compliance, and related delivery processes for the airline, all of which requires extensive travel by many different Delta employees to the Delivery Location. All of this is less expensive and much less time consuming when that delivery location is in Mobile.

I declare under penalty of perjury that the forgoing is true and correct.

  
Daniel J. Pietrzak

Date: December 21, 2017

EXHIBIT 1



**EXHIBIT 2**  
**A321 Delivery Costs (Excluding Crew)**

A large, empty rectangular frame with brackets on the left and right sides, indicating a placeholder for a table or chart. The frame is composed of two vertical lines with horizontal caps at the top and bottom.



**EXHIBIT 3**  
**A321 Pilot Delivery Cost Estimates**

## **Exhibit 21**

**Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements**

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
1	SO	GA	ATL	Atlanta	Hartsfield - Jackson Atlanta International	P	L	50,501,858	49,340,732	2.35%
2	WP	CA	LAX	Los Angeles	Los Angeles International	P	L	39,636,042	36,351,272	9.04%
3	GL	IL	ORD	Chicago	Chicago O'Hare International	P	L	37,589,899	36,305,668	3.54%
4	SW	TX	DFW	Fort Worth	Dallas-Fort Worth International	P	L	31,283,579	31,589,839	-0.97%
5	EA	NY	JFK	New York	John F Kennedy International	P	L	29,239,151	27,782,369	5.24%
6	NM	CO	DEN	Denver	Denver International	P	L	28,267,394	26,280,043	7.56%
7	WP	CA	SFO	San Francisco	San Francisco International	P	L	25,707,101	24,190,560	6.27%
8	WP	NV	LAS	Las Vegas	McCarran International	P	L	22,833,267	21,857,693	4.46%
9	NM	WA	SEA	Seattle	Seattle-Tacoma International	P	L	21,887,110	20,148,980	8.63%
10	SO	NC	CLT	Charlotte	Charlotte/Douglas International	P	L	21,511,880	21,913,166	-1.83%
11	WP	AZ	PHX	Phoenix	Phoenix Sky Harbor International	P	L	20,896,265	21,351,504	-2.13%
12	SO	FL	MIA	Miami	Miami International	P	L	20,875,813	20,986,349	-0.53%
13	SO	FL	MCO	Orlando	Orlando International	P	L	20,283,541	18,759,938	8.12%
14	SW	TX	IAH	Houston	George Bush Intercontinental/Houston	P	L	20,062,072	20,595,881	-2.59%
15	EA	NJ	EWR	Newark	Newark Liberty International	P	L	19,923,009	18,684,818	6.63%
16	GL	MN	MSP	Minneapolis	Minneapolis-St Paul International/Wold-Chamberlain	P	L	18,123,844	17,634,273	2.78%
17	NE	MA	BOS	Boston	General Edward Lawrence Logan International	P	L	17,759,044	16,290,362	9.02%
18	GL	MI	DTW	Detroit	Detroit Metropolitan Wayne County	P	L	16,847,135	16,255,520	3.64%
19	EA	NY	LGA	New York	Laguardia	P	L	14,762,593	14,319,924	3.09%
20	EA	PA	PHL	Philadelphia	Philadelphia International	P	L	14,564,419	15,101,349	-3.56%
21	SO	FL	FLL	Fort Lauderdale	Fort Lauderdale/Hollywood International	P	L	14,263,270	13,061,632	9.20%
22	EA	MD	BWI	Glen Burnie	Baltimore/Washington International Thurgood Marshall	P	L	12,340,972	11,738,845	5.13%
23	EA	VA	DCA	Arlington	Ronald Reagan Washington National	P	L	11,470,854	11,242,375	2.03%
24	NM	UT	SLC	Salt Lake City	Salt Lake City International	P	L	11,143,738	10,634,538	4.79%
25	GL	IL	MDW	Chicago	Chicago Midway International	P	L	11,044,387	10,830,850	1.97%
26	EA	VA	IAD	Dulles	Washington Dulles International	P	L	10,596,942	10,363,974	2.25%
27	WP	CA	SAN	San Diego	San Diego International	P	L	10,340,164	9,985,763	3.55%
28	WP	HI	HNL	Honolulu	Daniel K Inouye International	P	L	9,656,340	9,479,094	1.87%
29	SO	FL	TPA	Tampa	Tampa International	P	L	9,194,994	9,150,458	0.49%
30	NM	OR	PDX	Portland	Portland International	P	L	9,071,154	8,340,252	8.76%

Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
				<b>Large Hub Primary</b>	<b>30</b>					
31	SW	TX	DAL	Dallas	Dallas Love Field	P	M	7,554,596	7,040,950	7.30%
32	CE	MO	STL	St. Louis	St Louis Lambert International	P	M	6,793,076	6,239,248	8.88%
33	SO	TN	BNA	Nashville	Nashville International	P	M	6,338,517	5,715,205	10.91%
34	SW	TX	HOU	Houston	William P Hobby	P	M	6,285,181	5,937,990	5.85%
35	SW	TX	AUS	Austin	Austin-Bergstrom International	P	M	6,095,545	5,797,562	5.14%
36	WP	CA	OAK	Oakland	Metropolitan Oakland International	P	M	5,934,639	5,506,687	7.77%
37	SW	LA	MSY	Metairie	Louis Armstrong New Orleans International	P	M	5,569,705	5,329,711	4.50%
38	SO	NC	RDU	Raleigh	Raleigh-Durham International	P	M	5,401,714	4,954,735	9.02%
39	CE	MO	MCI	Kansas City	Kansas City International	P	M	5,391,557	5,135,127	4.99%
40	WP	CA	SJC	San Jose	Norman Y Mineta San Jose International	P	M	5,321,603	4,822,480	10.35%
41	WP	CA	SNA	Santa Ana	John Wayne Airport-Orange County	P	M	5,217,242	4,945,209	5.50%
42	WP	CA	SMF	Sacramento	Sacramento International	P	M	4,969,366	4,714,729	5.40%
43	SO	PR	SJU	San Juan	Luis Munoz Marin International	P	M	4,343,354	4,233,638	2.59%
44	SO	FL	RSW	Fort Myers	Southwest Florida International	P	M	4,239,261	4,159,215	1.92%
45	GL	IN	IND	Indianapolis	Indianapolis International	P	M	4,216,766	3,889,567	8.41%
46	SW	TX	SAT	San Antonio	San Antonio International	P	M	4,179,994	4,091,434	2.16%
47	GL	OH	CLE	Cleveland	Cleveland-Hopkins International	P	M	4,083,476	3,916,922	4.25%
48	EA	PA	PIT	Pittsburgh	Pittsburgh International	P	M	3,986,114	3,890,681	2.45%
49	GL	OH	CMH	Columbus	John Glenn Columbus International	P	M	3,567,864	3,312,496	7.71%
50	WP	HI	OGG	Kahului	Kahului	P	M	3,352,813	3,220,753	4.10%
51	GL	WI	MKE	Milwaukee	General Mitchell International	P	M	3,327,536	3,229,897	3.02%
52	SO	KY	CVG	Greater Cincinnati	Cincinnati/Northern Kentucky International	P	M	3,269,979	3,054,991	7.04%
53	SO	FL	PBI	West Palm Beach	Palm Beach International	P	M	3,100,624	3,113,591	-0.42%
54	NE	CT	BDL	Windsor Locks	Bradley International	P	M	2,982,194	2,926,054	1.92%
55	SO	FL	JAX	Jacksonville	Jacksonville International	P	M	2,729,129	2,716,473	0.47%
56	AL	AK	ANC	Anchorage	Ted Stevens Anchorage International	P	M	2,563,524	2,525,893	1.49%
57	SW	NM	ABQ	Albuquerque	Albuquerque International Sunport	P	M	2,341,719	2,323,883	0.77%
58	EA	NY	BUF	Buffalo	Buffalo Niagara International	P	M	2,313,724	2,336,431	-0.97%
59	CE	NE	OMA	Omaha	Eppley Airfield	P	M	2,127,387	2,046,179	3.97%
60	WP	CA	ONT	Ontario	Ontario International	P	M	2,104,625	2,089,801	0.71%
61	WP	CA	BUR	Burbank	Bob Hope	P	M	2,077,892	1,973,897	5.27%

Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
				<b>Medium Hub Primary</b>	<b>31</b>					
62	SO	TN	MEM	Memphis	Memphis International	P	S	2,016,089	1,873,716	7.60%
63	SO	SC	CHS	Charleston	Charleston AFB/International	P	S	1,811,695	1,669,988	8.49%
64	NE	RI	PVD	Warwick	Theodore Francis Green State	P	S	1,803,000	1,763,676	2.23%
65	SW	OK	OKC	Oklahoma City	Will Rogers World	P	S	1,796,473	1,803,188	-0.37%
66	EA	VA	RIC	Highland Springs	Richmond International	P	S	1,777,648	1,740,391	2.14%
67	WP	NV	RNO	Reno	Reno/Tahoe International	P	S	1,771,864	1,669,876	6.11%
68	NM	ID	BOI	Boise	Boise Air Terminal/Gowen Field	P	S	1,633,507	1,487,777	9.80%
69	SO	KY	SDF	Louisville	Louisville International- Standiford Field	P	S	1,631,494	1,640,297	-0.54%
70	EA	VA	ORF	Norfolk	Norfolk International	P	S	1,602,631	1,515,200	5.77%
71	WP	AZ	TUS	Tucson	Tucson International	P	S	1,594,594	1,549,253	2.93%
72	NM	WA	GEG	Spokane	Spokane International	P	S	1,570,652	1,515,351	3.65%
73	WP	HI	KOA	Kailua Kona	Kona International at Keahole	P	S	1,569,602	1,485,777	5.64%
74	WP	HI	LIH	Lihue	Lihue	P	S	1,458,940	1,491,688	-2.20%
75	WP	GU	GUM	Tamuning	Guam International	P	S	1,444,299	1,420,500	1.68%
76	SW	TX	ELP	El Paso	El Paso International	P	S	1,414,376	1,381,392	2.39%
77	EA	NY	ALB	Albany	Albany International	P	S	1,388,860	1,276,793	8.78%
78	WP	CA	LGB	Long Beach	Long Beach /Daugherty Field/	P	S	1,386,357	1,220,937	13.55%
79	SW	OK	TUL	Tulsa	Tulsa International	P	S	1,342,315	1,359,582	-1.27%
80	GL	MI	GRR	Grand Rapids	Gerald R Ford International	P	S	1,334,979	1,280,803	4.23%
81	SO	FL	SFB	Sanford	Orlando Sanford International	P	S	1,321,675	1,209,382	9.29%
82	SO	AL	BHM	Birmingham	Birmingham-Shuttlesworth International	P	S	1,304,467	1,325,897	-1.62%
83	CE	IA	DSM	Des Moines	Des Moines International	P	S	1,216,357	1,156,462	5.18%
84	EA	NY	ROC	Rochester	Greater Rochester International	P	S	1,186,002	1,177,994	0.68%
85	SO	GA	SAV	Savannah	Savannah/Hilton Head International	P	S	1,056,265	980,531	7.72%
86	GL	OH	DAY	Dayton	James M Cox Dayton International	P	S	1,019,922	1,041,759	-2.10%
87	WP	CA	PSP	Palm Springs	Palm Springs International	P	S	995,801	947,728	5.07%
88	NE	NH	MHT	Manchester	Manchester	P	S	995,403	1,026,349	-3.02%
89	SO	SC	GSP	Greer	Greenville Spartanburg International	P	S	991,276	955,097	3.79%
90	EA	NY	SYR	Syracuse	Syracuse Hancock International	P	S	988,496	987,732	0.08%
91	SW	AR	LIT	Little Rock	Bill and Hillary Clinton National/Adams Field	P	S	958,824	958,510	0.03%
92	SO	SC	MYR	Myrtle Beach	Myrtle Beach International	P	S	944,849	899,859	5.00%
93	SO	FL	PIE	Clearwater	St Pete-Clearwater International	P	S	915,672	819,974	11.67%

**Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements**

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
94	GL	WI	MSN	Madison	Dane County Regional-Truax Field	P	S	903,155	826,640	9.26%
95	SO	TN	TYS	Alcoa	McGhee Tyson	P	S	887,103	848,390	4.56%
96	NE	ME	PWM	Portland	Portland International Jetport	P	S	886,343	858,449	3.25%
97	SO	NC	GSO	Greensboro	Piedmont Triad International	P	S	848,261	848,249	0.00%
98	SO	FL	PNS	Pensacola	Pensacola International	P	S	792,916	787,916	0.63%
99	CE	KS	ICT	Wichita	Wichita Dwight D Eisenhower National	P	S	781,944	773,550	1.09%
100	EA	NY	HPN	White Plains	Westchester County	P	S	766,170	757,466	1.15%
101	WP	CA	FAT	Fresno	Fresno Yosemite International	P	S	761,298	695,008	9.54%
102	SO	VI	STT	Charlotte Amalie	Cyril E King	P	S	729,382	706,098	3.30%
103	WP	AZ	IWA	Mesa	Phoenix-Mesa Gateway	P	S	705,731	666,187	5.94%
104	GL	OH	CAK	Akron	Akron-Canton Regional	P	S	685,553	759,335	-9.72%
105	SW	AR	XNA	Bentonville	Northwest Arkansas Regional	P	S	673,810	629,905	6.97%
106	NM	CO	COS	Colorado Springs	City of Colorado Springs Municipal	P	S	657,694	593,246	10.86%
107	WP	HI	ITO	Hilo	Hilo International	P	S	640,757	627,171	2.17%
108	SO	KY	LEX	Lexington	Blue Grass	P	S	638,316	606,980	5.16%
109	EA	NY	ISP	Islip	Long Island MacArthur	P	S	597,133	603,653	-1.08%
110	NE	VT	BTB	Burlington	Burlington International	P	S	593,311	581,143	2.09%
111	SO	FL	SRQ	Sarasota	Sarasota/Bradenton International	P	S	589,860	607,449	-2.90%
112	EA	PA	MDT	Harrisburg	Harrisburg International	P	S	589,511	587,049	0.42%
113	EA	NJ	ACY	Atlantic City	Atlantic City International	P	S	589,091	587,967	0.19%
114	SO	FL	PGD	Punta Gorda	Punta Gorda	P	S	558,482	421,162	32.61%
115	SO	SC	CAE	Columbia	Columbia Metropolitan	P	S	553,658	533,575	3.76%
116	NM	MT	BZN	Bozeman	Bozeman Yellowstone International	P	S	553,245	512,042	8.05%
117	CE	IA	CID	Cedar Rapids	The Eastern Iowa	P	S	547,786	557,383	-1.72%
118	AL	AK	FAI	Fairbanks	Fairbanks International	P	S	538,881	493,443	9.21%
119	SO	AL	HSV	Huntsville	Huntsville International-Carl T Jones Field	P	S	527,801	519,785	1.54%
120	GL	SD	FSD	Sioux Falls	Joe Foss Field	P	S	510,105	493,530	3.36%
121	SO	MS	JAN	Jackson	Jackson-Medgar Wiley Evers International	P	S	491,464	497,042	-1.12%
122	NM	OR	EUG	Eugene	Mahlon Sweet Field	P	S	483,224	447,813	7.91%
123	SW	TX	MAF	Midland	Midland International Air And Space Port	P	S	471,490	518,509	-9.07%
124	CE	MO	SGF	Springfield	Springfield-Branson National	P	S	462,126	447,843	3.19%
125	SW	TX	LBB	Lubbock	Lubbock Preston Smith International	P	S	448,093	443,239	1.10%
126	SO	FL	VPS	Valparaiso	Eglin AFB/Destin-Ft Walton Beach	P	S	440,002	373,072	17.94%
127	SO	FL	ECP	Panama City	Northwest Florida Beaches International	P	S	434,302	428,704	1.31%

Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
128	WP	MP	GSN	Saipan	Francisco C Ada/Saipan International	P	S	430,275	455,232	-5.48%
129	NM	MT	BIL	Billings	Billings Logan International	P	S	423,213	420,426	0.66%
130	SO	TN	CHA	Chattanooga	Lovell Field	P	S	422,442	393,680	7.31%
131	AL	AK	JNU	Juneau	Juneau International	P	S	420,442	403,538	4.19%
132	SO	NC	AVL	Asheville	Asheville Regional	P	S	416,939	393,386	5.99%
133	NM	WA	BLI	Bellingham	Bellingham International	P	S	415,285	447,693	-7.24%
				<b>Small Hub Primary</b>	<b>72</b>					
134	SO	NC	ILM	Wilmington	Wilmington International	P	N	413,185	388,023	6.48%
135	GL	ND	FAR	Fargo	Hector International	P	N	402,976	437,188	-7.83%
136	NM	OR	MFR	Medford	Rogue Valley International - Medford	P	N	401,469	370,187	8.45%
137	GL	MI	FNT	Flint	Bishop International	P	N	398,508	411,763	-3.22%
138	NM	MT	MSO	Missoula	Missoula International	P	N	381,582	350,172	8.97%
139	SO	FL	EYW	Key West	Key West International	P	N	380,505	362,108	5.08%
140	NM	WA	PSC	Pasco	Tri-Cities	P	N	374,301	348,990	7.25%
141	GL	IL	MLI	Moline	Quad City International	P	N	364,393	368,114	-1.01%
142	SW	LA	BTR	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	P	N	364,200	366,102	-0.52%
143	GL	IN	FWA	Fort Wayne	Fort Wayne International	P	N	360,369	353,876	1.83%
144	SW	TX	MFE	McAllen	McAllen Miller International	P	N	355,224	391,687	-9.31%
145	SO	FL	TLH	Tallahassee	Tallahassee International	P	N	345,404	332,777	3.79%
146	SO	FL	DAB	Daytona Beach	Daytona Beach International	P	N	342,495	306,360	11.79%
147	NM	WY	JAC	Jackson	Jackson Hole	P	N	342,044	313,151	9.23%
148	SW	TX	AMA	Amarillo	Rick Husband Amarillo International	P	N	334,815	341,132	-1.85%
149	GL	IN	SBN	South Bend	South Bend International	P	N	329,957	315,313	4.64%
150	WP	CA	SBA	Santa Barbara	Santa Barbara Municipal	P	N	329,751	316,511	4.18%
151	SW	TX	CRP	Corpus Christi	Corpus Christi International	P	N	325,815	338,312	-3.69%
152	EA	PA	ABE	Allentown	Lehigh Valley International	P	N	324,511	320,544	1.24%
153	WP	AZ	GCN	Grand Canyon	Grand Canyon National Park General Downing - Peoria International	P	N	319,206	332,050	-3.87%
154	GL	IL	PIA	Peoria	Peoria International	P	N	307,189	318,162	-3.45%
155	NM	OR	RDM	Redmond	Roberts Field	P	N	306,517	280,823	9.15%
156	EA	VA	ROA	Roanoke	Roanoke-Blacksburg Regional/Woodrum Field	P	N	305,212	300,181	1.68%
157	SO	MS	GPT	Gulfport	Gulfport-Biloxi International	P	N	305,157	317,154	-3.78%
158	EA	VA	CHO	Charlottesville-Albemarle	Charlottesville-Albemarle	P	N	295,930	274,767	7.70%
159	GL	WI	GRB	Green Bay	Green Bay-Austin Straubel International	P	N	292,868	295,245	-0.81%
160	SO	AL	MOB	Mobile	Mobile Regional	P	N	288,209	278,053	3.65%
161	EA	NJ	TTN	Trenton	Trenton Mercer	P	N	278,436	389,598	-28.53%

**Commercial Service Airports (Rank Order)**  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
162	GL	ND	BIS	Bismarck	Bismarck Municipal	P	N	273,980	262,469	4.39%
163	GL	SD	RAP	Rapid City	Rapid City Regional	P	N	272,537	264,183	3.16%
164	SO	GA	AGS	Augusta	Augusta Regional at Bush Field	P	N	270,797	271,915	-0.41%
165	GL	WI	ATW	Appleton	Appleton International	P	N	270,633	258,321	4.77%
166	SW	LA	SHV	Shreveport	Shreveport Regional	P	N	270,395	295,257	-8.42%
167	NE	ME	BGR	Bangor	Bangor International	P	N	269,013	273,829	-1.76%
168	SW	TX	HRL	Harlingen	Valley International	P	N	263,760	259,864	1.50%
169	SO	PR	BQN	Aguadilla	Rafael Hernandez	P	N	257,871	202,197	27.53%
170	NM	CO	ASE	Aspen	Aspen-Pitkin County/Sardy Field	P	N	254,392	233,512	8.94%
171	NM	MT	GPI	Kalispell	Glacier Park International	P	N	247,816	237,501	4.34%
172	EA	PA	AVP	Avoca	Wilkes-Barre/Scranton International	P	N	232,855	219,796	5.94%
173	SO	NC	FAY	Fayetteville	Fayetteville Regional/Grannis Field	P	N	224,541	220,339	1.91%
174	GL	MI	TVC	Traverse City	Cherry Capital	P	N	223,924	210,231	6.51%
175	SO	FL	MLB	Melbourne	Melbourne International	P	N	220,360	220,393	-0.01%
176	NM	CO	GJT	Grand Junction	Grand Junction Regional	P	N	218,319	214,404	1.83%
177	EA	WV	CRW	Charleston	Yeager	P	N	213,412	225,170	-5.22%
178	WP	NV	BVU	Boulder City	Boulder City Municipal	P	N	211,615	234,101	-9.61%
179	SW	LA	LFT	Lafayette	Lafayette Regional/Paul Fournet Field	P	N	206,667	243,840	-15.24%
180	SO	FL	GNV	Gainesville	Gainesville Regional	P	N	206,330	213,225	-3.23%
181	SO	TN	TRI	Bristol/Johnson/Kingsport	Tri-Cities	P	N	204,926	216,426	-5.31%
182	GL	IN	EVV	Evansville	Evansville Regional	P	N	204,352	203,350	0.49%
183	EA	VA	PHF	Newport News	Newport News/Williamsburg International	P	N	199,421	202,104	-1.33%
184	SO	VI	STX	Christiansted	Henry E Rohlsen	P	N	196,047	176,588	11.02%
185	WP	CA	MRY	Monterey	Monterey Regional	P	N	192,136	180,605	6.38%
186	GL	IL	BMI	Bloomington-Normal	Central IL Regional Airport at Bloomington-Normal	P	N	188,490	186,633	1.00%
187	NM	CO	DRO	Durango	Durango-La Plata County	P	N	187,789	186,800	0.53%
188	NM	MT	GTF	Great Falls	Great Falls International	P	N	176,730	182,635	-3.23%
189	SO	AL	MGM	Montgomery	Montgomery Regional (Dannelly Field)	P	N	173,210	175,619	-1.37%
190	WP	CA	STS	Santa Rosa	Charles M Schulz - Sonoma County	P	N	167,151	129,086	29.49%
191	NM	CO	EGE	Eagle	Eagle County Regional	P	N	163,840	156,937	4.40%
192	CE	NE	LNK	Lincoln	Lincoln	P	N	162,876	160,525	1.46%
193	WP	CA	SBP	San Luis Obispo	San Luis County Regional	P	N	162,719	144,324	12.75%
194	GL	MI	LAN	Clinton (Township of)	Capital Region International	P	N	161,863	180,927	-10.54%
195	SW	TX	GRK	Killeen	Robert Gray AAF	P	N	157,161	176,895	-11.16%
196	AL	AK	BET	Bethel	Bethel	P	N	155,791	158,824	-1.91%



**Commercial Service Airports (Rank Order)**  
based on Calendar Year 2016 Enplanements

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197	GL	MI	AZO	Kalamazoo	Kalamazoo/Battle Creek International	P	N	154,242	122,081	26.34%
198	GL	ND	MOT	Minot	Minot International	P	N	150,634	181,328	-16.93%
199	SO	NC	OAJ	Jacksonville	Albert J Ellis	P	N	149,987	148,960	0.69%
200	NM	ID	IDA	Idaho Falls	Idaho Falls Regional	P	N	146,213	147,923	-1.16%
201	EA	PA	LBE	Latrobe	Arnold Palmer Regional	P	N	146,127	181,105	-19.31%
202	EA	NY	SWF	Newburgh	Stewart International	P	N	140,328	142,603	-1.60%
203	EA	NY	ELM	Elmira	Elmira/Corning Regional	P	N	139,583	155,936	-10.49%
204	EA	PA	UNV	State College	University Park	P	N	134,312	139,124	-3.46%
205	GL	ND	GFK	Grand Forks	Grand Forks International	P	N	132,557	145,785	-9.07%
206	SW	LA	AEX	Alexandria	Alexandria International	P	N	129,776	159,252	-18.51%
207	EA	NY	PBG	Plattsburgh	Plattsburgh International	P	N	129,622	131,600	-1.50%
208	WP	AZ	1G4	Peach Springs	Grand Canyon West	P	N	128,739	147,137	-12.50%
209	AL	AK	KTN	Ketchikan	Ketchikan International	P	N	127,881	124,747	2.51%
210	NE	MA	ACK	Nantucket	Nantucket Memorial	P	N	126,197	155,952	-19.08%
211	EA	NY	IAG	Niagara Falls	Niagara Falls International	P	N	126,028	121,616	3.63%
212	GL	MN	DLH	Duluth	Duluth International	P	N	124,284	131,128	-5.22%
213	GL	MI	MBS	Saginaw	MBS International	P	N	122,469	119,004	2.91%
214	SW	TX	BRO	Brownsville	Brownsville/South Padre Island International	P	N	120,151	143,353	-16.19%
215	GL	WI	CWA	Mosinee	Central Wisconsin	P	N	119,222	126,016	-5.39%
216	NM	CO	MTJ	Montrose	Montrose Regional	P	N	116,272	102,756	13.15%
217	GL	MN	RST	Rochester	Rochester International	P	N	112,864	114,657	-1.56%
218	WP	AZ	IFP	Bullhead City	Laughlin/Bullhead International	P	N	109,334	108,888	0.41%
219	NM	CO	HDN	Hayden	Yampa Valley	P	N	107,339	93,896	14.32%
220	SO	NC	EWN	New Bern	Coastal Carolina Regional	P	N	106,110	109,237	-2.86%
221	SO	PR	PSE	Ponce	Mercedita	P	N	105,804	98,830	7.06%
222	NM	MT	HLN	Helena	Helena Regional	P	N	103,239	99,460	3.80%
223	GL	OH	LCK	Columbus	Rickenbacker International	P	N	102,751	83,466	23.11%
224	SW	LA	MLU	Monroe	Monroe Regional	P	N	102,342	114,170	-10.36%
225	GL	IL	RFD	Rockford	Chicago/Rockford International	P	N	101,790	108,379	-6.08%
226	SW	TX	LRD	Laredo	Laredo International	P	N	101,115	110,368	-8.38%
227	WP	CA	BFL	Bakersfield	Meadows Field	P	N	100,433	120,966	-16.97%
228	EA	WV	HTS	Huntington	Tri-State/Milton J Ferguson Field	P	N	98,489	101,741	-3.20%
229	GL	WI	LSE	La Crosse	La Crosse Regional	P	N	94,047	94,874	-0.87%
230	GL	IL	SPI	Springfield	Abraham Lincoln Capital	P	N	93,269	90,413	3.16%
231	WP	CA	SCK	Stockton	Stockton Metropolitan	P	N	93,076	80,163	16.11%
232	NM	WY	CPR	Casper	Casper/Natrona County International	P	N	92,805	103,123	-10.01%
233	WP	HI	MKK	Kaunakakai	Molokai	P	N	92,560	90,122	2.71%
234	GL	OH	TOL	Toledo	Toledo Express	P	N	92,522	94,044	-1.62%
235	AL	AK	ENA	Kenai	Kenai Municipal	P	N	92,485	97,820	-5.45%

**Commercial Service Airports (Rank Order)**  
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236	SO	NC	JQF	Concord	Concord Regional	P	N	90,338	73,727	22.53%
237	GL	IL	CMI	Savoy	University of Illinois-Willard	P	N	89,318	89,836	-0.58%
238	EA	NY	ITH	Ithaca	Ithaca Tompkins Regional	P	N	88,692	87,321	1.57%
239	EA	PA	ERI	Erie	Erie International/Tom Ridge Field	P	N	87,647	88,953	-1.47%
240	SW	TX	ABI	Abilene	Abilene Regional	P	N	84,809	86,000	-1.38%
241	SW	AR	FSM	Fort Smith	Fort Smith Regional	P	N	83,920	84,136	-0.26%
242	AL	AK	SIT	Sitka	Sitka Rocky Gutierrez	P	N	83,404	81,019	2.94%
243	GL	IL	BLV	Belleville	Scott AFB/Midamerica	P	N	79,988	32,589	145.44%
244	AL	AK	ADQ	Kodiak	Kodiak	P	N	79,682	81,970	-2.79%
245	SW	TX	CLL	College Station	Easterwood Field	P	N	78,907	89,844	-12.17%
246	NM	UT	SGU	St. George	St George Regional	P	N	78,680	69,680	12.92%
247	NM	UT	PVU	Provo	Provo Municipal	P	N	78,451	65,307	20.13%
248	NM	ID	SUN	Hailey	Friedman Memorial	P	N	77,729	67,955	14.38%
249	EA	VA	LYH	Timberlake	Lynchburg Regional/Preston Glenn Field	P	N	75,465	75,824	-0.47%
250	WP	AZ	NYL	Yuma	Yuma MCAS/Yuma International	P	N	74,742	79,233	-5.67%
251	NE	NH	PSM	Portsmouth	Portsmouth International at Pease	P	N	73,247	45,933	59.46%
252	NM	ID	LWS	Lewiston	Lewiston-Nez Perce County	P	N	72,724	66,579	9.23%
253	SW	NM	SAF	Santa Fe	Santa Fe Municipal	P	N	71,252	75,460	-5.58%
254	NM	WA	YKM	Yakima	Yakima Air Terminal/McAllister Field	P	N	70,993	63,747	11.37%
255	WP	CA	ACV	Arcata	Arcata	P	N	69,732	55,168	26.40%
256	CE	NE	GRI	Grand Island	Central Nebraska Regional	P	N	68,879	64,602	6.62%
257	GL	ND	ISN	Williston	Sloulin Field International	P	N	68,829	102,345	-32.75%
258	EA	NY	BGM	Binghamton	Greater Binghamton/Edwin A Link Field	P	N	68,415	77,654	-11.90%
259	WP	AS	PPG	Pago Pago	Pago Pago International	P	N	65,439	65,860	-0.64%
260	CE	MO	COU	Columbia	Columbia Regional	P	N	65,014	64,707	0.47%
261	WP	AZ	FLG	Flagstaff	Flagstaff Pulliam	P	N	64,578	67,419	-4.21%
262	AL	AK	OTZ	Kotzebue	Ralph Wien Memorial	P	N	64,481	66,503	-3.04%
263	SW	TX	ACT	Waco	Waco Regional	P	N	64,356	62,882	2.34%
264	CE	KS	MHK	Manhattan	Manhattan Regional	P	N	63,761	66,263	-3.78%
265	WP	NV	HND	Las Vegas	Henderson Executive	P	N	63,445	53,551	18.48%
266	SO	PR	VQS	Vieques	Antonio Rivera Rodriguez	P	N	63,104	71,356	-11.56%
267	NM	WA	PUW	Pullman	Pullman/Moscow Regional	P	N	61,833	50,883	21.52%
268	AL	AK	OME	Nome	Nome	P	N	60,655	59,929	1.21%
269	SW	TX	SJT	San Angelo	San Angelo Regional/Mathis Field	P	N	60,277	63,842	-5.58%
270	NM	WA	EAT	East Wenatchee	Pangborn Memorial	P	N	60,068	62,319	-3.61%

**Commercial Service Airports (Rank Order)**  
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271	EA	MD	SBY	Salisbury	Salisbury-Ocean City Wicomico Regional	P	N	58,695	61,782	-5.00%
272	NE	MA	ORH	Worcester	Worcester Regional	P	N	57,800	59,624	-3.06%
273	NE	MA	MVY	Vineyard Haven	Martha's Vineyard	P	N	54,084	49,853	8.49%
274	GL	OH	YNG	Youngstown	Youngstown-Warren Regional	P	N	53,633	66,299	-19.10%
275	SW	LA	LCH	Lake Charles	Lake Charles Regional	P	N	53,576	69,130	-22.50%
276	SW	TX	TYR	Tyler	Tyler Pounds Regional	P	N	52,494	72,294	-27.39%
277	AL	AK	SCC	Deadhorse	Deadhorse	P	N	51,205	77,152	-33.63%
278	SW	OK	LAW	Lawton	Lawton-Fort Sill Regional	P	N	51,088	51,859	-1.49%
279	SO	AL	DHN	Dothan	Dothan Regional	P	N	49,411	46,792	5.60%
280	SO	NC	PGV	Greenville	Pitt-Greenville	P	N	47,457	55,017	-13.74%
281	NM	WA	ALW	Walla Walla	Walla Walla Regional	P	N	47,439	41,272	14.94%
283	GL	MI	SAW	Gwinn	Sawyer International	P	N	45,462	42,578	6.77%
284	AL	AK	BRW	Barrow	Wiley Post-Will Rogers Memorial	P	N	45,300	47,676	-4.98%
285	SO	SC	FLO	Florence	Florence Regional	P	N	45,300	52,611	-13.90%
286	SO	GA	CSG	Columbus	Columbus	P	N	44,813	51,790	-13.47%
287	SW	NM	ROW	Roswell	Roswell International Air Center	P	N	44,378	35,411	25.32%
289	AL	AK	HOM	Homer	Homer	P	N	44,117	40,770	8.21%
290	WP	CA	RDD	Redding	Redding Municipal	P	N	43,414	30,852	40.72%
291	WP	HI	LNJ	Lanai City	Lanai	P	N	43,275	40,599	6.59%
292	SO	PR	RVR	Ceiba	Jose Aponte De La Torre	P	N	43,005	43,506	-1.15%
293	SO	MS	GTR	Columbus	Golden Triangle Regional	P	N	40,823	38,632	5.67%
294	NM	WY	COD	Cody	Yellowstone Regional	P	N	40,340	33,278	21.22%
295	SO	GA	VLD	Valdosta	Valdosta Regional	P	N	40,275	39,544	1.85%
296	SW	TX	SPS	Wichita Falls	Sheppard AFB/Wichita Falls Municipal	P	N	40,165	44,262	-9.26%
297	WP	CA	SMX	Santa Maria	Santa Maria Public/Capt G Allan Hancock Field	P	N	40,120	43,941	-8.70%
298	NM	ID	TWF	Twin Falls	Joslin Field - Magic Valley Regional	P	N	38,869	33,806	14.98%
299	WP	MP	TNI	Tinian (Municipality)	Tinian International	P	N	38,452	46,977	-18.15%
300	CE	IA	DBQ	Dubuque	Dubuque Regional	P	N	37,954	38,248	-0.77%
301	AL	AK	AKN	King Salmon	King Salmon	P	N	36,717	35,693	2.87%
302	CE	IA	SUX	Sioux City	Sioux Gateway/Col Bud Day Field	P	N	36,413	26,104	39.49%
303	SO	GA	BQK	Brunswick	Brunswick Golden Isles	P	N	36,054	34,561	4.32%
304	NM	CO	GUC	Gunnison	Gunnison-Crested Butte Regional	P	N	34,979	34,412	1.65%
305	NM	ID	PIH	Arbon Valley	Pocatello Regional	P	N	34,462	24,745	39.27%
306	SO	GA	ABY	Albany	Southwest Georgia Regional	P	N	34,226	33,949	0.82%
307	AL	AK	DLG	Dillingham	Dillingham	P	N	33,616	26,949	24.74%

**Commercial Service Airports (Rank Order)**  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
308	SW	AR	TXK	Texarkana	Texarkana Regional-Webb Field	P	N	33,565	34,881	-3.77%
309	SO	PR	CPX	Culebra	Benjamin Rivera Noriega	P	N	31,141	32,907	-5.37%
310	AL	AK	DUT	Unalaska	Unalaska	P	N	31,055	31,753	-2.20%
311	NE	MA	HYA	Hyannis	Barnstable Municipal-Boardman/Polando Field	P	N	31,027	65,790	-52.84%
312	SO	SC	HXD	Hilton Head Island	Hilton Head	P	N	30,956	38,322	-19.22%
314	SO	FL	SGJ	Saint Augustine	Northeast Florida Regional	P	N	28,462	22,030	29.20%
315	NM	WY	GCC	Gillette	Gillette-Campbell County	P	N	28,383	30,502	-6.95%
317	CE	MO	JLN	Joplin	Joplin Regional	P	N	27,930	28,306	-1.33%
318	NE	CT	HVN	New Haven	Tweed-New Haven	P	N	27,911	30,955	-9.83%
319	EA	MD	HGR	Hagerstown	Hagerstown Regional-Richard A Henson Field	P	N	27,274	25,356	7.56%
320	CE	IA	ALO	Waterloo	Waterloo Regional	P	N	27,069	26,950	0.44%
321	CE	KS	GCK	Garden City	Garden City Regional	P	N	26,825	27,152	-1.20%
323	GL	SD	ABR	Aberdeen	Aberdeen Regional	P	N	26,529	27,595	-3.86%
324	SW	TX	BPT	Beaumont	Jack Brooks Regional	P	N	26,518	33,747	-21.42%
325	SO	MS	MEI	Meridian	Key Field	P	N	26,359	24,685	6.78%
326	EA	WV	CKB	Clarksburg	North Central West Virginia	P	N	26,025	24,087	8.05%
327	NM	MT	BTM	Butte	Bert Mooney	P	N	25,890	27,448	-5.68%
329	GL	MN	BJI	Bemidji	Bemidji Regional	P	N	25,510	24,765	3.01%
330	GL	MI	PLN	Pellston	Pellston Regional Airport of Emmet County	P	N	25,497	25,197	1.19%
331	GL	MI	CMX	Hancock	Houghton County Memorial	P	N	25,439	25,732	-1.14%
334	SO	PR	SIG	San Juan	Fernando Luis Ribas Dominicci	P	N	24,054	26,203	-8.20%
335	SO	KY	OWB	Owensboro	Owensboro-Daviess County Regional	P	N	23,537	21,951	7.23%
336	AL	AK	LHD	Anchorage	Lake Hood	P	N	23,382	20,586	13.58%
337	SW	TX	GGG	Longview	East Texas Regional	P	N	22,480	20,968	7.21%
338	AL	AK	PSG	Petersburg	Petersburg James A Johnson	P	N	21,896	20,477	6.93%
339	WP	CA	MMH	Mammoth Lakes	Mammoth Yosemite	P	N	21,826	23,504	-7.14%
340	GL	WI	EAU	Eau Claire	Chippewa Valley Regional	P	N	21,304	19,332	10.20%
342	GL	MI	CIU	Sault Ste. Marie	Chippewa County International	P	N	20,974	22,687	-7.55%
343	GL	WI	RHI	Rhinelander	Rhinelander-Oneida County	P	N	20,414	20,673	-1.25%
344	SO	KY	PAH	Paducah	Barkley Regional	P	N	20,266	21,027	-3.62%
345	EA	PA	IPT	Williamsport	Williamsport Regional	P	N	19,320	21,923	-11.87%
346	WP	MP	GRO	Northern Islands (Municipality)	Benjamin Taisacan Manglona International	P	N	19,178	12,116	58.29%
347	AL	AK	MRI	Anchorage	Merrill Field	P	N	19,144	15,091	26.86%
348	AL	AK	CDV	Cordova	Merle K (Mudhole) Smith	P	N	18,649	16,997	9.72%
349	GL	MN	BRD	Brainerd	Brainerd Lakes Regional	P	N	18,328	18,200	0.70%
350	GL	MI	MKG	Muskegon	Muskegon County	P	N	18,165	17,087	6.31%

**Commercial Service Airports (Rank Order)**  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
351	NM	WA	BFI	Seattle	Boeing Field/King County International	P	N	17,795	18,945	-6.07%
353	WP	AZ	PGA	Page	Page Municipal	P	N	17,435	19,440	-10.31%
354	EA	NY	ART	Watertown	Watertown International	P	N	17,312	18,650	-7.17%
355	NE	RI	BID	Block Island	Block Island State	P	N	17,225	12,415	38.74%
356	NE	RI	WST	Westerly	Westerly State	P	N	17,218	11,970	43.84%
358	AL	AK	UNK	Unalakleet	Unalakleet	P	N	16,948	15,927	6.41%
359	GL	ND	DIK	Dickinson	Dickinson - Theodore Roosevelt Regional	P	N	16,822	41,925	-59.88%
360	GL	MI	ESC	Escanaba	Delta County	P	N	16,822	16,665	0.94%
361	NE	ME	RKD	Rockland	Knox County Regional	P	N	16,206	15,730	3.03%
362	NM	WY	RKS	Rock Springs	Rock Springs-Sweetwater County	P	N	16,110	17,657	-8.76%
363	NM	WY	LAR	Laramie	Laramie Regional	P	N	15,957	14,741	8.25%
365	GL	MN	STC	St. Cloud	St. Cloud Regional	P	N	15,615	19,171	-18.55%
366	NM	UT	OGD	Ogden	Ogden-Hinckley	P	N	15,609	16,577	-5.84%
368	WP	NV	EKO	Elko	Elko Regional	P	N	14,893	13,701	8.70%
369	NM	OR	OTH	North Bend	Southwest Oregon Regional	P	N	14,719	16,207	-9.18%
371	SW	NM	HOB	Hobbs	Lea County Regional	P	N	14,707	16,567	-11.23%
372	NM	UT	CDC	Cedar City	Cedar City Regional	P	N	14,413	14,334	0.55%
373	GL	MN	INL	International Falls	Falls International-Einarson Field	P	N	13,831	14,706	-5.95%
374	AL	AK	ANI	Aniak	Aniak	P	N	13,688	13,771	-0.60%
375	AL	AK	KSM	St. Mary's (ANV/ANVSA)	St Mary's	P	N	12,851	13,192	-2.58%
376	NM	WA	FHR	Friday Harbor	Friday Harbor	P	N	12,831	11,254	14.01%
377	GL	MN	HIB	Hibbing	Range Regional	P	N	12,654	12,394	2.10%
378	AL	AK	VDZ	Valdez	Valdez Pioneer Field	P	N	12,631	14,153	-10.75%
379	GL	MI	IMT	Iron Mountain	Ford	P	N	12,604	12,672	-0.54%
380	AL	AK	WRG	Wrangell	Wrangell	P	N	12,569	12,588	-0.15%
381	NE	ME	PQI	Presque Isle	Northern Maine Regional Airport at Presque Isle	P	N	12,526	12,928	-3.11%
382	SO	MS	PIB	Moselle	Hattiesburg-Laurel Regional	P	N	12,367	12,947	-4.48%
383	AL	AK	GST	Gustavus	Gustavus	P	N	11,438	11,189	2.23%
386	AL	AK	YAK	Yakutat	Yakutat	P	N	10,756	10,230	5.14%
387	AL	AK	AKW	Klawock	Klawock	P	N	10,628	9,966	6.64%
388	AL	AK	GAL	Galena	Edward G Pitka Sr	P	N	10,532	10,703	-1.60%
390	SW	OK	SWO	Stillwater	Stillwater Regional	P	N	10,362	1,876	452.35%
391	EA	NY	OGS	Ogdensburg	Ogdensburg International	P	N	10,281	5,120	100.80%
392	NE	NH	LEB	Lebanon	Lebanon Municipal	P	N	10,245	10,144	1.00%
393	NE	ME	BHB	Bar Harbor	Hancock County-Bar Harbor	P	N	10,094	9,579	5.38%
394	NE	MA	PVC	Provincetown	Provincetown Municipal	P	N	10,074	10,841	-7.07%

Commercial Service Airports (Rank Order)  
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Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
395	GL	IL	MWA	Marion	Veterans Airport of Southern Illinois	P	N	10,044	10,570	-4.98%
396	GL	MI	APN	Alpena	Alpena County Regional	P	N	10,031	10,409	-3.63%
				<b>Nonhub Primary</b>	<b>246</b>					
398	WP	CA	MCE	Merced	Merced Regional/Macready Field	CS	Non e	9,426	2,000	371.30%
400	AL	AK	HNS	Haines	Haines	CS	Non e	8,936	8,945	-0.10%
401	AL	AK	HNH	Hoonah	Hoonah	CS	Non e	8,809	10,050	-12.35%
402	AL	AK	SGY	Skagway	Skagway	CS	Non e	8,714	8,239	5.77%
403	WP	CA	CEC	Crescent City	Jack McNamara Field	CS	Non e	8,667	4,915	76.34%
404	NM	MT	WYS	West Yellowstone	Yellowstone	CS	Non e	8,525	7,796	9.35%
405	GL	IL	DEC	Decatur	Decatur	CS	Non e	8,453	8,034	5.22%
406	CE	KS	HYS	Hays	Hays Regional	CS	Non e	8,265	8,470	-2.42%
407	GL	SD	PIR	Pierre	Pierre Regional	CS	Non e	8,246	6,664	23.74%
408	GL	ND	DVL	Devils Lake	Devils Lake Regional	CS	Non e	8,209	6,180	32.83%
409	CE	MO	TBN	Fort Leonard Wood (U.S. Army)	Waynesville-St Robert Regional Forney Field	CS	Non e	8,108	8,065	0.53%
410	AL	AK	ENM	Emmonak	Emmonak	CS	Non e	8,072	7,597	6.25%
411	NM	MT	SDY	Sidney	Sidney-Richland Regional	CS	Non e	8,065	10,129	-20.38%
413	GL	ND	JMS	Jamestown	Jamestown Regional	CS	Non e	7,941	6,086	30.48%
414	EA	WV	MGW	Morgantown	Morgantown Municipal-Walter L Bill Hart Field	CS	Non e	7,851	7,163	9.60%
415	GL	IL	UIN	Quincy	Quincy Regional-Baldwin Field	CS	Non e	7,847	9,159	-14.32%
416	NM	UT	CNY	Moab	Canyonlands Field	CS	Non e	7,837	2,105	272.30%
417	NM	WA	ORS	Eastsound	Orcas Island	CS	Non e	7,826	5,204	50.38%
420	CE	IA	MCW	Mason City	Mason City Municipal	CS	Non e	7,734	6,752	14.54%
421	SO	MS	TUP	Tupelo	Tupelo Regional	CS	Non e	7,539	2,560	194.49%
422	AL	AK	CDB	Cold Bay	Cold Bay	CS	Non e	7,403	7,019	5.47%
423	AL	AK	MBA	Bristol Bay (Borough)	Manokotak	CS	Non e	7,293	566	1188.52%
424	CE	IA	FOD	Fort Dodge	Fort Dodge Regional	CS	Non e	7,271	5,228	39.08%
426	AL	AK	CXF	Coldfoot	Coldfoot	CS	Non e	7,203	2,894	148.89%
427	CE	IA	BRL	Burlington	Southeast Iowa Regional	CS	Non e	7,086	9,000	-21.27%
428	NE	MA	EWB	New Bedford	New Bedford Regional	CS	Non e	7,022	7,271	-3.42%

**Commercial Service Airports (Rank Order)**  
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Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
429	AL	AK	AQH	Quinhagak	Quinhagak	CS	Non e	7,012	8,543	-17.92%
432	AL	AK	FYU	Fort Yukon	Fort Yukon	CS	Non e	6,552	6,691	-2.08%
435	WP	HI	LUP	Kalaupapa	Kalaupapa	CS	Non e	6,119	8,576	-28.65%
436	CE	KS	FOE	Topeka	Topeka Regional	CS	Non e	6,051	4,939	22.51%
437	AL	AK	ILI	Iliamna	Iliamna	CS	Non e	5,835	5,865	-0.51%
438	AL	AK	IIK	Kipnuk	Kipnuk	CS	Non e	5,747	6,475	-11.24%
439	AL	AK	VAK	Chevak	Chevak	CS	Non e	5,654	6,455	-12.41%
440	AL	AK	HPB	Hooper Bay	Hooper Bay	CS	Non e	5,635	6,288	-10.38%
442	CE	MO	CGI	Scott City	Cape Girardeau Regional	CS	Non e	5,532	6,213	-10.96%
443	EA	VA	SHD	Weyers Cave	Shenandoah Valley Regional	CS	Non e	5,442	5,536	-1.70%
444	SW	NM	SVC	Silver City	Grant County	CS	Non e	5,442	3,945	37.95%
445	SO	PR	MAZ	Mayaguez	Eugenio Maria De Hostos	CS	Non e	5,344	5,900	-9.42%
446	AL	AK	PHO	Point Hope	Point Hope	CS	Non e	5,338	4,974	7.32%
447	AL	AK	OOK	Wade Hampton (Census Area)	Toksook Bay	CS	Non e	5,316	6,148	-13.53%
448	EA	NY	MSS	Massena	Massena International- Richards Field	CS	Non e	5,311	4,462	19.03%
449	SO	AL	MSL	Muscle Shoals	Northwest Alabama Regional	CS	Non e	5,295	802	560.22%
450	CE	KS	LBL	Liberal	Liberal Mid-America Regional	CS	Non e	5,212	5,456	-4.47%
451	NE	VT	RUT	Rutland	Rutland - Southern Vermont Regional	CS	Non e	5,146	5,379	-4.33%
452	NE	ME	AUG	Augusta	Augusta State	CS	Non e	5,128	5,120	0.16%
454	GL	MI	IWD	Ironwood	Gogebic-Iron County	CS	Non e	5,069	4,697	7.92%
455	AL	AK	WLK	Selawik	Selawik	CS	Non e	5,011	5,376	-6.79%
456	SO	MS	GLH	Greenville	Greenville Mid-Delta	CS	Non e	4,986	773	545.02%
457	EA	WV	LWB	Lewisburg	Greenbrier Valley	CS	Non e	4,965	6,233	-20.34%
458	SW	NM	CVN	Clovis	Clovis Municipal	CS	Non e	4,854	4,799	1.15%
459	CE	MO	IRK	Kirksville	Kirksville Regional	CS	Non e	4,733	5,167	-8.40%
460	EA	NY	SLK	Saranac Lake	Adirondack Regional	CS	Non e	4,732	5,047	-6.24%
461	AL	AK	WTK	Noatak	Noatak	CS	Non e	4,681	4,392	6.58%
462	SW	AR	JBR	Jonesboro	Jonesboro Municipal	CS	Non e	4,593	4,836	-5.02%

**Commercial Service Airports (Rank Order)**  
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463	SO	FL	VRB	Vero Beach	Vero Beach Municipal	CS	Non e	4,581	101	4435.64%
464	NM	CO	CEZ	Cortez	Cortez Municipal	CS	Non e	4,564	2,303	98.18%
465	NM	CO	FNL	Loveland	Fort Collins-Loveland Municipal	CS	Non e	4,559	3,445	32.34%
466	AL	AK	SCM	Scammon Bay	Scammon Bay	CS	Non e	4,513	4,902	-7.94%
467	CE	NE	CDR	Chadron	Chadron Municipal	CS	Non e	4,474	1,715	160.87%
468	AL	AK	CFK	Chefornak	Chefornak	CS	Non e	4,456	5,018	-11.20%
469	WP	HI	MUE	Kamuela	Waimea-Kohala	CS	Non e	4,445	4,930	-9.84%
470	CE	NE	BFF	Scottsbluff	Western Nebraska Regional/William B Heilig Field	CS	Non e	4,262	5,144	-17.15%
472	EA	PA	LNS	Lititz	Lancaster	CS	Non e	4,230	1,523	177.74%
473	NM	WY	RIW	Riverton	Riverton Regional	CS	Non e	4,228	3,537	19.54%
475	AL	AK	BVK	Buckland	Buckland	CS	Non e	4,198	4,063	3.32%
476	AL	AK	SVA	Savoonga	Savoonga	CS	Non e	4,197	3,690	13.74%
477	WP	HI	JRF	Kapolei	Kalaeloa (John Rodgers Field)	CS	Non e	4,195	5,347	-21.54%
478	EA	PA	JST	Johnstown	John Murtha Johnstown- Cambria County	CS	Non e	4,193	4,338	-3.34%
479	AL	AK	Z09	Kasigluk	Kasigluk	CS	Non e	4,190	4,109	1.97%
480	CE	NE	EAR	Kearney	Kearney Regional	CS	Non e	4,180	4,543	-7.99%
481	EA	WV	PKB	Parkersburg	Mid-Ohio Valley Regional	CS	Non e	4,170	4,409	-5.42%
482	AL	AK	MOU	Mountain Village	Mountain Village	CS	Non e	4,159	4,692	-11.36%
483	AL	AK	SDP	Sand Point	Sand Point	CS	Non e	4,146	4,146	0.00%
484	WP	AZ	SOW	Show Low	Show Low Regional	CS	Non e	4,139	2,253	83.71%
485	WP	CA	IPL	Imperial	Imperial County	CS	Non e	4,136	2,601	59.02%
486	AL	AK	SOV	Seldovia	Seldovia	CS	Non e	4,133	3,926	5.27%
487	AL	AK	0AK	Pilot Station	Pilot Station	CS	Non e	4,127	3,727	10.73%
489	CE	NE	LBF	North Platte	North Platte Regional Airport Lee Bird Field	CS	Non e	4,075	4,628	-11.95%
490	NM	UT	VEL	Vernal	Vernal Regional	CS	Non e	4,007	1,320	203.56%
491	AL	AK	D76	Noorvik	Robert /Bob/ Curtis Memorial	CS	Non e	4,004	4,423	-9.47%
492	AL	AK	DUY	Kongiganak	Kongiganak	CS	Non e	3,978	4,298	-7.45%
493	CE	KS	SLN	Salina	Salina Regional	CS	Non e	3,967	10,079	-60.64%



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494	AL	AK	AWI	Barrow (County)	Wainwright	CS	Non e	3,932	3,989	-1.43%
496	AL	AK	A61	Tuntutuliak	Tuntutuliak	CS	Non e	3,875	4,007	-3.29%
497	AL	AK	GGV	Kwigillingok	Kwigillingok	CS	Non e	3,870	3,794	2.00%
498	NM	CO	ALS	Alamosa	San Luis Valley Regional/Bergman Field	CS	Non e	3,863	3,105	24.41%
499	AL	AK	GAM	Gambell	Gambell	CS	Non e	3,860	3,309	16.65%
501	AL	AK	KWT	Kwethluk	Kwethluk	CS	Non e	3,706	3,429	8.08%
502	SO	TN	MKL	Jackson	McKellar-Sipes Regional	CS	Non e	3,661	1,800	103.39%
503	AL	AK	16A	Nunapitchuk	Nunapitchuk	CS	Non e	3,628	3,449	5.19%
506	AL	AK	2A9	Kotlik	Kotlik	CS	Non e	3,531	4,484	-21.25%
507	GL	MN	TVF	Thief River Falls	Thief River Falls Regional	CS	Non e	3,524	1,029	242.47%
508	AL	AK	AKP	Anaktuvuk Pass	Anaktuvuk Pass	CS	Non e	3,522	3,402	3.53%
509	WP	AZ	PRC	Prescott	Ernest A Love Field	CS	Non e	3,451	3,428	0.67%
510	AL	AK	SHH	Shishmaref	Shishmaref	CS	Non e	3,445	3,366	2.35%
511	NM	MT	OLF	Wolf Point	L M Clayton	CS	Non e	3,439	3,901	-11.84%
512	AL	AK	KVL	Kivalina	Kivalina	CS	Non e	3,421	3,433	-0.35%
514	AL	AK	EEK	Eek	Eek	CS	Non e	3,406	3,832	-11.12%
516	NM	MT	GGW	Glasgow	Wokal Field/Glasgow International	CS	Non e	3,251	3,758	-13.49%
518	AL	AK	MCG	McGrath	McGrath	CS	Non e	3,236	2,877	12.48%
519	AL	AK	KAE	Kake	Kake	CS	Non e	3,227	2,273	41.97%
520	AL	AK	MDM	Marshall	Marshall Don Hunter Sr	CS	Non e	3,194	3,179	0.47%
521	NM	WY	CYS	Cheyenne	Cheyenne Regional/Jerry Olson Field	CS	Non e	3,189	3,650	-12.63%
522	AL	AK	KLG	Kalskag	Kalskag	CS	Non e	3,142	3,292	-4.56%
524	AL	AK	BTI	Kaktovik	Barter Island	CS	Non e	3,136	2,882	8.81%
525	AL	AK	IAN	Kiana	Bob Baker Memorial	CS	Non e	3,127	3,276	-4.55%
527	SW	NM	CNM	Carlsbad	Cavern City Air Terminal	CS	Non e	3,057	1,827	67.32%
528	AL	AK	Z13	Akiachak	Akiachak	CS	Non e	3,045	3,279	-7.14%
531	AL	AK	TAL	Tanana	Ralph M Calhoun Memorial	CS	Non e	2,952	2,997	-1.50%
532	AL	AK	EWU	Newtok	Newtok	CS	Non e	2,936	3,406	-13.80%

Commercial Service Airports (Rank Order)  
based on Calendar Year 2016 Enplanements

Rank	RO	ST	Locid	City	Airport Name	S/L	Hub	CY 16 Enplanements	CY 15 Enplanements	% Change
533	EA	PA	DUJ	Brookville	Dubois Regional	CS	Non e	2,934	3,215	-8.74%
535	WP	AS	FAQ	Fitiuta	Fitiuta	CS	Non e	2,887	2,436	18.51%
536	AL	AK	AUK	Alakanuk	Alakanuk	CS	Non e	2,854	3,845	-25.77%
537	AL	AK	SNP	Saint Paul Island	St Paul Island	CS	Non e	2,838	2,778	2.16%
538	NM	OR	LMT	Klamath Falls	Crater Lake-Klamath Regional	CS	Non e	2,827	93	2939.78%
539	AL	AK	HLA	Huslia	Huslia	CS	Non e	2,728	2,936	-7.08%
541	AL	AK	4A2	Atmautluak	Atmautluak	CS	Non e	2,706	2,684	0.82%
542	AL	AK	NUL	Nulato	Nulato	CS	Non e	2,694	2,289	17.69%
544	AL	AK	2A3	Larsen Bay	Larsen Bay	CS	Non e	2,649	2,519	5.16%
545	NM	MT	GDV	Glendive	Dawson Community	CS	Non e	2,639	2,311	14.19%
546	AL	AK	TLT	Tuluksak	Tuluksak	CS	Non e	2,634	2,572	2.41%
547	EA	PA	BFD	Bradford	Bradford Regional	CS	Non e	2,623	3,491	-24.86%
548	NM	OR	PDT	Pendleton	Eastern Oregon Regional at Pendleton	CS	Non e	2,582	4,277	-39.63%
549	AL	AK	CGA	Craig	Craig	CS	Non e	2,581	2,573	0.31%
550	AL	AK	WBB	Stebbins	Stebbins	CS	Non e	2,571	2,710	-5.13%
552	SW	AR	ELD	El Dorado	South Arkansas Regional at Goodwin Field	CS	Non e	2,544	3,919	-35.09%
554	AL	AK	MTM	Metlakatla	Metlakatla	CS	Non e	2,527	2,880	-12.26%
				<b>Nonprimary Commercial Service</b>	<b>127</b>					
				<b>Total Commercial Service Airports</b>	<b>506</b>					

## **Exhibit 22**

MediaRoom

# Boeing, Southwest Airlines Announce Launch of 737 MAX 7

- Southwest converts existing 30 Next-Generation 737 orders to 737 MAX 7s
- Dallas-based carrier launches another 737 model

SEATTLE, May 15, 2013 [PRNewswire](#)/ -- Boeing (NYSE: BA) and Southwest Airlines announced today the launch of the 737 MAX 7, the third member of the 737 MAX family. The Dallas-based carrier and launch customer for the 737 MAX program became the first airline to order the 737 MAX 7, when it converted 30 existing orders for Next-Generation 737s into orders for the 737 MAX 7.

Southwest also exercised options to add five more Next-Generation 737-800s to its fleet. These airplanes, along with the 737 MAX 7s, are part of Southwest's ongoing effort to improve fuel efficiency and profitability. The 737 MAX 7 supports Southwest's expanding fleet modernization effort. Southwest is expected to take its first 737 MAX 7 delivery in 2019.

"We are thrilled to announce that Southwest Airlines and Boeing have entered into an agreement for Southwest to be the launch customer for the Boeing MAX 7 series, with deliveries beginning in 2019," said Gary C. Kelly, Southwest Airlines Chairman of the Board, President, and CEO. "The 737 MAX 7 builds on the strengths of today's Next-Generation 737-700, incorporating the latest CFM International LEAP-1B engines is expected to reduce fuel burn and CO2 emissions by an additional 12 percent over today's most fuel-efficient single-aisle airplane."

The 737 MAX 7 brings the most advanced engine technologies to the world's best-selling airplane, building on the strengths of today's Next-Generation 737-700. The 110-ft long airplane incorporates the latest CFM International LEAP-1B engines to deliver improved efficiency with the most reliability and passenger comfort in the single-aisle market. The 737 MAX 7 also will extend the range over today's 737-700 by approximately 400 nautical miles (741 km).

"Southwest has been a valued partner in the evolution of the 737 program," said Boeing Commercial Airplanes President and CEO Ray Conner. "We have worked together to launch several models of the 737 including the 737 MAX family in 2011. We are excited to bring the 737 MAX 7 to market with Southwest."

With the MAX 7 conversions and exercised options for 737-800s, Southwest's unfilled orders consist of 180 737 MAX airplanes and 137 Next-Generation 737s. The 737 MAX now has orders for 1,315 airplanes.

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More information: <http://www.newairplane.com/737max/southwest/>

Photo and caption are available here: <http://boeing.mediaroom.com>

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<http://boeing.mediaroom.com/2013-05-15-Boeing-Southwest-Airlines-Announce-Launch-of-737-MAX-7>

## **Exhibit 23**

### **Declaration of Paul Baldoni**

I, Paul Baldoni, hereby declare as follows:

1. I make the statements in this declaration based on my personal knowledge.
2. I am the Managing Director for Domestic Revenue Management at Delta Air Lines, Inc. ("Delta"). I have worked at various positions in the revenue management and network planning departments of Delta and Northwest Airlines since 2006.
3. Delta offers air transportation service on thousands of routes for sale to the public every day. On each route, Delta publishes a range of different fares and makes them available for sale. Our pricing strategy in establishing these fares is a dynamic process driven by the competitive conditions in the marketplace. It is based upon a combination of supply and demand factors specific to each route. These can include, for example:
  - (a) Passenger demand for travel on the route;
  - (b) Price sensitivity of the demand for travel on the route, such as the difference between highly elastic demand for travel on a leisure route (for example, Minneapolis-Orlando) versus the relatively inelastic demand for travel on a primarily business route (for example, Atlanta-New York);
  - (c) Supply of seats made available for sale on the route by Delta and any other carriers offering competing service on the route;
  - (d) Relative product quality of Delta's service compared to the quality of service offered by any competitors, including for example, relative schedule convenience and relative quality of onboard experience.
4. In addition to establishing a range of potential fares that Delta will publish for sale on a route, Delta constantly makes related decisions on "inventory management," *i.e.*,

decisions as to the number of seats Delta will offer on any given aircraft at each of the various fares we choose to offer on the route at any given moment in time. Our inventory management process is designed to adjust the mix of fares we offer on any given flight right up until the moment of departure of each flight, in an attempt to match as closely as possible the demand for our service on each flight with the fares we make available on that flight. We use sophisticated software systems that constantly monitor and manage the mix of available fares on any given flight in real time based upon historical models and the current level of actual demand for seats on the flight. For example, if a given flight appears to be undersold as the time of departure approaches, Delta can make additional low fare seats available to move the inventory on the flight. Conversely, if demand for a flight is unexpectedly high, we can limit the availability of low fare seats to ensure that more profitable seats will be available at the last minute for travelers who are willing to pay a premium for the convenience and flexibility of last minute travel.

5. There is no direct relationship between our pricing or inventory management strategies and the purchase price of an aircraft that we may use to operate any given flight. We set our fares on each route without reference to aircraft acquisition cost, and our inventory management systems allocate seat inventory without reference to aircraft acquisition cost.

I declare under penalty of perjury that the forgoing is true and correct.

  
\_\_\_\_\_  
Paul Baldoni

Date: December 20, 2017



## **Exhibit 24**

**FORTUNE****Malaysia Airlines is Buying 16 New Airplanes from Boeing**

By **REUTERS** September 13, 2017

[Boeing \(BA, -0.05%\)](#) has signed a memorandum of understanding to sell 16 aircraft to [Malaysia Airlines](#), eight widebody 787 Dreamliners and eight narrowbody 737 MAXs, the company said on Wednesday.

The eight 787-9s were converted from a prior 737 MAX order while Malaysia Airlines also added eight purchase rights over 737 MAX aircraft, [Boeing](#) said.

[Malaysian Prime Minister Najib Razak](#) announced the plan to buy additional planes for the country's flag carrier during a visit to the White House on Tuesday, telling U.S. President Donald Trump that Malaysia Airlines would buy 25 Boeing 737 jets and eight 787 Dreamliners.


He said the airline would probably add another 25 737s in the near future, a deal he said would be worth more than \$10 billion within five years.

Boeing declined to comment on Najib's numbers. [Malaysia Airlines](#) in 2016 signed a deal to buy up to 50 737 MAX aircraft, which included 25 firm orders and 25 purchase rights.






Malaysia Airlines Chief Executive Peter Bellew said in a statement that the range of the 787-9 would allow the carrier to operate to any point in Europe and some destinations in the United States. At present, the airline has an all Airbus SE widebody fleet.

Two industry sources on Tuesday told Reuters that Malaysia Airlines had considered buying Airbus A330neos before settling on the 787 order. The sources did not want to be named because the discussions were private.

## **Exhibit 25**



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## Pegasus Airlines converts options on 25 A321neos

Victoria Moores

Dec 21, 2017

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Rendering of A321neo in Pegasus livery  
Airbus

### RELATED MEDIA

[2017 World Airline Report - World Airline Fleets](#)

Turkish LCC Pegasus Airlines has converted 25 Airbus A321neo options to a firm order, based on an [initial commitment](#) made in 2012.

Pegasus, which was historically a Boeing operator, placed a firm order for 58 A320neos and 17 A321neos in December 2012—along with 25 options—to support its expansion plans to 2023.

At the time, deliveries of the CFM International [LEAP-1A powered aircraft](#) were scheduled to run until 2022 and the order was valued at \$12 billion at list prices.

On Dec. 20, Airbus announced that Pegasus had firmed the 25 options.

“The order we placed in 2012 for 100 Airbus aircraft was the biggest order in Turkey’s aviation history at the time. We received the first aircraft of this order in Q3 2016 and now we have an agreement to convert 25 options into firm orders. We will continue to grow our fleet one step at a time,” Pegasus Airlines general manager Mehmet Nane said.

The aircraft will be supplied in Airbus’ Cabin Flex configuration, which includes door and fuselage changes aimed at improving cabin space utilization, as well as provision for greater under-floor fuel capacity for up to 4,000nm transatlantic range.

Victoria Moores [victoria.moores@informa.com](mailto:victoria.moores@informa.com)

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## **Exhibit 26**

🔍

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## How airlines set their ticket prices – plus tips to beat them at their own game



Beating the airlines at their own game can lead to great value flights CREDIT: ALAMY

By **Hugh Morris**, TRAVEL NEWS EDITOR  
21 SEPTEMBER 2016 • 1:31PM

The once-simple task of purchasing a plane ticket has become a science in its own right.

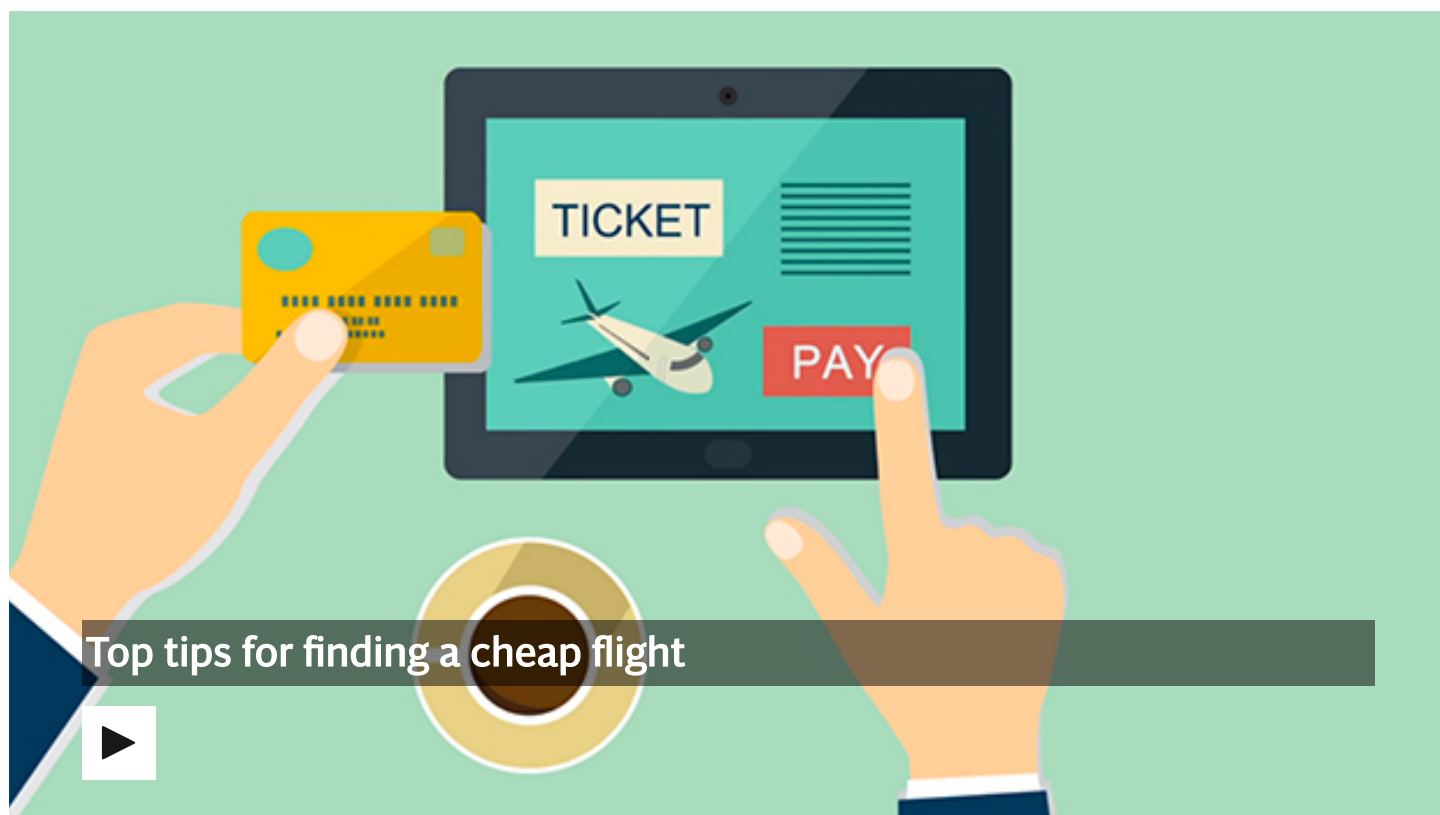
The savvy traveller now has a myriad of variables to take into account when plotting air travel – from the day of booking and time of service to choice of airline and whether the route is direct or indirect – but the other side of the story is that airlines are trying harder than ever to ensure they maximise revenue while also appearing to offer the best value.

Known rather unromantically as airline revenue management, carriers are perfecting the art of being able to adjust fares dynamically and in real time while using increasingly-sophisticated software that considers the performances of its routes and services around the world.

## So how exactly are airlines pricing their air fares, and what can you do to find the best offer?

“Techniques such as Expected Marginal Seat Revenue (EMSR) look at the best ways to optimise fares in real time, not only on a given route, but taking into account revenue-generating opportunities across the whole airline network,” explains Robert W Mann, a former airline planning executive, to [CNN](http://edition.cnn.com/2016/09/16/aviation/airline-pricing-secrets/) (<http://edition.cnn.com/2016/09/16/aviation/airline-pricing-secrets/>).

So, for example, a flight from London to Dubai might cost the same as a much longer service to Manila, via Dubai, as the airline is pricing up the first leg to discourage those who want to fly the shorter trip, and leaving the seats for higher value customers.



## They know who you are, sort of

It's no surprise that an airline will price its seats according to who it thinks is flying – families and leisure passengers or business fliers.

“The London to Majorca route, for example, has a marked leisure profile,” Stuart Barwood, founder of airline consultancy firm Traverical, told the broadcaster. “This has implication not only for fare levels but also for the way pricing changes over time.”

“If the airline assumes that leisure passengers will tend to book relatively early, months before their holidays, it may be tempted to start pricing seats on that route relatively high. It would then adjust them according to the market response.”



### Top 10 | The world's longest flights

- 1 Doha-Auckland, Qatar Airways, 9,028 miles
- 2 Dubai-Auckland, Emirates, 8,824 miles
- 3 Sydney-Dallas, Qantas, 8,578 miles
- 4 Atlanta-Johannesburg, Delta, 8,439 miles
- 5 San Francisco-Singapore, United Airlines & Singapore Airlines, 8,446 miles
- 6 Abu Dhabi-Los Angeles, Etihad, 8,390 miles
- 7 Dubai-Los Angeles, Emirates, 8,339 miles
- 8 Jeddah-Los Angeles, Saudia, 8,332 miles
- 9 Doha-Los Angeles, Qatar Airways, 7,202 miles
- 10 Dubai-Houston, Emirates, 7,082 miles

“Meanwhile on a typical business route – let’s say London to Frankfurt – the airline may start with low prices to fill a minimum capacity, then raise prices steeply for business travellers that book at the last minute.”

Some airlines are even prepared to bump lower value passengers to make room for the high fliers. A service developed by Barcelona-based company Caravelo helps airlines identify the customers most likely to accept a flight swap in exchange for compensation of busy routes, so leaving free seats to be sold at a higher price.

### Exploring the Cookies Myth

It has long been rumoured that airlines use internet cookies to raise airfares for customers returning to the booking website, in the belief that if they are coming back they will be prepared to pay more.

This, however, has been debunked by Telegraph Travel consumer expert Nick Trend, and there is little evidence to belief it is true. “If you think it affects a booking you are trying to make, you could try using a different browser (or clearing your 'cookies') and searching for the flights again,” said Nick Trend. “Of course, I’d be interested if any readers have experienced this problem, but think it is more likely to be caused by another customer buying flights in the interim period.”



However, loyalty programmes and registered users on websites does give airlines a clearer ideas as to who the passenger is and why and where they are flying – and likely to in the future – and can use that data to use in managing revenue.



## The cheapest day of the week

Another common tactic considered by travellers is that booking your flight on a certain day can be cheaper than another.

Last year, a survey by the Airline Reporting Corporation found that Friday was the most expensive day (<http://www.telegraph.co.uk/travel/news/Never-book-flights-on-Fridays-and-eight-other-tips-for-getting-cheap-air-fares/>) to buy a plane ticket, with flights 13 per cent dearer than if booked on a Sunday. And that Tuesday was the most likely day to find a bargain, as airline executives sought to offload their remaining seats after seeing how weekend sales went.

Greg Schulze, senior vice president of Expedia, said that while there is no guarantee which day will be cheapest, the weekend is often a good time to find cheap seats.

### At a glance | How to get an airline upgrade

#### Choose your route carefully

Most upgrades will be offered for “operational reasons”, such as when the economy class cabin is full or oversold. Therefore travelling on a busy route, where this is more likely to occur, will help.

#### Be loyal

Regular customers will normally be given priority when an upgrade is available.

#### Travel alone

If there are just one or two seats available up front, they will probably be offered to single travellers first.

#### Have a good reason

Being exceptionally tall, pregnant, or even celebrating a honeymoon, birthday, or anniversary, will go in your favour.

#### Be nice

It goes without saying that the lucky few who have received an upgrade after requesting one were polite, and probably smartly dressed. They didn't demand one.

#### Be unlucky

If you've got a faulty entertainment system, or a chair that won't recline, you've got good reason to complain, particularly if you're on a long-haul flight. You may simply be moved to another economy class seat, but if none are free...

## A tale of two classes

It is too simplistic nowadays to think of an aircraft as divided by just two classes – business and economy. The truth is that airlines have a number of subdivisions of cost within those classes, and as one sells out the fares jump to the next.

Anyone who has ever tried to buy a plane ticket at an airline desk with only hours to spare before departure will be familiar with the eyewatering prices of the last-remaining seats rising as the minutes roll away.

## How to create a second holiday

Research by Telegraph Travel has found (<http://www.telegraph.co.uk/travel/advice/best-indirect-flight-routes-where-you-get-two-holidays-for-one/>) that readers could save more than £1,000 on a long-haul flight if they decided to add on a day or two stopover on the way.

Soo Kim wrote: “A study of 80 different return flights - 40 direct routes and their cheapest corresponding indirect routes - found that those willing to put up with some testing stopovers will be rewarded with an average saving of £224.”



## The best indirect flights to take and why

### Plan ahead vs hold off

The same flights can be more than £600 cheaper depending on when they are booked (<http://www.telegraph.co.uk/travel/news/Revealed-the-cheapest-time-to-book-flights-to-your-favourite-destinations/>) – and each destination has its optimum booking window, ranging from 11 months before to just two months ahead of departure, research earlier this year revealed.

The study by travel search engine [Kavak.co.uk](http://kavak.co.uk/) (<http://kavak.co.uk/>) found that those wishing to travel outside Europe in autumn should book furthest in advance, while those sorting a winter getaway on the Continent should wait until just two months out.

### How to find the cheapest flights

Our consumer expert, Nick Trend, gives more advice on how to find the cheapest flights

### Know who flies where

Most of your research is likely to be based around fares, but if you want a comprehensive overview of which airlines fly to and from the airports you are interested in, try [flightmapping.com](http://flightmapping.com) (<http://flightmapping.com>).

### Head to the source

Most price-comparison sites will click you through to an airline's site in any case, so if you start there, you will at least be sure that you are getting live, up-to-date fares.



## The 10 cheapest European city breaks

### Or go compare

Price-comparison websites are, in theory, the easiest way to find the cheapest fares. But they can also be misleading. First, most do not list fares from every airline operating the route; second, they do not normally quote exact fares.

This is because they are not quite up to date, because they can't replicate the many preferences that an individual might have – to check in baggage, for example (see below) – and because they can't reflect all the different booking fees that might be charged for using different credit or debit cards.

As I found with my spot-check, they can also be subject to technical hitches without the user realising. Even so, they are a useful guide, as long as you bear in mind the limitations and check at least two or three as part of your research.



## How leaving the EU could affect travellers



### Approach the agents

Sites like Expedia take the booking themselves – you don't click through on to the airline site as you do with the price-comparison sites above.

They can be useful – you can put together packages including hotels and hire cars that are financially protected, for example. But they normally charge a booking fee for flight-only arrangements, and it isn't always clear how much extra you are paying.

### Fly off-peak

Midweek, outside the school holidays, at unsociable hours etc, and use filters on booking and price-comparison sites that allow you to search for cheaper fares on the days before and after your ideal date.

### Take hand luggage only

Or book with an airline, such as BA, that doesn't charge extra for hold luggage. Be sure to measure and weigh all luggage – cabin and hold – before you leave home and make sure it is under the limit for your airline. Penalty charges for breaching the limits can be swingeing.

### Watch for hidden extras

Some sites try to tempt you into booking insurance (which you may already have) and other extras (a new cabin bag, for example). Ryanair is the most aggressive at doing this, and you need to be careful to remove from the online booking form any extras you do not want.

### Pay by debit card

It is usually cheaper – though you won't have the automatic financial protection against airline failure that you get if you book a fare of £100 or more with a credit card.

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## **Exhibit 27**

VIDEO



BUSINESS TRAVELLER

## Airline pricing secrets: How carriers come up with fares

• Updated 16th June 2017

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(CNN) — Anyone who's lost an evening researching flight deals knows that airfare pricing can seem pretty random -- high one week, low the next and long-distance often cheaper than short-haul.



There's a method behind the madness, though.

It's called airline revenue management: the science of adjusting fares dynamically and in real time so that airlines can maximize their revenue.

And it's not just a case of simple supply and demand.

Airlines now rely on ever-more sophisticated software that takes into account a broad range of factors, from overall conditions across their global networks, right down to the individual preferences of their passengers.

[You can now buy airline tickets with monthly payments](#)

## The evolution of airline pricing techniques



1/17



Skytrax has revealed its 2016 top 10 best airlines. In 10th place is German carrier Lufthansa. It's successfully climbed two places to re-enter the top 10 list.

Courtesy Lufthansa

It hasn't always been like this.

For most of aviation history, airlines operated in a tightly regulated, uncompetitive environment, where air fares usually cost a small fortune.

Discounted tickets weren't unheard of, but usually came with lots of strings attached, such as having to spend a certain number of nights at the destination.

International routes were usually operated by the flag carriers of the countries involved, who would take a gentlemanly approach to competition and fare-setting.

Deregulation -- a global liberalization trend which began with the US Deregulation Act of 1978 -- swept everything before it, from the industry structure to the way we think about air travel and airline fares.

[Can you say cramped? Airplane seat patents that will make you gulp](#)

## Fiercely competitive

It's now all about revenue management, says Robert W. Mann, a consultant and former

airline planning executive.

And that's something, he says, has become increasingly complex and fiercely competitive in the past few decades.

"The growth of the network airline and the drop in the cost of computing has brought revenue management to whole new levels of sophistication," he tells CNN.

"Techniques such as Expected Marginal Seat Revenue (EMSR) look at the best ways to optimize fares in real time, not only on a given route, but taking into account revenue-generating opportunities across the whole airline network".

This is why, for example, flying from London to Dubai may cost pretty much the same as flying all the way to Manila, also via Dubai.

That's because the airline may prefer to keep seats on the London-Dubai leg for higher-value passengers that fly longer onward journeys, and will use pricing to discourage those aiming to fly shorter trips.

The world's going flat-fee... so why not airlines?

---



Richard Quest meets the travel blogger attempting to reap the rewards of air miles without flying.

---

## Customer profiling

But how does the airline know who the higher-value passengers are and how much to charge them?

Stuart Barwood, founder of Traverical, an airline consultancy firm, says airlines can make a number of reasonable assumptions about the profile of traffic on a certain route and then adjust their prices accordingly.

"The London to Majorca route, for example, has a marked leisure profile. This has implications not only for fare levels but also for the way pricing changes over time.

"If the airline assumes that leisure passengers will tend to book relatively early, months before their holidays, it may be tempted to start pricing seats on that route relatively high. It would then adjust them according to the market response.

"Meanwhile on a typical business route -- let's say London to Frankfurt -- the airline may start with low prices to fill a minimum of capacity, then raise prices steeply for business travelers that book at the last minute."



In fact, those last-minute high-value passengers are so precious that some airlines go the extra mile to make room for them.

For example, a service developed by Barcelona-based company Caravelo helps airlines identify those passengers most likely to accept a flight swap in exchange for compensation, such as vouchers or frequent flier miles, and offers to rebook them on a later flight.

With space then cleared, the high-fare passengers are then booked onto the previously full flight.

[20 incredible vintage planes you can still fly in](#)

## **Towards total customization**

You might think of fare classes in terms of economy, business and first class, but the reality is airlines have dozens of subdivisions.

The airline will adjust the number of seats allocated to each fare class. When one class has been sold, the sale price will leap to the next one.

This is how most fares are currently set, but it's still some way off from the ultimate goal: Airlines want to know their clients so well they're able to offer fully personalized pricing.

Loyalty programs, registered users and cookie tracking can give airlines some valuable clues, but even when an airline has gathered a lot of data about its passengers they still might not be putting it to profitable use.

[Helicopter tours: 5 great cities to see from just the right height](#)

## **Adding up the extras**

"In reality, it is quite common for passenger data to be scattered throughout several functional areas within an airline, kept in data silos where it is of little use to the revenue management department," says Barwood.

Airlines might be lagging behind the likes of Amazon when it comes to personalized marketing, but Barwood says many are getting up to speed with data management and this is already being felt in pricing and marketing.

Revenue management systems will increasingly take into account not only the air fare itself, but the total value a passenger can generate for the airline, including ancillary revenue.

That's all the extras that can be added to your base fare, and it's a growing source of profit.

Using seat choice as an example, many airlines now charge for the privilege of picking your seats in advance.

This could, in theory, be managed dynamically. Why not base seat prices on the occupancy of a given flight? Or charge less to members of your loyalty program?

This kind of profiling might be beneficial to the loyalty program customer in this instance, but what about when a frequent business traveler is then consistently shown higher fares when they're trying to book a family vacation?

It could well prompt a backlash among the sort of high value customers that every airline hopes to retain.

[Airport lounges: How airlines are improving their ground game](#)

## **Protecting the brand**

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Richard Quest explores the tricky world of airline ticketing and the shortcuts available for cheaper fares.

And while airlines may have good reasons not to overcharge their best customers, they also have to be careful not to undercharge the other classes of client.

The temptation is to aggressively lower prices when there are still empty seats left before a flight departs -- but if this becomes the norm there's a serious risk of undermining the brand and alienating higher-value passengers.

A number of companies, such as Bidflyer, Plusgrade and SeatFrog, have come up with applications that allow airlines to sell upgrades to the highest bidder through an auction mechanism -- an efficient but anonymous way to get passengers to tell the airline how much they're willing to pay for premium services.

How much would you pay for a flight upgrade?

## Back to basics

The apparent randomness of airfares makes for an excellent conversation topic with friends and colleagues, but it can also be a source of anxiety for many travelers.

Perceptions that prices are immensely variable can add to the fear that customers may be overcharged for any extras they inadvertently purchase, or the worry that they might not be getting the best deal out there.

Which is why many airlines have opted for a different approach: go back to basics and offer branded fares -- a bundle of services for a closed price.

This shouldn't be confused with the rigid fare system that prevailed when the first low-cost airlines hit the scene.

This is more like an evolution of the low-cost fare system which lets customers choose the extras they want to add to the base fare.

This approach means rebundling a bunch of services -- from checked-in luggage to a wider, more spacious seat --- into a number of fare package options of varying complexity, all selling for a set price.

Think of it as like the menu options at a fast food joint.

Airline cabins of the future: A new golden age of travel?

## The airfare arms race

Airlines might have a whole battery of tools to help them extract the most revenue from their passengers, but travelers can also call on their own arsenal of technological countermeasures.

Companies such as Skyscanner and Kayak have introduced fare alerts which allow you to monitor fares for specific flights and get automated alerts the moment they change.

Some companies are also developing fare prediction technology that promises to help travelers book their flights at the optimal moment, when the fare is likely to be lower.

In order to do this they rely on their own algorithms, plus a heap of historical data on air fares.

California-based FLYR uses its own proprietary fare prediction technology to offer fare lock-in insurance in partnership with TripAdvisor.

This service is similar to buying a financial option where you pay a relatively small premium in advance, to make sure you won't pay more than a certain amount at a later date.

It also works with travel agents and other distribution partners to optimize bookings.

Stopover buddy can show you local sites during layover

## Seizing the moment

FLYR's founder, Dutch entrepreneur Alexander Mans, says that outside a 30-day window of a flight's date of departure, there is a 60 to 70% chance that a specific air fare will drop in price at some point.

"It is practically impossible for someone to monitor this manually, but with our computing resources we can predict pretty accurately the chances of a fare coming down and advise on the best course of action.

"If we think a fare is going to be lower in the future, we recommend waiting, before hitting the 'book' button."

Hopper is another company specializing in the field of airfare prediction. Its mobile app, which has been downloaded more than eight million times, uses big data technology to predict fares as much as 12 months in advance.

"Our system looks at six to eight billion air fares every day. Our database has five years of historical fares, that means trillions of prices!" Frederic Lalonde, Hopper's founder and CEO, declares proudly.

He claims their algorithms are capable of accurately predicting an airfare within \$5, up to six months before departure.

"We are confident enough in our system to predict actual figures and to tell our customers whether they are getting a good fare or not.

"We have tracked our accuracy to 95%. Whether people later follow our advice or not is another story..."

With this amount of computing power being thrown into the field of airline pricing and the expectation that artificial intelligence technology will go mainstream, it might ultimately be up to the robots to fight the airfare war.

This isn't necessarily bad news -- it may result in better choices and more efficient booking processes.

With virtually millions of different air fares -- as many as the number of passengers airlines carry every year -- what seems assured is that airline fares will continue to be a topic of

conversation by the office cooler for years to come.

A light aircraft revolution takes off

## **Exhibit 28**



# Understanding Airline Ticket Prices: Why a Seatmate's Airfare Costs More or Less than Yours

[Why Fares Differ](#)   [How Airlines Price Seats](#)   [Pricing Hurdles](#)   [Finding Elusive Deals](#)

You may think you bought the [cheapest airline tickets](#) but the guy sitting next to you on the plane might have paid a lot less. Or maybe more. What's going on? The crazy world of airfare pricing, that's what, and understanding how it works can save you money.

## Why Airfare Prices Differ

Airlines price each and every ticket to maximize profits – on every seat on every plane on every route. One way to do this is by pricing according to seasonal demand. The tactic is not limited to the airline industry, either.

- Department store: Buy a sweater right before Christmas and you may pay \$100; purchase the same sweater in July and it may cost only \$30.
- Lemonade stand: An ambitious kid might charge \$3 for a tall cool glass in August; if the stand is still open in October, the kid might only get takers by offering it for a dollar.

And the same is true for airfare; it's just a little more complicated.

## How Airlines Price Seats

A typical domestic flight has about 10 different ticket price points per plane, with first or business class tickets being highest price points and the cheapest economy seats at the low end. The most expensive fares are typically purchased by business travelers who tend to buy at the last minute, and last-minute prices are almost always expensive. Leisure or vacation fares are generally cheaper because, for one thing, they're usually purchased well in advance.

So to get the cheapest tickets, you need to know [when to buy and when to fly](#) but there are some other important pricing variables.

- Route competition: Prices to smaller cities with little airline competition are typically more expensive than hub-to-hub routes because there's little incentive to drop fares.
- Route distance: Fly further, pay more (this is true for many routes).
- Seat demand: Airlines know when people want to fly and raise their prices accordingly.
- Seat supply: Airlines don't want to fly with empty seats because empty seats means zero revenue, so they've become extremely efficient in calculating how many want to fly and making only that many seats available, and no more.
- Fuel prices: Oil prices have been down for the past few years which is good news for passengers; high jet fuel prices can mean additional and expensive surcharges added to tickets.

## Other Fare Variables

There are other variables that affect ticket prices but flexible travelers can overcome these hurdles.

- Advance purchase: The cheapest airfare typically requires an advance purchase of at least 14 days before departure (though some low cost carriers have cheaper fares up until a week before departure).
- Minimum stay: Some airlines require a minimum stay or a Saturday night stay for the best deal; this is less common than it used to be but still in force on some routes.
- Departure day restrictions: Increasingly, the cheapest airline tickets require departures and/or returns on the least popular days to fly which are usually Tuesday, Wednesday or Saturday.

- Flight time restrictions: In some cases, the best deals require departure during unpopular times to fly which means taking off at dawn, during meal times or overnight flights.
- Route restrictions: Sometimes, a connecting flight can be a lot cheaper than a nonstop. Price out both to see if that's true for your trip and if the price difference is worth the inconvenience.
- Purchase restrictions: Many airfare sales expire after only three days; other may last only a day or so. If you see a deal you like, hurry.
- Maximum stay: This is usually only an issue for international travel where a stay of 30 days or less is sometimes required for cheaper seats.
- Blackouts dates: Airline sales typically black out the most popular days of the year to fly, which includes most-sought after dates around Christmas, New Year's, Thanksgiving in the U.S. and popular times to fly in summer.

## Best Way to Find Deals

Let's demystify all this craziness over prices with a few simple rules and a few simple tools so travelers can make the best airfare shopping decisions.

- **Always compare airfares:** Go to an airfare comparison search site like [FareCompare](#) and compare the prices offered by most airlines. Then, go to the Southwest Airlines' site and look at those prices, too (you have to do this because it's the only airline that doesn't share fare data). Now you know which airline has the cheapest price for your trip. You must compare fares every time you shop, though, because no single airline always has the best deal.
- **Be flexible on dates and routes:** Try the [Getaway Map](#); simply enter departure city and then set a month or season you'd like to fly. Now sit back and watch deals around the world pop up.
- **Set airfare alerts:** If you know where you want to go, set a [real-time airfare alert](#) and let the deals come to you. If you like what you see, hurry; you're not the only one setting an airfare alert!

Happy travels.





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