




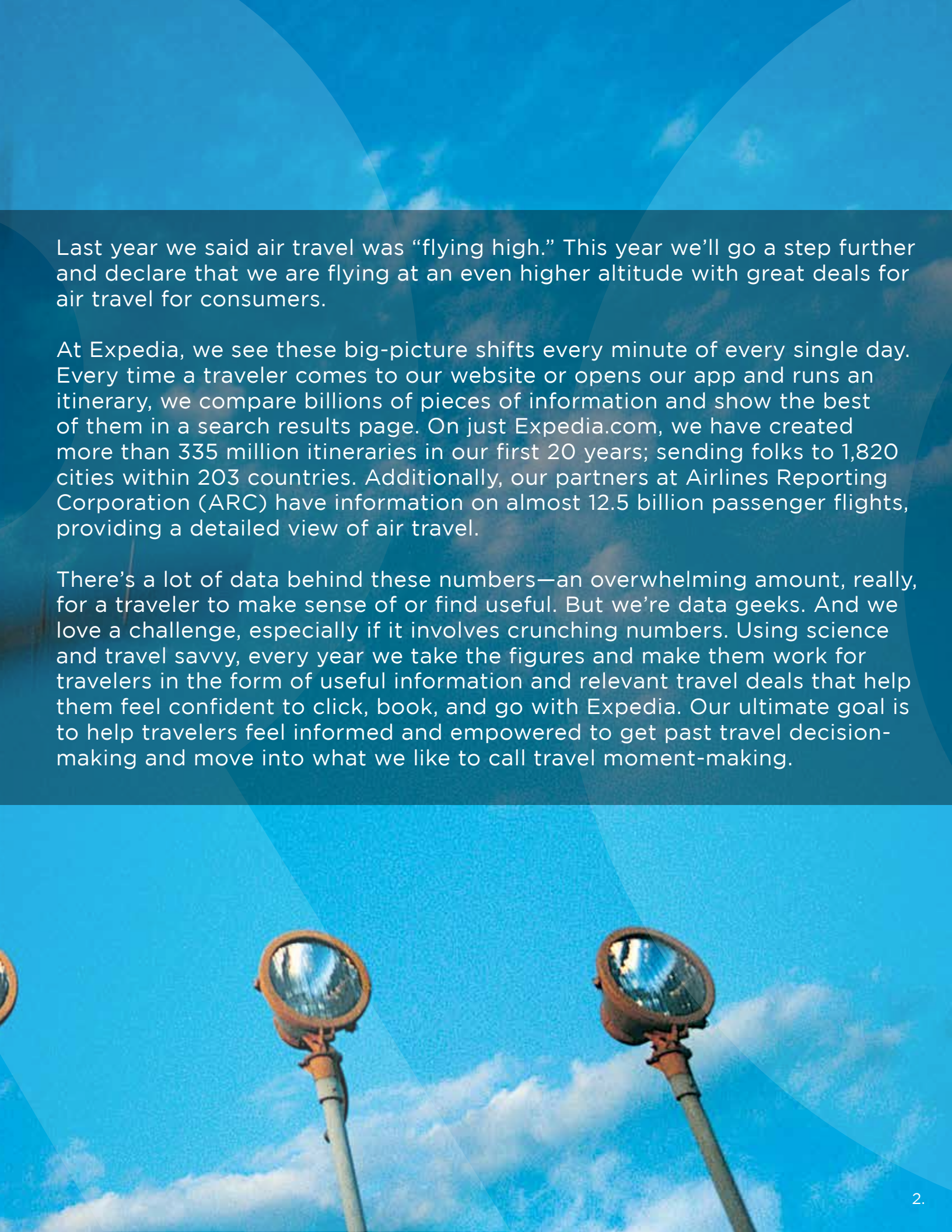
# ARC

## NEW HEIGHTS FOR AIR TRAVEL

Understanding the realities of dropping ticket prices and surging capacity



The year 2016 was another banner year for air travelers. Ticket prices continued a three-year decline and capacity continued to expand, meaning travelers today have an overwhelming number of options to more destinations for lower prices than at any point in the recent past. According to the International Air Transport Association (IATA), global air travel, as measured by revenue passenger kilometers, rose more than 7 percent in 2015 over 2014, and was on track to surpass these numbers again in 2016.



Last year we said air travel was “flying high.” This year we’ll go a step further and declare that we are flying at an even higher altitude with great deals for air travel for consumers.

At Expedia, we see these big-picture shifts every minute of every single day. Every time a traveler comes to our website or opens our app and runs an itinerary, we compare billions of pieces of information and show the best of them in a search results page. On just Expedia.com, we have created more than 335 million itineraries in our first 20 years; sending folks to 1,820 cities within 203 countries. Additionally, our partners at Airlines Reporting Corporation (ARC) have information on almost 12.5 billion passenger flights, providing a detailed view of air travel.

There’s a lot of data behind these numbers—an overwhelming amount, really, for a traveler to make sense of or find useful. But we’re data geeks. And we love a challenge, especially if it involves crunching numbers. Using science and travel savvy, every year we take the figures and make them work for travelers in the form of useful information and relevant travel deals that help them feel confident to click, book, and go with Expedia. Our ultimate goal is to help travelers feel informed and empowered to get past travel decision-making and move into what we like to call travel moment-making.



With that in mind this report looks back at ARC worldwide air travel data and analyzes exactly how good this past year has been for travelers. The document generally uses data from January 1, 2016 through October 24, 2016, and concludes with a few bold predictions heading into 2017. Overall, it presents several key takeaways:

- Average air ticket prices (ATP) continue to drop around the world, making now a stellar time to fly.
- Generally, the lowest ticket prices can be found if you purchase the tickets on weekends, more than 21 days in advance.
- In most parts of the world, trips with Saturday-night stays generally have the lowest prices.
- Increased competition is a good thing for travelers; more flights from more airlines mean more options for consumers.
- Bundling your travel products by booking more than one at the same time can provide big savings.



We are fortunate to rely on deep partnerships to conduct these data reviews. This particular report represents Expedia’s analysis of data powered by ARC, and is supplemented by data from other industry sources such as IATA, Diio Mi, and the Airline Tariff Publishing Company (ATPCO). We are excited to work with the partners on an ongoing basis and value their input as we put together this annual report.

## ATPs continue to drop

When it comes to airplane tickets, it's no secret that consumers care a whole lot about price. That's why the biggest news to emerge from analyzing data from 2016 is that average ATPs for economy class journeys continued to drop throughout the year, and now are at their lowest point since 2013.

In North America, ATPs declined approximately 6 percent for economy one-ways and about 5 percent for economy round-trips. To put these price drops in perspective, a round-trip ticket that cost \$472 in 2015 cost \$450 in 2016, a decrease of \$22.

For travelers specifically departing from the United States and looking to explore the globe, here is a rundown on some of the lowest average economy fares, including taxes and fees, based on a survey of round-trip tickets. [*Editor's note: The top 20 lowest fares are available for each table below.*]

U.S. to Asia Pacific				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (USD)
SEA	Seattle	KMJ	Kumamoto	\$111
SJC	San Jose	TPE	Taipei	\$341
SFO	San Francisco	TSA	Taipei	\$514
HNL	Honolulu	IWK	Iwakuni	\$543
LGA	New York	SGN	Ho Chi Minh City	\$584

U.S. to Europe				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (USD)
JFK	New York	OSL	Oslo	\$522
EWR	Newark	BMA	Stockholm	\$525
JFK	New York	TRF	Oslo	\$529
JFK	New York	BMA	Stockholm	\$532
JFK	New York	BGO	Bergen	\$541

In Asia Pacific, ATPs declined approximately 4 percent for economy one-ways and about 7 percent for economy round-trips. To put these price drops into perspective, a round-trip ticket that cost \$434 in 2015 cost \$405 in 2016, a drop of \$29. For travelers starting their trips in Asia Pacific, here is a rundown on some of the lowest average economy fares, including taxes and fees, based on a survey of round-trip tickets.

Asia Pacific to U.S.				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (USD)
KMJ	Kumamoto	SEA	Seattle	\$111
TPE	Taipei	SJC	San Jose	\$347
IWK	Iwakuni	HNL	Honolulu	\$551
TSA	Taipei	SFO	San Francisco	\$557
SGN	Ho Chi Minh City	LGA	New York	\$594

For European destinations originating in Australia, here's where you can find some of the best deals.

Australia to Europe				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (AUD) <sup>1</sup>
ADL	Adelaide	PSA	Pisa	\$1,374
DRW	Darwin	FRA	Frankfurt	\$1,427
PER	Perth	LGW	London	\$1,474
PER	Perth	EDI	Edinburgh	\$1,480
PER	Perth	MAN	Manchester	\$1,496



<sup>1</sup>Based on USD AUD exchange rate as of December 1, 2016 and sourced from The Wall Street Journal.

In Europe, ATPs declined approximately 4 percent for both economy one-ways and economy round-trips. To put these price drops in perspective, a round-trip ticket that cost \$318 in 2015 cost \$306 in 2016, a difference of \$12. For travelers starting their trips in Europe, here is a rundown on some of the lowest average economy fares, including taxes and fees, based on a survey of round-trip tickets.

Europe to Asia Pacific				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (USD)
LHR	London	TGG	Kuala Terengganu	\$454
PSA	Pisa	COK	Kochi	\$482
LGW	London	XIY	Xi'an	\$485
AMS	Amsterdam	IXC	Chandigarh	\$496
MLP	Milan	DVO	Davao	\$512

Europe to U.S.				
Origin Airport Code	Origin Airport City	Destination Airport Code	Destination Airport City	Average Round-Trip Fare (USD)
CPH	Copenhagen	BUR	Burbank	\$268
BMA	Stockholm	JFK	New York	\$509
BGY	Milan	JFK	New York	\$512
OSL	Oslo	JFK	New York	\$528
BRU	Brussels	LGA	New York	\$539





Overall, the average price for tickets for travel within a region declined; hovering around 4 percent drops for economy one-way tickets and 5 percent declines for economy round-trips. Africa experienced the largest decrease on economy tickets: a decrease of 11 percent for round-trip tickets and a dip of 14 for one-ways. The Middle East was the only region that experienced increases in ATPs for economy one-ways (5 percent) and round-trips (3 percent). Here’s a more detailed breakdown of the global trends for travel within a region (Africa, Asia Pacific, Europe, Middle East, North America, Canada, and Caribbean):

Year-on-Year Change in Average Ticket Prices for 2016		
Month	Economy One-Way	Economy Round-Trip
January	-3%	-7%
February	-8%	-7%
March	-4%	-6%
April	-6%	-7%
May	-7%	-7%
June	-4%	-5%
July	-6%	-5%
August	-4%	-3%
September	-5%	-4%
<b>Year-to-Date Average</b>	<b>-4%</b>	<b>-5%</b>

What’s more, our data indicates that the cheapest economy class tickets for travel within each region were found as follows:

Intra-Region	Cheapest Month for Economy Round-Trip
Africa	January
Asia Pacific	June
Europe	January
Middle East	February
North America, Canada, Caribbean	January

We observed similar price drops for inter-regional travel. The three itineraries with the biggest price drop were:

- South America to South East Asia (31 percent drop)
- South America to Southern Europe (15 percent)
- China to Southern Europe (also 15 percent)

The pairings of South America to North America (1 percent) and Japan to Northern Europe (5 percent) were the only two that saw an increase in average fare for economy round-trip tickets in 2016.

According to our data, the best months to buy economy tickets for traveling between regions irrespective of planned travel period are as follows:

Inter Region	Best Month to Buy Economy Round-Trip
South America <> North America	September
South America <> South East Asia	September
South America <> Northern Europe	January
South Korea <> Northern Europe	January
South America <> Southern Europe	January
Japan <> Northern Europe	January
Australia <> Southern Europe	January
Australia <> South East Asia	March
China <> Southern Europe	January
China <> Northern Europe	January
North America <> Europe	September
North America <> South East Asia	January
North America <> Australia	February

## Expedia+VIP Access™

### Adding value to price

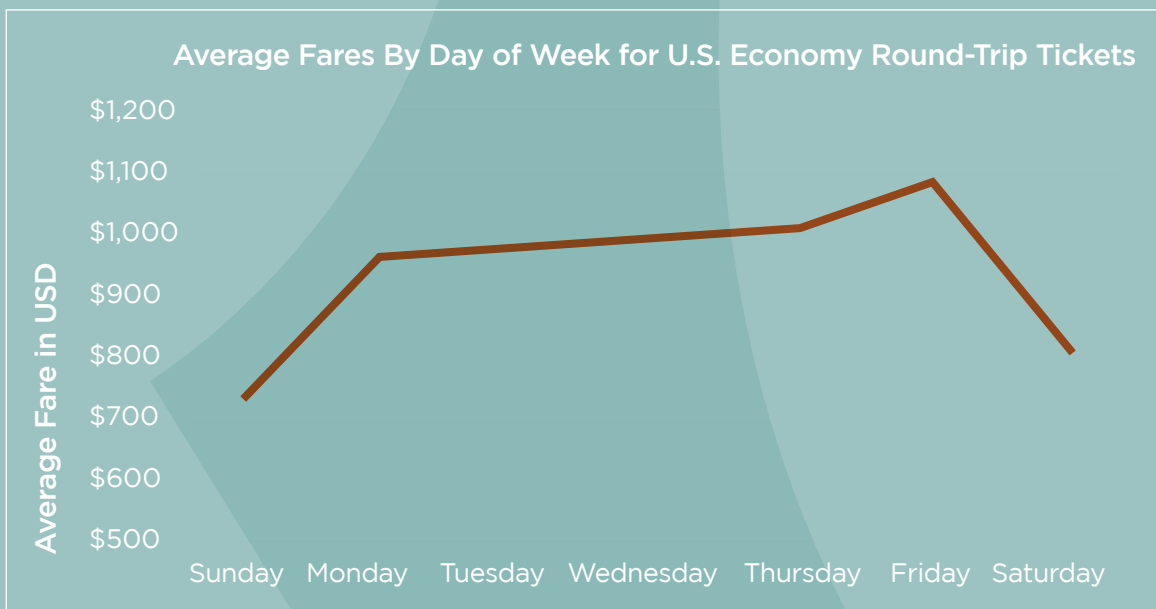
Normally, when we talk about ATPs, our focus is squarely on money—it's all about the price. This year, however, it's about something extra: value. Expedia specializes in package deals, and the amount one can save by booking multiple products (such as airfare and hotel) simultaneously has risen to upward of \$600 per trip. Travelers have other opportunities to add value—especially when they sign up for the Expedia+ rewards program that is currently available in most countries and will be expanding further in 2017. Expedia+ rewards members who book at +VIP Access hotels immediately are eligible for room upgrades or amenities with each stay. What's more, Expedia+ members who book through the mobile app receive twice the number of Expedia+ rewards points—points that can be redeemed for discounts at the time of booking.

## When to book

Consumers—and journalists, for that matter—always ask us about the best times to book travel. This year’s analysis looks at two aspects of when we see the lowest average ticket prices: days of the week and days in advance.

### *Days of the week*

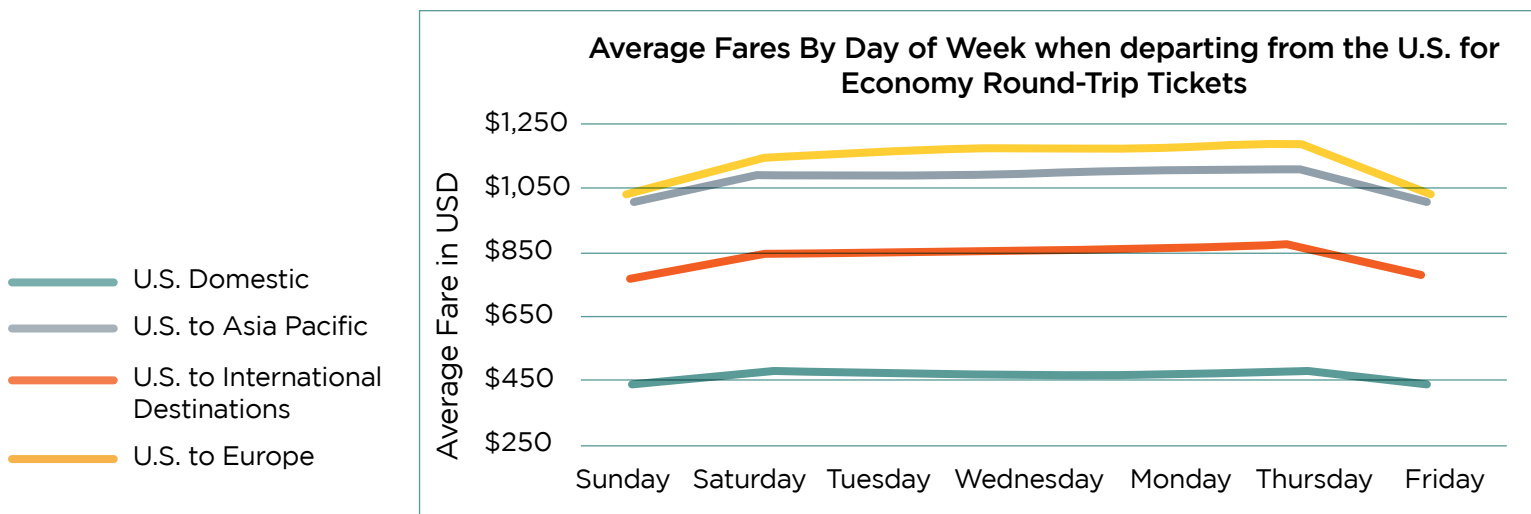
Our detailed investigation of ARC data indicates that some days do have lower ATPs than others, and this is important to know if you’re looking for good deals on flights. Generally speaking, weekends still have the lowest ATPs and Fridays have the highest. According to analysts, this phenomenon is driven largely by business travelers, who make most of their big-ticket purchases at the end of every week. However, even when we normalize the data to remove the effect of business versus leisure travel, the weekend is still cheaper. One example: If you’re trying to figure out the best time to visit the United States from outside of the country, lower ATPs are on the weekends and ATPs on Sundays have been almost 50 percent lower than ATPs on Fridays. While these trends are driven by a higher percentage of leisure travel booked on weekends, one should not ignore them when looking for travel deals.





A deeper dive into the data indicates that if you're originating travel in the United States and you're flying elsewhere in the United States, travelers buying on Sunday found the lowest ATPs, with average prices 11 percent lower than all other days. Sunday savings for flights originating in the United States and heading to Europe has proven to offer even better results for travelers: 16 percent. If you're originating in the United States and you're headed to Asia Pacific, tickets purchased on Sunday cost 10 percent less.

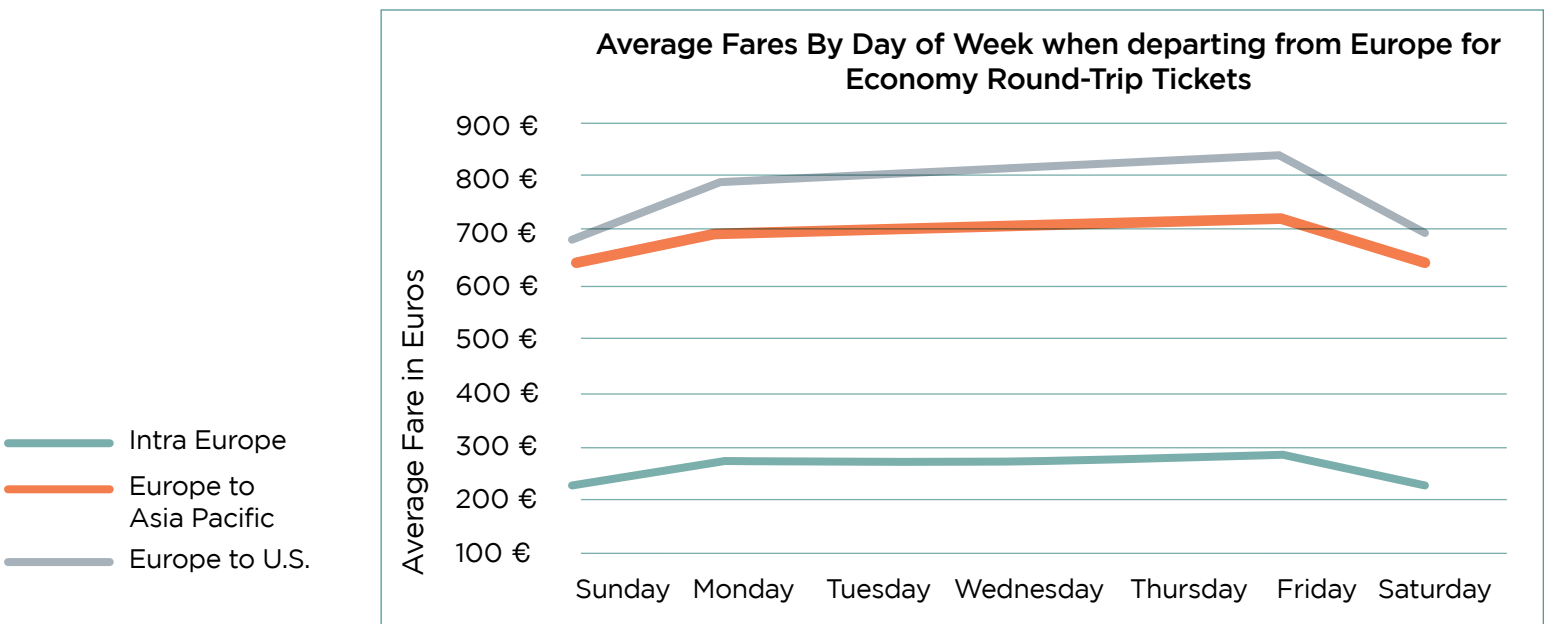
From	To	Representative Savings
U.S.	U.S.	11%
U.S.	Non-U.S. Destinations	13%
U.S.	Asia Pacific	10%
U.S.	Europe	16%





Sunday also has been the day with the lowest ATPs for travelers originating in Europe and traveling to other destinations in Europe, with ATPs coming in at roughly 30 percent lower than on any other day of the week. ARC data indicates that travelers booking on Sundays have seen ATPs up to 22 percent lower on flights originating in Europe and traveling to the United States, and roughly 13 percent lower on flights originating in Europe and heading to Asia Pacific.

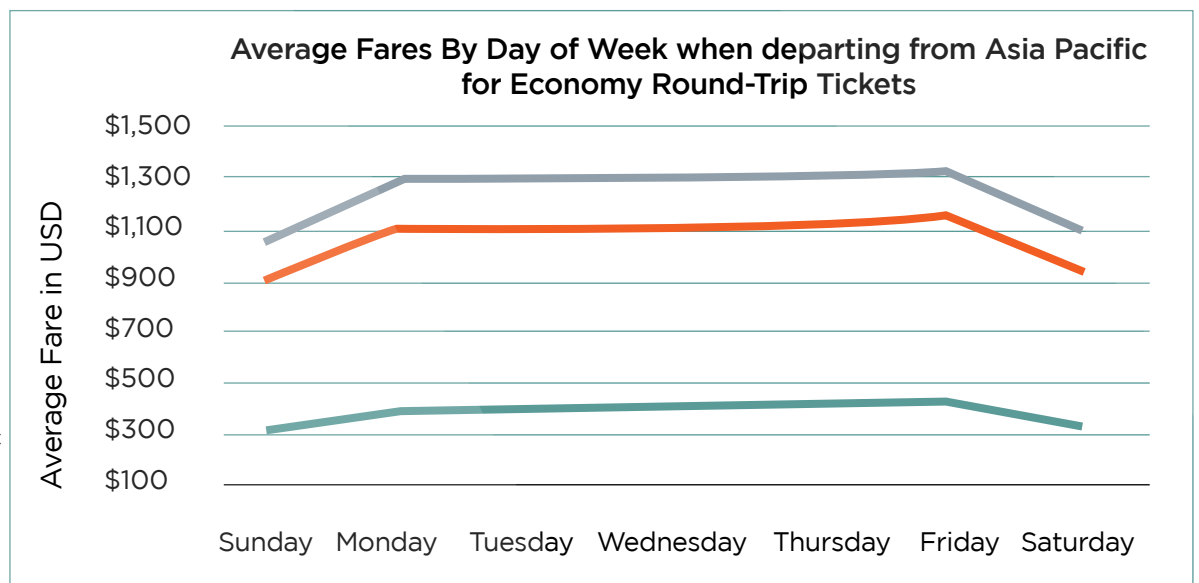
From	To	Representative Savings
Europe	Europe	30%
Europe	Asia Pacific	13%
Europe	U.S.	22%





Weekend discounts for flights originating in Asia Pacific are without question the biggest amongst the regions. For flights from destinations in Asia Pacific to other destinations in Asia Pacific, ATPs on Sundays are 38 percent lower. Flights from Asia Pacific to Europe booked on Sundays are 29 percent lower, while flights from Asia Pacific to the United States are 25 percent less.

From	To	Representative Savings
Asia Pacific	Asia Pacific	38%
Asia Pacific	Europe	29%
Asia Pacific	U.S.	25%





Overall, certain ticket classes show deeper discounts depending on what day of the week you book. For instance, ARC data indicates that with domestic travel, economy tickets booked on weekends are 5 percent lower than the average ATP, while premium tickets booked on weekends are 7 percent lower. Internationally, ATPs have been up to 20 percent less for premium-class tickets booked on weekends. Considering the cost of long-haul travel from, say, the United States to China, this can be a huge savings.

#### *Days in advance*

The day you book isn't the only factor impacting the price of an airplane ticket; the number of days in advance you book shows significant differences, too. In previous iterations of this report, we have noted that the earlier one books, the better. The most recent data from 2016 reaffirms this statement—to a point.

According to ARC, purchasing airplane tickets 21 days or more in advance has yielded the lowest ATPs for travel within a market—especially for trips within the United States and Europe. Some of these itineraries have been as much as 30 percent lower when booked three weeks before the departure date versus those booked closer to the departure date. A recent fare search indicated that a ticket originating in Europe and heading to the United States cost approximately \$1,962 when booked less than 21 days before departure but around \$1,293 when booked more than three weeks in advance. That's a difference of \$669. Savings like that are hard to ignore.

Advance Purchase Representative Savings of Travel Between Regions				
Region	Currency	Average Ticket Price		
		Less than 21 Days	Greater than 21 Days	Potential Savings
Asia Pacific to Europe	USD	\$1,555	\$1,343	14%
Asia Pacific to U.S.	USD	\$1,720	\$1,385	19%
Australia	AUD	A\$568	\$678	-19%
Central Europe	EUR	€451	€399	11%
China	CNY	¥1,256	¥1,861	-48%
Europe to Asia Pacific	USD	\$1,464	\$1,149	22%
Europe to U.S.	USD	\$1,962	\$1,293	34%
India	INR	14,752	19,028	-29%
Intra-Asia Pacific	USD	\$267	\$327	-22%
Intra-Europe	EUR	€302	€213	30%
Intra-U.S.	USD	\$448	\$371	17%
Nordics <sup>2</sup>	USD	\$317	\$291	8%
North Asia	USD	\$617	\$602	2%
South East Asia	USD	\$309	\$367	-19%
Southern Europe	EUR	€365	€356	2%
U.S. International	USD	\$563	\$519	8%
U.S. to Asia Pacific	USD	\$1,754	\$1,391	21%
U.S. to Australia	USD	\$2,516	\$1,891	25%
U.S. to Europe	USD	\$2,226	\$1,462	34%
U.S. to South America	USD	\$973	\$822	16%
U.S. to South East Asia Pacific	USD	\$1,612	\$1,205	25%





## Saturday nights

For years, a large number of travelers have believed that tickets including a Saturday night stay have unlocked the lowest prices and the best deals. This has not been a data point we've studied—until this year.

After evaluating terabytes of data about ATPs for trips that include a Saturday night, we concluded that the urban legend was, in fact, true—that most tickets including a Saturday stay have ATPs that are lower and therefore are good deals for travelers. This makes sense when you consider that airlines often try to segment business versus leisure travelers by filing cheaper fares that require Saturday night stays.

Domestically, ATPs for itineraries that include Saturday night stays have been 19 percent lower than those without them. In Central Europe, ATPs for itineraries that include Saturday night stays have been 74 percent less. Here's a rundown on the impact of a Saturday night stay by region.

Potential Savings by including a Saturday Night Stay		
Region	Currency	Potential Savings
Australia	AUD	13%
Central Europe	EUR	74%
China	CNY	-2%
India	INR	1%
Intra-Asia Pacific	USD	1%
Intra-Europe	EUR	34%
Intra-U.S.	USD	19%
Nordics	EUR	49%
North Asia	USD	-12%
South East Asia	USD	15%
Southern Europe	EUR	57%
United Kingdom & Ireland	EUR	47%

It's important to note that data for the impact of Saturday night stays exists independent of data about what day of the week a ticket was booked and how many days in advance it was purchased. Another critical tidbit: Not every region embraces the Saturday night stay. In China and North Asia, for instance, Saturday night stays have been more expensive than average.

## Changes in capacity

According to a variety of sources, including ARC, capacity was up about 5 percent globally for the year, which means more airlines are flying more planes with more seats to more destinations—all great news for consumers. According to IATA, in most boom cycles, overall market growth comes in somewhere around 3 percent. To see it upward of 5 percent in this economy has travel experts excited for the future.

Out of 500 of the top destination airports, Jose Marti International Airport in Havana, Cuba, represents the greatest percentage change (53 percent) in arriving travelers from 2015 to 2016. At a close second, the airport in Da Nang, a large city in Vietnam, experienced 51 percent growth from 2015. Other popular destinations included Zhuhai, China (41 percent); Cusco, Peru (39 percent); and Santiago, Chile (38 percent). Some other countries on the list include Panama, Uruguay, Iceland, and Russia.

Other notable observations regarding capacity:

- **Mexico City is hot.** Overall market growth in Mexico City for 2016 hovered around 11 percent, and was expected to continue to grow into 2017. The New York Times tabbed Mexico City as a “Destination to Watch” in 2016, and experts say it will remain in demand throughout 2017.
- **Dubai continues to grow.** The Middle Eastern city nearly experienced double-digit growth in capacity last year, and the city enjoyed another 6 percent this year. Even though Dubai’s traffic numbers receive a spike from the number of connecting flights that run through the city, the fact that Dubai has experienced the recent number on top of its numbers from last year is a big deal.
- **India is huge.** The Indian economy generally is performing better than it has for some time<sup>3</sup>, and airlines are responding by bumping capacity to the subcontinent in a big way. Specifically, capacity to India has grown by 17 percent this year. In addition to adding domestic flights (which generally are being booked by those living in India with their increased discretionary income), international carriers literally are going to new distances to bring travelers to India as well. A new flight between San Francisco International Airport and Delhi spans almost 7,700 air miles and 14 hours of flight time. This is important because it shows airlines are offering an added “service” with non-stops.
- **The year 2016 was another strong showing for China.** . China saw near double-digit growth (9 percent) in airline capacity during 2016, a testament to the expansion of a number of airports and a spike in the number of airlines serving them.

<sup>3</sup><http://www.malaysiasun.com/index.php/sid/249811635>

Globally, here is a look at capacity changes for the top 20 largest markets as measured by market share sourced from our partners at Diio Mi:

Rank	Destination Country	Global Market Share	Growth
1	United States	21%	3%
2	China	13%	9%
3	Japan	4%	0%
4	India	3%	17%
5	Indonesia	3%	-5%
6	United Kingdom	3%	6%
7	Brazil	3%	-8%
8	Germany	3%	5%
9	Spain	2%	8%
10	Australia	2%	3%
11	Turkey	2%	2%
12	Canada	2%	4%
13	France	2%	4%
14	Thailand	2%	2%
15	Italy	2%	2%
16	Mexico	2%	12%
17	United Arab Emirates	2%	6%
18	Russia	2%	13%
19	South Korea	2%	-3%
20	Malaysia	2%	3%



Taken regionally and measured by travelers, the question of capacity has a slightly different look. Globally, here is a look at the top change for travelers in destinations defined by the top 50 airports within a region.

Region	City, Country (as applicable)	Year-on-Year Percent Change in Travelers
Australia	Solomon	100%
Central Europe	Zirchow, Germany	58%
China	Zhuhai	41%
India	Magdalla	306%
Intra-U.S.	Miami	16%
Nordic	Kemi, Finland	68%
South East Asia	Greater Bangkok, Thailand	40%
Southern Europe	Sardinia, Italy	29%
U.S. International	Guangdong, China	41%



Of course, not every airport has seen added capacity. Against the backdrop of unparalleled global growth, a handful of airports have found themselves struggling to attract seats or passengers. There are many reasons for decline, but some of these airports are in areas of unrest or concern or are experiencing an economic downturn. Here's a list of the slowest-growing markets worldwide:

Rank	Destination Country	Growth
1	Palau	33%
2	Guinea Bissau	32%
3	Bhutan	27%
4	Nigeria	24%
5	Venezuela	17%
6	Falkland Islands	16%
7	Grenada and South Grenadines	14%
8	Chile	11%
9	Liberia	11%
10	Aruba	10%
11	Belize	10%
12	Ecuador	10%
13	Sri Lanka	9%
14	Brazil	8%
15	Mozambique	8%
16	Benin	7%
17	Paraguay	7%
18	Antigua and Barbuda	6%
19	Costa Rica	6%
20	Cape Verde	6%



Looking forward, analysts say they expect continued and sustained growth in capacity, but warn that global events could slow things down. Perhaps the biggest potential obstacle, at least overseas: Article 50 of the Treaty of Lisbon, which effectively would put into action Britain's plebiscite to leave the European Union. (For those of you who prefer the colloquial term, this would be the practical application of the Brexit vote.)

Other potential factors: An unexpected surge in the worldwide price of fuel, which has been at record lows for the last half a year or so; and a lag in competition, which at least to this point has driven a lot of the capacity growth we have witnessed in the United States.

One other point to consider: currency. Its impact on capacity can best be understood through a specific example. As shown above, travelers in Brazil declined year-on-year, largely because many U.S. airlines reduced capacity to Brazil since they no longer can fill their aircraft with Brazilian passengers, due in part to the decline of the Brazilian Real in comparison to the U.S. Dollar. Many Brazilians who used to visit the United States to go shopping now say the country too expensive to visit. These travelers have found that the savings they could get previously by shopping in the United States are no longer are sufficient to justify the airfare. In short, changing currency exchange rates can vary travel patterns significantly.



## Conclusion

No matter how you slice the data, one thing is certain: 2016 was another great year to buy airline travel. The good vibes, cheap tickets, and full planes should continue well into 2017 and beyond, according to ARC's data. ARC analysts predict a continued drop in ticket prices overall, a continued spike in capacity, and even more competition flooding the market. Ultimately, that competition is good for consumers, because it means airlines will begin to distinguish themselves in new ways. Coupled with the value consumers can enjoy from booking through an online travel agency like Expedia, the future of air travel will be both affordable and worthwhile—for airlines and travelers alike.

