



SUMMARY OUTLOOK 2008–2027

The transformation of air transport

Air transport is in a highly dynamic period. Challenges include a slowing world economy, high oil prices, and in some markets, slowing traffic growth. *Current Market Outlook 2008–2027* is rooted in today's realities. It goes on to show how air transport will be transformed over the next 20 years.

Resilience

Over the past 20 years, air travel grew by an average of 4.8 percent each year. This was despite two major world recessions, terrorist acts, the Asian financial crisis of 1997, the SARS¹ outbreak in 2003, and two Gulf wars. During 40 years of producing the *Current Market Outlook*, we have learned that the resilience of air transport growth comes from its intrinsic importance to the livelihood of people around the world.

On average over the next 20 years, passenger travel will grow at 5.0 percent and cargo at 5.8 percent. The fastest growing economies will lead the transformation into a more geographically balanced market. More productive, new airplanes will play a greater role, and there will be relentless pursuit of further environmental progress.

¹SARS: Severe acute respiratory syndrome.

KEY INDICATORS

2007–2027

Market growth rates

World economy, gross domestic product (GDP)	3.2%
Number of airplanes in service	3.2%
Number of passengers	4.0%
Airline traffic, revenue passenger-kilometers (RPK)	5.0%
Cargo traffic, revenue tonne-kilometers (RTK)	5.8%

DEMAND BY REGION

Future market value and airplane deliveries

Region	\$B	Airplanes
Asia-Pacific	1,190	9,160
North America	740	8,550
Europe	740	6,900
Middle East	260	1,580
Latin America	140	1,700
Commonwealth of Independent States (CIS)	70	950
Africa	60	560
Total	\$3.2T	29,400

AIRPLANES IN SERVICE

2007 and 2027

Size	2007	2027
747 and larger	910	1,340
Twin aisle	3,480	8,290
Single aisle	11,450	23,540
Regional jets	3,160	2,630
Total	19,000	35,800

DEMAND BY AIRPLANE SIZE

2008–2027

Size	\$B	Airplanes
747 and larger	290	980
Twin aisle	1,470	6,750
Single aisle	1,360	19,160
Regional jets	80	2,510
Total	\$3.2T	29,400



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Balanced growth

Airplanes in 2027 will be more productive. Each will carry about 40 percent more traffic (RPKs) than the average airplane today. Fewer airplanes will be needed to accommodate the same volume of travel. So the fleet needs to grow by only 3.2 percent each year, although travel will grow at 5.0 percent.

Longer distances

The average growth in airline passenger numbers will be around 4.0 percent each year. More people will be traveling by air as economies grow. Markets will open up through reduced regulation and increased competition. As markets expand, new travel opportunities will mostly be on longer distance flights.

The air transport fleet plays a fundamental role in stimulating and sustaining economic activity. This tie-in is clear, with the 3.2 percent annual fleet growth in line with expected long-term economic growth of 3.2 percent.

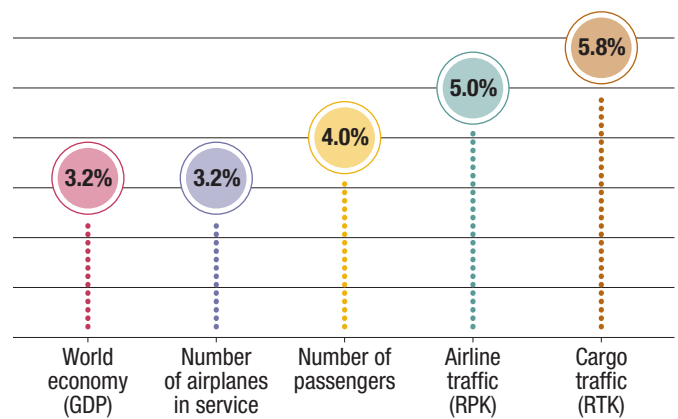
Using the right airplanes

As airlines seek better financial returns, they match the airplanes used more closely to the precise economics of the routes they fly. This means that airlines will in general use larger regional jets and single-aisle airplanes and more small- and medium-sized twin-aisle airplanes. The chart shows how this shift toward the middle of the market will look.

A natural product of this improved operational efficiency is that the average airplane has a lower environmental impact. In the year 2027, 82 percent of the fleet will be airplanes that do not exist today. They all will have been delivered new and will be better than today's fleet in every respect. More environmentally progressive. Better for passengers. And better for airlines.

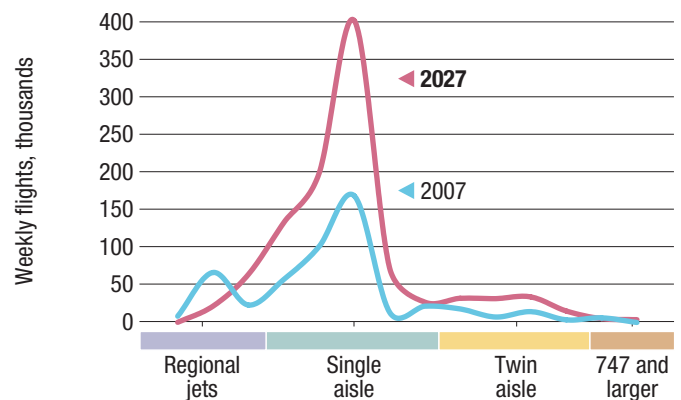
MARKET GROWTH RATES

2007–2027



FUTURE DISTRIBUTION OF FLIGHTS

Moving toward more efficient airplane sizes





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Reshaping the fleet

Today's record high fuel prices are forcing many airlines, particularly in the United States, to take urgent action in cutting back capacity or reducing planned growth. They are invariably doing so by reducing use of their oldest and least efficient airplanes, while retaining their investment in new airplanes.

Clear direction

The influence of current market conditions on our outlook is clear, with replacement airplanes taking a greater share of demand (43 percent) than we previously forecast (36 percent), and a smaller fleet size at the end of the 20-year period (35,800 airplanes) than we predicted in the previous outlook (36,400 airplanes).¹

Many of the newer aircraft being displaced from passenger fleets are ideal to satisfy pent-up demand for conversion into freighters. Around 2,500 airplanes will be converted from passenger to freight use, and 860 new freighters will be needed, most of which will bring new capabilities to the market.

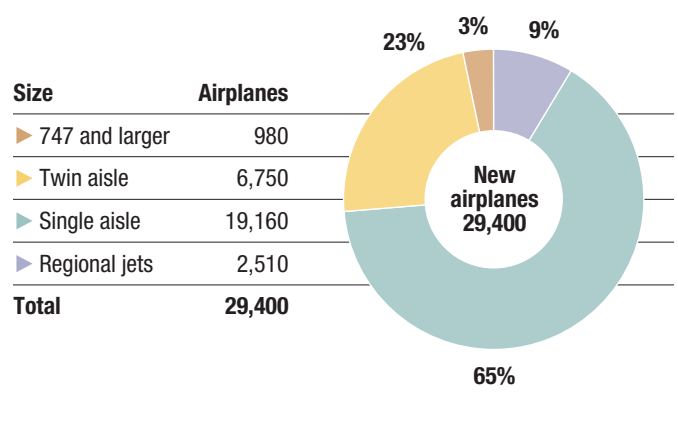
Backlog = see the future

A record 31 percent of our forecast for airplanes with more than 100 seats is already on firm order (7,900 aircraft).² So we have unprecedented visibility of future airplane requirements, giving more certainty to the shape of our forecast.

Long-established airlines will soon order further replacements for the numerous aging airplanes that will remain even beyond announced capacity cutbacks. Leasing companies will continue ordering new airplanes in the near to medium term. They have placed a high proportion of their future deliveries with customers and need to secure an additional supply of new airplanes.

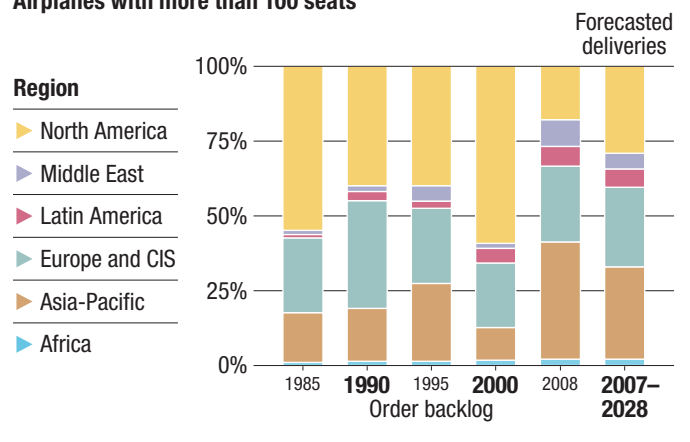
NEW AIRPLANE DELIVERIES

2008–2027



ORDER BACKLOG

Airplanes with more than 100 seats



¹ Comparisons are with data from *Current Market Outlook 2007*.

² Ascend CASE, June 2008.



SUMMARY OUTLOOK 2008–2027

Dynamic markets

Air transport markets are dynamic: they are always changing. New competitors drive changes to ongoing operations. The development of new markets shifts emphasis into new territories. Although the largest markets will remain, emerging markets will become big enough to bring new influences to the world order in aviation.

Shifting emphasis

Asia is now expected to need the most new airplanes as well as representing the largest market by value of deliveries. For first time, the value of the European airplane market will be equivalent to that in North America. As the airplane market expands, welcome competition is anticipated from manufacturers in Asia and CIS.

New trade routes and global sourcing will stimulate air cargo markets, for example, with strong growth in Southwest Asia. One-stop-to-anywhere airlines in the Middle East have a highly expansive vision. Investment in infrastructure and airplanes is on a scale to match.

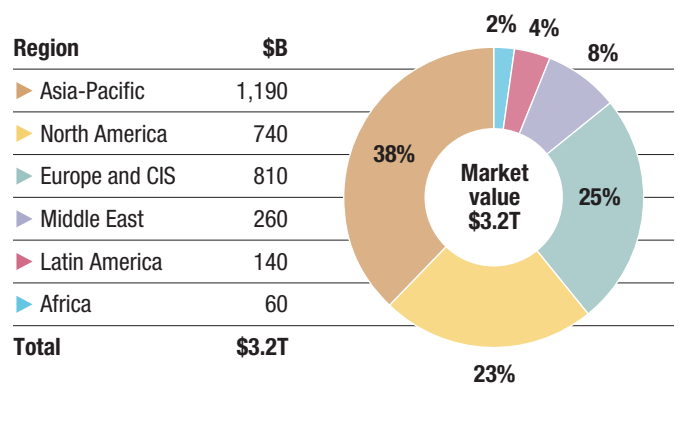
U.S. network carriers are already seeing contraction in domestic operations as they shift emphasis toward more rewarding international routes. Stronger growth in U.S. markets will come back in time. Meanwhile, the current fast pace of growth in Europe is expected to moderate a little.

A better balance

Dynamic markets combine to transform the future market toward more balance. In 2027, Asia Pacific and North America will both have around 30 percent of the fleet in service, with a further 25 percent in Europe and CIS. There also will be more balance between different types of airlines and between replacement and growth demand for airplanes.

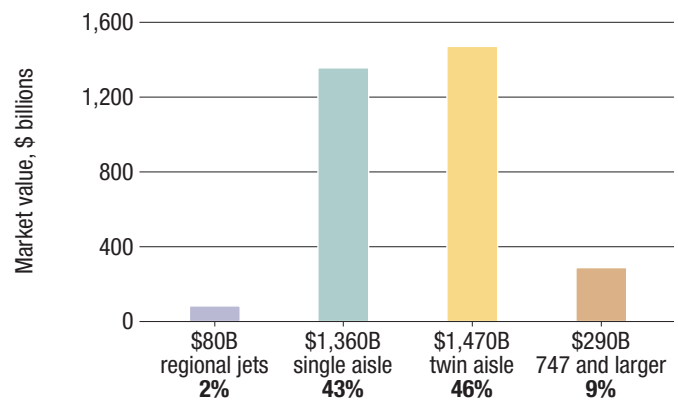
MARKET VALUE BY REGION

2008–2027



MARKET VALUE: \$3.2 TRILLION

2008–2027





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Efficient freighters

A shift toward larger freighters and new, more efficient airplanes will help keep air cargo transport affordable. Sustained growth of world trade and global GDP will drive a 5.8 percent average annual increase in air cargo traffic, consistent with past trends. New air trade routes will reach out to under-served places.

Business demand

The global economy demands rapid and reliable business-to-business exchange. Air cargo transport makes it possible. Manufacturers depend on air freight services for efficient just-in-time inventory management. Air freighters enable the most economical sourcing of components and assemblies. In many areas of the world, ground infrastructure is lacking. Here, air transport sustains vital export markets and allows transportation of even basic commodities.

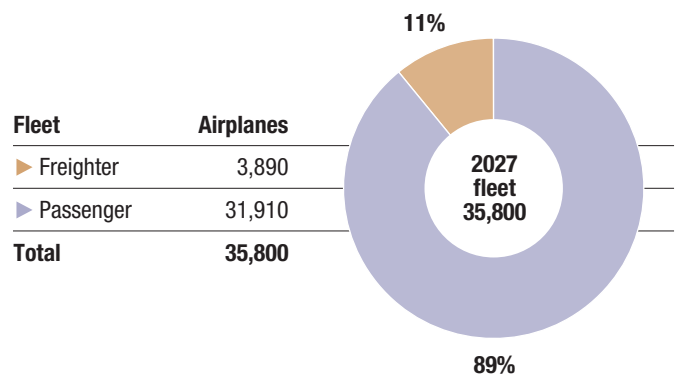
The tonne-kilometer cost and range advantages of large freighters will enable air carriers to meet demand on high-growth trade lanes, particularly links to Asia. As world air cargo traffic triples over the next 20 years, the number of freighters in the world fleet will double. Replacement airplanes will generally be larger, increasing the fleet share of large freighters from 26 percent to 35 percent by 2027.

Speed = value

Air transport sustains many developing world economies by making it possible to ship perishable products such as fresh flowers, fruit, and live animals to distant markets. Reliable, regularly scheduled air freight flights make pharmaceuticals, life-saving blood and tissue products, and emergency equipment available and affordable. Prompt delivery actually adds to the value of a variety of products, including fashion items and leading-edge consumer electronics.

2027 AIRPLANES IN SERVICE

11 percent will be freighters



2027 FREIGHTERS IN SERVICE: 3,890

Shift toward larger airplanes

