Federal Aviation Administration

FAA Aerospace Forecast

Fiscal Years 2014 - 2034

OK 14-0723

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FORECAST HIGHLIGHTS
2014-2034

Since the beginning of the century, the commercial air carrier industry has suffered several major shocks that have led to reduced demand for air travel. These shocks include the terror attacks of September 11, skyrocketing prices for fuel, debt restructuring in Europe and the United States (U.S.), and a global recession. To manage this period of extreme volatility, air carriers have fine-tuned their business models with the aim of minimizing financial losses by lowering operating costs, eliminating unprofitable routes and grounding older, less fuel efficient aircraft. To increase operating revenues, carriers have initiated new services that customers are willing to purchase. Carriers have also started charging separately for services that were historically bundled in the price of a ticket. The capacity discipline exhibited by carriers and their focus on additional revenue streams bolstered the industry to profitability in 2013 for the fourth consecutive year. Going into the next decade, there is cautious optimism that the industry has been transformed from that of a boom-to-bust cycle to one of sustainable profits.

As the economy recovers from the most serious economic downturn and slow recovery in recent history, aviation will continue to grow over the long run. Fundamentally, demand for aviation is driven by economic activity. As economic growth picks up, so will growth in aviation demand. The 2014 FAA forecast calls for U.S. carrier passenger growth over the next 20 years to average 2.2 percent per year, unchanged from last year's forecast. After another year of slow growth in 2014, growth over the next five years will be higher than the long run rate as we assume U.S. economic growth accelerates. One of the many factors influencing the muted recovery is the uncertainty that surrounds the U.S. and the global economy. The global economy has been hit by a number of headwinds during the past few years, from recession in Europe to a "soft landing" in China and inconsistent performance in other emerging economies. This has not helped the pace of U.S. economic growth given the increasing importance of its trade with Europe and the rest of the world. Despite this and the ambiguity surrounding its own fiscal imbalances, the U.S. economy has managed to avoid a double dip recession and trudges along the path of slow recovery.

System capacity in available seat miles (ASMs) – the overall yardstick for how busy aviation is both domestically and internationally – is projected to increase by 1.5 percent this year after posting a 0.8 percent increase in 2013; it will then grow at an average annual rate of 2.7 percent through 2034. In the domestic market, capacity growth in 2014 is forecast to be 1.0 percent and then grow at an average annual rate of 2.1 percent for the remainder of the forecast period. Domestic mainline carrier capacity is projected to increase 0.8 percent in 2014 after rising 1.3 percent in 2013. For the regional carriers, domestic capacity growth is projected to be 2.2 percent in 2014 after declining 2.8 percent in 2013. Commercial air carrier domestic revenue passenger miles (RPMs) are forecast to increase 0.9 percent in 2014, and then grow at an average of 2.2 percent per year through 2034; domestic enplanements in 2014 will increase 0.6 percent, and then grow at an average annual rate of 1.9 percent for the remainder of the forecast period.

The average size of domestic aircraft is expected to increase by 1.3 seats in FY 2014 to 126.3 seats. Average seats per aircraft for mainline carriers are projected to increase by 1.2 seats as network carriers[1] continue to reconfigure their domestic fleets. While demand for 70-90 seat aircraft continues to increase, we expect the number of 50 seat regional jets in service to fall, increasing the average regional aircraft size in 2014 by 1.4 seats to 57.5 seats per mile. Passenger trip length in all domestic markets will increase by 2.6 miles during the same period.

The long term outlook for general aviation is favorable even though the slow growth of the U.S. economy, contributed by uncertainties caused by debt ceiling crises, sequestration, government shutdown, and the European recession have affected the near term growth, particularly for the turbo jet sector. While it is slightly lower than predicted last year, the growth in business aviation demand over the long term continues, driven by a growing U.S. and world economy especially in the turbo jet, turboprop, and turbine rotorcraft markets. As the fleet grows, the number of general aviation hours flown is projected to increase an average of 1.4 percent a year through 2034.

After sputtering in the early part of 2013, both the U.S. and global economies began to show improvement in the latter half of 2013 and appear poised to grow faster in 2014. Assuming energy prices remain relatively stable, U.S. carrier profitability should increase as an improving economy in its fifth year of recovery leads to strengthening demand, which coupled with continuing capacity discipline results in higher fares (and increased ancillary revenues). Over the long term, we see a competitive and profitable aviation industry characterized by increasing demand for air travel and airfares growing more slowly than inflation, reflecting over the long term a growing U.S. economy.

[1] Alaska Airlines, American Airlines, United Airlines, Delta Airlines, and U.S. Airways.

REVIEW OF 2013

The year 2013 began with a good deal of uncertainty which never really let up. Despite the uncertainty surrounding the impacts of the expiration of the payroll tax cut, sequestration, and ultimately a government shutdown, 2013 saw the U.S. airline industry post solid results. The changes that U.S. carriers have made since the start of the global recession in 2008 helped the industry to make a profit for the fourth year in a row. Many industry professionals see these changes as providing traction towards profitability, even during future periods of uncertainty. The biggest change that U.S. passenger airlines have made is the shift in focus from increasing market share to one of boosting shareholder return on investment. The U.S. airline industry has become more nimble; that is, adjusting capacity to seize opportunities or contracting in times of economic distress. Even during times of economic instability and distress, the industry has found ways to increase revenue. For example, air carriers are charging fees for services that used to be included in airfare (e.g. meal service), as well as for services that were not previously available (e.g. premium boarding and fare lock fees). The impact from these recent initiatives gives reason for optimism as the industry (passenger and cargo carriers combined) posted profits for the fourth consecutive year in 2013.

Demand for air travel in 2013 grew slowly for the second year in a row amid an uncertain economic environment in the U.S. In 2013[2] system revenue passenger miles increased 1.4 percent as enplanements increased 0.4 percent. Commercial air carrier domestic enplanements were flat (up by 0.1 percent), while international enplanements were up 2.6 percent. The system-wide load factor rose to 83.2 percent (up 0.5 points from 2012). Domestic enplanement market share continued to rise for low-cost, network, and "other" carriers in 2013 while regional carrier share decreased. Domestic low cost carrier enplanement share increased by 0.1 points to 29.2 percent, while the share of network and "other" carriers rose by 0.5 points to 47.0 percent. Regional carrier share dropped by 0.5 points to 23.8 percent.

Capacity restraint by the carriers along with stable fuel prices helped boost industry profits in FY 2013 despite system wide real yield decreasing by 1.0 percent. Data for FY 2013 show that the reporting passenger carriers had a combined operating profit of $9.6 billion (compared to a $6.0 billion operating profit for FY 2012). The network carriers reported combined operating profits of $7.1 billion while the low cost carriers reported combined operating profits of $1.8 billion, with all carriers posting profits.

The general aviation market continued to improve in every segment, except for the business jets. Increase in aircraft deliveries was especially robust for the agricultural airplane portion of turboprops, for rotorcraft, and multi-engine piston aircraft. Overall deliveries were up by 6.4 percent in calendar year (CY) 2013; with a 38.1 percent increase in U.S. billings. Single engine piston shipments were up by 4.5 compared to the previous year. Combined with a 27.0

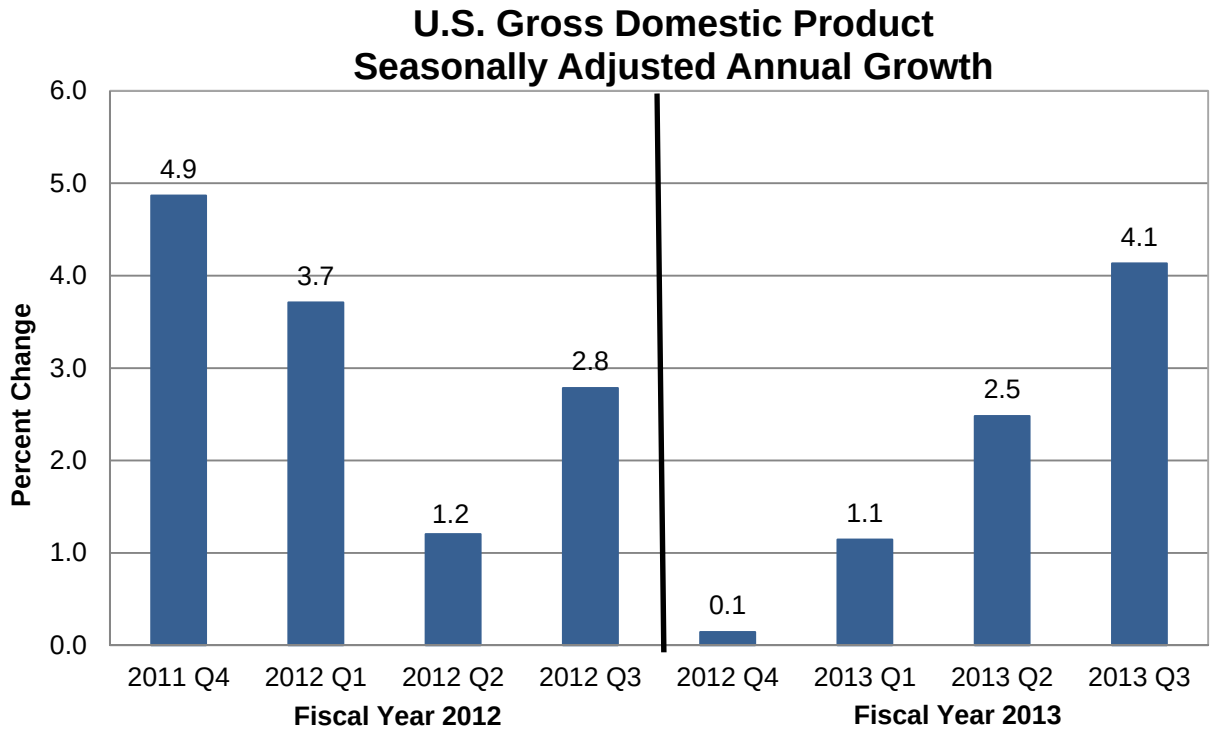
[2] All stated years and quarters for U.S. economic and U.S. air carrier traffic and financial data and forecasts are on a fiscal year (FY) basis (October 1 through September 30). All stated years and quarters for international economic and world traffic and financial data are on a calendar year (CY) basis, unless otherwise stated.

percent increase in the smaller multi-engine category, total piston aircraft shipments by U.S. manufacturers were up by 6.5 percent. Turbine aircraft shipments (turboprop and business jets) by U.S. manufacturers increased by 6.3 percent in CY 2013. Turboprop shipments, which increased by 13.8 percent in 2013 accounted for the growth in turbine shipments, as the decline of business jet shipments continued at a smaller rate of 3.7 percent, compared to 4.7 percent of CY 2012. This was a reflection of the fragile nature of the economic recovery. General aviation activity at FAA and contract tower airports recorded a 1.2 percent decline in 2013, which was caused by a decrease in itinerant activity; local operations were slightly up (0.7 percent) compared to previous year.

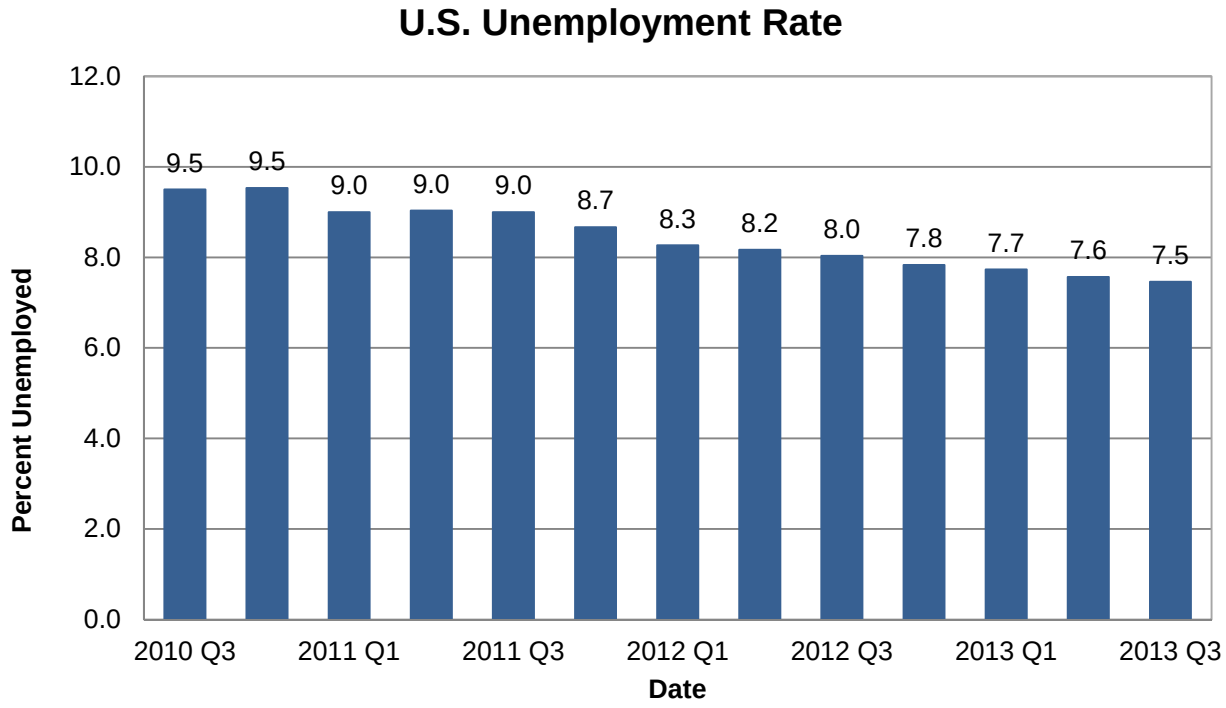
Total operations at FAA and contract towers fell again in 2013 by 1.3 percent, as activity declined in all user categories. Activity at large hubs fall by 0.9 percent, while medium hubs and small/non hub airports saw declines of 2.9 percent and 1.1 percent, respectively. With increasing numbers of regional and business jets in the nation's skies, fleet mix changes, and carriers consolidating operations in their large hubs, we expect increased activity growth which has the potential to increase controller workload.

U.S. ECONOMIC ACTIVITY

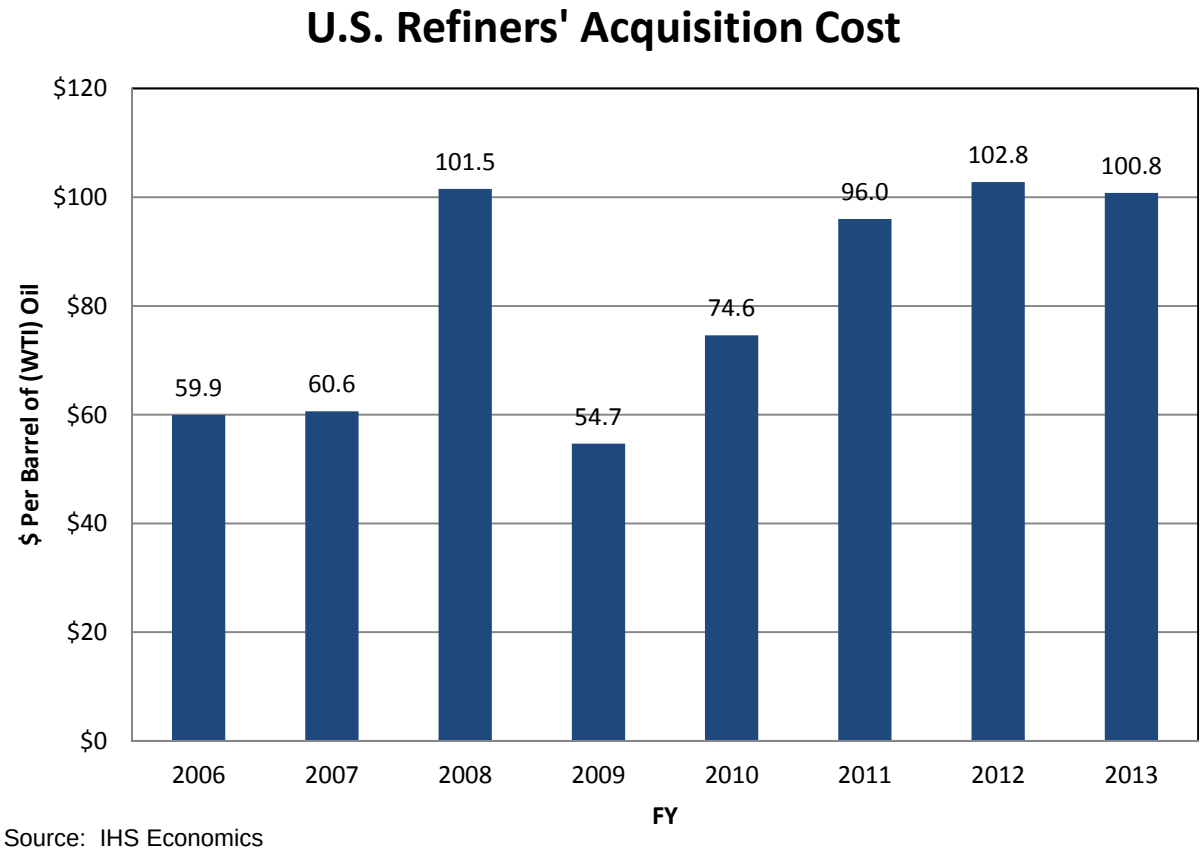
U.S. economic performance in 2013 continued to be mixed with modest growth in real GDP and real incomes, a slowly falling unemployment rate, and oil prices and consumer inflation remaining in check. The economy grew at an average annual rate of 1.6 percent in fiscal year (FY) 2013 after expanding 2.8 percent in FY 2012. Given the uncertainty that characterized 2013, it was not surprising that growth in 2013 was lower than the previous year. GDP growth accelerated throughout the year with the negative effects of Hurricane Sandy and the expiration of the temporary payroll tax cut impacting the first and second quarters. Despite the slow growth there were some favorable signs in the data as the housing market continued to improve, the stock market entered record territory, and the labor market saw steady but slow improvement.



One of the unique features about the economic recovery (now in its 5th year) has been the slow improvement in the nation's unemployment rate. Since 1960 there have been five economic expansions in the U.S. that have lasted longer than 48 months, including this latest expansion. On average, for the prior four expansions, the unemployment rate four years after the peak rate in the recession prior to the expansion, has declined by about one-third. If the current recovery had been similar to the prior four recoveries, the unemployment rate would be 0.6 to 0.7 points lower than the 7.5 percent in the fourth quarter of FY 2013, and 7.6 percent for all of FY 2013. The persistently high unemployment rate is thought to be a contributing factor to the slow recovery in consumer spending and aviation demand that has been experienced since 2009.



The price of oil, as measured by the U.S. Refiners' Acquisition Cost (for West Texas Intermediate, or WTI), remained relatively stable in FY 2013, averaging $100.79 per barrel, down 2.0 percent from the FY 2012 figure of $102.81. Although the refiner acquisition cost of oil has risen by 84 percent since 2009, the volatility that characterized 2008-2011 has diminished considerably in the last two years.

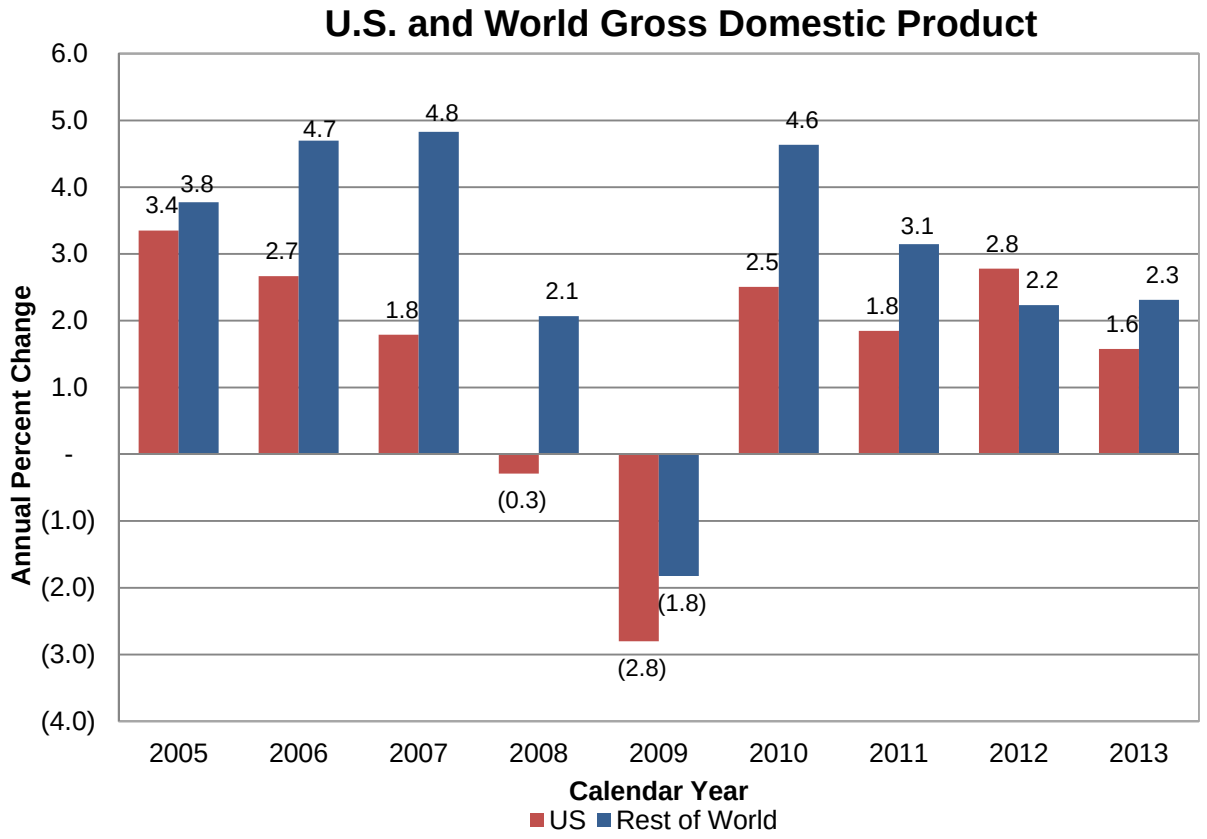


Source: IHS Economics

Finally, consumer prices increased at a modest rate in 2013. Core inflation (excluding gas and food) was moderate (1.8 percent); while headline inflation (including gas and food) was up 1.6 percent as food prices increased just 1.5 percent.

WORLD ECONOMIC ACTIVITY

Based on preliminary figures, according to IHS Global Insight, the U.S. and rest of the world economies grew 1.6 and 2.3 percent, respectively, in 2013. The advanced economies (U.S., Western Europe, Japan, Australia, New Zealand, and Canada) expanded 1.2 percent overall. All world regions saw their economies grow, except for Europe, which is still wrestling with the recession that began in second quarter of 2012. The fastest growth was in China followed by Indonesia and India.



Source: IHS Global Insight, GDP Components Tables (Interim Forecast, Monthly), Release date 12 Sept

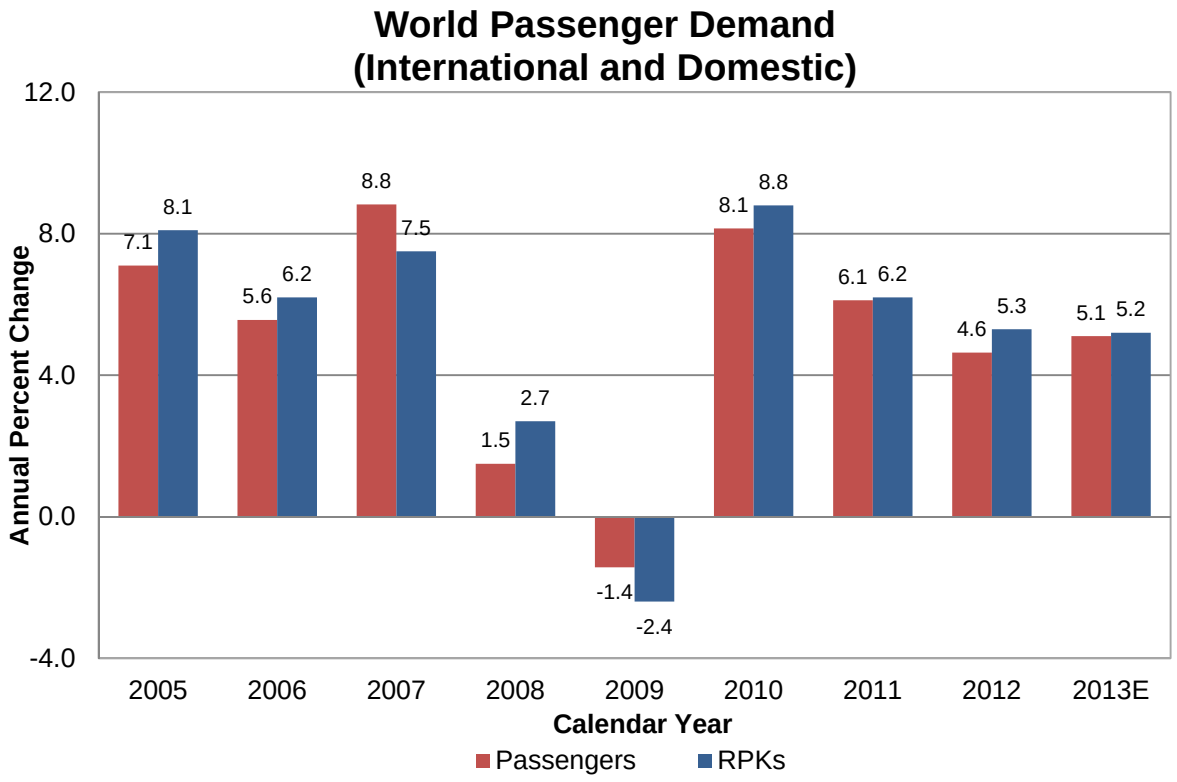
On a calendar year basis, gross domestic product (GDP) in Canada expanded at a slightly faster pace (up 1.7 percent) than the U.S. in 2013. The combined economies of the Asian and Far East nations grew 4.4 percent in 2013, up from 4.2 percent in 2012. This region includes the world's second largest and most vibrant economy, China (up 7.7 percent), and the world's third largest economy, Japan (up 1.9 percent). The combined economies of Europe remained mired in recession, with Western Europe (excluding Turkey) posting no growth and the combined economies of Central Europe and the former Soviet Union up 2.1 percent. GDP in Latin America (including the Caribbean) expanded by 2.7 percent, although Mexico grew just 2.0 percent. The largest economy in the region, Brazil, saw its GDP expand 2.4 percent in 2013, following gains of 2.7 and 0.9 percent, respectively, in 2011 and 2012.

COMMERCIAL AVIATION

Worldwide commercial aviation continued a slow recovery in 2013 as stable jet fuel prices offset relatively disappointing global economic growth. The U.S. industry posted a net profit in 2013, with a similar outcome predicted for foreign carriers. After registering net profits of $7.4 billion in 2012, global industry net profits for calendar year 2013 are expected to be $12.9 billion.[3] All global regions except Asia-Pacific and Africa are projected to see an increase in profits as fuel costs remained stable.

World Travel Demand

Based on data compiled by the International Civil Aviation Organization (ICAO), world air carriers are expected to post another moderate growth performance in CY 2013 as demand for air travel continues to recover from the depressed levels recorded during 2009. Preliminary traffic results for full year 2013 released by ICAO show worldwide revenue passenger kilometers (RPKs) increased 5.2 percent, a 0.1 percentage point decrease compared to last year's growth rate.[4]



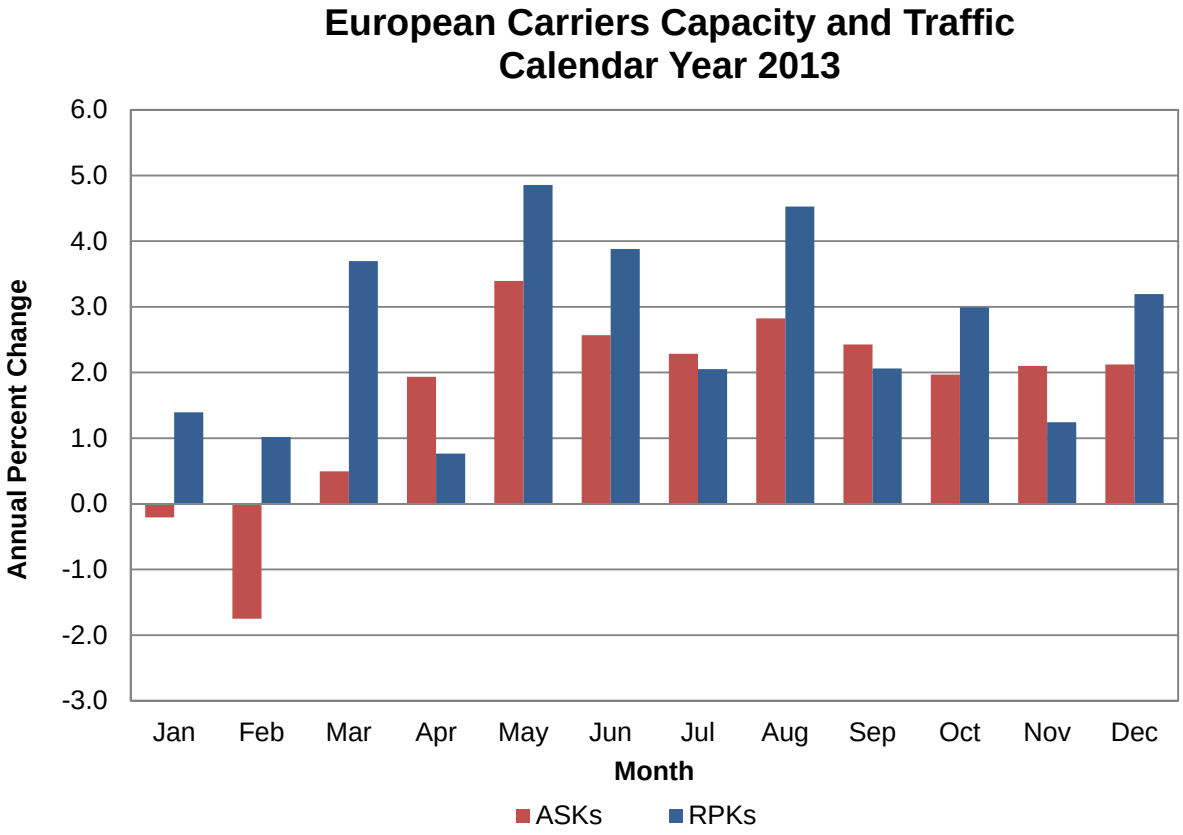
Source: RPKs (ICAO); Pax (2009-11 ICAO, 2012-13 IATA)

[3] IATA Financial Forecast, December 2013.

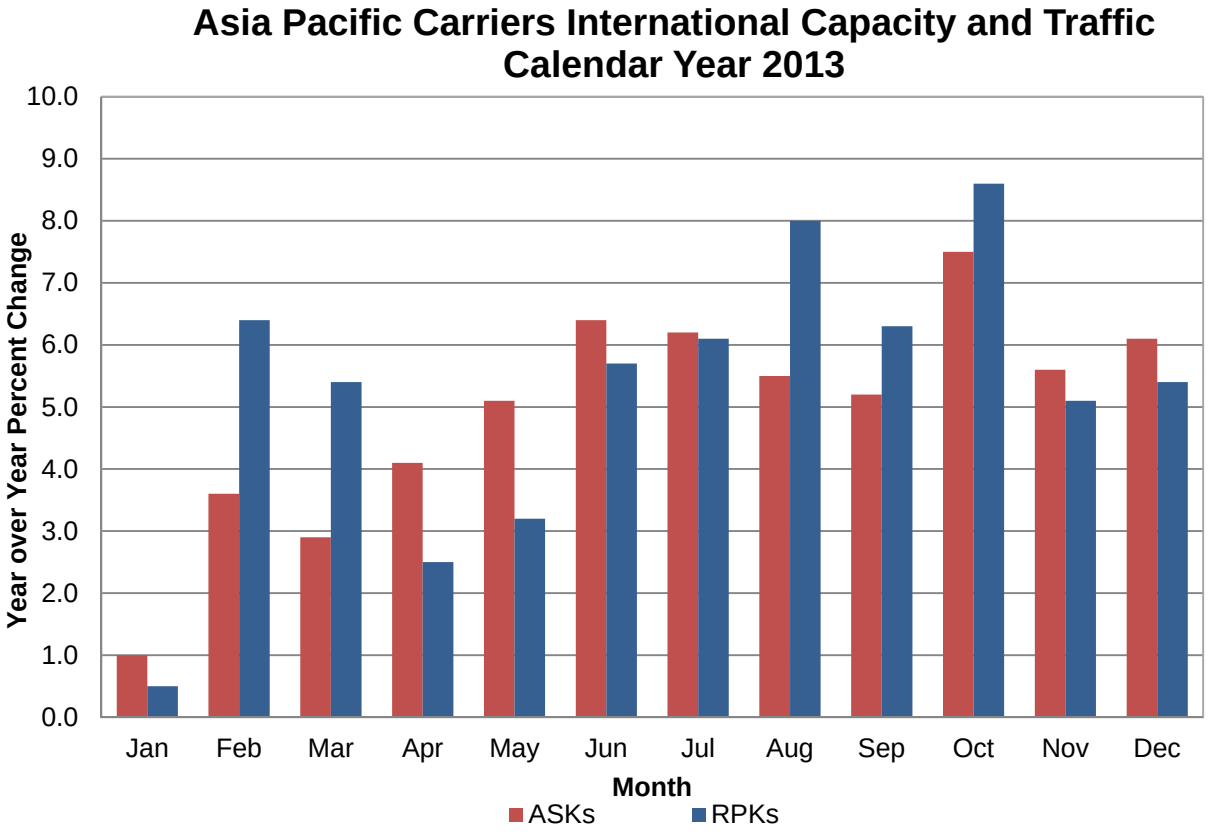
[4] ICAO press release dated December 16, 2013.

For calendar year 2013, preliminary data from ICAO show passengers were up 5.1 percent over calendar year 2012. Data for the same period shows capacity, as measured by available seat kilometers (ASKs), to be up 4.6 percent.

Traffic and capacity data from the Association of European Airlines (AEA) for calendar year 2013 showed year over year gains in RPKs ranging between 0.8 percent to 4.9 percent and year over year changes in ASKs ranging between -1.8 percent to 3.4 percent.

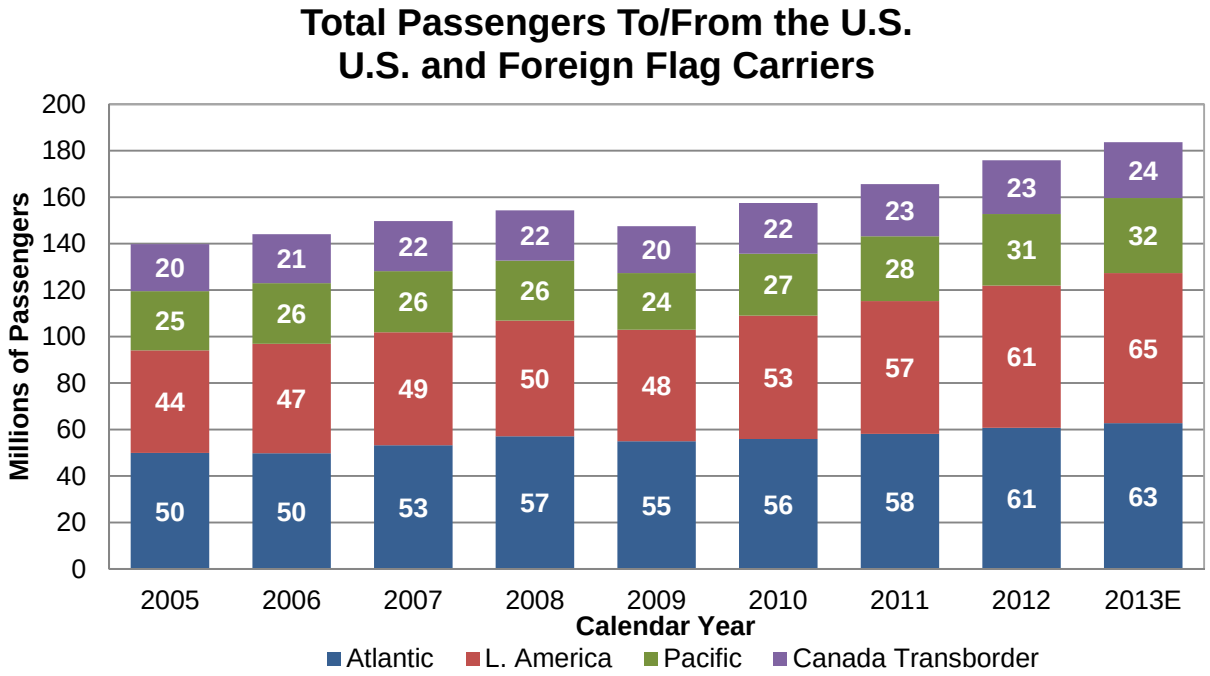


The Association of Asia Pacific Airlines (AAPA) reported an increase of 5.2 percent in international RPKs and a 4.8 percent increase in international ASKs; international passengers in the region were up 6.0 percent during the same period.[5]



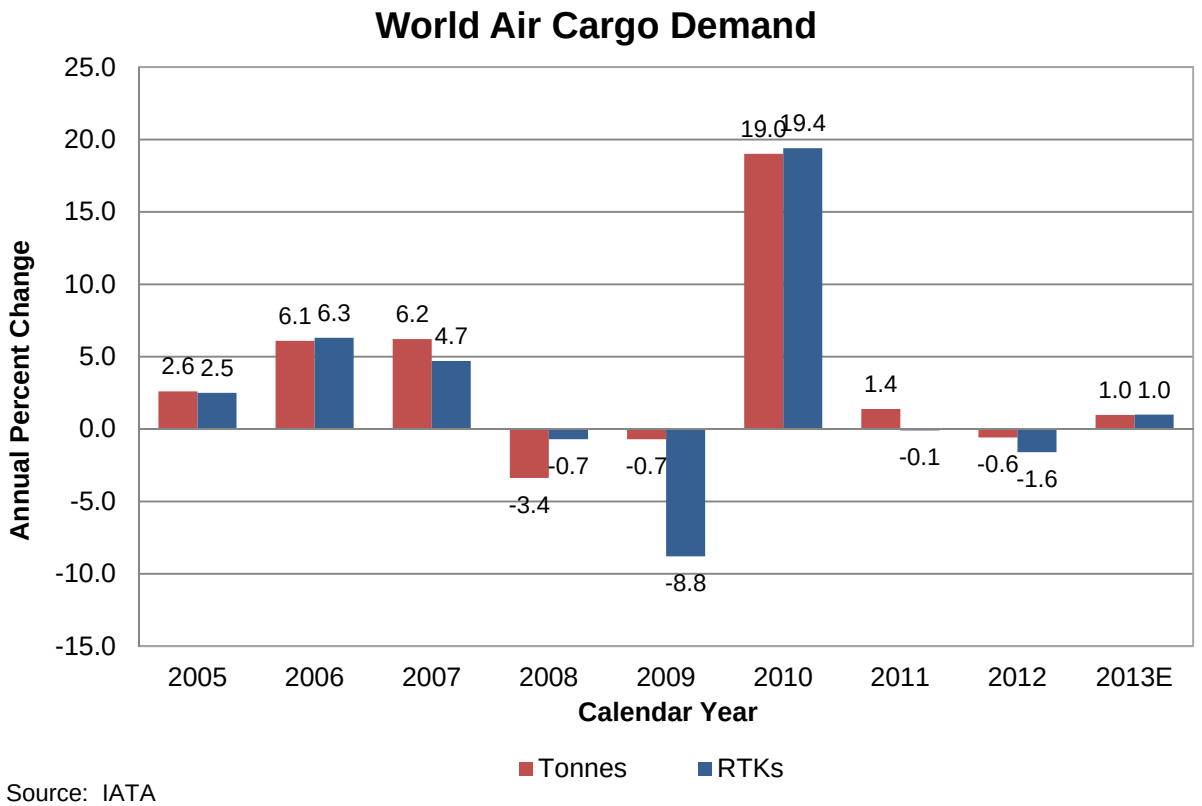
[5] Association of Asia Pacific Airlines, "Asia Pacific Full Year 2013 Traffic Results", Press Release dated 28 January 2014, Issue 2014: 02.

In CY 2013, U.S. and foreign flag carriers transported an estimated 183.6 million passengers between the United States and the rest of the world, a 4.4 percent increase from 2012. Year-over-year growth occurred in all markets (up 3.2, 5.6, 4.9, and 3.6 percent, respectively, for Atlantic, Latin America, Pacific, and Canada Transborder).



Source: US Customs & Border Protection data processed and released by Department of Commerce;

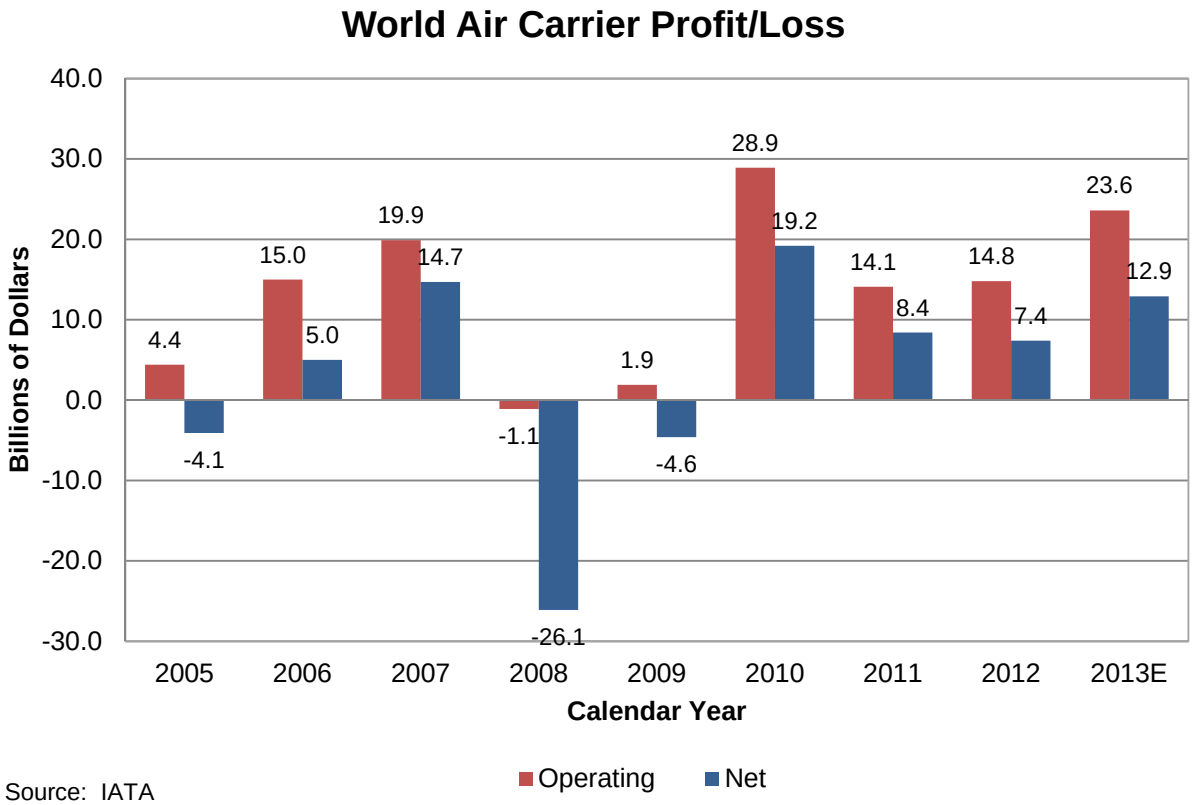
Worldwide air cargo demand increased for the first time in three years in 2013. According to ICAO, worldwide freight ton kilometers were estimated to increase 1.0 percent in calendar year 2013 compared to 2012. Freight ton kilometers (FTKs) of AEA member carriers rose 1.8 percent in calendar year 2013 while the international FTKs of AAPA member carriers fell 0.6 percent.



Source: IATA

The International Air Transport Association (IATA) reports that world air carriers (including U.S. airlines) are expected to register an operating profit of $23.6 billion for 2013. IATA estimates global airline industry net profits to be $12.9 billion for the same period with all regions except Africa to be in the black. Based on financial data compiled by ICAO and IATA, between 2004 and 2013 world airlines produced cumulative operating profits of $124.8 billion (with nine years out of ten posting gains) and net profits of $27.2 billion (with six years out of ten posting gains).[6]

[6] IATA Financial Forecast, December 2013.



Source: IATA

U.S. Travel Demand

By year end of FY 2013, the U.S. commercial aviation industry consisted of 15 scheduled mainline air carriers that used large passenger jets (over 90 seats) and 63 regional carriers that used smaller piston, turboprop, and regional jet aircraft (up to 90 seats) to provide connecting passengers to the larger carriers. Mainline and regional carriers offer domestic and international passenger service between the U.S. and foreign destinations, although regional carrier international service is confined to the border markets in Canada, Mexico, and the Caribbean. Thirty all-cargo carriers were providing domestic and/or international air cargo service at the end of 2013.

Shaping today's commercial air carrier industry are three distinct trends: (1) continuing industry consolidation and restructuring; (2) continued capacity discipline in response to external shocks, and (3) the proliferation of ancillary revenues.

The restructuring and consolidation of the U.S. airline industry that began in the aftermath of the terror attacks of September 11, 2011 continued in 2013. During the year, Southwest continued to integrate the former AirTran network into its operations as did United with the former Continental Airlines network. The culmination of the consolidation trend occurred on February 14, 2013, when American and US Airways (the third and fifth largest U.S. airlines, respectively) announced a

merger agreement that, if approved, would create the world's largest airline[7]. Consequently, when compared to 2007, 7.0 percent fewer domestic ASMs were flown and 5.2 percent less passengers were carried domestically in 2013. This has had clear implications on the size of the aircraft being used and the load factors, topics that will be discussed later in this document.

One of the most striking outcomes of industry restructuring has been the unprecedented period of capacity discipline, especially in domestic markets. Between 1978 and 2000, ASMs in domestic markets increased at an average annual rate of 4 percent a year, recording only two years of decline. Even though domestic ASMs shrank by 6.9 percent in FY 2002, following the events of September 11, 2001, growth resumed and by 2007, domestic ASMs were 3.6 percent above the FY 2000 level. However, since 2007, U.S. domestic market ASMs have decreased by 7.0 percent, as the industry responded first to the sharp rise in oil prices (up 155% between 2004 and 2008) and then the global recession that followed (2009 to the present).

The 7.0 percent reduction in domestic capacity since 2007 has not been shared equally between the mainline carriers and their regional counterparts. To better match demand to capacity, the mainline carriers contracted out "thin" routes to their regional counterparts because they could provide lift at a lower cost, or else they simply removed the capacity altogether. In 2013, the mainline carrier group provided 8.0 percent less capacity than it did in 2007 (and carried 6.6 percent fewer passengers). Capacity flown by the regional group has shrunk by 0.4 percent over the same period (with passengers carried down 0.5 percent).

The most recent trend to take hold is that of ancillary revenues. Carriers generate ancillary revenues by selling products and services beyond that of an airplane ticket to customers. This includes the un-bundling of services previously included in the ticket price such as checked bags and on-board meals, and by adding new services such as boarding priority. As noted earlier, U.S. passenger carriers posted net profits for the fourth consecutive year in 2013 with ancillary revenues a contributing factor to the favorable outcome.

Commercial Air Carriers – Passenger

U.S. commercial air carriers' traffic and capacity in 2013 showed little growth for the second year in a row. System (the sum of domestic plus international) capacity increased 0.8 percent to 1.003 trillion ASMs while RPMs increased 1.4 percent to 834.1 billion. During the same period system-wide passengers increased 0.4 percent to 739.3 million; U.S. mainline carrier passenger growth was 1.1 percent while regional carriers carried 2.3 percent fewer passengers. In the domestic market, mainline passengers saw an increase for the third consecutive year, up 0.8 percent, marking the first time since 1998-2000 that the industry recorded three consecutive years of passenger growth in the domestic market. Mainline passengers in international markets posted a fourth year of growth, up 2.9 percent.

Even though the recession was officially over in June 2009[8], carriers continued to face economic uncertainty in 2013 as corporate travel budgets remained strained, high

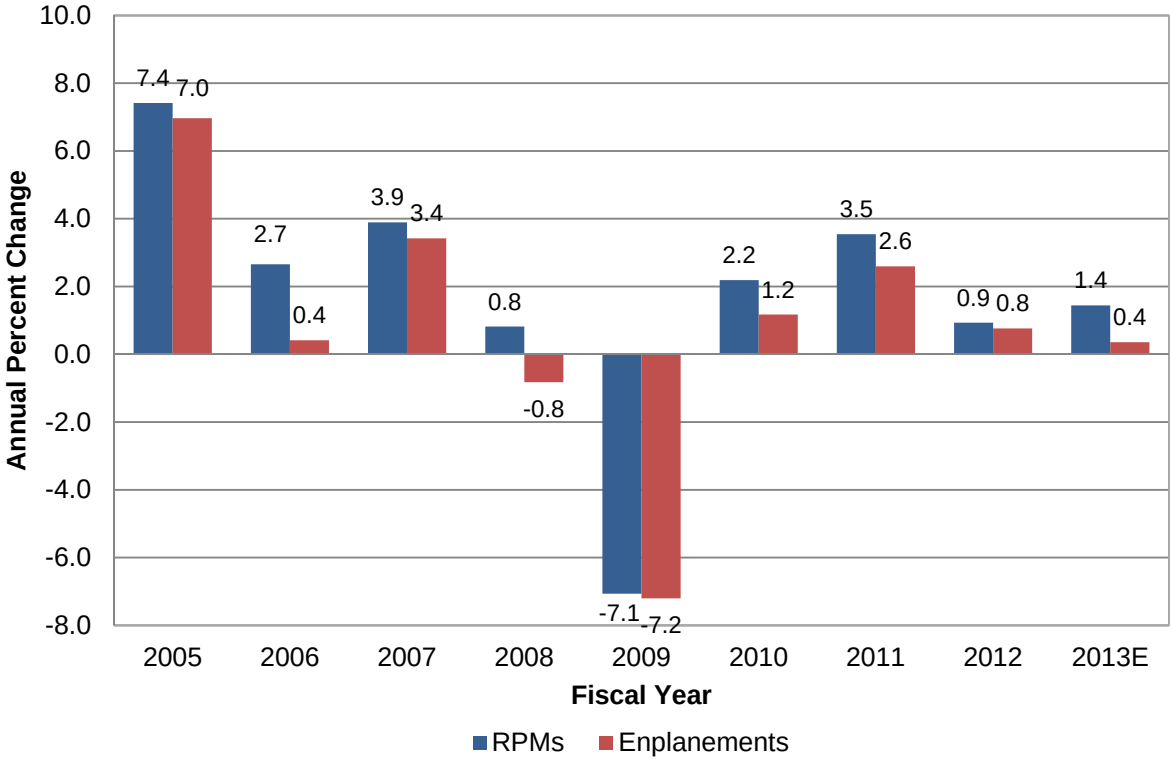
[7] On December 9, 2013 American and US Airways merged to form American Airlines Group, Inc.

[8] According to the National Bureau of Economic Research.

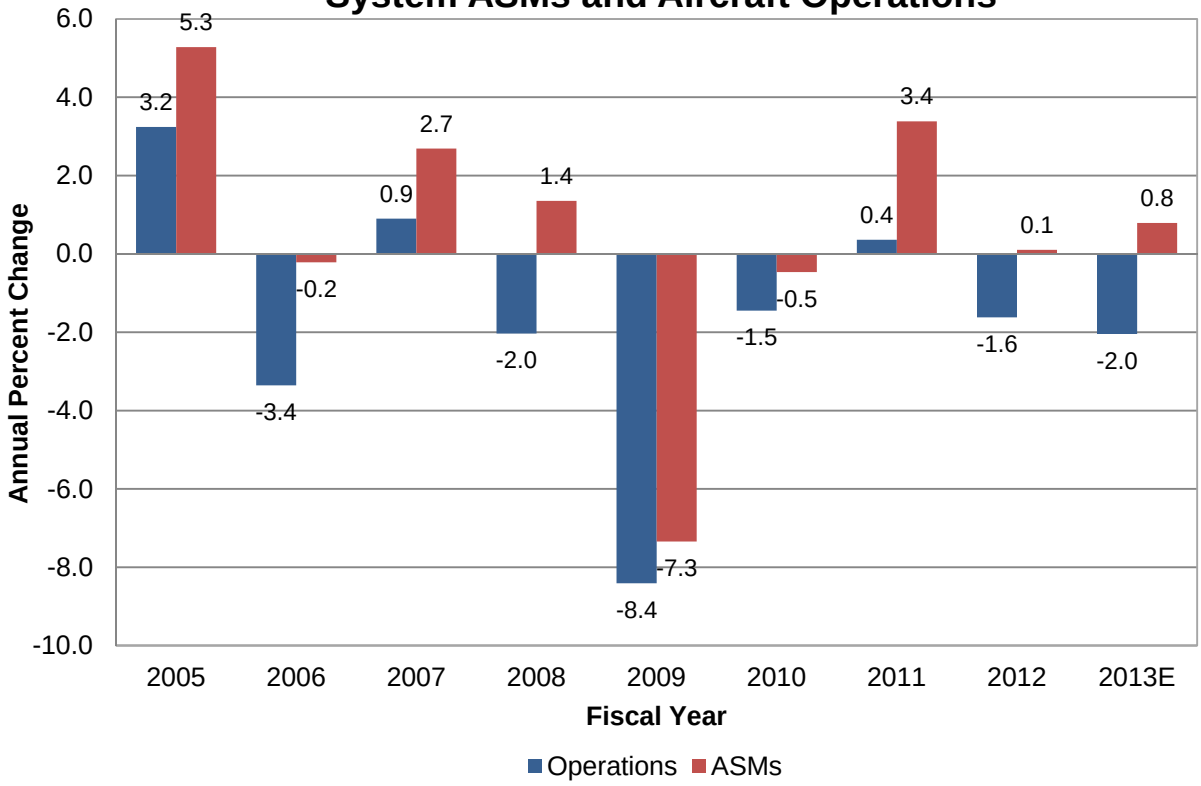
unemployment persisted and uncertainty surrounding the expiration of the payroll tax break in January, the impacts of sequestration in April, and the threat (which ultimately proved real) of a federal government shutdown at the end of September shadowed other more positive developments. In such an uncertain environment, industry capacity growth was restrained (up 0.8 percent), after only a 0.1 percent increase in 2012. Given the minimal increase in seats available to the travelling public, carriers were still able to raise airfares despite the slow growth in demand. Higher airfares and ancillary revenues, coupled with flat to falling fuel prices resulted in U.S. carriers finishing up 2013 with a net profit.

System load factor and trip length continued to head upwards in 2013, even as seats per aircraft mile increased. The average load factor reached a record-breaking 83.2 points, up 0.5 points from 2012. Passenger trip length posted its largest increase since 2008, up 12.1 miles, to 1,128.2 miles. Seats per aircraft mile increased to 142.9 seats (up 1.4 seats per aircraft mile).

U.S. Commercial Air Carriers
System RPMs and Enplanements

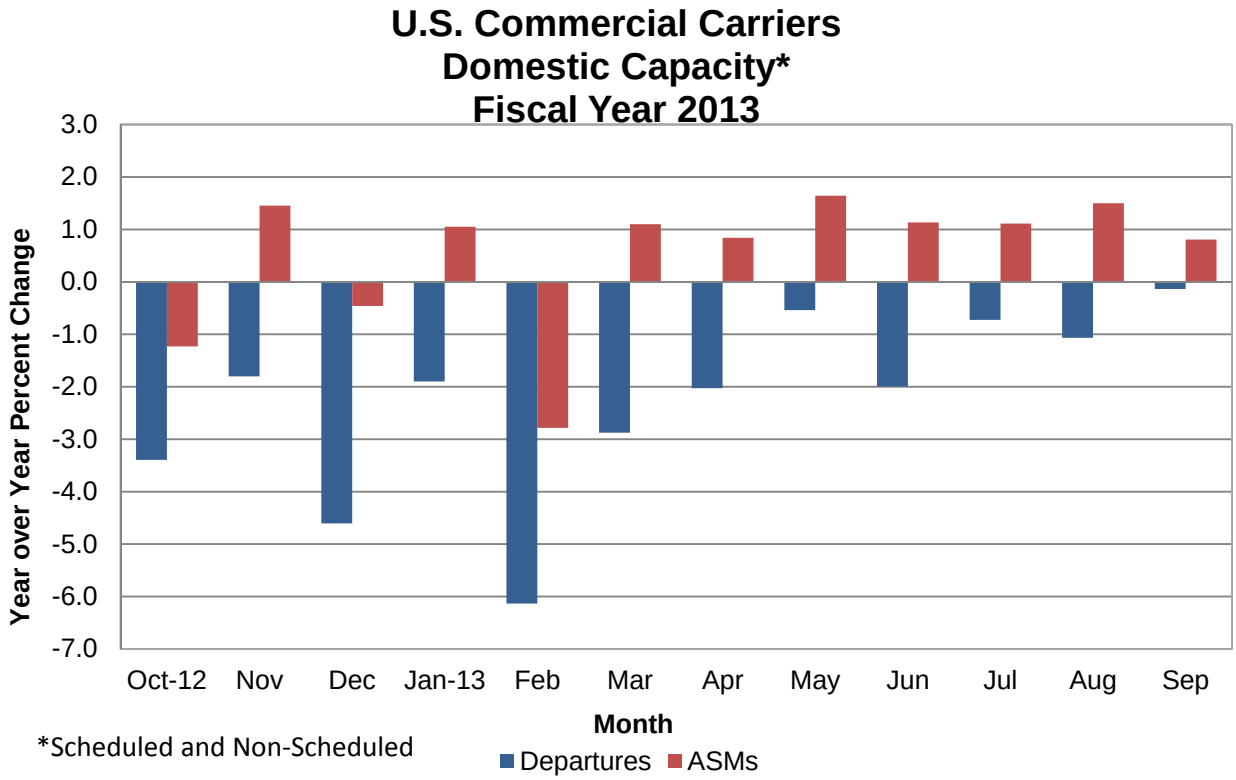


U.S. Commercial Air Carriers
System ASMs and Aircraft Operations



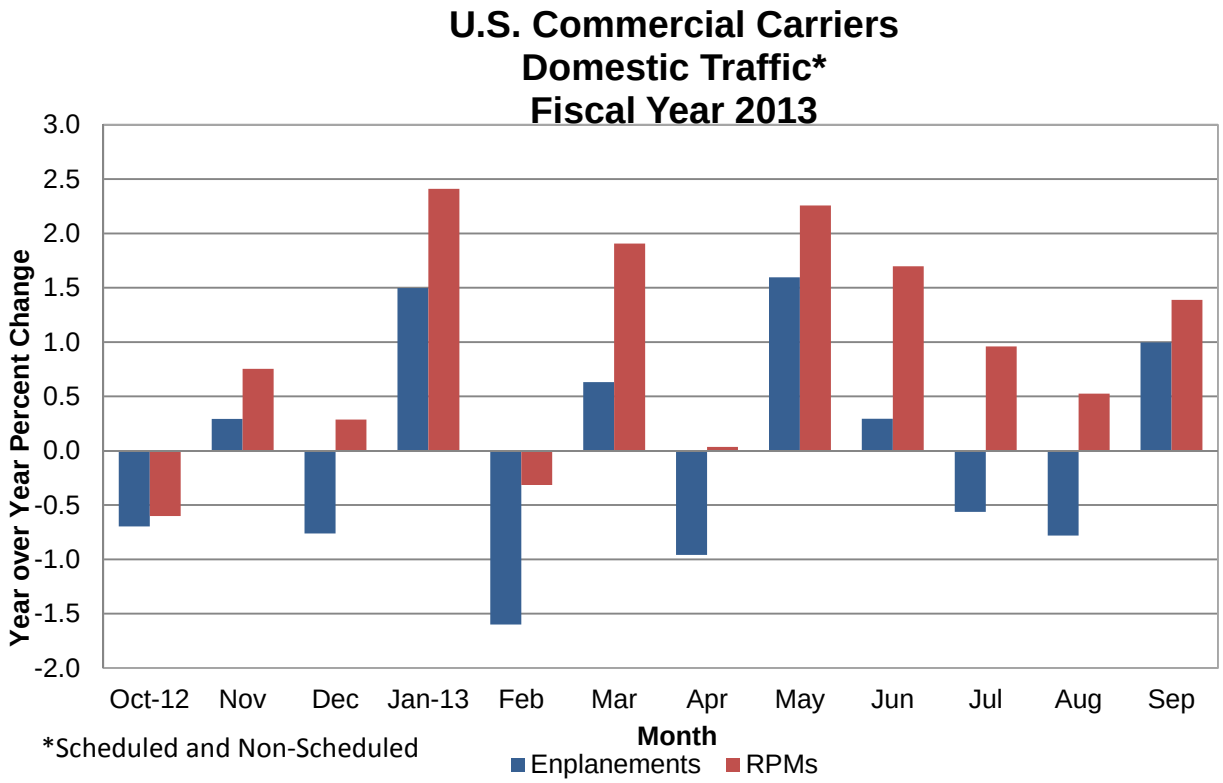
Domestic Passenger Markets

Domestic[9] ASMs increased 0.8 percent in 2013 after increasing just 0.1 percent in 2012. Departures were down 1.7 percent for the year after falling 2.0 percent in FY 2012. Mainline carrier ASMs were up 1.3 percent for the year, while regional carrier ASMs fell 2.8 percent. At the end of FY 2013, domestic ASMs were still 7.0 percent below pre-recession levels (2007) with departures down 15.3 percent.



Unlike 2012, domestic passenger enplanements grew at a slower rate than ASMs in 2013, up 0.1 percent for the year. Domestic passengers were unchanged from 2012 levels in the first half of the year, and showed only a slight improvement in the second half of the year. On a year-over-year basis, mainline carrier enplanements were up 0.8 percent for the year while regional carrier enplanements fell for the second consecutive year, down 2.2 percent, marking the first time since deregulation in 1978 that this sector of the industry has recorded back-to-back declines in passengers.

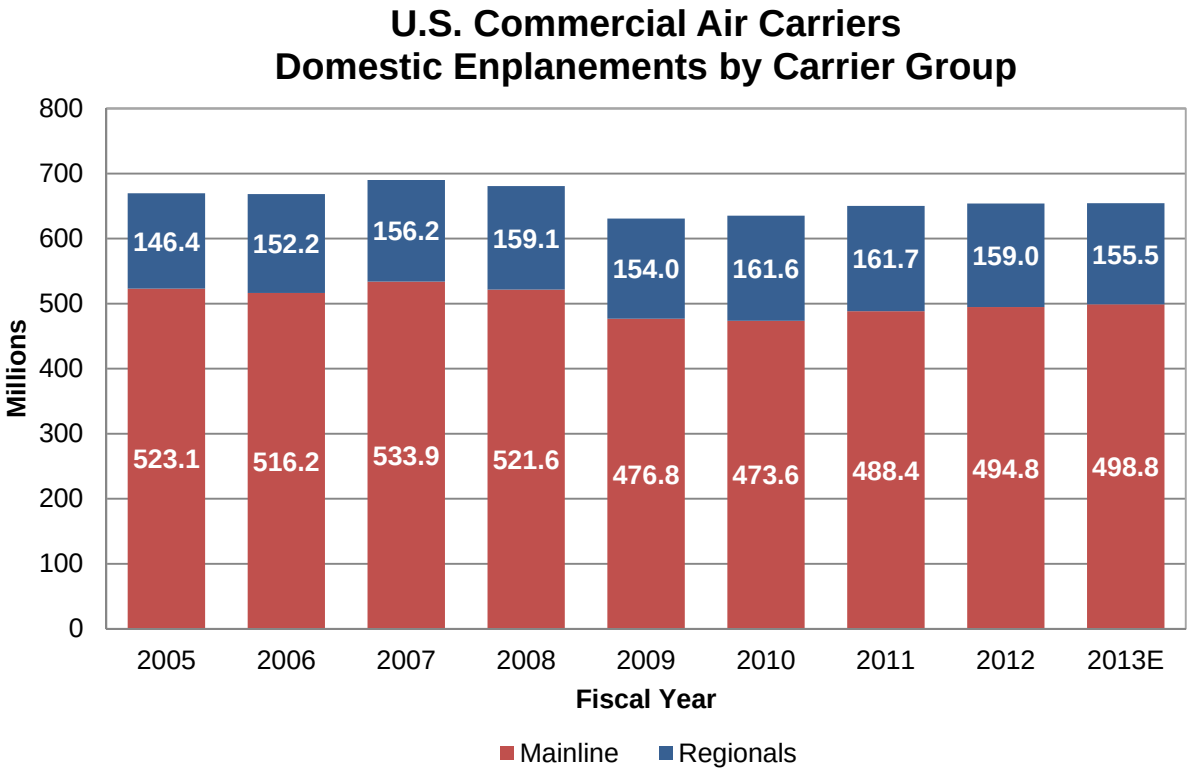
[9] The 50 states, Puerto Rico, and the U.S. Virgin Islands.



Unlike the passenger counts, domestic RPMs grew faster than ASMs with domestic RPMs up 1.1 percent in FY 2013. After minimal growth in the first quarter (up 0.2 percent), the pace of growth in domestic RPMs picked up in the second quarter (up 1.6 percent) and then averaged 1.2 percent during the second half of the year. For the year, mainline carrier RPM growth was 1.5 percent, while regional carrier RPMs declined 1.9 percent.

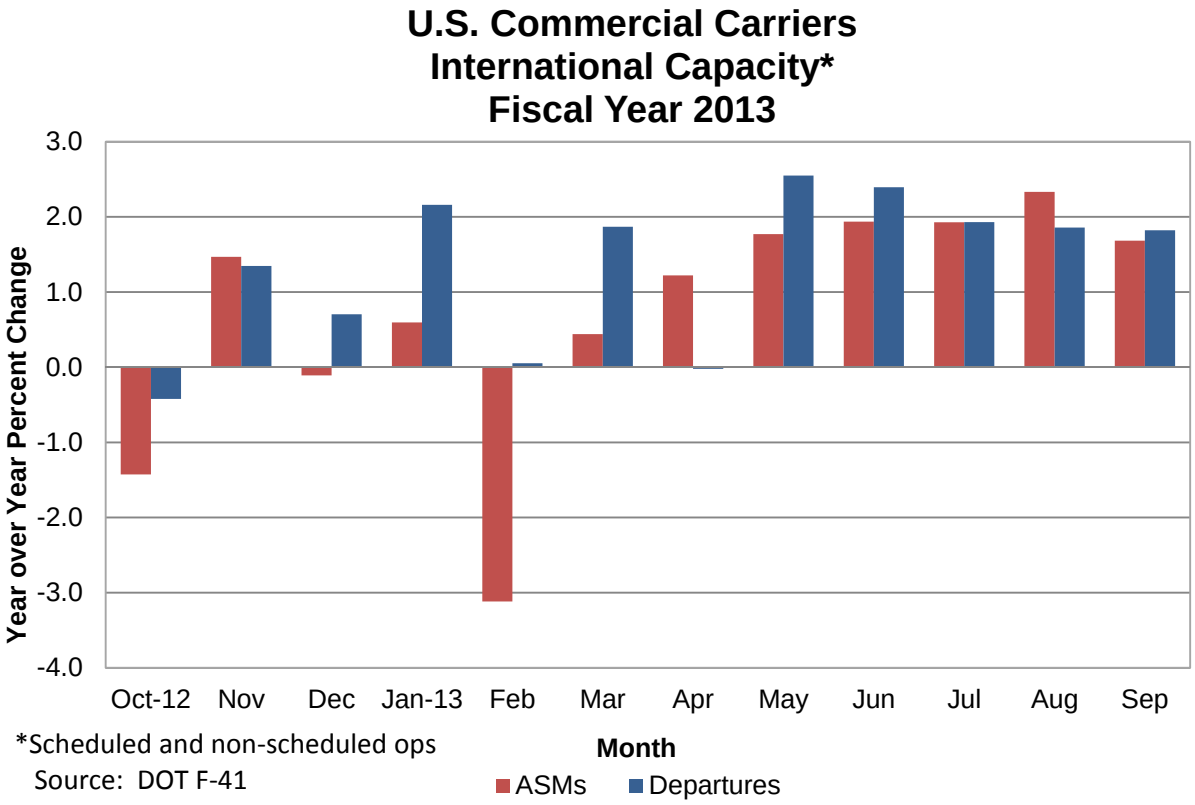
Domestic carrier load factor increased 0.3 points to 83.5 percent, with both the mainline and regional carriers groups posting record high loads. Mainline carrier load factor increased 0.2 points from FY 2012 to 84.2 percent, while regional carrier load factor increased 0.7 points to 78.4 percent.

Since FY 2007, total domestic capacity has decreased by 7.0 percent. Mainline carriers have reduced their domestic capacity by 8.0 percent with cutbacks by network carriers more than offsetting the growth of low-cost carriers, while regional carrier capacity has remained virtually flat (down 0.4 percent since 2007). During the same period, mainline carrier RPMs have decreased 3.6 percent, while enplanements have fallen 6.6 percent. In comparison, over this same period, regional carrier RPMs increased 3.4 percent while enplanements have fallen 0.5 percent. As a result, mainline carrier domestic capacity share has fallen from 87.6 percent in 2007 to 86.7 percent in 2013, with the share of domestic RPMs flown by mainline carriers dropping from 88.3 percent to 87.5 percent during the same period. In 2013 the regional carriers' domestic passenger share was 23.8 percent, up from 22.6 percent in 2007.

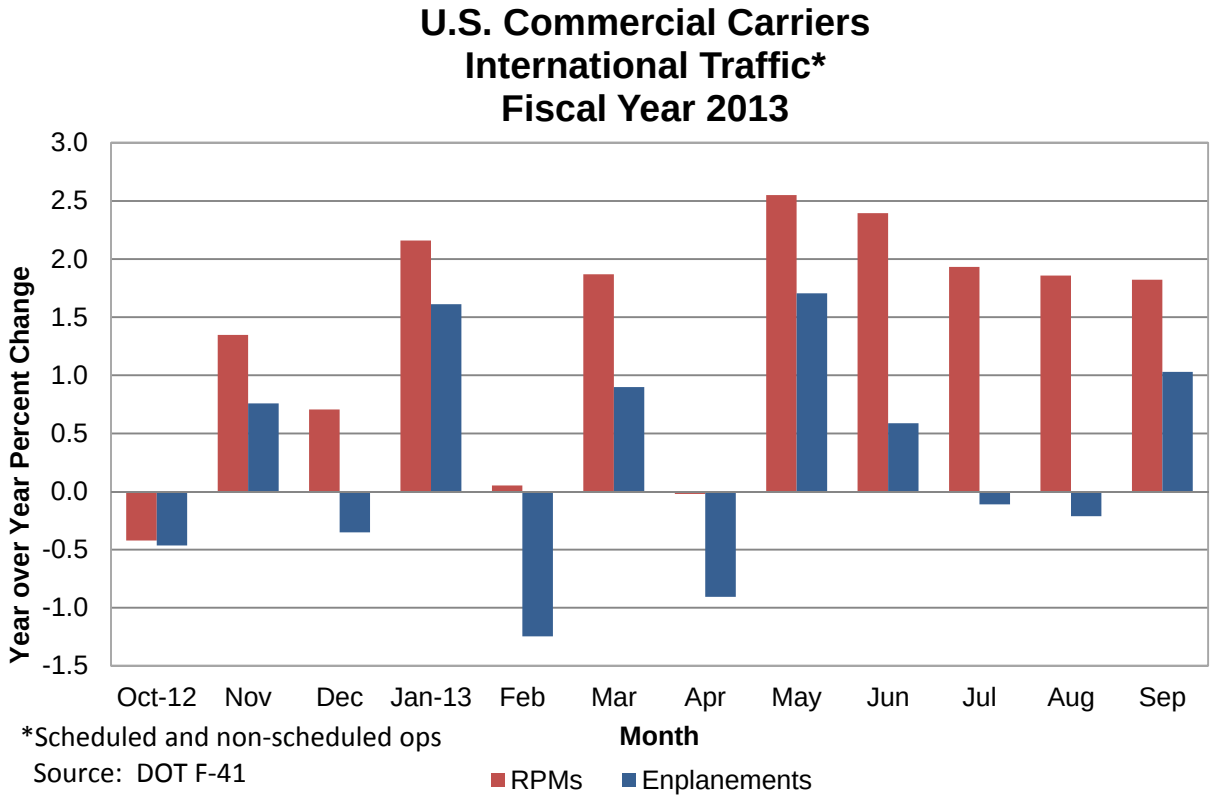

U.S. Commercial Air Carriers
Domestic Enplanements by Carrier Group
Millions
800
700
600
500
400
300
200
100
0
146.4
152.2
156.2
159.1
154.0
161.6
161.7
159.0
155.5
523.1
516.2
533.9
521.6
476.8
473.6
488.4
494.8
498.8
2005
2006
2007
2008
2009
2010
2011
2012
2013E
Fiscal Year
Mainline
Regionals

International Passenger Markets

U.S. carrier international ASMs were up 0.9 percent and departures were up 0.2 percent in 2013. ASMs increased in the Latin, and Pacific markets, up 5.6 and 2.0 percent, respectively; but decreased 2.9 percent in the Atlantic market.



U.S. carrier international RPMs were up a 2.3 percent and passenger enplanements were up 2.6 percent in 2013. The Atlantic market posted mixed results, with RPMs falling 0.8 percent while enplanements increased 0.4 percent. RPMs and enplanements increased 6.1 and 3.9 percent, respectively, in the Latin American market, while RPMs and enplanements increased 3.4 and 2.4 percent, respectively, in the Pacific market.



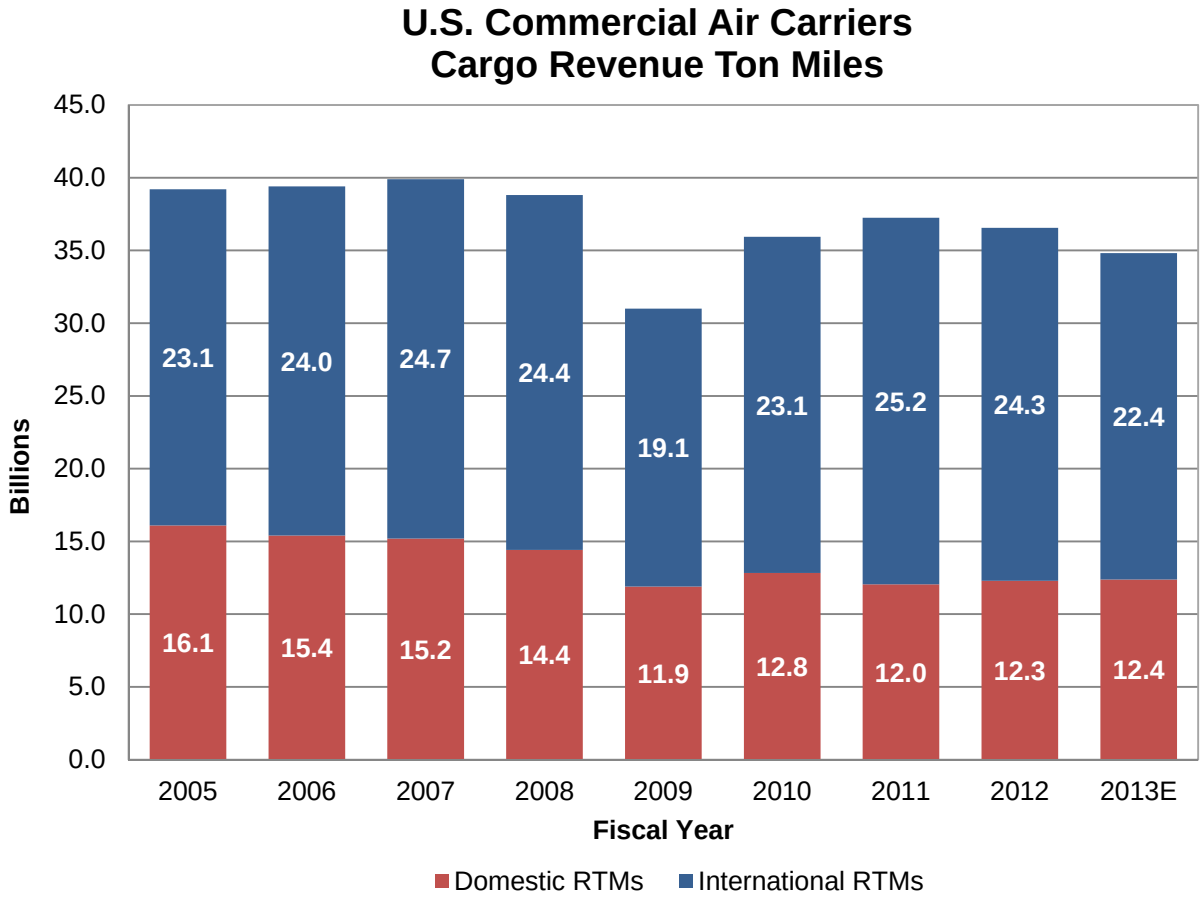
The international load factor increased 1.2 percentage points overall in 2013 to 82.6 percent. Load factor increased in all markets: in the Latin market load factor was up 0.4 points to 81.0 percent; in the Pacific market load factor was up 1.1 points to 83.1 percent; and in the North Atlantic market the load factor increased by 1.8 points to 83.3 percent.

In 2013, 54 percent of the passengers flying abroad on U.S. flag carriers traveled to the Latin America market. The remaining 46 percent of international passengers was split between the Atlantic market (29 percent) and the Pacific market (17 percent).

Commercial Air Carriers – Cargo

Air cargo traffic contains both domestic and international freight/express and mail. The demand for air cargo is a derived demand resulting from economic activity. Cargo moves in the bellies of passenger aircraft and in dedicated all-cargo aircraft on both scheduled and nonscheduled service. Cargo carriers face price competition from alternative shipping modes such as trucks, container ships, and rail cars.

U.S. air carriers flew 34.8 billion revenue ton miles (RTMs) in 2013, down 4.8 percent from 2012. Domestic cargo revenue ton miles (RTMs) increased slightly (a 0.7 percent increase) to 12.4 billion. However, international RTMs decreased by 7.5 percent to 22.4 billion.



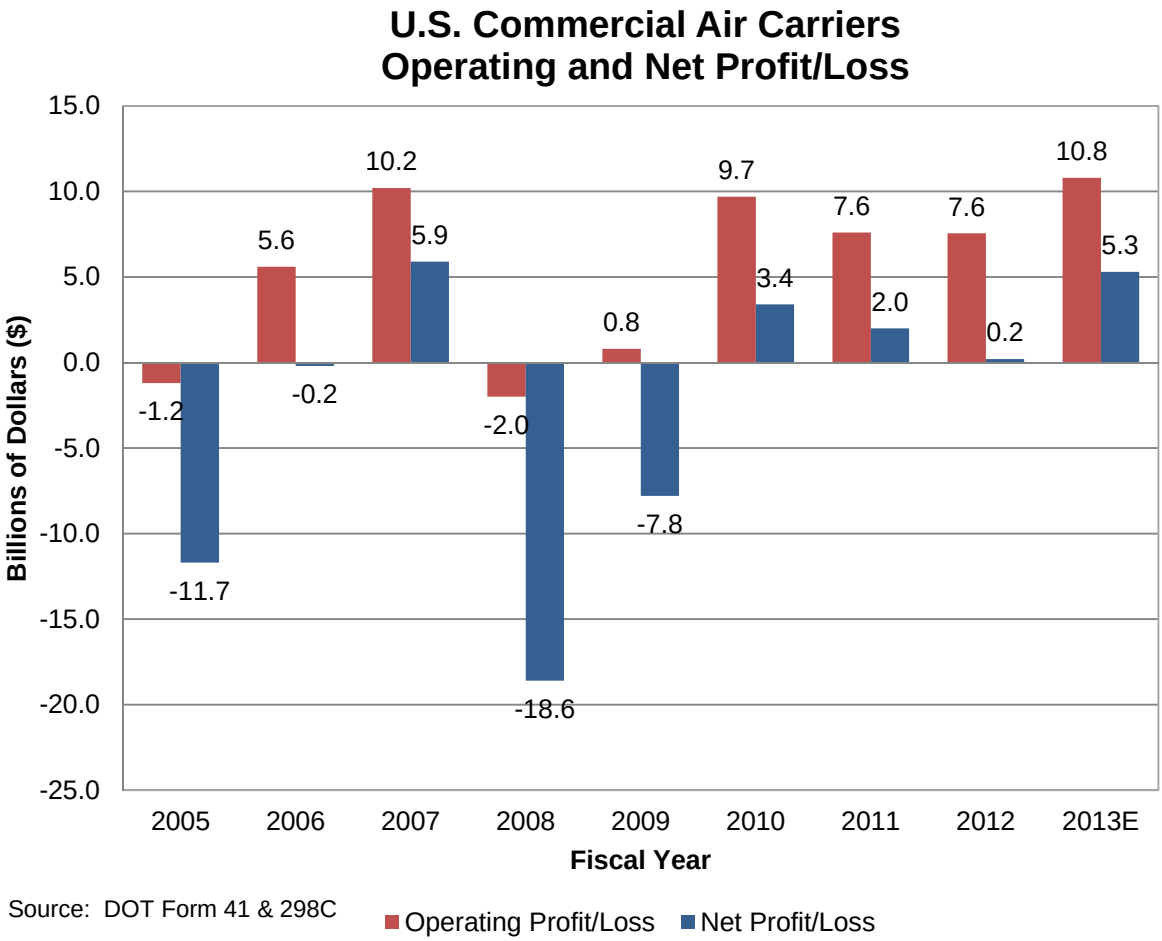
Air cargo RTMs flown by all-cargo carriers comprised 79.7 percent of total RTMs in 2013, with passenger carriers flying the remainder. Total RTMs flown by the all-cargo carriers decreased 5.0 percent in 2013 from 29.2 billion to 27.7 billion. Total RTMs flown by passenger carriers were 7.1 billion in 2013, 3.8 percent lower than in 2012.

International Air Cargo Revenue Ton Miles by Region

U.S. carrier international air cargo traffic can be divided into four components consisting of Atlantic, Latin, Pacific, and 'Other International.' In 2013 total international RTMs decreased 7.5 percent from 24.3 billion to 22.4 billion with all regions posting declines. The largest decrease was posted in the 'Other International' category where cargo RTMs fell by 14.6 percent from 6.80 billion RTMs to 5.81 billion RTMs. The Pacific market saw cargo RTMs fall by 4.5 percent from 8.57 billion RTMs to 8.18 billion RTMs, while the Atlantic market saw a greater contraction of 5.2 percent from 7.03 billion to 6.66 billion. The Latin market had smallest decline as cargo RTMs fell from 1.87 billion RTMs to 1.79 billion RTMs a decrease of 4.4 percent.

U.S. Commercial Air Carriers 2013 Financial Results

U.S. commercial air carriers posted a net profit of $ 5.3 billion during FY 2013 after reporting a net profit of $204 million one year earlier.



Source: DOT Form 41 & 298C

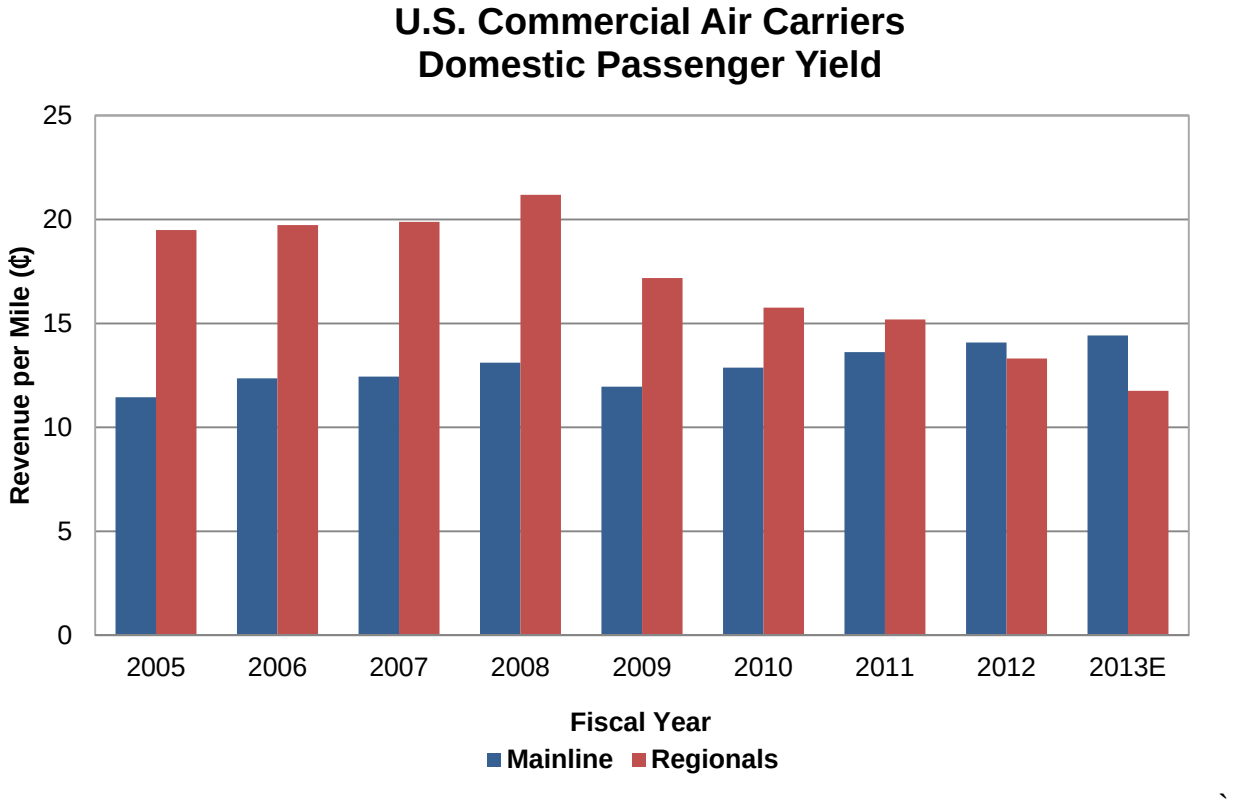
Operating revenues (passenger and cargo) for FY 2013 were up 0.8 percent from FY 2012. Passenger carriers saw their revenue increase 1.3 percent despite the minimal increase in traffic. The increase in revenue underscored the ability of passenger carriers to push through fare increases and to offer value-added services that leisure and business passengers were willing to buy. Revenues for cargo carriers fell by 1.2 percent with the slowdown in cargo traffic after rising 2.2 percent in FY 2012.

During the same period, operating expenses for all carriers fell 0.9 percent following a 3.7 percent increase in FY 2012. The decrease in operating expenses during FY 2013 was driven by a 0.6 percent fall in the price of fuel for the year.

In FY 2013, passenger carriers reported operating income of $9.6 billion and net income of $4.9 billion, while air cargo carriers reported an operating profit of $1.2 billion and a net income of $415 million. In the domestic market, passenger carriers generated an operating profit of $5.9 billion and net income of $2.4 billion. In the international market, this carrier group posted operating and net profits of $3.7 billion and $2.5 billion, respectively. Cargo carriers posted an operating profit of $4.4 billion and a net income of $2.8 billion in domestic markets. In international markets, the cargo carriers reported an operating loss of $3.2 billion and net loss of $2.4 billion.

The rebound in the industry's financial results in FY 2013 is largely due to a turnaround in the performance of the network carriers. After posting a net loss in FY 2012 of $971 million, this carrier group posted operating profits of $7.1 billion and net income of $3.7 billion. For the eight reporting low-cost carriers, operating profits totaled $1.8 billion and net income totaled $1.0 billion for the full year.

Capacity discipline combined with stable demand resulted in a modest increase in mainline carrier passenger yield for the year. Domestic mainline carrier passenger yield increased 2.4 percent in 2013.

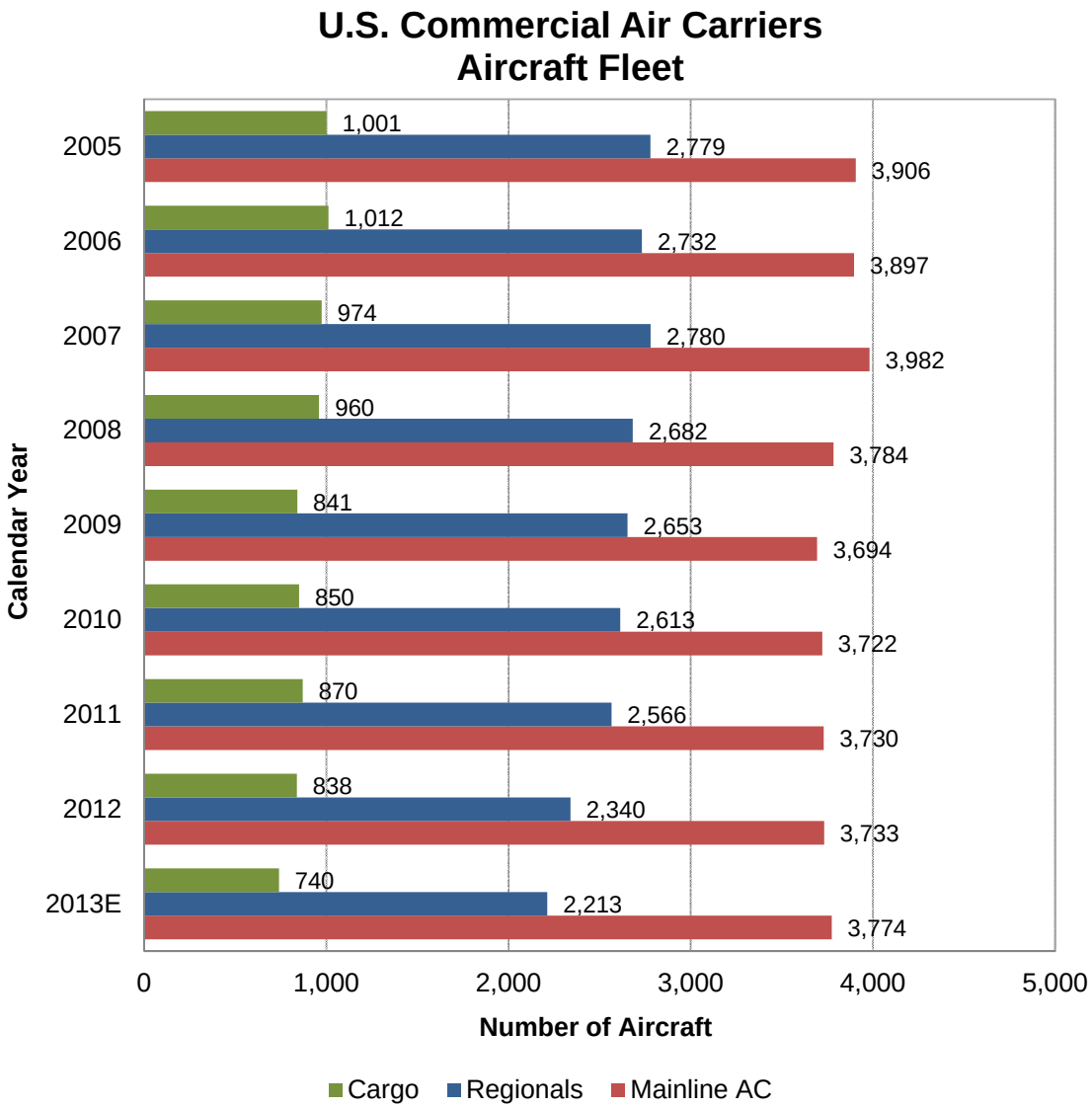


Of the reporting regional carriers, operating profits totaled $0.4 billion and net income totaled $133 million for FY 2013, despite domestic yield falling 11.6 percent. As the industry continues to restructure, network carriers have negotiated contracts with their regional partners that shift more of the financial risk of contract flying to the regional carriers. Since 2007, regional carrier yield is down 48.4 percent in real terms (compared to an increase of 3.1 percent in mainline carrier yield for the same period). In addition, longer trip lengths (due to a growing number of larger and faster regional jet aircraft entering the fleet) and higher load factors have also contributed to the drop in regional yield. All other things being equal, an increase in either the trip length or the load factor results in a drop in yield since fee-for-departure revenues are spread over a broader base of RPMs.

U.S. Commercial Air Carriers 2013 Aircraft Fleets

The commercial passenger carrier fleet is undergoing transformation. The mainline carriers are retiring older, less fuel efficient aircraft (e.g. 737-300/400/500, 757/767, and MD-80) and replacing them with more technologically advanced A320 and 737-700/800/900 aircraft. The regional carriers are growing their fleet of 70 to 90 seat regional jet aircraft and reducing their fleet of 50-seat jet aircraft.

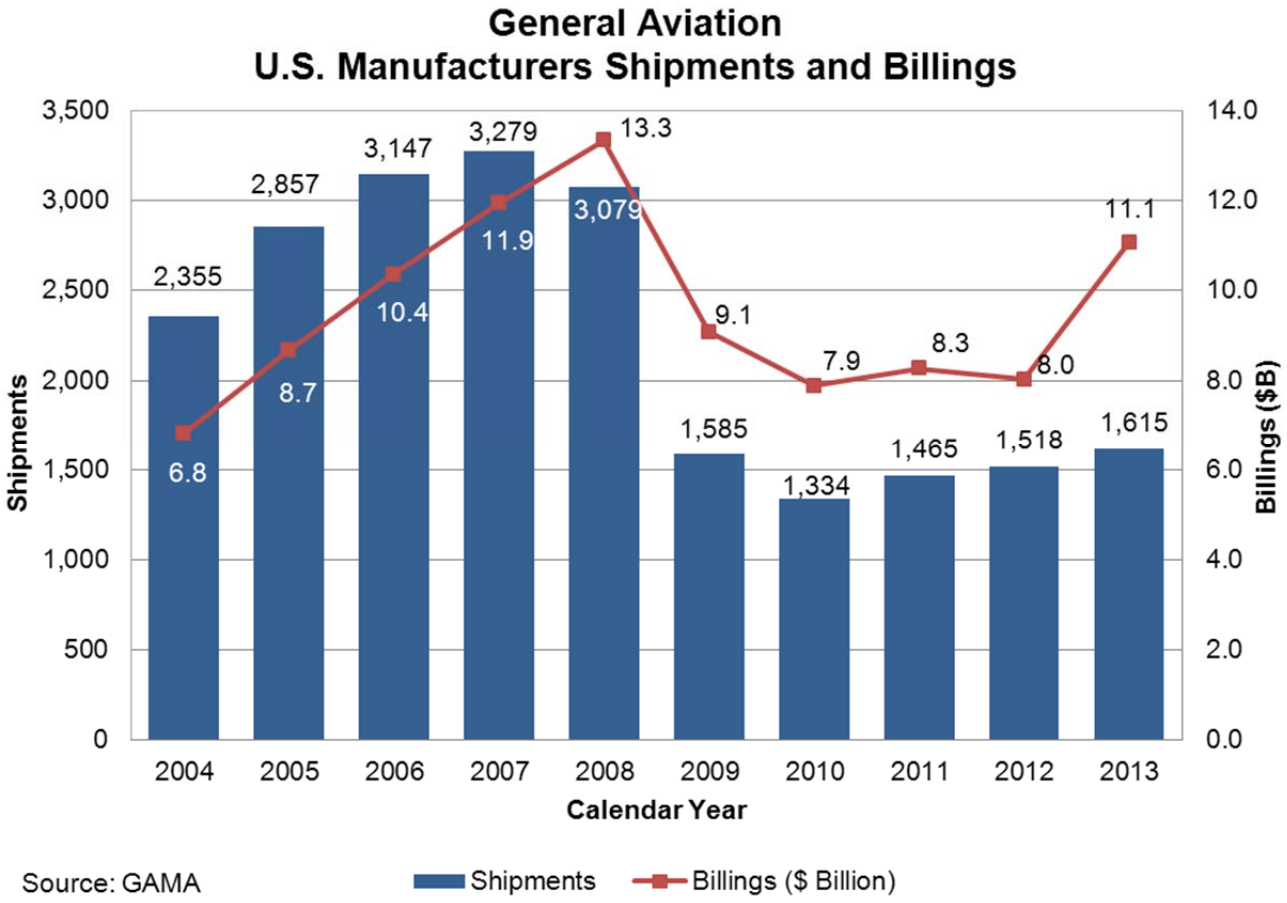
The total number of aircraft in the U.S. commercial fleet (including regional carriers) is estimated at 6,727 for 2013, a decrease of 184 aircraft from 2012. This includes 3,774 mainline air carrier passenger aircraft (over 90 seats), 740 mainline air carrier cargo aircraft, and 2,213 regional carrier aircraft (jets, turboprops, and pistons).



The mainline carriers' passenger jet fleet increased by 41 aircraft in 2013, following a 3 unit increase in 2012, as both network carriers and low cost carriers added to their fleets. Despite the increase in the fleet in 2013, the mainline carrier fleet now stands at 15.9 percent below (714 aircraft) the level it was in 2000. Unlike the mainline carrier fleet, the regional carrier fleet shrank in 2013, falling by 127 units. Since reaching a peak in 2007, the U.S. regional carrier fleet has been reduced by more than 20 percent (567 units). Consolidation among regional carriers and high fuel prices continue to spur retirements of 50 seat and smaller regional jets as well as small piston and turboprop aircraft.

GENERAL AVIATION

General aviation industry continued its modest growth, especially with the help from strong growth in rotorcraft, multi-engine piston, and the agricultural aircraft segment of the turboprop deliveries, as well as a moderate growth in the single-engine piston sector. Slow economic recovery and economic uncertainties continued to impact the turbojet deliveries. Based on figures released by the General Aviation Manufacturers Association (GAMA), U.S. manufacturers of general aviation aircraft delivered 1,615 aircraft in CY 2013, 6.4 percent more than CY 2012. This translates into the third year of increase in shipments. Overall piston deliveries increased by 6.5 percent, with single-engine deliveries up 4.5 percent and the much smaller multi-engine category up 27.0 percent. In the turbine categories, turbojet deliveries fell by 3.7 percent. Turboprop deliveries were up by 13.8 percent in 2013, even though a substantial portion of the deliveries were for the export market. U.S. billings in CY 2013 were totaled $11.1 billion, up 38.1 percent from 2012, contributed by deliveries of more advanced models.



General Aviation operations at combined FAA and contract towers decreased 1.2 percent in 2013, led by a 2.8 percent decline in itinerant operations, despite a 0.7 percent increase in local operations. General aviation activity at consolidated traffic facilities (FAA TRACONs) fell

2.8 percent, while the number of general aviation aircraft handled at FAA en-route centers declined by 0.5 percent.

The FAA uses estimates of fleet size, hours flown, and utilization from the General Aviation and Part 135 Activity Survey (GA Survey), which has been conducted annually since 1977, as baseline figures upon which assumed growth rates are applied. Beginning with the 2004 GA Survey, there were significant improvements to the survey methodology. These improvements included conducting 100 percent samples for turboprops and turbojets, all rotorcraft, all aircraft in Alaska and all aircraft operating on-demand under Part 135. In addition, the sample design was revised to stratify by aircraft type (15 categories), FAA region (9 categories), whether the aircraft was manufactured in the past 5 years (2 categories), and whether the aircraft operates under a Part 135 certificate (2 categories). Furthermore, a large fleet reporting form was incorporated to allow owners/operators of multiple aircraft to report aggregate data for their entire fleet on a single form. In 2005 an additional aircraft category (light sport aircraft) was added. As a result of these changes the sample size nearly doubled. Between 2003 and 2005 large changes in both the number of aircraft (turbojets up by 22.8 percent, total rotorcraft up by 33.7 percent) and hours (single-engine piston down by 17.6 percent) in many categories occurred. The results of 2011 survey were not available to use. Therefore, estimates of 2011 fleet and hours were based on estimated number of general aviation aircraft in the FAA civil aircraft registration database by the end of CY 2011, and past rates of active aircraft and utilization by type of aircraft and age of the fleet. The results of the 2012 Survey, the latest one available, were consistent with the results of past surveys since 2004. This reinforces our belief that methodological improvements have brought about superior estimates relative to those in the past and they are used as the basis for our forecast.

In 2010 FAA issued a Rule for Re-Registration and Renewal of Aircraft Registration. According to this rule, all aircraft registered in the U.S. had to re-register over the three-year period from 2011 to 2013, and afterwards registrations must be renewed every three years. The effect of this Rule was recorded in the results of 2012 GA Survey that the number of active GA aircraft went down by 6.4 percent, from 223,370 in 2010 to 209,034 in 2012. The biggest decline was in the piston aircraft category, in which the number of active aircraft decreased 7.9 percent from 155,419 to 143,160.

Based on the latest FAA assumptions about the impact of the re-registration rule, fleet attrition and aircraft utilization, along with General Aircraft Manufacturer's Association (GAMA) aircraft shipment statistics, the active general aviation fleet is estimated to have decreased 3.0 percent in 2013 at 202,865. General aviation flight hours are estimated to have decreased by 1.8 percent in 2013 at 24.0 million.

Student pilots are important to general aviation and the aviation industry as a whole. Student pilot numbers had been in decline for many years, but in 2010 the FAA issued a rule that increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 months to 60 months. As a result, according to statistics compiled by the FAA's Mike Monroney Aeronautical Center, the number of student pilots at the end of 2010 increased by 64.8 percent, or approximately by 47,000 pilots, compared to calendar year end 2009. While the impact of the new rule on the long term trend in student pilots has yet to be fully determined, by the end of 2013, the number of student pilots slightly increased by 0.3 percent from its 2012 level to 120,285. The average age of a U.S. pilot in 2013 was 44.8 years old.

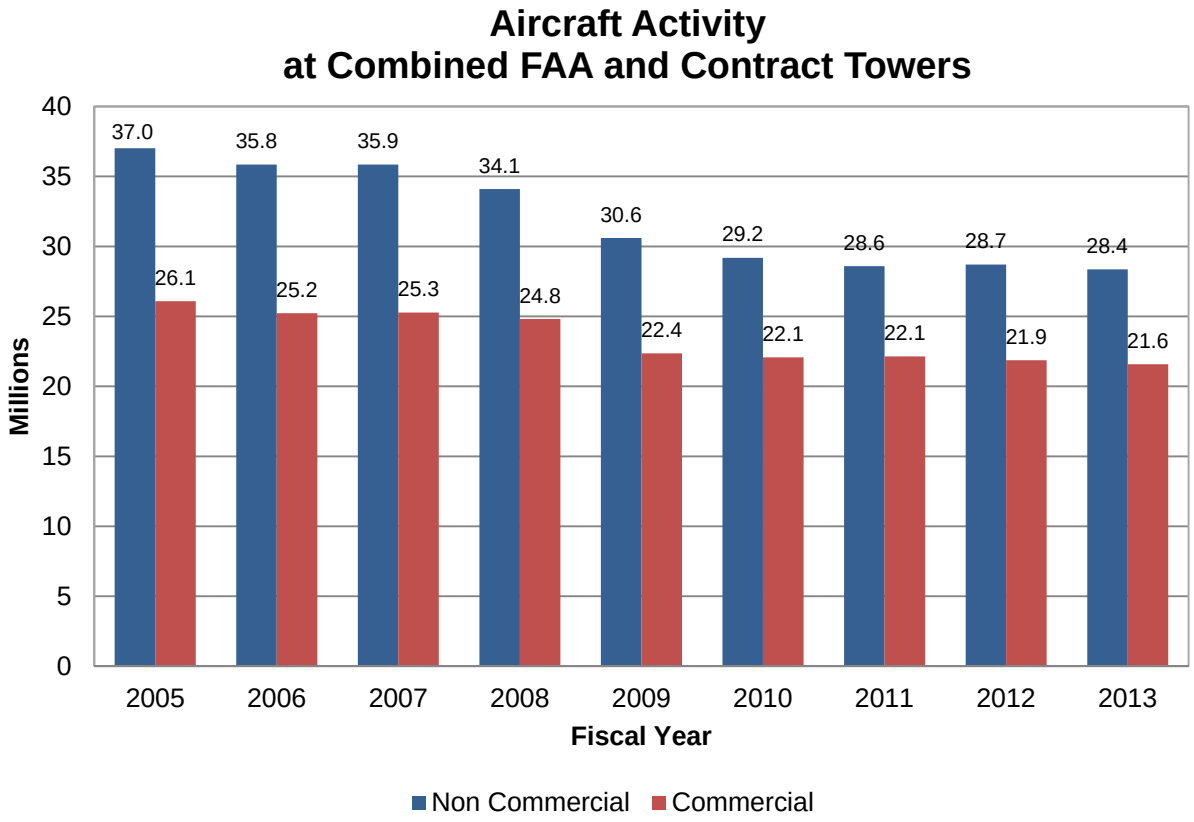
FAA OPERATIONS

In 2013, activity at FAA facilities declined for the sixth consecutive year. Commercial air traffic activity fell for the fifth time in six years as air carrier activity fell slightly while air taxi activity declined more substantially. The declines in activity were a continuation of a trend that started in the second half of FY 2011. Noncommercial activity also declined as both general aviation and military levels fell.

Total activity at combined FAA and contract tower airports (the set of 516 towers where FAA provides service, ranging from Atlanta (the busiest with 914,000 operations) to towers with as few as 7,000 operations (Branson, MO) was 49.9 million operations in 2013, down 1.3 percent from 2012 and 27.3 percent below the peak activity level recorded in 2000. In 2013, commercial activity (the sum of air carrier and commuter/air taxi) at combined FAA and contract towers fell by 1.3 percent for the second consecutive year. Air carrier operations were down 0.8 percent while commuter/air taxi operations declined 2.1 percent. Commercial operations in 2013 were 17.3 percent lower than their peak in 2005.

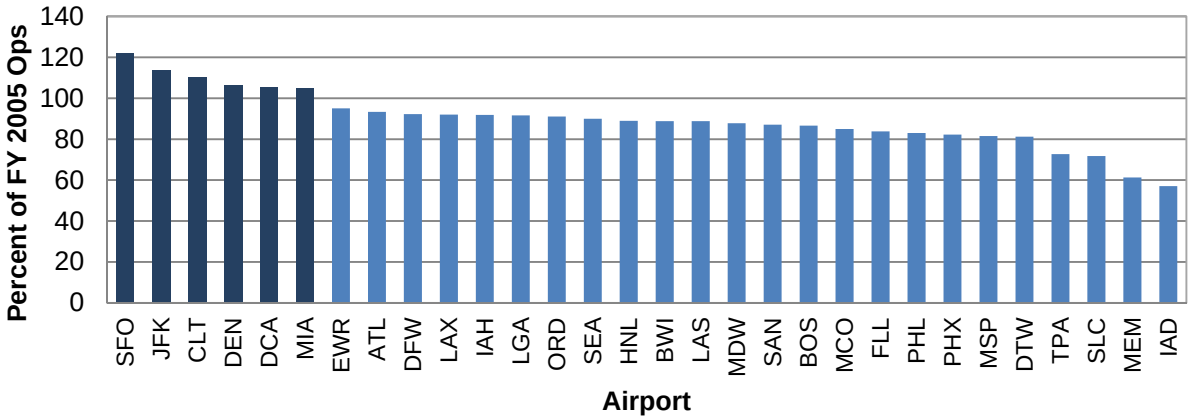
Non-commercial activity (the sum of general aviation and military) at combined FAA and contract towers decreased 1.2 percent in 2013 following a 0.4 percent increase in 2012. General aviation activity (25.8 million) was down 1.2 percent while military activity (2.6 million) was down 1.0 percent. At the end of 2013, non-commercial aircraft activity was 33.7 percent below the activity in 2000.

In FY 2013, total operations at the large hubs decreased by 0.9 percent to 12.5 million, and constituted 24.7 percent of all towered operations. Activity at the medium hubs fell by 2.9 percent to 5.3 million while activity at the small and non-hub towers decreased by 1.1 percent, from 32.8 million to 32.4 million. The share of total towered operations at the medium, and small and non-hub towers in FY 2013 were 10.3 and 65.0 percent, respectively. Since 2000, operations at large hubs have declined by 12.4 percent, while operations at medium hubs have fallen by 41.6 percent, and operations at small and non-hub towers have declined by 29.1 percent.



The FAA pays close attention to the trends occurring at the "Core 30" airports. These airports represent the top 30 airports in the country in terms of passenger activity (except Memphis which is a major freight hub) and account for about 70 percent of commercial passengers. Commercial activity at the Core 30 airports peaked in 2005, but subsequent industry restructuring has resulted in a drop in combined commercial activity at these airports since then. In 2013, commercial activity at the Core 30 airports fell by 1.3 percent from the previous year and was 10.2 percent below 2005 activity levels. Of the Core 30 airports, nine recorded increases in activity from 2012 with the largest increases occurring at Dallas-Fort Worth (up 4.7 percent) and Honolulu (up 3.8 percent). The largest decreases in activity occurred at Memphis (down 16.2 percent), and Baltimore (down 4.1 percent). Only six of the Core 30 airports exceeded 2005 peak activity levels during FY 2013, unchanged from the number in 2011 and 2012.

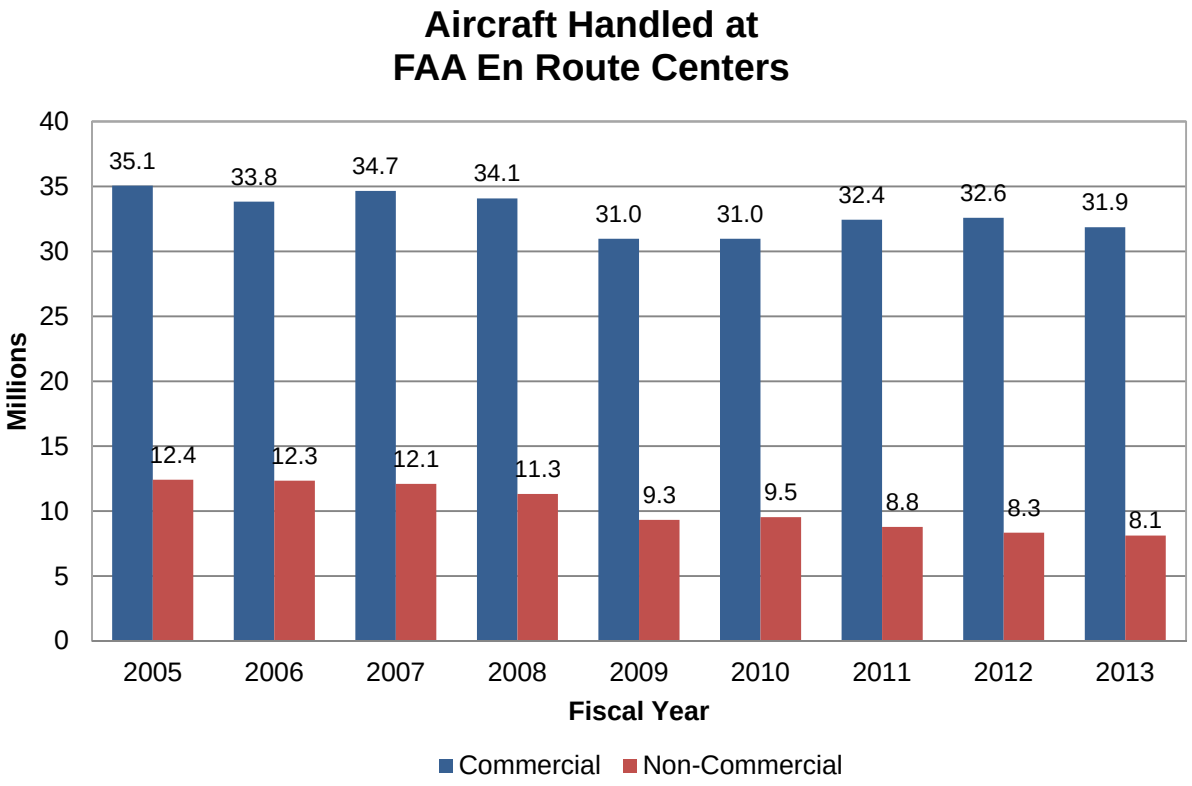
Only Six of Core 30 Airports are above 2005 Activity Levels
FY 2013 VS. FY 2005 Commercial Activity



Since 2005 there has been a pronounced shift in demand which is reflected in the relative growth of commercial operations across the Core 30 airports. Commercial operations at San Francisco (up 22.0 percent), New York-Kennedy (up 13.8 percent), and Charlotte (up 10.1 percent) have increased the most relative to their 2005 activity levels. Commercial operations at Dulles (down 42.9 percent) and Memphis (down 38.7 percent) have shown the largest declines from 2005 levels. These activity level shifts reflect the impact of airline industry restructuring. The demise of Independence Air and United's continuing restructuring of its network resulted in a dramatic reduction of operations at Dulles; while the bankruptcy of Delta, its subsequent merger with Northwest, and the restructuring of the combined network has led to a dramatic shrinking of operations in Memphis.

Non-commercial activity, 91 percent of which is in general aviation, decreased 1.2 percent in 2013 with general aviation activity falling by the same amount. Breaking down the general aviation activity by hub size, general aviation activity at large hubs rose by 0.3 percent, while activity at medium hubs fell 2.6 percent. General aviation activity at small and non-hubs decreased by 1.5 percent. However, general aviation activity at all hub categories has fallen substantially since 2005, down 40.3, 38.7, and 27.6 percent, respectively, at large, medium, and small/non hubs. Rising fuel prices, stagnant household incomes, falling household wealth, and a shrinking pilot population are all viewed as contributing to the long run decline in general aviation activity.

In 2013, total activity at FAA en-route centers (40.0 million) fell for the second year in a row, down 2.3 percent from 2012 levels, and 15.8 percent below their peak in 2005. Commercial activity decreased 2.2 percent with air carrier and commuter/air taxi operations down 2.0 and 2.9 percent, respectively. Non-commercial activity was down 2.6 percent for the year as general aviation activity posted a small decline (down 0.5 percent) while military activity decreased 9.9 percent. In 2013, air carrier operations were 7.3 percent below their 2005 activity levels and air taxi/commuter operations were 13.7 percent below activity levels for 2005. Operations for the general aviation and military user groups were 23.0 and 58.6 percent below their 2005 activity levels, respectively.


Aircraft Handled at
FAA En Route Centers
Millions
40
35
30
25
20
15
10
5
0
35.1
33.8
34.7
34.1
31.0
31.0
32.4
32.6
31.9
12.4
12.3
12.1
11.3
9.3
9.5
8.8
8.3
8.1
2005
2006
2007
2008
2009
2010
2011
2012
2013
Fiscal Year
Commercial
Non-Commercial

FAA AEROSPACE FORECASTS
FISCAL YEARS 2014 – 2034

Developing forecasts of aviation demand and activity levels continues to be challenging as the aviation industry evolves and prior relationships change. In times of amplified volatility, the process is filled with uncertainty, particularly in the short-term. Once again, the U.S. aviation industry has shown that the demand for air travel is resilient as it rebounds from its most recent downward spiral caused by the Great Recession. As 2014 begins, lingering questions remain. Are the U.S. and global economies on firm ground? Have the structural changes undertaken by the industry over the past 5 years revamped the industry from one of boom-to-bust to one of sustainable profits? Has industry consolidation finished?

The FAA has developed a set of assumptions and forecasts consistent with the emerging trends and structural changes currently taking place within the aviation industry. The intent of these forecasts is to accurately predict future demand; however, due to the large uncertainty of the operating environment, the variance around the forecasts is wider than it was in prior years.

The commercial aviation forecasts and assumptions are developed from econometric models that explain and incorporate emerging trends for the different segments of the industry. In addition, the commercial aviation forecasts are considered unconstrained in that they assume there will be sufficient infrastructure to handle the projected levels of activity. These forecasts do not assume further contractions of the industry through bankruptcy, consolidation, or liquidation. They also do not assume any drastic changes in federal government operations.

The commercial aviation forecast methodology is a blended one. The starting point for developing the commercial aviation forecasts (air carriers and regionals) is the future schedules published by airlines through Innovata. To generate the short-term forecast (i.e., one year out) current monthly trends are used in conjunction with published monthly schedules to allow FAA forecasters to develop monthly capacity and demand forecasts for both mainline and regional carriers for fiscal and calendar years 2014-15. The medium to long-term forecasts (2015-2034) are based on the results of econometric models.

The general aviation forecasts rely heavily on discussions with industry experts conducted at industry meetings, including four Transportation Research Board (TRB) meetings of Business Aviation and Civil Helicopter Subcommittees in May 2013 and January 2014 along with the results of the 2012 General Aviation and Part 135 Activity Survey. The assumptions have been updated by FAA analysts to reflect more recent data and developing trends, as well as further information from industry experts.

The FAA also presents the draft forecasts and assumptions to industry staff and aviation associations, who are asked to comment on the reasonableness of the assumptions and forecasts. Their comments and/or suggestions have been incorporated into the forecasts as appropriate.

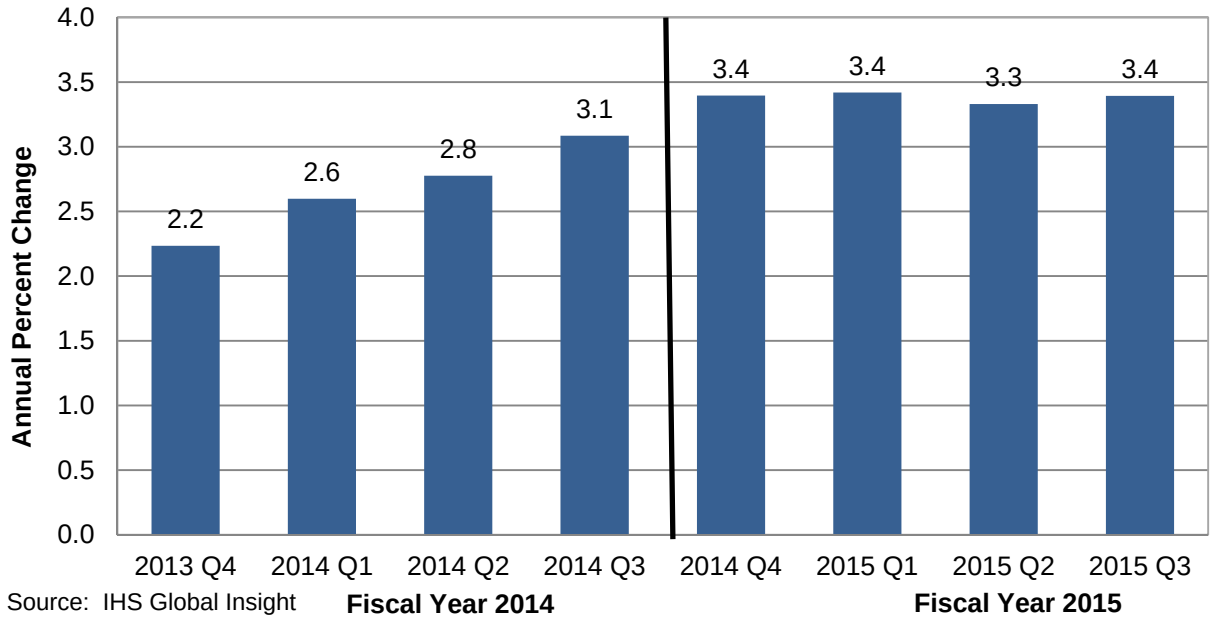
ECONOMIC FORECASTS

For this year's Aerospace Forecast, the FAA is using economic forecasts developed by IHS Global Insight, Inc. to project domestic aviation demand. Furthermore, the FAA uses world and individual country economic projections provided by IHS Global Insight, Inc. to forecast the demand for international aviation services. Annual historical data and economic forecasts are presented in Tables 1 through 4. U.S. economic forecasts are presented on a U.S. government fiscal year (October through September) basis, whereas international forecasts are presented on a calendar year basis.

As the recovery is now approaching its fifth year, the headwinds that have been faced by the economy appear to be diminishing. IHS Global Insight expects the recovery to begin to accelerate and the U.S. economy to grow faster than in the past few years. In the U.S., private sector debt levels have been coming down and public sector debt levels have stabilized. The housing market had its best performance since 2007 despite a rise in mortgage rates in the summer of 2013. The most recent data suggest a firming of the employment market. In the global economy, the outlook for Europe is improving and recent data from China still points to a "soft" landing (e.g. GDP growth remaining above 7 percent).

The boost to the economy from fiscal stimulus has faded, leaving the economy to depend on underlying strength in private demand. Growth is projected to accelerate throughout FY 2014 as the drag from the Federal government shutdown, reductions in government spending, and tepid consumer spending during the last Christmas holiday diminishes over the year. On a quarter-by-quarter basis, U.S. economic growth is projected to range between 2.2 to 3.4 percent for the next two years.

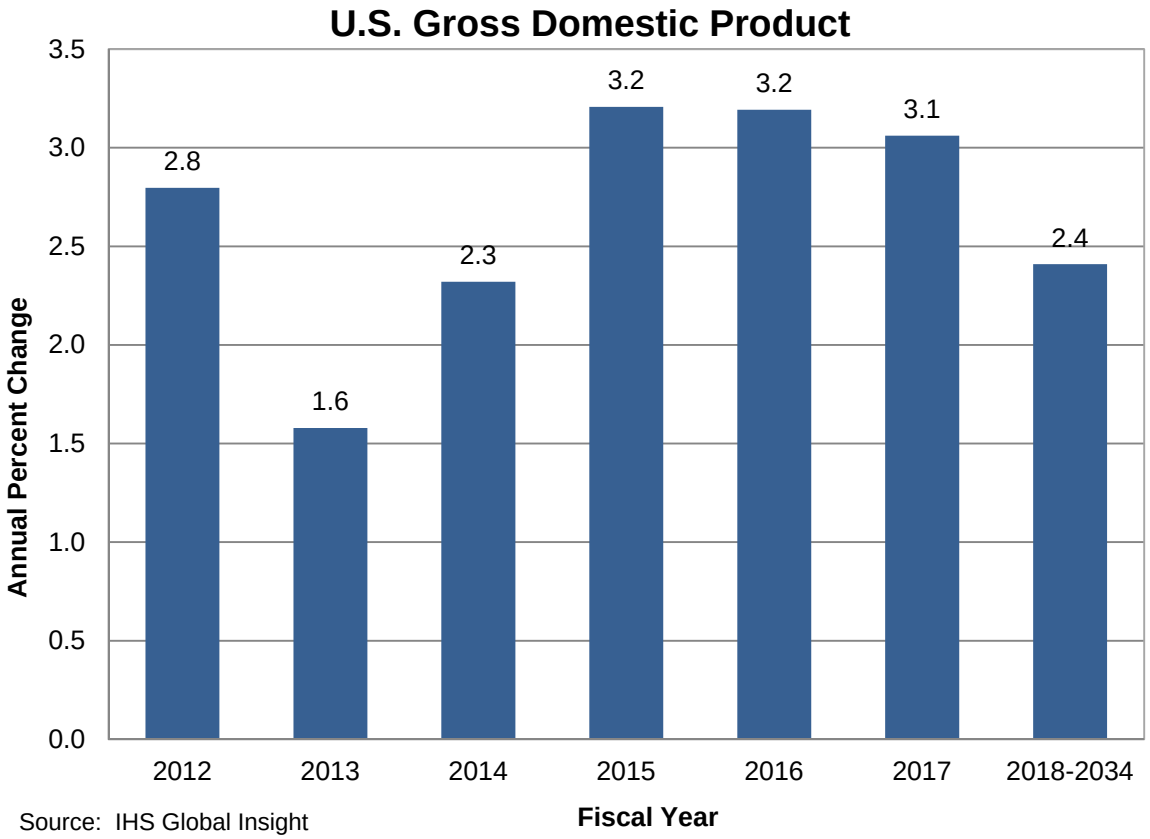
U.S. Gross Domestic Product
Seasonally Adjusted Annual Growth
by Quarter



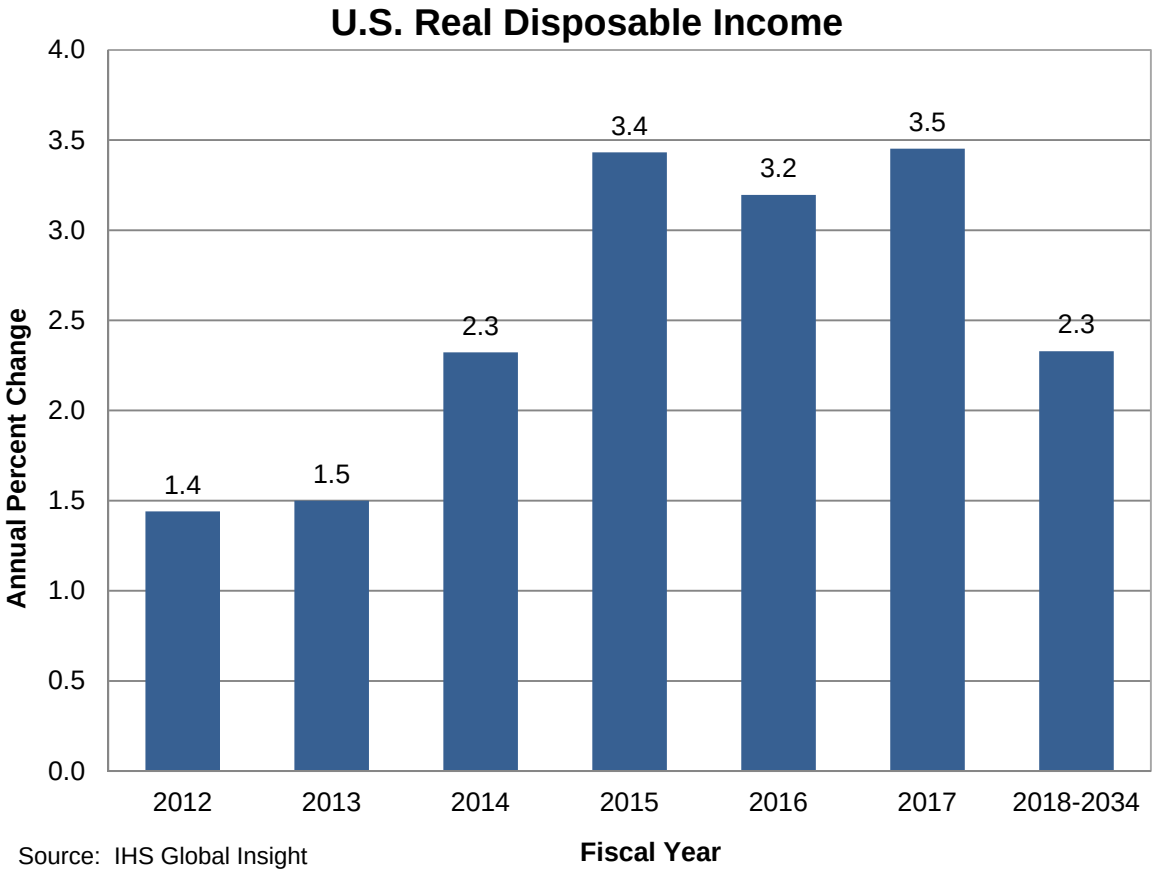
Source: IHS Global Insight

The modest pace of economic recovery has been most evident in the nation's unemployment rate. Since peaking at 9.9 percent in the fourth quarter of FY 2009, the unemployment rate has come down gradually, dropping to 7.5 percent in the fourth quarter of FY 2013. IHS Global Insight is projecting despite the pickup in economic growth, the unemployment rate will drop only modestly in FY 2014, averaging 7.3 percent for the year. The slow fall in the unemployment rate will continue to keep income growth in check. Real disposable income (income after taxes) increased an estimated 1.5 percent in 2013. The recovery in real disposable income is projected to continue with increases of 2.3 percent in 2014 and 3.4 percent in 2015 as unemployment falls and the role of taxes in any long term fiscal solution becomes clearer.

In the medium term, (the four year period between 2015 and 2019), U.S. economic growth is projected to average 3.0 percent per year with rates ranging between 2.9 and 3.2 percent. Income growth picks up during the same period averaging 3.2 percent per year. For the balance of the forecast period, both U.S. real GDP growth and real income growth slow to around 2.4 percent annually. The long-term stability of U.S. economic growth depends on sustained growth in the workforce and capital stock along with improved productivity and competitiveness.

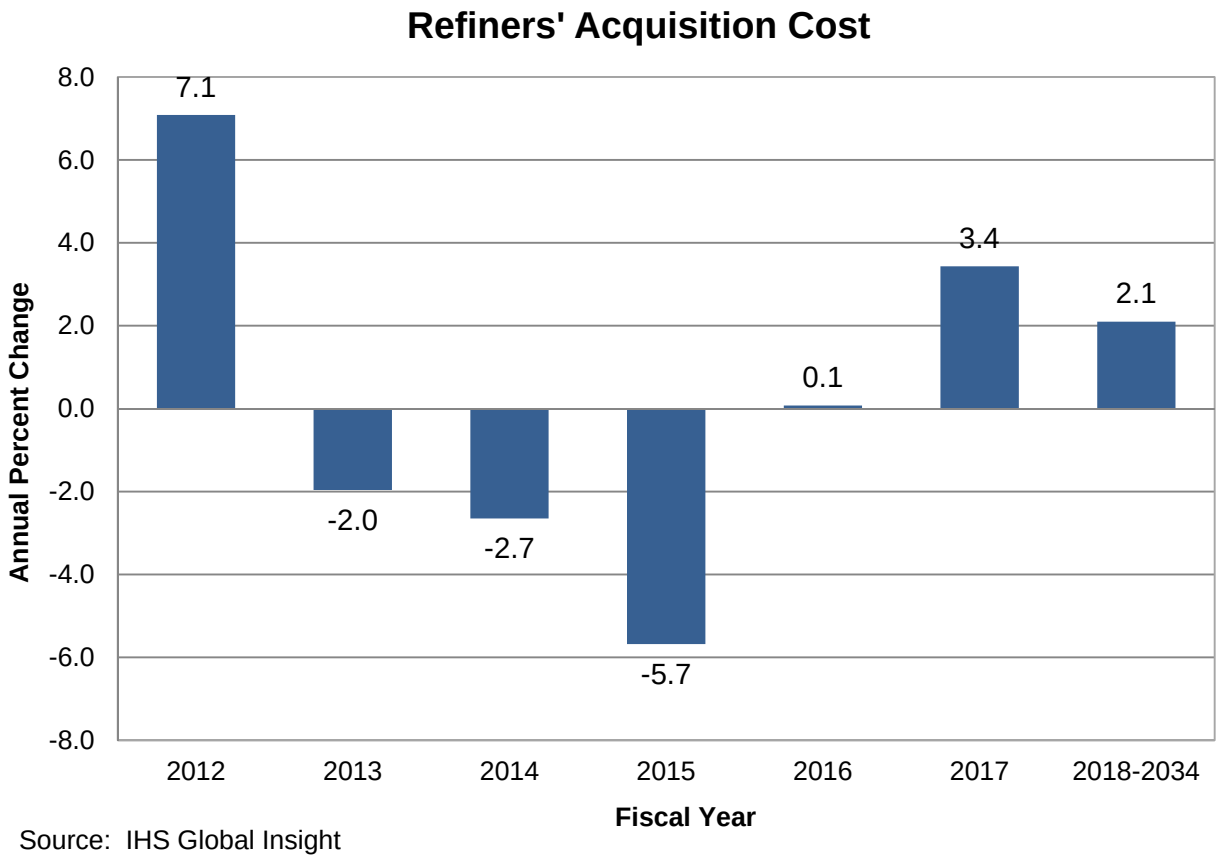


Source: IHS Global Insight



Source: IHS Global Insight

After the price of oil decreased by 2.0 percent in 2013, IHS Global Insight projects the price, as measured by the Refiners' Acquisition Cost, to fall slightly to $98 per barrel in 2014 (down 2.7 percent from 2013). Oil prices are forecast to decline to around $92 to $93 per barrel by 2015/16 and then gradually increase to $118 per barrel by 2025. For the remainder of the forecast period, oil prices are projected to grow at the same rate as general inflation, reaching $139 per barrel by 2034.



Source: IHS Global Insight

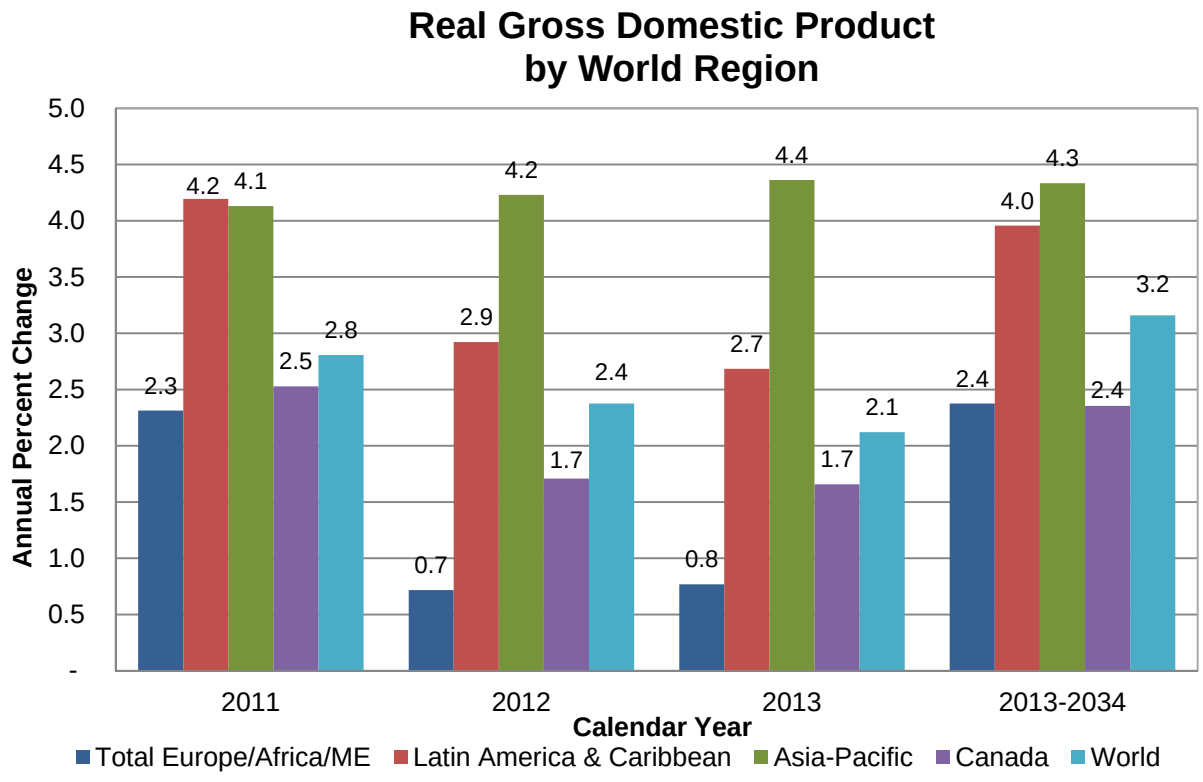
Inflation continues to remain in check as energy prices fall in 2013 and 2014. After increasing 1.6 percent in FY 2013, the inflation rate (as measured by the CPI), is projected to rise 1.5 percent and 1.6 percent in 2014 and 2015, respectively. After 2015, consumer price inflation is projected to grow between 1.9 and 2.2 percent per year for the balance of the forecast.

To reflect the uncertainty in the projection of economic growth, the FAA Aerospace Forecast uses high and low economic growth cases along with the base forecast. The optimistic and pessimistic economic growth cases are based on optimistic and pessimistic scenarios from IHS Global Insight's January 2014 U.S. economic forecast and go out to 2023. The optimistic case sees a successful and partisan-free debt ceiling increase, a credible plan to address sovereign-debt issues in Europe, faster foreign economic growth, along with faster employment growth and sustained improvements in the housing sector. Real GDP growth between 2013 and 2023 in the optimistic case averages 3.3 percent annually compared to 2.7 percent in the base case. The pessimistic case assumes partisan politics turn the task of raising the debt ceiling into a political crisis and assumes that in the face of uncertainty, cutting

spending is the best solution. In addition, the Eurozone crisis intensifies reducing demand for U.S. exports. The private sector retrenches and the housing market slows down, and the U.S. economy continues with growth below 1.5 percent in 2014-15 before finally picking up. Real GDP growth in the pessimistic case averages 2.1 percent annually between 2013 and 2023, 0.6 percentage points lower than the base case. Further details about the high and low scenarios can be found in Appendix A.

World Economy

After weathering the first contraction in global GDP since the Great Depression, a deepening recession in Europe and political stalemates in the U.S. over what to do with the U.S. federal budget, worldwide economic activity is estimated by IHS Global Insight to have expanded by 2.1 percent in 2013, down from 2.4 in 2012. The advanced economies (U.S., Canada, Western Europe, Australia, New Zealand, and Japan) posted growth in output ranging from a low of -0.2 percent to a high of 2.3 percent. The emerging market economies grew 4.7 percent, 0.1 points lower than in 2012 with the economy of China up 7.7 percent, India up 4.6 percent, Brazil up 2.5 percent, and Russia up 1.7 percent. In 2014, economic growth is projected to accelerate to 3.0 percent as the headwinds of the past few years, deleveraging in the private sector and public sector austerity begin to ease. While growth in the U.S. and in the emerging market economies edges up, the recovery in Europe continues to be weak, especially in Greece, Italy, and Spain. Beyond 2014 for the balance of the forecast period world real GDP is projected to increase an average of 3.2 percent per year.



Source: IHS Global Insight website, GDP Components Tables (Interim Forecast, Monthly), Release date 12 Sept 2013

The Asia/Pacific and Latin America/Caribbean regions will continue to have the world's highest economic growth rates. These regions are expected to see their economic activity grow at annual rates of 4.3 and 4.0 percent a year, respectively, over the forecast period (2014-2034).

China, which became the world's second largest economy by 2013 (surpassing Japan) is projected to grow 6.1 percent a year, while India, projected to see its GDP almost quadruple in size, is growing at an average rate of 6.7 percent a year during the forecast period. In contrast, Japan grows at just 0.9 percent a year over the forecast horizon as structural impediments, and an aging population continues to limit growth[10].

[10] IHS Global Insight, GDP Components Tables (Interim Forecast, Monthly), Release date 12 September 2013

AVIATION TRAFFIC AND ACTIVITY FORECASTS

Total traffic and activity forecasts for commercial air carriers (the sum of mainline and regional carriers) are presented in Tables 5 through 9. These tables contain year-to-year historical data and forecasts.

Mainline air carrier traffic and activity forecasts and the forecast assumptions are displayed in Tables 10 through 18, 21, and 23. These tables contain year-to-year historical data and forecasts.

Regional carrier forecasts and assumptions are found in Tables 24 through 27. These tables provide year-to-year historical and forecast data.

Tables 19 and 20 provide year-to-year historical and forecast data for cargo activity. Table 22 provides year-to-year historical and forecast data for the cargo jet fleet.

General aviation forecasts are found in Tables 28 through 31. These tables provide year-to-year historical data and forecasts.

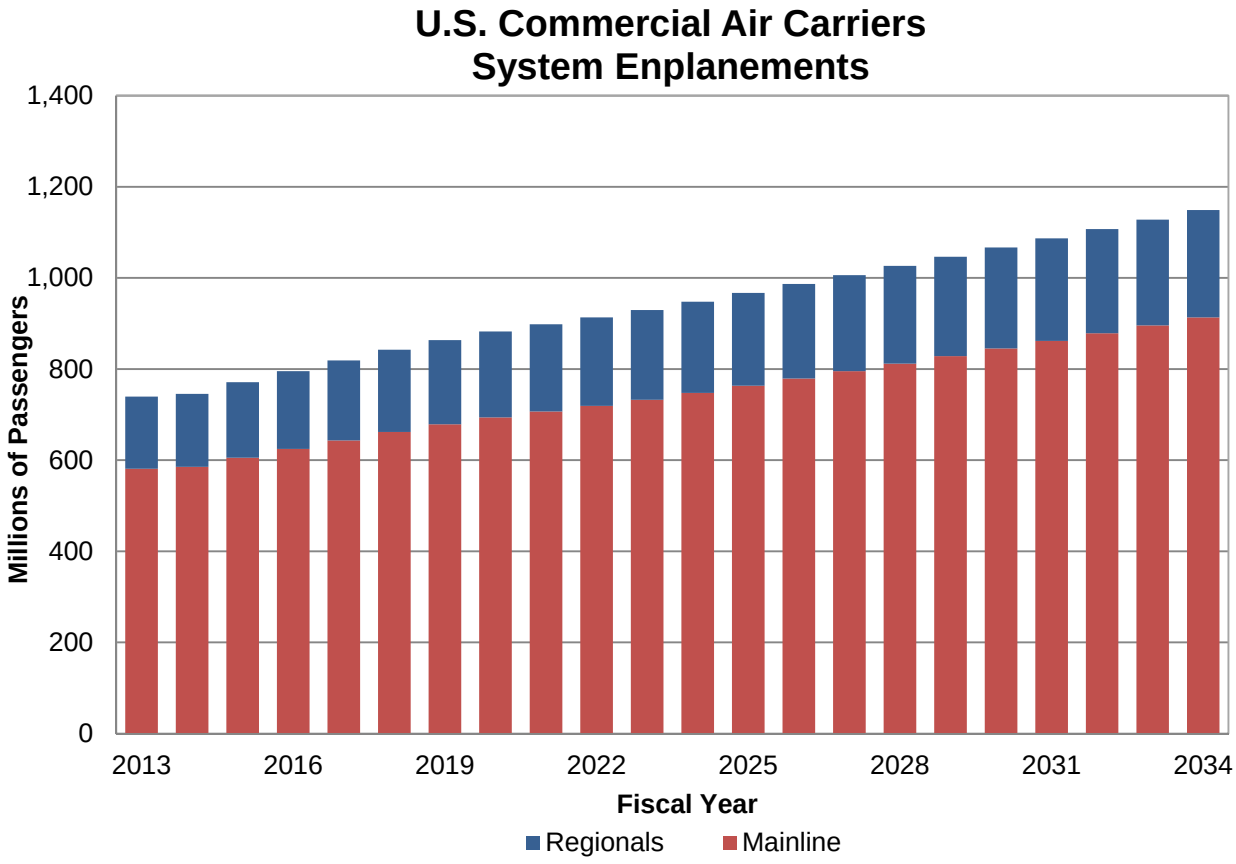
Tables 32 through 34 provide forecasts of aircraft activity at FAA and contract facilities.

Commercial Aviation Forecasts

System capacity is projected to increase modestly (up 1.5 percent) in 2014. In the domestic market, mainline carrier capacity expanded only slightly (1.3 percent) in 2013 but is projected to grow at an even slower rate (up 0.8 percent) in 2014, while capacity for the regional carriers is projected to post its first increase since FY 2011 (up 2.2 percent). In the international sector, capacity is forecast to increase slowly in the Atlantic and Pacific markets, respectively, and increase modestly in the Latin market -- resulting in an overall international capacity increase of 2.7 percent.

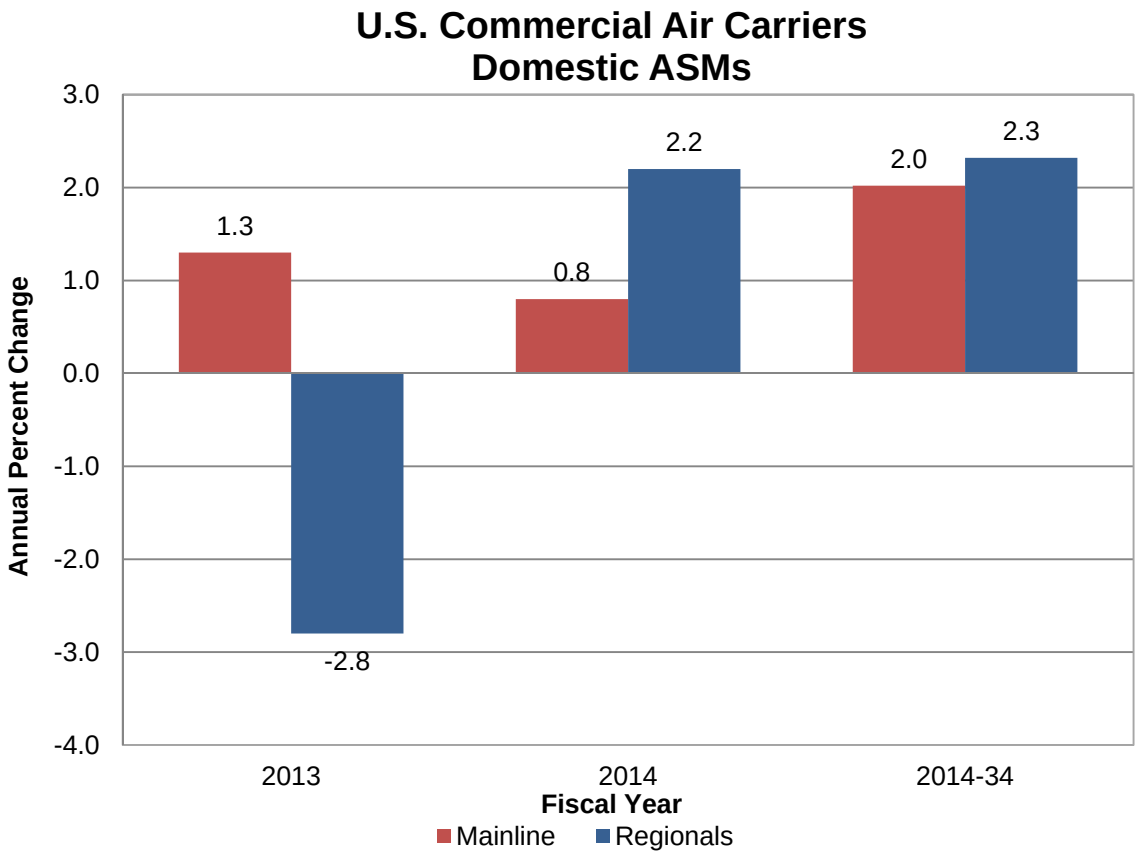
Passenger demand shows minimal growth in 2014 with system RPMs forecast to grow 1.4 percent, the same rate as in 2013. An upturn in growth is projected for the 2015-19 period, coincident with faster economic growth as system RPMs and passengers increase at an average annual rate of 3.4 and 2.9 percent, respectively. Over the same time period, system capacity growth averages of 3.3 percent per year. For the overall forecast period (2014-34), system capacity is projected to increase an average of 2.7 percent a year. Supported by a growing U.S. and world economy, system RPMs are projected to increase 2.8 percent a year, with regional carriers (up 2.3 percent a year) growing slower than mainline carriers (up 2.8 percent a year). System passengers are projected to increase an average of 2.2 percent a year, with mainline carriers growing at a higher rate (up 2.3 percent a year) than their regional counterparts (up 1.9 percent). By 2034, U.S. commercial air carriers are projected to fly 1.75 trillion ASMs and transport 1.15 billion enplaned passengers a total of 1.47 trillion passenger miles.

Planes will remain crowded, with load factors projected to grow moderately during the early years of the forecast period then tapering during the mid to latter years to 83.8 percent in 2034 (up 0.7 points compared to the beginning of the forecast period in 2014). Passenger trip length is forecast to increase by more than 141 miles over the forecast period to 1,276 miles in 2034 (up 7 miles annually). The growth in passenger trip length reflects the faster growth in the relatively longer international and domestic trips as compared to shorter-haul flights.

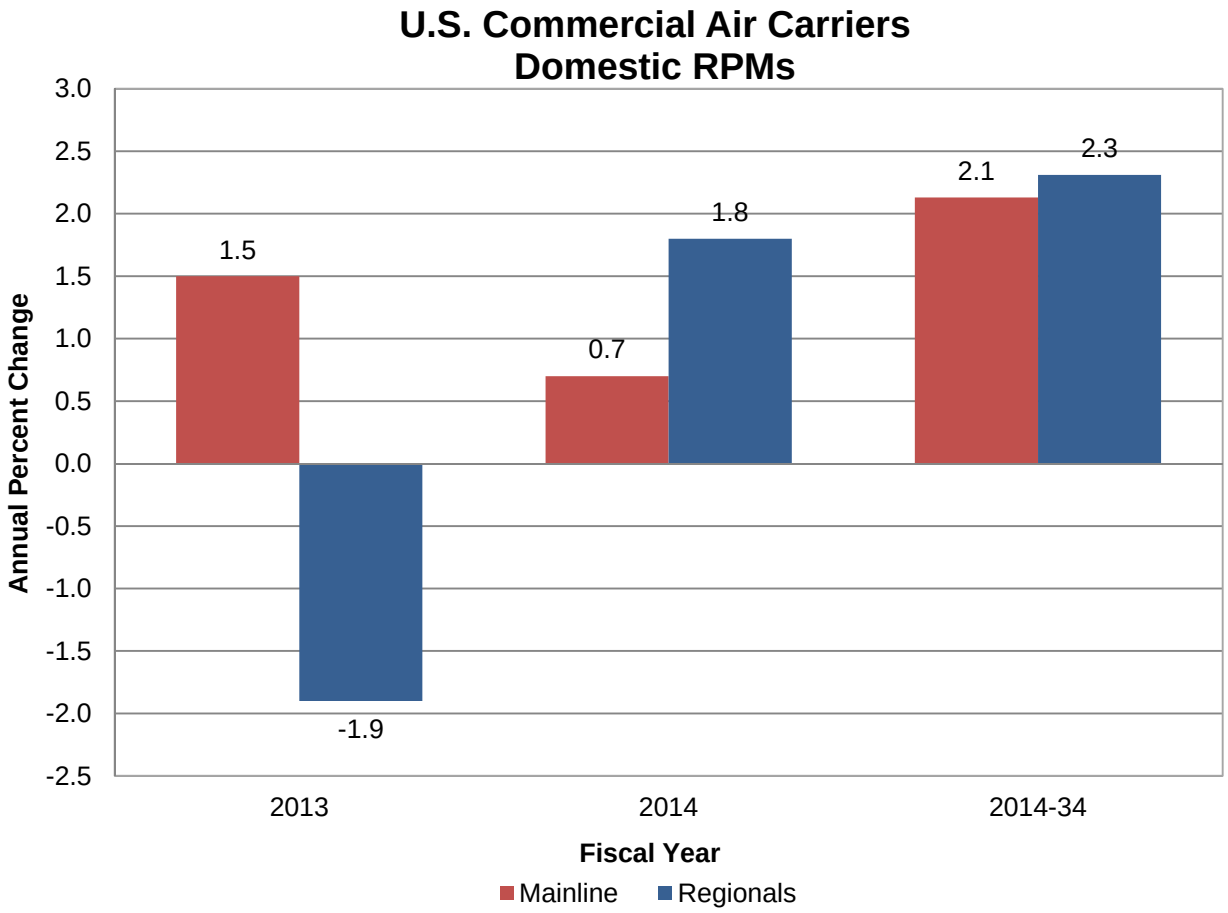


Domestic Markets

After expanding slightly in FY 2013 (up 0.8 percent), domestic capacity is projected to increase by 1.0 percent in 2014. Mainline carrier capacity is forecast to be up 0.8 percent while regional carrier capacity is projected to increase by 2.2 percent, the first increase since 2011. Domestic commercial carrier capacity growth picks up in 2015-2019 period (up 2.7 percent per year) as U.S. economic growth accelerates, with mainline carriers growing slower than regional carriers, 2.6 percent versus 3.0 percent. For the entire forecast period (2014-2034), overall domestic capacity is projected to increase at an average annual rate of 2.1 percent, slower than economic growth. Mainline carriers are projected to grow at an annual rate of 2.0 percent while regional carriers are projected to grow slightly faster at 2.3 percent a year.



Although economic growth is picking up in the U.S., U.S. carrier domestic RPM growth in 2014 is projected at 0.9 percent. Traffic growth is projected to be sluggish throughout the year as carriers continue to keep capacity growth in check. Mainline carrier RPMs are projected to increase by 0.7 percent during 2014, while regional carrier RPMs are projected to increase at a faster rate (1.8 percent). Traffic growth improves over the 2015-19 period with annual RPM growth averaging 2.9 percent as the economic recovery gains steam. For the balance of the forecast period (2019-2034) modest economic growth and falling real yield drive domestic RPM growth of 1.9 percent a year. Over the entire forecast period (2014-2034), domestic RPMs grow an average of 2.2 percent a year with mainline carriers growing more slowly than the regional carriers (2.1 percent a year versus 2.3 percent a year, respectively).



Enplanements are forecast to grow slightly (up 0.6 percent) in 2014 after a 0.1 percent increase in 2013. Similar to RPMs, passenger growth is expected to pick up in the 2015-2019 period (up 2.7 percent a year) as the recovery gains momentum and then average 1.6 percent per year for the period 2019-2034. Over the entire forecast period, domestic enplanements are projected to grow at an average annual rate of 1.9 percent with mainline and regional carriers growing at the same rate.

The continued modest recovery in demand, coupled with restricted capacity growth, provided pricing power for the mainline carriers during 2013, with nominal yield increasing 2.4 percent (up 0.8 percent in real terms). In spite of slow demand growth, continued tight capacity will provide support for higher fares in 2014, with an increase in nominal yield of 3.0 percent (1.5 percent in real terms). For the entire forecast period, nominal yield is projected to increase at an average rate of 1.4 percent a year, while in real terms it is projected to decline at an average rate of 0.5 percent a year. The decline in real yield over the forecast period assumes technological improvements, competition between carriers, and the increasing convergence of cost structures between network carriers and their low-cost counterparts. The convergence in cost structures between the carrier groups arises from gains in productivity as network carriers retire fuel inefficient aircraft and hold the line on labor costs while existing low-cost carriers contend with aging fleets, maturing work forces, and larger and more complex networks.

Domestic commercial carrier activity (departures) at FAA air traffic facilities is projected to grow more slowly than passenger traffic over the forecast period (1.3 percent per year for departures versus 2.2 percent for RPMs). This reflects increased carrier efficiencies in three operational measures: aircraft size, load factor, and trip length.

Overall domestic aircraft size increased by 1.6 seats to 124.9 in 2013 as a result of the combination of the increased mainline carrier domestic capacity share and increases in the aircraft size of the mainline carrier group. Mainline carrier aircraft size increased 1.2 seats with the retirement of older aircraft (i.e. MD-80's, 737-300/400/500, and 757's). Regional aircraft size remained unchanged despite the retirement of 50-seat jet aircraft as larger 70-90 seat jet aircraft entered the fleet. Domestic seats per aircraft are forecast to increase in 2014 (up 1.3 seats) as both mainline and regional carrier aircraft will increase in size. Over the balance of the forecast (2015-2034), domestic seats per aircraft are projected to gradually increase to 134.6 seats by 2034, an average increase of 0.4 seats per year.

The FAA's projection of domestic carrier average aircraft size is greatly influenced by carrier fleet plans, publicly known aircraft order books, and the FAA's expectations of the changing domestic competitive landscape. In the near-term (through 2015), the forecast incorporates several assumptions: 1) mainline carriers desire to constrain ASM capacity growth; 2) the retirement of older inefficient aircraft (many of which are narrow-body); 3) the shifting of wide-body and larger narrow-body aircraft to international services, and 4) growing use of 70-90 seat regional jet aircraft.

In the longer-term, network carriers will replace their older narrow-body aircraft (A320's/B757-200/300) in their domestic route networks with next generation, narrow-body aircraft like the A320 Neo and the 737 Max. The use of smaller aircraft, like the 100-seat Embraer 190, to supplement carrier route structures will be limited. The use of the next generation, narrow-body aircraft will allow mainline carriers to better serve their customers by more closely matching supply (the number of seats) with demand (the number of passengers), and improve profitability through lower operating costs.

Mainline carrier domestic aircraft size increased in 2013 by 1.2 seats to 153.9 seats, and is projected to increase by another 1.2 seats in 2014. Domestic aircraft size for mainline carriers is projected to increase by 0.3 seats in 2015 and then gradually increase for the balance of the forecast. Overall, average aircraft size for the mainline group will increase by 7.5 seats between 2013 and 2034, going from 153.9 to 161.4.

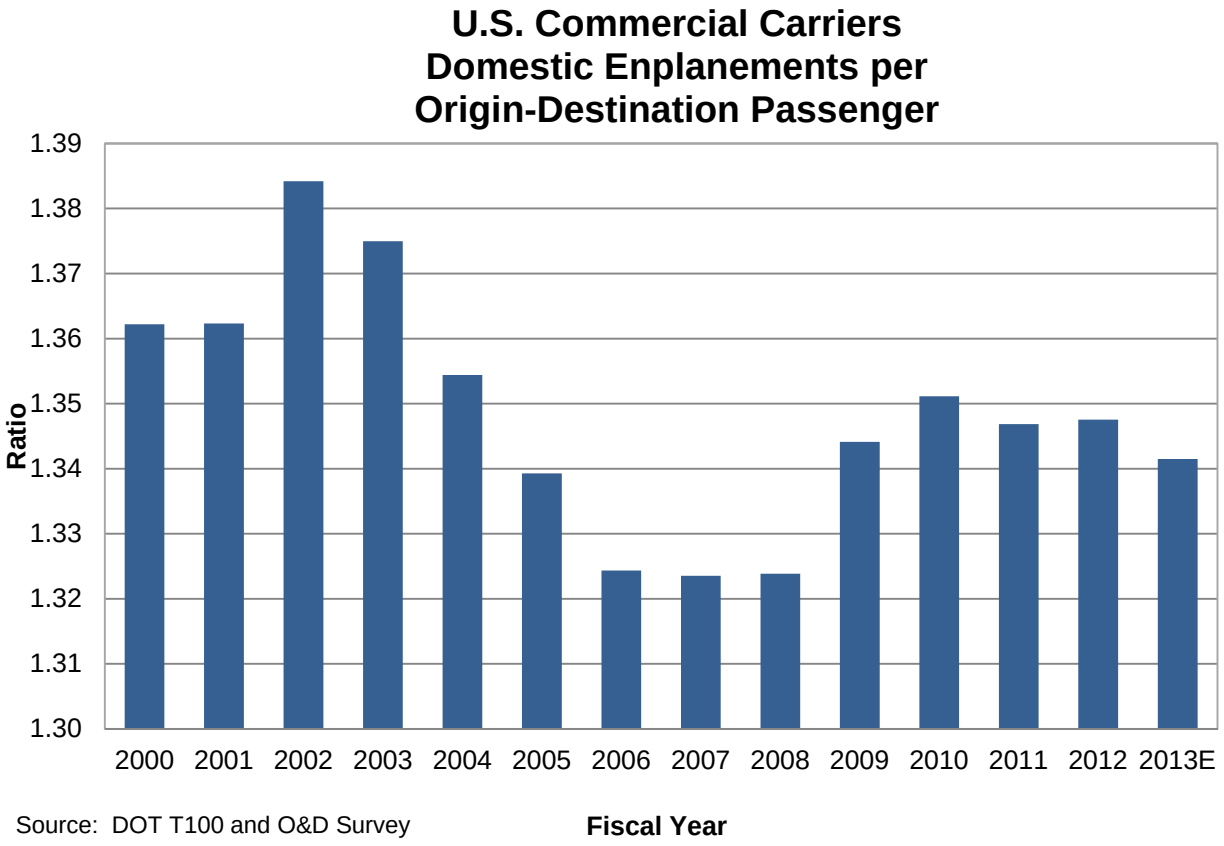
Regional carrier aircraft size flown domestically is projected to grow at a faster pace than that of the mainline carriers. The faster growth in aircraft size for regional carriers is stimulated by continued deliveries of 70 to 90 seat regional jet aircraft that are entering the fleet as well as reductions in the 50-seat and under jet fleet. The larger share of 70 to 90-seat regional jets in the fleet, coupled with 50-seat jet and small turboprop retirements over the next few years, increases the average seating capacity of the regional fleet from 56.1 seats in 2013 to 58.3 seats by 2016. Over the course of the forecast, seats per aircraft for regional carriers increases an average of 0.5 seats per year to 66.6 seats in 2034. The changing aircraft fleet mix is narrowing the gap between the size and aircraft types operated by the mainline and regional carriers.

The commercial carrier domestic load factor increased 0.3 points during FY 2013 to an all-time high of 83.5 percent, with record load factors posted by the mainline and regional carrier groups. The mainline carrier group posted a load factor of 84.2 percent, up 0.2 percentage points from 2012. Regional carrier load factor increased 0.7 points to 78.4 percent. In 2014, the domestic load factor is forecast to decrease 0.1 points to 83.4 percent as mainline carrier load factor remains unchanged while regional carrier load factor decreases by 0.3 percentage points. Thereafter, the commercial carrier domestic load factor gradually rises to 84.7 percent by 2034.

In 2013 the average domestic passenger trip length increased by 8.8 miles to 892.4 miles in total, after increasing by 3.5 miles in 2012. Passenger trip length is forecast to increase by 2.6 miles in 2014 as carriers continue to restructure their networks and realign capacity. After 2014, trip length is projected to remain relatively stable for a number of years before steadily increasing from 2018 onwards, reaching 937.9 miles by 2034. The increase in trip length reflects longer trips flown by the mainline and regional carrier group. Mainline carrier trip length increases as service in thinner, relatively shorter haul markets is dropped or relinquished to regional partners and replaced with longer domestic trips. Regional carrier trip length increases as flying in shorter haul markets is abandoned and/or reduced as more of the larger 70 and 90-seat regional jets continue to penetrate thinner longer-haul markets previously served with mainline equipment.

Another key factor in predicting aviation activity relative to passenger demand is the level of connecting versus non-stop (origin-destination) traffic. However, as the current cycle of U.S. airline industry restructuring unfolds and hub structures change, the impact on local communities and airport activity levels can vary significantly.

The FAA analyzes the ratio of passenger enplanements to origin-destination (O&D) passengers over time to identify changes in connecting versus non-stop traffic. This ratio is an indicator of the tendency of the average passenger to connect during a typical journey. The closer the ratio is to 1.0, the more passengers fly on a point-to-point routing. As the chart below shows, the overall ratio for the U.S. domestic industry peaked in 2002, and then trailed downward to its lowest level (1.32 enplanements for every O&D passenger) by 2007. The decline in the ratio during this six year period is characterized by a drop in connectivity by the network carriers and a rising passenger share for the low-cost carriers. As demand for air travel fell during the great recession and fuel costs skyrocketed, the ratio jumped up to over 1.34 in 2009. Since then the ratio has been in a narrow range between 1.34 and 1.35 enplanements for every O&D passenger, but the 2013 figure was the lowest since 2008. The FAA's forecast recognizes the changing pattern of domestic traffic connectivity and these trends are captured in the forecast's passenger enplanement totals.



Source: DOT T100 and O&D Survey

International Markets

U.S. and Foreign Flag Carriers

The FAA provides forecasts of total international passenger demand[11] for travel between the United States and three world travel areas: Atlantic, Latin America (including Mexico and the Caribbean), and Asia/Pacific, as well as for U.S.–Canadian transborder traffic. These forecasts are based on historical passenger statistics provided by the U.S. Customs and Border Protection[12] and Transport Canada, and on regional world historical data and economic projections from Global Insight, Inc.

Total passenger traffic between the United States and the rest of the world is estimated to total 183.6 million in CY 2013, 4.4 percent higher than in 2012. Passenger demand growth slows in 2014 (up 3.7 percent) but picks up again in 2015 (up 5.3 percent) as the U.S. and world economic recovery solidifies. For the balance of the forecast period, stable worldwide economic growth leads international passengers to grow at an average rate of 4.2 percent a year, totaling 434.8 million in 2034.

[11] The sum of U.S. and foreign flag carriers.

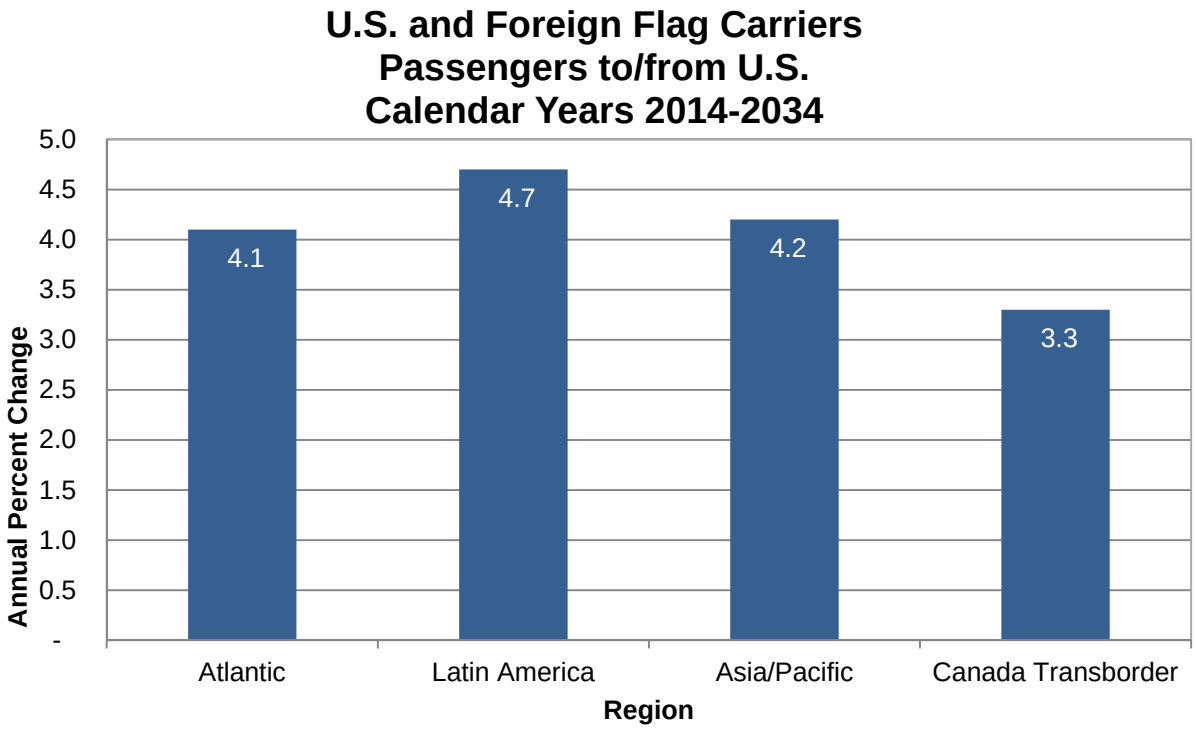
[12] Customs and border protection data is processed and released by the Department of Commerce.

In the Latin America region, sustained economic growth drives passenger growth to an average rate of 4.7 percent a year over the entire forecast period (2014-2034). The highest growth is projected for Brazil (average annual growth of 6.0 percent) while the largest market in the region, Mexico, grows at an average of 4.6 percent a year. The slowest rates of growth are projected to occur in the Bahamian and Jamaican markets (averaging growth of 0.2 and 2.8 percent a year, respectively).

Emerging economies in the Asia-Pacific market boost passenger demand an average of 4.2 percent per year. Taiwan, South Korea, India and China (passenger growth of 4.5, 4.5, 5.2 and 6.5 percent a year, respectively) are forecast to be the fastest growing markets in the region. Growth in the Japan market (the largest and most established in the region) is projected to be well below the regional average at 2.9 percent a year.

In the more mature Atlantic market, the Open Skies agreement between the European Union and the United States along with competition between global airline alliances helps fuel passenger growth of 4.1 percent a year over the forecast period. Over the 20-year forecast horizon, average annual passenger growth in the top four Atlantic country specific markets, the United Kingdom, Germany, France and the Netherlands, is 3.9, 4.6, 3.2, and 3.9 percent, respectively.

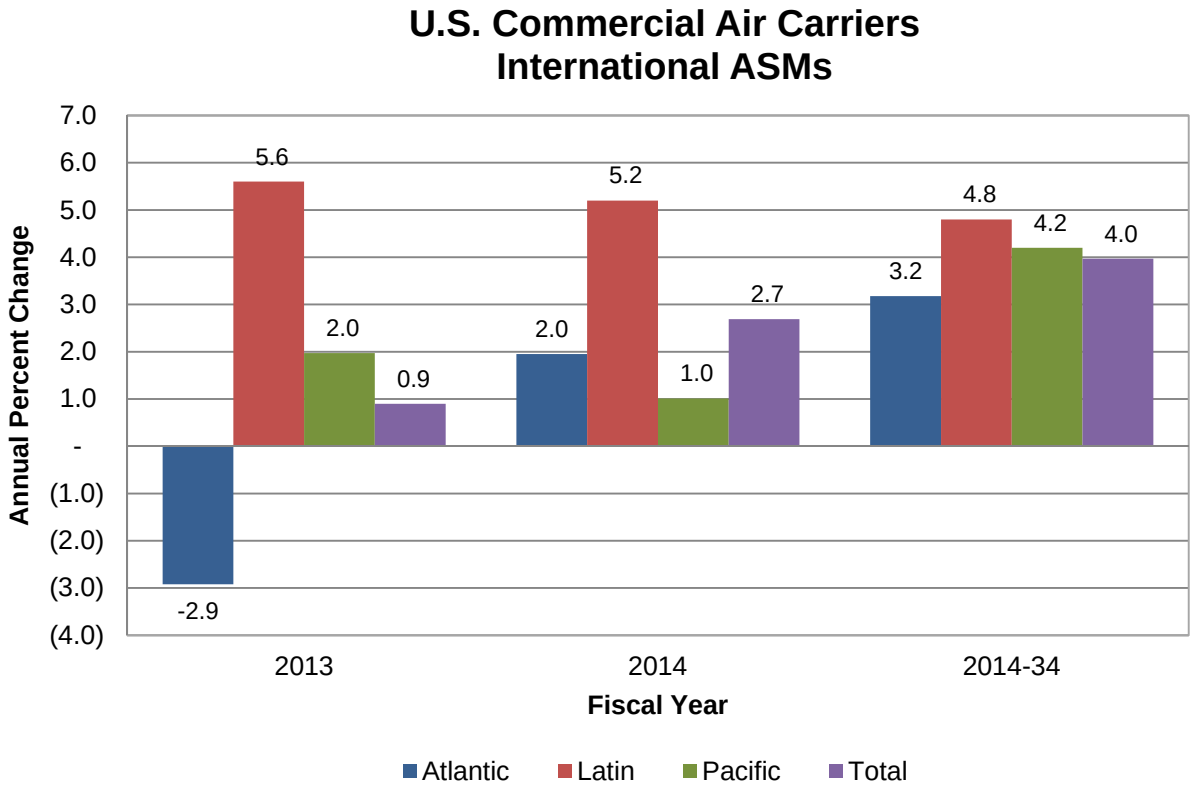
Growth in the Canadian transborder market is forecast to be higher than that of the domestic U.S. market (2.0 percent), averaging 3.3 percent a year over the forecast period.



Source: US Customs & Border Protection data processed and released by Department of Commerce; data also received from Transport Canada

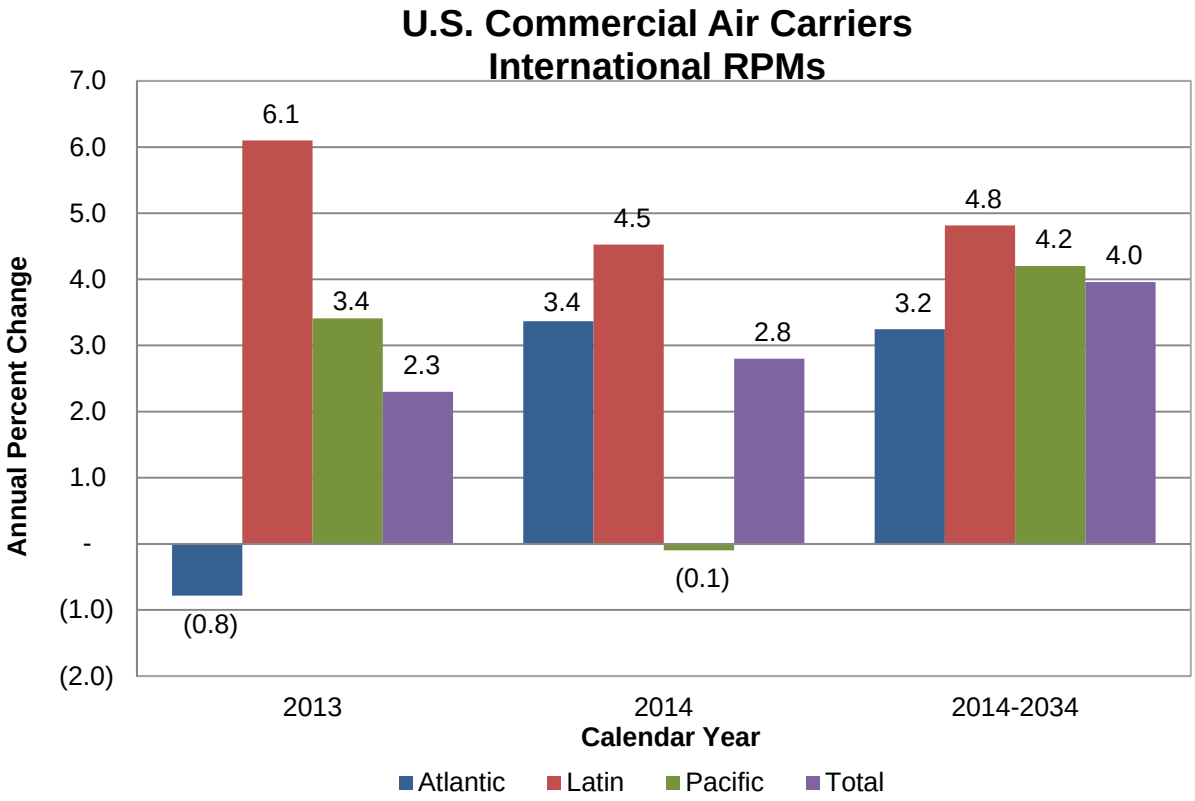
U.S. Flag Air Carriers

International U.S. commercial air carrier capacity grew slowly in 2013, up 0.9 percent from 2012. The Atlantic market continued to shrink (down 2.9 percent) after declining 4.4 percent in 2012. The Latin America market posted a solid 5.6 percent increase while the Pacific market showed more modest growth, up 2.0 percent. In 2014, moderate demand and increasing competition between global alliances is expected to boost total international capacity by 2.7 percent as all markets are expected to grow. The fastest growth is projected for the Latin market (up 5.2 percent), followed by the Atlantic (up 2.0 percent – the first increase since 2011), and the Pacific (up 1.0 percent). System-wide capacity is projected to accelerate in 2015 (up 4.8 percent), fueled by stronger economic growth projected for all world regions, and is projected to average 3.9 percent a year for the remainder of the forecast period. Moderate growth over the forecast period reflects favorable U.S. and world economic activity as it recovers from the global contraction.



U.S. commercial air carrier international RPMs and enplanements increased 2.3 and 2.6 percent, respectively, in 2013. Increases in RPMs for the Latin market (up 6.1 percent) and the Pacific market (up 3.4 percent) offset a decrease in the Atlantic market (down 0.8 percent). In 2014, U.S. carrier international RPMs are expected to increase by 2.8 percent as increases in the Latin American market (up 4.5 percent), and in the Atlantic market (up 3.4 percent) more than offset a slight decline in the Pacific market (down 0.1 percent). For the balance of the forecast, RPMs increase an average of 4.0 percent a year with the fastest growth in the Latin region (up 4.7 percent).

International enplanement growth for 2014 is projected to be 2.8 percent as solid growth in both the Latin (up 3.8 percent) and Atlantic (up 3.1 percent) markets offset a slight decline in the Pacific region (down 0.9 percent) where a slowdown in both China and India's economic growth impacts demand. Enplanement growth is projected to rebound to 4.4 percent in 2015 with all regions showing gains. Over the balance of the forecast period (2016-2034), enplanements are forecast to increase an average of 3.8 percent a year with the fastest growth in Latin and Pacific markets (up 4.3 and 4.0 percent a year, respectively).



The growth in U.S. carrier international passengers over the period 2014-2034 (3.9 percent a year) compares favorably to the growth in overall international passengers (4.2 percent a year, including the U.S.-Canada transborder market). Forecasts of international demand assume U.S. and foreign flag carriers will benefit from improving economic activity in both the United States and world markets.

International load factor for U.S. commercial carriers was 82.6 percent in 2013, a sharp increase of 1.2 points from 2012. Load factor is expected to remain steady in 2014 as capacity increases in line with demand. International load factor is projected to remain steady around 82.5 percent over the balance of the forecast period to 2034 as traffic growth matches capacity growth in all three world markets.

International passenger real yields for U.S. mainline carriers were down 1.3 percent in 2013 as decreases in the Pacific market (down 5.9 percent) and in the Latin market (down 2.2 percent) offset an increase in the Atlantic market (up 1.9 percent). In 2014 international real yield rises by 0.1 percent as strengthening demand in the Atlantic market offsets excess capacity in the

Latin market and weak demand in the Pacific market. For the remainder of the forecast period, real yield decreases an average of 0.6 percent a year. In nominal terms, international yields are forecast to increase 1.6 percent in 2014, and then grow at an annual rate of 1.4 percent over the remainder of the forecast. The decline in real yields assumes competitive pressures (including established and relatively new international carriers) and technological improvements will hold the line on fare increases.

Commercial Air Carriers – Air Cargo

Historically, air cargo activity tracks with GDP. Additional factors that affect air cargo growth are fuel price volatility, movement of real yields, and globalization. Significant structural changes have occurred in the air cargo industry; among these are air cargo security regulations by the FAA and TSA, maturation of the domestic express market, a shift from air to other modes (especially truck), use of all-cargo carriers (e.g., FedEx) by the U.S. Postal Service to transport mail, and the increased use of mail substitutes (e.g. e-mail, cloud-based services).

The forecasts of Revenue Ton Miles (RTMs) are based on several assumptions specific to the cargo industry. First, security restrictions on air cargo transportation will remain in place. Second, most of the shift from air to ground transportation has occurred. Finally, long-term cargo activity will be tied to economic growth.

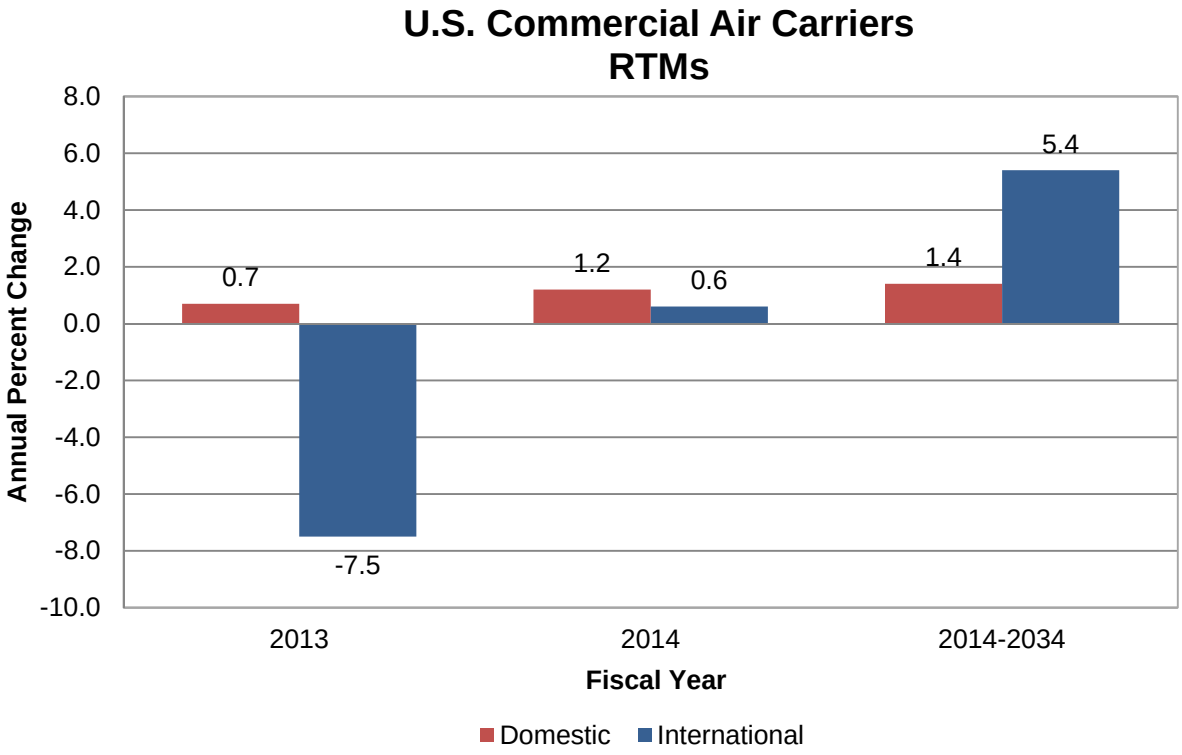
The forecasts of RTMs were based on models that link cargo activity to GDP, real fuel prices, and real personal consumption expenditures (PCE). Forecasts of domestic cargo RTMs were developed with real U.S. PCE and real fuel prices as the primary drivers. Projections of international cargo RTMs were based on growth in world GDP, adjusted for inflation. The distribution of RTMs between passenger and all-cargo carriers was forecast based on an analysis of historic trends in shares, changes in industry structure, and market assumptions.

Total RTMs shrank by 4.8 percent in 2013 but are forecast to grow slightly (up 0.8 percent) in 2014. Driven by steady U.S. and world economic growth, total RTMs are projected to increase at an average annual rate of 4.2 percent for the balance of the forecast period.

Domestic cargo RTMs increased 0.7 percent in 2013 and are forecast to grow 1.2 percent in 2014 as the U.S. economic recovery strengthens. Between 2014 and 2034, domestic cargo RTMs are forecast to increase at an average annual rate of 1.4 percent.

The freight/express segment of domestic air cargo is highly correlated with capital spending. Thus, this segment's growth will be tied to growth in the economy. The mail segment of domestic air cargo will be affected by price and substitution (e.g. e-mail).

The all-cargo carriers have increased their share of domestic cargo RTMs flown from 70.1 percent in 2000 to 88.8 percent in 2013. This is because of the shrinkage of the domestic freight/express business for passenger carriers as they have responded to the substantial shocks to the aviation system during this time. Shrinking networks, elimination of unprofitable flying, and consolidation have reduced opportunities for growth in their freight/express business. The all-cargo share is forecast to grow to 90.4 percent by 2034 based on increases in capacity for all-cargo carriers and ongoing security considerations.

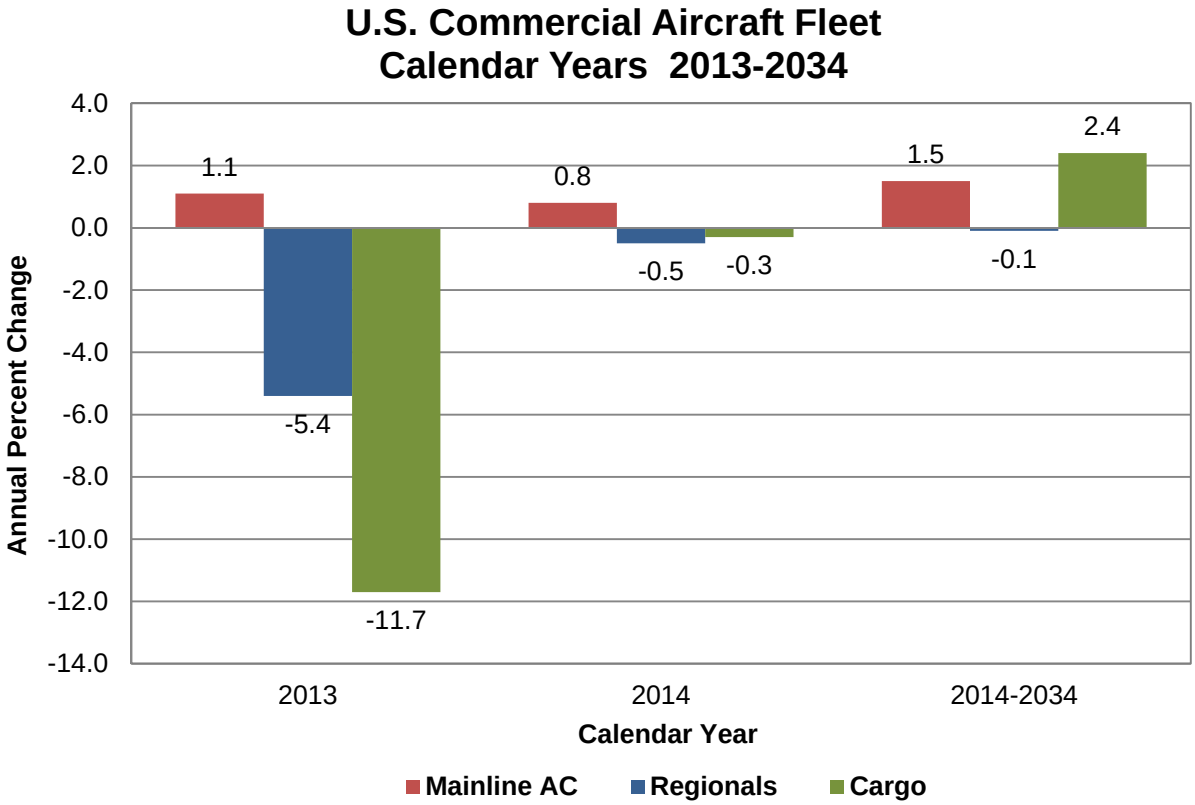


International cargo RTMs fell for a second year in a row, down 7.5 percent in 2013 as fallout from the European debt crisis and a slowdown in China's economic growth slowed worldwide trade. They are projected to grow 0.6 percent in 2014 as global trade growth resumes. For the forecast period (2014-34) international cargo RTMs are forecast to increase an average of 5.4 percent a year based on projected growth in world GDP.

The share of international cargo RTMs flown by all-cargo carriers increased from 50.3 percent in 2000 to 74.6 percent in 2013. Continuing the trend experienced over the past decade, the all-cargo share of international RTMs flown is forecast to increase modestly to 80.9 percent by 2034.

Commercial Aircraft Fleet

The number of commercial aircraft is forecast to grow from 6,727 in 2013 to 8,435 in 2034, an average annual growth rate of 1.1 percent or 81 aircraft annually. The commercial fleet is projected to increase by 17 aircraft in 2014 after shrinking by 184 aircraft in 2013 as the slow recovery in demand and rising fuel prices prompted carriers to prune their fleets. Since 2007, the U.S. commercial airline fleet has contracted by 1,005 aircraft. In comparison, the U.S. commercial fleet contracted by 262 aircraft between 2000 and 2003, the last downturn in aviation.



The number of passenger jets in the U.S. mainline carrier fleet increased by 41 aircraft in 2013 and is projected to rise by 30 aircraft in 2014 as network carriers continue to remove older, less fuel efficient narrow body aircraft. After 2014, the mainline air carrier passenger fleet increases an average of 65 aircraft a year over the remaining years of the forecast period, totaling 5,112 aircraft in 2034. The narrow-body fleet (including E-190's at JetBlue and American Airways) is projected to grow by 41 aircraft annually over the period 2013-2034; the wide-body fleet grows by 22 aircraft a year as the Boeing 787 and Airbus A350's enter the fleet.

The regional carrier passenger fleet is forecast to decrease by 11 aircraft in 2014 as increases in larger regional jets are more than offset by reductions in 50 seat and smaller regional jets and turboprops. After 2014, the regional carrier fleet is projected to decrease by an average of 3 aircraft (-0.1 percent) a year over the remaining years of the forecast period, totaling 2,141 aircraft in 2034. The number of regional jets (90 seats or fewer) at regional carriers is

projected to grow from 1,642 in 2013 to 1,953 in 2034, an average annual increase of 0.8 percent. All of the growth in regional jets over the forecast period occurs in the larger 70 to 90-seat aircraft. During the forecast period, all regional jets of 50 or less seats are removed from the fleet, reflecting the relaxation of scope clauses. The turboprop/piston fleet is expected to shrink from 571 units in 2013 to 188 in 2034. Turboprop/piston aircraft are expected to account for just 8.8 percent of the regional carrier passenger fleet in 2034, down from a 25.8 percent share in 2013.

Cargo large jet aircraft are forecast to increase by 8 aircraft over the next two years (from 740 to 748 aircraft in 2015) after declining by 98 aircraft in 2013 primarily due to retirements of 727-200s and 747-200s by Federal Express, Evergreen, and Southern Air. For the remainder of the forecast period, cargo large jet aircraft at U.S. carriers are forecast to grow at an average annual rate of 2.4 percent to 1,182 aircraft in 2034. The narrow-body, cargo jet fleet is projected to increase by 5 aircraft a year over the 21-year forecast period as older 757's and 737's are converted to cargo service. The wide-body, cargo jet fleet is projected to increase by 16 aircraft yearly.

General Aviation

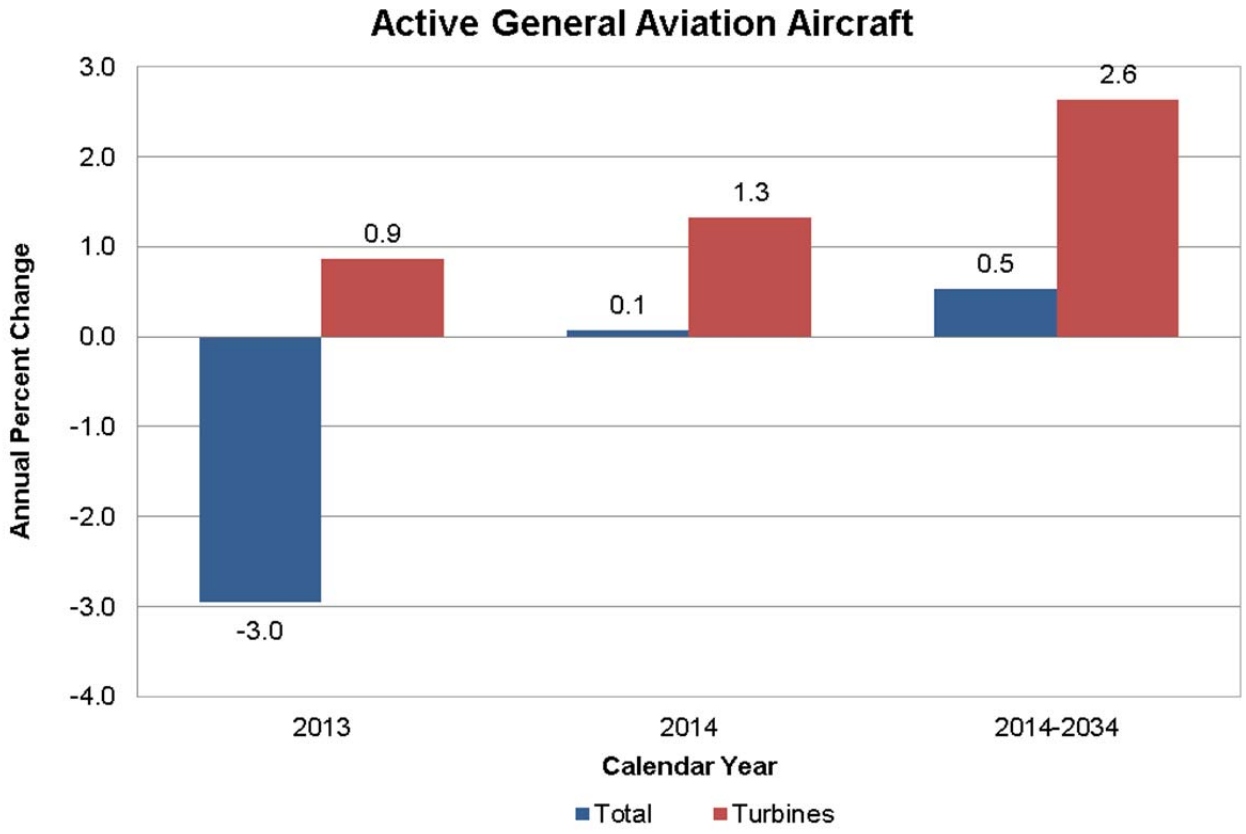
The FAA forecasts the fleet and hours flown for single-engine and multi-engine piston aircraft, turboprops, turbojets, piston and turbine powered rotorcraft, and light sport, experimental and "other" (which consists of gliders and lighter than air vehicles) aircraft. The forecasts are carried out for "active aircraft,"[13] not total aircraft. The FAA uses estimates of fleet size, hours flown, and utilization from the General Aviation and Part 135 Activity Survey (GA Survey) as baseline figures upon which assumed growth rates can be applied. Beginning with the 2004 GA Survey, there were significant improvements to the survey methodology. Coinciding with the changed survey methodology, large changes in many categories were observed, both in the number of aircraft and hours flown. The results of the 2012 GA Survey are consistent with the results of surveys conducted since 2004, reinforcing our belief that the methodological improvements have resulted in superior estimates relative to those of the past. Thus, they are used as the basis for our forecast. Because results from the GA Survey are not published until the following year, the 2012 statistics are the latest available. As an additional note, the results of the 2011 survey were not available to use. Therefore, estimates of 2011 fleet and hours were based on estimated number of general aviation aircraft in the FAA civil aircraft registration database by the end of CY 2011, and past rates of active aircraft and utilization by type of aircraft and age of the fleet. The 2012 GA Survey recorded partial effect of the 2010 Rule for Re-Registration and Renewal of Aircraft Registration. The complete effect of this Rule, which requires all aircraft registered in the U.S. to re-register within the three-year period from 2011 to 2013, will be noted after the 2013 Survey. In the meanwhile, the 2012 Survey showed that between 2010 and 2012 the number of active GA aircraft went down by 6.4 percent, from 223,370 to 209,034. Assuming a similar decline in 2013 as a result of cleaning up from the Registry inactive aircraft that previously thought to be active, GA active fleet is estimated to have decreased 3.0 percent in 2013 to 202,865. General aviation flight hours for 2013 are estimated based on the active fleet and other activity indicators at 24.0 million, with a decline

[13] An active aircraft is one that flies at least one hour during the year.

of 1.8 percent from the previous year. Activity forecasts begin in 2014 and continue through 2034.

After growing rapidly for most of the past decade, and then slowing over the past few years, the most recent shipment activity indicates the modest growth continues in the overall general aviation aircraft market. While economic uncertainties still affect the business jet market, the rate of decline slowed down and a recovery is expected in the near term. The forecast calls for robust growth in the long term outlook, driven by higher corporate profits and the growth of worldwide GDP, though at rates slightly lower than those predicted last year. Continued concerns about safety, security, and flight delays keep business aviation attractive relative to commercial air travel. As the industry experts and prior year's survey results report a significant portion of piston aircraft hours are also used for business purposes, we predict business usage of general aviation aircraft will expand at a faster pace than that for personal and recreational use. Increased demand, especially for agricultural use turboprop aircraft also contributes to increased turbine fleet and hours.

The active general aviation fleet is projected to increase at an average annual rate of 0.5 percent over the 21-year forecast period, growing from an estimated 202,865 in 2013 to 225,700 aircraft by 2034. The more expensive and sophisticated turbine-powered fleet (including rotorcraft) is projected to grow to a total of 49,565 aircraft at an average rate of 2.6 percent a year over the forecast period, with the turbine jet portion increasing at 3.0 percent a year, reaching a total of 22,050 by 2034.



The number of active piston-powered aircraft (including rotorcraft) is projected to decrease at an average annual rate of 0.3 percent from the 2013 total of 141,325 to 131,615 by 2034, with declines in both single and multi-engine fixed wing aircraft, but with the smaller category of piston-powered rotorcraft growing at 1.7 percent a year. Single-engine fixed-wing piston aircraft, which are much more numerous within this group, are projected to decline at a rate of 0.4 percent, while multi-engine fixed wing piston aircraft are projected to decline by 0.5 percent a year.

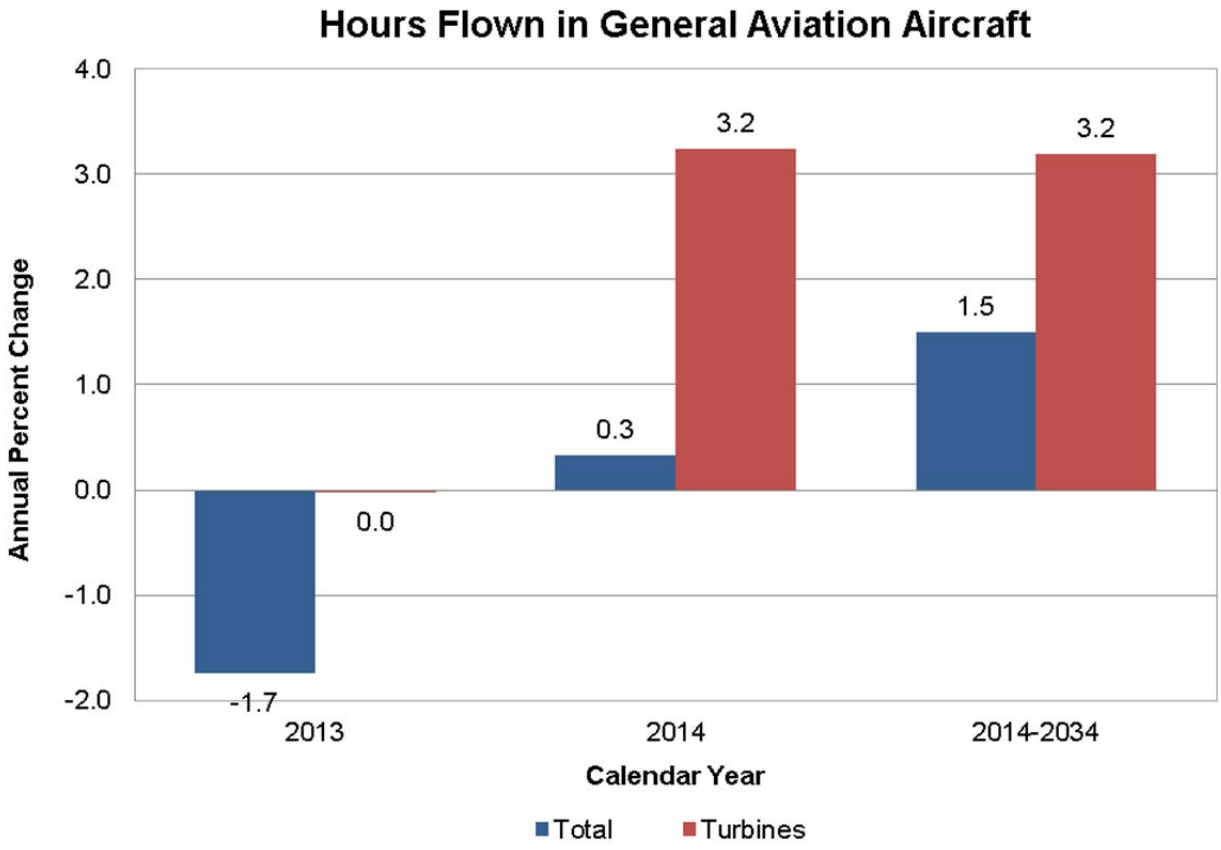
Starting in 2005, a new category of aircraft (previously not included in the FAA's aircraft registry counts) was created: "light sport" aircraft. At the end of 2012, a total of 2,001 active special light-sport aircraft were estimated in this category (Beginning in 2009, experimental light-sport aircraft category was reported in FAA statistics as a separate category and until 2012 reported under light sport aircraft together with the special light-sport aircraft. Starting in 2012, this experimental light-sport group was re-classified within the experimental aircraft category). The forecast assumes about 4.1 percent annual growth of the fleet by 2034, to a total of 4,880 light sport aircraft.

The total number of general aviation hours flown is projected to increase by 1.4 percent yearly over the forecast period. The FAA projects faster growth in hours will occur after 2023 with increases in the fixed wing turbine aircraft fleet, as well as increasing utilization of both single and multi-engine piston aircraft as the aging of this fleet starts to slow down. In the medium term, much of the increase in hours flown reflects strong growth in the rotorcraft and turbine jet fleets.

Hours flown by turbine aircraft (including rotorcraft) are forecast to increase 3.2 percent yearly over the forecast period, compared with a decline of 0.4 percent for piston-powered aircraft. Although hours flown by piston rotorcraft are forecast to increase an average of 1.8 percent per year during the forecast period, they have a relatively small share (less than 10 percent) in this segment of hours flown by general aviation aircraft; and thus have a small impact on the overall trend. Jet aircraft are forecast to account for most of the increase, with hours flown increasing at an average annual rate of 4.2 percent over the forecast period. The large increases in jet hours result mainly from the increasing size of the business jet fleet, along with a measured recovery in utilization rates from recession induced record lows. Turboprop hours are also expected to continue their increase, as also indicated by the 2012 GA Survey, which were significantly higher than previously estimated. .

Rotorcraft hours, which were less impacted by the economic downturn when compared to other categories and rebounded earlier, are projected to grow by 2.8 percent yearly, with turbine rotorcraft growing at an average annual rate of 3.1 percent. In our previous forecast, we had expected a decline in utilization rates of turbine rotorcraft with the assumption that recently improved affordability at the lower end of the turbine market after the introduction of a new light model would cause replacement of some pistons, but as they would function in their previous piston uses, utilization rates of some new turbines would be closer to those of the pistons. However, sales reports show that most of the replacements were not for pistons, which suggest that the new purchases were possibly to replace other turbine helicopter at the lower end of the market, or the newly introduced light turbine model was a product fulfilling a previously unmet need at the light end of the market. Overall, the market growth was robust in both segments of the industry. Therefore, we have changed our assumption of declining utilization for the turbine rotorcraft.

Lastly, the light sport aircraft category, which now includes only the special light sport (experimental light-sport aircraft is now considered as part of the experimental aircraft category), is expected to see an increase in hours flown of 5.1 percent a year, primarily driven by growth in the fleet.



The number of active general aviation pilots (excluding air transport pilots) is projected to be 484,425 in 2034, an increase of over 35,000 (up 0.4 percent yearly) over the forecast period. Between 2011 and 2013, there was a decline of 12,659 in the number of commercial pilots, accompanied by an increase of 7,313 in the number of air transport pilots (ATPs). A substantial part of the decline in commercial pilots is thought to be a result of these pilots obtaining the higher level ATP certificates as required by the Airline Safety and Federal Aviation Administration Extension Act of 2010. This Act mandated that all part 121 (scheduled airline) flight crew members would hold an ATP certificate by August 2, 2013. FAA estimated there were about 13,000 airline pilots holding a commercial pilot certificate, most of which were serving at Second in Command positions at the regional airlines. Since airline pilots could no longer operate with only a commercial pilot certificate after August 2013 (excluding a limited number of special cases as specified by 2013 FAA Final Rule for Pilot Certification and Qualification Requirements for Air Carrier Operations), we have reduced our commercial pilot forecast compared to the previous year and increased our ATP forecast. Taking this change into consideration, commercial pilots are projected to increase from 108,206 in 2013 to 122,000 in 2034, an average annual increase of 0.6 percent. The number of student pilots is forecast to decrease at an average annual rate of 0.2 percent over the forecast period, declining from 120,285 in 2013 to 116,050 in 2034. In addition,

the FAA is projecting that by the end of the forecast period a total of 15,200 sport pilots will be certified. As of December 31, 2013, the number of sport pilot certificates issued was 4,824 reflecting a steady increase in this new “entry level” pilot certificate that was only created in 2005. The number of private pilots is projected to grow at an average yearly rate of 0.1 percent over the forecast period to a total of 182,450 in 2034 from 180,214 in 2013.

FAA Operations Forecasts

FAA and Contract Towers

Activity at the 516 FAA (264) and contract towers (252) totaled 49.9 million operations in 2013, down 1.3 percent from 2012. Activity is projected to rise 0.8 percent in 2014, with increases in both commercial and non-commercial activity. Growth in total activity at FAA and contract towers accelerates slightly in 2015 (1.1 percent) and for the balance of the forecast, activity grows at an average rate of 1.0 percent per year, reaching 61.9 million operations in 2034.

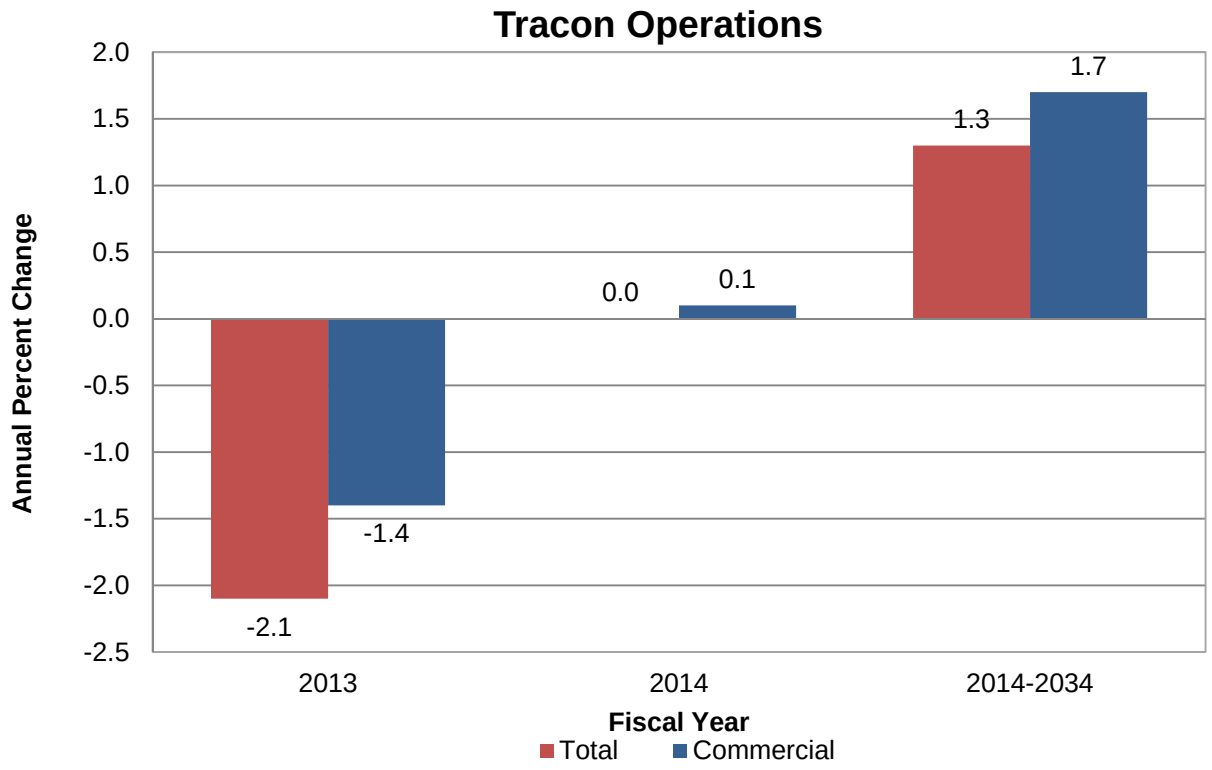
Most of the growth over the forecast period results from increased commercial aircraft activity (up 1.8 percent annually). Air carrier activity is projected to increase (1.4) percent in 2014 as carriers keep capacity in check. Beyond 2014, air carrier activity is projected to increase an average of 2.7 percent per year over the forecast period. The increase in air carrier activity is driven by combination of mainline carriers increasing capacity in response to growing demand as well as an increase in the operations of 70-90 seat jets which are counted in the air carrier category. Commuter/air taxi operations are forecast to fall 1.5 percent in 2014 and decrease 0.1 percent a year for the balance of the forecast period as regional jets less than 50 seats exit the industry.

General aviation activity decreased 1.2 percent in 2013 as itinerant activity fell 2.8 percent. Overall general aviation activity is projected to increase 1.4 percent in 2014 reflecting the impact of an improving economy on flight hours and operations. For the entire forecast period, general aviation activity at towered airports is projected to increase an average of 0.5 percent a year, to 28.7 million operations in 2034. General aviation activity at combined FAA/contract towers grows in line with the modest increase forecast for general aviation hours already cited. Most operations at the smaller towers are in piston aircraft, while those at the largest airports tend to be turbine operations.

Military activity fell 1.0 percent in 2013 and is assumed to remain at 2013 levels (2.55 million) throughout the balance of the forecast period.

The forecasted growth in operations is not uniform across all facility categories. Over the forecast period, total operations at large hub airports (those airports that enplane 1% or more of total US enplanements) are projected to increase from 12.3 million in 2013 to 17.8 million in 2034, an average annual rate of 1.7 percent a year. Operations at these facilities are overwhelmingly commercial in nature (95.3 percent in 2013) and their growth will mirror the growth in total commercial operations. Total operations at medium hub airports (those airports that enplane 0.25 to 0.99 percent of total US enplanements) are projected to increase a bit slower than the large hubs, averaging 1.5 percent a year over the forecast period, to total 7.1 million in 2034. In the largest category, small and non-hub airports, where 82 percent of the operations are non-commercial in nature, total operations are projected to increase from 32.4 million in 2013 to 37.1 million in 2034, an average annual rate of 0.6 percent a year.

Operations[14] at FAA TRACONs (Terminal Radar Approach Control) fell 2.1 percent in 2013, the ninth year in a row. They are projected to remain steady in 2014 as declines in non-commercial activity offset a slight rise in commercial activity. After 2014, TRACON operations are forecast to increase at an average annual rate of 1.3 percent for the balance of the forecast, reflecting the increasingly commercial nature of TRACON operations. For the entire forecast period, TRACON operations grow an average of 1.2 percent per year, totaling 47.9 million in 2034.



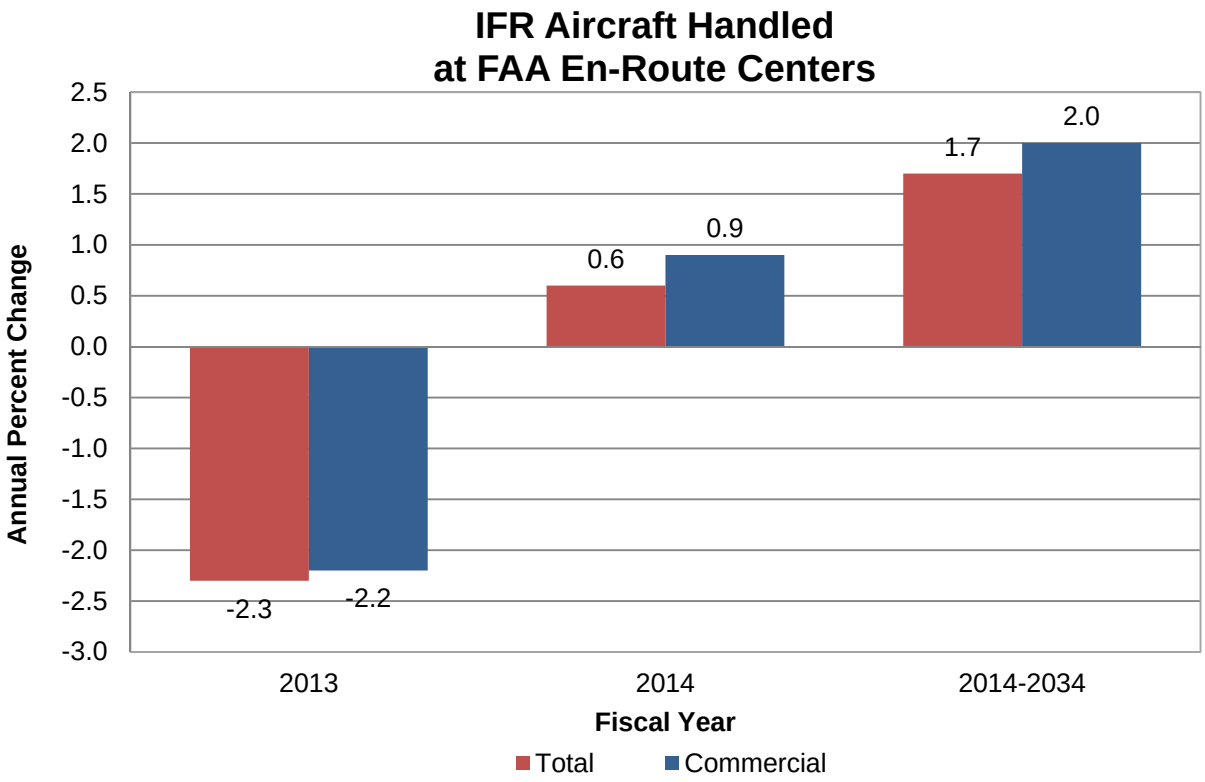
Over the forecast period, commercial aircraft operations at FAA TRACONs are forecast to increase at 1.7 percent per year driven by growth in air carrier activity. General aviation operations at FAA TRACONs are projected to grow 0.6 percent a year, reflecting the slow growth in the general aviation fleet and hours. Military activity is expected to remain at its 2013 level (2.2 million) of activity throughout the forecast period.

En-route Centers

The number of IFR aircraft handled at FAA en-route traffic control centers decreased 2.3 percent to 40.0 million in 2013, as declines in general aviation and military activity offset a slight increase in commercial aviation activity. In 2014 a modest increase in airline activity offsets a fall in general aviation activity, resulting in en-route center activity increasing by 0.6

[14] TRACON operations consist of itinerant Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) arrivals and departures at all airports in the domain of the TRACON as well as IFR and VFR overflights.

percent. After 2014, through the balance of the forecast period, en-route activity increases 1.7 percent annually, reaching 56.4 million aircraft handled in 2034. Between 2013 and 2034 commercial activity is projected to increase at an average annual rate of 1.9 percent, reflecting increases in the commercial fleet and aircraft stage lengths. During the same period, general aviation activity is projected to grow 0.7 percent per year, reflecting growth in business aviation. Military activity is held constant at the 2013 activity level throughout the forecast period.



Activity at FAA en-route centers is growing faster than at towered airports because more of the activity at en-route centers is from the faster growing commercial sector and high-end (mainly turbine) general aviation flying. Much of general aviation activity at towered airports, which is growing more slowly, is local in nature, and does not impact the centers.

UNMANNED AIRCRAFT SYSTEMS

Unmanned Aircraft Systems (UAS) continue to be the most dynamic growth sector within the aviation industry. Once enabled, commercial UAS will have the potential to be a significant component of the national airspace system.

Integration of Civil UAS in the National Airspace System-Roadmap

Unlike the manned aircraft industry, the UAS community does not have a set of standardized design specifications for basic UAS design that ensures safe and reliable operation in typical civilian service applications. Ultimately, the pace of integration will be determined by the ability of industry, the user community, and the FAA to overcome technical, regulatory, and operational challenges.

The purpose of the *Integration of Civil Unmanned Aircraft Systems in the National Airspace System Roadmap* is to outline, within a broad timeline, the tasks and considerations needed to enable UAS integration into the NAS for the planning purposes of the broader UAS community. The Roadmap also aligns proposed Agency actions with the Congressional mandate in the 2012 *FAA Reauthorization.*

The five-year Roadmap will be updated annually and is intended to guide aviation stakeholders in understanding operational goals and aviation safety and air traffic challenges when considering future investments.

Unmanned Aircraft Systems Comprehensive Plan

The *UAS Comprehensive Plan* details work that has been accomplished, along with future efforts needed to achieve safe integration of UAS into the National Airspace System (NAS). The perspectives and information available from these individual activities create a framework and reveal an evolving capability for the integration of UAS into the NAS.

The *UAS Comprehensive Plan* sets the overarching, interagency goals, objectives, and approach to integrating UAS into the NAS. Each partner agency will work to achieve these national goals and may develop agency-specific plans that are aligned to the national goals and objectives.

Unmanned Aircraft System Test Site Program

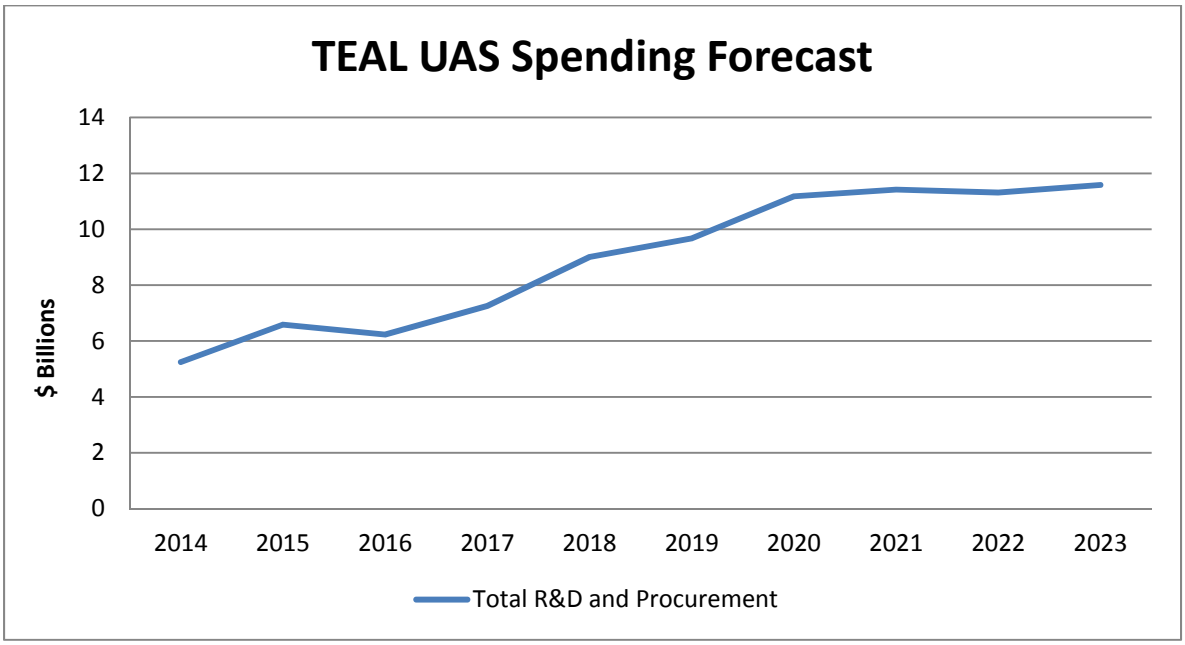
On February 14, 2012, Congress mandated the FAA to develop a test site program. These test sites will enable the development of a body of data and operational experiences to safely operate and integrate these aircraft into the NAS.

The overall purpose of this test site program is to develop a body of data along with operational expertise to enable the safe operation of these aircraft in the NAS. FAA received 25 applications from 24 states. The following map summarizes the locations of the six test

sites that were awarded on December 30, 2013. The first test site should be operational by July 2014 and the test sites will continue to operate until at least February 2017.

UAS Spending Forecast

Teal Group's 2013 World Unmanned Aerial Vehicle Systems annual sector study forecasts U.S. and international Unmanned Aircraft markets. Teal Group creates a market profile along with a forecast for military and civil markets for both the U.S. and outside the U.S. As summarized in the chart below, Teal Group forecasts significant spending growth. Total procurement and R&D is expected to increase from $5.2 billion to $11.6 billion annually over the next decade. Teal Group's ten year forecast estimates total UAS spending worldwide at $89.5 Billion.



UAS Small Commercial Forecast

Once the regulatory structure, operation requirements, and industry standards have been established, the commercial UAS markets will develop. Relatively inexpensive UAS systems under 55 pounds are economically viable for a commercial standpoint, and we expect that market demand for UAS will occur within the constraints of the regulatory and airspace requirements.

Once able to legally operate, the FAA estimates roughly 7,500 commercial small UAS will be operating at the end of five years. This forecast is highly uncertain and is dependent on the regulatory structure finally adopted, and the technology and the cost structure of the industry as it evolves. The safe and efficient integration of UAS into the airspace has the potential for broad benefits for virtually all Americans.

COMMERCIAL SPACE TRANSPORTATION

Since 1989, the Department of Transportation/Federal Aviation Administration has licensed over 220 U.S. commercial space launches. The FAA has also granted over 30 experimental permit launches since 2006. Activity in the U.S. commercial sector is expected to increase for both orbital and suborbital launches.

The FAA's Office of Commercial Space Transportation (AST) licenses and regulates U.S. commercial space launch activity including launch vehicles and non-federal launch sites authorized by Executive Order 12465 and Title 51 U.S. Code, Subtitle V, Chapter 509 (formerly the Commercial Space Launch Act). Title 51 and the Executive Order also direct the Department of Transportation to encourage, facilitate, and promote U.S. commercial launches. AST's mission is to license and regulate commercial launch and reentry operations and non-federal launch sites to protect public health and safety, the safety of property, and the national security and foreign policy interests of the United States.

Overview

The FAA licenses several expendable vehicles used for commercial orbital launches. The most frequently used orbital vehicles are:

- Falcon 9, an intermediate-class launch vehicle built, operated, and marketed by Space Exploration Technologies Corp. (SpaceX);
- Antares, Pegasus, Taurus and Minotaur vehicles built, operated, and marketed by Orbital Sciences Corporation (Orbital);
- Zenit-3SL, a heavy-class vehicle built by the Ukrainian company KB Yuzhnoye for the Russian-owned Sea Launch venture, launched from a floating launch platform based at Long Beach, CA; and
- Atlas V, a heavy-class vehicle built by United Launch Alliance (ULA), a joint venture between Boeing and Lockheed Martin, and marketed by Lockheed Martin Commercial Launch Services (LMCLS).

Companies such as Armadillo Aerospace have also carried out suborbital licensed launches. In addition to launch licenses, experimental permits were first granted by the FAA in 2006. Permits are used for suborbital reusable vehicle development and test flights. Companies that have been active in permit launches include Blue Origin, Masten Space Systems, SpaceX, and Scaled Composites.

The FAA Office of Commercial Space Transportation does not license or grant permits for amateur-class rockets which are unmanned rockets that have less than 200,000 pound-seconds of total impulse and cannot reach an altitude greater than 150 kilometers above the Earth's surface.

The FAA licenses launches or reentries carried out by U.S. persons inside or outside the United States. The FAA does not license launches or reentries the U.S. Government carries out for the Government (such as those operated for and by NASA or the Department of Defense).

Eight commercial spaceports are currently licensed by the FAA. These are located in six states: Alaska, California (part of Vandenberg Air Force Base and Mojave Air and Space Port), Florida (Cape Canaveral and Cecil Field Spaceport), New Mexico, Oklahoma, and Virginia. Several other commercial spaceports around the United States are under development including locations in Hawaii, Colorado, and Texas.

Review of 2013

There were seven orbital FAA-licensed launches in 2013, an increase from five in 2012. SpaceX's Falcon 9 vehicle made three launches including their first mission to geosynchronous orbit. There are nearly 50 future launches on the SpaceX manifest. Orbital Sciences completed the first two launches of the new Antares vehicle and also launched one Minotaur 1 vehicle. Sea Launch (a multinational consortium) had one launch of the Zenit 3SL launch vehicle that resulted in a launch failure. SpaceX also carried out the only licensed reentry mission when the Dragon capsule returned from orbit for an ocean landing after docking at the International Space Station.

In addition, there were 7 permit suborbital flights during 2013. Five were carried out by SpaceX in Texas with their Grasshopper vehicle to test vertical landings of a reusable first stage for the Falcon orbital launch vehicle. Two permit suborbital flights were done by Scaled Composites with SpaceShipTwo including the first powered rocket engine flight. Other companies are preparing for permit flights in 2014.

Successful permit flights or increases in private financing in 2014 could lead some suborbital companies to pursue licensed flights and increase the 2014 forecast.

	2012	2013	2014 Forecast
Licensed Launches	5	7	8-14
Permitted Launches	2	7	8-25

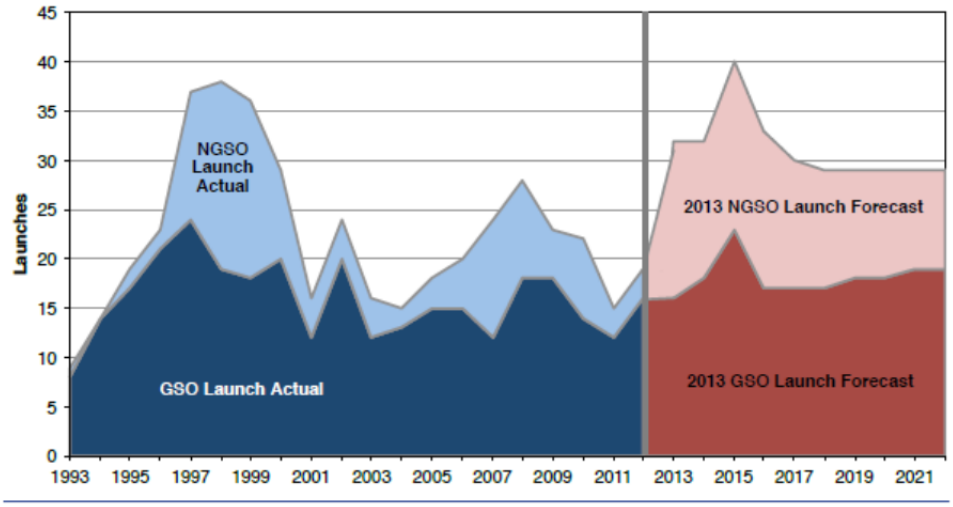
FAA Licensed and Permitted Launches

Worldwide there were 23 orbital commercial launches in 2013, compared to 20 in 2012. Russia led competitors with 12 orbital commercial launches in 2013, followed by six by the U.S. (U.S.-manufactured vehicles), four by Europe and one by Sea Launch. Overall there were 81 civil, commercial and military worldwide launches in 2013 compared to 78 in 2012.

For more details, see the annual Compendium and *Year in Review* reports available online at: http://www.faa.gov/about/office_org/headquarters_offices/ast/reports_studies/#accst

Global Orbital Launch Forecast

In May 2013, the FAA and the Commercial Space Transportation Advisory Committee (COMSTAC) published their annual global forecast for commercial launch demand, the *2013 Commercial Space Transportation Forecasts*. The report calculates satellite demand and then applies models to estimate international commercial launch demand. Multiple satellites can fly on one launch vehicle. The 2013 forecast estimated an average global demand of about 18 commercial launches per year to geosynchronous orbit (GSO) and a global demand of about 13 launches per year to non-geosynchronous orbits (NGSO). The forecast covers the years 2013-2022. The 2013 forecast is up slightly from the 2012 forecast for both GSO and NGSO destinations.



Combined 2013 GSO and NGSO Historical Launches and Launch Forecasts

Commercial GSO launches are used for communications satellites with masses ranging from 2,500 to over 6,000 kilograms. Demand for commercial NGSO launches spans a number of markets and payload sizes, including resupply of the International Space Station, commercial remote sensing; science and technology demonstration; and replenishment and replacement of low Earth orbit communications satellite systems reaching the end of their lifespan. The forecast shows an increasing trend in demand for medium-to-heavy sized launch vehicles. Despite increased interest in building very small satellites (including satellites known as "cubesats"), the demand for small launch vehicles is only an average of 0.3 launches per year. Many small satellites find rides aboard medium-to-heavy lift launch vehicles as secondary payloads.

The GSO and NGSO forecasts are not a prediction of what will actually be launched but instead represents the expected demand for launch services, based on a variety of inputs. The complete forecast report is available at:
http://www.faa.gov/about/office_org/headquarters_offices/ast/reports_studies/forecasts/

Suborbital Reusable Vehicles Forecast

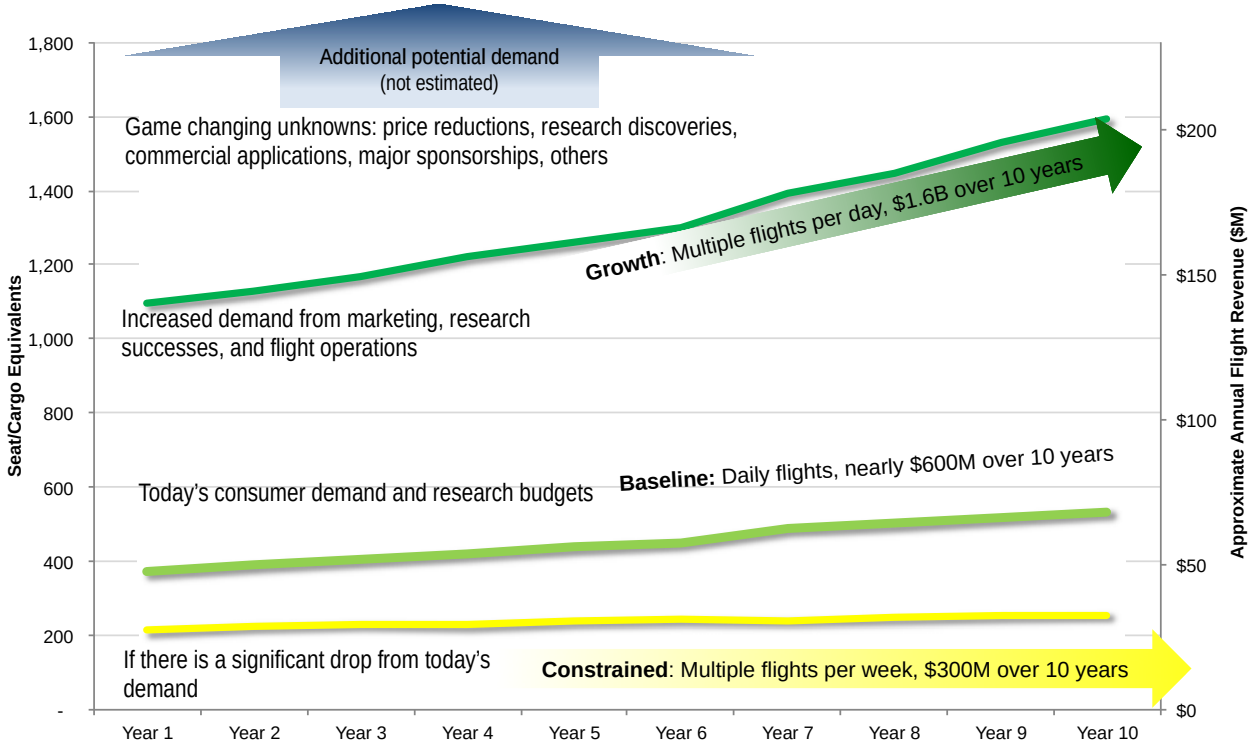
The most recent global forecast for suborbital reusable vehicles (SRVs) was completed in July 2012. A report prepared by the Tauri Group for the FAA and Space Florida covered a 10-year period that estimated demand once new suborbital vehicles begin flying. The goal of the study was to provide information for government and industry decision makers on the emerging SRV market by analyzing trends and areas of uncertainty in eight distinct markets SRVs could address. The eight markets include: Commercial Human Spaceflight, Basic and Applied Research, Aerospace Technology Test and Demonstration, Media and Public Relations, Education, Satellite Deployment, Remote Sensing, and Point-to-Point Transportation. The forecast includes three demand scenarios: baseline, growth, and constrained. Instead of flights, the forecast estimates seat demand. The demand is either for one seat for a single occupant or a cargo equivalent of 3.3 lockers (based on the size of mid-deck lockers used aboard the Space Shuttle).

Total projected demand for SRVs, across all eight markets, is estimate to begin at around 373 seat/cargo equivalents in Year 1 and increasing to 533 seat/cargo equivalents in the tenth year of the baseline case. Year 1 represents the first year of regular SRV operations. Demand under the growth scenario, which reflects increases due to factors such as marketing, research successes, and flight operations, grows from about 1,100 to more than 1,500 seat/cargo equivalents over ten years. The constrained scenario, which reflects significantly reduced consumer spending and government budgets, shows demand from about 213 to 255 seat/cargo equivalents per year.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Baseline Scenario	373	390	405	421	438	451	489	501	517	533	4,518
Growth Scenario	1,096	1,127	1,169	1,223	1,260	1,299	1,394	1,445	1,529	1,592	13,134
Constrained Scenario	213	226	232	229	239	243	241	247	252	255	2,378

Total projected demand for suborbital reusable vehicles by seat/cargo equivalents

Demand for SRVs is dominated by Commercial Human Spaceflight. The analysis indicates that about 8,000 high net worth individuals from across the globe are sufficiently interested and have spending patterns likely to result in the purchase of a suborbital flight. The second largest area of demand is Basic and Applied Research, funded primarily by government agencies, and also by research for not-for-profits, universities, and commercial firms. Aerospace Technology Test and Demonstration, Education, Satellite Deployment, and Media and PR generate the remaining demand. The Remote Sensing and Point-to-Point Transportation markets are not forecasted to drive launches at this time.



10-year Suborbital Reusable Vehicle demand forecast

For more details, see the *Suborbital Reusable Vehicles: A 10-Year Forecast of Market Demand* report available online at:
http://www.faa.gov/about/office_org/headquarters_offices/ast/reports_studies/forecasts/

Some companies have announced plans to begin operational suborbital flights carrying people in 2014.

RISKS TO THE FORECASTS

The forecasts in this document are forecasts of aviation demand, driven by models built on forecasts of economic activity. There are many assumptions in both the economic forecasts and in the FAA models that could impact the degree to which these forecasts are realized. This year's forecast is driven, at least in the short-term, by a number of factors including the strength of the economic recovery and any impact resulting from the U.S. government fiscal situation. Also, as numerous incidents in the past few years (like the attempted bombing of a Northwest airliner on Christmas Day 2009, the discovery of multiple devices on cargo flights out of Europe in October 2010) remind us, terrorism remains among the greatest risks to aviation growth. Any terrorist incident aimed at aviation would have an immediate and significant impact on the demand for aviation services that would be greater than its impact on overall economic activity.

Although oil prices remained high in 2013, there is still considerable uncertainty as to the level of oil prices once the economic recovery is on firmer ground. The FAA's baseline forecast (derived from economic assumptions in IHS Global Insight's 30-Year Focus released during the fourth quarter of 2013) calls for decreases in oil prices until 2015. These are relatively modest, with the price of oil approaching $92/barrel by 2015 and then gradually increasing thereafter, approaching $139/barrel by the end of the forecast period in 2034. Some forecasters are calling for a much sharper increase in the price of oil. The U.S. Energy Information Administration (EIA) in its 2014 Annual Energy Outlook projects oil prices to remain between $90 and $100/barrel through 2018 and then rising steadily over the next 16 years, approaching $185 per barrel in 2034. While lower oil prices give consumers an impetus for additional spending, including air travel, and enhance industry profitability, higher oil prices could lead to further shifts in consumer expenditures away from aviation, dampening a recovery in air transport demand. Furthermore, while the industry has demonstrated its ability to generate sustained profits at $100/bbl oil, a $20/bbl increase in the price of oil would eliminate the industry's $9.5 billion net profit in FY 2013. Over the long run higher oil prices will put increasing pressure on airline costs, delay balance sheet improvements and discourage expansion plans or orders for new aircraft as carriers focus on maintaining and increasing cash balances.

The baseline forecast assumes that global economic growth will accelerate, over the next few years, but weakness in certain areas may threaten the strength and sustainability of the expansion. The baseline forecast assumes that growth in the emerging market economies will be significantly higher than in the other large economies, in particular the U.S., Japan and the European Union. While economic growth appears to be picking up in the U.S., there are concerns about the strength of demand in Japan and in the European Union as these areas continue to be constrained by structural economic problems and institutional constraints. In addition, many countries in the European Union are still grappling with the impacts of fiscal austerity policies, aimed at reducing government spending and debt, implemented during the past three years which have prolonged the regional downturn. Furthermore the steps that were taken to resuscitate the global economy may prove to be excessive, since the resulting

surge in liquidity growth may cause asset bubbles and exacerbate existing global imbalances. The current forecasts assume strong passenger growth for travel between the United States and other world regions. Any slowing of worldwide economic activity could seriously inhibit the growth in global passenger demand.

With the merger of American Airlines and US Airways completed, the outlook for further consolidation via mergers and acquisitions (M&A) appears to be rather limited. Based on FY 2013 data, the Big 3 (American, Delta, and United) plus Southwest accounted for almost 77% of the U.S. airline industry capacity and traffic. Of the network carriers, only Alaska remains independent, although it does have code share agreements with both American and Delta. In the low cost carrier sector, the merger between Southwest and AirTran is progressing at a steady pace as the carriers are on track to have full integration of the fleet and a single ticketing system by the end of 2014. Aside from Southwest and AirTran, there appears to be little scope for further consolidation as there are significant obstacles. In particular the financial situation of many low cost carriers limits the possibilities of additional merger activity. For many low cost carriers, the sheer size of merger transactions or the amount of financial risk associated with a merger makes further merger activity unlikely. However, U.S. airlines are continuing to explore other options including global alliances. Many of the major carriers in the U.S. are members of global alliances that operate with some measure of anti-trust immunity from the U.S. DOT. While anti-trust immunity may provide flexibility for airline operators across borders, it may create an anti-competitive environment in the marketplace. These market consolidating vehicles, particularly the anti-trust immunity provisions, may invite increased regulatory scrutiny. If such oversights are launched in the future, this will complicate the evolving structure of the airline industry and may impact demand via new regulations.

The forecast assumes the addition of sizable numbers of large regional jets (70 to 90 seats) into the fleet of regional carriers. However, the regional carriers' future is closely linked to those of the larger network carriers. As demand continues to slowly recover, financial pressures on regional operators have increased. Furthermore, as consolidation has occurred among the network carriers, many regional carriers have found themselves either saddled with excess capacity or lack of sufficient capacity, or lack of feed traffic. The network carriers continue to make adjustments to the size and breadth of their networks, without providing opportunities for regional carriers to backfill the loss of the mainline service. Delta is well along in its plans to reduce its small (read 50 seat) regional jet fleet and United and the new American Airways have indicated that they will also be moving ahead with plans to bring down the number of 50 seat regional jets flown by their regional partners. While these actions may provide some opportunities for well positioned regional carriers, the overall impact of consolidation so far has been to reduce opportunities for regional flying substantially.

After suffering through a significant downturn in 2009, business and corporate aviation have seen a partial recovery during the past four years. The pace of the recovery in business and corporate aviation is largely based upon the future prospects of economic growth and corporate profits. Future uncertainty in these leading indicators could pose a risk to the forecast, but the risk is not limited to these factors. Public perception of business and corporate aviation, potential environmental regulations and taxes, along with increased security measures placed on business jets, will place downward pressure on the forecast. On the other hand, while corporate profits are currently high, perceived economic and political uncertainties are causing companies to postpone their purchase of new business aircraft. Translation of this

pent-up demand into sales of business jets in the near future can create an upward impact on the forecast.

Other factors, such as new and more efficient product offerings and increased competition from new entrant manufacturers, serve to broaden the potential of the industry. Estimates show that a record number of new business jets are delivered overseas and, with the potential easing of regulations on the use of airspace in foreign countries, the scenario for business jet manufacturers looks all the more promising. Raising the level of security restrictions, and the subsequent travel hassles placed on airline passengers, could make corporate jet travel look increasingly appealing.

Not only is the volume of aircraft operating at most large hubs expected to increase over the next 20 years, but the mix of aircraft is changing for this same period. The expected increases in the numbers of regional jets and business jets will increase the impact on the national airspace system and make the FAA's job more challenging. This change in the mix of aircraft will impact workload strictly due to the increasing demand for aviation services projected over the forecast period.

Although overall activity at FAA and contract towers fell in 2013, activity at a number of the largest airports increased in 2013 and delays remained at historically high levels at many U.S. airports. As demand recovers and workload increases, congestion and delays could become a critical limit to growth over the forecast period. FAA's forecasts of both demand and operations are unconstrained in that they assume that there will be sufficient infrastructure to handle the projected levels of activity. Should the infrastructure be inadequate and result in even more congestion and delays, it is likely that the forecasts of both demand and operations would not be achieved.

There are concerns that aviation's impact on the environment could potentially restrict the ability of the aviation sector to grow to meet national economic and mobility needs. Airport expansion or new construction is often a contentious issue because of noise, air quality, and water quality concerns. There is also an ongoing effort to address the climate impacts of aviation. Aviation currently accounts for 2 to 3 percent of global carbon emissions, but this percentage is expected to increase with the growth in operations unless mitigated with new technology, renewable fuels, operational improvements and market based measures. While certain measures to address climate impacts can result in reduced costs, such as increased fuel efficiency, other measures, such as market instruments could pose additional constraints on growth. Energy concerns are also rising, driven by spikes in fuel prices, supply and security issues, and concerns about fossil fuel emissions contributing to global climate change. Lack of progress in improving the environmental and energy outlook for the future fleet may result in more restrictions via standards or operating limitations on the fleet in service which in turn may depress growth. By contrast, breakthroughs in quieter, cleaner aircraft technologies and renewable fuels could reduce environmental and energy constraints on the forecast, and enable sustainable growth.

APPENDIX A: ALTERNATIVE FORECAST SCENARIOS

Uncertainty exists in all industries, but especially in the commercial air travel industry. As volatility in the global environment has increased, the importance of scenarios for planning purposes has increased. In order to help stakeholders better prepare for the future, the FAA has begun to provide alternative scenarios to our baseline forecasts of airline traffic and capacity.

To create the baseline domestic forecast, economic assumptions for both U.S. and international regions from IHS Global Insight's 30-Year Focus (released in the fourth quarter 2013) were used to generate enplanements, mainline real yield and nominal yield. To develop the alternative scenarios, assumptions from the optimistic and pessimistic scenarios contained in IHS Global Insight's 10 year alternatives from their January 2014 U.S. forecast were used. Inputs from these scenarios were substituted for the baseline scenario inputs to create a "high" and "low" traffic, capacity, and yield forecast.

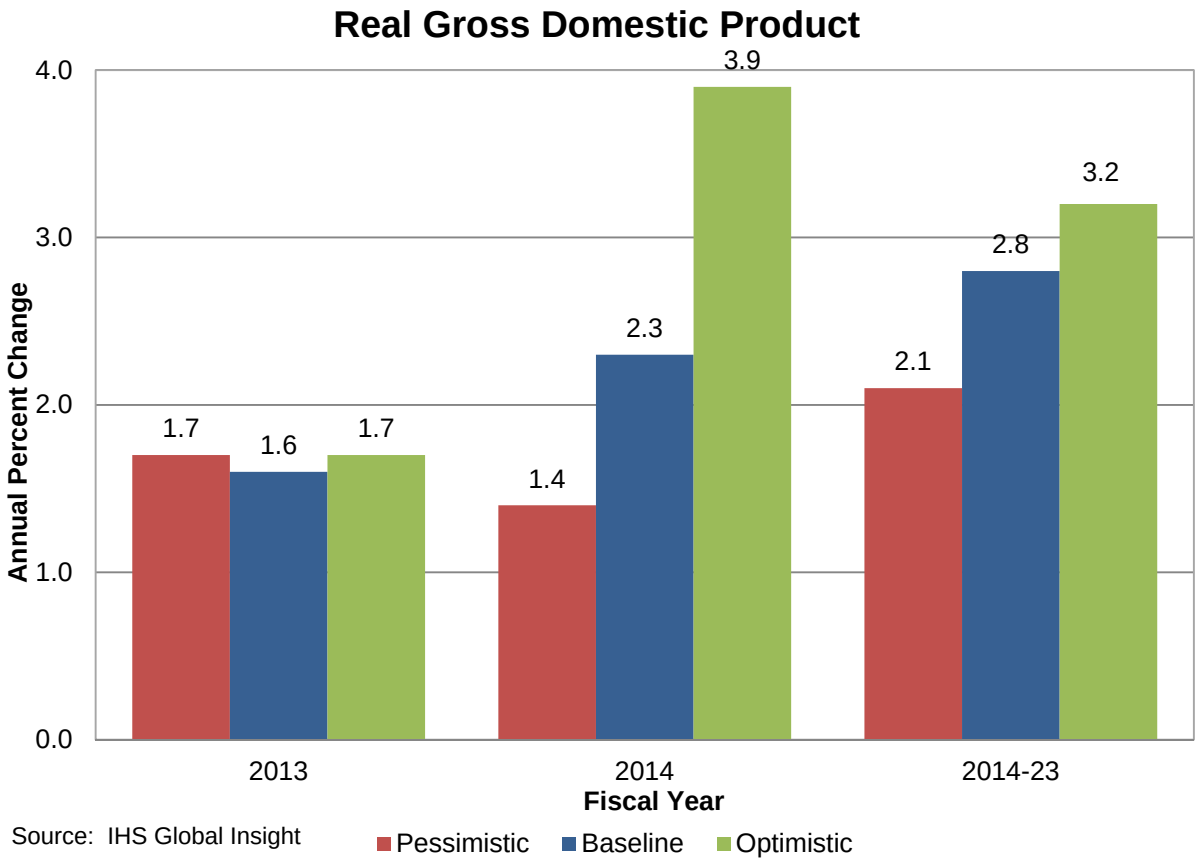
International passengers and traffic are primarily determined by country specific Gross Domestic Product (GDP) provided by IHS Global Insight. Thus, the baseline forecast of GDP for both the U.S. and international regions is modified using the optimistic and pessimistic forecasts of GDP described above in order to create a high and low case. Since only the ten year alternative GDP forecasts by Global Insight were available at the time of this analysis, both the domestic and international optimistic and pessimistic scenarios extend to 2023 only.[15]

Scenario Assumptions

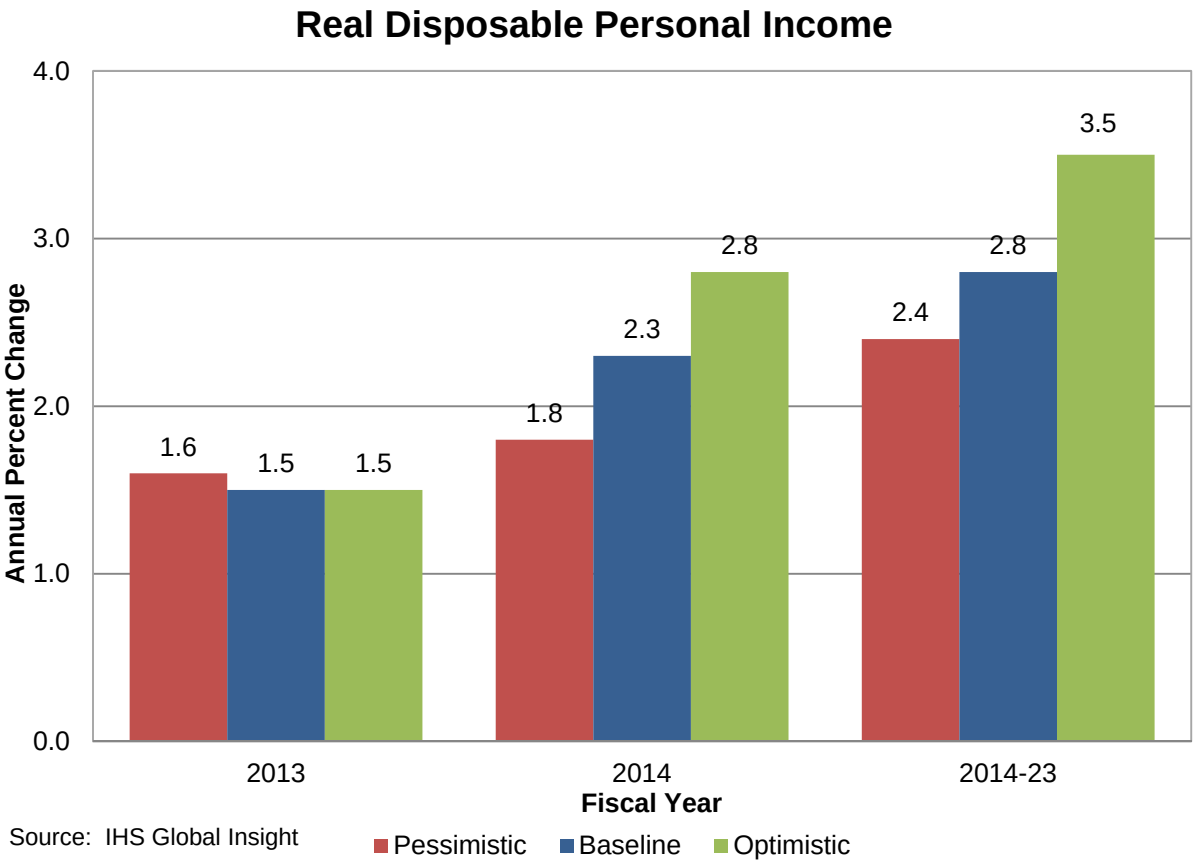
The FAA's baseline forecast assumes that the economy recovers from the current downturn and suffers no major mishaps such as large oil price shocks, swings in macroeconomic policy, or financial meltdowns. The FAA's high case forecast uses IHS Global Insight's optimistic forecast. The optimistic forecast sees improved business confidence leading to renewed vigor in the labor market and sustained improvements in the housing sector leading to a stronger economy. A credible plan to tackle sovereign-debt issues in Europe is enacted, and policy decisions in both Europe and China boost the global economic outlook. In this scenario GDP and real disposable income (DI) growth are about 0.4 and 0.7 percentage points, respectively, faster per year than the baseline forecast and unemployment averaging 1.5 points lower on an annual basis than the baseline (Real DI and unemployment are used as an input variables to the FAA's base, high and low forecasts of enplanements). Conversely, FAA's low case forecast uses IHS Global Insight's pessimistic scenario. In the pessimistic forecast, the combination of continued fiscal tightening and a weak global outlook combine to stall U.S. economic growth. In

[15] IHS Global Insight, Short-term macro forecast – baseline and alternatives, released January 4, 2014.

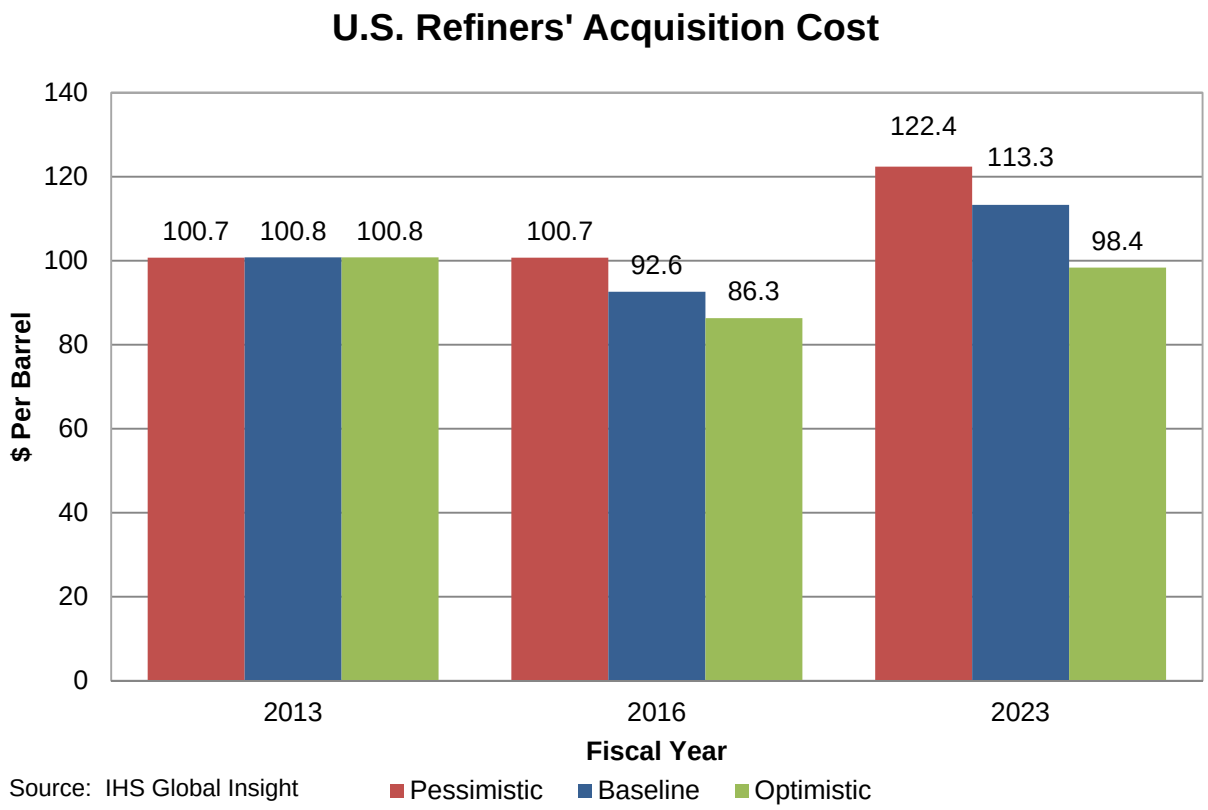
the U.S. debt-ceiling induced spending cuts take a chunk out of economic growth. The sovereign-debt crisis in Europe intensifies pushing Europe back into recession which reduces the demand for U.S. exports. As the private sector cuts back, unemployment rises and housing activity begins to slow. The U.S. economy barely avoids recession in 2014 and has sub-par growth in 2015. In this scenario, GDP and real DI grow 0.7 and 0.4 percentage points, respectively, slower per year than in the baseline, and unemployment, on average, is 1.4 points higher on an annual basis than in the baseline.



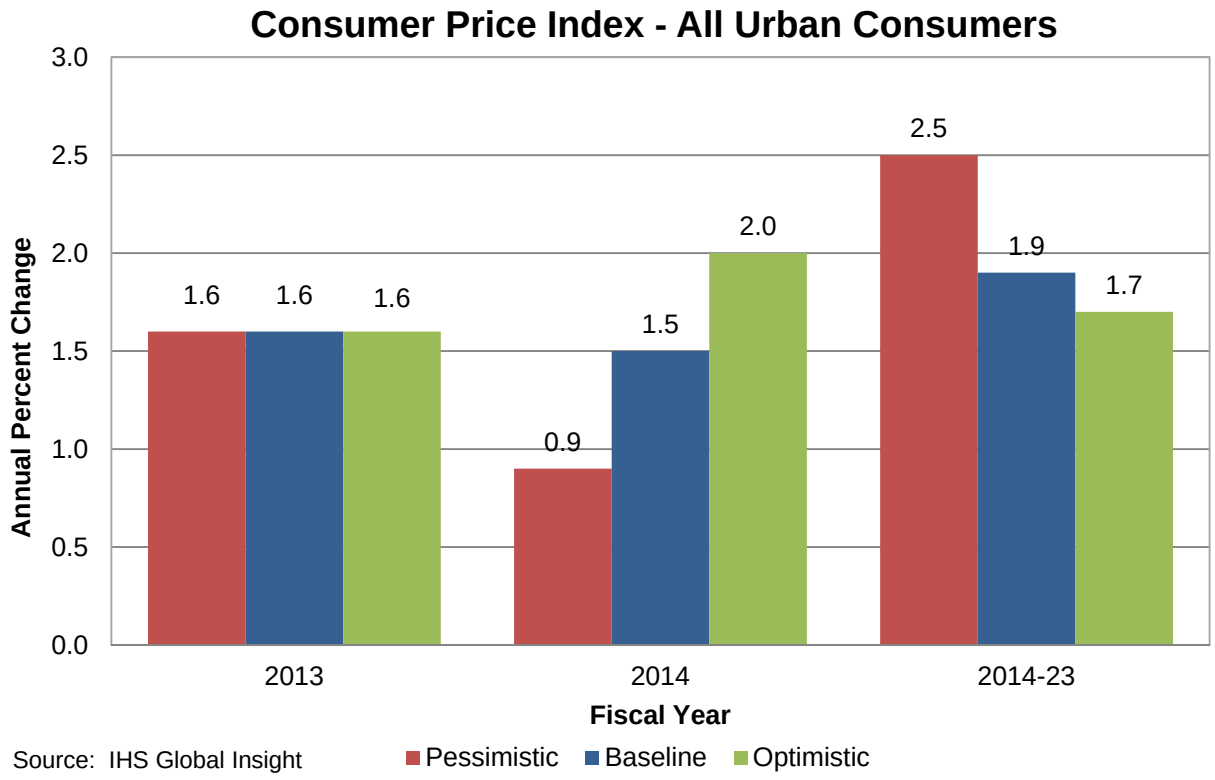
Source: IHS Global Insight


Real Disposable Personal Income
4.0
3.0
2.0
1.0
0.0
Annual Percent Change
1.6
1.5
1.5
1.8
2.3
2.8
2.4
2.8
3.5
2013
2014
2014-23
Fiscal Year
Source: IHS Global Insight
Pessimistic
Baseline
Optimistic

Oil prices affect the supply of and demand for air travel and have a direct impact on the profitability of the industry. In all three forecast scenarios prices fall over the next few years. In the baseline forecast, technological improvements act as a counterbalance to partially offset rising prices. In the baseline, the refiners acquisition cost (RAC) of oil increases 12.4 percent between 2013 and 2023, rising from $101 to $113 per barrel. In the optimistic case, the price of oil (RAC) decreases at a faster pace through 2017 than in the baseline forecast and then rises more slowly thereafter, resulting in a price of $98 per barrel by 2023. The high case is characterized by availability of energy, further gains in technology, and a stronger dollar which help to temper prices compared to the baseline. In the low case forecast, a weaker dollar and lower productivity gains create upward pressure in oil prices after 2015. In this scenario, the RAC rises by 35 percent over its 2015 low to $122 by 2023.



The price of energy is one of the critical drivers in the growth of consumer prices over the forecast period. In the optimistic case the consumer price index (CPI) grows at an average rate of 1.7 percent per year (compared to growth of 1.9 percent annually in the baseline) as energy prices, wages, and import prices grow more slowly than in the baseline. In the pessimistic case forecast the opposite holds with energy prices, wages and import prices rising more rapidly compared to the baseline. As a result, in the pessimistic case, the CPI grows an average of 2.5 percent annually over the forecast period.

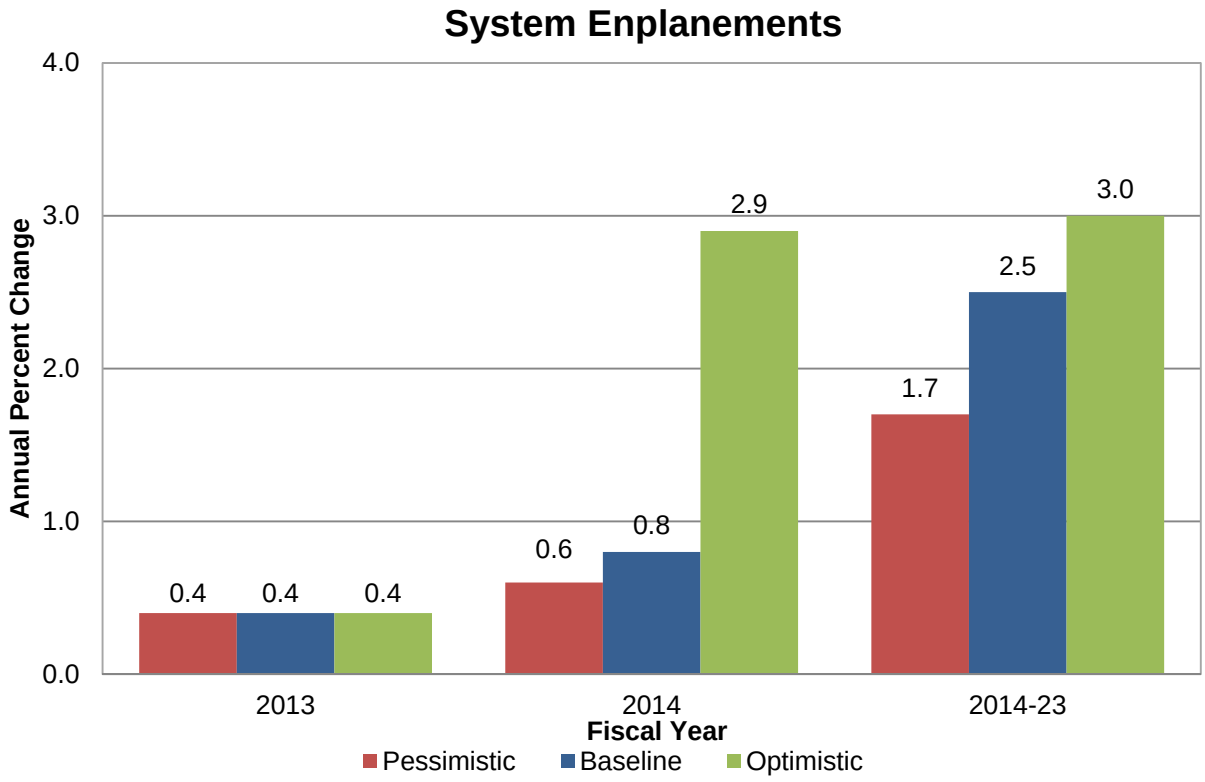


Source: IHS Global Insight

Alternative Forecasts

Passengers

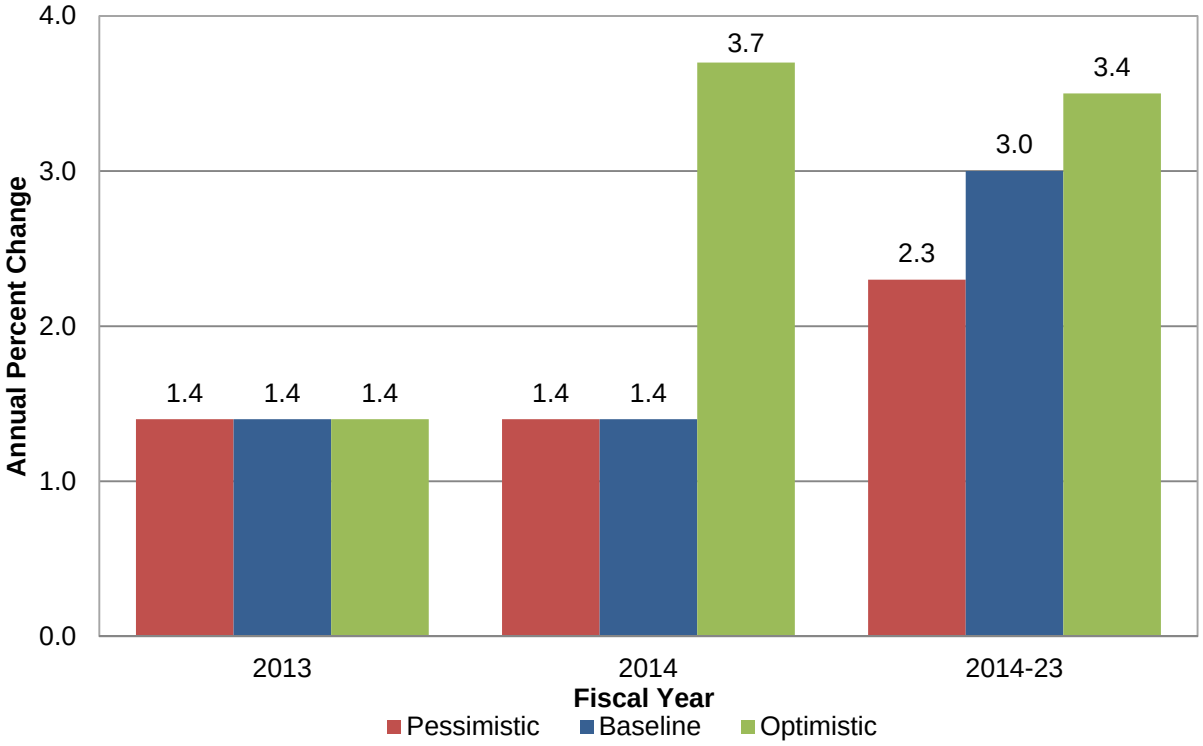
In the baseline forecast, system passengers are forecast to grow at an average annual rate of 2.5 percent a year over the forecast horizon of 2014-2023 (with domestic and international passengers up 2.3 and 4.1 percent, respectively). In the optimistic case, passengers grow at a quicker pace, averaging 3.0 percent per year (up 2.7 percent domestically and 4.6 percent internationally). This scenario is marked by a more favorable business environment, lower inflation, and lower fuel prices which make the price of flying more affordable to business and leisure travelers. By the end of the forecast period in 2023, passengers in the optimistic case are 6.5 percent above the baseline. The pessimistic case is characterized by a period of slow growth in 2014 and 2015 along with weakened consumer confidence brought on by persistent unemployment, higher energy prices, and higher inflation. In this scenario passengers grow an average of 1.7 percent per year (domestic up 1.6 percent and international up 3.0 percent). In the pessimistic case, system passengers in 2023 are 6.6 percent below the baseline case, totaling 868 million, 62 million fewer than in the baseline.



Revenue Passenger Miles

In the baseline forecast, system RPMs grow at an average annual rate of 3.0 percent a year over the forecast horizon, with domestic RPMs increasing 2.4 percent annually and international RPMs growing 4.3 percent annually. In the optimistic case, the faster growing economy coupled with lower energy prices drives RPMs higher than the baseline, with growth averaging 3.4 percent per year (domestic and international RPMs up 2.9 and 4.6 percent, respectively). In the pessimistic case, the combination of a slower growing economy and higher energy prices result in RPM growth averaging 2.3 percent annually with domestic markets growing 1.7 percent a year while international traffic grows 3.4 percent annually.

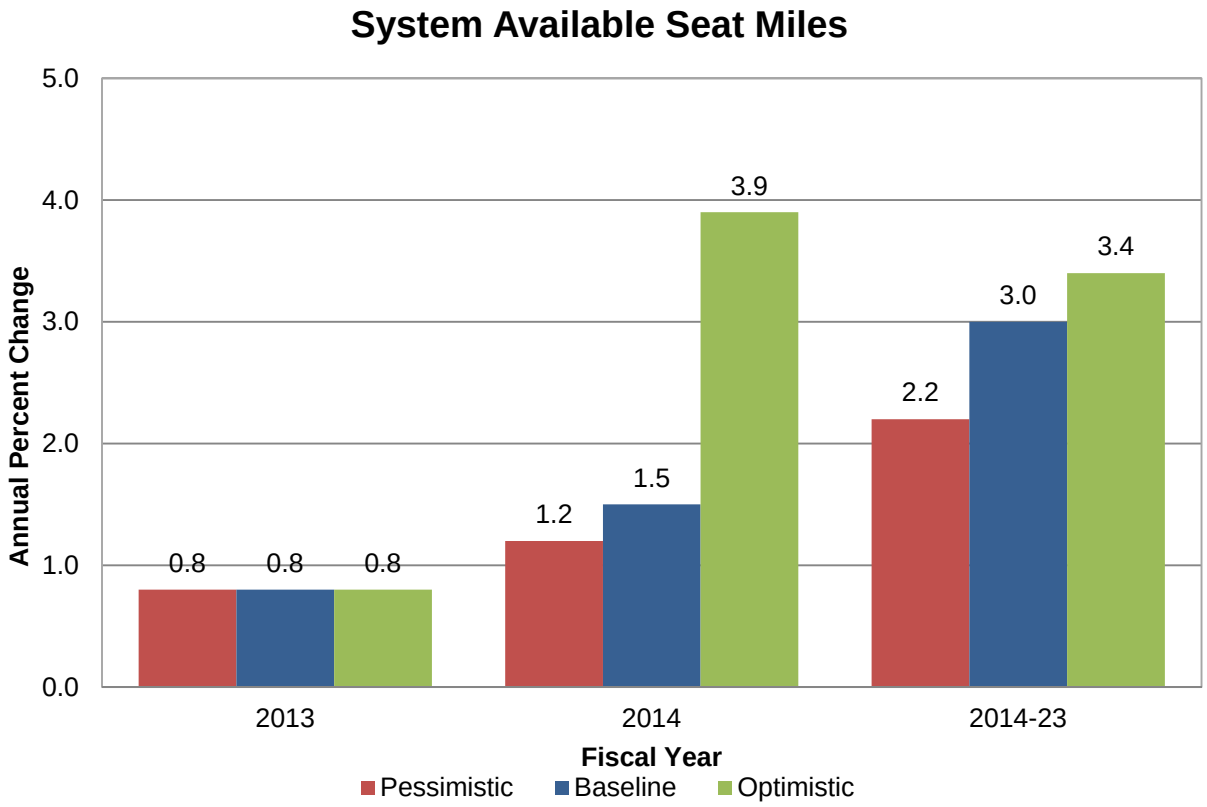
System Revenue Passenger Miles



Available Seat Miles

In the base case, system capacity is forecast to increase an average of 3.0 percent annually over the forecast horizon (with growth averaging 2.3 percent annually in domestic markets and 4.3 percent a year in international markets). In the optimistic case, capacity grows at a faster clip than in the baseline forecast, averaging 3.4 percent annually (up 2.8 percent domestically and up 4.6 percent internationally). Carriers increase capacity compared to the baseline forecast to accommodate increased travel demand brought about by a more favorable economic environment and by the end of the forecast horizon, system capacity in the optimistic case is 5.9 percent above the baseline case. In the pessimistic case, demand for air travel is lower than in the baseline, thus system capacity grows at a slower pace of 2.2 percent annually

(domestic growth of 1.6 percent annually and international up 3.4 percent annually). Total system capacity in the pessimistic case in 2023 is 7.0 percent below the baseline and 12.2 percent below the optimistic case.



Load Factor

System load factors over the 10-year forecast period are relatively similar for all three forecast scenarios. In the base case and in the optimistic scenario, system load factor rises from 83.2 percent in 2013 to 83.7 percent in 2023. In the pessimistic scenario, system load factor increases from 83.2 percent in 2013 to 84.0 percent in 2023. In all three scenarios it is assumed that carriers will keep load factors on the high side by actively managing capacity (seats) to more precisely meet demand (passengers). The domestic load factor increases over the forecast horizon from 83.5 percent to 84.4 percent in all three scenarios. The international load factor forecast is slightly different in the three scenarios, reflecting in part the relative growth in demand and capacity in the three (Atlantic, Latin, and Pacific) international regions under each scenario. In the base case, international load factor is relatively steady, going from 82.6 percent in 2013 to 82.5 percent in 2023. In the optimistic scenario, international load factor is lower than in the other scenarios, falling to 82.3 percent by 2023, reflecting the faster growth in the relatively lower load factor Latin America market. In the pessimistic scenario, there is more convergence of future growth rates than in either the base case or the optimistic scenario, resulting in international load factor climbing to 83.3 percent by 2023.

Yield

In the baseline forecast, nominal system yield increases 1.4 percent annually, going from 14.27 cents in 2013 to 16.58 cents in 2023. In domestic markets, yield in the baseline forecast rises from 14.08 cents in 2013 to 16.50 cents in 2023, while international yield rises from 14.69 cents in 2013 to 16.73 cents in 2023. System yield rises more slowly in the optimistic case, up 1.2 percent annually to be 16.34 cents at the end of the forecast period. Domestic yield increases to 16.27 cents while international yield increases to 16.48 cents. The slower growth in yield in the high case is due to advancements in technology, gains in productivity, more favorable fuel prices, and lower inflation. Increased competition is also assumed in this scenario. In the domestic market, fares are driven lower than baseline levels due to increased levels of competition between low cost and legacy carriers. In the international market, increased competition from growing liberalization puts downward pressure on fares. In the pessimistic case, nominal yields rise more rapidly than in the baseline, growing an average of 1.6 percent annually, reaching 16.87 cents by 2023 (16.54 cents domestically and 17.50 cents internationally). This scenario reflects higher general inflation and higher energy prices than in the baseline, forcing carriers to increase fares in order to cover the higher costs of fuel, labor, and capital.

TABLE A-1

FAA FORECAST ECONOMIC ASSUMPTIONS

FISCAL YEARS 2013-2023

Variable	Scenario	Historical	FORECAST				PERCENT AVERAGE ANNUAL GROWTH			
		2013E	2014	2015	2019	2023	2013-14	2014-15	2014-19	2014-23
Economic Assumptions										
Real Gross Domestic Product	Pessimistic	15,661	15,876	16,095	17,657	19,187	1.4%	1.4%	2.1%	2.1%
(BIL 09$)	Baseline	15,639	16,002	16,516	18,605	20,442	2.3%	3.2%	3.1%	2.8%
	Optimistic	15,661	16,267	16,981	19,506	21,677	3.9%	4.4%	3.7%	3.2%
Refiners Acquisition Cost -	Pessimistic	100.7	95.4	90.6	114.1	122.4	-5.3%	-5.0%	3.6%	2.8%
Average - $ Per Barrel	Baseline	100.8	98.1	92.5	102.6	113.3	-2.6%	-5.7%	0.9%	1.6%
	Optimistic	100.8	105.9	98.4	90.5	98.4	5.1%	-7.1%	-3.1%	-0.8%
Consumer Price Index	Pessimistic	2.32	2.34	2.38	2.64	2.93	0.8%	1.5%	2.4%	2.5%
All Urban, 1982-84 = 1.0	Baseline	2.32	2.36	2.39	2.58	2.79	1.5%	1.6%	1.8%	1.9%
	Optimistic	2.32	2.37	2.42	2.57	2.76	2.0%	2.0%	1.6%	1.7%
Civilian Unemployment Rate	Pessimistic	7.6	7.3	7.2	7.0	7.1	-0.3	-0.1	-0.1	0.0
(%)	Baseline	7.6	7.3	6.7	5.3	5.2	-0.3	-0.6	-0.4	-0.2
	Optimistic	7.6	6.2	4.8	3.7	4.2	-1.4	-1.4	-0.5	-0.2

Sources: Baseline -IHS Global Insight, 30-Year Focus, September 2013; Optimistic and Pessimistic - IHS Global Insight, U.S. Economic Outlook, January 2014

TABLE A-2

FAA FORECAST OF AVIATION ACTIVITY

FISCAL YEARS 2013-2023

Variable	Scenario	Historical	FORECAST				PERCENT AVERAGE ANNUAL GROWTH			
		2013E	2014	2015	2019	2023	2013-14	2014-15	2014-19	2014-23
System										
Aviation Activity										
Available Seat Miles	Pessimistic	1,002.8	1,014.6	1,034.2	1,122.8	1,230.7	1.2%	1.9%	2.0%	2.2%
(BIL)	Baseline	1,002.8	1,017.8	1,053.4	1,199.6	1,323.7	1.5%	3.5%	3.3%	3.0%
	Optimistic	1,002.8	1,041.5	1,098.3	1,275.8	1,402.2	3.9%	5.5%	4.1%	3.4%
Revenue Passenger Miles	Pessimistic	834.1	845.6	863.3	941.1	1,033.9	1.4%	2.1%	2.2%	2.3%
(BIL)	Baseline	834.1	846.1	877.0	1,002.6	1,108.3	1.4%	3.6%	3.5%	3.0%
	Optimistic	834.1	864.7	913.3	1,065.3	1,173.1	3.7%	5.6%	4.3%	3.4%
Enplanements	Pessimistic	739.3	743.7	756.3	806.8	868.1	0.6%	1.7%	1.6%	1.7%
(MIL)	Baseline	739.3	745.5	771.1	863.8	929.6	0.8%	3.4%	3.0%	2.5%
	Optimistic	739.3	761.1	806.2	925.2	989.9	2.9%	5.9%	4.0%	3.0%
Psgr Carrier Miles Flown	Pessimistic	7,016.3	7,015.5	7,113.7	7,570.8	8,148.3	0.0%	1.4%	1.5%	1.7%
(MIL)	Baseline	7,016.3	7,049.3	7,265.8	8,120.8	8,773.2	0.5%	3.1%	2.9%	2.5%
	Optimistic	7,016.3	7,197.8	7,580.7	8,662.1	9,306.6	2.6%	5.3%	3.8%	2.9%
Psgr Carrier Departures	Pessimistic	9,168.2	9,068.4	9,147.9	9,533.8	9,976.9	-1.1%	0.9%	1.0%	1.1%
(000s)	Baseline	9,168.2	9,107.5	9,345.1	10,185.7	10,544.3	-0.7%	2.6%	2.3%	1.6%
	Optimistic	9,168.2	9,320.0	9,804.3	10,907.3	11,327.4	1.7%	5.2%	3.2%	2.2%
Nominal Passenger Yield	Pessimistic	14.27	14.56	14.74	15.89	16.87	2.0%	1.2%	1.8%	1.6%
(cents)	Baseline	14.27	14.64	14.81	15.72	16.58	2.6%	1.2%	1.4%	1.4%
	Optimistic	14.27	14.71	14.89	15.53	16.34	3.1%	1.2%	1.1%	1.2%

TABLE A-3

FAA FORECAST OF DOMESTIC AVIATION ACTIVITY

FISCAL YEARS 2013-2023

Variable	Scenario	Historical	FORECAST				PERCENT AVERAGE ANNUAL GROWTH			
		2013E	2014	2015	2019	2023	2013-14	2014-15	2014-19	2014-23
Domestic										
Aviation Activity										
Available Seat Miles	Pessimistic	699.6	704.7	712.3	754.6	813.2	0.7%	1.1%	1.4%	1.6%
(BIL)	Baseline	699.6	706.5	727.2	808.7	867.6	1.0%	2.9%	2.7%	2.3%
	Optimistic	699.6	721.3	762.3	868.8	923.2	3.1%	5.7%	3.8%	2.8%
Revenue Passenger Miles	Pessimistic	583.9	587.5	595.2	634.4	686.0	0.6%	1.3%	1.5%	1.7%
(BIL)	Baseline	583.9	589.0	607.6	679.9	731.9	0.9%	3.2%	2.9%	2.4%
	Optimistic	583.9	601.4	636.9	730.4	778.8	3.0%	5.9%	4.0%	2.9%
Enplanements	Pessimistic	654.3	656.4	666.0	705.0	754.4	0.3%	1.5%	1.4%	1.6%
(MIL)	Baseline	654.3	658.1	679.8	755.1	804.0	0.6%	3.3%	2.8%	2.3%
	Optimistic	654.3	671.9	712.7	811.8	856.4	2.7%	6.1%	3.9%	2.7%
Psgr Carrier Miles Flown	Pessimistic	5,599.8	5,580.4	5,628.2	5,895.4	6,274.7	-0.3%	0.9%	1.1%	1.3%
(MIL)	Baseline	5,599.8	5,594.8	5,745.1	6,313.5	6,685.6	-0.1%	2.7%	2.4%	2.0%
	Optimistic	5,599.8	5,714.0	6,026.1	6,792.6	7,127.7	2.0%	5.5%	3.5%	2.5%
Psgr Carrier Departures	Pessimistic	8,554.4	8,451.7	8,514.1	8,838.7	9,219.3	-1.2%	0.7%	0.9%	1.0%
(000s)	Baseline	8,554.4	8,479.7	8,692.7	9,426.6	9,795.4	-0.9%	2.5%	2.1%	1.6%
	Optimistic	8,554.4	8,681.9	9,137.7	10,115.3	10,418.8	1.5%	5.3%	3.1%	2.0%
Nominal Passenger Yield	Pessimistic	14.08	14.47	14.67	15.78	16.54	2.8%	1.4%	1.7%	1.5%
(cents)	Baseline	14.08	14.50	14.69	15.64	16.50	3.0%	1.3%	1.5%	1.4%
	Optimistic	14.08	14.61	14.77	15.44	16.27	3.8%	1.1%	1.1%	1.2%

TABLE A-4

FAA FORECAST OF INTERNATIONAL AVIATION ACTIVITY*

FISCAL YEARS 2013-2023

Variable	Scenario	Historical	FORECAST				PERCENT AVERAGE ANNUAL GROWTH			
		2013E	2014	2015	2019	2023	2013-14	2014-15	2014-19	2014-23
International										
Aviation Activity										
Available Seat Miles	Pessimistic	303.1	309.9	321.9	368.2	417.5	2.2%	3.9%	3.5%	3.4%
(BIL)	Baseline	303.1	311.3	326.2	390.9	456.1	2.7%	4.8%	4.7%	4.3%
	Optimistic	303.1	320.1	336.0	406.9	479.0	5.6%	4.9%	4.9%	4.6%
Revenue Passenger Miles	Pessimistic	250.3	258.1	268.1	306.8	347.9	3.1%	3.9%	3.5%	3.4%
(BIL)	Baseline	250.3	257.2	269.4	322.7	376.4	2.8%	4.8%	4.6%	4.3%
	Optimistic	250.3	263.3	276.4	334.9	394.3	5.2%	5.0%	4.9%	4.6%
Enplanements	Pessimistic	85.1	87.3	90.3	101.8	113.7	2.6%	3.5%	3.1%	3.0%
(MIL)	Baseline	85.1	87.5	91.4	108.6	125.6	2.8%	4.4%	4.4%	4.1%
	Optimistic	85.1	89.2	93.5	113.5	133.5	4.8%	4.8%	4.9%	4.6%
Psgr Carrier Miles Flown	Pessimistic	1,416.5	1,435.1	1,485.5	1,675.4	1,873.8	1.3%	3.5%	3.1%	3.0%
(MIL)	Baseline	1,416.5	1,454.5	1,520.7	1,807.4	2,087.6	2.7%	4.6%	4.4%	4.1%
	Optimistic	1,416.5	1,483.9	1,554.6	1,869.5	2,178.9	4.8%	4.8%	4.7%	4.4%
Psgr Carrier Departures	Pessimistic	613.7	616.7	633.8	695.0	757.5	0.5%	2.8%	2.4%	2.3%
(000s)	Baseline	613.7	627.8	652.3	759.1	857.6	2.3%	3.9%	3.9%	3.5%
	Optimistic	613.7	638.1	666.6	792.0	908.7	4.0%	4.5%	4.4%	4.0%
Nominal Passenger Yield	Pessimistic	14.69	14.78	14.90	16.12	17.50	0.6%	0.8%	1.8%	1.9%
(cents)	Baseline	14.69	14.94	15.08	15.88	16.73	1.7%	0.9%	1.2%	1.3%
	Optimistic	14.69	14.94	15.15	15.72	16.48	1.7%	1.4%	1.0%	1.1%

*Includes mainline and regional carriers.

APPENDIX B: FAA FORECAST ACCURACY

Forecasts, by their nature, have a degree of uncertainty incorporated in them. They involve not only statistical analyses and various scientific methods, but also judgment and reliance on industry knowledge and the forecaster's experience to incorporate industry trends not yet reflected in recent results. The FAA's annual Aerospace Forecast is no exception. Given the volatile nature of the U.S. airline industry, it is not surprising that each year's forecast would contain a certain degree of forecast variance. Therefore, FAA forecasters have tried to build forecast models that give a consistent and predictable pattern of results. Analysts relying on the forecasts produced by the models would then be able to adjust for the predictable variance from actual results.

The table below presents an analysis of the variance from historical results for five key forecast metrics during the FY 2005-2013 forecast period. Although this period has experienced industry upheaval, the FAA's forecast methodology remained consistent during this time. For this reason, inclusion of prior periods in an analysis of forecast variance might lead to inconclusive or inaccurate implications about the accuracy of FAA's current forecast methodology.

The table below contains the mean absolute percent errors for the projected values versus the actual results for U.S. carriers' domestic operations. Each metric has five values showing the relative forecast variance by the number of years in advance the preparation of the forecast took place. For example, the "3 Years" column for ASMs shows that the mean absolute percent error was 8.2 percent for ASM forecasts prepared 3 years in advance. For the period under examination, preparation of the forecasts for FY 2005 through FY 2013 occurred in FY 2004, FY 2005, FY 2006, FY 2007, FY 2008, FY 2009, FY 2010, FY 2011, and FY 2012 respectively.[16]

[16] It should be noted that the first forecasted year for each respective fiscal year is that very same year. Therefore, FY 2003's first forecasted year is FY 2003, and the third forecasted year is FY 2005.

U.S. AIR CARRIERS
DOMESTIC SCHEDULED PASSENGER ACTIVITY
FORECAST EVALUATION

Forecast Variable	Mean Absolute Percent Error (Combined FY 2005 - FY 2013) (Forecast Variance from Actual) Forecast Performed Years Prior to Actual				
	1 Year	2 Years	3 Years	4 Years	5 Years
ASMs	0.8%	4.4%	8.2%	11.3%	17.3%
RPMs	1.0%	3.5%	6.6%	8.6%	12.6%
Passenger Enplanements	0.9%	3.2%	6.5%	8.4%	12.7%
Mainline Yield	3.3%	5.1%	7.4%	8.6%	10.4%
IFR Aircraft Handled*	2.4%	6.3%	9.6%	12.6%	18.0%

*Total - scheduled and nonscheduled commercial plus noncommercial

Presenting forecast variances from actual data in such a manner simplifies a review of longer-term trends. Typically, one would expect the variances to decrease as the forecast year is closer to the year the forecast is prepared. Presenting forecast variances in this way allows an examination of changes in the relative variances by time horizon, signaling when dramatic shifts in accuracy occur.

Examination of the forecast variances reveals several items. First, all the metrics examined show declining variances as the forecast time horizon decreases, as expected. The largest variances were found in the forecasts of ASMs and IFR Aircraft Handled, the variables most directly affected by exogenous events. Second, the ASM forecast variance being larger than the RPM forecast variance indicates a consistent underestimation of load factors, one of the key elements in converting passenger demand into aviation activity. All other things being equal, large variances in forecasts of load factor will lead to large variances in the long-term forecasts of aviation activity, as can been seen in the variances of the IFR aircraft handled forecasts.

Furthermore, ASMs and aircraft handled are becoming increasingly difficult to forecast beyond a relatively short time horizon, as carriers often react to changing market conditions. The relatively large variances in these forecasts beyond two years suggest that carriers have been permanently removing capacity by reducing flights and by changing the mix of aircraft to satisfy demand. In the short term, such capacity reductions can be identified by using advance schedule information. However, the FAA's longer-term forecasts rely on anticipated aircraft deliveries and retirements as well as historic relationships between economic activity and capacity deployed. Given the volatile nature of many of the factors that may influence longer term ASM and aircraft handled forecasts, a simpler approach to projecting ASMs, such as RPMs divided by load factors, may improve the long run accuracy of the ASM and aircraft handled forecasts.

APPENDIX C: ACKNOWLEDGEMENTS

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APPENDIX D: FORECAST TABLES

TABLE 1

U.S. SHORT-TERM ECONOMIC FORECASTS

ECONOMIC VARIABLE	FISCAL YEAR 2013				FISCAL YEAR 2014				FISCAL YEAR 2015			
	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.
Real GDP												
(Billions of 2009$)	15,539.6	15,583.9	15,681.0	15,753.2	15,840.5	15,942.4	16,051.9	16,174.3	16,309.9	16,447.5	16,582.8	16,721.7
Seasonally Adjusted Annual Rate		1.1%	2.5%	1.9%	2.2%	2.6%	2.8%	3.1%	3.4%	3.4%	3.3%	3.4%
Refiners' Acquisition Cost - Average												
(Dollars)	97.29	101.15	99.84	104.87	102.59	98.93	96.31	94.64	93.45	92.72	91.97	92.02
Seasonally Adjusted Annual Rate		16.9%	-5.1%	21.7%	-8.4%	-13.5%	-10.2%	-6.8%	-4.9%	-3.1%	-3.2%	0.2%
Consumer Price Index												
(1982-84 equals 100)	231.3	232.1	232.1	233.6	234.3	235.2	236.2	237.0	237.9	238.9	239.9	241.0
Seasonally Adjusted Annual Rate		1.4%	0.0%	2.7%	1.2%	1.5%	1.6%	1.5%	1.4%	1.8%	1.6%	1.9%

Source: IHS Global Insight, 30-Year Focus, Fourth Quarter 2013

TABLE 2

U.S. LONG-TERM ECONOMIC FORECASTS

FISCAL YEAR	GROSS DOMESTIC PRODUCT (Billions 2009$)	DISPOSABLE PERSONAL INCOME (Billions 2009$)	CONSUMER PRICE INDEX (1982-84=100)	REFINERS' ACQUISITION COST AVERAGE (Dollars per barrel)
Historical				
2000	12,477.1	8,803.8	170.74	26.70
2006	14,528.6	10,491.6	200.58	59.95
2007	14,807.4	10,789.6	205.31	60.62
2008	14,939.0	10,958.2	214.41	101.52
2009	14,426.5	10,954.9	213.78	54.68
2010	14,678.8	10,991.4	217.42	74.61
2011	14,977.5	11,286.3	223.10	96.00
2012	15,396.4	11,448.8	228.53	102.81
2013E	15,639.4	11,620.5	232.28	100.79
Forecast				
2014	16,002.3	11,890.5	235.68	98.12
2015	16,515.5	12,298.5	239.42	92.54
2016	17,042.8	12,691.4	243.88	92.61
2017	17,564.5	13,129.6	248.55	95.79
2018	18,084.2	13,553.7	253.26	99.15
2019	18,605.1	13,928.5	258.03	102.61
2020	19,091.1	14,271.8	263.02	105.82
2021	19,540.5	14,573.8	268.23	108.72
2022	19,984.2	14,883.2	273.39	110.97
2023	20,442.3	15,214.5	278.52	113.27
2024	20,935.7	15,589.5	283.92	115.60
2025	21,436.3	15,971.5	289.45	117.70
2026	21,943.8	16,350.8	295.13	119.84
2027	22,462.2	16,730.3	301.18	122.01
2028	22,986.8	17,139.8	307.10	124.21
2029	23,535.3	17,545.7	313.21	126.49
2030	24,096.2	17,954.0	319.49	128.81
2031	24,662.8	18,349.6	326.08	131.23
2032	25,241.9	18,754.1	332.90	133.69
2033	25,848.0	19,171.3	339.95	136.18
2034	26,469.3	19,588.7	347.44	138.71
Avg Annual Growth				
2000-13	1.8%	2.2%	2.4%	10.8%
2013-14	2.3%	2.3%	1.5%	-2.7%
2013-23	2.7%	2.7%	1.8%	1.2%
2013-34	2.5%	2.5%	1.9%	1.5%

Source: IHS Global Insight, 30-Year Focus, Fourth Quarter 2013

TABLE 3

INTERNATIONAL GDP FORECASTS BY TRAVEL REGION

	GROSS DOMESTIC PRODUCT (In Billions of 2005 U.S. Dollars)				
CALENDAR YEAR	CANADA	EUROPE / AFRICA/ MIDDLE EAST	LATIN AMERICA / CARIBBEAN / MEXICO	JAPAN / PACIFIC BASIN / CHINA / OTHER ASIA / AUSTRALIA / NEW ZEALAND	WORLD
Historical					
2000	1,027.2	16,088.7	2,491.0	9,108.0	40,273.8
2006	1,195.1	19,009.8	2,981.4	11,716.9	48,347.8
2007	1,219.1	19,755.0	3,141.9	12,472.6	50,273.9
2008	1,233.4	20,004.7	3,260.7	12,846.5	50,990.8
2009	1,199.9	19,265.9	3,199.5	12,998.9	49,927.3
2010	1,240.4	19,804.6	3,379.6	13,938.9	51,959.3
2011	1,271.8	20,262.7	3,521.3	14,514.8	53,417.3
2012	1,293.5	20,408.2	3,624.1	15,128.7	54,686.2
2013E	1,315.0	20,565.0	3,721.3	15,788.6	55,845.9
Forecast					
2014	1,347.0	20,956.7	3,854.3	16,528.6	57,515.2
2015	1,383.8	21,454.6	4,012.2	17,351.8	59,520.3
2016	1,421.1	22,016.6	4,181.0	18,184.9	61,601.5
2017	1,457.9	22,616.6	4,350.9	19,066.2	63,770.7
2018	1,495.0	23,196.6	4,528.6	19,947.1	65,920.6
2019	1,532.5	23,779.9	4,714.2	20,881.4	68,139.8
2020	1,569.3	24,379.9	4,903.4	21,854.5	70,373.1
2021	1,606.3	24,995.8	5,103.1	22,877.0	72,658.6
2022	1,642.7	25,608.6	5,306.3	23,921.9	74,968.3
2023	1,679.7	26,229.8	5,515.2	24,980.5	77,319.1
2024	1,717.9	26,860.8	5,733.3	26,067.0	79,751.0
2025	1,756.8	27,496.2	5,959.3	27,173.9	82,225.3
2026	1,796.2	28,135.6	6,193.7	28,315.4	84,758.8
2027	1,836.1	28,788.2	6,438.6	29,498.7	87,364.4
2028	1,877.3	29,452.3	6,690.0	30,708.6	90,025.3
2029	1,919.2	30,126.9	6,952.1	31,940.8	92,756.6
2030	1,962.1	30,814.3	7,222.6	33,191.2	95,542.0
2031	2,007.0	31,514.5	7,502.6	34,461.3	98,379.0
2032	2,052.2	32,221.4	7,791.2	35,761.4	101,269.5
2033	2,097.2	32,940.5	8,091.1	37,107.9	104,249.5
2034	2,143.7	33,673.2	8,400.3	38,483.8	107,301.8
Avg Annual Growth					
2000-13	1.9%	1.9%	3.1%	4.3%	2.5%
2013-14	2.4%	1.9%	3.6%	4.7%	3.0%
2013-23	2.5%	2.5%	4.0%	4.7%	3.3%
2013-34	2.4%	2.4%	4.0%	4.3%	3.2%

Source: IHS Global Insight website, GDP Components Tables (Interim Forecast, Monthly), Release date 12 Sept 2013

TABLE 4

INTERNATIONAL GDP FORECASTS – SELECTED AREAS/COUNTRIES

	GROSS DOMESTIC PRODUCT (In Billions of 2005 U.S. Dollars)				
CALENDAR YEAR	NORTH AMERICA (NAFTA)	EUROZONE	UNITED KINGDOM	JAPAN	CHINA
Historical					
2000	13,372.9	9,390.5	2,005.8	4,309.5	1,430.3
2006	15,532.4	10,458.4	2,385.3	4,649.7	2,567.3
2007	15,826.1	10,770.3	2,467.1	4,750.4	2,931.9
2008	15,811.7	10,797.7	2,448.1	4,699.6	3,213.3
2009	15,340.3	10,324.0	2,321.5	4,439.9	3,509.3
2010	15,759.6	10,521.8	2,360.0	4,647.4	3,876.1
2011	16,078.0	10,694.5	2,386.4	4,621.8	4,236.6
2012	16,522.3	10,632.1	2,390.5	4,712.0	4,564.6
2013E	16,787.9	10,580.1	2,425.2	4,803.6	4,917.6
Forecast					
2014	17,234.5	10,658.9	2,484.3	4,888.3	5,307.7
2015	17,808.1	10,791.6	2,546.7	4,951.3	5,745.2
2016	18,375.8	10,956.4	2,613.1	4,997.9	6,192.8
2017	18,941.8	11,147.3	2,676.3	5,076.8	6,645.8
2018	19,502.6	11,328.8	2,738.1	5,132.0	7,106.2
2019	20,069.8	11,509.7	2,799.7	5,181.3	7,611.6
2020	20,592.0	11,698.4	2,863.3	5,229.9	8,136.5
2021	21,093.6	11,894.5	2,927.7	5,278.1	8,691.3
2022	21,596.6	12,084.3	2,991.2	5,325.9	9,257.5
2023	22,113.5	12,276.2	3,055.3	5,373.4	9,827.9
2024	22,666.3	12,471.5	3,119.4	5,420.7	10,405.8
2025	23,230.9	12,664.7	3,184.6	5,468.3	11,014.1
2026	23,809.0	12,860.0	3,250.5	5,515.7	11,647.4
2027	24,395.0	13,056.9	3,318.5	5,562.1	12,311.1
2028	24,991.5	13,256.3	3,386.8	5,607.5	12,990.5
2029	25,618.6	13,455.7	3,456.9	5,651.7	13,683.4
2030	26,261.8	13,656.4	3,529.5	5,694.2	14,387.7
2031	26,916.3	13,861.3	3,604.0	5,735.3	15,101.2
2032	27,579.8	14,065.8	3,679.0	5,775.2	15,830.9
2033	28,266.3	14,269.9	3,754.4	5,813.9	16,592.5
2034	28,973.6	14,476.0	3,830.2	5,851.0	17,367.4
Avg Annual Growth					
2000-13	1.8%	0.9%	1.5%	0.8%	10.0%
2013-14	2.7%	0.7%	2.4%	1.8%	7.9%
2013-23	2.8%	1.5%	2.3%	1.1%	7.2%
2013-34	2.6%	1.5%	2.2%	0.9%	6.2%

Source: IHS Global Insight, GDP Components Tables (Interim Forecast, Monthly), Release date 12 September 2013

TABLE 5

U.S. COMMERCIAL AIR CARRIERS[1]

TOTAL SCHEDULED U.S. PASSENGER TRAFFIC

FISCAL	REVENUE PASSENGER ENPLANEMENTS (Millions)			REVENUE PASSENGER MILES (Billions)		
YEAR	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM
Historical						
2000	641.2	56.4	697.6	512.8	181.8	694.6
2006	668.4	71.6	740.0	582.4	208.5	790.9
2007	690.1	75.3	765.3	600.5	221.2	821.7
2008	680.7	78.3	759.1	594.6	233.8	828.5
2009	630.8	73.6	704.4	548.6	221.3	769.9
2010	635.2	77.4	712.6	555.8	231.0	786.8
2011	650.1	81.0	731.1	572.2	242.5	814.6
2012	653.8	82.9	736.7	577.7	244.6	822.2
2013E	654.3	85.1	739.3	583.9	250.3	834.1
Forecast						
2014	658.1	87.5	745.5	589.0	257.2	846.1
2015	679.8	91.4	771.1	607.6	269.4	877.0
2016	700.0	95.4	795.4	625.9	282.1	908.0
2017	719.1	99.8	818.9	644.0	295.5	939.5
2018	738.2	104.1	842.4	662.9	308.9	971.8
2019	755.1	108.6	863.7	679.9	322.7	1,002.6
2020	769.6	112.9	882.5	694.9	336.0	1,030.8
2021	781.3	117.0	898.4	707.4	349.2	1,056.6
2022	792.3	121.2	913.5	719.3	362.6	1,081.9
2023	804.0	125.6	929.6	731.9	376.4	1,108.3
2024	817.9	130.4	948.2	746.6	391.1	1,137.7
2025	832.3	135.2	967.5	761.9	406.2	1,168.0
2026	846.9	140.3	987.1	777.3	421.7	1,199.0
2027	861.1	145.4	1,006.5	792.4	437.7	1,230.1
2028	876.0	150.8	1,026.7	808.4	454.1	1,262.5
2029	890.5	156.4	1,046.9	824.0	471.2	1,295.2
2030	905.0	162.3	1,067.3	839.8	488.9	1,328.7
2031	919.1	168.3	1,087.3	855.1	507.0	1,362.1
2032	933.2	174.4	1,107.7	870.6	525.6	1,396.1
2033	947.5	180.9	1,128.4	886.2	544.8	1,431.1
2034	961.9	187.6	1,149.5	902.1	564.8	1,466.9
Avg Annual Growth						
2000-13	0.2%	3.2%	0.4%	1.0%	2.5%	1.4%
2013-14	0.6%	2.8%	0.8%	0.9%	2.8%	1.4%
2013-23	2.1%	4.0%	2.3%	2.3%	4.2%	2.9%
2013-34	1.9%	3.8%	2.1%	2.1%	4.0%	2.7%

*Source: Forms 41 and 298-C, U.S. Department of Transportation.

[1] Sum of U.S. Mainline and Regional Air Carriers.

TABLE 6

U.S. COMMERCIAL AIR CARRIERS[1]

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

	DOMESTIC			INTERNATIONAL			SYSTEM		
FISCAL YEAR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR
Historical									
2000	726.6	512.8	70.6	239.3	181.8	76.0	965.9	694.6	71.9
2006	740.2	582.4	78.7	261.3	208.5	79.8	1,001.5	790.9	79.0
2007	752.5	600.5	79.8	275.9	221.2	80.2	1,028.4	821.7	79.9
2008	749.6	594.6	79.3	292.7	233.8	79.9	1,042.4	828.5	79.5
2009	682.5	548.6	80.4	283.3	221.3	78.1	965.8	769.9	79.7
2010	680.0	555.8	81.7	281.3	231.0	82.1	961.3	786.8	81.8
2011	693.5	572.2	82.5	300.4	242.5	80.7	993.9	814.6	82.0
2012	694.4	577.7	83.2	300.5	244.6	81.4	994.9	822.2	82.6
2013E	699.6	583.9	83.5	303.1	250.3	82.6	1,002.8	834.1	83.2
Forecast									
2014	706.5	589.0	83.4	311.3	257.2	82.6	1,017.8	846.1	83.1
2015	727.2	607.6	83.6	326.2	269.4	82.6	1,053.4	877.0	83.3
2016	747.7	625.9	83.7	341.6	282.1	82.6	1,089.3	908.0	83.4
2017	768.0	644.0	83.9	357.9	295.5	82.6	1,125.9	939.5	83.4
2018	789.4	662.9	84.0	374.1	308.9	82.6	1,163.6	971.8	83.5
2019	808.7	679.9	84.1	390.9	322.7	82.5	1,199.6	1,002.6	83.6
2020	825.6	694.9	84.2	407.0	336.0	82.5	1,232.7	1,030.8	83.6
2021	839.8	707.4	84.2	423.1	349.2	82.5	1,262.9	1,056.6	83.7
2022	853.2	719.3	84.3	439.3	362.6	82.5	1,292.5	1,081.9	83.7
2023	867.6	731.9	84.4	456.1	376.4	82.5	1,323.7	1,108.3	83.7
2024	884.4	746.6	84.4	473.9	391.1	82.5	1,358.4	1,137.7	83.8
2025	902.0	761.9	84.5	492.2	406.2	82.5	1,394.2	1,168.0	83.8
2026	919.8	777.3	84.5	511.1	421.7	82.5	1,430.9	1,199.0	83.8
2027	937.3	792.4	84.5	530.5	437.7	82.5	1,467.8	1,230.1	83.8
2028	955.7	808.4	84.6	550.5	454.1	82.5	1,506.2	1,262.5	83.8
2029	973.8	824.0	84.6	571.3	471.2	82.5	1,545.2	1,295.2	83.8
2030	992.1	839.8	84.6	592.8	488.9	82.5	1,585.0	1,328.7	83.8
2031	1,009.8	855.1	84.7	614.9	507.0	82.5	1,624.7	1,362.1	83.8
2032	1,027.9	870.6	84.7	637.4	525.6	82.5	1,665.3	1,396.1	83.8
2033	1,046.1	886.2	84.7	660.8	544.8	82.4	1,706.9	1,431.1	83.8
2034	1,064.5	902.1	84.7	685.1	564.8	82.4	1,749.6	1,466.9	83.8
Avg Annual Growth									
2000-13	-0.3%	1.0%		1.8%	2.5%		0.3%	1.4%	
2013-14	1.0%	0.9%		2.7%	2.8%		1.5%	1.4%	
2013-23	2.2%	2.3%		4.2%	4.2%		2.8%	2.9%	
2013-34	2.0%	2.1%		4.0%	4.0%		2.7%	2.7%	

*Source: Forms 41 and 298-C, U.S. Department of Transportation.

[1]Sum of U.S. Mainline and Regional Air Carriers.

TABLE 7

U.S. COMMERCIAL AIR CARRIERS[1]

TOTAL SCHEDULED U.S. INTERNATIONAL PASSENGER TRAFFIC

	REVENUE PASSENGER ENPLANEMENTS				REVENUE PASSENGER MILES			
FISCAL YEAR	ATLANTIC (Mil)	LATIN AMERICA (Mil)	PACIFIC (Mil)	TOTAL INTERNATIONAL (Mil)	ATLANTIC (Bil)	LATIN AMERICA (Bil)	PACIFIC (Bil)	TOTAL INTERNATIONAL (Bil)
Historical								
2000	20.9	24.3	11.2	56.4	87.1	36.3	58.4	181.8
2006	22.5	35.2	13.9	71.6	93.9	53.6	61.1	208.5
2007	24.1	37.6	13.6	75.3	102.2	57.7	61.4	221.2
2008	26.0	39.1	13.2	78.3	112.7	60.7	60.4	233.8
2009	24.7	36.8	12.0	73.6	108.9	57.7	54.7	221.3
2010	24.5	40.0	12.9	77.4	108.6	63.1	59.2	231.0
2011	25.3	42.2	13.5	81.0	111.7	67.2	63.6	242.5
2012	24.8	44.1	14.0	82.9	107.9	70.3	66.4	244.6
2013E	24.9	45.8	14.4	85.1	107.0	74.6	68.6	250.3
Forecast								
2014	25.6	47.6	14.2	87.5	110.6	78.0	68.6	257.2
2015	26.4	49.9	15.0	91.4	114.6	82.6	72.3	269.4
2016	27.2	52.5	15.7	95.4	118.8	87.4	75.9	282.1
2017	28.1	55.1	16.5	99.8	123.2	92.5	79.8	295.5
2018	29.0	57.9	17.3	104.1	127.6	97.6	83.6	308.9
2019	29.8	60.7	18.1	108.6	132.2	103.0	87.5	322.7
2020	30.7	63.3	18.9	112.9	136.5	108.0	91.4	336.0
2021	31.5	65.8	19.7	117.0	140.9	112.8	95.4	349.2
2022	32.3	68.4	20.5	121.2	145.3	117.8	99.5	362.6
2023	33.1	71.1	21.3	125.6	149.8	123.0	103.6	376.4
2024	34.0	74.1	22.2	130.4	154.6	128.6	107.9	391.1
2025	34.9	77.2	23.1	135.2	159.5	134.4	112.3	406.2
2026	35.8	80.5	24.0	140.3	164.4	140.5	116.8	421.7
2027	36.7	83.8	24.9	145.4	169.5	146.7	121.4	437.7
2028	37.7	87.3	25.8	150.8	174.7	153.2	126.2	454.1
2029	38.6	91.0	26.8	156.4	180.1	160.1	131.0	471.2
2030	39.6	94.8	27.8	162.3	185.7	167.3	136.0	488.9
2031	40.6	98.8	28.8	168.3	191.4	174.6	141.0	507.0
2032	41.7	103.0	29.8	174.4	197.2	182.3	146.1	525.6
2033	42.7	107.3	30.9	180.9	203.2	190.3	151.4	544.8
2034	43.8	111.9	31.9	187.6	209.3	198.6	156.8	564.8
Avg Annual Growth								
2000-13	1.3%	5.0%	2.0%	3.2%	1.6%	5.7%	1.3%	2.5%
2013-14	3.1%	3.8%	-0.9%	2.8%	3.4%	4.5%	-0.1%	2.8%
2013-23	2.9%	4.5%	4.0%	4.0%	3.4%	5.1%	4.2%	4.2%
2013-34	2.7%	4.3%	3.9%	3.8%	3.2%	4.8%	4.0%	4.0%

* Source: Forms 41 and 298-C, U.S. Department of Transportation.

[1]Sum of U.S. Mainline and Regional Air Carriers.

TABLE 8

U.S. AND FOREIGN FLAG CARRIERS

TOTAL PASSENGER TRAFFIC TO/FROM THE UNITED STATES

CALENDAR YEAR	TOTAL PASSENGERS BY WORLD TRAVEL AREA (Millions)				
	ATLANTIC	LATIN AMERICA	PACIFIC	U.S./CANADA TRANSBORDER	TOTAL
Historical					
2000	53.0	40.8	26.2	20.5	140.5
2006	49.8	47.1	26.1	21.0	96.9
2007	53.3	48.6	26.3	21.5	101.1
2008	57.1	49.8	25.8	21.7	104.6
2009	55.0	48.0	24.4	20.2	99.6
2010	55.9	53.1	26.7	21.8	157.5
2011	58.1	57.2	27.8	22.5	165.6
2012	60.8	61.2	30.8	23.1	175.9
2013E	62.7	64.6	32.3	24.0	183.6
Forecast					
2014	64.0	67.5	34.5	24.5	190.4
2015	67.5	70.8	36.7	25.5	200.5
2016	70.9	74.3	38.6	26.4	210.1
2017	74.2	77.8	40.5	27.3	219.8
2018	77.4	81.5	42.4	28.1	229.4
2019	80.7	85.4	44.4	29.0	239.5
2020	84.0	89.4	46.4	30.0	249.9
2021	87.5	93.7	48.5	30.9	260.5
2022	91.0	98.1	50.6	31.9	271.6
2023	94.6	102.7	52.7	32.9	282.9
2024	98.3	107.5	54.8	34.0	294.6
2025	102.1	112.5	57.0	35.1	306.7
2026	106.0	117.7	59.2	36.2	319.1
2027	110.0	123.1	61.5	37.3	331.9
2028	114.1	128.7	63.8	38.5	345.1
2029	118.3	134.6	66.1	39.7	358.7
2030	122.8	140.8	68.5	41.0	373.0
2031	127.4	147.3	70.9	42.3	387.8
2032	132.0	153.9	73.3	43.6	402.9
2033	136.8	160.9	75.7	45.0	418.5
2034	141.8	168.2	78.2	46.5	434.8
Avg Annual Growth					
2000-13	1.3%	3.6%	1.6%	1.2%	2.1%
2013-14	1.9%	4.5%	6.7%	2.2%	3.7%
2013-23	4.2%	4.7%	5.0%	3.2%	4.4%
2013-34	4.0%	4.7%	4.3%	3.2%	4.2%

Source: US Customs & Border Protection data processed and released by Department of Commerce; data also received from Transport Canada.

TABLE 9

U.S. COMMERCIAL AIR CARRIERS' FORECAST ASSUMPTIONS[1]

SEATS PER AIRCRAFT MILE AND PASSENGER TRIP LENGTH

	AVERAGE SEATS PER AIRCRAFT MILE			AVERAGE PASSENGER TRIP LENGTH		
FISCAL YEAR	DOMESTIC (Seats/Mile)	INT'L. (Seats/Mile)	SYSTEM (Seats/Mile)	DOMESTIC (Miles)	INT'L. (Miles)	SYSTEM (Miles)
Historical						
2000	129.3	230.6	145.0	799.8	3,223.2	995.7
2006	120.1	215.0	135.7	871.4	2,911.5	1,068.8
2007	120.4	216.1	136.6	870.2	2,939.0	1,073.7
2008	120.8	218.6	138.2	873.5	2,985.2	1,091.4
2009	121.8	219.0	140.0	869.7	3,008.1	1,093.1
2010	121.8	216.4	139.7	875.0	2,983.6	1,104.0
2011	122.5	216.8	141.1	880.1	2,992.7	1,114.2
2012	123.4	213.9	141.5	883.6	2,949.6	1,116.1
2013E	124.9	214.0	142.9	892.4	2,942.2	1,128.2
Forecast						
2014	126.3	214.1	144.4	895.0	2,940.3	1,134.9
2015	126.6	214.5	145.0	893.8	2,949.0	1,137.3
2016	126.9	214.9	145.6	894.2	2,955.6	1,141.5
2017	127.3	215.4	146.3	895.5	2,961.7	1,147.3
2018	127.7	215.8	147.0	897.9	2,966.3	1,153.6
2019	128.1	216.3	147.7	900.4	2,970.4	1,160.8
2020	128.5	216.8	148.5	902.9	2,976.4	1,168.1
2021	128.9	217.4	149.3	905.4	2,983.7	1,176.1
2022	129.3	217.9	150.1	907.9	2,990.4	1,184.3
2023	129.8	218.5	150.9	910.4	2,996.2	1,192.2
2024	130.2	219.0	151.7	912.8	3,000.2	1,199.8
2025	130.6	219.5	152.4	915.3	3,003.6	1,207.2
2026	131.1	220.0	153.2	917.8	3,006.5	1,214.6
2027	131.5	220.5	153.9	920.3	3,009.2	1,222.2
2028	131.9	221.0	154.7	922.9	3,011.4	1,229.6
2029	132.4	221.4	155.5	925.3	3,012.5	1,237.2
2030	132.8	221.9	156.3	927.9	3,012.9	1,244.9
2031	133.2	222.3	157.0	930.4	3,013.0	1,252.7
2032	133.7	222.8	157.8	932.9	3,012.8	1,260.4
2033	134.1	223.2	158.6	935.4	3,011.9	1,268.2
2034	134.6	223.6	159.4	937.9	3,010.4	1,276.1

*Source: Forms 41 and 298-C, U.S. Department of Transportation.

[1]Sum of U.S. Mainline and Regional Air Carriers.

TABLE 10

U. S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER TRAFFIC

FISCAL YEAR	REVENUE PASSENGER ENPLANEMENTS (Millions)			REVENUE PASSENGER MILES (Billions)		
	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM
Historical						
2000	561.5	53.3	614.8	490.0	181.0	670.9
2006	516.2	68.1	584.4	513.9	206.8	720.7
2007	533.9	71.9	605.7	529.9	219.5	749.4
2008	521.6	74.8	596.5	521.3	231.9	753.3
2009	476.8	71.0	547.8	478.2	220.0	698.2
2010	473.6	74.7	548.3	480.7	229.6	710.4
2011	488.4	78.6	567.0	496.7	241.2	737.9
2012	494.8	79.9	574.6	503.3	242.7	746.1
2013E	498.8	82.2	581.0	510.9	248.4	759.3
Forecast						
2014	500.6	84.5	585.2	514.7	255.3	770.0
2015	517.2	88.3	605.5	530.6	267.4	798.1
2016	532.6	92.3	624.9	546.4	280.0	826.5
2017	547.2	96.6	643.8	562.0	293.4	855.4
2018	561.8	100.9	662.6	578.4	306.7	885.1
2019	574.6	105.3	679.9	593.1	320.4	913.5
2020	585.7	109.5	695.1	606.1	333.7	939.7
2021	594.7	113.6	708.2	616.9	346.8	963.7
2022	603.0	117.7	720.8	627.1	360.2	987.3
2023	612.0	122.1	734.0	638.1	373.9	1,012.0
2024	622.6	126.7	749.3	650.7	388.6	1,039.3
2025	633.6	131.5	765.2	663.9	403.6	1,067.5
2026	644.8	136.5	781.3	677.3	419.1	1,096.3
2027	655.6	141.6	797.2	690.4	435.0	1,125.3
2028	667.0	146.9	813.9	704.1	451.3	1,155.4
2029	678.1	152.5	830.6	717.6	468.4	1,186.0
2030	689.2	158.3	847.5	731.3	486.0	1,217.3
2031	699.9	164.2	864.1	744.4	504.0	1,248.5
2032	710.7	170.3	881.0	757.8	522.5	1,280.3
2033	721.6	176.7	898.2	771.3	541.7	1,313.0
2034	732.5	183.3	915.9	785.0	561.6	1,346.5
Avg Annual Growth						
2000-13	-0.9%	3.4%	-0.4%	0.3%	2.5%	1.0%
2013-14	0.4%	2.9%	0.7%	0.7%	2.8%	1.4%
2013-23	2.1%	4.0%	2.4%	2.2%	4.2%	2.9%
2013-34	1.8%	3.9%	2.2%	2.1%	4.0%	2.8%

*Source: Form 41, U.S. Department of Transportation.

TABLE 11

U.S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

	DOMESTIC			INTERNATIONAL			SYSTEM		
FISCAL YEAR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR
Historical									
2000	688.3	490.0	71.2	238.0	181.0	76.0	926.2	670.9	72.4
2006	648.7	513.9	79.2	258.9	206.8	79.9	907.6	720.7	79.4
2007	659.0	529.9	80.4	273.4	219.5	80.3	932.4	749.4	80.4
2008	650.2	521.3	80.2	290.1	231.9	80.0	940.3	753.3	80.1
2009	587.8	478.2	81.4	281.5	220.0	78.2	869.3	698.2	80.3
2010	581.5	480.7	82.7	279.5	229.6	82.2	861.0	710.4	82.5
2011	594.4	496.7	83.6	298.6	241.2	80.8	893.0	737.9	82.6
2012	598.7	503.3	84.1	297.9	242.7	81.5	896.6	746.1	83.2
2013E	606.6	510.9	84.2	300.7	248.4	82.6	907.3	759.3	83.7
Forecast									
2014	611.3	514.7	84.2	308.9	255.3	82.7	920.2	770.0	83.7
2015	628.6	530.6	84.4	323.6	267.4	82.6	952.2	798.1	83.8
2016	645.9	546.4	84.6	338.9	280.0	82.6	984.9	826.5	83.9
2017	663.1	562.0	84.8	355.2	293.4	82.6	1,018.3	855.4	84.0
2018	681.4	578.4	84.9	371.3	306.7	82.6	1,052.7	885.1	84.1
2019	697.8	593.1	85.0	388.0	320.4	82.6	1,085.8	913.5	84.1
2020	712.2	606.1	85.1	404.1	333.7	82.6	1,116.3	939.7	84.2
2021	724.2	616.9	85.2	420.1	346.8	82.6	1,144.3	963.7	84.2
2022	735.6	627.1	85.3	436.3	360.2	82.5	1,171.9	987.3	84.3
2023	747.8	638.1	85.3	453.1	373.9	82.5	1,200.8	1,012.0	84.3
2024	762.1	650.7	85.4	470.8	388.6	82.5	1,232.9	1,039.3	84.3
2025	777.1	663.9	85.4	489.1	403.6	82.5	1,266.1	1,067.5	84.3
2026	792.2	677.3	85.5	507.9	419.1	82.5	1,300.1	1,096.3	84.3
2027	807.1	690.4	85.5	527.2	435.0	82.5	1,334.4	1,125.3	84.3
2028	822.9	704.1	85.6	547.1	451.3	82.5	1,370.0	1,155.4	84.3
2029	838.2	717.6	85.6	567.9	468.4	82.5	1,406.1	1,186.0	84.3
2030	853.9	731.3	85.6	589.3	486.0	82.5	1,443.2	1,217.3	84.3
2031	868.9	744.4	85.7	611.3	504.0	82.5	1,480.2	1,248.5	84.3
2032	884.2	757.8	85.7	633.7	522.5	82.4	1,518.0	1,280.3	84.3
2033	899.7	771.3	85.7	657.1	541.7	82.4	1,556.7	1,313.0	84.3
2034	915.3	785.0	85.8	681.3	561.6	82.4	1,596.6	1,346.5	84.3
Avg Annual Growth									
2000-13	-1.0%	0.3%		1.8%	2.5%		-0.2%	1.0%	
2013-14	0.8%	0.7%		2.7%	2.8%		1.4%	1.4%	
2013-23	2.1%	2.2%		4.2%	4.2%		2.8%	2.9%	
2013-34	2.0%	2.1%		4.0%	4.0%		2.7%	2.8%	

* Source: Form 41, U.S. Department of Transportation.

TABLE 12

U.S. MAINLINE AIR CARRIERS

SCHEDULED INTERNATIONAL PASSENGER ENPLANEMENTS

FISCAL YEAR	REVENUE PASSENGER ENPLANEMENTS (MIL)			
	ATLANTIC	LATIN AMERICA	PACIFIC	TOTAL
Historical				
2000	20.9	21.2	11.2	53.3
2006	22.5	31.7	13.9	68.1
2007	24.1	34.2	13.6	71.9
2008	26.0	35.6	13.2	74.8
2009	24.7	34.3	12.0	71.0
2010	24.5	37.2	12.9	74.6
2011	25.3	39.8	13.5	78.6
2012	24.8	41.0	14.0	79.9
2013E	24.9	43.0	14.4	82.2
Forecast				
2014	25.6	44.7	14.2	84.5
2015	26.4	46.9	15.0	88.3
2016	27.2	49.4	15.7	92.3
2017	28.1	51.9	16.5	96.6
2018	29.0	54.6	17.3	100.9
2019	29.8	57.3	18.1	105.3
2020	30.7	59.9	18.9	109.5
2021	31.5	62.4	19.7	113.6
2022	32.3	64.9	20.5	117.7
2023	33.1	67.6	21.3	122.1
2024	34.0	70.5	22.2	126.7
2025	34.9	73.5	23.1	131.5
2026	35.8	76.7	24.0	136.5
2027	36.7	80.0	24.9	141.6
2028	37.7	83.4	25.8	146.9
2029	38.6	87.0	26.8	152.5
2030	39.6	90.8	27.8	158.3
2031	40.6	94.8	28.8	164.2
2032	41.7	98.8	29.8	170.3
2033	42.7	103.1	30.9	176.7
2034	43.8	107.6	31.9	183.3
Avg Annual Growth				
2000-13	1.3%	5.6%	2.0%	3.4%
2013-14	3.1%	3.9%	-0.9%	2.8%
2013-23	2.9%	4.6%	4.0%	4.0%
2013-34	2.7%	4.5%	3.9%	3.9%

* Source: Form 41, U.S. Department of Transportation.

TABLE 13

U.S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS BY INTERNATIONAL TRAVEL REGIONS

	ATLANTIC			LATIN AMERICA			PACIFIC			INTERNATIONAL		
FISCAL YEAR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR
Historical												
2000	109.9	87.1	79.2	51.4	35.5	69.0	76.6	58.4	76.2	238.0	181.0	76.0
2006	115.8	93.9	81.1	69.4	51.9	74.9	73.7	61.1	82.8	258.9	206.8	79.9
2007	126.6	102.2	80.7	72.7	55.9	76.9	74.1	61.4	82.9	273.4	219.5	80.3
2008	141.0	112.7	80.0	74.2	58.8	79.3	74.9	60.4	80.6	290.1	231.9	80.0
2009	138.2	108.9	78.9	73.5	56.4	76.8	69.9	54.7	78.3	281.5	220.0	78.2
2010	130.9	108.6	82.9	78.0	61.8	79.2	70.5	59.2	84.1	279.5	229.6	82.2
2011	138.3	111.7	80.7	82.5	65.9	79.9	77.8	63.6	81.8	298.6	241.2	80.8
2012	132.3	107.9	81.5	84.7	68.5	80.9	81.0	66.4	82.0	297.9	242.7	81.5
2013E	128.4	107.0	83.3	89.7	72.8	81.1	82.6	68.6	83.1	300.7	248.4	82.6
Forecast												
2014	130.9	110.6	84.5	94.5	76.1	80.5	83.4	68.6	82.2	308.9	255.3	82.7
2015	135.6	114.6	84.5	100.1	80.6	80.5	87.9	72.3	82.2	323.6	267.4	82.6
2016	140.6	118.8	84.5	106.0	85.4	80.5	92.3	75.9	82.2	338.9	280.0	82.6
2017	145.8	123.2	84.5	112.2	90.4	80.5	97.1	79.8	82.2	355.2	293.4	82.6
2018	151.0	127.6	84.5	118.6	95.5	80.5	101.7	83.6	82.2	371.3	306.7	82.6
2019	156.4	132.2	84.5	125.1	100.7	80.5	106.5	87.5	82.2	388.0	320.4	82.6
2020	161.6	136.5	84.5	131.3	105.7	80.5	111.3	91.4	82.2	404.1	333.7	82.6
2021	166.8	140.9	84.5	137.2	110.5	80.5	116.1	95.4	82.2	420.1	346.8	82.6
2022	172.0	145.3	84.5	143.3	115.4	80.5	121.0	99.5	82.2	436.3	360.2	82.5
2023	177.3	149.8	84.5	149.7	120.5	80.5	126.1	103.6	82.2	453.1	373.9	82.5
2024	183.0	154.6	84.5	156.6	126.1	80.5	131.3	107.9	82.2	470.8	388.6	82.5
2025	188.7	159.5	84.5	163.8	131.8	80.5	136.6	112.3	82.2	489.1	403.6	82.5
2026	194.6	164.4	84.5	171.2	137.8	80.5	142.1	116.8	82.2	507.9	419.1	82.5
2027	200.6	169.5	84.5	178.9	144.0	80.5	147.7	121.4	82.2	527.2	435.0	82.5
2028	206.8	174.7	84.5	186.8	150.4	80.5	153.5	126.2	82.2	547.1	451.3	82.5
2029	213.2	180.1	84.5	195.3	157.2	80.5	159.4	131.0	82.2	567.9	468.4	82.5
2030	219.8	185.7	84.5	204.2	164.3	80.5	165.4	136.0	82.2	589.3	486.0	82.5
2031	226.5	191.4	84.5	213.3	171.7	80.5	171.5	141.0	82.2	611.3	504.0	82.5
2032	233.4	197.2	84.5	222.6	179.2	80.5	177.7	146.1	82.2	633.7	522.5	82.4
2033	240.4	203.2	84.5	232.5	187.2	80.5	184.2	151.4	82.2	657.1	541.7	82.4
2034	247.7	209.3	84.5	242.8	195.5	80.5	190.8	156.8	82.2	681.3	561.6	82.4
Avg Annual Growth												
2000-13	1.2%	1.6%		4.4%	5.7%		0.6%	1.3%		1.8%	2.5%	
2013-14	2.0%	3.4%		5.3%	4.6%		1.0%	-0.1%		2.7%	2.8%	
2013-23	3.3%	3.4%		5.2%	5.2%		4.3%	4.2%		4.2%	4.2%	
2013-34	3.2%	3.2%		4.9%	4.8%		4.1%	4.0%		4.0%	4.0%	

* Source: Form 41, U.S. Department of Transportation.

TABLE 14

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

SEATS PER AIRCRAFT MILE

FISCAL YEAR	DOMESTIC (Seats/Mile)	INTERNATIONAL ATLANTIC (Seats/Mile)	INTERNATIONAL LATIN AMERICA (Seats/Mile)	INTERNATIONAL PACIFIC (Seats/Mile)	INTERNATIONAL TOTAL (Seats/Mile)	SYSTEM (Seats/Mile)
Historical						
2000	148.8	233.7	179.5	307.8	236.6	164.5
2006	150.5	229.4	175.2	274.4	221.4	165.7
2007	150.6	229.2	176.2	279.6	222.3	166.3
2008	150.3	229.2	177.3	292.3	224.9	167.5
2009	151.2	230.0	175.8	291.3	223.7	168.9
2010	151.9	231.7	171.7	287.2	220.9	169.1
2011	152.3	230.5	173.2	282.9	221.0	170.0
2012	152.7	230.4	171.8	278.3	219.4	169.9
2013E	153.9	233.3	171.8	276.2	219.2	170.8
Forecast						
2014	155.2	233.8	172.3	276.9	219.1	172.0
2015	155.5	234.3	172.8	277.7	219.5	172.6
2016	155.8	234.8	173.3	278.4	219.8	173.1
2017	156.1	235.3	173.8	279.2	220.1	173.7
2018	156.4	235.8	174.3	279.9	220.5	174.2
2019	156.7	236.3	174.8	280.7	220.8	174.8
2020	157.0	236.8	175.3	281.4	221.2	175.4
2021	157.3	237.3	175.8	282.2	221.7	176.1
2022	157.6	237.8	176.3	282.9	222.2	176.7
2023	157.9	238.3	176.8	283.7	222.6	177.4
2024	158.2	238.8	177.3	284.4	223.0	178.0
2025	158.5	239.3	177.8	285.2	223.5	178.6
2026	158.8	239.8	178.3	285.9	223.9	179.2
2027	159.2	240.3	178.8	286.7	224.3	179.8
2028	159.5	240.8	179.3	287.4	224.7	180.4
2029	159.8	241.3	179.8	288.2	225.1	181.0
2030	160.1	241.8	180.3	288.9	225.5	181.6
2031	160.4	242.3	180.8	289.7	225.9	182.2
2032	160.7	242.8	181.3	290.4	226.2	182.8
2033	161.0	243.3	181.8	291.2	226.6	183.5
2034	161.4	243.8	182.3	291.9	227.0	184.1

* Source: Form 41, U.S. Department of Transportation.

TABLE 15

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

AVERAGE PASSENGER TRIP LENGTH

FISCAL YEAR	DOMESTIC (Miles)	INTERNATIONAL ATLANTIC (Miles)	INTERNATIONAL LATIN AMERICA (Miles)	INTERNATIONAL PACIFIC (Miles)	INTERNATIONAL TOTAL (Miles)	SYSTEM (Miles)
Historical						
2000	872.6	4,168.1	1,675.2	5,219.9	3,397.3	1,091.4
2006	995.5	4,175.4	1,637.0	4,390.4	3,037.0	1,233.4
2007	992.7	4,247.8	1,634.3	4,515.1	3,054.2	1,237.2
2008	999.4	4,332.7	1,651.6	4,583.5	3,100.1	1,262.9
2009	1,003.0	4,402.4	1,645.6	4,549.9	3,097.6	1,274.6
2010	1,015.1	4,433.0	1,660.1	4,586.6	3,072.5	1,295.6
2011	1,016.9	4,414.7	1,655.3	4,706.9	3,067.5	1,301.3
2012	1,017.3	4,355.7	1,668.2	4,725.1	3,039.6	1,298.3
2013E	1,024.2	4,305.2	1,693.3	4,773.4	3,022.9	1,306.9
Forecast						
2014	1,028.1	4,316.3	1,703.5	4,812.0	3,019.6	1,315.8
2015	1,026.0	4,338.5	1,717.6	4,816.9	3,027.5	1,318.0
2016	1,026.0	4,360.8	1,729.7	4,821.7	3,033.0	1,322.5
2017	1,027.1	4,383.2	1,739.9	4,826.6	3,037.7	1,328.7
2018	1,029.6	4,405.7	1,748.9	4,831.5	3,041.0	1,335.8
2019	1,032.2	4,428.4	1,756.9	4,836.4	3,043.6	1,343.7
2020	1,034.8	4,451.1	1,764.1	4,841.3	3,048.1	1,351.8
2021	1,037.4	4,474.0	1,771.0	4,846.2	3,053.9	1,360.8
2022	1,040.0	4,497.0	1,777.3	4,851.1	3,059.1	1,369.8
2023	1,042.6	4,520.1	1,782.9	4,856.0	3,063.4	1,378.7
2024	1,045.2	4,543.3	1,788.0	4,860.9	3,066.1	1,387.0
2025	1,047.8	4,566.7	1,792.6	4,865.8	3,068.2	1,395.1
2026	1,050.4	4,590.2	1,796.7	4,870.7	3,069.7	1,403.2
2027	1,053.0	4,613.8	1,800.6	4,875.6	3,071.1	1,411.5
2028	1,055.7	4,637.5	1,803.9	4,880.5	3,072.0	1,419.7
2029	1,058.3	4,661.3	1,806.8	4,885.5	3,071.7	1,428.0
2030	1,061.0	4,685.3	1,809.3	4,890.4	3,070.7	1,436.3
2031	1,063.6	4,709.4	1,811.4	4,895.4	3,069.5	1,444.8
2032	1,066.3	4,733.6	1,813.3	4,900.3	3,068.0	1,453.3
2033	1,068.9	4,757.9	1,814.7	4,905.3	3,065.8	1,461.7
2034	1,071.6	4,782.4	1,815.8	4,910.2	3,063.0	1,470.3

* Source: Form 41, U.S. Department of Transportation.

TABLE 16

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

PASSENGER YIELDS

	REVENUE PER PASSENGER MILE					
	DOMESTIC		INTERNATIONAL		SYSTEM	
FISCAL YEAR	CURRENT $ (Cents)	FY 2013 $ (Cents)	CURRENT $ (Cents)	FY 2013 $ (Cents)	CURRENT $ (Cents)	FY 2013 $ (Cents)
Historical						
2000	14.03	19.08	10.46	14.22	13.06	17.77
2006	12.36	14.31	11.63	13.47	12.15	14.07
2007	12.45	14.08	12.45	14.09	12.45	14.08
2008	13.11	14.20	13.37	14.49	13.19	14.29
2009	11.95	12.99	11.68	12.69	11.87	12.89
2010	12.87	13.75	12.83	13.71	12.86	13.74
2011	13.62	14.18	14.09	14.67	13.77	14.34
2012	14.08	14.31	14.72	14.96	14.28	14.52
2013E	14.42	14.42	14.76	14.76	14.52	14.52
Forecast						
2014	14.85	14.63	14.99	14.78	14.90	14.68
2015	15.04	14.59	15.14	14.68	15.07	14.62
2016	15.29	14.56	15.34	14.61	15.31	14.58
2017	15.57	14.55	15.53	14.51	15.55	14.54
2018	15.79	14.48	15.74	14.43	15.77	14.47
2019	16.02	14.42	15.93	14.34	15.99	14.39
2020	16.24	14.34	16.14	14.26	16.21	14.31
2021	16.47	14.27	16.36	14.17	16.43	14.23
2022	16.69	14.18	16.57	14.08	16.65	14.14
2023	16.90	14.09	16.78	14.00	16.86	14.06
2024	17.12	14.01	17.00	13.91	17.08	13.97
2025	17.35	13.92	17.23	13.82	17.30	13.88
2026	17.57	13.83	17.46	13.74	17.53	13.80
2027	17.82	13.74	17.71	13.66	17.78	13.71
2028	18.05	13.65	17.96	13.58	18.01	13.62
2029	18.29	13.57	18.21	13.50	18.26	13.54
2030	18.54	13.48	18.47	13.43	18.51	13.46
2031	18.80	13.39	18.75	13.36	18.78	13.38
2032	19.07	13.31	19.03	13.27	19.05	13.29
2033	19.35	13.22	19.31	13.20	19.33	13.21
2034	19.64	13.13	19.61	13.11	19.63	13.12
Avg Annual Growth						
2000-13	0.2%	-2.1%	2.7%	0.3%	0.8%	-1.5%
2013-14	3.0%	1.5%	1.6%	0.1%	2.6%	1.1%
2013-23	1.6%	-0.2%	1.3%	-0.5%	1.5%	-0.3%
2013-34	1.5%	-0.4%	1.4%	-0.6%	1.4%	-0.5%

* Source: Form 41, U.S. Department of Transportation.

TABLE 17

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

INTERNATIONAL PASSENGER YIELDS BY REGION

	REVENUE PER PASSENGER MILE							
	ATLANTIC		LATIN AMERICA		PACIFIC		TOTAL INTERNATIONAL	
FISCAL	CURRENT $	FY 2013 $	CURRENT $	FY 2013 $	CURRENT $	FY 2013 $	CURRENT $	FY 2013 $
YEAR	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
Historical								
2000	9.73	13.24	13.00	17.69	9.99	13.59	10.46	14.22
2006	11.64	13.48	12.68	14.69	10.73	12.43	11.63	13.47
2007	12.46	14.10	13.37	15.13	11.61	13.13	12.45	14.09
2008	13.29	14.40	14.19	15.37	12.73	13.79	13.37	14.49
2009	11.25	12.22	12.99	14.11	11.20	12.17	11.68	12.69
2010	12.73	13.60	13.33	14.24	12.50	13.35	12.83	13.71
2011	13.48	14.04	15.13	15.75	14.07	14.65	14.09	14.67
2012	13.95	14.18	15.71	15.96	14.95	15.19	14.72	14.96
2013E	14.44	14.44	15.61	15.61	14.30	14.30	14.76	14.76
Forecast								
2014	14.80	14.59	15.74	15.52	14.48	14.27	14.99	14.78
2015	14.96	14.51	15.83	15.36	14.63	14.20	15.14	14.68
2016	15.16	14.44	16.02	15.26	14.84	14.13	15.34	14.61
2017	15.38	14.37	16.18	15.13	15.03	14.04	15.53	14.51
2018	15.59	14.30	16.37	15.01	15.24	13.98	15.74	14.43
2019	15.80	14.23	16.53	14.88	15.43	13.89	15.93	14.34
2020	16.03	14.15	16.72	14.76	15.65	13.82	16.14	14.26
2021	16.26	14.08	16.91	14.64	15.87	13.74	16.36	14.17
2022	16.49	14.01	17.10	14.53	16.09	13.67	16.57	14.08
2023	16.72	13.94	17.28	14.41	16.30	13.59	16.78	14.00
2024	16.96	13.87	17.47	14.29	16.52	13.52	17.00	13.91
2025	17.20	13.80	17.66	14.17	16.76	13.45	17.23	13.82
2026	17.45	13.74	17.86	14.06	17.00	13.38	17.46	13.74
2027	17.72	13.67	18.08	13.95	17.26	13.31	17.71	13.66
2028	17.98	13.60	18.30	13.84	17.52	13.25	17.96	13.58
2029	18.24	13.53	18.53	13.74	17.78	13.19	18.21	13.50
2030	18.52	13.46	18.76	13.64	18.06	13.13	18.47	13.43
2031	18.80	13.40	19.02	13.55	18.34	13.07	18.75	13.36
2032	19.10	13.33	19.26	13.44	18.64	13.01	19.03	13.27
2033	19.41	13.26	19.51	13.33	18.95	12.95	19.31	13.20
2034	19.72	13.18	19.76	13.21	19.26	12.88	19.61	13.11
Avg Annual Growth								
2000-13	3.1%	0.7%	1.4%	-1.0%	2.8%	0.4%	2.7%	0.3%
2013-14	2.5%	1.0%	0.9%	-0.6%	1.3%	-0.2%	1.6%	0.1%
2013-23	1.5%	-0.4%	1.0%	-0.8%	1.3%	-0.5%	1.3%	-0.5%
2013-34	1.5%	-0.4%	1.1%	-0.8%	1.4%	-0.5%	1.4%	-0.6%

* Source: Form 41, U.S. Department of Transportation.

TABLE 18

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

JET FUEL PRICES

FISCAL YEAR	DOMESTIC		INTERNATIONAL		SYSTEM	
	CURRENT $ (Cents)	FY 2013 $ (Cents)	CURRENT $ (Cents)	FY 2013 $ (Cents)	CURRENT $ (Cents)	FY 2013 $ (Cents)
Historical						
2000	71.49	97.26	79.35	107.95	73.57	100.08
2006	194.69	225.45	204.69	237.04	197.72	228.97
2007	194.01	219.50	203.31	230.02	196.90	222.77
2008	292.64	317.02	314.57	340.78	299.74	324.71
2009	202.31	219.82	208.41	226.45	204.35	222.03
2010	219.19	234.16	220.06	235.09	219.49	234.48
2011	274.41	285.69	271.77	282.94	273.44	284.68
2012	295.00	299.84	287.40	292.12	292.13	296.92
2013E	294.53	294.53	283.64	283.64	290.40	290.40
Forecast						
2014	288.28	284.11	277.62	273.60	284.23	280.13
2015	274.15	265.97	264.02	256.14	270.31	262.24
2016	271.43	258.52	261.39	248.96	267.62	254.89
2017	278.20	259.99	267.92	250.37	274.30	256.34
2018	287.31	263.51	276.69	253.77	283.29	259.82
2019	297.16	267.50	286.17	257.61	292.99	263.75
2020	306.56	270.73	295.22	260.72	302.26	266.93
2021	315.16	272.91	303.51	262.82	310.74	269.09
2022	322.10	273.67	310.19	263.55	317.59	269.83
2023	328.83	274.23	316.67	264.09	324.22	270.39
2024	335.58	274.54	323.17	264.39	330.87	270.69
2025	341.79	274.28	329.16	264.14	337.00	270.43
2026	348.00	273.88	335.13	263.76	343.12	270.04
2027	354.25	273.21	341.15	263.11	349.28	269.38
2028	360.61	272.75	347.27	262.66	355.55	268.92
2029	367.14	272.28	353.57	262.21	362.00	268.46
2030	373.84	271.79	360.02	261.74	368.60	267.98
2031	380.77	271.24	366.70	261.21	375.44	267.44
2032	387.85	270.62	373.51	260.61	382.41	266.82
2033	395.03	269.91	380.43	259.93	389.49	266.13
2034	402.35	268.99	387.47	259.04	396.71	265.21
Avg Annual Growth						
2000-13	11.5%	8.9%	10.3%	7.7%	11.1%	8.5%
2013-14	-2.1%	-3.5%	-2.1%	-3.5%	-2.1%	-3.5%
2013-23	1.1%	-0.7%	1.1%	-0.7%	1.1%	-0.7%
2013-34	1.5%	-0.4%	1.5%	-0.4%	1.5%	-0.4%

* Source: Form 41, U.S. Department of Transportation.

TABLE 19

U.S. COMMERCIAL AIR CARRIERS

AIR CARGO REVENUE TON MILES[1, 2, 3]

FISCAL YEAR	ALL-CARGO CARRIER RTMS (Millions)			PASSENGER CARRIER RTMS (Millions)			TOTAL RTMS (Millions)		
	DOMESTIC	INT'L.	TOTAL	DOMESTIC	INT'L.	TOTAL	DOMESTIC	INT'L.	TOTAL
Historical									
2000	10,423.7	7,960.6	18,384.3	4,456.1	7,879.9	12,336.0	14,879.8	15,840.5	30,720.3
2006	12,481.2	15,725.4	28,206.6	2,899.7	8,483.5	11,383.2	15,380.9	24,208.9	39,589.8
2007	12,940.5	17,502.7	30,443.2	2,278.6	7,187.0	9,465.7	15,219.1	24,689.7	39,908.8
2008	12,260.7	17,516.1	29,776.7	2,147.0	6,905.4	9,052.4	14,407.6	24,421.5	38,829.1
2009	10,275.3	13,834.3	24,109.7	1,623.2	5,265.9	6,889.1	11,898.6	19,100.2	30,998.8
2010	11,243.2	16,732.7	27,975.9	1,579.8	6,331.9	7,911.7	12,823.1	23,064.5	35,887.6
2011	10,601.2	18,979.4	29,580.5	1,445.7	6,250.5	7,696.2	12,046.9	25,229.8	37,276.7
2012	10,880.3	18,312.3	29,192.5	1,414.5	5,949.5	7,364.0	12,294.8	24,261.8	36,556.6
2013E	10,991.5	16,739.6	27,731.1	1,383.7	5,697.6	7,081.3	12,375.2	22,437.2	34,812.4
Forecast									
2014	11,138.3	16,909.2	28,047.4	1,388.0	5,664.6	7,052.6	12,526.3	22,573.8	35,100.0
2015	11,389.6	18,471.8	29,861.4	1,404.9	6,089.7	7,494.6	12,794.5	24,561.5	37,356.0
2016	11,667.2	19,987.4	31,654.6	1,428.2	6,483.7	7,911.9	13,095.3	26,471.2	39,566.5
2017	11,920.7	21,518.0	33,438.7	1,447.9	6,867.5	8,315.4	13,368.6	28,385.5	41,754.1
2018	12,144.7	22,992.1	35,136.8	1,463.7	7,218.4	8,682.1	13,608.4	30,210.5	43,818.8
2019	12,343.4	24,492.1	36,835.5	1,476.0	7,562.9	9,039.0	13,819.5	32,055.0	45,874.5
2020	12,520.3	25,915.6	38,435.9	1,485.4	7,869.8	9,355.3	14,005.8	33,785.4	47,791.2
2021	12,679.3	27,329.0	40,008.2	1,492.4	8,160.3	9,652.7	14,171.7	35,489.2	49,660.9
2022	12,831.2	28,782.5	41,613.7	1,498.3	8,449.2	9,947.5	14,329.5	37,231.7	51,561.2
2023	12,980.8	30,301.3	43,282.0	1,503.6	8,743.5	10,247.1	14,484.4	39,044.8	53,529.2
2024	13,133.0	31,951.8	45,084.8	1,509.0	9,061.3	10,570.2	14,642.0	41,013.0	55,655.0
2025	13,289.9	33,634.4	46,924.3	1,514.6	9,372.8	10,887.5	14,804.6	43,007.2	57,811.8
2026	13,450.6	35,383.6	48,834.2	1,520.4	9,687.4	11,207.8	14,971.0	45,070.9	60,042.0
2027	13,614.7	37,215.2	50,829.9	1,526.3	10,008.4	11,534.7	15,141.0	47,223.6	62,364.6
2028	13,781.0	39,115.3	52,896.3	1,532.2	10,331.2	11,863.4	15,313.2	49,446.5	64,759.7
2029	13,950.8	41,099.8	55,050.6	1,538.2	10,659.0	12,197.2	15,489.0	51,758.8	67,247.8
2030	14,123.5	43,161.4	57,285.0	1,544.2	10,989.1	12,533.3	15,667.7	54,150.5	69,818.2
2031	14,297.5	45,289.2	59,586.7	1,550.0	11,317.8	12,867.8	15,847.5	56,607.0	72,454.5
2032	14,472.8	47,501.1	61,973.9	1,555.7	11,648.7	13,204.4	16,028.5	59,149.8	75,178.3
2033	14,651.5	49,836.2	64,487.7	1,561.4	11,990.4	13,551.9	16,212.9	61,826.6	78,039.5
2034	14,833.3	52,258.3	67,091.7	1,567.2	12,332.8	13,900.0	16,400.5	64,591.1	80,991.6
Avg Annual Growth									
2000-13	0.4%	5.9%	3.2%	-8.6%	-2.5%	-4.2%	-1.4%	2.7%	1.0%
2013-14	1.3%	1.0%	1.1%	0.3%	-0.6%	-0.4%	1.2%	0.6%	0.8%
2013-23	1.7%	6.1%	4.6%	0.8%	4.4%	3.8%	1.6%	5.7%	4.4%
2013-34	1.4%	5.6%	4.3%	0.6%	3.7%	3.3%	1.4%	5.2%	4.1%

* Source: Form 41, U.S. Department of Transportation.

[1]Includes freight/express and mail revenue ton miles on mainline air carriers and regionals/commuters.

[2]Domestic figures from 2000 through 2002 exclude Airborne Express, Inc.; international figures for 2003 and beyond include new reporting of contract service by U.S. carriers for foreign flag carriers.

[3]Domestic figures from 2003 and beyond include Airborne Express. Inc.

TABLE 20

U.S. COMMERCIAL AIR CARRIERS

INTERNATIONAL AIR CARGO REVENUE TON MILES BY REGION[1, 2]

FISCAL YEAR	ATLANTIC (MILLIONS)	LATIN AMERICA (MILLIONS)	PACIFIC (MILLIONS)	OTHER INTERNATIONAL (MILLIONS)	TOTAL (MILLIONS)
Historical					
2000	5,416.8	1,791.2	7,543.8	1,088.7	15,840.5
2006	6,084.1	2,004.9	9,564.2	6,555.6	24,208.9
2007	6,124.7	2,304.2	9,497.3	6,763.5	24,689.7
2008	6,415.4	2,336.3	9,050.0	6,619.8	24,421.5
2009	5,740.1	1,793.4	6,855.4	4,711.2	19,100.2
2010	6,865.3	1,990.6	8,348.4	5,860.3	23,064.5
2011	7,235.5	1,832.4	9,105.4	7,056.5	25,229.8
2012	7,026.5	1,870.0	8,568.9	6,796.4	24,261.8
2013E	6,658.2	1,788.6	8,184.2	5,806.3	22,437.2
Forecast					
2014	6,589.7	1,758.3	8,684.7	5,541.1	22,573.8
2015	7,059.5	1,909.3	9,485.8	6,106.9	24,561.5
2016	7,532.7	2,055.9	10,294.0	6,588.6	26,471.2
2017	8,014.9	2,199.8	11,144.9	7,025.8	28,385.5
2018	8,481.8	2,337.5	11,955.9	7,435.3	30,210.5
2019	8,946.6	2,471.4	12,788.1	7,848.9	32,055.0
2020	9,399.4	2,594.9	13,530.0	8,261.1	33,785.4
2021	9,851.7	2,712.6	14,240.9	8,684.0	35,489.2
2022	10,311.5	2,829.9	14,977.6	9,112.8	37,231.7
2023	10,789.2	2,949.2	15,755.6	9,550.8	39,044.8
2024	11,297.9	3,076.0	16,634.7	10,004.4	41,013.0
2025	11,817.4	3,203.1	17,519.7	10,467.0	43,007.2
2026	12,352.3	3,333.1	18,442.7	10,942.8	45,070.9
2027	12,910.8	3,467.1	19,409.4	11,436.3	47,223.6
2028	13,490.7	3,604.6	20,409.4	11,941.8	49,446.5
2029	14,095.4	3,747.4	21,456.4	12,459.5	51,758.8
2030	14,726.6	3,895.1	22,540.3	12,988.5	54,150.5
2031	15,381.2	4,047.0	23,650.7	13,528.1	56,607.0
2032	16,059.6	4,204.3	24,805.4	14,080.5	59,149.8
2033	16,770.0	4,369.7	26,034.8	14,652.1	61,826.6
2034	17,508.7	4,540.8	27,304.0	15,237.7	64,591.1
Avg Annual Growth					
2000-13	1.6%	0.0%	0.6%	13.7%	2.7%
2013-14	-1.0%	-1.7%	6.1%	-4.6%	0.6%
2013-23	4.9%	5.1%	6.8%	5.1%	5.7%
2013-34	4.7%	4.5%	5.9%	4.7%	5.2%

* Source: Form 41, U.S. Department of Transportation.

[1]Includes freight/express and mail revenue ton miles on mainline air carriers and regionals/commuters.

[2]Figures for 2003 and beyond include new reporting of contract service by U.S. carriers for foreign flag carriers.

TABLE 21

U.S. MAINLINE AIR CARRIERS

PASSENGER JET AIRCRAFT

CALENDAR	LARGE NARROWBODY				LARGE WIDEBODY				LARGE	REGIONAL	TOTAL
YEAR	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	JETS	JETS	JETS
Historical											
2000	3,364	385	0	3,749	424	169	120	713	4,462	26	4,488
2006	3,302	26	0	3,328	462	19	49	530	3,858	39	3,897
2007	3,354	29	0	3,383	477	12	47	536	3,919	63	3,982
2008	3,170	10	1	3,181	471	9	44	524	3,705	79	3,784
2009	3,108	9	1	3,118	447	9	42	498	3,616	78	3,694
2010	3,120	8	1	3,129	470	9	43	522	3,651	71	3,722
2011	3,127	7	1	3,135	471	7	41	519	3,654	76	3,730
2012	3,121	7	0	3,128	480	3	40	523	3,651	82	3,733
2013E	3,155	5	0	3,160	481	0	40	521	3,681	93	3,774
Forecast											
2014	3,174	5	0	3,179	489	0	40	529	3,708	96	3,804
2015	3,199	5	0	3,204	507	0	40	547	3,751	102	3,853
2016	3,238	5	0	3,243	527	0	40	567	3,810	108	3,918
2017	3,271	5	0	3,276	543	0	40	583	3,859	114	3,973
2018	3,273	5	0	3,278	578	0	40	618	3,896	107	4,003
2019	3,291	5	0	3,296	594	0	31	625	3,921	97	4,018
2020	3,336	5	0	3,341	633	0	16	649	3,990	97	4,087
2021	3,376	5	0	3,381	670	0	12	682	4,063	97	4,160
2022	3,430	1	0	3,431	701	0	6	707	4,138	97	4,235
2023	3,476	0	0	3,476	714	0	4	718	4,194	97	4,291
2024	3,512	0	0	3,512	731	0	0	731	4,243	97	4,340
2025	3,554	0	0	3,554	757	0	0	757	4,311	102	4,413
2026	3,601	0	0	3,601	775	0	0	775	4,376	107	4,483
2027	3,635	0	0	3,635	783	0	0	783	4,418	112	4,530
2028	3,665	0	0	3,665	808	0	0	808	4,473	114	4,587
2029	3,718	0	0	3,718	833	0	0	833	4,551	114	4,665
2030	3,779	0	0	3,779	860	0	0	860	4,639	114	4,753
2031	3,839	0	0	3,839	885	0	0	885	4,724	113	4,837
2032	3,895	0	0	3,895	918	0	0	918	4,813	113	4,926
2033	3,948	0	0	3,948	948	0	0	948	4,896	113	5,009
2034	4,016	0	0	4,016	983	0	0	983	4,999	113	5,112
Avg Annual Growth											
2000-13	-0.5%	-28.4%	N/A	-1.3%	1.0%	-100.0%	-8.1%	-2.4%	-1.5%	10.3%	-1.3%
2013-14	0.6%	0.0%	N/A	0.6%	1.7%	N/A	0.0%	1.5%	0.7%	3.2%	0.8%
2013-23	1.0%	-100.0%	N/A	1.0%	4.0%	N/A	-20.6%	3.3%	1.3%	0.4%	1.3%
2013-34	1.2%	-100.0%	N/A	1.1%	3.5%	N/A	-100.0%	3.1%	1.5%	0.9%	1.5%

TABLE 22

U.S. MAINLINE AIR CARRIERS

CARGO JET AIRCRAFT

CALENDAR	LARGE NARROWBODY				LARGE WIDEBODY				
YEAR	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	TOTAL
Historical									
2000	166	332	176	674	164	158	68	390	1,064
2006	162	220	78	460	260	208	80	548	1,008
2007	162	162	75	399	272	213	86	571	970
2008	163	116	29	308	274	207	82	563	871
2009	154	107	30	291	253	196	82	531	822
2010	153	104	31	288	265	200	97	562	850
2011	175	89	26	290	281	203	96	580	870
2012	186	67	12	265	292	188	93	573	838
2013E	191	15	0	206	296	174	64	534	740
Forecast									
2014	191	15	0	206	294	174	64	532	738
2015	193	15	0	208	301	172	67	540	748
2016	199	13	0	212	309	173	70	552	764
2017	204	13	0	217	316	171	73	560	777
2018	210	13	0	223	338	167	73	578	801
2019	213	13	0	226	356	164	75	595	821
2020	216	11	0	227	374	154	78	606	833
2021	219	9	0	228	390	144	81	615	843
2022	224	7	0	231	408	136	84	628	859
2023	235	2	0	237	421	131	88	640	877
2024	243	0	0	243	439	128	91	658	901
2025	251	0	0	251	453	127	92	672	923
2026	257	0	0	257	470	127	94	691	948
2027	263	0	0	263	490	128	95	713	976
2028	270	0	0	270	511	129	97	737	1,007
2029	275	0	0	275	530	129	99	758	1,033
2030	282	0	0	282	551	129	102	782	1,064
2031	288	0	0	288	569	130	105	804	1,092
2032	294	0	0	294	589	131	110	830	1,124
2033	299	0	0	299	608	131	113	852	1,151
2034	306	0	0	306	628	132	116	876	1,182
Avg Annual Growth									
2000-13	1.1%	-21.2%	-100.0%	-8.7%	4.6%	0.7%	-0.5%	2.4%	-2.8%
2013-14	0.0%	0.0%	N/A	0.0%	-0.7%	0.0%	0.0%	-0.4%	-0.3%
2013-23	2.1%	-18.2%	N/A	1.4%	3.6%	-2.8%	3.2%	1.8%	1.7%
2013-34	2.3%	-100.0%	N/A	1.9%	3.6%	-1.3%	2.9%	2.4%	2.3%

TABLE 23

TOTAL JET FUEL AND AVIATION GASOLINE FUEL CONSUMPTION

U.S. CIVIL AVIATION AIRCRAFT

(Millions of Gallons)

FISCAL YEAR	JET FUEL					AVIATION GASOLINE			TOTAL FUEL CONSUMED
	U.S. AIR CARRIERS[1,2]			GENERAL AVIATION	TOTAL	AIR CARRIER	GENERAL AVIATION	TOTAL	
	DOMESTIC	INT'L.	TOTAL						
Historical									
2000	15,030	5,484	20,513	972	21,485	2	333	335	21,350
2006	13,775	6,186	19,961	1,643	21,603	2	283	285	21,889
2007	13,882	6,309	20,191	1,486	21,676	2	274	276	21,952
2008	13,397	6,499	19,896	1,706	21,602	2	248	250	21,852
2009	11,896	6,033	17,929	1,447	19,376	2	227	229	19,606
2010	11,973	6,290	18,263	1,435	19,698	2	221	223	19,921
2011	12,092	6,547	18,639	1,456	20,095	2	217	219	20,315
2012	12,038	6,590	18,628	1,435	20,063	2	206	208	20,272
2013E	11,812	6,355	18,167	1,413	19,580	2	202	204	19,785
Forecast									
2014	11,810	6,462	18,271	1,470	19,741	2	200	202	19,943
2015	12,035	6,703	18,738	1,521	20,259	2	197	199	20,458
2016	12,252	6,950	19,202	1,576	20,777	2	195	197	20,974
2017	12,461	7,209	19,670	1,636	21,305	2	193	195	21,500
2018	12,681	7,462	20,143	1,694	21,837	2	191	193	22,031
2019	12,862	7,719	20,581	1,757	22,338	2	190	192	22,530
2020	13,002	7,958	20,960	1,823	22,783	2	189	191	22,974
2021	13,094	8,190	21,283	1,878	23,161	2	188	190	23,351
2022	13,171	8,420	21,591	1,935	23,526	2	188	190	23,716
2023	13,260	8,655	21,916	1,990	23,906	2	188	190	24,095
2024	13,384	8,905	22,289	2,045	24,334	2	188	190	24,524
2025	13,515	9,157	22,672	2,104	24,775	2	188	190	24,965
2026	13,645	9,414	23,059	2,158	25,218	2	188	190	25,407
2027	13,767	9,675	23,442	2,216	25,658	2	188	190	25,849
2028	13,899	9,939	23,838	2,276	26,114	2	188	190	26,304
2029	14,021	10,214	24,235	2,336	26,571	2	189	191	26,762
2030	14,144	10,493	24,637	2,394	27,031	2	189	191	27,222
2031	14,254	10,775	25,029	2,454	27,483	2	190	192	27,675
2032	14,365	11,060	25,424	2,511	27,936	2	192	194	28,129
2033	14,474	11,353	25,827	2,568	28,395	2	193	195	28,590
2034	14,584	11,653	26,237	2,629	28,866	2	195	197	29,062
Avg Annual Growth									
2000-13	-1.8%	1.1%	-0.9%	2.9%	-0.7%	0.0%	-3.8%	-3.7%	-0.6%
2013-14	0.0%	1.7%	0.6%	4.0%	0.8%	0.0%	-1.2%	-1.2%	0.8%
2013-23	1.2%	3.1%	1.9%	3.5%	2.0%	0.0%	-0.7%	-0.7%	2.0%
2013-34	1.0%	2.9%	1.8%	3.0%	1.9%	0.0%	-0.2%	-0.2%	1.8%

* Source: Air carrier jet fuel, Form 41, U.S. Department of Transportation; all others, FAA APO estimates.

[1]Includes both passenger (mainline and regional air carrier) and cargo carriers.

[2]Forecast assumes 1.0% annual improvement in ASMs/Gallon for U.S. Commercial Air Carrier

TABLE 24

U.S. REGIONAL CARRIER FORECAST ASSUMPTIONS

	AVERAGE SEATS PER AIRCRAFT MILE			AVERAGE PASSENGER TRIP LENGTH			REVENUE PER PASSENGER MILE**	
FISCAL	DOMESTIC	INT'L.	SYSTEM	DOMESTIC	INT'L.	SYSTEM	CURRENT $	2013$
YEAR	(Seats/Mile)	(Seats/Mile)	(Seats/Mile)	(Miles)	(Miles)	(Miles)	(Cents)	(Cents)
Historical								
2000	38.4	41.8	38.5	286.5	260.0	285.5	30.28	41.20
2006	49.3	52.2	49.4	450.4	467.2	450.7	19.84	22.98
2007	49.9	54.0	50.0	451.5	518.1	452.9	19.95	22.57
2008	52.9	53.4	53.0	460.8	532.7	462.3	21.04	22.79
2009	55.2	52.8	55.1	456.9	512.3	457.8	17.04	18.52
2010	56.1	53.2	56.1	464.3	502.9	465.0	15.73	16.81
2011	56.4	52.7	56.3	467.0	531.4	468.0	15.10	15.73
2012	56.1	54.8	56.0	467.4	605.7	470.0	13.16	13.38
2013E	56.1	55.1	56.1	469.3	641.5	472.4	11.66	11.66
Forecast								
2014	57.5	55.4	57.5	471.7	646.5	474.9	12.00	11.83
2015	57.9	55.7	57.9	473.3	651.5	476.6	12.15	11.79
2016	58.3	56.0	58.3	474.8	656.5	478.2	12.36	11.77
2017	58.8	56.3	58.7	476.8	661.5	480.2	12.58	11.75
2018	59.2	56.6	59.1	478.8	666.5	482.3	12.76	11.70
2019	59.6	56.9	59.6	480.8	671.5	484.3	12.94	11.65
2020	60.1	57.2	60.0	482.8	676.5	486.4	13.12	11.59
2021	60.5	57.5	60.5	484.8	681.5	488.4	13.30	11.52
2022	61.0	57.8	60.9	486.8	686.5	490.5	13.48	11.45
2023	61.4	58.1	61.3	488.8	691.5	492.5	13.64	11.38
2024	61.9	58.4	61.8	490.8	696.5	494.6	13.82	11.31
2025	62.3	58.7	62.3	492.8	701.5	496.6	14.00	11.24
2026	62.8	59.0	62.7	494.8	706.5	498.7	14.18	11.16
2027	63.3	59.3	63.2	496.8	711.5	500.8	14.38	11.09
2028	63.7	59.6	63.6	498.8	716.5	502.8	14.57	11.02
2029	64.2	59.9	64.1	500.8	721.5	504.9	14.76	10.95
2030	64.7	60.2	64.6	502.8	726.5	506.9	14.96	10.88
2031	65.2	60.5	65.0	504.8	731.5	509.0	15.17	10.80
2032	65.6	60.8	65.5	506.8	736.5	511.0	15.39	10.73
2033	66.1	61.1	66.0	508.8	741.5	513.1	15.61	10.66
2034	66.6	61.4	66.5	510.8	746.5	515.1	15.85	10.59
Avg Annual Growth								
2000-13	3.0%	2.2%	2.9%	3.9%	7.2%	3.9%	-7.1%	-9.3%
2013-14	2.5%	0.5%	2.5%	0.5%	0.8%	0.5%	3.0%	1.5%
2013-23	0.9%	0.5%	0.9%	0.4%	0.8%	0.4%	1.6%	-0.2%
2013-34	0.8%	0.5%	0.8%	0.4%	0.7%	0.4%	1.5%	-0.5%

* Source: Form 41 and 298C, U.S. Department of Transportation.

** Reporting carriers.

TABLE 25

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER TRAFFIC

(In Millions)

FISCAL	REVENUE PASSENGERS			REVENUE PASSENGER MILES		
YEAR	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM
Historical						
2000	79.7	3.1	82.8	22,825	814	23,639
2006	152.2	3.5	155.7	68,532	1,634	70,166
2007	156.2	3.4	159.6	70,528	1,772	72,300
2008	159.1	3.5	162.6	73,305	1,867	75,172
2009	154.0	2.5	156.6	70,374	1,304	71,678
2010	161.6	2.7	164.3	75,053	1,347	76,400
2011	161.7	2.4	164.1	75,513	1,270	76,783
2012	159.0	3.1	162.1	74,330	1,856	76,186
2013E	155.5	2.9	158.3	72,951	1,851	74,801
Forecast						
2014	157.5	2.9	160.4	74,278	1,889	76,167
2015	162.6	3.0	165.6	76,974	1,966	78,940
2016	167.4	3.1	170.5	79,496	2,040	81,536
2017	172.0	3.2	175.1	81,997	2,111	84,108
2018	176.5	3.3	179.8	84,510	2,183	86,693
2019	180.5	3.3	183.8	86,782	2,249	89,031
2020	183.9	3.4	187.3	88,797	2,309	91,105
2021	186.7	3.5	190.1	90,509	2,361	92,869
2022	189.2	3.5	192.8	92,132	2,411	94,543
2023	192.0	3.6	195.6	93,859	2,464	96,323
2024	195.3	3.6	198.9	95,851	2,524	98,375
2025	198.7	3.7	202.4	97,922	2,586	100,509
2026	202.1	3.8	205.9	100,017	2,650	102,667
2027	205.5	3.8	209.3	102,083	2,713	104,796
2028	209.0	3.9	212.8	104,243	2,778	107,022
2029	212.4	3.9	216.3	106,372	2,844	109,215
2030	215.8	4.0	219.8	108,522	2,910	111,431
2031	219.2	4.1	223.2	110,642	2,975	113,617
2032	222.5	4.1	226.7	112,792	3,041	115,833
2033	225.9	4.2	230.1	114,969	3,109	118,078
2034	229.4	4.3	233.6	117,174	3,177	120,351
Avg Annual Growth						
2000-13	5.3%	-0.6%	5.1%	9.3%	6.5%	9.3%
2013-14	1.3%	1.3%	1.3%	1.8%	2.1%	1.8%
2013-23	2.1%	2.1%	2.1%	2.6%	2.9%	2.6%
2013-34	1.9%	1.9%	1.9%	2.3%	2.6%	2.3%

* Source: Form 41 and 298C, U.S. Department of Transportation.

TABLE 26

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

	DOMESTIC			INTERNATIONAL			SYSTEM		
FISCAL YEAR	ASMs (MIL)	RPMs (MIL)	% LOAD FACTOR	ASMs (MIL)	RPMs (MIL)	% LOAD FACTOR	ASMs (MIL)	RPMs (MIL)	% LOAD FACTOR
Historical									
2000	38,332	22,825	59.5	1,338	814	60.8	39,670	23,639	59.6
2006	91,458	68,532	74.9	2,387	1,634	68.5	93,845	70,166	74.8
2007	93,452	70,528	75.5	2,550	1,772	69.5	96,002	72,300	75.3
2008	99,469	73,305	73.7	2,632	1,867	70.9	102,101	75,172	73.6
2009	94,664	70,374	74.3	1,859	1,304	70.2	96,523	71,678	74.3
2010	98,489	75,053	76.2	1,857	1,347	72.5	100,346	76,400	76.1
2011	99,075	75,513	76.2	1,818	1,270	69.9	100,893	76,783	76.1
2012	95,748	74,330	77.6	2,595	1,856	71.5	98,343	76,186	77.5
2013E	93,075	72,951	78.4	2,448	1,851	75.6	95,523	74,801	78.3
Forecast									
2014	95,151	74,278	78.1	2,482	1,889	76.1	97,633	76,167	78.0
2015	98,554	76,974	78.1	2,567	1,966	76.6	101,120	78,940	78.1
2016	101,736	79,496	78.1	2,645	2,040	77.1	104,381	81,536	78.1
2017	104,890	81,997	78.2	2,720	2,111	77.6	107,610	84,108	78.2
2018	108,060	84,510	78.2	2,795	2,183	78.1	110,855	86,693	78.2
2019	110,921	86,782	78.2	2,861	2,249	78.6	113,782	89,031	78.2
2020	113,455	88,797	78.3	2,919	2,309	79.1	116,374	91,105	78.3
2021	115,602	90,509	78.3	2,966	2,361	79.6	118,568	92,869	78.3
2022	117,638	92,132	78.3	3,010	2,411	80.1	120,648	94,543	78.4
2023	119,806	93,859	78.3	3,057	2,464	80.6	122,863	96,323	78.4
2024	122,312	95,851	78.4	3,112	2,524	81.1	125,425	98,375	78.4
2025	124,921	97,922	78.4	3,170	2,586	81.6	128,091	100,509	78.5
2026	127,560	100,017	78.4	3,238	2,650	81.8	130,798	102,667	78.5
2027	130,162	102,083	78.4	3,304	2,713	82.1	133,467	104,796	78.5
2028	132,885	104,243	78.4	3,374	2,778	82.3	136,259	107,022	78.5
2029	135,567	106,372	78.5	3,443	2,844	82.6	139,010	109,215	78.6
2030	138,277	108,522	78.5	3,518	2,910	82.7	141,796	111,431	78.6
2031	140,949	110,642	78.5	3,593	2,975	82.8	144,542	113,617	78.6
2032	143,660	112,792	78.5	3,669	3,041	82.9	147,329	115,833	78.6
2033	146,406	114,969	78.5	3,746	3,109	83.0	150,152	118,078	78.6
2034	149,185	117,174	78.5	3,824	3,177	83.1	153,009	120,351	78.7
Avg Annual Growth									
2000-13	7.1%	9.3%		4.8%	6.5%		7.0%	9.3%	
2013-14	2.2%	1.8%		1.4%	2.1%		2.2%	1.8%	
2013-23	2.6%	2.6%		2.2%	2.9%		2.5%	2.6%	
2013-34	2.3%	2.3%		2.1%	2.6%		2.3%	2.3%	

* Source: Form 41 and 298C, U.S. Department of Transportation.

TABLE 27

U.S. REGIONAL CARRIERS

PASSENGER AIRCRAFT

	REGIONAL AIRCRAFT											
AS OF	LESS THAN	10 TO 19	20 TO 30	31 TO 40 SEATS			OVER 40 SEATS			TOTAL FLEET		
JANUARY 1	9 SEATS	SEATS	SEATS	PROP	JET	TOTAL	PROP	JET**	TOTAL	NON JET	JET	TOTAL
Historical												
2000	470	343	262	474	74	548	155	496	651	1,704	570	2,274
2006	453	204	88	224	92	316	87	1,584	1,671	1,056	1,676	2,732
2007	453	172	79	228	91	319	101	1,656	1,757	1,033	1,747	2,780
2008	451	107	68	180	25	205	121	1,730	1,851	927	1,755	2,682
2009	466	103	65	153	29	182	115	1,722	1,837	902	1,751	2,653
2010	440	92	82	144	28	172	99	1,728	1,827	857	1,756	2,613
2011	447	94	67	113	27	140	135	1,683	1,818	856	1,710	2,566
2012	394	90	55	115	23	138	104	1,559	1,663	758	1,582	2,340
2013E	337	94	52	37	0	37	51	1,642	1,693	571	1,642	2,213
Forecast												
2014	326	91	50	36	0	36	53	1,646	1,699	556	1,646	2,202
2015	317	88	49	35	0	35	54	1,642	1,696	543	1,642	2,185
2016	304	85	47	33	0	33	57	1,640	1,697	526	1,640	2,166
2017	293	82	45	32	0	32	59	1,645	1,704	511	1,645	2,156
2018	282	79	43	31	0	31	61	1,644	1,705	496	1,644	2,140
2019	271	75	42	30	0	30	62	1,660	1,722	480	1,660	2,140
2020	258	72	40	28	0	28	64	1,668	1,732	462	1,668	2,130
2021	247	69	38	27	0	27	67	1,689	1,756	448	1,689	2,137
2022	234	65	36	26	0	26	69	1,712	1,781	430	1,712	2,142
2023	219	61	34	24	0	24	72	1,724	1,796	410	1,724	2,134
2024	204	57	32	22	0	22	75	1,740	1,815	390	1,740	2,130
2025	190	53	29	21	0	21	77	1,752	1,829	370	1,752	2,122
2026	173	48	27	19	0	19	80	1,768	1,848	347	1,768	2,115
2027	157	44	24	17	0	17	83	1,784	1,867	325	1,784	2,109
2028	144	40	22	16	0	16	85	1,801	1,886	307	1,801	2,108
2029	129	36	20	14	0	14	89	1,827	1,916	288	1,827	2,115
2030	116	32	18	13	0	13	91	1,855	1,946	270	1,855	2,125
2031	99	28	15	11	0	11	94	1,879	1,973	247	1,879	2,126
2032	85	24	13	9	0	9	97	1,904	2,001	228	1,904	2,132
2033	72	20	11	8	0	8	100	1,928	2,028	211	1,928	2,139
2034	55	15	9	6	0	6	103	1,953	2,056	188	1,953	2,141
Avg Annual Growth												
2000-13	-2.5%	-9.5%	-11.7%	-17.8%	-100.0%	-18.7%	-8.2%	9.6%	7.6%	-8.1%	8.5%	-0.2%
2013-14	-3.3%	-3.2%	-3.8%	-2.7%	N/A	-2.7%	3.9%	0.2%	0.4%	-2.6%	0.2%	-0.5%
2013-23	-4.2%	-4.2%	-4.2%	-4.2%	N/A	-4.2%	3.5%	0.5%	0.6%	-3.3%	0.5%	-0.4%
2013-34	-8.3%	-8.4%	-8.0%	-8.3%	N/A	-8.3%	3.4%	0.8%	0.9%	-5.2%	0.8%	-0.2%

*Source: The Velocity Group for the Regional Airline Association through 2004.

**Independence Air A319 aircraft are included in Table 20 - U.S. Mainline Air Carriers Passenger Jet Aircraft.

TABLE 28

ACTIVE GENERAL AVIATION AND AIR TAXI AIRCRAFT

	FIXED WING												TOTAL		
	PISTON			TURBINE			ROTORCRAFT						GENERAL		
AS OF	SINGLE	MULTI-		TURBO	TURBO					EXPERI-	SPORT		AVIATION	TOTAL	TOTAL
DEC. 31	ENGINE	ENGINE	TOTAL	PROP	JET	TOTAL	PISTON	TURBINE	TOTAL	MENTAL**	AIRCRAFT**	OTHER	FLEET	PISTONS	TURBINES
Historical															
2000	149,422	21,091	170,513	5,762	7,001	12,763	2,680	4,470	7,150	20,407	NA	6,700	217,533	173,193	17,233
2006	145,036	18,708	163,744	8,063	10,379	18,442	3,264	5,895	9,159	23,047	1,273	6,277	221,942	167,008	24,337
2007	147,569	19,337	166,906	9,514	10,385	19,899	2,769	6,798	9,567	23,228	6,066	5,940	231,606	169,675	26,697
2008	145,497	17,515	163,012	8,907	11,042	19,949	3,498	6,378	9,876	23,364	6,811	5,652	228,664	166,510	26,327
2009	140,649	16,474	157,123	9,055	11,268	20,323	3,499	6,485	9,984	24,419	6,547	5,480	223,876	160,622	26,808
2010	139,519	15,900	155,419	9,369	11,484	20,853	3,588	6,514	10,102	24,784	6,528	5,684	223,370	159,007	27,367
2011E	136,895	15,702	152,597	9,523	11,650	21,173	3,411	6,671	10,082	24,275	6,645	5,681	220,453	156,008	27,844
2012	128,847	14,313	143,160	10,304	11,793	22,097	3,292	6,763	10,055	26,715	2,001	5,006	209,034	146,452	28,860
2013E	123,730	14,235	137,965	10,195	11,890	22,085	3,360	7,025	10,385	25,305	2,110	5,015	202,865	141,325	29,110
Forecast															
2014	122,755	14,180	136,935	10,160	12,055	22,215	3,430	7,280	10,710	25,895	2,240	5,025	203,020	140,365	29,495
2015	121,850	14,130	135,980	10,175	12,250	22,425	3,500	7,545	11,045	26,415	2,370	5,035	203,270	139,480	29,970
2016	121,000	14,075	135,075	10,190	12,540	22,730	3,570	7,820	11,390	26,880	2,515	5,040	203,630	138,645	30,550
2017	120,200	14,020	134,220	10,230	12,875	23,105	3,640	8,110	11,750	27,305	2,690	5,050	204,120	137,860	31,215
2018	119,435	13,955	133,390	10,285	13,225	23,510	3,710	8,405	12,115	27,705	2,830	5,065	204,615	137,100	31,915
2019	118,700	13,890	132,590	10,355	13,600	23,955	3,775	8,690	12,465	28,100	2,955	5,075	205,140	136,365	32,645
2020	118,015	13,820	131,835	10,445	14,010	24,455	3,840	8,990	12,830	28,500	3,080	5,080	205,780	135,675	33,445
2021	117,365	13,735	131,100	10,550	14,425	24,975	3,905	9,290	13,195	28,900	3,195	5,085	206,450	135,005	34,265
2022	116,760	13,655	130,415	10,685	14,855	25,540	3,970	9,585	13,555	29,310	3,315	5,100	207,235	134,385	35,125
2023	116,190	13,575	129,765	10,820	15,315	26,135	4,030	9,870	13,900	29,715	3,450	5,110	208,075	133,795	36,005
2024	115,660	13,500	129,160	11,000	15,800	26,800	4,090	10,150	14,240	30,130	3,595	5,115	209,040	133,250	36,950
2025	115,200	13,435	128,635	11,205	16,325	27,530	4,150	10,435	14,585	30,555	3,745	5,120	210,170	132,785	37,965
2026	114,790	13,360	128,150	11,455	16,870	28,325	4,210	10,720	14,930	30,980	3,885	5,135	211,405	132,360	39,045
2027	114,430	13,295	127,725	11,735	17,445	29,180	4,275	11,010	15,285	31,415	4,030	5,145	212,780	132,000	40,190
2028	114,125	13,220	127,345	12,045	18,045	30,090	4,340	11,305	15,645	31,850	4,170	5,150	214,250	131,685	41,395
2029	113,895	13,155	127,050	12,375	18,665	31,040	4,405	11,600	16,005	32,275	4,315	5,155	215,840	131,455	42,640
2030	113,740	13,090	126,830	12,725	19,310	32,035	4,470	11,900	16,370	32,715	4,445	5,165	217,560	131,300	43,935
2031	113,660	13,030	126,690	13,110	19,970	33,080	4,540	12,205	16,745	33,145	4,565	5,175	219,400	131,230	45,285
2032	113,675	12,985	126,660	13,515	20,645	34,160	4,610	12,510	17,120	33,575	4,680	5,185	221,380	131,270	46,670
2033	113,780	12,935	126,715	13,930	21,340	35,270	4,680	12,825	17,505	34,010	4,780	5,190	223,470	131,395	48,095
2034	113,975	12,890	126,865	14,370	22,050	36,420	4,750	13,145	17,895	34,440	4,880	5,200	225,700	131,615	49,565
Avg Annual Growth															
2000-13	-1.4%	-3.0%	-1.6%	4.5%	4.2%	4.3%	1.8%	3.5%	2.9%	1.7%	N/A	-2.2%	-0.5%	-1.6%	4.1%
2013-14	-0.8%	-0.4%	-0.7%	-0.3%	1.4%	0.6%	2.1%	3.6%	3.1%	2.3%	6.2%	0.2%	0.1%	-0.7%	1.3%
2013-23	-0.6%	-0.5%	-0.6%	0.6%	2.6%	1.7%	1.8%	3.5%	3.0%	1.6%	5.0%	0.2%	0.3%	-0.5%	2.1%
2013-34	-0.4%	-0.5%	-0.4%	1.6%	3.0%	2.4%	1.7%	3.0%	2.6%	1.5%	4.1%	0.2%	0.5%	-0.3%	2.6%

* Source: 2000-2010, 2012, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

**Experimental Light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.

TABLE 29

ACTIVE GENERAL AVIATION AND AIR TAXI HOURS FLOWN

(In Thousands)

CALENDAR YEAR	FIXED WING						ROTORCRAFT			EXPERI-MENTAL**	SPORT AIRCRAFT**	OTHER	TOTAL GENERAL AVIATION HOURS	TOTAL PISTONS	TOTAL TURBINES
	PISTON			TURBINE											
	SINGLE ENGINE	MULTI-ENGINE	TOTAL	TURBO PROP	TURBO JET	TOTAL	PISTON	TURBINE	TOTAL						
Historical															
2000	18,089	3,400	21,489	1,986	2,755	4,741	530	1,661	2,191	1,307	NA	374	30,102	22,019	6,402
2006	13,976	2,550	16,525	2,162	4,077	6,240	918	2,528	3,446	1,218	66	211	27,705	17,443	8,767
2007	13,571	2,686	16,257	2,661	3,938	6,600	704	2,541	3,245	1,275	260	215	27,852	16,962	9,141
2008	12,746	2,328	15,074	2,457	3,600	6,057	751	2,470	3,222	1,155	293	209	26,009	15,825	8,527
2009	11,730	1,903	13,634	2,215	3,161	5,376	755	2,248	3,003	1,286	286	178	23,763	14,389	7,624
2010	12,161	1,818	13,979	2,325	3,375	5,700	794	2,611	3,405	1,226	311	181	24,802	14,773	8,311
2011	11,844	1,782	13,626	2,463	3,407	5,870	757	2,654	3,411	1,203	278	181	24,570	14,383	8,524
2012	11,442	1,766	13,207	2,733	3,418	6,151	731	2,723	3,454	1,243	169	180	24,404	13,938	8,874
2013E	11,050	1,756	12,806	2,759	3,387	6,146	748	2,725	3,473	1,191	180	181	23,978	13,554	8,872
Forecast															
2014	10,806	1,714	12,521	2,784	3,571	6,355	765	2,804	3,569	1,237	193	182	24,057	13,285	9,159
2015	10,556	1,677	12,233	2,809	3,744	6,553	782	2,884	3,666	1,287	206	183	24,130	13,015	9,437
2016	10,340	1,652	11,992	2,828	3,927	6,755	799	2,987	3,786	1,343	221	185	24,282	12,791	9,742
2017	10,155	1,630	11,785	2,852	4,123	6,975	816	3,103	3,919	1,405	239	186	24,509	12,602	10,078
2018	10,010	1,609	11,618	2,872	4,317	7,189	834	3,220	4,054	1,454	254	187	24,756	12,452	10,409
2019	9,886	1,590	11,476	2,897	4,521	7,418	850	3,335	4,184	1,489	268	189	25,023	12,325	10,752
2020	9,783	1,577	11,360	2,924	4,738	7,661	866	3,455	4,320	1,526	282	190	25,338	12,225	11,116
2021	9,691	1,564	11,255	2,953	4,952	7,905	882	3,575	4,457	1,563	295	191	25,667	12,137	11,481
2022	9,629	1,554	11,183	2,992	5,172	8,163	898	3,695	4,592	1,600	309	192	26,040	12,080	11,858
2023	9,593	1,548	11,141	3,032	5,391	8,423	913	3,801	4,714	1,636	325	194	26,432	12,054	12,224
2024	9,557	1,542	11,099	3,080	5,609	8,689	927	3,906	4,833	1,672	343	195	26,831	12,026	12,595
2025	9,532	1,540	11,072	3,141	5,838	8,979	943	4,012	4,955	1,709	360	196	27,271	12,014	12,992
2026	9,518	1,539	11,057	3,211	6,069	9,280	957	4,120	5,077	1,743	377	198	27,732	12,015	13,399
2027	9,516	1,536	11,052	3,290	6,303	9,594	974	4,229	5,203	1,778	395	199	28,220	12,025	13,823
2028	9,521	1,529	11,049	3,381	6,542	9,923	990	4,343	5,332	1,812	413	200	28,731	12,039	14,266
2029	9,532	1,530	11,063	3,479	6,785	10,264	1,005	4,458	5,463	1,847	432	202	29,270	12,068	14,721
2030	9,547	1,530	11,076	3,582	7,029	10,611	1,021	4,577	5,598	1,882	449	203	29,819	12,098	15,188
2031	9,578	1,538	11,116	3,688	7,275	10,963	1,038	4,703	5,741	1,917	466	204	30,408	12,154	15,666
2032	9,619	1,554	11,174	3,800	7,512	11,313	1,055	4,831	5,886	1,952	482	206	31,013	12,229	16,144
2033	9,679	1,572	11,250	3,920	7,751	11,671	1,072	4,976	6,048	1,987	498	207	31,661	12,323	16,646
2034	9,768	1,594	11,361	4,041	8,005	12,046	1,090	5,123	6,213	2,023	513	208	32,365	12,451	17,169
Avg Annual Growth															
2000-13	-3.7%	-5.0%	-3.9%	2.6%	1.6%	2.0%	2.7%	3.9%	3.6%	-0.7%	N/A	-5.4%	-1.7%	-3.7%	2.5%
2013-14	-2.2%	-2.4%	-2.2%	0.9%	5.4%	3.4%	2.3%	2.9%	2.8%	3.9%	7.0%	0.7%	0.3%	-2.0%	3.2%
2013-23	-1.4%	-1.3%	-1.4%	0.9%	4.8%	3.2%	2.0%	3.4%	3.1%	3.2%	6.1%	0.7%	1.0%	-1.2%	3.3%
2013-34	-0.6%	-0.5%	-0.6%	1.8%	4.2%	3.3%	1.8%	3.1%	2.8%	2.6%	5.1%	0.7%	1.4%	-0.4%	3.2%

* Source: 2000-2010, 2012, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

**Experimental Light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the previous calendar year.

TABLE 30

ACTIVE PILOTS BY TYPE OF CERTIFICATE

AS OF DEC. 31	STUDENTS	RECREA-TIONAL	SPORT PILOT	PRIVATE	COMMERCIAL	AIRLINE TRANSPORT	ROTOR-CRAFT ONLY	GLIDER ONLY	TOTAL PILOTS	TOTAL LESS AT PILOTS	INSTRUMENT RATED PILOTS[1]
Historical											
2000	93,064	340	N/A	251,561	121,858	141,596	7,775	9,387	625,581	483,985	311,944
2006	84,866	239	939	219,233	117,610	141,935	10,690	21,597	597,109	455,174	309,333
2007	84,339	239	2,031	211,096	115,127	143,953	12,290	21,274	590,349	446,396	309,865
2008	80,989	252	2,623	222,596	124,746	146,838	14,647	21,055	613,746	466,908	325,247
2009	72,280	234	3,248	211,619	125,738	144,600	15,298	21,268	594,285	449,685	323,495
2010	119,119 [2]	212	3,682	202,020	123,705	142,198	15,377	21,275	627,588	485,390	318,001
2011	118,657	227	4,066	194,441	120,865	142,511	15,220	21,141	617,128	474,617	314,122
2012	119,946	218	4,493	188,001	116,400	145,590	15,126	20,802	610,576	464,986	311,952
2013E	120,285	238	4,824	180,214	108,206	149,824	15,114	20,381	599,086	449,262	307,120
Forecast											
2014	120,050	235	5,250	182,500	110,900	150,000	15,210	20,470	604,615	454,615	307,100
2015	119,550	235	5,700	183,900	110,950	150,600	15,415	20,560	606,910	456,310	307,850
2016	118,950	235	6,100	183,750	111,700	151,200	15,715	20,645	608,295	457,095	308,400
2017	118,350	235	6,550	182,950	112,200	151,700	16,105	20,730	608,820	457,120	308,800
2018	117,800	235	6,950	182,200	112,450	152,200	16,600	20,805	609,240	457,040	309,250
2019	117,300	235	7,400	181,500	112,650	152,600	17,150	20,885	609,720	457,120	309,850
2020	116,850	235	7,800	180,950	112,800	153,300	17,750	20,955	610,640	457,340	310,550
2021	116,500	230	8,200	180,700	113,050	154,200	18,300	21,030	612,210	458,010	311,300
2022	116,200	230	8,650	180,500	113,300	155,100	18,900	21,095	613,975	458,875	312,150
2023	116,000	230	9,100	180,450	113,650	155,800	19,500	21,160	615,890	460,090	313,100
2024	115,800	230	9,600	180,400	114,050	156,600	20,100	21,225	618,005	461,405	314,050
2025	115,650	230	10,050	180,450	114,550	157,600	20,750	21,285	620,565	462,965	315,100
2026	115,550	225	10,550	180,550	115,100	158,500	21,400	21,340	623,215	464,715	316,150
2027	115,500	225	11,050	180,700	115,800	159,400	22,050	21,395	626,120	466,720	317,250
2028	115,500	225	11,550	180,850	116,500	160,300	22,700	21,445	629,070	468,770	318,350
2029	115,500	225	12,100	181,050	117,300	161,400	23,350	21,495	632,420	471,020	319,500
2030	115,550	225	12,650	181,250	118,100	162,600	24,000	21,540	635,915	473,315	320,700
2031	115,600	225	13,250	181,450	119,000	163,700	24,700	21,585	639,510	475,810	321,850
2032	115,700	225	13,850	181,700	119,950	164,900	25,400	21,620	643,345	478,445	323,000
2033	115,850	225	14,500	182,050	120,950	166,000	26,100	21,660	647,335	481,335	324,200
2034	116,050	225	15,200	182,450	122,000	167,200	26,800	21,700	651,625	484,425	325,400
Avg Annual Growth											
2000-13	2.0%	-2.7%	N/A	-2.5%	-0.9%	0.4%	5.2%	6.1%	-0.3%	-0.6%	-0.1%
2013-14	-0.2%	-1.3%	8.8%	1.3%	2.5%	0.1%	0.6%	0.4%	0.9%	1.2%	0.0%
2013-23	-0.4%	-0.3%	6.6%	0.0%	0.5%	0.4%	2.6%	0.4%	0.3%	0.2%	0.2%
2013-34	-0.2%	-0.3%	5.6%	0.1%	0.6%	0.5%	2.8%	0.3%	0.4%	0.4%	0.3%

* Source: FAA U.S. Civil Airmen Statistics.

[1]Instrument rated pilots should not be added to other categories in deriving total.

[2]In July 2010, the FAA issued a rule that increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 to 60 months. This resulted in the increase in active student pilots to 119,119 from 72,280 at the end of 2009.

Note: An active pilot is a person with a pilot certificate and a valid medical certificate.

TABLE 31

GENERAL AVIATION AIRCRAFT FUEL CONSUMPTION
(In Millions of Gallons)

	FIXED WING								TOTAL FUEL CONSUMED		
	PISTON		TURBINE		ROTORCRAFT		EXPERI-				
CALENDAR YEAR	SINGLE ENGINE	MULTI-ENGINE	TURBO-PROP	TURBO-JET	PISTON	TURBINE	MENTAL**/ OTHER	SPORT**	AVGAS	JET FUEL	TOTAL
Historical											
2000	200.8	108.4	176.3	736.7	8.4	59.0	15.2	NA	332.8	972.0	1,304.8
2006	164.9	79.9	190.1	1,303.9	16.7	148.6	21.6	0.3	283.4	1,642.6	1,926.0
2007	157.6	83.0	205.2	1,148.0	9.3	132.4	22.6	1.2	273.6	1,485.6	1,759.2
2008	143.0	69.5	230.4	1,313.2	10.7	162.1	23.3	1.5	248.1	1,705.7	1,953.8
2009	132.3	57.1	208.7	1,104.6	10.7	133.6	25.8	1.4	227.4	1,447.0	1,674.4
2010	133.1	53.9	187.1	1,122.9	10.7	124.8	21.6	1.5	220.7	1,434.8	1,655.6
2011E	129.9	52.9	195.3	1,124.6	10.3	136.4	21.5	1.4	216.0	1,456.3	1,672.3
2012	125.8	53.9	208.8	1,077.2	10.2	148.9	15.7	0.8	206.4	1,434.9	1,641.3
2013E	121.5	53.6	208.2	1,056.6	10.5	148.6	15.9	0.9	202.4	1,413.4	1,615.8
Forecast											
2014	118.8	52.6	209.0	1,108.4	10.7	152.2	16.9	1.0	200.0	1,469.5	1,669.5
2015	115.8	51.4	208.7	1,156.4	10.9	155.7	17.6	1.0	196.8	1,520.8	1,717.6
2016	113.5	50.6	209.1	1,206.7	11.2	159.7	18.2	1.1	194.5	1,575.5	1,770.1
2017	111.3	49.9	209.8	1,260.7	11.4	165.0	19.0	1.2	192.8	1,635.6	1,828.3
2018	109.7	49.2	210.2	1,313.4	11.6	170.4	19.6	1.3	191.4	1,694.0	1,885.5
2019	108.4	48.6	212.1	1,368.5	11.8	176.5	20.0	1.3	190.2	1,757.0	1,947.3
2020	107.0	48.2	213.0	1,427.0	12.1	182.8	20.5	1.4	189.2	1,822.7	2,012.0
2021	106.0	47.7	214.1	1,476.5	12.2	187.3	20.7	1.4	188.1	1,877.9	2,066.0
2022	105.1	47.4	215.8	1,526.7	12.5	192.6	21.2	1.5	187.6	1,935.0	2,122.6
2023	104.7	47.2	217.6	1,575.4	12.7	197.2	21.6	1.6	187.8	1,990.1	2,177.9
2024	104.3	47.0	221.0	1,622.8	12.9	201.6	22.1	1.7	188.0	2,045.4	2,233.4
2025	103.9	46.7	224.2	1,672.3	13.1	207.1	22.5	1.8	188.0	2,103.6	2,291.6
2026	103.4	46.7	226.9	1,721.0	13.2	210.5	22.7	1.8	187.9	2,158.4	2,346.3
2027	103.1	46.6	231.9	1,769.5	13.4	215.0	23.1	1.9	188.2	2,216.4	2,404.6
2028	102.8	46.2	238.0	1,818.3	13.7	219.7	23.5	2.0	188.2	2,276.0	2,464.2
2029	102.6	46.2	243.7	1,866.9	13.9	225.5	24.0	2.1	188.8	2,336.0	2,524.8
2030	102.5	46.2	250.2	1,914.6	14.1	229.2	24.4	2.2	189.3	2,393.9	2,583.3
2031	102.4	46.4	256.8	1,961.9	14.3	235.5	24.8	2.3	190.3	2,454.2	2,644.5
2032	102.4	46.9	263.8	2,005.6	14.6	241.9	25.2	2.3	191.5	2,511.4	2,702.9
2033	102.5	47.5	270.7	2,048.6	14.8	249.2	25.7	2.4	192.9	2,568.5	2,761.4
2034	103.0	48.1	277.7	2,094.6	15.0	256.6	26.1	2.5	194.7	2,628.9	2,823.6
Avg Annual Growth											
2000-13	-3.8%	-5.3%	1.3%	2.8%	1.7%	7.4%	0.3%	N/A	-3.8%	2.9%	1.7%
2013-14	-2.2%	-1.9%	0.4%	4.9%	2.0%	2.4%	6.5%	7.0%	-1.2%	4.0%	3.3%
2013-23	-1.5%	-1.3%	0.4%	4.1%	1.9%	2.9%	3.1%	5.9%	-0.7%	3.5%	3.0%
2013-34	-0.8%	-0.5%	1.4%	3.3%	1.7%	2.6%	2.4%	5.0%	-0.2%	3.0%	2.7%

*Source: FAA APO Estimates.

**Experimental Light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.

Note: Detail may not add to total because of independent rounding.

TABLE 32

TOTAL COMBINED AIRCRAFT OPERATIONS AT AIRPORTS

WITH FAA AND CONTRACT TRAFFIC CONTROL SERVICE

(In Thousands)

FISCAL	AIR	AIR TAXI/	GENERAL AVIATION			MILITARY				NUMBER OF TOWERS	
YEAR	CARRIER	COMMUTER	ITINERANT	LOCAL	TOTAL	ITINERANT	LOCAL	TOTAL	TOTAL	FAA	CONTRACT
Historical											
2000	15,158.7	10,760.5	22,844.1	17,034.4	39,878.5	1,439.8	1,448.2	2,888.0	68,685.7	266	192
2006	13,256.3	11,967.6	18,707.1	14,365.4	33,072.5	1,358.4	1,417.3	2,775.7	61,072.1	263	231
2007	13,611.2	11,667.3	18,575.2	14,556.8	33,132.0	1,313.9	1,405.7	2,719.5	61,130.0	264	235
2008	13,780.1	11,032.1	17,492.7	14,081.2	31,573.8	1,285.0	1,245.6	2,530.6	58,916.6	264	239
2009	12,836.4	9,520.8	15,571.1	12,448.0	28,019.0	1,305.2	1,280.4	2,585.5	52,961.7	264	244
2010	12,657.6	9,410.4	14,863.9	11,716.3	26,580.1	1,309.0	1,297.9	2,606.9	51,255.0	264	244
2011	12,866.0	9,278.5	14,527.9	11,437.0	25,964.9	1,319.0	1,311.3	2,630.3	50,739.8	264	248
2012	12,872.9	8,994.4	14,521.7	11,608.3	26,130.0	1,308.9	1,269.9	2,578.8	50,576.0	264	250
2013E	12,776.0	8,803.6	14,119.0	11,690.0	25,808.9	1,275.3	1,276.9	2,552.2	49,940.7	264	252
Forecast											
2014	12,951.3	8,668.2	14,172.4	12,001.5	26,173.8	1,275.3	1,276.9	2,552.2	50,345.5	264	252
2015	13,298.6	8,767.9	14,237.4	12,052.2	26,289.6	1,275.3	1,276.9	2,552.2	50,908.2	264	252
2016	13,625.9	8,878.2	14,303.0	12,103.4	26,406.3	1,275.3	1,276.9	2,552.1	51,462.6	264	252
2017	13,978.7	8,988.7	14,369.1	12,155.0	26,524.1	1,275.2	1,276.9	2,552.1	52,043.6	264	252
2018	14,339.3	9,102.9	14,435.9	12,207.1	26,643.0	1,275.2	1,276.9	2,552.1	52,637.2	264	252
2019	14,711.2	9,209.0	14,503.2	12,259.6	26,762.9	1,275.2	1,276.9	2,552.1	53,235.2	264	252
2020	15,079.5	9,298.3	14,571.2	12,312.7	26,883.9	1,275.2	1,276.9	2,552.1	53,813.7	264	252
2021	15,421.8	9,357.9	14,639.8	12,366.2	27,006.0	1,275.2	1,276.9	2,552.1	54,337.8	264	252
2022	15,808.2	9,366.6	14,709.0	12,420.2	27,129.2	1,275.2	1,276.9	2,552.0	54,856.1	264	252
2023	16,266.7	9,317.4	14,778.8	12,474.7	27,253.5	1,275.1	1,276.9	2,552.0	55,389.7	264	252
2024	16,762.2	9,256.5	14,849.3	12,529.7	27,379.0	1,275.1	1,276.9	2,552.0	55,949.8	264	252
2025	17,313.1	9,145.1	14,920.4	12,585.2	27,505.6	1,275.1	1,276.9	2,552.0	56,515.9	264	252
2026	17,881.0	9,015.7	14,992.2	12,641.2	27,633.4	1,275.1	1,276.9	2,552.0	57,082.1	264	252
2027	18,558.2	8,788.1	15,064.7	12,697.7	27,762.4	1,275.1	1,276.9	2,552.0	57,660.7	264	252
2028	19,282.9	8,526.7	15,137.8	12,754.8	27,892.6	1,275.1	1,276.9	2,552.0	58,254.2	264	252
2029	19,927.1	8,353.8	15,211.6	12,812.3	28,024.0	1,275.1	1,276.9	2,551.9	58,856.8	264	252
2030	20,564.1	8,208.0	15,286.1	12,870.5	28,156.6	1,275.0	1,276.9	2,551.9	59,480.6	264	252
2031	20,996.0	8,253.5	15,361.4	12,929.1	28,290.5	1,275.0	1,276.9	2,551.9	60,091.8	264	252
2032	21,369.8	8,358.9	15,437.3	12,988.3	28,425.6	1,275.0	1,276.9	2,551.9	60,706.2	264	252
2033	21,742.4	8,465.5	15,513.9	13,048.1	28,562.0	1,275.0	1,276.9	2,551.9	61,321.8	264	252
2034	22,110.4	8,570.3	15,591.3	13,108.4	28,699.8	1,275.0	1,276.9	2,551.9	61,932.4	264	252
Avg Annual Growth											
2000-13	-1.3%	-1.5%	-3.6%	-2.9%	-3.3%	-0.9%	-1.0%	-0.9%	-2.4%		
2013-14	1.4%	-1.5%	0.4%	2.7%	1.4%	0.0%	0.0%	0.0%	0.8%		
2013-23	2.4%	0.6%	0.5%	0.7%	0.5%	0.0%	0.0%	0.0%	1.0%		
2013-34	2.6%	-0.1%	0.5%	0.5%	0.5%	0.0%	0.0%	0.0%	1.0%		

* Source: FAA Air Traffic Activity.

TABLE 33

TOTAL TRACON OPERATIONS
(In Thousands)

FISCAL YEAR	AIR CARRIER	AIR TAXI/ COMMUTER	GENERAL AVIATION	MILITARY	TOTAL
Historical					
2000	16,395.0	11,197.7	20,799.2	3,466.9	51,858.8
2006	13,963.3	12,035.7	17,005.3	2,669.9	45,674.2
2007	14,366.0	11,675.8	16,747.4	2,498.7	45,288.0
2008	14,443.0	11,048.3	15,763.0	2,399.5	43,653.8
2009	13,302.3	9,622.8	14,151.1	2,398.8	39,474.9
2010	13,174.3	9,511.3	13,863.6	2,437.5	38,986.7
2011	13,068.0	9,349.4	13,503.1	2,374.6	38,295.2
2012	13,045.1	8,977.0	13,423.6	2,332.2	37,778.0
2013E	12,913.6	8,797.5	13,047.7	2,225.2	36,983.9
Forecast					
2014	13,089.0	8,645.3	13,026.9	2,225.1	36,986.4
2015	13,437.3	8,748.2	13,119.7	2,225.1	37,530.2
2016	13,765.3	8,861.8	13,212.1	2,225.0	38,064.2
2017	14,119.0	8,976.2	13,307.3	2,225.0	38,627.5
2018	14,481.0	9,094.9	13,404.0	2,225.0	39,204.9
2019	14,854.4	9,205.0	13,501.5	2,224.9	39,785.9
2020	15,223.8	9,296.1	13,597.5	2,224.9	40,342.3
2021	15,566.8	9,353.9	13,688.9	2,224.8	40,834.5
2022	15,953.7	9,356.4	13,779.9	2,224.8	41,314.8
2023	16,413.2	9,296.5	13,872.3	2,224.8	41,806.8
2024	16,909.7	9,224.2	13,967.3	2,224.7	42,326.0
2025	17,461.4	9,097.1	14,062.9	2,224.7	42,846.1
2026	18,029.8	8,950.7	14,158.9	2,224.6	43,364.0
2027	18,707.4	8,698.1	14,255.6	2,224.6	43,885.7
2028	19,432.4	8,408.8	14,353.8	2,224.6	44,419.6
2029	20,077.2	8,215.2	14,453.9	2,224.5	44,970.8
2030	20,715.0	8,051.4	14,556.4	2,224.5	45,547.3
2031	21,148.2	8,093.9	14,659.8	2,224.4	46,126.3
2032	21,523.6	8,200.8	14,764.3	2,224.4	46,713.0
2033	21,897.9	8,308.6	14,869.3	2,224.4	47,300.1
2034	22,267.6	8,414.0	14,974.4	2,224.3	47,880.3
Avg Annual Growth					
2000-13	-1.8%	-1.8%	-3.5%	-3.4%	-2.6%
2013-14	1.4%	-1.7%	-0.2%	0.0%	0.0%
2013-23	2.4%	0.6%	0.6%	0.0%	1.2%
2013-34	2.6%	-0.2%	0.7%	0.0%	1.2%

* Source: FAA Air Traffic Activity.

TABLE 34

IFR AIRCRAFT HANDLED

AT FAA EN ROUTE TRAFFIC CONTROL CENTERS

(In Thousands)

FISCAL YEAR	IFR AIRCRAFT HANDLED				
	AIR CARRIER	AIR TAXI/ COMMUTER	GENERAL AVIATION	MILITARY	TOTAL
Historical					
2000	24,987.0	8,100.9	8,744.3	4,192.5	46,024.8
2006	24,394.5	9,436.7	8,197.0	4,149.7	46,177.8
2007	25,006.2	9,652.9	8,294.3	3,803.3	46,756.7
2008	23,895.3	10,179.0	7,670.7	3,649.2	45,394.1
2009	22,406.8	8,561.8	6,331.8	2,993.0	40,293.5
2010	22,341.5	8,623.8	6,550.3	2,982.2	40,497.8
2011	23,431.7	9,010.4	6,557.3	2,227.6	41,227.1
2012	23,650.9	8,932.1	6,472.1	1,859.9	40,915.1
2013E	23,181.1	8,672.7	6,439.1	1,675.6	39,968.5
Forecast					
2014	23,583.8	8,561.0	6,397.3	1,675.6	40,217.8
2015	24,221.5	8,571.7	6,443.5	1,675.6	40,912.3
2016	24,905.0	8,597.4	6,481.8	1,675.6	41,659.8
2017	25,602.0	8,636.0	6,535.6	1,675.6	42,449.2
2018	26,308.3	8,705.3	6,591.2	1,675.6	43,280.4
2019	27,021.6	8,777.8	6,650.7	1,675.6	44,125.7
2020	27,718.7	8,853.4	6,705.7	1,675.6	44,953.4
2021	28,364.9	8,921.4	6,749.8	1,675.6	45,711.7
2022	29,000.0	8,991.2	6,790.7	1,675.6	46,457.6
2023	29,642.4	9,066.0	6,832.3	1,675.6	47,216.4
2024	30,308.5	9,145.1	6,877.5	1,675.6	48,006.7
2025	30,973.2	9,228.0	6,922.9	1,675.6	48,799.7
2026	31,618.4	9,328.7	6,967.2	1,675.6	49,589.9
2027	32,257.9	9,440.4	7,013.8	1,675.6	50,387.7
2028	32,909.4	9,552.9	7,062.1	1,675.6	51,199.9
2029	33,578.6	9,667.6	7,113.0	1,675.6	52,034.9
2030	34,268.7	9,788.6	7,169.5	1,675.6	52,902.4
2031	34,959.1	9,916.9	7,225.4	1,675.6	53,777.0
2032	35,659.7	10,045.7	7,284.6	1,675.6	54,665.7
2033	36,362.1	10,177.2	7,344.4	1,675.6	55,559.3
2034	37,062.2	10,305.6	7,403.0	1,675.6	56,446.4
Avg Annual Growth					
2000-13	-0.6%	0.5%	-2.3%	-6.8%	-1.1%
2013-14	1.7%	-1.3%	-0.6%	0.0%	0.6%
2013-23	2.5%	0.4%	0.6%	0.0%	1.7%
2013-34	2.3%	0.8%	0.7%	0.0%	1.7%

* Source: FAA Air Traffic Activity.