



Federal Aviation Administration

FAA Aerospace Forecasts

Fiscal Years 2007–2020

U.S. Department of Transportation Federal Aviation Administration Aviation Policy and Plans

MESSAGE FROM THE ADMINISTRATOR



The headlines say it all: *Aviation Industry Turns a Profit in '06*. Aviation has withstood the turbulence created by 9/11 and its aftershocks. An industry that saw four network carriers enter bankruptcy in a five-year period is now back in the black.

The FAA's aviation forecast for 2007-2020 indicates that this upswing will continue. Aviation is indeed back, and it has done so with a vengeance. More passengers are flying more than ever. Wall Street has taken notice. Profits of \$5.5 billion for the industry and \$2.9 billion for passenger carriers are not the entire story. Commercial aviation is still on track to reach a billion passengers by 2015. We expect a growth in passengers of 3.5 percent. Capacity will grow 4.3 percent. Load factors will increase to about 80 percent. The general aviation fleet is looking up as well. We expect the fleet to grow to about 275,000 by 2020, an increase of 51,000. General aviation hours will climb to 43.9 million by 2020, a jump of almost 17 million. Cargo is growing by 5.3 percent as well. Additionally, the FAA's workload will increase. Tower operations should grow 2 percent, and en route operations by more than 3 percent.

In the big picture, we expect continued increased passenger demand among low-cost carriers and smaller regional airlines. We also see continued growth in larger regional jets flying more point-to-point routes. There will be increases in corporate jet flights, fractional ownership and new micro jets. Airline operations are expected to return to traditional levels at most hub-and-spoke airports.

Overall, last year's forecast was weakened by the risk factors present in any projection. The high cost of fuel continued to affect airline operations. The airlines flew fewer aircraft, which affected capacity. The domino effect then hit FAA operations, as a slight dip in operations registered in controller workload. However, some facilities such as Las Vegas, Houston Intercontinental and Salt Lake City that offer considerable service by low cost and regional carriers continue to see growth.

The 2007-2020 forecast may be affected by the entry of very light jets as well. The exact nature and scope of their presence is largely unknown. If they are as popular as early projections indicate, they could trigger a considerable increase in workload.

We remain optimistic about the continued recovery of aviation. This industry has shown itself to be remarkably resilient. The 2007-2020 forecast shows more of the same.

huir C. Stakey

Marion C. Blakey Administrator

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FORECAST HIGHLIGHTS 2007-2020

The 2007 forecast for commercial aviation calls for a return to growth and over time, the industry is expected to grow significantly. System capacity – the overall yardstick for how busy aviation is both domestically and internationally – will increase 2.8 percent this year, following last year's decline of 0.2 percent.

In domestic markets, capacity is expected to increase 2.1 percent, as network carrier capacity stabilizes and low cost carriers continue to grow. Regional carrier capacity, which depends in large part on feed from the legacy carriers, is forecast to increase 2.9 percent. Revenue passenger miles will increase 2.8 percent while enplanements are expected to increase faster, up 3.6 percent.

The average size of domestic aircraft is expected to increase this year by 0.3 seats to 120.5 seats. Network carriers are reconfiguring their domestic fleets to increase the number of seats, while low-cost carriers with relativley smaller aircraft sizes continue to grow at a faster rate. The result is a slight decrease in overall aircraft size for the mainline carrier group in aggregate. While demand for 70–90 seat aircraft continues to increase, we expect that the number of 50 seat regional jets in service will continue to fall, increasing the average regional aircraft in 2007 by 0.8 seats to 50.8 seats per mile. Domestic passenger trip length is expected to decrease by 7 miles in 2007 as network carrier trip length remains steady while trip length in the growing low-cost carrier sector falls.

General aviation is expected to receive a boost from the certification of Very Light Jets (VLJ's). These relatively inexpensive twin-engine microjets may redefine "on-demand" air taxi service. Next year, we project that 350 microjets will join the fleet, with that figure growing to 400-500 per year through 2020. Partly as a result of the influx of new microjets, the number of general aviation hours flown is projected to increase an average of 3.4 percent per year through 2020.

The FAA continues to be optimistic about the future. Since 2000, the industry has been battered with 9/11, the spread of the Severe Acute Respiratory Syndrome (SARS) and concerns about pandemics, the bankruptcy of 4 network carriers, and record high fuel prices. An important yardstick, though, remains the number of passengers that traveled. Last year, that number was a record 741 million. U.S. commercial aviation remains on track to carry one billion passengers by 2015. In addition, international traffic is growing at much faster rates than domestic traffic.

For the first time since 2000, the industry returned to profitability as capacity decreases coupled with fare increases offset the impact from rising fuel prices. We see the industry returning to a period of sustained profitability buoyed by a strong national economy. In the long run, a healthy industry, inexpensive tickets, and increasing demand for seats aboard aircraft should bode well for consumers.

REVIEW OF 2006

In 2006¹, passenger demand growth on U.S. airlines was weak, following two strong years in 2004 and 2005. System revenue passenger miles (RPMs) and enplanements grew 2.1 and 0.4 percent, respectively. Commercial air carrier domestic enplanements fell 0.2 percent while international enplanements grew 6.0 percent and surpassed 70 million for the first time. The system-wide load factor increased to an all-time high of 79.0 percent and coupled with a 7.5 percent increase in yield resulted in an industry wide operating profit for the first time since 2000.

Regional and low-cost carriers² grew while their network carrier³ counterparts shrank. In 2006 the domestic enplanement market share for the regional and low-cost carriers increased 2.7 points to 47.7 percent, up from a 30 percent share in 2000. Increased competition is prompting network carriers to continue to cut costs and prices in markets served by low-cost carriers. This is good news for the flying public.

In spite of increasing competition, the network carriers are beginning to see a turnaround in their finances. United Airlines emerged from Chapter 11 bankruptcy protection after more than three years and both Delta and Northwest are on track to emerge from bankruptcy protection in 2007. After reporting a \$10.3 billion net loss in 2005, network carriers reported a \$3.2 billion net loss in 2006. However, network carriers reported a \$1.0 billion operating profit in 2006, the first since 2000, despite the fact that fuel prices increased more than 30 percent. Higher fuel prices cost the industry some \$8.9 billion last year alone. Higher fuel prices are also impacting low-cost and regional carriers as well, as carriers have deferred deliveries of new aircraft and trimmed growth plans in order to sustain profitability. Cargo carriers, on the other hand, reported net profits of \$1.6 billion.

The market for general aviation products and services climbed for the third consecutive year. General aviation aircraft shipments and billings in 2006 were up 10.1 and 19.6 percent respectively compared to 2005. The surge in shipments and billings was stimulated by growth in the U.S. and world economy. Despite the increase in shipments and in billings, general aviation activity fell in 2006 as high fuel prices took their toll.

¹ 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.

² American Trans Air, America West Airlines, AirTran Airways, Frontier Airlines, JetBlue Airways, Southwest Airlines, and Spirit Airlines

³ Alaska Airlines, American Airlines, Continental Airlines, Delta Air Lines, Northwest Airlines, United Airlines, and US Airways.

U.S. ECONOMIC ACTIVITY

The U.S. Gross Domestic Product (GDP) enjoyed solid growth in fiscal years 2005 and 2006 growing by 3.3 percent each year. In fiscal year 2005, seasonally adjusted quarterly growth ranged between 2.6 percent (1Q) to 4.2 percent (4Q); in fiscal 2006, growth fluctuated considerably from 1.8 percent rising to 5.6 percent in the second and falling again to 1.6 percent in the last quarter.



According to the consumer price index (CPI), prices rose 3.3 percent in fiscal year 2005, a full percentage point above a year earlier. Price increases jumped even more in fiscal year 2006 with the CPI rising 3.7 percent. Large oil price increases played an important role in the rise of overall prices.

Oil prices, as measured by the U.S. Refiners' Acquisition Cost, rose by 27.3 percent in fiscal year 2006. This rise follows a 40.3 percent increase in fiscal year 2005. Higher prices were spurred by strong global demand for oil and concerns about potential supply disruptions.



WORLD ECONOMIC ACTIVITY

As the world's largest economy, the U.S continues to have a prominent role in world economic growth. In 2005 and 2006 though, U.S. GDP growth lagged that of the rest of the world. U.S. and world economic growth reached 3.2 and 3.5 percent, respectively, in calendar year 2005; growth rose slightly to 3.3 percent here at home while worldwide GDP growth jumped to 3.9 percent in calendar year 2006. The rise in GDP growth in the remainder of the world was driven by the growth in Latin American and Asian markets.



On a calendar year basis, Canadian GDP growth lagged the U.S. in 2005 and 2006 with growth of 2.9 percent each year. The combined economies of the Asian and Far East nations grew by 5.0 percent in 2006 up from 4.7 percent a year earlier. This region includes the world's second largest economy, Japan (up 2.7 percent), and the world's most vibrant economy, China (up 10.6 percent). The combined

economies of the Europe/Middle East/Africa nations rose by 3.1 percent in 2006, as rapid growth of Eastern Europe, up 6.2 percent offset the slower growth in Eurozone⁴ countries of 2.5 percent. GDP in Latin America and Mexico grew by 4.5 percent and 5.0 percent in 2005 and 2006, respectively.

COMMERCIAL AVIATION

Commercial aviation was a study in contrasts in 2006. While high jet fuel prices plagued all carriers the impacts to the bottom line were very different in the U.S. compared to the rest of the world. U.S. air-lines raised fares, cut capacity in domestic markets and increased their international flying. World air-lines were not as affected by the high fuel prices as a relatively strong world economy limited the impact on the demand for aviation services and allowed carriers to pass on increased fuel costs to the traveling public through higher fares without dampening demand. In the U.S., despite the higher fares and capacity cutbacks, on a net basis, the industry lost money for a sixth consecutive year. Outside of the U.S., the story was different as world airlines made an estimated \$3.2 billion.⁵

World Travel Demand

Based on data compiled by the International Civil Aviation Organization (ICAO), world air carriers transported 2.2 billion passengers (up 7 percent) a total of 3.7 trillion revenue passenger kilometers (RPKs) (up 8.0 percent) in calendar year 2005. Although worldwide traffic results are not available for full year 2006, signs are the demand for world aviation services continued to grow in 2006. In December 2006, ICAO estimated that worldwide RPKs increased 5 percent and passengers increased about 4 percent in 2006.⁶



⁴ Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain.

- ⁵ IATA Financial Forecast, December 2006.
- 6 ICAO News Release, December 21, 2006.

Statistics from the Association of European Airlines (AEA) show that passengers and RPKs increased 4.5 percent and 5.2 percent, respectively, during the first ten months of 2006. Capacity, as measured by available seat kilometers (ASKs), was up 4.3 percent. With double-digit growth, AEA carrier traffic was strongest in the South Atlantic (13.0 percent) and Far East/Australasia regions (12.1 percent). The North Atlantic region posted weak results with only 0.6 percent growth in traffic.



The Association of Asia Pacific Airlines (AAPA) reported increases of 3.6 percent in RPKs and 0.9 percent in ASKs for the first ten months of 2006. Passengers increased 3.9 percent during the same period.



In calendar year 2006, it is estimated that U.S. and foreign flag carriers combined transported 141.5 million passengers between the United States and the rest of the world, an increase of 2.9 percent over 2005. Growth occurred in all four world travel regions, with Canadian transborder markets growing the fastest, up 5.9 percent, followed by Latin America (up 5.0 percent), Asia/Pacific (up 2.0 percent), and Atlantic markets (up 0.3 percent). Transborder passengers returned to pre-9/11 levels during 2006 (Latin America returned in 2005). Pacific and Atlantic passengers have yet to return to pre-911 levels.



Worldwide air cargo demand slowed considerably in 2005 despite strong global economic activity, with freight tonnes and freight ton kilometers (FTKs) up 2.7 and 2.5 percent, respectively. Cargo demand growth in 2006 appears to be similar to that in 2005. For the first ten months of 2006, IATA reported that member carrier cargo traffic was up 4.9 percent. AEA and AAPA statistics show that their member carriers' FTKs were up 2.7 and 6.4 percent, respectively, during the January to October 2006 time period. ICAO estimated that member cargo carrier traffic increased about 3 percent in 2006.⁷



ICAO News Release, December 21, 2006.

Based on financial data compiled by ICAO, world air carriers (including U.S. airlines) reported an operating profit of \$4.3 billion but a net loss of \$3.2 billion in 2005. Since 2000, world airlines have generated cumulative operating profits of \$100 million but net losses of \$36.9 billion. Air carrier financial results in 2006 continued to be negatively impacted by significantly higher fuel prices. In early December, the International Air Transport Association (IATA) estimated that global airline industry losses would be \$0.5 billion in 2006.⁸



U.S. Travel Demand

The U.S. commercial aviation industry consists of 33 mainline air carriers that use large passenger jets (over 90 seats) and 81 regional carriers that use smaller piston, turboprop, and regional jet aircraft (up to 90 seats) to provide connecting passengers to the larger carriers. Mainline and regional carriers provide both domestic and international passenger service between the U.S. and foreign destinations, although regional carrier international service is confined to border markets in Canada, Mexico, and the Caribbean. An additional 25 all-cargo carriers provide domestic and/or international air cargo service.

Three distinct trends have occurred over the past five years that have helped shape today's U.S. commercial air carrier industry: (1) major restructuring and downsizing among the mainline network carriers; (2) rapid growth among low-cost carriers, particularly in nontraditional long-distance transcontinental markets; and (3) exceptional growth among regional carriers.

Commercial Air Carriers – Passengers

After two consecutive years of strong growth, U.S. commercial carrier system capacity and traffic (the sum of domestic and international services) grew at much slower rates in 2006. System ASMs were down 0.2 percent while system RPMs and enplanements showed gains of 2.1 and 0.4 percent, respectively. The system-wide load factor increased 1.8 points to 79.0 percent in 2006, an all-time high, and

⁸ IATA Financial Forecast, December 2006

one which would have been thought impossible to achieve as recently as the early 1990's. New distribution methods, especially the increased use of the Internet by consumers and the compression of the spread between the highest and lowest fares have led to this result.



At the end of 2006, commercial air carrier enplanements exceeded pre-9/11 levels by 6.2 percent while RPMs were 13.9 percent higher than in 2000.



Domestic Passenger Markets

Domestic capacity (50 states, Puerto Rico, and the U.S. Virgin Islands) was down 2.0 percent in 2006 while the number of departures fell 4.0 percent. The fall in ASMs was a bit steeper in the second half of the year (down 2.1 percent) compared to the first half of the year (down 1.8 percent). Mainline carrier capacity was down an estimated 2.5 percent while regional carrier capacity was up 1.5 percent. At the end of 2006, domestic ASMs were just 1.9 percent above pre-9/11 levels while departures were 5.9 percent below.



With the reductions in capacity, domestic passenger enplanements fell slightly (down 0.2 percent) in 2006 compared to 2005. Mainline carrier enplanements were down 1.3 percent while regional carrier enplanements were up 3.9 percent. Enplanements were up just 0.5 percent in the first part of the year before falling 0.8 percent in the latter half of the year.



Despite the slight decline in passengers, domestic passenger traffic grew in 2006 with domestic RPMs up 1.0 percent. Traffic growth was higher in the first half of the year, up 1.8 percent before slowing significantly to 0.2 percent in the second half. Mainline carrier RPMs were up just 0.1 percent while regional carrier RPMs were up 7.6 percent.

Domestic carrier load factor achieved an all-time high of 78.7 percent in 2006, an increase of 2.3 points over 2005 as both mainline (79.3 percent, up 2.1 points) and regional (74.1 percent, up 4.2 points) carriers achieved all-time highs.

Since 2000, total domestic capacity has increased by only 1.9 percent. Network carriers have reduced their domestic capacity by 20.6 percent while low-cost carriers have increased capacity by 57.0 percent and regional carriers have increased capacity a whopping 141.3 percent. Largely due to the cuts in capacity, network carrier RPMs and enplanements fell 10.4 and 22.3 percent, respectively. During this same time period, low-cost carrier RPMs and enplanements have increased 71.1 and 47.9 percent, respectively, while regional carrier RPMs and enplanements have increased 200.2 and 91.0 percent, respectively. As a result, network carriers' share of domestic capacity has fallen from 76.7 percent in 2000 to 59.8 percent in 2006 while their share of RPMs has fallen from 77.7 to 61.3 percent. The combined domestic enplanements of the low-cost carriers and regionals have increased 65.7 percent since 2000, to 319.0 million in 2006. In 2006, their combined passenger count represented 47.7 percent of domestic commercial enplanements, up from 30.0 percent in 2000.



International Passenger Markets

U.S. carriers posted a third consecutive year of strong gains in international capacity and traffic in 2006. U.S. carrier ASMs and departures were up 5.1 and 4.0 percent, respectively, in 2006. ASM growth of 5.8 percent in the second half of the year, was slightly higher than in the first half of the year, up 4.2 percent. Strong capacity growth in the latter half of the year was driven by the Atlantic market, which grew at a pace of 9.3 percent during this period. ASMs increased in all world travel regions—up 6.7, 5.6, and 1.9 percent, respectively, in Atlantic, Latin American, and Asia/Pacific markets.



International RPMs and passenger enplanements were up 5.6 and 6.0 percent, respectively, in 2006 with faster growth recorded in the second half of the year. Latin American markets posted the strongest gains, with RPMs up 9.6 percent and enplanements up 7.8 percent, respectively. RPMs and enplanements grew by 4.9 and 3.9 percent, respectively, in Atlantic markets and by 3.2 and 5.0 percent, respectively, in Pacific markets.



The international load factor climbed 0.4 percentage points over 2005 levels to an all-time high of 79.7 percent in 2006. Load factor increased in Latin American markets (up 2.6 points to 74.4 percent) and Pacific markets (up 1.0 point to 82.8 percent) while declining in North Atlantic markets (down 1.3 points to 81.1 percent).

In 2006, almost 50 percent of the passengers flying abroad on U.S. flag carriers traveled to the Latin American markets. The remaining 50 percent of international passengers was split between the Atlantic markets (31 percent) and the Pacific markets (19 percent).

Commercial Air Carriers—Cargo

Air cargo traffic comprises both domestic and international revenue freight/express and mail. The demand for air cargo is a derived demand resulting from economic activity. Cargo is moved in the bellies of passenger aircraft and in dedicated all-cargo aircraft, on both scheduled and nonscheduled service.

U.S. air carriers flew 39.7 billion revenue ton miles (RTMs) in 2006, up 1.2 percent from 2005. Domestic cargo RTMs (15.7 billion) decreased 2.4 percent, while international RTMs (24.0 billion) were up 3.7 percent. The decrease in domestic RTMs reflects a continuation of the modal shift from air to ground shipments and the impact of air fuel surcharges as well as a large (60 percent) reduction in RTMs by Atlas Air. The increase in international RTMs is attributable to increases in trade (e.g., Asia) and military shipments to the Middle East.



Air cargo RTMs flown by all-cargo carriers were 71.0 percent of total RTMs in 2006, with passenger carriers flying the rest, or 29.0 percent of the total. Total RTMs flown by all-cargo carriers increased 1.5 percent in 2006, from 27.8 billion to 28.2 billion. Total RTMs flown by passenger carriers were 11.5 billion in 2006 (up 0.5 percent).

Since 9/11, the FAA and the Transportation Security Administration (TSA) have issued security directives aimed at strengthening security standards for transporting cargo by air. These directives have caused the diversion of a portion of the freight and mail cargo from passenger to all-cargo carriers. In November 2004, TSA issued a notice of proposed rulemaking that applies security requirements throughout the supply chain. This rule, which became final in 2006, is likely to increase the shift in cargo share from passenger to all-cargo carriers.

U.S. Commercial Air Carriers 2006 Financial Results

Financial results for the U.S. commercial airline industry (including regional carriers) improved in 2006, despite record high oil prices, although disparities remained between passenger and cargo carriers, and between domestic and international markets. In fiscal year 2006, U.S. commercial airlines reported an operating profit of \$5.5 billion and a net loss of \$200 million, the smallest since 2000. Between 2001 and 2006, the industry has posted cumulative operating and net losses of \$15.3 and \$37.6 billion, respectively.



Operating revenues (passenger and cargo) were up 10.7 percent in 2006, reflecting higher fares and increased cargo demand. Operating expenses were up 6.0 percent in 2006, despite the 30.4 percent increase in jet fuel prices per gallon from \$1.52 to \$1.98. Higher jet fuel prices are estimated to have added \$8.9 billion to industry operating costs in 2006, masking the significant improvement carriers made in reducing their non fuel expenses.

In 2006, passenger carriers reported an operating profit of \$2.9 billion and a net loss of \$1.8 billion, respectively, while air cargo carriers, reported operating and net profits of \$2.6 billion and \$1.6 billion, respectively. For the first time since 2000, passenger carriers generated an operating profit (\$1.5 billion) in domestic markets as international operations remained profitable (\$1.4 billion). Largely due to one-time expenses associated with the bankruptcies of Delta and Northwest, passenger carriers reported a \$3.0 billion net loss in domestic markets, while posting a \$1.2 billion net profit in international markets. In international markets, air cargo carriers reported operating and net profits of \$1.4 billion and \$846.6 million. Domestic markets were profitable for cargo carriers who posted operating and net profits of \$1.3 billion and \$764 million, respectively.

Although the overall financial results for passenger carriers improved in 2006, there were noticeable differences between the carrier groups. The low-cost carriers reported combined operating and net profits of \$911.6 million and \$1.5 billion, respectively, in 2006. However, these results were skewed by the emergence of American Trans Air from Chapter 11 bankruptcy protection during the year. Excluding American Trans Air's financial results, the low-cost carriers reported operating and net profits of \$822.9 and \$46.9 million, respectively. Strong competition from the network carriers and high fuel prices hurt the low-cost carriers' profits. However, the reduction in capacity, especially in the intra-east coast markets, coupled with relatively strong demand, resulted in a sharp increase in domestic passenger yield. Low-cost carriers' passenger yield increased 10.3 percent in 2006 while network carriers passenger yield increased by 8.7 percent.



In 2006, regional carriers reported operating profits of \$866.3 million, but a net loss of \$114.4 million. The future of regional carriers is closely tied to the fortunes of the larger network carriers for whom they provide feed at major air carrier airports. Regional carrier domestic passenger yield increased 1.2 percent in 2006 but is down 35.1 percent since 2000. Much of the increase in 2006 reflects the increase in prorated share of the higher yields of their larger partners.

Most of the industry's financial losses are from the seven network carriers' domestic operations. These seven carriers accounted for 59.8 percent of domestic capacity and transported 49.7 percent of all domestic passengers in 2006. Since 2000, the domestic operations of the network carriers have reported combined operating and net losses of \$27.9 and \$36.2 billion, respectively. In 2006 alone, the network carriers' domestic operations incurred operating and net losses of \$141.5 million and \$4.0 billion, respectively.

U.S. Commercial Air Carriers 2006 Aircraft Fleets

Immediately following the events of 9/11 many of the mainline airlines grounded large numbers of their older, less efficient aircraft and deferred delivery of many of the new aircraft scheduled for delivery over the next several years. The industry's current weakened financial condition has dictated yet another round of restructuring and cost cutting efforts, resulting in additional aircraft being grounded and/or the deferring of additional aircraft deliveries.

The total number of aircraft in the U.S. commercial fleet (including regional carriers) is estimated at 7,626 for 2006, a decrease of 58 aircraft from 2005. This includes 3,886 mainline air carrier passenger aircraft (over 90 seats), 997 mainline air carrier cargo aircraft, and 2,743 regional carrier aircraft (jets, turboprops, and pistons).



The mainline carriers' passenger jet fleet fell by 39 aircraft in 2006 as cuts at network and other non low-cost carriers offset increases in low-cost carrier fleets. The mainline carrier fleet now contains 576 fewer aircraft than in 2000.

The mainline carrier cargo fleet increased for the second year in a row, up 6 aircraft to 997 in 2006. On the other hand, the regional carrier passenger fleet has increased by 469 aircraft since 2000. During this 6-year period, 1,117 regional jets have come into to the regional carriers' fleet while the number of turboprops and pistons has declined by 648 aircraft.

GENERAL AVIATION

The General Aviation Manufacturers Association (GAMA) reported that U.S. manufacturers of general aviation aircraft shipped 3,146 aircraft during 2006. This represents an increase of 10.1 percent over 2005, and represents the third consecutive year of impressive gains. All aircraft categories shared in the recovery—jet aircraft, up 15.5 percent; piston aircraft, up 9.2 percent; and turboprops, up 6.7 percent. Billings for the period totaled \$10.4 billion, up 19.6 percent compared to 2005.



The estimated shipment of 2,208 (9.1 percent increase) single-engine piston aircraft in 2006 provides further evidence the array of new aircraft models has stimulated sales in the low-end of the market.

General aviation activity at FAA air traffic facilities declined in 2006. Operations at combined FAA and contract towers dropped 3.0 percent in 2006 with declines in both itinerant and local operations. General aviation instrument activity (IFR) at combined FAA and contract towers also fell in 2006, down 2.3 percent. The number of general aviation aircraft handled at FAA en route centers decreased as well, down 1.8 percent.

The FAA uses estimates of fleet size, hours flown and, utilization from the General Aviation and Air Taxi Activity and Avionics Survey (GA Survey) as baseline figures upon which assumed growth rates can be applied. This survey has been conducted annually since 1977. Beginning with the CY2004 Survey there were significant improvements to the survey methodology. These improvements included conducting 100% 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 (19 categories), FAA region (9 categories), and whether or not the aircraft was owned by an entity certified to fly Part 135 operations (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. The result of these changes was that the sample size nearly doubled. Between 2003 and 2005 large changes in both the number of aircraft (turbojets up by 22.8%, total rotorcraft up by 33.7%) and hours (single engine piston

down by 17.6%) in many categories occurred. It is unclear whether the large changes mentioned above are due to the methodological changes described. Nonetheless, we believe that because of the methodological improvements, current estimates from the GA Survey are superior to those in the past.

Based on the latest FAA assumptions about fleet attrition and aircraft utilization along with GAMA aircraft shipment statistics, the active general aviation fleet is estimated to have increased 0.9 percent in 2006, to 226,422. General aviation flight hours are estimated to have increased 2.1 percent in 2006 to 27.5 million.

Student pilots are important to general aviation and the aviation industry as a whole. In 2006, according to statistics compiled by the FAA's Mike Monroney Aeronautical Center, the number of student pilots decreased by 2.7 percent. This is the second consecutive year of decline in this important pilot category. The industry has, over the past several years, maintained several industry-wide programs designed to attract new pilots to general aviation. The industry is trying to stimulate interest in flying, but the data suggest that more may need to be done.

FAA WORKLOAD

During the late 1990's, the demand for both commercial and general aviation expanded significantly resulting in the delays that plagued many U.S. commercial airports in 2000 and 2001. Passenger demand and activity at FAA air traffic facilities declined significantly following the events of 9/11. However, passenger levels have recovered and the combination of the recovery in passenger demand plus the shift in activity from larger aircraft to smaller regional jets has resulted in increased activity and delays at some U.S. airports during 2006.

Total activity at combined FAA and contract tower airports totaled 61.1 million operations in 2006, down 3.1 percent from 2005 and 11.0 percent below the peak activity level recorded in 2000. Commercial activity (the sum of air carrier and commuter/air taxi) at combined FAA and contract towers decreased 3.3 percent in 2006 with declines in both air carrier operations (down 2.0 percent) and commuter/air taxi operations (down 4.7 percent) while some of the busiest airports in the country are significantly above the activity levels of 2000. Air carrier operations at combined FAA and contract tower airports remain 12.5 percent below their peak 2000 activity level. In spite of the decline from 2005 activity levels, commuter/air taxi operations remain 11.2 percent above activity levels posted in 2000.

Non-commercial activity (the sum of general aviation and military) at combined FAA and contract towers fell 3.0 percent in 2006, with general aviation activity (33.1 million) down 3.0 percent and military activity (2.8 million) down 3.1 percent. At the end of 2006, non-commercial aircraft activity remains 16.0 percent below the activity in 2000.



The FAA pays close attention to the trends occurring at the 35 Operational Evolution Plan (OEP) airports. These airports are the top 35 airports in the country in terms of passenger activity and account for about 75 percent of commercial passengers. Fiscal year 2005 marked the first time since the terror attacks that commercial activity at the OEP airports exceeded pre-9/11 peak activity levels. Because of industry restructuring, combined commercial activity at these airports fell 3.4 percent from fiscal year 2005 levels, and 2.5 percent below pre-9/11 activity levels. In 2006, commercial activity at Cincinnati, Phoenix, Baltimore Washington International, Detroit (DTW) and Washington Dulles fell below 2000 peak activity levels. As result, only eighteen airports exceeded 2000 peak activity levels during fiscal year 2006, down from 23 airports during the previous year.



Reflecting the shift in demand to low-cost and regional carriers, commercial operations at Las Vegas (up 41.1 percent), Houston (up 27.3 percent), and Salt Lake City (up 25.6 percent), are up the greatest relative to their pre-September 11th activity levels. Commercial operations at St. Louis (down 44.4 percent) and Pittsburgh (down 48.4 percent) show the largest reductions from pre-9/11 levels. These activity level shifts reflect the impact of the restructuring of the airline industry and changes in hub location.



During 2006, total activity at FAA en route centers (46.2 million) was down 2.7 percent from the previous year. Commercial activity was down 3.5 percent, with air carrier and commuter/air taxi operations down 2.4 and 6.1 percent, respectively. Non-commercial activity was down just 0.6 percent in 2006 with general aviation activity down 2.0 percent and military activity up 2.4 percent. In 2006, operations for the air carrier, general aviation, and military user groups are below their 2000 activity levels, down 2.4 percent, 6.3, and 1.0 percent, respectively.



FAA AEROSPACE FORECASTS FISCAL YEARS 2007–2020

Developing forecasts of aviation demand and activity levels continues to be challenging as the uncertainties confronting the aviation industry have remained complex and difficult to quantify. Nevertheless, 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 main assumption in developing this year's forecasts continues to be that there will not be a successful terrorist incident against either U.S. or world aviation. Also, the forecasts do not assume further major contractions of the industry through bankruptcy, consolidation, or liquidation.

The commercial aviation forecasts and assumptions are developed from econometric models that try to explain and incorporate emerging trends for three carrier groupings—legacy network carriers, low-cost carriers, and regionals. Strategies and success levels have historically differed for each carrier grouping.

The commercial aviation forecast methodology is a blended methodology. It relies on published schedule information and current monthly trends to drive the short-term (one year out) forecasts and then bases the medium and long-term (2008-2020) forecasts on the results of econometric models. The starting point for developing the commercial aviation forecasts (air carriers and regionals) continues to be the future schedules published in the Official Airline Guide (OAG). Using monthly schedules allows FAA forecasters to develop monthly capacity and demand forecasts for both mainline and regional carriers for fiscal and calendar year 2007.

The general aviation forecasts rely heavily on the discussions with industry experts that occurred at the October 2006 FAA/Transportation Research Board (TRB) Workshop on General Aviation. The assumptions have been updated by FAA analysts to reflect more recent data and developing trends, as well as further discussions with industry experts.

FAA also presents the 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

The FAA uses economic forecasts developed by the Executive Office of the President, Office of Management and Budget (OMB) to project domestic aviation demand. The FAA uses the world and individual country economic projections provided by Global Insight, Inc. to forecast the demand for international aviation services. Annual historical data and economic forecasts are presented in tabular form in Tables 1 through 4. OMB projections are presented on a U.S. government fiscal year (October through September) basis. International forecasts are presented on a calendar year basis. OMB forecasts continued growth for the U.S. economy. On a quarter-by-quarter basis for the next two years OMB projects U.S. economic growth at 2.8 to 3.1 percent through fiscal year 2008. This consistent and solid economic expansion should allow the U.S. commercial aviation industry to continue its growth.



Over the forecast period 2006 through 2020, growth is expected to remain strong with rates declining slightly from 3.3 percent in 2006 to 2.8 percent in 2007 and remaining near 3.0 percent for the remainder of the period. According to Global Insight, Inc. the long-term stability of the U.S. economic growth is dependent on continued growth in the workforce, the capital stock, and improved productivity. A major risk to continued U.S. economic growth is the upward pressure on commodity prices, including the price of oil worldwide. These inflationary pressures, if unchecked, could force up inflation and bond yields and reduce domestic demand.



OMB projects the price of oil, as measured by Refiners' Acquisition Cost, to fall by 4.8 percent in 2007 after more than doubling over the past 3 years. The cost of oil is expected to rise again in 2008 (7.1 percent) and become somewhat less volatile through the remainder of the forecast period.



The inflation rate (as measured by the CPI) is expected to be 2.0 percent in 2007, down substantially from the hefty rise of 3.7 percent in 2006. The slowdown in the rate of inflation in 2007 is attributed, in part, to an expected slowdown in the rise of energy prices and a mild cooling in economic growth. Consumer price inflation is expected to rise in 2008 and 2009 to 2.6 percent and then level off to 2.3 percent for the balance of the forecast.

World Economy

Worldwide economic activity is predicted by Global Insight to expand by 3.3 and 3.5 percent in 2007 and 2008, respectively, and average 3.1 percent over the forecast period.



Latin America and the Asia/Pacific region will continue with the world's highest economic growth rates. These regions are expected to expand their economic activity at annual rates of 3.9 and 3.8 percent, respectively over the period. In Asia, China, with a population of 1.3 billion, is forecast to expand by 7.1 percent a year, while India, with a population of 1.1 billion, is projected to grow 6.2 percent a year over the period 2006 through 2020. Canadian and European GDP growth is anticipated to rise at more moderate rates of 2.4 and 2.5 percent a year, respectively, over the forecast period.

AVIATION TRAFFIC AND ACTIVITY FORECASTS

Total traffic and activity forecasts for commercial air carriers (the sum of mainline and regional carriers) are contained 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 contained in Tables 10 through 18, 20, and 22. These tables contain year-to-year historical data and forecasts.

Regional carrier forecasts and assumptions are found in Tables 23 through 26. These tables provide year-to-year historical and forecast data.

Table 19 provides year-to-year historical and forecast data for cargo activity. Table 21 provides year-to-year historical and forecast data for the cargo jet fleet.

General aviation forecasts are found in Tables 27 through 30. These tables provide year-to-year historical data and forecasts.

Tables 31 through 33 provide forecasts of aircraft activity at FAA and contract facilities.

Commercial Aviation Forecasts

After two years of strong growth, U.S. commercial air carriers in 2006 posted flat capacity and traffic results. In 2006, system (the sum of domestic plus international) capacity fell by 0.2 percent to just over one trillion ASMs. Passenger demand, impacted by higher fares and a slowing economy, remained flat, with enplanements up just 0.4 percent to 741.1 million while RPMs increased 2.1 percent to 791.3 billion. Demand remained healthy for regional carriers in 2006 but large domestic capacity cuts by legacy carriers dampened mainline carrier demand. While domestic markets remained basically flat, international markets saw 5 to 6 percent growth propelled by a double-digit increase in the Latin American regions.

System load factor and trip length climbed in 2006, while seats per aircraft mile increased for the first time since 1997. Load factor increased 1.8 points to an all-time high of 79.0 percent, and trip length grew 17.9 miles to 1,067.8 miles. Reversing an 8-year downward trend, seats per aircraft mile increased by 0.6 in 2006 to 135.6 seats per aircraft mile as network carriers shifted wide-body flying from domestic to international markets.

Capacity and demand growth are forecast in 2007 to rebound from the slowdown in 2006. Capacity is projected to grow 2.8 percent as the network carrier domestic market capacity stabilizes (after falling almost 6 percent in 2006) while low-cost carriers continue to add capacity in domestic markets and network carriers continue to grow in international markets. Mainline carrier system capacity is projected to increase 2.8 percent while regional carrier capacity rises 3.0 percent. Passenger demand growth also rebounds with RPMs forecast to increase 3.4 percent (up 3.2 percent and 5.2 percent for mainline and regional carriers, respectively) as passenger enplanements rise 3.7 percent. Growth is projected to accelerate in 2008 as RPMs and passengers increase 4.2 and 3.4 percent, respectively, while capacity increases slightly faster at 4.3 percent. For the balance of the forecast, system capacity is projected to increase an average of 4.4 percent a year. Supported by solid economic growth and falling real yields, system RPMs are projected to increase 4.5 percent a year, with regional carriers (5.1 percent a year) growing faster than mainline carriers (4.4 percent a year). System passengers are projected to increase an average of 3.5 percent a year, with mainline carriers growing faster than regional carriers (3.7 vs. 3.0 percent a year). By 2020, U.S. commercial air carriers are projected to fly 1.8 trillion ASMs and transport 1.2 billion enplaned passengers a total of 1.4 trillion passenger miles. Planes will become fuller, as load factor is projected to continue to increase to 80.3 percent by 2020. Passenger trip length is also forecast to increase by more than 130 miles over the forecast to 1,198.1 miles (up 9.3 miles annually). The growth in passenger trip length reflects the faster growth in the relatively longer international trips and longer domestic trips resulting from increased point-to-point service.



Domestic Markets

After a significant capacity decline of 2.0 percent in FY 2006 driven primarily by network carrier capacity cuts and a shift in aircraft to international markets, domestic capacity is projected to rebound in FY 2007, increasing by 2.1 percent. Mainline carrier capacity is projected to rise 2.0 percent following the 2.5 percent decline in 2006 as network carrier capacity stabilizes and low-cost carriers continue to grow.

In an environment of high oil prices, and unrelenting low-cost carrier competition, network carriers continue to fine-tune their business models. In the post-9/11 environment network carriers released a windfall of capacity to their regional partners. However, in the current environment, Chapter 11 network carriers are carrying out schedule cuts that not only reduce mainline capacity, but also capacity flown by their regional partners. These schedule cuts significantly dampened regional carrier capacity growth during 2006 compared to the double-digit growth rates during the FY 2002–FY 2005 period. After posting annual increases in the 20 percent range, regional carrier capacity grew only moderately in 2006 at 1.5 percent, and is projected to increase 2.9 percent in 2007. Domestic commercial carrier capacity growth accelerates in 2008 to 3.6 percent as mainline carriers grow 3.3 percent while regional carriers grow 5.4 percent. For the balance of the forecast (2008–2020), domestic capacity is projected to increase at an average annual rate of 4.0 percent, with mainline carrier growth lower (3.8 percent) than the regional carriers (5.0 percent).



Supported by a growing economy and moderating fare increases, domestic RPM growth returns in 2007 (up 2.8 percent) as industry capacity and demand move more into balance. Mainline carrier RPMs are projected to grow slightly slower (2.5 percent) than the overall industry. Growth picks up in 2008 (3.4 percent) driven by consumer spending, and then for the balance of the forecast (2008-2020) domestic RPMs are projected to grow an average of 4.1 percent a year driven by continued growth in the economy and falling real yields. Mainline carriers are projected to grow more slowly than regional carriers (4.0 and 5.2 percent a year, respectively). Domestic passenger enplanements fell by 0.2 percent in 2006 as carriers tried to shore up their profitability by raising fares. Passenger volumes are expected to bounce back in 2007 and 2008, growing 3.6 and 3.1 percent respectively. For the remainder of the forecast period, domestic enplanements are projected to grow at an average annual rate of 3.4 percent with mainline carriers growing faster than regional carriers (3.5 and 3.0 percent a year, respectively). Although total domestic enplanements exceeded pre-9/11 levels in 2005, mainline carrier volumes do not return to pre-9/11 levels until 2009.



Following an 8.5 percent increase (4.7 percent in real terms) in 2006, nominal mainline carrier domestic passenger yield, is projected to increase further in 2007 by 2.5 percent (0.4 percent in real terms) as industry supply and demand move more into balance and oil price increases moderate. Beginning in 2008 and continuing for the balance of the forecast period, increases in nominal yields are projected to grow at a rate of 1.4 percent a year, while in real terms they are projected to decline an average of 0.9 percent a year. The decline in real yields over the forecast period is based on the assumption that increased competition from low-cost carriers will continue, and exert pressure on the network carriers to match the lower fares on competitive routes. Competition in domestic markets will come from established low-cost carriers such as Southwest, as well as smaller low-cost carriers such as AirTran, Frontier, and JetBlue. In addition, the newly formed US Airways (the result of the merger between America West and US Airways) may be a catalyst for a broader application of simpler fare structures in domestic markets.

The slower growth in projected domestic commercial carrier activity (departures) at FAA air traffic facilities compared to passenger traffic growth (average annual growth during 2006–2020 of 2.3 percent for departures versus 3.4 percent for enplanements) reflects increased carrier efficiencies in three operational measures—aircraft size, load factor, and trip length.

Domestic aircraft size⁹ declined in 2005 by 1.3 seats to 120.4, and remained essentially flat at 120.2 seats in 2006, but is forecast to increase by 0.3 seats in 2007 to 120.5 seats. Aircraft size is projected to increase through 2011 to 121.3 seats, then decline gradually through 2015 to 120.9 seats. Seat capacity will start to recover in 2016 and rise to 121.4 seats by 2020.

The FAA's projections of domestic carrier average aircraft size is greatly influenced by carrier fleet plans, publicly known aircraft order books and FAA's expectations of the evolving domestic competitive landscape. In the short-term timeframe (through 2011), the forecast incorporates several network carrier assumptions: 1) network carrier desire to constrain ASM capacity growth; 2) network carrier "own metal" service on longer-haul routes; 3) the retirement of older inefficient aircraft (many of which are narrow-body); 4) shifting wide-body and larger narrow-body aircraft to international services, and 5) the significant downsizing of Chapter 11 carriers during bankruptcy and its implications for aircraft retirements.

In the longer-term, network carriers will continue to replace their wide-body and larger narrow-body aircraft in their domestic route networks with smaller narrow-body aircraft. In addition, some carriers, such as JetBlue, are turning to smaller aircraft, like the 100-seat Embraer 190, to supplement their network structure. The use of smaller narrow-body aircraft allows mainline carriers to better serve their customers by boosting frequency, as well as improve profitability by more closely matching supply (the number of seats) with demand (the number of passengers).

Mainline aircraft size increased in 2006 by 0.2 seats to 150.4 seats, but is projected to fall in 2007 by 0.1 seats. The overall average for the mainline group will peak in 2010 at 151.2 seats and then gradually decrease to 147.7 by 2020.

⁹ Defined as seats per mile flown and computed by dividing ASMs by miles flown
While mainline carriers have been reducing the size of aircraft flown domestically, regional carriers have been increasing the size of their aircraft. The most visible example of this trend is the wave of 70-90 seat regional jet aircraft that are entering the fleet with the continuing relaxation of scope clauses. Regional carriers are better able to support operations of their mainline partners when they can provide capacity that complements market demand. The greater number of the larger 70 and 90 seat regional jets in the fleet increases the average seating capacity of the regional fleet – from 50.0 seats in 2006 to 50.8 seats in 2007 and 59.0 seats in 2020. The changing aircraft fleet mix is narrowing the gap between the size and aircraft types operated by the mainline and regional carriers.

Commercial carrier domestic load factor increased 2.3 points in 2006 to 78.7 percent. The increase in load factor was heavily weighted by the results of the network carriers whose load factor grew 2.3 points to a record 80.6 percent. In 2007, domestic load factor is expected to increase 0.5 points to 79.2 percent with increases for both mainline and regional carriers. After 2007 load factor is projected to increase at an average of 0.1 points a year, reaching 80.3 percent in 2020.

Passenger trip length is also forecast to increase after 2007. In 2006, domestic passenger trip length increased by a substantial margin of 9.6 miles to 871.4 miles with gains recorded by both mainline and regional carriers. A decline in mainline carrier trip length due to a fall in trip length in the growing low-cost carrier sector leads to a passenger trip length decrease of 6.7 miles in 2007. However, for the balance of the forecast period, trip length is projected to increase an average of 6.5 miles a year, reflecting gains in both mainline carrier and regional carrier trip length. Mainline carrier trip lengths are increasing primarily because shorter length routes are continuing to be transferred to regional partner carriers and because of increased point-to-point service. Regional carrier trip lengths increase because the introduction and use of the larger 70 and 90 seat regional jets allow these carriers to service longer haul markets.

Another key factor in predicting aviation activity relative to passenger demand is the level of connecting versus non-stop (origin-destination) traffic. In the aggregate, it appears that the number of direct flights by carriers (both network and low-cost) is increasing. 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 fluctuate significantly.

The FAA analyzes the ratio of passenger enplanements to origin-destination (O&D) passengers to shed light on long-term trends. 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 on the next page demonstrates, the overall ratio for the U.S. domestic industry varied within a narrow band between 1995 and 2002, but has been decreasing since then. Disaggregating the industry average into network and low-cost carrier components reveals that while the network carrier trend has mirrored the national average, the low-cost carrier sector has reversed its trend in 2004, and has been increasing since. In fact, the respective connectivity ratios of the network and low-cost carrier sector has reversed its trend in 2004, and has been increasing since. In fact, the respective connectivity ratios of the network and low-cost carrier sector has reversed its trend in 2004, and has been increasing since. In fact, the respective connectivity ratios of the network and low-cost carriers were the closest to each other in FY 2006 than any time since FY 1999. The FAA's forecast recognizes the changing pattern of domestic traffic connectivity, and the relative mix of network versus low-cost carrier traffic volumes. These trends are captured in the forecast's passenger enplanement totals.



International Markets

U.S. and Foreign Flag Carriers

FAA provides forecasts of total international passenger demand (the sum of U.S. and foreign flag carriers) 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 from the United States Immigration and Naturalization Services (INS) and Transport Canada, and on regional world historical data and economic projections from Global Insight.

Total passenger traffic between the United States and the rest of the world is estimated to total 141.5 million in calendar year 2006, 2.9 percent higher than in 2005. It is anticipated that 2006 will mark the first time since the 9/11 terror attacks that passengers flown on U.S. and foreign flag carriers between the U.S. and international markets will surpass levels posted in 2000. Economic growth in both the U.S. and the rest of the world drives passengers up 5.2 and 5.3 percent, respectively, in 2007 and 2008. For the balance of the forecast, average annual U.S. and world economic growth of 2.9 and 3.0 percent, respectively, leads to passengers growing at an average rate of 4.8 percent per year, and totaling 274.7 million in 2020.

Over the entire forecast period, high economic growth in the Asia/Pacific and Latin American regions fuels passenger growth averaging 7.0 and 4.8 percent a year, respectively, in these markets. Passenger traffic is projected to grow an average of 4.1 percent a year in Atlantic markets and 3.6 percent a year in Canadian transborder markets.



U.S. Flag Air Carriers

In 2006, U.S. commercial air carrier international capacity grew 5.1 percent. Capacity is forecast to increase 4.8 percent in 2007, with the fastest growth in the Latin markets. Capacity growth remains robust at 6.3 percent in 2008, and averages 5.4 percent a year for the balance of the forecast. Strong growth throughout the forecast reflects favorable U.S. and world economic activity as well as the realization by U.S. mainline carriers that international markets are a source of profitable operations.





U.S. commercial air carrier international RPMs increased 5.6 percent in 2006 and enplanements increased 6.0 percent. RPM growth is projected to slow in 2007 to 5.1 percent reflecting slower growth in the Atlantic and Latin markets. In 2008, strong growth in the Pacific market results in total U.S. carrier international RPMs growing 6.3 percent. For the balance of the forecast, RPM growth is forecast to average 5.4 percent a year with the fastest growth in the Pacific region. A similar pattern is forecast for enplanement growth. International enplanement growth is projected to slow in 2007, to 4.7 percent, then bounce back to 5.5 percent in 2008. Over the balance of the forecast period, enplanements are forecast to increase an average of 4.8 percent a year with the fastest growth in Pacific markets.

The similar growth in U.S. carrier international passengers compared to total international passengers (including foreign flag carrier traffic) over the forecast period (4.9 percent a year) reflects stabilization in market share for U.S. airlines. Forecasts of international demand assume U.S. carriers will benefit from the favorable economic activity in both the United States and world markets. Stronger growth in international travel relative to domestic markets is driven by growth in the Asia/Pacific and Latin America markets.

International load factor for U.S. commercial carriers was 79.7 percent in 2006. Load factor is expected to rise slightly in 2007 to 80.0 percent as capacity increases, especially in the Pacific and Latin markets, are surpassed by the growth in traffic. International load factor is then projected to hold steady at 80.0 percent through 2009, and then increase by 0.1 percentage points to 80.1 percent in 2010 where it remains for the remainder of the forecast period.

International passenger real yields for mainline carriers were up 3.8 percent in 2006, led by growth in Atlantic (4.7 percent), and followed by Asia/Pacific (up 3.1 percent) and Latin markets (up 2.2 percent), reflecting strong demand for travel in the international regions. International yields are expected to increase by 1.1 percent in 2007 and increase an average 1.3 percent a year over the balance of the forecast. In real terms, international yields are forecast to decline at an annual rate of 1.0 percent over the forecast. The decline in real yields is based on the assumption that competitive pressures will continue to exert pressure on carriers to hold the line on fare increases. In international markets, this takes the form of expanded open sky agreements and new and existing global alliances.

Air Cargo

Historically, air cargo activity has moved in synch with GDP. Additional factors that have affected the growth in air cargo traffic include declining real yields, improved productivity, and globalization. Significant structural changes have occurred in the air cargo industry. Among these changes are the following: air cargo security regulations by FAA and TSA; market maturation of the domestic express market; modal shift from air to other modes (especially truck); increases in air fuel surcharges; growth in international trade from open skies agreements; use of all-cargo carriers (e.g., FedEx) by the U.S. Postal Service to transport mail; and increased use of mail substitutes (e.g., e-mail).

The forecasts of Revenue Ton Miles (RTMs) are based on several assumptions specific to the cargo industry. First, security restrictions concerning 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 mainly on models that relate cargo activity to GDP. Forecasts of domestic cargo RTMs were developed with real U.S. GDP as the primary driver. Projections of international cargo RTMs were based on growth in world GDP, adjusted for inflation. The distribution of RTMs between passenger carriers and all-cargo carriers was forecast based on an analysis of historic trends in shares; changes in industry structure and market assumptions.

Total RTMs are forecast to increase 4.6 percent in 2007 and 6.1 percent in 2008. For the balance of the forecast period, total RTMs are forecast to increase at an average annual rate of 5.2 percent, based mainly on economic growth. The forecast of 81.3 billion RTMs in 2020 represents an average annual increase of 5.3 percent over the entire forecast period.

Domestic cargo RTMs are forecast to increase 2.7 percent in 2007 and 4.7 percent in 2008 driven by growth in the U.S. economy. Between 2008 and 2020, domestic cargo RTMs are forecast to increase at an average annual rate of 3.3 percent, based on projected U.S. economic growth. The forecast of 24.9 billion RTMs in 2020 represents an average annual increase of 3.3 percent over the entire forecast period.

The freight/express component of domestic air cargo is highly correlated with capital spending. Consequently, the growth of this component in the future will be tied to growth in the economy. The mail component of domestic air cargo will be affected by overall mail volume.

The all-cargo carriers have increased their share of domestic cargo RTMs flown from 65.4 percent in 1997 to 79.4 percent in 2006. This is because of significant growth in express service by FedEx and United Parcel Service coupled with a lack of growth of domestic freight/express business for passenger carriers. There are a number of recent factors that account for the relative growth of the all-cargo sector. One was the October 2001 FAA security directive that strengthened security standards for transporting cargo on passenger flights. Another factor was the inclusion of Airborne Express into the cargo data reported beginning in 2003. In addition, with passenger load factors at record levels, there is less space available for belly cargo. The all-cargo share is forecast to increase to 83.6 percent by 2020 based on increases in wide-body capacity for all-cargo carriers and security considerations.



International cargo RTMs are forecast to increase 5.9 percent in 2007 and 7.0 percent in 2008 with growth of the world economy and expansion in trade with open skies agreements. For the balance of the forecast period, international cargo RTMs are forecast to increase an average of 6.3 percent a year based on projected growth in world GDP. The forecast 56.4 billion RTMs in 2020 represents an average annual increase of 6.3 percent over the entire forecast period.

All-cargo carriers increased their share of international cargo RTMs flown from 54.5 percent in 1997 to 65.5 percent in 2006. This increase has resulted from the demand for expedited service, increased activity from the war in Iraq, and the change in reporting of contract services. The all-cargo share is forecast to increase to 69.7 percent by 2020 based on increased capacity.

Commercial Aircraft Fleet

The number of commercial aircraft is forecast to grow from 7,626 in 2006 to 11,203 in 2020, an average annual growth rate of 2.8 percent or 256 aircraft annually. The commercial fleet grows by a net 120 aircraft in 2007 and 152 aircraft in 2008; however, most of this growth occurs in low-cost carriers.



The number of passenger jets in the mainline carrier fleet fell by 39 aircraft in 2006 but is expected to increase by 92 aircraft in 2007 and 108 aircraft in 2008. Over the remaining 12 years of the forecast period, the mainline air carrier passenger fleet increases by an average of 163 aircraft a year, reaching a total of 6,041 aircraft in 2020. The narrow-body fleet (including E-190's at JetBlue and US Airways) is projected to grow by 123 aircraft annually over the 14-year forecast period; the wide-body fleet grows by 31 aircraft a year as the Boeing 787 and Airbus A350's enter into the fleet.

The regional carrier passenger fleet is forecast to increase by only 49 aircraft over the next 2 years--16 in 2007 and 33 in 2008. After that, the regional carrier fleet is expected to increase by an average of 75 aircraft (2.4 percent) over the remaining 12 years of the forecast period, reaching 3,694 aircraft in 2020. The number of regional jets (90 seats or fewer) at regional carriers is projected to grow from 1,687 in 2006 to 2,689 in 2020, an average annual increase of 3.4 percent. All of the growth in regional jets over the forecast period occurs in the larger 70 and 90 seat aircraft (1,012 compared to a reduction of 10 aircraft with 50 or less seats), reflecting the relaxation of scope clauses. The turboprop/piston fleet is expected to decline from 1,056 in 2006 to 1,005 in 2020. Turboprop/piston aircraft are expected to account for just over 27 percent of the regional fleet in 2020, down from a 38.5 percent share in 2006.

Cargo large jet aircraft are forecast to increase by 23 aircraft over the next 2 years (from 997 to 1,020 aircraft in 2008), and total 1,468 aircraft in 2020. The narrow-body jet fleet is projected to decline by 4 aircraft a year over the 14-year forecast period. The wide-body jet fleet, including the Airbus A-380 jumbo jet, is projected to increase by more than 37 aircraft yearly.

General Aviation

FAA forecasts fleet and hours flown for single-engine piston aircraft, multi-engine piston, turboprops, turbojets, rotorcraft (piston, turbine), sport, experimental and other (glider, balloon). The FAA forecasts "active aircraft", not total aircraft. An active aircraft is one that has flown at least one hour during the year. The FAA uses estimates of fleet size, hours flown and, utilization from the General Aviation and Air Taxi Activity and Avionics Survey (GA Survey) as baseline figures upon which assumed growth rates can be applied. This survey has been conducted annually since 1977. As noted previously, beginning with the CY2004 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. The changes resulted in the sample size nearly doubling. At the same time the survey methodology changed, large changes in both the number of aircraft and hours in many categories occurred. It is unclear whether the large changes observed in the past two years of the Survey are in fact indicative of changes in the underlying population. As such, we believe that because of the methodological improvements, current estimates from the GA Survey are superior to those in the past and are used as the basis for our forecast. Because the Survey is on a calendar year basis, the 2005 statistics are the latest available. Figures for 2006 are estimated based on other activity indicators and the forecasts of activity begin in 2007 and continue through 2020.

As the demand for business jets has grown over the past several years, the current forecast assumes that business use of general aviation aircraft will expand at a more rapid pace than that for personal/sport use. The business/corporate side of general aviation should continue to benefit from a growing market for new microjets. In addition, corporate safety/security concerns for corporate staff, combined with increased processing times at some U.S. airports have made fractional, corporate, and on-demand charter flights practical alternatives to travel on commercial flights.

The active general aviation fleet is projected to increase at an average annual rate of 1.4 percent over the 14-year forecast period, growing from an estimated 226,422 in 2006 to 274,914 aircraft in 2020. The more expensive and sophisticated turbine-powered fleet (including rotorcraft) is projected to grow at an average of 3.6 percent a year over the 14-year forecast period with the turbine jet fleet increasing at 6.0 percent per year.



At the October 2006 TRB/FAA workshop, industry experts suggested the market for new microjets could add 500 aircraft a year to the active fleet by 2010. The relatively inexpensive twin-engine microjets (priced between \$1 and \$2 million) are believed by many to have the potential to redefine the business

jet segment by expanding business jet flying and offering performance that could support a true ondemand air-taxi business service. This year's forecast assumes that microjets will begin to enter the active fleet in 2007 (350 aircraft) and grow by 400 to 500 aircraft a year after that, reaching 6,300 aircraft by 2020.

The number of piston-powered aircraft (including rotorcraft) is projected to increase from 170,967 in 2006 to 181,750 in 2020, an average increase of 0.4 percent yearly. Although piston rotorcraft are projected to increase rapidly (5.7 percent per year) they are a relatively small component of this segment of general aviation aircraft. Single-engine and multi-engine fixed-wing piston aircraft, which are much more numerous, are projected to grow at much slower rates (0.3 and -0.2 percent respectively) leading to the low growth of the piston-powered fleet. In addition, it is assumed that relatively inexpensive microjets and new light sport aircraft could erode the replacement market for traditional piston aircraft at the high and low ends of the market respectively.

Starting in 2005, a new category of aircraft (previously not included in the FAA's aircraft registry counts) was created: "light sport" aircraft. The forecast assumes registration of 5,600 aircraft over a 5-year period beginning in 2006 including both newly built aircraft and conversions from ultralight trainers. This new aircraft category is projected to total roughly 13,200 in 2020.

The number of general aviation hours flown is projected to increase by 3.4 percent yearly over the 14year forecast period. Much of the increase reflects increased flying by business and corporate aircraft as well as steady if relatively small annual percentage increases in utilization rates for piston aircraft. Hours flown by turbine aircraft (including rotorcraft) are forecast to increase 6.1 percent yearly over the forecast period, compared with 1.3 percent for piston-powered aircraft. Jet aircraft are forecast to account for most of the increase, with hours flown expanding at an average annual rate of 9.4 percent over the 14 years. The large increases in jet hours result from the introduction of microjets, as well as increases in the fractional ownership fleet and its activity levels. Fractional ownership aircraft fly about 1,200 hours annually compared to roughly 350 hours for all business jets in all applications.

Very light jets (VLJs) are expected to function much differently than traditional turbojets. Because of this, FAA has made separate assumptions for traditional turbojets and VLJs. The assumptions underlying the very light jet (VLJ) forecast are vital for both fleet and hours flown. Assumptions are made for the entire VLJ fleet and also for the distribution of that fleet among air taxi use, private use and fractional use. For the various uses, assumptions are made about utilization rates which, along with fleet sizes, determine hours flown. Utilization rates for VLJs will vary by mission. VLJ air taxis are expected to average approximately 1,500 hours per year, fractionals 1,200 and private use 350. This results in an expected utilization rate for all VLJs in 2020 of 1,067 hours. Traditional (non-VLJ) turbojets are expected to average approximately 407 hours per year by 2020, since VLJs are expected to have a greater share of their use in on-demand air taxi than the traditional turbojets.



The number of active general aviation pilots (excluding air transport pilots) is projected to be 506,097 in 2020, an increase of almost 51,000 (up 0.8 percent yearly) over the forecast period. Commercial pilots are projected to increase from 117,610 in 2006 to 130,590 in 2020, an average annual increase of 0.8 percent. The number of student pilots increase from 84,866 in 2006 to 100,181 in 2020, an average annual rate of 1.2 percent. In addition, FAA is projecting that 16,252 new sport pilots will be certified during the forecast period. As of December 31, 2006, the number of sport pilot certificates issued was 939, reflecting a growing interest in this new "entry level" pilot certificate that was only created in 2005. The number of private pilots is projected to total 219,655 in 2020, just 422 higher than the total in 2006.

FAA Workload Forecasts

There were 494 towered airports at the end of September 2006--263 FAA towers and 231 contract towers. While the number of FAA towers is expected to remain constant at 263 in 2007, the number of FAA contract towered airports is forecast to increase by 8 to 239. In 2006, aircraft activity at these 8 airports totaled roughly 767,000 operations, with general aviation accounting for 95.4 percent of the total activity.

FAA and Contract Towers

Activity at the combined FAA and contract towers totaled 61.1 million operations in 2006, down 3.1 percent from 2005. Activity is projected to increase 2.2 percent in 2007, reflecting a surge in non-commercial activity, rise 2.7 percent in 2008, and increase 2.0 percent a year over the remaining 12 years of the forecast period, reaching 81.1 million operations in 2020. Total activity at combined FAA/contract towers is not expected to return to pre-9/11 levels until 2012.

Most of the growth over the 14-year forecast period results from increased commercial aircraft activity (up 2.3 percent annually). Air carrier activity is projected to increase 3.4 percent in 2007 as carriers add

back capacity following sizeable cuts in 2006, then rises 2.8 percent in 2008 as capacity increases, and increases an average of 3.3 percent a year over the remaining 12 years of the forecast period. Commuter/air taxi operations are forecast to fall 0.4 percent in 2007 then rise 0.6 percent in 2008, before growing an average of 1.2 percent a year over the rest of the forecast period.

General aviation activity (down 3.0 percent in 2006) is forecast to increase 2.8 percent in 2007 and 3.5 percent in 2008. For the balance of the forecast, general aviation activity at towered airports is projected to increase an average of 1.8 percent a year, to 43.7 million operations in 2020. Much of the growth in 2007 and 2008 results from the extra activity at the 8 new contract towers that was not in the previous database. General aviation activity at combined FAA/contract towers is not expected to return to pre-9/11 levels until 2014.

Military activity, which declined 3.1 percent in 2006, is forecast to rise 1.0 percent in 2007 and 0.7 percent in 2008. Activity levels are then held constant at the 2008 activity level (2.8 million) through the forecast period. The increase in 2007 and 2008 is because of activity at the 8 new contract towers.

Instrument operations at FAA towered airports (45.8 million) fell 2.9 percent in 2006. Instrument activity is projected to increase just 1.3 percent in 2007, as increases in air carrier and general aviation activity offset declines in commuter/air taxi activity, and then rise 2.2 percent in 2008. For the balance of the forecast period, instrument operations grow an average of 2.7 percent a year, totaling 65.4 million in 2020. Instrument activity at FAA towers is forecast to exceed pre-9/11 levels by 2012.



Over the 14-year forecast period, commercial aircraft instrument operations are forecast to increase at 2.5 percent per year with modest increases in commuter/air taxi activity. General aviation instrument operations are projected to grow faster at 3.1 percent a year. After 2007, general aviation instrument operations are projected to grow 3.2 percent a year versus a 2.6 percent annual rate for commercial instrument operations, reflecting the expected impact of the introduction of microjets to the general aviation fleet. Military activity is expected to remain constant at its 2007 level (2.6 million) of activity throughout the forecast period.

En Route Centers

The number of IFR aircraft handled at FAA en route traffic control centers decreased 2.7 percent to 46.2 million in 2006. All user groups except military saw declines in activity in 2006. The other user categories – air carrier (down 2.4 percent), commuter/air taxi (down 6.1 percent), and general aviation (down 2.0 percent) fell at least 2 percent. Activity at en route centers is forecast to increase by 2.2 percent in 2007, with increases in air carrier and general aviation activity, then rises 2.6 percent in 2008 as commuter/air taxi activity picks up. En route activity then increases by 3.2 percent annually over the balance of the forecast period, reaching 70.3 million aircraft handled in 2020. Between 2008 and 2020, commercial activity is projected to increase at an average annual rate of 3.3 percent, reflecting increases in the commercial fleet and aircraft stage lengths. During the same period, general aviation activity is projected to grow faster, 3.8 percent a year, reflecting the expected impact of microjets and fractional activity. Military activity is held constant at the 2007 activity level throughout the forecast period.



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

COMMERCIAL SPACE TRANSPORTATION

The Federal Aviation Administration's (FAA) 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 49 US Code, Subtitle IX, Chapter 701 (formerly the *Commercial Space Launch Act*). Title 49 and the Executive Order also direct the Department of Transportation (carried out by the FAA) to encourage, facilitate, and promote 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 term "commercial space transportation" refers to the launch of an object into space or the reentry of an object from space by a private, non-government entity. Typically, commercial space transportation concerns the activities of launch service providers, which place satellites into orbit under contract from corporations, governments, or other organizations. Launch service providers also conduct suborbital flights: launches of objects high into the atmosphere or into space that return to Earth instead of entering orbit. The world's major commercial orbital launch service providers are located in the United States, Europe, Russia, and China. Potential entrants include Brazil, Japan, and India.

The FAA licenses several expendable vehicles currently used for commercial orbital launches. These include the Pegasus and Taurus, two small vehicles built and operated by Orbital Sciences Corporation; the Delta IV, a heavy-class vehicle and the Delta II, a medium-class vehicle both built by Boeing and marketed by Boeing Launch Services (BLS); the Zenit 3SL, a heavy-class vehicle built by the Ukrainian company KB Yuzhnoye for the multinational Sea Launch venture and marketed by BLS; and the Atlas 5, a heavy-class vehicle built by Lockheed Martin. Commercial vehicles under development include the Falcon family of boosters by SpaceX. The FAA has also previously licensed small suborbital expendable vehicles.

In 2004 the FAA issued its first license for a suborbital reusable launch vehicle, Scaled Composites' SpaceShipOne; that vehicle was retired after winning the \$10-million Ansari X Prize in October 2004. A number of suborbital vehicles are currently under development for space tourism and other commercial applications. Experimental Permits, for suborbital reusable development and test flights, were first granted by FAA in 2006 to Blue Origin and Armadillo Aerospace.

From 1989 through the end of 2006, DOT/FAA has licensed 180 orbital and suborbital commercial launches.

Six commercial spaceports, located in Alaska, California (Vandenberg Air Force Base and Mojave Airport), Florida, Oklahoma, and Virginia currently have FAA launch site operator licenses. Oklahoma received its launch site operator license in 2006. Several other commercial spaceports are under active development, including sites in New Mexico and Texas.

REVIEW OF 2006

There were seven FAA-licensed launches, all orbital, in 2006, up from five in 2005. ILS carried out one Atlas 5 launch from Cape Canaveral, Sea Launch conducted five successful launches from their Pacific Ocean platform, and Boeing conducted one licensed Delta 4 launch of a government payload from Cape Canaveral. There were also six suborbital permit flights during 2006.

Worldwide there were a total of 21 orbital commercial launches during 2006, compared to 18 in 2005. In addition to the seven FAA-licensed launches, Europe performed five commercial launches of its Ariane 5 and Russia conducted nine launches of various vehicles. There were 66 total worldwide commercial, civil, and military launches in 2006, with commercial launches representing about 32 percent of the total. For more details, see the Year in Review report available from the FAA/AST website at http://www.faa.gov/about/office_org/headquarters_offices/ast/reports_studies/year_review/.

FORECAST

In May 2006, the FAA and the Commercial Space Transportation Advisory Committee (COMSTAC) published their annual forecast for commercial launch demand, the *2006 Commercial Space Transportation Forecasts*. The report forecasts an average of approximately 23.6 commercial orbital launches per year of geosynchronous orbit (GSO) and non-geosynchronous orbit (NGSO) payloads through 2015, with the following annual averages:

- 16.7 launches of medium-to-heavy vehicles to deploy GSO satellites;
- 3.6 launches of medium-to-heavy vehicles to NGSO; and
- 3.3 launches to NGSO by small vehicles



The GSO and NGSO forecasts are not a prediction of what will actually be launched but instead represent 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/

RISKS TO THE FORECAST

The FAA is confident that its current outlook for aviation demand and activity can be achieved, evidenced by the resiliency of the demand for air transportation in the face of challenges. As has been the case for the past several years, terrorism remains the greatest risk to achieving the forecasts. Tighter security measures have restored the public's confidence in the integrity of U.S. and world aviation security systems. However, because of aviation's high visibility and global reach, concerns remain about international terrorism. Any terrorist incident aimed at aviation would have an immediate and significant impact on the demand for aviation services. In addition, there has been much discussion about a worldwide pandemic with the Asian flu. Should such an event occur, it is likely that severe limits on aviation would be enacted and would have a significant impact on the demand for aviation services.

Terrorist and pandemic concerns notwithstanding, this year's forecast is driven, at least in the shortterm, by the improving financial health of the commercial aviation industry, which, in turn, is tied to the price of jet fuel and the health of the U.S. economy.

Oil prices peaked at over \$77/barrel in early August 2006 and then fell below \$56/barrel by mid-November. However, prices then gradually rose to over \$63/barrel by mid-December. Most economic projections now assume that oil prices will remain in the \$55-\$65/barrel range over the next several years, with \$50/barrel being touted as the new floor for future oil prices.

Higher fuel prices cost U.S. commercial air carriers \$8.9 billion in fiscal year 2006, essentially wiping out the significant improvements made by the network carriers in reducing their operating costs. The network carriers, which currently account for 59 percent of the industry's domestic capacity and carry 50 percent of the industry's domestic passengers, are most at risk form higher fuel prices. If oil prices (and jet kerosene prices) had stayed at 2005 levels in 2006, most carriers, including several network carriers, would have generated net profits. This year's forecast assumes \$57/barrel oil in 2007, rising to \$61/barrel in 2008-09 and then gradually falling back to \$58/barrel by 2013. In a high oil price scenario, the potential exists for major supply disruptions/dislocations and/or increased passenger inconveniences, either of which could significantly lessen capacity and passenger demand and reduce competition in many markets. In a \$100/barrel plus scenario, supply disruptions would most likely occur through liquidation and/or further contraction of mainline carrier route structures. Under this scenario, several large U.S. airports could lose their major service provider.

Although FAA uses economic projections from OMB to derive the forecasts of aviation demand, an important part of the FAA forecast process is to compare the OMB forecasts with other economic forecasts. FAA typically compares OMB economic forecasts to those of Global Insight, Inc., a leading economic consulting firm. Global Insight's U.S. GDP forecast is similar to OMB's. Both Global Insight and OMB are projecting U.S. GDP growth to average 3.0 percent a year between 2006 and 2010. In addition, Global Insight regularly provides alternative forecasts and assigns a likelihood of their occurrence; along with the likelihood of the baseline forecast. An optimistic scenario—higher economic growth in

the rest of the world, lower oil prices, and a continuation of the information-driven technology boom that results in higher U.S. economic growth was assigned a 20 percent likelihood by Global Insight. Higher economic growth would lead to increased demand for aviation services and speed the industry's return to profitability.

However, Global Insight's pessimistic scenario—a weaker dollar, rising oil prices, higher inflation, a deeper housing downturn, and rising unemployment—that results in slower U.S. economic growth was assigned a 20 percent likelihood. Slower economic growth would not only slow the recovery in the demand for aviation services but would also hamper and slow the industry's return to profitability.

Low-cost carriers are forecast to continue to increase their share of domestic traffic over the forecast period through a large increase in their fleet. However, except for Southwest, the 2006 financial performance of these carriers was, at best, mixed. There appears to be a good deal of uncertainty as to whether or not the low-cost carriers, with their present business models, can profitably deploy all of the aircraft they are scheduled to take in the next few years. Although most of the current low-cost carriers appear to have greater financial stability and access to funding than previous start-ups, continued high fuel prices, a prolonged slump in travel demand, and/or a prolonged fare war could cause these carriers to scale back planned growth and/or cease operations. In addition, low-cost carriers have a significantly smaller percentage of their future fuel needs hedged. If jet fuel prices go higher than are forecast, the cost gap between low-cost carriers and the network carriers should narrow, further reducing the competitive advantage that many of the low-cost carriers currently enjoy. Any loss of competition could lead to higher fares and a loss of passenger demand.

Also, the forecast assumes the addition of sizable numbers of regional jets into the fleet of regional carriers. However, the regional carriers' future is closely tied to those of the larger network carriers. Should one or more of these large carriers cease to exist (two are operating under Chapter 11 bankruptcy protection), certain regional carriers could find themselves either saddled with excess capacity or lack of sufficient capacity, or lack of feed traffic. Already in both the Delta and Northwest bankruptcies, regional partners are seeing network carrier needs for regional flying substantially reduced.

Consolidation in the airline industry is another risk to the forecast despite US Airways' unsuccessful attempt to acquire Delta. Some carriers, particularly United, have made it clear that they believe consolidation is necessary for the long-term stability/profitability of the industry and, in fact, United and Continental held merger discussions.¹⁰ If consolidation were to occur, it is likely to lesson competition in many markets. Less competition could lead to higher fares for the flying public and lower travel demand.

The global economy continued to perform well in 2006, posting strong gains in many regions of the world. Although the current forecast calls for continuation of high growth rates throughout the forecast period, there are many downside risks inherent in these forecasts. The health of the global economy will continue to depend on the sustainability and strength of U.S. economic growth, with most world regions counting on strong export growth to the United States as a major contributor to their future economic growth. If, as predicted, the U.S. dollar continues to fall, strong U.S. economic growth may not translate into strong U.S. import growth. If this occurs, global economic growth could remain sluggish for some time into the future.

¹⁰ Airline Industry Buzzes With Merger Talk. (Source: New York Times, Wednesday, December 13, 2006)

Furthermore, much of the growth that is currently occurring is concentrated in a relatively few countries such as China and India. Because so much of the current growth is concentrated in a few countries, the risk that a local event could quickly have widespread consequences increases. In addition, there are potential geopolitical risks that could slow global economic growth, i.e., the uncertain political situations in several major oil exporting countries. Doubts remain over the strength of domestic demand in both Japan and the Eurozone as these areas continue to be constrained by structural economic problems, institutional constraints, and the authorities' reluctance to take decisive action. The current forecasts assume strong passenger growth for travel between the United States and other world regions. Any slowing of global economic activity could seriously inhibit the growth in world passenger demand.

On the other hand, loosening of international regulatory constraints could drive growth higher than what is projected. Historically, international markets have been subject to a series of bilateral agreements that have, for the most part, severely restricted competition. Although the latest round of negotiations between the U.S. and the European Union were unsuccessful in reaching a more liberal agreement, it is likely that sometime during the forecast horizon, further liberalization of the North Atlantic market will happen. If it does, more U.S. carriers could gain access to new markets and introduce new competition in the North Atlantic market. Greater competition could lead to lower fares and higher growth in these markets.

The demand for general aviation products and services, especially business jets, appears to be expanding. How long the industry expansion continues depends, in large part, on the strength of the market for business jets and microjets. The market for business jets is largely dependent upon the growth in the economy and corporate profits and it is unknown how well this market will fare in the face of an economic downturn or a slowdown in corporate profit growth.

The current forecast assumes the introduction of low priced micro jets starting in 2007, with the market growing to 6,300 by 2020. This is in the middle of a fairly wide range of industry estimates. The key driver of the market for microjets is the on-demand air taxi industry. Those who believe that the time has come for the air taxi industry tend to have higher fleet forecasts while those who are less sanguine about the prospects for the on-demand air taxi industry tend to have more conservative fleet forecasts. If the on-demand air taxi industry does gain widespread acceptance, it will spur the demand for microjets and the general aviation active jet fleet and hours flown could be higher than forecast.

The mix of aircraft operating at most large hubs is also expected to become increasingly complex over the forecast period. The expected large increases in the numbers of regional jets and new microjets will increase the complexities of the national airspace system and make the FAA's job more challenging. The increased complexity of the mix of aircraft serves to compound the increases in workload strictly due to the increasing demand for aviation services projected over the forecast period.

Delays occurred at many U.S. airports in 2006 and could become a critical limit to growth over the forecast period. Based on the 2006 FAA Terminal Area Forecasts, commercial operations at 18 of the 35 Operational Evolution Plan (OEP) airports currently exceed pre-September 11th activity levels. In addition, another four airports are expected to reach or exceed pre-September 11th levels over the next 2 years.¹¹ FAA's forecasts of both demand and workload are unconstrained in that they assume that there will be sufficient infrastructure to handle the projected levels of activity. Should the infrastructure be insufficient and result in more delays, it is likely that the forecasts of both demand and workload would not be achieved.

¹¹ Detroit and New York Newark in 2007; Baltimore and Phoenix in 2008

APPENDIX I 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 on the next page presents an analysis of the variance from historical results for five key forecast metrics during the FY 2002–FY 2006 forecast period. Although this brief period experienced industry upheaval created by the September 11th terrorist attacks, FAA's forecast methodology remained consistent during this time. For these reasons, 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 contains the weighted average forecast errors expressed in percentage terms of the projected values versus the eventual 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 ASM shows the average forecast error was 4.7 percent for ASM forecasts prepared 3 years in advance. For the period under examination, preparation of the forecasts for FY 2004, FY 2005 and FY 2006 occurred in FY 2002, FY 2003 and FY 2004, respectively.¹

It should be noted that the first forecasted year for each respective fiscal year is that very same year. Therefore, FY 2002's first forecasted year is FY 2002, and the third forecasted year is FY 2004. This also means that the 5 Years column in the table above consists of only one observation point, while the 4 Years column is based upon two observations.

U.S. AIR CARRIERS DOMESTIC SCHEDULED PASSENGER OPERATIONS FORECAST EVALUATION									
Forecast	Forecast Percent Error (Combined FY 2002 - FY 2006)								
Variable	Variable Forecast Published Years Prior to Actual								
	1 Year	2 Years	3 Years	4 Years	5 Years				
ASM	0.3%	3.9%	4.7%	5.8%	14.7%				
RPM	-2.3%	-0.8%	-2.8%	-4.1%	0.3%				
Pax Enplanement	-1.3%	2.0%	1.9%	1.4%	5.7%				
Mainline Pax Yield	1.9%	7.3%	13.5%	17.4%	18.9%				
IFR Aircraft Handled	-0.5%	1.0%	0.4%	1.0%	5.4%				

Presenting forecast variances in such a manner simplifies a review of longer-term trends. Typically, one would expect the variances to decline as the forecast year draws closer to the year the forecast is prepared. In addition, presenting forecast variance in this way allows an examination of changes in the relative variances by time horizon, signaling when dramatic shifts in accuracy occur. Finally, it also shows whether forecast values are greater or lower than actual results.

The result of this examination of forecast variance reveals several noteworthy items. First, the Passenger Yield and ASM forecasts display declining variances as the forecast time horizon decreases, as expected. For Yields, large improvements in variance occur in the Years 3, 2, and 1 horizon. With ASMs, there is significant decline in variance in the 4 Years and 1-Year period. However, for both ASMs and Yield, the variances are relatively large except in the 1-Year period. Second, the FAA's forecast model produces small variances for the IFR metric, except in the 5 Years horizon. Although the variance trend-line varies in amplitude, the annual variances are small.

Third, the two traffic metrics – RPM and Enplanements – show relatively small variances, except for Enplanements in Year 5 and RPMs in Year 4. However, the respective trend lines rise and fall and do not suggest a clear pattern. For Enplanement the trend turns negative in Year 1, and there is a significant 3.3 percentage point swing in variance from Year 2 to Year 1. For RPM, there are significant improvements in forecast accuracy in Years 3 and 2 compared to previous years, but then there is a significant worsening in Year 1 versus Year 2. Fourth, the relative divergence in forecast variances between RPM and Enplanements, where the former tends to be underestimated and the latter overestimated, suggests errors in forecasting passenger trip lengths.

The table above suggests two primary implications. First, added focus on passenger trip length in the forecasting process – as passenger trip length is the linchpin between RPM and Enplanements – might help improve the forecast model's robustness. Specifically, by integrating trip length estimation into its forecast model FAA believes a reduction in the divergence in annual variations between RPM and Enplanements can occur.

Second, annual yield changes are notoriously difficult to forecast, as carriers often react to changing market conditions that are unpredictable. For example, the particular phase of the business cycle can influence airline pricing. During the upswing of the cycle, carriers can exert added pricing power, even in the face of strong demand resulting in higher yield, and lower traffic decreases, in contrast to results based on historical elasticity – as FY 2006 showed. Therefore, exploration of the link between the business cycle and market demand and carrier performance might also improve the forecast model's efficiency.

APPENDIX II ACKNOWLEDGEMENTS

This document was prepared by the Statistics and Forecast Branch (APO-110), Office of Aviation Policy and Plans, under the direction of Mr. Roger D. Schaufele, Jr. The following individuals were responsible for individual subject areas:

Economic Environment:	Daniel E. Taylor (202) 267-3302 Cheryl L. Miner (202) 493-4236
Commercial Air Carriers: – Passengers	Roger D. Schaufele, Jr. (202) 267-3306
– Cargo	Cheryl L. Miner (202) 493-4236
General Aviation: – Forecasts	Darryl E. Bertolucci (202) 267-3103
 Survey Data 	Darryl E. Bertolucci (202) 267-3103
FAA Workload Measures: – Forecasts	Roger D. Schaufele, Jr. (202) 267-3306 Cheryl L. Miner (202) 493-4236
– Data	Information Systems Branch, APO-130
Commercial Space:	John Sloan, Commercial Space Transportation, AST-100 (202) 267-7989
Text and Table Preparation:	Statistics and Forecast Branch Staff
Forecast Conference Planner:	Linda Baranovics (202) 267-7924
APO Websites: – Forecasts/Statistical Publications – APO Data System	http://www.faa.gov/data_statistics http://www.faa.gov/data_statistics
Email: – APO staff	first name.last name@faa.gov

FORECAST TABLES

U.S. SHORT-TERM ECONOMIC FORECASTS

ECONOMIC		FISCAL YEAR 2007				FISCAL YEAR 2008			
VARIABLE	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	
Real GDP (Billions of 2000\$) Seasonally Adjusted Annual Rate	11,512.1 2.8%	11,595.2 2.9%	11,679.0 2.9%	11,763.4 2.9%	11,848.2 2.9%	11,939.0 3.1%	12,030.5 3.1%	12,122.6 3.1%	
Refiners' Acquisition Cost - Average (Dollars) Seasonally Adjusted Annual Rate	53.82 -55.0%	56.48 21.3%	58.63 16.1%	59.89 8.9%	60.69 5.5%	61.19 3.3%	61.47 1.8%	61.61 0.9%	
Consumer Price Index (1982-84 equals 100) Seasonally Adjusted Annual Rate	202.7 -1.0%	204.1 2.7%	205.4 2.6%	206.7 2.6%	208.0 2.6%	209.4 2.6%	210.7 2.6%	212.1 2.6%	

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Source: Office of Management and Budget, November 2006.

U.S. LONG-TERM ECONOMIC FORECASTS

	GROSS	CONSUMER PRICE	REFINERS' ACQUISITION COST
FISCAL	DOMESTIC PRODUCT	INDEX	AVERAGE
YEAR	(Billions 2000\$)	(1982-84=100)	(Dollars)
Historical			
2000	9,762.8	170.74	26.70
2001	9,885.1	176.27	25.79
2002	10,002.4	178.85	21.98
2003	10,208.3	183.11	28.01
2004	10,614.5	187.33	33.65
2005	10,963.4	193.47	47.21
2006E	11,325.3	200.60	60.09
Forecast			
2007	11,637.4	204.70	57.21
2008	11,985.1	210.04	61.24
2009	12,356.6	215.43	61.24
2010	12,732.2	220.74	60.17
2011	13,114.4	225.95	59.03
2012	13,501.8	231.15	57.94
2013	13,895.6	236.46	57.70
2014	14,301.3	241.90	58.84
2015	14,718.9	247.47	60.03
2016	15,148.6	253.16	60.20
2017	15,591.0	258.98	62.46
2018	16,046.3	264.94	64.80
2019	16,514.9	271.03	67.23
2020	16,997.2	277.26	69.76
Avg Annual Growth			
2000-06	2.5%	2.7%	14.5%
2006-10	3.0%	2.4%	0.0%
2010-20	2.9%	2.3%	1.5%
2006-20	2.9%	2.3%	1.1%

Source: 2006-2017; Office of Management and Budget, November 2006. Extrapolated to 2020.

INTERNATIONAL GDP FORECASTS BY TRAVEL REGION

			GROSS DOMESTIC PROD	UCT	
	-		(In Billions of 2000 U.S. Dol	lars)	
		AERICA/		BASIN/CHINA/OTHER	
VEAR	CANADA	MIDDI E EAST	MEXICO	N ZEALAND	WORLD
Historical	CANADA		MEXICO	N. ZEALAND	WORLD
2000	724.8	10.258.5	1.831.9	8,318,4	31,701,3
2001	737.7	10,508.7	1.834.8	8,535,9	32.271.7
2002	759.4	10,660,6	1,815,6	8,780,1	32 861 2
2003	773.3	10,844.2	1.850.0	9,132,8	33,744,7
2004	798.8	11,152,8	1,964,7	9,564,1	35,083,4
2005	822.2	11,422.7	2.052.2	10.017.9	36,316.0
2006E	845.8	11,782.1	2,155.4	10,521.1	37,728.7
Forecast					
2007	867 5	12 087 6	2 253 4	10 999 6	38 958 0
2008	893.2	12 410 5	2 345 2	11 469 4	40 310 5
2009	919.1	12 760 0	2 438 7	11 942 2	41 710 8
2010	945.0	13,100.4	2,537.7	12,418.5	43,102.7
2011	970.6	13,435,8	2 635 6	12 910 1	44 479 9
2012	995.8	13,778.0	2.737.3	13,412,1	45,840.3
2013	1.019.8	14,124,4	2.842.0	13,917,8	47,237.5
2014	1.043.5	14 472 0	2,950,3	14,433,9	48,686,9
2015	1,067.1	14,828.4	3,062.1	14,959.5	50,182.1
2016	1.090.7	15,195.6	3,178.0	15,497,2	51,721,1
2017	1,114.0	15,570.2	3,298.0	16.045.0	53,297.6
2018	1,137,3	15,946,8	3,422,3	16,604,5	54,899,3
2019	1,160.8	16,334,9	3,550,9	17,178,3	56,541.8
2020	1,184.7	16,729.6	3,684.1	17,770.4	58,229.0
Avg Annual Growth					
2000-06	2.6%	2.3%	2.7%	4.0%	2.9%
2006-10	2.8%	2.7%	4.2%	4.2%	3.4%
2010-20	2.3%	2.5%	3.8%	3.6%	3.1%
2006-20	2.4%	2.5%	3.9%	3.8%	3.1%

Source: Global Insight, October 2006.

INTERNATIONAL GDP FORECASTS--SELECTED AREAS/COUNTRIES

	(In Billions of 2000 U.S. Dollars)								
	NORTH								
CALENDAR	AMERICA		UNITED						
YEAR	(NAFTA)	EUROZONE	KINGDOM	JAPAN	CHINA				
Historical	100000000		2.222						
2000	11,122.3	6,144.1	1,443.7	4,751.5	1,080.7				
2001	11,208.0	6,282.8	1,477.1	4,667.7	1,297.9				
2002	11,392.7	6,337.3	1,507.6	4,674.2	1,416.1				
2003	11,667.0	6,385.2	1,547.7	4,759.4	1,557.7				
2004	12,120.8	6,495.4	1,598.2	4,867.4	1,715.0				
2005	12,507.6	6,589.7	1,627.8	4,995.0	1,884.8				
2006E	12,922.9	6,756.1	1,669.4	5,130.4	2,084.6				
Forecast									
2007	13,238.9	6,869.5	1,710.6	5,248.8	2,273.1				
2008	13,676.1	6,993.2	1,757.4	5,345.3	2,463.5				
2009	14,129.6	7,136.0	1,809.4	5,428.5	2,660.5				
2010	14,577.3	7,272.2	1,855.2	5,505.8	2,867.9				
	1253			27 	10				
2011	15,000.0	7,405.3	1,900.5	5,586.2	3,086.0				
2012	15,386.9	7,539.0	1,948.6	5,666.3	3,311.2				
2013	15,801.3	7,672.3	1,997.5	5,741.3	3,543.2				
2014	16,253.0	7,805.7	2,045,4	5,811.8	3,785.3				
2015	16,728.2	7,940.8	2,092.9	5,876.8	4,037.4				
				201 2 3311052200233					
2016	17.220.0	8.078.5	2,141.6	5,936.8	4,302,3				
2017	17,727.3	8,218,7	2,191.8	5,990.3	4,577.5				
2018	18,241,8	8.356.0	2.242.6	6.038.0	4,864,4				
2019	18,766,4	8,499,3	2,294,4	6.082.2	5,161.7				
2020	19.306.0	8.644.0	2.345.6	6,122.8	5,474,1				
		-1	-1						
Avg Annual Growth									
2000-06	2.5%	1.6%	2.5%	1.3%	11.6%				
2006-10	3.1%	1.9%	2.7%	1.8%	8.3%				
2010-20	2.8%	1.7%	2.4%	1.1%	6.7%				
2006-20	2.9%	1.8%	2.5%	1.3%	7.1%				
2000-20	2.070	1.070	2.070	1.070	171.09				

Source: Global Insight, October 2006.

U.S. COMMERCIAL AIR CARRIERS 1/

TOTAL SCHEDULED U.S. PASSENGER TRAFFIC

FISCAL	REVENUE PAS	SENGER ENPLANEN	IENTS (Millions)	REVENU	REVENUE PASSENGER MILES (Billio		
YEAR	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM	
Historical*	101.100.0				- 0. 2007 - 0. 1	ALSI 7055 S	
2000	641.2	56.4	697.6	512.8	181.8	694.6	
2001	626.8	56.7	683.4	508.1	183.3	691.4	
2002	574.6	51.2	625.9	473.0	158.2	631.2	
2003	587.8	54.2	642.0	492.7	155.9	648.6	
2004	628.5	61.4	689.9	540.2	177.4	717.7	
2005	668.0	68.6	736.6	576.6	197.9	774.5	
2006E	667.7	72.7	740.4	582.9	208.9	791.8	
Forecast							
2007	692.3	76.1	768.4	598.6	219.6	818.2	
2008	714.0	80.3	794.3	618.8	233.5	852.3	
2009	736.3	84.7	821.0	640.6	248.3	888.9	
2010	759.9	89.1	848.9	665.3	263.1	928.4	
2011	784.5	93.5	878.0	690.6	278.0	968.6	
2012	810.3	98.0	908.3	718.4	293.1	1,011.5	
2013	837.2	102.6	939.8	747.0	308.7	1,055.7	
2014	865.5	107.4	973.0	778.1	325.0	1,103.1	
2015	895.3	112.4	1,007.7	811.3	342.0	1,153.3	
		201.007.0020		11900 (Jacobia V)		viz	
2016	926.5	117.7	1,044.1	845.7	359.7	1,205.4	
2017	959.3	123.1	1,082.4	883.3	378.1	1,261.5	
2018	994.2	128.7	1,122.9	922.9	397.3	1,320.2	
2019	1,029.2	134.6	1,163.8	964.0	417.3	1,381.3	
2020	1,065.9	140.7	1,206.6	1,007.4	438.3	1,445.6	
	The second		The Theorem Street				
Avg Annual Growth:							
2000-06	0.7%	4.3%	1.0%	2.2%	2.3%	2.2%	
2006-10	3.3%	5.2%	3.5%	3.4%	5.9%	4.1%	
2010-20	3.4%	4.7%	3.6%	4.2%	5.2%	4.5%	
2006-20	3.4%	4.8%	3.5%	4.0%	5.4%	4.4%	

* Source: Forms 41 and 298-C, U.S. Department of Transportation. 1/ Sum of U.S. Mainline and Regional Air Carriers.

U.S. COMMERCIAL AIR CARRIERS 1/

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

	1	DOMESTIC		1	NTERNATION	AL		SYSTEM	
FISCAL	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD
YEAR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR
Historical*	dimined:								
2000	726.6	512.8	70.6	239.3	181.8	76.0	965.9	694.6	71.9
2001	732.5	508.1	69.4	246.6	183.3	74.3	979.1	691.4	70.6
2002	681.2	473.0	69.4	212.3	158.2	74.5	893.5	631.2	70.6
2003	684.2	492.7	72.0	207.1	155.9	75.3	891.3	648.6	72.8
2004	730.2	540.2	74.0	223.7	177.4	79.3	953.9	717.7	75.2
2005	755.1	576.6	76.4	249.5	197.9	79.3	1,004.6	774.5	77.1
2006E	740.2	582.9	78.8	262.1	208.9	79.7	1,002.3	791.8	79.0
Forecast									
2007	755.8	598.6	79.2	274.6	219.6	80.0	1,030.3	818.2	79.4
2008	782.9	618.8	79.0	291.8	233.5	80.0	1,074.7	852.3	79.3
2009	811.1	640.6	79.0	310.3	248.3	80.0	1,121.4	888.9	79.3
2010	841.0	665.3	79.1	328.6	263.1	80.1	1,169.6	928.4	79.4
2011	872.7	690.6	79.1	347.1	278.0	80.1	1,219.9	968.6	79.4
2012	906.1	718.4	79.3	366.0	293.1	80.1	1,272.1	1,011.5	79.5
2013	941.4	747.0	79.4	385.4	308.7	80.1	1,326.8	1,055.7	79.6
2014	978.6	778.1	79.5	405.7	325.0	80.1	1,384.3	1,103.1	79.7
2015	1,018.1	811.3	79.7	426.9	342.0	80.1	1,445.0	1,153.3	79.8
2016	1,059.9	845.7	79.8	449.0	359.7	80.1	1,508.9	1,205.4	79.9
2017	1,104.3	883.3	80.0	471.9	378.1	80.1	1,576.2	1,261.5	80.0
2018	1,151.5	922.9	80.1	495.8	397.3	80.1	1,647.3	1,320.2	80.1
2019	1,201.3	964.0	80.2	520.8	417.3	80.1	1,722.1	1,381.3	80.2
2020	1,254.3	1,007.4	80.3	546.9	438.3	80.1	1,801.2	1,445.6	80.3
Avg Annual Growth:									
2000-06	0.3%	2.2%		1.5%	2.3%		0.6%	2.2%	
2006-10	3.2%	3.4%		5.8%	5.9%		3.9%	4.1%	
2010-20	4.1%	4.2%		5.2%	5.2%		4.4%	4.5%	
2006-20	3.8%	4.0%		5.4%	5.4%		4.3%	4.4%	-1

* Source: Forms 41 and 298-C, U.S. Department of Transportation. 1/ Sum of U.S. Mainline and Regional Air Carriers.

U.S. COMMERCIAL AIR CARRIERS 1/

TOTAL SCHEDULED U.S. INTERNATIONAL PASSENGER TRAFFIC

	REVENUE PASSENGER ENPLANEMENTS					REVENUE PA	SSENGER MILES	S
		LATIN		TOTAL		LATIN		TOTAL
FISCAL	ATLANTIC	AMERICA	PACIFIC	INTERNATIONAL	ATLANTIC	AMERICA	PACIFIC	INTERNATIONAL
YEAR	(Mil)	(Mil)	(Mil)	(Mil)	(Bil)	(Bil)	(Bil)	(Bil)
Historical*						s 0.	· · · · · · · · · · · · · · · · · · ·	
2000	20.9	24.3	11.2	56.4	87.1	36.3	58.4	181.8
2001	20.5	24.8	11.4	56.7	86.2	37.6	59.4	183.3
2002	18.0	23.6	9.6	51.2	74.7	34.5	49.0	158.2
2003	17.8	25.9	10.5	54.2	73.2	36.6	46.2	155.9
2004	19.9	29.2	12.3	61.4	82.1	41.8	53.5	177.4
2005	21.6	33.7	13.2	68.6	89.5	49.2	59.2	197.9
2006E	22.5	36.3	13.9	72.7	93.9	54.0	61.1	208.9
Forecast	C 25 - 2	100		A 4 5 6	12.0		2.025	25-2.2
2007	23.4	38.1	14.6	76.1	98.1	57.8	63.7	219.6
2008	24.4	40.0	15.9	80.3	102.5	61.4	69.6	233.5
2009	25.4	41.9	17.3	84.7	107.0	65.3	76.0	248.3
2010	26.4	43.9	18.7	89.1	111.4	69.3	82.4	263.1
2011	27.4	46.0	20.1	93.5	115.9	73 5	88.6	278.0
2012	28.4	48.1	21.5	98.0	120.4	77.9	94.9	293.1
2013	29.4	50.3	22.9	102.6	125.0	82.5	101.3	308.7
2014	30.4	52.7	24.4	107.4	129.7	87.3	108.0	325.0
2015	31.5	55.1	25.9	112.4	134.6	92.5	114.9	342.0
2016	22.6	F7 C	27.6	1477	120.7	07.0	100.0	250.7
2010	32.0	57.0	27.5	117.7	139.7	97.9	122.2	359.7
2017	33.7	60.3	29.1	123.1	144.9	103.0	129.7	370.1
2010	34.0	03.1	30.6	120.7	150.2	109.5	137.5	397.3
2019	30.0	60.0	32.5	140.7	155.0	115.9	145.0	417.5
2020	31.2	69.1	34.4	140.7	101.5	122.0	154.2	430.3
Avg Annual Growth:								
2000-06	1.2%	6.9%	3.7%	4.3%	1.3%	6.8%	0.7%	2.3%
2006-10	4.1%	4.9%	7.7%	5.2%	4.4%	6.4%	7.8%	5.9%
2010-20	3.5%	4.6%	6.3%	4.7%	3.8%	5.9%	6.5%	5.2%
2006-20	3.7%	4.7%	6.7%	4.8%	4.0%	6.0%	6.8%	5.4%

* Source: Forms 41 and 298-C, U.S. Department of Transportation. 1/ Sum of U.S. Mainline and Regional Air Carriers.

U.S. AND FOREIGN FLAG CARRIERS

TOTAL PASSENGER TRAFFIC TO/FROM THE UNITED STATES

	TOTAL PASSENGERS BY WORLD TRAVEL AREA (Millions)							
CALENDAR		1		U.S./CANADA				
YEAR	ATLANTIC	LATIN AMERICA	PACIFIC	TRANSBORDER	TOTAL			
Historical*								
2000	53.0	40.8	26.0	20.8	140.6			
2001	47.5	38.8	23.0	18.6	127.9			
2002	43.4	36.9	22.3	17.6	120.1			
2003	43.8	38.7	20.0	16.9	119.4			
2004	48.7	42.4	23.9	18.5	133.5			
2005	49.5	43.4	24.9	19.7	137.5			
2006E	49.6	45.5	25.4	20.9	141.5			
Forecast								
2007	51.8	48.1	27.4	21.5	148.9			
2008	54.2	50.7	29.5	22.3	156.8			
2009	56.8	53.4	31.7	23.2	165.0			
2010	59.3	56.1	34.0	24.1	173.5			
2011	61.9	58.9	36.5	25.0	182.2			
2012	64.4	61.7	39.1	25.9	191.1			
2013	67.1	64.6	41.8	26.8	200.3			
2014	69.8	67.6	44.6	27.8	209.8			
2015	72.5	70.7	47.7	28.7	219.6			
2016	75.3	73.9	50.8	29.7	229.8			
2017	78.2	77.3	54.2	30.8	240.4			
2018	81.1	80.7	57.7	31.9	251.4			
2019	84.1	84.2	61.5	33.0	262.8			
2020	87.2	87.9	65.5	34.1	274.7			
Avg Annual Growth:								
2000-06	-1.1%	1.9%	-0.3%	0.1%	0.1%			
2006-10	4.6%	5.4%	7.5%	3.6%	5.2%			
2010-20	3.9%	4.6%	6.8%	3.5%	4.7%			
2006-20	4.1%	4.8%	7.0%	3.6%	4.9%			

* Sources: Atlantic, Pacific, and Latin America, INS Form I-92, U.S. Department of Commerce; U.S./ Canada Transborder, Transport Canada.

U.S. COMMERCIAL AIR CARRIERS' FORECAST ASSUMPTIONS 1/

SEATS PER AIRCRAFT AND PASSENGER TRIP LENGTH

	AVERA	GE SEATS PER AIR	CRAFT	AVERAG	E PASSENGER TRIF	P LENGTH
FISCAL	DOMESTIC	INT'L.	SYSTEM	DOMESTIC	INT'L.	SYSTEM
YEAR	(Seats)	(Seats)	(Seats)	(Miles)	(Miles)	(Miles)
Historical*						
2000	129.3	230.6	145.0	799.8	3,223.2	995.7
2001	127.7	226.9	143.5	810.7	3,233.9	1,011.6
2002	125.9	221.5	140.3	823.1	3,088.8	1,008.5
2003	123.0	216.7	136.7	838.1	2,878.5	1,010.3
2004	121.7	215.4	135.5	859.6	2,891.5	1,040.3
2005	120.4	213.5	135.0	861.8	2,885.6	1,049.8
2006E	120.2	212.0	135.6	871.4	2,873.5	1,067.8
Forecast						
2007	120.5	211.7	136.2	864.7	2,886.0	1,064.8
2008	120.7	212.8	136.8	866.6	2,909.2	1,073.0
2009	121.1	213.9	137.6	870.0	2,932.8	1,082.8
2010	121.3	214.8	138.2	875.5	2,954.0	1,093.6
2011	121.3	215.7	138.5	880.4	2,973.1	1,103.3
2012	121.2	216.5	138.8	886.6	2,991.1	1,113.6
2013	121.1	217.3	139.0	892.2	3,008.3	1,123.3
2014	121.0	218.0	139.2	899.0	3,025.0	1,133.7
2015	120.9	218.8	139.4	906.2	3,041.5	1,144.5
2016	121.0	219.5	139.6	912.8	3,057.5	1,154.5
2017	121.0	220.2	139.9	920.8	3,072.3	1,165.5
2018	121.1	220.8	140.2	928.3	3,086.7	1,175.7
2019	121.3	221.5	140.5	936.6	3,101.0	1,186.9
2020	121.4	222.1	140.8	945.1	3,115.1	1,198.1

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

1/ Sum of U.S. Mainline and Regional Air Carriers.
U. S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER TRAFFIC

	REVENUE	PASSENGER ENPLA	ANEMENTS	REVE	ENUE PASSENGER M	AILES
FISCAL		(Millions)			(Billions)	
YEAR	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM
Historical*						
2000	561.5	53.3	614.8	490.0	181.0	670.9
2001	546.3	53.5	599.9	483.8	182.3	666.1
2002	486.0	48.4	534.4	443.2	157.3	600.5
2003	482.8	50.6	533.4	453.4	154.8	608.2
2004	502.6	57.3	559.9	488.5	175.9	664.4
2005	523.0	64.2	587.2	513.2	195.8	709.1
2006E	516.3	68.1	584.4	513.9	206.8	720.7
Forecast						
2007	533.5	71.2	604.7	526.5	217.4	743.9
2008	550.2	75.3	625.5	542.7	231.2	773.9
2009	567.9	79.5	647.4	560.5	246.0	806.5
2010	586.6	83.8	670.4	581.0	260.6	841.6
2011	606.2	88.1	694.2	602.0	275.4	877.4
2012	626.8	92.4	719.1	625.1	290.4	915.5
2013	648.3	96.8	745.1	648.8	305.9	954.8
2014	670.9	101.5	772.4	674.9	322.1	997.0
2015	694.7	106.3	801.1	702.8	339.0	1,041.7
2016	719 7	111.3	831.1	731.5	356.6	1 088 1
2017	746.2	116.6	862.7	763.3	374.8	1,138,1
2018	774.4	122.0	896.4	796.7	393.9	1,190.5
2019	802.7	127.6	930.3	831.4	413.7	1,245,2
2020	832.4	133.5	965.9	868.2	434.6	1,302.8
Avg Annual Growth:						
2000-06	-1.4%	4.2%	-0.8%	0.8%	2.3%	1.2%
2006-10	3.2%	5.3%	3.5%	3.1%	5.9%	4.0%
2010-20	3.6%	4.8%	3.7%	4.1%	5.2%	4.5%
2006-20	3.5%	4.9%	3.7%	3.8%	5.4%	4.3%

U.S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

		DOMESTIC			NTERNATIONA	L		SYSTEM	~
FISCAL	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD
YEAR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR
Historical*	n	S					72 77	· · · · · · · · · · · · · · · · · · ·	
2000	688.3	490.0	71.2	238.0	181.0	76.0	926.2	670.9	72.4
2001	691.1	483.8	70.0	244.9	182.3	74.4	936.0	666.1	71.2
2002	632.5	443.2	70.1	210.8	157.3	74.6	843.4	600.5	71.2
2003	623.7	453.4	72.7	205.1	154.8	75.5	828.8	608.2	73.4
2004	654.2	488.5	74.7	221.3	175.9	79.5	875.5	664.4	75.9
2005	664.0	513.2	77.3	246.3	195.8	79.5	910.3	709.1	77.9
2006E	647.7	513.9	79.3	258.9	206.8	79.9	906.6	720.7	79.5
Forecast									
2007	660.6	526 5	79 7	271.2	217.4	80.2	931.8	743.9	79.8
2008	682.6	542 7	79.5	288.4	231.2	80.2	970.9	773.9	79.7
2009	705.8	560.5	79.4	306.7	246.0	80.2	1 012 4	806.5	79.7
2010	730.4	581.0	79.5	324.9	260.6	80.2	1 055 3	841.6	79.8
2010	,00.,	00110	10.0	021.0	200.0	00.2	1,000.0	011.0	10.0
2011	756.5	602.0	79.6	343.3	275.4	80.2	1.099.8	877.4	79.8
2012	784.1	625.1	79.7	362.0	290.4	80.2	1,146.1	915.5	79.9
2013	813.2	648.8	79.8	381.3	305.9	80.2	1,194.5	954.8	79.9
2014	844.0	674.9	80.0	401.5	322.1	80.2	1,245.4	997.0	80.0
2015	876.6	702.8	80.2	422.5	339.0	80.2	1,299.2	1,041.7	80.2
2016	911.4	731.5	80.3	444.5	356.6	80.2	1,355.9	1,088.1	80.3
2017	948.3	763.3	80.5	467.3	374.8	80.2	1,415.6	1,138.1	80.4
2018	987.6	796.7	80.7	491.0	393.9	80.2	1,478.6	1,190.5	80.5
2019	1,029.4	831.4	80.8	515.8	413.7	80.2	1,545.2	1,245.2	80.6
2020	1,073.9	868.2	80.8	541.8	434.6	80.2	1,615.7	1,302.8	80.6
Avg Annual Growth:									
2000-06	-1.0%	0.8%		1.4%	2.3%		-0.4%	1.2%	
2006-10	3.0%	3.1%		5.8%	5.9%		3.9%	4.0%	
2010-20	3.9%	4.1%		5.2%	5.2%		4.4%	4.5%	
2006-20	3.5%	3.9%		5.4%	5.4%		4.2%	4.4%	

U.S. MAINLINE AIR CARRIERS

SCHEDULED INTERNATIONAL PASSENGER ENPLANEMENTS

FISCAL		REVENUE PASSENGER	R ENPLANEMENTS (MIL)	
YEAR	ATLANTIC	LATIN AMERICA	PACIFIC	TOTAL
Historical*	-28-51			1. 2. May 1997
2000	20.9	21.2	11.2	53.3
2001	20.5	21.7	11.4	53.5
2002	18.0	20.7	9.6	48.4
2003	17.8	22.3	10.5	50.6
2004	19.9	25.2	12.3	57.3
2005	21.6	29.3	13.2	64.2
2006E	22.5	31.7	13.9	68.1
Foreset				
POTECASI 2007	22.4	22.2	14.6	71.0
2007	23.4	33.2	14.0	71.2
2008	24.4	35.0	17.9	75.5
2009	25.4	30.0	17.3	79.5
2010	20.4	30.0	10.7	03.0
2011	27.4	40.6	20.1	88.1
2012	28.4	42.5	21.5	92.4
2013	29.4	44.6	22.9	96.8
2014	30.4	46.7	24.4	101.5
2015	31.5	49.0	25.9	106.3
2016	22.6	51.2	27.5	111.2
2010	32.0	51.5	27.5	116.6
2017	33.7	55.6	20.1	122.0
2010	34.0	50.4	32.5	122.0
2019	37.2	61.0	32.5	127.0
2020	57.2	01.9	34.4	133.5
Avg Annual Growth:				
2000-06	1.2%	6.9%	3.7%	4.2%
2006-10	4.1%	5.1%	7.7%	5.3%
2010-20	3.5%	4.8%	6.3%	4.8%
2006-20	3.7%	4.9%	6.7%	4.9%

* Source: Form 41, U.S. Department of Transportation. Note: Detail may not add to total because of rounding.

U.S. MAINLINE AIR CARRIERS

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

1		ATLANTIC		L	TIN AMERI	CA		PACIFIC		IN	TERNATION	AL
FISCAL	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD
YEAR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR	(BIL)	(BIL)	FACTOR
Historical*											- Alter and Alter	
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
2001	112.9	86.2	76.4	53.0	36.6	69.2	79.1	59.4	75.2	244.9	182.3	74.4
2002	97.0	74.7	77.0	50.6	33.6	66.5	63.2	49.0	77.5	210.8	157.3	74.6
2003	93.7	73.2	78.1	51.1	35.4	69.3	60.3	46.2	76.6	205.1	154.8	75.5
2004	100.5	82.1	81.7	57.2	40.3	70.4	63.6	53.5	84.2	221.3	175.9	79.5
2005	108.6	89.5	82.4	65.4	47.2	72.2	72.3	59.2	81.8	246.3	195.8	79.5
2006E	115.8	93.9	81.1	69.3	51.9	74.9	73.7	61.1	82.8	258.9	206.8	79.9
Forecast												
2007	121.3	98.1	80.8	73.1	55.6	76.0	76.8	63.7	83.0	271.2	217.4	80.2
2008	126.7	102.5	80.9	77.8	59.1	76.0	83.8	69.6	83.0	288.4	231.2	80.2
2009	132.2	107.0	80.9	82.8	62.9	76.0	91.6	76.0	83.0	306.7	246.0	80.2
2010	137.7	111.4	80.9	87.9	66.8	76.0	99.2	82.4	83.0	324.9	260.6	80.2
2011	143.2	115.9	80.9	93.3	70.9	76.0	106.7	88.6	83.0	343.3	275.4	80.2
2012	148.8	120.4	80.9	98.9	75.2	76.0	114.3	94.9	83.0	362.0	290.4	80.2
2013	154.5	125.0	80.9	104.8	79.7	76.0	122.0	101.3	83.0	381.3	305.9	80.2
2014	160.3	129.7	80.9	111.1	84.4	76.0	130.1	108.0	83.0	401.5	322.1	80.2
2015	166.4	134.6	80.9	117.7	89.4	76.0	138.5	114.9	83.0	422.5	339.0	80.2
2016	172.6	139.7	80.9	124.7	94.8	76.0	147.2	122.2	83.0	444.5	356.6	80.2
2017	179.1	144.9	80.9	132.0	100.3	76.0	156.3	129.7	83.0	467.3	374.8	80.2
2018	185.7	150.2	80.9	139.6	106.1	76.0	165.7	137.5	83.0	491.0	393.9	80.2
2019	192.6	155.8	80.9	147.8	112.3	76.0	175.5	145.6	83.0	515.8	413.7	80.2
2020	199.6	161.5	80.9	156.4	118.9	76.0	185.8	154.2	83.0	541.8	434.6	80.2
Avg Annual Growth:												
2000-06	0.9%	1.3%		5.1%	6.5%		-0.6%	0.7%		1.4%	2.3%	
2006-10	4.4%	4.4%		6.1%	6.5%		7.7%	7.8%		5.8%	5.9%	
2010-20	3.8%	3.8%		5.9%	5.9%		6.5%	6.5%		5.2%	5.2%	
2006-20	4.0%	4.0%		6.0%	6.1%		6.8%	6.8%		5.4%	5.4%	

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

SEATS PER AIRCRAFT MILE

			INTERNA	TIONAL		
FISCAL	DOMESTIC	ATLANTIC	LATIN AMERICA	PACIFIC	TOTAL	SYSTEM
YEAR	(Seats)	(Seats)	(Seats)	(Seats)	(Seats)	(Seats)
Historical*			100 - 316			· · · · · · · · · · · · · · · · · · ·
2000	148.8	233.7	179.5	307.8	236.6	164.5
2001	146.6	232.6	174.7	304.1	233.6	162.5
2002	148.0	233.8	172.5	295.2	228.6	162.3
2003	148.5	231.5	171.7	287.6	224.9	162.2
2004	149.7	231.6	174.0	281.8	223.9	163.4
2005	150.2	230.8	173.5	278.7	222.5	164.7
2006E	150.4	229.4	173.4	274.4	220.6	165.4
Forecast						
2007	150.3	227.8	173.5	276.7	220.2	165.6
2008	150.5	228.3	174.0	277.5	221.1	166.3
2009	151.1	228.8	174.5	278.2	221.9	167.3
2010	151.2	229.3	175.0	279.0	222.7	167.7
2011	150.9	229.8	175.5	279.7	223.4	167.9
2012	150.5	230.3	176.0	280.5	224.1	168.0
2013	150.1	230.8	176.5	281.2	224.7	167.9
2014	149.6	231.3	177.0	282.0	225.3	167.7
2015	149.1	231.8	177.5	282.7	225.9	167.6
2016	148.7	232.3	178.0	283.5	226.5	167.6
2017	148.4	232.8	178.5	284.2	227.0	167.6
2018	148.1	233.3	179.0	285.0	227.6	167.6
2019	147.9	233.8	179.5	285.7	228.1	167.6
2020	147.7	234.3	180.0	286.5	228.7	167.6

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

AVERAGE PASSENGER TRIP LENGTH

			INTERNA	TIONAL		
FISCAL	DOMESTIC	ATLANTIC	LATIN AMERICA	PACIFIC	TOTAL	SYSTEM
YEAR	(Miles)	(Miles)	(Miles)	(Miles)	(Miles)	(Miles)
Historical*						
2000	872.6	4,168.1	1,675.2	5,219.9	3,397.3	1,091.4
2001	885.6	4,211.8	1,688.3	5,228.8	3,405.0	1,110.5
2002	911.8	4,147.5	1,622.5	5,077.6	3,251.5	1,123.7
2003	939.1	4,105.4	1,588.3	4,419.6	3,061.0	1,140.2
2004	972.0	4,125.7	1,599.7	4,365.7	3,068.3	1,186.6
2005	981.4	4,133.1	1,611.1	4,466.1	3,051.2	1,207.6
2006E	995.4	4,175.4	1,637.8	4,390.4	3,037.9	1,233.4
Forecast						
2007	987.0	4,187.0	1,671.4	4,378.6	3,051.9	1,230.2
2008	986.2	4,198.3	1,690.8	4,385.0	3,072.3	1,237.2
2009	987.0	4,209.6	1,710.2	4,391.1	3,092.8	1,245.6
2010	990.4	4,220.9	1,729.6	4,398.0	3,111.2	1,255.4
2011	993.0	4,232.3	1.748.9	4,405.7	3.127.9	1,263.8
2012	997.3	4.243.7	1,768,1	4,414.0	3,143.8	1.273.0
2013	1,000.9	4,255.2	1,787.5	4,422.3	3,159.0	1,281.4
2014	1,005.9	4,266.7	1,806.9	4,430.6	3,173.8	1,290.8
2015	1,011.6	4,278.3	1,826.7	4,439.3	3,188.5	1,300.5
2016	1.016.4	4,290.3	1.846.6	4,448,1	3,202,9	1.309.3
2017	1,023.0	4,302.3	1,864.6	4,456.9	3,216.0	1,319.3
2018	1,028.8	4,313.9	1,882.7	4,465.8	3,228.8	1,328.2
2019	1,035.8	4,325.6	1,901.0	4,475.1	3,241.5	1,338.5
2020	1,043.0	4,337.3	1,919.5	4,484.0	3,254.0	1,348.7

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

PASSENGER YIELDS

			REVENUE PER P	ASSENGER MILE		
	DOME	STIC	INTERN/	ATIONAL	SYS	TEM
FISCAL	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$
YEAR	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
Historical*						
2000	14.03	16.48	10.46	12.28	13.06	15.35
2001	13.53	15.39	10.34	11.77	12.65	14.40
2002	11.86	13.30	9.78	10.97	11.31	12.69
2003	11.78	12.91	9.92	10.87	11.31	12.39
2004	11.51	12.32	10.47	11.21	11.23	12.03
2005	11.37	11.79	10.87	11.28	11.23	11.65
2006E	12.34	12.34	11.70	11.70	12.15	12.15
Forecast						
2007	12.64	12.39	11.83	11.59	12.40	12.16
2008	12.88	12.31	12.01	11.47	12.62	12.06
2009	13.11	12.21	12.18	11.35	12.83	11.95
2010	13.32	12.10	12.35	11.23	13.02	11.83
2011	13.52	12.00	12.52	11.11	13.21	11.72
2012	13.70	11.89	12.67	11.00	13.37	11.61
2013	13.90	11.79	12.83	10.89	13.56	11.50
2014	14.09	11.69	12.99	10.77	13.74	11.39
2015	14.29	11.58	13.16	10.67	13.92	11.28
2016	14.49	11.48	13.33	10.56	14.11	11.18
2017	14.69	11.38	13.49	10.45	14.29	11.07
2018	14.89	11.27	13.66	10.35	14.48	10.97
2019	15.10	11.17	13.84	10.24	14.68	10.87
2020	15.31	11.08	14.01	10.14	14.88	10.76
Avg Annual Growth:						
2000-06	-2.1%	-4.7%	1.9%	-0.8%	-1.2%	-3.8%
2006-10	1.9%	-0.5%	1.4%	-1.0%	1.7%	-0.7%
2010-20	1.4%	-0.9%	1.3%	-1.0%	1.3%	-0.9%
2006-20	1.6%	-0.8%	1.3%	-1.0%	1.5%	-0.9%

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

INTERNATIONAL PASSENGER YIELDS BY REGION

	ATLA	NTIC	LATIN AM	IERICA 1/	PAC	IFIC	TOTAL INTE	RNATIONAL			
FISCAL	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$			
YEAR	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)			
Historical*		N.N. 1453	No. of Concession	11774 J. 111	179-627	- 19 (C. 1977)					
2000	9.73	11.43	13.00	15.27	9.99	11.73	10.46	12.28			
2001	9.71	11.06	13.38	15.23	9.38	10.68	10.34	11.77			
2002	9.29	10.42	12.49	14.01	8.67	9.72	9.78	10.97			
2003	9.60	10.52	12.40	13.58	8.53	9.35	9.92	10.87			
2004	10.15	10.87	12.28	13.15	9.61	10.29	10.47	11.21			
2005	10.75	11.15	12.16	12.61	10.04	10.41	10.87	11.28			
2006E	11.68	11.68	12.89	12.89	10.73	10.73	11.70	11.70			
	A Set TABLE BROWN		1.011.02.02.02.00.011				an Richard - Cathe	and Adda to the			
Forecast											
2007	11.80	11.56	13.02	12.76	10.83	10.62	11.83	11.59			
2008	11.98	11.45	13.23	12.63	11.00	10.51	12.01	11.47			
2009	12.17	11.33	13.43	12.51	11.17	10.41	12.18	11.35			
2010	12.34	11.22	13.62	12.38	11.33	10.30	12.35	11.23			
2011	12.51	11.11	13.81	12.26	11.49	10.20	12.52	11.11			
2012	12.67	11.00	13.98	12.14	11.63	10.10	12.67	11.00			
2013	12.83	10.89	14.16	12.01	11.79	10.00	12.83	10.89			
2014	13.00	10.78	14.34	11.89	11.93	9.90	12.99	10.77			
2015	13.16	10.67	14.53	11.78	12.09	9.80	13.16	10.67			
			1947 - 1948 - 1947 - 19								
2016	13.33	10.56	14.71	11.66	12.24	9.70	13.33	10.56			
2017	13.50	10.46	14.90	11.54	12.40	9.60	13.49	10.45			
2018	13.67	10.35	15.09	11.43	12.56	9.51	13.66	10.35			
2019	13.85	10.25	15.28	11.31	12.71	9.41	13.84	10.24			
2020	14.02	10.15	15.47	11.20	12.88	9.32	14.01	10.14			
Avg Annual Growth:											
2000-06	3.1%	0.4%	-0.1%	-2.8%	1.2%	-1.5%	1.9%	-0.8%			
2006-10	1.4%	-1.0%	1.4%	-1.0%	1.4%	-1.0%	1.4%	-1.0%			
2010-20	1.3%	-1.0%	1.3%	-1.0%	1.3%	-1.0%	1.3%	-1.0%			
2006-20	1.3%	-1.0%	1.3%	-1.0%	1.3%	-1.0%	1.3%	-1.0%			

1/ Mainline Air Carrier Only * Source: Form 41, U.S. Department of Transportation.

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

JET FUEL PRICES

	DOM	ESTIC	INTERN	ATIONAL	SYS	TEM
FISCAL	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$	CURRENT \$	FY 2006 \$
YEAR	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
Historical*		a da				
2000	71.5	83.9	79.4	93.2	73.57	86.39
2001	82.4	93.7	86.1	98.0	83.37	94.90
2002	67.0	75.1	71.7	80.4	68.28	76.58
2003	82.2	90.1	86.0	94.2	83.28	91.23
2004	100.7	107.9	105.8	113.2	102.07	109.30
2005	149.4	154.9	157.3	163.0	151.58	157.16
2006E	194.7	194.7	204.7	204.7	197.72	197.72
	The Industry	APPA AN APPA PERMIT	10.51.2000000	13.1 august 197 - 53.9536	Diele Distribution 201	C Construction (1975) (1975)
Forecast	101080004445		-240 M (10)	07500 645770		1040041-045420-1
2007	193.2	189.3	203.1	199.0	196.16	192.23
2008	204.5	195.3	215.0	205.4	207.68	198.38
2009	206.2	192.0	216.8	201.9	209.39	195.01
2010	203.4	184.9	213.8	194.3	206.54	187.73
2011	199.7	177.2	209.9	186.3	202.77	179.98
2012	196.0	170.1	206.1	178.9	199.07	172.79
2013	194.8	165.2	204.8	173.7	197.82	167.79
2014	197.9	164.1	208.0	172.5	200.95	166.64
2015	201.7	163.5	212.1	171.9	204.87	166.05
		(6 6 7		(00.0		100.17
2016	202.8	160.7	213.2	168.9	205.95	163.17
2017	209.4	162.2	220.2	170.5	212.69	164.73
2018	217.1	164.4	228.3	172.9	220.51	166.96
2019	225.2	166.7	236.8	1/5.3	228.75	169.32
2020	233.7	169.1	245.7	177.8	237.32	1/1./3
Ave Appuel Crowth						
Avg Annual Growth:	19 00/	15 10/	17 10/	14.00/	17.00/	44 00/
2000-06	18.2%	15.1%	1/.1%	14.0%	17.9%	14.8%
2000-10	1.1%	-1.3%	1.1%	-1.3%	1.1%	-1.3%
2010-20	1.4%	-0.9%	1.4%	-0.9%	1.4%	-0.9%
2006-20	1.3%	-1.0%	1.3%	-1.0%	1.3%	-1.0%

U.S. COMMERCIAL AIR CARRIERS

AIR CARGO REVENUE TON MILES 1/

	ALL-CA	RGO CARRIER	RTMS	PASSE	NGER CARRIE	R RTMS		TOTAL RTMS	
FISCAL		(Millions)		1.10204-0.2101-01-014	(Millions)			(Millions)	
YEAR	DOMESTIC	INT'L.	TOTAL	DOMESTIC	INT'L.	TOTAL	DOMESTIC	INT'L.	TOTAL
Historical*	2								
2000	10,283.5	7,568.2	17,851.7	4,415.3	7,789.6	12,204.9	14,698.8	15,357.8	30,056.6
2001	9,992.3	7,370.4	17,362.7	3,941.7	7,176.6	11,118.3	13,934.0	14,547.0	28,481.0
2002	9,629.9	8,202.1	17,832.0	3,337.4	6,594.0	9,931.4	12,967.3	14,796.1	27,763.4
2003 2/	10,450.7	11,766.8	22,217.5	3,819.1	6,775.1	10,594.2	14,269.8	18,541.9	32,811.7
2003 3/	11,153.3	11,766.8	22,920.1	3,819.1	6,775.1	10,594.2	14,972.4	18,541.9	33,514.3
2004	13,040.8	12,748.3	25,789.1	3,300.1	7,373.4	10,673.5	16,340.9	20,121.7	36,462.6
2005	13,007.9	14,774.3	27,782.2	3,081.7	8,354.6	11,436.3	16,089.6	23,128.9	39,218.5
2006E	12,481.2	15,715.0	28,196.1	3,229.3	8,263.5	11,492.9	15,710.5	23,978.5	39,689.0
			32	2010		33:04	251	347	40
Forecast									
2007	12,871.1	16,711.1	29,582.3	3,269.3	8,671.2	11,940.5	16,140.4	25,382.3	41,522.7
2008	13,530.6	17,959.4	31,490.0	3,373.2	9,195.1	12,568.3	16,903.8	27,154.5	44,058.3
2009	14,137.9	19,216.5	33,354.4	3,458.7	9,707.6	13,166.2	17,596.6	28,924.0	46,520.6
2010	14,708.4	20,541.4	35,249.8	3,530.1	10,237.9	13,768.0	18,238.5	30,779.3	49,017.8
2000,000	0404040331001			-211.20-334.02		THE REPORT OF THE REPORT OF			(+/0+
2011	15,266.3	21,948.3	37,214.5	3,593.8	10,791.9	14,385.8	18,860.1	32,740.2	51,600.3
2012	15,821.1	23,430.0	39,251.1	3,652.3	11,364.8	15,017.0	19,473.4	34,794.7	54,268.1
2013	16,380.6	25,013.7	41,394.3	3,707.3	11,968.2	15,675.5	20,087.9	36,981.9	57,069.8
2014	16,954.8	26,725.0	43,679.8	3,761.0	12,612.5	16,373.5	20,715.9	39,337.5	60,053.3
2015	17,546.1	28,560.6	46,106.7	3,813.9	13,294.0	17,107.8	21,359.9	41,854.6	63,214.5
2016	18,155.3	30,483.9	48,639.2	3,865.9	13,993.7	17,859.5	22,021.1	44,477.6	66,498.8
2017	18,784.0	32,488.0	51,271.9	3,917.1	14,707.0	18,624.2	22,701.1	47,195.0	69,896.1
2018	19,432.9	34,630.5	54,063.5	3,967.6	15,458.7	19,426.3	23,400.6	50,089.2	73,489.8
2019	20,104.0	36,913.7	57,017.8	4,017.5	16,247.2	20,264.7	24,121.6	53,160.9	77,282.5
2020	20,798.1	39,346.7	60,144.8	4,066.7	17,074.3	21,141.0	24,864.8	56,421.0	81,285.8
Avg Annual Growth:			12/12/202	G171078781		111-112-12-01	1.0111012.00	710 22230	2012-020
2000-06	3.3%	13.0%	7.9%	-5.1%	1.0%	-1.0%	1.1%	7.7%	4.7%
2006-10	4.2%	6.9%	5.7%	2.3%	5.5%	4.6%	3.8%	6.4%	5.4%
2010-20	3.5%	6.7%	5.5%	1.4%	5.2%	4.4%	3.1%	6.2%	5.2%
2006-20	3.7%	6.8%	5.6%	1.7%	5.3%	4.4%	3.3%	6.3%	5.3%

* 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 this line 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 this line and beyond include Airborne Express. Inc.

U.S. MAINLINE AIR CARRIERS

PASSENGER JET AIRCRAFT

CALENDAR	LARG	ENARROWB	ODY		LARGE W	IDEBODY		LARGE	REGIONAL	TOTAL
YEAR	2 ENGINE	3 ENGINE	TOTAL	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	JETS	JETS	JETS
Historical										
2000	3,364	385	3,749	424	169	120	713	4,462	26	4,488
2001	3,412	187	3,599	451	89	85	625	4,224	20	4,244
2002	3,386	107	3,493	472	69	81	622	4,115	3	4,118
2003	3,378	70	3,448	464	37	67	568	4,016	6	4,022
2004	3,400	57	3,457	473	34	63	570	4,027	5	4,032
2005	3,302	43	3,345	466	28	64	558	3,903	22	3,925
2006E	3,247	32	3,279	466	19	63	548	3,827	59	3,886
Forecast										
2007	3,311	30	3,341	475	14	63	552	3,893	85	3,978
2008	3,382	30	3,412	489	14	60	563	3,975	111	4,086
2009	3,474	30	3,504	520	14	56	590	4,094	137	4,231
2010	3,564	30	3,594	545	13	56	614	4,208	163	4,371
2011	3.629	30	3.659	592	12	56	660	4.319	183	4,502
2012	3,705	30	3,735	630	11	56	697	4,432	201	4.633
2013	3,781	30	3,811	670	10	56	736	4,547	218	4,765
2014	3,872	30	3,902	702	10	56	768	4,670	231	4,901
2015	3,986	30	4,016	736	10	56	802	4,818	241	5,059
2016	4.095	30	4,125	776	10	56	842	4,967	251	5,218
2017	4,227	30	4,257	813	10	56	879	5,136	261	5,397
2018	4,378	29	4,407	848	10	56	914	5,321	271	5,592
2019	4,552	29	4,581	881	10	56	947	5,528	281	5,809
2020	4,739	29	4,768	916	10	56	982	5,750	291	6,041
Avg Annual Growth:										
2000-06	-0.6%	-33,9%	-2.2%	1.6%	-30.5%	-10.2%	-4.3%	-2.5%	14.6%	-2.4%
2006-10	2.4%	-1.6%	2.3%	4.0%	-9.1%	-2.9%	2.9%	2.4%	28.9%	3.0%
2010-20	2.9%	-0.3%	2.9%	5.3%	-2.6%	0.0%	4.8%	3.2%	6.0%	3.3%
2006-20	2.7%	-0.7%	2.7%	4.9%	-4.5%	-0.8%	4.3%	3.0%	12.1%	3.2%

U.S. MAINLINE AIR CARRIERS

CARGO JET AIRCRAFT

CALENDAR		LARGE NAP	ROWBODY			LARGE W	/IDEBODY	-	
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
2001	180	343	143	666	190	192	85	467	1,133
2002	175	315	114	604	214	165	73	452	1,056
2003	175	277	104	556	203	165	69	437	993
2004	174	277	102	553	202	163	65	430	983
2005	164	233	90	487	246	193	65	504	991
2006E	156	223	87	466	262	205	64	531	997
Forecast									
2007	157	214	84	455	273	213	68	554	1,009
2008	159	205	78	442	283	222	73	578	1,020
2009	160	198	76	434	300	228	77	605	1,039
2010	166	195	69	430	318	233	88	639	1,069
2011	172	192	63	427	335	238	99	672	1,099
2012	183	189	58	430	357	243	110	710	1,140
2013	193	185	53	431	378	249	123	750	1,181
2014	203	181	48	432	399	254	137	790	1,222
2015	212	177	43	432	419	259	151	829	1,261
2016	223	173	33	429	445	264	164	873	1,302
2017	231	168	23	422	472	269	177	918	1,340
2018	237	163	14	414	505	274	188	967	1,381
2019	240	162	6	408	538	279	199	1,016	1,424
2020	248	162	0	410	564	284	210	1,058	1,468
Avg Annual Growth:									
2000-06	-1.0%	-6.4%	-11.1%	-6.0%	8.1%	4.4%	-1.0%	5.3%	-1.1%
2006-10	1.6%	-3.3%	-5.6%	-2.0%	5.0%	3.3%	8.3%	4.7%	1.8%
2010-20	4.1%	-1.8%	NA	-0.5%	5.9%	2.0%	9.1%	5.2%	3.2%
2006-20	3.4%	-2.3%	NA	-0.9%	5.6%	2.4%	8.9%	5.0%	2.8%

TOTAL JET FUEL AND AVIATION GASOLINE FUEL CONSUMPTION

U.S. CIVIL AVIATION AIRCRAFT

(Millions of Gallons)

			JET FUEL			AV	IATION GASOL	INE	TOTAL
FISCAL	U.S	. AIR CARRIER	S 1/	GENERAL		AIR	GENERAL		FUEL
YEAR	DOMESTIC	INT'L.	TOTAL	AVIATION	TOTAL	CARRIER	AVIATION	TOTAL	CONSUMED
Historical*									
2000	14,746	5,297	20,043	972	21,015	2	333	335	21,350
2001	14,469	5,395	19,864	918	20,782	2	279	281	21,064
2002	12,653	4,844	17,497	938	18,435	2	277	279	18,714
2003	12,886	4,990	17,876	932	18,808	2	273	275	19,083
2004	13,502	4,835	18,337	1,231	19,568	2	273	275	19,843
2005	13,978	5,378	19,356	1,255	20,612	2	255	257	20,869
2006E	13,461	5,851	19,313	1,289	20,601	2	262	264	20,865
Forecast									
2007	13,676	6,099	19,775	1,406	21,181	2	268	270	21,451
2008	14,096	6,450	20,546	1,552	22,099	2	274	276	22,375
2009	14,531	6,824	21,355	1,711	23,066	2	281	283	23,349
2010	14,993	7,191	22,184	1,886	24,069	2	286	288	24,357
2011	15,480	7,559	23,039	2,083	25,122	2	293	295	25,417
2012	15,993	7,929	23,922	2,273	26,195	2	294	296	26,491
2013	16,532	8,309	24,841	2,464	27,305	2	294	296	27,601
2014	17,101	8,703	25,803	2,646	28,449	2	294	296	28,745
2015	17,701	9,112	26,813	2,822	29,635	2	296	298	29,933
2016	18,337	9,536	27,873	2,994	30,868	2	297	299	31,167
2017	19,010	9,973	28,984	3,170	32,154	2	299	301	32,455
2018	19,724	10,426	30,150	3,348	33,499	2	300	302	33,801
2019	20,475	10,897	31,372	3,522	34,894	2	301	303	35,197
2020	21,271	11,387	32,658	3,699	36,357	2	301	303	36,660
Avg Annual Growth:									
2000-06	-1.5%	1.7%	-0.6%	4.8%	-0.3%	0.0%	-3.9%	-3.9%	-0.4%
2006-10	2.7%	5.3%	3.5%	10.0%	4.0%	0.0%	2.3%	2.3%	3.9%
2010-20	3.6%	4.7%	3.9%	7.0%	4.2%	0.0%	0.5%	0.5%	4.2%
2006-20	3.3%	4.9%	3.8%	7.8%	4.1%	0.0%	1.0%	1.0%	4.1%

* 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.

U.S. REGIONAL CARRIER FORECAST ASSUMPTIONS

							REVENU	JE PER
	AVERAGE S	EATS PER AIR	CRAFT MILE	AVERAGE P	ASSENGER TR	RIP LENGTH	PASSENGE	ER MILE**
FISCAL	DOMESTIC	INT'L.	SYSTEM	DOMESTIC	INT'L.	SYSTEM	CURRENT \$	2006\$
YEAR	(Seats/Mile)	(Seats/Mile)	(Seats/Mile)	(Miles)	(Miles)	(Miles)	(Cents)	(Cents)
Historical*	- MA	e a		a 10 m i			- 33 - 72	5 JA 19 3
2000	38.4	41.8	38.5	286.5	260.0	285.5	30.28	35.58
2001	40.5	43.0	40.6	302.1	302.9	302.1	31.65	36.02
2002	42.8	41.0	42.8	336.3	320.4	335.8	27.49	30.83
2003	44.3	46.0	44.4	373.9	326.6	372.4	25.85	28.32
2004	46.6	48.1	46.7	410.9	382.2	410.0	24.04	25.75
2005	49.2	52.0	49.3	437.0	471.1	435.8	19.74	20.47
2006E	50.0	51.4	50.1	455.4	448.1	450.4	19.92	19.92
Forecast								
2007	50.8	51.6	50.8	453.8	453.0	453.7	21.40	20.97
2008	51.4	51.9	51.4	464.7	458.0	464.5	20.41	19.50
2009	52.0	52.2	52.0	475.6	463.0	475.3	20.48	19.08
2010	52.6	52.5	52.6	486.6	468.0	486.0	20.53	18.66
2011	53.2	52.8	53.2	497.5	473.0	496.8	20.58	18.27
2012	53.8	53.1	53.8	508.5	478.0	507.6	20.61	17.89
2013	54.4	53.4	54.4	519.4	483.0	518.3	20.67	17.53
2014	55.1	53.7	55.0	530.4	488.0	529.1	20.72	17.18
2015	55.7	54.0	55.7	541.3	493.0	539.9	20.78	16.84
2016	56.4	54.3	56.3	552.3	498.0	550.6	20.86	16.52
2017	57.0	54.6	56.9	563.2	503.0	561.4	20.93	16.21
2018	57.7	54.9	57.6	574.1	508.0	572.2	21.01	15.91
2019	58.3	55.2	58.3	585.1	513.0	582.9	21.10	15.62
2020	59.0	55.5	58.9	596.0	518.0	593.7	21.20	15.34
Avg Annual Growth:								
2000-06							-6.7%	-9.2%
2006-10							0.8%	-1.6%
2010-20							0.3%	-1.9%
2006-20							0.4%	-1.8%

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

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER TRAFFIC

(In Millions)

FISCAL		REVENUE PASSENGER	S	REVENUE PASSENGER MILES				
YEAR	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM		
Historical*								
2000	79.7	3.1	82.8	22,825	814	23,639		
2001	80.4	3.1	83.6	24,299	947	25,246		
2002	88.6	2.8	91.5	29,807	911	30,718		
2003	105.0	3.6	108.6	39,259	1,181	40,440		
2004	125.9	4.0	130.0	51,737	1,544	53,281		
2005	146.4	4.4	150.8	63,661	2,073	65,734		
2006E	152.1	4.6	156.8	68,529	2,068	70,596		
Forecast								
2007	158.8	4.9	163.7	72,061	2,200	74,261		
2008	163.8	5.0	168.8	76,104	2,294	78,398		
2009	168.4	5.2	173.6	80,102	2,385	82,487		
2010	173.2	5.3	178.5	84,296	2,480	86,776		
2011	178.3	5.5	183.7	88,694	2,579	91,273		
2012	183.5	5.6	189.1	93,308	2,683	95,991		
2013	189.0	5.8	194.7	98,150	2,791	100,941		
2014	194.6	6.0	200.6	103,232	2,905	106,137		
2015	200.6	6.1	206.7	108,565	3,024	111,589		
2016	206.7	6.3	213.0	114,163	3,149	117,311		
2017	213.1	6.5	219.7	120,041	3,279	123,320		
2018	219.8	6.7	226.6	126,212	3,416	129,627		
2019	226.5	6.9	233.5	132,540	3,554	136,095		
2020	233.5	7.1	240.7	139,179	3,700	142,878		
Avg Annual Growth:								
2000-06	11.4%	6.7%	11.2%	20.1%	16.8%	20.0%		
2006-10	3.3%	3.5%	3.3%	5.3%	4.6%	5.3%		
2010-20	3.0%	3.0%	3.0%	5.1%	4.1%	5.1%		
2006-20	3.1%	3.2%	3.1%	5.2%	4.2%	5.2%		

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

		DOMESTIC		1	NTERNATIONA	AL.		SYSTEM	
FISCAL	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD	ASMs	RPMs	% LOAD
YEAR	(MIL)	(MIL)	FACTOR	(MIL)	(MIL)	FACTOR	(MIL)	(MIL)	FACTOR
Historical*		101 101	34 	n 9					
2000	38,332	22,825	59.5	1,338	814	60.8	39,670.2	23,638.6	59.6
2001	41,418	24,299	58.7	1,633	947	58.0	43,050.9	25,245.7	58.6
2002	48,660	29,807	61.3	1,492	911	61.1	50,151.7	30,718.3	61.3
2003	60,491	39,259	64.9	2,017	1,181	58.5	62,507.9	40,439.8	64.7
2004	76,015	51,737	68.1	2,409	1,544	64.1	78,423.5	53,280.9	67.9
2005	91,091	63,661	69.9	3,199	2,073	64.8	94,289.7	65,733.8	69.7
2006E	92,485	68,529	74.1	3,224	2,068	64.1	95,709.6	70,596.4	73.8
Forecast									
2007	95,192	72,061	75.7	3,367	2,200	65.4	98,558.4	74,261.2	75.3
2008	100,297	76,104	75.9	3,484	2,294	65.9	103,780.6	78,397.9	75.5
2009	105,343	80,102	76.0	3,594	2,385	66.4	108,936.7	82,487.2	75.7
2010	110,643	84,296	76.2	3,709	2,480	66.9	114,352.4	86,775.8	75.9
2011	116,210	88,694	76.3	3,829	2,579	67.4	120,038.9	91,273.1	76.0
2012	122,056	93,308	76.4	3,954	2,683	67.9	126,010.2	95,990.9	76.2
2013	128,198	98,150	76.6	4,084	2,791	68.4	132,281.3	100,941.3	76.3
2014	134,648	103,232	76.7	4,219	2,905	68.9	138,867.7	106,136.9	76.4
2015	141,423	108,565	76.8	4,360	3,024	69.4	145,783.1	111,589.1	76.5
2016	148,537	114,163	76.9	4,508	3,149	69.9	153,044.1	117,311.2	76.7
2017	156,012	120,041	76.9	4,661	3,279	70.4	160,672.4	123,320.4	76.8
2018	163,860	126,212	77.0	4,821	3,416	70.9	168,680.8	129,627.4	76.8
2019	171,909	132,540	77.1	4,981	3,554	71.4	176,890.1	136,094.7	76.9
2020	180,354	139,179	77.2	5,149	3,700	71.9	185,502.7	142,878.5	77.0
Avg Annual Growth:									
2000-06	15.8%	20.1%		15.8%	16.8%		15.8%	20.0%	
2006-10	4.6%	5.3%		3.6%	4.6%		4.5%	5.3%	
2010-20	5.0%	5.1%		3.3%	4.1%		5.0%	5.1%	
2006-20	4.9%	5.2%		3.4%	4.2%		4.8%	5.2%	

U.S. REGIONAL CARRIERS

PASSENGER AIRCRAFT

	REGIONAL AIRCRAFT											
AS OF	LESS THAN	10 TO 19	20 TO 30	31	TO 40 SEA	ATS	OV	ER 40 SEA	TS	ТО	TAL FLE	ET
JANUARY 1	9 SEATS	SEATS	SEATS	PROP	JET	TOTAL	PROP	JET*	TOTAL	NON JET	JET	TOTAL
Historical*								- -			í i	
2000	470	343	262	474	74	548	155	496	651	1,704	570	2,274
2001	490	250	248	445	110	555	148	672	820	1,581	782	2,363
2002	490	253	194	396	118	514	128	920	1048	1,461	1,038	2,499
2003	447	246	137	280	116	396	106	1,217	1323	1,216	1,333	2,549
2004	451	237	108	280	96	376	89	1,486	1,575	1,165	1,582	2,747
2005	451	220	99	253	98	351	81	1,566	1,647	1,104	1,664	2,768
2006E	453	204	88	224	96	320	87	1,591	1,678	1,056	1,687	2,743
			17000			1000		11000-00000		1001-000-000		
Forecast												
2007	453	204	80	214	96	310	87	1,625	1,712	1,038	1,721	2,759
2008	453	204	80	204	96	300	87	1,668	1,755	1,028	1,764	2,792
2009	453	204	80	194	96	290	87	1,719	1,806	1,018	1,815	2,833
2010	453	204	80	184	96	280	87	1,807	1,894	1,008	1,903	2,911
											~	
2011	453	204	80	181	96	277	87	1,894	1,981	1,005	1,990	2,995
2012	453	204	80	181	96	277	87	1,968	2,055	1,005	2,064	3,069
2013	453	204	80	181	96	277	87	2,046	2,133	1,005	2,142	3,147
2014	453	204	80	181	96	277	87	2,124	2,211	1,005	2,220	3,225
2015	453	204	80	181	96	277	87	2,201	2,288	1,005	2,297	3,302
	2010/010	10000	02025	P0022/11		303 52	1346	SCALL AND		104 199-9 0		
2016	453	204	80	181	96	277	87	2,276	2,363	1,005	2,372	3,377
2017	453	204	80	181	96	277	87	2,354	2,441	1,005	2,450	3,455
2018	453	204	80	181	96	277	87	2,433	2,520	1,005	2,529	3,534
2019	453	204	80	181	96	277	87	2,513	2,600	1,005	2,609	3,614
2020	453	204	80	181	96	277	87	2,593	2,680	1,005	2,689	3,694
Avg Annual Growth:												
2000-06	-0.6%	-8.3%	-16.6%	-11.7%	4.4%	-8.6%	-9.2%	21.4%	17.1%	-7.7%	19.8%	3.2%
2006-10	0.0%	0.0%	-2.4%	-4.8%	0.0%	-3.3%	0.0%	3.2%	3.1%	-1.2%	3.1%	1.5%
2010-20	0.0%	0.0%	0.0%	-0.2%	0.0%	-0.1%	0.0%	3.7%	3.5%	0.0%	3.5%	2.4%
2006-20	0.0%	0.0%	-0.7%	-1.5%	0.0%	-1.0%	0.0%	3.6%	3.4%	-0.4%	3.4%	2.1%

*Source: The Velocity Group for the Regional Airline Association. **Independence Air A319 aircraft are included in Table 20 - U.S. Mainline Air Carriers Passenger Jet Aircraft.

ACTIVE GENERAL AVIATION AND AIR TAXI AIRCRAFT

			FIXED \	VING									TOTAL		
		PISTON		1	TURBINE								GENERAL		
AS OF	SINGLE	MULTI-		TURBO	TURBO		RO	TORCRAF	т	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
2001	145,034	18,281	163,315	6,596	7,787	14,383	2,292	4,491	6,783	20,421	NA	6,633	211,535	165,607	18,874
2002	143,503	17,584	161,087	6,841	8,355	15,196	2,351	4,297	6,648	21,936	NA	6,478	211,345	163,438	19,493
2003	143,265	17,673	160,938	7,689	7,997	15,686	2,123	4,403	6,526	20,550	NA	6,088	209,788	163,061	20,089
2004	146,613	18,576	165,189	8,379	9,298	17,677	2,315	5,506	7,821	22,800	NA	5,939	219,426	167,504	23,183
2005	148,101	19,507	167,608	7,942	9,823	17,765	3,039	5,689	8,728	23,627	170	6,454	224,352	170,647	23,454
2006E	148,236	19,364	167,600	8,026	10,032	18,058	3,367	5,865	9,232	24,541	400	6,592	226,422	170,967	23,923
Forecast															
2007	148,570	19,317	167,887	8,087	10,835	18,922	3,710	6,041	9,750	25,395	2,700	6,688	231,343	171,596	24,963
2008	149,100	19,272	168,371	8,146	11,670	19,816	4,067	6,207	10,274	26,241	3,800	6,751	235,253	172,438	26,023
2009	149,725	19,227	168,952	8,199	12,500	20,699	4,439	6,372	10,811	26,979	4,700	6,787	238,928	173,391	27,071
2010	150,444	19,184	169,628	8,248	13,436	21,684	4,816	6,528	11,344	27,709	5,600	6,802	242,766	174,444	28,212
2011	151,195	19,142	170,337	8,300	14,372	22,672	5,163	6,683	11,846	28,432	6,600	6,800	246,687	175,500	29,355
2012	151,989	19,101	171,091	8,352	15,304	23,656	5,479	6,829	12,308	29,148	7,600	6,785	250,587	176,570	30,484
2013	152,769	19,062	171,831	8,402	16,205	24,607	5,775	6,974	12,749	29,806	8,500	6,767	254,261	177,606	31,581
2014	153,442	19,024	172,465	8,454	17,093	25,547	6,071	7,109	13,180	30,458	9,500	6,750	257,900	178,536	32,656
2015	154,007	18,986	172,994	8,504	17,999	26,503	6,327	7,244	13,571	31,104	10,500	6,732	261,404	179,321	33,747
2016	154,467	18,951	173,418	8.554	18,930	27.484	6.562	7.369	13,931	31,693	11,500	6.715	264,741	179,980	34,853
2017	154,823	18,916	173,739	8,605	19,881	28,486	6,778	7,494	14.272	32,276	12,000	6,698	267,470	180,517	35,980
2018	155.074	18,882	173,956	8,656	20.854	29,510	6,973	7.619	14.592	32,853	12,500	6.681	270.092	180,929	37,129
2019	155,324	18,849	174,173	8,708	21.825	30,534	7,168	7,743	14.911	33,374	12,900	6,664	272,555	181.341	38,277
2020	155,570	18,817	174,387	8,761	22,797	31,558	7,363	7,868	15,231	33,891	13,200	6,647	274,914	181,750	39,426
Avg Annual Growth:															
2000-06	-0.1%	-1.4%	-0.3%	5.7%	6.2%	6.0%	3.9%	4.6%	4.4%	3.1%		-0.3%	0.7%	-0.2%	5.6%
2006-10	0.4%	-0.2%	0.3%	0.7%	7.6%	4.7%	9.4%	2.7%	5.3%	3.1%	93.4%	0.8%	1.8%	0.5%	4.2%
2010-20	0.3%	-0.2%	0.3%	0.6%	5.4%	3.8%	4.3%	1.9%	3.0%	2.0%	9.0%	-0.2%	1.3%	0.4%	3.4%
2006-20	0.3%	-0.2%	0.3%	0.6%	6.0%	4.1%	5.7%	2.1%	3.6%	2.3%	28.4%	0.1%	1.4%	0.4%	3.6%

* Source: 2000-2005, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

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

ACTIVE GENERAL AVIATION AND AIR TAXI HOURS FLOWN (In Thousands)

			FIXED W	ING									TOTAL		
		PISTON			TURBINE								GENERAL	1	
CALENDAR	SINGLE	MULTI-		TURBO	TURBO		R	DTORCRAF	T	EXPERI-	SPORT		AVIATION	TOTAL	TOTAL
YEAR	ENGINE	ENGINE	TOTAL	PROP	JET	TOTAL	PISTON	TURBINE	TOTAL	MENTAL	AIRCRAFT	OTHER	HOURS	PISTONS	TURBINES
Historical*		5 													
2000	18,089	3,400	21,489	1,986	2,755	4,741	531	1,777	2,308	1,307	NA	374	30,219	22,020	6,518
2001	16,549	2,644	19,193	1,773	2,654	4,427	474	1,478	1,952	1,157	NA	287	27,016	19,667	5,905
2002	16,325	2,566	18,891	1,850	2,745	4,595	453	1,422	1,875	1,345	NA	333	27,039	19,344	6,017
2003	16,680	2,333	19,013	1,922	2,704	4,626	448	1,687	2,135	1,293	NA	264	27,331	19,461	6,313
2004	15,363	2,780	18,143	2,161	3,719	5,880	514	2,020	2,534	1,322	NA	249	28,128	18,657	7,900
2005	13,739	2,695	16,434	2,106	3,771	5,877	617	2,439	3,056	1,339	9	267	26,982	17,051	8,316
2006E	13,854	2,684	16,538	2,143	3,884	6,027	755	2,526	3,281	1,398	22	277	27,543	17,293	8,553
Forecast															
2007	13,990	2,691	16,680	2,163	4,411	6,574	836	2,615	3,451	1,454	220	282	28,662	17,516	9,190
2008	14,145	2,698	16,842	2,183	4,979	7,162	921	2,700	3,621	1,510	280	286	29,702	17,763	9,862
2009	14,311	2,705	17,015	2,201	5,585	7,787	1,010	2,786	3,797	1,561	344	289	30,792	18,026	10,573
2010	14,487	2,712	17,199	2,219	6,298	8,517	1,102	2,868	3,970	1,611	417	291	32,005	18,301	11,385
		-41	15	10	5) ()	~	· ·	72	1.12	65			<u>.</u>	22	0.02
2011	14.669	2,720	17,389	2,237	7,035	9,271	1,187	2,951	4,138	1,661	495	293	33,247	18,575	12,223
2012	14,856	2,728	17,584	2.255	7,773	10,028	1,266	3,031	4,297	1,711	570	294	34,484	18,850	13.059
2013	15,045	2.736	17,780	2.270	8,497	10,767	1.341	3,111	4,452	1,759	656	294	35,708	19,121	13,878
2014	15.224	2.744	17.968	2.286	9.225	11.511	1.417	3,187	4,603	1,806	747	295	36,930	19,385	14.697
2015	15,395	2,752	18,147	2,301	9,936	12,238	1,484	3,264	4,747	1,854	842	296	38,124	19,631	15,501
1942.022	1012 039	1.0.0.0.000	192534092962	257A75265	69455555	14040320	2007/02/02/25	1.00000000	- 12 - 13 A	10000000000	(77)(2420))		2002/2012/01	0.000	10.045125290
2016	15,557	2,761	18,317	2,318	10,650	12,968	1,547	3,336	4,883	1,898	905	296	39,268	19,864	16,304
2017	15,709	2,769	18,479	2,341	11,373	13,714	1,605	3,410	5,015	1,943	971	297	40,419	20,084	17,124
2018	15,853	2.778	18,631	2.363	12,108	14,471	1,660	3,484	5,144	1,988	1.032	298	41,564	20,291	17,955
2019	15,998	2.787	18,785	2.389	12.845	15,234	1,715	3,559	5.274	2.029	1,088	299	42,708	20,500	18,793
2020	16,143	2,796	18,939	2,414	13,587	16,001	1,770	3,634	5,404	2,071	1,146	299	43,860	20,709	19,635
	1000	1.10	111228-12117-2111		**************************************	* 1949 <u>9</u> * 00001441	199250709.1C.1I	1.17 M 227 Martin		6.99 6 .9770.0	10.21 • 31.4 (1999)			Concert Protecter	1000000000000
Avg Annual Growth:															
2000-06	-4.3%	-3.9%	-4.3%	1.3%	5.9%	4.1%	6.0%	6.0%	6.0%	1.1%		-4.9%	-1.5%	-3.9%	4.6%
2006-10	1.1%	0.3%	1.0%	0.9%	12.8%	9.0%	9.9%	3.2%	4.9%	3.6%	108.7%	1.2%	3.8%	1.4%	7.4%
2010-20	1.1%	0.3%	1.0%	0.8%	8.0%	6.5%	4.9%	2.4%	3.1%	2.5%	10.6%	0.3%	3.2%	1.2%	5.6%
2006-20	1.1%	0.3%	1.0%	0.9%	9.4%	7.2%	6.3%	2.6%	3.6%	2.8%	32.6%	0.5%	3.4%	1.3%	6.1%

* Source: 2000-2005, FAA General Aviation and Air Taxi Surveys.

1/ Estimates have been revised to reflect changes in edit and estimation procedures, and may not be comparable

to estimates prior to 1995.

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

ACTIVE PILOTS BY TYPE OF CERTIFICATE

							ROTOR-			TOTAL	INSTRUMENT
AS OF		RECREA-	SPORT			AIRLINE	CRAFT	GLIDER	TOTAL	LESS	RATED
DEC. 31	STUDENTS	TIONAL	PILOT	PRIVATE	COMMERCIAL	TRANSPORT	ONLY	ONLY	PILOTS	AT PILOTS	PILOTS 1/
Historical*											
2000	99,110	340	NA	251,561	121,858	141,598	7,775	9,387	631,629	490,031	315,100
2001	94,420	316	NA	243,823	120,502	144,702	7,727	8,473	619,963	475,261	315,276
2002	85,991	317	NA	245,230	125,920	144,708	7,770	21,826 2/	631,762	487,054	317,389
2003	87,296	310	NA	241,045	123,990	143,504	7,916	20,950	625,011	481,507	315,413
2004	87,910	291	NA	235,994	122,592	142,160	8,586	21,100	618,633	476,473	313,545
2005	87,213	278	134	228,619	120,614	141,992	9,518	21,369	609,737	467,745	311,500
2006E	84,866	239	939	219,233	117,610	141,935	10,690	21,597	597,109	455,174	309,333
Forecast											
2007	84,000	235	2,100	212,656	115.611	141,921	11,759	21,899	590,181	448,260	309.024
2008	83,500	235	4,200	207.340	113,876	142.063	12,465	22,118	585,797	443,734	309,951
2009	84,300	235	6,500	205,266	112,738	142,205	13.088	22.317	586,649	444,444	311,191
2010	85,902	235	8,500	205,882	113,865	142,347	13,611	22,474	592,816	450,469	314,302
2011	87 620	225	10.200	206 500	115.004	142 480	14.020	22 586	508 653	456 164	317 445
2011	80 372	235	11,200	200,300	116 720	142,403	14,020	22,500	604 041	450,104	321 800
2012	00.081	235	11,000	207,119	119 490	142,032	14,500	22,034	600 272	401,409	226 719
2013	02 / 37	235	12 128	208 087	120 257	142,017	14,300	22,070	614 823	400,430	320,710
2014	03 823	235	12,120	210 241	120,257	143,203	15 175	22,099	620 480	471,020	333 285
2015	33,023	200	12,754	210,241	122,001	143,403	15,175	22,122	020,400	470,551	333,203
2016	95,137	235	13,371	211,713	123,770	143,920	15,403	22,745	626,292	482,372	336,618
2017	96,373	235	14,039	213,407	125,502	144,352	15,634	22,767	632,309	487,958	339,984
2018	97,626	235	14,741	215,327	127,259	144,785	15,868	22,790	638,632	493,848	343,384
2019	98,895	235	15,478	217,481	128,914	145,219	16,106	22,813	645,141	499,922	346,818
2020	100,181	235	16,252	219,655	130,590	145,655	16,348	22,836	651,752	506,097	350,286
Avg Annual Growth:											
2000-06	-2.6%	-5.7%		-2.3%	-0.6%	0.0%	5.4%	14.9%	-0.9%	-1.2%	-0.3%
2006-10	0.3%	-0.4%	73.5%	-1.6%	-0.8%	0.1%	6.2%	1.0%	-0.2%	-0.3%	0.4%
2010-20	1.5%	0.0%	6.7%	0.6%	1.4%	0.2%	1.8%	0.2%	1.0%	1.2%	1.1%
2006-20	1.2%	-0.1%	22.6%	0.0%	0.8%	0.2%	3.1%	0.4%	0.6%	0.8%	0.9%

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

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

2/ In March 2001, the FAA Registry changed the definition of this pilot category. It added approximately 13,000 to this pilot category.

E: Estimate

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

GENERAL AVIATION AIRCRAFT FUEL CONSUMPTION (In Millions of Gallons)

-	FIXED WING					5	0				
	PI	STON	TUR	BINE	1		EXPERI-		TOTAL	FUEL CONSU	JMED
CALENDAR	SINGLE	MULTI-	TURBO-	TURBO-	ROTOF	RCRAFT	MENTAL/	S COMPANY STOR		JET	
YEAR	ENGINE	ENGINE	PROP	JET	PISTON	TURBINE	OTHER	SPORT	AVGAS	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
2001	180.4	76.4	149.1	726.7	7.2	42.6	15.3	NA	279.2	918.3	1,197.6
2002	177.9	74.2	152.3	745.5	6.8	40.5	17.8	NA	276.7	938.3	1,215.0
2003	181.8	66.7	154.5	729.0	6.8	48.8	17.1	NA	272.4	932.3	1,204.7
2004	167.5	80.1	167.0	1,004.9	7.9	59.0	17.5	NA	272.9	1,230.9	1,503.8
2005	149.8	77.6	166.5	1,017.1	10.4	71.7	17.7	0.0	255.4	1,255.3	1,510.7
2006E	152.4	77.9	165.3	1,048.7	11.7	74.8	19.6	0.7	262.2	1,288.8	1,551.0
Forecast											
2007	155.3	78.5	166.6	1,162.3	13.0	77.4	20.7	0.9	268.3	1,406.3	1.674.6
2008	158.4	79.1	168.1	1,304.4	14.3	79.9	21.4	1.2	274.4	1,552.5	1,826,9
2009	161.7	79.7	169.5	1,460.0	15.6	81.9	22.5	1.5	280.9	1.711.4	1,992.3
2010	165.2	79.9	168.6	1,633.2	16.9	83.8	22.9	1.8	286.5	1,885.6	2,172.1
2011	168.7	80.5	170.0	1.826.8	18.2	85.9	23.4	2.1	292.9	2.082.7	2.375.5
2012	167.9	80.2	171.4	2 013.4	19.2	87.9	24.1	2.4	293.8	2 272 7	2,566,5
2013	167.0	79.9	170.3	2 203 6	20.2	89.9	24.4	2.7	294.3	2 463 8	2,758.0
2014	165.9	79.6	171.4	2 382 1	21.4	92.1	24.7	3.1	294.7	2 645 7	2 940 4
2015	166.3	79.3	172.6	2,554.7	22.3	94.3	25.0	3.5	296.3	2,821.6	3,117.8
2016	166.5	79.0	171 5	2 726 3	23.0	96.4	25.2	37	297.4	2 994 3	3 291 7
2017	166.5	78.7	173.2	2 899 0	23.9	98.2	25.6	4.0	298 7	3 170 4	3 469 1
2018	166.5	78.3	174.9	3.073.0	24.6	100.3	26.0	4.2	300.1	3 348 2	3 648 3
2019	166.4	78.0	174.4	3 246 0	25.4	102.1	26.4	44	300.5	3 522 5	3 823 0
2020	166.3	77.7	176.2	3,418.5	25.9	104.0	26.7	4.6	301.2	3,698.7	3,999.9
Avg Annual Growth											
2000-06	-4.5%	-5.4%	-1.1%	6.1%	5.7%	4.0%	4.3%		-3.9%	4.8%	2.9%
2006-10	2.0%	0.6%	0.5%	11.7%	9.6%	2.9%	4.0%	27.9%	2.2%	10.0%	8.8%
2010-20	0.1%	-0.3%	0.4%	7.7%	4 4%	2.2%	1.6%	10.1%	0.5%	7.0%	6.3%
2006-20	0.6%	0.0%	0.5%	8.8%	5.8%	2.4%	2.2%	14.9%	1.0%	7.8%	7.0%

Source: FAA APO Estimates.

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

TOTAL COMBINED AIRCRAFT OPERATIONS AT AIRPORTS

WITH FAA AND CONTRACT TRAFFIC CONTROL SERVICE

(In Thousands)

FISCAL	AIR	AIR TAXI/	GEN	ERAL AVIATI	ON	·	MILITARY			NUMBER	OF TOWERS
YEAR	CARRIER	COMMUTER	ITINERANT	LOCAL	TOTAL	ITINERANT	LOCAL	TOTAL	TOTAL	FAA	CONTRACT
Historical*											
2000	15,158.7	10,760.6	22,844.1	17,034.4	39,878.5	1,422.0	1,448.2	2,870.2	68,668.0	266	192
2001	14,762.8	10,882.1	21,433.3	16,193.7	37,627.0	1,493.0	1,437.6	2,930.6	66,202.5	266	206
2002	13,209.7	11,029.4	21,450.5	16,172.8	37,623.2	1,552.5	1,511.0	3,063.5	64,925.9	266	216
2003	12,823.9	11,426.0	20,231.3	15,292.1	35,523.5	1,528.7	1,480.5	3,009.2	62,782.5	266	218
2004	12,934.0	12,243.9	20,007.2	14,960.4	34,967.6	1,498.8	1,480.5	2,979.3	63,124.8	266	224
2005	13,532.3	12,551.7	19,315.1	14,845.9	34,161.0	1,414.8	1,449.1	2,863.9	63,108.8	264	229
2006E	13,256.3	11,967.6	18,751.9	14,378.9	33,130.7	1,358.4	1,417.5	2,775.8	61,130.4	263	231
Forecast											
2007	13,706.2	11,923.8	19,220.1	14,833.3	34,053.5	1,381.7	1,421.5	2,803.2	62,486.7	263	239
2008	14,090,0	11,990.9	19,816.9	15,429.3	35,246.2	1,399.9	1,422.6	2,822.4	64,149.5	263	239
2009	14,497.2	12,080.4	20,285.7	15,748.3	36,034.0	1,399.9	1,422.6	2,822.4	65,434.2	263	239
2010	14,937.6	12,192.5	20,786.8	16,034.3	36,821.1	1,399.9	1,422.6	2,822.4	66,773.7	263	239
2011	15,413,9	12.319.0	21,307,7	16,300,1	37.607.8	1,399,9	1,422.6	2.822.4	68,163,1	263	239
2012	15,912,0	12,455,7	21,840,3	16.552.9	38,393,2	1,399,9	1,422.6	2.822.4	69,583,4	263	239
2013	16,442,8	12.600.5	22.359.9	16,799,9	39,159,8	1,399,9	1.422.6	2.822.4	71.025.5	263	239
2014	16,991.8	12,752.2	22,841.3	17.041.8	39,883.1	1,399.9	1,422.6	2,822.4	72,449.5	263	239
2015	17,559.9	12,910.1	23,297.5	17,279.3	40,576.8	1,399.9	1,422.6	2,822.4	73,869.2	263	239
2016	18,160.0	13.074.1	23.731.0	17.503.0	41,234,0	1.399.9	1,422.6	2.822.4	75.290.5	263	239
2017	18,769.8	13,244.0	24,153.6	17,715.8	41,869.4	1,399.9	1,422.6	2.822.4	76,705.6	263	239
2018	19,416,7	13,419,7	24,568.3	17.917.3	42,485.7	1,399,9	1,422.6	2.822.4	78,144.5	263	239
2019	20,085.4	13,595.9	24,977.6	18,110.1	43,087.7	1,399.9	1,422.6	2,822.4	79,591.4	263	239
2020	20,790.9	13,775.0	25,383.7	18,297.7	43,681.4	1,399.9	1,422.6	2,822.4	81,069.8	263	239
Avg Annual Growth											
2000-06	-2.2%	1.8%	-3.2%	-2.8%	-3.0%	-0.8%	-0.4%	-0.6%	-1.9%		
2006-10	3.0%	0.5%	2.6%	2.8%	2.7%	0.8%	0.1%	0.4%	2.2%		
2010-20	3.4%	1.2%	2.0%	1.3%	1.7%	0.0%	0.0%	0.0%	2.0%		
2006-20	3.3%	1.0%	2.2%	1.7%	2.0%	0.2%	0.0%	0.1%	2.0%		

* Source: FAA Air Traffic Activity.

TOTAL INSTRUMENT OPERATIONS

AT AIRPORTS WITH FAA TRAFFIC CONTROL SERVICE

(In Thousands)

FISCAL	AIR	AIR TAXI/	GENERAL	1	
YEAR	CARRIER	COMMUTER	AVIATION	MILITARY	TOTAL
Historical*					
2000	16,395.0	11,197.7	20,799.2	3,466.9	51,858.8
2001	15,894.0	11,326.5	19,274.9	3,465.7	49,961.0
2002	14,243.0	11,540.0	19,212.5	3,523.4	48,518.9
2003	13,650.2	11,814.5	18,094.2	3,202.3	46,761.1
2004	13,680.5	12,599.0	18,006.8	3,021.5	47,307.8
2005	14,161.8	12,803.1	17,394.1	2,801.0	47,159.9
2006E	14,015.6	12,081.4	17,010.7	2,670.4	45,778.1
Forecast					
2007	14,478.1	12,008.9	17,248.9	2,643.7	46,379.6
2008	14,788.6	12,181.8	17,780.7	2,643.7	47,394.7
2009	15,206.4	12,338.2	18,388.8	2,643.7	48,577.0
2010	15,679.5	12,498.8	19,060.7	2,643.7	49,882.6
2011	16,211.2	12,663.3	19,781.0	2,643.7	51,299.1
2012	16,772.9	12,831.9	20,535.9	2,643.7	52,784.5
2013	17,380.4	13,004.7	21,301.3	2,643.7	54,330.1
2014	18,010.6	13,181.6	22,046.8	2,643.7	55,882.6
2015	18,666.1	13,362.6	22,764.3	2,643.7	57,436.7
2016	19.364.2	13,547.8	23,451.3	2.643.7	59,007.0
2017	20,074.7	13,737.4	24,114.0	2,643.7	60,569.8
2018	20,834.1	13,931.1	24,758.1	2,643.7	62,166.9
2019	21,621,9	14,120.5	25,388.2	2,643.7	63,774.2
2020	22,458.0	14,314.1	26,008.5	2,643.7	65,424.3
Avg Annual Growth					
2000-06	-2.6%	1.3%	-3.3%	-4.3%	-2.1%
2006-10	2.8%	0.9%	2.9%	-0.3%	2.2%
2010-20	3.7%	1.4%	3.2%	0.0%	2.7%
2006-20	3.4%	1.2%	3.1%	-0.1%	2.6%

IFR AIRCRAFT HANDLED

AT FAA AIR ROUTE TRAFFIC CONTROL CENTERS

(In Thousands)

		IFF	R AIRCRAFT HANDL	ED	2
FISCAL	AIR	AIR TAXI/	GENERAL		
YEAR	CARRIER	COMMUTER	AVIATION	MILITARY	TOTAL
Historical*					
2000	24,987.1	8,100.9	8,744.4	4,192.5	46,024.9
2001	24,865.5	8,303.3	8,024.6	4,038.6	45,232.0
2002	22,819.3	8,809.4	8,180.8	3,920.7	43,730.2
2003	22,743.4	9,149.0	7,999.8	3,855.3	43,747.4
2004	23,856.9	9,981.5	8,350.4	4,027.7	46,216.5
2005	25,005.1	10,054.0	8,367.8	4,052.0	47,478.9
2006E	24,395.1	9,436.6	8,197.0	4,149.7	46,178.4
Forecast					
2007	25,265.5	9,457.4	8,356.7	4,121.7	47,201.3
2008	26,049.0	9,606.4	8,674.5	4,121.7	48,451.5
2009	26,725.4	9,793.1	9,028.9	4,121.7	49,669.1
2010	27,498.6	9,999.6	9,414.0	4,121.7	51,033.8
2011	28,433.5	10,216.6	9,827.3	4,121.7	52,599.0
2012	29,471.6	10,440.8	10,262.5	4,121.7	54,296.6
2013	30,574.6	10,671.3	10,702.1	4,121.7	56,069.6
2014	31,764.2	10,907.5	11,136.1	4,121.7	57,929.5
2015	33,020.9	11,149.4	11,560.5	4,121.7	59,852.6
2016	34.332.2	11,397.0	11,973.7	4,121.7	61,824.6
2017	35,728.0	11,650.3	12,378.8	4,121.7	63,878.8
2018	37,190.3	11,909.4	12,778.3	4,121.7	65,999.7
2019	38,668.9	12,166.7	13,174.7	4,121.7	68,132.0
2020	40,217.9	12,427.1	13,569.9	4,121.7	70,336.6
Avg Annual Growth					
2000-06	-0.4%	2.6%	-1.1%	-0.2%	0.1%
2006-10	3.0%	1.5%	3.5%	-0.2%	2.5%
2010-20	3.9%	2.2%	3.7%	0.0%	3.3%
2006-20	3.6%	2.0%	3.7%	0.0%	3.1%

* Source: FAA Air Traffic Activity.