United States Government Accountability Office

GAO

Report to Congressional Committees

August 2004

COMMERCIAL AVIATION

Legacy Airlines Must Further Reduce Costs to Restore Profitability

GAO-04-836

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GAO Accountability • Integrity • Reliability

Highlights

Highlights of GAO-04-836, a report to congressional committees

Why GAO Did This Study

Since 2001, the U.S. airline industry has confronted financial losses of previously unseen proportions. From 2001 to 2003, the industry lost $23 billion, and two of the nation's biggest airlines have gone into bankruptcy. To assist airlines, the Congress provided U.S. airlines with $7 billion of direct financial assistance—most recently in the form of $2.4 billion of financial assistance under the 2003 Emergency Wartime Supplemental Appropriations Act. Under the Act and its accompanying conference report, the conferees directed GAO to review measures taken by airlines to reduce costs, improve revenues and profits, and strengthen their balance sheets. The Congress also tasked airlines receiving assistance to report their cost-cutting plans to GAO. GAO was also required to report on the financial condition of the U.S. airline industry by Vision 100—Century of Aviation Reauthorization Act, which became law in January 2004. In consultation with the Congress, GAO agreed to satisfy these directives and report to the Congress on (1) the major challenges to the airline industry since 1998, (2) measures airlines report taking to remain financially viable, (3) the current financial and operating condition of the industry, and (4) how the competitiveness of the domestic airline industry has changed since 1998.

GAO is making no recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-04-836.

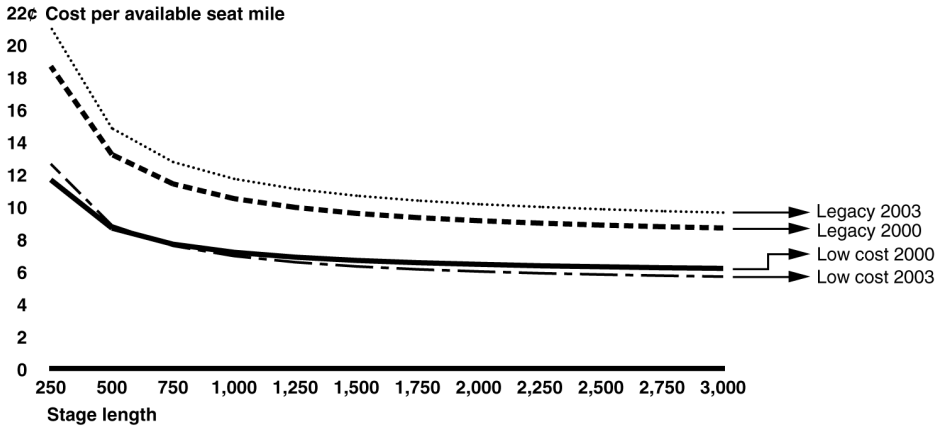
To view the full product, including the scope and methodology, click on the link above. For more information, contact JayEtta Z. Hecker at (202) 512-2834 or heckerj@gao.gov.

What GAO Found

U.S. airlines, particularly major network or "legacy" airlines, have faced an unprecedented set of challenges since 1998 that are reshaping the industry and demand for air travel. The decline in business travel, followed by the September 11, 2001, attacks, caused a significant loss of operating revenue for many airlines. In response to these new challenges, the legacy airlines reported a goal of $19.5 billion in cost-cutting measures to restore their profitability through 2003. As a group, legacy airlines actually reduced their operating costs by $12.7 billion over the last 2 years. For legacy airlines, cost cutting was greatest in labor and commission costs. Meanwhile, low cost airlines, which as a group grew 26.1 percent during the last 2 years, reported little cost cutting.

Since 2000, legacy airlines financial performance has deteriorated significantly, while low cost airlines have used their comparative cost advantage to expand their market share. Low cost airlines maintained their unit cost advantage over legacy airlines between 2000 and 2003, despite concerted cost cutting efforts by legacy airlines (see fig. below). For several of the legacy airlines, their weakened financial condition combined with significant future financial obligations makes their recovery uncertain.

Unit Costs for Legacy and Low Cost Airlines, 2000 and 2003



Source: Unisys R2A, Transportation Management Consultants, based on data reported by airlines to DOT.

Competition in the domestic airline industry has increased since 1998, primarily owing to the growth and expansion of low cost airlines. Between 1998 and 2003, low cost airlines expanded their presence from 1,594 to 2,304 of the top 5,000 domestic markets and now have a presence in markets that serve about 85 percent of passengers. Legacy airlines, despite financial problems and reduced capacity, continued to serve nearly all of the markets in 2003 as in 1998, but carried fewer passengers as they lost market share to low cost airlines.

Contents

Abbreviations

ASM	Available seat mile
ATA	Air Transport Association
ATSB	Air Transportation Stabilization Board
BTS	Bureau of Transportation Statistics
CASM	Cost per available seat mile
DOT	Department of Transportation
FAA	Federal Aviation Administration
GDP	Gross domestic product
RPM	Revenue passenger mile
SARS	Severe Acute Respiratory Syndrome
SEC	Securities and Exchange Commission
TSA	Transportation Security Administration

GAO
Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, D.C. 20548

August 11, 2004

Congressional Committees:

Since 2001, the U.S. airline industry has confronted financial losses of previously unseen proportions. Over the last 3 years, 2001 through 2003, the airline industry reported losses of $23 billion, and two of the nation's largest airlines went into bankruptcy. Following the tragic terrorist attack of September 11, 2001, the U.S. government has provided struggling airlines with $7 billion in direct assistance and many billions of dollars more in indirect assistance in the form of loan guarantees, a tax holiday, and pension relief. In April 2003, under the 2003 Emergency Wartime Supplemental Appropriations Act (P.L. 108-11) the federal government provided $2.4 billion of direct financial assistance to the airline industry.

The Congress, in the conference report accompanying the act, also directed that we review measures taken by airlines to reduce costs, improve their revenues and profits, and strengthen their balance sheets. Subsequent to the Supplemental Appropriations Act, in January 2004, the Congress required under the Vision 100—Century of Aviation Reauthorization Act that we report on the financial condition of the U.S. airline industry. In consultation with the Congress, we agreed to answer the following key questions to help satisfy these mandates: (1) What have been the major challenges to the airline industry since 1998? (2) What measures have airlines reported taking to remain financially viable? (3) What is the current financial and operating condition of the airline industry? (4) How has the competitiveness of the domestic airline industry changed since 1998?

To help answer these questions, the Congress, in the conference report accompanying the 2003 Emergency Wartime Supplemental Act, directed the 64 U.S. commercial airlines that received assistance under the act to provide us with a plan demonstrating how they would reduce their operating expenses by 10 percent. Working with airlines, we devised a data collection template for airlines to submit their financial plans (see app. I). Because of the amount of information and proprietary nature of these plans, for the purposes of this report, we focused our analysis on the 30 largest domestic airlines and aggregated the financial information contained in these plans into one of three airline categories—legacy airlines, low cost airlines, and regional airlines (see app. II for a list of these

airlines by category).[1] The body of this report focuses on the cost-cutting activities and financial condition of the largest seven legacy and largest seven low cost airlines (in terms of passenger volume). Although regional airlines have carried more passengers over the past several years, they have done so largely under contract with legacy airlines. Hence, we present their results in appendix III. We also used airline financial and operating data as reported to the Department of Transportation (DOT) to examine airline financial condition and changes in competition in the largest 5,000 airline markets in the U.S. To assess the reliability of those data, we reviewed the quality control procedures that DOT applies and subsequently determined that the data were sufficiently reliable for our purposes. We also met with airlines and their trade associations, airline equity and credit analysts, government experts, and academics to discuss airline cost-cutting efforts and the current financial condition of airlines. We had sufficient information to make informed judgments on the matters covered by this report. We performed our work between December 2003 and August 2004 in accordance with generally accepted government auditing standards.

Results In Brief

U.S. airlines, particularly legacy airlines, have faced an unprecedented set of challenges since 1998. These challenges were both internal factors that are reshaping the airline industry and external events that sharply reduced the demand for air travel. Within the airline industry, even before the events of September 11, the growth of the Internet as a means to sell and distribute tickets, the growth of low cost airlines as a powerful market force, and the shifting role of regional airlines were all transforming the industry. Coincidently, a series of largely unforeseen events—among them the September 11 terrorist attacks, war in the Middle East, and associated

[1]While there is variation in the size and financial condition of the airlines in each of these categories, there are far more similarities than differences for airlines in each group. Each of the legacy airlines predate airline deregulation of 1978 and all have adopted a hub-and-spoke network model that can be more expensive to operate than a simple point-to-point service model. Low cost airlines have generally entered the market since 1978, are smaller, and generally employ a less costly point-to-point service model. The seven low cost airlines (AirTran, America West, ATA, Frontier, JetBlue, Southwest, and Spirit) had consistently lower unit costs than the seven legacy airlines (Alaska, American, Continental, Delta, Northwest, United, and US Airways). Regional airlines generally employ much smaller (under 100 seat aircraft) and provide service under code sharing arrangements with larger legacy airlines for which they are paid on a cost-plus or fee for departure basis to provide capacity. Many regional airlines are owned by a legacy parent while others are independent. While 64 airlines received assistance under the Act, we focused our analysis on the 30 largest airlines, which enplaned 96 percent of passengers in 2002 and received over 97 percent of the assistance provided under the Act.

security concerns; the Severe Acute Respiratory Syndrome (SARS) epidemic; global recession; and a steep decline in business travel—seriously disrupted the demand for air travel.

To meet the many challenges of the last several years, airlines sought to cut costs, enhance revenues, and obtain the assistance of the federal government. Legacy airlines collectively reported to us a goal of $19.5 billion in cost-saving initiatives between October 1, 2001, and the end of 2003—and actually achieved $12.7 billion in cost-savings, or about a 14.5 percent reduction in operating expenses over the same period. These airlines reported cuts from a variety of measures, including reduced employee pay, a 12.6 percent reduction in capacity, and productivity measures. Conversely, low cost airlines reported very little cost-cutting, and their total operating expenses as a group increased about $1 billion, or about 10 percent. However, low cost airlines' capacity increased even faster, 26.1 percent. Both legacy and low cost airlines reported relatively modest amounts of revenue enhancement initiatives due to the weak demand for air travel and limited pricing power that airlines held during the period. Legacy airlines operating revenues actually declined 14.5 percent, while low cost airlines revenues increased 9.4 percent.

Since 2000, as a group, the financial condition and viability of legacy airlines has deteriorated significantly. Despite the cost-cutting efforts of legacy airlines over the last couple of years, legacy airlines' unit costs have not been reduced and low cost airlines still enjoy a cost-competitive advantage. After adjusting for differences in the average distances flown ("stage length"), low cost airlines have a 67 percent unit cost advantage over their legacy airline competitors, as compared to 45 percent in 2000. Meanwhile, neither legacy nor low cost airlines have been able to significantly improve their unit revenue, owing to weak fare growth and overcapacity in the system. As a result of their weak performance and mounting losses, legacy airlines liquidity and solvency have also deteriorated, and they face considerable debt and pension obligations in the next few years. At least one other legacy airline may enter bankruptcy before the year is out and all legacy airlines remain vulnerable to potential future industry shocks.

Since 1998, competition in the domestic airline industry has increased, primarily due to the growth and expansion of low cost airlines. On average, the largest 5,000 domestic markets were more competitive in 2003, compared with 1998, although total passenger traffic remained about the same. Low cost airlines, which have been found to reduce fares in markets

they enter, expanded their presence from 1,594 to 2,304 of the top 5,000 markets and had a presence in markets that served 84.6 percent of all passengers. Legacy airlines, despite financial problems and reduced capacity, continued to serve nearly all of the top 5,000 markets from 1998 to 2003, but they carried fewer passengers as they lost market share to low cost airlines. Legacy airlines continued to dominate many of the largest 5,000 domestic markets in 2003, but most of those were relatively small local markets to or from their hubs.

Background

In 1978, under the Airline Deregulation Act, the United States deregulated its domestic airline industry. The main purpose of deregulation was to remove government control and open the air transport industry to market forces. Prior to the Act, the Civil Aeronautics Board regulated all domestic air transport, controlling fares and setting routes. In this regulated market, airlines competed more through advertising and onboard services than through fares. Similar to other highly regulated industries, the airline industry was heavily unionized with a highly trained and stable workforce.

In the years since deregulation, many studies, including ours, have found that fares measured in real terms have fallen since 1978. For example, in 1999, we reported that overall airfares had fallen 21 percent in constant dollars between 1990 and the second quarter of 1998.[2] However, while deregulation led to lower fares, it did not bring about the full measure of competition envisioned by its creators. Legacy airlines created unique hub-and-spoke networks that increased service for consumers but kept local market fares high at their dominated hubs. Generally, the legacy airlines earned a premium for operating their hub and acted in a highly competitive fashion (e.g. substantially increasing scheduled service and aggressive pricing) against intruders, including low cost new entrant airlines. In many ways, however, these legacy airlines continue to compete based on service rather than fares.

The U.S. commercial airline industry is capital-intensive, labor-intensive, and has high fixed costs with revenues and profits closely tied to the nation's business cycle. Fixed costs, including labor union contracts that are in effect for several years at a time, comprise a large portion of airline expenses and airlines must anticipate their capacity needs several years in

[2]U.S. General Accounting Office, *Airline Deregulation: Changes in Airfares, Service Quality, and Barriers to Entry*, GAO/RCED-99-92, (Washington, D.C.: Mar. 4, 1999).

advance. As a result, airlines tend to place orders for aircraft during profitable years, but deliveries tend to occur during down years. This has contributed to the cyclic nature of industry profitability. For example, in the 1990s, the industry recorded historically high profits of $47.4 billion from 1993 through 1999, during which time several airlines signed new agreements with their contract work force and ordered new aircraft. However, the industry has also experienced downturns at the beginning of each decade since deregulation. The airline industry reported losses of $2.5 billion from 1980 through 1982, $7.7 billion from 1990 through 1992, and $23 billion from 2001 through 2003. It is during these lean times that legacy airlines such as Braniff and Eastern failed, and others—such as US Airways and United more recently—filed for bankruptcy protection. It is also during these lean times that new entrant low cost airlines emerged. In the past, many of those new airlines quickly disappeared. In response to the latest downturn, the Congress provided several forms of financial relief, including direct grants and a 4-month security fee holiday, and it set up the Air Transportation Stabilization Board to provide up to $10 billion in loan guarantees.[3]

The U.S. airline industry is principally composed of legacy, low cost, and regional airlines; and while it is free of economic regulation, it remains regulated in other respects, most notably safety and operating standards. Legacy airlines are essentially those airlines that were in operation before deregulation and whose goal is to provide service from "anywhere to everywhere." To meet this goal, these airlines support large, complex hub-and-spoke operations with thousands of employees and hundreds of aircraft (of various types) with service to domestic communities of all sizes as well as international points at numerous fare levels. To enhance revenues without expending capital, legacy airlines have entered into domestic (and international) alliances that give them access to some portion of each other's network. Legacy airlines contract with or separately operate regional airlines to provide service to smaller communities; regional airlines typically operate turboprop or regional jet aircraft with up to 100 seats. Low cost airlines entered the marketplace after deregulation[4] and primarily operate point-to-point service from "focus cities" using fewer

[3]The ATSB was created under P.L. 107-42, and as of June 3, 2004, had issued $1.56 billion in guarantees supporting loans of $1.74 billion, including guarantees for several of the airlines included in this study: America West, US Airways, ATA, and Frontier.

[4]Southwest is the obvious anomaly in this discussion as it operated within Texas before deregulation.

types of aircraft. These airlines typically offer a simplified fare structure that was originally aimed at leisure passengers, but is increasingly attractive to business passengers because they do not have restrictive ticketing rules that make it significantly more expensive to purchase tickets within 2 weeks of the flight or make changes to an existing itinerary. Low cost airlines do not yet offer service outside Canada, Central America, and the Caribbean. DOT oversees industry competition and safety,[5] including the air traffic control system. The Department of Homeland Security's Transportation Security Administration (TSA), which was formed after the September 11, 2001, terrorist attacks and was originally part of DOT, oversees industry security, including passenger and baggage screening.[6]

Airline Industry Facing Serious Challenges

Although the airline industry was deregulated 26 years ago, during the last several years, airlines have been presented with a sweeping set of challenges. These challenges stem from the internal restructuring of the airline industry and from external factors affecting the demand for air travel. Internally, the impact of the Internet on how tickets are sold and how consumers can search for fares, the emergence of low cost airlines as a powerful market force, and the growth of regional airlines have had a major impact on the airline industry. Coincidently, a series of largely unforeseen events—among them the September 11, 2001, terrorist attacks, war in Iraq, and associated security concerns; the SARS crisis; economic downturn; and a steep decline in business travel have seriously disrupted the demand for air travel.

Structural Changes Have Altered Historical Industry Trends

Since 1998, the U.S. airline industry has faced internal changes that have fundamentally altered the domestic airline industry. Among the most significant factors affecting this change are the emergence of the Internet and a new breed of low cost airlines, and the growth of regional airlines have spurred the industry to reevaluate how it conducts business.

[5]49 U.S.C. 41712 and 49 U.S.C. 40103.

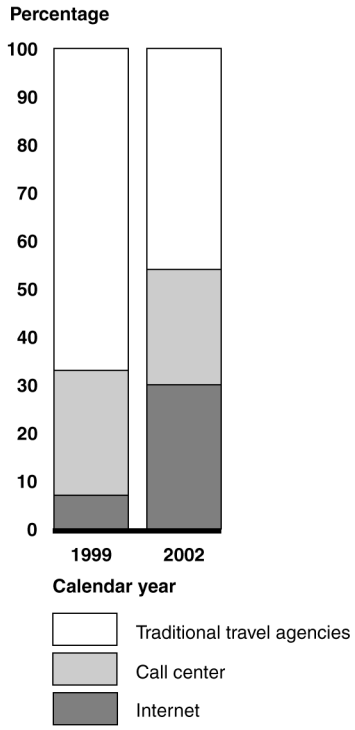
[6]Aviation and Transportation Security Act, P.L. 107-71.

The Increased Use of the Internet Has Lowered Airline Distribution Costs but Created Price Transparency and Downward Pressure on Airfares

Since the mid-1990s, partly in response to increasing costs of global distribution systems, airlines have increasingly sold and processed tickets through Internet-based applications, such as airline Web sites, Orbitz, and other internet-based travel agencies.[7] Through various incentives, airlines have encouraged some passengers to book a growing portion of tickets this way (see fig. 1). This distribution method is less expensive to airlines than traditional travel agencies, but it has also increased the ability of consumers to compare airline ticket pricing and scheduling and often gives consumers access to special low fares available only on the Internet. This increased price transparency has been a significant factor in the downward pressure on airfares, creating a real decline in airline passenger revenues at the same time that airlines are incurring cost savings.

[7]For more information on this topic, see U.S. General Accounting Office, *Airline Ticketing: Impact of Changes in the Airline Ticket Distribution Industry*, GAO-03-749 (Washington, D.C.: July 31, 2003).

Figure 1: Average Airline Bookings Per Distribution Method, 1999 and 2002

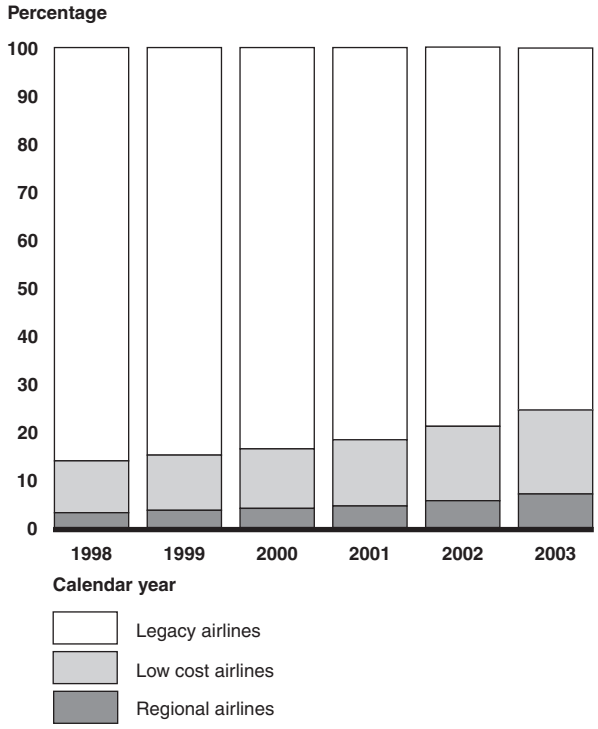


Source: GAO analysis of airline data.

Low Cost Airlines Have Emerged to Challenge Legacy Airlines

Another major factor in the internal restructuring of the U.S. commercial aviation industry is the growth of low cost airlines. Low cost airlines have increased their share of available seat miles (ASM)—an industry measure of supply—from 10.8 percent in 1998 to 17.5 percent in 2003 (see fig. 2). Low cost airlines typically rely upon fewer types of aircraft and offer simpler fare structures than legacy airlines. Unlike earlier low cost airlines, many of which quickly disappeared, these airlines are well-capitalized and offer a good overall product. As relative newcomers in the industry, these airlines do not yet suffer from what is commonly know as "legacy costs," costs that older airlines incur simply due to their longevity. These include the labor costs of a more senior workforce as well as retirees, aircraft costs from maintaining several fleet types as well as older aircraft, and the costs of maintaining networks.

Figure 2: Airline Group Market Share of Industry Capacity (ASMs), 1998 through 2003



Source: GAO analysis of DOT data.

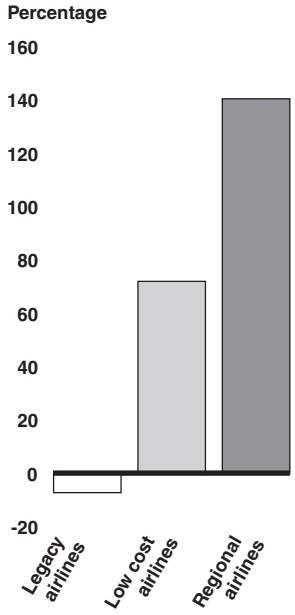
Note: Regional airline available seat mile capacity is provided under code share arrangements with legacy airlines.

Regional Airlines Have Grown and Remained Profitable

During this period of turmoil for the legacy airlines, their regional affiliates have increased capacity and maintained profitability. Regional airlines, which operate in affiliation with one or more legacy airlines, may be wholly or partially owned by the partner airline or completely independent. Regional airlines primarily serve smaller communities with regional jet or turboprop aircraft through contractual arrangements with legacy carriers. Many of these contracts are risk free for the regional airline because the legacy partner pays a fee for the regional airline's service. From 1998 through 2003, the 16 largest regional airlines included in our study earned an operating profit of $3.3 billion. At the same time, regional airlines increased seat capacity 140.6 percent between 1998 and 2003 (see fig. 3). This growth and profitability of the regional airlines came about because legacy airlines transferred routes to them. Recently, two low cost carriers—AirTran and Frontier—also partnered with regional airlines for

regional jet service. In contrast, JetBlue plans to introduce 100-seat Embraer 190 regional jets into its own fleet for service in late 2005. However, changes are looming for regional airlines. Legacy airlines are seeking less expensive contracts with their regional partners. In the case of one of United Airline's former regional partners, Atlantic Coast Airlines decided to reinvent itself as a low cost carrier, Independence Air, instead of operating under a new contract with United or another airline.[8] This may be the first of several shake-ups in the legacy-regional airline partnerships, as Delta Air Lines contemplates a bankruptcy filing and US Airways struggles to avoid a second bankruptcy. (App. III contains additional financial information on the regional airlines.)

Figure 3: Airline Industry--Change in Capacity (ASMs), 1998 through 2003



Source: GAO analysis of DOT data.

[8]Atlantic Coast also operates as Delta Connection and will terminate its Delta service later this year (2004). Atlantic Coast began operating as Independence Air on June 16, 2004.

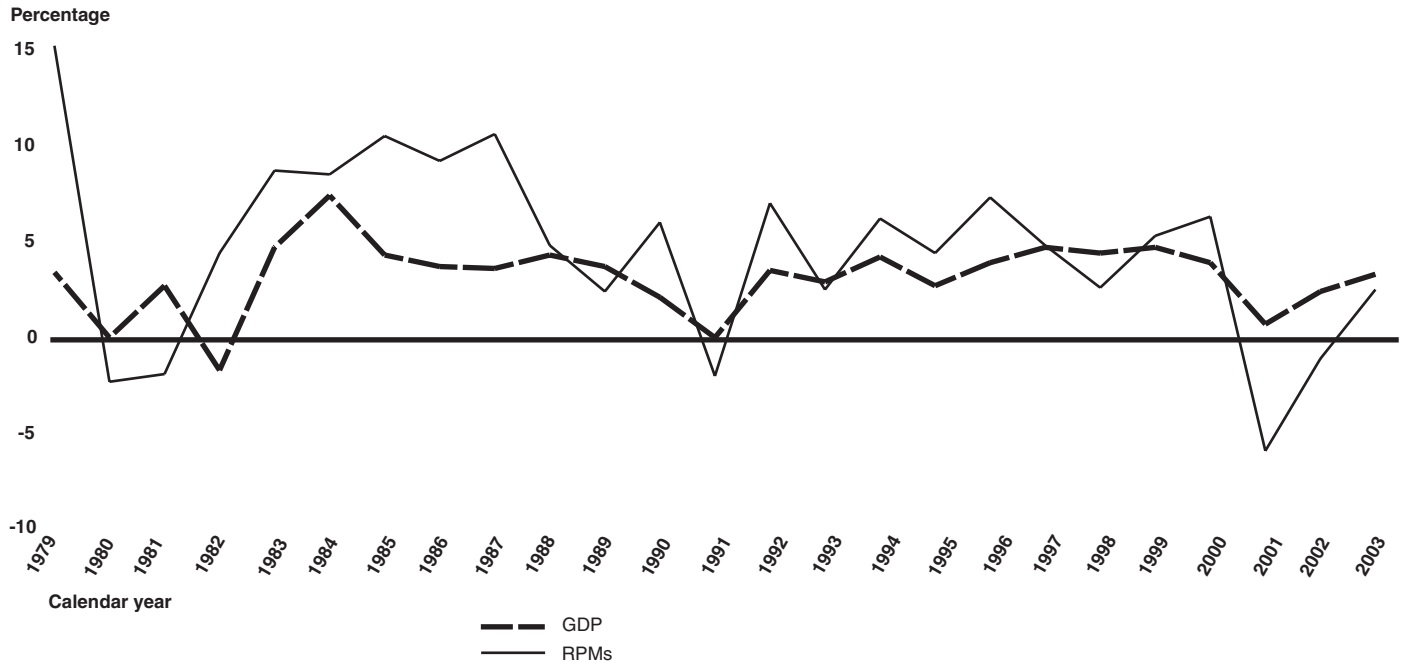
External Shocks Have Depressed Demand for Air Travel

Demand for air travel began weakening in 2000 due to a number of external changes in the aviation environment. An economic downturn that began in 2000 precipitated a decrease in demand for air travel, while the terrorist attacks of September 11, the Iraq War, and the outbreak of SARS have compounded this trend. These events have accelerated the structural changes in the demand for air travel that is likely to suppress revenue for the foreseeable future, including the inability of airlines to charge premium business fares.

Airlines' financial problems of the past 4 years began with an economic downturn in 2000. As illustrated in figure 4 below, industry experts have long recognized a relationship between the nation's economic performance and the demand for air travel. The growth in the nation's gross domestic product (GDP) most recently peaked in 1999 before falling to 0.5 percent in 2001, and then rebounding in 2002. This coincided with a drop in demand for air travel from a high of 691 billion revenue passenger miles (RPM) in 2000 to a low of 641 billion RPMs in 2002.[9] While this time period includes September 11, quarterly year-over-year data reveals a clear downward trend in RPM growth prior to September 11; RPM growth reached a peak of 8.9 percent in the second quarter of 2000, with a recession in air travel beginning in the second quarter of 2001.

[9]Demand is commonly measured in revenue passenger miles (RPMS)—this is the number of miles paying passengers are transported.

Figure 4: Percentage Change in GDP and Airline Industry Passenger Demand, 1979 through 2003



Source: GAO analysis of DOT and Bureau of Economic Analysis data.

The terrorist events of September 11 compounded the decline in demand for air travel in the United States. Compared to the Federal Aviation Administration's (FAA) June 11, 2001, forecast of passenger demand (the last forecast made before the terrorist attack of September 11):

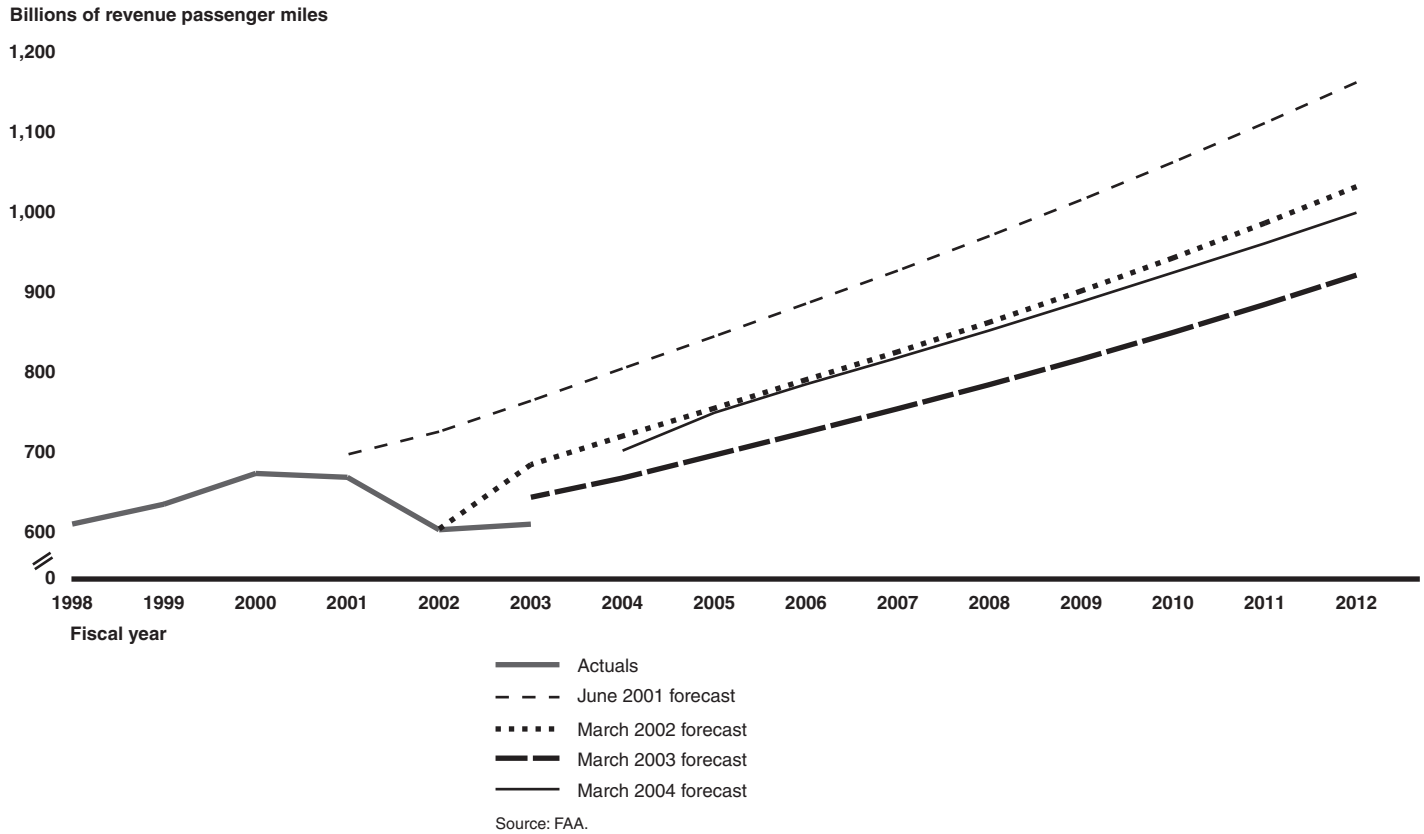
- actual full year 2001 demand, as measured in RPMS, turned out to be about 4 percent less; and
- actual demand for 2002 was about 17 percent less compared with FAA's June 2001 forecast.

After September 11, FAA revised its forecasted demand downward considerably relative to its June 11, 2001, estimates.[10] FAA's March 2002 demand forecast predicted RPMS would be an average of 11.5 percent per year less from 2002 through 2012. FAA's March 2003 forecast (prior to the Iraq War and SARS), predicted demand would be an average of nearly 19 percent per year less from 2003 through 2012, compared with FAA's estimates of June 2001.[11] Figure 5 presents FAA forecasts of RPMS for June of 2001 through March of 2004, and actual RPMS for 1998 through 2003.

[10]Precise estimates quantifying the effects the terrorist attacks of September 11 and subsequent events had on demand for air travel are not possible since no one can know in fact what the demand may have been absent these events. Nonetheless, we decided to examine changes in FAA aviation forecasts as an indicator of changes in demand as a result of these events because FAA forecasts are generally quite accurate; FAA 1-year RPM forecasts had an average absolute error rate of 1.6 percent from 1995 through 2000.

[11]FAA staff stated that the agency's March 2003 aviation forecasts did not account for the war in Iraq or SARS.

Figure 5: FAA Demand Forecasts (System traffic)



Source: FAA.

The effects of the war in Iraq and the outbreak of SARS on demand for air travel were relatively minimal compared with the effects of September 11. Actual demand in 2003 was about the same as it was in 2002. FAA's demand forecast after the Iraq War began and the SARS outbreak was revised upward an average of 8 percent for 2004 through 2012. FAA staff we interviewed thought that the SARS effect, while significant, was limited to Pacific air travel; year-over-year RPMs dropped 33 percent for the second quarter of 2003 in the Pacific sector.

The Iraq War and unrest in the Middle East also contributed to rising fuel costs for airlines. From the first quarter of 2002 through the first quarter of 2004, the price of oil per barrel increased from $20.98 to $32.97; an increase of 57 percent. However, oil prices are volatile by nature, and many airlines hedge some portion of their oil and fuel costs to lock in these costs. Figure

6 presents the cost of oil per barrel from 1998 through the first quarter of 2004.

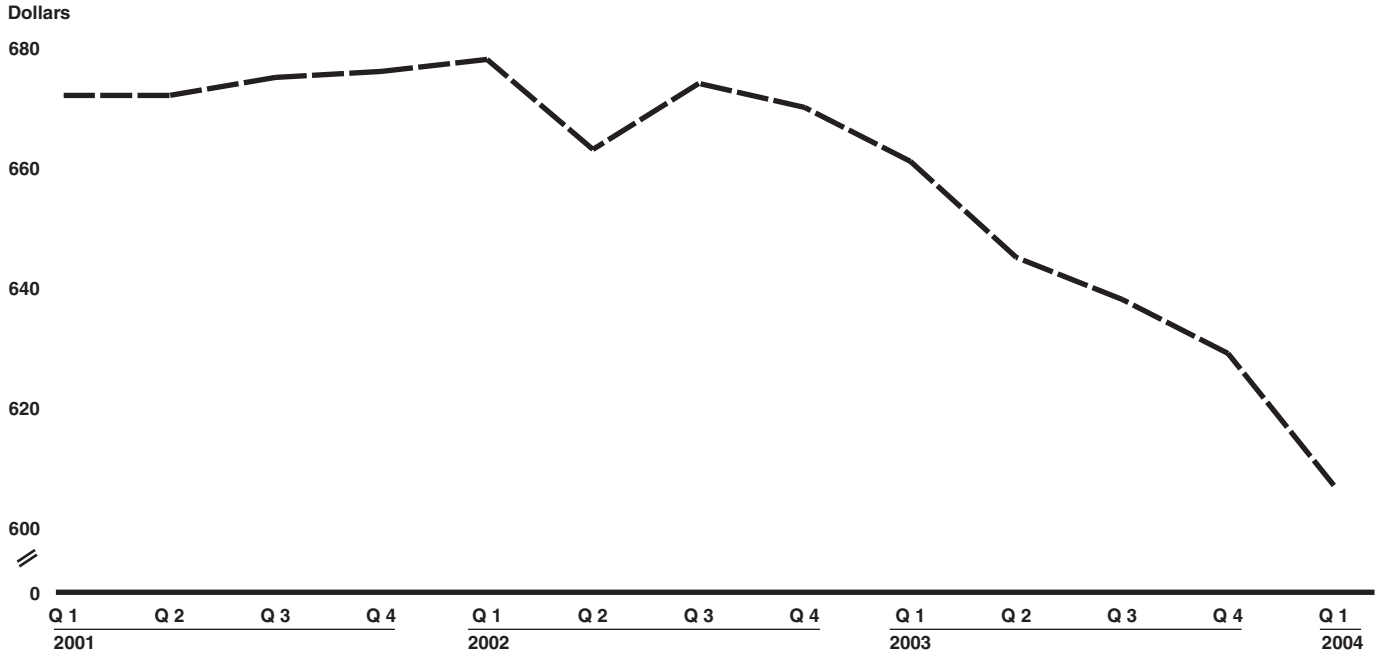
Figure 6: Cost of Oil Per Barrel, 1998 through the 1st Quarter of 2004

Source: GAO analysis of ATA data.

The decline in business fares is another factor that has contributed to the financial problems of the industry. During the late 1990s, legacy airlines' profitability became increasingly reliant on a very small percentage of last minute business travelers that paid fares much higher than the average leisure fare. As the economy soured in 2001, business travelers became less willing to pay premium fares. According to Air Transport Association (ATA) data reported by the DOT Inspector General, the number of business travelers declined 26 percent from December 2001 through December

2002.[12] Moreover, the average one-way business fare also declined nearly 10 percent, from $672 in the first quarter of 2001 to $607, in the first quarter of 2004 (see fig. 7).

Figure 7: Average Quarterly Business Fares, 2001 through 2004



Source: Harrell Associates.

[12]Since airline ticket data do not indicate the purpose for which an individual is traveling, these data are based on the assumption that those passengers paying higher fares were traveling for business purposes, and those passengers paying lower fares were generally traveling for leisure. While this assumption may have been practical in the past for analytical purposes, it has become increasingly unrealistic over the past few years due to the introduction of simplified fare structures by low cost airlines. As a result, ATA no longer publishes these data.

In Response to Challenges, Legacy Airlines Reduced Costs and Cut Capacity, While Low Cost Airlines' Total Costs Increased Due to Capacity Expansion

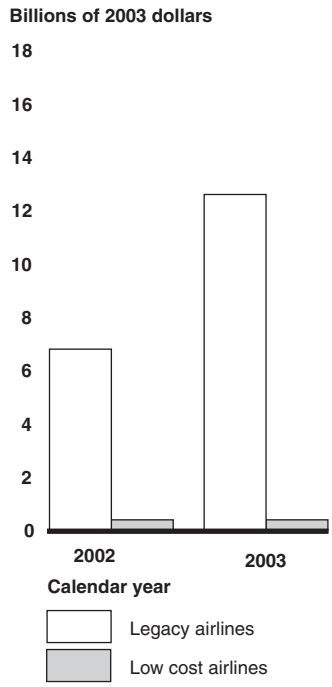
To meet the many challenges of the last several years, airlines have sought to cut costs, enhance revenues, and obtain the assistance of the federal government. Legacy and low-cost airlines collectively reported to us $20.3 billion in cost-saving initiatives from October 1, 2001, through December 31, 2003. For the nine-quarter period ending December 31, 2003, legacy airlines collectively reported to us about $19.5 billion in cost-saving initiatives; actual operating costs decreased by about $12.7 billion dollars, or 14.5 percent, during that time. Collectively, legacy airlines cut their capacity by about 12.6 percent during the same period. Conversely, low cost airlines reported relatively little cost-cutting and their total operating expenses as a group actually increased 9.8 percent; however, their capacity increased even faster at 26.1 percent. Both legacy and low cost airlines reported relatively modest amounts of revenue enhancement initiatives in recognition of the weak demand for air travel during the period. From October 1, 2001, through December 31, 2003, legacy airlines revenues actually declined about 14.5 percent, while low cost airlines revenues increased 9.4 percent. Airlines used the $2.3 billion in security assistance provided under the 2003 Emergency Wartime Supplemental Appropriations Act to fund their security and operating costs, with 75 percent of the assistance going to the seven legacy airlines.

Legacy Airlines Sought 20 Percent Cost Reductions to Restore Profitability

Legacy airlines accounted for the vast majority of all cost-savings reported to us. The 14 legacy and low cost airlines in our study reported that they expected to cut a total of $20.3 billion from October 1, 2001, through 2003.[13] Legacy airlines reported that they expected to reduce operating costs by about $19.5 billion through December 31, 2003, or 96 percent of this total. If achieved this would have amounted to a 22 percent reduction in costs for the legacy airlines. Low cost airlines, in contrast, reported $803 million in anticipated cost-savings through December 31, 2003, or just 4 percent of the combined total. Figure 8 presents expected cost-savings for each year by airline group.

[13]Airlines also reported expected cost-savings for calendar year 2004; legacy airlines reported they expected to achieve $16.8 billion in cost-savings in 2004, while low cost airlines legacy airlines reported they expected to achieve $500 million in cost savings in 2004.

Figure 8: Airline Cost-savings Reported to GAO



Source: GAO analysis of airline data.

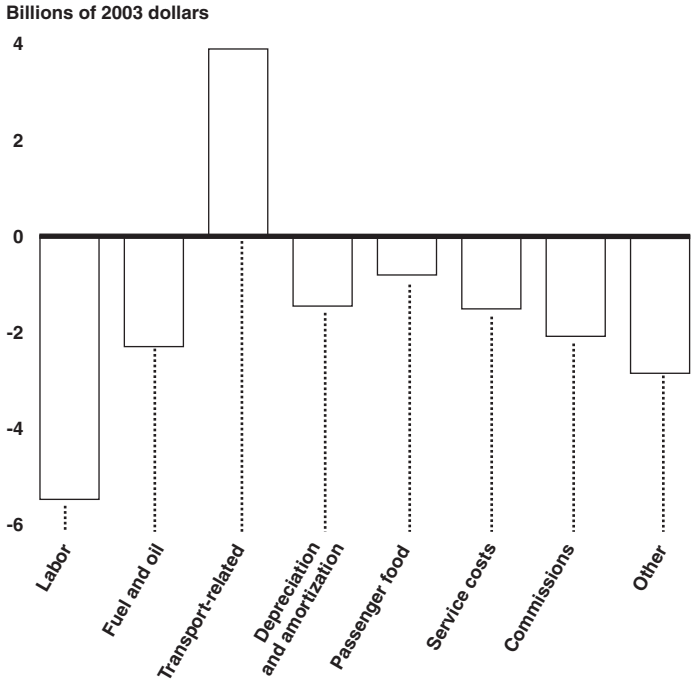
It is difficult to disaggregate the cost-savings reported to us into cost categories because airlines lacked uniformity in their reporting. However, based on these reports, discussions with airlines and industry experts, airlines generally sought cost-savings from cuts in capacity, changes in salary and benefits, vendor concessions, and productivity improvements. In particular, United Airlines and US Airways were able to obtain concessions from their unions through the bankruptcy process or, in the case of American Airlines, through the threat of bankruptcy. Immediately following September 11, legacy airlines parked planes in the desert in an effort to reduce capacity and save costs. In recent months, some of these planes have been returned to service.[14]

[14]According to Lehman Brothers, as of March 2004, there were 534 parked planes, down from 595 in November 2003. This decrease represented 11.7 percent of the pre-September 11 domestic fleet.

Actual Cost Cutting by Airlines Differed

Legacy airlines cut operating expenses by $12.7 billion between October 1, 2001, and December 31, 2003. This 14.5 percent reduction in operating expenses exceeds the percentage reduction in seat capacity of 12.6 percent during the same period. Unlike the plans submitted to us, actual financial results reported to DOT can be disaggregated. Notably, legacy airline labor costs were reduced $5.5 billion annually, or about 16 percent during this time period (see fig. 9). Legacy airlines also achieved $2.1 billion in annual savings from a 59 percent reduction in the commissions paid to travel agents, because those commissions were sharply reduced. Finally, legacy airlines reduced fuel costs by 18.7 percent during the period, although the recent upsurge in fuel prices has likely reversed these savings. The only cost category to increase for legacy airlines was transport-related expenses, which doubled during the period, an increase of $3.9 billion annually. Increases in transport-related expenses for legacy airlines are largely due to fees being paid to regional airline partners for providing regional air service. In the aftermath of September 11, legacy airlines shifted some of their capacity over to regional airlines in an attempt to reduce seat capacity and costs on these routes.

Figure 9: Change in Component Costs for Legacy Airlines, October 1, 2001, through December 31, 2003

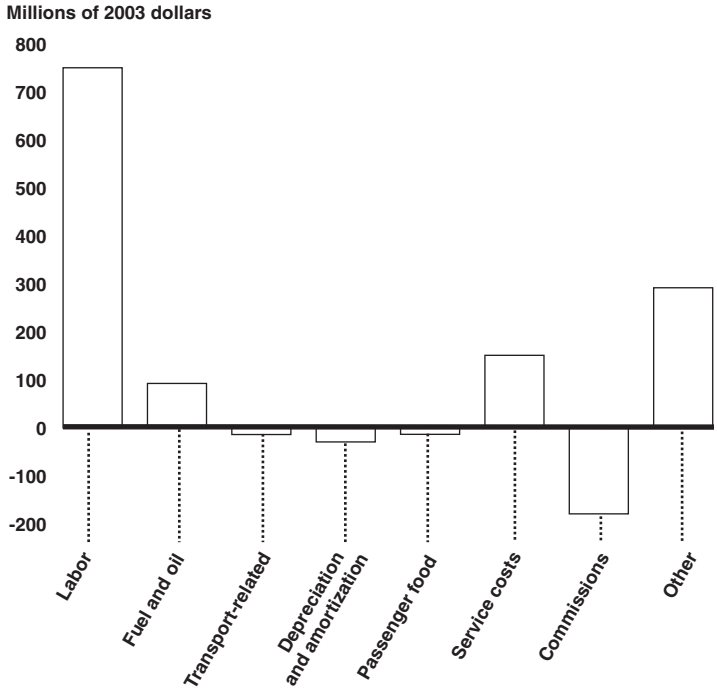


Source: GAO analysis of DOT data.

Note: Annual change calculated by comparing the 4 quarters preceding October 1, 2001 (fiscal year 2001) and the 4 quarters preceding December 31, 2003 (calendar year 2003). Transport-related costs include, but are not limited to, fees paid to regional airline partners for providing regional air service, extra baggage expenses, and other miscellaneous overhead. Service costs include advertising and promotions, insurance, outside flight equipment maintenance, and communications. Other costs include fees, taxes, and other charges; filing costs, membership dues, and losses.

Meanwhile, low cost airlines used legacy airlines retrenchment as an opportunity to expand. The seven low cost airlines increased seat capacity by 26.1 percent during the same period that legacy airlines cut capacity by 12.6 percent, but total operating costs for low cost airlines increased by a more modest 9.8 percent, or a little more than $1 billion. Low cost airlines' labor costs, these airlines' largest single cost component increased over $750 million annually, or 21 percent (see fig. 10). Despite their growth, low cost airlines were able to achieve small reductions in some of their other costs, including commissions, passenger food, depreciation and amortization, and transportation related expenses.

Figure 10: Change in Component Costs for Low Cost Airlines, October 1, 2001, through December 31, 2003



Source: GAO analysis of DOT data.

Note: Annual change calculated by comparing the 4 quarters preceding October 1, 2001 (fiscal year 2001) and the 4 quarters preceding December 31, 2003 (calendar year 2003). Transport-related costs include, but are not limited to, fees paid to regional airline partners for providing regional air service, extra baggage expenses, and other miscellaneous overhead. Service costs include advertising and promotions, insurance, outside flight equipment maintenance, and communications. Other costs include fees, taxes, and other charges; filing costs, membership dues, and losses.

Revenue Enhancement Measures Reported to Us Were Far More Modest Than Cost Savings

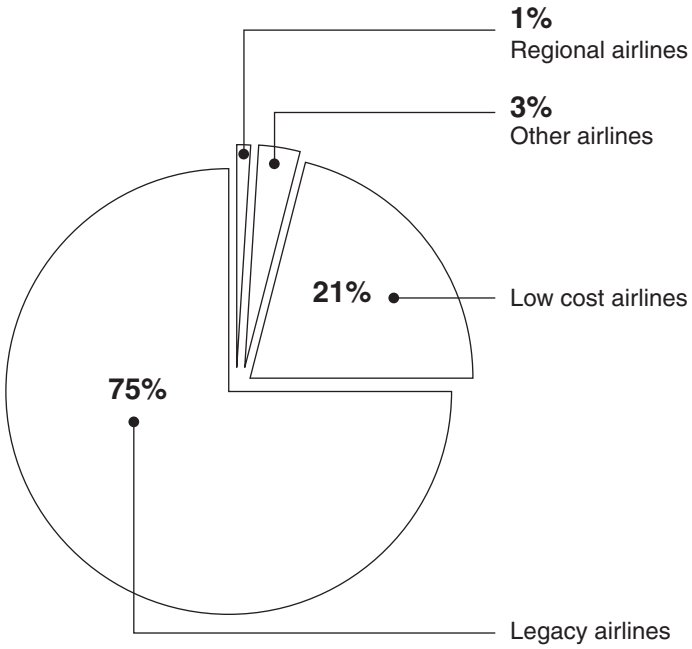
The revenue enhancement measures that were reported to us were small compared with the cost-savings reported by airlines. Legacy airlines reported $2.3 billion in expected revenue enhancement benefits for the period October 1, 2001, through December 31, 2004, with most of this amount ($1.6 billion) expected in 2004. Legacy airlines reported benefits from changes in ticketing policies and fare structures, schedule changes, and new code-sharing arrangements. From October 1, 2001, through December 31, 2003, legacy airlines actually saw a decline of about $11.9 billion (14.5 percent) in operating revenue. Meanwhile, low cost airlines reported even less revenue enhancement, only $189 million for the same period, but actually increased their revenue for the period by about $1.1

billion (9.4 percent), thanks to greatly increased volume. Airline officials and analysts indicated that fares have remained very weak during the period limiting revenue options for airlines.

Government Assistance Stemmed Airline Losses

Airlines also depended on federal assistance in 2001 and 2003 to counter their losses during the period. For example, in 2001 airlines received nearly $5 billion in assistance, and the industry was authorized up to $10 billion in loan guarantees under the Air Transportation Safety and System Stabilization Act, of which loans totaling $1.56 billion were extended to 9 airlines. In 2003, the federal government provided another $2.4 billion in assistance, of which $100 million was reserved for reimbursement of cockpit door reinforcements and the remainder provided to help U.S. airlines with their security costs. Of the $2.3 billion, three-quarters went to legacy airlines, as shown in figure 11.

Figure 11: Distribution of $2.3 Billion of Direct Assistance Under P.L. 108-11, by Airline Type



Source: TSA.

The law did not establish how airlines were to use the assistance, but it did require TSA to certify that the 64 airlines that ultimately received assistance allocated the funds for security-related expenses or revenues foregone as a result of meeting federal security mandates.[15] By accepting the funds, the airlines agreed to this certification requirement. As shown in table 1, most airlines reported to TSA that they used the funds for their ongoing security costs and core operations.

Table 1: Distribution of $2.3 Billion in Federal Aid From P.L. 108-11

Expense category	Amount	Percent of total
Ongoing security related expenses and core activities	$1,983,169,527	86.6
Passed on to code share partners and other affiliates	17,371,034	0.8
Liability reduction	8,278,794	0.4
Short term assets or investments	9,069,221	0.4
Other	271,374,057	11.9
Total	**$2,289,262,633**	**100.0**

Source: TSA.

Legacy Airlines' Financial Condition Has Deteriorated Relative to Low Cost Airlines

The financial condition of U.S. airlines since 2000 has followed two very different paths. Despite significant cost-saving initiatives and industry-wide traffic volumes approaching pre-September 11 levels, legacy airlines continue to lose money. Legacy airlines' unit costs (cost to fly one seat 1 mile) have not decreased since 2000 while fares have declined; as a result, these airlines have yet to regain profitability. Meanwhile, low cost airlines continue to expand market share, enjoy a greater unit cost advantage over legacy airlines than they did in 2000, and in all but one quarter have collectively earned a profit. The weak performance of the legacy airlines over the last 3 years has significantly diminished their financial condition; as a result, some of these airlines are vulnerable to bankruptcy, especially if there are additional shocks to the industry.

[15]Two airlines were eligible for assistance but refused it.

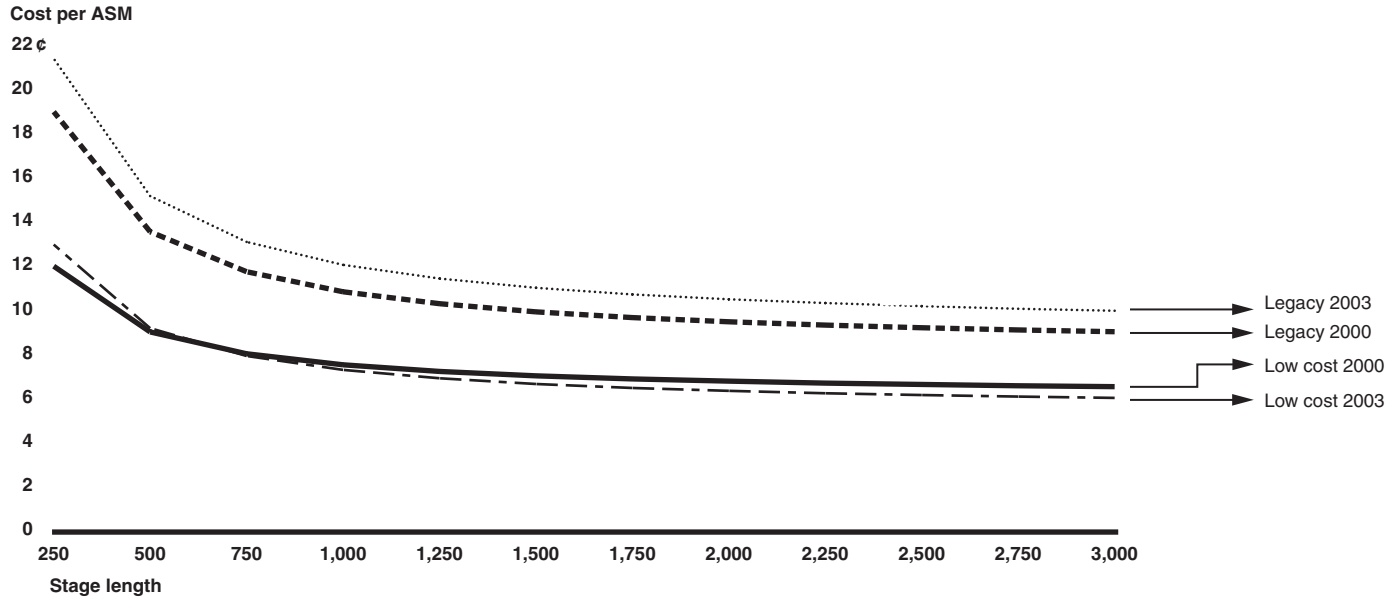
Legacy Airlines Have Significantly Higher Unit Costs Than Low Cost Airlines

Legacy airlines, as a group, have been unsuccessful in sufficiently reducing their costs to make them more competitive with low cost airlines. Unit cost competitiveness is key to profitability for airlines because airlines have found it extremely difficult to increase their revenues in the current environment. While legacy carriers reduced their overall operating expenses over the last 3 years, capacity reductions have made it difficult for legacy airlines to achieve meaningful unit cost reductions. Conversely, low cost airlines have been able to reduce their unit costs through expansion. Low cost airlines' ability to maintain lower labor costs and lower asset-related costs accounts for the majority of the unit cost differences between low cost airlines and legacy airlines.

Equity and credit analysts suggested that one of the best measures for examining airline unit cost performance is to compare airline unit cost curves. These curves illustrate the relationship between airlines' unit costs and the distance flown ("stage length"). Figure 12 shows legacy and low cost airlines' unit cost curves for 2000 and 2003 and suggests that the gap between legacy and low cost airlines' unit costs has widened across all distances. For example, in 2000, at a 1,000-mile stage length legacy airlines' unit costs were 45 percent higher than low cost airlines'; by 2003, legacy airlines' unit costs were 67 percent higher. Some of the legacy airline unit cost increase is due to the capacity purchased from regional airlines—an increase in operating expenses (the numerator) but without a corresponding increase in available seat miles (ASM) (the denominator) in the unit cost calculation.[16] However, this does not account for all or even most of the gap between legacy and low cost airlines' unit costs.

[16]Beginning in the first quarter of 2003, DOT required airlines to report the amount they spent on capacity purchases from regional airlines as a transport-related cost but did not require airlines to report the corresponding amount of seat miles purchased.

Figure 12: Airline Stage Length Adjusted Unit Costs, 2000 vs. 2003

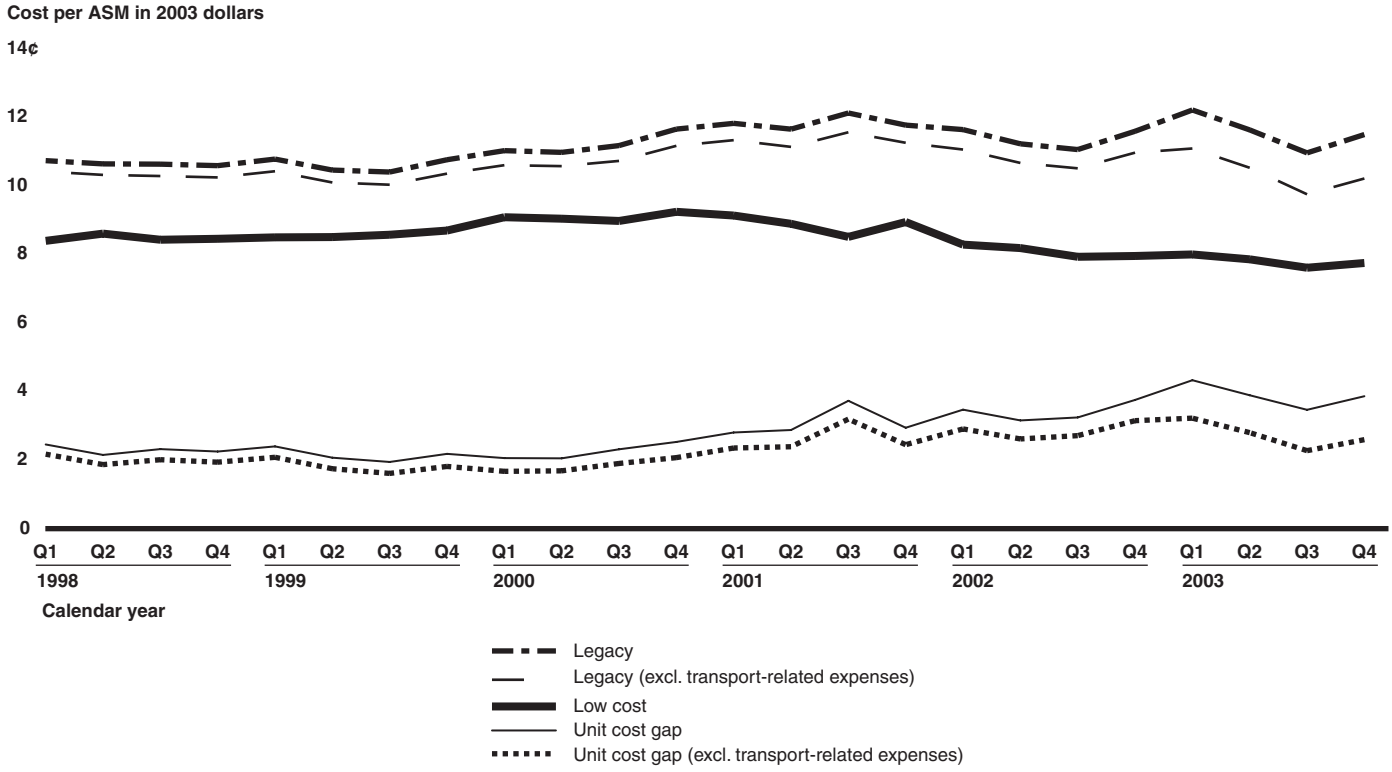


Source: Unisys R2A, Transportation Management Consultants, based on data reported by airlines to DOT.

To account for this unit cost difference between legacy and low cost airlines, we also examined legacy and low cost airline unit costs over time and the various cost items that comprise total operating expenses. Overall, we found that the gap in aggregated (for all stage lengths) unit costs for legacy and low cost airlines has widened since 2000, from 2.1 cents per ASM to 3.8 cents at the end of 2003. The size of this gap may be somewhat overstated because of a change in the financial reporting requirements for airlines during this time. Beginning in 2003, airlines were required to report the cost of buying additional capacity from regional airlines under transport-related expenses. To calculate the legacy airlines' unit costs correctly under this new reporting requirement, the ASMs that the legacy airlines buy from the regional airlines should also be included in calculating their unit costs. We could not incorporate this into our calculation because the exact amount of capacity purchased by legacy airlines and the amount of money spent on capacity purchased from regional airlines are not reported in sufficient detail to do so. However, to indicate legacy airlines' minimum unit costs, we calculated legacy airlines unit costs excluding transport-related expenses (low cost airlines reported very little transport-related expenses). Accordingly, the unit cost difference between legacy and low cost airlines grew from 1.6 cents per ASM in 2000 to 2.5 cents in 2003.

Figure 13 shows the gap between legacy and low cost airlines' unit costs, including and excluding transport-related expenses.

Figure 13: Unit Cost Differential, 1998 through 2003



Source: GAO analysis of DOT data.

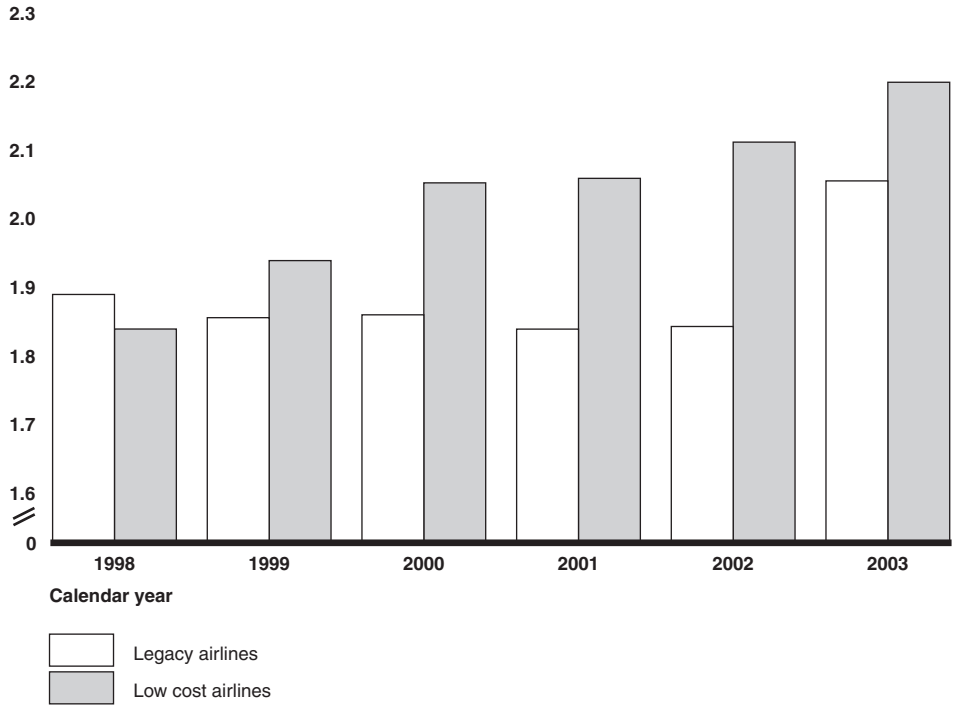
The two primary cost components that comprise the unit cost differential between legacy airlines and low cost airlines are labor costs and asset-related costs. Legacy airlines have high labor costs owing to a highly tenured, unionized workforce. Low cost airlines are able to suppress unit costs by achieving higher levels of labor productivity than legacy airlines. Legacy airlines have higher asset-related costs than low cost airlines because legacy airlines generally have older fleets and different fleet structures than low cost airlines. Additionally, because legacy airlines generally operate hub-and-spoke business models in comparison to the point-to-point model generally operated by low cost airlines, legacy airlines are not able to achieve the same level of asset utilization as low cost airlines. Other costs that currently comprise the remaining unit cost

difference between legacy airlines and low cost airlines include expenses for items such as fuel, passenger ticketing commissions, and passenger food.

Labor costs accounted for over 40 percent of the unit cost difference between legacy airlines and low cost airlines in 2003. Legacy airlines' high labor costs are the result of a highly tenured workforce, higher pension costs, and work rules that differ from their low cost competitors. Low cost airlines have been effective at keeping unit labor costs down by achieving higher labor productivity and paying less. Legacy airlines have made progress in improving labor productivity since 2001, but they continue to trail low cost airlines, which have steadily improved labor productivity since 1998. As Figure 14 illustrates, in 2003 legacy airlines had improved labor productivity 8.3 percent, compared with 1998, by increasing the number of ASMs produced per employee.[17] However, in 2003 they still produced 7 percent fewer ASMs per employee than low cost airlines.

[17]ASMs per employee are measured by dividing the number of ASMs flown by an airline in 1 year by the average number of full-time equivalents employed by the airline during the year. Airlines with high labor productivity generate more ASMs per employee than airlines with lower labor productivity.

Figure 14: Labor Productivity, Legacy Airlines vs. Low Cost Airlines

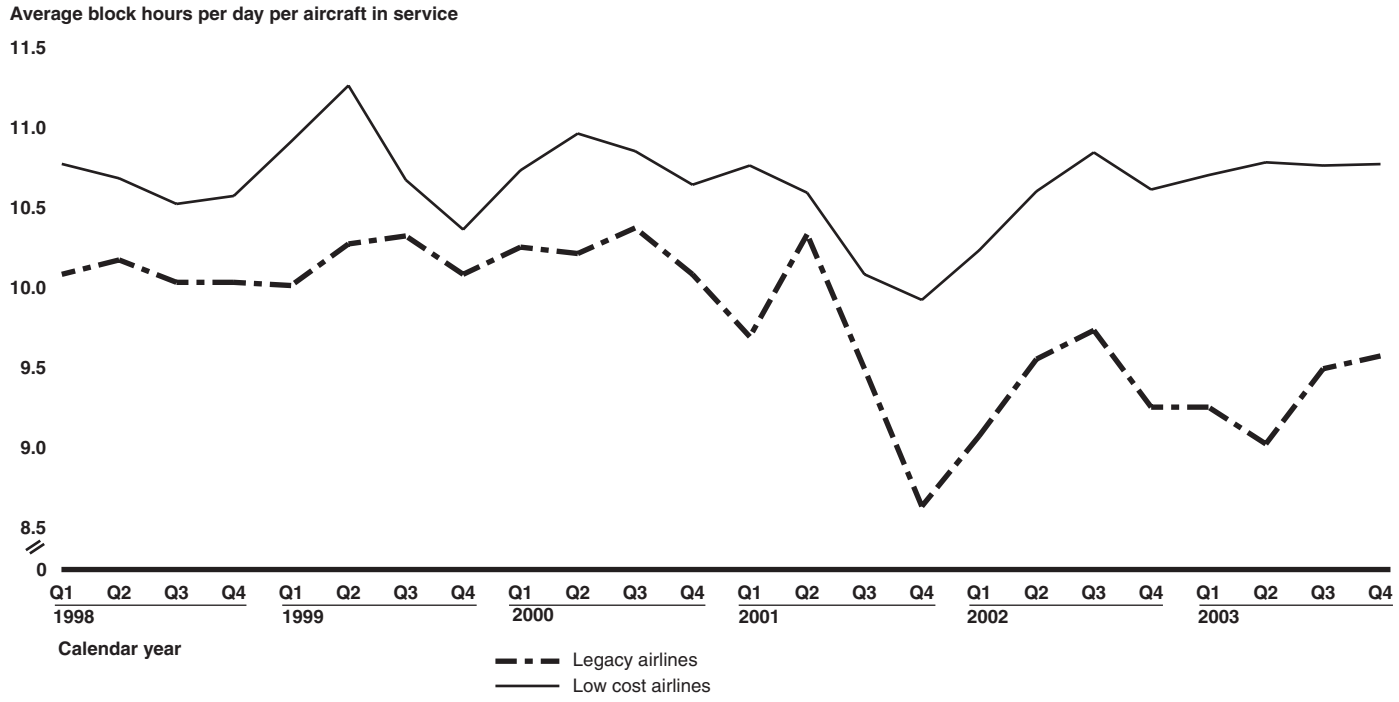


Source: GAO analysis of DOT data.

Legacy airlines encounter higher asset-related unit costs than low cost airlines because legacy airlines have older fleets and more types of aircraft in their fleets than low cost airlines, and legacy airlines put their planes in the air fewer hours per day than low cost airlines. Legacy airlines own older aircraft than many low cost airlines; and older aircraft can be expensive to operate because they are less fuel-efficient than newer aircraft, and they have higher maintenance costs. Additionally, legacy airlines usually have more types of aircraft in their fleets, adding to maintenance costs and pilot training costs. Moreover, because legacy airlines generally operate a hub-and-spoke business model, they are not able to operate their aircraft for as many block hours per day as low cost

airlines.[18] Low cost airlines typically operate a point-to-point business model that allows them to limit the amount of time a plane must spend on the ground from the time it lands until it is ready to take off again. Figure 15 demonstrates the asset utilization differential that exists between legacy airlines and low cost airlines when measured in block hours per day per aircraft in service. Legacy airlines have improved asset utilization since the events of September 11; however, despite these improvements, they continue to trail low cost airlines with respect to asset utilization trends.

Figure 15: Asset Utilization: Legacy Airlines vs. Low Cost Airlines



Source: GAO analysis of DOT data.

Other operating expenses that explain the unit cost difference between legacy airlines and low cost airlines include items such as aircraft fuel and

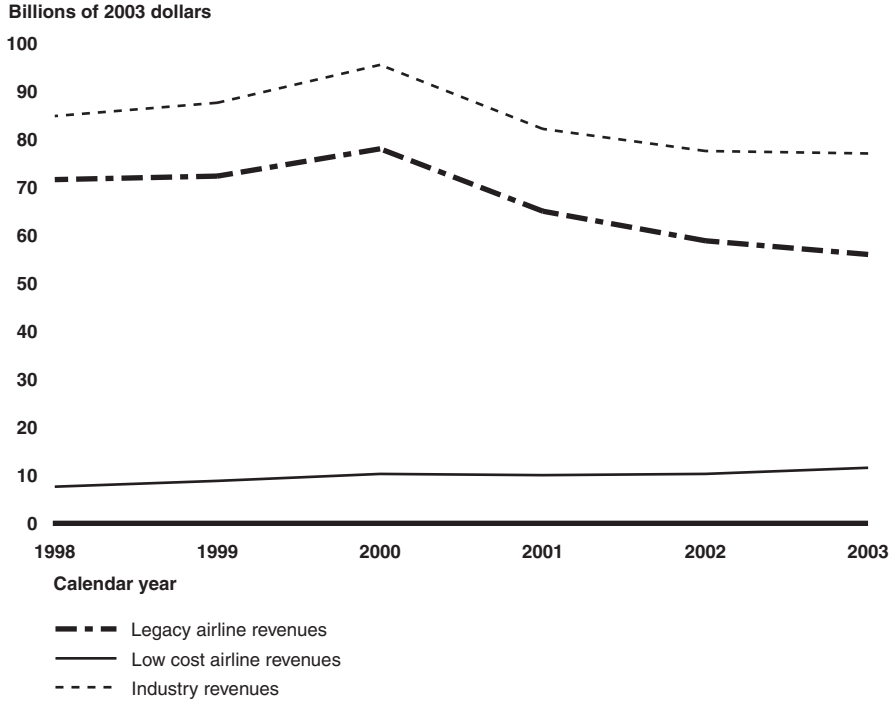
[18]Block hours per day are defined as the number of hours per day that a plane is in service from the time it pulls away from its originating gate until it arrives at its destination gate. Highly productive airlines are generally able to achieve higher block hour utilization of their aircraft than less productive airlines.

oil, passenger food, and passenger commissions related to ticketing. Together these items comprise approximately 20 percent of the unit cost difference between legacy airlines and low cost airlines.

Depressed Fares and Declining Traffic Have Weakened Revenues for Legacy Airlines

Overall industry revenues have not returned to pre-September 11 levels despite a return in demand for air travel. In 2003, passenger demand for air travel (as measured in miles flown by paying passengers) returned to 95 percent of the 2000 level. However, industry revenues only totaled $77 billion in 2003, which represents just under 80 percent of the 2000 level. The revenue picture is significantly different when comparing legacy airlines with low cost airlines. Legacy airline passenger revenues are down 28 percent from 2000 through 2003, while low cost airlines have increased passenger revenues over 12 percent. Figure 16 below presents the changes in total industry revenues from 1998 through 2003, as well as changes by the legacy and low cost groups.

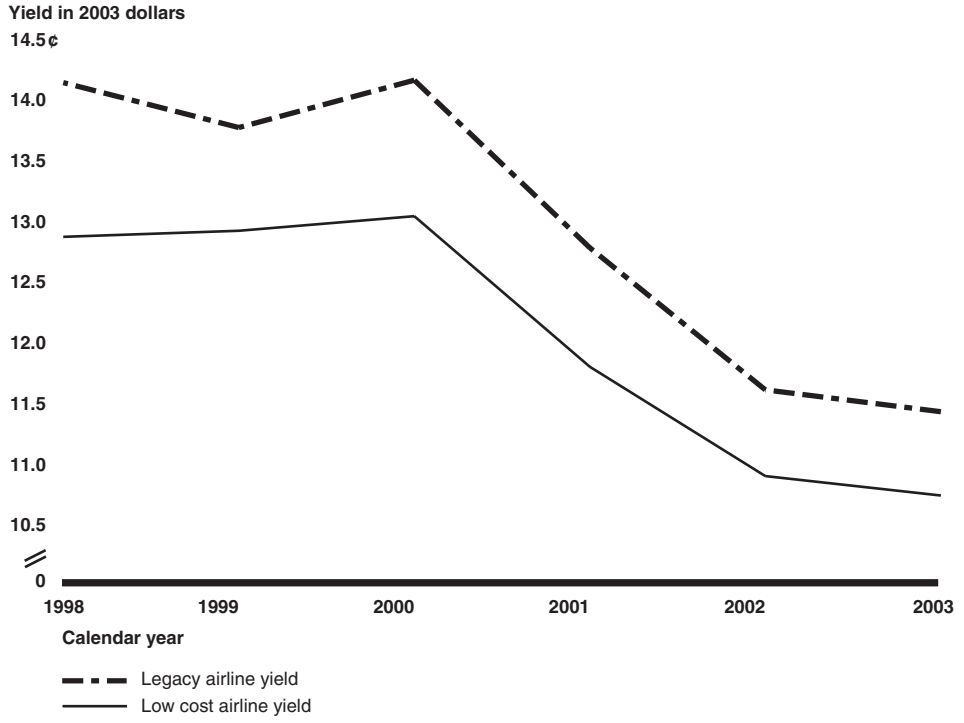
Figure 16: Airline Revenues, 1998 through 2003, by Airline Group



Source: GAO analysis of DOT data.

Low airfares constrained revenues for both legacy and low cost airlines. Yields, the amount of revenue airlines collect for every mile a passenger travels, have fallen 19 percent industry-wide from the first quarter of 2000 through the fourth quarter of 2003 for the 30 airlines examined in this study. Figure 17 presents the trends in yields for both legacy airlines and low cost airlines from 1998 through 2003. The trends are similar for both the legacy airlines and low cost airlines; legacy yields dropped about 19 percent, while low cost airline yields dropped about 17 percent.

Figure 17: Revenue Collected Per RPM (Yield), 1998 through 2003, by Airline Group



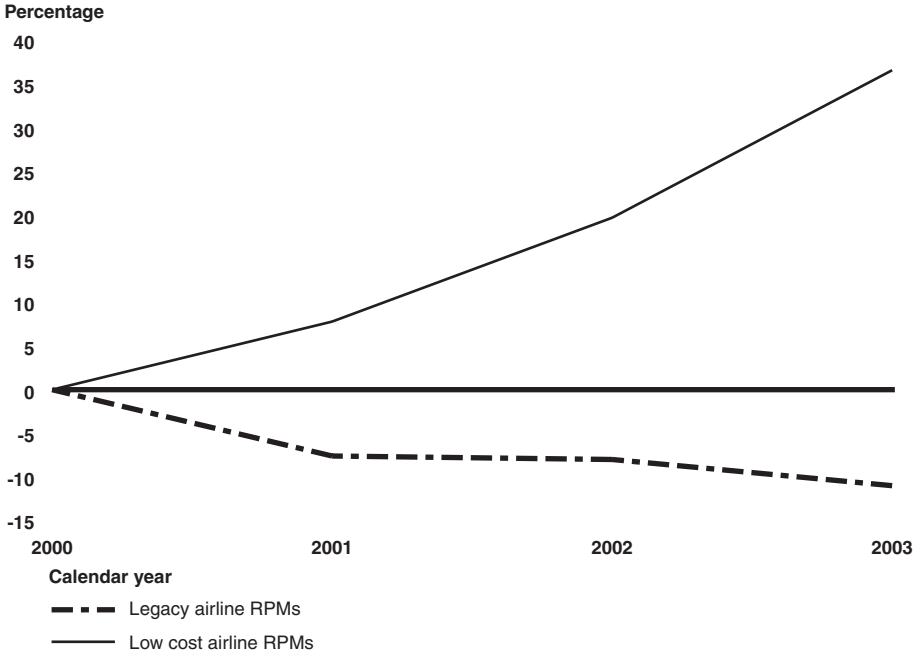
Source: GAO analysis of DOT data.

In addition, the gap between the legacy airline yields and the low cost airline yields has narrowed. Legacy carriers are often able to command a higher fare—or "revenue premium"—compared with low cost airlines because passengers will often pay more for the benefits of a network structure. Accordingly, legacy airline officials have stated that they do not need to lower their costs to the same levels as low cost airlines because they can command a revenue premium. This ability to command a revenue

premium, however, appears to be eroding. The revenue premium commanded by the legacy airlines has fallen from 9.8 percent to 6.4 percent from 1998 to 2003—a 45 percent decrease. Moreover, this revenue premium is less than half of the 15 percent to 16 percent revenue premium one legacy airline stated that they expected to be able to command.

The primary factor differentiating legacy and low cost airline revenue performance is the change in demand. Demand (as measured in RPMs) is down 11 percent for legacy airlines from 2000 through 2003, while demand for low cost airlines has risen nearly 37 percent (see fig. 18). Low cost airlines have expanded their operations and market share enough to increase revenues in a lower yield environment and can do so profitably because of their lower cost structure. Legacy airlines are simply flying fewer people at lower fares, which represent decreases in both factors of the revenue equation. Although nearly as many passengers are flying as before September 11, they are paying less to do so and choosing to fly on low cost airlines more often.

Figure 18: Percentage Change in Airline RPMs, Since 2000



Source: GAO analysis of DOT data.

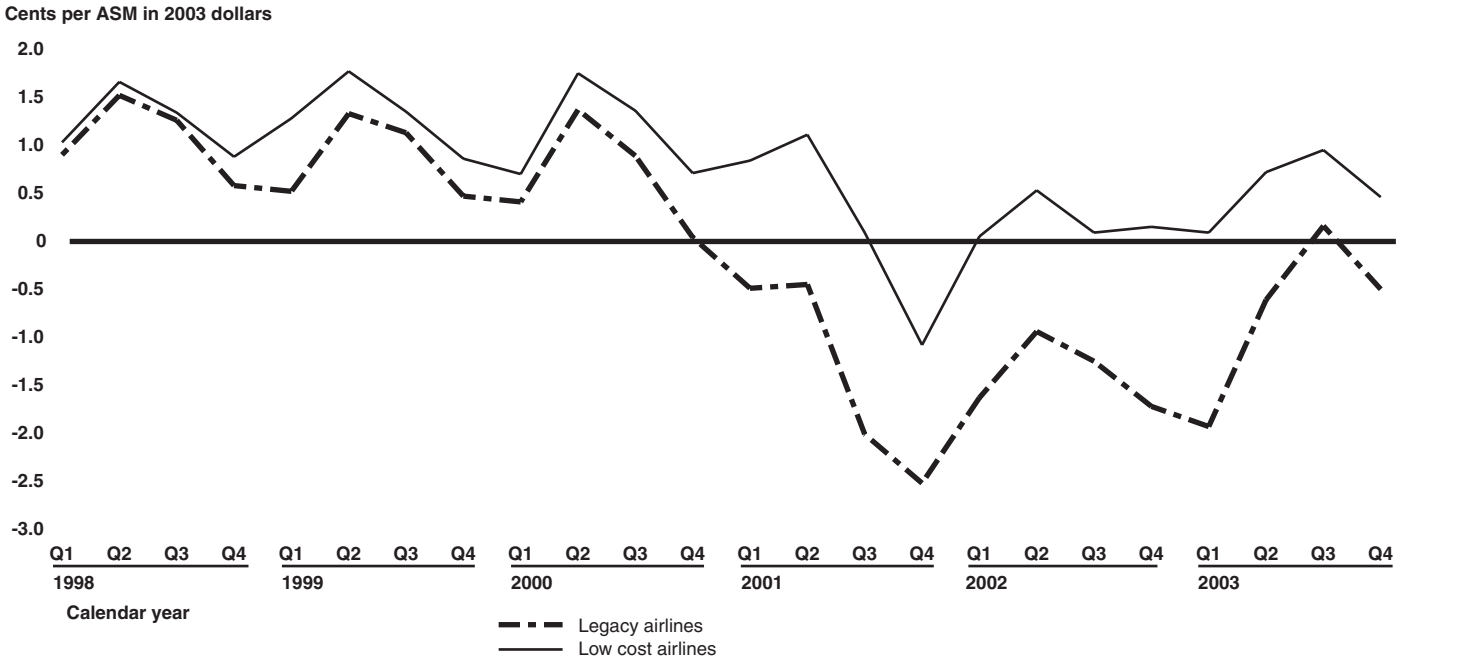
It appears low fares will continue to depress revenues during 2004 since airlines continue to add capacity. A year-over-year comparison of ASMs for the first quarter of 2004 indicates capacity is up over 7 percent from 2003. Airlines generally add capacity to compete for or defend market share. Legacy airlines are adding capacity because they possess excess capacity that can be added at relatively low marginal costs. Collectively, however, this strategy is problematic because the additional capacity depresses fares further. Credit and equity analysts we interviewed stated that the increase in capacity is likely to outweigh the increase in demand for air travel and continue to depress fare prices.

High Unit Costs and Depressed Fares Have Combined to Eliminate Profitability at Legacy Airlines

Weak revenues and the inability to realize greater cost-savings have combined to create unprecedented losses for legacy ailrines. At the same time, low cost airlines have been able to continue producing modest profits as the result of significantly improved cost performance. As figure 19 demonstrates, the unit-operating margin (or difference between unit revenues and costs) for legacy airlines turned negative during the second half of 2000 and reached its trough shortly after September 11. While the operating margin for legacy airlines recovered in 2003 from its post-September 11 low, and losses in 2003 are not as great as in 2002, these airlines have experienced operating losses in all quarters but one since September 11, 2001.[19] Meanwhile, low cost airlines maintained a positive operating margin between 2001 and 2003, with the exception of the fourth quarter of 2001—the immediate aftermath of September 11. Further, an expected return to moderate profitability in 2004 for legacy airlines has not materialized due, in large part, to historically high oil prices.

[19]The profitability of legacy airlines in the third quarter of 2003 coincides with the "security fee holiday" authorized by P.L. 108-11, which suspended collections of the passenger fee for security and the aviation security infrastructure fee for tickets sold during June through September of 2003. For further information, see U.S. General Accounting Office, *Summary Analysis of Federal Commercial Aviation Taxes and Fees*, GAO-04-406R, (Washington, D.C.: Mar. 12, 2004).

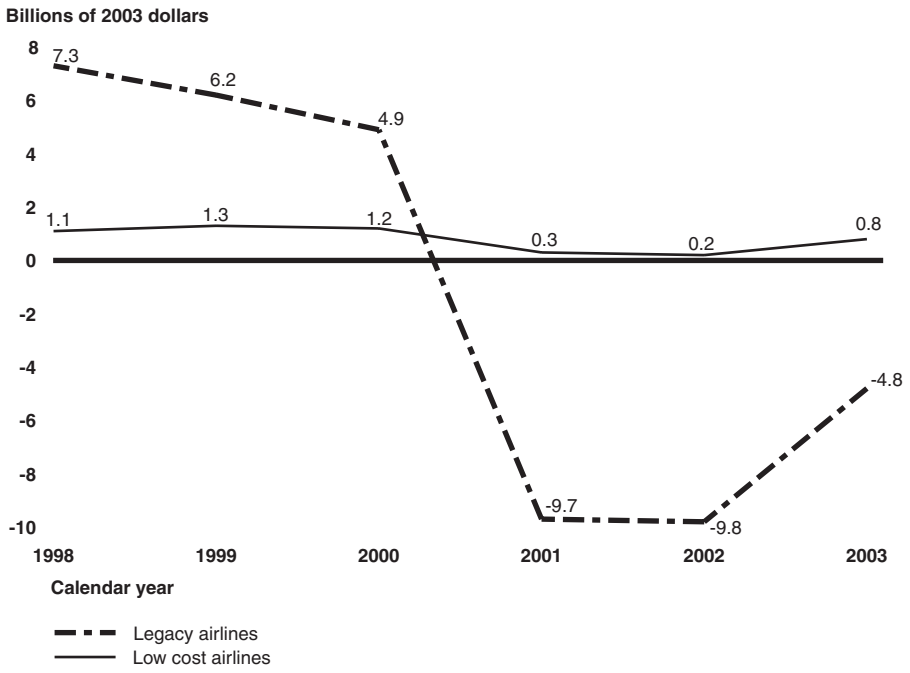
Figure 19: Airline Profitability (in unit operating margin), 1998 through 2003



Source: GAO analysis of DOT data.

As a result of the difference in operating margin, legacy airlines have lost $24.3 billion since the end of 2000, while low cost airlines have made a profit of $1.3 billion. Figure 20 presents airline profits and losses from 1998 through 2003. One industry estimate indicates the airline industry, as a whole, will again be unprofitable in 2004, losing in excess of $3 billion.

Figure 20: Airline Profits and Losses, 1998 through 2003



Source: GAO analysis of DOT data.

Legacy Airlines' Financial Condition Has Weakened Since 2000

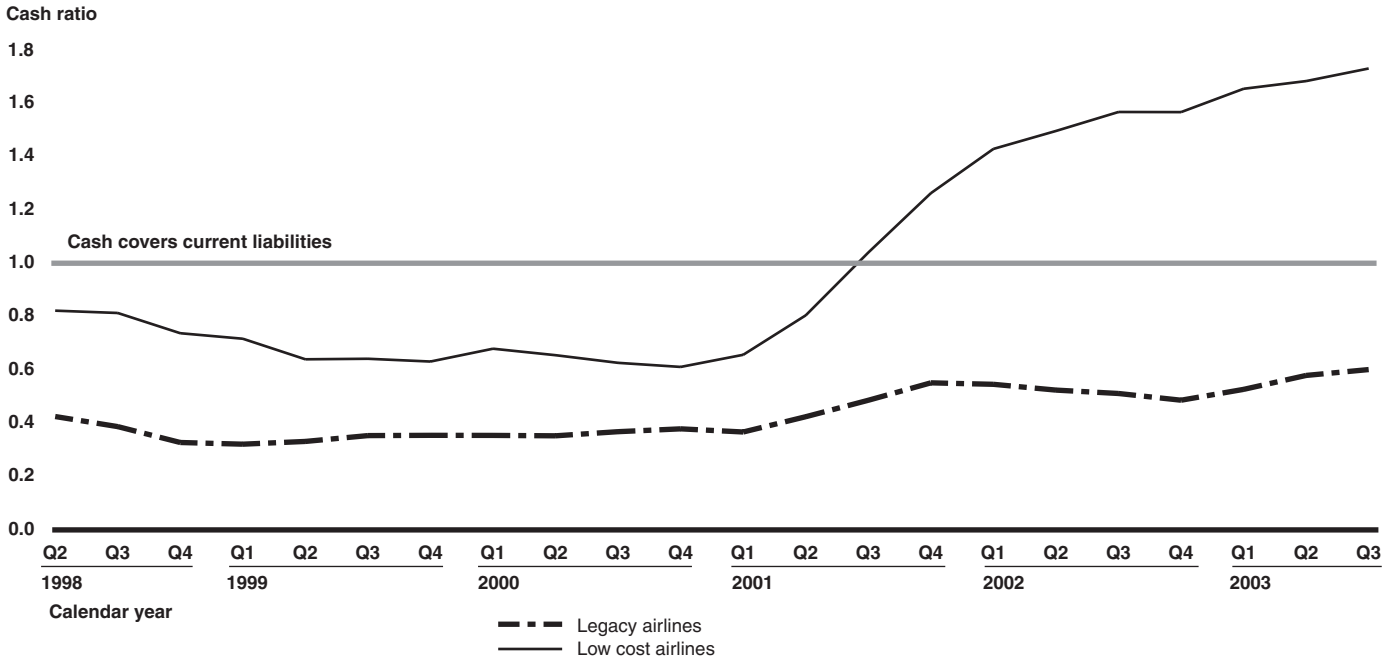
Since 2000, the financial condition of legacy airlines has deteriorated. Both legacy airlines and low cost airlines built cash balances following the events of September 11; legacy airlines did so primarily through borrowing, while low cost airlines increased liquidity through borrowing and generating cash from operations. Since 2001, legacy airlines have taken on more debt, relying on creditors for more of their capital needs than in the past. Higher debt levels leads to greater interest expenses and can make raising additional capital more difficult. Low cost airlines also increased their debt levels, but not as much, and their solvency (or long-term prospects of repaying the debt) has not deteriorated to the same extent as legacy airlines. In the process of taking on additional debt, several legacy airlines have used all, or nearly all, of their assets as collateral, limiting their access to capital markets.

Legacy airlines' liquidity has deteriorated overall and relative to low cost airlines. Liquidity is a measure of a firm's ability to meet short-term liabilities with cash or marketable securities. Both groups of airlines built

cash balances immediately following September 11—for example, comparing cash and marketable securities to current liabilities, known as the cash ratio, rose for both types of airlines (see fig. 21). However, low cost airlines have built proportionally larger cash balances and did it primarily by generating cash from operations, as well as modest borrowing. In contrast, legacy airlines built cash balances after September 11, principally by borrowing. More recently, losses have depleted cash balances and legacy airlines' ability to meet current obligations has not improved. During 2002 and 2003, low cost airlines built cash balances by generating cash from operations, while legacy airlines continued to lose cash from operations and compensated for operating losses by taking on additional debt. In 2003, low cost airlines generated approximately $2.2 million in cash per day while legacy airlines depleted their cash reserves at a rate of approximately $682,000 per day. Low cost airlines maintain more favorable liquidity measures than legacy airlines, and the differential between the two groups of airlines is widening.[20]

[20]Adding an airline's cash balance to its highly liquid, short-term investments and dividing by the airline's total current liabilities produces an airline's cash ratio. If an airline's cash ratio is greater than 1, this indicates that the airline is financially liquid enough to cover all of its current liabilities.

Figure 21: Liquidity of Legacy Carriers vs. Low Cost Carriers, Moving Average 1998 through 2003



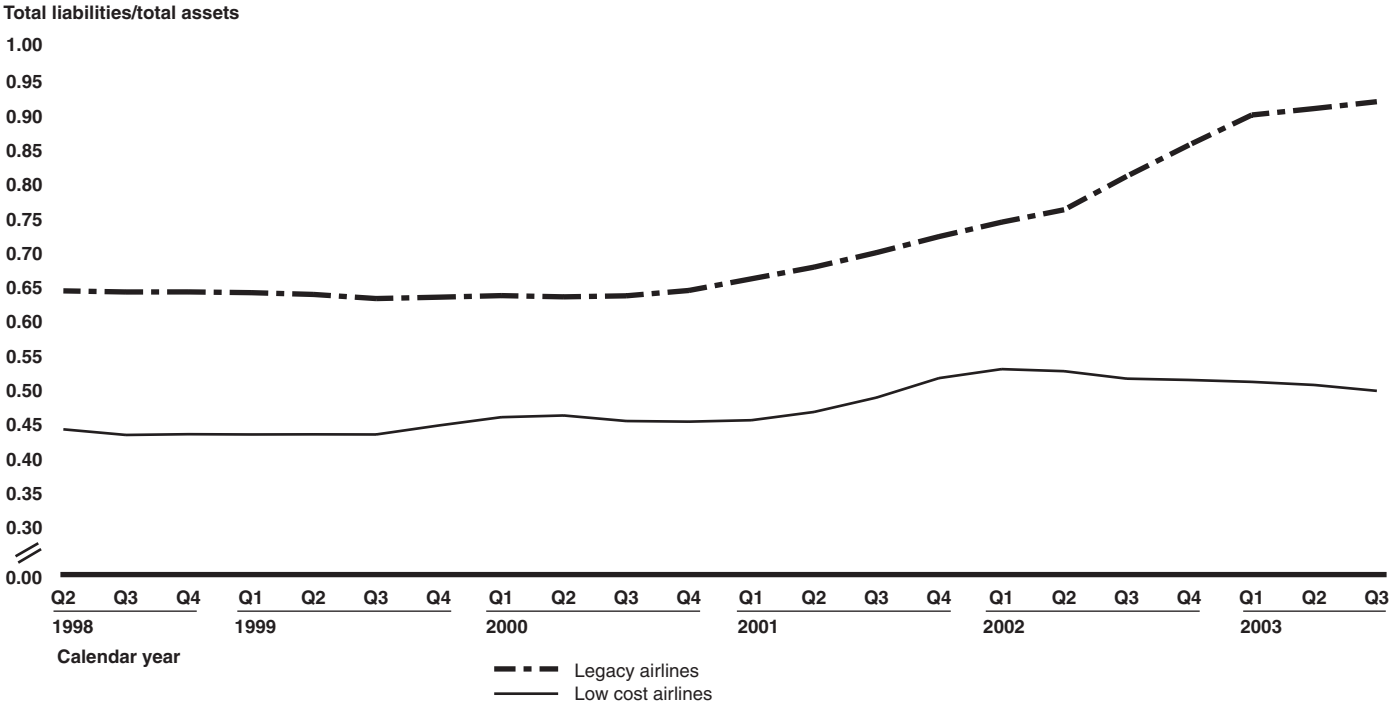
Source: GAO analysis of DOT data.

Since legacy airlines have issued debt to cover operating losses, they continue to be more highly leveraged than low cost airlines, indicating that low cost airlines are more likely to be able to fulfill their long-term financial obligations than legacy airlines, and the gap between the airline groups is growing. Both legacy airlines' and low cost airlines' debt have increased since 1998. As figure 22 demonstrates, legacy airlines have financed 92 percent of their assets by issuing debt (priced at book value), while low cost airlines have only financed approximately 50 percent of their assets by issuing debt. However, as the graph also illustrates, low cost airlines' debt ratios[21] have fallen since the end of 2002, and the gap between the two groups of airlines appears to be widening. In the process of taking on additional debt, several legacy airlines have used all or nearly all of their assets as collateral, limiting their access to capital markets. In addition, as legacy airlines' financial condition has deteriorated, credit rating agencies

[21]"Debt ratio" is a measurement of an airline's total liabilities divided by its total assets. As an airline's debt ratio increases, the likelihood of that airline fulfilling its long-term financial obligations decreases.

have generally downgraded airline debt, further limiting their access to capital markets.

Figure 22: Liabilities as Proportion of Total Assets, Moving Average 1998 through 2003



Source: GAO analysis of DOT data.

Legacy airlines face large debt repayment obligations and pension plan contributions during the next 4 years. Figure 23 illustrates the looming long-term debt and capital lease (a fixed obligation similar to long-term debt) payments that legacy airlines face in comparison with their low cost competitors. While legacy airlines had approximately $6.8 billion in cash at the end of 2003, they face a total of $19.2 billion in long-term debt and capital lease obligations during the next 4 years.[22] In contrast, low cost airlines had a collective cash balance of approximately $3.5 billion at the end of 2003 versus long-term debt and capital lease obligations of $2.1

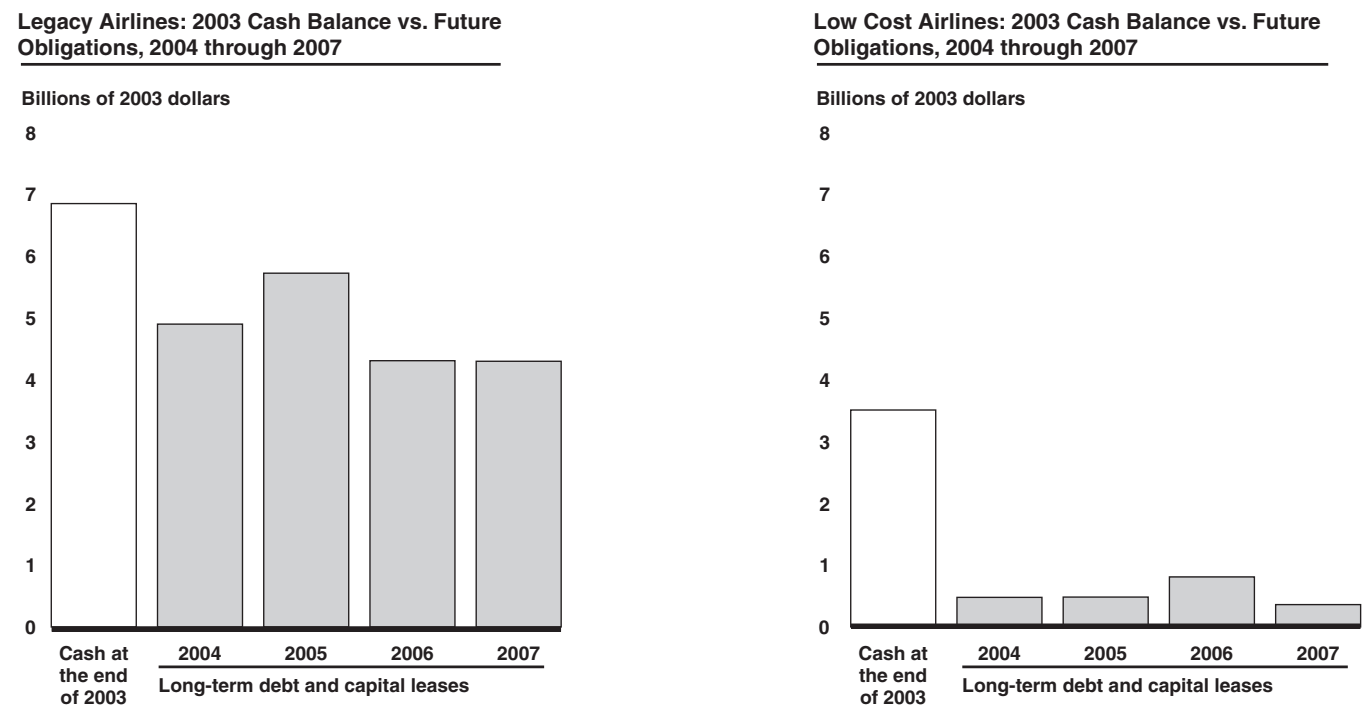
[22]In addition, as noted in figure 21, legacy airlines must also meet considerable current liabilities.

billion coming due through 2007. A recently passed law postpones a portion of legacy airlines' requirements to make payments to their defined benefit pension plans in 2004 and 2005,[23] but these airlines are still required to fully fund these plans in future years.[24] Current estimates indicate that legacy airlines' defined benefit pension plans are underfunded by approximately $20.5 billion. Because legacy airlines' future access to capital markets appears to be limited, these airlines will need to begin generating cash from operations if they intend to fulfill their future financial obligations and avoid bankruptcy.

[23]Pension Fund Equity Act of 2004 (P. L. 108-218, April 10, 2004). The law temporarily replaces the interest rate on 30-year U.S. Treasury Bonds with an interest rate based on the average rate of return on high-quality long-term corporate bonds and allows airlines to postpone part of their necessary contributions for 2004 and 2005. Because not all airlines have disclosed their minimum pension funding requirements pursuant to this law, these obligations are not included in figure 23.

[24]Defined benefit plans promise a fixed payment amount in the future. In contrast, the defined contribution plans employed by low cost airlines fix the current contribution amount, but the future payment amount depends on returns on the pension assets.

Figure 23: Out-Year Obligations, Legacy Airlines vs. Low Cost Airlines



Source: GAO analysis of company Securities and Exchange Commission filings.

Low Cost Airline Growth Has Created Greater Competition in Many Domestic Markets

Airline competition has increased in domestic markets since 1998 because of the growth and expansion of low cost airlines. Between 1998 and 2003, the number of effective competitors[25] in many of the 5,000 largest domestic markets increased, even as the overall number of passengers remained about the same. Low cost airlines entered more of these markets and increased their share of total passengers, particularly in longer distance markets. Legacy carriers continued to serve nearly all of these markets, but

[25]The number of "effective competitors" is a numeric representation of the number of equal-sized competitors in a market. The number is derived from the individual market shares of all of the participants in a market, and effectively adjusts for the varying market strength of airlines in each market. For example, one market served by three airlines, each of which carries one-third of the total traffic, would have three effective competitors. A different market, also served by three airlines, but where one airline carried two-thirds of the passenger traffic and the other two airlines equally divided the remaining passenger traffic, is calculated to have two effective competitors. For additional information on the calculation of this construct, see app. IV.

they carried fewer passengers in 2003 than in 1998, and their overall share decreased. Legacy airlines continued to dominate many of the largest 5,000 domestic markets in 2003, but most of those were relatively small markets to or from their hubs.

The top 5,000 city-pair markets we analyzed accounted for about 92 percent of all domestic passenger traffic in 2003.[26] Within this group, markets differ greatly in size, with passenger traffic concentrated in relatively few of them. In 2003, almost 23 percent of all domestic passengers flew in the 52 largest markets. Each of these large markets had at least 840,000 passengers annually and on average, over 1.5 million passengers flew in each. The largest market in 2003 was Los Angeles—San Francisco, in which 5.1 million passengers flew. Throughout the remainder of this report, we define "large" markets as those 52 markets. Conversely, relatively few passengers flew in each of the smaller markets. At the opposite end of the spectrum from the 52 largest markets are the 4,157 small markets, in which 24 percent of domestic passengers flew. Each of those markets had less than 85,000 passengers annually and had an average of 20,569 passengers annually. The smallest markets in this group, which includes Oklahoma City to Savannah, had 4,840 passengers (about 13 passengers per day) in 2003.

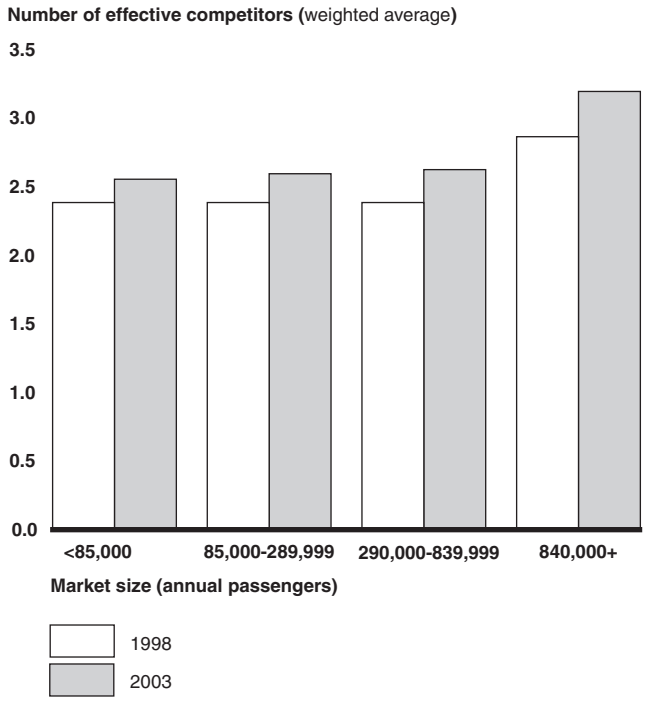
Competition Has Increased Most in Larger Markets as Low Cost Airlines Have Expanded Service Beyond Their Traditional Markets

Although most of the top 5,000 largest domestic markets were already competitive in 1998, many had become more competitive by 2003 as low cost carriers ventured into new markets, more directly challenging legacy carriers and taking a larger share of passengers. The number of monopoly markets decreased, and the number of markets with three or more airlines providing service grew by 8.9 percent. Overall, the average number of effective competitors in the top 5,000 markets rose from 2.20 in 1998 to 2.36

[26]Air service markets are usually defined in terms of scheduled service between a point of origin and a point of destination. The markets in our analysis included airlines providing both nonstop and single connecting service. Connecting service is not a perfect substitute for nonstop service and, therefore, may not provide effective competition for certain classes of service (e.g., business travel). Our examination of the data reliability procedures for DOT's top 5,000 market data indicated that they were sufficiently reliable for the purpose of discussing broad changes in competition in domestic aviation. Readers should note, however, that because this analysis uses the largest 5,000 markets, it excludes information on service to small communities (i.e., those often legislatively defined as being served by "nonhub" airports), because markets in which those communities would represent either a point of origin or destination are too small to be included. For more information on the data used in our analysis and overall changes in the top 5,000 markets, see app. IV.

in 2003. Figure 24 illustrates the number of effective competitors in 1998 and 2003 by market size.

Figure 24: Top 5,000 Markets Were More Competitive in 2003

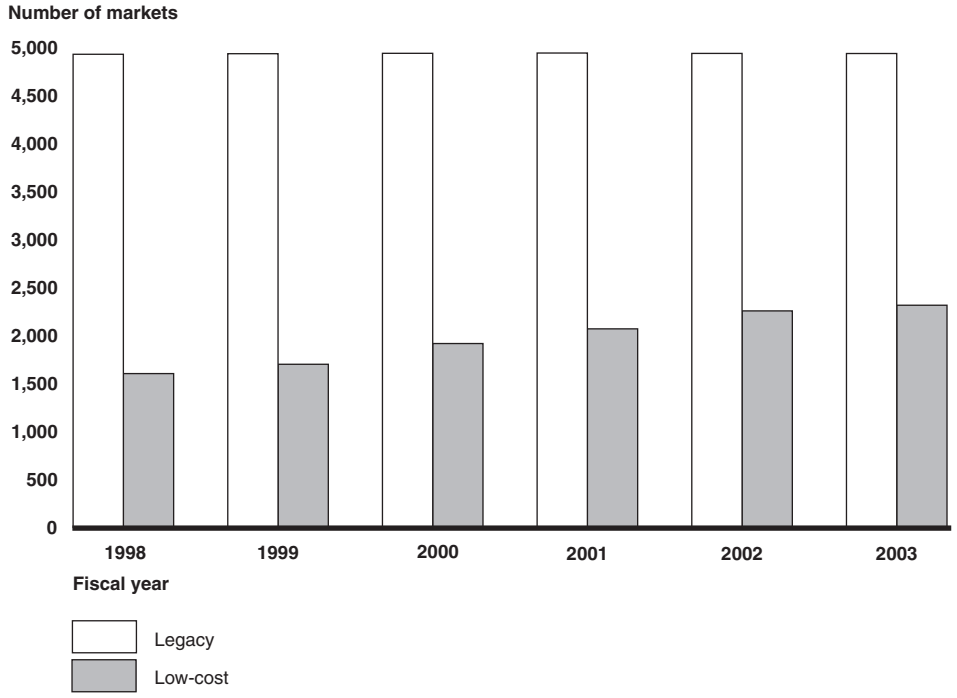


Source: GAO analysis of DOT data.

Increased competition in domestic air service is largely attributable to the growth of low cost airlines, which increased the number of markets served from 1,594 in 1998 to 2,304 in 2003, an increase of 44.5 percent (see fig. 25). In 1998, low cost airlines were generally serving large, short-haul markets such as Dallas to Houston or Atlanta to Orlando. By 2003, as they opened operations in new cities, low cost airlines expanded into smaller markets by making connections available that did not exist before. In addition, low cost airlines evolved from serving mostly short-haul markets to flying transcontinental (e.g., in 2003 JetBlue began service from Fort Lauderdale to Long Beach and Southwest began service between Baltimore and California). DOT has also observed that low cost airlines have been spreading service to smaller and longer-haul markets as well as competing more aggressively for business passengers. According to DOT, low cost airlines generate lower fares and an increase in passengers in the markets

they enter.[27] Although legacy airlines have made large cuts in operating costs over the past few years, they were present in nearly all of the top 5,000 markets each year.

Figure 25: Low Cost Airlines Had Expanded Service to Additional Markets by 2003



Source: GAO analysis of DOT data.

Low cost airlines' addition of more routes expanded the extent to which they competed directly with legacy airlines. In 1998, low cost airlines operated in 31.5 percent of the markets served by legacy airlines, and provided a low-cost alternative to 72.5 percent of passengers. By 2003, low-cost airlines competed directly with legacy airlines in an additional 698 markets. They operated in 45.5 percent of the markets served by legacy

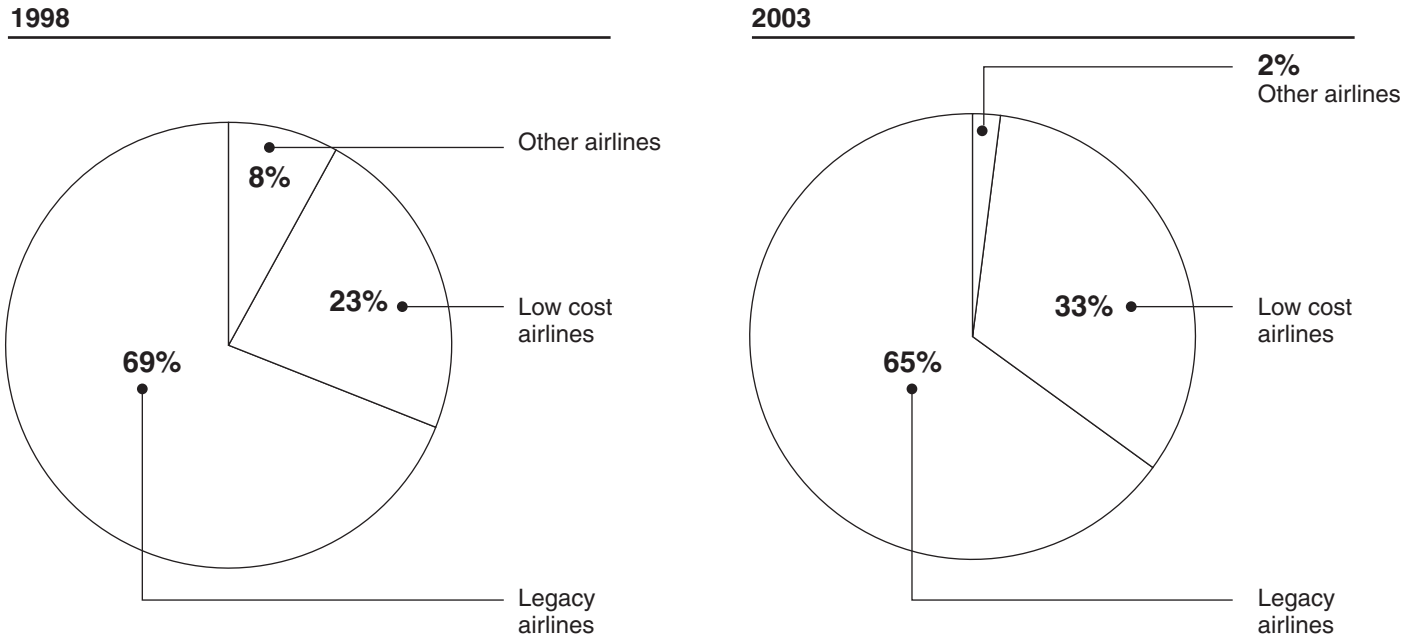
[27]Domestic Airline Fares Consumer Report, Third Quarter 2002 Passenger and Fare Information, U.S. Department of Transportation, Washington, D.C.: July 2003. For example, between 2000 and 2002, in the New York-Los Angeles market, low-fare carriers grew their traffic by 171 percent on a 19-percent decrease in average fare. Other carriers' traffic declined on a decrease in their average fare. As a result, low-fare carrier market share rose from 8.6 percent to 22.7 percent over the 2-year period.

airlines and provided a low cost alternative to 84.6 percent of passengers in the top 5,000 markets.

The entry of low cost airlines into new markets contributed to the shift in market share for legacy and low cost airlines. Overall, low cost airlines' share of total passenger traffic increased from 23 percent in 1998 to 33 percent in 2003, while legacy airlines lost market share, falling from 69 to 65 percent (see fig. 26). Low cost airline total passenger traffic increased from 79.8 million in 1998 to 117.1 million in 2003. Low cost airline passengers also increased in all markets sizes and market distances over 250 miles, with the largest increases in long haul markets. Legacy carrier passengers decreased from 242.2 million in 1998 to 231.6 million in 2003.[28]

[28]Though our focus in this study is on the legacy and low cost airlines, we recognize the near disappearance of "other" carriers" from the top 5,000 domestic markets. Other carriers are those that did not fit our definitions of legacy and low cost airlines and include currently operating airlines such as Hawaiian and Midwest as well as airlines such as Midway and National, which declared bankruptcy and ceased operations. As a group, these carriers showed dramatic declines in markets served and passenger traffic between 1998 and 2003. For example, other carriers' overall passengers declined 73.7 percent, from 28.6 million in 1998 to 7.5 million in 2003 as their market share declined from 8.2 to 2.1 percent. Additionally, these carriers served only 270 markets in 2003, which is a decrease from 1,901 markets served in 1998.

Figure 26: Low Cost Airlines Gained Market Share (Passengers) from Legacy and Other Airlines



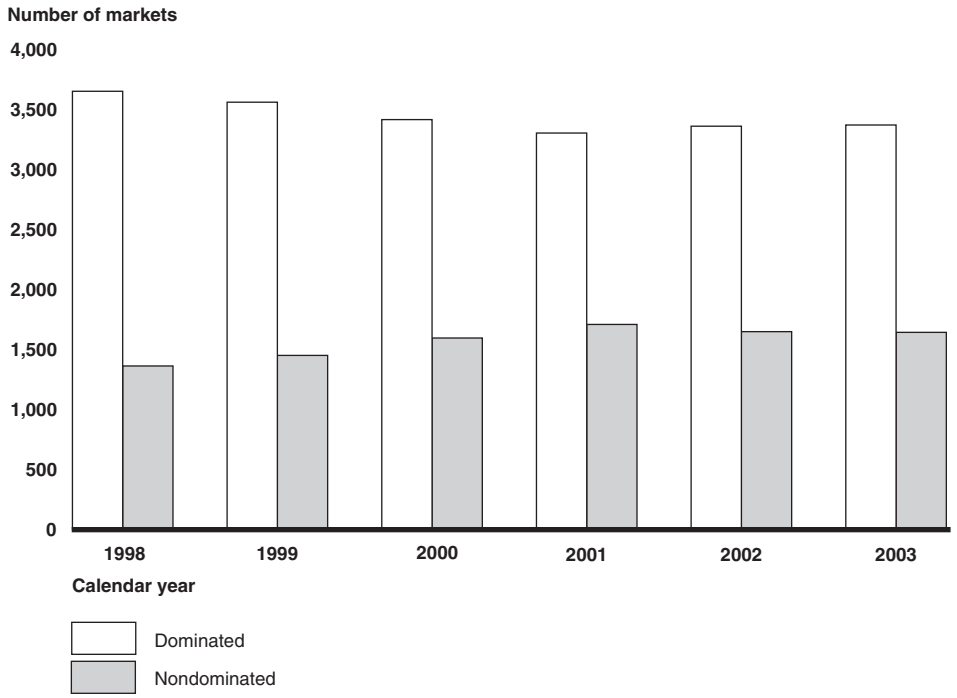
Source: GAO analysis of DOT data.

Note: "Other" carriers are those that did not fit our definitions of legacy and low cost airlines. Current carriers in this category are Hawaiian and Midwest. In 1998, this category also included Midway and National, which have since ceased operations.

Fewer Markets Dominated by a Single Airline

With the increase in overall competition, the number of dominated markets declined by 279 between 1998 and 2003 (7.7 percent). However, during the financially difficult years of 2001 through 2003, the number of dominated markets increased by 63 (see fig. 27). And although a single airline may have carried more than half of the total passenger traffic in those dominated markets, 31.2 percent of those markets had service from three or more airlines in 2003.

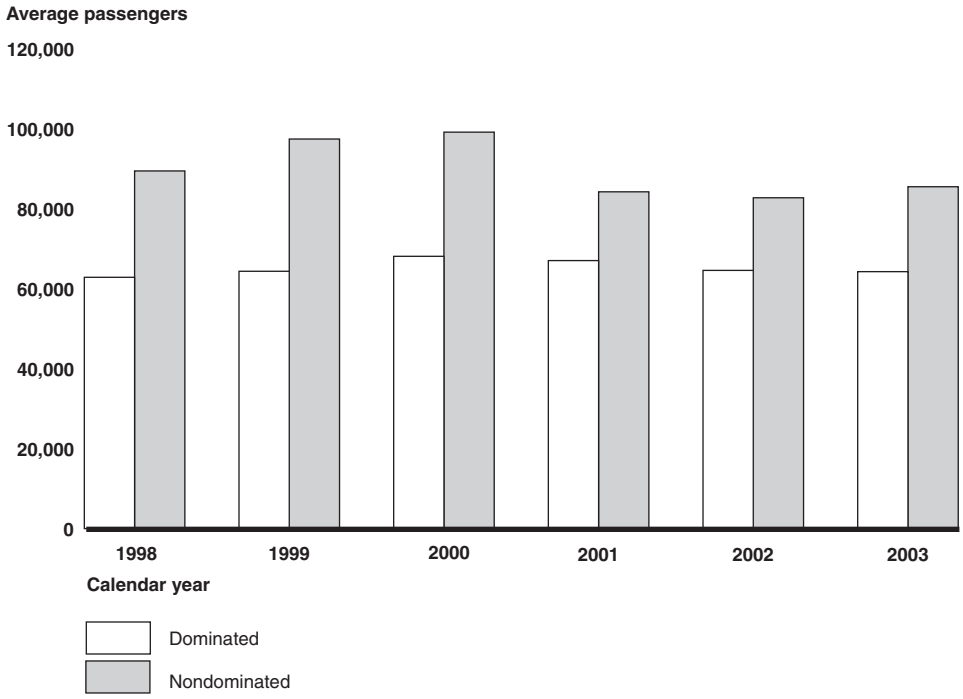
Figure 27: The Majority of Markets in the Top 5,000 Were Dominated from 1998 through 2003



Source: GAO analysis of DOT data.

As a group, dominated markets enplaned the majority of passengers from 1998 to 2003, but individually they tended to be smaller than non-dominated markets. In 2003, dominated markets enplaned an average of 64,217 passengers each, while nondominated markets enplaned an average of 85,730 passengers each, a difference of 34 percent (see fig. 28).

Figure 28: Dominated Markets Tended To Be Smaller Than Nondominated Markets



Source: GAO analysis of DOT data.

Nearly 85 percent of the markets dominated in 2003 were dominated by legacy airlines. Additionally, a large percentage of the total number of dominated markets were "hub markets" of legacy airlines (i.e., travel originated or terminated in one of the legacy airline's hubs). In 2003, the 2,854 markets that were dominated by legacy carrier. Each had an average of 48,375 passengers. Low cost airlines dominated 458 markets in 2003, and those markets tended to be significantly larger. On average, 158,378 passengers flew annually in markets dominated by low cost airlines. This difference reflects the low cost carriers' targeting of high-density markets and the nature of hub-and-spoke networks operated by legacy airlines.

Concluding Observations

While the airline industry was deregulated more than 25 years ago, some of the most significant competitive changes are only now occurring, brought about by the unprecedented challenges of the last 4 years. Before 2000, large legacy airlines, all of which predated deregulation, dominated the domestic airline industry. These airlines competed on the basis of their

networks and onboard amenities as well as fares; profits were earned by maximizing revenues from high-value business travelers. While low cost airlines competed in some markets, as a whole, they never accounted for a significant segment of the industry and rarely took on a legacy airline directly. In the past, new entrant low cost airlines rarely survived an entire business cycle. However in recent years this pattern has changed, perhaps permanently. Significant structural change combined with severe demand shocks has presented unprecedented challenges to the airline industry, especially for legacy airlines. Legacy airlines, burdened by significant costs of labor contracts and pension plans negotiated during profitable years and an extensive and costly network infrastructure, have found it difficult to reduce costs quickly enough to restore profitability. The scale of cost-cutting reported to us by legacy airlines was not fully achieved and, most importantly, legacy airlines were no more cost competitive with low cost airlines in 2003 than they were in 2000.

Meanwhile, low cost airlines are using their cost advantage to expand their market share and challenge legacy airlines like never before. While industry traffic has recovered to pre-September 11 levels, profitability for legacy airlines has not, owing to higher costs and weak fare growth. Three years of losses have left legacy airlines in a weakened financial condition with large debt and pension obligations looming in the next few years. The potential for airlines to earn large profits during up-cycles to cover losses during down-cycles, as they did during the 1990s, appears to have come undone this decade. Whether legacy airlines can effectively compete with low cost airlines and regain profitability will depend on their ability to further reduce their unit costs and gain a revenue premium associated with network service that connects smaller U.S. communities with international destinations—a service that low cost airlines do not now offer. The survivability of legacy carriers may well depend on their ability to do so—certainly, they cannot continue to sustain losses like those incurred over the past few years. The growth of low cost airlines in recent years has benefited most consumers through increased competition, but the structure of the U.S. domestic airline industry remains very much in flux.

Comments

We provided a draft of this report to DOT for its review and comment. DOT officials provided some clarifying and technical comments that we incorporated where appropriate. We also provided selected portions of a draft of this report to the ATA to verify the presentation of factual material. We incorporated their technical clarifications as appropriate.

We provided copies of this report to the Secretary of Transportation and other interested parties and will make copies available to others upon request. In addition, this report will be available at no charge on our Web site at http://www.gao.gov. If you have any questions about this report, please contact me or Steve Martin at 202-512-2834. Other major contributors are listed in appendix V.

JayEtta Z. Hecker
Director, Physical Infrastructure

List of Congressional Committees

The Honorable Ted Stevens
Chairman
The Honorable Robert Byrd
Ranking Minority Member
Committee on Appropriations
United States Senate

The Honorable John McCain
Chairman
The Honorable Ernest Hollings, Jr.
Ranking Democratic Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Richard Shelby
Chairman
The Honorable Patty Murray
Ranking Minority Member
Subcommittee on Transportation, Treasury, and General Government
Committee on Appropriations
United States Senate

The Honorable Thad Cochran
Chairman
The Honorable Robert Byrd
Ranking Minority Member
Subcommittee on Homeland Security
Committee on Appropriations
United States Senate

The Honorable Trent Lott
Chairman
The Honorable John D. Rockefeller
Ranking Democratic Member
Subcommittee on Aviation
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable C.W. Bill Young
Chairman
The Honorable David R. Obey
Ranking Minority Member
Committee on Appropriations
House of Representatives

The Honorable Don Young
Chairman
The Honorable James L. Oberstar
Ranking Democratic Member
Committee on Transportation and Infrastructure
House of Representatives

The Honorable Ernest J. Istook, Jr.
Chairman
The Honorable John V. Olver
Ranking Minority Member
Subcommittee on Transportation and Treasury, and Independent Agencies
Committee on Appropriations
House of Representatives

The Honorable Harold Rogers
Chairman
The Honorable Martin Olav Sabo
Ranking Minority Member
Subcommittee on Homeland Security
Committee on Appropriations
House of Representatives

The Honorable John L. Mica
Chairman
The Honorable Peter A. DeFazio
Ranking Democratic Member
Subcommittee on Aviation
Committee on Transportation and Infrastructure
House of Representatives

Airline Cover Letter

United States General Accounting Office
Washington, DC 20548

June 26, 2003

Dear Carrier Representatives:

The conference report accompanying the 2003 Emergency Wartime Supplemental Appropriation Act (Act) directs the General Accounting Office to submit a report to Congress on measures taken by air carriers who received financial assistance under the Act to reduce costs and strengthen their balance sheets. As part of this effort, the conference report stated that carriers that obtained relief payments from the Transportation Security Administration (TSA) under the Act should submit a plan to the Comptroller General of the United States that would reduce annual operating expenses by an amount equal to the greater of 10 percent of that carrier's annual operating expenses or the amount of financial assistance that the carrier received. Under the conference report, carriers are to submit these plans within 90 days of enactment of the Act, i.e., by July 16, 2003. This letter outlines the general approach we will use to conduct this review. The enclosed template shows how we would prefer your plans to be structured and contains more specific instructions for preparing the plan and sending it to us.

We recognize that each carrier's financial position is unique and that many, if not all, carriers since September 2001, and possibly before, have been taking actions to reduce costs and/or improve revenues. Accordingly and consistent with the guidance and template enclosed, we intend to approach our analysis in two parts. First, we are asking each carrier that received payments directly from TSA (66 carriers) to provide us with information on the most significant cost cutting or revenue enhancing actions taken or planned subsequent to the enactment of the legislation (i.e., since April 2003), the actual or expected financial benefits, and the major operational impacts, of those actions. Secondly, we are asking these carriers to provide information on the major cost cutting or revenue enhancing initiatives undertaken between September 2001 and March 31, 2003, including the benefits achieved or to be achieved by those actions.[1] In addition, we are requesting that you provide us certain financial and operational data that will help tie together and demonstrate the overall impact of these various initiatives.

This approach will allow us to include in our report our views on the various "self-help" measures the airlines have or are taking and the overall effect of the airlines' initiatives from both a financial and operational perspective. We understand that

[1] We are using March 31, 2003, rather than the enactment date of April 16, 2003, because for most, if not all, carriers this date will coincide with either a monthly or quarterly closing of carrier financial records.

information you provide to us may be of a proprietary nature. We are prohibited from including any proprietary information in a publicly available report (See 18 USC 1905). Further, GAO routinely handles sensitive information and has in-place processes and procedures to safeguard that information. In addition, we will provide each carrier furnishing us with information the opportunity to review that portion of our draft report containing such information to ensure that we have reported it accurately and that we are not inadvertently disclosing any proprietary information.

If you have any questions about this data request or your plans, which we expect to receive by July 16, 2003, please contact Phil McIntyre at (202) 512-4373 or Steve Martin at (202) 512-3389. The enclosed template provides the details on how to submit your completed plans to us.

Sincerely yours,

Linda Calbom
Director, Financial Management
and Assurance

JayEtta Hecker
Director, Physical Infrastructure

Enclosures

Page 2

Air Carrier Contact Information

Contact Name: _____

Email Address: _____

Phone Number: _____

Fax Number: _____

1. Post-Enactment Implementation Period

In completing this section, list only the initiatives that were or are expected to be implemented after the enactment of the Act, i.e.,April 1, 2003 through December 31, 2003. Initiatives that were begun in this time period but have not yet been completed are considered implemented in this time period.

Using your best judgment, (1) report only the most significant initiatives such as those that result in large dollar benefits or large operational impacts and (2) categorize initiatives into Cost Reduction and Revenue Enhancement categories for the Financial Improvement Initiatives and into Liquidity, Debt Management, and Other categories for the Balance Sheet Initiatives.

Chart 1A: Financial Improvement Initiatives Post-Enactment

Name of the Most Significant Financial Improvement Initiatives	Describe Each Initiative	Summary of How Expected Cost Savings/ Revenue Increases Were Calculated, Including Key Assumptions, for Each Initiative	Implementation Date, for Each Initiative (also include expected implementation dates if applicable)	Actual and/or Estimated Cost Savings or Revenue Increases for January 1 through December 31, 2003 for Each Initiative (Net, rounded to the nearest dollar)	Estimated Cost Savings or Revenue Increases for January 1 through December 31, 2004 for Each Initiative (Net, rounded to the nearest dollar)	Significant Operational Impacts Resulting From Each Initiative, If Any
A	B	C	D	E	F	G
I. Cost Reduction Initiatives This section might include initiatives relating to the following areas: -- labor -- fleet -- offices and facilities -- flight schedules -- commissions -- customer service						
II. Revenue Enhancement Initiatives This section might include initiatives relating to the following areas: -- fare deals and specials -- new lines of business, i.e., low cost airline -- advertising/marketing -- alliance and code sharing agreements						

Chart 1B: Balance Sheet Improvement Initiatives Post-Enactment

Name of the Most Significant Financial Improvement Initiatives	Describe Each Initiative	Summary of Expected Benefits for Each Initiative (Net, rounded to the nearest dollar)	Implementation Date, for Each Initiative (also include expected implementation dates if applicable)	Significant Operational Impacts Resulting From Each Initiative, If Any
A	B	C	D	E
I. Liquidity This section might include initiatives relating to the following areas: -- lines of credit -- investments				
II. Debt Management This section might include initiatives relating to the following areas: -- refinancing or restructuring debt				
III. Other				

2. Pre-Enactment Implementation Period

In completing this section, list only the initiatives that were implemented after the terrorist attacks and before the enactment of the Act (October 1, 2001 through March 31, 2003). Initiatives that were begun in this time period but have not yet been completed are considered implemented in this time period.

Using your best judgment, (1) report only the most significant initiatives such as those that result in large dollar benefits or large operational impacts and (2) categorize initiatives into Cost Reduction and Revenue Enhancement categories for the Financial Improvement Initiatives and into Liquidity, Debt Management, and Other categories for the Balance Sheet Initiatives.

Chart 2A: Financial Improvement Initiatives Pre-Enactment

Name of the Most Significant Financial Improvement Initiatives	Describe Each Initiative	Summary of How Expected Cost Savings/Revenue Increases Were Calculated, Including Key Assumptions, for Each Initiative	Implementation Date, for Each Initiative	Actual Cost Savings or Revenue Increase for October 1, 2001 through December 31, 2002 for Each Initiative (Net, rounded to the nearest dollar)	Actual or Estimated Cost Savings or Revenue Increase for January 1 through December 31, 2003 for Each Initiative (Net, rounded to the nearest dollar)	Estimated Cost Savings or Revenue Increase for January 1 through December 31, 2004 for Each Initiative (Net, rounded to the nearest dollar)	Significant Operational Impacts Resulting From Each Initiative, If Any
A	B	C	D	E	F	G	H
I. Cost Reduction Initiatives This section might include initiatives relating to the following areas: -- labor -- fleet -- offices and facilities -- flight schedules -- commissions -- customer service							
II. Revenue Enhancement Initiatives This section might include initiatives relating to the following areas: -- fare deals and specials -- new lines of business, i.e., low cost airline -- advertising/marketing -- alliance and code sharing agreements							

Chart 2B: Balance Sheet Improvement Initiatives Pre-Enactment

Name of the Most Significant Financial Improvement Initiatives	Describe Each Initiative	Summary of Expected Benefits for Each Initiative (Net, rounded to the nearest dollar)	Implementation Date, for Each Initiative	Significant Operational Impacts Resulting From Each Initiative, If Any
A	B	C	D	E
I. Liquidity This section might include initiatives relating to the following areas: -- lines of credit -- investments				
II. Debt Management This section might include initiatives relating to the following areas: -- refinancing or restructuring debt				
III. Other				

3. Net Effect of All Initiatives

In completing this section, record the following operating statistics, financial data, and economic assumptions for the specified time periods. This overall carrier performance will provide a context in which we will evaluate the reasonableness and feasibility of the initiatives listed in this plan. This information is similar to that which is provided to the Department of Transportation's Bureau of Transportion Statistics on the Form 41.

A. Operating Statistics	CY 2002 Actual	1st Quarter CY 2003 Actual	2nd - 4th Quarter CY 2003 Estimated	CY 2004 Estimated
Total Revenue Passengers Enplaned				
Total Revenue Passenger Miles				
Total Available Seat Miles				
Total Block Hours				
Total Departures				
Average Fare, Domestic				
Average Fare, Int'l				
Revenue Passenger Load Factor (%)				
Average Passenger Trip Length (miles)				
Average Number Aircraft in Service				
Avg. Number of Departures per Aircraft				
Block Hours per Day				
Revenue Aircraft Miles				
Revenue Aircraft Departures				
Average Stage Length (miles)				
Employees (avg. FTEs)				

B. Financial Data	CY 2002 Actual	1st Quarter CY 2003 Actual	2nd - 4th Quarter CY 2003 Estimated	CY 2004 Estimated
Revenue				
Passenger Revenues				
Freight and Express Revenues				
Charter Revenues				
Mail Revenues				
Other				
Total Operating Revenues				

B. Financial Data		CY 2002 Actual	1st Quarter CY 2003 Actual	2nd - 4th Quarter CY 2003 Estimated	CY 2004 Estimated
Expenses					
	Wages and Expenses				
	Fuel Expense				
	Aircraft rentals and landing fees				
	Depreciation and Amortization				
	Maintenance				
	Commissions				
	Food Service				
	Security				
	Other				
	Total Operating Expenses				
NonOperating Income and Expenses					
	Long term debt and capital leases				
	Other Interest				
	Other				
	Other income and expenses (net)				
	Net Income (Loss) Before Taxes				
	Income Taxes				
	Net Income (Loss)				
Other					
	Outstanding Debt				
	Common Stockholders Equity				
C. Economic Assumptions		CY 2002 Actual	1st Quarter CY 2003 Actual	2nd - 4th Quarter CY 2003 Estimated	CY 2004 Estimated
	GDP (% change)				
	CPI (% change)				
	Average Federal Funds Rate				
	Avg. Fuel Price ($/gallon)				

4. List the amount of airline relief payments you received on May 15, 2003 from the Transportation Security Administration under the Emergency Wartime Supplemental Appropriations Act, 2003, (P.L. 108-11). If you distributed any portion of these funds to another carrier or entity, provide a listing of such payments.
5. Describe how the funds received from TSA were or are expected to be used.
6. Discuss here any other relevant information that you wish to highlight regarding financial improvement initiatives such as uncontrollable events or factors.
7. Once the plan is completed, submit it and any other supporting analysis or other documentation via overnight mail, postmarked no later than July 16, 2003 to:

Phil McIntyre
Room 5V21
U.S. General Accounting Office
441 G Street, NW
Washington, DC 20548

We are expecting that we will be provided sufficient information to evaluate the reasonableness or feasibility of the initiative and underlying assumptions. During our review, we may follow-up with the contact person listed on page 1 to ask for additional supporting information or clarification of the information provided. If you have any questions or concerns, please call Phil McIntyre (202) 512-4373 or Steve Martin (202) 512-3389.

Airline Enplanements and Government Assistance Received Pursuant to P.L. 108-11

Legacy airlines	2003 Enplanements	Percent of total	2003 Assistance	Percent of assistance
Alaska Airlines	15,046,919	2.32	$67,058,661	2.93
American Airlines	88,798,446	13.71	360,975,306	15.77
Continental	38,474,938	5.94	173,210,289	7.57
Delta	84,076,432	12.98	390,151,227	17.04
Northwest Airlines	51,865,302	8.01	205,000,407	8.95
United Airlines	66,018,276	10.19	300,231,855	13.11
US Airways	41,250,548	6.37	216,050,915	9.44
Subtotal	**385,530,861**	**59.52**	**$1,712,678,660**	**74.81**
Low cost airlines				
AirTran	11,651,340	1.80	$38,061,041	1.66
America West	20,031,976	3.09	81,255,380	3.55
ATA	9,386,902	1.45	37,156,308	1.62
Frontier	5,061,757	0.78	15,573,165	0.68
Jet Blue	8,949,744	1.38	22,761,459	0.99
Southwest	74,719,340	11.54	271,374,057	11.85
Spirit	4,105,929	0.63	14,433,937	0.63
Subtotal	**133,906,988**	**20.67**	**$480,615,347**	**20.99**
Regional airlines				
Air Wisconsin	5,865,638	0.91	$2,261,517	0.10
Allegheny Airlines	1,997,934	0.31	645,050	0.03
American Eagle[a]	12,474,076	1.93	(Incl. in AA)	N/A
Atlantic Coast	8,390,143	1.30	1,520,495	0.07
Atlantic Southeast	9,205,348	1.42	4,327,404	0.19
Chautauqua	4,624,335	0.71	426,665	0.02
Comair	10,935,597	1.69	3,814,004	0.17
Executive Airlines[a]	2,739,909	0.42	(Incl. in AA)	N/A
Express Jet	11,227,944	1.73	3,034,197	0.13
Horizon	4,934,769	0.76	4,337,459	0.19
Mesaba	5,702,260	0.88	2,373,104	0.10
Mesa[b]	5,241,877	0.81	(Returned aid)	N/A
Piedmont	2,343,742	0.36	1,138,230	0.05
Pinnacle	4,544,994	0.70	999,913	0.04

(Continued From Previous Page)

Regional airlines	2003 Enplanements	Percent of total	2003 Assistance	Percent of assistance
TransStates	2,544,816	0.39	958,172	0.04
Subtotal	**103,493,130**	**15.98**	**$32,290,392**	**1.41**
Grand Total[c]	**622,930,979**	**96.17**	**$2,225,584,399[d]**	**97.22**

Source: GAO analysis of DOT data.

[a]Aid to American Eagle and Executive Airlines was included with American Airlines.

[b]Mesa was awarded aid, but did not accept the aid.

[c]The total number of enplanements in the U.S. airline industry during 2003 was 647,761,545.

[d]TSA's July 9, 2003, memorandum cited total aid as $2,289,262,632.

Regional Airline Financial and Operating Statistics, 1998 through 2003

Table 2: Financial Plans Reported to GAO

	Oct. 1, 2001-Dec. 31, 2002	2003	2004	Total
Estimated costing savings	$446,502,222	$629,541,586	$683,673,652	**$1,759,717,460**
Estimated revenue enhancements	19,113,222	151,552,715	335,779,305	**506,445,242**

Source: Airline plans reported to GAO.

Table 3: Regional Airline Financial Data, 1998 through 2003

	1998	1999	2000	2001	2002	2003
Total operating expenses	$5,057,869,883	$5,881,841,615	$6,915,601,352	$7,720,000,791	$8,150,793,920	$8,509,585,465
Total operating revenues	5,783,674,129	6,636,592,689	7,483,755,692	7,332,342,090	8,690,621,788	9,619,103,662
Operating profitability	725,804,247	754,751,074	568,154,341	(387,658,702)	539,827,869	1,109,518,197
Net profitability	442,994,024	479,620,812	315,474,270	(254,927,731)	160,989,012	672,896,060
Cost per available seat mile	0.199	0.189	0.190	0.194	0.166	0.139
Revenue per available seat mile	0.227	0.213	0.205	0.184	0.177	0.157

Source: DOT Form 41.

Table 4: Regional Airline Operating Data, 1998 through 2003

	1998	1999	2000	2001	2002	2003
Available seat miles	25,443,959,344	31,093,704,791	36,466,550,000	39,862,849,000	49,113,092,768	61,220,086,000
Revenue passenger miles	14,907,428,829	18,450,932,577	21,972,811,000	23,521,349,000	31,438,127,438	40,733,293,000
Revenue departures	2,886,675	3,052,628	3,097,984	3,026,924	3,225,374	3,481,985

Source: DOT Form 41.

Scope and Methodology

To identify challenges facing U.S. airlines since 1998, we relied on a variety of sources. We conducted interviews with airline officials from legacy airlines, low cost airlines, regional airlines, and representatives from airline trade associations. We also interviewed government experts from the Department of Transportation (DOT) and its agencies—the Federal Aviation Administration (FAA) and the Bureau of Transportation Statistics—and the Department of Homeland Security's Transportation Security Administration (TSA). Using DOT Form 41 and SC-298 financial and traffic data, FAA aviation forecasts, and business fare data from Harrell Associates, we examined the effects of various events and time frames on airline traffic and finances. In addition, we interviewed credit and equity analysts, academic experts, and private consultants to gather their opinions and relevant studies.

To assess the measures taken by airlines to remain financially viable, we relied on a variety of sources. First, we used submissions provided by 64 U.S. commercial airlines that received assistance under the Emergency Wartime Supplemental Appropriations Act of 2003. The Act and its accompanying conference report tasked airlines with providing us with a plan demonstrating how they would reduce their operating expenses by 10 percent. Working with airlines and airline trade associations, we devised a data collection template for airlines to submit their financial plans (see app. I). Because of the proprietary nature of these plans, and for the purposes of this report, we aggregated the financial information contained in these plans into one of three airline categories—legacy airlines, low cost airlines, and regional airlines. We then compared the plans with actual financial results as reported to the DOT on Form 41 filing for the same period to determine to what extent these plans were realized. We also interviewed airline trade associations and representatives of five legacy, two low cost, and two regional airlines to discuss their plans. Finally, we met with airline equity and credit analysts to discuss airline measures.

To review the financial condition of the U.S. airline industry, we conducted interviews with airlines and their trade associations, credit and equity analysts, government experts, and academics. We also reviewed DOT Form 41 and SC-298 financial and traffic data submitted by the carriers in our study. We obtained these data from BACK Aviation Solutions, a private contractor that provides DOT Form 41 data to interested parties. To determine airline stage-length adjusted cost curves, we contracted with Roberts Roach Associates, a consulting group that specializes in airline economics. We also reviewed airline cash flow data that DOT supplied directly to us in order to determine how airlines' cash balances have

fluctuated in recent years and what airlines' main sources of cash have been in recent years. Finally, we used airlines' publicly reported Securities and Exchange Commission filings to determine airlines future financial obligations. To assess the reliability of these data, we reviewed the quality control procedures that BACK Aviation Solutions, DOT, and Roberts Roach Associates apply and subsequently determined that the data were sufficiently reliable for our purposes.

To determine how the competitiveness of the U.S. airline industry has changed since 1998, we obtained and stratified DOT quarterly data on the top 5,000[1] city-pair markets for calendar years 1998 through 2003 and then determined shifts in competitive factors overall and for markets with and without low cost airlines as well as for legacy and low cost airlines. These data are collected by DOT based on a 10-percent sampling of tickets and identify the origin and destination airport, which we converted to city-pair markets for cities with multiple airports.[2] Since only the issuing carrier is identified, regional airline traffic is counted under the legacy parent or partner airline. To assess the reliability of these data, we reviewed the quality control procedures DOT applies and subsequently determined that the data were sufficiently reliable for our purposes. According to DOT, these markets accounted for about 92 percent of all passengers and about 11 percent of domestic city-pairs in 2003. The smallest markets in this group ticketed 4,840 passengers while the largest ticketed 5.1 million passengers in 2003. To analyze changes in competition based on the size of the passenger markets, we divided the markets into four groupings based on 1998 passenger traffic: less than 85,000 passengers; 85,000 to 289,999 passengers; 290,000 to 839,999 passengers; and 840,000 and more passengers. Each group comprised one-quarter of the total passenger traffic in 1998. To stratify these markets by the number of carriers operating, we used the following categories: 1, 2, 3, 4, and 5 or more carriers. To stratify the data by market distance, we obtained the great

[1]Because there were often several markets with the same number of passengers at the low end of the passenger scale, it was not always possible to have exactly 5,000 markets in our database for each year. For example, in 1998,we included 5,002 markets whereas in 2003 we included exactly 5,000 markets.

[2]Multiple airport cities are Chicago, Dallas, Houston, Los Angeles, New York, San Francisco, and Washington, D.C. We have in the past analyzed the Washington, D.C., market both as airport pairs and as one market because we had found that the airports represented distinct markets for time-sensitive business travelers.

circle distance[3] for each market using the BACK Aviation Solutions database and then grouped the markets into five distance categories: up to 250 miles; 251-500 miles; 501-750 miles; 751-1,000 miles; and 1,001 miles and over. To assess changes in competition in these markets, we analyzed changes in passenger traffic by market type and airline type, changes in the number of markets according the various stratifications we developed, determined the number of dominated markets,[4] and calculated the average number of effective competitors[5] in each market for each year as well as the average annual number of effective competitors per market grouping.

We had access to sufficient information to make informed judgments on the matters covered by this report. We performed our work between December 2003 and August 2004 in accordance with generally accepted government auditing standards.

[3]The great circle distance is the shortest distance between points along the surface of the earth.

[4]Consistent with definitions that others (e.g., the Transportation Research Board) have applied in the past, we defined a market as dominated if a single airline carried more than half of total passengers.

[5]Effective competitors are the number of equal-sized competitors that would provide a degree of competition equivalent to that actually observed in the market-share data. We computed the number of effective competitors in each market by summing the squares of the markets shares of all airlines serving in the market (the Herfindahl-Hirschman Index) and then inverting this number.

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