

**Office of Aviation and International Affairs, Aviation Analysis**  
**The Low-Fare Evolution, Part II -Third Quarter 2002**  
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Over the past few years, new entrants and low-fare competitors have increasingly expanded their operations beyond the traditional low-fare model focused on leisure travelers and characterized by limited amenity, point-to-point service in dense, short-haul markets. Our last Special Feature, the Low-Fare Evolution, Part I, focused on one aspect of the development of the low-fare business model, namely how certain low-fare carriers are more aggressively competing for the time-sensitive, higher-fare business market traditionally dominated by the major network carriers.<sup>1</sup> This Special Feature will examine another way in which low-fare carriers are breaking the mold, and in the process reshaping the domestic airline industry by rapidly expanding their presence in long-haul markets.<sup>2</sup>

Although there have been some attempts by new entrants to serve long-haul, transcontinental markets with both connecting and non-stop service in the deregulated era, non-stop long-haul flying has primarily remained the domain of the major network carriers. Consistent with the legacy carrier business model, the number of seats offered at lower fares in these markets had been strictly limited to prevent price dilution. Over the last few years, low-fare carriers have demonstrated an increasing tendency toward exploiting unmet demand for lower priced service in long-haul markets. Some, in a new development, have commenced non-stop transcontinental services. One example of this is the rapid growth of JetBlue's non-stop services between the New York and Washington metropolitan areas and the West Coast since it began operations in 2000. Another example is provided by Southwest, primarily a short-haul carrier, which began Baltimore-Los Angeles non-stop flights during the 3<sup>rd</sup> quarter of 2002. Between the 3<sup>rd</sup> quarter of 2000 and the 3<sup>rd</sup> quarter of 2002, among the top 1000 domestic markets, Frontier, JetBlue, Spirit, and Southwest all grew long-haul traffic at a faster rate than their medium and short-haul traffic.

{Note: The analysis below is based on composite cities to account for inter-airport competitive dynamics in metropolitan areas with multiple airports. See Appendix A for this list of cities as well as for a definition of "low-fare carriers."}

### **Growth of Low-Fare Competition in the Top 1000 Domestic Markets**

Comparing the top 1000 domestic markets in the 3rd quarter of 2002 (3Q2002) to the 3rd quarter of 2000 (3Q2000) reveals that low-fare carriers continue to expand their reach. In 3Q2000, low-fare carriers had obtained a competitive market presence<sup>3</sup> in 547 of the top 1000 markets; by 3Q2002, this number increased to 632 markets. In terms of passengers, in 3Q2000, 69% of the passengers traveling in top 1000 markets in 3Q2000 were traveling in markets where there was low-fare carrier competitive presence. By 3Q2002, this percentage grew to 76%. Overall low-fare carrier market share in the top 1000 markets increased from 26.9% in 3Q2000 to 30.2% in 3Q2002.

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<sup>1</sup> See *Domestic Airline Fares Consumer Report, Third Quarter 2001 Passenger and Fare Information*, U.S. Department of Transportation, August 2002.

<sup>2</sup> For the purpose of this analysis, we have divided market distances into three groups. "Short-haul" is defined as less than or equal to 750 miles, "medium-haul" is 751-1500 miles, and "long-haul" is greater than 1500 miles.

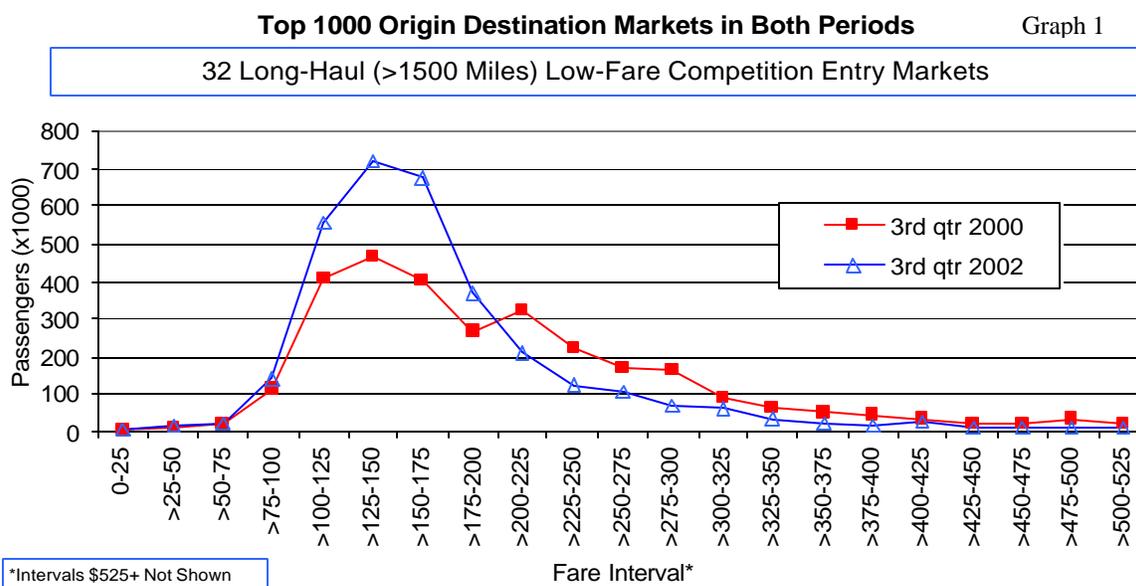
<sup>3</sup> For the purpose of this analysis, competitive market presence is achieved when aggregate low-fare carrier market share reaches or exceeds 10%. For the purpose of this analysis, the 10% benchmark also signifies our threshold for low-fare "entry."

While the growth of low-fare carriers is not a new development, what has changed recently is where that growth is occurring. While low-fare competition grew in all stage lengths among the top 1000 markets, low-fare carriers achieved competitive presence in 26.9% additional long-haul markets in 3Q2002, compared to 4.7% additional short-haul markets. Despite this increasing growth in long-haul markets, as of the third quarter of 2002, only 53% of long-haul markets had low-fare competition, compared to 66% of short-haul markets. In terms of market share, while low-fare carrier share in long-haul markets grew from 12.5% to 17.3% between 3Q2000 and 3Q2002, this number still pales in comparison to low-fare carrier market share in short-haul markets (41.6% in 3Q2002), indicating that plenty of growth opportunities remain for low-fare competition in long-haul markets. Service additions announced since the period covered by this Fare Report indicate that further expansion is occurring. For example, in May 2003, JetBlue began non-stop service in the Atlanta-Los Angeles (Long Beach) and south Florida (Fort Lauderdale)-Los Angeles (Long Beach) markets and commenced New York-San Diego flights in late June 2003. In June 2003, AirTran also extended its network westward to Los Angeles as well as to Las Vegas with new flights from its Atlanta hub, thereby creating new competition to these cities from many points on the East Coast and in the Midwest. Southwest began flying non-stop between Baltimore and San Jose in January 2003 and non-stop between Baltimore and San Diego in July 2003.

### The Impact of Low-Fare Competition on Traffic and Fares in Top 1000 Long-Haul Markets

{Note: The analysis below focuses on the 923 markets that appeared in the top 1000 in both 3Q2000 and 3Q2002.}

An analysis of the impact of the growth of low-fare carriers in long-haul markets reveals that low-fare competitive presence was achieved in 32 new long-haul markets between 3Q2000 and 3Q2002. In these markets, average fares declined 28.5%. Graph 1 illustrates that, while the largest concentration of passengers was still paying between \$125 and \$150 in 3Q2002, many more passengers were traveling in that and several other fare intervals below \$200 than in 3Q2000. Meanwhile, demand at the higher end of the fare structure has dropped off dramatically, as evidenced by the declines in traffic in intervals above \$200.



While the large average fare decline in the markets with low-fare carrier entry is not surprising, it is atypical that, despite the entry of low-fare competition and a concomitant decline in average fare, the

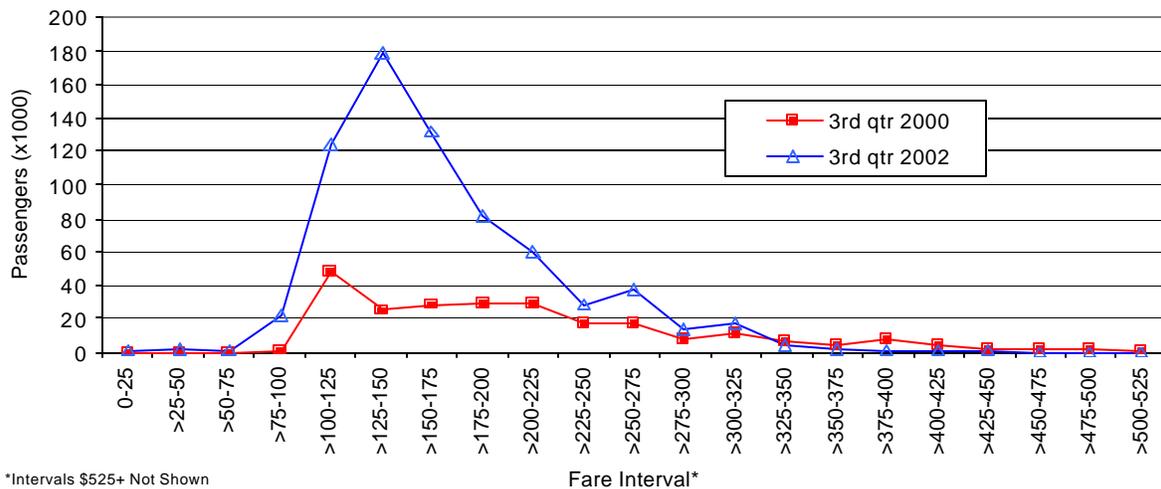
net number of passengers flying in these markets declined by 1.5%. Further examination of the results by carrier indicates that the major network carriers and low-fare competitors are faring quite differently in these markets.

Graphs 2 and 3 below illustrate what has happened to the distribution of traffic by fare interval between the low-fare carrier and other carrier groups in the 32 long-haul, low-fare entry markets. Low-fare carriers' traffic grew 179%, the vast majority of which was concentrated in a narrow band between \$100 and \$225. Meanwhile, traffic on other carriers declined 15.5%, despite a 25% decrease in other carriers' average fare. (Despite this drop in other carriers' average fare, the other carriers' average fare of \$256, was still 51% higher than the low-fare carriers' average fare.) It is also apparent from Graph 3 that there has been a substantial decline in the number of passengers paying more than \$200. The combination of rapid low-fare carrier growth and other carrier losses resulted in an increase in low-fare carrier market share from 7.2% in 3Q2000 to 20.4% in 3Q2002. While JetBlue was a large driver of this increase, as its market share grew from 1.1% to 8.9%, ATA, Frontier, Southwest, and Spirit contributed as well. Southwest's market share increased from 2.5% to 3.9%, Spirit's from 0% to 2.7%, ATA's from 1.1% to 1.8%, and Frontier's from 1.1% to 1.7%.

**Top 1000 Origin Destination Markets in Both Periods**

Graph 2

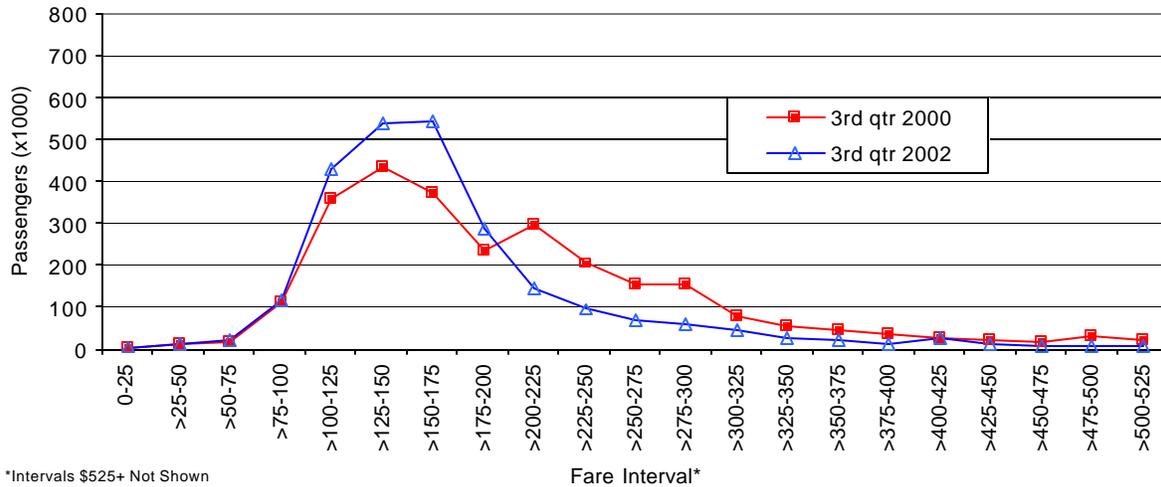
32 Long-Haul (>1500 Miles) Low-Fare Competition Entry Markets, "Low-Fare" Carriers Only



**Top 1000 Origin Destination Markets in Both Periods**

Graph 3

32 Long-Haul (>1500 Miles) Low-Fare Competition Entry Markets, "Other" Carriers Only



The New York-Los Angeles market is representative of the overall trend in these 32 markets. While New York-Los Angeles showed only moderate passenger growth of 3% despite a 25% drop in average fare from \$361 to \$270, dividing the market into traffic flown by low-fare competitors versus that flown by other carriers paints a diametrically opposed picture. Between 2000 and 2002, low-fare carriers grew their traffic by 171% on a 19% decrease in low-fare carrier average fare. Meanwhile, other carriers' traffic declined 13% despite a 21% decrease in other carriers' average fare. As a result of these changes, low-fare carrier market share in the New York-Los Angeles market grew from 8.6% to 22.7% over this two-year period. While JetBlue was a large driver of this increase, as its market share grew from 2.5% to 14.6%, Spirit and ATA contributed as well. Spirit's market share more than doubled from 0.4% to 2.2%, while ATA grew its share from 2.2% to 2.8%.

In the past we have observed that low-fare carrier entry typically results in a dramatic decline in fares and a large increase in overall market size. In this case, overall traffic declined slightly despite a large decrease in average fare. However, the average fare declined by a larger percentage in the 32 long-haul markets with low-fare entry (28.5%) than it did in the 83 long-haul markets that did not have low-fare competition in either period (23.4%). Traffic also declined in long-haul, low-fare carrier entry markets to a lesser degree (1.5%) than traffic in long-haul markets with no low-fare competition in either period (7.6%). Furthermore, the disproportionate size of several of the long-haul, low-fare entry markets obscures the fact that 15 of these 32 markets grew during a period when overall traffic in markets in the top 1000 (in both 3Q2000 and 3Q2002) declined 10.8%.

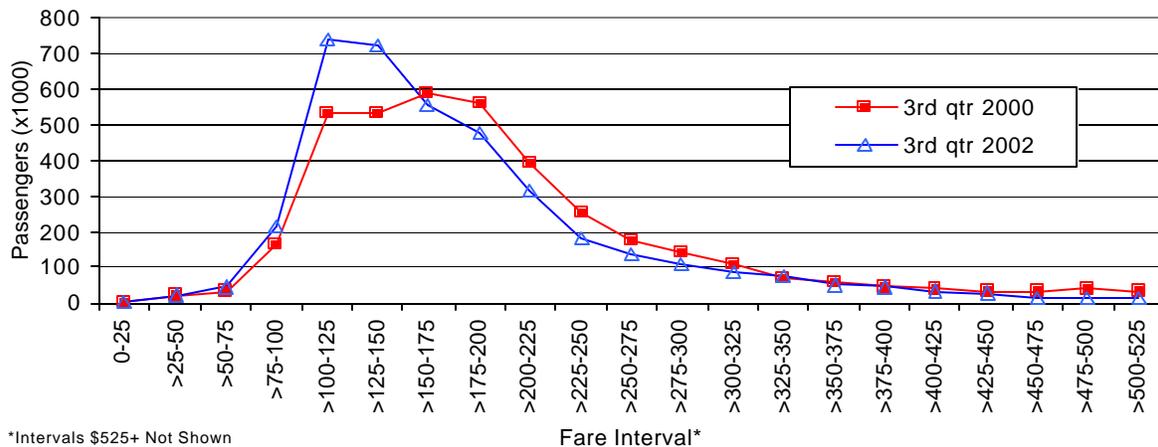
It is important to view these results against the backdrop of the unprecedented confluence of forces the airline industry has confronted over the period covered by this analysis, including the events of September 11, a weak economy, increasing business traveler price sensitivity, and greater price transparency enabled by the internet. In this context, the results in the long-haul, low-fare carrier entry markets described above are indicative of a continuation of the typical trend observed in markets after low-fare entry, albeit manifested in a different form due to the challenging economic environment. (Indeed, replicating the same analysis for short-haul markets for the same period shows the typical pattern of market stimulation; traffic grew 31.5% in short-haul markets where low-fare competition entered, compared to a drop in traffic of 20.7% in short-haul markets with no low-fare competition in either period.)

The average fare in long-haul markets without low-fare competition in either period declined to a similar degree as in long-haul markets with entry by low-fare competition. This is likely attributable to the challenging economic environment. As a result, Graph 4 below looks very similar to Graph 3, despite the lack of low-fare carrier entry in the set of markets represented in Graph 4. While traffic in lower fare intervals grew, traffic in intervals above \$150 declined and the net result was fewer passengers. The largest fare interval by passenger volume shifted down from \$150-\$175 in 2000 to \$100-\$125 in 2002 even without the price disciplining influence of low-fare entry.

**Top 1000 Origin Destination Markets in Both Periods**

Graph 4

Long-Haul (>1500 Miles) Markets with No Low-Fare Competition In Either Period



### Overall Traffic and Fares in the Top 1000 Markets

Taking a broader perspective, the overall demand for air travel in the 923 markets that were in the top 1000 in both 3Q2002 and 3Q2000 dropped precipitously when comparing the two periods. Despite the fact that fares declined by an average of 13%, traffic for the quarter was still down 10.8%, or roughly 8 million passengers. Traffic in short-haul markets has been impacted the most, with a decline in traffic of 17.8% on a 6.2% decline in average fare. Medium-haul and long-haul traffic declined 5.6% and 3%, respectively on average fare declines of 13.5% and 24.3%.

All indications suggest that many air travel consumers have become increasingly price sensitive over the past few years. In markets that appeared in the top 1000 in both periods, the vast majority of the overall decline in passengers between 3Q2000 and 3Q2002 occurred at fares above \$175. About one-fifth of the overall passenger decline occurred at fares above \$525. Meanwhile, traffic in low-fare intervals has remained relatively constant.

Despite having to face the most difficult airline operating environment in history over the past three years, carriers with low costs enabling them to charge lower fares have still been able to make profits. Other carriers are making changes to their business models and cost structures in an effort to return to profitability. In future Special Features, we will examine the continuing evolution of low-fare carrier business models as well as how the large network carriers respond as they restructure their businesses to adapt to the new environment.

Appendix A

Composite Cities for the Purpose of the Special Feature Analysis	
Boston, MA	BOS
	MHT
	PVD
Chicago, IL (CHI)	MDW
	ORD
Cleveland, OH	CAK
	CLE
Dallas/Ft. Worth, TX	DAL
	DFW
Detroit, MI	DET
	DTW
Houston, TX	EFD
	HOU
	IAH
Kansas City, MO (MKC)	MCI
Los Angeles, CA	BUR
	LAX
	LGB
	ONT
	SNA
Miami, FL	FLL
	MIA
New York, NY (NYC)	EWR
	JFK
	LGA
Norfolk, VA	ORF
	PHF
San Francisco, CA	OAK
	SFO
	SJC
Tampa/St. Petersburg/Lakeland, FL	PIE
	TPA
Washington, DC (WAS)	BWI
	DCA
	IAD

Low-Fare Carriers for the Purpose of the Special Feature Analysis	
B6	JetBlue Airways
F9	Frontier Airlines, Inc.
FL	AirTran Airways Corporation
N7*	National Airlines
NJ*	Vanguard Airlines, Inc.
NK	Spirit Air Lines
P9*	Pro Air, Inc.
SY	Sun Country Airlines
TZ	American Trans Air, Inc.
WN	Southwest Airlines, Co.
XP	Casino Express

\*carrier has ceased operations