Office of Aviation and International Affairs, Aviation Analysis

Independence Brings More Low-Fare Competition to the East Coast – First Quarter 2005

Domestic Aviation Competition Issue Brief Number 27

In 2003, Washington Dulles-based Atlantic Coast Airlines announced plans to transition its business model from contract regional aircraft provider for major airline partners United and Delta to independent low-fare carrier. The rebranded carrier, Independence Air, inaugurated operations on June 16, 2004, with nonstop flights between Dulles and six cities. Over the following months, the company transitioned its fleet of 50-seat Canadair Regional Jet (CRJ) aircraft from regional affiliate operations to Independence Air operations, adding cities to its route map in a number of waves. By September 2004, Independence was operating to more than 35 cities across the Eastern half of the United States.

During the fourth quarter of 2004, Independence began operating its first 132-seat A319 aircraft. The addition of A319s to the fleet enabled Independence to initiate service between Dulles and a number of large Florida markets in time for the peak winter vacation season. The A319s have also allowed Independence to begin service between Dulles and the West Coast. The addition of the Airbus A319 markets have helped to boost load factors in recent months; Independence's load factor for July 2005 was 79%, up from levels as low as the 40% range earlier in its history.

In this Special Feature, we examine the impact that Independence has had on fares and traffic in the Washington and Baltimore markets. During the third and fourth quarters of 2004, Independence was not required to report traffic and fare data to DOT because it did not yet operate any aircraft with more than 60 seats.[1] Therefore, we were only able to indirectly observe the impact that competition from Independence had on traffic and fares in markets across the East Coast through the traffic and fare data reported to DOT by Independence's competitors. Despite the absence of Independence's data, many Washington markets were among those that experienced the largest reductions in average fare, as illustrated in Table 4 of our Fare Reports for the previous two quarters. However, with Independence's introduction of the 132-seat A319 during the fourth quarter of 2004, Independence began reporting traffic and fare data to DOT during the first quarter of 2005. As a result, we now have a more complete picture of the impact of Independence's entry on fares and traffic in affected markets.

While the inclusion of Independence's data provides a much improved ability to understand the changes occurring in its markets, data limitations affecting the analysis persist. In certain Independence markets, competitors operate some or all of the service with regional affiliate carriers that are not required to report data to DOT. Most significantly for this analysis, United replaced some of its United Express flights formerly operated by Atlantic Coast with flights operated by Chautauqua and Shuttle America, neither of which met the reporting threshold as of the first quarter of 2005. In such cases, new market sizes are understated and the average fare calculation is missing data points from these carriers. Similarly, in making year-over-year comparisons, one must also exercise caution in interpreting the results because, to the extent Atlantic Coast (or another regional carrier that did not have to report data at that time) operated a significant portion of the service in a given market in the prior period, the traffic and fare data in that prior period may not be representative of actual market characteristics. In such cases, year-over-year comparisons likely overstate true traffic growth rates and fare declines. Because of these limitations, we

[1] DOT regulations require U.S. carriers to submit O&D Survey data only if they operate aircraft with more than 60 seats. The practical result of this regulation is that certain regional carriers are not required to report O&D data. With the tremendous growth in the regional airline sector, the absence of this data has become an increasing problem. DOT is in the process of evaluating its airline data regulations in light of this and other changes in the industry.

have highlighted markets where more than half of the nonstop capacity was operated by carriers that did not have to report data to DOT. While the numbers in these markets in particular are not as precise as we would like, they still provide a sense of the magnitude of Independence's impact.

Impact on the Washington Market

During the first quarter of 2005, Independence operated flights for the entire quarter between Dulles and 36 cities.[2] Figure 1 provides Washington (combining Dulles and Reagan National) market-level average fare data for each of these markets in ascending order of year-over-year percentage change. For the reasons provided in the introduction, we have highlighted markets where missing data has the greatest potential to impact the validity of the analysis. These markets, where carriers for which we do not have traffic and fare data operated more than half of the nonstop capacity in one or both of the quarters being examined, are highlighted in yellow. Please be aware that traffic growth rates are likely to be overstated in these markets in particular. Actual percentage fare declines may be higher or lower than those provided, depending on the representativeness of the limited sample data we have in these cases.

[2] This figure excludes service to Dayton, OH; Lansing, MI; Las Vegas, NV; West Palm Beach, FL; and Fort Myers, FL. Independence cancelled service to Dayton and Lansing in January. Independence began service to Las Vegas, West Palm Beach, and Fort Myers after the beginning of the first quarter.

Figure 1

Changes in Washington (Dulles + Reagan National) Market Average Fares and Traffic in Independence Air Markets - 1Q05 vs. 1Q04 - In Ascending Order of Average Fare Change							
Washington Market	Independence Air Market Share 1Q05	Average Fare 1Q04	Average Fare 1Q05	**Fare % Change**	Fared Passengers 1Q04	Fared Passengers 1Q05	Passengers % Change
Newburgh (Stewart), NY	98%	$276	$97	-65%	420	6,680	1490%
Charleston, WV	80%	$311	$110	-65%	2,690	12,660	371%
Greenville/Spartanburg, SC	54%	$263	$105	-60%	5,800	27,890	381%
Greensboro/High Point, NC	64%	$270	$108	-60%	5,650	19,200	240%
Norfolk, VA	41%	$274	$121	-56%	3,520	15,380	337%
Knoxville, TN	48%	$271	$121	-55%	9,780	26,180	168%
Rochester, NY	64%	$234	$111	-52%	4,060	20,390	402%
Charlotte, NC	29%	$314	$150	-52%	24,900	61,490	147%
Columbia, SC	46%	$260	$125	-52%	9,200	29,680	223%
Syracuse, NY	46%	$262	$127	-52%	7,490	26,950	260%
Cleveland, OH	18%	$263	$127	-52%	14,030	41,710	197%
Detroit, MI	10%	$237	$118	-50%	56,270	115,320	105%
White Plains/Westchester County, NY	60%	$231	$116	-50%	5,620	22,200	295%
Burlington, VT	52%	$232	$118	-49%	6,920	23,840	245%
Pittsburgh, PA	48%	$317	$163	-49%	16,370	33,500	105%
Charleston, SC	42%	$247	$130	-48%	14,020	45,160	222%
Buffalo, NY	53%	$216	$113	-48%	4,240	15,740	271%
Louisville, KY	48%	$243	$129	-47%	9,370	22,360	139%
Portland, ME	41%	$243	$131	-46%	7,650	25,690	236%
Albany, NY	44%	$216	$117	-46%	10,000	23,070	131%
Columbus, OH	30%	$195	$107	-45%	25,220	39,800	58%
Raleigh/Durham, NC	24%	$181	$102	-43%	34,960	61,640	76%
Nashville, TN	39%	$231	$131	-43%	13,740	43,580	217%
Indianapolis, IN	38%	$222	$128	-42%	23,310	35,830	54%
Manchester, NH	47%	$204	$119	-42%	13,000	23,450	80%
Hartford, CT	27%	$197	$120	-39%	23,300	49,910	114%
Providence, RI	27%	$207	$133	-36%	20,990	44,450	112%
Savannah, GA	54%	$167	$116	-30%	10,120	28,550	182%
Huntsville, AL	43%	$245	$172	-30%	23,310	34,500	48%
Boston, MA	11%	$200	$141	-29%	167,000	228,610	37%
Chicago, IL	7%	$182	$139	-24%	213,270	260,870	22%
Tampa, FL	21%	$174	$134	-23%	86,360	141,220	64%
Atlanta, GA	7%	$161	$126	-22%	239,740	303,260	26%
Orlando, FL	24%	$156	$133	-15%	160,330	214,440	34%
Jacksonville, FL	33%	$155	$134	-13%	27,090	61,260	126%
New York, NY	9%	$140	$129	-8%	328,970	400,460	22%

Markets highlighted in yellow are those where at least 50% of the nonstop capacity in either or both quarters was operated by carriers for which we do not have O&D data.

The results in Figure 1 illustrate that Independence has had a tremendous impact on fares and traffic in its Washington markets. Almost all markets saw reductions in average fare of more than 30%.
The Washington-Newburgh, NY market, which had also almost no traffic last year, exhibited both the largest percentage decline in average fare and the largest percentage increase in traffic. (Last year, no airline offered nonstop service between Washington and Newburgh, a 251 mile trip.) The Charleston, WV market experienced the second largest percentage fare decline. Last year, when the only nonstop options in the market were United Express flights from Dulles and US Airways Express flights from Reagan National, the average fare was $311. This year, with Independence in the market from Dulles, the average fare fell to $110, a decline of 65%. Figure 1 shows that fares declined in every Washington market served by Independence, with a combination of small, medium, and legacy hub markets exhibiting the largest percentage declines. Additionally, although the details are not broken out here, the average fare fell at *both* Dulles and Reagan National in almost every market served by Independence from Dulles.

Our quarterly Fare Reports include information on average fare premiums at domestic airports.[3] During the first quarter of 2004, before Independence's entry, Dulles travelers paid on average 33% more than

[3] For airports that appear within the 1000 largest city-pairs within the continental U.S. and for markets with more than one passenger per day.

the national average. During the first quarter of 2005, with Independence in the market, Dulles fares were on average 9% higher than the national average. By this metric, Dulles fares fell from sixth highest during the first quarter of 2004 to twenty-fifth highest during the first quarter of 2005. Reagan National's fare premium fell from 27% to 15% during the same comparison period.

Impact of Independence Air's Entry at Dulles on BWI

We typically define *Washington* city-pair markets as including only Washington Dulles (IAD) and Reagan National (DCA) airports. This definition excludes Baltimore/Washington Airport (BWI). In certain cases, we have observed that competition at BWI, located approximately thirty miles from downtown Washington, can influence traffic and fares at Washington Dulles and/or Reagan National airports, particularly in cases where a low-fare carrier begins offering service from BWI.[4] BWI has extensive service by low-fare carriers. Southwest's operations at BWI are among the largest of any airport in its system and Southwest is by far the largest carrier at BWI. The size of AirTran's operation at BWI is second only to that of its Atlanta hub and AirTran is BWI's second largest carrier. BWI is also served by Frontier and USA 3000. Independence Air's entry has changed the dynamic among the three Washington/Baltimore area airports – instead of low-fare entry at BWI affecting Washington, here the effect has occurred in the opposite direction.

Figure 2 illustrates the year-over-year changes in traffic and average fare between BWI and each of the 36 cities served by Independence from Dulles for the entire first quarter of 2005 (the same list of cities that appeared in Figure 1 above). The markets are sorted in ascending order of the year-over-year percentage change in traffic. BWI traffic declined in all but four of the 36 markets served by Independence from Dulles,[5] with traffic in a number of markets falling more than 25%. Overall, across these 36 markets, BWI traffic fell 13%. Notably, in almost all markets, traffic declined in the face of fare reductions, although the fare reductions were small in many markets and 10% or less in a majority of markets. The decline in BWI traffic in the face of lower prices suggests that, in these markets, the Washington airports captured some price-sensitive traffic that had been using BWI prior to Independence's entry.[6] The data indicates that with the ability to obtain lower fares relative to last year from a Washington airport and in certain cases the added bonus of lower fare *nonstop* service from a Washington airport where only *connecting* options existed at BWI (e.g. Charleston, WV), many travelers chose to use a Washington airport rather than BWI. The amount of traffic lost by BWI in the face of the availability of reduced fares at Washington in these markets is a testament to the number of people that were willing to use what for them may have been a less convenient airport in order to travel at a low fare.

[4] The competitive interaction among BWI, DCA, and IAD varies by market and can be influenced by, among other factors, the carriers involved, the type of market (business/leisure, hub/non-hub), the size of the market, relative capacity, and relative frequency. As a general proposition, competition among the three airports is more vigorous for price-sensitive leisure passengers than for typically less price-sensitive business travelers.

[5] Unlike in many of the Dulles markets relevant to this analysis, we have complete data for almost all relevant BWI markets. The only relevant BWI market with missing data is White Plains/Westchester County, where nonstop service is operated by CommutAir as Continental Connection. Segment traffic declined in this market, almost certainly indicating that O&D traffic fell given the point-to-point nature of this route.

[6] To be sure, the entry of Independence was not the only year-over-year change in the competitive dynamics in these markets (e.g., as discussed below, US Airways began nonstop service between Reagan National and Cleveland), however, it was a major factor in all cases.

Figure 2

Changes in Baltimore Market Average Fares and Traffic in Independence Air Washington Markets - 1Q05 vs. 1Q04 - In Ascending Order of Average Fare Change						
Baltimore Market	Average Fare 1Q04	Average Fare 1Q05	Fare % Change	Fared Passengers 1Q04	Fared Passengers 1Q05	**Passengers % Change**
White Plains/Westchester County, NY	$333	$326	-2%	80	40	-50%
Charleston, WV	$187	$176	-6%	1,990	1,000	-50%
Greensboro/High Point, NC	$211	$194	-8%	7,370	5,150	-30%
Cleveland, OH	$79	$81	2%	76,810	53,730	-30%
Raleigh/Durham, NC	$80	$79	-1%	55,100	38,740	-30%
Manchester, NH	$76	$74	-3%	107,230	78,950	-26%
Syracuse, NY	$204	$195	-5%	6,020	4,450	-26%
Huntsville, AL	$151	$170	13%	8,060	5,960	-26%
Louisville, KY	$92	$85	-7%	45,870	34,160	-26%
Providence, RI	$76	$74	-3%	116,200	87,260	-25%
Albany, NY	$72	$72	-1%	45,050	33,880	-25%
Nashville, TN	$108	$105	-3%	73,010	55,210	-24%
Indianapolis, IN	$130	$105	-20%	31,320	23,830	-24%
Knoxville, TN	$240	$212	-12%	2,930	2,230	-24%
Rochester, NY	$91	$89	-3%	23,830	18,840	-21%
Columbia, SC	$237	$220	-7%	3,470	2,780	-20%
Buffalo, NY	$72	$71	-2%	52,830	42,780	-19%
Hartford, CT	$78	$75	-4%	69,080	56,280	-19%
Charleston, SC	$223	$201	-10%	7,140	5,860	-18%
Norfolk, VA	$73	$74	0%	20,510	17,110	-17%
Detroit, MI	$219	$173	-21%	35,280	29,730	-16%
Columbus, OH	$90	$81	-10%	38,220	32,440	-15%
Savannah, GA	$154	$148	-4%	7,890	6,790	-14%
Burlington, VT	$256	$212	-17%	1,500	1,360	-9%
Boston, MA	$100	$91	-9%	102,700	93,320	-9%
Chicago, IL	$132	$115	-13%	133,430	121,700	-9%
Atlanta, GA	$145	$134	-7%	117,200	108,160	-8%
Greenville/Spartanburg, SC	$271	$206	-24%	3,070	2,870	-7%
Tampa, FL	$129	$115	-11%	113,430	107,250	-5%
Pittsburgh, PA	$303	$293	-3%	7,040	6,720	-5%
Portland, ME	$252	$183	-27%	1,650	1,620	-2%
Jacksonville, FL	$130	$125	-4%	40,570	40,500	0%
Newburgh (Stewart), NY	$301	$157	-48%	130	130	0%
Orlando, FL	$126	$117	-8%	174,250	193,860	11%
New York, NY	$182	$170	-7%	12,190	14,470	19%
Charlotte, NC	$315	$251	-20%	15,150	18,360	21%

Markets highlighted in yellow are those where at least 50% of the nonstop capacity in either or both quarters was operated by carriers for which we do not have O&D data.

Taken together, Figures 1 and 2 show that in almost all markets affected by Independence, Washington traffic grew while Baltimore traffic fell. At face value, our data shows that combined Washington/Baltimore traffic grew in almost every market entered by Independence and that, collectively, combined Washington/Baltimore traffic increased 23% across these markets. In other words, traffic declines at Baltimore were more than offset by traffic increases, including both diverted and incremental passengers, across the two Washington airports. However, in certain markets, the extent of the stimulation is overstated by missing data in the base period, in particular from Independence's former role as a regional feeder for United at Dulles. Despite this missing data, it is reasonable to assume that combined Washington/Baltimore traffic increased in most affected markets, particularly in those that did not have low-fare competition prior to Independence's entry. However, the case study below examines a situation where it appears that new competition simply caused a reallocation of traffic among the three airports rather than stimulation of new traffic.

The changing dynamics of the Cleveland-Washington/Baltimore area market create an interesting case study. First, the market links the hubs of two legacy carriers, United and Continental. United serves the market nonstop from Dulles. Continental serves the market nonstop from Dulles, National, and BWI. Second, another legacy carrier, US Airways, began nonstop service between Cleveland and Reagan National in February 2005. Third, Southwest offers nonstop service between BWI and Cleveland. In sum, last year, there were three nonstop carriers (Continental, United, and Southwest) across three airports. This year, there were five nonstop carriers (the existing three plus US Airways and Independence) across the three airports. Figure 3 illustrates the changes in nonstop capacity by carrier by airport comparing 1Q04 versus 1Q05. Overall Washington/Baltimore-Cleveland capacity was 20% higher during 1Q05 versus 1Q04.

Figure 3

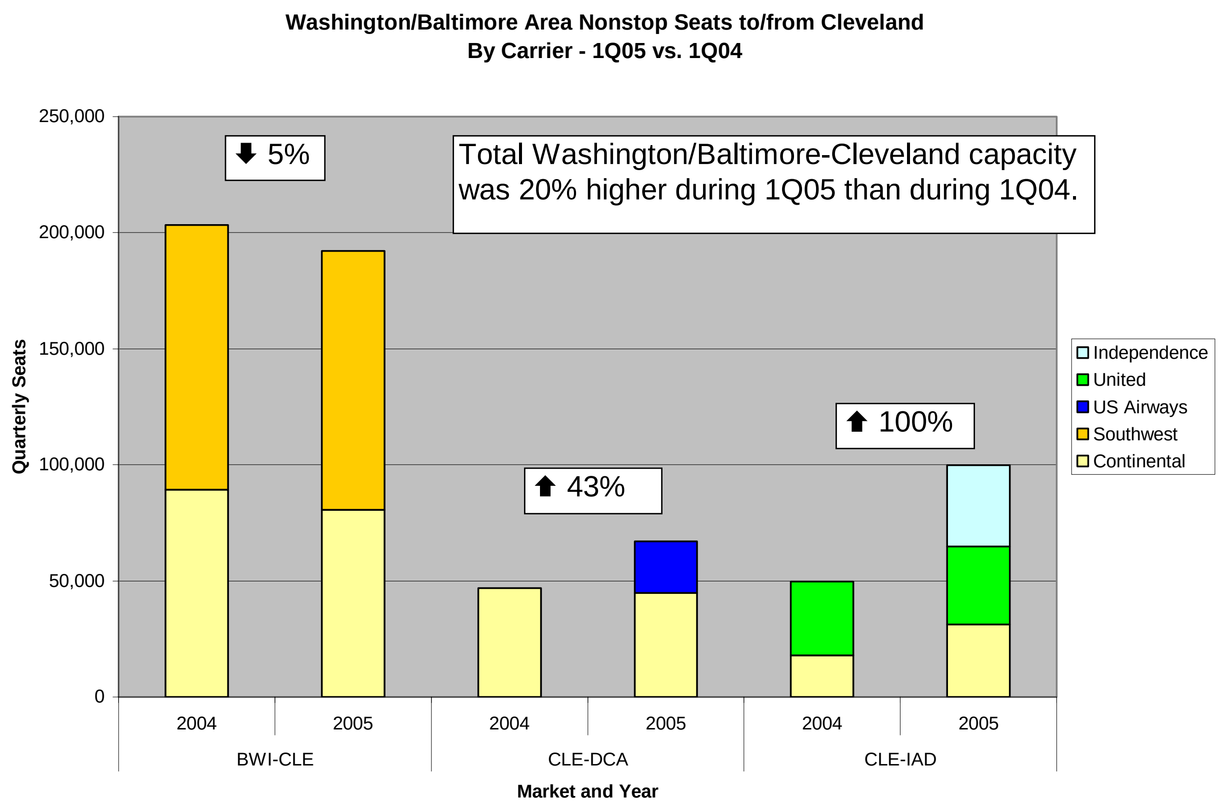


Figure 4 summarizes the changes in average fare, traffic, and market share by airport pair by carrier.[7]

[7] United's Dulles-Cleveland service was operated by Atlantic Coast during 1Q04. Atlantic Coast did not report traffic and fare data. For this case study, we estimated United's 1Q04 traffic by using segment passenger data and assuming that United's local versus connecting traffic mix was similar to that of Continental.

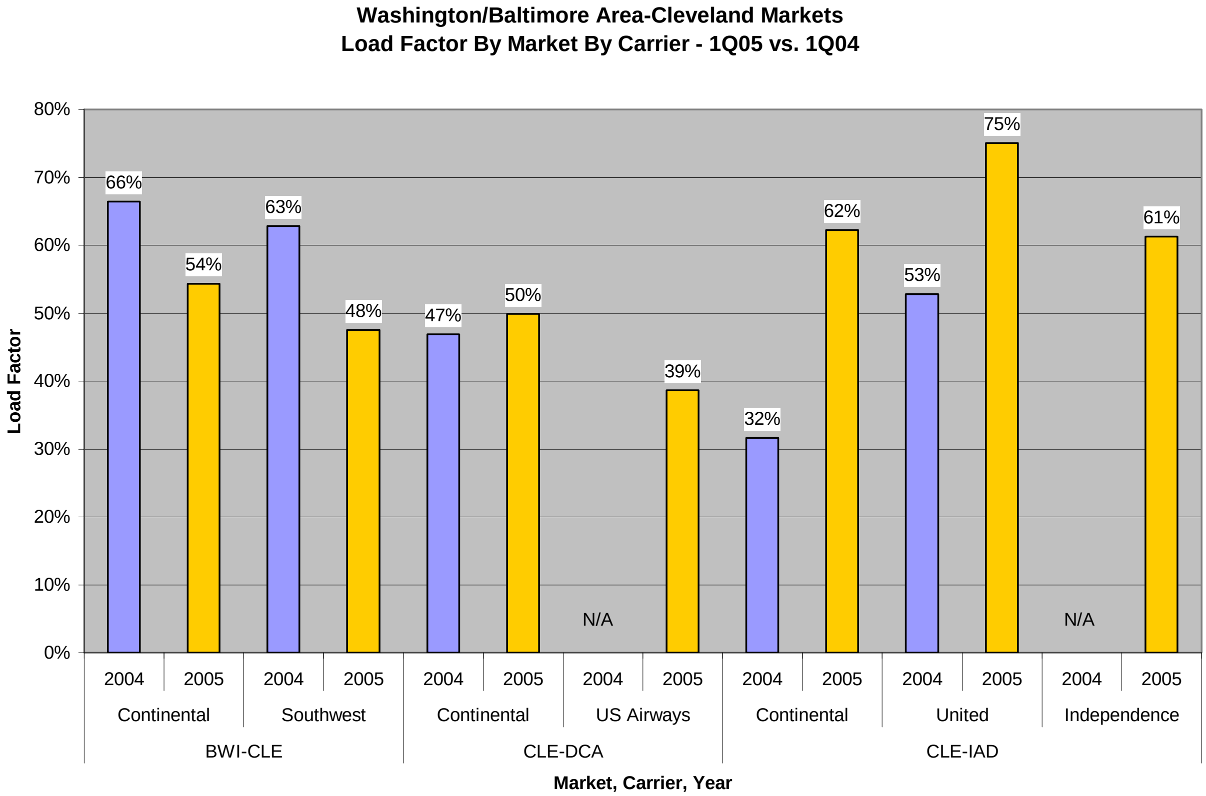
Figure 4

Carrier	Market	Average Fare 1Q04	Average Fare 1Q05	Fare % Change	Fared Passengers 1Q04	Fared Passengers 1Q05	Passengers % Change	Airport's Share of Wash/Balt Market 1Q04	Airport's Share of Wash/Balt Market 1Q05	Share Change in Points
Changes in the Washington/Baltimore-Cleveland Market - 1Q05 vs. 1Q04										
Continental	BWI-CLE	$77	$79	3%	34,480	26,440	-23%			
Southwest	BWI-CLE	$79	$80	2%	40,880	26,330	-36%			
All Others	BWI-CLE	$116	$127	9%	1,450	960	-34%			
BWI-CLE Total		$79	$81	2%	76,810	53,730	-30%	80.9%	56.3%	-24.6%
Continental	DCA-CLE	$262	$198	-24%	11,880	12,650	6%			
US Airways	DCA-CLE	$196	$114	-42%	170	3,920	2206%			
All Others	DCA-CLE	$285	$136	-52%	360	710	97%			
DCA-CLE Total		$261	$177	-32%	12,410	17,280	39%	13.1%	18.1%	5.0%
Continental	IAD-CLE	$279	$92	-67%	1,460	10,720	634%			
Independence	IAD-CLE	n/a	$81	n/a	n/a	7,300	n/a			
United (Estimated)	IAD-CLE	$252	$102	-59%	4,201	6,220	48%			
All Others	IAD-CLE	$264	$237	-10%	90	190	111%			
IAD-CLE Total		$259	$92	-64%	5,751	24,430	325%	6.1%	25.6%	19.5%
BWI/DCA/IAD-CLE Total		$114	$101	-11%	94,971	95,440	0%			

Figure 4 provides several insights. First, as would be expected, the Dulles-Cleveland market exhibited the most dramatic year-over-year change. The Dulles-Cleveland market average fare fell by 64%, from $259 to $92. Market traffic increased 325%. Second, due to the combination of 1) Independence's entry at Dulles and 2) US Airways' entry into Reagan National in competition with incumbent Continental, the DCA-Cleveland market average fare declined 32% while traffic increased 39%. Note, however, that while DCA-Cleveland fares have fallen, there is no head-to-head low-fare competition in that airport-pair market. Consequently, the average fare in the DCA-Cleveland market is still about twice as high as the BWI-Cleveland and IAD-Cleveland average fares. Third, and most importantly, despite a flat average fare (and relatively stable capacity – down 5%), Baltimore-Cleveland traffic fell 30% as both Continental and Southwest experienced large losses in traffic. With the ability to obtain a similarly low fare at Dulles and a lower fare at Reagan National this year, a significant number of Cleveland passengers used these airports rather than BWI. As a result of the leakage from BWI, traffic in the overall Washington/Baltimore area-Cleveland market was flat. However, despite the decline at BWI, more than half of Washington/Baltimore area-Cleveland passengers still flew into and out of BWI, where more capacity was offered than in the IAD-Cleveland and DCA-Cleveland markets combined.

Figure 4 showed that BWI-Cleveland origin and destination traffic fell 30% while Figure 3 showed that total BWI-Cleveland capacity fell only 5% year-over-year. What was the impact on BWI load factors? Figure 5 below shows load factors for all Washington/Baltimore area-Cleveland markets by carrier for 1Q05 vs. 1Q04.

Figure 5



In the BWI-Cleveland market, where fares were already low prior to Independence's entry, Continental/Continental Express' load factor fell from 66% to 54% while Southwest's load factor fell from 63% to 48%. In the IAD-Cleveland market, both Continental's and United's Dulles-Cleveland load factors increased substantially as they sold many more low fare seats in response to new competition from Independence. For its part, Independence achieved a load factor of 61%.

Looking Forward

In previous reports we have documented the dramatic fare reductions and explosive traffic growth that occur when low-fare carriers enter legacy carrier dominated markets. The market's response to low-fare carrier entry shows that there is a tremendous pool of demand for low-fare air travel, demand that until recently was not typically satisfied by legacy carrier business models focused on constraining capacity to avoid dilution of high-end revenue. With the expansion of low-cost carrier competition in the domestic market, more of that previously untapped demand is finally being satisfied. While there is clearly tremendous demand for low-fare travel, the challenge for airlines is to attain cost structures that enable them to profitably serve it. Airlines having a competitive cost structure and product offering will thrive in the new domestic revenue environment. The huge pool of low-fare demand also speaks to a business opportunity for new entrants with low cost structures (and, of course, a viable product) that can profitably tap into that large segment of the air travel market.