



*The Economic Benefit of Low Cost Carriers to the
Pittsburgh Region-2011 Update*

Prepared for: Allegheny County Airport Authority

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Key Findings

The primary goal of the attached White Paper is to identify economic benefits associated with expanded low-cost carrier (LCC) service at Pittsburgh International Airport. Pittsburgh International Airport's current roster of LCCs includes, JetBlue, Frontier, DirectAir, USA3000 and Southwest/AirTran.

As a rule, airports generally experience an increase in annual passenger enplanements when LCC carriers enter a market as a result of low air fares. Pittsburgh is no exception. Benefits related to LCC service include lower airfares for resident travelers and an increase in local Pittsburgh traffic. The most significant findings of this study are presented below:

1. During the 2000-2010 period, the price of air travel nationwide increased by approximately 45 percent, while at Pittsburgh average fares dropped 16 percent.
2. Originating passengers climbed to a record high of 4.21 million in 2007, with the entrance of Southwest, JetBlue, and other LCCs stimulating latent demand and recapturing passengers from competing LCC airports. Originating passengers decreased to 3.80 million in 2010, due primarily to the global economic downturn, rising ticket prices and less disposable income for Pittsburgh residents.
3. Lower ticket prices resulting from the presence of LCC service at Pittsburgh International Airport in 2010 saved local leisure passengers \$38.71 million which yields 258 direct jobs.
4. Lower ticket prices resulting from the presence of LCC service at Pittsburgh International Airport in 2010 saved local business passengers \$53.8 million.
5. In 2000, 91 percent of originating passengers were from Pennsylvania and 9 percent were from other states. In 2010, 79 percent of originating passengers were from Pennsylvania and 21 percent were from other states which are indicative of lower air fares attracting passengers from greater distances.
6. When the Philadelphia to Pittsburgh LCC route is discontinued, approximately \$21.3 million in annual output to the region's economy will cease. This will result in a loss of nearly 300 jobs with an associated payroll of nearly \$7.0 million.
7. Time savings related to non-stop LCC service on the PHL-PIT route is estimated at an annual aggregated time-savings value of more than \$16.4 million.
8. If the Atlanta to Pittsburgh LCC route was to be discontinued, up to \$91.2 million in annual output to the region's economy would cease. This would result in a job loss of over 1,540 jobs with an associated payroll of nearly \$37.0 million.
9. If two LCCs discontinued operations at the airport and no other LCC carrier operated on the discontinued routes, 33 percent of passenger traffic would be discontinued, since fare sensitive travelers would find alternative modes of travel or not travel to/from Pittsburgh. Just over \$311.5 million in annual output to the region's economy would cease. This would result in a loss of over 3,170 jobs with an associated payroll of just over \$73.9 million.

The Regional Economic Benefit of Low-Cost Carriers at Pittsburgh International Airport

1. Introduction

In 2010 U.S. legacy carriers experienced a boost in sales due to international air travel but lost ground in the domestic travel market to low-cost airlines. This trend is pushing legacy carriers into the role of “trunk carriers”. While some domestic traffic is recovering more slowly for legacy carriers, low-cost carriers have become more entrenched in local markets. With this in mind, this study provides analysis of low cost carrier trends at Pittsburgh International Airport and also analyzes the current economic impact of LCCs at PIT as well as the consequences if LCCs reduce service, such as reduce frequency or drop a route, at PIT. Low-cost carriers operate on a reduced-cost model, typically with a single jet model and simplified routes and fare structures. In the U.S. their routes are often confined to the domestic market. The legacy carrier focuses on their core domestic traffic lanes and international routes.

According to data released in 2011 by AirFinancials.com, domestic carrying capacity for the nation's legacy carriers declined by 85 billion available seat miles between 2003 and 2009, or by 21% on average. Over the same period, domestic capacity among low-cost carriers Southwest Airlines, JetBlue Airways, AirTran and four other small carriers rose by more than 84 billion available seat miles. Many domestic routes the legacy carriers gave up had slim profit margins which allowed LCCs move in and earn profits through their lower-cost model. During this time period legacy carriers expanded in the international routes, particularly as it relates to premium-paying business travel.

A number of LCCs have attempted to enter the Pittsburgh market since the 1990s, with uneven results. ValueJet, Nations Air, JetTrain, Spirit, and Vanguard all offered service during the late 1990s, and America West, Pan Am, Midway, ATA, and Independence Air offered service between late 2000 and early 2006. All of these airlines were forced to withdraw service for a variety of reasons.¹

Pittsburgh's current roster of LCCs includes AirTran, Frontier, JetBlue, and Southwest. USA3000 and Direct Air function as major low-cost carriers, however, on a less-than daily basis. AirTran has the longest tenure among these carriers, with continuous service since December 2000 (see **Exhibit 1**). AirTran faced fierce competition from US Airways from its onset of operations. In fact, as the three LCCs initiated service at Pittsburgh, US Airways protected its 87 percent market share at the airport by matching the fares of LCCs operating on specific routes at the airport. Additionally, US Airways customer loyalty program constrained all LCCs' expansion plans as Pittsburgh residents continued in large numbers to fly the hometown legacy carrier. As shown in Exhibit 1, the other LCCs currently offering service at Pittsburgh entered the market in the following years:

¹ America West merged with legacy carrier US Airways in September 2005.

Exhibit 1
Low-Cost Carrier Activity by Quarter 2000–2011

Quarter	# LCC At PIT	Low Cost Carriers											
2000-1	1			Vanguard									
2000-2	1			Vanguard									
2000-3	1			Vanguard									
2000-4	4	PanAm	Midway	Vanguard	Air Tran								
2001-1	4	PanAm	Midway	Vanguard	Air Tran								
2001-2	4	PanAm	Midway	Vanguard	Air Tran								
2001-3	3		Midway	Vanguard	Air Tran								
2001-4	2			Vanguard	Air Tran								
2002-1	2			Vanguard	Air Tran								
2002-2	2			Vanguard	Air Tran								
2002-3	2			Vanguard	Air Tran								
2002-4	2				Air Tran	Am West							
2003-1	2				Air Tran	Am West							
2003-2	3				Air Tran	Am West	ATA						
2003-3	3				Air Tran	Am West	ATA			USA3K			
2003-4	4				Air Tran	Am West	ATA			USA3K			
2004-1	4				Air Tran	Am West	ATA			USA3K			
2004-2	4				Air Tran	Am West	ATA			USA3K			
2004-3	5				Air Tran	Am West	ATA	Ind Air		USA3K			
2004-4	5				Air Tran	Am West	ATA	Ind Air		USA3K			
2005-1	5				Air Tran	Am West	ATA	Ind Air		USA3K			
2005-2	5				Air Tran	Am West		Ind Air		USA3K	SW		
2005-3	5				Air Tran	Am West		Ind Air		USA3K	SW		
2005-4	4				Air Tran	Am West*		Ind Air		USA3K	SW		
2006-1	4				Air Tran	Am West*		Ind Air		USA3K	SW		
2006-2	4				Air Tran	Am West*				USA3K	SW	JetBlue	
2006-3	4				Air Tran	Am West*				USA3K	SW	JetBlue	
2006-4	4				Air Tran	Am West*				USA3K	SW	JetBlue	
2007-1	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2007-2	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2007-3	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2007-4	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2008-1	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2008-2	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2008-3	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2008-4	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2009-1	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2009-2	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2009-3	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2009-4	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2010-1	5				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2010-2	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2010-3	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2010-4	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2011-1	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2011-2	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air
2011-3	6				Air Tran	Am West*				USA3K	SW	JetBlue	Direct Air

Source: Allegheny County Airport Authority. Legend: Pan Am; Midway; Vanguard; AirTran; America West; ATA; Ind Air = Independence; USA3K = USA3000; SW = Southwest; JetBlue; Direct Air; and Frontier. *America West merged with US Airways in September, 2005.

- USA3000 – December 2003
- Southwest Airlines – May 2005
- JetBlue – June 2006
- Frontier – April 2010

2. Changes in Passenger Volume and Airfares, 2000–2010

World events and new low-fare carrier offerings, namely the entrance of Southwest Airlines, contributed to significant change in passenger counts and average fares at Pittsburgh International Airport between 2000 and 2007. This increase in local demand was originally initiated by AirTran in 2000 and further stimulated by Southwest Airlines entering the Pittsburgh market in 2005. Despite a decrease in passengers in 2002 due to a variety of factors², originating passengers (passengers beginning an itinerary at Pittsburgh International Airport) reached pre-9/11 levels in 2005 and recorded record highs in 2007. While the airport handled a larger number of total passengers in 2000 due to US Airways connecting passengers, Pittsburgh originations (and by extension, local Pittsburgh demand) were at their highest level ever in 2007.

The trend of declining total passenger counts at Pittsburgh International continued from 2007 to 2010 due to decreased US Airways hub activity and associated reduction in flight offerings, the global economic downturn beginning in late 2007, as well as rising air fares. Originating passengers fell below the 2007 peak, but still remained above the pre-9/11 levels. Meanwhile, average fares, which had fallen at Pittsburgh between 2000 and 2006, increased slightly between 2006 and 2010.

For the overall period from 2000 to 2010, Pittsburgh International observed three major trends regarding passenger counts and average fares:

- Total passenger counts decreased 58 percent due to continuing US decline
- Originating passengers increased 2 percent
- Average fares decreased 16 percent

Of particular note among these trends is the stimulation of local demand in the Pittsburgh region. Local demand stimulation is typical of new service by Southwest Airlines, AirTran, JetBlue and other low-cost carriers. Local demand stimulation arises in two ways. First, latent local market demand is increased as passengers that were previously unable to afford air travel are able to do so. Secondly, such new fare offerings are often inexpensive enough to induce new demand from more distant markets, which effectively expands an airport's geographic market area. Increases in markets served by Southwest increased passenger traffic on average 23.5 percent after the airline initiated service in Pittsburgh while markets served by JetBlue increased on average 29 percent.³ In addition, LCC service is often able to recapture demand that previously "leaked" to other distant low-fare

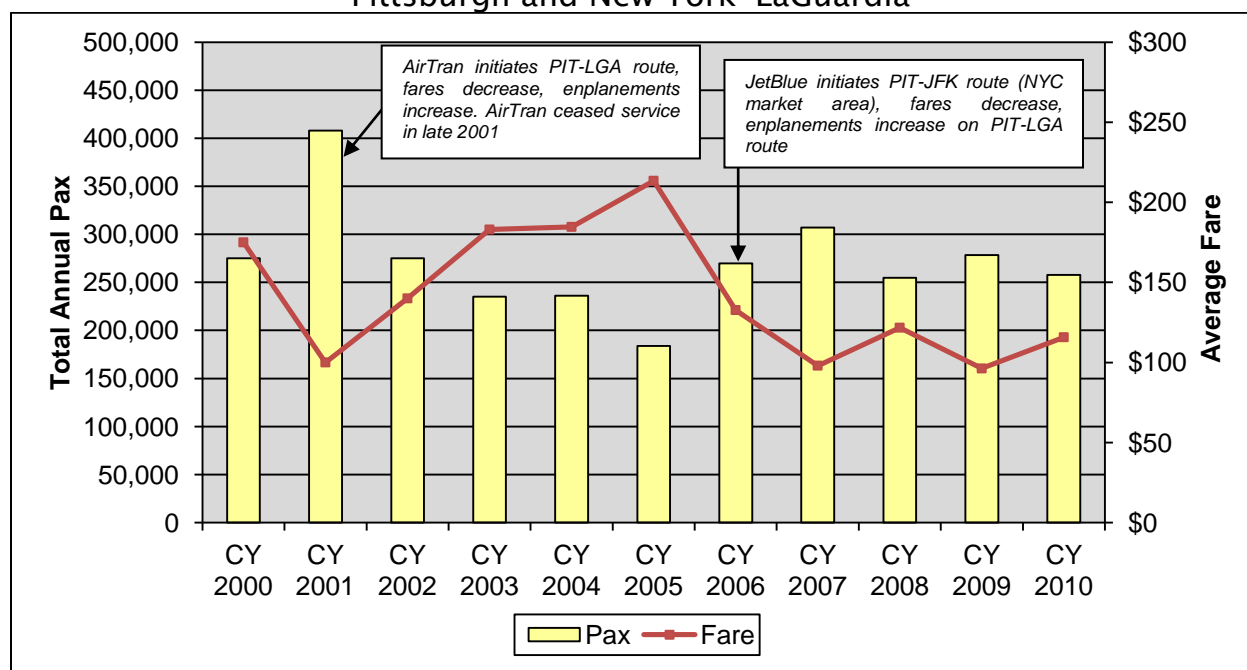
² Factors commonly attributed to this decline in demand include lingering fears after 9/11, an economic downturn nationwide, an outbreak of SARS, and reprioritization of travel needs among businesses.

³ Pittsburgh Air Service Update, May 2007, Eclat Consulting

markets. (For Pittsburgh, passengers sought LCC service most often in Cleveland, Columbus, and to a lesser extent, Akron/Canton.) These increases are commonly referred to as the “Southwest Effect” which is the phenomena of passengers driving outside of their respective airport market area to board a flight in another market area. It is not uncommon for passengers to drive two to three hours to board a low cost carrier flight.

AirTran’s initial experience beginning in 2001 in the Pittsburgh-Atlanta and Pittsburgh LaGuardia markets demonstrates how AirTran service increased traffic and reduced fares. In response, US Airways aggressively defended their market share by matching fares, adding frequency and appealing to customer loyalty. As a result, the Pittsburgh community responded to the LCC entrant in a lackluster manner. Eventually, AirTran ceased service from Pittsburgh to LaGuardia in 2001 and to Philadelphia and Chicago Midway in 2002. Correspondingly, air fares went back up and passenger levels dropped until 2005 as illustrated in **Exhibit 2**.

Exhibit 2
O&D Passengers and Average Fares Between
Pittsburgh and New York–LaGuardia



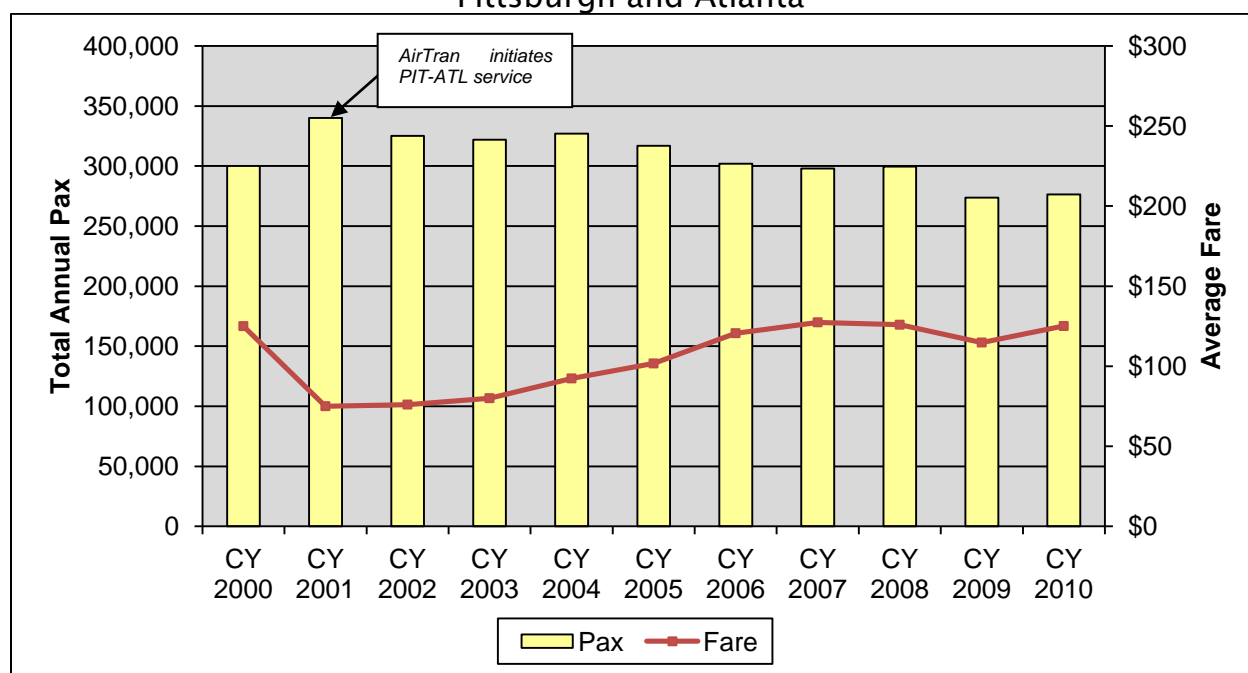
Source: USDOT, OD1A Databank

JetBlue’s similar impact is evident in Exhibit 2 beginning in 2006 when that airline entered the Pittsburgh market and started non-stop service to John F. Kennedy International Airport. Air fares to airports (LGA, JFK, and EWR) in the New York City metropolitan area fell sharply in 2006 as US Airways and Continental, which provided competing service to LaGuardia Airport and Newark International Airport, respectively, matched JetBlue’s fares. As the average fare decreased precipitously in 2006 and 2007, passenger levels correspondingly increased. It is noteworthy to point out that it is a common practice for air

carriers that operate routes to markets with multiple commercial service airports to match fares. This is discussed at length in a subsequent section.

The long-term impact created by an LCC is better understood when comparing the Pittsburgh-Atlanta market, where average fares fell 40 percent and O&D passenger traffic rose 13 percent between 2000 and 2001 due to AirTran’s initiation of service on the route. AirTran continues to serve Atlanta from Pittsburgh, and although fares returned to the 2000 level in 2010, only a gradual increase in average fares and a slight decrease in passenger counts occurred. These can be primarily attributed to rising fuel costs. **Exhibit 3** identifies these trends.

Exhibit 3
O&D Passengers and Average Fares Between
Pittsburgh and Atlanta



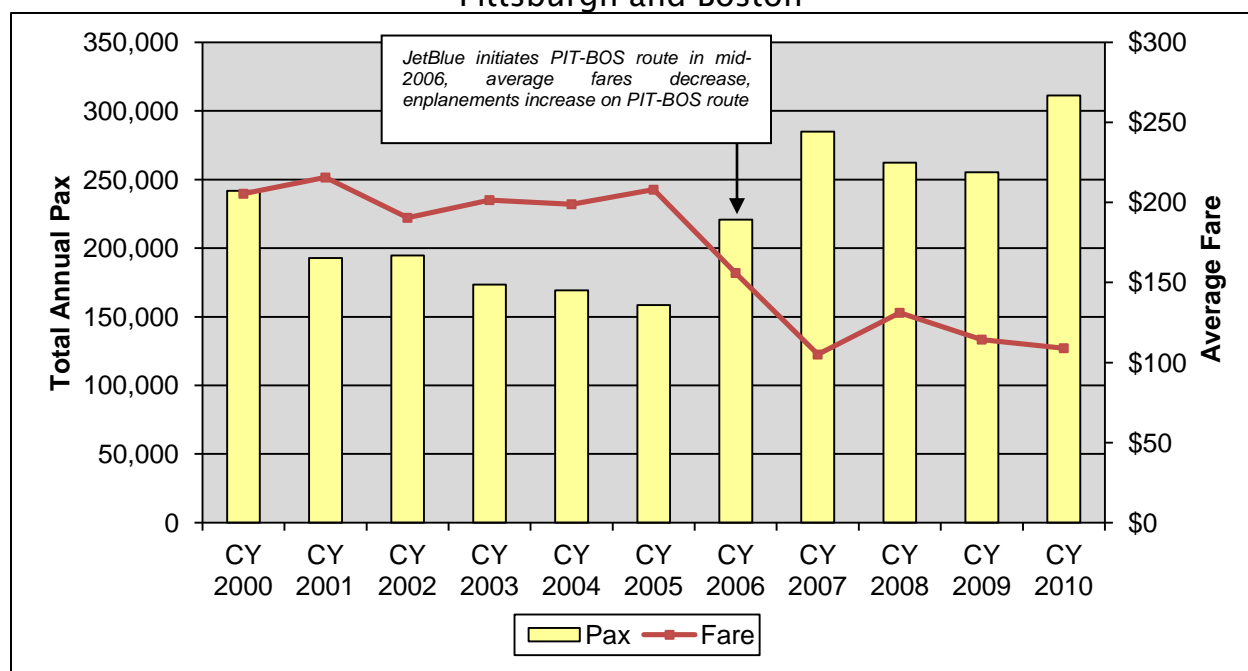
Source: USDOT, OD1A Databank

Three additional markets served by LCCs operating at Pittsburgh that further illustrate the trend of increasing O&D passenger traffic and corresponding reductions in fares are Pittsburgh-Boston, Pittsburgh-Philadelphia, and Pittsburgh-Washington, D.C. These markets are discussed below.

Since 2000, the Pittsburgh-Boston market has been served by three airlines: US Airways, American Airlines, and JetBlue. US Airways and American competed in the market between 2000 and 2001, US Airways served the market exclusively between 2001 and 2005, and JetBlue and US Airways competed between 2006 and 2010. As shown in **Exhibit 4**, average fares between Pittsburgh and Boston were at their highest levels and passenger traffic was at its lowest levels between 2000 and 2005 when no LCC served the market.

When JetBlue initiated service in 2006, the average fares fell significantly as US Airways lowered fares to match JetBlue’s fares. Average fares have remained below \$135 since 2007, and passenger traffic has risen to its highest levels since 2000.

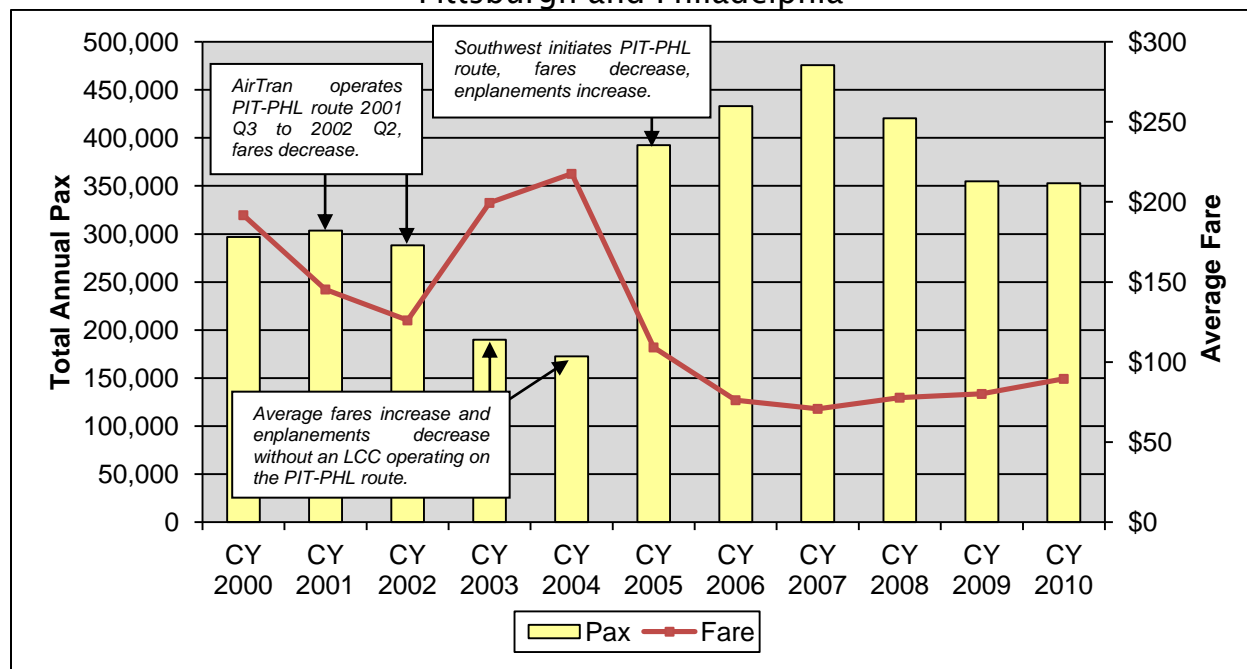
Exhibit 4
O&D Passengers and Average Fares Between
Pittsburgh and Boston



Source: USDOT, OD1A Databank

LCCs have had a similar impact in the Pittsburgh-Philadelphia market. The Pittsburgh-Philadelphia market has been served by US Airways since 2000, with AirTran briefly serving the market between 2001 and 2002, and Southwest serving the market since 2005. The average fare fell 13 percent between 2001 and 2002 when AirTran competed with US Airways on the route, although passenger traffic decreased during this period due to the events of 9/11 and the economy. When AirTran exited the route in 2002, US Airways served Philadelphia exclusively until 2005. Between 2003 and 2004, average fares rose to their highest levels during the 2000-2010 period, and passenger traffic was at its lowest levels. When Southwest entered the market in 2005, the average fare decreased 50 percent from 2004 levels and passenger traffic correspondingly increased 127 percent. Average fares have remained below \$100 since 2006 while passenger traffic has increased significantly. **Exhibit 5** illustrates these trends.

Exhibit 5
O&D Passengers and Average Fares Between
Pittsburgh and Philadelphia

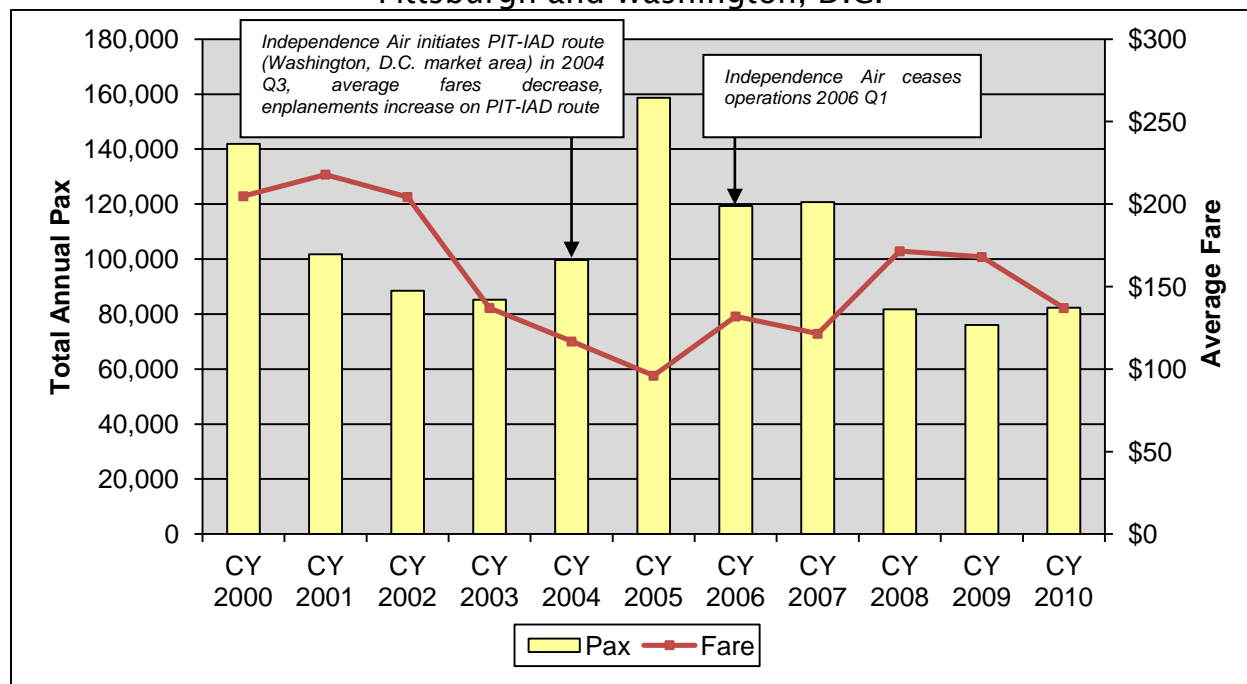


Source: USDOT, OD1A Databank

Lastly, **Exhibit 6** illustrates Independence Air’s impacts on average fares and O&D passenger traffic in the Pittsburgh-Washington, D.C. market, which includes both Reagan National Airport and Washington-Dulles International Airport. Historically, the Pittsburgh-Washington, D.C. market has been served by two airlines: United at Dulles International and US Airways at Reagan National. However, low-cost carrier Independence Air briefly served the market beginning in 2004 and impacted average fares and passenger levels before it ceased operations in early 2006.

Prior to Independence Air’s entrance, US Airways and United competed with each other in the Pittsburgh-Washington, D.C. market. As shown in Exhibit 6, average fares decreased between 2000 and 2003 due to a national trend of fare reduction during this period. Passenger traffic also decreased during this period due to the effects of 9/11 and the economic recession. When Independence Air served the market through Dulles International, the average fare decreased 30 percent between 2003 and 2005 while O&D passenger traffic increased 86 percent. Since Independence Air’s exit from the market, average fares have increased and passenger traffic has declined as legacy carriers US Airways and United resumed dominance in the market.

Exhibit 6
O&D Passengers and Average Fares Between
Pittsburgh and Washington, D.C.



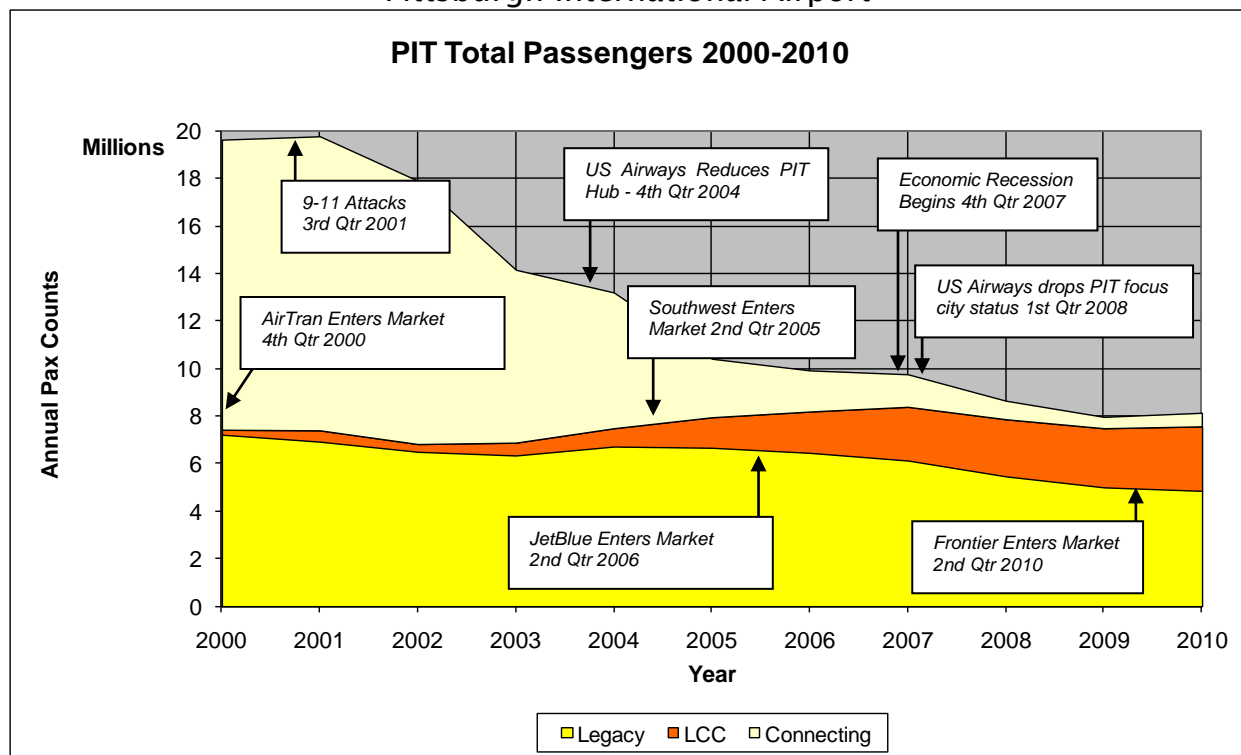
Source: USDOT, OD1A Databank

2.1 Changes in Passenger Demand

In 2000, the airport supported 19.25 million total annual passengers. A similar number of passengers was served in 2001.⁴ After 9/11, total passengers fell to 17.9 million in 2002 and again dropped significantly in 2003 to 14.2 million. For 2004, total passengers declined to 13.2 million as a result of declining hub activity (connecting passengers) by US Airways. The following year another sharp drop in hub activity lowered overall passenger traffic to 10.4 million passengers. Hub activity continued to decline after 2005, and the economic recession began in December 2007. These two factors caused overall passenger traffic to decrease from 9.9 million in 2006 to 8.2 million in 2010. **Exhibit 7** identifies passenger traffic by year, along with significant events in Pittsburgh’s air service market.

⁴ Total Passenger data obtained from Allegheny County Airport Authority. Source: Eclat Consulting, US DOT, OD1A Databank

Exhibit 7
Annual Passenger Statistics and Key Air Service Events
Pittsburgh International Airport



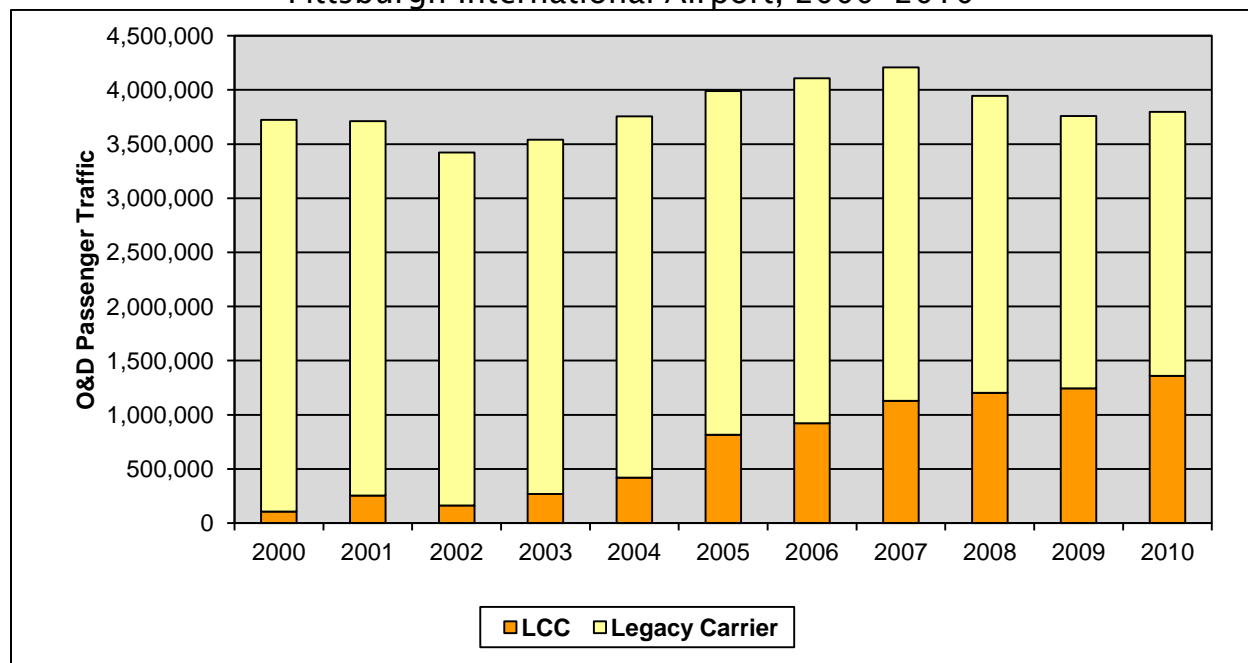
Source: US Department of Transportation, Allegheny County Airport Authority.

2.2 Changes in Originating Passenger Demand

In 2000, there were 3.72 million annual originating passengers. A similar number of originating passengers utilized Pittsburgh in 2001. After 9/11, originating passengers fell to 3.42 million in 2002 and stayed at that level through 2003. For 2004, originations totaled 3.76 million.

Originating passenger traffic increased to 3.99 million in 2005 as a result of continued local demand recovery, along with the arrival of low cost carrier Southwest Airlines, JetBlue entering the market in 2006, the resurgent success of AirTran, and the influence of other low-cost carriers such as USA3000 and Myrtle Beach Direct Air (now Direct Air) that sent originating passengers to a record level of 4.21 million in 2007. From 2002 through 2007, nearly 800,000 enplaned passengers were gained in Pittsburgh’s air service market. A significant portion of these gains were lost between 2008 and 2010, when originating passenger traffic fell from 4.21 million in 2007 to 3.80 million in 2010 due to the effects of the economic recession and rising ticket prices. **Exhibit 8** graphically depicts the split between legacy carrier market share and LCC market share during the 2000 to 2010 time period.

Exhibit 8
LCC and Legacy Carrier Enplanements by Market Share
Pittsburgh International Airport, 2000–2010



Source: Allegheny County Airport Authority.

2.3 Passenger Enplanements & Carriers

As stated previously, Pittsburgh International Airport historically enjoyed hub status for US Airways. Due to connecting passenger traffic and extensive destination offerings, passenger traffic was significant. For example, in 2000, the airport handled nearly 19.6 million passengers, of which over 87 percent were on board US Airways and its regional partners.

In November 2004, US Airways dropped its hub status at the airport, and further reduced its operations in January 2008 when it removed its focus city status. Resultantly, many destinations and connecting opportunities were lost, and with them, connecting passenger counts began a steep decline. By 2010, the airport handled 8.17 million passengers, an overall decline of nearly 60 percent from 2000. US Airways remained the dominant carrier in Pittsburgh in 2010, however, handling nearly 2.14 million passengers. **Exhibit 9** shows historic passenger counts by carrier.

Exhibit 9
Total Passengers by Carrier
Pittsburgh International Airport, 2000–2010

Airline	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AirTran	16,718	413,442	264,892	278,445	307,677	389,240	317,038	407,196	527,349	658,080	849,478
America West	0	0	21,490	138,475	91,827	144,381	104,848	0	0	0	0
American	334,581	343,432	444,348	382,868	409,652	413,949	419,246	460,543	451,279	430,819	479,713
ATA	0	0	0	116,310	187,818	10,200	0	0	0	0	0
Continental	269,742	229,685	228,410	276,909	262,310	354,617	453,348	500,303	553,619	524,058	513,978
Delta	611,733	539,689	616,158	673,116	671,345	737,923	772,249	940,885	978,141	892,899	1,054,670
Direct Air	0	0	0	0	0	0	0	21,415	27,686	31,194	35,651
Frontier	0	0	0	0	0	0	0	0	0	0	72,339
Hooters Air	0	0	0	0	0	15,901	0	0	0	0	0
Independence Air	0	0	0	0	71,328	175,908	1,227	0	0	0	0
JetBlue	0	0	0	0	0	0	128,665	271,406	198,719	176,971	242,217
Midway	3,312	32,298	0	0	0	0	0	0	0	0	0
Midwest	12,554	14,346	15,146	18,194	25,079	54,625	90,102	106,372	81,315	71,708	0
Northwest	357,795	299,012	345,691	329,116	388,342	489,676	530,205	499,575	510,663	476,121	322,428
SkyWest	0	0	0	0	0	0	0	0	0	6,377	72,325
Southwest	0	0	0	0	0	571,666	1,138,504	1,390,887	1,465,277	1,509,547	1,493,254
TWA	232,795	167,619	0	0	0	0	0	0	0	0	0
United	339,923	338,616	361,519	381,857	475,572	667,509	683,829	724,143	773,468	778,606	831,955
US Airways	17,166,562	17,282,002	15,568,436	11,527,362	10,076,182	6,162,098	5,122,541	4,257,628	2,880,602	2,296,561	2,139,094
USA3000	0	0	0	4,201	180,375	222,377	153,022	166,570	180,767	108,456	17,518
Vanguard	189,222	60,790	37,608	0	0	0	0	0	0	0	0
Foreign & Other Carriers	47,445	32,500	23,846	25,640	26,416	30,430	34,225	38,728	44,129	32,878	40,395
All Other Regionals*	78,558	49,614	2,868	32,383	56,051	0	0	0	0	0	0
US Airways Regionals	2,298,771	2,808,929	3,499,248	3,102,674	3,050,904	2,036,382	2,054,722	1,720,152	1,233,866	1,111,222	1,040,232
Total	19,660,940	19,803,045	17,930,412	14,184,876	13,229,974	10,440,500	9,949,049	9,785,651	8,673,014	7,994,275	8,165,015

Source: Allegheny County Airport Authority. * "All Other Regionals" includes regional carriers with multiple alliances, and small specialty carriers.

In terms of market share, US Airways handled 87 percent of all passengers passing through Pittsburgh International Airport's terminals in 2000. By 2010, that figure fell to 26 percent. In its place, Southwest, AirTran, Delta, and United saw their market shares increase to over 10 percent each in 2010. Since initiating service in Pittsburgh in 2005, Southwest Airlines has become the airport's second-largest carrier in terms of enplanements and may become the largest carrier in 2012.

2.4 Average One-Way Fares

In 2000, during the height of US Airways' Pittsburgh dominance, the average one-way fare to all destinations was nearly \$192. Average one-way airfares to Pittsburgh's 15 most popular destinations (which accounted for 49 percent of all passengers) were slightly lower, at \$178. Travelers to Philadelphia, a key US Airways route and one it dominated, was \$195 each way on average.

The expansion of low-fare service at Pittsburgh changed these figures significantly. The average one-way fare to all destinations decreased by 16 percent from 2000 to 2010, and fares to Pittsburgh's Top 15 destinations dropped 27 percent. Fares to Philadelphia fell by 54 percent.⁵ Fares to Chicago, another important destination for business travelers, fell 33 percent. As a result, fares to most of the Top 15 destinations saw increases in originating passengers. Exceptions include Atlanta and Denver, which saw decreases in annual originating passengers (approximately 10,200 to Atlanta and nearly 1,600 to Denver) despite fare reductions of 5 percent and 11 percent, respectively, to each destination. **Exhibit 10** shows these changes in fares to Pittsburgh's Top 15 destinations. It should be noted that in 2010, each of the Top 15 destinations could be reached in one stop or less on one or more of Pittsburgh's low-cost carriers. These Top 15 destinations accounted for 55 percent of all passenger travel.

Exhibit 10 also indicates the Air Travel Price Index (ATPI), a data series compiled by the Bureau of Transportation Statistics. The ATPI measures the relative change in the average price of air travel nationwide. During the 2000-2010 period, the price of air travel nationwide increased by approximately 45 percent, while at Pittsburgh average fares dropped 16 percent from levels seen in 2000.

Exhibit 11 presents the Top 15 destinations for Pittsburgh area businesses in 2010. As shown, the New York metropolitan area ranked first on this list. Philadelphia ranked second, with Chicago, Boston, and Washington, D.C. rounding out the top five destinations.

⁵ Southwest Airlines will eliminate four daily flights to Pittsburgh in February 2012. As a result, only US Airways, Philadelphia's dominant carrier, will fly to Pittsburgh and passengers will more than likely see fares increase. US Airways operates nine flights a day to Pittsburgh.

Exhibit 10
Top 15 Destination Cities, Originations and Average One-way Fares
Pittsburgh International Airport, 2000–2010

2010 Rank	2006 Rank	2000 Rank	Destination City	2000 Originations	2006 Originations	2010 Originations	2000-2006 Change in Originations	2000-2006 AAGR	2006-2010 Change in Originations	2006-2010 AAGR	2000-2010 Change in Originations	2000-2010 AAGR	2000 Avg One-Way Fare	2006 Avg One-Way Fare	2010 Avg One-Way Fare	2000-2006 Change in Avg One-Way Fares	2000-2006 % Change in One-Way Fares	2006-2010 Change in Avg One-Way Fares	2006-2010 % Change in One-Way Fares	2000-2010 Change in Avg One-Way Fares	2000-2010 % Change in One-Way Fares
1	1	1	New York/Newark*	267,150	266,010	275,824	-1,140	-0.1%	9,814	0.9%	8,674	0.3%	\$189.50	\$131.61	\$134.44	-\$57.89	-31%	\$2.83	2%	-\$55.06	-29%
2	2	3	Orlando	153,990	264,850	238,105	110,860	9.5%	-26,745	-2.6%	84,115	4.5%	\$127.62	\$92.72	\$107.35	-\$34.90	-27%	\$14.63	16%	-\$20.27	-16%
3	3	2	Chicago*	183,720	235,450	194,828	51,730	4.2%	-40,622	-4.6%	11,108	0.6%	\$162.49	\$80.05	\$109.40	-\$82.44	-51%	\$29.35	37%	-\$53.09	-33%
4	4	5	Philadelphia	148,380	213,860	176,293	65,480	6.3%	-37,567	-4.7%	27,913	1.7%	\$194.52	\$79.73	\$89.52	-\$114.79	-59%	\$9.79	12%	-\$105.00	-54%
5	8	6	Boston	118,150	107,790	155,575	-10,360	-1.5%	47,785	9.6%	37,425	2.8%	\$205.73	\$142.60	\$106.04	-\$63.13	-31%	-\$36.56	-26%	-\$99.69	-48%
6	5	4	Atlanta	148,520	152,650	138,330	4,130	0.5%	-14,320	-2.4%	-10,190	-0.7%	\$130.35	\$122.67	\$124.36	-\$7.68	-6%	\$1.69	1%	-\$5.99	-5%
7	7	14	Las Vegas	67,240	140,170	132,322	72,930	13.0%	-7,848	-1.4%	65,082	7.0%	\$172.13	\$143.52	\$155.05	-\$28.61	-17%	\$11.53	8%	-\$17.08	-10%
8	6	7	Tampa	102,850	143,790	127,329	40,940	5.7%	-16,461	-3.0%	24,479	2.2%	\$133.91	\$102.38	\$111.97	-\$31.53	-24%	\$9.59	9%	-\$21.94	-16%
9	9	12	Fort Lauderdale	69,440	104,330	121,323	34,890	7.0%	16,993	3.8%	51,883	5.7%	\$134.31	\$113.11	\$114.11	-\$21.20	-16%	\$1.00	1%	-\$20.20	-15%
10	10	9	Los Angeles*	81,980	97,240	117,144	15,260	2.9%	19,904	4.8%	35,164	3.6%	\$228.88	\$172.14	\$186.77	-\$56.74	-25%	\$14.63	8%	-\$42.11	-18%
11	12	10	Dallas/Fort Worth*	72,940	82,450	90,329	9,510	2.1%	7,879	2.3%	17,389	2.2%	\$268.18	\$189.76	\$177.71	-\$78.42	-29%	-\$12.05	-6%	-\$90.47	-34%
12	11	17	Phoenix	55,290	91,230	85,635	35,940	8.7%	-5,595	-1.6%	30,345	4.5%	\$199.42	\$139.01	\$166.72	-\$60.41	-30%	\$27.71	20%	-\$32.70	-16%
13	13	16	Houston*	55,680	77,460	81,852	21,780	5.7%	4,392	1.4%	26,172	3.9%	\$284.43	\$165.80	\$207.52	-\$118.63	-42%	\$41.72	25%	-\$76.91	-27%
14	15	19	Fort Myers	48,710	70,310	81,332	21,600	6.3%	11,022	3.7%	32,622	5.3%	\$122.19	\$121.19	\$111.26	-\$1.00	-1%	-\$9.93	-8%	-\$10.93	-9%
15	14	13	Denver	68,160	74,590	66,591	6,430	1.5%	-7,999	-2.8%	-1,569	-0.2%	\$207.45	\$171.97	\$184.78	-\$35.48	-17%	\$12.81	7%	-\$22.67	-11%
Top 15 Destinations				1,642,200	2,122,180	2,082,812	479,980	4.4%	-39,368	-0.5%	440,612	2.4%	\$178.18	\$120.38	\$130.88	-\$57.81	-32%	\$10.51	9%	-\$47.30	-27%
All Destinations				3,354,930	3,720,220	3,576,729	365,290	1.7%	-143,491	-1.0%	221,799	0.6%	\$191.65	\$139.97	\$161.86	-\$51.68	-27%	\$21.89	16%	-\$29.79	-16%
Air Travel Price Index (National Avg)													\$108.71	\$116.66	\$158.00	\$7.95	7%	\$41.34	35%	\$49.29	45%

Source: US Department of Transportation. AAGR: Average Annual Growth Rate. * Includes multiple airports serving the market

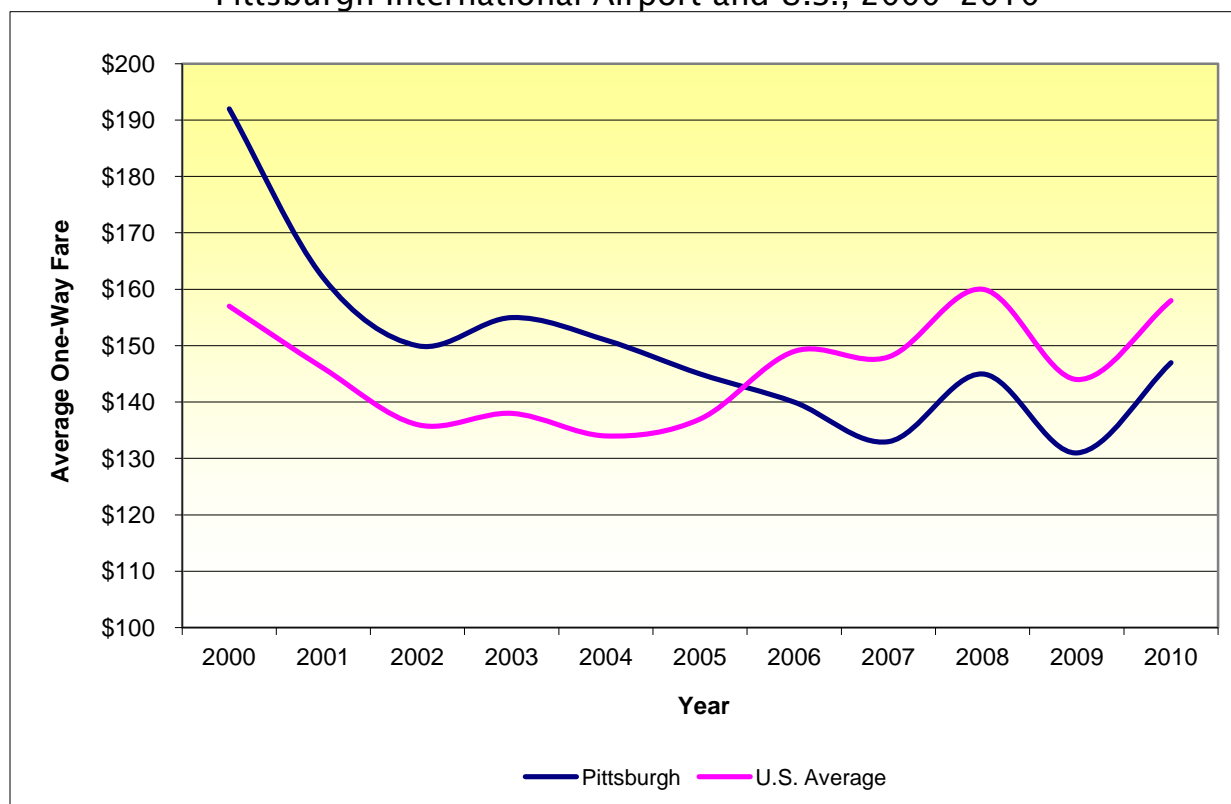
Exhibit 11
Top 15 Destination Cities by Pittsburgh Area Businesses, 2010

Rank	Destination City	Rank	Destination City
1	New York	9	Charlotte
2	Philadelphia	10	Dallas
3	Chicago	11	Los Angeles
4	Boston	12	Providence
5	Washington, D.C.	13	Detroit
6	Atlanta	14	Raleigh
7	Hartford	15	San Francisco
8	Houston		

Source: Regional Air Service Partnership, Survey Status of Top 30 U.S. Business Destinations, 2007-2010

Exhibit 12 identifies the average one-way fare at Pittsburgh relative to average one-way fares nationwide. As shown, average fares fell dramatically in 2002 with the entrance of several low-cost carriers, and in 2006 fell below the U.S. average with the entrance of Southwest in 2005 and JetBlue in 2006. Average fares at Pittsburgh remained below the U.S. average through 2010, despite several increases and decreases in both fares during this period due to the economic recession and rising fuel prices.

Exhibit 12
Average One-way Fares
Pittsburgh International Airport and U.S., 2000–2010



Source: US DOT O&D Survey, Wilbur Smith Associates

3. Economic Benefit of LCC Fares to Pittsburgh

Since 2000, several LCC carriers have operated at Pittsburgh International Airport some with more success than others. Airports generally experience an increase in annual passenger enplanements when LCC carriers enter a market as a result of low air fares. These savings provide added disposable income to Pittsburgh travelers which may be spent in the local economy or spent at the traveler’s destination. Another benefit is an increase in local Pittsburgh traffic. These fare sensitive travelers may not have utilized air travel, but lower air fares provide new travel opportunities for local residents.

In concert with local passenger travel, visitors to Pittsburgh traveling on a LCC have increased disposable income as a result of air fare savings. This disposable income can be spent within the visitor’s home town or while on their trip to Pittsburgh.

Based on the Pennsylvania Department of Transportation’s (PennDOT) 2010 *Economic Impact of Aviation in Pennsylvania Study*, approximately 41 percent of local passengers utilize Pittsburgh International Airport for business purposes while 59 percent of these passengers travel for leisure and personal purposes. Local passengers are primarily derived from Allegheny County and six surrounding counties. The airport’s secondary market includes counties in all of western Pennsylvania, eastern Ohio, and northern West Virginia. The PennDOT study also indicates that 58 percent of all Pittsburgh International Airport passengers, that are not connecting passengers, are residents of the Pittsburgh market area while 42 percent are visitors to Pittsburgh.

3.1 Leisure Cost Savings

WSA estimates that lower ticket prices resulting from the presence of LCC service at Pittsburgh International Airport in 2010 saved local leisure passengers \$38.71 million. Approximately 1.30 million of the 3.80 million O&D passengers at Pittsburgh International Airport are local passengers traveling for leisure or personal purposes. Multiplying the 1.30 million local passengers by the round trip fare savings of \$59.58 (from Exhibit 10) yields a savings of more than \$77.41 million in 2010. It is estimated that 50 percent of the total air fare savings, \$38.71 million, is spent in the Pittsburgh market, the remaining 50 percent is spent as travel expenses at destination markets. This local spending creates a ripple or multiplier effect in the Pittsburgh region’s economy.

The multiplier effects are comprised of indirect and induced impacts. Indirect effects measure the additional effects the original purchase may have as expenditures "turnover" within the region. The induced impact is economic activity generated by household expenditures resulting from direct and indirect impacts. **Exhibit 13** indicates the \$38.71 million in savings is spent and re-spent several times in the local economy generating an additional \$8.90 million in economic benefit. These LCC fare saving benefits also create jobs. It is estimated that every \$150,000 in direct impact creates one direct job. Dividing \$38.71 million by \$150,000 yields 258 direct jobs. As more disposable income flows into the local economy jobs are created as are spin-off jobs, related to the indirect and induced impacts. As those employees spend their wages in the economy, their expenditures support an additional 114 jobs, for a total of 372 jobs.

Exhibit 13

2010 Economic Impact of Local Passenger Savings

Category	Direct	Indirect	Induced	Total
Spending	\$38,706,000	\$8,902,400	\$3,870,600	\$51,479,000
Employment	258	80	34	372

Source: Wilbur Smith Associates and IMPLAN multipliers

3.2 Cost Savings to Area Businesses

LCC service in Pittsburgh also benefits local businesses that have employees travel on a regular basis. The 2010 PennDOT economic impact study indicates approximately 41 percent of local passengers utilize Pittsburgh International Airport for business purposes. Multiplying the number of local business travelers⁶ (902,900) by the average air fare savings of \$59.58 yields an annual savings to the local business community of \$53.79 million. Measuring the multiplier impacts for businesses, however, is less precise since there is insufficient information on where monies saved on air fare are expended. They may for example be spent outside the Pittsburgh region, retained for profits, invested, used for capital projects or spent on marketing and advertising.

Premium fares saw even larger decreases overall. For this analysis, premium fares (shown in **Exhibit 14**) are defined as the most expensive 10 percent of all airfares sold. Business travelers traveling on short notice or requiring refundable tickets typically pay these fares. In 2000, the average one-way premium fare to Pittsburgh's Top 15 destinations was \$548, with average one-way fares to some of these cities exceeding \$700. By 2010, the average premium fare fell to \$301, with no average one-way fare to any Top-15 city exceeding \$500. West Coast fares were affected significantly, with Los Angeles and Phoenix fares falling by more than \$400 each.

⁶ (3,796,891 X 58% Local Traveler) X 41% Business Traveler = 902,900 Local Business Travelers

Exhibit 14
Premium Fares to Top 15 Destinations
Pittsburgh International Airport, 2000–2010

2010 Rank	2006 Rank	2000 Rank	Destination City	Top 10% Avg Fare 2000	Top 10% Avg Fare 2006	Top 10% Avg Fare 2010	2000–2006 Change in Fares	2000–2006 % Change in Fares	2006–2010 Change in Fares	2006–2010 % Change in Fares	2000–2010 Change in Fares	2000–2010 % Change in Fares
1	1	1	New York/Newark*	\$369.49	\$340.07	\$295.07	-\$29.42	-8%	-\$45.00	-13.2%	-\$74.42	-20.1%
2	2	3	Orlando	\$394.39	\$205.22	\$213.84	-\$189.17	-48%	\$8.62	4.2%	-\$180.55	-45.8%
3	3	2	Chicago*	\$450.32	\$226.05	\$208.24	-\$224.27	-50%	-\$17.82	-7.9%	-\$242.09	-53.8%
4	4	5	Philadelphia	\$330.78	\$222.45	\$159.83	-\$108.33	-33%	-\$62.62	-28.2%	-\$170.95	-51.7%
5	8	6	Boston	\$459.29	\$388.78	\$225.44	-\$70.51	-15%	-\$163.34	-42.0%	-\$233.85	-50.9%
6	5	4	Atlanta	\$398.63	\$296.22	\$301.48	-\$102.41	-26%	\$5.26	1.8%	-\$97.15	-24.4%
7	7	14	Las Vegas	\$552.15	\$319.35	\$327.27	-\$232.80	-42%	\$7.92	2.5%	-\$224.88	-40.7%
8	6	7	Tampa	\$454.80	\$245.13	\$228.30	-\$209.67	-46%	-\$16.83	-6.9%	-\$226.50	-49.8%
9	9	12	Fort Lauderdale	\$456.16	\$279.03	\$253.25	-\$177.13	-39%	-\$25.78	-9.2%	-\$202.91	-44.5%
10	10	9	Los Angeles*	\$938.28	\$494.30	\$438.77	-\$443.98	-47%	-\$55.53	-11.2%	-\$499.51	-53.2%
11	12	10	Dallas/Fort Worth*	\$765.52	\$531.94	\$382.47	-\$233.58	-31%	-\$149.48	-28.1%	-\$383.06	-50.0%
12	11	17	Phoenix	\$789.58	\$381.18	\$381.69	-\$408.40	-52%	\$0.51	0.1%	-\$407.89	-51.7%
13	13	16	Houston*	\$758.45	\$466.67	\$470.35	-\$291.78	-38%	\$3.68	0.8%	-\$288.10	-38.0%
14	15	19	Fort Myers	\$360.12	\$292.83	\$253.71	-\$67.29	-19%	-\$39.12	-13.4%	-\$106.41	-29.5%
15	14	13	Denver	\$738.61	\$477.47	\$371.02	-\$261.14	-35%	-\$106.45	-22.3%	-\$367.59	-49.8%
Top 15 Destinations				\$547.77	\$344.45	\$300.71	-\$203.33	-37%	-\$43.73	-12.7%	-\$247.06	-45.1%

Source: US DOT via Data Base Products, Inc. * Includes multiple airports serving the market.

Of particular interest in Exhibit 14 are average one-way fares between Pittsburgh and both New York City and Boston. These fares illustrate the effect of JetBlue's initiation of non-stop service to New York City and Boston in June 2006. In Exhibit 14, it is shown that the decline in premium fares to these two cities between 2000 and 2006 was eight and 15 percent, respectively. Between 2006 and 2010, the decline in premium fares to New York City and Boston increased to 13 and 42 percent, respectively, as JetBlue became entrenched on these routes and legacy carriers such as US Airways and Delta were forced to lower fares to these destinations. Overall, JetBlue's entrance on these routes caused average premium fares between Pittsburgh and both New York City and Boston to fall by 20 and 51 percent, respectively, between 2000 and 2010.

Exhibit 14 also provides telling information on markets with low cost carriers operating at competing airports. For example, in the Dallas market area, Southwest Airlines operates focus city at Dallas-Love Field while mainline carrier American Airlines operates a hub at Dallas-Fort Worth International (DFW). Although the carriers operate at different airports they will often match fares to the market. So while a fare from Pittsburgh to Dallas-Love Field may be \$249, American Airlines will match it on at Pittsburgh to DFW itinerary. Other destinations with competing airports include Houston, Chicago and Los Angeles. It is also important to point out that other carriers commonly match the air fares on itineraries connecting through hub airports. That is to say, an air fare on a nonstop flight from Pittsburgh to Atlanta on low cost carrier Air Tran may be matched by competing carrier Continental Airlines with a Pittsburgh-Cleveland-Atlanta itinerary. While these connecting itineraries may be less appealing to the traveler the brand loyalty program often trumps passenger time-savings factors.

4. Economic Benefit of LCC Increased Passengers

4.1 Visitor Impacts to Pittsburgh's Economy

LCC service entry often stimulates new visitor traffic. These new visitors are stimulated to travel to Pittsburgh by several factors such as lower fares, improved schedules and better city-pair availability. New visitors travel to the market to attend sporting events, conventions, conduct business, visit family and friends, and for vacations and getaway weekends. Without LCC service these visitors would likely chose to visit other markets or not travel by air. Analysis of LCC activity by WSA at other airports indicates that when new LCC service is initiated at an airport it stimulates new visitor traffic by approximately 12 percent over previous levels.⁷ In 2000, 12,904 (12 percent) of the 107,535 LCC boarding passengers were in the new visitor category. By 2010, annual new visitor traffic is estimated to have increased by over 150,000 visitors (see **Exhibit 15**).

⁷ Survey data for similar economic impact studies in Columbus and Kansas City, which are both served by low cost carriers, indicate 12 percent higher visitor traffic.

**Exhibit 15
New Visitor Passenger Traffic
Pittsburgh International
Airport, 2000–2010**

	Total LCC Traffic	New Visitor Traffic
2000	107,535	12,904
2010	1,359,465	163,136
2010 vs. 2000 Difference		150,232

Source: Wilbur Smith Associates and ACAA
Analysis of Scheduled Airline Traffic

This new visitor traffic at Pittsburgh International Airport stimulates the local economy and creates jobs, payroll and economic output on-airport at LCC airlines, concessions tenants, and the Transportation Security Administration, and off-airport in the tourism sector, which includes the hotel, restaurant, retail and ground transportation industries. Economic impacts associated with new visitor traffic are derived by breaking out the economic impacts associated with all LCC activity at Pittsburgh International Airport. Wilbur Smith Associates recently completed economic impact analysis of Pittsburgh International Airport in the 2010 *Economic Impact of Aviation in Pennsylvania Study*. By multiplying low cost carrier visitor related impacts by 12 percent the new visitor traffic economic impacts were obtained.

Exhibit 16 identifies the economic benefits (including the multiplier impacts) of new visitor passengers related to LCC service in 2010. As shown in Exhibit 16, newly stimulated LCC related-visitor activity supported over 1,800 jobs, nearly \$48.5 million in annual payroll, and approximately \$111.2 million in annual economic output in the Pittsburgh regional economy.

**Exhibit 16
Pittsburgh Economic Impacts
Related to LCC Service, 2010**

	Total Employment	Total Payroll	Total Output
PIT Total Economic Impacts	67,219	\$2,078,171,500	\$5,629,170,400
LCC Traffic Related	15,077	\$403,985,200	\$926,292,800
New LCC Traffic Related	1,809	\$48,478,200	\$111,155,100

Source: Wilbur Smith Associates, IMPLAN multipliers, and 2010 *Economic Impact of Aviation in Pennsylvania Study*

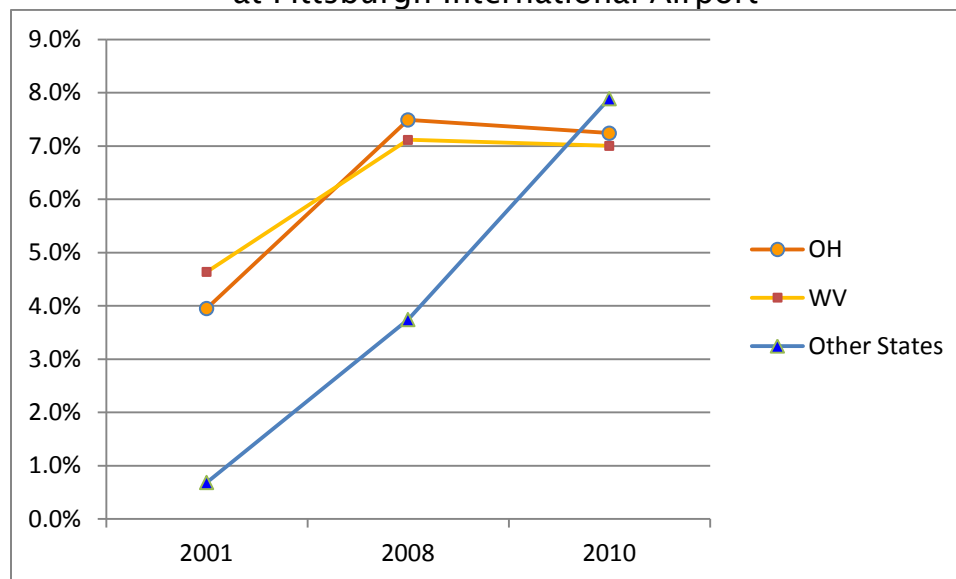
It is important to note that these estimates are conservative, since they do not account for new visitor traffic generated on legacy carriers that match LCC fares. For example, LCC carrier AirTran transports some new visitor traffic from Atlanta as would Delta Air Lines if Delta matches AirTran’s Atlanta-Pittsburgh fare.

4.2 Recapturing Local Passengers

Pittsburgh International Airport's primary market area is comprised of Allegheny County and six surrounding counties. The airport's secondary market area includes counties in all of western Pennsylvania, eastern Ohio, and northern West Virginia. Competing airports with LCC service have successfully attracted Pittsburgh passengers, and have in the past considered Pittsburgh a secondary market. Three airports in Ohio (Cleveland Hopkins International, Port Columbus International and Akron-Canton Regional) have historically attracted Pittsburgh residents due to the presence of LCC service at their airport. Air service studies define this drive-fly phenomenon as passenger "leakage." In 2005, passenger leakage to Cleveland and Columbus decreased significantly as the result of Southwest Airlines and Jet Blue entering the Pittsburgh market.

As LCC carrier activity has increased at Pittsburgh International Airport, particularly since the arrival of Southwest Airlines and JetBlue, passenger leakage has decreased, as indicated in **Exhibit 17**. Exhibit 17 identifies trends in the state of residency for Pittsburgh International Airport's originating passengers and is based on zip code data collected during departing passenger surveys conducted in 2001 and 2008 as well as 2010 license plate data provided by the Allegheny County Airport Authority. As shown in Exhibit 17, Pennsylvania's market share of passenger originations has decreased since 2001. Four (4) percent of originating passengers at Pittsburgh in 2001 were Ohio residents, 5 percent were West Virginia residents, and 1 percent were residents of states such as New York and Maryland. In 2008 and 2010, Pittsburgh International attracted new passenger traffic from states other than Pennsylvania to board flights after Southwest and JetBlue initiated service at the airport. More passengers in Ohio, West Virginia, and other states are assumed to be attracted to PIT due to the lower airfares now offered at Pittsburgh International. In 2010, 7 percent of originating passengers were residents of Ohio and West Virginia each, and 8 percent of originating passengers were residents of states such as New York and Maryland.

Exhibit 17
Market Share of Out-of-State Originating Passengers
at Pittsburgh International Airport



Source: 2001 and 2008 Pittsburgh International Airport passenger surveys and Allegheny County Airport Authority parking lot survey data

5. *Effect of LCC Operations Reduction*

In the previous LCC study completed by WSA in 2007, we identified how LCCs at Pittsburgh International Airport benefit the business community, the traveling public, and the airport. WSA also identified the implications if a LCC were to experience insufficient enplanements to operate profitably, that carrier will likely exit the Pittsburgh market. For this analysis, WSA analyzes the impacts of the loss of two city-pair routes at Pittsburgh International Airport and the negative impacts it would (or in the case of one route, will) have on the passenger market. In addition, analysis in this section identifies the implications if a LCC were to leave Pittsburgh International Airport. Typically the business and leisure traveler would be left with four options if LCC service is lost. These options are:

- Pay higher fares,
- Drive to distant airports with more affordable fares,
- Use other modes of transport,
- Forgo traveling.

When a LCC discontinues a city-pair route and all frequencies related to the market, the economic consequences can be significant. Typically the traveling public will pay higher fares on the route on legacy carriers and even other LCCs. Fare sensitive passengers may forgo air travel altogether and use an alternate mode of travel such as automobile, or they may choose not to travel at all. Other implications include loss of sales in airport concessions, auto parking, airline fees, as well as lost revenues in the hospitality sector.

This section identifies the implications of Southwest Airline’s imminent discontinuation of Philadelphia - Pittsburgh service and the implications if AirTran discontinued Atlanta - Pittsburgh service.

5.1 Assumptions for Philadelphia–Pittsburgh Route Analysis

Several assumptions were made to develop the estimated economic impacts that the PHL-PIT route provides. The analysis assumed that four flights (frequencies) per day per weekday and 3 flights per day on weekends operate between PHL and PIT. The route is operated by Southwest using a Boeing 737-300. The Boeing 737-300 aircraft was assumed to have 137 seats. An average load factor of 55 percent is used while 40 percent of all passengers utilizing this route are assumed to be visitors to the Pittsburgh region. An average visitor expenditure of \$310 is used, based on the assumption that the majority of visitors on the route are traveling on business and have a shorter length of stay. Only impacts affecting the Pittsburgh regional economy were included in the analysis and impacts to Philadelphia were omitted. All assumptions are presented in **Exhibit 18**.

Exhibit 18

Pittsburgh to Philadelphia Route Assumptions

Aircraft Type	B737–300
Business Class Seats	0
Coach Seats	137
Load Factor	55%
Resident	60%
Visitor	40%
Connecting	0%
Cost Per Block Hour*	\$3,663
Fuel Per Block Hour*	\$1,624
Block Hours	0.8
Business Class Expenditures Per Visiting Passenger	\$0
Coach Class Expenditures Per Visiting Passenger	\$310

* Based on Southwest 2009 costs. Does not include aircraft lease costs per block hour.
Sources: Wilbur Smith Associates, Aviation Daily 2009 Aircraft Operating Costs (Form 41) and Statistics, and Bureau of Transportation Statistics

Direct Output Impacts

In this PHL-PIT route analysis, it is assumed that 26 flights per week operate between Pittsburgh and Philadelphia based on Pittsburgh International’s daily nonstop flights schedule dated September 2011. As presented in **Exhibit 19**, the Pittsburgh to Philadelphia route for the B737-300 operation contributes over \$21.1 million annually in direct output to the Pittsburgh economy. These estimates do not include multiplier impacts. A discussion of each industry sector’s benefits is provided below.

Exhibit 19

Annual Economic Impacts of a Philadelphia to Pittsburgh Route

OUTPUT	Direct	Multiplier	Total
Business Class Visitor Expenditures	\$0	\$0	\$0
Coach Class Visitor Expenditures	\$12,758,200	\$8,152,200	\$20,910,400
Air Carrier Fuel Expenditures	\$1,759,300	\$651,200	\$2,410,500
Air Carrier Local Expenditures	\$3,968,200	\$2,208,700	\$6,176,900
Crew Per Diem Expenditures	\$311,000	\$198,700	\$509,700
Concessions	\$1,399,300	\$894,100	\$2,293,400
Parking	\$703,800	\$435,800	\$1,139,600
Freight	\$175,200	\$120,100	\$295,300
Travel Agent Commission	<u>\$45,000</u>	<u>\$27,000</u>	<u>\$72,000</u>
TOTAL	\$21,120,000	\$12,687,800	\$33,807,800
EMPLOYMENT			
Business Class Visitor Expenditures	0	0	0
Coach Class Visitor Expenditures	255	124	379
Air Carrier Fuel Expenditures	8	9	17
Air Carrier Local Expenditures	33	38	71
Crew Per Diem Expenditures	6	3	9
Concessions	28	14	42
Parking	1	1	2
Freight	21	2	4
Travel Agent Commission	<u>1</u>	<u>0</u>	<u>1</u>
TOTAL	334	191	526
PAYROLL			
Business Class Visitor Expenditures	\$0	\$0	\$0
Coach Class Visitor Expenditures	\$5,511,400	\$3,685,000	\$9,196,400
Air Carrier Fuel Expenditures	\$245,600	\$156,800	\$402,400
Air Carrier Local Expenditures	\$872,900	\$576,500	\$1,449,400
Crew Per Diem Expenditures	\$134,300	\$89,800	\$224,100
Concessions	\$604,500	\$404,200	\$1,008,700
Parking	\$23,500	\$8,000	\$31,500
Freight	\$105,800	\$65,800	\$171,600
Travel Agent Commission	<u>\$17,700</u>	<u>\$10,900</u>	<u>\$28,600</u>
TOTAL	\$7,515,700	\$4,997,000	\$12,512,700

Source: Wilbur Smith Associates

Visitor Expenditures – This impact is based on the number of visitors traveling on the PHL-PIT route, as well as the estimated average spending per visitor while in the Pittsburgh area. It includes expenditures by visitors on lodging, meals, entertainment, retail purchases, and ground transportation. An estimated \$12.8 million is generated in direct annual visitor-related impacts.

In order to estimate the employment associated with those commercial service visitor expenditures, region-specific ratios of employment per million dollars of visitor output were

developed using the IMPLAN model. Approximately 20 jobs in the Pittsburgh region result from every \$1 million in commercial service visitor spending.

In order to estimate the payroll impacts associated with employment generated by commercial service visitors, average state wages for appropriate industry sectors were applied to the estimated number of employees. Most of the direct visitor expenditures take place in the hotel/motel, food/beverage, entertainment, retail, and transportation sectors. Based on data obtained from the U.S. Bureau of Labor Statistics, an average annual payroll of \$21,600 per hospitality industry employee in Pittsburgh was assumed for these job categories.

On the Philadelphia to Pittsburgh route, an average of 60 percent of passengers are residents and 40 percent are visitors to the region. In this analysis, there are an estimated 41,090 visitor passenger enplanements annually traveling on the LCC PHL-PIT route.

Air Carrier Expenditures – This impact is an estimate of the air carrier expenditures to be incurred by the air carrier on- and off-airport while in the Pittsburgh region. It includes fuel purchases, employee compensation, in-flight catering, crew per diem, taxes, insurance, landing fees and other operational expenses. The PHL-PIT route originating in Pittsburgh for the B737-300 operation contributes approximately \$6.0 million annually to the Pittsburgh economy.

In order to estimate the employment associated with air carrier expenditures, region-specific ratios of employment per million dollars of visitor output were developed using the IMPLAN model. Approximately 7 jobs in the Pittsburgh region result from every \$1 million in air carrier spending.

Concessions Expenditures – As connecting, resident, and visitor passengers pass through the airport terminal building, many purchase concessions. According to Allegheny County Airport Authority (ACAA) data, the average concession expenditure is \$13.60 per passenger. Applying this average to the PHL-PIT route originating in Pittsburgh, the B737-300 PHL-PIT operation contributes an estimated \$1.4 million annually. Based on the IMPLAN model, approximately 20 jobs in the Pittsburgh region result from every \$1 million in concessions spending.

Parking Expenditures – Many resident passengers departing on flights at Pittsburgh International Airport use the airport's parking facilities. Assuming the average parking expenditure is \$10.00 per enplaning resident passenger, resident passengers utilizing the PHL-PIT route contribute an estimated \$703,800 annually in parking expenditures. Based on the IMPLAN model, approximately 2 jobs in the Pittsburgh region result from every \$1 million in parking-related expenditures.

Air Cargo Expenditures – Air carriers make expenditures for labor for freight and mail loading and handling, transport, equipment operating costs, storage space, and other operational expenses. The value of goods shipped typically ranges from \$17 to \$56 per pound. The PHL-PIT route originating in Pittsburgh contributes approximately \$175,200 in the air cargo sector.

Travel Agent Revenues – This amount is based on estimated commission levels and travel agent utilization in Pittsburgh. The analysis estimates 5 percent of Pittsburgh’s originating PHL-PIT passengers will book their travel through local travel agents which receive an estimated \$30 commission per passenger. Annual travel agent commissions are estimated at \$45,000 annually for the Philadelphia to Pittsburgh route. Based on the IMPLAN model, approximately 10 jobs in the Pittsburgh region result from every \$1 million in spending in the travel agency sector.

Direct Employment and Payroll Impacts

Annual first-round employment and associated payroll attributed to these sectors is also provided in Exhibit 19. The Pittsburgh to Philadelphia LCC route supports an estimated 334 employees in the Pittsburgh region with an estimated \$7.5 million in annual direct payroll. The employees and payroll are a direct result of the route and do not include the multiplier impact. Direct employment impacts were divided into three categories: Visitor Impacts, Air Carrier and Other Sectors.

Multiplier and Total Impact

As these expenditures flow into the Pittsburgh economy, additional spending circulates throughout the local economy as a result of expenditures by airlines and passengers, such as visitor expenditures, air carrier expenditures, and travel agency revenues. For each direct expenditure item, second-round impacts were calculated by applying sector specific multipliers.

When the direct and multiplier impacts are combined, the Philadelphia to Pittsburgh LCC route contributes over \$33.8 million in output to the economy supporting 526 jobs with an associated payroll of over \$12.5 million.

5.3 Time Savings Benefit of the PHL–PIT LCC Route

In addition to the above economic benefits, an additional benefit can be added to the economic impacts of a PHL-PIT route. These benefits are in the form of passenger time-savings from direct air service routes. This factor is based on estimated passenger time-savings from less circuitous routings, with time values based on guidance furnished by the U.S. Department of Transportation and endorsed by the Federal Aviation Administration (FAA). The idea behind this factor is that, if direct PHL-PIT routes from Pittsburgh International Airport were available, local residents would spend less valuable time reaching their destinations as compared to connecting through other airports on longer flights.

Passenger per hour value is \$46.80 for business travelers and \$27.20 for leisure travelers.⁸ A non-stop flight would save each passenger on average one hour and 12 minutes in travel time by reducing connecting times and time in the air. Applying the value per hour for each passenger on each flight yields an estimated \$12,200 in savings per flight depending on schedule. Based on the analysis, it is estimated that both resident and visitor passengers originating in and destined for the Pittsburgh market on this route would

⁸ U.S. Department of Transportation and Federal Aviation Administration

experience an annual aggregated time-savings value of more than \$16.4 million. It should be noted, however, that these benefits do not include a multiplier value.

5.4 Economic Impact of the Loss of LCC PHL-PIT Route

This analysis identifies the negative economic impact when Pittsburgh soon loses the Southwest PHL-PIT route. As presented in the analysis the economic impact will be significant. Assuming that the traffic will decrease 40 percent, total economic impact including the multiplier impact will decline \$21.3 million. Total employment will decrease by 298 jobs with substantial losses in payroll. The losses will be attributed to the hospitality sector as well as losses in airline jobs and concession jobs on the airport. **Exhibit 20** below identifies the economic impact losses attributed to the loss of the Southwest PHL-PIT route.

Exhibit 20
Estimated Economic Impact Loss When Southwest Airlines
Philadelphia to Pittsburgh Route is Discontinued

OUTPUT	Direct	Multiplier	Total
Business Class Visitor Expenditures	\$0	\$0	\$0
Coach Class Visitor Expenditures	\$5,103,300	\$3,260,900	\$8,364,200
Air Carrier Fuel Expenditures	\$1,759,300	\$651,200	\$2,410,500
Air Carrier Local Expenditures	\$3,968,200	\$2,208,700	\$6,176,900
Crew Per Diem Expenditures	\$311,000	\$198,700	\$509,700
Concessions	\$559,700	\$894,100	\$2,293,400
Parking	\$703,800	\$435,800	\$1,139,600
Freight	\$175,200	\$120,100	\$295,300
Travel Agent Commission	<u>\$45,000</u>	<u>\$27,000</u>	<u>\$72,000</u>
TOTAL	\$12,625,500	\$7,796,500	\$21,261,600
EMPLOYMENT			
Business Class Visitor Expenditures	0	0	0
Coach Class Visitor Expenditures	102	50	152
Air Carrier Fuel Expenditures	8	9	17
Air Carrier Local Expenditures	33	38	71
Crew Per Diem Expenditures	6	3	9
Concessions	11	14	42
Parking	1	1	2
Freight	2	2	4
Travel Agent Commission	<u>1</u>	<u>0</u>	<u>1</u>
TOTAL	164	117	298
PAYROLL			
Business Class Visitor Expenditures	\$0	\$0	\$0
Coach Class Visitor Expenditures	\$2,204,600	\$1,474,000	\$3,678,600
Air Carrier Fuel Expenditures	\$245,600	\$156,800	\$402,400
Air Carrier Local Expenditures	\$872,900	\$576,500	\$1,449,400
Crew Per Diem Expenditures	\$134,300	\$89,800	\$224,100
Concessions	\$241,800	\$404,200	\$1,008,700
Parking	\$9,400	\$8,000	\$31,500
Freight	\$105,800	\$65,800	\$171,600
Travel Agent Commission	<u>\$17,700</u>	<u>\$10,900</u>	<u>\$28,600</u>
TOTAL	\$3,832,100	\$2,786,000	\$6,994,900

Source: Wilbur Smith Associates

5.5 Assumptions for Atlanta–Pittsburgh Route Analysis

Several assumptions were made to develop the estimated economic impacts that the ATL-PIT route provides. The analysis assumed that four flights (frequencies) per day per weekday and 3 flights per day on weekends operate between ATL and PIT. The route is operated by AirTran using a Boeing 717-200. The Boeing 717-200 aircraft was assumed to have 117 seats with 12 seats in Business Class. An average load factor of 80 percent is used while 40 percent of all passengers utilizing this route are assumed to be visitors to the Pittsburgh region. Only impacts affecting the Pittsburgh regional economy were included in the analysis and impacts to Atlanta were omitted. All assumptions are presented in **Exhibit 21**.

Exhibit 21

Pittsburgh to Atlanta Route Assumptions

Aircraft Type	B717-200
Business Class Seats	12
Coach Seats	105
Load Factor	80%
Resident	60%
Visitor	40%
Connecting	0%
Cost Per Block Hour*	\$3,400
Fuel Per Block Hour*	\$1,185
Block Hours	1.2
Business Class Expenditures Per Visiting Passenger	\$860
Coach Class Expenditures Per Visiting Passenger	\$860

* Based on Air Tran 2009 costs. Does not include aircraft lease costs per block hour.
Sources: Wilbur Smith Associates, Aviation Daily 2009 Aircraft Operating Costs (Form 41) and Statistics, and Bureau of Transportation Statistics

Direct Output Impacts

In this ATL-PIT route analysis, it is assumed that 26 flights per week operate between Pittsburgh and Atlanta based on AirTran's published schedule. As presented in **Exhibit 22**, the Pittsburgh to Atlanta route for the B717-200 operation contributes nearly \$56.2 million annually in direct output to the Pittsburgh economy. These estimates do not include multiplier impacts. A discussion of each industry sector's benefits is provided below.

Exhibit 22

Annual Economic Impacts of an Atlanta to Pittsburgh Route

OUTPUT	Direct	Multiplier	Total
Business Class Visitor Expenditures	\$4,682,900	\$2,992,300	\$7,675,200
Coach Class Visitor Expenditures	\$40,975,300	\$26,182,400	\$67,157,700
Air Carrier Fuel Expenditures	\$1,920,400	\$710,800	\$2,631,200
Air Carrier Local Expenditures	\$5,510,000	\$3,066,900	\$8,576,900
Crew Per Diem Expenditures	\$311,000	\$198,700	\$509,700
Concessions	\$1,719,100	\$1,098,500	\$2,817,600
Parking	\$864,600	\$535,400	\$1,400,000
Freight*	\$0	\$0	\$0
Travel Agent Commission	<u>\$69,000</u>	<u>\$41,300</u>	<u>\$110,300</u>
TOTAL	\$56,052,300	\$34,826,300	\$90,878,600
EMPLOYMENT			
Business Class Visitor Expenditures	94	46	139
Coach Class Visitor Expenditures	819	399	1,218
Air Carrier Fuel Expenditures	8	10	18
Air Carrier Local Expenditures	46	53	99
Crew Per Diem Expenditures	6	3	9
Concessions	34	17	51
Parking	2	1	2
Freight*	0	0	0
Travel Agent Commission	<u>1</u>	<u>1</u>	<u>1</u>
TOTAL	1,011	529	1,540
PAYROLL			
Business Class Visitor Expenditures	\$2,023,000	\$1,352,600	\$3,375,600
Coach Class Visitor Expenditures	\$17,700,800	\$11,835,000	\$29,535,800
Air Carrier Fuel Expenditures	\$268,100	\$171,100	\$439,200
Air Carrier Local Expenditures	\$1,212,000	\$800,400	\$2,012,400
Crew Per Diem Expenditures	\$134,300	\$89,800	\$224,100
Concessions	\$742,600	\$496,500	\$1,239,100
Parking	\$28,900	\$9,900	\$38,800
Freight*	\$0	\$0	\$0
Travel Agent Commission	<u>\$27,100</u>	<u>\$16,700</u>	<u>\$43,800</u>
TOTAL	\$22,136,800	\$14,772,000	\$36,908,800

Source: Wilbur Smith Associates *AirTran does not provide cargo service but other LCC carriers such as South West Airlines do.

Visitor Expenditures – This impact is based on the number of visitors traveling on the ATL-PIT route, as well as the estimated average spending per visitor while in the Pittsburgh area. It includes expenditures by visitors on lodging, meals, entertainment, retail purchases, and ground transportation.

According to the PennDOT 2010 *Economic Impact of Aviation in Pennsylvania Study*, visitors to the Pittsburgh region spent \$860 per trip on average. This in turn generates an estimated \$45.7 million in direct annual visitor-related impacts.

In order to estimate the employment associated with those commercial service visitor expenditures, region-specific ratios of employment per million dollars of visitor output were developed using the IMPLAN model. Approximately 20 jobs in the Pittsburgh region result from every \$1 million in commercial service visitor spending.

In order to estimate the payroll impacts associated with employment generated by commercial service visitors, average state wages for appropriate industry sectors were applied to the estimated number of employees. Most of the direct visitor expenditures take place in the hotel/motel, food/beverage, entertainment, retail, and transportation sectors. Based on data obtained from the U.S. Bureau of Labor Statistics, an average annual payroll of \$21,600 per hospitality industry employee in Pittsburgh was assumed for these job categories.

On the Atlanta to Pittsburgh route, an average of 60 percent of passengers are residents and 40 percent are visitors to the region. In this analysis, there are an estimated 63,300 visitor passenger enplanements annually traveling on the LCC ATL-PIT route.

Air Carrier Expenditures – This impact is an estimate of the air carrier expenditures to be incurred by the air carrier on- and off-airport while in the Pittsburgh region. It includes fuel purchases, employee compensation, in-flight catering, crew per diem, taxes, insurance, landing fees and other operational expenses. The ATL-PIT route originating in Pittsburgh for the B717-200 operation contributes approximately \$5.5 million annually to the Pittsburgh economy.

In order to estimate the employment associated with air carrier expenditures, region-specific ratios of employment per million dollars of visitor output were developed using the IMPLAN model. Approximately 7 jobs in the Pittsburgh region result from every \$1 million in air carrier spending.

Concessions Expenditures – As connecting, resident, and visitor passengers pass through the airport terminal building, many purchase concessions. According to Allegheny County Airport Authority (ACAA) data, the average concession expenditure is \$13.60 per passenger. Applying this average to the ATL-PIT route originating in Pittsburgh, the B717-200 ATL-PIT operation contributes an estimated \$1.7 million annually. Based on the IMPLAN model, approximately 20 jobs in the Pittsburgh region result from every \$1 million in concessions spending.

Parking Expenditures – Many resident passengers departing on flights at Pittsburgh International Airport use the airport's parking facilities. Assuming the average parking expenditure is \$10.00 per enplaning resident passenger, resident passengers utilizing the ATL-PIT route contribute an estimated \$864,600 annually in parking expenditures. Based on the IMPLAN model, approximately 2 jobs in the Pittsburgh region result from every \$1 million in parking-related expenditures.

Air Cargo Expenditures – Air carriers make expenditures for labor for freight and mail loading and handling, transport, equipment operating costs, storage space, and other operational expenses. The value of goods shipped typically ranges from \$17 to \$56 per pound. While AirTran does not provide cargo service on their aircraft Southwest and Jet Blue do and have staff, real estate facilities and equipment dedicated to air cargo logistics.

Travel Agent Revenues – This amount is based on estimated commission levels and travel agent utilization in Pittsburgh. The analysis estimates 10 percent of Pittsburgh’s originating ATL-PIT passengers will book their travel through local travel agents which receive an estimated \$30 commission per passenger. Annual travel agent commissions are estimated at over \$69,000 annually for the Atlanta to Pittsburgh route. Based on the IMPLAN model, approximately 10 jobs in the Pittsburgh region result from every \$1 million in spending in the travel agency sector.

Direct Employment and Payroll Impacts

Annual first-round employment and associated payroll attributed to these sectors is also provided in Exhibit 22. The Pittsburgh to Atlanta LCC route supports an estimated 1,011 employees in the Pittsburgh region with an estimated \$22.1 million in annual direct payroll. The employees and payroll are a direct result of the route and do not include the multiplier impact. Direct employment impacts were divided into three categories: Visitor Impacts, Air Carrier and Other Sectors.

Multiplier and Total Impact

As these expenditures flow into the Pittsburgh economy, additional spending circulates throughout the local economy as a result of expenditures by airlines and passengers, such as visitor expenditures, air carrier expenditures, and travel agency revenues. For each direct expenditure item, second-round impacts were calculated by applying sector specific multipliers.

When the direct and multiplier impacts are combined, the Atlanta to Pittsburgh LCC route contributes over \$91.2 million in output to the economy supporting over 1,540 jobs with an associated payroll of nearly \$37.0 million.

5.6 Time Savings Benefit of the ATL–PIT LCC Route

In addition to the above economic benefits, an additional benefit can be added to the economic impacts of an ATL-PIT route. These benefits are in the form of passenger time-savings from direct air service routes. This factor is based on estimated passenger time-savings from less circuitous routings, with time values based on guidance furnished by the U.S. Department of Transportation and endorsed by the Federal Aviation Administration (FAA). The idea behind this factor is that, if direct ATL-PIT routes from Pittsburgh International Airport were available, local residents would spend less valuable time reaching their destinations as compared to connecting through other airports on longer flights.

Passenger per hour value is \$46.80 for business travelers and \$27.20 for leisure travelers.⁹ A non-stop flight would save each passenger on average one hour and 12 minutes in travel time by reducing connecting times and time in the air. Applying the value per hour for each passenger on each flight yields an estimated \$9,300 in savings per flight depending on aircraft size and schedule. Based on the analysis, it is estimated that both resident and visitor passengers originating in and destined for the Pittsburgh market on this route would experience an annual aggregated time-savings value of more than \$12.5 million. It should be noted, however, that these benefits do not include a multiplier value.

5.7 Economic Impact of the Loss of LCC ATL-PIT Route

This analysis provides a hypothetical situation to identify the potential negative economic impact should Pittsburgh lose the ATL-PIT route. As presented in the analysis the economic impact would be significant. Assuming that the traffic would decrease 40 percent, total economic impact including the multiplier impact would decline \$46.3 million. Total employment would decrease by 729 jobs with substantial losses in payroll. The losses would be attributed to the hospitality sector as well as losses in airline jobs and concession jobs on the airport. **Exhibit 23** below identifies the economic impact losses attributed to the loss of a single LCC ATL-PIT route.

⁹ U.S. Department of Transportation and Federal Aviation Administration

Exhibit 23
Estimated Economic Impact Loss if LCC
Atlanta to Pittsburgh Route is Discontinued

OUTPUT	Direct	Multiplier	Total
Business Class Visitor Expenditures	\$1,873,160	\$1,196,920	\$3,070,080
Coach Class Visitor Expenditures	\$16,390,120	\$10,472,960	\$26,863,080
Air Carrier Fuel Expenditures	\$1,920,400	\$710,800	\$2,631,200
Air Carrier Local Expenditures	\$5,510,000	\$3,066,900	\$8,576,900
Crew Per Diem Expenditures	\$311,000	\$198,700	\$509,700
Concessions	\$1,719,100	\$1,098,500	\$2,817,600
Parking	\$864,600	\$535,400	\$1,400,000
Freight	\$175,200	\$120,100	\$295,300
Travel Agent Commission	<u>\$69,000</u>	<u>\$41,300</u>	<u>\$110,300</u>
TOTAL	\$28,832,580	\$17,441,580	\$46,274,160
EMPLOYMENT			
Business Class Visitor Expenditures	37	18	56
Coach Class Visitor Expenditures	328	160	487
Air Carrier Fuel Expenditures	8	10	18
Air Carrier Local Expenditures	46	53	99
Crew Per Diem Expenditures	6	3	9
Concessions	34	17	51
Parking	2	1	2
Freight	2	2	4
Travel Agent Commission	<u>1</u>	<u>1</u>	<u>1</u>
TOTAL	465	264	729
PAYROLL			
Business Class Visitor Expenditures	\$809,200	\$541,040	\$1,350,240
Coach Class Visitor Expenditures	\$7,080,320	\$4,734,000	\$11,814,320
Air Carrier Fuel Expenditures	\$268,100	\$171,100	\$439,200
Air Carrier Local Expenditures	\$1,212,000	\$800,400	\$2,012,400
Crew Per Diem Expenditures	\$134,300	\$89,800	\$224,100
Concessions	\$742,600	\$496,500	\$1,239,100
Parking	\$28,900	\$9,900	\$38,800
Freight	\$105,800	\$65,800	\$171,600
Travel Agent Commission	<u>\$27,100</u>	<u>\$16,700</u>	<u>\$43,800</u>
TOTAL	\$10,408,320	\$6,925,240	\$17,333,560

Source: Wilbur Smith Associates

5.8 LCC Exit Implications to Pittsburgh

Since LCCs are entrenched at many airports throughout the U.S., it is unlikely that all LCCs at Pittsburgh International Airport would discontinue service at the airport. What is more likely is that one or two carriers could discontinue service at the airport and move assets to a more lucrative market. Currently there are six LCCs at the airport including: AirTran, JetBlue, Southwest, USA3000, Frontier and Direct Air.¹⁰ These six airlines combined employ 222 FTE (full-time equivalent) employees directly which provide ticketing, baggage handling, aircraft maintenance, and administrative functions. LCC passengers traveling through the airport make expenditures in airport concessions. Expenditures just by LCC passengers support 422 jobs in the airport terminal restaurants and shops. Additionally, nearly 8,800 jobs in the hospitality sector can be assigned to LCC visitors utilizing Pittsburgh International Airport. Total output related to LCC activity at Pittsburgh International is estimated at nearly \$1 billion in economic activity, which supports over 15,000 jobs, as identified in **Exhibit 24**.

Exhibit 24

2010 Economic Impact of All LCCs at Pittsburgh International

	Direct Impacts	Multiplier Impacts	Total Impacts
EMPLOYMENT			
LCC Tenants	222.6	337.4	560.0
Concessions	422.8	118.7	541.5
CS Visitors	<u>8,790.6</u>	<u>5,184.6</u>	<u>13,975.2</u>
TOTAL	9,436	5,641	15,077
PAYROLL			
LCC Tenants	\$11,493,040	\$11,983,648	\$23,476,688
Concessions	\$11,750,752	\$8,217,048	\$19,967,800
CS Visitors	<u>\$196,167,280</u>	<u>\$164,373,431</u>	<u>\$360,540,711</u>
TOTAL	\$219,411,100	\$184,574,100	\$403,985,200
OUTPUT			
LCC Tenants	\$28,125,781	\$28,180,474	\$56,306,255
Concessions	\$83,168,069	\$73,341,824	\$156,509,893
CS Visitors	<u>\$384,188,997</u>	<u>\$329,287,703</u>	<u>\$713,476,700</u>
TOTAL	\$495,482,800	\$430,810,000	\$926,292,800

Source: Wilbur Smith Associates

¹⁰ It is noteworthy to point out that Frontier Airlines, USA3000 and Direct Air do not operate as signatory carriers at PIT and contract with other carriers as well as Worldwide Flight Services to provide ticket counter service as well as baggage handling, etc. This practice results in these carriers having relatively few actual staff on the airport.

In this hypothetical analysis we considered what would occur to the LCC portion of Pittsburgh International’s overall economic impact if two LCC carriers discontinue service at the airport. Should this occur, LCC airline employment would drop and passenger traffic would decrease. For this analysis it is estimated that if two LCCs discontinued operations at the airport and no other LCC carrier operated on the discontinued routes, 33 percent of passenger traffic would be discontinued, since fare sensitive travelers would find alternative modes of travel or not travel to Pittsburgh. If two carriers pulled out, employment would drop to 152 from 222 while concessions jobs would drop to 280 from 422. The hospitality sector would take the brunt of the job loss impact with a loss of nearly 3,000 jobs in hotels, restaurants and retail. The overall economic impact associated with LCC activity at the airport would decrease from nearly \$1 billion to just over \$644.8 million. (See **Exhibit 25**).

Exhibit 25

**2010 Estimated Economic Impact Loss if Two LCCs (JetBlue and AirTran)
Discontinue Service at Pittsburgh International**

	Direct Impacts	Multiplier Impacts	Total Impacts
EMPLOYMENT			
LCC Tenants	152.1	230.6	382.8
Concessions	280.2	78.7	358.9
CS Visitors	<u>5,825.8</u>	<u>3,436.0</u>	<u>9,261.8</u>
TOTAL	6,258	3,745	10,003
PAYROLL			
LCC Tenants	\$7,700,693	\$8,029,415	\$15,730,108
Concessions	\$7,787,585	\$5,445,715	\$13,233,300
CS Visitors	<u>\$130,006,096</u>	<u>\$108,935,333</u>	<u>\$238,941,429</u>
TOTAL	\$145,494,400	\$122,410,500	\$267,904,800
OUTPUT			
LCC Tenants	\$19,075,118	\$19,112,212	\$38,187,330
Concessions	\$55,118,040	\$48,605,885	\$103,723,925
CS Visitors	<u>\$254,613,876</u>	<u>\$218,229,124</u>	<u>\$472,843,000</u>
TOTAL	\$328,807,000	\$285,947,200	\$614,754,300

Source: Wilbur Smith Associates

It is also important to point out that partial loss of LCC service also has negative effects on the business and leisure traveler. Partial loss could include the two hypothetical situations just presented, such as two LCCs ceasing operations at the Airport or a LCC discontinuing service between Pittsburgh International Airport and another city. For example, if a LCC ceased operations to Atlanta, that route would likely see an increase in fares. In the previous study it was determined that if a Pittsburgh business generated 52 premium fare trips per year to Chicago, its annual travel budget would increase an estimated \$11,700, since the average fare could increase over 50 percent.

6. Summary

In summary, a few notable trends in Pittsburgh's air service market between 2000 and 2010 as well as related economic impacts are provided below:

- Since initiating service in Pittsburgh in 2005, Southwest Airlines has become the airport's second-largest carrier in terms of enplanements.
- The total number of passengers at Pittsburgh declined from 19.66 million to 8.17 million due to US Airways' decision to remove hub and focus city operations at the airport.
- The average one-way fare to all destinations decreased by 16 percent from 2000 to 2010, and fares to Pittsburgh's Top 15 destinations dropped 27 percent. Fares to Philadelphia fell by 54 percent. Fares to Chicago, another important destination for business travelers, fell 33 percent. As a result, most of the Top 15 destinations saw increases in originating passengers. The primary driver of growth in local demand is significantly lower fares.
- During the 2000-2010 period, the price of air travel nationwide increased by approximately 45 percent, while at Pittsburgh average fares dropped 16 percent.
- Air fares to airports in the New York City metropolitan area fell sharply in 2006 as US Airways and Continental, which provided competing service to LaGuardia Airport and Newark International Airport, respectively, matched JetBlue's fares. As the average fare decreased precipitously in 2006 and 2007, passenger levels correspondingly increased.
- Originating passengers climbed to a record high of 4.21 million in 2007, with the entrance of Southwest, JetBlue, and other LCCs stimulating latent demand and recapturing passengers from competing LCC airports. Originating passengers decreased to 3.80 million in 2010, due primarily to the global economic downturn, rising ticket prices, and less disposable income for Pittsburgh residents.
- Lower ticket prices resulting from the presence of LCC service at Pittsburgh International Airport in 2010 saved local leisure passengers \$38.71 million which yields 258 direct jobs.
- Lower ticket prices resulting from the presence of LCC service at Pittsburgh International Airport in 2010 saved local business passengers \$53.8 million.
- Between 2006 and 2010, premium fares to New York City and Boston fell 13 and 42 percent, respectively, as JetBlue became entrenched on these routes and legacy carriers such as US Airways and Delta were forced to lower fares to these destinations. Overall, JetBlue's entrance on these routes caused average premium fares between Pittsburgh and both New York City and Boston to fall by 20 and 51 percent, respectively, between 2000 and 2010.
- In 2000, 12,904 (12 percent) of the 107,535 LCC boarding passengers were in the new visitor category. By 2010, new visitor traffic increased by over 150,000 visitors.
- Newly stimulated LCC related-visitor activity supported over 1,800 jobs, nearly \$48.5 million in annual payroll, and approximately \$111.2 million in annual economic output in the Pittsburgh regional economy.
- In 2000, 91 percent of originating passengers were from Pennsylvania and 9 percent were from other states. In 2010, 79 percent of originating passengers were from Pennsylvania and 21 percent were from other states.

- When the Philadelphia to Pittsburgh LCC route is discontinued, up to \$21.3 million in annual output to the region's economy will cease. This will result in a job loss of nearly 300 jobs with an associated payroll of nearly \$7.0 million.
- Time savings related to non-stop LCC service on the PHL-PIT route is estimated at an annual aggregated time-savings value of more than \$16.4 million.
- If the Atlanta to Pittsburgh LCC route was to be discontinued, up to \$91.2 million in annual output to the region's economy would cease. This would result in a job loss of over 1,540 jobs with an associated payroll of nearly \$37.0 million.
- Time savings related to non-stop LCC service on the ATL-PIT route is estimated at an annual aggregated time-savings value of more than \$12.5 million.
- If two LCCs discontinued operations at the airport and no other LCC carrier operated on the discontinued routes, 33 percent of passenger traffic would be discontinued, since fare sensitive travelers would find alternative modes of travel or not travel to/from Pittsburgh. Just over \$311.5 million in annual output to the region's economy would cease. This would result in a loss of over 3,170 jobs with an associated payroll of just over \$73.9 million.