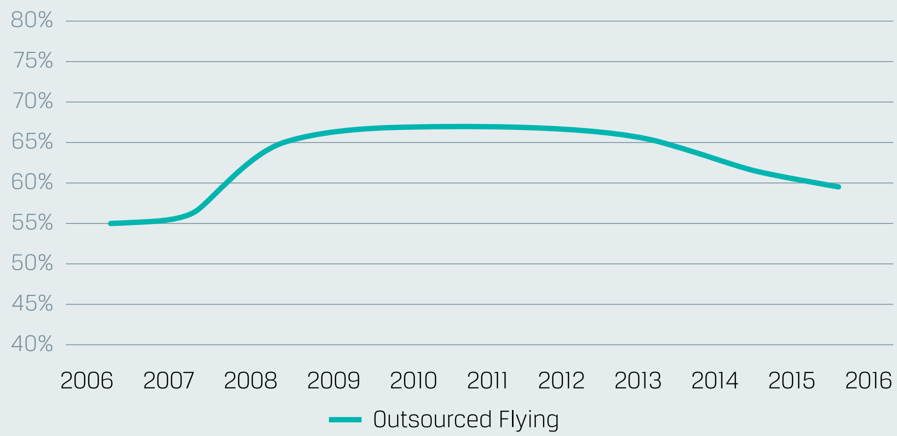
White Paper

In a Sharp Course Reversal, U.S. Legacy Carriers Have Begun to Reduce Outsourced Flying

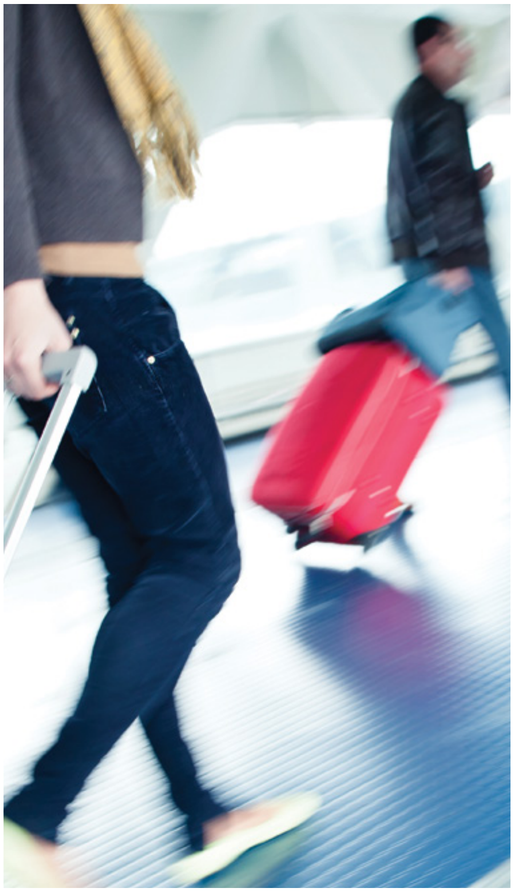
By Brian McGoldrick, ICF

In December 2016, the three U.S. legacy carriers (Delta, American, and United) outsourced approximately 60% of domestic short-haul departures to regional airlines. After years of increased domestic outsourcing, which peaked at 67% in 2010, this number has been declining over the past six years. While regionals are still a significant source of short-haul lift, Exhibit 1 shows how U.S. legacy carriers are beginning to buck the trend of outsourcing flying to regional carriers. As a result, changes in outsourcing strategy will have a significant impact on airline costs, labor relations, and passenger experience.

EXHIBIT 1: U.S. DOMESTIC SHORT-HAUL OUTSOURCED FLYING BY U.S. LEGACY AIRLINES



*Note: Short-haul flying is defined as less than 1,500 miles
Source: PaxIS SRS Schedule Analyzer, December 2016; excludes point-to-point flying



Key Factors for Reduction of U.S. Legacy Carrier Outsourcing

The outsourcing trend began to reverse in 2010 and continues to decline today. This is being driven by several key factors:

1. **Regional Pilot Shortage:** After years of low wages, slow career advancement, and a rising cost of flight training, many once-aspiring professional pilots were dissuaded from pursuing careers at regional airlines. This was greatly exacerbated by new federal regulations that increased the minimum time pilots must fly to be certified as an Airline Transport Pilot from 250 to 1,500 hours. Simple economics dictates that when steady demand is accompanied by a great reduction of labor supply, a shortage will occur. This has occurred at regional airlines and led to many service disruptions, including the inability of major airlines to find regional partners as easily as they had in the past. In order to not be beholden to the whim of regional airline labor supply, legacy carriers began to bring more short-haul flying in house—a move that provides more control over their capacity and operational reliability.
2. **Low Fuel Prices and Explosion of ULCCs Force Fares Lower:** Low fuel prices make it more economically feasible for airlines to carry a larger number of lower-yielding passengers. Furthermore, the past six years have seen the explosion of ultra-low cost carriers (ULCCs) such as Spirit. and Frontier, which have put pressure on legacy carriers to offer lower fares. These fares are even less economical with high cost per available seat mile (CASM) regional jets.
3. **Focus on Enhanced Customer Experience:** After resurging from 9/11 demand shocks and a string of airline bankruptcies, the post-consolidation legacy carriers have emerged stronger than ever and are allocating savings from lower fuel prices into customer amenities. These amenities include Wi-Fi, increased legroom in the economy section, enhanced in-flight entertainment, and overall improved premium cabin experience. These enhanced experience features are more difficult or impossible to replicate in smaller regional jets that are operated by outsourced labor.

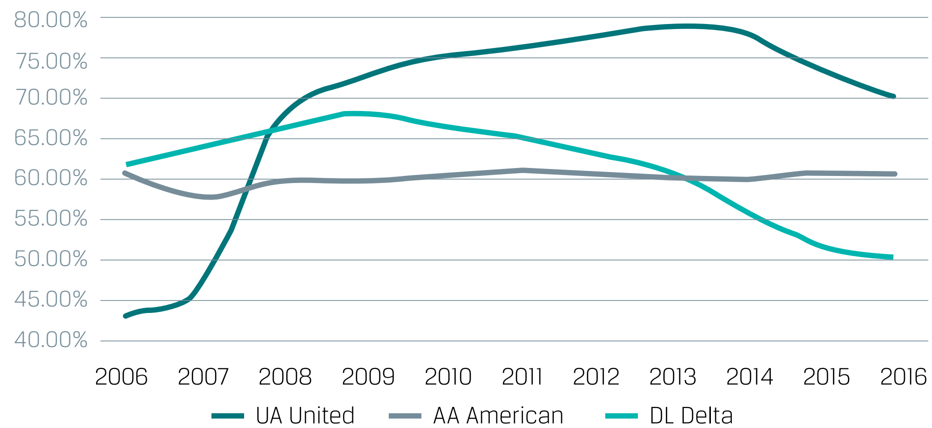
Though the forces of a macroeconomic or regulatory change always leave the possibility for this trend to reverse, U.S. outsourcing rates do not seem to be increasing anytime soon. Fuel prices are low and are not projected to return to 2008 levels, ULCC growth will continue, and the legacy focus on customer experience continues to endure. Furthermore, United, the legacy carrier using the most outsourcing, has a new president that is committed to revamping its domestic network with an increased mainline presence.

Unless federal regulators amend the 1,500-hour certification minimum for airline pilots, U.S. legacy carriers are unlikely to significantly increase short-haul outsourcing.

U.S. Legacy Carrier Differing Outsource Strategies

While United currently outsources the most regional flying and Delta the least, American has remained fairly stable over time. The striking trend can be seen in the great increase in percent of outsourced flights at United between 2007 and 2008 (Exhibit 2). This can be explained by pre-merger United retiring its fleet of almost 100 classic 737s in 2008 and backfilling much of this flying with regional capacity. American, which has just undergone the most recent merger, still may need more time to fine tune capacity and integrate its regional network.

EXHIBIT 2: U.S. DOMESTIC SHORT-HAUL OUTSOURCED FLYING BY U.S. LEGACY AIRLINES



Source: PaxIS SRS Schedule Analyzer; 2006-2016

Beyond the strategic commitment that Delta has made to provide more of its customers with a superior mainline product, much of its more robust mainline presence in short-haul markets can likely be attributed to the relative size of its major hubs.

Looking at Delta's entire route network, data shows that approximately 40% of hub seats are allocated to its ATL fortress hub. This allows Delta to achieve tremendous scale in that it can funnel larger mainline aircraft into ATL, which then has a greater amount of connecting opportunities for these passengers. In contrast, American and United have less concentrated hubs, with only about 24% and 20% of seats allocated to their largest respective hubs, DFW and ORD. Having less concentrated hubs that are more even in size provides less feed through these hubs and necessitates more outsourced regional flying in many markets.

Exhibit 3 shows each legacy carrier's largest four hubs and the respective percentage of system seats of the hubs within each carrier's network. It is not surprising that the order of carriers with the largest relative hubs is also the order in which they fly the most mainline short-haul flying.

EXHIBIT 3: ALLOCATION OF SYSTEM SEATS AT TOP 4 HUBS OF U.S. LEGACY CARRIERS

Delta		American		Unites	
Hub	**% Seats**	**Hub**	**% Seats**	**Hub**	**% Seats**
ATL	40%	**DFW**	24%	**ORD**	20%
DTW	13%	**CLT**	19%	**IAH**	20%
MSP	13%	**MIA**	13%	**EWR**	17%
SLC	8%	**ORD**	12%	**DEN**	14%

*Note: This excludes non-hub flying
Source: PaxIS SRS Schedule Analyzer; December 2016

What Does This Reduction Trend of U.S. Legacy Carrier Outsourcing Mean for Airline Management, Employees, and Passengers?

Airline managers must deal with an increase in labor cost, since more short-haul flying is being performed by more expensive mainline crews. This is partially offset by the increase in seats spreading fixed costs between more passengers and reducing CASM. Since this trend may result in mainline jets flying into smaller markets, it will put pressure on load factors as airlines struggle to fill larger aircraft.

For employees, particularly at legacy carriers, this reduction in outsourcing will be welcomed, as it will result in higher paying mainline jobs for pilots and flight attendants. While a reduction in U.S. legacy carrier outsourcing is at the expense of regional airlines, for reasons described earlier, regional labor demand currently exceeds labor supply at the moment.

Customers will generally see a benefit from decreased outsourcing. Mainline jets often provide customers with a more spacious cabin, inflight entertainment, increased legroom seating, and a premium cabin experience. However, increased mainline flying on short-haul sectors may come with decreased frequency, leaving customers with fewer options when choosing a departure time.

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About the Author

Brian McGoldrick is a manager at ICF with 8 years of aviation experience. He has worked with a variety of airline clients ranging from leading major airlines as well as regional and low cost carriers in areas such as network and strategic planning. Brian previously worked as an analyst on a hybrid Network Planning and Scheduling team at United Airlines. In this role, he optimized the schedule of both the mainline and regional North American network to maximize profitability.

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