

A research engineer at MIT's International Center for Air Transportation, William S. Swelbar addressed the 2009 F. Russell Hoyt National Airports Conference Sept. 21 in San Antonio, Texas. The following is a summary of his remarks

By William S. Swelbar

It Is The Economy, Stupid

According to the National Bureau of Economic Research, the U.S. recession that began in December 2007 is not yet over. What makes this recession different from many in the past are the interdependencies of the global economy on the U.S. economy, with some regions of the U.S. hit harder than others and likely slower to recover.

The same can be said for the U.S. airline industry. As airlines cut capacity, domestic airline systems are beginning to look more like the merged, regionally centric systems we saw in the late 1980s rather than the networks present in 2000 — the baseline year against which capacity cuts are often measured. Said another way, the U.S. airline industry finally has embraced the

notion that a sustainable business model cannot satisfy every stakeholder's wants. Today's networks still retain broad scope and scale, but airline service is increasingly more hub focused. That means airlines with hubs in areas with more vibrant economies than others likely will benefit even more from economic recovery.

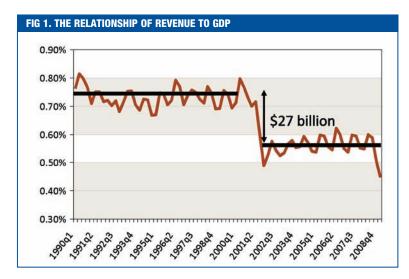
In this environment, the airline industry and its investors may want to reconsider their love affair with the low-cost airlines, which focus almost exclusively on domestic

routes. And by that measure, the old legacy network carriers have a competitive advantage, providing not only a wider array of product offerings, but also giving travelers access to markets around the globe. These days, it's more about Auckland and less about Amarillo.

Domestic Market Economics

The underlying economics of the U.S. domestic airline industry are driving change and forcing carriers to find ways to adapt to deteriorating fundamentals. That change is underway as an increasing share of the U.S. domestic market finds its way into the hands of the U.S. low-cost carriers (See Fig. 1). Historically, domestic





Now, even the low-cost sector is forced to find new revenue sources, in part by raising fares carriers routinely had used to undercut and gain advantage over legacy competitors. Over the period, average airfares increased in all but one of the nation's 100 largest airport markets (See fig. 2).

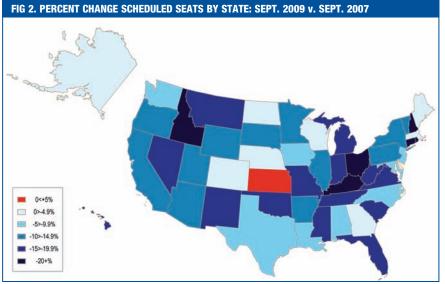
And in many cases Southwest led the pack, raising fares between 2005 and 2008 in each of its markets and often by 20 percent or more.

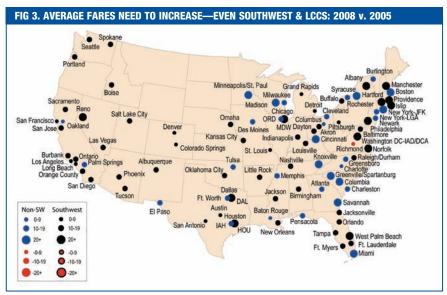
The other new norm for the airline industry is the price of oil. The rise, and the volatility, of fuel prices puts tremendous pressure on the air carriers to raise new revenue. That's one reason ancillary fees are here to stay. When comparing the amount of money collected in fees in 2009 versus the decline in revenue, fees account for only 25 percent of that

passenger revenue accounted for .74 percent of U.S. gross domestic product (GDP). But a secular shift began sometime during the last half of 2000.

Many attribute this change to the events of 9/11. But they are wrong. Of the many issues that contributed to this realignment in the revenue relationship to GDP, the two primary contributors are: 1) the significant growth and incursion of the low-cost carriers in the U.S. domestic market beginning in the late 1990s, and 2) the introduction of the Internet as an airline ticket distribution vehicle that prompted near total transparency in airline pricing. Between late 2000 and 2008, the relationship of domestic passenger revenue as a percent of GDP fell to .57 percent. If the relationship had stayed at the historic .74 percent standard, there would have been \$27 billion more in industry revenue.

In fact, revenues in 2008 were actually propped up by high oil prices when airlines were able to pass through some of the cost of fuel to airline customers. But 2009 has been a year of yet more declines in airfares as the industry tries to fill seats in the face of economic contraction. Based on the 2009 trend, the relationship has fallen to .47 percent in the second quarter, suggesting further deterioration to the point where the domestic market is now producing \$32 billion less in revenue compared with historic norms. The new norm is probably closer to .50 percent.





drop. Bottom line for the industry: the only way to cover airline costs is either to continue to raise fares or continue to collect fees sufficient to make up for the structural decline in revenues.

Outlook for Airports

For airports and the markets they serve, the forecast remains bleak. Some hub cities have suffered a tremendous decline in traffic over the past 20 years as network carrier fortunes fell, and many have realigned their route structures. Capacity cuts in just the past two years will impact airport service for years to come.

With only one exception, every state has suffered significant capacity reductions since 2007, with economically troubled regions the hardest hit by airline reductions (See fig. 3).

One important question is how many commercial airports are really necessary to satisfy U.S. air travel demand? Currently 451 airports have commercial air service. Of those, 200 account for 97 percent of domestic origin and destination traffic. At what point can Congress continue to justify investing limited federal funds to support more than half of those airports — 251 in all — that comprise just 3 percent of U.S. domestic traffic?

Most, if not all, of the airports in question are served only by regional carriers — a sector of the industry already suffering from poor economics and little investment or innovation in building right-sized new technology aircraft to serve these low-demand markets. The airline industry has been its own worst enemy by flying smaller and smaller aircraft that continually fragment markets. This may lead travelers to reconsider what is a reasonable driving distance to an airport and the ticket price that will cause them to choose one airport over another. After all, the highway is already the first access point to the air transportation grid for a large pool of demand today as consumers seek the lowest fare.

For the industry's two principal stakeholders, airlines and airports, the question is how or whether to support an airport infrastructure built for an industry that grew too big. Ultimately, the market may be forced to determine where infrastructure dollars are spent, and that should be on airports where demand exists.

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