An air-traffic controller watches outbound flights from the Memphis International Airport.

If you're having trouble finding flights to Memphis, Pittsburgh or a host of other cities, you're not alone.

A decade of restructuring in the U.S. airline industry has produced a sharp reduction in air service that is curtailing traveler choice and some local economies even as it improves the industry's health, new research shows.

The study, by Massachusetts Institute of Technology, shows that from 2007 through last year, U.S. airlines cut the number of scheduled domestic flights by 14%. The number of seats offered fell by slightly less, as airlines pushed passengers onto bigger planes, says the study, which was prepared by MIT's International Center for Air Transportation and is expected to be made public Wednesday.

Among the hardest hit were the nation's 35 midsize airports, as defined by the government, where carriers
U.S. airlines cut the number of domestic flights by 14% since 2007.

The restructuring of the airline industry has caused a sharp reduction in air service in many U.S. cities in recent years. Search for your hometown airport to see how it has fared.

Industry executives say that the changes have helped reduce overcapacity and revive the fortunes of the industry after years of losses and bankruptcies, which they say benefits travelers.

But the changes have also affected convenience and cost for fliers. Overall, average domestic round-trip fares have inched up 4% to $374 in 2012 from 2007, adjusted for inflation. Competition on busy routes between big cities and new flights from discount carriers have held some fares down. But at some midsize and smaller airports, the recent service cuts have reduced competition and caused fares to shoot up.

In Boise, Idaho, where the nearest big airport is a five-hour drive south in Salt Lake City, airlines cut 40% of the flights over the study period, including nonstop service to Atlanta. Boise also has fewer airlines flying to Seattle, Los Angeles and Portland, Ore., helping to lift the average inflation-adjusted fare there by 18% since 2007.

That has stifled efforts of the city's burgeoning technology industry to attract new workers. "We have a real problem here in Boise of not having enough local talent," said Tom LaJoie, president of eTripTrader Inc., a local tech company, noting that potential recruits often are turned off by the lack of flights. "You can get here,"
he said, "but when you want to go somewhere else, it's very expensive and you have limited options."

Mergers between Delta Air Lines Inc. and Northwest Airlines, United Airlines and Continental Airlines, and Southwest Airlines Co. and AirTran Airways have led the combined carriers to rethink their route maps. The planned merger of AMR Corp.'s American Airlines and US Airways Group Inc. is expected to lead to more route restructuring. The deal would leave the four big airlines with control of 85% of domestic capacity.

Airlines also have been responding to soaring fuel prices, the sluggish economy and falling travel demand. The cutbacks also reflect the failures of some smaller airlines, according to industry experts. Some of the cuts have been softened by new service from small, turboprop airlines or discounters like Spirit Airlines Inc. and Allegiant Travel Co.—although those carriers offer travelers far fewer connecting opportunities.

Even with fewer flights, airlines spent $47.3 billion on fuel last year, up from $38.6 billion in 2007—though down from the peak of $55 billion in 2008. Bob Jordan, Southwest's chief commercial officer, said airlines' efforts to increase fares to compensate for pricier fuel "put a general damper on traffic," which in turn drove airlines to reduce flights. Overall U.S. airlines carried 4.2% fewer passengers last year than in 2007, when traffic peaked at 767 million.

But fuel wasn't the only factor. Discount king Southwest, known for its frequent service to midsize airports, is behaving more like the larger network airlines, exacerbating the downward trend, according to the MIT study. Southwest expanded by 6% at the busiest airports while cutting nearly 10% of its flights from smaller airports from 2007 through 2012, according to the MIT researchers.

Over the study period, Southwest entered Boston while slashing flights from nearby Providence, R.I., and Manchester, N.H., by 40%. The Providence and Manchester flights "were very successful, but at some point we needed to enter Boston proper," Mr. Jordan said in an interview. The same thing happened at the airport on Long Island in Islip, N.Y., after Southwest entered LaGuardia and Newark, two leading New York-area airports.

Newport News/Williamsburg Airport in Virginia lost nine daily flights in March 2012 when Southwest withdrew AirTran flights there, said Ken Spirito, the airport's executive director. Southwest already flies to Norfolk, 24 miles away, and AirTran serves Richmond, 80 miles away.

Mr. Spirito said the region lost more than 400,000 passengers in the year after AirTran departed, as well as nonstop service to New York and Boston. Industry mergers mean "there are fewer choices
of airlines for us to go seek service from," he said, adding that fares on remaining flights have risen dramatically.

Delta and United Continental Holdings Inc. both have trimmed their smallest hubs, which tended to be served by 50-seat regional jets that are uneconomical to operate at today's oil prices.

At Delta's Cincinnati hub, the number of flights has declined by nearly two thirds since 2007. Produce company Chiquita Brands International Inc. in late 2011 moved its headquarters and 300 employees from Cincinnati to Charlotte, N.C., citing better air service as a primary reason. Cincinnati's airport in 2010 was responsible directly and indirectly for 16,000 jobs and contributed $3.6 billion to the area's economy, according to a University of Cincinnati study, compared with 56,000 jobs and $4.5 billion estimated for 2003 in an earlier study by the university.

Delta is doing the same in Memphis, Tenn., where flights are down 41%, according to MIT researchers Bill Swelbar and Michael Wittman. A few years ago, Delta's merger partner Northwest alone operated 300 daily flights out of Memphis. This summer, according to Larry Cox, chief executive of the Memphis-Shelby County Airport Authority, the airport will be down to 91 total daily passenger flights. But all hope isn't lost, Mr. Cox said. AirTran intends to add flights from Memphis to three destinations in August, and by November Southwest will replace AirTran in the Memphis market and fly to five cities.

Bob Cortelyou, Delta's senior vice president for network planning, said fuel prices forced his company to make tough decisions at smaller hubs like Cincinnati and Memphis. "We want an airline industry that is stable and profitable. That is good for everybody," Mr. Cortelyou said. "I don't think you necessarily want to go back to the way it was."

Cleveland, the smallest domestic hub of United, has lost 26% of its flights in the past five years. United made pledges to city officials to retain the Cleveland hub. But Brian Znotins, United's vice president of network, said when passenger demand dips it is better to route passengers through the largest hubs, which generate more traffic by virtue of their local passengers.

For example, a flight from Pittsburgh to Oklahoma City is more efficient if routed through Chicago than Cleveland, he said. Flights from larger cities such as Chicago tend to fill more quickly and at higher fares.

In some cases, the impact on fliers is limited because airlines are merely consolidating traffic within a cluster of nearby airports. Oakland and San Jose, Calif., for example, are losing flights while nearby San Francisco International, a hub for United and the home base of discounter Virgin America, has boosted flights by 21% since 2007, the top increase among the 29 large airports.

Smaller airports that are in close proximity to larger hubs also are getting bypassed. Toledo Express Airport in Ohio, which is only 53 miles from Delta's hub in Detroit, has lost 75% of its flights since 2007, the study shows.

But for some smaller communities, the stakes are higher. The Lake Havasu City, Ariz., airport has been without commercial flights since 2007, when the 19-seat prop planes that served the community became unprofitable, said Steve Johnston, the airport's manager. The city's 53,000 residents now have to drive 2½ hours to Las Vegas or more than three hours to Phoenix to catch flights.

Mr. Johnston said those options are so unappealing that he now drives 10 hours to visit his family near San Jose, Calif. "Some people have gotten their own airplanes," he said. "It's a different way of life."
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