

RESEARCH SUMMARY

Planepooling and Air Taxis for Post-COVID Aviation

For most of its history, commercial aviation has tended toward large airplanes, large airports, and rigidly scheduled flights. But that may be changing in the light of technological innovation and long-term societal changes accelerated by the COVID-19 pandemic. In “Planepooling and Air Taxis for Post-COVID Aviation,” Robert Graboyes and Brent Skorup make the case for “planepooling”—smaller planes, smaller airports, and, for some routes, ad hoc scheduling.

AN IDEA WHOSE TIME HAS COME

The idea of planepooling has been around for a quarter of a century, though in its heyday of discussion (c.1997–2004) it was not a practical option. Since then, new developments in technology (e.g., ridesharing, smartphone apps, more cost-efficient planes) and societal trends (e.g., exodus from large cities, increase in remote work, greater disposable income) have made planepooling more feasible.

AN EVOLVING ENVIRONMENT FOR AVIATION

Social and technological changes are creating an environment in which many flight routes would be better served by planepooling. For example:

- During the pandemic, there has been significant growth in private aviation (e.g., charter jets for business or leisure) as people seek to avoid crowded airports and long connections.
- The private aviation industry is making major investments in the electrification of aircraft, the testing of autonomous (no pilot on board) planes and vertical-takeoff-and-landing (eVTOL) air taxis, and the use of ridesharing software.
- The costs of private aviation will likely fall rapidly as these technologies are adopted, and (COVID-spurred) consumer interest in private regional aviation will likely grow.

HOW PUBLIC POLICY CHANGE CAN HELP

The developments just discussed could make private regional aviation attractive and affordable for business travelers and the middle class. However, convenient, cost-effective planepooling will require both technological advances and changes in public policy. For the latter, regulators should consider the following:

- prioritizing regional aviation at the US Department of Transportation
- liberalizing federal subsidy programs to small airports that might benefit from regional aviation
- the development of a market for regional aviation aerial corridors

KEY TAKEAWAY

As planepooling becomes more feasible, economical, and desirable, we may be moving toward an era in which it becomes an important segment of commercial aviation. This would be a boon to smaller communities and their residents. New technologies, societal changes, and COVID-19 will speed our way toward that new era, but changes to public policy are also necessary.

(#1) Present-day airliner: Nashville to Atlanta to Asheville (6 hours, 20 minutes)



Source: Travelocity

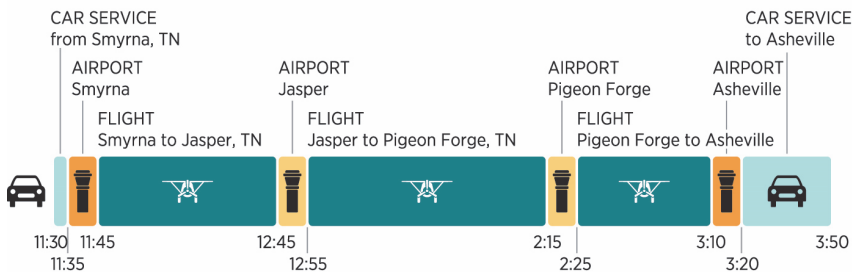
(#2) Drive Self from Nashville to Asheville (4 hours, 21 minutes)



Car travel takes 2 hours less than airlines, plus no fears of missed connections. But the traveler driving himself cannot work, rest, or read.

Source: Google Maps

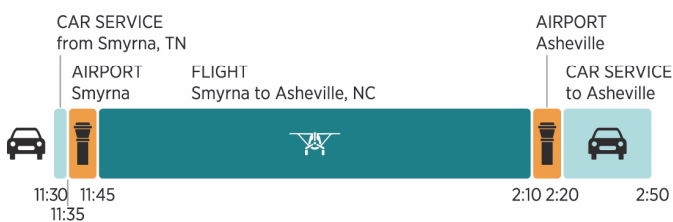
(#3) 8- to 10-seat planepool from Smyrna to Jasper to Pigeon Forge to Asheville (4 hours, 20 minutes)



Planepool passenger gets from Smyrna to Asheville in an 8- to 10-seat plane as quickly as by automobile and can work, rest, or read almost nonstop. The traveler never changes planes. Stops are only to pick up and drop off other passengers. Enplaning, deplaning, and getting to and from ground transportation are brief processes.

Source: Estimate by authors

(#4) 8- to 10-seat planepool, nonstop from Smyrna to Asheville (3 hours, 20 minutes)



In scenario 3, the plane makes stops to pick up and drop off other passengers in Jasper and Pigeon Forge. The authors expect that many trips would have only one stop or none. In scenario 4, there are no stops between Smyrna and Asheville.

Source: Estimate by authors

Note: In 2009, roughly half of flight departures, carrying 30 percent of passengers, were flights of under 500 miles. Of course, this does not measure the number of prospective short-haul passengers who choose not to fly because of the inconvenience and inefficiency.