COMPLEX CONNECTIONS: THE CHALLENGE OF IMPROVING AIR, BUS, AND RAIL SERVICE TO DOWNSTATE ILLINOIS, 2009-PRESENT

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This study evaluates trends in intercity air, bus, and rail service to cities in downstate Illinois. Through a review of service patterns and passenger data, it explores gaps that have emerged and efforts by the state government to fill these gaps. The results show that Illinois has been a leader in promoting conventional rail-passenger service but has struggled to promote higher-speed service and sustain intercity bus connections. Ten downstate airports presently have commercial air service, and most are experiencing growth, but their performance has fluctuated dramatically over the past decade.

INTRODUCTION

The large size and relatively low population density of downstate Illinois has for generations been an obstacle to providing high-quality intercity air, bus, and rail transportation to many of the region's cities. This challenge is magnified by the absence of metropolitan areas larger than Bloomington–Normal, which has an estimated population of 175,000, a level well below that generally considered necessary to support frequent intercity bus and low-cost airline service to points several hundred miles away. Despite this, the system of airports and bus and train routes serving the region has significantly improved in recent years, and some of the policies created to support these routes deserve recognition for their exemplary qualities.

This article provides a broad perspective on how the air, bus, and rail passenger systems serving downstate Illinois have evolved in recent years and identifies trends relevant to understanding how mobility in the region can be improved. It summarizes major policy initiatives undertaken by state and local governments, with a specific focus on how these initiatives have affected passenger traffic over the past 10 years. Each mode is considered in a separate section. The final section offers general conclusions about the state's overall performance and makes suggestions for further improvement.

Throughout the study, the term *downstate* is used to refer to the entirety of Illinois outside of metropolitan Chicago, including the north-central and northwestern parts of the state. The terms *commercial bus service* and *intercity bus service* are used interchangeably, referring to regularly scheduled services between points that are not part of the same municipality or metropolitan region. The phrase *commercial air service* refers only to regularly scheduled passenger flights and excludes charter, cargo, and general aviation flights.

DOWNSTATE ACCESS TO INTERCITY RAIL-PASSENGER SERVICE

The state government's longstanding policy of supporting rail-passenger service has for decades been one of its highest-profile ways to foster downstate mobility. This policy helped reverse some of the decline in the state's network of passenger trains that took place between World War II and the early 1970s. During this period, the rising deficits generated by privately operated trains resulted in gradual cutbacks, prompting the federal government to intervene. In May 1971, the vast majority of the country's private railroads were relieved of the financial burden of operating these trains. Routes deemed most viable were turned over to the National Railroad Passenger Corporation, a quasipublic entity known as "Amtrak" that receives an annual appropriation from the U.S. Congress.

The number of trains in Illinois greatly diminished when Amtrak began service. Danville, Decatur, Rockford, and many other downstate cities were left bereft of rail-passenger service, and none of those that retained service had more than two or three daily roundtrip runs. Despite this, the system in Illinois remained far more extensive than most neighboring states, partially due to Chicago's role as a connecting point for transcontinental railroad trips and to the vitality of regional routes linking that city to other Midwestern population centers.

Two of the state's long-distance trains remained under private management after the inception of Amtrak, owing to the decision by the Rock Island Lines, a Chicago-based railroad, to not participate in this federally-managed undertaking. In doing so, the carrier was required by the Interstate Commerce Commission to continue operating these money-losing roundtrips between Chicago and Peoria and the Quad Cities for several more years before finally receiving permission to terminate them in 1978. As was the case for other state-supported services, for the routes linking Chicago to other Midwestern points,

FIGURE 1

INTERCITY RAIL-PASSENGER SERVICE IN ILLINOIS



Top: An Amtrak train in west-central Illinois along the BNSF Railway (Photo credit: image adapted from "Amtrak, Kewanee, Illinois" by David Wilson, Creative Commons Attribution 2.0 Generic License); Bottom: Illinois Terminal in Champaign, a facility owned by the Champaign–Urbana Mass Transit District used by Amtrak and both intercity and transit buses, allowing for efficient passenger transfers.

Amtrak increasingly shifted financial responsibility to state governments, a burden accepted more willingly by Illinois than most other states.² The state's commitment remained particularly strong compared to neighboring Indiana. Its lone state-supported train, regularly at risk of cancellation due to the Indiana government's reluctance to appropriate the necessary subsidies, was finally cut for financial reasons in 2019. Similarly, Iowa's reluctance repeatedly prevented proposals to restore Des Moines service from moving forward.

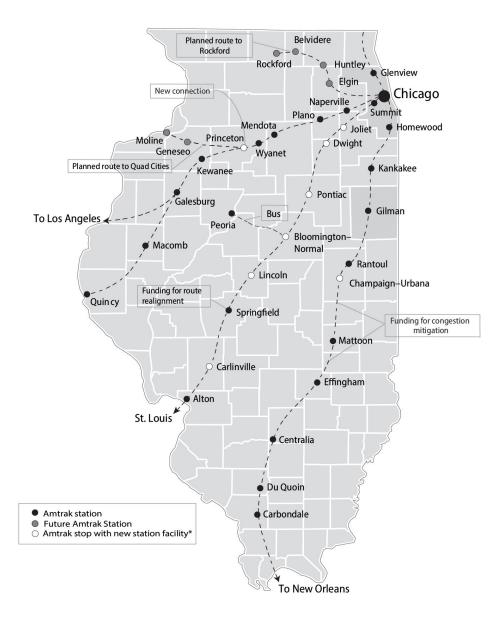
RECENT CHANGES IN RAIL SERVICE COVERAGE

In Illinois, the rail-passenger network serving downstate has undergone many changes in the decades since Amtrak's inception. In cooperation with the state government, the passenger railroad experimented with a Chicago-Peoria service, which ran from 1980–81, and a Chicago-Dubuque, Iowa, service, with stops in Rockford, Freeport, Warren, Galena, and East Dubuque, which ran from 1974–81. A train linking Carbondale and Kansas City, operating via St. Louis, with a Belleville stop, was launched in 1984 to provide connections to Amtrak's Chicago-New Orleans route but was discontinued in 1994. (Belleville regained rail-passenger service through an extension of the Metrolink light rail system from St. Louis in 2001). In 1996, Chillicothe and Streator saw their last passenger train when Amtrak re-routed its Chicago-Los Angeles train to a more northerly route east of Galesburg (Sanders, 2006).

The next sizable push to expand the system came in 2006, when new trains began operating on three established routes to and from Chicago. Made possible by a sharp increase in state financial support, the frequency of daily trains on the route to St. Louis (via Normal and Springfield) grew from three to five, while the number grew from two to three trains to Carbondale (via Kankakee and Champaign), and from one train to two to West Quincy, Missouri (via Galesburg and Macomb). Expanded cooperation and additional appropriations by the states of Illinois and Wisconsin also allowed for gradual increases in the Chicago–Milwaukee *Hiawatha Service*, which grew to reach its present level of seven daily trains by 2007.

These new trains together with other enhancements, including new stations built in Alton, Carlinville, Champaign, Dwight, Joliet, Lincoln, and, Pontiac, and gradual improvements to Chicago's Union Station, stimulated passenger demand (Figure 2). Higher gasoline prices also helped drive passengers to the state's expanded train network. Nevertheless, the momentum began to ebb in 2014 with the decline of fuel prices, disruptions due to track construction, and lingering problems with on-time performance.

FIGURE 2 INTERCITY RAILROAD PASSENGER NETWORK IN ILLINOIS



^{*}New station built since 1999 to replace pre-Amtrak structure existing before 1971

The next government push to expand the Amtrak system came in 2019 amid growing momentum to resume service between Chicago and both the Quad Cities (Moline) and Rockford. The comprehensive capital and spending bill passed by the Illinois General Assembly in spring of that year authorized \$500 million for the two routes. Supported by heightened fuel taxes, projected revenues from new casinos, and other sources, funds were approved for a new track connection outside of Wyanet (near Princeton) and right-of-way improvements from that junction west through Geneseo (a future station stop) to Moline (Corselli, 2019). Other funds were provided for right-of-way improvements through Elgin, Huntley, and Belvidere, all proposed stops along the new Rockford route. Both new routes are slated to begin by 2022, although, in each case, the timely completion of improvements will likely require at least some form of federal support.

The capital bill also includes funds to relocate trains away from downtown Springfield via the 10th Street Corridor—a project long supported by the city's government—and to mitigate congestion on the Carbondale route (Corselli, 2019). Momentum has also grown in support of repurposing old mail platforms under the Main Post Office in Chicago to expand Chicago Union Station's capacity.

Repeated delays in the deployment of higher-speed service on the St. Louis route are part of a less favorable chapter in the state's recent rail transportation history. A maximum speed target of 110 mph was selected for this route as this is the highest allowable speed without the elimination of highway-rail grade crossings. With more than 200 active crossings, this strategy, if pursued on a large scale, would be an extremely costly endeavor along this stretch of railroad.

Optimism nonetheless ran high in the early years of the Obama administration when Illinois successfully secured \$1.6 billion of funding, including federal dollars to match state appropriations, for track improvements and signals to support speed enhancements. Some of these funds became available when Wisconsin and other states turned back federal funds due to local opposition to high-speed rail. Nevertheless, the next decade brought continual setbacks for Illinois. For one, the installation of a mandated Positive Train Control (PTC) safety system has been riddled with high cost, complexity, and missed deployment goals.

A failed contract for the construction of bi-level passenger cars for this regional service delivered another blow. Nippon Sharyo, Ltd., the multinational firm that

won the bid to build the cars in Rochelle, found its equipment incapable of meeting federal crash-worthiness tests and had to abandon production (DeCoster, 2017). More conventional single-level cars are now on order, but the result is a lengthy delay in rolling out newer and more comfortable passenger cars.

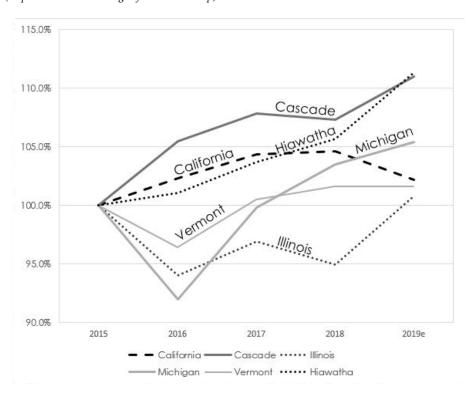
Momentum to increase the number of trains on the Chicago–Milwaukee route from seven to 10 trains, meanwhile, stalled due to severe opposition raised by residents and some village governments along the route concerning the construction of a passing track envisioned to support this service. Opponents in Glenview and other North Shore communities voiced concerns over noise, air pollution, vibration, and added delays at grade crossings. In response, the state government scuttled plans for a passing track in spring 2019, requiring the transportation departments in both Illinois and Wisconsin reassess their options. Despite this, Wisconsin officials have remained committed to the frequency increase and announced this past summer the state's commitment to expanding to 10 daily trains in each direction, even without the passing track (Sadler, 2019).

The setbacks facing improvements to the Milwaukee and St. Louis routes contrast sharply with the progress made in Michigan, which, after suffering its own problems, has achieved gradual speed improvements on the Chicago–Detroit corridor. By bringing a length of track segments under public ownership, relieving itself of the burden of negotiating with a freight railroad, and by overcoming PTC installation issues, Michigan has been able to increase average speeds on a faster timetable than Illinois.

TREND ANALYSIS

To understand how the rail-passenger system in Illinois has fared in recent years, we analyzed changes in ridership on trains serving downstate with other major state-supported corridors in which there have been no significant schedule changes since 2015. In order to facilitate meaningful comparisons, the analysis focuses entirely on systems with three or more roundtrips daily. The analysis excludes routes that are a part of the Northeast Corridor between Boston, Massachusetts, and Richmond, Virginia, as well as state-supported routes serving Virginia and the Carolinas, due to recent expansions in service on these systems that make direct comparisons difficult. The results are reported on the basis of Amtrak's fiscal year, which ends September 30 annually. Estimates for the 2019 fiscal year were made by reviewing year-over-year changes through July 31, using the most recent results available.

FIGURE 3
CHANGES IN AMTRAK RIDERSHIP ON MAJOR STATE-SUPPORTED SYSTEMS SINCE 2015
(Expressed as a Percentage of 2015 Ridership)



Amtrak's Hiawatha Service between Chicago and Milwaukee has outperformed most comparative state-supported corridors since 2015. Routes serving downstate Illinois lagged behind other state-supported routes from 2015–2018, in part due to disruptions resulting from extensive track work, but have recorded stronger gains since 2018 than the other five systems included in the analysis.

Our analysis shows that ridership on the Illinois system (defined as the routes linking Chicago to Carbondale, West Quincy, and St. Louis) like other regional service, experienced traffic declines from 2015–2016 before flattening out and then ultimately rising in impressive fashion (Figure 3). The ridership drop appears to have been attributable partially to the weak economy in Illinois at the time, as well as track work on the Chicago–St. Louis *Lincoln Service* route, which resulted in significant service disruptions and mediocre on-time performance. The rebound between 2018 and 2019 was sharper than on any of

the other five systems. The *Hiawatha Service* linking Chicago to Milwaukee has seen more consistent improvement, having achieved at least modest gains each year. The route's projected 2019 ridership is more than 10% above that of 2015 levels, showing the highest growth of the six systems considered. As previously noted, this increase occurred without the addition of any trains.

Several caveats should be kept in mind when interpreting these results. First, the time period considered does not capture the significant ridership fluctuation between 2013 and 2015, in part due to dramatic fuel-price swings that affected nearly all routes. Second, relative performance of the corridors depends heavily on the selected base year due to unique factors, such as the timing of maintenance projects on each route. If the period evaluated is extended back to 2013, the trends generally look less favorable for Illinois routes; however, if it is limited to 2016 onward, Illinois and Michigan would both appear to be stellar performers. Even so, these results broadly support the notion that both the downstate system and the Hiawatha corridor have performed strongly since 2018.

Overall, these results show that support for conventional passenger trains in Illinois has been in many respects exceptional, paving the way for a recent ridership surge, while plans for high-speed service have been riddled with setbacks. The system of conventional passenger trains is far more expansive than in most other states due to the state's consistent financial support. Even if both new routes being funded by the state are brought to completion, several sizable Illinois cities, including Danville, Decatur, DeKalb, and Peoria, will remain off the state's passenger-train map.

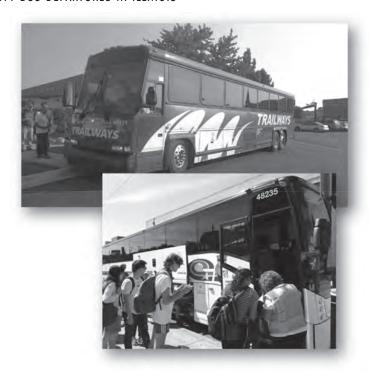
DOWNSTATE ACCESS TO INTERCITY BUS SERVICE

Illinois no longer has the network of intercity bus routes that provided access to nearly every town or city with more than a few thousand residents. The state's bus system is now confined primarily to routes along major interstate highways, leaving even places with populations of 10,000 or more unserved (Figure 5). Although recent innovations and a rural subsidy program have closed some of the gaps, raising optimism about bus travel returning to a position of greater prominence, significant shortfalls persist.

CHANGES IN SERVICE COVERAGE

During the past 30 years, sharp cutbacks by Greyhound Lines, Trailways, and other motor coach lines have left only a skeletal network of routes downstate, particularly south of Decatur, where population densities are lower. Although federal regulatory reform in 1983 gave intercity bus lines expanded pricing and scheduling flexibility across the country, few new routes were added (Schwieterman & Fischer, 2012). Whereas the state provided sizable appropriations to prevent the loss of rail-passenger service, it did comparatively little to arrest the decline of the bus system. Cuts by Greyhound in 2004 had particularly large impacts throughout the Midwest (Schmelzer, 2004).

FIGURE 4 INTERCITY BUS DEPARTURES IN ILLINOIS



Top: Passengers prepare to board a Burlington Trailways coach operated as part of the Amtrak Thruway network in Galesburg, IL; Bottom: A queue forms outside a Megabus single-deck coach at the carrier's curbside boarding area on Polk Street in Chicago.

A modest turnaround began when Megabus, a unit of Stagecoach Group plc, based in the United Kingdom, made its debut in the United States in spring 2006 with service featuring free Wi-Fi, discounted online ticketing, and guaranteed seating (Schwieterman & Fischer, 2012). Within 18 months, the curbside carrier's double-deck buses linked Chicago—its first North American hub—to nearly a dozen major Midwestern destinations. Initially, Megabus coaches ran nonstop from the carrier's loading and unloading area outside Chicago Union Station to out-of-state destinations. Over the next several years, Megabus began experimenting with in-state stops by adding Champaign to its Memphis service and Bloomington–Normal to its St. Louis service. Although both of the above stops proved unsuccessful and were eventually abandoned, the carrier added Moline to its Des Moines route in 2017 and returned to Bloomington–Normal in 2019.

Two years after Megabus' start, Greyhound Lines began a new chapter by introducing Greyhound Express, which offered many of the same amenities as its new curbside competitor (Hall, 2013). Greyhound Express became available in Bloomington–Normal, Champaign–Urbana, Decatur, DeKalb, Galena, Springfield, and a handful of other points. Many passengers prefer this option over conventional Greyhound service due to the longer distances between stops and the seat guarantee provided to all ticket holders. Without guaranteed seats, many passengers arrive early and wait in line at busy terminals to lessen the risk of being denied passage.

Customers also increasingly turned to campus-oriented bus services linking Chicago to Charleston, Normal, and Urbana, which reached their zenith around 2011–12, when LEX (LincolnLand Express, Inc.) and Suburban Express/Illini Shuttle emerged and competed heavily to provide the best value. Students at the University of Illinois campus in Urbana could choose among nearly hourly departures to Chicago, whereas those at other universities around the state had less frequent service. The sudden shutdown of LEX after a series of failed safety inspections in 2012, however, sharply reduced service ("FMCSA shuts down Ill. operator", 2012). Another carrier, Peoria Charter Bus Lines, expanded to fill some of the void, but campus service diminished again in early 2019 when Suburban Express/Illini Shuttle, which had been marred by controversy over comments its owner made about Asian customers, shut down (Zigterman, 2019). This reduced campus service from Urbana–Champaign to only a handful of daily trips and ended direct intercity bus service between Chicago and Charleston. At this writing, much of the void has yet to be filled.

FIGURE 5
INTERCITY BUS NETWORK IN ILLINOIS



The expansion of airport shuttle services, particularly routes linking downstate to O'Hare International Airport, also helped fill some of the gap left by campusservice cutbacks. Although these services tend to be more expensive than other

types of bus services, they have improved access to O'Hare from Bloomington–Normal, Champaign–Urbana, the Quad Cities, and several other points. Rockford is well-connected to O'Hare via a service by Van Galder Lines linking southern Wisconsin to Chicago. Concerned that the absence of airport service is affecting its economy, River Valley Metro in Kankakee is running a shuttle service to Chicago Midway International Airport. As noted in the following section, these services have a downside: they divert traffic from downstate airports struggling to sustain airline service.

Although official statistics are not available, ridership on intercity bus lines supposedly started declining in 2014 due to similar factors that hurt Amtrak: falling gasoline prices, rising car ownership, and a weak state economy. Compounding this stagnation, Megabus was required to move its loading and unloading spot near Chicago Union Station to a less desirable location near the city's Main Post Office Building. A concerted push by public agencies to find a location more closely connected to other modal options has been lacking. Due to declining traffic, Megabus' once-familiar double-deck buses have been largely replaced with single-deck equipment.

The need to improve mobility to places with few options other than private vehicles increased state government interest in expanding intercity bus options. In 2015, it leveraged federal funds to subsidize services linking points left off the intercity bus map and helped launch twice-a-day service by Greyhound Connect between Chicago and the Quad Cities, with stops in DeKalb, Dixon, Rochelle, and Naperville. This service, usually involving small buses, was particularly important in filling a gap in intercity service faced by students at Northern Illinois University. Some of the funding for this service is made possible by the federal 5311(f) program, which requires a portion of federal dollars received—generally 15%—to be spent on serving communities with populations fewer than 25,000.

In the southeastern part of the state, county governments have worked to create a system of rural routes, mixing on-demand and regularly scheduled services. This system, operated with federal, state, and local financial support, dates to 1977, when the Rural Initiative Development of Effective Services began in Pope County, making it one of the country's first government-funded rural transportation services. Initially, "RIDES" had only a few 15-passenger vans and primarily served to carry people to and from nutrition centers and deliver meals to the homebound. This network, now renamed Rides Mass Transit District, gradually added more than a dozen additional counties to its system

(see Figure 5). The carrier began offering an on-demand service linking rural residents to distant cities, including Champaign, Danville, and Springfield, Illinois, as well as Evansville, Indiana and Paducah, Kentucky and St. Louis, Missouri. Residents needing transportation simply need to call 24 hours in advance to schedule pick up and return travel. Ridership has increased to nearly a million passengers annually, making it among the country's largest rural operators.

Another important strategy has been coordination and support for Amtrak Thruway buses. These motor coaches offer connecting services over three primary routes that allow train travelers to make connections to Danville, Peoria, and the Quad Cities, as well as other points. Nevertheless, this service remains less developed than that of many other states. Michigan, for example, has an elaborate system of well-timed connections linking Indian Trails Bus Lines to Amtrak. In 2019, Wisconsin unveiled new connecting routes linking Green Bay to Milwaukee, while California and Oregon have sophisticated branding systems that include bus and rail connections to points not served by Amtrak trains.

Another bright spot in the development of the state's intercity bus network is the expansion of bus lines oriented toward Latinx passengers. Since 2012, two lines, Tornado and Turimex, have developed particularly extensive networks, in part due to Chicago's large Spanish-speaking population. Tornado operates a heavily used route linking Milwaukee, Chicago, and Texas with stops in Anna, Bloomington, Champaign, Kankakee, Marion, Mount Vernon, and Rantoul. In Houston, passengers can make connections to a bevy of routes to points near the border of the United States and Mexico and other locations. Turimex also operates a route to Texas, via St. Louis with a Bloomington stop.

TREND ANALYSIS

To better understand the gaps in the state's bus network, we evaluated the access of downstate communities to regularly scheduled intercity bus service since 1980. We did not include carriers that exclusively offer airport shuttle service using minibuses and vans because of their orientation toward flyers and their relatively high fares, which make them inaccessible to many lower-income residents.

The analysis, using the Russell's Official Motor Coach Guide and other archival timetables, showed that the number of Illinois communities served by intercity

bus lines has gradually dropped since the 1970s. Chillicothe and Rock Falls are among the dozens of communities that had lost service by 1980, and both were left a considerable distance from the nearest intercity-bus stop. Between 1980 and 1995, the number of cities served in Illinois plummeted from 103 to a mere 32. Among the 81 municipalities that lost service during this interval were Charleston, Harrisburg, Herrin, Macomb, and Murphysboro, each of which was more than 10 miles removed from the nearest stop.³ Between 1995 and 2010, another eight cities lost service, including Fairfield, Litchfield, Mount Carmel, and Vandalia, bringing the total down to 24. Much of the decline is attributable to cutbacks by Greyhound, which trimmed its Illinois service from 54 communities in 1980 to 22 in 2010.

On a more positive note, the number of communities served rebounded from 24 to 26 between 2010 and 2019, a period in which only Pontiac lost service entirely. As Greyhound transferred some of its routes to other bus lines, such as Burlington Trailways, the number of communities with more than one bus line (generally Greyhound and at least one other line) rebounded from six to 12 after continuously dropping since 1980.

TABLE 1

DOWNSTATE MUNICIPAL COVERAGE OF INTERCITY BUS SYSTEM IN ILLINOIS

SERVICE CATEGORY	NUMBER OF COMMUNITIES SERVED			
SERVICE CAIEGORY	1980	1995	2010	2019
Cities with Intercity Bus Service	103	32	24	26
Cities with Greyhound Bus Service	54	24	22	22
Cities with Multiple Bus Carriers	44	13	6	12

Many of these communities suffering a loss of service are unlikely to regain it anytime soon without a concerted state initiative. At the same time, the downward spiral of the intercity bus system has clearly ended, in part due to state intervention and targeted expansions by Peoria Charter, curbside bus lines, Latinx carriers, and other growth-minded operators. The state government, however, has played only a minor role in sustaining service and notable gaps remain. For example, Danville and Peoria lack direct bus (as well as rail) connections to downtown Chicago. Decatur has only one daily departure to the Windy City, which is not amenable to daytrips. Hundreds of villages and small cities have no regularly scheduled service at all.

DOWNSTATE ACCESS TO COMMERCIAL AIRPORTS

Nearly all 10 downstate airports with scheduled air-passenger service have experienced dramatic traffic fluctuations during the past decade (Figure 7). Sudden withdrawals by air carriers, passenger diversions to Chicago and St. Louis, and new flight patterns due to the realignment of major hubs have left some bereft of the "critical mass" needed to attract significant numbers of business flyers. As a result, the prognosis for most airports attracting large numbers of corporate flyers is mixed.

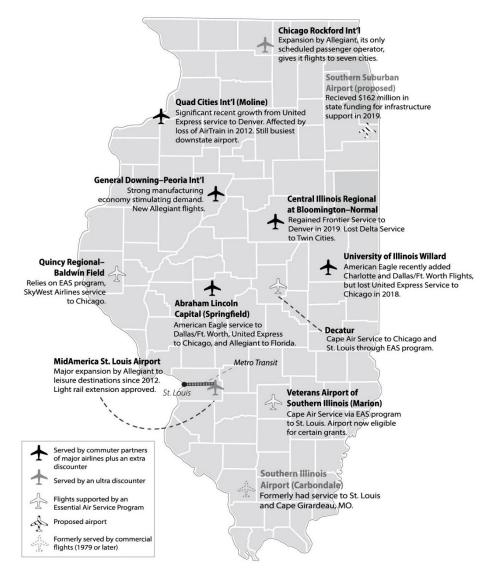
At the same time, air-passenger traffic is generally growing, mirroring the trend in air travel nationwide. As described below, American Airlines and United Airlines are returning to downstate airfields with smaller jets, typically having less than 80 seats, operated by their regional partner affiliates as they vie for market share at O'Hare International Airport and other hubs. Ultradiscounters, mostly notably Allegiant Airlines, which specializes in flights from mid-size airports to major leisure destinations, and Frontier Airlines, which caters to many underutilized airports situated near major metropolitan areas, are also on the rise. These airlines bring the bounty of lower fares to places previously attractive only for business flyers willing to pay a premium. Although the scheduled offerings to any given destination are limited to a few days a week, they attract leisure travelers heading to Arizona, Colorado, Florida, and other vacation spots.

FIGURE 6 DOWNSTATE AIRPORT SERVICES



Left: An arrival/
departure monitor
at Central Illinois
Regional Airport
at BloomingtonNormal; Top left,
Decatur Airport's
terminal building;
Bottom right:
An Allegiant
Airlines jet at
BloomingtonNormal.

FIGURE 7 COMMERCIAL AIRPORTS IN DOWNSTATE ILLINOIS WITH SCHEDULED PASSENGER FLIGHTS



CHANGES IN SERVICE COVERAGE

The seven most heavily used airports located downstate, ranked from largest to smallest on the basis of passenger enplanements for the year leading up to June 2019 are: i) Quad Cities International in Moline; ii) MidAmerica Airport

St. Louis near Belleville; iii) Chicago Rockford International in Rockford; iv) General Downing–Peoria International; v) Central Illinois Regional at Bloomington–Normal; vi) University of Illinois Willard, in Savoy, part of the Champaign–Urbana area; and vii) Abraham Lincoln Capital in Springfield. Our estimates of annual enplanements for 2019 (i.e., the number of passengers boarding scheduled departures) are based on traffic reported on U.S. Department of Transportation T-100 reports through May of 2019 (Table 2). All estimates are rounded to nearest 1,000 except those for the airports with Essential Air Service, due to the manner in which this data is reported. ⁵ Total passenger volume, which encompasses both enplanements and deplanements, is roughly twice these amounts.

Quad Cities, by far the largest, is projected to have 369,000 enplanements (an average of more than 1,000 enplanements per day). Peoria International—the second busiest—is projected to have around 341,000, followed by Central Illinois (Bloomington–Normal), projected to have 206,000. The smallest, Veterans Airport of Southern Illinois, near Marion, is on pace to have 9,091 (an average of about 25 enplanements daily).

 TABLE 2

 TRENDS IN ENPLANEMENTS AT COMMERCIAL AIRPORTS IN ILLINOIS

AIRPORT	ANNUAL ENPLANEMENTS		RECENT FACILITY	AIRLINES	
	2009	2019E	HIGHLIGHTS		
Quad Cities International	461,000	369,000	Solar project, parking improvements underway.	Allegiant, American Eagle, Delta Connect, and United Express	
General Downing-Peoria International	241,000	341,000	Ray LaHood International Terminal opened in 2017.	Allegiant, American Eagle, Delta Connect, and United Express	
Central IL Regional Airport, Bloomington- Normal	243,000	206,000	Wrapping up five-year \$5.2 million pavement improvement plan; Received FAA grant in 2018.	Allegiant, American Eagle, Delta Connect, and Frontier	

MidAmerica Airport St. Louis (near Bellville)	<500	148,000	Light-rail extension to airport approved.	Allegiant
Chicago Rockford International	82,000	104,000	Terminal expansion launched in 2017; expanding cargo service attracted \$9 million federal grant in 2019. Country's 22nd- busiest airfreight hub.	Allegiant
University of Illinois Willard (Champaign)	86,000	101,000	Adopted Fly Local campaign for employers. Received FAA grant in 2018.	American Eagle
Abraham Lincoln Capital (Springfield)	53,000	66,000	\$10.25 million grant for 225 more parking spaces. Received FAA grant in 2018.	Allegiant, American Eagle, and United Express
Quincy Regional- Baldwin Field	1,735	11,178	Considering united Express (Essential Air Service)	
Decatur	645	9,696	Received \$2.9 million federal grant in 2019 for runway improvements.	Cape Air (Essential Air Service)
Veterans Airport of Southern Illinois (Marion)	2,456	9,091	Received \$1.2 million grant in 2017 for lighting improvements. Cape Air (Essential A Service)	

Of the 10 downstate airports, six have experienced traffic growth since 2009. Quad Cities International Airport handles the greatest volume of scheduled passengers despite periodic declines during the past decade. All 10 have recently made facility improvements. Estimates for 2019 are based on traffic through June 2019. All estimates are rounded to nearest 1,000 except those for the airports with Essential Air Service.

The three airports with the least commercial traffic, Decatur, Veterans Airport of Southern Illinois (in Williamson County, near Marion), and Quincy Regional–Baldwin Field, are all heavily reliant on the federal Essential Air Service program. The funds from this program, available only to places more than 100 miles from a larger hub airport, are used to subsidize service to outlying airports otherwise unable to sustain service. Veterans Airport of Southern Illinois, for example, has had approximately \$2 million allocated annually to support this service in recent years (U.S. DOT, 2014).

Much can be learned about the diverging performance of these airports by looking at enplanement totals during two distinct periods: i) in the years leading up to 2009, which ended amid the Great Recession, and ii) the more recent 2009–2019 period. Bloomington–Normal and Quad Cities, in particular, saw buoyant growth between 2000 and 2009. Quad Cities, in fact, appeared poised to galvanize its position as the most dominant downstate airport, having 461,000 enplanements in 2009, nearly twice the number of any other downstate facility. Bloomington–Normal, ranking second, benefitted from mainline Delta Airlines jets having more than 100 seats flying to distant hubs, as well as AirTran's DC-9 departures to its Atlanta hub. The resulting traffic growth prompted a variety of terminal improvements and attracted many travelers from Decatur and Springfield.

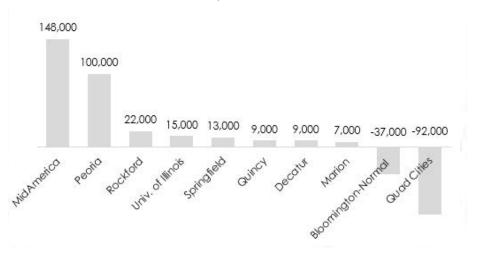
Administrators at MidAmerica Airport, meanwhile, struggled to shed that airport's image as a chronic underperformer. MidAmerica, adjacent to Scott Air Force Base, lacked any scheduled passenger service during much of the period leading up to 2009, with fewer than 500 enplanements that year. Critics derided its architecturally striking but mostly vacant terminal, built partially at state expense, as an example of wasteful government spending (Provost, 2008). Springfield, another underperformer, struggled to be more than a niche player, handling a mere 53,000 passengers in 2009, less than a quarter of either Bloomington–Normal or Quad Cities. In fact, the University of Illinois Willard at Champaign–Urbana had more than one-and-a-half as many enplanements—86,000—at the time.

The next decade, however, brought dramatic change (Figure 8). Between 2009 and 2019, Peoria rose to greater prominence, growing from being slightly smaller than Bloomington–Normal, in terms of passenger volume, to more than 50% greater. The airport added 100,000 enplanements during the period (derived from projections for 2019 based on traffic through May), bolstered by a booming manufacturing economy—the result of stepped-up Caterpillar

production. Peoria joined the Quad Cities airport as one of only two downstate facilities served by the regional partners of all the country's three largest network airlines—American, Delta, and United.

Bloomington–Normal surrendered ground after 2009, suffering the loss of AirTran in 2012 (Hansen, 2013) and Delta service to the Twin Cities. Flight reductions pushed enplanements downward by 37,000 between 2009 and 2019. Fortunately for the city's residents, Frontier relaunched service to Denver in April 2019, laying the groundwork for a comeback, suggesting that passenger traffic may return to 2009 levels in the next few years. In both absolute and relative terms, Quad Cities suffered an even greater loss in passenger traffic than Bloomington–Normal, in part due to United downsizing service, although it still has the most traffic of any downstate facility, even if by a diminishing margin. Its traffic, too, appears to be recovering.

FIGURE 8
CHANGE IN PASSENGER ENPLANEMENTS, 2009—2019



Eight of the 10 downstate airports have seen growth in passenger enplanements since 2009. Six of the 10, however, have experienced only modest increases, with enplanements growing by around 22,000 passengers or fewer annually (roughly 60 passengers/day), or overall declines, with Quad Cities International Airport (Moline) particularly hard hit. Traffic changes rounded to the nearest 1,000.

MidAmerica continued to struggle after 2009 but eventually turned the corner, welcoming many new customers attracted to Allegiant, which made the airport a full-fledged hub. The no-frills operator began flying directly to nine destinations, albeit with some flights operating only a few days a week. The airport went from having no scheduled passenger service as recently as 2013 (although it did serve a general aviation traffic role at the time) to having a projected 148,000 enplanements in 2019. In the process, MidAmerica is approaching roughly three-quarters the volume of Bloomington–Normal.

Other airports had mixed results. Springfield, for example, expanded its traffic by 13,000 passengers between 2009 and 2019, the fifth-largest amount among the 10 airports. This airport's traffic is now roughly a quarter greater than it was a decade ago, although there was a modest downturn in early 2019. Rockford and University of Illinois Willard also enjoyed growth, while at a more modest pace, rising by 22,000 and 15,000 passengers, respectively. After suffering the loss of United in 2018, University of Illinois Willard regained momentum when its only passenger airline, American, added regional-jet service to both Charlotte and Dallas–Ft. Worth. Rockford suffered the loss of several carriers, leaving Allegiant as its only scheduled passenger airline. However, its traffic is again growing due to aggressive expansion by the discounter. Enplanements are likely to exceed 100,000 in 2019, well above Rockford's volume in 2009.

The three airports reliant on Essential Air Service funds have experienced only slight changes over the past decade, in part due to their continuing dependence on planes with 12 or fewer seats and the availability of nonstop service only to Chicago, St. Louis, or both. Decatur and Quincy had modest traffic losses between 2016 and 2017 before seeing a rebound, while Marion's traffic has risen more steadily. Service at Decatur and Marion is provided by Cape Air, and Quincy's flights are operated by SkyWest Airlines, a United Airlines affiliate.

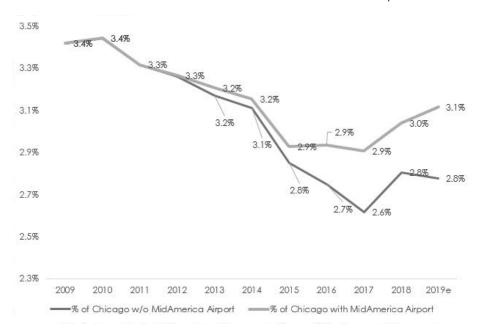
TREND ANALYSIS

Despite the recent growth in passenger traffic, the cumulative traffic of downstate airports continues to be only a small fraction of that of Chicago's Midway and O'Hare. Our analysis of U.S. Department of Transportation data shows that all downstate airports combined handled just 3.1% the passenger traffic of Chicago's airports in 2019 (Figure 9). In other terms, Chicago has more than 30 times as many enplanements as all downstate airports combined. This small percentage, while up from 2.9% in 2009, speaks to the stiff competition facing these outlying facilities. When MidAmerica (which draws heavily

from the St. Louis metropolitan area) is excluded from these comparisons, downstate airports have a mere 2.8% the number of enplanements as Chicago. Yet downstate airports have modestly outperformed Chicago since 2017, as is evidenced by the upward ticking trend lines on figure 9 for 2018–19.

Several caveats should be kept in mind when interpreting these statistics. The Chicago metropolitan area has more than three quarters of the state's population. It should be expected, therefore, that its passenger traffic is several times higher. Enplanements at both Midway and O'Hare are bolstered by passengers making connections between flights, a practice that is rare at downstate facilities. A significant share of traffic at O'Hare involves international flights, which is typically not available at smaller airports. Nevertheless, the comparison shows why the incentive for air passengers to divert from downstate airports to Chicago or St. Louis is so strong.

FIGURE 9DOWNSTATE ENPLANEMENTS AS PERCENT OF CHICAGO ENPLANEMENTS, 2009-2019



Enplanements at downstate airports as a percentage of enplanements at Chicago's airports gradually fell between 2009 and 2017 before rebounding, largely due to expansion at Scott Air Force Base and Peoria. Chicago's enplanement numbers are bolstered by large numbers of passengers making connections on trips between out-of-state destinations.

Underlying the struggle facing downstate airports is their inability to sustain *mainline* service by a major network airline, such as American, Delta, or United. This service, typically provided on jets with 140 or more seats (such as newer-model Boeing 737 and Airbus 320 planes), is often regarded as more comfortable than the regional jets that dominate downstate airports. Larger planes typically allow airlines to offer lower fares, which stimulates traffic.

The inability of downstate airports to attain the critical mass necessary to support mainline service may be partially attributable to the diffusion of traffic over so many facilities. Airports at Bloomington–Normal, Decatur, Peoria, and the University of Illinois compete for many of the same passengers. Only one downstate airport that had service in 1979, Southern Illinois Airport near Carbondale, has lost passenger service. By comparison, three airports in Indiana have lost service. Simply put, on a per capita basis, downstate Illinois has many small and mid-size airports.

The diffusion of traffic across airports raises the difficult question of whether state government policy should seek to develop airports that serve pairs or clusters of cities. The performance of airports elsewhere in the Midwest serving pairs of non-contiguous cities, such as Kalamazoo/Battle Creek International Airport in Michigan, Akron–Canton Airport in Ohio, and Eastern Iowa Airport (which serves Cedar Rapids and Iowa City), suggests that promoting airports serving pairs of cities may be an effective strategy. Each has more than 150,000 enplanements annually and is served by all three of the largest network airlines. Quad Cities International Airport is also notable for serving a cluster of four cities, each with populations of 25,000; but unlike the above out-of-state examples, these cities are contiguous.⁴

Nevertheless, the lessons these out-of-state airports offer for downstate are limited. In each of the above cases, driving distance between the downtowns of the cities involved is less than 35 miles, whereas most Illinois cities are separated by longer distances. For example, the driving distances from Bloomington to Peoria and Springfield are 38 miles and 74 miles, respectively. Peoria and Moline are 93 miles apart. Longer drive times, together with the enormous financial outlay needed to restructure the airport system (which would likely mean building new airports at locations halfway between cities), render significant changes difficult to contemplate for the foreseeable future.

Moreover, consolidation proposals would likely generate strong opposition in most cities with commercial service. Most airports are in the midst of improvements in anticipation of traffic increases. This year, Bloomington finished a five-year, \$5.2 million pavement renovation project. Quad Cities is undertaking a solar energy and parking project, while Peoria is benefitting from its relatively new Ray LaHood International Terminal, which opened in 2017. Rockford is leveraging its growing cargo traffic to support passenger-service improvements. MidAmerica will become the endpoint of a new light-rail line linking it with St. Louis. In summer 2019, Decatur received an FAA grant for runway improvements.

Regardless of the policy the state pursues, market forces may ultimately result in some degree of consolidation. Southwest Airlines' entry into a downstate airport, for example, would accelerate this process. Research has shown that many travelers would gravitate to an airport served by this Texas-based carrier in order to take advantage of the airline's discount fares, frequent service, and flexible ticket rules—a phenomenon known as "the Southwest Effect" (Pitfield, 2008). In 2010, there were reports that Southwest, following its purchase of AirTran, considered entering Bloomington–Normal, but that never came to fruition (Doston, 2010).

Adding to the complexity facing downstate airports, a new facility—the South Suburban Airport—could enter the mix in the next several years. Interest in this airport, envisioned being built on land that is largely state owned between Peotone and Monee on metropolitan Chicago's southern periphery, is being fueled by the expansion of the logistics business along Interstate 57, including Amazon distribution centers (Wisniewski, 2019). This airport, potentially opening by 2023, would primarily serve Chicago's south suburbs and the east-central part of the state, including Kankakee and Rantoul. The state government's land holdings, plus modest additions, would allow for a so-called "starter airport" having a single runway and small terminal (IDOT, 2017). A vocal anti-airport group has emerged in Peotone, although many other stakeholders in this part of the state have voiced support (Wisniewski, 2019).

The state government approved \$162 million in funds for a new Interstate 57 interchange and other ancillary improvements needed for the airport in 2019 (Wisniewski, 2019). Although the state has not committed to funding the airport's construction itself, optimism has grown that a private concessionaire can be found to build the runway and terminal. Even so, some observers are skeptical that it can be built without significant state government outlays (Chicago Tribune Editorial Board, 2019). Even if the proposed airport comes to fruition and proves successful in attracting commercial flights, it would

likely do relatively little to improve mobility in central Illinois, considering that its passenger-service offering would likely remain, at best, limited in its early years, and driving distances would be considerable.

CONCLUSION

When viewed in its totality, the evolution of passenger service to the downstate region is a mix of positive and negative developments. The analysis presented above points to several strengths and weaknesses of the state's policy.

1. The state government's financial support for rail passenger service has been a cornerstone of its efforts to improve mobility in the downstate region.

This consistent support has laid the groundwork for a sharp rebound in passenger-train travel since 2018. Furthermore, the state is committed to expanding the network by investing in new routes linking Chicago to Rockford and the Quad Cities, as well as making improvements on the Chicago to Carbondale and St. Louis routes. On a cautionary note, however, the state's ongoing budget woes could make sustaining this expanded system of trains a challenge.

2. The state's efforts to promote higher-speed rail service have been marred with miscalculations and technical problems.

Continual delays, diminished expectations, and a failed passenger-car order have no doubt left municipal leaders wondering whether the original goal of much faster and reliable service on the St. Louis route will take place anytime soon. The state appears to be wavering in its promise to have trains operating at 110 mph over lengthy segments within the state.

3. Illinois does not have a strong record of supporting the development of intercity bus travel, which has resulted in reduced intercity bus access in many downstate communities.

This fact, together with a decline in campus-oriented bus services, has hindered bus access to some major downstate universities. Danville and Peoria stand out as examples of cities that lack direct bus lines to downtown Chicago, while other cities, including Decatur, have only poor connections to the Windy City. The sluggish expansion of this sector is being aggravated by the absence of an attractive boarding area for curbside bus operators in downtown Chicago.

4. The downstate airport system is recovering from a turbulent period but is generally in the midst of a rebound.

Nearly all airports in this region have experienced significant gains since 2017, in some cases due to the expansion of ultra-discounters. The MidAmerica, Peoria, and Springfield airports have made particularly large strides in recent years. Bloomington–Normal and the Quad Cities, while hit hard by the Great Recession, have seen their fortunes improve recently. Three airports, however, remain precariously dependent on Essential Air Service funds.

5. The dispersed nature of the downstate airport system presents serious challenges that result in significant diversion to airports in Chicago and St. Louis.

Passenger traffic is spread thinly across airports, which limits the economies of agglomeration and prevents airports from offering mainline service of major airlines. An unfortunate result of this dispersion has been that Chicago's airports have tended to outperform downstate airports during the past decade. Although the prognosis for the proposed South Suburban Airport along the Interstate 57 corridor has improved, it is unclear how this will affect the accessibility to convenient and affordable air-passenger transportation for downstate residents.

6. A notable shortfall in state policy is the absence of a coordinated strategy to build stronger links between the state's air, bus, and rail systems.

Different modes of transportation remain poorly integrated in Chicago, where, for example, Amtrak trains and most intercity bus lines operate from different locations and are absent from the city's major airports. Nearly all intercity buses and trains use the same stations in Champaign and Galesburg, but connections between modes are not as tightly coordinated as in other states. The state has not invested in large-scale co-branding of Amtrak Thruway service that has proven successful in California, Michigan, Oregon, and other states.

Despite the challenges, the push to improve downstate mobility—a process filled with unexpected turns in recent decades—appears destined to remain a high-profile component of the state's policy agenda.

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ENDNOTES

- ¹ The Illinois portion of metropolitan St. Louis has an estimated population of around 600,000, but is not a distinct metropolitan area.
- ² The shift in financial burden to state government was particularly large with the Passenger Rail Investment and Improvement Act of 2008. For details: https://amtrakoig.gov/sites/default/files/reports/oig-a-2014-003.pdf
- ³ Charleston later regained service with the expansion of LEX Express, and then lost it again, while Harrisburg now has on-demand service by RMTD.
- ⁴ The Metropolitan Airport Authority of Rock Island County is governed by a board of commissioners, with members appointed by the Rock Island County Board Chairman and the mayors of East Moline, Moline, Milan, Rock Island, and Silvis.
- ⁵ Enplanement information was obtained from the Bureau of Transportation Statistics (BTS) website at the link below. Annual airport totals were determined by reviewing 12-month totals, January to December, for each year. On the BTS website, enplanement statistics are rounded to the nearest 1,000 for most large airports. Our analysis shows that historical enplanement totals differed between BTS sources; please contact the authors for detail of our efforts to reconcile these statistics. Link to data for MidAmerica: https://www.transtats.bts.gov/airports.asp?pn=1&Airport=BLV&Airport_Name=Belleville,%20IL:%20Scott%20AFB/MidAmerica&carrier=FACTS. Click "Show all airports (by state)" to select different airports

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