

Chapter 8. Future Aviation Scenarios

8.1. Introduction

The IASP evaluates the existing and future demands on Illinois' aviation system to provide IDOT Aeronautics with guidance on capital needs over a 20-year planning horizon. Existing and future demands are typically evaluated at a gradual, incremental level as changes in aviation demand and economy occur over time. Because the changes to the system are gradual, this analysis provides a higher degree of certainty related to system demand in the short term, or three to five years. Beyond the three-to-five-year timeframe, influences on aviation demand and the economy become more difficult to plan for and predict. In the five-20-year timeframe, demand may be influenced by scenarios that cannot be foreseen, such as an economic recession or global pandemic. For example, in recent history the COVID-19 pandemic, the Great Recession of 2008, and the terrorist attacks on September 11, 2001 have had significant effect on the aviation industry, including the evolution of airline service and airport facilities. Each of these events had fundamental impacts to the entirety of the aviation system that were largely unplanned. In addition to these monumental events, technological advances also influence aircraft design, fuel alternatives, and airport development in notable ways.

To seek to identify and address some of these unknowns, this chapter documents anticipated or possible scenarios that could impact Illinois' aviation system in the future. The scenarios were developed in two parts to identify a possible "what if?" scenario as well as a "could we?" solution. Commercial service, general aviation (GA), and COVID-19 were the three main scenarios analyzed for future aviation scenario solutions.

8.2. Commercial Service

Over the last decade, due to a variety of reasons including healthy economic conditions, the commercial service industry experienced significant growth. In 2009, air carriers served over 700 million passenger enplanements and by 2019, annual passenger enplanements were over 920 million. The COVID-19 pandemic reduced commercial activity significantly in 2020 and 2021, however, air travel is rebounding due to growth in e-commerce, air cargo, and leisure activity. The last decade is proof that the industry is vulnerable to sharp changes brought on by economic disruptions, technological advances, and others. Due to the industries continued emphasis to recover from the effects of COVID-19, the subsections below highlight three potential scenarios that may be experienced in Illinois in the coming years as a result of the pandemic. These include:

- ◆ Regional Service Markets
- ◆ Essential Air Service (EAS)
- ◆ Passenger Facility Charges (PFCs)

8.2.1. Regional Service Markets



What if...

regional markets experience sustained contractions and reduced service?



Could We...

consider facilitating consolidation of traffic and multi-modal solutions for access to large hub airports?

Illinois' regional airports primarily offer short haul service to connection hub airports. Risks in regional markets for air travel existed before the pandemic, but do even more so now as staff shortages, new transportation technologies, and recent heightened attention to carbon emissions, may dampen near-term recovery of these short haul markets. There are several factors that pose a threat to Illinois' short haul service including:

- ◆ Regional carrier workforce shortage
- ◆ Driverless vehicle adoption for short haul trips
- ◆ National carbon emission reduction programs

8.2.1.1. Regional Carrier Workforce Shortage

Like trends across the nation, regional air carriers are experiencing workforce shortages across all levels and job types, from entry-level positions, such as baggage handlers to highly qualified positions such as pilots and technicians. Some workforce shortages predate the COVID-19 pandemic but have been exacerbated by the pandemic and its ancillary effects and pose a larger challenge for airline recovery as the pandemic continues. Most U.S. airlines used federal COVID-19 relief funds to avoid involuntary staff furloughs and layoffs. Although in some cases, airlines also offered early retirement and voluntary departure packages to reduce overall staff and operating costs. Some network carriers were forced to cut or cancel flights because of staffing shortages.

8.2.1.2. Driverless Vehicle Adoption for Short Haul Trips

Over the 20-year planning period, driverless vehicles may be certified and used by former air passengers that choose instead one mode of transportation instead of multiple connections from origin to destination. On a short haul trip of less than 250 miles, the trip to the airport, a nonstop or connecting flight, and ground transportation to the destination, while generally accepted today, may become a less compelling choice if a passenger can take make one driverless vehicle trip door-to-door. This alternative mode of travel could compete effectively with regional air service to a hub airport.

8.2.1.3. National Carbon Emission Reduction Programs

The movement to fly responsibly (or not fly at all) speaks to growing awareness of climate change and the desire to reduce carbon emissions. Twenty-five percent of airplane emissions occur during take-off and landing which is especially impactful for short haul flights which spend the least amount of time at cruising altitude. It is possible that attitudes about reducing emissions will erode demand for short haul air travel and/or increase pressure to support alternate fuels or participate in carbon offsetting programs.

As changes to regional service markets continue to evolve, it is important for all modal partners across IDOT to remain connected to allow for a more streamlined adoption and implementation of passenger travel choice. While no one change is necessarily bad, understanding the impacts across modes is imperative to all modes of transportation working together to serve the needs of residents and visitors to the state.

8.2.2. Essential Air Service (EAS)



What if...

EAS subsidy levels are negatively impacted by inflation and higher fuel prices?



Could We...

actively pursue EAS renewals and sufficient subsidies to maintain air service at Illinois' smallest commercial service airports?

The Essential Air Service (EAS) program was developed to subsidize a minimum level of air service in remote markets in response to the Airline Deregulation Act of 1978. Today, the U.S. Department of Transportation (USDOT) provides EAS support to 110 communities in the continental U.S. and Puerto Rico and 60 small communities in Alaska that depend on air access. As of March 2021, EAS airports in the lower 48 states and Puerto Rico received approximately \$312 million for an average of \$2.8 million in subsidies per EAS recipient airport.

EAS is a popular program for small communities. Despite its popularity, Congress has limited the scope of the EAS program by establishing eligibility criteria that must be met every time an EAS contract is renewed. EAS contracts are typically for three to four years with annual subsidy increases during the contract period. The eligibility requirements established by Congress include:

- ◆ The community must be located more than 70 highway miles from the nearest medium or large hub airport.
- ◆ Per passenger subsidy rates cannot exceed \$200 unless the community is more than 210 highway miles from a medium or large hub airport.
- ◆ While in the EAS program, the community must have 10 or more enplaned passengers per day to continue to remain eligible for EAS funding. (3,650 annual enplanements)

Communities that fail to meet one or more of these requirements can apply for a waiver from exemption, though it is not guaranteed that exemptions will be granted by the USDOT. The loss of EAS service in small communities often leads to a complete termination of commercial air service. There are three EAS airports in Illinois. These airports are Decatur (DEC), Veterans Airport of Southern Illinois (MWA), and Quincy Regional-Baldwin Field (UIN). EAS in Illinois consists of the following service:

- ◆ SkyWest Airlines, operating as a United Express carrier, provides 12 nonstop roundtrips per week

between DEC and Chicago O'Hare International (ORD). The SkyWest Airlines contract term expires in January 2025.

- ◆ Cape Air provides EAS from UIN with 18 nonstop roundtrips to ORD and 18 nonstop roundtrips to St. Louis-Lambert Airport (STL). The Cape Air contract is for four years.
- ◆ Cape Air also provides nine-seat turboprop service from MWA in Marion to Nashville International (BNA) at 12 weekly roundtrips and 24 roundtrips to STL. The current Cape Air contract at MWA expires in November 2023.

In an environment of higher inflation and potentially higher fuel prices, it will be important that EAS subsidies cover anticipated increase in costs over the lifetime of the contract. While the future of the EAS program is not known, IDOT Aeronautics should continue to engage with EAS airports in the state to remain ahead of issues and appropriately communicate concerns at a statewide level.

8.2.3. Passenger Facility Charges (PFCs)



What if...

funding levels for PFCs do not increase?



Could We...

explore other funding sources to maintain, update, or replace airport infrastructure at commercial service airports?

Illinois' commercial service airports finance capital improvement programs through a variety of funding sources such as passenger facility charges (PFCs), airport revenues, debt instruments, and a variety of public support programs, including the federal Airport Improvement Program (AIP), state grants, and matching contributions from local government sources.

During the COVID-19 pandemic, airports were supported by three additional federal grant programs:

- ◆ The Coronavirus Aid, Relief, and Economic Security (CARES) Act
- ◆ Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA)
- ◆ American Rescue Plan

COVID-19 related grant awards were based on the number of annual passenger enplanements at commercial service airports. A separate, lower amount of funding was set-aside for GA airports based on NPIAS classification (i.e., national, regional, local, basic, and unclassified).

Most recently, in December 2021, the FAA announced first year awards from the Bipartisan Infrastructure Law (BIL) in the amount of \$2.89 billion for 3,075 airports.¹ BIL funds can be invested in runway, taxiway,

¹ <https://www.faa.gov/bil>



safety, sustainability, terminal, in-airport transit, and airport roadway projects. The funds will come from the Airport Infrastructure Grant program, one of three new aviation programs created by the BIL. The law provides \$15 billion over five years for airport infrastructure projects that increase safety and expand capacity. In addition, the BIL provides \$5 billion to replace aging terminals, increase terminal energy efficiency and accessibility, and \$5 billion to replace air traffic facilities and equipment. The FAA estimates the backlog of airport modernization and safety projects totals \$43.6 billion.² Illinois airports have been allocated \$123.6 million in the first year of the Bipartisan Infrastructure program as follows:

- ◆ Chicago O'Hare International (ORD) - \$73.7 million
- ◆ Chicago Midway International - \$20.3 million
- ◆ Non-hub commercial airports - \$1 to \$3 million each
- ◆ National GA airports - \$763,000 each
- ◆ Regional GA airports – \$159,000 to \$259,000 each
- ◆ Local and basic GA airports - \$110,000 to \$159,000 each

Allocations from the BIL require local matches like Airport Improvement Plan (AIP) match requirements. PFCs revenues are federally authorized to be used as match fund sources.

PFCs are federally authorized user fees paid by a passenger at the time of ticket purchase. PFCs collected from passenger ticket sales are distributed back to airports following confirmed passenger boardings. All of Illinois' commercial services airports partake in the PFC program. There is a high demand to use PFCs revenues as a funding source for airport projects because the funds can be used for a wider range of projects than AIP grants. PFCs can be used to fund airport capital projects, debt service, and financing costs.

In 2001, Congress capped the maximum PFC fee at \$4.50 per flight leg with a maximum allowable fee of \$18 per round trip per passenger. The future of this established PFC cap remains uncertain. Rising construction and inflation cost erode the ability to fund projects with PFCs, like other types of funding revenues. Policymakers have considered various options to adjust and change the current PFC maximum cap including a fixed increase, indexing to inflation, and removing the cap entirely. To date, Congress has opted to keep the PFC cap in place.

In the short term, COVID-related airport grants and the BIL will deliver additional funding for airport capital projects. The availability of these funds will likely reduce political pressure to raise the maximum cap on PFC funds or remove the cap altogether. However, GA airports will have to raise matching funds to unlock BIL grants. Due to the many uncertainties that these funding mechanisms have imposed and the cap remaining on PFCs for the foreseeable future, it is important for Illinois to continue to study and evaluate the changing funding landscape to remain prepared and vigilant in its ability to respond to both positive and negative developments.

8.3. General Aviation

General aviation (GA) makeup the vast majority of airports across Illinois and serve as local connections to communities throughout the state. Despite their numbers, GA airports receive significantly less funding than their commercial service partners and are in many instances even more susceptible to shifts in the economy and changes in demand. Because GA airports are so critical to the overall health of the aviation

² [aa.gov/newsroom/faq-announces-first-year-airport-funding-amounts-bipartisan-infrastructure-law](https://www.faa.gov/newsroom/faq-announces-first-year-airport-funding-amounts-bipartisan-infrastructure-law)

industry, it is critical that GA airports continue to be developed in a safe manner to allow for the ever-changing landscape they operate in. To assist in identifying and addressing some these, the following GA-related alternatives were evaluated:

- ◆ GA fleet changes
- ◆ Shifts to alternative fuel sources
- ◆ Changes to existing rates and charges models

8.3.1. General Aviation Fleet Changes



What if...

electric aircraft change the skill sets required by aviation maintenance and repair professionals?



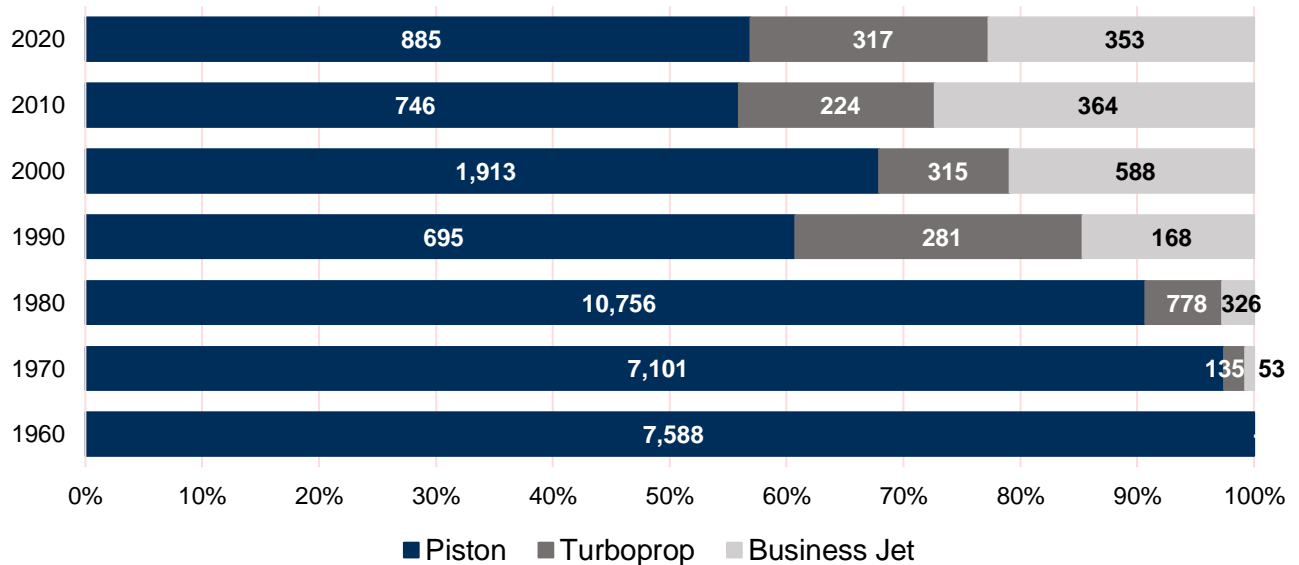
Could We...

proactively develop and/or support A&P and pilot programs in Illinois that include electric aircraft?

The predominant type of GA aircraft utilized by pilots has long been piston aircraft. In recent years, the market share of larger private jets has increased, causing many airports to request expanded facilities to meet these changes in aircraft fleet mix. To illustrate this,

Figure 8.1 shows GA aircraft shipments by type from 1960-2020.

Figure 8.1. GA Aircraft Shipments, 1960-2020



Source: GAMA 2020

As shown, the decline in market share of piston aircraft has led to the increase in market share of turboprops, jets, all-electric, and hybrid-electric aircraft. Turboprop and jet aircraft are forecasted to increase at an average annual rate of 1.7 percent. The COVID-19 pandemic exacerbated this issue with a substantial increase in consumer interest in these types of larger jet aircraft through charters and fractional ownership as commercial air service was constrained. Adding to the issue, helicopters, experimental aircraft, and sport aircraft are also experiencing an increase in market share of the GA fleet. While still a small segment, there is evidence that experimental and sport aircraft may be replacing some piston aircraft as they offer lower entry and ownership costs.

New technologies are beginning to enter the market that may further transform the future GA fleet. Small all-electric and hybrid-electric aircraft present new opportunities for smaller airports as the aircraft can operate on shorter runways. All-electric and hybrid aircraft generate less noise than piston and other aircraft, allowing for their operation in urban areas where noise pollution has been a concern. Electric aircraft also have a significantly lower cost of flying than other aircraft types. All-electric aircraft also produce less carbon emissions than non-electric aircraft, especially if their electric generation sources also use renewable resources.

Other alternatively powered aircraft, such as hydrogen-powered aircraft, are also under development. NASA is supporting research for development of all electric aircraft using a liquid hydrogen fuel cell propulsion system.³ Use of hydrogen fuel could result in increased efficiency and maintain zero emissions. These technologies could eventually replace traditional fuels for small GA aircraft, air taxis, and regional air carriers.

The advent of new alternative fuels, electric aircraft, and increasing use of jet aircraft to the active GA fleet are very likely to alter the pilot and maintenance skills required to fly and service the new aircraft. As these aircraft become more prevalent, the aviation workforce, including pilots, aircraft mechanics, and avionics professionals, will have to develop new skills to operate and maintain these aircraft. IDOT Aeronautics, airports, and the aviation industry should continue to be proactive and promote the advancement of curriculums that include alternative fuels and electric aircraft.

8.3.2. Adoption of Unleaded Fuel for Piston Aircraft



What if...

supplies of the new unleaded piston fuel are slow to expand?



Could We...

explore ways for airports to handle the transition period when supplies of both fuels are in demand?

In July of 2021, the FAA approved the use of unleaded fuel for piston aircraft (G100UL). This new fuel is

³ Quailan Homann. "Aviation." 2019. <http://www.fchea.org/in-transition/2019/11/25/aviation>

considered a 'drop-in' fuel, meaning a separate fueling system is not needed for piston aircraft. Once G100UL fuel supplies become adequate, G100UL will likely replace 100LL fuel in most piston aircraft. Illinois has an estimated 3,690 based aircraft (2020), of which many are powered by 100LL fuel. As supplies of G100UL become more available, fixed base operators (FBOs) and self-service fueling stations may convert to the new fuel. As this transition period occurs, it would be advisable to store supplies of unleaded and low leaded fuel separately, either in separate tanks or fueling trucks, so that fuel customers can purchase one or the other fuel without commingling the products. As this change begins to occur on a broad scale, airports across Illinois should be preparing and planning for how this change may impact the services that they offer. IDOT Aeronautics should continue to work its airports partners to ensure that as changes occur, demand across the state is met in an equitable and efficient manner.

8.3.3. Charging Stations and Power Generation



What if...

electric aircraft usage is limited by availability of charging stations and the capacity of the electric distribution system?



Could We...

expand electric capacity at airports through on-site power generation or partnerships with local utilities.

Electricity, power generation, and charging station infrastructure must be widely and readily available at competitive prices for aircraft owners to purchase and operate electric airplanes. Further, the power sources for electric charging stations primarily come from renewable sources to be an efficient emission-reducing solution at airports. Airports will need multiple charging stations and on-airport power generation to facilitate and support electrical aircraft operations. Currently, there is no single plug-in standard for universal charging stations. Until equipment is standardized, airports would have to install different types of charging facilities for individual aircraft types.

Many airports generate solar or geothermal power on airport property for their own use or for use by local utility companies. To advance the adoption of electric aircraft, the following must happen:

- ◆ Complete the design and testing for electric aircraft
- ◆ Design a standardized, rapid charge plug-in system for different types of electric aircraft
- ◆ Study the capability of local power generation to support electric aircraft and electric vehicles
- ◆ Add capacity for electrical aircraft and vehicle charging from renewable energy sources
- ◆ Deploy a national, standardized system for charging stations at airports

Implementation of a national system of charging stations and sufficient low emission power generation to support electric vehicles and aircraft is a private enterprise and multi-agency effort that will take place at the local, state, and national levels. Similar to electric vehicles, the availability of electric aircraft may precede the infrastructure needed to support widespread adoption of charging infrastructure. It should be noted that \$65 billion has been allocated for improving the country's power grid and transmissions lines in

the BIL.⁴ To remain ahead of this issue, it may be beneficial for Illinois to study and evaluate locations where these changes are likely to occur first to allow for a more proactive response to these changes in airport facility needs.

8.3.4. Rates and Charges Models



What if...

GA fuel sales or flowage fees decline because of electric aircraft, or other propulsion/fuel options?



Could We...

Create a new statewide funding model that would help airports to establish fee structures that cover the costs to provide electricity for electric aircraft?

Electric aircraft offer numerous advantages such as reduced cost of operations, improved air quality, fewer carbon and greenhouse gas emissions, and lessened noise profiles compared to combustion engine aircraft. Based on current market forecasts, it is likely that small two and four-seat electric aircraft will be the first aircraft be widely purchased and operated. Currently, many small airports operate self-service fuel for piston aircraft. Fuel sales provide a reliable revenue source for small, fuel selling airports. Similarly, at airports with fixed base operators (FBOs) managing fueling operation, fuel sales also provide a revenue source. For small aircraft, the flowage fees and markups are relatively low. The growing presence of electric and alternately powered aircraft may erode fuel revenues at airports of all sizes if Illinois continues to utilize traditional fuel tax mechanisms. While this is certainly true for airports, it is not unique to the aviation industry, as all modes of transportation continue to push toward electrification. As a collective modal unit, Illinois must prepare for these changes and prepare to be able to offset decreases in traditional fuel revenues that will be felt from the continued electrification of all modes of transportation.

Growth in aircraft electrification may also impact the broader electricity grid, particularly if widespread adoption of electric aircraft happens concurrently with the widespread adoption of electric cars, buses, railcars and boats. This added demand on the grid will require utility companies to construct new transmission lines and substations.

Illinois is a net exporter of electricity and is served by two electrical grids. As of March 2019, most of the state's electricity (54 percent) was generated by nuclear power, natural gas (seven percent), coal (30 percent), and renewable energy (ten percent).⁵

If electric aircraft are widely adopted, airports will need to find ways to set rates at charging stations that can subsidize the cost of electricity, power generation, and the infrastructure needed to provide the service, while also ensuring that the state's electrical grid is expanded to accommodate these new entrants. State guidelines and methodologies for setting rates and charges for electric aircraft would be a

⁴ <https://www.ase.org/blog/heres-how-infrastructure-bill-improves-grid>

⁵ <https://ilenviro.org/energy/>

helpful resource for Illinois airports as the adoption of electric aircraft continues to grow.

8.4. COVID-19 Impacts

Between 2009 and 2019, compound annual growth for domestic air traffic was 2.6 percent per year while international air traffic grew by 4.9 percent per year. This period of growth and prosperity ended in March 2020 when COVID-19 stay-at-home orders and travel restrictions brought the aviation industry, along with many others, to a standstill. In 2020, total US passenger volumes declined by 61 percent relative to 2019, with domestic traffic declining 59 percent and international by 74 percent.⁶ COVID-19 impacted airline traffic across the country and globe in the following ways:

- ◆ **Passenger Traffic.** All commercial service airports experienced a near shutdown during the height of COVID-19 related restrictions. The near shut down of commercial service shifted some air traffic to private GA operations and airports. The return of operations at commercial service airports was influenced by the passenger and carrier mix at individual airports. Those airports that served destination markets (such as Orlando, FL or Jackson Hole, WY) tended to recover faster than airports in non-destination markets. Airports that had a significant proportion of low-cost carriers (LCCs) or ultra-low-cost carriers (ULCCs) also typically experienced a faster recovery. International markets have recovered much slower than domestic markets due to varying levels of COVID-19 related travel restrictions across the globe.
- ◆ **Aircraft Operations.** Carriers continued to operate flights, either to maintain market position or to satisfy requirements for government support. In general, operations did not decline as much as passengers. To reduce operating costs, some airlines concentrated their flights during certain times of the day. At hub airports, carriers reduced connecting banks. In some instances, GA operations dipped slightly, but in most cases, GA airport operations increased as business travelers sought to avoid commercial airports. Additionally, air cargo operations significantly increased to meet rising e-commerce demand and to offset lost capacity previously available in passenger aircraft.
- ◆ **Airport Revenues.** Airport revenues tied to passenger activity declined substantially during the COVID-19 pandemic. These revenues included PFCs, retail and concession, parking, and rental car revenues. Airports had to reduce minimum revenue guarantees (MRGs) to link concession revenues more closely to reduced passenger levels.
- ◆ **Operating Costs.** Airports reduced operating costs in many functional areas by reducing the number of open parking lots, closing some retail and restaurant concessions, cancelling or renegotiating contracts with service providers and suppliers, postponing capital projects, and concentrating on highest priority and necessary expenditures. Often these reductions in costs were offset by additional costs for cleaning and pandemic safety protocols. Federal support through the CARES Act, CRRSAA, and the ARP helped airports provide relief funding to concessionaires and tenants, maintain operations, cover airport staff salaries, and service debt.
- ◆ **On-going Capital Projects.** Airports took different approaches to on-going capital projects in response to COVID-19. Some airports chose to accelerate runway and terminal projects while traffic and operations were lower, while others slowed or postponed projects due to varying levels of revenue streams.

⁶ United States Department of Transportation, Bureau of Transport Statistics, *Air Carrier Statistics (Form 41): T100 Segment (All Carriers)*

- ◆ **Staffing.** Like other industries, staffing was difficult, especially in the early days of the pandemic. Some airports formed teams to carry out airport duties; however, if one team came down with COVID-19, other teams worked much longer hours.

While the aviation industry has endured recessions and other tragic events, prior experience with short-term closures did not fully prepare airport and airline staff for the COVID-19 pandemic. The extent and severity of COVID-19 as an acute shock event may have permanently altered ways that airports plan for and consider risk and response to future events.

8.4.1. Pandemic Persists



What if...

Pandemic conditions persist?



Could We...

Offer strategies to permanently reduce health risks in facilities and to pursue administrative policies that help to control operating costs, staffing levels, and project financing?

Despite being two years into the pandemic, the question of how aviation industry recovery will unfold is still in question. Domestic traffic has returned but remains well below 2019 levels in most markets. International traffic has been slower to recover due to the emergence of virus variants and individual country travel restrictions. Airport administrations across the country have adopted pandemic strategies that may remain in place in the near future. Some of these strategies include the following:

- ◆ The adoption of more touchless technologies for passenger check-in, baggage handling, and biometric identification
- ◆ Increased spending for in-terminal and on-airport cleaning
- ◆ The inclusion of scope of work and payment provisions to contracts in the event of a shock event that disrupts air travel and regular airport functions

Airports are also adapting to smaller workforces in the following ways:

- ◆ Adjusting sick leave policies to include accrued sick leave and paid leave in the event of a pandemic
- ◆ Transitioning to terminal automation for security, passenger check-ins and baggage handling as staffing level remain low
- ◆ Adopting of autonomous vehicles as this technology continues to be tested to prove safe operation and application within terminals, around airport property, and for ground access to the airport

As the impacts of the pandemic continue to unfold, Illinois airports must remain vigilant in preparing for and meeting changing passenger travel patterns. It may also become imperative for the state and local communities to increase marketing opportunities to attract new entrants or expand services to capture

additional users.

8.4.2. Pandemic Scenario



What if...

COVID-19 permanently alters business travel?



Could We...

Promote use of aeronautical and non-aeronautical uses of the airport to offset losses sustained by reduced demand for business travel?

Under pre-pandemic conditions, business air travelers who bought premium-class or refundable tickets accounted for 75 percent of airline pre-pandemic profits but only occupied 12 percent of seats.⁷ Business travelers have a variety of reasons for travelling for business related purposes, as shown in **Figure 8.2**. Approximately 20 percent of all business travel prior to the pandemic was for internal meetings and training and another 30 percent was for customer support and professional services. Together these two types of business-related travel represented 50 percent of all business travel. To many businesses, the ease and efficiency of virtual online meetings has been a positive outcome of the pandemic, allowing companies to reduce travel costs. As the pandemic environment continues, the amount of business travel that will return to airlines remains in question. A decline in business travel also impacts non-aeronautical revenues at airport from parking, concessions, retail, restaurants, and rental cars. The business travel trends should be monitored as pandemic conditions continue to change and commercial service airports may benefit from developing alternative revenue sources to offset potential losses resulting from reduced business air travel trends.

⁷ Alexander Michael Pearson, Tara Patel, and William Wilkes, 'Forever Changed': CEOs Are Dooming Business Travel — Maybe for Good, Bloomberg Business, August 31, 2021

Figure 8.2. Why Companies Travel



Source: AlixPartners via Bloomberg, August 2021

8.5. Summary

This chapter summarizes the potential impacts of commercial service, GA, and COVID-19 scenarios on Illinois' aviation system. Each scenario identified a potential action that could be implemented or considered by airports or IDOT Aeronautics. The impacts of COVID-19 may linger in the aviation industry for years to come. Additionally, new aviation and energy technologies may have a significant effect on future facilities, infrastructure needs, services, and revenues at Illinois' airports. It will be important for Illinois' airports to increase their resiliency in the face of changing technologies, revenue streams, and funding opportunities as shifts in the industry continue to occur.