

5.1. Introduction

For a transportation system to function well, all modes of transportation must be integrated to enable the safe and efficient movement of people and goods from one location to the next. The overall function of an airport is closely related to other forms of transportation, as most air travelers do not originate or terminate their movements at an airport; other transportation modes must be utilized for travelers to get to an airport to begin their air travel and ultimately to reach their final destination after arriving at an airport. As a result, the 2022 Indiana State Aviation System Plan (2022 ISASP) includes a high-level evaluation of the statewide multimodal network to provide a more comprehensive picture of the overall transportation system and better understand how other modes of transport are integrated with airports. The inclusion of multimodal connections is outlined in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-7, Change 1, *The Airport System Planning Process*, which highlights the need to evaluate aviation within the context of multimodal planning. This chapter describes Indiana's multimodal transportation system and includes roadway connectivity analysis; multimodal integration (transit, rail, and freight) with Indiana's aviation facilities; areas of concern; and planned transportation improvements.

In 2022, the novel coronavirus (COVID-19) pandemic continued to disrupt national and global economies as well as the daily lives of all people across the globe. Financial uncertainty throughout all levels of business and disruption of supply chains is expected to continue well into 2022 and beyond. Global travel restrictions (including vaccine and testing requirements) and new variants have significantly impacted all aspects of air travel. These implications have extended beyond the Indiana airport system to include nearly all forms of multimodal activity. Impacts due to COVID-19 are included where applicable in this chapter; additional information regarding the general impacts of COVID-19 to Indiana system facilities is included in **Chapter 4 - Aviation Demand and Activity Forecasts**.

The remainder of this chapter is organized as follows:

- 5.2 Roadway Connectivity
- 5.3 Multimodal Integration
- 5.4 Indiana's Freight System
- 5.5 Areas of Concern Specific to Airports
- 5.6 Planned Transportation Improvements
- 5.7 Summary

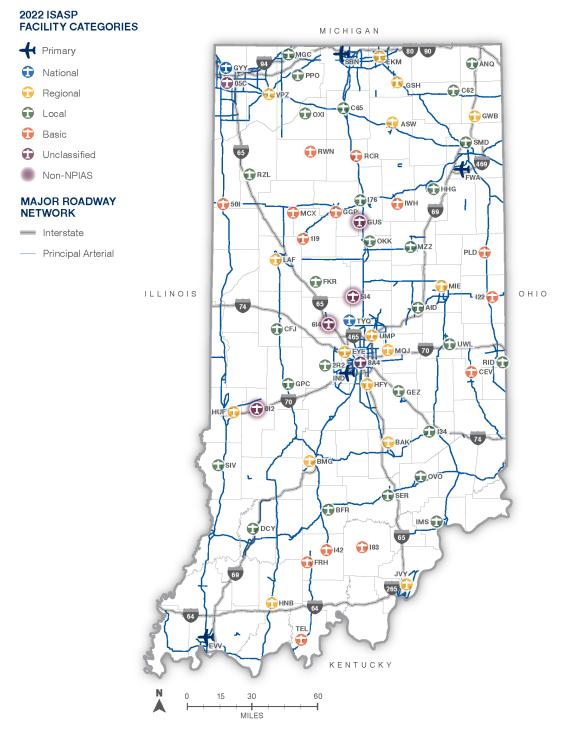
5.2. Roadway Connectivity

Aviation facilities represent one of the multiple transportation modes that provide residents and visitors with quick and convenient access to all areas of Indiana. Known as "The Crossroads of America," Indiana has a combination of interstates, United States (U.S.) highways, state roads, county roads, and local roads that connect users with every airport in the state. There are 11 interstates that traverse the state, forming an extensive network of roads for residents, visitors, and truck freight operators. Indiana's major roadway network is depicted in **Figure 5.1**.









Sources: IndianaMAP Open Data Hub, INDOT Interstate Roadways, 2020; ESRI ArcPro, 2022; Kimley-Horn, 2022.





Existing roadway connectivity to Indiana's 69-facility system was analyzed using Google Maps and Google Earth. The visual analysis only studied interstates, U.S. highways, and state roads, not county, local, or municipal roads. Roads were characterized as providing direct or indirect access. Direct access to an airport was defined as a road that provided immediate access to airport premises via a driveway or airport access road, without the use of a secondary road. Indirect access roadways are all other interstates, U.S. highways, and state roads within the vicinity of an airport that provides access from all points east, west, north, and south for the traveler. In most cases, only one roadway connection for each direction is listed; however, roadways providing duplicate access in a given direction may be included for primary and larger general aviation (GA) facilities to present the complete picture of major roadway connectivity at Indiana aviation facilities. In addition, interstates are listed if they are within 20 miles of the airport, even if the interstate duplicates a travel direction already provided by another route. Google Earth satellite view was used to determine the number of lanes on the roadways and Google Maps was used to determine the driving distance from the airport to the relevant roadway. All distances were rounded to the nearest mile.

In total, Indiana has over 11,000 miles of interstates, U.S. highways, and state roads in the state.¹ These roadways are under the responsibility of the Indiana Department of Transportation (INDOT) and the Indiana Toll Road (ITR) Concession Company, LLC, which manages 157 miles of tolled highway in the northern part of the state. Of these roadways, approximately 5,400 miles are part of interstates serving Indiana. Based on the visual analysis conducted, there are a total of 10 interstates that provide direct or indirect access to the aviation facilities within Indiana's aviation system. These interstates include:

- Coast-to-coast route: I-65 and I-80/I-90 (toll within Indiana)
- Midwestern to southeastern route: I-74
- East-west corridors: I-70, I-94, and I-64
- North-south corridor: I-69²
- Auxiliary interstates serving Indiana's urban areas: I-465, I-265, and I-469

Table 5.1 provides a summary of the roadway connectivity analysis (interstates, U.S. highways, and state roads) for each of Indiana's 69 aviation system facilities

² I-69 is being constructed from Martinsville to Indianapolis and is expected to be complete in 2025. Once complete, I-69 will run border to border in Indiana.



¹ INDOT. (2021) "INDOT Facts". <u>https://www.in.gov/indot/about-indot/indot-facts/</u> (Accessed December 2021).



Table 5.1. Roadway Connectivity Analysis

Facili	ty Information			Direct	Access		Indirect Access					
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport	
	Commercial Service											
			State Road	SR-57	2	E	State Road	SR-66	6	W	6 miles	
Evansville	Evansville Regional	EVV	U.S.	US-41	4	N - S	Interstate	I-69	4	N - S	5 miles	
			Highway	05 11	4	14 - 5	Interstate	I-64	4	E - W	9 miles	
							Interstate/U.S. Highway	I-469 / US-33*	4	E	3 miles	
Fort Wayne	Fort Wayne	FWA					State Road	SR-1	2	S	3 miles	
	International						Interstate	I-69	4	N - S	5 miles	
							U.S. Highway	US-24	4	W	9 miles	
							Interstate	I-465	8	Metro Loop	2 miles	
la dia a su s lis	Indianapolis			1 70			State Road	SR-267	4	N - S	7 miles	
Indianapolis	International	IND	Interstate	I-70	6	E - W	Interstate	I-65	8	S	15 miles	
							Interstate	I-74	4	N	11 miles	
	South Bend		U.S.				U.S. Highway	US-31	4	N - S	2 miles	
South Bend	International	SBN	Highway	US-20	4	E - W	Interstate	I-80 / I-90 (Toll)*	4	E - W	5 miles	
						GA						
	Anderson						State Road	SR-9	4	N - S	2 miles	
Anderson	Municipal- Darlington Field	AID	State Road	SR-32	2	E - W	Interstate	I-69	4	N - S	2 miles	
Angola	Tri-State Steuben County	ANQ	U.S. Highway	US-20	4	E - W	Interstate	I-69	4	N - S	2 miles	





Facilit	y Information			Direct	t Access			Indirect Access			
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
Auburn	DeKalb County	GWB					Interstate	I-69	4	N - S	3 miles
Adburn	Denaid County	GWD					State Road	SR-8	2	E - W	7 miles
Bedford	Virgil I Grissom	BFR					U.S. Highway	US-50	2	E - W	3 miles
Bealora	Municipal	DEK					State Road	SR-37	4	N - S	5 miles
							State Road	SR-48	2	E - W	1 mile
Bloomington	Monroe County	BMG					State Road	SR-45	2	SW	1 mile
	county						Interstate	I-69	4	SW - NE	3 miles
Brazil	Brazil Clay	012					Interstate	I-70	4	E-W	4 miles
Brazil	County	UIZ					State Road	SR-59	2	N - S	2 miles
							U.S. Highway	US-31	4	N - S	2 miles
Columbus	Columbus Municipal	BAK					Interstate	I-65	4	N - S	6 miles
	Manicipat						State Road	SR-46	2	E - W	4 miles
Commerceville		CEV	State	SR-1	2	N - S	State Road	SR-44	2	E - W	4 miles
Connersville	Mettel Field	CEV	Road	SK-1	Z	N - 5	Interstate	I-70	4	E - W	12 miles
							U.S. Highway	US-231	2	N - S	1 mile
Crawfordsville	Crawfordsville	CFJ					State Road	SR-47	2	NE - SW	1 mile
Crawfordsville	Regional	CFJ					State Road	SR-32	2	E - W	4 miles
							Interstate	I-74	4	E - W	8 miles
							State Road	SR-25	4	NE - SW	1 mile
	5.1.1.						State Road	SR-18	2	E	2 miles
Delphi	Delphi Municipal	119					State Road	SR-18	2	W	3 miles
	Municipat						U.S. Highway	US-421	2	N - S	2 miles
							Interstate	I-65	6	N - S	13 miles





Facili	ty Information			Direct	Access		Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
Elkhart	Elkhart	EKM					Interstate	I-80 / I-90 (Toll)*	4	E - W	2 miles
	Municipal						State Road	SR-19	4	N - S	1 mile
							State Road	SR-3	6	N - S	1 mile
							U.S. Highway	US-30	4	W	3miles
Fort Wayne	Smith Field	SMD					State Road	SR-930	4	E	3 miles
							Interstate/U.S. Highway	I-69 / US-27*	6	N - S	1mile
			_				U.S. Highway	US-421	2	N - S	3 miles
Frankfort	Frankfort Municipal	FKR	State Road	SR-28	4	E - W	State Road	SR-39	2	S	3 miles
	Municipat		Noau				Interstate	I-65	4	N - S	5 miles
							State Road	SR-145	2	S	2 miles
French Lick	French Lick Municipal	FRH					State Road	SR-37	2	N	10 miles
	Municipat						State Road	SR-56	2	E - W	3 miles
	Gary/Chicago						Interstate	I-90 (Toll)	6	E - W	4 miles
Gary	International	GYY					U.S. Highway	US-12/ US-20*	6	N - S	2 miles
							U.S. Highway	US-33	2	NE - SW	1 mile
Goshen	Goshen Municipal	GSH					U.S. Highway	US-6	2	E - W	5 miles
	Municipat						State Road	SR-15	2	N - S	2 miles
	Putnam						State Road	SR-240	2	E - W	1 mile
Greencastle	County	GPC					U.S. Highway	US-231	2	N - S	3 miles
	Regional						Interstate	I-70	4	E - W	11 miles





Facilit	ty Information			Direct	Access			Indir	ect Acces	S	
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
	Croonsburg						State Road	SR-46	2	E - W	1 mile
Greensburg	Greensburg Municipal	134					State Road	SR-3	4	N - S	1 mile
	manicipat						Interstate	I-74	4	NW - SE	4 miles
							State Road	SR-55	4	N - S	3 miles
	C .: (C) II						U.S. Highway	US-41	4	N-S	4 miles
Griffith	Griffith- Merrillville	05C					Interstate	I-65	6	N - S	5 miles
	merriterite						U.S. Highway	US-30	4	E - W	5 miles
							Interstate	1-94/1-80*	8	E - W	5 miles
							U.S. Highway	US-231	2	N - S	1 mile
Huntingburg	Huntingburg	HNB					State Road	SR-64	2	E - W	4 miles
							Interstate	I-64	4	E - W	5 miles
			6 · · ·				U.S. Highway	US-224	2	E	1 mile
Huntington	Huntington Municipal	HHG	State Road	SR-5	2	N - S	U.S. Highway	US-24	4	W	5 miles
	Municipat		Nodu				Interstate	I-69	4	N - S	8 miles
							Interstate	I-465	8	N - S	2 miles
la disa sa siis	Eagle Creek	EYE					Interstate	I-74	4	W	3 miles
Indianapolis	Airpark	CIC					U.S. Highway	US-136	2	W	3 miles
							Interstate	I-70	8	E - W	10 miles
	Hendricks						U.S. Highway	US-36	4	E - W	1 mile
Indianapolis	County- Gordon	2R2					State Road	SR-39	2	N - S	5 miles
-	Graham Field						Interstate	1-74/1-465*	4	E - W	11 miles
Indianapolis	Indianapolis Downtown	8A4					Interstate	I-70	6	E - W	1 mile
	Heliport	044					Interstate	I-65	6	N - S	2 miles





Facilit	y Information		Direct Access				Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
							U.S. Highway	US-421	2	NE - SW	2 miles
Indianapolis	Indianapolis	TYQ	State	SR-32	2	E - W	U.S. Highway	US-31	6	N - S	7 miles
manapons	Executive	1102	Road	51(52	-	L 11	Interstate	I-465	6	E - W	10 miles
							Interstate	I-65	6	N - S	11 miles
							Interstate	I-69	8	NE	2 miles
Indiananalia	Indianapolis	UMP					State Road	SR-37	4	N	4 miles
Indianapolis	Metropolitan	UMP					Interstate	I-465	6	W or S	3 miles
							Interstate	I-70	6	E	11 miles
							Interstate	I-70	6	E - W	2 miles
Indianapolis	Indianapolis Regional	MQJ					Interstate	I-465	6	Metro Loop	9 miles
	Regionat						State Road	SR-9	2	N - S	10 miles
							Interstate	I-65	6	N - S	2 miles
Indianapolis	Indy South	HFY					Interstate	I-465	6	Metro Loop	7 miles
manapons	Greenwood						Interstate	I-74	4	N - S	11 miles
							U.S. Highway	US-31	6	N-S	3 miles
							Interstate	I-265	4	E - W	3 miles
Jeffersonville	Clark Regional	JVY	U.S.	US-31	2	N - S	State Road	SR-60	4	NW	1 mile
Jerrersonville	Clark Regional	JVI	Highway	03-31	2	IN - 2	Interstate	I-65	6	N - S	1 miles
							Interstate	I-64	6	W	9 miles
Kendallville	Kendallville	C62	State	SR-3	2	N - S	U.S. Highway	US-6	4	E - W	2 miles
Rendativitte	Municipal	COZ	Road	51-5	L	C - N	Interstate	I-69	4	N - S	13 miles
Kentland	Kentland Municipal	501	U.S. Highway	US-41	4	N - S	U.S. Highway	US-24 / US-52*	4	E - W	1 mile
	Municipat		iligiiway				Interstate	I-65	6	N - S	17 miles





Facili	ty Information			Direct	Access		Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
							U.S. Highway	US-35	2	N - S	3 miles
Knox	Starke County	OXI					State Road	SR-8	2	W	1 mile
							U.S. Highway	US-30	4	E - W	6 miles
Kokomo	Kokomo	ОКК					U.S. Highway	US-31 / US-35	4	N - S	3 miles
	Municipal	_					State Road	SR-18	2	E - W	4 miles
							State Road	SR-2	2	E - W	2 miles
La Porte	La Porte Municipal	PPO	State Road	SR-39	2	N - S	Interstate	I-80 / I-90 (Toll)*	4	E - W	8 miles
							Interstate	1-94	6	NE - SW	11 miles
							State Road	SR-43	2	N	2 miles
	Purdue		U.S.	US-52 /			State Road	SR-26	4	E	7 miles
Lafayette	University	LAF	U.S. Highway	US-527 US-231	4	N-S		SR-26	4	W	1 mile
	University		Ingilway	05 251			State Road	SR-25		SW	3 miles
							Interstate	I-65	6	N - S	7 miles
							State Road	SR-39	2	N - S	2 miles
Lebanon	Boone County	614					State Road	SR-32	2	E - W	4 miles
							Interstate	I-65	6	N - S	2 miles
							State Road	SR-29	4	N - S	1 mile
	Logansport/						State Road	SR-25	4	SW	3 miles
Logansport	Cass County	GGP					State Road	SR-24	2	E - W	2 miles
							U.S. Highway	US-35	4	N - S	2 miles
	Madison						State Road	SR-56	2	E - W	2 miles
Madison	Municipal Airport	IMS					State Road	SR-62	4	N - S	1 mile





Facilit	y Information			Direct	Access		Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
Marion	Marion Municipal-	MZZ	State	SR-9	2	N - S	U.S. Highway	US-35	2	E - W	1 mile
	McKinney Field		Road		_		Interstate	I-69	4	N - S	7 miles
	Michigan City		Charles				U.S. Highway	US-20	4	E - W	1 mile
Michigan City	Municipal-	MGC	State Road	SR-212	4	N	U.S. Highway	US-35	2	S	2 miles
	Phillips Field		Nodu				Interstate	I-94	6	NE - SW	2 miles
Monticello	White County	мсх					U.S. Highway / State Road	US-421/ SR-39*	2	N - S	2 miles
							U.S. Highway	US-24	4	E - W	3 miles
							U.S. Highway / State Road	US-35 / SR-28*	2	E - W	3 miles
Muncie	Delaware County	MIE					U.S. Highway	US-35 Bypass	4	N -SE	3 miles
	Regional						State Road	SR-67	2	NE	3 miles
							Interstate	I-69	4	N - S	12 miles
New Castle	New Castle Henry County	UWL					Interstate	I-70	4	E - W	5 miles
	Marlatt Field	0					State Road	SR-103	2	N - S	1 mile
							State Road	SR-3	2	N - S	3 miles
North Vernon	North Vernon	ovo					U.S. Highway	US-50	2	E - W	3 miles
North vernon	North vernon	000					State Road	SR-7	4	NW - SE	5 miles
							Interstate	I-65	6	N - S	17 miles
Paoli	Paoli Municipal	142	State Road	SR-37	2	N-S	U.S. Highway	US-150 / SR-56*	2	E - W	2 miles
Peru	Grissom Air Reverse Base (ARB)	GUS	U.S. Highway	US-31	4	N - S	State Road	SR-218	2	E - W	1 mile





Facili	ty Information		Direct Access				Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
B	Peru	177					U.S. Highway	US-24	4	E - W	2 miles
Peru	Municipal Airport	176					U.S. Highway	US-31	4	N - S	2 miles
Dhumanuth	Plymouth	C65					U.S. Highway	US-30	6	E - W	1 mile
Plymouth	Municipal	C65					U.S. Highway	US-31	4	N - S	2 miles
Portland	Portland	PLD					U.S. Highway	US-27	2	N - S	1 mile
Fortialia	Municipal	FLD					State Road	SR-26	2	E - W	2 miles
Rensselaer	Jasper County	RZL	State	SR-114	2	E - W	U.S. Highway	US-231	2	N - S	2 miles
Relisseidel	Jasper County	RZL	Road	38-114	2	E - VV	Interstate	I-65	4	N - S	2 miles
	D: I I		C 11.				U.S. Highway	US-27	2	N - S	6 miles
Richmond	Richmond Municipal	RID	State Road	SR-227	2	NW - SE	U.S. Highway	US-40	4	E - W	6 miles
	Mullepat		Nodu				Interstate	I-70	4	E - W	8 miles
Rochester	Fulton County	RCR	State	SR-25	2	N	State Road	SR-14	2	E - W	1mile
Kochester	T utton County	NCK	Road	JK-ZJ	2	IN	U.S. Highway	US-31	4	N - S	3 miles
	C. I.						State Road	SR-56	2	E	1 miles
Salem	Salem Municipal	183					State Road	SR-60	2	W	1 mile
	Maneipat						State Road	SR-135	2	N - S	3 miles
Seymour	Freeman	SER	State	SR-11	2	N - S	U.S. Highway	US-50	2	E - W	2 miles
Seymour	Municipal	JLK	Road	214-11	2	N - 3	Interstate	I-65	6	N - S	5 miles
							State Road	SR-9	2	N -S	1 mile
Shelbyville	Shelbyville Municipal	GEZ					State Road	SR-44	4	E - W	5 miles
	Municipat						Interstate	I-74	4	NW - SE	3 miles
							State Road	SR-38	2	E - W	3 miles
Sheridan	Sheridan	514					U.S. Highway	US-31	4	N - S	6 miles
							Interstate	I-65	4	N - S	19 miles





Facilit	ty Information			Direct	Access		Indirect Access				
Associated City	Facility Name	FAA ID	Road Type	Road Name	Lanes	Direction	Road Type	Road Name	Lanes	Direction	Miles from Airport
6 W	Sullivan	C 11/					U.S. Highway	US-41 / US-150*	4	N - S	1 mile
Sullivan	County	SIV					State Road	SR-154	2	W	1 mile
							State Road	SR-54	2	E	4 miles
Tell City	Perry County Municipal	TEL	State Road	SR-37	2	N - S	Interstate	I-64	4	E - W	18 miles
Terre Haute	Terre Haute	HUF	State	SR-42	2	Е	Interstate	I-70	4	E - W	4 miles
Terre naule	Regional	пог	Road	5K-42	Ζ	E	U.S. Highway	US-41	4	N - S	6 miles
Valparaiso	Porter County Regional	VPZ	U.S. Highway	US-30	4	E - W	State Road	SR-49	4	N - S	1 mile
							State Road	SR-15	2	N - S	1 mile
Wabash	Wabash Municipal	IWH					U.S. Highway	US-24	4	E - W	5 miles
	municipat						State Road	SR-13	2	N	4 miles
	Warsaw						State Road	SR-15	2	N - S	1 mile
Warsaw	Municipal	ASW					U.S. Highway	US-30	4	E - W	2 miles
							State Road	SR-57	2	N - S	3 miles
Washington	Daviess	DCY					U.S. Highway	US-150	4	E - W	4 miles
	County						Interstate	I-69	4	N - S	4 miles
Winamac	Arens Field	RWN	U.S. Highway	US-35	2	N - S	State Road	SR-14	2	E - W	3 miles
Winchester	Randolph County	122	State Road	SR-32	2	E - W	U.S. Highway	US-27	2	N - S	3 miles

Notes: The analysis presented in this table did not include county, local, or municipal roadways. Only major roadways were considered. *Roadways are the same for the specific airport listed. Sources: Google Maps, 2021; Kimley-Horn, 2021.





5.2.1. Distance to Major Roadways

Figure 5.2 summarizes airport roadway connectivity by proximity to interstates, U.S. highways, and state roads.³ The analysis shows that 39 percent of airports have direct access (0 miles) to major roadways, and approximately 81 percent of Indiana system airports have access to at least one major roadway within two miles or less. This includes all four commercial service airports and 52 GA airports. Nineteen percent of airports are located more than two miles away from a major roadway. Airports that do not connect directly with a major roadway are connected by short distances over local, county, or municipal roads.

Figure 5.3 shows that 20 percent of airports are within three miles of one of 11 interstates that span Indiana, 16 percent of airports are located between three and five miles from the nearest interstate, and 32 percent of airports are located between five and 20 miles from the nearest interstate. In addition, approximately 32 percent of airports are located more than 20 miles from the nearest interstate. One commercial service airport has direct access to an interstate: Indianapolis International Airport (IND) via I-70.

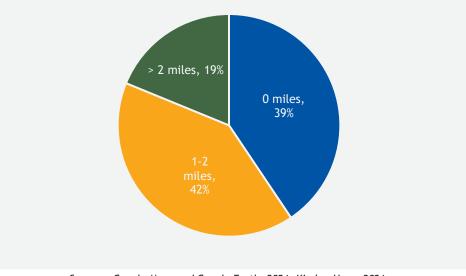


Figure 5.2. Distance to Nearest Major Roadway (Interstate, U.S. Highway, or State Road)

Sources: Google Maps and Google Earth, 2021; Kimley-Horn, 2021.

³ Table 5.1 rounds mileage to roadways to the nearest whole mile. For the analysis depicted in Figure 5.2 and Figure 5.3, mileage to the nearest tenth of a mile was used.





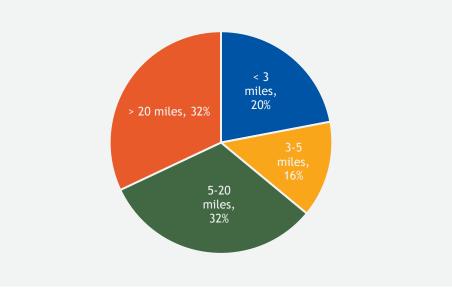


Figure 5.3. Distance to Nearest Interstate

5.3. Multimodal Integration

It is important to evaluate how other modes of transportation, like rental cars or public transit, interact with the airport system to better understand how airport users are accessing airports and surrounding areas. The 2022 ISASP evaluated the different types of multimodal options that are available at Indiana system facilities. This review included the presence of rental cars, taxi and rideshare services, courtesy cars, shuttle services, and public transit options.

5.3.1. Rental Cars

On-airport rental car services are a convenient way for arriving passengers to connect to their final destinations at their leisure without relying on public transportation or the availability of taxi or rideshare services. Rental car facilities may not be necessary or appropriate at all system facilities; however, they can be a sought-after service at commercial service airports as arriving passengers are able to select their preferred vehicle type, pick the route to their final destination, leave the airport at their convenience, and make stops along the way. The availability of on-site rental car service within the Indiana aviation system was collected from facility managers via the 2022 ISASP Airport Manager Survey. Of the 69 facilities in Indiana's system, 21 reported the availability of on-site rental car service for airport users. This includes four commercial service airports and 17 GA airports. An additional 13 GA airports reported the availability of off-site rental car service.

5.3.2. Courtesy Cars

Courtesy cars are often a favorite amenity for pilots and passengers to use to travel quickly and easily to the local community for meals, meetings, entertainment, and recreation. In communities where other transportation modes (e.g., rental cars and public transit) are not supported due to low demand, courtesy cars offer a critical connection between an airport and its surrounding community. These cars are typically stored on-airport and sponsored by the airport owner/operator or by the fixed-base operator (FBO).



Sources: Google Maps and Google Earth, 2021; Kimley-Horn, 2021.



In many cases, courtesy cars are free to use, but there is an expectation that users return vehicles in good condition and with a full tank of gas. Data retrieved from the 2022 ISASP Airport Manager Survey indicate that 58 of 69 system facilities have courtesy cars available.

5.3.3. Taxis and Shuttle Service

Taxi or shuttle services may often provide the only transportation service for airport users to reach their final destination, particularly for rural areas or smaller communities. Taxi services continue to provide conventional connectivity access to airports. In areas with higher population and other transportation options, taxis are still heavily relied upon to connect users to their local or regional aviation facilities. According to the 2022 ISASP Airport Manager Survey, 46 system facilities have taxi service (67 percent). Among these facilities, four are commercial service and 42 are GA facilities. Two airports also have limousine services available.

Shuttle services provide transportation on-demand via a bus or other vehicle to surrounding areas and typically require advance notification or reservation. Data retrieved from the 2022 ISASP Airport Manager Survey show that 14 of 69 system airports have on-demand shuttle services available (three commercial service airports and 11 GA airports). Some shuttle services are offered by state colleges or universities and provide service to airports with schedule options that might be more appealing to students than other options, see **Table 5.2**.

Shuttle Service Provider	City/University	Destination
Go Express	Bloomington, IN / Indiana University	Indianapolis International Airport
Lafayette Limo, Inc.	Lafayette, IN / Purdue University	Indianapolis International Airport
Reindeer Shuttle	Lafayette, IN / Purdue University	Chicago O'Hare International Airport and Indianapolis International Airport
Ball State University Shuttle	Muncie, IN / Ball State University	Indianapolis International Airport
Express Air Coach	Lafayette, IN / Purdue University	Chicago O'Hare International Airport

Table 5.2. College Shuttle Services to Airports

Sources: Go Express Bloomington Shuttle; Lafayette Limo Airport Shuttle Services; Reindeer Shuttle; Ball State University Shuttle Services; Express Air Coach, 2021.

5.3.4. Rideshare

Rideshare pioneered by transportation network companies (TNCs) has transformed the transportation industry over the past several years. Companies like Uber and Lyft leverage their drivers' private vehicles to provide rides to other users, providing a network of shared vehicles available to a large user base. As rideshare services have evolved, both companies have further improved their services to allow for shared carpooling, where users can share their ride with other travelers heading in the same direction. This allows Uber and Lyft to achieve higher occupancy levels per trip. In return, users are enticed by the reduction in the cost of the trip as everyone in the carpool pays an equitable share for the trip. Uber and Lyft are available in many communities throughout Indiana with 48 of 69 facilities reporting the availability of rideshares in their associated cities.

5.3.5. Public Transit (Buses, Light Rail, and Commuter Rail)

Public transportation within a community can greatly increase the accessibility of a community or metropolitan area by providing cost-effective, reliable, and environmentally friendly transportation to residents and visitors.





Direct connections from airports to public transportation allow visitors quick and reliable mobility into and within the community. Public transit provides transportation options for both short distances and long distances, while reducing congestion on roadways. This level of convenience further boosts the airport's ability to connect the community and the state to the rest of the world.

From the data collected, 10 of 69 system facilities are directly served by public transportation. Two of the 10 are commercial service airports (South Bend International Airport [SBN] and Indianapolis International Airport [IND]) and eight are GA airports. The other two commercial service airports, Evansville Regional Airport (EVV) and Fort Wayne International Airport (FWA), report no public transportation service. Fort Wayne Public Transportation Corporation operates Citilink, which provides transit service in the greater Ft. Wayne area. Citilink has plans to expand transit service in growing areas where ridership is increasing, and a potential location includes the airport.

According to INDOT's Office of Transit, there are 63 transit systems in the state. These systems provide public transit service to 78 of 92 Indiana counties either via fixed route or demand response (defined as a door-to-door or curb-to-curb service that typically requires an advance reservation). In 2019, Indiana's transit systems reported more than 33 million passenger trips. Due to the COVID-19 pandemic's impact on travel, in 2020 the number of passenger trips dropped to 17.5 million trips. **Figure 5.4** illustrates the locations of Indiana's transit systems.





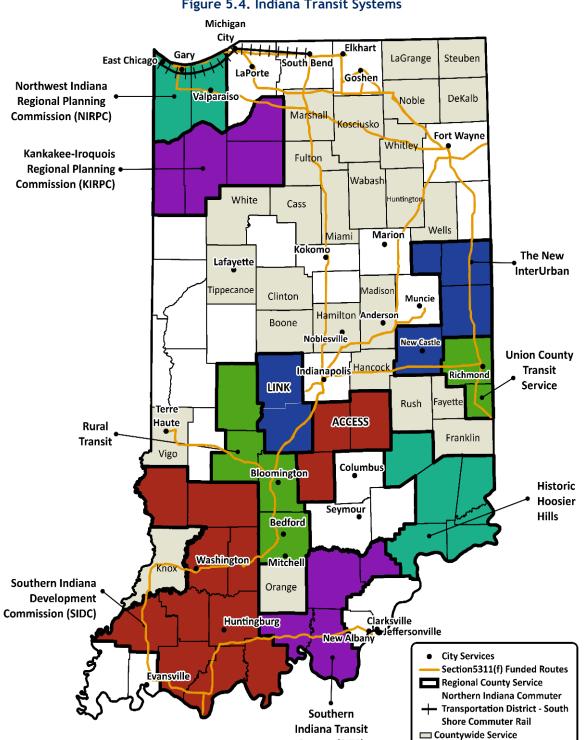


Figure 5.4. Indiana Transit Systems

Source: Indiana Public Transit Annual Report, Calendar Year (CY) 2020.

System (SITS)





The Indianapolis Public Transportation Corporation operates IndyGo, which provides public transportation via 37 fixed routes in the cities and towns of Indianapolis, Speedway, Beech Grove, Southport, and Greenwood in Central Indiana. IndyGo's ongoing capital investment program is detailed in the Marion County Transit Plan and includes new bus rapid transit (BRT) systems, which provide more frequent and reliable service along popular routes, as well as updated bus fleets and infrastructure improvements.⁴ The Red Line BRT services 13 miles north-south through the heart of Indianapolis and opened in late 2019. The Purple Line BRT runs 15 miles from downtown Indianapolis to the northeast in Lawrence and will share 12 stations with the Red Line once completed in 2024. The Blue Line BRT will run 24 miles from Cumberland on the east side to the Indianapolis International Airport (IND) on the west side. Construction is planned to begin in 2025. Once completed, the Blue Line BRT will enable travelers fast and frequent service to and from Indianapolis International Airport (IND).

5.3.5.1. Commuter and Passenger Rail

South Bend International Airport (SBN) and Gary/Chicago International Airport (GYY) are the only two airports in the state that have commuter rail integration, provided by the Northern Indiana Commuter Transportation District's (NICTD) South Shore Line. The South Shore Line provides service between Millennium Station in Chicago, Illinois and South Bend International Airport (SBN), seven days a week. There are 16 eastbound trains traveling from Chicago and 15 westbound trains traveling to Chicago during the weekdays. Weekends have seven fewer trains for the east and westbound routes. **Figure 5.5** displays the South Shore Line route map.



Figure 5.5. NICTD South Shore Line Route Map

Source: NICTD, 2021.

⁴ IndyGo Projects. <u>https://www.indygo.net/projects/</u> (Accessed December 2021).



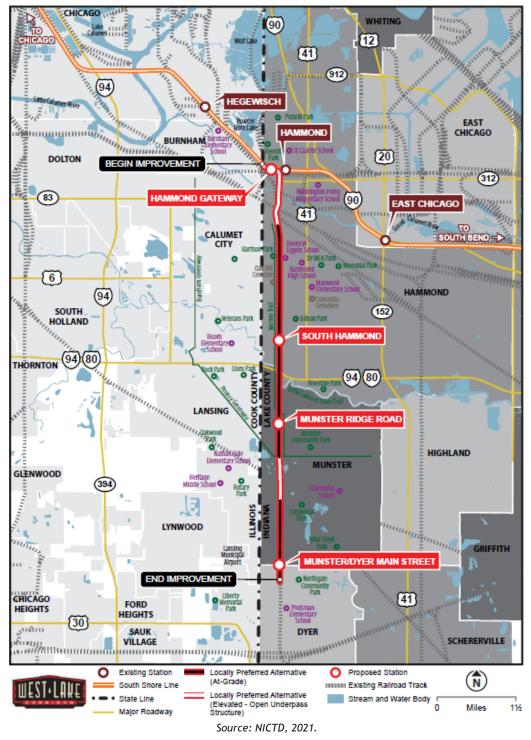


NICTD is currently undertaking two major improvement projects in Indiana: adding double track to the rail line from Gary to Michigan City in the growing areas of Northwest Indiana and constructing an eight-mile extension from Hammond south to Dyer called the West Lake Corridor project. The double-tracking project is expected to be completed in 2024 and will result in the addition of 26 new round trip trains, which will increase reliability and allow for reduced travel time as trains will be arriving more frequently. NICTD is also considering a proposed realignment of the train tracks at South Bend International Airport (SBN) to move the train terminal from the east end of airport terminal building to the west end of the building, which would further reduce travel times. These improvements will also benefit other travelers along the route from South Bend International Airport (SBN) to Millennium Station in Chicago. The addition of a stop in Dyer as a part of the West Lake Corridor project is not reflected in **Figure 5.6**. The West Lake Corridor is expected to be completed in 2026 and will offer new service to high-growth areas in Lake County and connections to reach Gary/Chicago International Airport (GYY) and South Bend International Airport (SBN) on the South Shore Line. See **Figure 5.6** for the planned West Lake Corridor route and stations.





Figure 5.6. West Lake Corridor Project Map



WEST LAKE CORRIDOR PROJECT MAP - HAMMOND, IN TO DYER, IN





As shown in **Table 5.3**, there are nine system airports within 60 miles of all West Lake Corridor existing and proposed stations, excluding the existing Hegewisch station, which has eight system airports within 60 miles. The existing East Chicago Station is the only existing or proposed station that has an airport within five miles of the station, and that airport is Gary/Chicago International Airport (GYY). The East Chicago Station also has the most airports within 40 miles of the station, as La Porte Municipal Airport (PPO) is more than 40 miles away from the other existing and proposed stations. South Bend International Airport (SBN) is just shy of the 60-mile buffer and is approximately 62 miles from each of the West Lake Corridor stops.

Station	Airports Within Five Miles from Station	Additional Airports Within 6-20 Miles	Additional Airports Within 21 - 40 miles	Additional Airports Within 41 - 60 miles
Hegewisch (Existing)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Kentland Municipal
Hammond (Existing)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Arens Field, Kentland Municipal
East Chicago (Existing)	Gary/Chicago International	Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field, La Porte Municipal	Starke County, Jasper County, Arens Field, Kentland Municipal
Hammond Gateway (Proposed)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Arens Field, Kentland Municipal
South Hammond (Proposed)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Arens Field, Kentland Municipal

Table 5.3. System Airports Within 60 Miles of Existing and Proposed West Lake Corridor Stations





Station	Airports Less Than 5 Miles from Station	Additional Airports Within 5-20 Miles	Additional Airports Within 21 - 40 miles	Additional Airports Within 41 - 60 miles
Munster Ridge Road (Proposed)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Arens Field, Kentland Municipal
Munster/ Dyer Main Street (Proposed)	None	Gary/Chicago International, Griffith-Merrillville	Porter County Regional, Michigan City Municipal - Phillips Field	La Porte Municipal, Starke County, Jasper County, Arens Field, Kentland Municipal

Sources: NITCD Interactive West Lake Corridor Map, 2022; ESRI ArcPro, 2022; Kimley-Horn, 2022.

The availability of intercity passenger rail improves the livability of Indiana communities by offering an alternative transportation option between various cities. Intercity passenger rail service within the state is provided by Amtrak long-distance trains that provide service between Chicago (with connections west) and the east coast and by regional short-distance trains that connect Chicago and the Detroit/Pontiac, Michigan, region. Four Amtrak routes have stops at 11 passenger rail stations in Indiana, and travelers can access an additional 14 stations located in Illinois, Michigan, and Ohio that are within 30 miles of the Indiana state border.⁵

Amtrak's *Hoosier State* intercity passenger rail service operated until 2019, when the State made the decision to cease financial support of the 196-mile route between Indianapolis and Chicago.⁶ Since the end of the service, INDOT has explored the feasibility of reinstating service on the Hoosier State corridor, at travel times and frequencies better suited for the Indianapolis-Chicago travel market.⁷ In November of 2019, INDOT released the *Intercity Passenger Rail Conceptual Infrastructure Plan*, which summarized the scope and cost of infrastructure improvements that would be required to support a reduction in travel time and increase in frequency for passenger rail service within the state of Indiana only. The plan includes a new station added near the Indianapolis International Airport (IND).

5.3.5.2. Intercity Bus Transportation

While public bus transit networks often operate within a specific city or region, they do not typically offer services outside of that location. Instead, private intercity bus operators provide interregional transportation options between cities and communities. Intercity bus services allow residents and visitors to travel between cities without having to rely on commercial air service or their own personal vehicle.

⁶ Beginning in 2013, Congress ended federal financial support for Amtrak routes of less than 750 miles. The State of Indiana partnered with local communities along the route to fund operating and capital costs not covered by ticket revenue until the last day of service on June 30, 2019. ⁷ Indiana State Rail Plan. (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021).



⁵ Indiana State Rail Plan. (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021).



There are 24 intercity bus routes operated by nine carriers, who service 51 communities in the state, and more than 84 percent of Indiana's population resides within 25 miles of an intercity bus station or stop.⁸ While most operators do not provide direct access to airports without a transfer, three operators offer direct service to Indianapolis International Airport (IND), South Bend International Airport (SBN), and Evansville Regional Airport (EVV).

Table 5.4 provides a tabular and visual summary of the ground transportation options available at 2022 ISASP facilities.Two system airports reported having no transportation modes available and are listed as follows:

- Salem Salem Municipal Airport (183)
- Winamac Arens Field Airport (RWN)

Both identified that a personal vehicle or the airport manager is sometimes available to provide transportation.

⁸ INDOT. Indiana Intercity Bus Needs Assessment and Service Evaluation 2017. (February 2018). <u>https://www.in.gov/indot/files/INDOT-2017-ICB-Study.pdf</u> (Accessed November 2021).





Table 5.4. Ground Transportation Options at ISASP Facilities

Associated City	Facility Name	FAA ID	Rental Cars	Courtesy Cars	Taxi	Shuttle Service	Rideshare	Public Transit
		Comr	nercial Servio	:e				
Evansville	Evansville Regional	EVV	Yes	Yes	Yes	No	Yes	No
Fort Wayne	Fort Wayne International	FWA	Yes	Yes	Yes	Yes	Yes	No
Indianapolis	Indianapolis International	IND	Yes	Yes	Yes	Yes	Yes	Yes
South Bend	South Bend International	SBN	Yes	Yes	Yes	Yes	Yes	Yes
			GA				· · · · · ·	
Anderson	Anderson Municipal-Darlington Field	AID	No	Yes	Yes	No	Yes	No
Angola	Tri-State Steuben County	ANQ	No	Yes	No	No	No	No
Auburn	DeKalb County	GWB	No	Yes	No	Yes	Yes	No
Bedford	Virgil I Grissom Municipal	BFR	No	Yes	No	No	Yes	No
Bloomington	Monroe County	BMG	Yes	Yes	Yes	Yes	Yes	No
Brazil	Brazil Clay County	012	No	No	No	No	Yes	No
Columbus	Columbus Municipal	BAK	Yes	Yes	Yes	Yes	Yes	Yes
Connersville	Mettel Field	CEV	No	Yes	No	No	No	No
Crawfordsville	Crawfordsville Regional	CFJ	No	Yes	No	No	No	No
Delphi	Delphi Municipal	119	No	Yes	No	No	Yes	No
Elkhart	Elkhart Municipal	EKM	No	Yes	Yes	No	Yes	No
Fort Wayne	Smith Field	SMD	No	Yes	Yes	Yes	Yes	No
Frankfort	Frankfort Municipal	FKR	No	Yes	Yes	No	Yes	No
French Lick	French Lick Municipal	FRH	No	Yes	No	Yes	Yes	No
Gary	Gary/Chicago International	GYY	Yes	Yes	Yes	Yes	Yes	Yes
Goshen	Goshen Municipal	GSH	Yes	Yes	Yes	No	No	No
Greencastle	Putnam County Regional	GPC	No	No	No	No	Yes	No
Greensburg	Greensburg Municipal	134	No	No	Yes	No	No	Yes





Associated City	Facility Name	FAA ID	Rental Cars	Courtesy Cars	Taxi	Shuttle Service	Rideshare	Public Transit
Griffith	Griffith-Merrillville	05C	Yes	No	Yes	No	Yes	No
Huntingburg	Huntingburg	HNB	Yes	Yes	No	No	No	Yes
Huntington	Huntington Municipal	HHG	No	Yes	Yes	No	Yes	No
Indianapolis	Hendricks County-Gordon Graham Field	2R2	No	No	Yes	No	Yes	No
Indianapolis	Eagle Creek Airpark	EYE	No	Yes	Yes	No	Yes	No
Indianapolis	Indianapolis Downtown Heliport	8A4	No	No	Yes	No	Yes	Yes
Indianapolis	Indianapolis Executive	TYQ	Yes	Yes	No	No	Yes	No
Indianapolis	Indianapolis Metropolitan	UMP	Yes	Yes	Yes	No	Yes	No
Indianapolis	Indianapolis Regional	MQJ	Yes	Yes	Yes	No	Yes	No
Indianapolis	Indy South Greenwood	HFY	No	Yes	Yes	No	Yes	No
Jeffersonville	Clark Regional	JVY	Yes	Yes	Yes	Yes	Yes	No
Kendallville	Kendallville Municipal	C62	No	Yes	No	No	No	No
Kentland	Kentland Municipal	501	No	Yes	No	No	Yes	No
Knox	Starke County	OXI	No	Yes	Yes	No	Yes	No
Kokomo	Kokomo Municipal	OKK	No	Yes	Yes	No	Yes	No
La Porte	La Porte Municipal	PPO	No	Yes	Yes	No	Yes	No
Lafayette	Purdue University	LAF	Yes	Yes	Yes	No	Yes	Yes
Lebanon	Boone County	614	No	No	Yes	No	Yes	No
Logansport	Logansport/Cass County	GGP	No	Yes	Yes	No	No	No
Madison	Madison Municipal Airport	IMS	No	Yes	Yes	No	Yes	No
Marion	Marion Municipal-McKinney Field	MZZ	Yes	Yes	No	No	Yes	No
Michigan City	Michigan City Municipal-Phillips Field	MGC	No	Yes	Yes	No	Yes	No
Monticello	White County	MCX	Yes	Yes	Yes	No	No	No
Muncie	Delaware County Regional	MIE	No	Yes	Yes	No	Yes	No
New Castle	New Castle Henry County Marlatt Field	UWL	No	Yes	No	No	No	No





Associated City	Facility Name	FAA ID	Rental Cars	Courtesy Cars	Taxi	Shuttle Service	Rideshare	Public Transit
North Vernon	North Vernon	OVO	No	Yes	Yes	No	Yes	Yes
Paoli	Paoli Municipal	142	No	Yes	No	No	No	No
Peru	Grissom ARB	GUS	No	Yes	No	No	Yes	No
Peru	Peru Municipal	176	No	Yes	Yes	No	Yes	No
Plymouth	Plymouth Municipal	C65	Yes	Yes	Yes	No	No	No
Portland	Portland Municipal	PLD	No	Yes	Yes	No	Yes	No
Rensselaer	Jasper County	RZL	Yes	Yes	No	Yes	Yes	Yes
Richmond	Richmond Municipal	RID	Yes	Yes	Yes	No	Yes	No
Rochester	Fulton County	RCR	No	Yes	No	No	No	No
Salem	Salem Municipal	183	No	No	No	No	No	No
Seymour	Freeman Municipal	SER	No	No	Yes	No	No	No
Shelbyville	Shelbyville Municipal	GEZ	Yes	Yes	Yes	Yes	No	No
Sheridan	Sheridan	514	No	Not Provided	Yes	No	Yes	No
Sullivan	Sullivan County	SIV	No	Yes	Yes	No	No	No
Tell City	Perry County Municipal	TEL	No	Yes	Yes	No	No	No
Terre Haute	Terre Haute Regional	HUF	Yes	Yes	Yes	No	Yes	No
Valparaiso	Porter County Regional	VPZ	No	Yes	Yes	No	Yes	No
Wabash	Wabash Municipal	IWH	No	Yes	No	Yes	No	No
Warsaw	Warsaw Municipal	ASW	No	Yes	Yes	Yes	Yes	No
Washington	Daviess County	DCY	No	Yes	Yes	No	No	No
Winamac	Arens Field	RWN	No	No	No	No	No	No
Winchester	Randolph County	122	No	Yes	No	No	No	No

Source: 2022 ISASP Airport Manager Survey, 2021; Kimley-Horn, 2021.





5.4. Indiana's Freight System

The effective transportation of freight within and outside of Indiana is essential for supporting the movement of goods and is a key driver of economic activity. As "The Crossroads of America," Indiana has a robust freight network comprised of a multimodal system that includes highway, railroad, port and waterway, and air cargo facilities. In particular, freight rail service can provide significant cost savings for specific industries. The availability of rail also adds to the capacity of the transportation system, relieving capacity and reducing maintenance costs on the Indiana roadway system. The following subsections summarize the different freight modes available in Indiana. INDOT and the Ports of Indiana (POI) recognize the importance of transportation planning for different modes and have published long-term planning and economic impact documents for freight, rail, and waterways and ports that were used for the analysis described in the following sections. For more information, please see the Indiana Multimodal Freight Plan Update 2018, the 2021 Indiana State Rail Plan, and the Local and Regional Economic Impacts of the Ports of Indiana 2020 (which can be accessed at INDOT's and POI's websites).

5.4.1. Freight Rail

Indiana businesses benefit from an extensive transportation network across all modes, including the U.S. rail network. According to most metrics used to assess rail access and activity, Indiana is among the more rail-intensive states in the U.S, ranking 4th in the number of freight railroads and 11th in total rail mileage.⁹ Indiana has three Class I freight railroads (CSX Transportation, Canadian National (CN) Railway, and Norfolk Southern (NS) Railway) which together operate 3,224 miles in Indiana and link multiple regions, including routes from the U.S. Midwest to the Northeast and Mid-Atlantic, routes from the Midwest to the Southern U.S., and from Chicago to Eastern Canada. Together with 39 other freight railroads in Indiana, freight rail is able to facilitate cargo movement both within the state and nationwide. **Figure 5.7** illustrates the Indiana railroad network and major rail operators in the state.

⁹ Indiana State Rail Plan. (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021).







Figure 5.7. Indiana Rail System

Sources: INDOT Rail Office, 2021; State of Indiana 2019 Rail System Map.





Freight rail is used primarily for long-distance cargo transportation. Rail in Indiana carries mostly bulk, low-value commodities such as coal, base metals, cereal grains, and animal feeds while other cargo includes automobiles and containerized cargo. Freight is transported via intermodal containers which can be transferred between railcar and truck-trailer quickly and efficiently. Compared to other modes, approximately 17 percent of all cargo in Indiana is transported by freight rail.¹⁰ Indiana is one of the few places in the U.S. that manufactures railroad locomotives. The high-horsepower diesel locomotives built by Progress Rail in Muncie, Indiana, feature the latest Tier 4 emission-reducing technology and new industry safety features, such as Positive Train Control and Crash Energy Management technology.¹¹

Rail congestion around Chicago has improved the viability of Indiana options provided by CSX Transportation and new services over the CN network, which enable trains to bypass Chicago, a dominant intermodal service area. CN operates their largest railyard in the U.S. in Gary, and NS operates a freight classification yard in Elkhart, which are both along the northern Indiana border, close to the Chicago area. CSX operates one intermodal freight facility in Avon, west of Indianapolis, and is committed to investing \$100 million to install new rail, upgrade the rail bed structure, and improve bridges on the Louisville and Indiana Railroads (LIRCs) 106-mile rail line between Indianapolis and Louisville, Kentucky, in return for a permanent easement from LIRC. Train speeds and the number of daily trains are anticipated to increase as these track improvements are completed.¹² In addition, Indiana plays a critical role in keeping Amtrak's locomotives and passenger cars in service. Amtrak's Beech Grove Shop, southeast of Indianapolis, is the passenger railroad's primary heavy maintenance facility for all equipment that operates predominantly outside of the Northeast.

When integrated with airports, heavy rail provides a unique connection that can facilitate the movement of cargo. This type of connection is rare. Based on inventory data collected, there are no Indiana system facilities with integrated heavy rail. However, Gary/Chicago International Airport (GYY) is the proposed location of a future intermodal rail terminal.¹³ With close proximity to Chicago, new freight rail connectivity and completion of ongoing commuter rail improvements would create a unique economic opportunity for Gary/Chicago International Airport (GYY) to emerge as a major regional multimodal transportation hub.

5.4.2. Waterways and Ports

Indiana's waterway network includes 385 miles along the Ohio River on the state's southern border and 43 miles along Lake Michigan on the northwest border. Each year, Indiana ships 50 million tons of cargo by water. Indiana has three state ports which are operated by POI, a self-funded state-wide port authority established in 1961. The Jeffersonville and Mount Vernon ports are located on the Ohio River, and the Burns Harbor port is located on Lake Michigan. The ports are accessible from the Great Lakes, the Mississippi River, the Gulf of Mexico, and the Atlantic Ocean.

¹³ Northwest Indiana Regional Planning Commission (NIRPC). NWI 2050 <u>https://nirpc.org/wp-content/uploads/2020/02/NWI-2050-FINAL-PLAN.pdf</u> (Accessed December 2021).



¹⁰ Indiana Multimodal Freight Plan Update 2018. <u>https://www.in.gov/indot/multimodal/freight/</u> (Accessed December 2021).

¹¹ Indiana State Rail Plan. (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021).

¹² Indiana State Rail Plan. (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021). Page 39.



Burns Harbor receives ocean vessels, 1,000-foot lake vessels, and river barges, while Jeffersonville and Mount Vernon handle river barges that exchange cargo with ocean vessels in the Gulf of Mexico.

Freight transported via Indiana's waterways contribute significantly to Indiana's economy. The State of Indiana has more than 100 private terminals that handle millions of tons of cargo. Indiana's northern shoreline on Lake Michigan is ranked as the 28th largest port district in the country by tonnage and the second largest on the Great Lakes. In 2019, maritime shipping contributed \$27 billion to the state economy and supported more than 156,000 jobs.

The state's three public ports handle approximately 16.4 million tons of waterborne cargo including key commodities such as coal, iron ore, steel products, grain, soybean products, ethanol, dried distillers grains (DDGs), fertilizer, dry bulks, and minerals. All three ports are rail-served, and most of their tenants have rail access. There are expansion projects underway at all three ports including the construction of additional rail infrastructure. The Jeffersonville and Burns Harbor ports have received federal grants for improvements which have spurred additional rail investments outside the ports. In addition, POI is leveraging federal and private investments to build more than \$50 million in infrastructure improvement projects at its ports to upgrade infrastructure and attract new economic development to the state. ¹⁴

5.4.3. Roadway Freight Network

Highways in Indiana are the largest component of Indiana's freight network, which include more than 11,000 miles of interstates, U.S. highways, and state roads. Trucks provide supplementary connectivity between intermodal facilities and often provide the first-and last-mile transportation of goods and materials moving between producers and consumers. According to the 2018 Indiana State Freight Plan, trucks carry more than 400 million tons of cargo per year, which accounts for nearly 80 percent of all freight tonnage in the state and is valued at more than \$560 million.¹⁵ The top three commodities carried by trucks are gravel, base metals, and cereal grains, which together account for 56 percent of all goods transported. **Figure 5.8** illustrates the roadway network that trucks use to transport goods and materials around Indiana as presented in the Indiana 2018 State Freight Plan.

¹⁵ Indiana Multimodal Freight Plan Update 2018. <u>https://www.in.gov/indot/multimodal/freight/</u> (Accessed December 2021).



¹⁴ POI. "Ports of Indiana Releases Economic Impact Report." June 25, 2021. https://www.portsofindiana.com/2021/06/25/ports-of-indiana-releaseseconomic-impact-report/ (Accessed December 2021).







Sources: ESRI ArcPro, 2022; Indiana State Freight Plan, 2018; Kimley-Horn, 2022.





Indiana is centrally located in the U.S., which provides easy access to heavily traveled truck corridors, such as I-65 (Chicago, Illinois - Indianapolis, Indiana - Louisville, Kentucky), I-70 (St. Louis, Missouri - Indianapolis, Indiana - Columbus, Ohio), and I-69 (Port Huron, Michigan - Ft. Wayne, Indiana - Indianapolis, Indiana, and soon will continue through to Evansville, Indiana). As a result, slightly more than half of all freight in Indiana originates or terminates within the state, while the rest of the freight is moved from one point to another within the state.¹⁶

5.4.4. Air Cargo Connectivity

Air cargo services enable quick transport of goods from all parts of the world to, through, and within Indiana. Although air cargo represents a small portion of Indiana's total freight tonnage (less than one percent), it contributes approximately six percent of the total value of freight goods transported in Indiana.¹⁷ The majority of freight flows through four airports in Indiana that support air cargo service: Indianapolis International Airport (IND), Fort Wayne International Airport (FWA), Gary/Chicago International Airport (GYY), and South Bend International Airport (SBN). **Table 5.5** presents amount of air cargo handled at these four airports in 2020. The key air commodities are electronics, pharmaceuticals, basic chemicals, and motorized vehicles, leading to the higher value share of freight despite lower volume share. According to the 2022 ISASP Airport Manager Survey, 28 Indiana system airports reported cargo operations in 2019 and 2020 (four commercial service airports and 24 GA airports). Fort Wayne International Airport (FWA) handles cargo via FedEx and UPS and has a foreign trade zone (FTZ-82). FWA also has a 425-acre site called the Air Trade Center, which has a 32-acre cargo ramp for both aeronautical and non-aeronautical development.

Associated City	Airport Name	FAA ID	Amount of Air Cargo in 2020
Gary	Gary/Chicago International Airport	GYY	103,314,000 lb.
Indianapolis	Indianapolis International Airport	IND	5,653,005,700 lb.
Purdue	Fort Wayne International Airport	FWA	195,516,005 lb.
South Bend	South Bend International Airport	SBN	102,718,674 lb.

Table 5.5. 2020 Amount of Air Cargo at Major Air Cargo Facilities

Sources: FAA Air Cargo Data, 2020; GYY Airport Website, 2020.

Air cargo continues to present significant growth opportunities for central Indiana. Indianapolis International Airport (IND) is home to FedEx Express' second largest air cargo hub in the world, employing approximately 4,000 staff, which places it among the world's largest airports by annual cargo tonnage throughput. FedEx has operated at Indianapolis International Airport (IND) since 1988 and currently processes 99,000 packages per hour. FedEx is currently nearing the end of a seven-year, \$1.5 billion expansion of its 320-acre site, including two new package-sorting facilities and equipment, a new refrigerated building for perishable shipments, a new building for truck deliveries, and 16 additional aircraft gates.¹⁸ Once complete, FedEx will be able to process 147,000 packages per hour.¹⁹

¹⁹ Ibid.



¹⁶ Ibid.

¹⁷ Indiana Multimodal Freight Plan Update 2018. <u>https://www.in.gov/indot/multimodal/freight/</u> (Accessed December 2021).

¹⁸ Indianapolis Business Journal. FedEx's \$1.5B investment in Indy will expand capacity, add jobs, strengthen airport finances. October 18, 2018. (Accessed December 2021).



Also, there are more than 10 cargo-based firms and over 165 flights per day that carry cargo in passenger planes at Indianapolis International Airport (IND).²⁰ While the COVID-19 pandemic contributed to a sharp decline in passenger travel and revenue, 2020 was a record year for air cargo in the U.S., as airlines carried 11 percent more cargo in 2020, compared to the same period in 2019.²¹ Between January and September 2020, air cargo at Indianapolis International Airport (IND) increased nearly nine percent.²²

5.5. Areas of Concern Specific to Airports

With the constant adaption of and reliance on transportation, new areas of concern or issues arise from time to time. With the majority of aviation system facilities being within two miles of major roadways and all but two airports having at least one ground transportation option to connect their passengers, most Indiana aviation facilities have at least baseline transportation connections. However, responses to the 2022 ISASP Airport Manager Survey did highlight two specific areas of concern related to ground transportation:

- Rideshare Concerns
- Traffic Congestion

5.5.1. Rideshare Concerns

Over the past decade, rideshare applications, such as Uber and Lyft, have become an increasingly popular way for people to travel to and from the airport. While these rideshare applications offer a convenient mode of transportation to and from the airport, there are a number of challenges that this technology has created for airports. These challenges include increased vehicular traffic interacting with the airport environment and increased congestion at airport curb fronts and in cell phone parking lots. Moreover, the increased use of rideshare applications has greatly impacted airport parking and taxi revenues for many airports, and there is concern about how equitable these transportation methods are for Americans with Disabilities Act (ADA) users.

5.5.1.1. Increased Vehicular Traffic

Many TNCs have argued that rideshares reduce overall traffic congestion at airports and other areas of operation, but there is a lack of evidence to support this claim. In general, rideshares encourage the continued and growing use of low-occupancy vehicles at airports and on roadways. If TNCs were able to provide more opportunities for car or van pool rides instead of single passenger rides, it could result in a reduction in vehicular traffic at airports.

5.5.1.2. Congestion at Airport Curb Fronts and Cell Phone Lots

As the use of rideshare continues to increase, a larger percentage of airport users will be dropped off and picked up at airport curb fronts rather than parking a vehicle in traditional parking facilities (e.g., parking garage or surface lots) and walking or taking shuttles to the airport terminal. This naturally causes curb fronts to become congested and exceed the capacity that they were designed to accommodate.

²² INDOT. "Indiana State Rail Plan." (2021) <u>https://www.in.gov/indot/files/INDOT_SRP_Combined_FINAL_Nov-2021-INDOT-website.pdf</u> (Accessed November 2021). Page 151.



²⁰ Indianapolis Metropolitan Planning Organization. "2045 Long-Range Transportation Plan." (Accessed December 2021).

²¹ Bureau of Transportation Statistics, <u>https://www.bts.gov/data-spotlight/commercial-aviation-2020-downturn-airline-passengers-employment-profits-and-flights</u> (Accessed December 2021).



Congested curb fronts can cause safety concerns as there are more opportunities for collisions between vehicles and pedestrians. Congested curb fronts can cause delays and negatively impact an airport user's experience. A variety of different approaches are being tested at commercial service airports to determine the best strategy for accommodating rideshare proliferation while reducing congestion. These strategies may look different across commercial service airport's available space, the roadway access network, and other issues impacting curb front congestion.

Cell phone waiting lots can also become congested and difficult to use because of the increase in rideshare vehicles. Oftentimes, rideshare drivers will take up space in cell phone lots as they wait for users to request rides. As cell phone lots become more congested with rideshare vehicles, there are fewer parking spaces available for non-rideshare drivers to park and wait to pick up their passengers. Indianapolis International Airport (IND) and other airports across the country have established parking lots specifically for rideshare users to wait for ride requests so as not to add unnecessary demand to the cell phone lots.

5.5.1.3. Reduction of Airport Revenues

As more and more people rely on rideshare applications to get them to and from the airport, there are fewer people using available short- and long-term airport parking facilities. If demand for these parking structures declines, there could be a corresponding loss in revenue that is usually generated by these facilities. Furthermore, the growth of transit options (such as BRT at airports) has the potential to cause additional decline in parking revenues.

In addition to losing parking revenues (which have historically been one of the largest and most stable sources of revenue for airports), airports are also being impacted by rideshare companies not responsible for paying some of the user fees that traditional taxi services have been required to pay to airports. Solutions such as instituting GPS-based geofences that collect user fees from rideshare vehicles as they enter the airport environment have been implemented at airports to combat rideshare-related revenue loss.

5.5.1.4. Inequitable Americans with Disability Act (ADA) Accessibility

There is also concern with rideshare companies not being properly accessible to the ADA community because many of the vehicles used for rideshares are personal vehicles that may not be properly equipped to accommodate ADA needs. There is concern that the more rideshare applications grow in popularity, the fewer options there will be for ADA compatible transportation modes. Rideshare companies provide a limited number of ADA-compliant vehicles (particularly for non-folding wheelchairs); however, these services are not available in all markets, may not serve all ADA needs, and there can be considerable delays if the ADA-compliant fleet is limited or already in use. It is the responsibility of transit authorities, rideshare companies, taxi services, and other transportation entities to provide ADA-compatible vehicles for passengers that need them.

5.5.2. Traffic Congestion

Indiana relies heavily on its roadways for quick and efficient transportation around the state for many purposes, including getting passengers and freight to and from airports. In 2017, there was an estimated 82.7 billion miles traveled throughout Indiana's roadway network alone.





Major interstates I-65 and I-70 experience frequent congestion statewide, while I-465 around Indianapolis experiences significant recurring congestion during peak hours.²³ According to the road connectivity analysis in **Table 5.1**, these three interstates provide indirect access to 21 aviation facilities in the state (20 GA airports and one heliport), and I-70 provides direct access to Indianapolis International Airport (IND). Traffic congestion on these interstates can impact the ability of passengers and freight to access these facilities in a timely manner. I-65 and I-70 are heavily traveled corridors for freight traffic, as well, connecting Indianapolis to Chicago, Illinoi; Louisville, Kentucky; Columbus, Ohio; St. Louis, Missouri; and points beyond. Indiana's population is expected to increase by approximately 19 percent between 2015 and 2045. Population increases tend to increase vehicle miles traveled (VMT), as well; truck VMT is expected to increase 39 percent and personal VMT is projected to increase 23 percent over the same horizon.²⁴ As a result, travel time and delay are expected to increase significantly in the future.

5.6. Planned Transportation Improvements

Indiana engages in both long-range planning and near-term project prioritization based on available funding to ensure that current and future transportation needs are met across the state. Planning is an important component used to guide the development of Indiana's transportation system and helps to ensure accessibility and multimodal connectivity. The following subsections highlight Indiana's planning efforts at the state, regional, and local levels and specific infrastructure improvements that are either in process or planned for the near future.

5.6.1. Long-Range Transportation Plan

The 2018-2045 Future Transportation Needs Report is Indiana's long-range transportation plan (LRTP). INDOT is responsible for developing and updating the plan. The document includes broad-based policies developed to ensure that the transportation infrastructure network will adequately serve future needs through 2045. The plan identifies existing and emerging transportation challenges, establishes goals and performance measures, details what is needed to meet the transportation demands, recommends strategies to ensure regional mobility, and includes an implementation process to meet Indiana's transportation vision. The current LRTP was formally adopted in June 2019. INDOT will continually monitor and periodically update the plan as needed to reflect changes in demographics and land use, updated technologies, and new planning requirements. Policy goals and objectives cover the following areas:

- Safe & Secure Travel
- System Preservation
- Economic Competitiveness & Quality of Life
- Multimodal Mobility
- Environmental Responsibility
- New Technology & Advancements

 ²³ INDOT. "Indiana Multimodal Freight Plan Update 2018." <u>https://www.in.gov/indot/multimodal/freight/</u> (Accessed December 2021).
 ²⁴ INDOT. "2018-2045 Future Transportation Needs Report." <u>https://www.in.gov/indot/resources/planning-studies/technical-planning/2045-indot-long-range-transportation-plan/</u> (Accessed December 2021).





The LRTP includes strategic policy initiatives to use performance measures to inform decision-making, engage in open decision-making, integrate regions and corridors to better focus cost-effective transportation systems, explore public-private partnership opportunities, and reduce project delivery delays. The LRTP is not project-specific, but rather identifies investment priorities based on current and projected funding. For specific project planning, INDOT develops and updates the State Transportation Improvement Program (STIP), a four-year planning and construction document that lists all projects that are expected to be funded with federal and/or state funds.

Overall transportation system needs are identified in the LRTP by transportation mode. Aviation needs are estimated at \$3.9 billion for projects at airport facilities across the state to upgrade runway pavements, improve access and signage, address obsolete terminal facilities, add weather reporting systems, etc. However, these aviation needs are not included as a current funding priority in the LRTP. The LRTP includes several goals to "Enhance Multimodal Connections," including a goal to "create incentives for more direct flights to national and international markets."²⁵ An updated assessment of aviation funding needs conducted as a part of the 2022 ISASP is provided in **Chapter 8 - Indiana Airport Development Fund and System Cost Estimates**.

5.6.1.1. Statewide Transportation Improvements

Over the 30-year horizon, Indiana expects to significantly improve the condition of roads and bridges throughout the state. Twenty-one major corridor improvements are identified in the LRTP based on a mobility corridor hierarchy system: statewide connections, regional connections, and sub-regional connections, which are trips characterized by different speeds and distances. The corridors are critical to mobility and economic activity throughout the state. Examples of highway expansions and modernizations over the next thirty years include:

- I-69, Section 6: New 26-mile north-south interstate from Martinsville to I-465 on the south side of Indianapolis
- I-69 Ohio River Crossing: New bridge crossing in Evansville
- I-70 and I-65 Expansion: From four lanes to six lanes across the state
- I-465 Improvements: Multiple interstate segments targeted for traffic flow improvements
- I-94 Improvements: Add Transportation System Management treatments from Illinois state line to I-65
- US-31 Improvements: Improve traffic flow and safety from Kokomo north to US-30
- US-30 Improvements: Upgrade 100-mile stretch from Fort Wayne to Valparaiso to improve traffic flow and safety

Multimodal projects include the development or improvement of heavy-haul routes to improve truck access to the POI Jeffersonville and Mount Vernon ports and the expansion of commuter rail in Northwest Indiana. These projects are expected to improve safety, mitigate congestion, and increase capacity, which will help to ensure that the Indiana transportation infrastructure network will adequately serve future needs.

5.6.2. Next Level Roads and Next Level Connections

As noted in **Section 5.3.5**, traffic congestion can impact the ability of people and goods to move efficiently from place to place and can negatively impact airport access.

²⁵ INDOT. "2018-2045 Future Transportation Needs Report." https://www.in.gov/indot/resources/planning-studies/technical-planning/2045-indot-long-range-transportation-plan/ (Accessed December 2021).





Degraded roadway and bridge infrastructure can also impact Indiana drivers and negatively impact the overall quality of life for residents. To quantify this cost, the non-profit transportation research organization, TRIP, calculated the estimated costs of deficient roadways to Indiana drivers. Altogether, these roadway issues are estimated to cost Indiana's drivers an estimated \$2.9 billion each year.²⁶ According to TRIP, an estimated 44 percent of Indiana's major roads and bridges are either in poor or mediocre condition. In addition, an estimated six percent of all local- and statemaintained bridges in Indiana are highlighted as poor/structurally deficient. Drivers face safety risks and weight capacity limits are put in place, which limits the network range of heavier vehicle users (emergency vehicles, commercial trucks, large buses, etc.). Freight transport, in particular the trucking industry, is most impacted by traffic congestion and degraded infrastructure, as it is the most heavily used form of freight transportation in the state. Drivers also face increased operating costs for their vehicles and increased congestion in more populated areas.

Lack of funding for continuous maintenance to combat the normal causes of wear (e.g., vehicle traffic, moisture, extreme climates, etc.) has contributed to poor infrastructure conditions. Recognizing the need to take action, the Indiana State Legislature passed a fully funded 20-year road and bridge funding bill in 2017 by raising the gas tax 10 cents a gallon, raising special fuel and motor carrier surcharges, and increasing toll rates. Two spending plans were a result of the additional funds: The Next Level Roads (\$30 billion investment over 20 years for maintenance and construction of roads and bridges) and the Next Level Connections Initiative (\$1 billion investment in other infrastructure projects).²⁷ The Next Level Roads will be used to improve existing roads and bridges, enhance safety, and correct drainage issues on Indiana's highways. Next Level Connections will be used to complete major highway projects statewide, develop trails, help expand commuter rail in Northwest Indiana (South Shore Expansion and West Lake Corridor), and to create more non-stop international flights. ²⁸ The bill also provides additional funding for Indiana cities, towns, and counties to improve local roads. Nearly 90 percent of the funding will be directed toward preservation.

5.6.3. Regional and Local Plans

Planning for transportation needs also occurs at the regional and local levels. Planning enables communities to estimate future growth in order to predict shifts in demand and to best prepare for desired outcomes. INDOT collaborates with local government entities to develop the STIP, including Transportation Planning Regions, Metropolitan Planning Organizations (MPOs), and Regional Planning Organizations, which in turn, have developed their own regional and local plans. These plans include projects of significance to the local community and/or region. Across Indiana, there are 14 MPOs that publish long-range planning documents and transportation improvement plans (TIPs) that include future infrastructure improvements and projects with estimated costs. The MPO plans were reviewed to determine if airport access is considered or if airport projects are integrated with local transportation planning efforts. Several transportation plans and agencies have identified or recommended projects that address areas of concern or improve access to Indiana's aviation facilities, as identified in **Table 5.6** below.

²⁸ IN.gov. "Next Level Indiana." <u>https://www.in.gov/indot/maintenance-operations/next-level-preservation/next-level-indiana/</u> (Accessed December 2021).



²⁶ TRIP. (May 2021). "Key Facts about Indiana's Surface Transportation System." (Accessed December 2021).

²⁷ 2045 Indiana Long-Range Transportation Plan.



Table 5.6. Airports Included in MPO Plans

MPO Airport Included		Details			
Northwestern Indiana Regional Planning Commission	Gary/Chicago International (GYY)	Improving intercity passenger rail services (currently underway) positions Gary/Chicago International to emerge as a major regional multimodal transit hub, attracting new airline service and the potential for an intermodal rail terminal at the airport.			
Michiana Area Council of GovernmentsSouth Bend International (SBN), Elkhart Municipal (EKM), Goshen Municipal (GSH), Warsaw Municipal (ASW), and Plymouth Municipal (C65)		High-speed rail and hyperloop are potential advancements that could improve access to airports.			
Northeastern Indiana Regional Coordinating Council	Fort Wayne International (FWA)	Citilink transit service is currently expanding and is considering adding a stop at Fort Wayne International.			
Indianapolis Metropolitan Planning Organization	Indianapolis International (IND)	FedEx's ongoing expansion has facilitated significant air cargo opportunities for Central Indiana.			
Bloomington / Monroe County Metropolitan Planning Organization	Monroe County (BMG)	Extending Airport Road and intersection improvements at Airport Road and IN-45 are being considered to improve access and ease congestion.			
Columbus AreaMetropolitan PlanningColumbus Municipal (BAK)Organization		ColumBUS transit is in the planning stage of adding a 6th route to the fixed-route system and is considering adding a stop near the airport.			

Sources: MPO websites, 2021; Kimley-Horn, 2021.

In addition to the 10 airports noted in **Table 5.6**, 13 Indiana aviation facilities reported on the 2022 ISASP Airport Manager Survey that their facility is included or has been considered in local or other regional plans; 44 reported they are not included, and two did not provide a response.

5.7. Summary

Prioritizing aviation needs, including improved airport access, is a challenge that Indiana is well-positioned to address over the next 20 years. Multimodal integration is increasingly important to aviation system planning, as well as other modal planning efforts, which INDOT has recognized. Continued coordination between airports, communities and planning agencies will help Indiana's transportation system meet the future needs of users accessing aviation facilities in the state.

