Chapter 3 – Inventory of Existing Conditions

3.1. Introduction

To understand the presence and condition of existing airport facilities, services, and activities, a multi-faceted data collection effort was performed early for the 2022 Indiana State Aviation System Plan (ISASP). It was critical that the information collected during this effort be comprehensive and complete as it informs many subsequent parts of the 2022 ISASP, such as project and policy recommendations. Not only is this information required to assess the performance of Indiana's aviation system in meeting the established Performance Measures (PMs) and Performance Indicators (PIs) introduced in **Chapter 1 - Study Design and Goals,** but it is also needed to assess each airport's ability to meet Minimum Service Level Recommendations (MSLRs) which were introduced in **Chapter 2 – ISASP Facility Categories**.

This chapter includes a summary of the inventory process, along with the inventory information collected, organized by system goal as follows:

- 3.2 Inventory and Data Collection Process
- 3.3 2022 ISASP Data by Goal
- 3.4 Summary

3.2. Inventory and Data Collection Process

The main source of information for the 2022 ISASP inventory was aviation facility representatives. Data was collected from facility staff via a 21-page Airport Manager Survey that was customized for each of the system's 69 facilities. The surveys were pre-populated with data available from supplemental sources prior to sending it to the airport and heliport representatives to complete. The supplemental sources included the Federal Aviation Administration (FAA) Airport Master Record (FAA Form 5010), FAA Terminal Area Forecast (TAF), FAA National Based Aircraft Inventory (basedaircraft.com), individual Airport Layout Plans (ALPs), and Indiana Department of Transportation's (INDOT) State Office of Aviation Records System (SOARS) database. Once the surveys were pre-populated with data from these additional sources, they were emailed to facility representatives who were asked to review the information to confirm or correct any of the pre-populated fields as well as fill in any missing information. The Airport Manager Survey included 10 major sections, which are summarized in **Table 3.1**. It is important to note that the Airport Manager Survey also asked facility representatives to report information used to inform the 2022 Indiana State Aviation Economic Impact Study (AEIS). More information about the data collected for that study is presented in the 2022 Indiana State AEIS Technical Report.

Table 3.1. 2022 ISASP Airport Manager Survey Data Categories

2022 ISASP Airport Manager Survey Section	Example Data Categories
General Airport Information	■ Contact Information
Airside Facilities	■ Runways ■ Taxiways

2022 ISASP Airport Manager Survey Section	Example Data Categories
Airside Facilities (Cont'd)	■ Navigational Aids (NAVAIDS) ■ Fencing
Aircraft Storage	■ Based Aircraft T-Hangar Storage ■ Based Aircraft Conventional/Box Storage ■ Transient Aircraft T-Hangar Storage ■ Transient Aircraft Conventional/Box Hangar Storage
Airport Services	■ Fuel ■ Airframe and Avionics Repair ■ Aircraft Deicing ■ Aircraft Rescue and Firefighting (ARFF)
Airport Activity	■ Operations ■ Air Cargo Operations ■ Enplanements ■ Activities: Air Ambulance, Surveying, Corporate Business, etc.
Ground Transportation	■ Courtesy Car ■ Public Transit ■ Rental Car
Airport Planning	■ Master Plan ■ Airport Layout Plan ■ Wildlife Hazard Assessment/Management Plan ■ Emergency Response Plan
Environmental Actions	■ Recycling Protocols ■ Renewable Energy ■ Electric Vehicle Charging Stations
Aviation Industry Advancement	■ Unmanned Aerial System (UAS) Operations ■ Science, Technology, Engineering, Math (STEM) Outreach ■ Electric Aircraft Planning
Land Use Compatibility	■ Land Use and Height Controls ■ Part 77 Approach Surfaces ■ Coordination with Local/Regional Planning Agencies
Special Attributes and Airport Issues	■ Top Challenges at the Airport ■ Special Airport Attributes

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

Twenty-three of the 69 facilities received an in-person site visit with a member of the project team. Site visits were critical at larger and busier facilities due to the amount of data needed to complete the Airport Manager Survey. These visits allowed for discussion of the importance of participation in the 2022 ISASP and an opportunity for the project team to take photos of the facility for deliverables.

Table 3.2 presents the facilities that received an in-person site visit. As shown, several facilities are part of a larger airport authority. In these instances, the site visit was conducted at one facility, but all authority facilities were

reviewed, and the project team traveled to each facility to take photos and distribute business tenant surveys (more information on tenant surveys can be found in the 2022 Indiana State AEIS).

Table 3.2. 2022 ISASP In-Person Site Visit Facilities

Associated City	Facility Name	FAA ID	Airport Authority
Auburn	DeKalb County	GWB	N/A
Bloomington	Monroe County	BMG	N/A
Columbus	Columbus Municipal	BAK	N/A
Elkhart	Elkhart Municipal	EKM	N/A
Evansville	Evansville Regional	EVV	N/A
Fort Wayne	Fort Wayne International	FWA	FWACAA
Fort Wayne	Smith Field	SMD	FWACAA
Gary	Gary/Chicago International	GYY	N/A
Huntingburg	Huntingburg Regional	HNB	N/A
Indianapolis	Eagle Creek Airpark	EYE	IAA
Indianapolis	Hendricks County-Gordon Graham Field	2R2	IAA
Indianapolis	Indianapolis Downtown Heliport	8A4	IAA
Indianapolis	Indianapolis Executive	TYQ	N/A
Indianapolis	Indianapolis International	IND	IAA
Indianapolis	Indianapolis Metropolitan	UMP	IAA
Indianapolis	Indianapolis Regional	MQJ	IAA
Jeffersonville	Clark Regional	JVY	N/A
Muncie	Delaware County Regional	MIE	N/A
Peru	Grissom Air Reserve Base (ARB)	GUS	N/A
South Bend	South Bend International	SBN	N/A
Terre Haute	Terre Haute Regional	HUF	N/A
Valparaiso	Porter County Regional	VPZ	N/A
Warsaw	Warsaw Municipal	ASW	N/A

Notes: N/A = Not Applicable as these airports do not belong to an airport authority. FWACAA = Fort Wayne-Allen County Airport Authority; IAA = Indianapolis Airport Authority. Source: Kimley-Horn, 2022.

Virtual meetings were scheduled with facilities that did not receive an in-person site visit. In instances where Airport Manager Surveys were not fully completed, a combination of emails and phone calls were made to collect any remaining information.

3.3. 2022 ISASP Data by Goal

This section presents the data and information gathered from Airport Manager Surveys through in-person and virtual meetings. The data and information presented in this section is organized by goal with a brief description of the

facilities and/or services provided for each. As noted in **Chapter 1**, each of the goals and associated PMs and PIs were developed with input from the INDOT Office of Aviation and the Industry Advisory Committee (IAC).

3.3.1. Goal 1. Safety and Security

Inventory information needed for each of the PMs and PIs under Goal 1. Safety and Security is included here in the following order:

PM:

- Percent of airports meeting FAA standards:
  - Runway Safety Areas (RSAs)
  - Taxiway Geometries (wide expanse of pavement, three-node concepts, direct access)
  - Separation Standards

PI:

- Percent of non-Part 139 facilities whose local responders have basic ARFF training

3.3.1.1. PM: Percent of Airports Meeting FAA Standards

The FAA outlines a variety of precise design standards for aviation facility development through the publication of Advisory Circulars (ACs), particularly FAA AC 150/5300-13B, *Airport Design, (*AC 150/5300-13B). Three different design standards were selected to be evaluated as part of the 2022 ISASP and include RSAs, taxiway geometries, and separation standards.

Runway Safety Areas (RSAs)

RSAs support safe aircraft operations during take-off and landing. The RSAs extend from both ends of the runway and provide additional clearance in the event of an aircraft overrun, overshoot, or if the aircraft veers off the side of the runway. RSAs typically extend 1,000 feet beyond each runway end and are 500 feet wide but may be smaller if the runway has a less demanding runway design code (RDC). Dimensions also depend on the runway approach visibility minimums. **Table 3.3** provides a summary of the minimum and maximum RSA dimensions based on an airport's RDC. Minimum RSA dimensions apply when visibility minimums are one mile or greater and maximum RSA dimensions apply when visibility minimums are less than ¾ mile.

Table 3.3. RSA Dimensions Based on RDCs

RDC	Minimum RSA Dimensions	Maximum RSA Dimensions
A-I & B-I	240' x 120'	600' x 300'
A-II & B-II	300' x 150'	600' x 300'
A-III & B-III	600' x 300'	800' x 400'
A-IV, B-IV, C-I and Greater	1,000' x 500'	1,000' x 500'

Sources: FAA AC 150/5300-13B; Kimley-Horn, 2022.

According to FAA AC 150/5300-13B, RSAs must be:

- Cleared and graded with no potentially hazardous ruts, humps, depressions, or other surface variations
- Drained by grading or storm sewers to prevent water accumulation
- Capable, under dry conditions, of supporting snow removal equipment (SRE), ARFF equipment, and occasional passage of aircraft without causing major damage
- Free of objects and obstructions [1]

The existing conditions for 2022 ISASP facility RSAs presented in **Table 3.4** were identified using desktop visual analyses using Google Earth and include any unauthorized objects within the RSA boundary. Grade, drainage, and capability of supporting SRE, ARFF, and occasional aircraft was not evaluated for this PM as it would require in-person site visits for inspection.

Taxiway Geometries

The FAA established taxiway design criteria to promote and facilitate safe airfield maneuverability. Taxiway design criteria are frequently monitored by the FAA and updated to determine if recent advancements in aircraft, such as faster aircraft or wider wingspans, require an update to standards. FAA AC 150/5300-13B provides guidance on multiple airfield design concepts. Three design concepts specific to taxiways were evaluated at the applicable 2022 ISASP facilities. Examples of each are shown in **Figure 3.1**:

- **Wide Expanse of Pavement**: The FAA recommends avoiding wide expanses of pavement that allow for direct access to the runway or taxiway. Wide pavements require placement of signs far from a pilot's eye and reduce conspicuity of other visual cues. Wide expanses of pavement can reduce signage awareness during low-visibility conditions, particularly at runway entrance points.
- **More than Three Node Concept**: Airfield intersections should be designed to consist of three or fewer nodes to keep taxiway intersections simple, reducing the number of decisions the pilot must make. Adhering to the three-node principle reduces the number of intersecting taxiways at a single location and allows for proper placement of airfield markings, signage, and lighting.
- **Direct Access**: Aprons that allow for direct access onto a runway are not recommended. The apron and taxiway layout should be designed to promote situational awareness by forcing pilots to make conscious 90 degree turns to enter the runway environment.

[1] Except for objects that are required to be located in the RSA because of their function; in which case, objects higher than three inches above grade must be constructed on frangibly mounted structures.

Figure 3.1. Taxiway Design Geometry Examples

Sources: FAA AC 150/5300-13B, 2022; Google Earth, 2021; Kimley-Horn, 2022.

Using aerial imagery from Google Earth, a visual desktop analysis of 2022 ISASP airports was conducted to determine if these design concerns are present at any system airports. Taxiway geometry conditions related to this PM are presented in**Table 3.4**.

Separation Standards

Airfield separation standards are another FAA design element that was reviewed under Goal 1. Safety and Security of the 2022 ISASP. For the purposes of the 2022 ISASP, the following airfield separation standards were evaluated:

- Primary runway centerline to holding position
- Primary runway centerline to parallel taxiway centerline
- Primary runway centerline to aircraft parking area

The recommended distance between these airfield components depends on the RDC. Separation standards are implemented to facilitate safe operations of aircraft around the airfield by ensuring there is adequate clearance for aircraft to navigate the airfield. Using aerial imagery from Google Earth, a visual desktop analysis of airports was conducted to determine if these design concerns are present at any of the system airports. Separation standard conditions related to this PM are presented in **Table 3.4**.

3.3.1.2. PI: Percent of Non-Part 139 Facilities whose Local Responders have Basic ARFF Training

ARFF refers to firefighting that involves emergency response, mitigation, evacuation, and rescue of passengers and crew of aircraft involved in an aviation accident. First responders must receive specialized training to become ARFF certified and deliver this level of emergency response.

Part 139 airports are required to have ARFF-trained responders on the airfield[2]; however, there are no federal requirements for non-Part 139 airports to have ARFF-trained first responders onsite. It is possible for local first responders to complete ARFF training courses for certification to appropriately respond to on-airport emergencies at non-Part 139 airports. **Table 3.4** summarizes facility representative responses regarding local responders being trained in basic ARFF protocols.

[2] As defined by the FAA, Part 139 airports serve scheduled or unscheduled air carrier aircraft with more than 30 seats or serve scheduled air carrier operations in aircraft with more than nine seats but less than 31 seats. An airport must pass the FAA certification process before it can be considered Part 139.

Table 3.4. System Facilities' Existing Conditions Related to Goal 1

Facility Information			PM Data																PI Data
Associated City	Facility Name	FAA ID	Objects in RSAs				Taxiway Geometries			Primary Runway Centerline to:			Secondary Runway Centerline to:			Tertiary Runway Centerline to:			Local Responders Trained in ARFF
			Primary Runway	Secondary Runway	Tertiary Runway	Quaternary Runway	Direct Access	Wide Expanse of Pavement	More than Three-Node Concept	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	
Commercial Service																			
Evansville	Evansville Regional	EVV	None	None	None		Yes	No	No	250-280'	400-780'	1,600'	250-450'	415-800'	500'	130-150'	480'	300'	Yes*
Fort Wayne	Fort Wayne International	FWA	None	None	None		Yes	Yes	No	400-600'	550-750'	600'	290-305'	400'	600'	200-280'	300'	2,000'	Yes*
Indianapolis	Indianapolis International	IND	None	None	None		No	No	No	280-295'	600-650'	1,150'	280-295'	400-600'	1,600'	280-300'	600-625'	1,100'	No*
South Bend	South Bend International	SBN	None	None	None		Yes	Yes	Yes	250-300'	450-630'	880'	250-270'	400-610'	1,000'	200'	400'	4,300'	Yes*
General Aviation (GA)																			
Anderson	Anderson Municipal-Darlington Field	AID	Road	None			Yes	Yes	No	250-270'	400'	1,000'	200-250'	400'	430'				Yes
Angola	Tri-State Steuben County	ANQ	None				Yes	No	No	200'	300'	430'							No
Auburn	DeKalb County	GWB	None				Yes	Yes	No	250'	400'	425'							No
Bedford	Virgil I Grissom Municipal	BFR	None	None			Yes	Yes	No	No Markings	No Parallel Taxiway	1,000'	130'	No Parallel Taxiway	500'				No
Bloomington	Monroe County	BMG	None	None			Yes	No	No	250-260'	400-410'	560'	200-270'	350-400'	2,000'				No*
Brazil	Brazil Clay County	0I2	None				Yes	No	No	125'	No Parallel Taxiway	200'							No
Columbus	Columbus Municipal	BAK	None	None			No	Yes	No	250-370'	400'	900'	250-265'	400'	1,000'				Yes*
Connersville	Mettel Field	CEV	None				No	No	No	260'	400'	860'							No
Crawfordsville	Crawfordsville Regional	CFJ	None				Yes	No	No	200'	300'	430'							No
Delphi	Delphi Municipal	1I9	None				Yes	Yes	No	125'	No Parallel Taxiway	130'							Yes
Elkhart	Elkhart Municipal	EKM	Road	None	None		Yes	No	No	250'	700'	940'	200-350'	260'	1,100'	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway	Yes
Fort Wayne	Smith Field	SMD	None	None			Yes	Yes	No	200'	225'	550'	130'	225'	225'				No
Frankfort	Frankfort Municipal	FKR	None	None			No	No	No	200'	400'	525'	200'	400'	900'				No
French Lick	French Lick Municipal	FRH	None				Yes	Yes	No	200-250'	300-400'	480'							Yes
Gary	Gary/Chicago International	GYY	None	None			Yes	No	No	250'	400'	625'	200'	250-300'	800'				Yes*
Goshen	Goshen Municipal	GSH	None	None			Yes	No	No	250'	400'	500'	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				Yes
Greencastle	Putnam County Regional	GPC	None				No	Yes	No	250'	300'	400'							No

Facility Information			PM Data																PI Data
Associated City	Facility Name	FAA ID	Objects in RSAs				Taxiway Geometries			Primary Runway Centerline to:			Secondary Runway Centerline to:			Tertiary Runway Centerline to:			Local Responders Trained in ARFF
			Primary Runway	Secondary Runway	Tertiary Runway	Quaternary Runway	Direct Access	Wide Expanse of Pavement	More than Three-Node Concept	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	
Greensburg	Greensburg Municipal	I34	None				No	No	No	125’	No Parallel Taxiway	540’							No
Griffith	Griffith-Merrillville	05C	None				Yes	Yes	No	132-200’	250’	360’							Yes
Huntingburg	Huntingburg	HNB	None				Yes	No	No	200-250’	250-400’	360’							Yes
Huntington	Huntington Municipal	HHG	None				Yes	Yes	No	200’	400’	300’							Yes
Indianapolis	Eagle Creek Airpark	EYE	None				No	No	No	160’	200-220’	330’							No
Indianapolis	Hendricks County-Gordon Graham Field	2R2	None				No	No	No	150’	400’	500’							No
Indianapolis	Indianapolis Downtown Heliport	8A4	N/A - Heliport																No
Indianapolis	Indianapolis Executive	TYQ	None				Yes	No	No	260’	400’	650’							Yes
Indianapolis	Indianapolis Metropolitan	UMP	None				No	No	No	200’	340’	415’							No
Indianapolis	Indianapolis Regional	MQJ	None	None			No	No	No	250-270’	500’	800’	200’	480’	3,000’				No
Indianapolis	Indy South Greenwood	HFY	None				No	Yes	No	125’	240’	300’							Yes
Jeffersonville	Clark Regional	JVY	Water	None			Yes	No	No	250-300’	400’	660’	200’	400’	6600’				Yes
Kendallville	Kendallville Municipal	C62	None				Yes	Yes	No	200’	400’	475’							No
Kentland	Kentland Municipal	50I	None				No	No	No	126’	No Parallel Taxiway	250’							Yes
Knox	Starke County	OXI	None	None			Yes	Yes	No	200’	300’	400’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				No
Kokomo	Kokomo Municipal	OKK	None	None			Yes	Yes	Yes	250’	400’	550’	250’	275’	565’				No
La Porte	La Porte Municipal	PPO	None	None			Yes	Yes	No	200-250’	400’	420’	200’	300’	800’				Yes
Lafayette	Purdue University	LAF	None	None			Yes	Yes	Yes	250’	400’	550’	125’	250’	1,000’				Yes*
Lebanon	Boone County	6I4	Water				No	No	No	54’	No Parallel Taxiway	150’							No
Logansport	Logansport/Cass County	GGP	None				Yes	Yes	no	200’	275-300’	350’							No
Madison	Madison Municipal	IMS	None				Yes	No	No	125’	250’	400’							No
Marion	Marion Municipal-McKinney Field	MZZ	None	None			No	No	No	250’	400’	600’	140’	250’	1,000’				Yes
Michigan City	Michigan City Municipal-Phillips Field	MGC	None				No	No	No	130’	240’	320’							No

Facility Information			PM Data																PI Data
Associated City	Facility Name	FAA ID	Objects in RSAs				Taxiway Geometries			Primary Runway Centerline to:			Secondary Runway Centerline to:			Tertiary Runway Centerline to:			Local Responders Trained in ARFF
			Primary Runway	Secondary Runway	Tertiary Runway	Quaternary Runway	Direct Access	Wide Expanse of Pavement	More than Three-Node Concept	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	
Monticello	White County	MCX	None				No	No	No	200’	150-240’	370’							No
Muncie	Delaware County Regional	MIE	None	None			No	No	No	260’	400’	600’	250’	250-400’	580’				Yes*
New Castle	New Castle Henry County Marlatt Field	UWL	None				No	No	No	200’	310’	1,000’							No
North Vernon	North Vernon	OVO	None	None			No	Yes	No	250’	520’	550’	200’	525’	2,000’				No
Paoli	Paoli Municipal	I42	None				No	No	No	150’	No Parallel Taxiway	1,100’							No
Peru	Grissom ARB	GUS	None				Yes	No	No	200’-240’	650’-1,000’	730’							No
Peru	Peru Municipal	I76	None				Yes	No	No	125’	250’	350’							No
Plymouth	Plymouth Municipal	C65	None				No	No	No	200’	300’	400’							No
Portland	Portland Municipal	PLD	None				No	No	No	No Markings	300’	480’							Yes
Rensselaer	Jasper County	RZL	None	None			No	No	No	125’	240’	350’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				Yes
Richmond	Richmond Municipal	RID	None	None			Yes	Yes	No	365-300’	510-720’	1,200’	250-275’	500-725’	760’				No
Rochester	Fulton County	RCR	None				Yes	Yes	No	200’	300’	300’							Yes
Salem	Salem Municipal	I83	None				No	No	No	200’	300’	425’							Yes
Seymour	Freeman Municipal	SER	None	None	None	None	Yes	Yes	No	250’	530’	1,000’	250’	950’	1,000’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway	No
Shelbyville	Shelbyville Municipal	GEZ	None	None			No	No	No	250’	400-950’	1,200’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				No
Sheridan	Sheridan	5I4	None	none			No	No	No	125’	No Parallel Taxiway	200’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				No
Sullivan	Sullivan County	SIV	None				No	Yes	No	125’	190’	250’							No
Tell City	Perry County Municipal	TEL	None				Yes	No	No	125’	No Parallel Taxiway	350’							No
Terre Haute	Terre Haute Regional	HUF	None	None			Yes	Yes	No	260-420’	800’	700’	250-300’	740’	700’				No*
Valparaiso	Porter County Regional	VPZ	None	None			No	No	No	250-300’	400-640’	600’	250’	400’	450’				Yes*

Facility Information			PM Data																PI Data
Associated City	Facility Name	FAA ID	Objects in RSAs				Taxiway Geometries			Primary Runway Centerline to:			Secondary Runway Centerline to:			Tertiary Runway Centerline to:			Local Responders Trained in ARFF
			Primary Runway	Secondary Runway	Tertiary Runway	Quaternary Runway	Direct Access	Wide Expanse of Pavement	More than Three-Node Concept	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	Holding Position	Parallel Taxiway Centerline	Aircraft Parking Area	
Wabash	Wabash Municipal	IWH	None	None			Yes	No	No	200’	300’	855’	125’	No Parallel Taxiway	250’				Yes
Warsaw	Warsaw Municipal	ASW	None	None			No	Yes	No	250’	400’	2,300’	200’	250’	350’				Yes
Washington	Daviess County	DCY	None	None			No	No	No	200’	300’	400’	N/A - Turf Runway	N/A - Turf Runway	N/A - Turf Runway				Yes
Winamac	Arens Field	RWN	None				Yes	No	No	200’	No Parallel Taxiway	250’							No
Winchester	Randolph County	I22	None				No	No	No	200’	300-360’	450’							No

*Notes: The RDC for Grissom ARB (GUS) was not provided which resulted in a “not applicable” response for the airport’s RSA analysis and separation standards analysis. Blank cells in the RSA and separation standards section indicate the absence of a runway. Airports with a turf runway were not applicable to the separation standards analysis as no runway markings are present. If a range of distances is provided, it is due to multiple holding positions or variances in the parallel taxiway. *Indicates that the airport is a Part 139 airport and is therefore required to have on-airport, ARFF-trained staff, but there is no requirement for any airport to train local responders in ARFF; therefore, if a Part 139 airport is listed as not training local responders, it is because they have ARFF-trained responders onsite already. Sources: FAA AC 150/5300-13B, 2022; Google Earth; 2022 ISASP Airport Manager Survey, 2021; Kimley-Horn, 2022.*

3.3.2. Goal 2. Economic Sustainability and Quality of Life

Inventory information needed for each of the PMs and PIs under Goal 2. Economic Sustainability and Quality of Life is included in the follow subsections.

PM:

- Percent of facilities with 24/7 fuel availability

PIs

- Percent of facilities with an active development partnership with chambers of commerce, tourism bureaus, air service development groups, service organizations, local or regional governments, recreation districts, or other similar entities
- Percent of airports that experience regular aerial agricultural operations
- Percent of facilities with air cargo/freight activities including small operators

3.3.2.1. PM: Percent of Facilities with 24/7 Fuel Availability (Jet A and/or 100LL Offered via Credit-Card Machines or 24/7 Staffing)

There are two main types of fuel available: Jet A for jet aircraft and 100 low lead (100LL or AvGas) for piston-powered aircraft. Twenty-four/seven fuel availability is particularly critical for emergency medical flights, aerial firefighting, and search-and-rescue missions as these operations can occur at any time, day or night. Twenty-four/seven fuel availability also allows the airport to generate revenue around the clock by any user instead of during business hours only.

Twenty-four/seven fueling is accomplished through self-service fuel stations or on-call services where an airport or Fixed Based Operator (FBO) employee is called out after hours to fuel an aircraft. Fuel facilities can be owned directly by the airport or by the on-site FBO. **Table 3.5** summarizes facility representative responses regarding Jet A and 100LL fuel availability at their airport or heliport.

3.3.2.2. PI: Percent of Facilities with an Active Development Partnership with Chambers of Commerce, Tourism Bureaus, Air Service Development Groups, Service Organizations, Local or Regional Governments, Recreation Districts, or Other Similar Entities

Active development partnerships between airports or heliports and other organizations facilitate mutually beneficial development of facilities or services toward shared goals. Aviation facilities can leverage their position as an economic anchor to create partnerships with public or private entities to promote the development of compatible land uses such as business parks, warehouses, and other uses nearby. These active development partnerships support shared goals across industries and encourage a greater mix of economic activity to occur within the state of Indiana. **Table 3.5** summarizes facility representative responses regarding involvement in active development partnerships.

3.3.2.3. PI: Percent of Airports that Experience Regular Aerial Agricultural Operations

Aerial agricultural operations refer to operations conducted by aircraft to complete agricultural tasks. Most commonly, aerial agriculture refers to spraying crops with pest-control substances and/or fertilizers, but the practice can also include spraying seeds for planting and aerial surveying to monitor crop health. Airports that support aerial agricultural operations experience higher seasonal activity. This activity can occasionally create congestion at airports on the landside when large trucks take up space in access drives while offloading agricultural products and on the airside when apron space is taken up by these seasonal users to park, fuel, and load agricultural products. Aerial agricultural operations require support facilities such as fuel, aircraft storage, and utilities. Additionally, some aircraft used to support aerial agricultural operations have wider wingspans, which may require wider runways or additional runway clearance areas (e.g., RSAs and object-free areas) to accommodate safe maneuverability of these specialized aircraft. **Table 3.5** summarizes facility representative responses regarding aerial agricultural operations at their airport, including their frequency.

3.3.2.4. PI: Percent of Facilities with Air Cargo/Freight Activities Including Small Operators

Air cargo operations can occur at facilities of all sizes, from commercial service airports with large handling facilities to rural GA airports that support air cargo operations by small operators. **Table 3.5** summarizes facility representative responses regarding air cargo or freight activities, including small operators, at their airport or heliport.

Table 3.5. System Facilities' Existing Conditions Related to Goal 2

Facility Information			PM Data				PI Data		
Associated City	Facility Name	FAA ID	Fuel				Active Development Partnership	Aerial Agricultural Operations	Air Cargo/ Freight Activities
			100LL	24/7 100LL	Jet A	24/7 Jet A			
Commercial Service									
Evansville	Evansville Regional	EVV	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Fort Wayne	Fort Wayne International	FWA	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Indianapolis	Indianapolis International	IND	Yes	Yes	Yes	Yes	Yes	Never	Yes
South Bend	South Bend International	SBN	Yes	Yes	Yes	Yes	Yes	Never	Yes
GA									
Anderson	Anderson Municipal-Darlington Field	AID	Yes	Yes	Yes	Yes	No	Monthly	Yes
Angola	Tri-State Steuben County	ANQ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Auburn	DeKalb County	GWB	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Bedford	Virgil I Grissom Municipal	BFR	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Bloomington	Monroe County	BMG	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Brazil	Brazil Clay County	0I2	Yes	Yes	No	N/A	No	Annually/Seasonally	No
Columbus	Columbus Municipal	BAK	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Connersville	Mettel Field	CEV	Yes	Yes	Yes	Yes	No	Annually/Seasonally	Yes
Crawfordsville	Crawfordsville Regional	CFJ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Delphi	Delphi Municipal	1I9	Yes	Yes	No	N/A	Yes	Annually/Seasonally	No
Elkhart	Elkhart Municipal	EKM	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Fort Wayne	Smith Field	SMD	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Frankfort	Frankfort Municipal	FKR	Yes	Yes	Yes	Yes	Yes	Monthly	Yes
French Lick	French Lick Municipal	FRH	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Gary	Gary/Chicago International	GYY	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes

Facility Information		PM Data					PI Data		
Associated City	Facility Name	FAA ID	Fuel				Active Development Partnership	Aerial Agricultural Operations	Air Cargo/ Freight Activities
			100LL	24/7 100LL	Jet A	24/7 Jet A			
Goshen	Goshen Municipal	GSH	Yes	Yes	Yes	Yes	No	Annually/Seasonally	Yes
Greencastle	Putnam County Regional	GPC	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Greensburg	Greensburg Municipal	I34	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Griffith	Griffith-Merrillville	05C	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Huntingburg	Huntingburg	HNB	Yes	Yes	Yes	Yes	Yes	Weekly	Yes
Huntington	Huntington Municipal	HHG	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Indianapolis	Eagle Creek Airpark	EYE	Yes	Yes	Yes	Yes	Yes	Never	No
Indianapolis	Hendricks County-Gordon Graham Field	2R2	Yes	Yes	No	N/A	Yes	Annually/Seasonally	No
Indianapolis	Indianapolis Downtown	8A4	No	N/A	Yes	Yes	Yes	Never	No
Indianapolis	Indianapolis Executive	TYQ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Indianapolis	Indianapolis Metropolitan	UMP	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Indianapolis	Indianapolis Regional	MQJ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Indianapolis	Indy South Greenwood	HFY	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Jeffersonville	Clark Regional	JVY	Yes	Yes	Yes	Yes	Yes	Never	Yes
Kendallville	Kendallville Municipal	C62	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Kentland	Kentland Municipal	50I	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Knox	Starke County	OXI	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Kokomo	Kokomo Municipal	OKK	Yes	Yes	Yes	No	No	Annually/Seasonally	Yes
La Porte	La Porte Municipal	PPO	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Lafayette	Purdue University	LAF	Yes	Yes	Yes	Yes	Yes	Never	Yes
Lebanon	Boone County	6I4	No	N/A	No	N/A	Not Provided	Annually/Seasonally	Not Provided
Logansport	Logansport/Cass County	GGP	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No

Facility Information		PM Data					PI Data		
Associated City	Facility Name	FAA ID	Fuel				Active Development Partnership	Aerial Agricultural Operations	Air Cargo/ Freight Activities
			100LL	24/7 100LL	Jet A	24/7 Jet A			
Madison	Madison Municipal	IMS	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Marion	Marion Municipal-McKinney Field	MZZ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Michigan City	Michigan City Municipal-Phillips Field	MGC	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Monticello	White County	MCX	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Muncie	Delaware County Regional	MIE	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
New Castle	New Castle Henry County Marlatt Field	UWL	Yes	No	Yes	No	Yes	Annually/Seasonally	Yes
North Vernon	North Vernon	OVO	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Paoli	Paoli Municipal	I42	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Peru	Grissom ARB	GUS	Yes	Yes	Yes	Yes	Yes	Never	No
Peru	Peru Municipal	I76	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Plymouth	Plymouth Municipal	C65	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Portland	Portland Municipal	PLD	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Rensselaer	Jasper County	RZL	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Richmond	Richmond Municipal	RID	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Rochester	Fulton County	RCR	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Salem	Salem Municipal	I83	Yes	Yes	No	N/A	Yes	Annually/Seasonally	No
Seymour	Freeman Municipal	SER	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Shelbyville	Shelbyville Municipal	GEZ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Sheridan	Sheridan	5I4	No	N/A	No	N/A	Not Provided	Not Provided	Not Provided
Sullivan	Sullivan County	SIV	Yes	Yes	Yes	Yes	Yes	Never	No
Tell City	Perry County Municipal	TEL	Yes	Yes	No	N/A	Yes	Annually/Seasonally	No
Terre Haute	Terre Haute Regional	HUF	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No

Facility Information		PM Data					PI Data		
Associated City	Facility Name	FAA ID	Fuel				Active Development Partnership	Aerial Agricultural Operations	Air Cargo/ Freight Activities
			100LL	24/7 100LL	Jet A	24/7 Jet A			
Valparaiso	Porter County Regional	VPZ	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Wabash	Wabash Municipal	IWH	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Warsaw	Warsaw Municipal	ASW	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	Yes
Washington	Daviess County	DCY	Yes	Yes	Yes	Yes	No	Annually/Seasonally	No
Winamac	Arens Field	RWN	Yes	Yes	Yes	Yes	Yes	Annually/Seasonally	No
Winchester	Randolph County	I22	Yes	Yes	Yes	Yes	No	Annually/Seasonally	Yes

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

3.3.3. Goal 3. Infrastructure Preservation and Development

Inventory information needed for each of the PMs and PIs under Goal 3. Infrastructure Preservation and Development is included here in the following order:

PMs:

- Percent of facilities with primary runway/helipad Pavement Condition Index (PCI) within 10 points of INDOT's MSLR
    - Primary ≥ 70
    - Large GA (>4,500' Runway) ≥ 60
    - Small GA (<4,500' Runway) ≥ 55
    - Heliport ≥ 50
- Percent of facilities with approach procedures appropriate to their category
- Percent of facilities with an ALP:
    - <10 years old
    - 10-20 years old
    - >20 years old
- Percent of facilities that perform pavement maintenance at least once every five years (crack sealing, seal coat, patching, etc.)
- Percent of facilities with certified on-site weather reporting stations (Automated Weather/Surface Observing Systems [AWOS/ASOS])

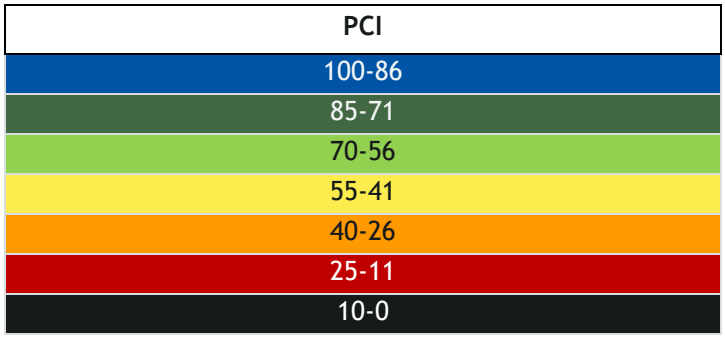
PI:

- Percent of airports at 90 percent capacity for:
    - T-Hangars
    - Corporate Box Hangars

3.3.3.1. PM: Percent of Facilities with Primary Runway PCI within 10 Points of INDOT's Minimum Service Level Recommendations (MSLRs)

Airfield pavements must be properly maintained to support safe and efficient operations. Pavement construction and continued maintenance is one of the costliest capital improvements an airport makes. Pavement condition is measured using an FAA standard index, referred to as PCI. The index includes an evaluation of the pavement in question and produces a score between zero (failed pavement) and 100 (new pavement) that indicates the condition of that pavement. **Figure 3.2** presents Indiana's PCI breakdowns per the state's PCI inspection process.

Figure 3.2. Pavement Condition Index Chart



Source: INDOT, 2021.

The 2022 ISASP provides a range of what is considered satisfactory, based on existing thresholds used by INDOT, as presented in **Table 3.6**. The minimum PCI of Primary airports is 70 or greater. The minimum PCI of GA airports with runways greater than or equal to 4,500 feet is 60 or greater, and the minimum PCI of small GA airports (GA airports with runways less than 4,500 feet in length) is 55 or greater. Heliport pavement has a minimum PCI of 60 or greater. **Table 3.8** summarizes facility representative responses regarding PCI for primary runways and heliport primary surfaces.

Table 3.6. Primary Runway/Heliport Pavement Condition Index (PCI) Minimums for ISASP Facilities

Facility Type	Minimum Primary Runway/Heliport PCI Thresholds
Primary Airports	70+
Large GA Airports (Runway > 4,500')	60+
Small GA Airports (Runway < 4,449')	55+
Heliport	60+

Source: INDOT Office of Aviation, 2021.

3.3.3.2. PM: Percent of Facilities with Approach Procedures Appropriate to their Category

The series of procedures dictating an aircraft's route, direction, and rate of descent to a runway is known as an approach. The three approach types considered in the 2022 ISASP are summarized below:

- **Precision Approach (PIR)**: Provides lateral and vertical guidance and is supported by multiple ground-based NAVAIDS, collectively referred to as an Instrument Landing System or "ILS." An ILS includes a localizer (provides lateral guidance), a glideslope (provides vertical guidance), and an approach lighting system (ALS) to provide close-in visual guidance.
- **Non-Precision Approach (NP)**: There are ground-based and space-based types of non-precision approaches. All ground-based and space-based systems provide lateral guidance, and only some space-based approaches provide vertical guidance, in addition to lateral guidance. The space-based systems that provide both lateral and vertical guidance are as close to a precision approach as possible without having an ILS, and these are often referred to as "near-precision" approaches.

Only space-based systems are present at ISASP facilities. The two space-based non-precision approach types in Indiana are listed here:

- Area Navigation (RNAV)(GPS) – provides lateral guidance
- Localizer Performance with Vertical Guidance (LPV) – provides lateral and vertical guidance

- **Visual Approach (V)**: Conducted under Visual Meteorological Conditions (VMC), which are defined as a cloud ceiling greater than 1,000 feet above ground level (AGL) and visibility conditions equal to or greater than three statute miles. Under VMC conditions, pilots approach an airport using only visual standards or cues.

Considering the variety in airport activity levels across the system, it was important to determine the appropriate approach procedure for each role (airport roles are presented and discussed more in **Chapter 2 – ISASP Facility Categories**) based on the types of airport operations they support. **Table 3.7** shows the approach procedure appropriate to each 2022 ISASP role. Assigning an appropriate IAP to an airport role was conducted based on determinations made by INDOT Office of Aviation and in alignment with MSLRs related to runway markings. **Table 3.8** summarizes facility representative responses regarding the most sophisticated approach type at their airport or heliport.

Table 3.7. Approach Procedures Appropriate to 2022 ISASP Category

2022 ISASP Role	Approach Appropriate to Category
Primary	Precision
National	Precision
Regional	Non-Precision with Vertical Guidance
Local	Non-Precision
Basic	Non-Precision or Visual
Unclassified	Visual

Source: Kimley-Horn, 2022.

3.3.3.3. PM: Percent of Facilities with an Airport Layout Plan (ALP) Less than 10 Years Old, Between 10 and 20 Years Old, and Greater than 20 Years Old

ALPs are planning documents developed at the airport level to establish existing conditions and plan for future development. In more detail, ALPs are developed to show:

- Boundaries and proposed additions to all areas owned or controlled by the sponsor for airport purposes
- The location and nature of existing and proposed airport facilities and structures
- The location on the airport of existing and proposed non-aviation areas and improvements thereon [3]

[3] https://www.faa.gov/airports/central/aip/sponsor_guide/media/0500.pdf

National Plan of Integrated Airport System (NPIAS) airports are required to maintain a current ALP in order to maintain eligibility for Airport Improvement Program (AIP) funding that is distributed by the FAA. It is recommended that airports maintain an ALP that is less than 10 years old. According to the FAA, an ALP may be considered out of date if the plan:

- Does not adequately provide for future needs
- Does not conform with current airport design standards
- Does not accurately reflect existing features
- Does not reflect airport and critical land use changes which may affect the navigable airspace or the ability of the airport to expand[4]

Non-NPIAS airports are not required to develop and maintain an ALP; however, it is a useful planning tool for airports of all sizes and activity levels. **Table 3.8** summarizes facility representative responses regarding the status of ALPs at their airport or heliport.

3.3.3.4. PM: Percent of Facilities that Perform Pavement Maintenance At least Once Every Five Years

As previously mentioned, airfield pavement is a critical asset to any airport, and therefore, it is important to preserve the investment by performing routine and necessary pavement maintenance. There are a variety of actions that can be performed to maintain pavement, the most common of which are listed below:

- Monitor changes over time
- Track improvement needs
- Perform crack sealing
- Apply seal coating
- Apply overlays
- Apply patching

Regular pavement maintenance projects or programs are an effective method of prolonging the useful life of pavement. **Table 3.8** summarizes facility representative responses regarding regular pavement maintenance actions at their airport or heliport.

3.3.3.5. PM: Percent of Facilities with Certified On-Site Weather Reporting Stations (Automated Weather/Surface Observing Systems AWOS/ASOS])

Surface weather observation stations allow for minute-by-minute local weather data to be transmitted directly to the pilot. When in operation, pilots can obtain weather reports from the air traffic control towers (ATCTs) at towered airports. At non-towered airports, information is primarily disseminated via automated weather reporting systems. AWOS and ASOS are both common weather data sensing, processing, and disseminating systems that are designed to support weather forecast activities and aviation operations.

[4] Ibid.

The most significant difference between the two systems is that ASOS proliferation was a part of a joint-effort program managed by the National Weather Service (NWS), the FAA, and the Department of Defense (DOD). This program installed over 900 ASOS systems across the U.S. between 1991 and 2004. ASOS systems are maintained by the NWS to the standards required by the FAA for them to be eligible to report data to the Weather Message Switching Center Replacement (WMSCR) System. Although ASOS installation ended in 2004, AWOS systems continue to be installed at airports every year. AWOS systems are not owned or operated by the federal government (like ASOS are), but they are installed, maintained, and operated under the FAA's non-federal program. This non-federal program still operates under a series of rules which allow it to report data to the federal government, such as to the NWS, the National Airspace Data Interchange Network (NADIN), and WMSCR. [5]

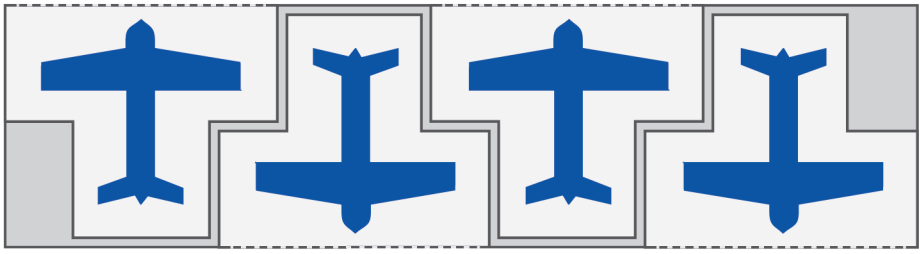
The AWOS and ASOS are both considered certified weather reporting systems by the FAA. There is a third type of weather reporting equipment, called a SuperAWOS. A SuperAWOS is not certified by the FAA as it reports altimeter and visibility data but is advisory only. Certified versus non-certified is an important distinction because aeromedical operations (such as emergency patient evacuation flights) rely on certified weather readings and cannot rely on SuperAWOS (or other non-certified) weather reporting systems. **Table 3.8** summarizes facility representative responses regarding on-site certified weather reporting stations at their airport or heliport.

3.3.3.6. PI: Percent of Facilities at 90 Percent Capacity for T-Hangars and Conventional Box Hangars

Covered aircraft storage is preferred by most aircraft owners as it preserves the aircraft's condition, especially during harsh winters in Indiana. The two types of aircraft storage evaluated as a part of the 2022 ISASP are detailed below:

- **T-hangars**: T-hangars are T-shaped covered parking spaces that typically accommodate only small piston-powered and turboprop aircraft. There are two types of T-hangars typically found at Indiana airports: a nested T-hangar and a singular T-hangar. As shown in **Figure 3.3,** a nested T-hangar is one larger structure that holds multiple T-hangar spaces, and the individual spaces are designed to fit together like puzzle pieces. A singular T-hangar is a stand-alone structure that fits one aircraft, as shown in **Figure 3.4**.

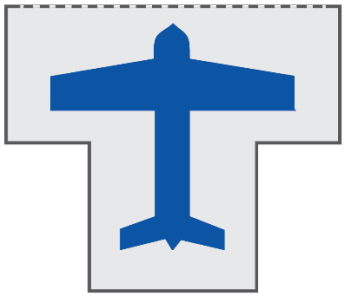
Figure 3.3. Nested T-Hangar



Source: Kimley-Horn, 2021.

[5] Airport Cooperative Research Program (ACRP) Synthesis 105: Airport Surface Weather Observation Options for GA Airports, 2019

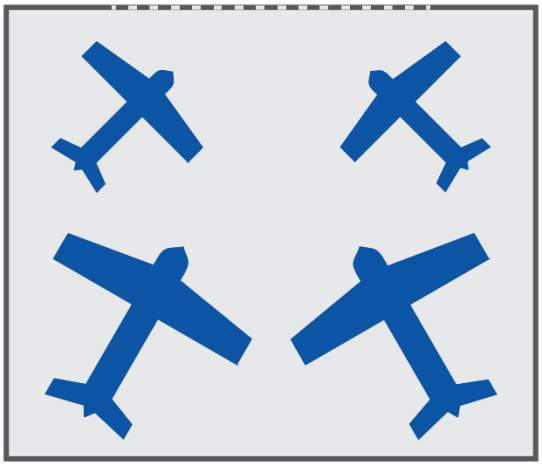
Figure 3.4. Standalone T-Hangar



Source: Kimley-Horn, 2021.

- **Conventional Box Hangars**: Conventional hangars (or box hangars) are large, warehouse-style rooms designed to accommodate one large aircraft, or multiple smaller aircraft, as illustrated in **Figure 3.5**. Typically, conventional hangars are used to store larger corporate aircraft and can be equipped with temperature-controlled office space, restrooms, and other amenities.

Figure 3.5. Conventional Box Hangar



Source: Kimley-Horn, 2021.

Table 3.8 summarizes facility-representative responses regarding covered aircraft storage capacity at their airport or heliport.

Table 3.8. System Facilities' Existing Conditions Related to Goal 3

Facility Information			PM Data						PI Data	
Associated City	Facility Name	FAA ID	Primary Runway PCI	Approach Type	ALP	ALP Year	Perform Pavement Maintenance at least Every Five Years	Certified On-Site Weather Reporting	Percent Occupied	
									T-Hangars	Conventional Box Hangars
Commercial Service										
Evansville	Evansville Regional	EVV	89	PIR/PIR	Yes	2009	Yes	Yes	100%	75%
Fort Wayne	Fort Wayne International	FWA	92	PIR/PIR	Yes	2012	Yes	Yes	80%	85%
Indianapolis	Indianapolis International	IND	90	PIR/PIR	Yes	2019	Yes	Yes	No T-Hangars	84%
South Bend	South Bend International	SBN	70	PIR/PIR	Yes	2022*	Yes	Yes	40%	100%
GA										
Anderson	Anderson Municipal-Darlington Field	AID	97	NP/PIR	Yes	2017	Yes	Yes	100%	100%
Angola	Tri-State Steuben County	ANQ	100	NP/NP	Yes	2018	Yes	Yes	100%	60%
Auburn	De Kalb County	GWB	43	NP/PIR	Yes	2020	Yes	Yes	100%	90%
Bedford	Virgil I Grissom Municipal	BFR	97	NP/NP	Yes	2019	Yes	Yes	100%	100%
Bloomington	Monroe County	BMG	88	NP/PIR	Yes	2009	Yes	Yes	100%	100%
Brazil	Brazil Clay County	0I2	71	V/NP	Yes	1975	Yes	No	90%	90%
Columbus	Columbus Municipal	BAK	91	NP/PIR	Yes	2000	Yes	Yes	100%	100%
Connersville	Mettel Field	CEV	55	PIR/NP	Yes	1992	Yes	Yes	90%	100%
Crawfordsville	Crawfordsville Regional	CFJ	78	NP/NP	Yes	2022*	Yes	Yes	100%	100%
Delphi	Delphi Municipal	1I9	95	V/V	Yes	1984	Yes	No	100%	100%

Facility Information			PM Data						PI Data	
Associated City	Facility Name	FAA ID	Primary Runway PCI	Approach Type	ALP	ALP Year	Perform Pavement Maintenance at least Every Five Years	Certified On-Site Weather Reporting	Percent Occupied	
									T-Hangars	Conventional Box Hangars
Elkhart	Elkhart Municipal	EKM	98	NP/PIR	Yes	2011	Yes	Yes	100%	100%
Fort Wayne	Smith Field	SMD	58	NP/NP	Yes	2009	Yes	Yes	100%	100%
Frankfort	Frankfort Municipal	FKR	75	NP/NP	Yes	2017	Yes	Yes	100%	80%
French Lick	French Lick Municipal	FRH	66	NP/NP	Yes	2013	Yes	Yes	100%	No Box Hangars
Gary	Gary/Chicago International	GYY	100	NP/PIR	Yes	2021	Yes	Yes	80%	80%
Goshen	Goshen Municipal	GSH	60	NP/PIR	Yes	2020	Yes	Yes	100%	100%
Greencastle	Putnam County Regional	GPC	90	NP/NP	Yes	2011	Yes	Yes	100%	100%
Greensburg	Greensburg Municipal	I34	68	V/NP	Yes	2010	Yes	No	100%	100%
Griffith	Griffith-Merrillville	05C	58	NP/NP	Yes	2004	Yes	No	Not Provided	Not Provided
Huntingburg	Huntingburg	HNB	65	NP/NP	Yes	2016	Yes	Yes	100%	90%
Huntington	Huntington Municipal	HHG	100	NP/NP	Yes	2017	Yes	Yes	100%	100%
Indianapolis	Eagle Creek Airpark	EYE	80	V/NP	Yes	2022*	Yes	Yes	100%	100%
Indianapolis	Hendricks County-Gordon Graham Field	2R2	69	NP/NP	Yes	2010	Yes	Yes	100%	No Box Hangars
Indianapolis	Indianapolis Downtown Heliport	8A4	96	NP/NP	Yes	1984	Yes	Yes	No T-Hangars	50%
Indianapolis	Indianapolis Executive	TYQ	80	NP/PIR	Yes	2009	Yes	Yes	100%	100%

Facility Information			PM Data						PI Data	
Associated City	Facility Name	FAA ID	Primary Runway PCI	Approach Type	ALP	ALP Year	Perform Pavement Maintenance at least Every Five Years	Certified On-Site Weather Reporting	Percent Occupied	
									T-Hangars	Conventional Box Hangars
Indianapolis	Indianapolis Metropolitan	UMP	88	NP/NP	Yes	2015	Yes	Yes	100%	100%
Indianapolis	Indianapolis Regional	MQJ	66	V/PIR	Yes	2007	Yes	Yes	85%	100%
Indianapolis	Indy South Greenwood	HFY	83	NP/NP	Yes	2015	Yes	Yes	100%	100%
Jeffersonville	Clark Regional	JVY	66	PIR/V	Yes	2015	Yes	Yes	100%	100%
Kendallville	Kendallville Municipal	C62	94	NP/NP	Yes	1988	Yes	No	100%	75%
Kentland	Kentland Municipal	50I	92	V/NP	Yes	2005	Yes	No	72%	85%
Knox	Starke County	OXI	49	NP/V	Yes	1997	Yes	Yes	100%	100%
Kokomo	Kokomo Municipal	OKK	53	NP/PIR	Yes	1999	Yes	Yes	100%	100%
La Porte	La Porte Municipal	PPO	55	NP/NP	Yes	2014	Yes	Yes	90%	100%
Lafayette	Purdue University	LAF	92	PIR/NP	Yes	2015	Yes	Yes	91%	100%
Lebanon	Boone County	6I4	19	V/V	Not Provided	Not Provided	Not Provided	No	Not Provided	Not Provided
Logansport	Logansport/Cass County	GGP	63	NP/NP	Yes	2020	Yes	Yes	89%	100%
Madison	Madison Municipal	IMS	64	NP/NP	Yes	2003	Yes	Yes	No T-Hangars	100%
Marion	Marion Municipal-McKinney Field	MZZ	77	PIR/NP	Yes	2011	Yes	Yes	90%	100%
Michigan City	Michigan City Municipal-Phillips Field	MGC	56	V/NP	Yes	2020	Yes	Yes	100%	100%
Monticello	White County	MCX	73	NP/NP	Yes	2004	Yes	Yes	75%	100%

Facility Information			PM Data						PI Data	
Associated City	Facility Name	FAA ID	Primary Runway PCI	Approach Type	ALP	ALP Year	Perform Pavement Maintenance at least Every Five Years	Certified On-Site Weather Reporting	Percent Occupied	
									T-Hangars	Conventional Box Hangars
Muncie	Delaware County Regional	MIE	90	NP/PIR	Yes	2020	Yes	Yes	92%	100%
New Castle	New Castle Henry County Marlatt Field	UWL	94	NP/NP	Yes	2011	Yes	No	70%	100%
North Vernon	North Vernon	OVO	74	NP/NP	Yes	2011	Yes	Yes	100%	100%
Paoli	Paoli Municipal	I42	100	V/V	Yes	2015	Yes	No	100%	No Box Hangars
Peru	Grissom ARB	GUS	Not Provided	PIR/PIR	No	N/A	No	No	Not Provided	100%
Peru	Peru Municipal	I76	79	NP/NP	Yes	2013	Yes	No*	94%	100%
Plymouth	Plymouth Municipal	C65	91	NP/NP	Yes	2021	Yes	Yes	85%	100%
Portland	Portland Municipal	PLD	63	NP/NP	Yes	2019	Yes	Yes	70%	100%
Rensselaer	Jasper County	RZL	97	NP/NP	Yes	2022*	Yes	Yes	75%	100%
Richmond	Richmond Municipal	RID	69	NP/NP	Yes	2020	Yes	Yes	100%	100%
Rochester	Fulton County	RCR	61	NP/NP	Yes	2018	Yes	Yes	60%	100%
Salem	Salem Municipal	I83	93	V/V	Yes	2009	Yes	No	100%	No Box Hangars
Seymour	Freeman Municipal	SER	73	NP/NP	Yes	2020	Yes	Yes	100%	100%
Shelbyville	Shelbyville Municipal	GEZ	85	NP/NP	Yes	2014	Yes	Yes	95%	100%
Sheridan	Sheridan	5I4	53	NP/NP	Not Provided	Not Provided	Not Provided	No	Not Provided	Not Provided

Facility Information			PM Data						PI Data	
Associated City	Facility Name	FAA ID	Primary Runway PCI	Approach Type	ALP	ALP Year	Perform Pavement Maintenance at least Every Five Years	Certified On-Site Weather Reporting	Percent Occupied	
									T-Hangars	Conventional Box Hangars
Sullivan	Sullivan County	SIV	64	NP/NP	Yes	2000	Yes	No	100%	100%
Tell City	Perry County Municipal	TEL	68	NP/NP	Yes	1993	Yes	No	80%	75%
Terre Haute	Terre Haute Regional	HUF	80	PIR/NP	Yes	2021	Yes	Yes	100%	100%
Valparaiso	Porter County Regional	VPZ	86	NP/PIR	Yes	2011	Yes	Yes	100%	100%
Wabash	Wabash Municipal	IWH	99	NP/NP	Yes	2019	Yes	No	80%	100%
Warsaw	Warsaw Municipal	ASW	60	NP/PIR	Yes	2019	Yes	Yes	100%	100%
Washington	Daviess County	DCY	80	NP/V	Yes	2021	Yes	No	100%	60%
Winamac	Arens Field	RWN	63	NP/NP	Yes	2010	Yes	No	100%	100%
Winchester	Randolph County	I22	75	NP/NP	Yes	2017	Yes	No	80%	100%

*Notes: *Airport has an ongoing or upcoming ALP that will be completed as a part of a current Master Plan process. V = visual approach, NP = non-precision approach, and PIR = precision approach. Grissom ARB (GUS) reports weather via an Automatic Terminal Information Service (ATIS), which reports weather conditions by human recording during the ATCT hours of operation. Sources: 2022 ISASP Airport Manager Survey, 2021; INDOT Office of Aviation, 2021; FAA Airport Data and Information Portal, 2021; Kimley-Horn, 2022.*

3.3.4. Goal 4. Environmental Responsibility and Land Planning

Inventory information needed for each of the PMs and PIs under Goal 4. Environmental Responsibility and Land Planning is included here in the following order:

PMs:

- Percent of facilities that have completed a Wildlife Hazard Assessment (WHA) and Wildlife Hazard Management Plan (WHMP) if required
- Percent of airports that have full wildlife or security fencing around the Air Operations Area (AOA)

PIs:

- Percent of facilities with height and land use controls adopted and enforced by the local planning agency
- Percent of facilities included in local or regional comprehensive plans
- Percent of facilities implementing environmentally friendly actions

3.3.4.1. PM: Percent of Facilities that have Completed a Wildlife Hazard Assessment (WHA) and Wildlife Hazard Management Plan (WHMP) if Required

A WHA is a study that inspects for evidence of animals in the airport environs and/or other wildlife concerns that may have developed specific to an airport. WHAs are important because birds, mammals, and reptiles can all pose significant threats to aircraft operations. A WHA is the first step in monitoring wildlife on the airport as it only identifies potential hazards posed by wildlife or natural habitats, but it does not provide strategies for mitigation and prevention. A WHMP is developed based on findings from the WHA and identifies the specific steps to be taken to mitigate and prevent the risk of wildlife strikes on or near the airport environment.

A WHMP is only required if the WHA identified wildlife concerns. It is important to note the FAA encourages all airports to take the initial step of conducting a WHA, and in some circumstances an airport may be required by the FAA to complete a WHA. **Table 3.9** summarizes facility representative responses regarding WHAs and WHMPs completed at their airport or heliport.

3.3.4.2. PM: Percent of Airports that have Full Wildlife or Security Fencing around the Airport Operations Area (AOA)

As mentioned above, wildlife presents a serious safety risk around the airport environs, endangering aircraft, as well as people on the ground and in the air. Mitigating these risks is essential to not only safety, but also the preservation of wildlife in the area. One of the ways wildlife hazards are minimized is through the use of fencing, which also protects the airport from trespassing. The 2022 ISASP focuses on the presence of fencing around the Airport Operations Area (AOA). The AOA includes aircraft movement areas, aircraft parking areas, loading ramps, safety areas, and other adjacent areas that are not separated by other security measures. The two types of fencing considered for AOA protection in the 2022 ISASP is detailed below:

- **Wildlife Fencing:** Wildlife fencing is chain link fence at least 10 feet tall with three strands (one foot) of barbed wire on top. Wildlife fencing also includes a buried skirt which prevents animals from digging underneath the fence.
- **Security Fencing**: Security fencing is chain link fence at least six feet tall with three strands of barbed wire.

Table 3.8 summarizes facility representative responses regarding the type of fencing present at their airport or heliport.

3.3.4.3. PI: Percent of Facilities with Height and Land Use Controls Adopted and Enforced by the Local Planning Agency

Protecting the land and air surrounding an aviation facility is essential for the facility's long-term viability. The land and air surrounding an airport or heliport can be protected through the implementation of local zoning ordinances that protect the facility from nearby incompatible development. While the FAA intervenes and monitors development or alterations of structures that are 200 feet AGL or higher[6], there are other development factors that can limit an airport's operational capacity that the FAA cannot regulate. Incompatible land uses, such as dense residential areas, heavy industrial sites that emit steam or smog, and event centers that attract large crowds, can all impact the operational capability of an airport and the quality of life for those living near an airport. **Table 3.9** summarizes facility representative responses regarding any height and/or land use controls enforced to protect their airport or heliport.

3.3.4.4. PI: Percent of Facilities Included in Local or Regional Comprehensive Plans

Comprehensive plans are developed at the local and/or regional level and detail a long-term vision for the region's development in terms of land uses and the transportation network. Comprehensive plans inform development decisions and can factor into local zoning laws. It is important for an airport or heliport to be included in the local comprehensive plan so the facility is considered when decisions are made related to future development. Having an airport or heliport included in a comprehensive plan requires increased coordination between the facility and the local planning authority. **Table 3.9** summarizes facility representative responses regarding inclusion in local or regional comprehensive plans.

3.3.4.5. PI: Percent of Facilities Implementing Environmentally Friendly Actions

Environmentally friendly initiatives are a priority for many aviation facilities in Indiana, as well as across the nation, to combat climate change and promote sustainability. The 2022 ISASP asked airport and heliport representatives if they participate in environmentally friendly initiatives, a few of which are considered here:

- **Recycling Protocols**: Recycling protocols can be as simple as offering receptacles at the airport specifically for allowed recyclable materials, or as complex as recycling construction materials during projects.

[6] Under FAA FAR PART 77 Regulations

- **Renewable Energy Initiatives**: Renewable energy initiatives include supplementing or replacing traditional energy supplies with renewable energy sources, such as:
    - Solar
    - Geothermal
    - Wind
    - Hydropower
- **Electric Ground Vehicle Charging Stations**: Electric vehicles (EVs) are becoming more common each year as more models are introduced in the market and traditional fuel-burning vehicles are phased out. The need for electric charging stations for these vehicles will only increase over time, including locations at airports for passengers and staff to utilize.

It should be emphasized that these protocols and initiatives are only a handful of environmentally friendly and sustainable actions an airport or heliport can conduct. There are many resources available to facility representatives that outline environmentally friendly and sustainable actions specific to aviation facilities, such as the interactive Sustainable Aviation Guidance Alliance (SAGA) website[7]; Airport Cooperative Research Program (ACRP) Report 80: *Guidebook for Incorporating Sustainability into Traditional Airport Projects;* FAA's *Synthesis on Recycling, Reuse and Waste Reduction at Airport*s; and ACRP Synthesis 66: *Lessons Learned from Airport Sustainability Plans*. **Table 3.9** summarizes facility representative responses regarding their participation in environmentally friendly initiatives, including the three listed above and any others that they offer at their airport or heliport.

[7] http://www.airportsustainability.org/

Table 3.9. System Facilities' Existing Conditions Related to Goal 4

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Commercial Service									
Evansville	Evansville Regional	EVV	Yes	Yes	Wildlife Fence, Full Perimeter	No	No	Yes	Recycling Protocols, Renewable Energy Initiatives, Future EV Charging Stations, LED Lighting, Water Bottle Fill Stations, Building Updates for Energy Efficiency
Fort Wayne	Fort Wayne International	FWA	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives, Existing EV Charging Stations
Indianapolis	Indianapolis International	IND	Yes	Yes	Wildlife Fence, AOA	Yes	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives, Existing and Future EV Charging Stations
South Bend	South Bend International	SBN	Yes	Yes	Wildlife Fence, Full Perimeter	No	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives, Future EV Charging Stations, Sustainable Grass
GA									
Anderson	Anderson Municipal-Darlington Field	AID	No	Not Required	Wildlife Fence, Full Perimeter	Yes	Yes	No	Recycling Protocols
Angola	Tri-State Steuben County	ANQ	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	None

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Auburn	De Kalb County	GWB	Yes	Yes	Security Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols, LED Lighting
Bedford	Virgil I Grissom Municipal	BFR	No	No	6’ Fence, AOA	No	No	No	None
Bloomington	Monroe County	BMG	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	No	None
Brazil	Brazil Clay County	0I2	No	No	No Fencing	No	No	No	Oil Collection
Columbus	Columbus Municipal	BAK	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols, Future EV Charging Stations
Connersville	Mettel Field	CEV	No	No	No Fencing	Yes	No	Yes	Renewable Energy Initiatives
Crawfordsville	Crawfordsville Regional	CFJ	Yes	No	Wildlife Fence, Terminal	No	No	No	Recycling Protocols, Oil Recycling, LED Lighting
Delphi	Delphi Municipal	1I9	No	No	No Fencing	Yes	Yes	No	None
Elkhart	Elkhart Municipal	EKM	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	No	None
Fort Wayne	Smith Field	SMD	No	No	Security Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols
Frankfort	Frankfort Municipal	FKR	No	No	4’ Fence at Parking and Entrances	Yes	Yes	Yes	Recycling Protocols

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
French Lick	French Lick Municipal	FRH	No	No	Wildlife Fence, Full Perimeter	No	No	No	None
Gary	Gary/Chicago International	GYY	Yes	Yes	Wildlife Fence, AOA	Yes	Yes	No	Future EV Charging Stations, LED Lighting
Goshen	Goshen Municipal	GSH	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	No	None
Greencastle	Putnam County Regional	GPC	Yes	Yes	Wildlife Fence, Full Perimeter	No	No	No	None
Greensburg	Greensburg Municipal	I34	Yes	Not Required	No Fencing	No	No	Yes	None
Griffith	Griffith-Merrillville	05C	No	No	Wildlife Fence, Full Perimeter	No	No	Yes	None
Huntingburg	Huntingburg	HNB	No	No	4' Fence, Partial Perimeter	No	No	Yes	Recycling Protocols, Future EV Charging Stations
Huntington	Huntington Municipal	HHG	No	No	6' Fence, Full Perimeter	No	No	No	None
Indianapolis	Eagle Creek Airpark	EYE	Yes	Not Required	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	None
Indianapolis	Hendricks County-Gordon Graham Field	2R2	Yes	No	Wildlife Fence, AOA	Yes	Yes	Yes	None

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Indianapolis	Indianapolis Downtown Heliport	8A4	No	No	4’ Wildlife Fence, AOA	Yes	Yes	No	None
Indianapolis	Indianapolis Executive	TYQ	Yes	Yes	Wildlife Fence, Full Perimeter	No	No	No	Recycling Protocols, Future EV Charging Stations
Indianapolis	Indianapolis Metropolitan	UMP	No	No	Wildlife Fence, AOA	No	No	Yes	None
Indianapolis	Indianapolis Regional	MQJ	Yes	Not Required	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	Existing and Future EV Charging Stations
Indianapolis	Indy South Greenwood	HFY	No	No	6’ Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols
Jeffersonville	Clark Regional	JVY	Yes	No	Wildlife Fence, Full Perimeter	No	No	No	None
Kendallville	Kendallville Municipal	C62	No	No	No Fencing	Yes	Yes	No	None
Kentland	Kentland Municipal	50I	No	No	No Fencing	Yes	Yes	No	None
Knox	Starke County	OXI	No	No	Security Fence, Partial Perimeter	Yes	Yes	No	None
Kokomo	Kokomo Municipal	OKK	No	No	Security Fence, Full Perimeter	Yes	Yes	Yes	None
La Porte	La Porte Municipal	PPO	No	No	No Fencing	Yes	Yes	No	Recycling Protocols

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Lafayette	Purdue University	LAF	Yes	Yes	Wildlife Fence, Full Perimeter	No	No	Yes	Recycling Protocols
Lebanon	Boone County	6I4	No	No	No Fencing	Not Provided	Not Provided	Not Provided	None
Logansport	Logansport/Cass County	GGP	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	None
Madison	Madison Municipal	IMS	Yes	No	Wildlife Fence, Full Perimeter	Yes	No	No	Storm Water Prevention Plan (SWPP) and Indiana Department of Environmental Management (IDEM) Compliant, Spill Prevention Control and Countermeasure (SPCC) Training in Place
Marion	Marion Municipal-McKinney Field	MZZ	No	No	No Fencing	Yes	Yes	No	None
Michigan City	Michigan City Municipal-Phillips Field	MGC	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives
Monticello	White County	MCX	Yes	No	Wildlife Fence, Full Perimeter	Yes	Yes	No	None
Muncie	Delaware County Regional	MIE	Yes	Yes	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	None

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
New Castle	New Castle Henry County Marlatt Field	UWL	Yes	No	No Fencing	No	No	No	None
North Vernon	North Vernon	OVO	Yes	Yes	Wildlife Fence, AOA	Yes	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives
Paoli	Paoli Municipal	I42	No	No	4' Fence, Partial Perimeter	No	No	No	Recycling Protocols
Peru	Grissom ARB	GUS	No	No	Wildlife Fence, Full Perimeter	Yes	Yes	Yes	Currently evaluating solar panel installations
Peru	Peru Municipal	I76	No	No	3' Farm Fence, Full Perimeter	No	No	No	Recycling Protocols
Plymouth	Plymouth Municipal	C65	No	No	10' Wildlife Fence, North and South Sides of Runway	Yes	Yes	Yes	Recycling Protocols, Renewable Energy Initiatives
Portland	Portland Municipal	PLD	No	No	No Fencing	Yes	Yes	Yes	None
Rensselaer	Jasper County	RZL	No	No	No Fencing	No	Yes*	Yes	Recycling Protocols, Future EV Charging Stations, Fluid Recycling, Fuel Sump Disposal, Spill Kit by Fuel Farm
Richmond	Richmond Municipal	RID	Yes	Yes	No Fencing	Yes	Yes	Yes	None

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Rochester	Fulton County	RCR	No	No	No Fencing	Yes	Yes	No	None
Salem	Salem Municipal	I83	No	No	No Fencing	Yes	Yes	Yes	Recycling Protocols, Future EV Charging Stations, Kudzu Eradication Plan
Seymour	Freeman Municipal	SER	No	No	No Fencing	Yes	Yes	Yes	Recycling Protocols
Shelbyville	Shelbyville Municipal	GEZ	No	No	6’ fence, AOA	Yes	Yes	No	Renewable Energy Initiatives
Sheridan	Sheridan	5I4	No	No	No Fencing	Not Provided	Not Provided	Not Provided	None
Sullivan	Sullivan County	SIV	Yes	No	Unknown Fence Height, AOA	No	No	No	Future EV Charging Stations
Tell City	Perry County Municipal	TEL	No	No	Security Fence, Full Perimeter	No	No	No	None
Terre Haute	Terre Haute Regional	HUF	Yes	Yes	Wildlife Fence, Full Perimeter	No	No	Yes	None
Valparaiso	Porter County Regional	VPZ	Yes	Yes	Security Fence, Full Perimeter	Yes	Yes	Yes	None
Wabash	Wabash Municipal	IWH	No	No	Unknown Height, Partial AOA	Yes	Yes	No	LED Lighting

Facility Information			PM Data			PI Data			
Associated City	Facility Name	FAA ID	Wildlife Management		Fencing	Enforced Height/Land Use Controls		Included in Local/ Regional Comprehensive Plan	Environmentally Friendly Actions
			WHA	WHMP		Height	Land Use		
Warsaw	Warsaw Municipal	ASW	No	No	6' Fence, Full Perimeter	Yes	Yes	Yes	Recycling Protocols, Future EV Charging Stations, Routine Storm Water Inspections, Fuel and Oil Recycling
Washington	Daviess County	DCY	No	No	Partial Security Fence at Entrances	No	No	No	None
Winamac	Arens Field	RWN	No	No	No Fencing	No	No	No	None
Winchester	Randolph County	I22	No	No	No Fencing	Yes	Yes	No	Oil Recycling

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

3.3.5. Goal 5. Aviation Industry Advancement

Inventory information needed for each of the PIs under Goal 5. Aviation Industry Advancement is included here in the following order:

PIs:

- Percent of facilities that host or participate in STEM education programs, aviation outreach programs, or other similar events
- Percent of facilities with formal procedures for managing UAS operations on-facility
- Percent of facilities with formal procedures for managing proximate off-facility UAS operations
- Percent of facilities that have taken steps to prepare for the needs of electric aircraft

3.3.5.1. PI: Percent of Facilities that Host or Participate in STEM Education Programs, Aviation Outreach Programs, or Other Similar Events

A workforce shortage has been identified in the aviation industry for years, and the aviation industry continues to develop focused initiatives to close the workforce gap. To aid in this effort, some airports partner with the local community to promote aviation to future generations. These partnerships include STEM education programs, aviation outreach programs, and other similar events such as airshows. **Table 3.10** summarizes facility representative responses regarding hosting or participating in STEM education or other aviation outreach programs.

3.3.5.2. PI: Percent of Facilities with Formal Procedures for Managing UAS Operations On-Facility

UAS refers to an unmanned, electric-powered aircraft and all of the associated equipment (control station, data links, communications, and navigation equipment) necessary to operate the unmanned aircraft. UAS are increasing in popularity across industries for commercial use, as well as for personal/recreational use. UAS can create efficiencies in many industries, such as geological surveying, construction site management, search and rescue, and more. While UAS advancements are exciting and beneficial to many industries, they can contribute to serious concerns for an aviation facility's daily operations. UAS operations can cause delays in airport flight traffic if they are conducted in an aviation facility's airspace and can pose severe risks to aircraft, passengers, and people on the ground in the event of a collision or high-risk maneuver to avoid collision. As more UAS populate the airspace, the more important it is that airports have procedures in place to manage UAS activity. The FAA has established a formal process, referred to as Low Altitude Authorization and Notification Capability (LAANC), for approving UAS flights that can help reduce unsafe UAS operations. LAANC allows UAS users to request flight authorization and the FAA can provide real-time approval or denials based on the UAS Data Exchange which reviews information from Notice to Airmen (NOTAMs), Temporary Flight Restrictions (TFRs), and Facility Maps. LAANC is only currently available at ten system airports, so there is room for airports to generate their own formal procedures for monitoring and managing UAS operations at their airport. **Table 3.10** summarizes facility representative responses regarding formal procedures for managing UAS operations on-facility.

3.3.5.3. PI: Percent of Facilities with Formal Procedures for Managing Proximate Off-Facility UAS Operations

UAS operations occurring off-facility, but proximate to the airport, can still pose potential risks to aircraft operations. Formal procedures adopted for on-facility operations can also be adopted to include UAS operations off-facility as well.

Table 3.10 summarizes facility representative responses regarding formal procedures for managing proximate off-facility UAS operations.

3.3.5.4. PI: Percent of Facilities that have Taken Steps to Prepare for the Needs of Electric Aircraft

The aviation industry is ever advancing with new technology that could change the landscape of the industry. A popular topic among the aviation industry is the development and use of electric aircraft. Electric aircraft are growing in popularity, and while their development is still in its infancy, the technology is rapidly progressing with some reports indicating that commercial air passenger flights could go electric by 2026.[8] Considering these advancements, it is important to understand ways an airport can and should prepare for the proliferation of electric aircraft. Preparedness for these technological advancements can take many forms. For example, Indiana airports may start considering an airside location where electric aircraft can charge and investigate the cost of charging stations and what funding programs may be available to support these advancements. Moreover, Indiana aviation facilities may investigate necessary updates to utilities and other infrastructure to support electric aircraft charging. **Table 3.10** summarizes facility representative responses regarding steps taken to prepare for the needs of electric aircraft.

Table 3.10. System Facilities' Existing Conditions Related to Goal 5

Facility Information			PI Data			
Associated City	Facility Name	FAA ID	STEM Educational or Other Outreach Programs	Formal Procedures for Managing UAS Activity		Steps to Prepare for Electric Aircraft Needs
				On-Facility	Proximate Off-Facility	
Commercial Service						
Evansville	Evansville Regional	EVV	Yes	No	No	No
Fort Wayne	Fort Wayne International	FWA	Yes	Yes	Yes	No
Indianapolis	Indianapolis International	IND	Yes	Yes	Yes	No
South Bend	South Bend International	SBN	Yes	Yes	Yes	No
GA						
Anderson	Anderson Municipal-Darlington Field	AID	Yes	No	No	No
Angola	Tri-State Steuben County	ANQ	No	No	No	No
Auburn	De Kalb County	GWB	No	Yes	Yes	No
Bedford	Virgil I Grissom Municipal	BFR	No	No	No	No
Bloomington	Monroe County	BMG	Yes	No	No	No
Brazil	Brazil Clay County	0I2	No	No	No	No
Columbus	Columbus Municipal	BAK	Yes	No	No	Yes
Connersville	Mettel Field	CEV	No	No	No	No
Crawfordsville	Crawfordsville Regional	CFJ	No	Yes	Yes	Yes

[8] https://www.reuters.com/business/sustainable-business/united-airlines-buy-100-19-seat-electric-planes-heart-aerospace-2021-07-13/

Facility Information			PI Data			
Associated City	Facility Name	FAA ID	STEM Educational or Other Outreach Programs	Formal Procedures for Managing UAS Activity		Steps to Prepare for Electric Aircraft Needs
				On-Facility	Proximate Off-Facility	
Delphi	Delphi Municipal	1I9	Yes	Yes	No	No
Elkhart	Elkhart Municipal	EKM	No	No	No	No
Fort Wayne	Smith Field	SMD	No	Yes	Yes	No
Frankfort	Frankfort Municipal	FKR	Yes	No	Yes	No
French Lick	French Lick Municipal	FRH	No	No	No	No
Gary	Gary/Chicago International	GYY	Yes	No	No	No
Goshen	Goshen Municipal	GSH	Yes	No	No	No
Greencastle	Putnam County Regional	GPC	No	No	No	No
Greensburg	Greensburg Municipal	I34	No	No	No	No
Griffith	Griffith-Merrillville	05C	Yes	Yes	Yes	No
Huntingburg	Huntingburg	HNB	Yes	No	No	No
Huntington	Huntington Municipal	HHG	Yes	No	No	No
Indianapolis	Eagle Creek Airpark	EYE	Yes	Yes	Yes	No
Indianapolis	Hendricks County-Gordon Graham Field	2R2	No	Yes	Yes	No
Indianapolis	Indianapolis Downtown Heliport	8A4	No	Yes	Yes	No
Indianapolis	Indianapolis Executive	TYQ	Yes	No	No	No
Indianapolis	Indianapolis Metropolitan	UMP	No	Yes	Yes	No
Indianapolis	Indianapolis Regional	MQJ	Yes	Yes	Yes	Yes
Indianapolis	Indy South Greenwood	HFY	Yes	Yes	Yes	No
Jeffersonville	Clark Regional	JVY	Yes	No	No	No
Kendallville	Kendallville Municipal	C62	No	No	No	No
Kentland	Kentland Municipal	50I	No	No	No	No
Knox	Starke County	OXI	No	No	No	No
Kokomo	Kokomo Municipal	OKK	No	No	No	No
La Porte	La Porte Municipal	PPO	Yes	Yes	Yes	No
Lafayette	Purdue University	LAF	Yes	No	Yes	No
Lebanon	Boone County	6I4	Not Provided	Not Provided	Not Provided	Not Provided
Logansport	Logansport/Cass County	GGP	No	No	No	No
Madison	Madison Municipal	IMS	No	No	No	Yes
Marion	Marion Municipal-McKinney Field	MZZ	Yes	No	No	No

Facility Information			PI Data			
Associated City	Facility Name	FAA ID	STEM Educational or Other Outreach Programs	Formal Procedures for Managing UAS Activity		Steps to Prepare for Electric Aircraft Needs
				On-Facility	Proximate Off-Facility	
Michigan City	Michigan City Municipal-Phillips Field	MGC	Yes	No	No	No
Monticello	White County	MCX	Yes	Yes	Yes	No
Muncie	Delaware County Regional	MIE	No	No	No	No
New Castle	New Castle Henry County Marlatt Field	UWL	No	No	No	No
North Vernon	North Vernon	OVO	Yes	Yes	Yes	No
Paoli	Paoli Municipal	I42	Yes	No	No	No
Peru	Grissom ARB	GUS	Yes	Yes	No	No
Peru	Peru Municipal	I76	Yes	No	No	No
Plymouth	Plymouth Municipal	C65	Yes	No	No	No
Portland	Portland Municipal	PLD	No	No	No	No
Rensselaer	Jasper County	RZL	Yes	Yes	Yes	No
Richmond	Richmond Municipal	RID	Yes	No	No	No
Rochester	Fulton County	RCR	No	Yes	Yes	No
Salem	Salem Municipal	I83	Yes	No	No	No
Seymour	Freeman Municipal	SER	No	No	No	No
Shelbyville	Shelbyville Municipal	GEZ	Yes	No	No	No
Sheridan	Sheridan	5I4	Not Provided	Not Provided	Not Provided	Not Provided
Sullivan	Sullivan County	SIV	Yes	No	No	Yes
Tell City	Perry County Municipal	TEL	No	No	No	No
Terre Haute	Terre Haute Regional	HUF	Yes	Yes	Yes	No
Valparaiso	Porter County Regional	VPZ	Yes	No	No	No
Wabash	Wabash Municipal	IWH	Yes	No	No	Yes
Warsaw	Warsaw Municipal	ASW	Yes	No	No	No
Washington	Daviess County	DCY	Yes	No	No	No
Winamac	Arens Field	RWN	No	No	No	No
Winchester	Randolph County	I22	Yes	No	No	No

Source: 2022 ISASP Airport Manager Survey, 2021.

3.3.6. Minimum Service Level Recommendations (MSLRs)

MSLRs provide the minimum suggested level of facilities and services needed to optimally support the type and volume of aviation activity that is typical for the NPIAS/2022 ISASP facility category. The purpose of MSLRs is further explained in **Chapter 2 - ISASP Facility Categories**; however, as an introduction to the analysis, this chapter defines the facilities that were later evaluated. In **Chapter 5 – Existing System Performance**, airports are analyzed based on the MSLRs relative to their role.

3.3.6.1. MSLR Definitions

Runway Length

Runway length (among other factors like width, surface type, and strength) impact the type of aircraft and operations that an airport can safely support. An airport's runway length is dependent on the critical aircraft operating at the facility, along with other local factors, such as temperature and elevation. Longer and wider runways can support more demanding aircraft compared to shorter and narrower runways. **Table 3.11** summarizes facility representative responses regarding the primary runway length at their airport.

Runway Strength

Runway strength determines the load-bearing capacity of a runway based on its pavement type and design. Sixty thousand pounds of load-bearing weight for a dual-wheel aircraft is considered suitable for most GA airports as 60,000 pounds is capable of supporting anything from a light single-engine aircraft to a medium-sized regional jet. Commercial service airports require a higher load-bearing capacity to accommodate large- and wide-body jet aircraft. [9] Typical runway strength abbreviations are defined below:

SW: Single Wheel
DW: Dual Wheel
2D: Two Dual Wheels in Tandem
2D/2D2: Two Dual Wheels in Tandem/Two Dual Wheels in Double Tandem

Table 3.11 summarizes facility representative responses regarding existing primary runway strength at their airport.

Runway Grooving

A paved runway surface can be grooved or treated with Porous Friction Course (PFC). Runway grooving allows channels for water to escape, reducing or eliminating the presence of standing water that can create slick conditions or glare. Moreover, a grooved runway can enhance tire friction, reducing the likelihood of an aircraft losing traction on the runway. A PFC-treated runway shares similar benefits to a grooved runway. PFC treatment is a hot-mix asphalt that is applied in a thin layer on the surface of pavement.

[9] FAA guidance is transitioning to using the International Civil Aviation Organization (ICAO) standard where Pavement Classification Number (PCN) is used in combination with the Aircraft Classification Number (CAN). This method of reporting is based on the concept of reporting strength in terms of a standardized equivalent single-wheel load. PCN is an important emerging metric for airport planning, but it is not suitable for systemwide analyses because PCN is determined based on an airport-by-airport evaluation based on a variety of airport-specific conditions, including individual aircraft analyses.

PFC-treated runways can reduce risk of hydroplaning, decrease splash and spray, reduce tire/pavement noise, improve visibility of pavement markings at night or in wet conditions, and contribute to cleaner stormwater runoff compared to more densely graded mixes. **Table 3.11** summarizes facility representative responses regarding primary runway grooving at their airport.

Runway Lights

Runway lighting outlines the edges of a runway during low-light or low-visibility conditions. Runway lights range in intensity from high-intensity runway lighting (HIRL) to medium-intensity runway lighting (MIRL) and low-intensity runway lighting (LIRL). Non-standard lighting, such as reflectors, may replace runway lights at smaller GA airports where nighttime and low-visibility operations do not occur. **Table 3.11** summarizes facility representative responses regarding the runway lighting present at their airport or heliport.

Full Parallel Taxiway

A full-parallel taxiway runs parallel to the runway and extends the full length of the runway. In some instances, an airport may have a partial parallel taxiway where the taxiway only runs parallel along a portion of the runway. Some airports may not experience enough demand to necessitate a partial- or full-parallel taxiway, in which case the airport will make use of connector and/or turn-around taxiways. A connector is a short taxiway that connects a taxiway or apron to a runway. A turn-around taxiway is at a runway end and is a paved loop where the pilot can easily turn their aircraft around before maneuvering toward the nearest runway exit. **Table 3.11** summarizes facility representative responses regarding the type of taxiway present at their airport.

Taxiway Lights

Taxiway lighting outlines the edges of a taxiway during low-light or low-visibility conditions. Taxiway lights, like runway lights, range from high-intensity taxiway lighting (HITL) to medium-intensity taxiway lighting (MITL) and low-intensity taxiway lighting (LITL). Non-standard taxiway lighting, such as reflectors, may replace taxiway lighting at smaller GA airports were nighttime operations and low-visibility operations do not occur. **Table 3.11** summarizes facility representative responses regarding the taxiway lighting present at their airport or heliport.

Visibility Minimums

Visibility minimums are established for each runway end and indicate the field of vision or distance that a pilot must be able to see before it is considered safe to takeoff or land. Visibility minimums are determined based on runway design factors and the types of available approaches. Precision approaches require less visibility than a visual approach, considering a visual approach requires the pilot to physically be able to see a certain distance a head of them, whereas a precision approach relies more on NAVAIDS during lower visibility conditions. **Table 3.11** summarizes facility representative responses regarding the visibility minimums present at their airport or heliport. Visibility minimums are presented in terms of miles and separated by a forward slash to indicate runway ends. Many of the visibility minimums are less than a mile and are presented in fractions of a mile.

Ceiling Minimums

Ceiling minimums are a similar concept to visibility minimums, but instead of indicating lateral visibility, ceiling minimums refer to vertical visibility and cloud ceiling.

Typically, a more sophisticated IAP results in lower ceiling minimums. **Table 3.11** summarizes facility representative responses regarding the ceiling minimums present at their airport or heliport. Ceiling minimums are presented in feet.

Visual Glide Slope Indicator (VGSI)

A VGSI is a lit ground device, or NAVAID, that vertically assists pilots during decent. There are two types of VGSIs that can be present at an airport:

PAPI: Precision Approach Path Indicator

VASI: Visual Approach Slope Indicator

Table 3.10 summarizes facility representative responses regarding the VGSIs present at their airport. The data is presented in an abbreviated form consiting of a three-character alphanumeric format. The first character showing a P for PAPI or a V for VASI, the second character indicating the number of lights associated with the equipment, and the third character indicating whether it is on the left (L) or right (R) side of the runway. This data is presented by runway end with a forward slash separating the runway ends.

Approach Lighting System (ALS)

In some instances, an ALS can be used and that provides a similar type of NAVAID that a VGSI provides with additional lighting. It is important to note that Runway End Identifier Lights (REILs) are excluded when an approach lighting system is installed. A list of ALS types is provided here:

MALS: Medium Approach Light System

MALSF: Medium Approach Light System with Flashing Lights

MALSR: Medium Approach Light System with Runway Alignment

ALSF2: High Intensity Approach Lighting System – Dual Mode

ODALS: Omni-Directional Approach Lights

RLLS: Runway Lead-In Light System

Table 3.11 summarizes facility representative responses regarding the ALSs present at their facility. This data is presented by runway end with a forward slash separating the data for each end.

Runway End Indicator Lights (REILs)

REILs are one of many NAVAIDs that may be present at an airport. REILs are two lights that illuminate the end of the runway. **Table 3.11** summarizes facility representative responses regarding the REILs present at their airport. This data is presented by runway end with a forward slash separating the data for each end. The letter “Y” is used to indicate an airport has a REIL on that runway end and “N” to indicate that an airport does not have a REIL on that runway end.

Runway Markings and Signage

Runway markings are additional visual cues that pilots utilize and differ based on the type of approach available for each runway.

A precision approach (abbreviated to PIR in **Table 3.11**) requires the following runway surface markings:

- Landing Designator
- Centerline
- Threshold Markings
- Aiming Point
- Touchdown Zone
- Edge Markings

A non-precision approach (abbreviated to NPI in **Table 3.11**) requires the following runway surface markings:

- Landing Designator
- Centerline
- Threshold Markings
- Aiming Point (if the instrumented runway is 4,200 feet or longer)
- Edge Markings (if the full runway pavement width may not be available for use as a runway)

A visual approach (referred to as BSC for "Basic" in **Table 3.11**) requires the following runway surface markings:

- Landing Designator
- Centerline
- Threshold Markings (if the runway services approach category C and D aircraft)
- Aiming Point (if the runway is 4,200 feet or longer and services approach category C and D aircraft)

Table 3.10 summarizes facility representative responses regarding the runway markings present their airport or heliport.

Clear Precision Obstacle Free Zone (POFZ)

As defined by the FAA, the POFZ is a section of airspace above an area beginning at the runway threshold, at the threshold elevation, and centered on the extended runway line. The standard dimension of a POFZ is 200 feet long and 800 feet wide. A POFZ is only applicable to runways that have a vertically guided approach procedure with low minimums. This includes precision approaches and some non-precision approaches with vertical guidance if the minimums are low enough. The POFZ must be clear when an aircraft is within two nautical miles of a runway threshold during a vertically guided final approach and if the reported ceiling minimum is below 250 feet or the visibility minimum is less than ¾ of a mile. **Table 3.11** summarizes facility representative responses or information gathered from ALPs regarding the presence of a POFZ at their airport. Blank cells in the POFZ column of **Table 3.11** indicate that the airport is not required to have a POFZ on either runway end.

Table 3.11. System Facilities' Existing Conditions Related to MSLRs

Facility Information			MSLR Data												
Associated City	Facility Name	FAA ID	Runway Length	Runway Strength	Runway Grooving	Runway Lights	Full Parallel Taxiway	Taxiway Lights	Visibility Minimums (in miles)	Ceiling Minimums	Primary VGSI	Approach Lighting Systems	Primary REILs	Runway Signage & Markings	POFZ
Commercial Service															
Evansville	Evansville Regional	EVV	8,021'	2D: 300,000 lb.	Grooved	HIRL	Full Parallel	MITL	3/4 – 1/2	200'/200'	P4R/N	N/MALSR	Y/N	PIR/PIR	N/A / Y
Fort Wayne	Fort Wayne International	FWA	11,981'	2D/2D2: 847,000 lb.	Grooved	HIRL	Full Parallel	MITL	1/2 – 3/4	200'/254'	N/P4L	ALSF2/N	N/Y	PIR/PIR	Y / N/A
Indianapolis	Indianapolis International	IND	11,200'	2D: 500,000 lb.	Grooved	HIRL	Full Parallel	MITL	1/2 – 1/2	200'/200'	P4L/P4L	ASLF2/MALSR	N/N	PIR/PIR	Y/Y
South Bend	South Bend International	SBN	8,412'	2D: 313,000 lb.	Grooved	HIRL	Full Parallel	MITL	3/4 – 1/2	200'/200'	P4L/P4L	MASLF/MASLR	N/Y	PIR/PIR	N/A / Y
GA															
Anderson	Anderson Municipal-Darlington Field	AID	5,400'	2D: 215,000 lb.	Grooved	MIRL	Full Parallel	MITL	N/A – 3/4	260'/290'	P4L/P4L	N/MASLF	Y/N	PIR/PIR	
Angola	Tri-State Steuben County	ANQ	4,540'	SW: 22,000 lb.	None	MIRL	Full Parallel	Reflectors	1 3/4 – 1	484'/705'	P2L/P2L	N/N	Y/Y	NP/NP	
Auburn	De Kalb County	GWB	5,001'	2D: 120,000 lb.	Grooved	MIRL	Full Parallel	MITL	1 – 1/2	302'/200'	P2L/P2L	N/MASLR	Y/Y	NP/PIR	N/A / Y
Bedford	Virgil I Grissom Municipal	BFR	4,501'	DW: 77,000 lb.	Grooved	MIRL	Turn Around	MITL	1 – 1	439'/435'	N/P2L	N/N	Y/Y	NP/NP	
Bloomington	Monroe County	BMG	6,500'	2D/2D2: 169,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 1/4 – 1/2	384'/200'	P4L/N	N/MASLR	Y/N	NP/NP	N/A / Y
Brazil	Brazil Clay County	0I2	2,941'	SW: 8,000 lb.	None	LIRL	Connector and Turnaround	MITL	N/A – 1	NA/595'	N/N	N/N	N/N	NP/BSC	
Columbus	Columbus Municipal	BAK	6,401'	2D: 200,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 – 1/2	427'/200'	P4L/P4L	N/MALSR	Y/N	PIR/PIR	N/A / Y
Connersville	Mettel Field	CEV	6,503'	DW: 85,000 lb.	Grooved	MIRL	Full Parallel	MITL	1/2 – 7/8	250'/270'	P4L/P4L	MASLR/N	Y/Y	PIR/PIR	Y / N/A
Crawfordsville	Crawfordsville Regional	CFJ	5,505'	DW: 25,000 lb.	Grooved	MIRL	Full Parallel	MITL	7/8 – 1	279'/253'	P4L/P4L	N/N	Y/Y	NP/NP	
Delphi	Delphi Municipal	1I9	4,001'	SW: 12,500 lb.	None	MIRL	Connector and Turnaround	MITL	N/A – N/A	NA/NA	P2L/P2L	N/N	Y/Y	BSC/BSC	
Elkhart	Elkhart Municipal	EKM	6,500'	2D: 120,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 – 3/4	563'/288'	V4L/P4L	N/MALSR	Y/N	PIR/PIR	N/A / Y
Fort Wayne	Smith Field	SMD	3,126'	SW: 40,000 lb.	None	MIRL	Connector	Reflectors	1 1/4 – 1	1046'/526'	P2L/P2L	N/N	N/N	NP/NP	
Frankfort	Frankfort Municipal	FKR	5,000'	DW: 55,000 lb.	None	MIRL	Full Parallel	MITL	7/8 – 7/8	250'/250'	P2L/P2L	N/N	Y/Y	NP/NP	
French Lick	French Lick Municipal	FRH	5,500'	SW: 50,000 lb. DW: 60,000 lb.	Grooved	MIRL	Full Parallel	MITL	7/8 – 1	265'/250'	P4L/P4L	N/N	Y/Y	NP/NP	
Gary	Gary/Chicago International	GYY	8,859'	2D/2D2: 250,000 lb.	Grooved	HIRL	Full Parallel	MITL	3/4 – 1/2	200'/200'	P4L/P4L	N/MASLR	Y/N	PIR/PIR	N/A / Y
Goshen	Goshen Municipal	GSH	6,050'	2D/2D2: 100,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 – 3/4	360'/200'	P2L/P2L	N/N	Y/Y	NP/PIR	N/A / Y
Greencastle	Putnam County Regional	GPC	5,002'	SW: 30,000 lb. DW: 60,000 lb.	Grooved	MIRL	Full Parallel	MITL	7/8 – 7/8	265'/250'	P2L/P2L	N/N	Y/Y	NP/NP	
Greensburg	Greensburg Municipal	I34	3,433'	SW: 12,500 lb.	Grooved	MIRL	Connector and Turnaround	None	N/A – 1	NA/648'	V2L/V2L	N/N	N/N	BSC/BSC	
Griffith	Griffith-Merrillville	05C	4,899'	SW: 38,000 lb. DW: 50,000 lb.	Grooved	MIRL	Partial Parallel	Reflectors	1 – 1	446'/528'	P2L/P2L	N/N	Y/Y	BSC/BSC	
Huntingburg	Huntingburg	HNB	5,501'	DW: 33,000 lb.	Grooved	MIRL	Full Parallel	Reflectors	1 1/4 – 1	250'/200'	P4L/P4L	N/N	Y/Y	PIR/PIR	

Facility Information			MSLR Data												
Associated City	Facility Name	FAA ID	Runway Length	Runway Strength	Runway Grooving	Runway Lights	Full Parallel Taxiway	Taxiway Lights	Visibility Minimums (in miles)	Ceiling Minimums	Primary VGSI	Approach Lighting Systems	Primary REILs	Runway Signage & Markings	POFZ
Huntington	Huntington Municipal	HHG	5,003’	DW: 50,000 lb.	Grooved	MIRL	Full Parallel	Reflectors	1 — 1	414'/394'	P2L/P2L	N/N	Y/Y	NP/NP	
Indianapolis	Eagle Creek Airpark	EYE	4,200’	SW: 12,500 lb.	None	MIRL	Full Parallel	MITL	N/A — 3/4	NA/268'	P2L/P2L	N/MALS	Y/N	NP/NP	
Indianapolis	Hendricks County-Gordon Graham Field	2R2	4,400’	SW: 12,500 lb.	None	MIRL	Full Parallel	MITL	1 — 7/8	317'/284'	P2L/P2L	N/N	Y/Y	NP/NP	
Indianapolis	Indianapolis Downtown Heliport	8A4	N/A	N/A	N/A	HIRL	None	MITL	3/4	1360'/NA	PLASI	ODALS	N/A	BSC	
Indianapolis	Indianapolis Executive	TYQ	5,500’	DW: 90,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 — 3/4	294'/200'	P2L/P2L	N/N	Y/Y	NP/PIR	N/A / Y
Indianapolis	Indianapolis Metropolitan	UMP	4,004’	SW: 17,000 lb.	Grooved	MIRL	Full Parallel	MITL	1 — 1	435'/449'	P4L/P4L	N/N	Y/Y	NP/NP	
Indianapolis	Indianapolis Regional	MQJ	6,005’	DW: 75,000 lb.	Grooved	HIRL	Full Parallel	MITL	N/A — 1/2	NA/200'	P4R/P4L	N/MALSR	Y/N	NP/PIR	N/A / Y
Indianapolis	Indy South Greenwood	HFY	5,102’	Not Provided	Grooved	MIRL	Full Parallel	MITL	1 1/8 — 1	345'/308'	P4L/P4L	N/ODALS	Y/N	NP/NP	
Jeffersonville	Clark Regional	JVY	7,000’	DW: 60,000 lb.	Grooved	MIRL	Full Parallel	MITL	1/2 — N/A	200'/NA	P4L/P4L	MASLR/N	Y/Y	PIR/PIR	Y / N/A
Kendallville	Kendallville Municipal	C62	4,399’	SW: 12,500 lb. DW: 20,000 lb.	None	MIRL	Full Parallel	MITL	1 — 1	361'/348'	P2L/P2L	N/N	Y/Y	NP/NP	
Kentland	Kentland Municipal	50I	4,004'	SW: 12,500 lb.	None	MIRL	Connector and Turnaround	MITL	N/A — 1	NA/287'	P2L/P2L	N/N	Y/Y	NP/NP	
Knox	Starke County	OXI	5,001’	SW: 30,000 lb.	None	MIRL	Full Parallel	MITL	1 — N/A	250'/NA	P2L/P2L	N/N	Y/Y	NP/NP	
Kokomo	Kokomo Municipal	OKK	6,001’	2D: 95,000 lb.	Grooved	HIRL	Partial Parallel	MITL	7/8 — 1/2	250'/200'	P2L/N	N/MALSR	Y/N	NP/PIR	N/A / Y
La Porte	La Porte Municipal	PPO	5,000’	SW: 18,000 lb. DW: 33,000 lb.	Grooved	MIRL	Full Parallel	MITL	1 — 1	262'/388'	P2L/P2L	N/N	Y/Y	NP/NP	
Lafayette	Purdue University	LAF	6,600’	2D: 165,000 lb.	Grooved	HIRL	Partial Parallel	MITL	1/2 — 1	200'/258'	P4L/V4R	MASLR/N	N/Y	PIR/PIR	Y/Y
Lebanon	Boone County	6I4	3,600’	SW: 10,500 lb.	None	NSTD	Connector and Turnaround	Not Provided	N/A — N/A	NA/NA	N/N	N/N	N/N	BSC/BSC	
Logansport	Logansport/Cass County	GGP	5,001’	SW: 20,000 lb.	Grooved	MIRL	Full Parallel	None	1 — 3/4	255'/200'	P2L/P2L	N/N	Y/Y	NP/NP	Y/Y
Madison	Madison Municipal	IMS	5,000’	SW: 61,000 lb. DW: 82,000 lb.	Grooved	HIRL	Full Parallel	MITL	3/4 — 7/8	330'/280'	P4L/P2L	MASLF/N	Y/Y	NP/NP	
Marion	Marion Municipal-McKinney Field	MZZ	6,011’	DW: 90,000 lb.	Grooved	HIRL	Full Parallel	MITL	1/2 — 1	200'/401'	N/N	MALSR/N	N/Y	PIR/NP	Y / N/A
Michigan City	Michigan City Municipal-Phillips Field	MGC	4,099’	SW: 12,500 lb.	None	MIRL	Full Parallel	Reflectors	N/A — 1	NA/507'	P2L/P2L	N/N	N/Y	NP/NP	
Monticello	White County	MCX	5,001’	SW: 22,000 lb.	Grooved	MIRL	Full Parallel	None	1 — 1	601'/367'	P2L/P2L	N/N	Y/Y	NP/NP	
Muncie	Delaware County Regional	MIE	6,500’	2D: 215,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 — 1/2	321'/200'	P4L/N	N/MALSR	Y/N	PIR/PIR	N/A / Y
New Castle	New Castle Henry County Marlatt Field	UWL	4,201’	SW: 12,500 lb. DW: 24,000 lb.	None	MIRL	Partial Parallel	MITL	1 — 1	319'/322'	P2L/P2L	N/N	Y/Y	NP/NP	
North Vernon	North Vernon	OVO	5,002’	DW: 50,000 lb.	None	MIRL	Full Parallel	MITL	1 1/4 — 1	334'/365'	P2L/P2L	N/N	N/N	NP/NP	

Facility Information			MSLR Data											
Associated City	Facility Name	FAA ID	Runway Length	Runway Strength	Runway Grooving	Runway Lights	Full Parallel Taxiway	Taxiway Lights	Visibility Minimums (in miles)	Ceiling Minimums	Primary VGSI	Approach Lighting Systems	Primary REILs	Runway Signage & Markings	POFZ
Paoli	Paoli Municipal	I42	2,793’	SW: 12,500 lb.	None	MIRL	Connector and Turnaround	MITL	N/A – N/A	NA/NA	P2R/P2L	N/N	Y/Y	BSC/BSC	
Peru	Grissom ARB	GUS	12,501’	Not Provided	Not Provided	HIRL	Partial Parallel	Not Provided	1/2 – 1/2	200'/200'	P4L/P4L	ALSF1/ALSF1	N/N	PIR/PIR	Y/Y
Peru	Peru Municipal	I76	4,400’	SW: 12,500 lb.	Grooved	MIRL	Full Parallel	MITL	1 – 1	463'/274'	P2L/P2L	N/N	Y/Y	NP/NP	
Plymouth	Plymouth Municipal	C65	4,400’	DW: 45,000 lb.	None	MIRL	Connector and Turnaround	None	1 – 1	444'/303'	P2L/V4L	N/N	Y/Y	NP/NP	
Portland	Portland Municipal	PLD	4,002’	SW: 12,500 lb.	AFSC	MIRL	Full Parallel	Reflectors	1 – 1	250'/375'	P2L/P2L	N/N	Y/Y	NP/NP	
Rensselaer	Jasper County	RZL	4,000’	SW: 12,500 lb.	None	MIRL	Full Parallel	LITL	1 – 1	250'/250'	P2L/P2L	N/N	Y/Y	NP/NP	
Richmond	Richmond Municipal	RID	5,502’	2D: 60,000 lb.	Grooved	MIRL	Full Parallel	MITL	1 – 3/4	364'/200'	P4L/P4L	N/RLLS	Y/Y	PIR/PIR	N/A / Y
Rochester	Fulton County	RCR	5,001’	DW: 47,000 lb.	Grooved	MIRL	Full Parallel	MITL	1 – 1 1/4	430'/337'	P2L/P2L	N/N	Y/Y	NP/NP	
Salem	Salem Municipal	I83	3,000’	DW: 60,000 lb.	None	MIRL	Connector and Turnaround	MITL	N/A – N/A	NA/NA	P2L/N	N/N	Y/Y	NP/NP	
Seymour	Freeman Municipal	SER	5,501’	DW: 180,000 lb.	Grooved	MIRL	Partial Parallel	MITL	3/4 – 3/4	250'/250'	P2L/P2L	ODALS/ODALS	Y/Y	NP/NP	
Shelbyville	Shelbyville Municipal	GEZ	5,000’	DW: 40,000 lb.	Grooved	MIRL	Partial Parallel	MITL	1 – 1	498'/292'	P2L/V4L	N/N	Y/Y	NP/NP	
Sheridan	Sheridan	5I4	3,760’	Not Provided	None	NSTD	Connector and Turnaround	Not Provided	1 – 1	468'/468'	N/TRIL	N/N	N/N	BSC/BSC	
Sullivan	Sullivan County	SIV	4,359’	DW: 35,000 lb.	RFSC	MIRL	Full Parallel	MITL	1 – 1 1/8	287'/317'	V2L/V2L	N/N	Y/Y	NP/NP	
Tell City	Perry County Municipal	TEL	4,400’	SW: 12,000 lb.	None	MIRL	Connector and Turnaround	MITL	1 – 1	361'/348'	P4R/P4R	N/N	Y/Y	NP/NP	
Terre Haute	Terre Haute Regional	HUF	9,021’	2D/2D2: 600,000 lb.	Grooved	HIRL	Full Parallel	MITL	1/2 – 7/8	200'/308'	P4L/P4L	MASLR/N	N/Y	PIR/PIR	Y / N/A
Valparaiso	Porter County Regional	VPZ	7,001’	DW: 250,000 lb. 2D: 375,000 lb.	Grooved	HIRL	Full Parallel	MITL	1 – 1/2	269'/200'	P4L/P4L	N/MASLR	Y/N	NP/PIR	N/A / Y
Wabash	Wabash Municipal	IWH	4,401’	DW: 27,000 lb.	Grooved	MIRL	Full Parallel	None	1 – 1	424'/484'	P2L/P2L	N/N	Y/Y	NP/NP	
Warsaw	Warsaw Municipal	ASW	6,001’	SW: 75,000 lb.	Grooved	HIRL	Partial Parallel	Reflectors	1 – 3/4	250'/200'	P2L/P4L	N/N	Y/Y	NP/PIR	N/A / Y
Washington	Daviess County	DCY	4,615’	2D: 44,000 lb.	Grooved	MIRL	Partial Parallel	Reflectors	7/8 – N/A	250'/NA	P2L/P2L	N/N	Y/Y	NP/NP	
Winamac	Arens Field	RWN	4,201’	SW: 25,000 lb. DW: 36,000 lb.	Grooved	MIRL	Connector and Turnaround	None	1 – 1	287'/287'	P2L/P2L	N/N	Y/Y	NP/NP	
Winchester	Randolph County	I22	4,300’	SW: 64,000 lb. DW: 90,000 lb. 2DW: 176,000 lb.	Grooved	MIRL	Full Parallel	MITL	7/8 – 1 1/4	309'/372'	P2L/P2L	N/N	Y/Y	NP/NP	

Notes: Data presented in this table pertains to the primary runway. The taxiway system at Columbus Municipal Airport (BAK) is comprised of multiple partial parallel taxiways designed in a “Y” shape. This taxiway system functions as a full parallel taxiway system because no back taxiing is required. Sources: 2022 ISASP Airport Manager Survey, 2021; Kimley-Horn, 2022.

3.4. Summary

Establishing a comprehensive dataset in the early stages of a system plan is a critical step in supporting informed policy and project recommendations. The data presented in this chapter was collected via in-person airport site visits and virtual meetings via phone calls and emails with airport managers and by reviewing available public sources. The data for each facility in the system is organized by goal and by PM and PI to clearly define the data that will be used in subsequent system adequacy analyses. These data will be used to better understand Indiana's aviation system's existing conditions and can be used as a benchmark for existing conditions moving forward.