



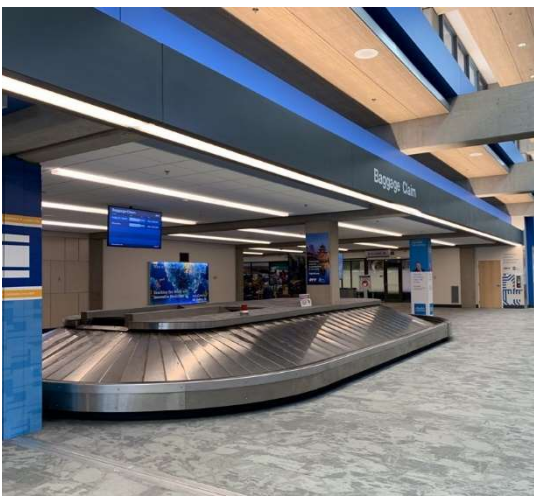
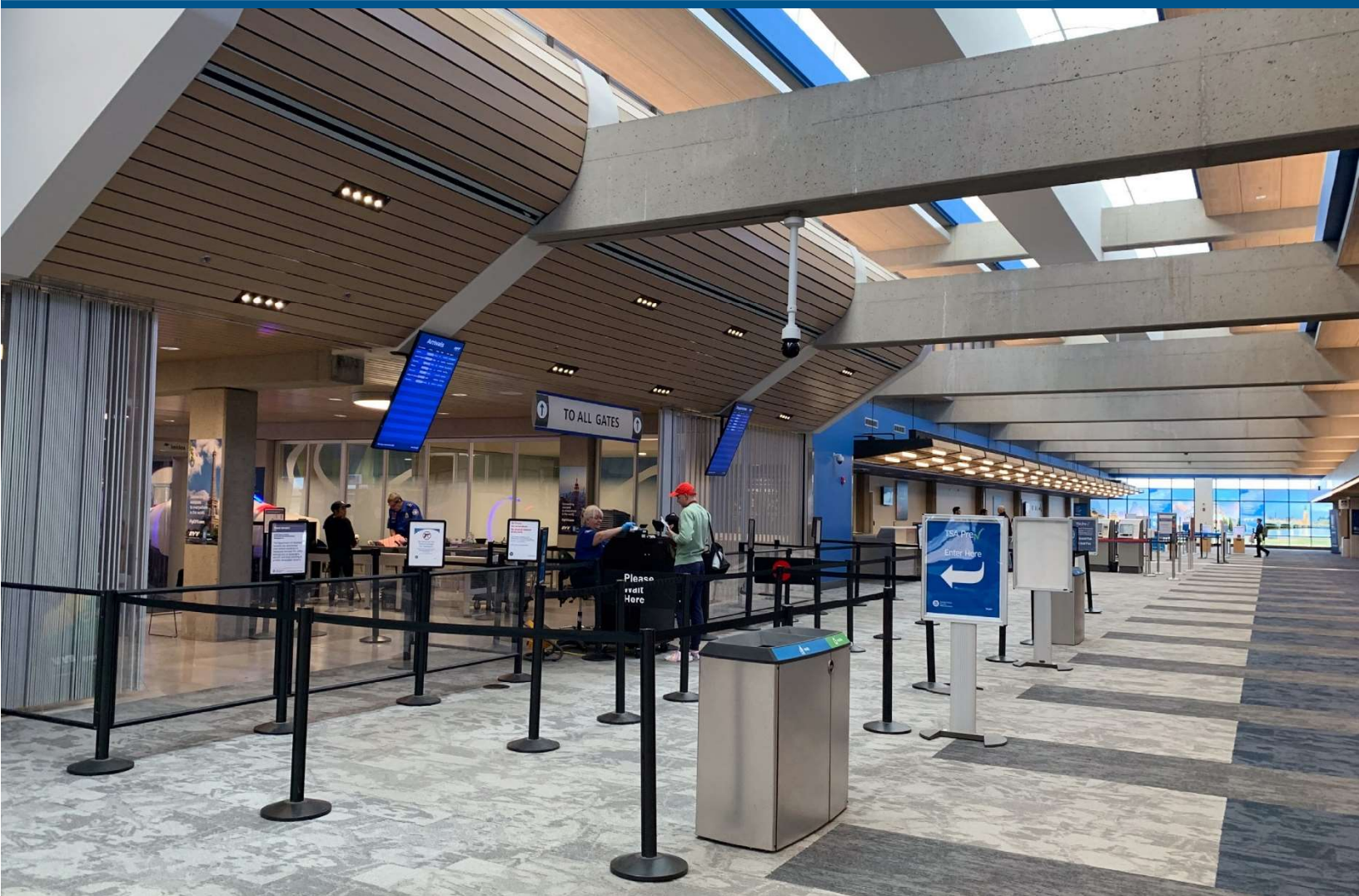
Evansville Regional Airport

# Draft Working Paper #9

Airport Master Plan Update

Airport Layout Plan

October 2025



## TABLE OF CONTENTS

9	Airport Layout Plan .....	9-1
9.1	Summary of the Recommended Plan .....	9-1
9.2	Airport Layout Plan .....	9-1
9.2.1	Title Sheet .....	9-2
9.2.2	Airport Data Sheet .....	9-2
9.2.3	Existing Airport Layout Plan (ALP) Sheet .....	9-2
9.2.4	Future Airport Layout Plan (ALP) Sheet .....	9-3
9.2.5	Traverse Way Data Sheet.....	9-4
9.2.6	Airspace Plans .....	9-4
9.2.7	Centerline Profiles.....	9-5
9.2.8	Inner Approach & Departure Surfaces .....	9-5
9.2.9	Obstruction Tables.....	9-6
9.2.10	Terminal Area Plan.....	9-6
9.2.11	Land Use Map .....	9-6
9.2.12	Airport Property Map/Data Tables.....	9-7

## TABLES

Table 9-1	–Table ALP Drawing Index .....	9-1
Table 9-2	– Approach Surface Dimensions (Existing) .....	9-5
Table 9-3	– Approach Surface Dimensions (Future).....	9-5

## 9 AIRPORT LAYOUT PLAN

This chapter presents the Airport Layout Plan (ALP) for the recommended developments at Evansville Regional Airport (‘EVV’ or the ‘Airport’). The ALP illustrates the recommended future airport facilities, airspace, and serves as the official development plan for the Airport. In addition, several drawings are included to illustrate the surrounding airspace and land uses in the vicinity of the Airport. The combined set of drawings is termed the “ALP drawing set.” This chapter contains a summary of the Recommended Plan and a description of the ALP drawing set.

### 9.1 SUMMARY OF THE RECOMMENDED PLAN

The recommended airport developments for EVV were previously presented in **Chapter 5, Figure 5-31**. The plan includes recommendations for the airfield, passenger terminal, surface transportation and parking areas, general aviation, aprons, support facilities, and—non-aeronautical development, etc.

### 9.2 AIRPORT LAYOUT PLAN

The ALP drawing set illustrates all development projects identified at EVV throughout the 20-year planning horizon. Upon approval by the Federal Aviation Administration (FAA), the ALP becomes the official planning document for the Airport. The FAA requires that all new airport facilities be consistent with the ALP. As such, keeping the drawings updated to accurately reflect the current conditions at the Airport should be of high priority. Furthermore, any future development to be funded by the Airport Improvement Program (AIP) must be depicted on an approved ALP prior to approval to adhere to grant assurances. At a minimum, the FAA requires that the ALP be updated at least every five years. Although the ALP is the only drawing that is signed by the FAA, it is part of a larger drawing set that includes the sheets listed below. **Table 9-1**, below, lists the layout of the ALP content.

**Table 9-1 –Table ALP Drawing Index**

SHEET INDEX			
SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION
1	Title Sheet	15	Obstruction Data Tables
2	Airport Data Sheet	16	Obstruction Data Tables – Runway 36
3	Existing Airport Layout Sheet	17	Terminal Area Plan – Passenger Terminal
4	Future Airport Layout Sheet	18	Terminal Area Plan – General Aviation Areal
5	Traverse Way Data Sheet	19	Airport Land Use (Sheet 1 of 2)
6	Airspace Plan (Sheet 1 of 2)	20	Airport Land Use (Sheet 2 of 2)
7	Airspace Plan (Sheet 2 of 2)	21	Property Map Sheet
8	Approach & Departure Profile – Runway 4	22	Property Map Sheet (Parcel Page 1 of 4)
9	Approach & Departure Profile – Runway 22	23	Property Map Sheet (Parcel Page 2 of 4)
10	Approach Profile – Runway 9	24	Property Map Sheet (Parcel Page 3 of 4)
11	Approach Profile – Runway 27	25	Property Map Sheet (Parcel Page 4 of 4 & Future Data Tables)
12	Approach & Departure Profile – Runway 18	26	Property Map Sheet (Adjoiner Data Tables)
13	Approach & Departure Profile – Runway 36		
14	Obstruction Data Tables		

Source: CHA, 2025.

The Evansville-Vanderburg Airport Authority District ('EVAAD') and the FAA maintain full size copies of the final approved ALP set. Each of the drawings is described below in the subsequent sections.

The following publications were used during the preparation of the drawing sets:

- ✈️ FAA Airports ARP SOP 2.00 – *Standard Procedure for FAA Review and Approval of Airport Layout Plans*
- ✈️ FAA Advisory Circular 150/5300-13B (Change 1), *Airport Design*
- ✈️ FAA Advisory Circular 150/5070-6B (Change 2), *Airport Master Plans*
- ✈️ Title 14 Code of Federal Regulations (CFR) Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*

### 9.2.1 Title Sheet

The Title Sheet is the introduction to the full ALP drawing set. This sheet includes a vicinity and location map to illustrate the location of the Airport, a sheet index similar to **Table 9-1** above, and reserves space for the signed FAA Approval Letter along with signature blocks for both the FAA, EVAAD, and the Indiana Department of Transportation (INDOT).

### 9.2.2 Airport Data Sheet

The Airport Data Sheet presents the existing conditions of the Airport and lists the design FAA standards and setbacks applicable for the Airport. This sheet includes:

- ✈️ Airport data
- ✈️ Runway data
- ✈️ Taxiway data
- ✈️ Runway and taxiway safety area data
- ✈️ Approach surface types and slope information
- ✈️ Departure surfaces
- ✈️ Modifications to standards
- ✈️ Wind coverage [visual and instrument flight rules (VFR and IFR) and all-weather conditions]

The information establishes the criteria for existing and future design requirements and is contained and is reflected graphically throughout the ALP drawing set.

### 9.2.3 Existing Airport Layout Plan (ALP) Sheet

The Existing ALP sheet is the first drawing sheet of the ALP drawing set and depicts the Airport in its current condition. This drawing identifies all key FAA airfield design standards [e.g., Runway Safety Areas (RSA), Object Free Areas (OFA), Object Free Zones (OFZ), Runway Protection Zones (RPZ), approach surfaces, etc.], and illustrates all landside facilities. Existing facilities are denoted by their respective ID and identified in the facilities table.

#### **9.2.4 Future Airport Layout Plan (ALP) Sheet**

The Future ALP sheet includes all features of the Existing sheet as well as all proposed facilities, airfield improvements, and recommendations. This drawing is reviewed by several offices within the FAA for consistency with airport design standards, flight procedures, airspace, and environmental requirements. Approval indicates the FAA's endorsement of the proposed project types and locations. However, proposed development may still be predicated upon environmental approvals and demand/capacity justification.

It should be noted that projects illustrated on the Future ALP sheet do not commit the EVAAD to pursue the development nor does depiction of projects ensure that FAA funding will be available. Rather, the proposed development projects are intended to depict the maximum build-out of the Airport within the planning period and to protect identified areas for future development. Lastly, the FAA conditionally approves all ALPs pending environmental review under the National Environmental Policy Act (NEPA).

##### ***Future Taxiway Improvements***

As Identified in Chapter 4, the existing taxiway system at EVV does not comply with FAA fillet design standards and could be subject to improvement. As such, the Future ALP sheet depicts a taxiway System that reflects the appropriate taxiway fillet design. As well as includes alternatives to relocate portions of some taxiways to accommodate an expansion of the commercial apron.

##### ***Future Runway 9-27 Conversion***

As shown on the Future ALP sheet, portions of the Runway 9-27 will be demolished between Taxiway Charlie and the intersection of Runway 18-36 and between the intersection of Runway 18-36 and the future relocated Taxiway Alpha. The remaining section of Runway 9-27 will be converted into two usable taxiways. Taxiway Juliet, between the intersection of Taxiway D1 and Taxiway Charlie, and Taxiway Kilo between the relocated Taxiway Alpha and the Runway 4-22. The converted taxiway pavement will also meet FAA fillet geometry standards.

##### ***Future Runway 36 Easements***

As shown on the Future ALP sheet, portions of the Runway 18-36 approach corridors extend beyond the airport property boundary. The Airport maintains control of these areas through avigation easements with an additional avigation easement planned at the approach end of Runway 36.

##### ***Future Runway 22 Easements***

As shown on the Future ALP sheet, portions of the Runway 4-22 approach corridors extend beyond the airport property boundary. The Airport maintains control of these areas through avigation easements with an additional avigation easement planned near the approach end of Runway 22.

##### ***Terminal Area Improvements***

Future development of the terminal area, northwest general aviation area, and southwest general aviation area are depicted on the Future ALP sheet. The Terminal Area Sheet section of this report provides additional detail regarding proposed development within these areas.

### 9.2.5 Traverse Way Data Sheet

This sheet contains the traverse data tables associated with the Traverse Way identifiers (T# icons) depicted on both the Existing and Future ALP Sheets. The data shown within each of the tables highlights the elevation of roadways and railways (including an average vehicle height as identified by the ARP SOP 2.00) in relation to the approach/departure ends of each active runway at the airport. The determination of any identified traverse penetrations can be found on the Obstruction Data Tables sheet (Sheet 15).

### 9.2.6 Airspace Plans

Code of Federal Regulations 14 Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, establishes areas of airspace where notice to the FAA is required prior to construction or alteration of certain structures. While clearance of objects within the Part 77 surfaces is recommended where practical, objects that remain may require publication, marking, and/or lighting.

Part 77 includes five areas of airspace including the Primary Surface, Approach Surface, Transitional Surface, Horizontal Surface, and the Conical Surface. The overall design, location, and elevation of the FAR Part 77 surfaces at each airport vary based upon runway elevation, runway designation, and available instrument approach procedures.

Sheet 6 and Sheet 7 of the ALP drawing set illustrate the Part 77 airspace surfaces at EVV along with objects penetrating the various surfaces. The following provides a brief description of each Part 77 surface.

#### **Primary Surface**

The primary surface is longitudinally centered on each runway and extends 200 feet beyond the usable runway end. Due to the existence of the Instrument Landing System (ILS) for Runway 4-22, the departure ends of Runway 4 and Runway 22 are listed as “precision runway” with a primary surface width of 1,000 feet. Runway 18-36 is listed as a “non-precision runway” with a similar primary surface width of 1,000 feet. Runway 9-27 is listed as a “visual runway” (i.e., design aircraft with a maximum gross takeoff weight of less than or equal to 12,500 pounds) with a primary surface width of 250 feet.

The elevation of the primary surface is equal to the elevation of the nearest point of a runway centerline. The highest point of the primary surface determines the official airport elevation (i.e., for EVV: 421.7 feet above mean sea level [AMSL]).

#### **Transitional Surface**

Transitional surfaces extend outward and upward at right angles from the sides of the primary and approach surfaces at a slope of 7 to 1 (7:1), with the transitional surfaces terminating at the overlying horizontal surface.

#### **Approach Surface**

The Part 77 Approach Surface is considered of high importance as this area facilitates the arrival of aircraft. The Approach Surface begins 200 feet beyond the physical end of each runway, regardless of the presence of a threshold displacement, and slopes upward at either a 20:1, 34:1, or 50:1 slope based upon the type of runway designation and approach procedure.

The dimensions and slopes of the existing approach surfaces for Runway 4-22, Runway 9-27 and Runway 18-36 are listed in **Table 9-2** and the future approach surface characteristics are listed in **Table 9-3**.

**Table 9-2 – Approach Surface Dimensions (Existing)**

Runway End	Inner Width (Ft.)	Outer Width (Ft.)	Length (Ft.)	Slope
Runway 4 (Precision)	1,000	16,000	10,000 (+40,000)	50:1 (40:1)
Runway 22 (Precision)	1,000	16,000	10,000 (+40,000)	50:1 (40:1)
Runway 9 (Visual)	250	1,250	5,000	20:1
Runway 27 (Visual)	250	1,250	5,000	20:1
Runway 18 (Non-Precision)	1,000	4,000	10,000	34:1
Runway 36 (Non-Precision)	1,000	4,000	10,000	34:1

Source: CHA, 2025.

**Table 9-3 – Approach Surface Dimensions (Future)**

Runway End	Inner Width (Ft.)	Outer Width (Ft.)	Length (Ft.)	Slope
Runway 4 (Precision)	1,000	16,000	10,000 (+40,000)	50:1 (40:1)
Runway 22 (Precision)	1,000	16,000	10,000 (+40,000)	50:1 (40:1)
Runway 9-27 to be converted to Taxiways K & J				
Runway 18 (Non-Precision)	1,000	4,000	10,000	34:1
Runway 36 (Non-Precision)	1,000	4,000	10,000	34:1

Source: CHA, 2025.

**Horizontal Surface**

The horizontal surface consists of the horizontal plane 150 feet above the Airport’s elevation of 421.7 feet mean sea level (MSL); therefore, the horizontal surface at EVV is 571.7 feet MSL. The shape of the surface is created using radial arcs of 10,000 feet from the ends of the primary surface of the existing and future runways at EVV, connected by lines tangent to the arcs.

**Conical Surface**

The conical surface extends outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 (20:1), for a horizontal distance of 4,000 feet. At EVV, the elevation of the outer edge of the conical surface is 771.70 feet MSL.

The overall Airspace Plan illustrates the full dimensions of the Part 77 surfaces and obstructions located within the outer portions of the approach, horizontal, and conical surfaces. These drawings use a small scale, as they depict a large area extending approximately 9.5 miles from the runway ends.

**9.2.7 Centerline Profiles**

Runway Centerline Profiles for each of the three runways are presented on Sheet 14 in the ALP drawing set. The Runway Centerline Profiles provide a view of the runways’ elevation at various points and illustrate the line of sight for each runway.

**9.2.8 Inner Approach & Departure Surfaces**

The inner approach surfaces of each runway end are depicted within the Sheet 8 (Runway 4), Sheet 9 (Runway 22), Sheet 10 (Runway 9), Sheet 11 (Runway 27), Sheet 12 (Runway 18), and

Sheet 13 (Runway 36) of the ALP drawing set along with each runway centerline profile. The inner portion of the surface extends outward to the point where the approach reaches 100 feet above the runway end elevation. In addition, the departure surfaces for runway Runway 4-22 and Runway 18-36 are also illustrated on Sheet 8 through Sheet 13 of the ALP drawing set.

These sheets illustrate approach and departure surface obstructions in a greater level of detail to identify specific objects, such as trees, poles, and building penetrations. Significant objects within the approach and departure surfaces which are not obstructions are also shown to illustrate the Airport operating environment.

**9.2.9 Obstruction Tables**

Sheet 15 and Sheet 16 contains obstruction tables for the approach surfaces (current and future), the departure surface and traverse ways for all six runway ends at the Airport. Each obstruction is given an Object ID, as well as their object type (i.e., tree, antenna, utility pole, road, etc.), location, height (MSL), the amount of feet that they penetrate a particular surface, and the proposed disposition action to mitigate any identified penetrations.

**9.2.10 Terminal Area Plan**

The Terminal Area Plan is depicted across two sheets (Sheets 17 and 18) and illustrates existing and future infrastructure within the terminal area and general aviation area.

Facilities depicted within the Terminal Area Plan sheets reflect those depicted on the Future ALP drawing, but at a smaller scale and in greater detail. Highlights of the proposed new facilities on the Terminal Area Plan include:

- ✈ Concourse Expansions
- ✈ Terminal Curb Canopy Extension
- ✈ Public and employee parking development
- ✈ Economy Parking Structure
- ✈ Rental Car Facility Ready & Return (R&R) and Quick-Turn Around Maintenance Facility Improvements
- ✈ Northwest/Southwest General Aviation Facility Improvements
- ✈ Northwest/Southwest Non-Aeronautical Development
- ✈ Northeast Non-Aeronautical Development
- ✈ Fuel Farm Expansion

**9.2.11 Land Use Map**

The Land Use Map is depicted on Sheet 19 and 20. This sheet depicts surrounding land uses including:

- |                |                       |
|----------------|-----------------------|
| ✈ Agricultural | ✈ Developmental Zones |
| ✈ Commercial   | ✈ Industrial          |
| ✈ Conservancy  | ✈ Residential         |

Most of the land surrounding the Airport fall within Zone A (Agricultural), Zone M-2 (General Industrial), and Zone R-5 (Residential) according to the City and County Zoning Ordinance.

### **9.2.12 Airport Property Map/Data Tables**

The final sheets of the ALP drawing set are the Airport Property Map (Sheet 21) and associated Property Data Tables (Sheet 22 through Sheet 26). The primary purpose of this drawing and the associated data tables is to provide information regarding the acquisition of airport property (i.e., federal programs, local funds only, etc.) that make up the airport property boundary depicted on the ALP. The map assists with identification of current and future aeronautical uses of properties acquired with federal funds. The map also identifies each location that is proposed or planned for ultimate acquisition.

The Airport Property Map drawing reflects the Airport's current "Exhibit A" which was previously updated in 2020.

DRAFT