

## Defiance

### Airport System Plan Compliance Recommendations Summary\*

Associated City	Defiance		
Airport Name	Defiance Memorial (DFI)		
Ohio Airport System Classification Level	General Aviation Level 1		
<b>CRITICAL COMPLIANCE FACTORS</b>			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	47.5%	Land Acquisition of remaining 53%	\$198,000
PCI - Primary Runway	82.5 (Satisfactory)	20 year pavement maintenance	\$1,581,000
PCI - All Other Pavements	86.3 (Good)	20 year pavement maintenance	\$1,335,000
<b>Compliance Factors: Estimated Cost</b>			<b>\$3,114,000</b>

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#### **GLOSSARY**

**Aircraft Fuel:** 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

**Airport Beacon:** a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

**ALS (Approach Lighting System):** allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

**ARC (Airport Reference Code):** expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

**ATCT (Air Traffic Control Tower):** service provided by ground-based controllers who direct aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

**ATC Comms (Communications):** Capability to communicate while on the ground with air traffic control, either by radio or by cell phone.

**Automated Weather Reporting:** disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

**Benchmarks:** minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

**Classification Levels:** a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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## Defiance

### Airport System Plan Benchmark Recommendations Summary\*

Associated City	Defiance
Airport Name	Defiance Memorial (DFI)
Ohio Airport System Classification Level	General Aviation Level 1

#### SCENARIO 1 RECOMMENDATIONS

Level 1 Facility and Service Benchmarks

*Scenario 1: Upgrade from ARC B-II to C-II with Other Recommendations to Meet Level 1 Classification Benchmarks\*\**

Benchmark Item	GA Level 1 Objective***	Airport Facility	Recommendation	Estimated Cost
IAP	P or APV	NP	Install APV approach	\$62,500
Fencing	Perimeter	No	Install full perimeter fencing	\$589,100
ARC	C-II	B-II	B-II to C-II ARC Items (details below)	
<i>ARC Detail</i>			Primary Runway to 5,000'	\$5,286,600
<i>ARC Detail</i>			RSA/ROFA RWY End Improvements	\$458,400
<i>ARC Detail</i>			Widen RWY 25' (Final Width 100')	\$3,776,500
<i>ARC Detail</i>			Runway End Lights both ends	\$67,500
<i>ARC Detail</i>			Approach Lighting System (MALSR)	\$1,427,500
<i>ARC Detail</i>			Non-Precision Runway Markings	\$136,700
<i>ARC Detail</i>			Extend Partial Parallel Taxiway	\$2,727,500
<b>Scenario 1: Estimated Cost - Full ARC Upgrade from B-II to C-II with Other Benchmark Recommendations</b>				<b>\$14,532,000</b>

*Red text = airport facility does not meet Ohio System Plan objective*

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*\*\*Scenario 1 incorporates recommended changes to ARC standards; Scenario 2 assumes airport will not change its current ARC*

*\*\*\*These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances*

#### GLOSSARY

**Compliance Factors:** FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

**Fencing:** a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

**Fuel:** attended or self-service fueling facilities.

**IAP (Instrument Approach Procedure):** enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

**PCI (Pavement Condition Index):** an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

**Runway Lighting:** includes three standard forms: high, medium, and low intensity runway lighting, expressed as HIRL, MIRL, and LIRL.

**RPZ (Runway Protection Zone):** a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

**RSA (Runway Safety Area):** a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

**Snow Removal:** Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

**Terminal Building:** a building for airport users that typically houses any or all of the following: airport administration, pilot lounge, flight planning, restrooms, FBO offices, and conference room.

**Visual Approach Aids:** visual glide slope indicator (VGS), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSs include the precision approach slope indicator (VASI) and precision approach path indicator (PAPI).

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#### SCENARIO 2 RECOMMENDATIONS

Level 1 Facility and Service Benchmarks

*Scenario 2: Recommended Individual Projects if Airport is to Remain at ARC B-II\*\**

Benchmark Item	GA Level 1 Objective**	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 5000	4,199	Primary Runway to 5,000'	\$3,416,300
Runway Lighting	HIRL	MIRL	HIRL	\$419,900
Airport Beacon	Yes	Yes		
Taxiway Type	Full Parallel	Partial Parallel	Full Parallel	\$2,060,900
ATCT	Yes, if Part 139 certified			
ATC Comms	Yes	Yes		
IAP	P or APV	NP	APV	\$62,500
Terminal/Admin. Building	Yes	Yes		
Fuel	Jet-A, 100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	MALSR	No	MALSR	\$1,427,500
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	Perimeter	Partial	Full Perimeter	\$589,100
<b>Level 1 Facility and Service Benchmarks: Estimated Cost</b>				<b>\$7,976,000</b>

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