

# City of Casa Grande



## AIRPORT MASTER PLAN EXECUTIVE SUMMARY

# Casa Grande Municipal

**Airport** is owned and operated by the City of Casa Grande, Arizona, which is situated approximately 40 miles southeast of Phoenix. The airport proper is located five miles north of the city and encompasses approximately 470 acres. Casa Grande Municipal Airport is currently served by a single runway with a field elevation of 1,464 feet above mean sea level (MSL). Runway 5-23, oriented northeast/southwest, measures 5,200 feet long by 100 feet wide and is served by full-length parallel Taxiway B. The airport is classified in the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) as a local general aviation (GA) airport. Local GA airports provide a critical component to the national aviation system and account for 37 percent of all NPIAS airports. They are typically located near population centers and have moderate levels of activity. They often accommodate flight training and emergency services, and average approximately 32 based propeller-driven aircraft at their facilities.

## BACKGROUND

The City of Casa Grande initiated an Airport Master Plan with the objective of determining future requirements for the airport. The Master Plan, initiated in December 2021, was sponsored by the FAA. The airport consulting firm Coffman Associates was selected to conduct this planning effort. Completed in January 2024, the Casa Grande Municipal Airport Master Plan is a long-term planning document outlining future airport development based upon aviation demand forecasts prepared during the study process. Recognizing that the airport is of interest to many constituencies, a group of community leaders, aviation interest groups, and government officials were identified to act in an advisory role during the development of the Master Plan. This Planning Advisory Committee (PAC) met four times during the course of the study, reviewed draft reports, and provided comments throughout to help ensure that a realistic, viable plan was developed. Public Information Workshops were also conducted throughout the study process to provide information and solicit input from interested citizens.

## DEMAND-BASED PLAN

Airport planning begins with an analysis of future demand expected to occur at the facility. For Casa Grande Municipal Airport, this involved generating forecasts to identify potential aviation demand for based aircraft and annual aircraft operations over the next 20 years. Recognizing the realities of year-to-year fluctuations in activity, the focus was on potential demand levels rather than future dates in time. These "demand planning horizons" were established as levels of activity that will trigger the consideration of implementing the next step in the development program (see adjacent table). By developing the airport to meet aviation demand levels, it will serve the actual needs of users, while maintaining a safe and efficient environment. For Casa Grande Municipal Airport, the number of based aircraft and annual aircraft operations are forecast to increase during the planning period when considering a diverse economy and continued development of airport facilities. Given that activity and growth may not occur as predicted, flexibility will be very important to future development. The Master Plan provides airport stakeholders with a general guide that, if followed, can maintain the airport's long-term viability and allow the airport to continue to provide corporate and general aviation services to the region.

	BASE YEAR (2021)	Short Term (1-5 Years)	Intermediate Term (6-10 Years)	Long Term (11-20 Years)
<b>BASED AIRCRAFT</b>				
Single Engine	94	104	117	141
Multi-Engine	7	7	5	3
Turboprop	0	2	4	10
Jet	0	1	2	6
Helicopter	1	1	3	7
<b>TOTAL BASED AIRCRAFT</b>	<b>102</b>	<b>115</b>	<b>131</b>	<b>167</b>
<b>ANNUAL OPERATIONS</b>				
<b>Itinerant</b>				
Air Carrier	0	0	0	0
Other Air Taxi	2,038	2,400	2,800	3,800
General Aviation	106,586	114,000	121,900	139,400
Military	410	410	410	410
<b>Total Itinerant</b>	<b>109,034</b>	<b>116,800</b>	<b>125,100</b>	<b>143,600</b>
<b>Local</b>				
General Aviation	12,966	14,800	16,900	22,000
Military	0	0	0	0
<b>Total Local</b>	<b>12,966</b>	<b>14,800</b>	<b>16,900</b>	<b>22,000</b>
<b>Total Operations</b>	<b>122,000</b>	<b>131,600</b>	<b>142,000</b>	<b>165,600</b>

## RECOMMENDED DEVELOPMENT PLAN

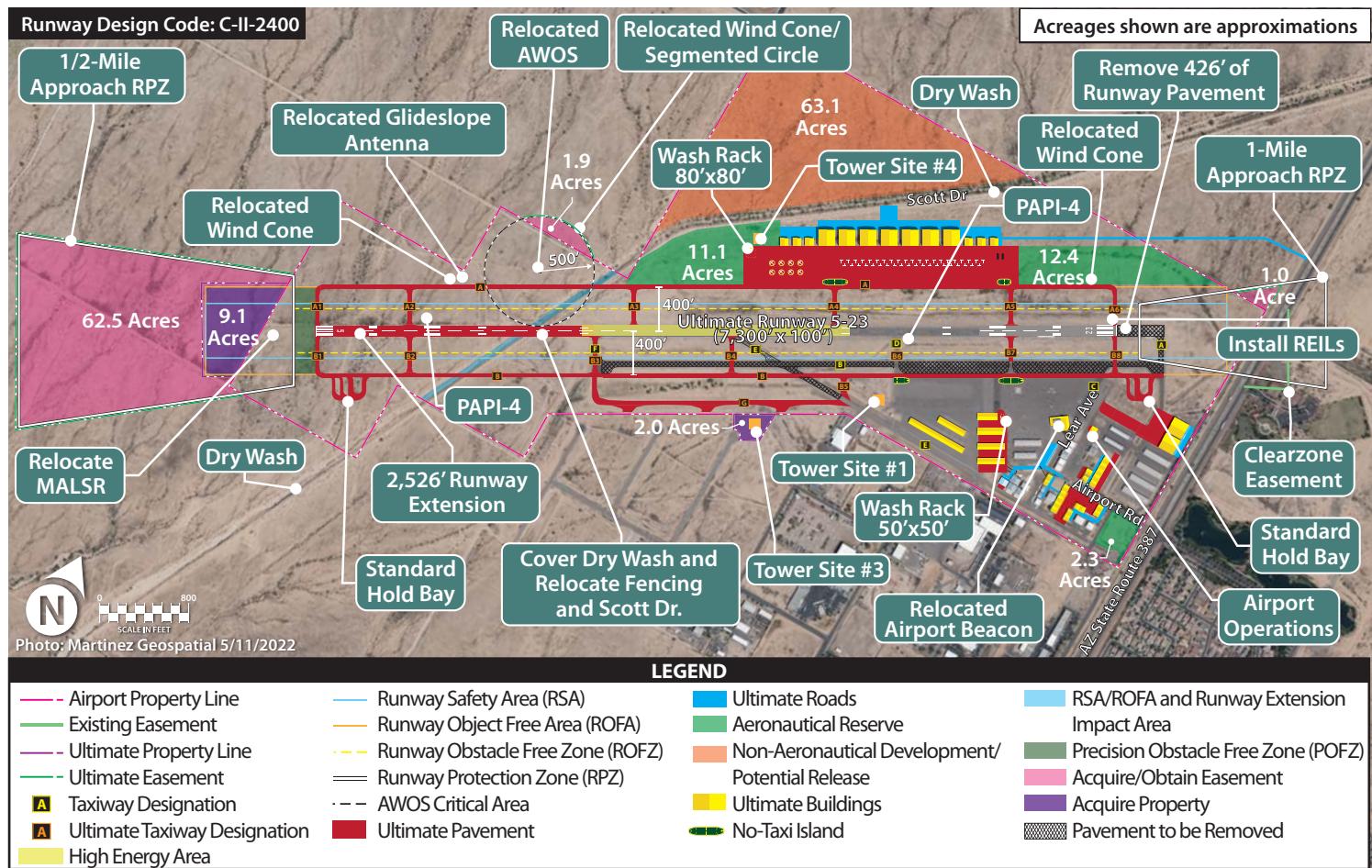
The recommended development concept includes improvements to airside (runways, taxiways, navigational aids, etc.) and landside (hangars, aprons, terminal area, etc.) facilities that would meet current and short-term needs as well as long-term projects that can be implemented as forecast demand materializes. The following summarizes the airside and landside recommendations that will serve the airport well beyond the long-term planning horizon.

### MAJOR AIRSIDE DEVELOPMENT INCLUDES:

- Upgrading to ultimate Runway Design Code (RDC) C-II-2400 standards on Runway 5-23 when demand dictates.
- Shift Runway 5-23 to the southwest to meet C-II-2400 design standards for safety areas. This would be accomplished by removing 426 feet of runway pavement from Runway 23. An extension is also planned for the Runway 5 end, ultimately bringing the total runway length to 7,300 feet to better accommodate corporate jet operators.
- Relocate Taxiway B 100 feet south to provide a 400-foot separation between it and Runway 5-23, in accordance with C-II-2400 design standards.
- Realign non-standard taxiways and construct additional taxiway connectors to provide access from the extended runway.
- Upgrade visual approach aids from two-box precision approach path indicators (PAPIs) to four-box PAPIs.
- Construct a full-length parallel taxiway on the north side of Runway 5-23 to support potential aviation development
- Analyze the potential for an airport traffic control tower.

### MAJOR LANDSIDE DEVELOPMENT INCLUDES:

- Analyze the potential for additional infrastructure associated with general aviation terminal facilities, aircraft storage hangars, and aircraft apron space to meet future needs.
- Construct support facilities needed for aviation activities, including additional fuel tanks and an aircraft wash rack.
- Construct additional automobile parking at the terminal.
- Identify areas of airport property that are suitable for non-aviation development.



## CAPITAL IMPROVEMENT PROGRAM

A capital improvement program (CIP) for the orderly development of the airport has been prepared to outline long-term investment costs. The CIP has been developed to individualize each of the first five years, and the remaining projects are grouped into intermediate (years 6-10) and long-term (years 11-20 and beyond) planning horizons. By utilizing planning horizons instead of specific years for intermediate and long-term development, the City of Casa Grande will have greater flexibility to adjust capital needs as demand dictates. The total CIP proposes approximately \$74.1 million in airport development needs. Of this total, approximately \$63.2 million could be eligible for federal and state funding assistance, while the local funding estimate for the proposed CIP is approximately \$10.9 million. The CIP is intended to serve as a road map of airport improvements to help guide the City of Casa Grande, the Arizona Department of Transportation (ADOT) – Aeronautics Group, and the FAA.

	Total Project Cost Estimate	Federal Funding Share	State Funding Share	Local Funding Share
Short Term (Years 0-5) Total	\$10,704,000	\$3,750,761	\$2,510,619	\$4,442,619
Intermediate Term (Years 6-10) Total	\$40,397,300	\$32,982,661	\$3,619,069	\$3,795,569
Long Term (Years 11-20+) Total	\$23,037,300	\$19,386,037	\$951,632	\$2,699,632
<b>CIP TOTAL</b>	<b>\$74,138,600</b>	<b>\$56,119,459</b>	<b>\$7,081,320</b>	<b>\$10,937,820</b>

## PLAN IMPLEMENTATION

The Casa Grande Municipal Airport Master Plan has been undertaken to evaluate the airport's capabilities and role and to plan for the timely development of new or expanded facilities that may be required to meet future demand. The ultimate goal of the Master Plan is to be a proactive document providing systematic guidelines for the airport's overall maintenance, development, and operation.

Casa Grande Municipal Airport serves as a vital economic asset for the City of Casa Grande and surrounding region. As such, it should be carefully and thoughtfully planned and subsequently developed in a manner which matches the development goals of the community. The continued development of Casa Grande Municipal Airport demonstrates the City's commitment to growth and prosperity, while also remaining sensitive to the needs of the residential area and businesses it serves. The Master Plan provides the tools that the City of Casa Grande will need to meet the challenges of the future. By providing a safe and efficient facility, Casa Grande Municipal Airport will remain a valuable component to the surrounding region.



For more information, please contact:

Airport Management  
3225 N. Lear Ave.  
Casa Grande, AZ 85122  
Phone: (520) 421-8625 Ext. 3347  
Website: casagrandeaz.gov/321/airport



January 2024