



EXECUTIVE SUMMARY

Cuyahoga County Airport is a public-use, general aviation reliever facility that plays a vital role in the National Plan of Integrated Airport Systems (NPIAS) in northeast Ohio, for Lake and Cuyahoga counties and surrounding municipalities and local businesses. Cuyahoga County owns the Airport; its operation and maintenance is the responsibility of the Department of Development under the auspices of the Board of County Commissioners.

In 2003, Cuyahoga County began an Airport Master Plan Update and a Runway Safety Area Study for the County Airport. The previous Airport Master Plan was completed in 1977 by the staffs of the Cuyahoga County Regional and Lake County Planning Commissions. The sponsor of the facility initiated this Airport Master Plan Update (AMPU) in 2003 in order to determine the current and future potential of the Airport, and to identify specific opportunities for improving its facilities. The study, part of due diligence planning for the Airport, was funded jointly by the Federal Aviation Administration (FAA) and Cuyahoga County. The recommended development program will satisfy aviation demand and be compatible with the environment, community development, and other transportation modes.

During the first phase of the AMPU study, the existing airport facilities were evaluated, 20-year aviation forecasts prepared, and facility needs identified for the 20-year planning period. Cuyahoga County Airport has a single runway, designated Runway 6-24, that is 5,102 feet long and 100 feet wide. More than a dozen corporate hangars front on the corporate aircraft parking apron in an alignment with the runway and parallel taxiway. Forty based aircraft are housed in T-hangars at two locations on the airfield. The fixed based operator (FBO) area is north of the Runway 6 end and provides fueling, aircraft maintenance, and other services. The taxiway system includes a full parallel taxiway and several access taxiways that connect the T-hangars, corporate hangars and apron areas, and the FBO area with the runway. The number of annual aircraft operations at Cuyahoga County Airport in 2003 totaled 69,540. In 2025, operations are forecasted to be 83,510, an increase of approximately 20 percent.

The Airport undertook a Runway Safety Area Study to evaluate areas along both sides of the runway and beyond the runway ends for surface conditions and FAA-required dimensional characteristics. According to FAA regulations, the existing RSA lengths are currently deficient at both runway ends. An important reason for undertaking the AMPU was to consider how best to address known runway safety area deficiencies. The FAA made standard RSAs a priority with a directive in 1999 that requires all airports to correct RSA deficiencies; RSA compliance is “triggered” by a runway construction or rehabilitation project. Because Cuyahoga County Airport’s Runway 6-24 is in dire need of pavement rehabilitation and FAA Airport Improvement Project (AIP) funding for runway construction or rehabilitation is contingent upon design that meets FAA standards for runway safety areas, addressing



the RSA deficiencies is a priority. In fact, any AIP-eligible project is in jeopardy if an airport does not first address RSA deficiencies.

The critical design aircraft for Cuyahoga County Airport, based upon existing and anticipated continuing use, is the family of business jets that currently operate at the Airport. Based upon the user data, for the business jets using Cuyahoga County Airport with the destinations served, the existing runway length is a constraint on their ability to operate. Extending the runway length to 6,000 feet would substantially meet the critical aircraft needs. Additional runway length would provide operators with an increased safety margin and more efficient operations by reducing the number of diversions and extra fuel stops, making Cuyahoga County Airport capable of handling tenants' operational needs in a wider range of weather conditions.

Analysis of various runway configurations at Cuyahoga County Airport is a critical element of this Master Plan Update study. Following the inventory and forecast phases of the study effort and the selection of a design aircraft, thirty-five airfield development concepts and a no-build alternative were proposed for evaluation. These options were developed as a result of meetings and discussions with the Airport's Technical and Community Advisory Committees, seven focus groups representing specific areas of interest and concerns, representatives of the Federal Aviation Administration, the Cuyahoga County Department of Development, and Airport management staff.

Key issues examined for each alternative included airport safety improvements, current and potential aircraft operations, siting navigational equipment, land acquisition, noise impacts, potential road relocations and traffic impacts, preliminary environmental review, and financial considerations. The selected alternative was the most advantageous when considering these criteria. The result was the recommendation of adding 900 feet of runway length by extending the Runway 24 end, runway safety areas that meet FAA-required design standards, and a tunnel for vehicle traffic along Bishop Road.

Other development proposed for the 20-year planning period includes new corporate hangars and apron expansion along the runway, relocation of all T-hangars to the south side of the airfield, and providing an AWOS and an aircraft ground run-up enclosure to reduce noise exposure for Airport neighbors.

Phase 1, or the short-term development, at Cuyahoga County Airport concentrates on satisfying existing needs and correcting existing problems. These projects are considered to be the highest priorities in the development plan, and are supported by findings reached during previous portions of this study. The Phase 1 project recommendations are:

- Purchase and Install Automated Weather Observation System (AWOS) and Upgrade Runway Sensor System
- Airport Administrative and Maintenance Expansion



- Airport Perimeter Fencing
- Electrical Improvements (Transformer and Field Lighting Loop)
- Rehabilitate Taxiways A, A1, A2, A3, A5, A6, A7 and A8
- Aircraft Run-Up Enclosure (Design and Construct)

The intermediate-range development, Phase 2, encompasses the period 2011-2015 and includes airfield and landside improvements. The Phase 2 recommendations are:

- Curtiss Wright Parkway Conceptual Realignment Route
- Runway and Parallel Taxiway Extension (Design and Construct)
- Land/Easement Acquisition for Runway 6-24 Improvements
- Relocate Taxiway A (Design and Construct)
- Design and Construct Two 10-Bay T-Hangars
- Design and Construct Based Aircraft Apron
- Demolition of County T-Hangars

The long-range development, Phase 3, covers the period from 2016-2025. In this phase, additional airside and landside facilities are planned to complete the needs defined in this plan. The Phase 3 recommendations are:

- Design and Construct Corporate Hangars (3)
- Design and Construct Corporate Apron Expansion

During the review of this Airport Master Plan Update, the Airport Advisory Committees evaluated the need and role of the Airport in terms of the demand for aviation services. This plan reflects the commitment on the part of Cuyahoga County to comply with FAA regulations regarding safety areas and to support and improve the Airport and sustain its ability to provide economic benefits to the aviation and municipal communities.