



Project Fact Sheet

The City of Tuscaloosa has begun a master planning process to define the vision and provide the necessary framework to guide airport development for the next 20 years.

WHAT IS AN AIRPORT MASTER PLAN?



An Airport Master Plan is a study to determine the long-term development plans for an airport including the extent, type and schedule of development required to meet the forecasted needs. Airport master planning is a strategic process used to establish guidelines for the

efficient development of airports that is consistent with local, state and national goals.

The purpose of an Airport Master Plan Update is to study and provide the Airport a 20-year development program that will create a safe, efficient, economical, and environmentally responsible airport facility. This study will ensure the airport can facilitate the demand for aviation services expected, meet the development goals of the City, and create additional public value for residents in the Tuscaloosa area and the aeronautical community at large.

The final product will serve as a critical tool for TCL depicting the existing airport facilities, and planned development initiatives. This document is vital for coordination between the Airport, the Alabama Department of Transportation (ALDOT) and the Federal Aviation Administration (FAA) to ensure capital improvement needs are met.

ABOUT THE PROJECT

The Airport Master Plan project is a 24-month process that will be completed in the Summer of 2021.



The Airport Master Plan project is funded through a grant partnership with the FAA, ALDOT and local funding sources. The Airport received an FAA grant for approximately 90% of project costs, a ALDOT grant for 5% with the City providing funding for the remaining 5%.

ABOUT THE AIRPORT

Oliver “Lafe” Parks was brought to Alabama in 1939 to establish a Civilian Pilot Training Program (CPTP) for the University of Alabama. The original airfield, Van De Graaff Field, became operational in 1940. Van De Graaff Field originally consisted of four turf runways, and one brick hangar. The CPTP was hosted at the airfield to take action towards strengthening our national defense.

Towards the beginning of World War II, the airfield was enhanced to include one paved runway. The United States Army Air Force took control of the airfield and established it as a pilot training airfield detachment of the 51st Flying Training Group which was located in nearby Greenville, Mississippi. Under contract by the Alabama Institute of Aeronautics, pilot training was performed primarily with Fairchild PT-19s, PT-17 Stearmans, and a select few P-40 Warhawks. When the war ended in September of 1945, the airfield was then transferred to the City of Tuscaloosa. In the 1950’s, the University of Alabama began utilizing the airport for athletic charters for the football, basketball, baseball, softball, gymnastics, and volleyball teams. These athletic charters are still operated out of the Airport to this day.

GET INVOLVED

The Airport, and the City of Tuscaloosa are dedicated to a transparent, complete, and inclusive planning process. The Airport is excited to engage the community and stakeholders to gather feedback to develop the Airport Master Plan. You can participate in the Airport Master Plan Process primarily in the following method:

Stay Up to Date on Project Work

To learn more about the project and provide feedback that will help shape the Airport Master Plan, project materials will be hosted on the airport website. This will allow all stakeholders the opportunity to remain engaged during the process. Project deliverables, and information will be posted at airport.tuscaloosa.com. To provide feedback on the Airport Master Plan, please email Connor.Haskin@atkinsglobal.com.

Airport Master Plan

Frequently Asked Questions



1. What is an Airport Master Plan?

An Airport Master Plan presents the community and airport's vision for a 20-year strategic development plan based on the forecast of activity. The Master plan is used as a decision-making tool and is intended to complement and integrate into other local regional and national plans. The Airport Master Plan consists of a report documenting existing conditions of the Airport, a forecast of activity, facility requirements (the airport's needs based on the forecast and compliance with FAA Design Standards for airports), development and evaluation of alternatives to meet those needs, and a funding plan for that development. The Airport Master Plan also includes an Airport Layout Plan (ALP).

2. What is an Airport Layout Plan and why do we need one?

An Airport Layout Plan (ALP) graphically depicts all planned development at the airport within the 20-year planning period which is studied in the Airport Master Plan. This drawing or set of drawings requires approval by the Federal Aviation Administration (FAA) and the Alabama Department of Transportation (ALDOT) which makes the airport eligible to receive federal and state funding under the FAA's Airport Improvement Program and the FAA and ALDOT Grant Program.

3. How often are Airport Master Plans and Airport Layout Plans undertaken?

FAA guidance recommends that Airport Master Plans be completed every 5 to 10 years based on the development needs of the airport and market changes. Airport Layout Plans should be kept current always to ensure Airport Improvement Program funding compliance.

4. Why are you doing this Airport Master Plan?

The FAA requires a current approved ALP for an airport to be eligible for federal funding. In the years since the Airport's previous ALP and Airport Master Plan were prepared, there have been significant changes that necessitate a Master Plan and ALP update. These factors include the airport accomplishing a significant amount of previously programmed improvements, updated FAA design standards, changes in aviation markets, and shifts in the types and levels of activity at the Airport.

5. How does the Airport Master Plan address potential future commercial service at the Airport?

The Airport and the City of Tuscaloosa are actively pursuing commercial air service operations through market research, small community air device development grants, attendance at industry conferences, and working with individual airlines to reestablish scheduled service to Tuscaloosa. Launching commercial air service is a high priority to both the City of Tuscaloosa and the community at large. Within the Airport Master Plan, the community's efforts and market research have provided baseline justification to reserve adequate property for future commercial service. In the event where a commercial service operator commits to scheduled service, a more detailed study including specific design of facilities and supporting infrastructure is recommended as a supplement to the airport master plan update.

6. How much input will the community have in the planning process?

The Airport is excited to engage the community and stakeholders to gather feedback to develop the Airport Master Plan. Feedback can be provided to the airport via email at Connor.Haskin@atkinsglobal.com. Additionally, the planning process will include one public meeting to invite the community to share ideas, opinions and concerns regarding the future of Tuscaloosa National Airport. Updates on the progress of the Airport Master Plan process as well as supporting documentation will be posted on the Airport's website (airport.tuscaloosa.com).

7. Will the Airport Master Plan report be made available to the public?

The Airport Master Plan final report will be posted on the Airport's website for public review at airport.tuscaloosa.com. Additionally, public meeting materials will be posted to the Airport's website.

8. What is the cost to prepare the Airport Master Plan study?

The cost to prepare the Airport Master Plan study is \$483,915. Ninety percent of the cost is covered by an FAA grant, five percent by a ALDOT grant and five percent local match by the City of Tuscaloosa.

9. What level of environmental analysis will be conducted as part of the study?

The Airport Master Plan will include an Environmental Overview section that will outline the environmental features and constraints on and surrounding the airport. This overview will aid in the development of airport alternatives.

Airports 101

Airport & Aviation Terminology



Airport Master Plan

An airport master plan is a comprehensive study of an airport and usually describes the short, medium, and long-term development plans to meet future aviation demand.

Aircraft Operation

The landing, takeoff or touch-and-go procedure by an aircraft on a runway at an airport.

Airport Improvement Program (AIP)

The AIP provides grants to public agencies, and in some cases, to private owners and entities, for the planning and development of public-use airports that are included in the NPIAS.

Airport Layout Plan (ALP)

A scaled drawing (or set of drawings), in either traditional or electronic form, of current and future airport facilities that provides a graphic representation of the existing and long-term development plan for the airport and demonstrates the preservation and continuity of safety, utility, and efficiency of the airport to the satisfaction of the FAA.

Airport Reference Code (ARC)

An ARC is a combination of the design aircraft's Aircraft Approach Category and Airplane Design Group. The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the airport.

Airport Reference Point (ARP)

The approximate geometric center of all usable runways at the airport.

Aircraft Approach Category (AAC)

A term used to specify a grouping of aircraft based upon approach speed in a landing configuration at their maximum certified landing weight.

Airplane Design Group (ADG)

A classification of aircraft based upon wingspan and tail height.

Average Annual Growth Rate (AAGR)

AAGR is utilized in aviation forecasting as it is useful in expressing short and long-term trends. AAGR is calculated by taking the sum of each year over year growth rate and divided by the number of years. This is a linear measure that does not account for the effects of compounding.

Based Aircraft

Based aircraft are those that have a lease either for storage facilities or space on a parking apron at the airport, for a majority of the year.

Building Restriction Line (BRL)

A notional line that identifies suitable and unsuitable locations for buildings on airports on the Airport Layout Plan.

Airports 101

Airport & Aviation Terminology

Declared Distances

The distances the airport owner declares available for an aircraft's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are:

- Takeoff Run Available (TORA)
- Takeoff Distance Available (TODA)
- Accelerate-Stop Distance Available (ASDA)
- Landing Distance Available (LDA)

Design Aircraft / Critical Aircraft

An aircraft with characteristics that determine the application of airport design standards for a specific runway, taxiway, taxilane, apron, or other facility. This aircraft can be a specific aircraft model, or a composite of several aircraft using, expected, or intended to use the airport or part of the airport. (Also called "critical aircraft" or "critical design aircraft.")

Displaced Threshold

A threshold that is located at a point on the runway beyond the beginning of the runway.

Enplanement

The boarding of a passenger or unit of cargo, freight, and mail on an aircraft at an airport.

Federal Aviation Administration (FAA)

The FAA is a government authority which operates under the United States Department of Transportation (DOT). The FAA regulates all aspects of civil aviation in the United States.

Fixed Base Operator (FBO)

A business enterprise located at on airport that provides services to pilots including aircraft rental, training, fueling, maintenance, parking, and the sale of pilot supplies.

General Aviation (GA)

All non-scheduled flights other than military conducted by non-commercial aircraft. General aviation covers local recreational flying to business transport that is not operating under the FAA regulations for commercial air carriers.

Hot Spot

A location on an airport movement area with a history of potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary.

Imaginary Surfaces

Described in Federal Aviation Regulations (FAR) Part 77 as established surfaces based on the runway that are used to identify objects that may impact airport plans or aircraft departure/arrival procedures or routes. There are five types of imaginary surfaces: primary, transitional, approach, horizontal, and conical.

Instrument Approach Procedure (IAP)

A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority.

Itinerant Operations

Operations by aircraft that leaves the local airspace.

Airports 101

Airport & Aviation Terminology

Large Aircraft

An aircraft with a maximum certificated take off weight of more than 12,500 lbs

Local Operations

Aircraft operations performed by aircraft that are based at the airport and that operate in the local traffic pattern or within sight of the airport, that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport.

Modification to Standards

Any approved nonconformance to FAA standards, other than dimensional standards for Runway Safety Areas (RSAs), applicable to an airport design, construction, or equipment procurement project that is necessary to accommodate an unusual local condition for a specific project on a case-by-case basis while maintaining an acceptable level of safety.

Movement Area

The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft including helicopters and tilt-rotors, exclusive of loading aprons and aircraft parking areas

National Plan of Integrated Airport Systems (NPIAS)

The national airport system plan developed by the Secretary of Transportation on a biannual basis for the development of public use airports to meet national air transportation needs.

National Environmental Policy Act (NEPA)

A U.S. Environmental law that promotes the enhancement of the environment. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions. Agencies also provide opportunities for public review and comment on those evaluations.

Navigational Aid (NAVAID)

Electronic and visual air navigation aids, lights, signs, and associated supporting equipment.

Object Free Area (OFA)

An area centered on the ground on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by remaining clear of objects, except for objects that need to be in the OFA for air navigation or aircraft ground maneuvering purposes.

Obstacle Free Zone (OFZ)

The OFZ is the three-dimensional airspace along the runway and extended runway centerline that is required to be clear of obstacles for protection for aircraft landing or taking off from the runway and for missed approaches.

Runway Safety Area (RSA)

Defined 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.

Runway Protection Zone (RPZ)

A trapezoidal area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.

Airports 101

Small Aircraft

An aircraft with a maximum certificated takeoff weight of 12,500 lbs or less.

Terminal Area Forecast (TAF)

The official forecast of aviation activity, both aircraft and enplanements, at FAA facilities. This includes FAA-towered airports, federally contracted towered airports, non-federal towered airports, and many non-towered airports.

Taxilane

A taxiway designed for low speed and precise taxiing. Taxilanes are usually, but not always, located outside the movement area, providing access from taxiways (usually an apron taxiway) to aircraft parking positions and other terminal areas.

Taxiway

A defined path established for the taxiing of aircraft from one part of an airport to another.

Taxiway Design Group (TDG)

A number classification of aircraft based upon the aircraft main gear width, and distance from the cockpit to the main gear.

TCL

TCL is the Tuscaloosa National Airport location identifier. Airport Location Identifiers are commonly referred to as Airport Codes, these codes are given to airports throughout the world. In the United States Airport Location Identifiers are assigned to publicly owned and operated airports by the FAA.

Threshold

The beginning of that portion of the runway available for landing. In some instances, the threshold may be displaced. "Threshold" always refers to landing, not the start of takeoff.

