

## RECENT MASTER PLAN/ALP UPDATE WITH NARRATIVE EXPERIENCE

Coffman Associates is known for its extensive experience in airport planning, having completed more than 600 such studies. Airport master plans vary with the size, complexity, and role of each airport and may include a variety of supporting studies. The plans provide a comprehensive study of the airport that describes the short-, intermediate-, and long-term plans for airport development. Coffman Associates utilizes Advisory Circular 150/5070-6B, *Airport Master Plans*, as a guide for the preparation of master plans for airports ranging in size and function from small general aviation to large commercial service facilities. The firm has always given specific attention to tailor each master plan scope for the individual airport under evaluation.

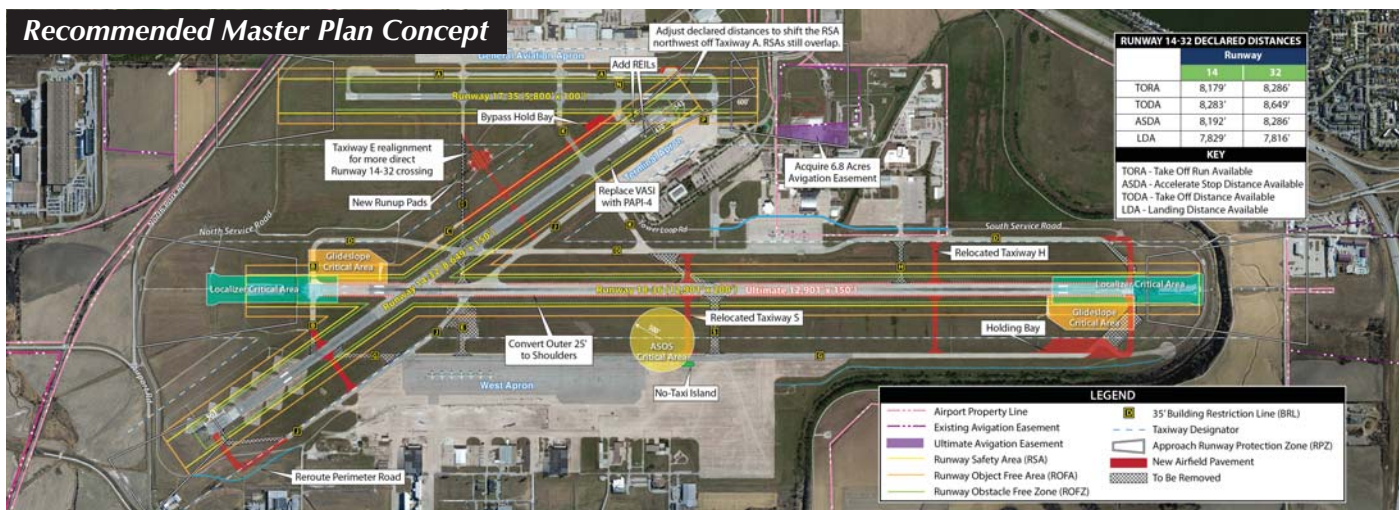
### Lincoln Airport, Nebraska

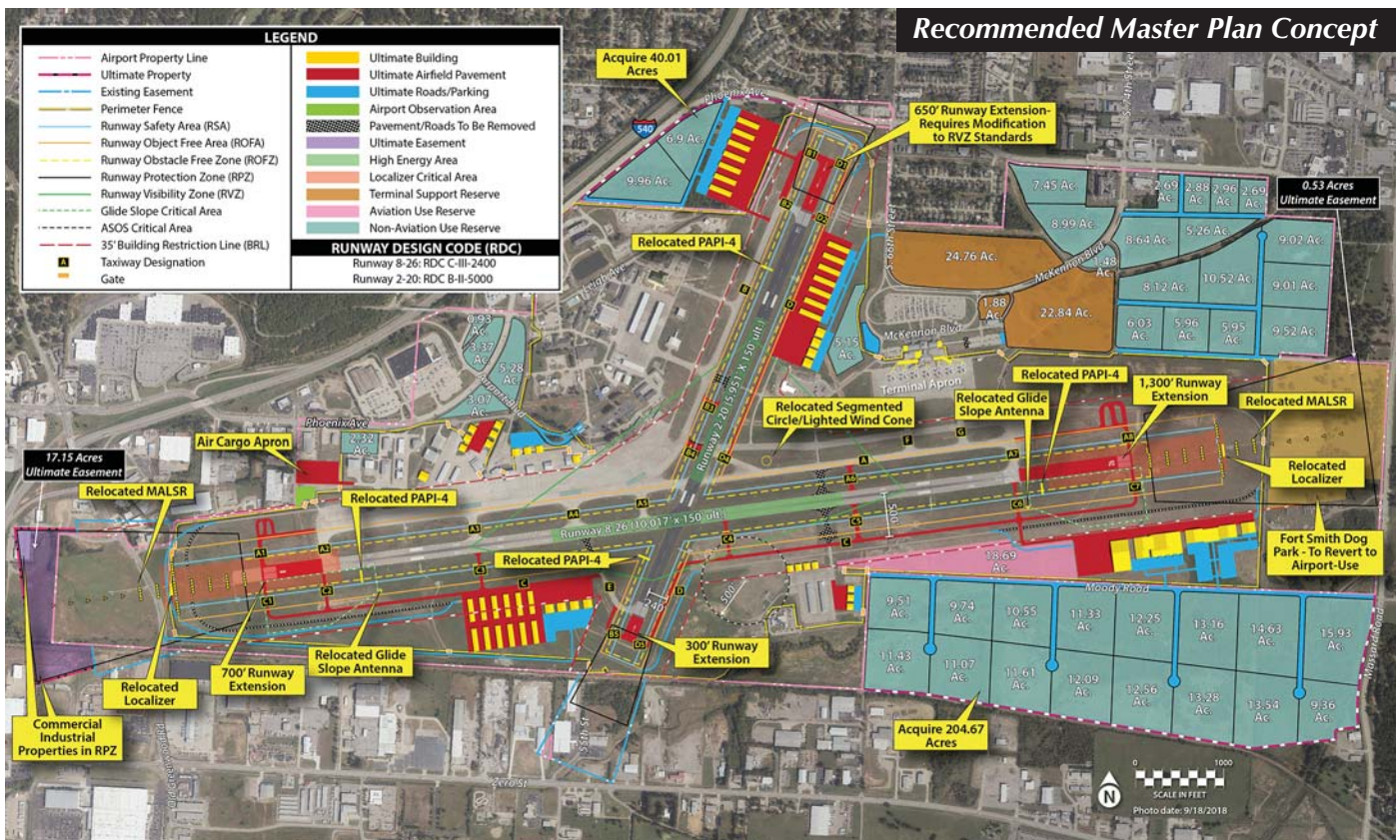
**Project:** Airport Master Plan  
**Completed:** Ongoing  
**Key Personnel:** Mike Dmyterko, Principal-in-Charge;  
Eric Pfeifer, Project Manager  
**Reference:** Chad Lay, Director – Planning and Development, (402) 458-2403



**Description:** Lincoln Airport (LNK) is a 4,714-acre airport in Lincoln, Nebraska. Its three runways support a variety of users, including commercial passenger service; the Nebraska Army and Air National Guard (NEANG) Joint Force Headquarters; Duncan Aviation, which is one of the largest aircraft maintenance/repair/overhaul (MRO) operators in the world; general aviation activity; and a 1,000-acre industrial park with a Foreign Trade Zone (FTZ). Major issues addressed in the master plan included justification for and alternatives to reconstructing primary Runway 18-36, which has a length of 12,901 feet and a width of 200 feet. A detailed runway length analysis was conducted for commercial, general aviation, and military aircraft to determine AIP eligibility for the reconstruction, as well as appropriate lengths for the crosswind and parallel runways. Several non-standard taxiway geometry areas and FAA-identified hot spots were also addressed by rerouting taxiways and creating a new aircraft run-up pad at midfield, which reduces taxi distances and the need for aircraft to make multiple runway crossings. The plan also identified development areas for a new air cargo operation, as well as vertiport developments to support future advanced air mobility (AAM) air cargo and passenger activities. Additional recommendations included:

- Development plans for expanded fixed base operator (FBO) and hangar developments on the east and west sides of the airfield
- Reservation of land on the north side for new MRO and AAM facilities supported by a 36-acre solar farm to provide a power source for the emerging electric aircraft fleet
- Terminal expansion plans to add more gates, passenger holdroom and circulation areas, and food/beverage and retail spaces
- Vehicle parking capacity expansion projects in the terminal area, including an expanded parking garage and a new surface cell phone lot and economy lot







## Kansas City Wheeler Downtown Airport, Missouri

**Project:** Airport Master Plan

**Completed:** Ongoing

**Key Personnel:** Mike Dmyterko, Principal-in-Charge;  
Patrick Taylor, Project Manager

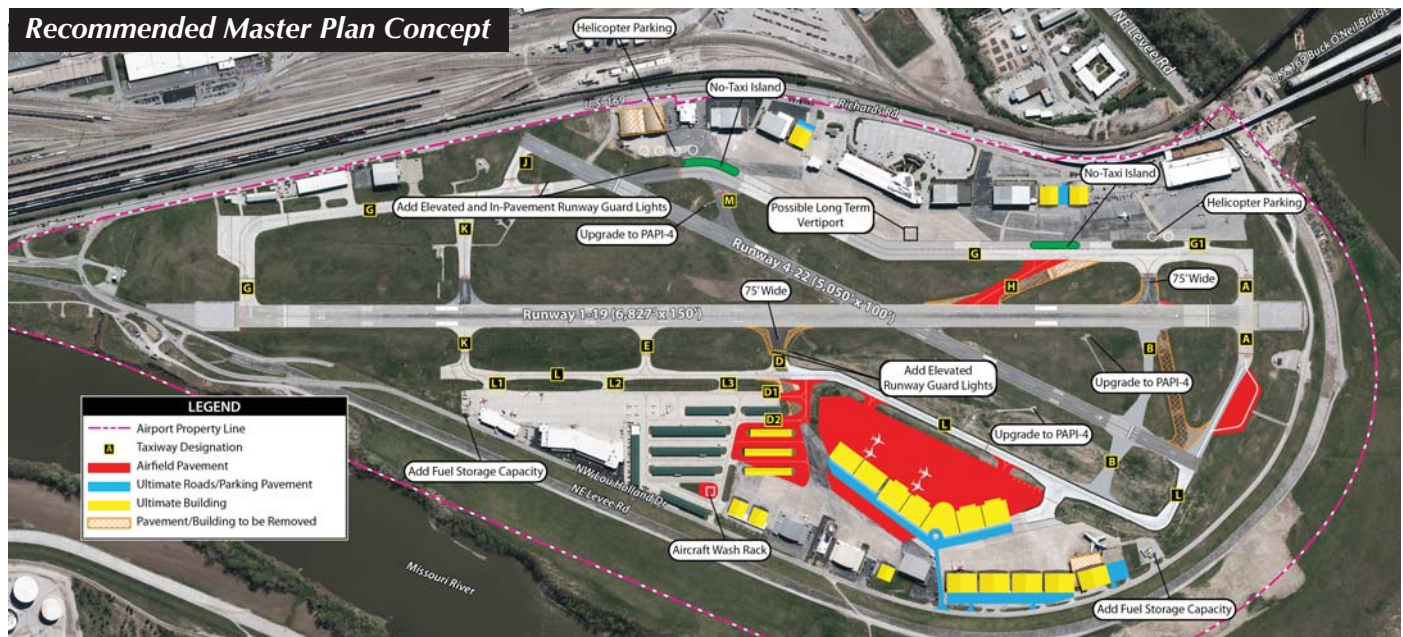
**Reference:** Mike Waller, Airport Planning Manager  
(816) 243-3038



**Description:** Kansas City Wheeler Downtown Airport (MKC) is a national general aviation reliever airport in Kansas City, Missouri. The Master Plan was undertaken to address changes in the aviation industry, growth at the airport, and the need to have a current ALP on file with the FAA to support future projects. MKC presents numerous challenges including its proximity to tall downtown buildings, which historically have prevented the implementation of an instrument approach to Runway 1, the most heavily used runway at the airport. As part of the Master Plan, a specialized team of consultants was assembled to not only analyze the feasibility of an instrument approach to Runway 1 but also to technically build the instrument approach plate. Ultimately, that effort did show that an approach was feasible, and the technical data was provided to FAA for reference as they build the actual instrument approach.

The Master Plan also took a deep dive into the development potential of a 26-acre parcel that recently became available for development after several preceding projects were completed. The preceding projects included decommission of an on-field VOR facility and construction of a parallel taxiway. The 26-acre parcel was the first developable land to come on-line in more than 20 years at the airport, so there was pent up demand. The Master Plan analysis determined the optimal development scenario, roadway access point, and best (and most profitable) type of hangars to develop. Near the end of the Master Plan process, the airport released an RFP for the parcel which generated numerous proposals.

A significant challenge in this Master Plan was the analysis associated with addressing three FAA identified hot spots and one FAA runway incursion mitigation (RIM) location. Once a set of alternatives were developed to address these issues, a comparative safety assessment (CSA) was undertaken. A CSA is an FAA prescribed process of a group of technical stakeholders to flesh out the pros and cons of each alternative, to introduce new ideas, and to come to consensus on the best alternative to carry forward to the airport layout plan (ALP). Typically, changes to the airfield geometry are a preferred solution, and that was the solution for two of the three hot spots. The preferred solution to the third hot spot, which is also the RIM location, was not a geometry solution because those considered would have made the location less safe. The preferred solution included additional pavement marking and the installation of both elevated and in-pavement runway guard light.



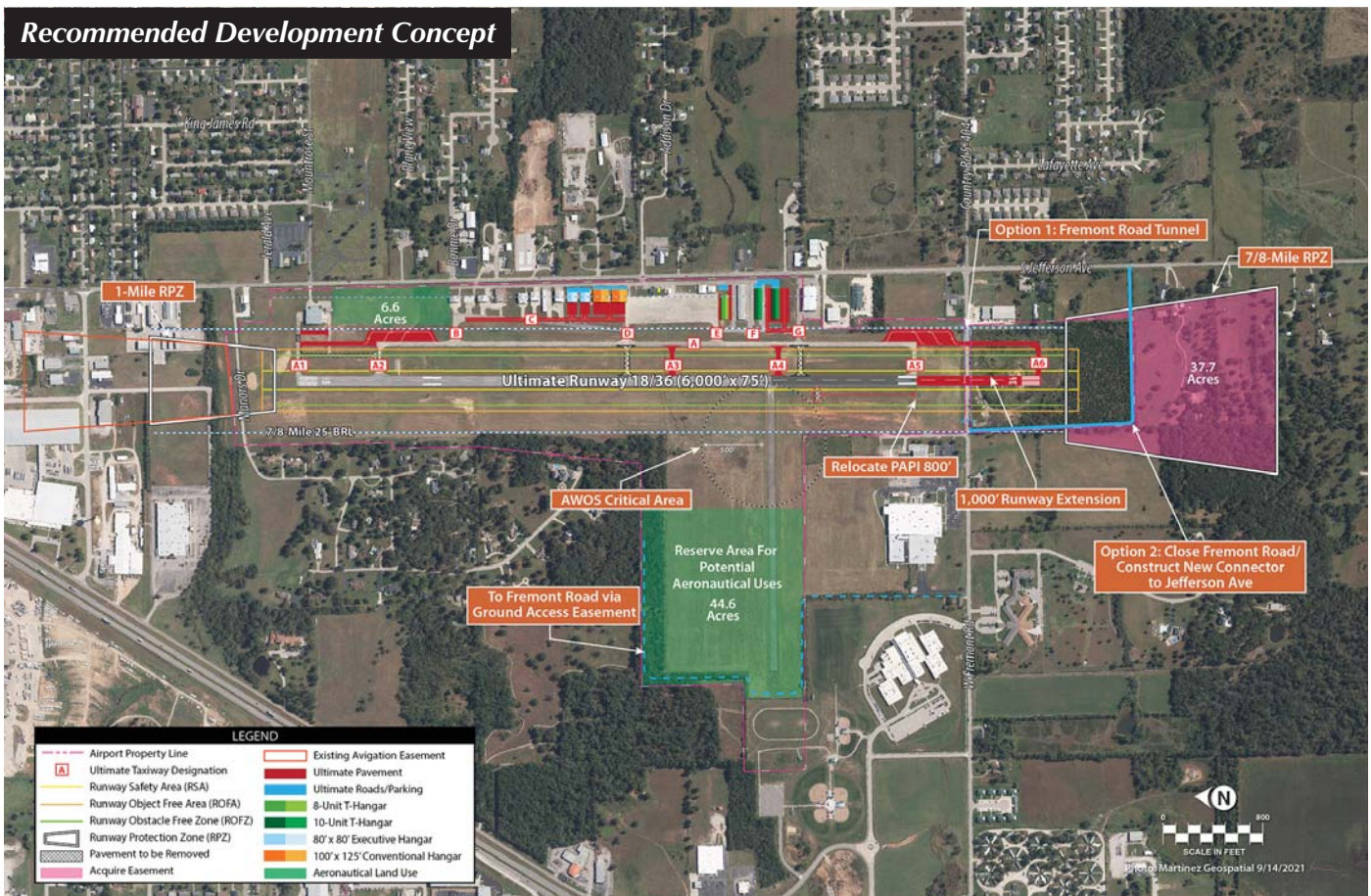
## Floyd W. Jones Airport, Missouri

**Project:** Airport Master Plan  
**Completed:** December 2023  
**Key Personnel:** Eric Pfeifer, Project Manager  
**Reference:** Jarrad Schomaker, IT/Airport Director  
(417) 532-2156

Floyd W. Jones Airport (LBO) is a general aviation airport owned by the City of Lebanon in central Missouri. LBO serves the state of Missouri and the greater central region of the United States, supporting a range of general aviation activity and experiencing frequent flight training and charter operations. The master plan focused on enhancing existing facilities, modifying airfield geometry to meet FAA design standards, and developing airport property for both aviation and non-aviation uses. Focal points of the study included:

- Extending Runway 18/36 to allow for greater utilization by larger business jet aircraft
- Rerouting of surface road around the runway extension or construction of an under-runway tunnel
- Reducing GPS instrument approach visibility minimums to improve airport operational capacity
- Taxiway modifications to correct non-standard geometry
- Expansion of general aviation terminal building to accommodate increases in travelers
- Identification of new hangar and apron sites to support on-airport businesses and provide additional aircraft storage capacity

### Recommended Development Concept



## Colonel James Jabara Airport, Wichita, Kansas

**Project:** LP Update and Narrative Report

**Completed:** December 2021

**Key Personnel:** Patrick Taylor, Project Manager

**Reference:** John Oswald, Director of Engineering  
(316) 946-4715



Colonel James Jabara Airport is a reliever airport owned and operated by the Wichita Airport Authority/City of Wichita (the sponsor). This project focused on updating the airport layout plan (ALP) and providing the sponsor with a new 20-year capital improvement program. The project included extensive analysis of development alternatives and a determination of the highest and best use of airport property. The analysis included an obstruction survey, in which several tree stands were identified as obstructions and subsequently determined to be hazards. Removal of these obstructions became priority projects for the FAA and the sponsor. Recommendations from the ALP update and narrative report included:

- Construction of several taxilanes to facilitate access to hangar development areas
- Construction of a second parallel taxiway to provide access to an 80-acre parcel of undeveloped land
- Identification of certain property interests for acquisition to accommodate future aeronautical development
- Closure of a low-utility public road due to its incompatibility with the runway protection zone

