

LEE'S SUMMIT MUNICIPAL AIRPORT

SYSTEM SUMMARY REPORT



In 2015, the Mid-America Regional Council (MARC) completed a regional aviation system plan (RASP) for a nine-county study area focused on the Kansas City Region. The study area included counties in both Kansas and Missouri and considered 13 general aviation airports, including the Lee's Summit Municipal Airport. This report focuses on two important topics: individual finding and recommendations in the system plan for this facility; and various benefits the airport provides/supports in the study area.

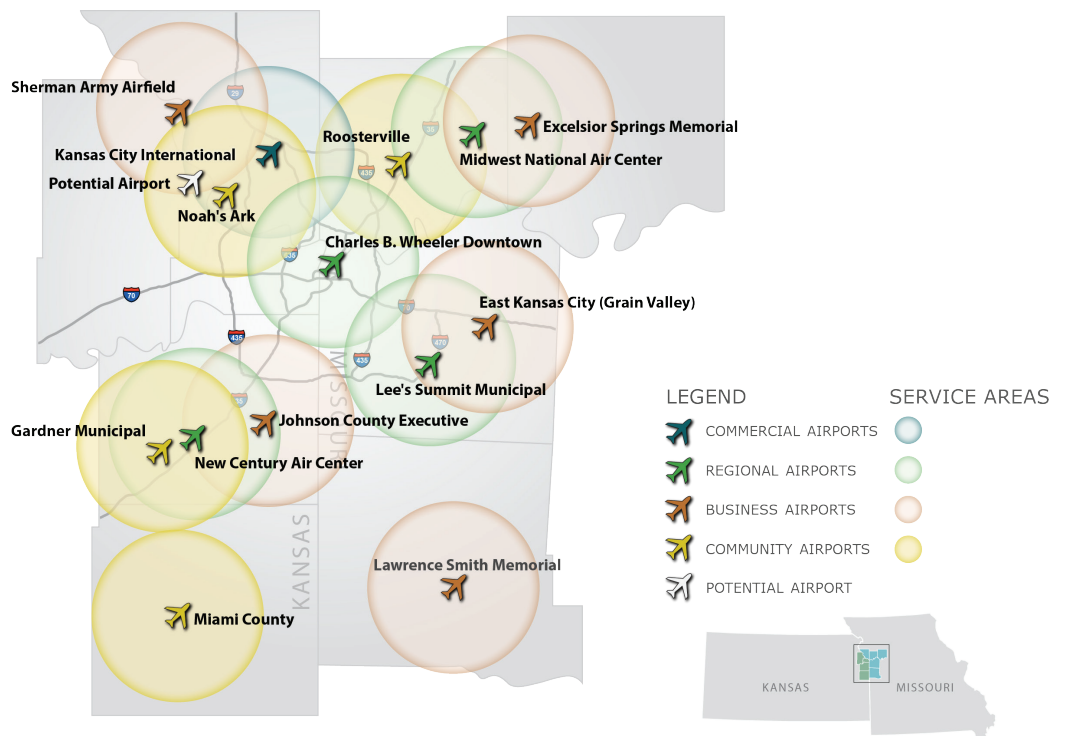
Aviation system plans are top down studies that must still be implemented from the bottom up by individual study airports. The ultimate success of the plan depends on each airport implementing recommendations from the study and following through on any identified improvement actions. Individual airport improvements will result in the enhancement of overall system performance.

As the map below shows, within the regional system, Lee's Summit Municipal

Airport is designated as a Regional Airport. Within the system plan, a Regional Airport is described as follows: Regional Airports accommodate a wide range of general aviation users and support regional economic activities. Some but not all airports included in the regional study also have federal role definitions from the FAA as part of their ASSET Study. Within FAA's national airport system, the Lee's Summit Municipal is also designated as a Regional Airport.

The Lee's Summit Airport is in the midst of a major expansion plan. The airport is extending its runway from 4,016 feet to 5,500 feet. In addition, the airport is widening its runway from 75 feet to 100 feet. The airport's ultimate plans call for the replacement of its existing passenger terminal. As expansion plans continue to be implemented, some of the airports existing T-hangars will also need to be replaced. Ongoing expansion of the airport will enable it to play a more significant role in meeting the general aviation needs in the MARC study area.

RASP RECOMMENDED AIRPORT SYSTEM



SERVICE AREA CHARACTERISTICS

The system plan uses a 10-mile radius around each airport to examine current and future population and employment characteristics. The table below shows this information for the Lee's Summit Municipal Airport. GIS analysis completed in the plan shows that Lee's Summit Municipal Airport has the third highest concentrations of both current population and employment. However, between now and 2040, the rate of increase for both population and employment in the 10-mile radius around the airport is expected to be the lowest among all study airports.

Population and Employment						
Airport	Role	Ownership	Total Population within Service Area (2011)	Population Growth within Service Area (2011)	Total Employment within Service Area (2011)	Rate of Employment Growth within Service Area (2011)
Lee's Summit Memorial	Regional	Public	385,961	15%	140,885	25%

FUTURE AVIATION DEMAND

Projections of aviation demand were developed for all study airports. These projections considered service area characteristics, actual historic growth, and FAA projections for the general aviation industry (as contained in FAA's most current National Aerospace Forecast).

Forecasts were developed for both based aircraft and annual operations. Annual operations reflect takeoffs and landings performed by aircraft that are based or permanently stored at the airport and aircraft that are visiting or transient in nature. Projected growth for the airport considers its improved facilities and the fact that airport is expected to play an increased role in serving regional aviation demand.

As the table below shows, the number of based aircraft reported at the airport in 2015 was lower than it was in 2000. Part of this change is undoubtedly related to FAA changes for reporting/counting based aircraft, rather than to an actual decline in the number of planes based at the airport. Perhaps most importantly, between 2010 and 2015 the airport shows an increase in based aircraft.

Based aircraft at the airport are expected, according to system plan projections, to increase from 152 to 170, a 12 percent increase over the period. Single-engine planes at the airport are expected to actually decrease from 102 to 93, but based jet aircraft are expected to reach 12, up from a current level of 2, by the end of planning period. This expected increase speaks to the increasing role the airport will play in meeting businesses aviation needs in the region.

Historic Changes in Based Aircraft								
Airport	2000	2005	2010	2015	2000-2015		2010-2015	
					Change	CAGR	Change	CAGR
Lee's Summit Municipal	170	169	146	152	-18	-0.7%	6	0.8%

* CAGR - Compound Average Annual Rate of Growth

Projected Aviation Demand					
Lee's Summit Municipal	2015	2020	2025	2035	2015-2035 CAGR
Forecast of Based Aircraft	152	154	157	170	12%
Forecast of Annual Operations	50,500	52,700	57,300	61,550	22%

Based Aircraft Fleet Mix 2035					
Airport	Single Engine	Multi Engine	Jet	Rotor	Other
Lee's Summit Municipal	93	17	12	2	46

RASP IDENTIFIED ACTIONS AND IMPROVEMENTS

As part of the system plan, facility and service objectives were developed for each of the three airport roles: Regional, Business, and Community. The table to the right shows the ability of current facilities and services at the Lee's Summit Municipal Airport to meet the objectives for a Regional Airport. If the system plan analysis determined that actions were needed to improve the airport to make it fully compliant with its specific objectives, planning level cost estimates were developed for these projects. Costs by recommended improvement are shown in the table to the right.

As shown, the anticipated cost to improve the airport to meet all of its facility and service objectives and performance measure objectives is estimated at \$3.3 million. The Lee's Summit Municipal Airport is eligible for local funding from the city's General Fund, MoDOT state funding, and federal funding from the FAA to address most identified improvement costs. It is important to note that these costs are not all inclusive of additional projects that the airport may need to implement as part of its individual capital improvement plan, nor does the cost include maintenance and replacement costs that the airport will incur over the planning period.

LEE'S SUMMIT MUNICIPAL AIRPORT

SYSTEM SUMMARY REPORT

In addition to facility and service needs, airports in the regional system were evaluated for their ability to meet financial, environmental, and social sustainability performance measures. Actions needed to make the Lee Summit Municipal Airport fully compliant with all sustainability objectives follow:

- Work with remaining municipalities around the airport to enact height zoning following Part 77.
- Work with remaining municipalities around the airport to adopt land use controls to prevent airport encroachment.
- Have access to public transit.

Some of these actions have an associated cost, while others do not. Any associated costs to meet sustainability performance measures are included in the airport's report card.

Lee's Summit Municipal Airport Report Card					LXT
AIRPORT NAME: Lee's Summit Municipal			CITY: Lee's Summit, MO		
AIRPORT CODE: LXT			AIRPORT ROLE: Regional		
Actions Needed to Meet Facility and Service Objectives					
	Actual	Minimum Objective	Compliant	Improvement Needed	Estimated Cost
ARC	B-II*	B-II	Yes		
Runway Length	4,016 feet	5,000 Feet	No	Extend runway 984 feet	Project Currently Underway to Extend to Length of 5,500 Ft.
Runway Width	75 feet	75 - 100 Feet	Yes		
Taxiway	Full Parallel	Full Parallel	Yes		
PCI	67**	70 or Greater	Yes		
Navigational Aids					
Rotating Beacon	Rotating Beacon	Rotating Beacon	Yes		
Wind Sock	Lighted Wind Sock	Lighted Wind Sock/Segmented Circle	Yes		
REILs	REIL/REIL	REILs	Yes		
VGSI	VASI/VASI	VGSI (VASIs/PAPIs)	Yes		
Approach Type	LPV	APV	Yes		
Lighting	MRL/MITL	MIRL/MITL with ALS; HIRL/HITL Desired	No	Install ALS	\$2,600,000
Weather	ASOS	ASOS or AWOS	Yes		
Hangar Storage	177 spaces***	100% of Based Aircraft	Yes		
Apron Tie-Downs	60 spaces	20% of Busy Day Transient Aircraft	Yes		
Terminal/Admin Building	1,800 sq. ft. with Restrooms, Conference Room, and Pilots' Lounge	2,500 sq. ft. with Restrooms, Conference Room, and Pilots' Lounge	No	Provide additional 600 square footage	\$215,280
Auto Parking	53 spaces	1.5 Spaces per Based Aircraft Departures on Average Day in Peak Month	No	Provide additional 101 spaces	\$436,754
Ground Communications	Public Phone, WiFi, RCO	Public Phone, WiFi and GCO/RCO or ATCT	Yes		
Services					
Fuel	AvGas and Jet A	AvGas and Jet A	Yes		
FBO	Full Service	Full Service	Yes		
Maintenance	Full Service	Full Service	Yes		
Rental Cars	Rental Cars	Available	Yes		
Additional Actions Needed to Meet System Performance Measure Objectives					
Project Description					Estimated Cost
Work w/Surrounding Municipalities to Enact Height Zoning Following Part 77					***
Work w/Surrounding Municipalities to Adopt Land Use Controls to Prevent Airport Encroachment					***
Provide Access to Public Transit					***
Estimated RASP Project Costs					\$3,252,034

Note: Acronyms defined in Technical Report Glossary

* ARC will be C-II when the current runway project is complete.

** PCI will be 100 when current runway project including 1,500' extension is complete.

*** Future development plans include removing 4 hangars that house 68 aircraft. These hangars will need to be replaced in order to be compliant with RASP objectives.

**** No fixed cost needed

AIRPORT BENEFITS

General aviation airports are often part of the infrastructure needed to attract and retain jobs and to support the vibrancy of the local and/or regional economy. General aviation airports, however, can also support other benefits.

As part of a prior statewide study conducted by MoDOT (completed in 2012) the positive annual economic impacts of the Lee's Summit Municipal Airport were estimated. While the data that this estimate is based on is not current, the results still help to show the airport's annual positive economic impact.

Total annual economic impacts for the airport are attributed to one or more of the following four economic activity centers: airport management, airport tenants, average annual capital investment, and spending by visitors who arrive on general aviation aircraft. Total impacts represent both direct and indirect impacts. Indirect impacts result from the re-recirculating direct impacts, once the direct impacts enter the economy being studied. Indirect impacts are estimated using an input/output model. Total impacts for the airport, shown here, are the sum of direct and indirect impacts. Since economic impacts are a "snapshot" in time of airport conditions when the study was completed, it is possible that annual economic impacts for the airport have changed.

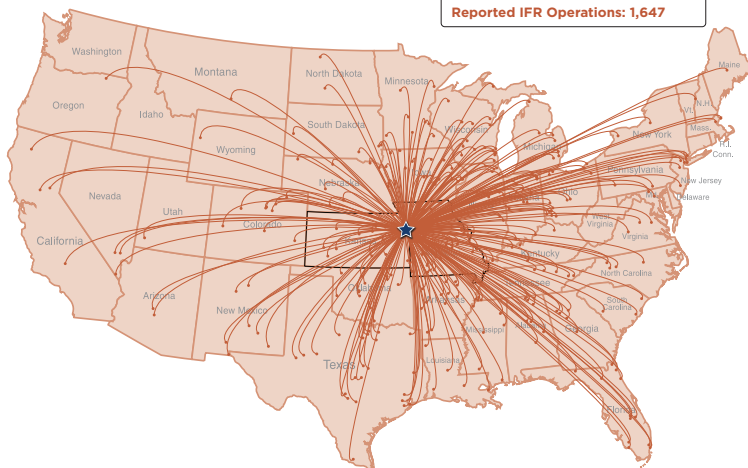
Estimated Annual Economic Impact			
Airport	Total Jobs	Total Payroll	Total Output
Lee's Summit Municipal	63	\$1,887,000	\$9,204,000

The map below shows how the Lee's Summit Municipal Airport supports non-stop flights on general aviation aircraft to many destinations around the U.S. These instrument flight rule (IFR) flights were obtained from FAA data and represent only an estimated 3 percent of all of the airport's annual operations. This map shows how the airport ties the Kansas City area to other cities around the country.

LEE'S SUMMIT MUNICIPAL PROVIDES NON-STOP FLIGHTS TO ANYWHERE!

LEE'S SUMMIT MUNICIPAL AIRPORT (LXT)
IFR Flight Map | January 2014 - January 2015

LEGEND
 LXT Flight Plans Completed as Filed
 Reported IFR Operations: 1,647



USER OUTREACH

As part of the system plan, outreach was completed through an online survey to collect additional information of how the study area relies on and benefits from general aviation airports. This survey, that was advertised through a press release sent to all media outlets in the study area, enabled airport users and employers to provide input on how they use the airports.

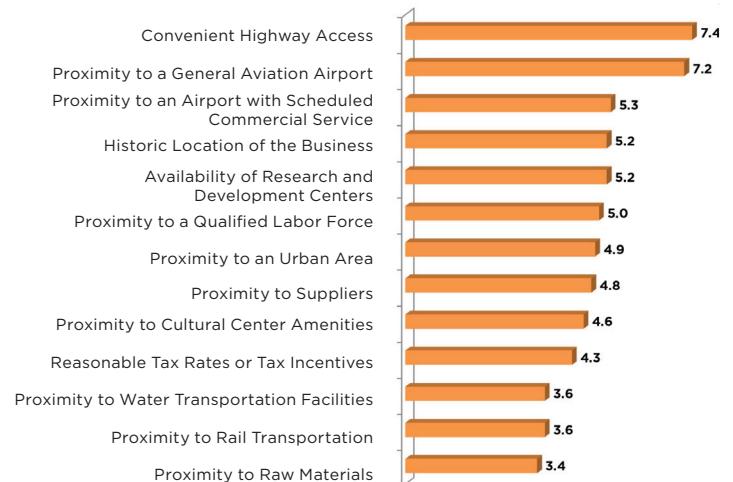
Survey responses from area employers show that the types of employers that most frequently rely on general aviation aircraft for travel and improved efficiency include:

- Government
- Professional Services
- Construction
- Retail Trade
- Health Care
- Real Estate
- Technical Support
- Finance and Insurance
- Social Services

Employer responses often indicated that more than 50 percent of their employees in the study area improve their job efficiency by using general aviation. Since this survey was geared to gather information from users/employers that benefit from general aviation, the high employee reliance is not surprising.

For businesses that rely on general aviation, the online survey also gathered information on how important the proximity of a general aviation airport is to their business location. Again, since general aviation-dependent businesses were targeted as the respondents for this survey, the high rating given to general aviation airport proximity is not unexpected. Nevertheless, for those employers in the study area that do rely on and benefit from one of the general aviation airports, only proximity to highway access is more important to the location of their business in the nine-county study area.

IMPORTANCE OF LOCATION FACTORS TO LOCAL BUSINESSES



By improving general aviation airports in the study area, such as the Lee's Summit Municipal Airport, the Kansas City metropolitan area will be able to continue to realize economic and other benefits.