



KANSAS AVIATION SYSTEM PLAN

KANSAS DEPARTMENT OF TRANSPORTATION
DIVISION OF AVIATION

Prepared by

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In association with


Kansas
Department of Transportation
Division of Aviation

Kansas Statewide Aviation System Plan

prepared for



**Kansas Department of Transportation
Division of Aviation
Topeka, Kansas**

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With assistance from

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SECTION 1 EXECUTIVE SUMMARY

The Kansas Aviation System Plan (KASP) was completed by the Kansas Department of Transportation (KDOT) Division of Aviation, and is an update of a previous plan completed in 2008. The KASP works in concert with other important planning efforts that include the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), KDOT's Long Range Transportation Plan (LRTP), and Kansas Airport Improvement Program (KAIP), plus individual airport capital improvement programs, layout plans, and master plans. The following are the primary objectives of the KASP process:

- Determine those system airports that are most essential to Kansas transportation needs and economic objectives;
- Identify projects that have the greatest potential to improve the performance of the Kansas airport system, and;
- Demonstrate how investment improves the performance of the Kansas airport system relative to established performance measures and benchmarks.

This document explains the airport system planning process and how it achieves the listed objectives. Additionally, much of this information has been incorporated into the Kansas Aviation Portal, a web-based tool that makes use of an airspace awareness tool and additional data layers - including pavement conditions, economic impact, and other useful information - to increase awareness of airports in Kansas. Access to the Kansas Aviation Portal is available at <http://ksaviationportal.ksdot.org>.

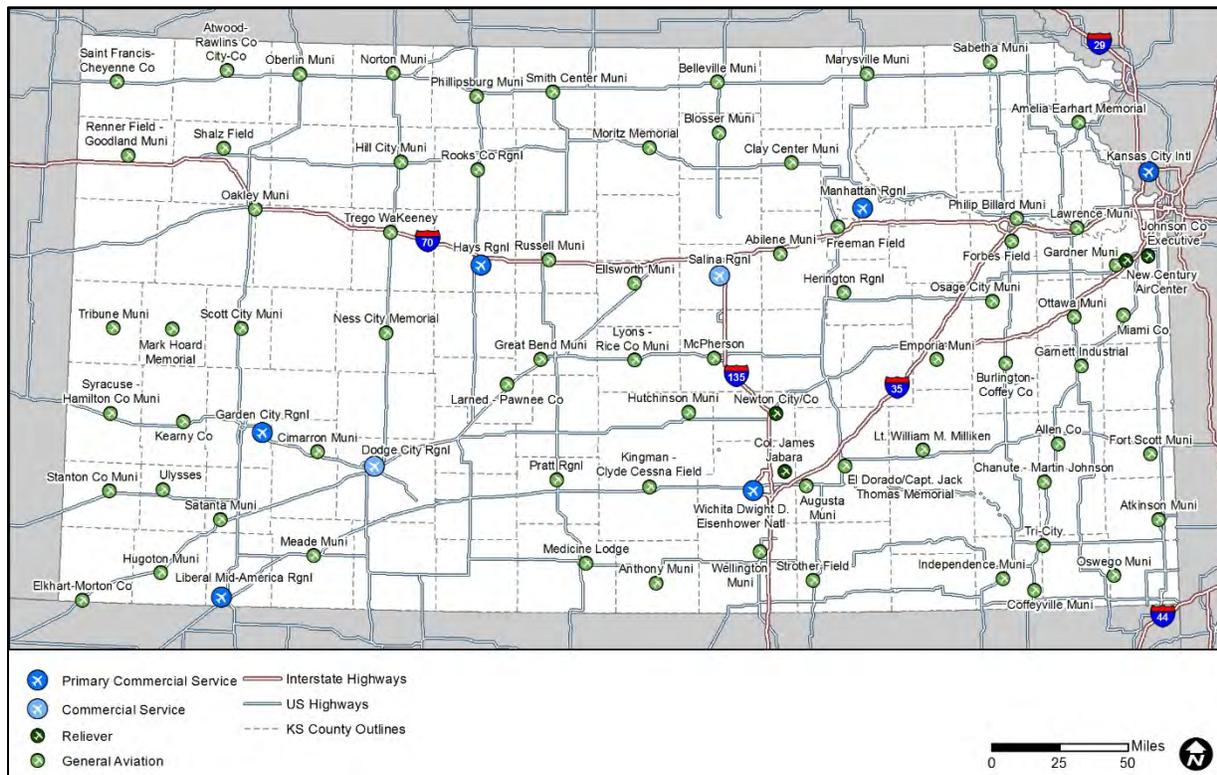
1.1 KASP OVERVIEW

The KASP accomplishes the three objectives listed above through a methodical process that starts with the goals of KDOT Aviation and determines how to evaluate those goals. The information needed to assess the goals is gathered during the inventory process. Once the inventory is completed, that data is used to develop forecasts of aviation activity, analyze the roles each airport performs in the system, and conduct an evaluation of the system and each individual airport. Based on these analyses, recommendations are made that are intended to improve the performance of the airport system. A cost estimate is developed as the last step of the process.

The recommendations and cost estimates presented in this document were developed at the system planning level, and are not meant to replace detailed engineering studies or to supersede planning or engineering work done as a result of individual airport master plans. Rather, this system plan is intended to complement those studies, providing additional support for projects at the system level.

Throughout the system planning process, the project team coordinated closely with KDOT Aviation, taking into account their input and comments. More details of each step in the process are outlined in the following subsections. The KASP is focused on the 80 NPIAS airports located in Kansas, shown in Figure 1-1.

Figure 1-1 Kansas NPIAS Airports



Source: CDM Smith, 2016

1.2 SYSTEM GOALS AND PERFORMANCE MEASURES

Goals and performance measures from the last KASP were reviewed. Recommendations were made to streamline or eliminate a number of the performance measures. However, the KASP is still based upon the following five overarching system goals:

Goal: Preserve the Aviation System (seven performance measures) - A well-maintained airport system promotes safety and mobility. Actions aimed at preserving the existing airport system help to maximize previous investment in the airport system.

Goal: Provide a Modern Network of Airports (three performance measures) - Modern airport facilities are key to satisfying the needs of an aviation market, particularly for customers using aircraft that are technologically sophisticated and demanding.

Goal: Provide a Network of Airports that is Accessible by the Air and the Ground (eight performance measures) - An effective airport system serves the largest number of residents, businesses, services, and attractions as is feasible. Convenient access to a state's airport system should be provided from both the ground and air.

Goal: Support Local and Statewide Economic Growth (three performance measures) - Airports are important to business attraction and retention. Companies often consider proximity to commercial and/or general aviation airports when selecting a business location.

Goal: Support the Promotion of Aviation Education (three performance measures) - Supporting aviation education is important to both the present and future of aviation in Kansas.

More details on the System Goals and Performance Measures are available in Section 2 of this report.

1.3 SYSTEM INVENTORY

The KASP inventory effort identified current facilities and conditions at Kansas system airports, while updating data collected during the 2008 KASP inventory effort. The inventory process and the data collected provided a sturdy foundation for understanding the existing system's conditions, while also providing a solid footing for subsequent analysis within the KASP.

To collect inventory data, a questionnaire was sent to each of the state's 80 NPIAS airports. The questionnaire gathered data on general airport information, airside facilities, landside facilities, airport services, airport activity, and other pertinent information such as airport documents and community outreach activities. More details on the System Inventory are available in Section 3 of this report.

1.4 FORECAST OF AVIATION DEMAND

Forecasts of based aircraft and general aviation operations were developed for each airport from a system level perspective. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast. They reflect conditions at the time of their evaluation; subsequent changes in airline activities or operators impacting passenger use will not necessarily be reflected in individual airport reports. A summary of aviation forecasts is provided in Table 1-1.

Table 1-1 Summary of Aviation Forecasts

	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Based Aircraft	2,403	2,472	2,544	2,698	0.6%
General Aviation Operations	1,328,141	1,347,463	1,367,520	1,415,948	0.3%
Commercial Service Operations	84,605	87,674	90,324	101,490	0.9%
Total Operations	1,412,746	1,435,137	1,457,844	1,517,438	0.4%
Enplanements	862,650	908,164	993,054	1,154,151	1.5%

Source: CDM Smith, Airport Master Plans, and FAA TAF. 2015.

More details on the Forecast of Aviation Demand are available in Section 4 of this report.

1.5 AIRPORT ROLE ANALYSIS

Airport roles were determined using a methodology that was based on the process that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type
- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The following describes these roles:

- **Commercial Service Airports:** Airports that accommodate scheduled national or regional commercial air carrier service. Unlike the other roles, Commercial Service Airports were identified using the National Plan of Integrated Airport Systems (NPIAS) definition of any airport with scheduled commercial airline service that enplanes 2,500 passengers or more annually.

- **Regional Airports:** Airports that accommodate regional economic activities, connect the state and national economies, and serve all types of general aviation aircraft.
- **Business Airports:** Airports that accommodate local business activities and general aviation users.
- **Community Airports:** Airports that serve a supplemental role in local economies, primarily serving smaller business, recreational, and personal flying.
- **Basic Airports:** Airports that serve a limited role in the local economy, primarily serving recreational and personal flying.

The results were compared to the airport roles from the 2008 Study and only those airports that experienced a significant shift were identified as having a role change. These airports are shown in Table 1-2. The number of Kansas NPIAS Airports in each airport role is detailed in Table 1-3.

Table 1-2 Airport Role Changes from the 2008 KASP

Associated City	Airport	Kansas Airport System Role in 2008	Recommended Airport System Role
Atchison	Amelia Earhart	Business	Community
Great Bend	Great Bend Municipal	Commercial Service	Regional
Olathe	Johnson County Executive	Business	Regional
Osage City	Osage City Municipal	Business	Community
Stockton	Rooks County Regional	Community	Business
Topeka	Topeka Regional	Commercial Service	Regional

Source: CDM Smith. 2015.

Table 1-3 Number of Kansas NPIAS Airports per Airport Role

State System Role	Number of Airports
Commercial Service	7
Regional	17
Business	33
Community	22
Basic	1

Source: CDM Smith, 2015

More details on the Airport Role Analysis are available in Section 5 of this report.

1.6 SYSTEM EVALUATION

Previously identified goals for the system were also used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently

adequate, where the system is deficient, and where duplications or surpluses in the system exist. Table 1-4 details benchmarks and current performance for each performance measure.

Table 1-4 System Evaluation Summary

Performance Measure	Benchmark	Performance
GOAL: PRESERVE THE AVIATION SYSTEM		
NPIAS Airports with primary runways meeting a minimum pavement condition index (PCI)	100% of primary runways to have a PCI of 70 or higher	Commercial Service: 42.9% Regional: 76.5% Business: 75.8% Community: 54.5% Basic: 100%
NPIAS Airports with clear approaches to the primary runway	100% of primary runway approaches to have clear obstructions	Commercial Service: 71.4% Regional: 47.1% Business: 21.2% Community: 9.1% Basic: 100%
NPIAS Airports with an adopted emergency response plan	100% of Commercial Service, Regional, and Business Airports	Commercial Service: 100% Regional: 47.1% Business: 0.0%
NPIAS Airports with an adopted wildlife management plan	100% of Commercial Service and Regional Airports	Commercial Service: 42.9% Regional: 17.6%
NPIAS Airports with an adopted security plan	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 71.4% Regional: 64.7% Business: 9.1% Community: 4.5%
NPIAS Airports with an adopted snow removal plan	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 100% Regional: 100% Business: 90.9% Community: 77.3%
NPIAS Airports meeting minimum facility and service objectives	100% of airports to meet benchmarks for their airport role	Performance varies by benchmark
GOAL: PROVIDE A MODERN NETWORK OF AIRPORTS		
NPIAS Airports within 50 nautical miles (NM) of an alternate airport with a precision or near-precision APV approach	95% of study airports	98.8% of study airports
NPIAS Airports with 24 access to aircraft fuel	100% of Commercial Service and Regional Airports	Commercial Service: 100% Regional: 100%
NPIAS Airports with jet fuel	100% of Commercial Service and Regional Airports	Commercial Service: 100% Regional: 94.1%

Performance Measure	Benchmark	Performance
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GOAL: PROVIDE A NETWORK OF AIRPORTS ACCESSIBLE BY AIR AND GROUND

Population and area within 90 minutes of a NPIAS Commercial Service airport	Population: 75% Area: 50%	Population: 55.6% (89.5% with MCI) Area: 58.3% (64.6% with MCI)
Population and area within 45 minutes of a NPIAS Commercial Service or Regional airport	Population: 90% Area: 70%	Population: 87.5% (87.7% with MCI) Area: 40.2% (40.3% with MCI)
Population and area within 30 minutes of a NPIAS airport	Population: 95% Area: 70%	Population: 91.4% Area: 54.9%
Population and area within 30 minutes of a NPIAS airport capable of supporting air ambulance service	Population: 94% Area: 72%	Population: 81.3% Area: 28.6%
Hospitals within 30 minutes of a NPIAS airport	100% of hospitals	85.4% of hospitals
Population and area within 30 minutes of a NPIAS airport capable of supporting physician flown aircraft	Population: 97% Area: 81%	Population: 88.0% Area: 44.7%
Population and area within 30 minutes of a NPIAS airport with an instrument approach	Population: 95% Area: 90%	Population: 89.3% Area: 47.4%
Population and area within 30 nautical miles of a NPIAS airport with on-site weather reporting	Population: 100% Area: 100%	Population: 99.1% Area: 96.7%

GOAL: SUPPORT LOCAL AND STATEWIDE ECONOMIC GROWTH

Population and area within 45 minutes of a NPIAS airport with a 5,000 foot, or greater runway	Population: 95% Area: 65%	Population: 92.8% Area: 58.5%
Airports with available ground transportation	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 100% Regional: 94.1% Business: 84.8% Community: 31.8%
Population and area within 45 minutes of a NPIAS airport meeting business user needs	Population: 91% Area: 56%	Population: 91.1% Area: 49.2%

GOAL: SUPPORT THE PROMOTION OF AVIATION EDUCATION

NPIAS Airports with community outreach programs	Informational - no benchmark	Commercial Service: 57.1% Regional: 76.5%
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Performance Measure	Benchmark	Performance
		Business: 45.5% Community: 27.3% Basic: 0.0%
NPIAS Airports supporting flight training	Informational - no benchmark	Commercial Service: 100% Regional: 94.1% Business: 93.9% Community: 72.7% Basic: 100%
Airports supporting airframe and powerplant (A&P) programs	Informational - no benchmark	1 airport: Col. James Jabara

Source: CDM Smith, 2015

1.7 SYSTEM RECOMMENDATIONS

Many of the above performance measures are provided strictly for informational purposes, and do not have associated recommendations. Some of these informational performance measures were analyzed within the future system, that being the system that would exist if all facility and service benchmarks were met. For example, if the twelve airports recommended to install an instrument approach met this benchmark, 30 minute drive time coverage of these airports would increase from 89.3 percent to 91.2 percent of the state's total population.

The other performance measures, those considered to be action-oriented, resulted in airport-specific recommendations. The most significant airport recommendations are a result of the facility and service benchmarks, part of the Preservation Goal. Table 1-5 lists these benchmarks for each airport role.

Table 1-5 Facility and Service Benchmarks by Airport Role

Facility and Service Benchmark Category	Commercial Service	Regional	Business	Community	Basic
Runway Length (feet)	5,500	5,000	4,000	3,200	N/A*
Runway Width (feet)	100	100	75	60	N/A*
Runway Surface	Paved	Paved	Paved	Paved	N/A*
Taxiway Type	Full Parallel	Full Parallel	Turnarounds	Turnarounds	N/A*
Best IAP	Precision	APV	Any IAP	Any IAP	N/A*
Rotating Beacon	Yes	Yes	Yes	N/A*	N/A*
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Wind Sock*	Wind Sock

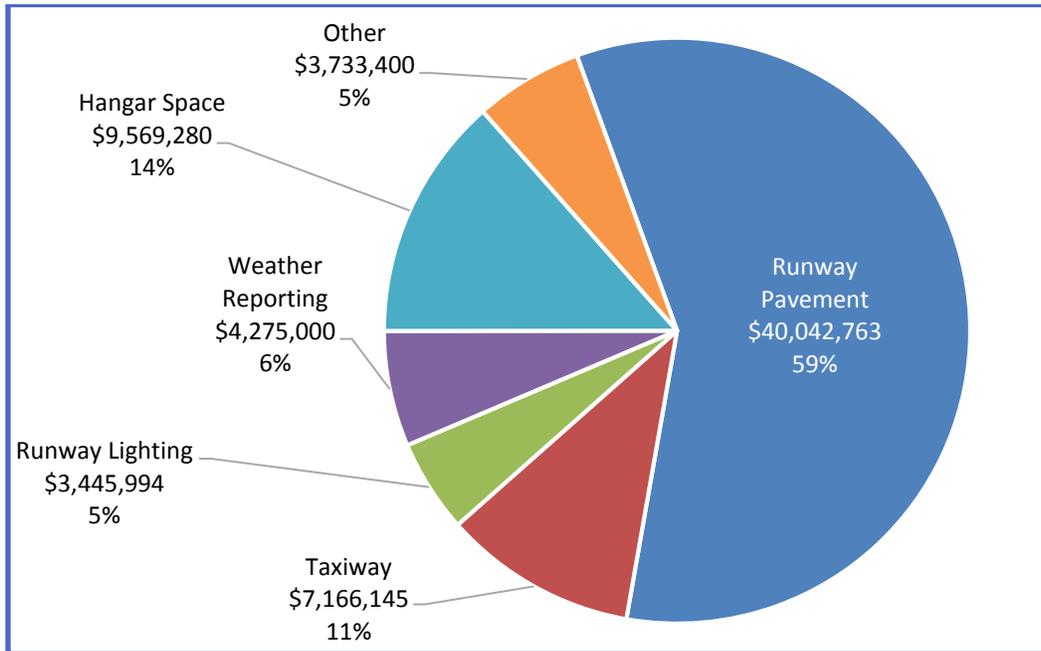
Facility and Service Benchmark Category	Commercial Service	Regional	Business	Community	Basic
VGSI	PAPI or VASI	PAPI or VASI	PAPI or VASI	N/A*	N/A*
Runway Lighting	MIRL	MIRL	MIRL	MIRL	N/A*
ALS or REILs	ALS	ALS or REILs	ALS or REILs	N/A*	N/A*
Weather Reporting	Automated	Automated	Automated	Automated	N/A*
Restroom	Yes	Yes	Yes	Yes	N/A*
Link to Ground Transportation	Yes	Yes	Yes	Yes	N/A*
Fuel	AvGas, Jet A, 24/7 Fuel	AvGas, Jet A, 24/7 Fuel	AvGas	N/A*	N/A*
Terminal	Terminal	Terminal	Terminal	N/A*	N/A*
Hangar Capacity	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	N/A*
Apron Capacity (square feet)	10,000	10,000	10,000	10,000	N/A*

**Not an Objective for KASP/KAIP project planning, but beacons are required by AC 150/5300-13A with runway edge lighting, and wind socks should be lighted at airports with runway lighting (per FAA).*

Source: CDM Smith, FAA, KDOT Aviation

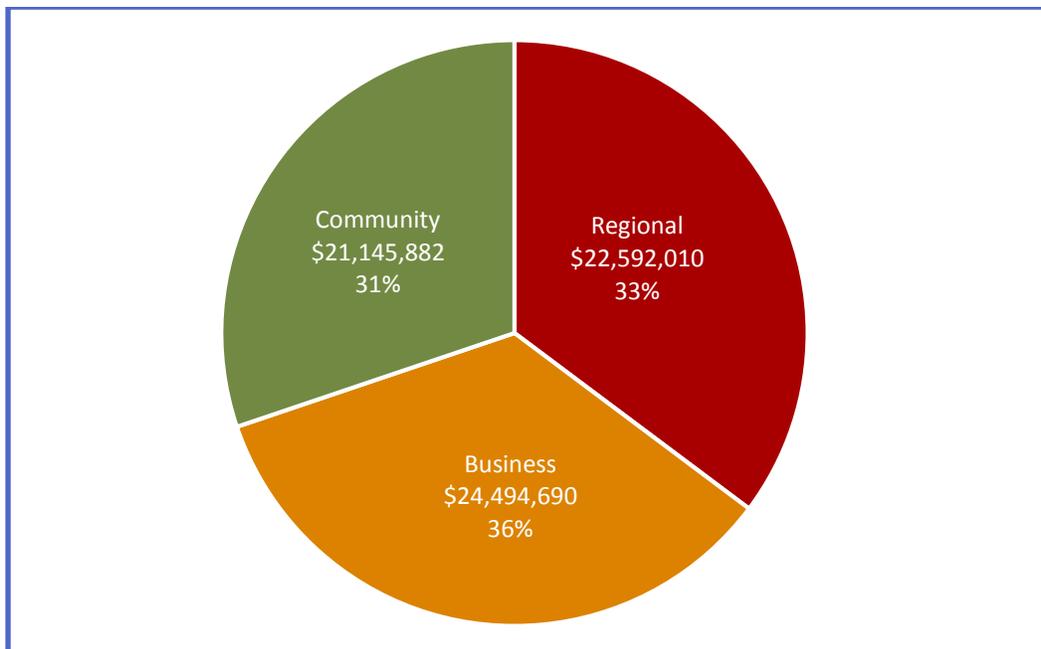
For each deficiency found, a recommendation was made. In total, 154 recommendations were made at 50 NPIAS airports in Kansas based on facility and service benchmarks. Cost estimates were made for these recommendations, with all costs related to facility and service benchmarks totaling over \$67 million. Figure 1-2 summarizes costs by project type, with more than half of the estimated project costs going to airport pavement improvements. Figure 1-3 summarizes costs by airport role, showing that costs are split evenly between the Regional, Community, and Business roles.

Figure 1-2 Estimated Costs by Project Type



Source: CDM Smith, 2015

Figure 1-3 Estimated Costs by Airport Role



Source: CDM Smith, 2015

SECTION 2 SYSTEM GOALS AND PERFORMANCE MEASURES

The purpose of the Kansas Airport System Plan (KASP) is to assess the needs of the state's airports, determine the extent to which the airport system fulfills the needs of the state, help justify funding for future airport improvements, and provide information for governmental and other entities concerning the value, use, and needs of the state's public use airports.

2.1 PLAN OVERVIEW

This plan provides the Kansas Department of Transportation (KDOT) Division of Aviation with an important planning tool that enables it to remain current with industry trends. This plan also helps KDOT Aviation determine how the Kansas airport system should be developed to respond to future challenges and to meet changes in demand. This study updates the previous KASP completed in 2008. In the future, it will be appropriate for the plan to continue to be updated at regular intervals. The 2016 KASP will provide the baseline for future updates and allow KDOT to track changes at both commercial and general aviation airports in future years.

Through the National Plan of Integrated Airport Systems (NPIAS), the Federal Aviation Administration (FAA) monitors the development needs of the national air transportation system. State aviation system plans are one of the primary inputs for updating the NPIAS. All general aviation and commercial airports in Kansas that are open to the public are part of Kansas' state airport system. However, not all system airports are included in the NPIAS. Only those Kansas airports included in the NPIAS are eligible for federal funding from the FAA. Therefore, the 2016 KASP is concerned with only the 80 NPIAS airports in Kansas.

The stated purpose of the KASP is to provide KDOT Aviation with guidelines to continue the successful development of its aviation system. Within this process, individual airport needs are considered within the broader framework of the entire Kansas system of NPIAS airports. Further, the KASP works in conjunction with the Kansas Long Range Transportation Plan (LRTP) adopted in 2008. The LRTP examines all of the state's transportation needs and sets the direction for making improvements and investments in all modes of transportation. The KASP will follow a similar approach while being based on current performance. By being performance-based, the KASP establishes accountability for improvements to the state's airports, and employs a systematic approach to the enhancement of the airport system through an ongoing process. With annual requests for grants the Kansas Airport Improvement Program (KAIP) that far exceed available financial resources, the KASP provides KDOT Aviation with information that it uses to do the following:

- Determine those system airports that are most essential to Kansas transportation needs and economic objectives;



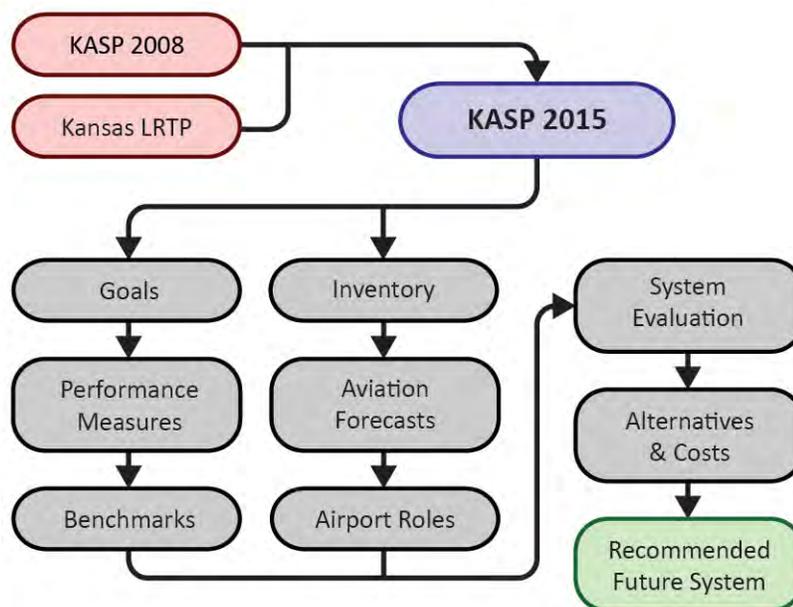
- Identify projects that have the greatest potential to improve the performance of the Kansas airport system, and;
- Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks.

It is important to note that the KASP is not a programming document. Inclusion of projects in this plan does not constitute a commitment of either state or federal funding. The KASP is a “top-down” planning study with recommendations that must still be implemented from the “bottom-up.” Implementation of specific airport improvements identified in this study remains the responsibility of individual airport owners. Some actions identified by the KASP could require the development of an updated airport master plan and in some cases an environmental assessment prior to actual development. Information contained in this document should be used by airports in Kansas as they evaluate and determine their individual development needs.

Figure 2-1 KASP Process

2.2 PLANNING PROCESS

The KASP is conducted in a series of separate but related technical steps. The process incorporates guidance from the Kansas LRTP and FAA system planning guidelines. Figure 2-1 outlines the process used to conduct the KASP when it was initiated in 2015.



This section details the initial steps in the system planning process, including establishing goals for the aviation system, the performance measures used to assess the system’s current performance in

achieving those goals, and specific benchmarks for each performance measure. Other steps in the system planning process include the following:

- **Inventory:** One of the first steps needed to update the KASP is the update of airport inventory data, including current facility, service, and activity data for each airport. This information was obtained from airport managers, KDOT Aviation, and other resources such as the FAA Facility Directory;
- **Forecasts:** It is important to have a general understanding of those airports in the Kansas NPIAS system that are likely to experience the most notable growth over the forecast

periods of five, 10, and 20 years. This task provides a 20-year forecast of key commercial and general aviation demand indicators;

- **Airport Role Analysis:** The FAA currently uses a national level classification system for airports that does not take into account localized factors such as population served, economic needs, geography, or accessibility. The KASP role analysis considers these factors as well as aviation-related needs to develop a classification system specific to Kansas. This classification system plays a large part in the system evaluation;
- **System Evaluation:** The evaluation of the Kansas airport system's performance is directly aligned with airport roles and the goals laid out later in this section. Certain performance measures apply only to certain levels of airport roles, while specific benchmarks for facilities such as runway length or approach capabilities may also vary by role. This analysis identifies basic needs at each airport in order to maximize their ability to meet the demands of their respective airport roles;
- **Alternatives & Costs:** The system evaluation creates a list of airport deficiencies as a result. For each of these deficiencies, a cost is estimated, and costs are aggregated for each airport, airport role, and type of deficiency. While these costs are planning-level estimates, they provide useful information to KDOT Aviation that helps in the prioritization of projects. Other system-wide benchmarks, such as total coverage of Kansas' population by a certain role of airport, may require other recommendations. These may include airport role changes or facility recommendations at airports in roles not specifically calling for that facility. For example, to achieve a higher coverage of airports with a 5,000-foot runway, an airport in a lower role may be recommended for such an extension, even if the minimum recommended runway length for that role is 4,000 feet; and,
- **Recommended Future System:** The results of the KASP and its various components culminate in the development of system recommendations. These recommendations are developed from both airport and statewide needs identified during the system evaluation process. The recommended future system should achieve, to the most feasible extent possible, the goals set in the KASP, and be able to serve the current and future needs of Kansas' population and economy.

2.3 SYSTEM GOALS

The KASP serves as a working blueprint for airport development within the state, capturing data that enables KDOT Aviation to make informed decisions related to the planning and development of its aviation system. The KASP supports KDOT's overarching goal to have an airport system that meets the needs of its residents, businesses, and visitors.

The KASP takes a strategic approach to identifying and evaluating the needs of the Kansas NPIAS airports, over a 20-year planning period. Part of this system planning process is to establish goals that describe an effective and efficient airport system. These goals are then translated into system performance measures and specific benchmarks. In later analyses, the benchmarks are used to



determine how well the existing system of NPIAS airports are currently serving the market needs typical of its assigned airport role. This benchmarking process makes it possible to identify adequacies and inadequacies in Kansas' system of NPIAS airports. Ultimately, the KASP provides KDOT Aviation with a framework to support informed decisions related to planning and developing the state's system of 80 NPIAS airports.

KDOT Aviation recognizes the importance of a healthy airport system to statewide, regional, and local economic and transportation infrastructures. Planning for a safe, efficient, and effective collection of airports is integral to the aviation system planning process. The first step in the KASP is therefore to identify goals for the Kansas system of NPIAS airports.

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Aviation and Kansas Aviation Advisory and Review Committee (KAARC). Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP. These goals are as follows:

- Preserve the aviation system;
- Provide a modern network of airports;
- Provide a network of airports that is accessible by air and ground;
- Support local and statewide economic growth; and,
- Support the promotion of aviation education.

Subsequent sections of the KASP evaluate system adequacies and deficiencies using these goals and their associated performance measures. Further discussion and definitions of the technical aspects of these performance measures, including all associated benchmarks, are contained in subsequent sections. These performance measures lay the groundwork for later analysis and are briefly discussed in the following sections.

2.3.1 Goal: Preserve the Aviation System

An important goal for KDOT Aviation in regards to the state's system of NPIAS airports is to maximize and preserve, where possible, the return on historic investment. A network of airports that is well-maintained promotes both safety and mobility for all users. Performance measures associated with the preservation goal are as follows:

- Airports with primary runways meeting a minimum pavement condition index (PCI);
- Airports with clear approaches to the primary runway;
- Airports with an adopted emergency response plan;
- Airports with an adopted wildlife management plan;
- Airports with an adopted security plan;
- Airports with an adopted snow removal plan; and,

- Airports meeting minimum facility and service objectives.

2.3.2 Goal: Provide a Modern Network of Airports

Another goal of the KASP is to provide modern facilities that meet the needs of Kansas and its airport customers. A good airport system should be adequately developed, providing infrastructure and facilities that meet both current and future demand. Performance measures associated with the goal of a modern network of airports are as follows:

- Airports within 50 nautical miles (NM) of an alternate airport with a precision or near-precision APV approach;
- Airports with access to 24-hour aircraft fuel; and,
- Airports with Jet fuel (Jet-A).

2.3.3 Goal: Provide a Network of Airports Accessible by Air and Ground

Adequate accessibility, both from the ground and the air, is an important goal for the Kansas system of NPIAS airports. The FAA, through the NPIAS, establishes guidelines to evaluate the accessibility of airports by ground transportation. These standards help to identify the percent of the state's population and area that are within convenient access of various types of system airports and facilities. Accessibility to airports that provide coverage for a full range of the general aviation fleet is an important trait of a healthy aviation system.

Air accessibility is influenced by factors such as the airport's instrument approach capabilities and on-site weather reporting facilities. Airports that are equipped to support operations in all weather conditions greatly enhance an airport system's safety, efficiency, and operability.

Ground accessibility is determined by the road network surrounding an airport, and the level of associated traffic congestion. Airports that are served by a well maintained and adequate road network complement the region economically and contribute to the area's overall transportation system.

The following performance measures use drive-times of varying lengths and are associated with the accessibility goal:

- Percent of population and area within 90 minutes of a Commercial Service airport;
- Percent of population and area within 45 minutes of a Commercial Service or Regional Airport;
- Percent of population and area within 30 minutes of a NPIAS airport;
- Percent of population and area within 30 minutes of an airport capable of supporting air ambulance service;
- Percent of Hospitals within 30 minutes of a NPIAS airport;



- Percent of population and area within 30 minutes of an airport capable of supporting physician-flown aircraft;
- Percent of population and area within 30 minutes of an airport with an instrument approach; and,
- Percent of population and area within 30 nautical miles of an airport with on-site weather reporting.

2.3.4 Goal: Support Local and Statewide Economic Growth

It is important for a state's airport system to support its economic growth and diversification. Employers typically consider the existence and efficiency of air transportation facilities when expanding or developing in a given geographic area. Typically, businesses require a minimum level of facilities and services to utilize an airport. However, airports alone, even those with advanced facilities and services, do not always spur economic growth and diversification. The following performance measures are associated with the goal of economic support:

- Percent of population and area within 45 minutes of an airport with a 5,000-foot, or greater, runway;
- Percent of Airports with available ground transportation; and,
- Percent of population and area within 45 minutes of an airport meeting business user needs.

2.3.5 Goal: Support the Promotion of Aviation Education

KDOT Aviation recognizes that airports can be aviation classrooms and are valuable learning resources and centers. Traditional educational programs and curricula do not typically prepare students for the wide variety of careers that exist in the field of aviation. This analysis will help KDOT Aviation gain a better understanding of the extent to which aviation education occurs at Kansas NPIAS airports. Performance measures associated with the aviation education goal are the following:

- Percent of Airports with community outreach programs;
- Percent of Airports supporting flight training; and,
- Percent of Airports supporting airframe and powerplant (A&P) mechanic programs.

2.4 NEXT STEPS

In subsequent sections of the KASP, these performance measures are discussed in greater detail and used to provide a report card for the Kansas airport system that reveals current system performance and deficiencies. Before this step, however, it is necessary to perform an inventory of system facilities, services, and activities, forecast future aviation activity, and stratify the Kansas system of NPIAS airports into role levels.

SECTION 3 SYSTEM INVENTORY

The purpose of the Kansas Airport System Plan (KASP) inventory effort is to identify current facilities and conditions at Kansas system airports, while updating data collected during the 2008 KASP inventory effort. The inventory process and the data collected provide a solid foundation for understanding the existing system's conditions, while also providing a foundation for subsequent analysis within the KASP. The data collected also serves as a valuable resource to the Kansas Department of Transportation (KDOT) Division of Aviation as it provides a means of updating KDOT's Kansas Aviation Portal (<http://ksaviationportal.ksdot.org>).

This section presents an overview of the KASP inventory effort.

3.1 INVENTORY PROCESS

The 2016 KASP is primarily focused on airports included in the National Plan of Integrated Airport Systems (NPIAS). Airports in the NPIAS are eligible to receive federal grants from the FAA Airport Improvement Program (AIP). Currently, 80 airports in Kansas are included in the NPIAS. Data on these airports, their facilities, services, and condition exists in various locations. To consolidate this data and ensure its accuracy, the inventory process was developed. The primary component of the inventory effort is a questionnaire sent to each of the state's 80 NPIAS airports. The questionnaire collects the following data from airports:

- General Information: Contact information, hours attended, and air traffic control tower data.
- Airside Facilities: Runway and taxiway data, runway lighting, NAVAIDS, automated weather reporting, and instrument approach data.
- Landside Facilities: Hangar and apron parking data, terminal building facilities, and automobile parking.
- Airport Services: Aviation education, aircraft fueling, maintenance, ground transportation, and other services.
- Airport Activity: Based aircraft, annual operations, and frequency of various activities such as recreational activity and business flights.
- Other Information: Airport policy documents such as emergency response plans and security plans, community events, airport communications, and industrial park information.

Data collected through the survey process was supplemented through various other sources such as the KDOT records, FAA 5010 Airport Master Records, and instrument approach plates.

For the purposes of this section of the KASP, all airport-specific data is presented alphabetically by associated city. All tabulation figures referenced in this section appear in Appendix A at the end of this document.

3.2 STUDY AIRPORTS

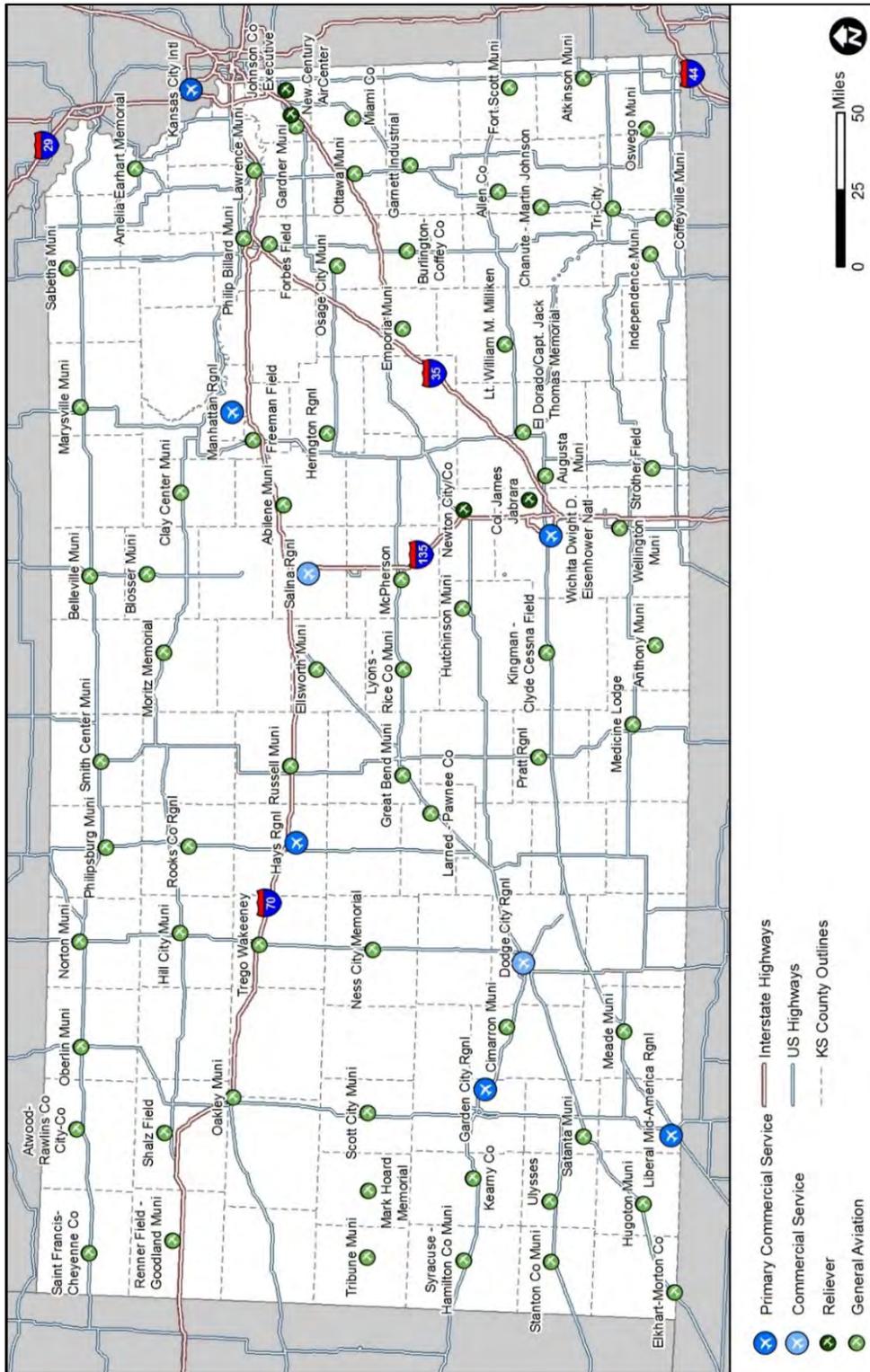
As stated above, the KASP focuses on the 80 Kansas airports included in the NPIAS. Table A-1 presents basic data on these 80 airports, including service level and roles within the NPIAS and which airports have an air traffic control tower (ATCT). Since NPIAS and asset roles can change, it is important to note that the NPIAS roles are taken from the National Plan of Integrated Airports Systems (NPIAS) 2016-2019 report, and Asset roles come from the FAA's 2012 Asset 1 and 2014 Asset 2 reports.

The NPIAS helps to establish a priority grouping for funding initiatives for those airports included in the federal system. In an effort to prioritize airports, classifications exist to distinguish between the different service roles among airports. Airport classifications in the NPIAS also represent different funding categories under which the distribution of federal aid, through the AIP, is determined. NPIAS airports are categorized by the type and level of service they provide to a community. The NPIAS is subject to change, based on system needs. At the time of this study, these service levels include:

- **Commercial Service:** Defined as airports that enplane 2,500 or more passengers annually and receive scheduled airline service.
- **Primary Commercial Service:** These airports enplane at least 10,000 passengers annually and are grouped into four sub-categories: large, medium, small hub, and non-hub. There are five Primary Commercial Service airports in Kansas: Garden City Regional, Hays Regional, Wichita Dwight D. Eisenhower National, Liberal Mid-America Regional, and Manhattan Regional.
- **Non-Primary Commercial Service:** These airports enplane at least 2,500 but fewer than 10,000 passengers annually, accounting for only 0.1 percent of all enplanements in the United States. There are currently two Non-Primary Commercial Service airports in Kansas: Dodge City Regional and Salina Regional.
- **General Aviation:** Airports that do not receive scheduled commercial service or do not meet the 2,500 enplanements threshold may be designated as general aviation airports.
- **Reliever:** General aviation access is often constrained and more expensive at larger, congested commercial service airports located in metropolitan areas. Airports are designated as Relievers within the NPIAS to address operational capacity shortfalls in these markets. There are currently four Reliever-designated airports in Kansas: Col. James Jabara, Newton City/County, New Century AirCenter, and Johnson County Executive.

Figure 3-1 depicts the location of NPIAS airports in Kansas, as well as the location of Kansas City International Airport in Missouri.

Figure 3-1 NPIAS Airports in Kansas



Source: CDM Smith, 2015

3.3 AIRPORT FACILITIES

This section of the system inventory presents information on airport facilities, including such airside facilities as runways and taxiways as well as navigational equipment and approach capabilities. Also presented are landside facilities such as aircraft parking, terminal facilities, and automobile parking.

3.3.1 Airside Facilities

Airside facilities are pavements and equipment that are directly involved in flight activities, including runways, taxiways, published instrument approach procedures (IAP), and weather reporting equipment. The following sections provide details on airside facilities at the 80 NPIAS airports in Kansas. The longest runways in Kansas are at Topeka Regional Airport (12,803 feet), Salina Regional (12,301 feet), and Wichita Dwight D. Eisenhower National (10,301 feet). In total, 37 of 80 Kansas NPIAS airports have a primary runway of at least 5,000 feet in length.

3.3.1.1 Runway Characteristics

Table A-2 presents data on the primary runway at each NPIAS airport in Kansas. For the purposes of this study, "primary runway" refers to the runway that is typically used most often and is capable of accommodating the widest variety of aircraft types and activity.

The pavement condition index (PCI) is a standard practice for visually rating the condition of airport pavements. The PCI is expressed as a number ranging from 0 (failed pavement) to 100 (new pavement). Pavement condition is affected by such factors as age, type of aircraft use and frequency of operations. Table A-2 details the primary runway PCI at each NPIAS airport in Kansas. The System Evaluation section of the KASP offers greater detail of the PCI and how it is used to make decisions regarding runway rehabilitation projects.

Table A-2 also presents data on the runway design code (RDC) of each primary runway. RDC is a coding system that relate airport design criteria to the operational and physical characteristics of the primary airplanes that are intended to operate at an airport. An RDC is represented by the Aircraft Categories (letters A through E), which refer to aircraft approach speed (shown in Table 3-1), and Airplane Design Groups (Roman numerals I through VI), which refer to wingspan (shown in Table 3-2).

Table 3-1 Aircraft Categories

Aircraft Category	Approach Speed
A	< 91 knots
B	91 to < 121 knots
C	121 to < 141 knots
D	141 to < 166 knots
E	166 knots or more

Source: AC 150/5300-13A

Table 3-2 Airplane Design Groups

Airplane Design Group	Aircraft Wingspan
I	< 49 feet
II	49 to < 79 feet
III	79 to < 118 feet
IV	118 to < 171 feet
V	171 to < 214 feet
VI	214 to < 262 feet

Source: AC 150/5300-13A

Currently, 19 Kansas NPIAS airports have an RDC in the “A” category, 28 have a “B,” 21 have a “C,” 11 have a “D,” and one airport has an “E” RDC.

The type of installed runway lighting is also noted on Table A-2. Airports typically install high (HIRL), medium (MIRL), or low (LIRL) intensity runway lighting, while certain airports use non-standard (NSTD) systems such as reflectors or cones. Of NPIAS airports in Kansas, 27 have HIRL, 41 have MIRL, and eight have LIRL. Four airports have some type of NSTD system, including a combination of LIRL and NSTD markings at Amelia Earhart Memorial Airport.

Finally, Table A-2 details taxiway types serving each NPIAS airport in Kansas. Of the 80 airports, 29 have a full parallel taxiway and 15 have a partial parallel taxiway. The other 36 airports have a turnaround system installed at the end of their primary runway.

3.3.1.2 Approach Types and Navigational Aids

Published instrument approach procedures (IAP) can greatly improve operational safety and efficiency, and are particularly crucial during times of inclement weather. An IAP allows a pilot to navigate to a runway without outside visual references until a point close enough to the runway that visual contact can be made. The more advanced the technology of the IAP, the closer the aircraft can come to the runway without having to make visual contact.

Published IAPs can be categorized generally into three groups: precision approach (PIR), approach with vertical guidance (APV), and non-precision (NPI). A precision instrument approach permits properly equipped aircraft the ability to land when ceilings are as low as 200 feet and visibility at least ½-mile. A near-precision approach provides vertical guidance but do not meet the criteria for a precision approach, and referred to as Approaches with Vertical Guidance (APV), and include approaches such as LNAV/VNAV, and localizer performance with vertical guidance (LPV). Table A-3 details approach capabilities at Kansas NPIAS airports. In total, 17 airports have PIR approaches, 28 have a APV approaches, an additional 7 have APV capabilities, and 17 have NPI approaches. Aircraft flying to the remaining 13 Kansas NPIAS airports rely on visual navigation.

Table A-3 details the best IAP published at each Kansas NPIAS airport, the runway end or ends that the IAP serves, as well as cloud ceiling and visibility minima. Published IAPs at Kansas NPIAS airports make use of the following equipment:

- Instrument Landing System (ILS): A ground-based instrument approach system that provides precision vertical and horizontal guidance to an aircraft approaching a runway. An ILS uses a combination of radio signals and lighting arrays to enable a safe landing during less than ideal conditions. An ILS is one system associated with a precision IAP;
- Global Positioning System (GPS): The GPS allows an aircraft pilot to determine location to within a very small margin of error using time signals transmitted from satellites. A minimum of three satellites is required to triangulate an aircraft's location;
- Area Navigation (RNAV): A method of navigation that allows an aircraft to choose any course within a network of navigation beacons. In conjunction with GPS and other navigational aids, RNAV commonly achieves APV capabilities;
- Distance Measuring Equipment (DME): Radio navigation technology that measures distance by measuring the time it takes a radio signal to travel from the DME to the aircraft. DMEs are often installed in conjunction with a VOR (see below);
- VHF Omni-directional Range (VOR): A type of radio navigation system for aircraft. VORs broadcast a VHF radio composite signal and data that allows the aircraft to determine a magnetic bearing from the station to the aircraft;
- Localizer (LOC): one component of an ILS. The localizer provides runway centerline guidance to aircraft; and,
- Non-directional Beacon (NDB): A radio transmitter at a known location, broadcasting in a non-directional pattern. NDBs are currently being phased out by the FAA in favor of less expensive GPS technology and approaches.

Table A-4 details the type of navigational aids (NAVAIDs) installed at each Kansas NPIAS airport. NAVAIDs provide assistance to pilots during the en-route phase of flight and on final approach to an airport, particularly during less than ideal weather conditions, allowing for visual identification of runways and proper alignment with runway centerlines and glideslopes, as well as items such as beacons and windsocks. NAVAIDs at Kansas NPIAS airports include:

- Runway End Identifier Lights (REILs): Listed on Table A-4 by runway end. Many runways only feature REILs on one end. Forty-three Kansas NPIAS airports have REILs on at least one runway end;
- Visual Glideslope Indicator (VGSI): Includes the precision approach path indicator (PAPI) and/or visual approach slope indicator (VASI). Listed on Table A-4 by runway end and the type of PAPI or VASI installed. For example, a listing of P4/P4 indicates that both ends of a runway have a four-light PAPI installed. Of the 80 NPIAS airports in Kansas, 60 have a VGSI system installed on at least one runway end;
- Approach Lighting System (ALS): Types of ALS systems installed at Kansas NPIAS airports vary, with the medium-intensity approach lighting system with runway alignment (MALSR) being the most common. Also installed are the approach lighting system configuration 2 (ALSF2) and short approach light system (SALS). In total, 18 of the 80 NPIAS airports in the state have an ALS;
- Rotating Beacon: The only NPIAS airport in Kansas that does not have an installed rotating beacon is Rooks County Regional in Stockton; and,
- Wind Indicator: An unlighted wind cone is the most basic of wind indicators available to airports. Of the 80 Kansas NPIAS airports, 77 have a lighted wind indicator, and three have an unlighted wind cone.
- Also detailed on Table A-4 is the presence of on-site weather reporting equipment at Kansas NPIAS airports. Sixty of the 80 NPIAS airports have an automated weather reporting system installed. The types of weather reporting systems installed at Kansas NPIAS airports include:
- On-Site Weather Reporting:
 - Automated Weather Observing System (AWOS): continuously transmits a 20- to 30-second weather observation of local conditions over a VHF frequency. The information is updated each minute. There are several varieties of AWOS depending upon the sensor systems which are installed, while the most common type is the AWOS-III, which observes temperature and dew point in degrees Celsius, wind speed and direction in knots, visibility, cloud coverage and ceiling up to 12,000 feet, and barometric pressure;
 - Automated Surface Observing System (ASOS): similar to the AWOS, the ASOS provides more standardization of weather reporting elements. Every ASOS reports barometric pressure, temperature, dew point, visibility, wind speed and direction, cloud ceiling, precipitation (including freezing rain), and rainfall accumulation. Like AWOS, ASOS stations continuously broadcast weather information over VHF that is updated every minute; and,
 - Automated Terminal Information System (ATIS): is a system typically found at airports with ATC, and provides a continuous broadcast of recorded airfield information.

3.3.2 Landside Facilities

Landside facilities at an airport include structures and areas that support flight activities, but are not directly involved in aircraft operations. Landside facilities include all airport buildings and parking areas for both aircraft and automobiles. Table A-5 details landside facilities at Kansas NPIAS airports. Items included in the KASP inventory of landside facilities are:

- **Aircraft Hangars:** For overnight and/or long-term storage of aircraft. Inventoried hangars included both T-hangars and conventional hangars. All 80 NPIAS airports have covered aircraft storage in the form of T-hangars and/or conventional hangars;
- **Aircraft Apron:** Large, paved areas set aside for parking aircraft. Apron areas often have tie-downs for securing aircraft while parked. Aircraft aprons are often adjacent to terminal areas. Seventy-six of the 80 NPIAS airports in Kansas have an aircraft apron;
- **GA Terminal:** A building that typically houses facilities catering to GA pilots and passengers such as pilot rest areas, restrooms, flight planning areas, conference rooms, food service, telephone, and internet facilities. Of the 80 NPIAS airports in Kansas, 73 have a GA terminal;
- **Public Restrooms:** Seventy of 80 NPIAS airports in Kansas have public restroom facilities;
- **Pilot Lounge:** A room set aside for pilots to rest. Seventy-one of 80 NPIAS airports in Kansas have a pilot lounge; and,
- **Automobile Parking:** Only two NPIAS airports in Kansas (Ness City Memorial and Rooks County Regional) do not have parking space dedicated for automobiles.

3.4 AVIATION SERVICES

Airports with a greater number of available aviation services are better positioned to attract activity. Table A-6 details a variety of services available at Kansas NPIAS airports. The availability of services such as fuel, maintenance, and ground transportation will attract transient pilots and visitors to an airport, increasing visitors and spending in the local area. These services include the following:

- **Fixed Based Operator (FBO):** A business catering to the needs of general aviation pilots, passengers, and aircraft. FBOs provide a range of services including fuel, storage, and maintenance of aircraft. Many FBOs also provide aircraft rental, charter services, and flight instruction. The buildings which house FBOs (typically the GA terminal) often include facilities and services for pilots and passengers, such as conference rooms, flight planning, catering, ground transportation, and arrangement accommodations. Forty-five NPIAS airports in Kansas are served by an FBO;
- **Aircraft Fuel:** Avgas is utilized by piston-engine aircraft, while Jet-A fuel is used in turbine-powered aircraft. Some aircraft still use automobile gasoline (mogas). Of the 80 NPIAS airports in Kansas, 75 offer avgas, 45 offer jet-A, and six have mogas available. A total of 74 airports offer at least one type of aviation fuel 24 hours per day;

- **Aviation Maintenance:** At Kansas NPIAS airports, maintenance services include major and minor airframe and power plant repairs as well as avionics work. In total, 46 NPIAS airports in Kansas offer at least some type of aircraft maintenance;
- **Rental Car:** This service includes cars available for rent at the airport by passengers and pilots through a rental car agency or FBO. It does not include services that will deliver a car to the airport upon request. Car rental is available at 14 NPIAS airports in Kansas;
- **Courtesy or Crew Car:** This service includes cars available to borrow from the airport or FBO on a short-term basis. A courtesy or crew car is available at 56 NPIAS airports in Kansas;
- **Public Transit:** Three of the 80 NPIAS airports in Kansas have intermodal transit access to modes such as bus or train. These airports are Burlington-Coffey County, Topeka Regional, and Wichita Dwight D. Eisenhower National; and,
- **Based Flight Training:** This service involves a business or individual on the airport offering flight instruction to the airport. Such training may take the form of single-engine private pilot courses or courses designed for commercial and specialty aircraft. Seventy-one NPIAS airports in Kansas offer based flight training.

3.5 AIRPORT PLANS AND POLICIES

Certain types of airport planning and policy documents are recommended to assure the safe and efficient operation of aircraft and airport personnel. Table A-7 details the existence of the following planning and policy documents at Kansas NPIAS airports:

- **Emergency Response Plan:** These plans include procedures for police, fire, and ambulance response to aircraft emergencies or security breaches. Seventeen airports have an emergency response plan;
- **Wildlife Management Plan:** These plans include steps to remediate the incursion of animals into aircraft operating areas. Such plans are useful for airports with nearby populations of birds, deer, livestock, or other wildlife that interfere with or could be harmed by aircraft using the airport. Eight of the 80 Kansas NPIAS airports have a wildlife management plan in place;
- **Security Plan:** These plans contain the steps and measures to be taken to protect the airport. Security at airports includes ensuring proper access to aircraft operations areas, safeguarding aircraft, and preventing theft of property. Security plans can range from comprehensive and detailed, such as those at large commercial airports, to relatively simple plans at smaller GA airports. Twenty NPIAS airports in Kansas have a security plan in place; and,
- **Snow Removal Plan:** These plans detail the procedures for clearing snow and ice from airport pavements. Of the 80 NPIAS airports in Kansas, 72 have a snow removal plan.

3.6 AVIATION ACTIVITY

The survey effort collected aviation activity information. This information includes total GA operations at each NPIAS airport in the state, the number of these operations that are itinerant versus local, and based aircraft, including based jets. Table A-8 details operations and based aircraft data at Kansas NPIAS airports.

- **Aircraft Operations:** An aircraft operation occurs when an aircraft performs either a takeoff or landing. For example, an aircraft arriving at an airport performs one operation when it lands. Upon departure, that aircraft's takeoff counts as a second operation for the airport. An itinerant operation is one where an aircraft departs or arrives from outside of the local traffic pattern. By GA operations, Newton City/County is the busiest NPIAS airport in Kansas with 64,894 operations, followed by Wichita Dwight D. Eisenhower National with 64,449; and,
- **Based Aircraft:** An aircraft is known to be based at an airport if it is stored at that airport for more than six months out of the year. This is essentially a count of all the aircraft known to be stored at an airport by local users. The airports with the largest based aircraft counts in Kansas are Wichita Dwight D. Eisenhower National with 213, followed by Newton City/County with 129, Augusta Municipal with 111, and Johnson County Executive with 110.

3.7 SUMMARY

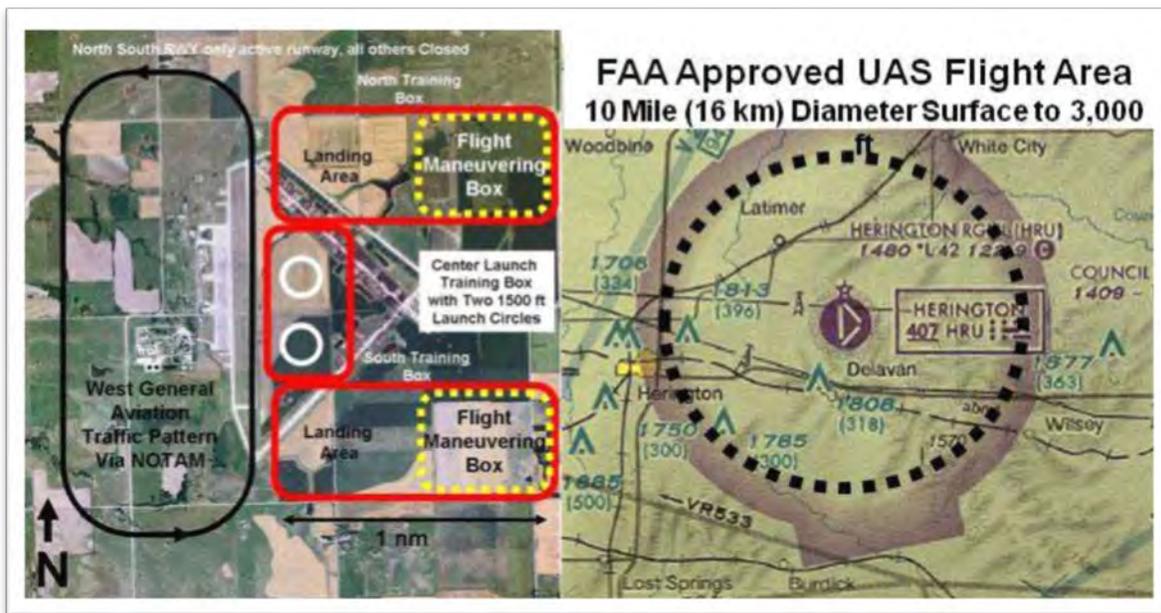
The 2016 KASP inventory effort confirms that Kansas boasts a diverse and active aviation system. This data is a snapshot of the Kansas aviation system, and can be compared to both past and future inventory efforts to evaluate the growth and evolution of the system. In essence, this inventory forms the basis of both current and future "report cards" of the Kansas aviation system. As KDOT Aviation and state and local decision-makers make future funding decisions, the KASP can be expected to be an integral resource.

3.8 UAS OPERATIONS ADDENDUM

Within this study's KASP inventory is the assumption that Unmanned Aircraft Systems (UAS) will increase their presence amid emerging civilian and commercial UAS interest. Consequently, KDOT Aviation has created the concept of Kansas UAS Operations Centers as a designation that can help facilitate technical and operational advancements as part of promoting the UAS industry in the state. A Kansas UAS Operations Center is defined by KDOT Aviation as *an aviation facility and geographic location with demonstrable support for UAS maintenance, operations and future missions*. This definition focuses on airports only for UAS benefitting from airport infrastructure to operate. Typically, this will be UAS with a Special Airworthiness Certificate, not Small UAS operating with a COA or Section 333 exemption. Presently, FAA does not consider all small UAS operations as aeronautical activity that must be considered by NPIAS airports as part of their grant assurances.

KDOT Aviation used several workshops in 2015 to explore UAS for use in agriculture, public safety, by small businesses, for mapping/surveying and academic research. The resulting consensus has been that UAS technology is construed as aviation’s new horizon, which Kansas is to expand without hesitation for economic and social benefits. By further considering the KASP inventory, “Kansas UAS Operations Centers” is a valid concept for future use. For example, local efforts in Herington created the Herington Unmanned Flight Facility (Figure 3-2) at Herington Regional Airport (HRU).

Figure 3-2 HUFF Layout Applied at Herington Regional Airport



Source: KDOT Division of Aviation

New hangar space and pavement improvements, combined with designated UAS operational areas to separate manned and unmanned aircraft, could conceivably count HUFF as a Kansas UAS Operations Center. The designation would further acknowledge such attributes as the rural location associated with agriculture (and reasonable proximity to the Department of Agriculture’s headquarters in Manhattan), plus demonstrable local interest congruent with state goals, whereby the designation can assist marketing efforts for the sake of business and job development. Other examples show a range of potential “Kansas UAS Operations Centers,” from activities in Salina via Kansas State University’s Polytechnic Campus for its UAS operations at a pavilion constructed on-site at Salina Regional Airport (SLN), to schools like Wichita State University and the University of Kansas for their participation in a FAA-designated Center of Excellence for UAS research and development.

In addition to system capabilities for UAS, KDOT Aviation plans to harness UAS potential through dedicated UAS staff and collaborations with other departments of state government and industry.



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SECTION 4 FORECAST OF AVIATION DEMAND

The development of aviation activity projections for the airports included in Kansas's aviation system is an essential step in assessing the adequacy of the system. Activity forecasts focus on three areas: based aircraft, aircraft operations, and enplanements. Based aircraft are the total number of active general aviation aircraft that are either hangared or tied down at an airport. Aircraft operations are defined as the number of takeoffs and landings. If an aircraft departs from an airport, and returns, this is counted as two operations. Enplanements are the number of passengers that board a commercial service aircraft. All forecasts provide data for the base year (2014), and for 5-year (2019), 10-year (2024), and 20-year (2034) intervals.

4.1 GENERAL APPROACH TO FORECASTING

The forecasts were developed using input from the Kansas Department of Transportation Division of Aviation. This approach includes a summary of historic aviation activity. As noted in the previous aviation system plan, aviation activity is often tied to changes in regional demographics, such as population and employment. Therefore, a summary of those demographic trends in Kansas is examined.

Demand projections generally fall into two distinct categories: general aviation and commercial service. Significant differences in these two sectors of the aviation industry call for different methodologies used in forecasting. Forecasts for commercial service airports were obtained from the FAA Terminal Area Forecast (TAF) issued in January 2015, reasoning that the FAA would provide adequate detail and analysis for these airports.

The forecasts of general aviation activity start with the number of based aircraft at each airport. Methods used in the previous aviation system plan were reviewed and several methods of forecasting aviation activity were then developed and compared for purposes of selecting the preferred forecast for based aircraft. The same process was followed for general aviation operations, which are detailed in the following subsections:

- Kansas Historical Aviation Activity
- Kansas Demographic Forecasts
- Based Aircraft Forecasts
- General Aviation Operations Forecasts
- Commercial Service Operations Forecasts
- Commercial Service Enplanements
- Summary

General aviation activity represents all facets of civil aviation, except scheduled activity by certificated air carriers. Projections of based aircraft and general aviation operations were prepared for the system airports in Kansas. These terms are defined as follows:

- **Based aircraft** - The total number of general aviation aircraft that are stored in either hangars or tie downs at an airport, as reported from the National Based Aircraft Inventory database, provided by KDOT. Topeka Regional did not submit data to the National Based Aircraft Inventory, so TAF data was used instead.
- **Operations** - An operation is defined as a landing or a takeoff. In the case of a touch-and-go, where an aircraft executes both a landing followed promptly by a takeoff, two operations are tabulated. Operations data for 2014 was obtained from the FAA TAF issued in January 2015.

It is important to note that general aviation activity occurs at all of the airports in Kansas's system, including the commercial service airports. Therefore, projections of these two activity indicators were prepared for all 80 Kansas system airports.

In each subsection, overview tables of data are provided, with detailed airport by airport data found in Appendix B.

4.2 KANSAS HISTORICAL AVIATION ACTIVITY

This section examines the past 10 years of aviation activity at the 80 NPIAS airports in Kansas, based on FAA TAF data. Table 4-1 shows the number of based aircraft found in the state in 2004 and 2014, along with the average annual growth rate over that 10-year period.

Table 4-1 Based Aircraft at Kansas NPIAS Airports, 2004-2014

Airport Type	2004	2014	Average Annual Growth Rate
Commercial Airports	625	563	-1.0%
General Aviation Airports	2,279	1,840	-2.1%
Total	2,904	2,403	-1.9%

Source: FAA National Based Aircraft Inventory and TAF. Prepared February 2016.

It is apparent from Table 4-1 that Kansas has experienced a decline in the number of general aviation aircraft based in the state. This may, in part, be attributed to the implementation of the National Based Aircraft Inventory program, which attempts to verify the number of aircraft based at an airport. No such program was in place in 2004, so the unverified based aircraft count of 2004 may be artificially higher than the verified count of 2014.

However, aircraft operations indicate that aviation in Kansas has experienced an upsurge in the past 10 years. As shown in Table 4-2, over the last 10 years, aviation operations have increased at an annual average growth rate of 1.9 percent.

Table 4-2 Total Operations at Kansas NPIAS Airports, 2004-2014

Airport Type	2004	2014	Average Annual Growth Rate
General Aviation Operations	1,094,362	1,328,141	2.0%
Commercial Service Operations	85,757	84,605	-0.1%
Military Operations	62,969	82,959	2.8%
Total Operations	1,243,088	1,495,705	1.9%

Source: FAA TAF. Prepared February 2016.

General aviation, comprising the largest segment of aircraft operations by far, drove the growth, increasing to more than 1.3 million operations in 2014 from just under 1.1 million operations in 2004. Commercial service operations remained steady at approximately 85,000 operations over the 10-year period, and military operations increased at an average annual rate of 2.8 percent, adding approximately 20,000 operations over the 10 years.

4.3 KANSAS DEMOGRAPHIC FORECASTS

The magnitude of aviation activity is linked to the demand that is generated within the state. While some activity is driven by visitors to Kansas, much of the growth in aviation activity results from its residents and businesses. As population, and employment, rises in the state, demand for airline travel, air cargo shipments, personal flying, and other aviation-related activities also rises. This section looks at how the demographics of Kansas are expected to change over the forecast period.

Table 4-3 illustrates the growth in Kansas population and indicates that the population of Kansas will increase at an annual average rate of 0.5 percent, increasing from 2.9 million residents in 2016 to nearly 3.2 million residents in 2035. Employment in the state is projected to increase even more rapidly, growing at 1.1 percent per year leading 2016 employment in the state to increase from 1.9 million to nearly 2.4 million by 2035.

Table 4-3 Demographic Forecasts

Demographic	2015	2035	Average Annual Growth Rate
Population	2,916,705	3,195,809	0.5%
Employment	1,916,499	2,375,093	1.1%

Source: U.S. Census Bureau, and Wichita State University Center for Economic Development and Business Research. Prepared October 2015.

The Center for Economic Development and Business Research of Wichita State University developed these forecasts using assumptions applied at the county level. Both population and employment

forecasts accounted for the net migration of people into the state. These forecasts assume that trends such as urban concentration, and the aging of the population, will continue into the future. As a result, Kansas is expected to have a population and workforce whose growth will steadily slow over time, concentrate in urban centers, gradually age, and become more ethnically diverse.

4.4 BASED AIRCRAFT FORECASTS

The based aircraft forecast methodologies, developed by KDOT during the previous plan, were reviewed for applicability and relevance. The review found that each were suitable for analysis with the current system plan, and were updated accordingly. The results of each methodology are summarized in Table 4-4 by commercial service airports and general aviation airports. Note that since the forecasts for commercial service airports were obtained from the FAA TAF issued in January 2016, the forecasts for the commercial service airports remain the same for all three methods. The three methodologies used were:

Population Growth Methodology - The population growth methodology uses projections of Kansas' population growth to develop projections of based aircraft through the planning period. Based on projected population growth rates in each county, fixed growth rates were applied to each airport's based aircraft count. For those airports in counties with negative or no population growth, based aircraft were held steady through the planning period. Airports in counties with growth rates up to 0.5 percent annually were assumed to grow their based aircraft at a 0.2 percent annual growth rate. Airports in counties with greater than a 0.5 percent population growth were assumed to increase their based aircraft count at an annual rate of 1.0 percent. In this methodology, shown in Table 4-4, based aircraft at NPIAS airports are projected to increase from 2,403 aircraft in 2014 to approximately 2,698 aircraft in 2034, representing an average annual growth rate of 0.6 percent.

Table 4-4 Based Aircraft Forecast Using Population Projections

Airport Type	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Commercial Airports	563	593	625	696	1.1%
General Aviation Airports	1,840	1,879	1,919	2,002	0.4%
Total	2,403	2,472	2,544	2,698	0.6%

Source: CDM Smith. Prepared February 2016.

Employment Growth Methodology - The employment growth methodology is similar to the population growth methodology but uses projections of Kansas' employment growth in place of population growth to develop projections of based aircraft through the planning period. Based on projected employment growth rates in each county, fixed growth rates were applied to each airport's based aircraft count. For those airports in counties with negative or no employment growth, based aircraft were held steady through the planning period. Airports in counties with growth rates up to 1.1 percent annually were assumed to grow their based aircraft at a 0.6 percent annual growth rate. Airports in counties with greater than a 1.1 percent employment growth were

assumed to increase their based aircraft count at an annual rate of 2.1 percent. In this methodology, shown in Table 4-6, based aircraft at NPIAS airports are projected to increase from 2,403 aircraft in 2014 to approximately 2,917 aircraft in 2034, representing an average annual growth rate of 1.0 percent.

Table 4-5 Based Aircraft Forecast Using Employment Projections

Airport Type	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Commercial Airports	563	593	625	696	1.1%
General Aviation Airports	1,840	1,927	2,025	2,221	0.9%
Total	2,403	2,520	2,650	2,917	1.0%

Source: CDM Smith. Prepared February 2016.

FAA Forecast Approach - The FAA Forecast methodology uses a top-down approach. In this scenario, Kansas' share of total U.S. active general aviation aircraft and the market share of each study airport are assumed to remain constant from 2014 out through the end of the planning period. Based on these assumptions and active general aviation aircraft projections presented in FAA's Aerospace Forecasts Fiscal Years 2015-2035, a statewide projection of based aircraft is developed, which are then proportionally allocated amongst the study airports. Using this approach, based aircraft at NPIAS airports in Kansas are projected to increase from 2,403 aircraft in 2014 to 2,663 in 2034, representing an average annual growth rate of 0.5 percent, as shown in Table 4-6, while All three of the previously mentioned based aircraft forecasts are summarized in Table 4-7.

Table 4-6 Based Aircraft Forecast Using FAA Forecast Growth Rates

Airport Type	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Commercial Airports	563	593	625	696	1.1%
General Aviation Airports	1,840	1,840	1,851	1,967	0.3%
Total	2,403	2,433	2,476	2,663	0.5%

Source: FAA Aerospace Forecasts Fiscal Year 2015-2035 and CDM Smith, February 2016.

Table 4-7 Comparison of Based Aircraft Forecasts

Forecast	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Population Growth	2,403	2,472	2,544	2,698	0.6%
Employment Growth	2,403	2,520	2,650	2,917	1.0%
FAA Forecast	2,403	2,433	2,476	2,663	0.5%

Source: CDM Smith. February 2016.

The difference between the employment growth method, the highest growth forecast, and the FAA forecast, the lowest growth forecast, is only 254 aircraft, or about 10 percent of the base year aircraft. With such a narrow range of outcomes, it stands to reason that the middle forecast - population growth - should be chosen as the preferred forecast since it falls within that narrow range. Furthermore, it is in the lower end of the range, making it a slightly more conservative estimate of based aircraft growth. The population growth methodology is used as the preferred based aircraft forecast.

4.5 GENERAL AVIATION OPERATIONS FORECASTS

Projections of general aviation operations at Kansas' airports are presented in the following sections. As with all the forecasts in this section, the time horizon is 20 years and the base year for the forecast is 2014. The methodologies used in the last system plan to project general operations at Kansas' airports were evaluated and were determined to be appropriate for use in this system plan. The following forecast methodologies for aircraft operations were assessed and analyzed for the KASP:

Operations per Based Aircraft (OPBA) Methodology - The OPBA methodology uses the results of each airport's preferred forecast of based aircraft and multiplies that number by an appropriate number of general aviation operations per based aircraft to yield projected total annual general aviation aircraft operations for each airport. The OPBA ratio represents all general aviation operations, not just those conducted by the based aircraft. Each general aviation airport's 2014 OPBA ratio was used to develop these projections. The forecast of general aviation operations at the commercial service airports was obtained from the FAA TAF. The preferred based aircraft projections from the population growth forecast were used as part of this projection technique. This methodology produces a 2034 estimate of 1,415,948 general aviation operations at Kansas' NPIAS airports. As shown in Table 4-8, this is an average annual growth rate of 0.3 percent over the 20-year period. See Appendix B for additional details.

Table 4-8 General Aviation Operations Forecast Using Operations per Based Aircraft

Airport Type	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Commercial Airports	237,404	231,563	233,660	237,978	0.0%
General Aviation Airports	1,090,737	1,115,900	1,133,860	1,177,970	0.4%
Total General Aviation Operations	1,328,141	1,347,463	1,367,520	1,415,948	0.3%

Source: FAA TAF and CDM Smith. Prepared February 2016.

Socioeconomic Methodology - The socioeconomic methodology uses projections of Kansas's employment growth to develop forecasts of general aviation operations. Based on current employment and aircraft operations statistics, a ratio of operations per employee at general aviation airports was developed for each Kansas county. This ratio is then applied to forecasts of

socioeconomic data to arrive at operations forecasts at each general aviation airport, as summarized in Table 4-9. As noted previously, general aviation forecasts for the commercial service airports were obtained from the FAA TAF, and are identical to the forecasts for commercial service airports found in Table 4-9. In this methodology, operations at general aviation airports are projected to increase from 1,328,141 in 2014 to 1,523,148 operations in 2034, representing a compound annual growth rate of 0.7 percent.

Table 4-9 General Aviation Operations Forecast Using Socioeconomic Growth Rates

Airport Type	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Commercial Airports	237,404	231,563	233,660	237,978	0.0%
General Aviation Airports	1,090,737	1,151,320	1,202,310	1,285,170	0.8%
Total General Aviation Operations	1,328,141	1,382,883	1,435,970	1,523,148	0.7%

Source: FAA TAF and CDM Smith. Prepared February 2016.

Table 4-10 summarizes the results of the two general aviation operations forecasts for comparison purposes. The operations forecast for 2034 for both methods are within 7 percent of each other, so there is not a large difference between the two methodologies.

Table 4-10 Comparison of General Aviation Operations Forecasts

Forecast	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
OPBA Forecast	1,328,141	1,347,463	1,367,520	1,415,948	0.3%
Socioeconomic Forecast	1,328,141	1,382,883	1,435,970	1,523,148	0.7%

Source: FAA TAF and CDM Smith. Prepared February 2016.

Of the two, the OPBA forecast method has a somewhat more conservative growth rate. Additionally, the OPBA forecast method provides for some differentiation at the individual airport level, projecting that those airports with the greatest increase in based aircraft can expect the greatest increase in operations, and those airports that are not expected to increase their based aircraft can anticipate operations to remain unchanged. For these reasons, the OPBA forecast is the preferred forecast of general aviation operations. See Appendix B for additional details.

4.6 COMMERCIAL SERVICE OPERATIONS FORECASTS

The forecast of commercial service operations is based upon the forecasts obtained from the FAA TAF. Commercial service operations represent those operations, scheduled or unscheduled, completed by air carriers, air taxi, or commuter aircraft. As shown in Table 4-11, the total number of commercial service operations at Kansas airports is expected to increase at an annual average rate of nearly 1 percent. This is driven by nearly 7,000 additional operations at Wichita Dwight D.

Eisenhower National Airport over the planning period, and growth rates of more than 1 percent at Garden City Regional, and Salina Regional.

Table 4-11 Commercial Service Operations Forecast

Associated City	Airport	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Dodge City	Dodge City Regional	5,301	5,301	5,301	5,301	0.0%
Garden City	Garden City Regional	3,576	3,949	4,141	4,558	1.2%
Hays	Hays Regional	8,405	8,405	8,405	8,405	0.0%
Liberal	Liberal Mid-America Regional	2,260	2,260	2,260	2,260	0.0%
Manhattan	Manhattan Regional	3,618	3,256	3,521	4,102	0.6%
Salina	Salina Regional	22,495	24,177	26,252	30,963	1.6%
Wichita	Wichita Dwight D. Eisenhower National	38,950	40,326	40,444	45,901	0.8%
Total		84,605	87,674	90,324	101,490	0.9%

Source: FAA TAF. Prepared February 2016.

All forecasts were obtained from the FAA TAF issued in January 2015.

4.7 COMMERCIAL SERVICE ENPLANEMENTS

The commercial service enplanement forecast, shown in Table 4-12, is based upon forecasts taken from the FAA TAF. Enplanements in Kansas are expected to increase at an annual rate of approximately 1.5 percent, increasing from 863,000 enplanements in 2014 to nearly 1.2 million enplanements in 2034.

Table 4-12 Commercial Service Enplanements Forecast

Associated City	Airport	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Dodge City	Dodge City Regional	3,828	2,277	2,317	2,397	-2.3%
Garden City	Garden City Regional	26,071	28,586	31,398	37,880	1.9%
Hays	Hays Regional	4,964	9,131	9,131	9,131	3.1%
Liberal	Liberal Mid-America Regional	4,331	2,915	2,985	3,125	-1.6%

Associated City	Airport	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Manhattan	Manhattan Regional	66,249	70,904	80,005	101,981	2.2%
Salina	Salina Regional	2,253	1,691	1,732	1,799	-1.1%
Wichita	Wichita Dwight D. Eisenhower National	754,954	792,660	865,486	997,838	1.4%
Total		862,650	908,164	993,054	1,154,151	1.5%

Source: FAA TAF. February 2016.

Most of the growth is expected to come from Wichita Dwight D. Eisenhower National Airport, which increases by nearly 243,000 enplanements over the planning period. However, other airports are projected to increase significantly. For example, growth at Manhattan Regional is expected to exceed 2 percent per year. With more than 66,000 enplanements in 2014, the TAF forecasts enplanements at Manhattan Regional to reach nearly 102,000 by 2034.

4.8 SUMMARY

The forecasts provided in this section are considered planning-level estimates and are based on information gathered from all available sources, with forecasts for the commercial service airports relying on the FAA TAF. These forecasts were developed at a system planning, rather than a master planning, level of detail. Comprehensive airport development plans will continue to provide guidance for actual airport development as individual airport plans are developed from an examination of each airport’s local conditions and operating environment. Base year 2014 data for based aircraft was obtained through the National Based Aircraft Inventory as provided by KDOT Division of Aviation. Base year 2014 operations came from the FAA TAF issued in January 2015. Table 4-13 summarizes the preferred statewide forecasts for the study airports.

Table 4-13 Summary of Kansas Aviation Forecasts

Forecast Category	2014	2019	2024	2034	Average Annual Growth Rate 2014 to 2034
Based Aircraft	2,403	2,472	2,544	2,698	0.6%
General Aviation Operations	1,328,141	1,347,463	1,367,520	1,415,948	0.3%
Commercial Service Operations	84,605	87,674	90,324	101,490	0.9%
Total Operations	1,412,746	1,435,137	1,457,844	1,517,438	0.4%
Enplanements	862,650	908,164	993,054	1,154,151	1.5%

Source: CDM Smith and FAA TAF. Prepared February 2016.

Both based aircraft and general aviation operations are expected to increase at modest rates. Commercial service operations are forecast to grow at a more rapid rate, due to forecasts from the FAA TAF issued in January 2016 that anticipate increases in airline operations, as discussed previously. The growth in total operations is expected to be below 1 percent annually, because general aviation operations account for more than 93 percent of total operations and temper the growth. Finally, enplanements in the state are expected to exceed 1 million passengers by the end of the planning period, increasing at an annual rate of approximately 1.5 percent.

SECTION 5 AIRPORT ROLE ANALYSIS

This study will examine the method by which the Kansas airport system was categorized in the previous system plan and evaluate whether changes to airport roles are necessary. In order to perform this evaluation, it is first necessary to review how the previous study stratified airports into their respective roles.

5.1 AIRPORT SYSTEM STRATIFICATION

The previous Kansas system plan classified airports into five categories. Those categories were based upon the role airports performed within the aviation system and were defined, as follows:

- **Commercial Service Airports:** Airports that accommodate scheduled national or regional commercial air carrier service are defined as Commercial Service Airports. Unlike other classifications, Commercial Service Airports were defined in the National Plan of Integrated Airport Systems (NPIAS) as any airport with scheduled commercial airline service that enplanes 2,500 passengers or more annually.
- **Regional Airports:** Airports that accommodate regional economic activities, connect the state and national economies, and serve all types of general aviation aircraft are classified as Regional Airports.
- **Business Airports:** Airports that accommodate local business activities and general aviation users are defined as Business Airports.
- **Community Airports:** These airports serve a supplemental role in local economies, primarily serving smaller business, recreational, and personal flying.
- **Basic Airports:** Airports that serve a limited role in the local economy, primarily serving recreational and personal flying are generally classified as Basic Airports.

With the exception of Commercial Service Airports, a total of 14 elements were used to evaluate each airport. These 14 elements were used to evaluate factors such as airport infrastructure, markets served, and regional economic benefits. For each factor, airports were scored relative to each other on a scale of zero to 10 points, using the following criteria:

- **Primary runway length** - Airports were evaluated based on the length of the primary runway, with more points awarded to airports with longer runways on the basis that the role airports serve in a system is related the length of the primary runway;
- **Total based aircraft** - Airports were also rated based on the total number of permanently based aircraft. Higher numbers of based aircraft typically reflects the airport role in meeting air transportation and economic needs of the market area it serves;

- Percent of itinerant to total operations - Itinerant operations are an important indicator of airport activity because it typically indicates demand from outside of the local area. Higher percentages of itinerant operations (as opposed to local operations) reflect the role the airport is playing in meeting the air transportation and economic needs of the market area it serves.
- Instrument Approach Procedure (IAP) - Airports were evaluated based on the type of the most demanding published IAP. The availability of IAPs indicates increased accessibility (during inclement weather) as well as increased safety of operations. The IAP classifications used in this analysis were precision instrument approach (PIR), approaches with vertical guidance, non-precision, and visual.
- Fuel facilities - Airports were evaluated on the types of fuel available. The various fuel types included Avgas, Jet-A, MOGAS, or a combination of these.
- Weather Reporting - Weather reporting facilities may be a vital component to services offered to pilots, especially airports with IAPs. Weather reporting facilities such as the automated surface observing system (ASOS) or automated weather observing system (AWOS) on-site, were used to evaluate each airport.
- Based jet aircraft - Since jet aircraft are deemed an indicator of demand for aviation services and facilities, airports were scored on the number of permanently based jet aircraft reported by the airport owner.
- Population served - In order to determine how many residents are adequately served by access to the national airspace system, the NPIAS airports were evaluated on total population within a 30-minute drive time of each Kansas airport.
- Employment served - Airports were rated based on total employment within a 30-minute drive time of each Kansas airport;
- Square miles - Airports were assessed based on the estimated number of square miles within a 30-minute drive time of each Kansas airport;
- Industry groups served - The number of businesses and overall employment are indicators of the economic viability of an area. Targeted businesses that have 20 or more employees are more likely to use commercial service and business aviation airports, than smaller businesses employing fewer people. Using GIS, the number of businesses that have the propensity to use aviation services were assessed for each airport's service area;
- Gross Regional Product - Airports were analyzed by the total gross regional product (GRP) captured within a 30-minute drive time. The associated counties that have higher GRP were noted to likely have more demand for aviation services;
- Retail sales - Airports were analyzed based on the total retail sales captured within a 30-minute drive time. Similar to GRP, those counties having higher retail sales are more likely to have more demand for aviation services; and,

- Registered pilots served - Airports were assessed on the estimated number of pilots within a 30-minute drive time of each Kansas airport, reasoning that pilots would concentrate around airports that were in higher demand.

For each of the 14 factors, airports were assigned a score ranging from low to high. For each factor, the airport with the highest numeric value was assigned to “high” to start the scoring process. In this process, “high” represents those airports that currently best meet or fulfill the factor being scored. Each airport was then assigned a score from zero to 10 based upon where its parameter fell relatively within the low to high ranking. If the airport had the highest parameter for that factor among all airports, it received a score of 10. If its parameter fell exactly in the middle of the parameters for all airports, it received a score of five, and so on.

The factor scores for each performance category were weighted and then summed to determine individual scores. The final scores for all airports were evaluated to determine where natural breaks occurred in the scoring process. These natural breaks were used to separate the airports into categories for role assignment. The 2008 system plan found that there were nine Commercial Service Airports, 14 Regional Airports, 35 Business Airports, 21 Community Airports, and one Basic Airport among the 80 NPIAS airports in Kansas.

The roles of the NPIAS airports in Kansas were re-evaluated using this stratification methodology with updated data. During this re-evaluation, role changes were recommended for those airports listed in Table 5-1.

Table 5-1 Recommended Role Changes for Kansas Airports

Associated City	Airport	Kansas Airport System Role in 2008	Recommended Airport System Role
Atchison	Amelia Earhart Memorial	Business	Community
Great Bend	Great Bend Municipal	Commercial Service	Regional
Olathe	Johnson County Executive	Business	Regional
Osage City	Osage City Municipal	Business	Community
Stockton	Rooks County Regional	Community	Business
Topeka	Topeka Regional	Commercial Service	Regional

Source: CDM Smith. September 2015.

It was expected that there would be some movement in relative scoring because the previous system plan took into account the non-NPIAS airports, whereas this evaluation only examined the 80 NPIAS airports. Additionally, because local demographics and economics are not static, some of the factors, such as employment or retail sales, were expected to cause minor changes in the relative rankings of the NPIAS airports. In order to maintain a degree of stability in the system, only airports with significant changes in relative ranking were considered for a role change. A significant shift was defined as one that moved an airport’s score more than two standard deviations away from the



average score for that role. Using this definition, three airports were identified as potential candidates for a change in role. Those airports are Johnson County Executive, Amelia Earhart Memorial, and Osage City Municipal.

Since the last system plan, two airports designated as Commercial Service Airports in the NPIAS have changed classification to General Aviation Airports - Topeka Regional in Topeka and Great Bend Municipal Airport. The scores of both of these airports placed them in the Regional Airport role.

This analysis also found that Rooks County Airport, which did not exist at the time of the last system plan, scored closest to the average of the Business Airports. The previous system plan assigned a prospective role of Community Airport to Rooks County Airport. While Rooks County's score does fall within two standard deviations of the average score of the Community Airports, that score is in the high end of the range. It is recommended that Rooks County Airport be assigned as a Business Airport since it appears demand for services in the region would support this airport role.

5.2 ASSET STUDY EVALUATION

In addition to the stratification of airports described previously, there are other stratification systems used to categorize airports in Kansas. Two such systems are used by the FAA. The NPIAS is a system used by the FAA to categorize airports eligible for FAA Airport Improvement Program grants. The NPIAS has several categories for commercial service airports, but only two for general aviation airports - reliever airports and general aviation airports. As a result, this system classified the 80 NPIAS airports in Kansas as consisting of one small hub commercial service airport, four primary non-hub commercial service airports, two nonprimary commercial service airports, three reliever airports, and 70 general aviation airports.

The NPIAS method of classification does not offer a great deal of differentiation among general aviation airports, which comprise the vast majority of airports in the NPIAS, as can be seen in Table 5-2, which also shows airports grouped by 2008 system plan classification in alphabetical order of associated city.

The FAA attempted to address this shortfall in their general aviation study entitled General Aviation Airports: A National Asset. This study defined five categories of general aviation airports - National, Regional, Local, Basic, and Unclassified. A follow up study in 2014 - Asset 2: In-Depth Review of the 497 Unclassified Airports - succeeded in assigning roles to a majority of the airports labeled Unclassified. Collectively, these two studies are referred to as the FAA Asset Study, and were intended to examine the roles that general aviation airports play in the national aviation system so that federal policies could effectively support the public interest. The FAA Asset Study roles for airports in Kansas are shown in Table 5-2.

Table 5-2 Airport Roles in Kansas

Associated City	Airport	Kansas Airport System Role in 2008	NPIAS Role	Asset Study Role
Dodge City	Dodge City Regional	Commercial Service	Nonprimary Commercial Service	Regional
Garden City	Garden City Regional	Commercial Service	Primary Nonhub	Primary Commercial Service
Great Bend	Great Bend Municipal ⁽¹⁾	Commercial Service	General Aviation	Local
Hays	Hays Regional	Commercial Service	Primary Nonhub	Primary Commercial Service
Liberal	Liberal Mid-America Regional	Commercial Service	Primary Nonhub	Primary Commercial Service
Manhattan	Manhattan Regional	Commercial Service	Primary Nonhub	Primary Commercial Service
Salina	Salina Regional	Commercial Service	Nonprimary Commercial Service	Regional
Topeka	Topeka Regional ⁽¹⁾	Commercial Service	General Aviation	Regional
Wichita	Wichita Dwight D. Eisenhower National	Commercial Service	Small Hub	Primary Commercial Service
Goodland	Renner Field - Goodland Municipal	Regional	General Aviation	Local
Hutchison	Hutchinson Municipal	Regional	General Aviation	Regional
Independence	Independence Municipal	Regional	General Aviation	Local
Iola	Allen County	Regional	General Aviation	Basic
Lawrence	Lawrence Municipal	Regional	General Aviation	Regional
McPherson	McPherson	Regional	General Aviation	Local
Newton	Newton City/County	Regional	Reliever	Regional
Oberlin	Oberlin Municipal	Regional	General Aviation	Local
Olathe	New Century AirCenter	Regional	Reliever	Regional
Pittsburg	Atkinson Municipal	Regional	General Aviation	Local
Pratt	Pratt Regional	Regional	General Aviation	Local

Associated City	Airport	Kansas Airport System Role in 2008	NPIAS Role	Asset Study Role
Topeka	Philip Billard Municipal	Regional	General Aviation	Local
Wellington	Wellington Municipal	Regional	General Aviation	Local
Wichita	Col. James Jabara	Regional	Reliever	Regional
Winfield	Strother Field	Regional	General Aviation	Local
Abilene	Abilene Municipal	Business	General Aviation	Local
Atchison	Amelia Earhart Memorial ⁽²⁾	Business	General Aviation	Local
Atwood	Atwood-Rawlins County City-County	Business	General Aviation	Basic
Augusta	Augusta Municipal	Business	General Aviation	Local
Burlington	Burlington-Coffey County	Business	General Aviation	Local
Chanute	Chanute - Martin Johnson	Business	General Aviation	Local
Coffeyville	Coffeyville Municipal	Business	General Aviation	Local
Colby	Shalz Field	Business	General Aviation	Local
Concordia	Blosser Municipal	Business	General Aviation	Basic
El Dorado	El Dorado/Capt. Jack Thomas Memorial	Business	General Aviation	Local
Elkhart	Elkhart-Morton County	Business	General Aviation	Basic
Ellsworth	Ellsworth Municipal	Business	General Aviation	Basic
Emporia	Emporia Municipal	Business	General Aviation	Local
Fort Scott	Fort Scott Municipal	Business	General Aviation	Local
Hill City	Hill City Municipal	Business	General Aviation	Basic
Hugoton	Hugoton Municipal	Business	General Aviation	Local
Johnson	Stanton County Municipal	Business	General Aviation	Local

Associated City	Airport	Kansas Airport System Role in 2008	NPIAS Role	Asset Study Role
Kingman	Kingman - Clyde Cessna Field	Business	General Aviation	Local
Larned	Larned - Pawnee County	Business	General Aviation	Basic
Marysville	Marysville Municipal	Business	General Aviation	Basic
Meade	Meade Municipal	Business	General Aviation	Basic
Medicine Lodge	Medicine Lodge	Business	General Aviation	Basic
Norton	Norton Municipal	Business	General Aviation	Local
Oakley	Oakley Municipal	Business	General Aviation	Basic
Olathe	Johnson County Executive1	Business	Reliever	Regional
Osage City	Osage City Municipal ⁽²⁾	Business	General Aviation	Basic
Ottawa	Ottawa Municipal	Business	General Aviation	Local
Parsons	Tri-City	Business	General Aviation	Local
Phillipsburg	Phillipsburg Municipal	Business	General Aviation	Basic
Russell	Russell Municipal	Business	General Aviation	Basic
Scott City	Scott City Municipal	Business	General Aviation	Local
Smith Center	Smith Center Municipal	Business	General Aviation	Basic
Syracuse	Syracuse - Hamilton County Municipal	Business	General Aviation	Local
Tribune	Tribune Municipal	Business	General Aviation	Local
Ulysses	Ulysses	Business	General Aviation	Local
Anthony	Anthony Municipal	Community	General Aviation	Basic
Belleville	Belleville Municipal	Community	General Aviation	Basic
Beloit	Moritz Memorial	Community	General Aviation	Local

Associated City	Airport	Kansas Airport System Role in 2008	NPIAS Role	Asset Study Role
Cimarron	Cimarron Municipal	Community	General Aviation	Basic
Clay Center	Clay Center Municipal	Community	General Aviation	Local
Eureka	Lt. William M. Milliken	Community	General Aviation	Basic
Gardner	Gardner Municipal	Community	General Aviation	Local
Garnett	Garnett Industrial	Community	General Aviation	Basic
Herington	Herington Regional	Community	General Aviation	Basic
Junction City	Freeman Field	Community	General Aviation	Local
Lakin	Kearny County	Community	General Aviation	Basic
Leoti	Mark Hoard Memorial	Community	General Aviation	Basic
Lyons	Lyons - Rice County Municipal	Community	General Aviation	Basic
Ness City	Ness City Memorial	Community	General Aviation	Basic
Oswego	Oswego Municipal	Community	General Aviation	Unclassified
Paola	Miami County	Community	General Aviation	Local
Sabetha	Sabetha Municipal	Community	General Aviation	Basic
St. Francis	St. Francis-Cheyenne County	Community	General Aviation	Basic
Stockton	Rooks County Regional ⁽³⁾	Community	General Aviation	Basic
Wakeeney	Trego Wakeeney	Community	General Aviation	Basic
Satanta	Satanta Municipal	Basic	General Aviation	Local

¹Recommended airport system role change to Regional Airport

²Recommended airport system role change to Community Airport

³Recommended airport system role change to Business Airport

Source: FAA and Kansas Airport System Plan (2007). September 2015.

The results of this study are useful for comparing a state’s airport system to other states or the national system. For example, the FAA Asset study found that there are nine Regional Airports in Kansas (including two nonprimary commercial service airports), 36 Local Airports, 29 Basic Airports, one Unclassified airport, and five primary commercial service airports. Table 5-3 shows the distribution of general aviation airport roles in Kansas and in the U.S.

Table 5-3 Airport Roles in Kansas

Asset Study Airport Role	Number of Kansas General Aviation Airports	Number of U.S. General Aviation Airports	Percent of Kansas Airports	Percent of U.S. Airports
National	0	84	0%	3%
Regional	9	468	12%	16%
Local	36	1,263	48%	43%
Basic	29	852	39%	29%
Unclassified	1	281	1%	10%
Total	75	2,948	100%	100%

Source: FAA Asset Study. November 2015.

As can be seen in Table 5-3, the distribution of FAA Asset Study roles is fairly similar between Kansas and the U.S. (with the notable exception of no airports in Kansas classified as National), indicating that, from the national perspective, the Kansas airport system conforms to what is seen at the national level. These roles can also be compared to the Kansas airport system role classifications as a check of reasonableness and identification of possible outliers.

It is worth noting that, with one exception, all airports identified as Regional in the Asset Study were classified as Regional Airports in the system plan. The one exception is Johnson County Executive airport, which is under consideration for a role change to Regional Airport, by KDOT Aviation, on the basis of its re-evaluated score. It is also worth noting that Johnson County Executive is the only airport designated as a NPIAS Reliever that is so far not classified as a Regional Airport in the state system plan.

It is important to note this role analysis is based on a “snapshot in time” of data gathered for base year 2014 and is only a starting point in Kansas’ system planning process. Based on analyses that were conducted in subsequent steps, some airports may be identified to serve a different role in the future for the system to function at its highest level.

In subsequent chapters, each airport will be analyzed to determine its future role within the Kansas airport system. This process evaluates if more advanced aviation services are needed to serve an area. This may indicate that a role change is needed for a particular airport. An underserved area could indicate the need for a different category of airport, or possibly development of a new airport.

5.3 FACILITY AND SERVICE OBJECTIVES

Once the roles of the NPIAS airports have been verified, the next step is to identify facilities and services that are appropriate for each airport role. Facility and service objectives delineated in this section are just that, objectives; they are not standards or requirements. It is possible that airports included in, or recommended for, an elevated functional role may be unable to achieve certain facility and service objectives. An airport's inability to meet all facility and service objectives for its functional role does not necessarily preclude that airport from filling its recommended role within the system.

Service objectives present the minimum level of development for the airport to meet its recommended system role. It is possible that some airports may have facilities or services that are in excess of those attached to its functional role. However, this in no way interferes with the airport fulfilling its role in the system.

Table 5-4 identifies recommended facility and service objectives for each of the five airport roles. These facility and service objectives are nearly identical to those found in the previous system plan. A review of the facility and service objectives from the previous system plan found that most of them were still appropriate and only minor changes were made to account for changes from the last system plan. For example, the instrument approach category was expanded to reflect the prevalence of GPS approaches with localizer performance with vertical guidance (LPV) that do not rise to the standards of a precision approach. Such approaches were not all that common when the last system plan was completed.

Table 5-4 Facility and Service Objectives

Facility and Service Category	Commercial	Regional	Business	Community	Basic
Runway Length (feet)	5,500	5,000	4,000	3,200	Maintain Existing
Runway Width (feet)	100	100	75	60	Maintain Existing
Runway Surface	Paved	Paved	Paved	Paved	Not an Objective
Taxiway Type	Full Parallel	Full Parallel	Turnarounds	Turnarounds	Not an Objective
Best Instrument Approach	Precision	APV	Any	Any	Visual
Rotating Beacon	Yes	Yes	Yes	Not an Objective*	Not an Objective
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Wind Sock*	Wind Sock
VGSI	PAPI or VASI	PAPI or VASI	PAPI or VASI	Not an Objective	Not an Objective
Runway Lighting	MIRL	MIRL	MIRL	MIRL	Not an Objective

Facility and Service Category	Commercial	Regional	Business	Community	Basic
ALS or REILs	ALS	ALS or REILs	ALS or REILs	Not an Objective	Not an Objective
Weather Reporting	Automated	Automated	Automated	Automated	Not an Objective
Restroom	Yes	Yes	Yes	Yes	Yes
Link to Ground Transportation	Yes	Yes	Yes	Yes	Not an Objective
Fuel	AVGAS, Jet-A, 24/7 Fuel	AVGAS, Jet-A, 24/7 Fuel	AVGAS	Not an Objective	Not an Objective
Terminal	Terminal	Terminal	Terminal	Not an Objective	Not an Objective
Hangar Capacity	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	Not an Objective
Apron Capacity (square feet)	10,000	10,000	10,000	10,000	Not an Objective

**Not an Objective for KASP/KAIP project planning, but beacons are required by AC 150/5300-13A with runway edge lighting, and wind socks should be lighted at airports with runway lighting (per FAA).*

Source: CDM Smith. FAA, KDOT Aviation, 2015.

A subsequent chapter of this report compares current facilities and services at system airports to the objectives presented in Table 5-4. From this comparison, enhancements for system airports will be developed.



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SECTION 6 SYSTEM EVALUATION

The Kansas system of NPIAS airports is divided into five roles: Commercial Service, Regional, Business, Community, and Basic, as defined in Chapter 5. The role stratification provides a baseline for evaluating the performance of the state's existing airport system. This includes defining facility and service objectives specific to each role, which helps measure the extent to which airports are capable of meeting their respective aviation markets. The system evaluation provides information in three main areas:

1. Where the current airport system meets Kansas' near and long-term aviation needs,
2. Where specific system deficiencies exist within the state, and
3. Where surpluses, or duplications, of service exist within the system.

The evaluation also provides the foundation for recommendations for the Kansas system of NPIAS airports, to be made in subsequent chapters of the KASP.

This chapter provides an analysis of the existing airport system's performance with respect to the five system goals established earlier in the KASP. These goals are:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

To measure the extent to which the Kansas system meets these goals, several performance measures have been established, each with a benchmark of preferred performance. The following sections analyze current system performance of these goals and performance measures. These analyses are based on data for base year 2014. Certain analyses involving the same set of airports that were analyzed in the 2008 system plan are compared to those previous results. However, it should be noted that this study was limited to NPIAS airports only, whereas the previous study included both NPIAS and non-NPIAS airports. As a result, most analyses cannot be compared to the previous system plan due to the differences in those airports evaluated.

GOAL: PRESERVE THE AVIATION SYSTEM

Kansas and the FAA have dedicated considerable resources to developing, maintaining, and improving its aviation system. As a result, it is important to protect this investment. The ability of the aviation system to provide a network of airports that is well maintained helps to promote safety and efficiency for all users.

While maintaining existing pavements, buildings, and equipment at NPIAS airports in Kansas is important, preservation of the state system is not limited to these items. A comprehensive approach to protecting each airport, and the state's investment, is required. Therefore, several performance measures were formulated for the goal of preserving the system, with safety, security, and efficiency of the airports in mind in addition to the maintenance of facilities and provision of aviation services. The preservation goal includes the following performance measures:

- Airports with primary runways meeting a minimum pavement condition index (PCI)
- Airports with clear approaches to the primary runway
- Airports with an adopted emergency response plan
- Airports with an adopted wildlife management plan
- Airports with an adopted security plan
- Airports with an adopted snow removal plan
- Airports meeting minimal facility and service objectives

PERFORMANCE MEASURE: AIRPORTS WITH PRIMARY RUNWAYS MEETING A MINIMUM PAVEMENT CONDITION INDEX (PCI)

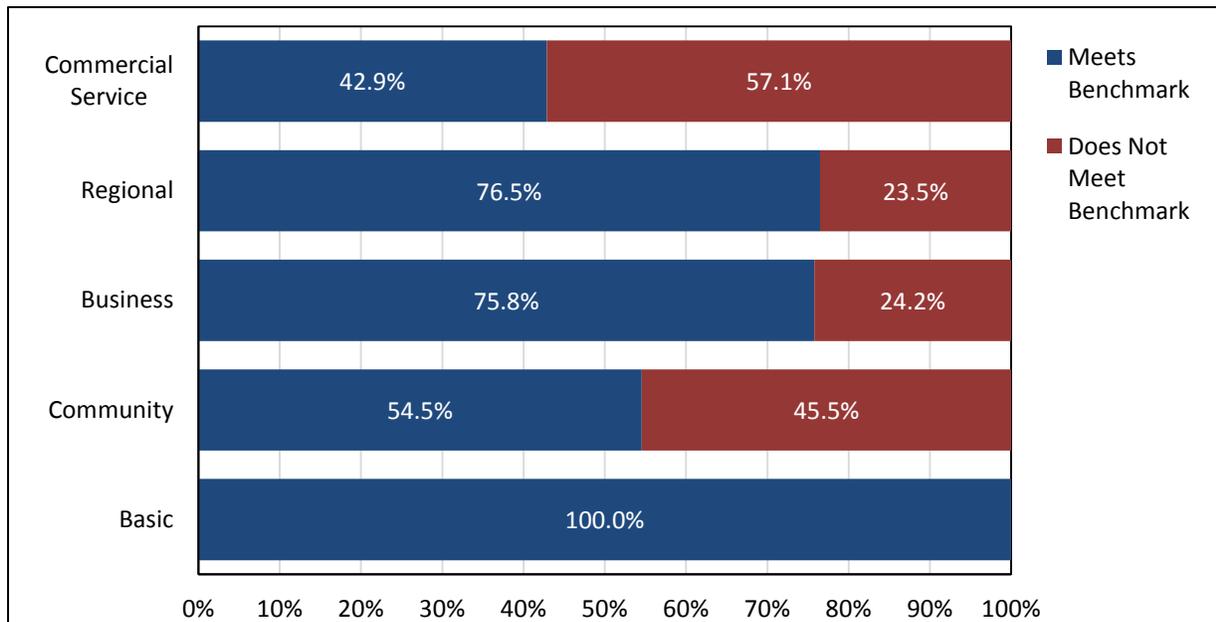
BENCHMARK: 100 PERCENT OF PRIMARY RUNWAYS WITH A PCI OF 70 OR HIGHER

Airport pavements are rated by engineers for condition, strength and durability. This qualitative analysis is known as a pavement condition index (PCI), and is the national standard for expressing the condition of an airport pavement. The PCI rating is expressed as a number ranging from 0 (failed pavement) to 100 (new pavement). Typically, the airport pavement condition is affected by age, type of aircraft use and frequency of operations. Therefore, it is typical for older pavements to exhibit a lower PCI without regular maintenance. Although PCIs are provided for all airport pavements, this performance measure focuses only on the study airports

Periodic maintenance has proven to be a cost-effective method to maintain runway pavements, which results in retaining a higher PCI. Therefore, a benchmark PCI of 70 was established for each primary paved runway in the Kansas NPIAS system. Primary runways which score below a 70 PCI will require maintenance in the short term, while those that score a PCI at, or above, 70 will likely require maintenance, or repairs, during the intermediate- and long-term planning periods.

Figure 6-1 reveals the percentage of airports that meet this benchmark, categorized by role. At least half of the primary runways in the Regional, Business, Community, and Basic roles meet the benchmark of a PCI of 70 or above. Runways at Commercial Service airports are the most in need of maintenance, with only three of the seven airports having a primary runway meeting this benchmark. However, of the four Commercial Service airports not meeting the benchmark, only one (Dodge City Regional) has a primary runway PCI below 50.

Figure 6-1 NPIAS Airports with a PCI of 70 or Greater on the Primary Runway



Source: CDM Smith, 2015

PERFORMANCE MEASURE: AIRPORTS WITH CLEAR APPROACHES TO THE PRIMARY RUNWAY

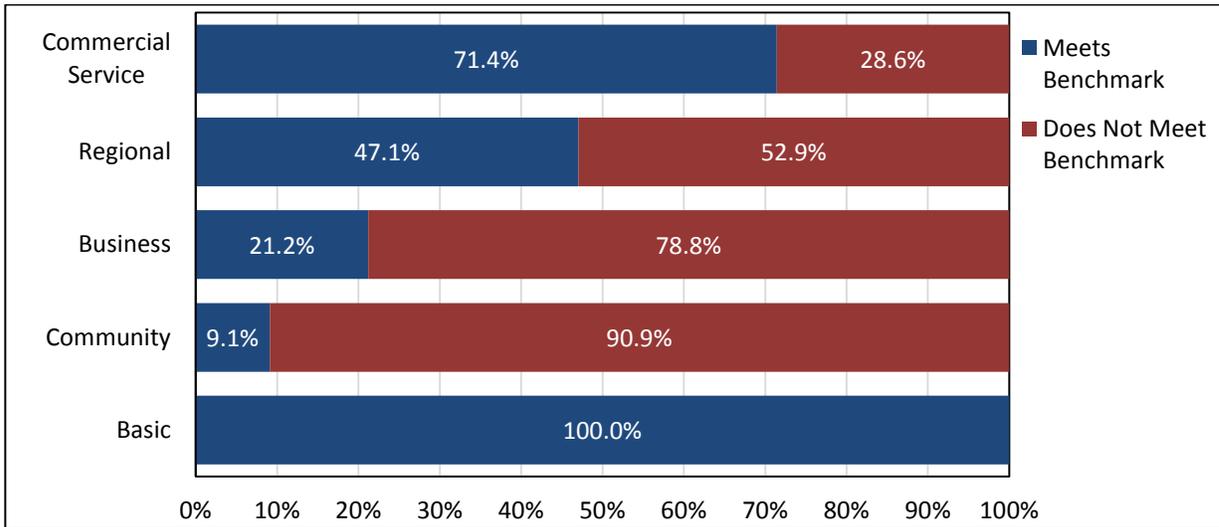
BENCHMARK: 100 PERCENT OF PRIMARY RUNWAY APPROACHES CLEAR OF OBSTRUCTIONS

An important airport system preservation goal is maintaining clear approaches. FAR Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions to air navigation, through the use of imaginary surfaces. These imaginary surfaces are based on the category of runway and type of instrument approach, which include visual and instrument approaches, with the latter consisting of precision, near precision, and non-precision approaches.

Approach slopes vary, depending upon the type of visibility minimums. Visual and some non-precision approaches typically have a slope of 20:1 (i.e.: one vertical foot rise for every 20 horizontal feet). Near- and non-precision instrument approaches utilize a 20:1 or 34:1 slope, while precision approaches typically have a slope of 50:1. Objects penetrating the approach slope (imaginary surface) are likely an obstruction to navigable airspace. Known obstructions are listed on instrument approach charts to caution nearby pilots.

The KASP benchmark for all primary runways at NPIAS airports is to be free and clear of obstructions. Figure 6-2 reveals the percentage of airports that meet this benchmark, categorized by role. The results reveal that 28.8 percent of the total system meets this benchmark. The Community role scored the lowest for this performance measure, with only 9.1 percent of airports meeting the benchmark.

Figure 6-2 NPIAS Airports with Clear Approaches on the Primary Runway



Source: CDM Smith, 2015

PERFORMANCE MEASURE: AIRPORTS WITH AN ADOPTED EMERGENCY RESPONSE PLAN

BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE, REGIONAL, AND BUSINESS AIRPORTS

In the event of an on-airport emergency, it is critical that plans and procedures be in place to notify the proper first responders, gather needed equipment and transportation, and provide for the continued safety of employees and the public. The diverse nature of possible on-airport emergencies, such as aircraft accidents, building fires, fuel spills, and medical emergencies, necessitates thoughtful yet airport-specific planning. Complicating the matter is the fact that not every airport requires the same level of emergency planning. Many airport sponsors have adopted written emergency response plans that provide procedures in the event of an on-airport emergency.

While all airports are encouraged to implement an emergency response plan, it is a requirement for Commercial Service Airports certificated under 14 CFR Part 139. However, it is a recommended Benchmark for airports in the Regional and Business roles to adopt these plans. Figure 6-3 reveals that all airports in the Commercial Service role have an emergency response plan, but that less than half of the Regional role and no airports in the Business role have such a plan. Developing these plans is encouraged for these airports.

Figure 6-3 NPIAS Airports with an Adopted Emergency Response Plan



Source: CDM Smith, 2015

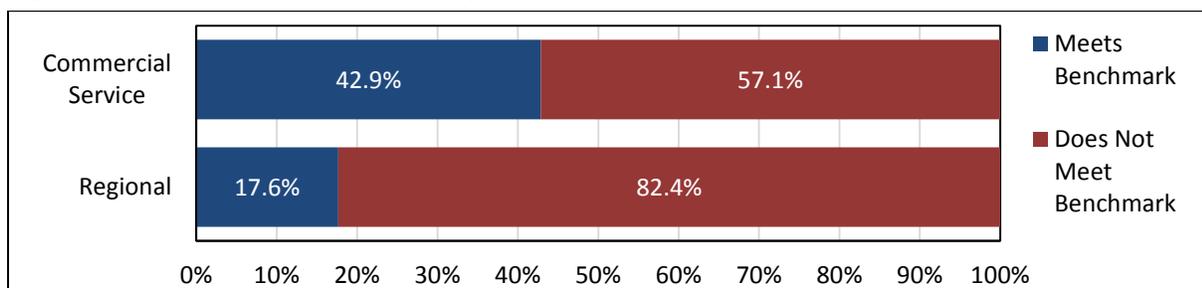
PERFORMANCE MEASURE: AIRPORTS WITH AN ADOPTED WILDLIFE MANAGEMENT PLAN

BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE AND REGIONAL AIRPORTS

Hazards to aviation in the form of wildlife, which can damage aircraft or obstruct aircraft operations, need to be addressed. Examples of wildlife hazards are bird strikes, wherein a bird damages an aircraft in flight, and the incursion of mammals such as deer onto runways. One method for airports to address wildlife hazards is to implement a wildlife management plan, which contains specific procedures for mitigating incursions and bird strikes. Such mitigation practices include perimeter fencing, the removal of bird attractants, and animal deterrence measures.

While all system airports are encouraged to adopt a wildlife management plan, the specific KASP benchmark is for these plans to be adopted at all Commercial Service and Regional airports. Figure 6-4 reveals the percentage of airports in these roles that currently have a wildlife management plan. With low compliance in both the Commercial Service and Regional roles, developing wildlife management plans is viewed as a priority for these airports.

Figure 6-4 NPIAS Airports with an Adopted Wildlife Management Plan



Source: CDM Smith, 2015

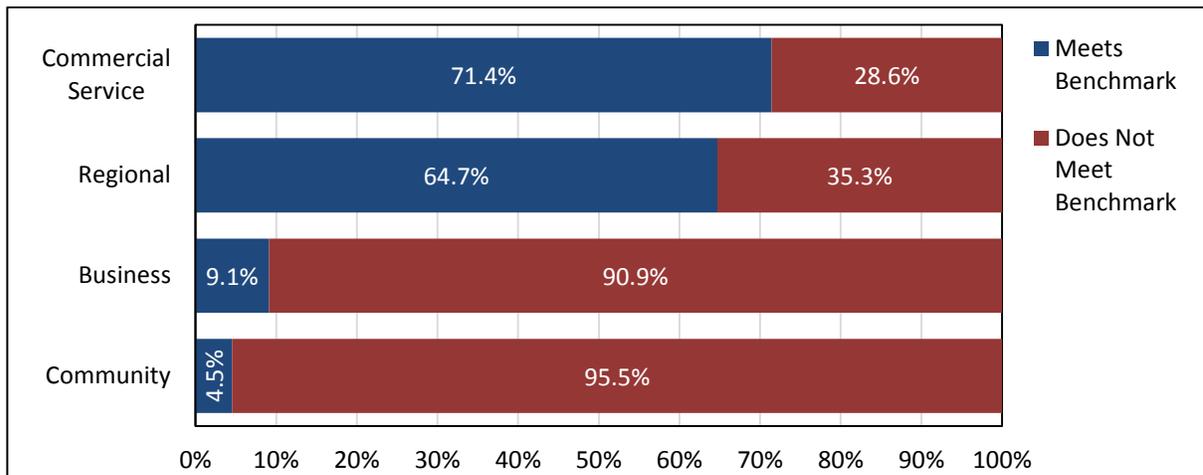
PERFORMANCE MEASURE: AIRPORTS WITH AN ADOPTED SECURITY PLAN

BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE, REGIONAL, BUSINESS, AND COMMUNITY AIRPORTS

Security is among an airport's top priorities. Even at airports not served by a commercial passenger service, preventing unauthorized access to aircraft and airport facilities, preventing criminal activity, and ensuring the protection of airport users, employees, and the general public is crucial. Regardless of the level of security measures employed, possession of a written security plan is important to all airports, both as a means of protecting airport users and the public, and as an additional tool to protect a community's or state's investment in its airports.

The benchmark for the KASP is for all airports in the Commercial Service, Regional, Business, and Community roles to have an adopted security plan. Figure 6-5 shows the percentage of airports by role that meets this benchmark. Over half of the airports in the Commercial Service and Regional roles have an adopted security plan. However, low percentages of the Business and Community roles meet this benchmark. Having a security plan is viewed as a priority for all airports in these roles.

Figure 6-5 NPIAS Airports with an Adopted Security Plan



Source: CDM Smith, 2015

PERFORMANCE MEASURE: AIRPORTS WITH AN ADOPTED SNOW REMOVAL PLAN

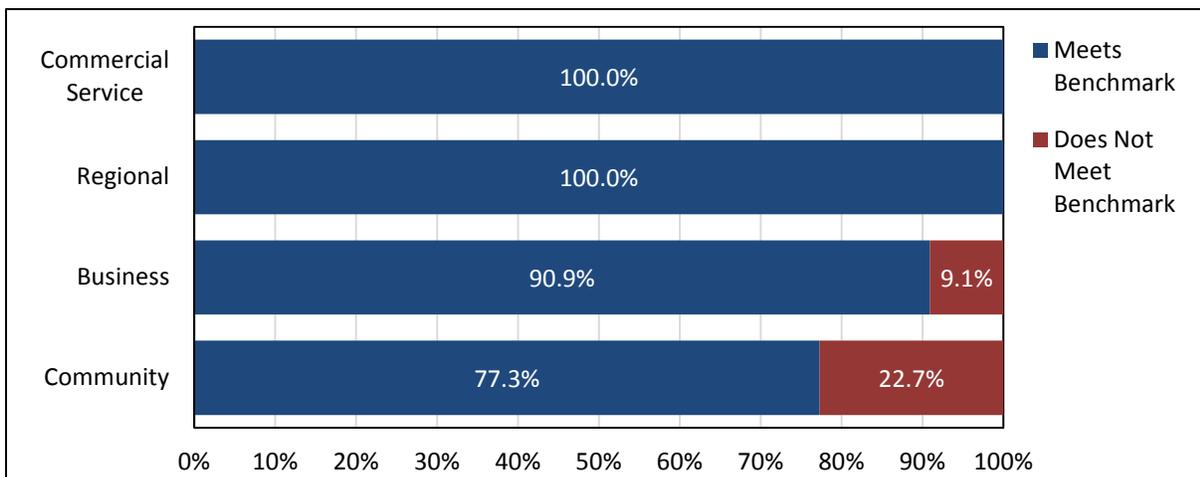
BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE, REGIONAL, BUSINESS, AND COMMUNITY AIRPORTS

During the winter months, snow and ice accumulation can lower the safety and efficiency of airport operations. A snow removal plan will lay out specific procedures for keeping a runway and other airport pavements operable as winter precipitation accumulates. As with other airport planning, snow removal plans may vary depending on the activity level of the airport. Large airports maintain

snow removal equipment and staff at the airport permanently, while smaller airports may have an arrangement with the local public works or private companies to clear the runway following a snow event.

The benchmark for the KASP is for all airports in the Commercial Service, Regional, Business, and Community roles to have an adopted snow removal plan. Figure 6-6 shows the percentage of airports by role that have an adopted snow removal plan. All airports in the Commercial Service and Regional roles meet this benchmark, while the vast majority of airports in the Business and Community roles also maintain snow removal plans.

Figure 6-6 NPIAS Airports with an Adopted Snow Removal Plan



Source: CDM Smith, 2015

PERFORMANCE MEASURE: NPIAS AIRPORTS MEETING MINIMUM FACILITY AND SERVICE BENCHMARKS

Each NPIAS airport in Kansas has a unique set of facilities and services that it offers to aviation users and the general public. The development of facilities and aviation services is often based on available funding and long-term planning goals while other facilities and services may be market driven. An airport that lacks the necessary facilities and services may not be able to fully serve its local community needs and market demand. For example, an airport may have the runway dimensions and navigational equipment to accommodate corporate jet aircraft, but without jet fuel or ground transportation, such aircraft could choose alternate airports.

Part of the KASP process is to set minimum recommended airport facility and service benchmarks for each airport role that maximize each airport’s ability to serve its respective market and role within Kansas as a whole. More extensive facilities are needed at airports that serve larger, more sophisticated aircraft. For example, the recommended benchmarks for facilities and services at

Commercial Service and Regional airports are naturally higher than those set for Community and Basic airports.

Table 6-1 lists the facility and service categories as well as the recommended benchmark set for each airport role. As stated, these are viewed as minimal recommendations for airports in each role. Airports that exceed these benchmarks will not be recommended to remove services or downgrade a facility. Additionally, these are recommendations, not requirements.

Table 6-1 Facility and Service Benchmarks by Airport Role

Facility and Service Benchmark	Commercial Service	Regional	Business	Community	Basic
Runway Length (feet)	5,500	5,000	4,000	3,200	Not an Objective
Runway Width (feet)	100	100	75	60	Not an Objective
Runway Surface	Paved	Paved	Paved	Paved	Not an Objective
Taxiway Type	Full Parallel	Full Parallel	Turnarounds	Turnarounds	Not an Objective
Best IAP	Precision	APV	Any IAP	Any IAP	Not an Objective
Rotating Beacon	Yes	Yes	Yes	Not an Objective*	Not an Objective
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Wind Sock*	Wind Sock
VGSI	PAPI or VASI	PAPI or VASI	PAPI or VASI	Not an Objective	Not an Objective
Runway Lighting	MIRL	MIRL	MIRL	MIRL	Not an Objective
ALS or REILs	ALS	ALS or REILs	ALS or REILs	Not an Objective	Not an Objective
Weather Reporting	Automated	Automated	Automated	Automated	Not an Objective
Restroom	Yes	Yes	Yes	Yes	Yes
Link to Ground Transportation	Yes	Yes	Yes	Yes	Not an Objective
Fuel	AvGas, Jet A, 24/7 Fuel	AvGas, Jet A, 24/7 Fuel	AvGas	Not an Objective	Not an Objective

Facility and Service Benchmark	Commercial Service	Regional	Business	Community	Basic
Terminal	Terminal	Terminal	Terminal	Not an Objective	Not an Objective
Hangar Capacity	100% of Based Aircraft	Not an Objective			
Apron Capacity (square feet)	10,000	10,000	10,000	10,000	Not an Objective

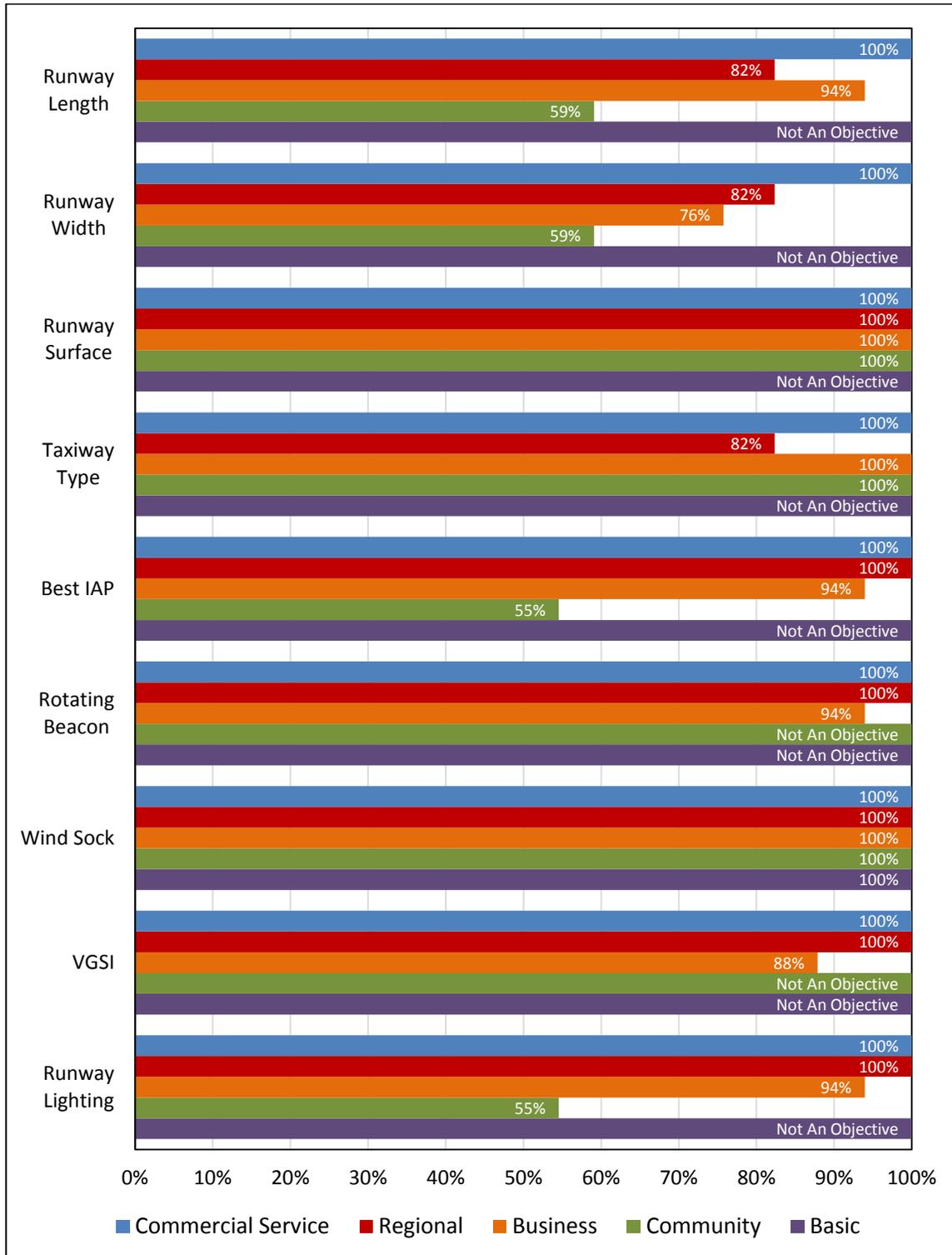
**Not an Objective for KASP/KAIP project planning, but beacons are required by AC 150/5300-13A with runway edge lighting, and wind socks should be lighted at airports with runway lighting (per FAA).*

Source: CDM Smith, FAA, KDOT Aviation, 2015

It is important to note that the purpose of the KASP is to provide the KDOT Division of Aviation with a clear assessment of airport needs in the state. Facility and service deficiencies identified in this analysis do not necessarily indicate that an airport should or must meet that benchmark during or beyond the planning period. Projects must be included and justified in an airport-specific study to qualify for FAA or state airport improvement funds. Projects must be AIP eligible, identified on an airport layout plan (ALP), including any appropriate environmental analyses, prior to receiving funding consideration. While the KASP analysis is considered in the overall context of FAA review, justification for airport-specific projects must be provided to obtain FAA and state funding approval. Figures 6-7 and 6-8 summarize the results of this analysis by role. All Commercial Service airports meet every facility and service benchmark set up in the KASP.

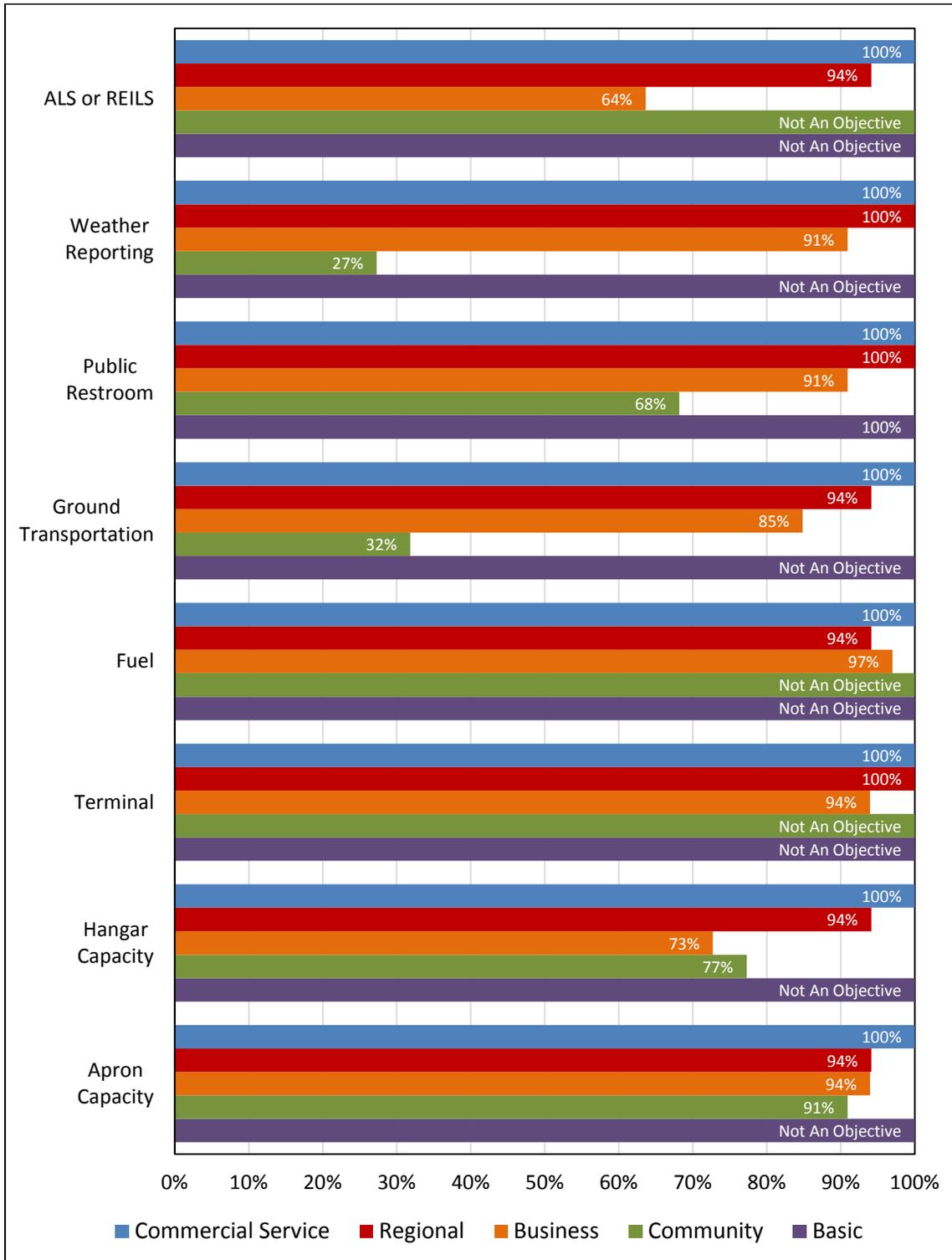


Figure 6-7 NPIAS Airports Meeting Facility and Service Benchmarks (1 of 2)



Source: CDM Smith, 2015

Figure 6-8 NPIAS Airports Meeting Facility and Service Benchmarks (2 of 2)



Source: CDM Smith, 2015

GOAL: PROVIDE A MODERN NETWORK OF AIRPORTS

Another goal of the KASP is to provide modern airport facilities that meet the needs of the state and its aviation users. A good airport system should be adequately developed, to provide infrastructure and facilities that meet both current and expected future demand. The modernization goal includes the following performance measures:

- Airports within 50 NM of an alternate airport with a precision or near-precision (APV) approach
- Airports with 24-hour access to aircraft fuel
- Airports with jet fuel (Jet-A)

Advanced instrument approach capabilities, 24-hour access to aircraft fuel, and Jet-A fuel are considered attributes of a modern system of airports. The following sections discuss these performance measures and their specific benchmarks.

PERFORMANCE MEASURE: NPIAS AIRPORTS WITHIN 50 NM OF AN ALTERNATE AIRPORT WITH A PRECISION OR NEAR-PRECISION APPROACH

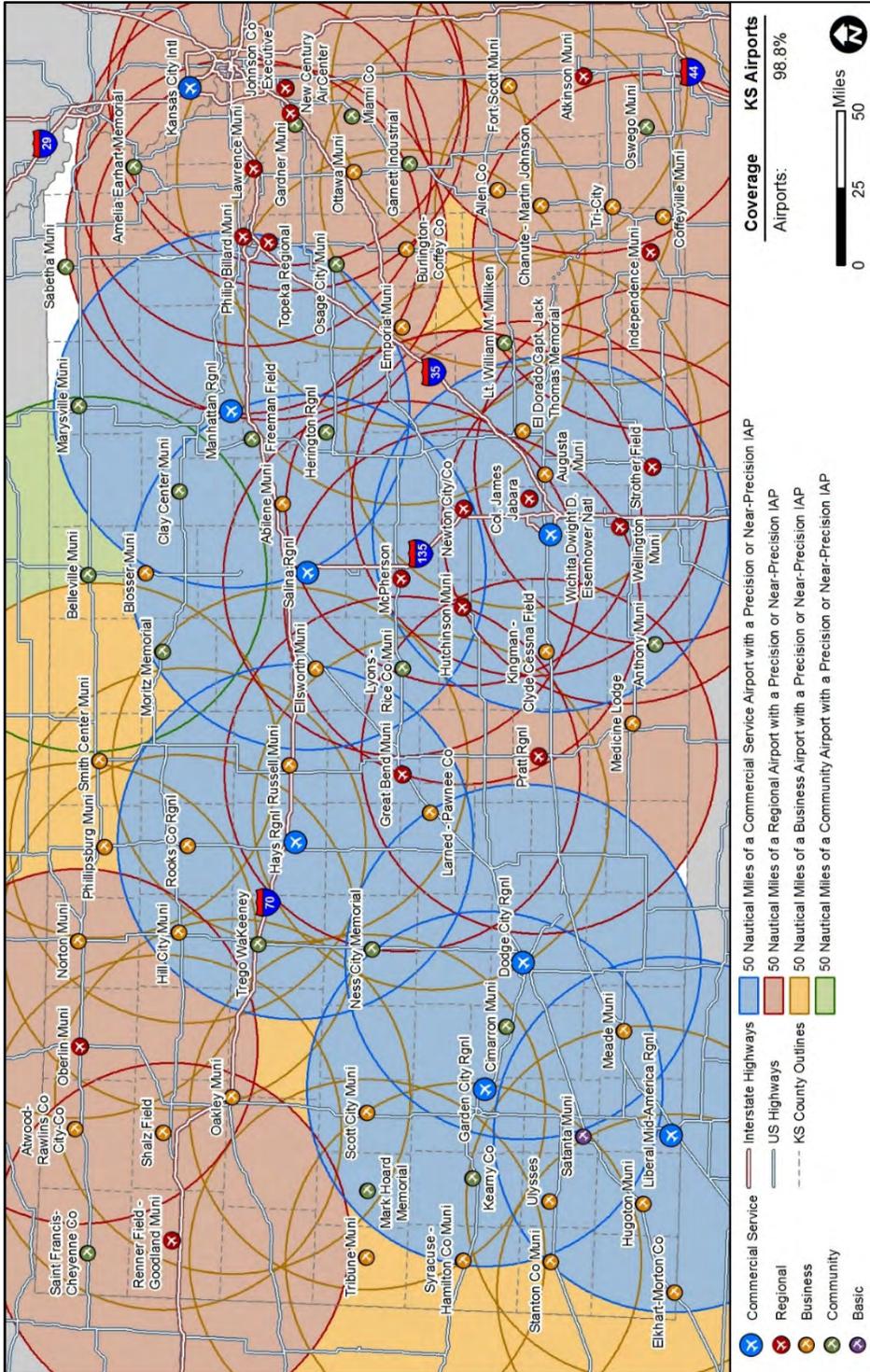
BENCHMARK: 95 PERCENT OF STUDY AIRPORTS

The current system of NPIAS airports in Kansas is composed of airports with varying runway dimensions and NAVAIDs, and these facilities are distributed in such a way that pilots can fly to an airport near their intended destination that will accommodate their particular aircraft. However, some airports are unavailable during conditions of low ceilings and decreased visibility because they are not equipped with instrument approach capabilities. A modern system of airports should provide advanced approaches and NAVAIDs that are equally distributed throughout the state. In this way, a system of airports performs like a network that allows continuous access to all parts of the state.

For the purpose of this performance measure, an advanced approach is defined as either a precision approach (lateral and vertical guidance), or a near-precision approach with vertical guidance (APV). A near-precision APV is defined as an approach with a cloud ceiling no higher than 300 feet and visibility of 1 mile or lower.

A 50 nautical mile range was chosen as a distance for an alternate airport with these capabilities. The KASP benchmark is for 95 percent of the airports in this study to be within 50 nautical miles of an alternate airport with a precision or near-precision APV approach. Figure 6-9 reveals the 50 nautical mile radius of each airport with either a precision or near-precision instrument approach. In total, 98.8 percent of the state's NPIAS airports are within this range of an alternate airport that has a precision or near-precision approach, surpassing the benchmark. Only Belleville Municipal, which itself has a near-precision APV approach, is located further than 50 nautical miles from an alternate airport with a precision or near-precision APV approach. However, it is located fewer than 55 nautical miles from Smith Center Municipal, which has a near-precision APV approach.

Figure 6-9 NPIAS Airports within 50 NM of an Alternate Airport with a Precision or Near-Precision Approach



Source: CDM Smith, 2015



PERFORMANCE MEASURE: NPIAS AIRPORTS WITH 24-HOUR ACCESS TO AIRCRAFT FUEL

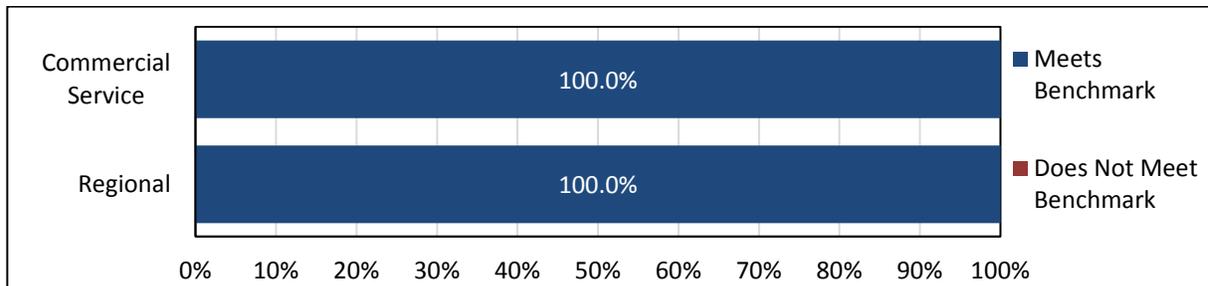
BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE AND REGIONAL AIRPORTS

The availability of aircraft fuel on a 24-hour basis allows airport users to operate their aircraft to meet their individual schedules. This helps cater to a wider range of airport users. Furthermore, due to Kansas' central location in North America, the state is a convenient refueling point for cross-country flights. Providing the opportunity to fuel at the users' convenience allows aviation commerce in Kansas to continue uninterrupted.

The benchmark for 24-hour access to fuel is applied to all airports in the Commercial Service and Regional roles. In general, these are the busiest airports located near the state's largest population centers, and thus more likely to have demand for round-the-clock fuel service. Fueling may be performed from fixed-base operators (FBOs) or self-serve fuel pumps with card-readers, however, most business jet customers request refuels from an authorized fuel truck.

Figure 6-10 reveals that all Kansas NPIAS airports in the Commercial Service and Regional roles have 24-hour access to fuel services. In addition, 50 airports in the Business, Community, and Basic roles also offer 24-hour access to fueling.

Figure 6-10 NPIAS Airports with 24-hour access to Fuel



Source: CDM Smith, 2015

PERFORMANCE MEASURE: NPIAS AIRPORTS WITH JET FUEL

BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE AND REGIONAL AIRPORTS

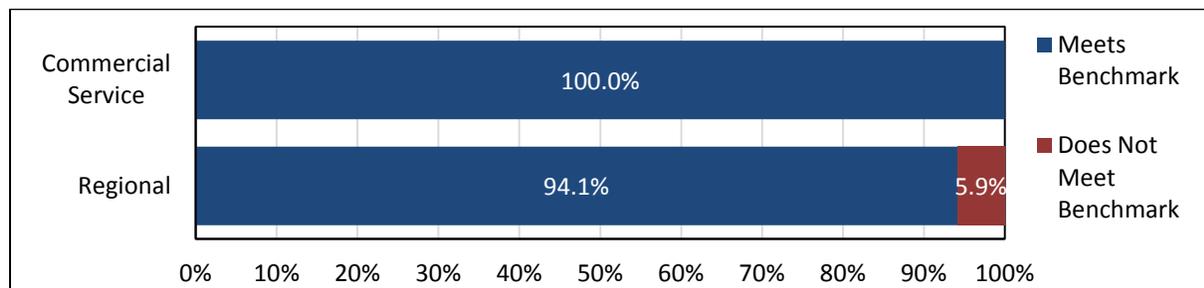
Jet aircraft are becoming increasingly tied to global commerce. Many corporations and individual entrepreneurs utilize business jets as a flexible, fast, and convenient method of travel between airports, especially those that do not have commercial air service. The popularity of fractional jet ownership and the advent of very light jet (VLJ) aircraft have increased demand for business travel, nationwide. As the nation's jet fleet grows, it is increasingly important that airports continue to meet the needs of the airport users.

Jet-A is a basic requirement to service jet aircraft. Though jets can use airports without Jet-A availability, it decreases the overall efficiency and convenience afforded by business jet travel. Having Jet A available at an airport helps to maximize this convenience.

The KASP benchmark for Jet-A is for all airports in the Commercial Service and Regional roles to offer Jet-A service. As with the benchmark for 24-hour access to fuel, the aim is for Jet-A to be offered at the busiest airports located near the largest population and business centers in Kansas.

As shown in Figure 6-11, nearly all airports in the Commercial Service and Regional roles offer jet fuel. Only Oberlin Municipal Airport lacks jet fuel service. In addition, 25 airports in the Business and Community roles offer jet fuel service.

Figure 6-11 NPIAS Airports with Jet Fuel



Source: CDM Smith, 2015

GOAL: PROVIDE A NETWORK OF AIRPORTS THAT IS ACCESSIBLE BY THE AIR AND THE GROUND

Convenient access to Kansas’ NPIAS airports is another important goal of the system. Accessibility to an airport can be defined in terms of access both from the ground and the air. The FAA, through the NPIAS, has established guidelines to evaluate the accessibility of airports by ground. Specifically, general aviation airports should be accessible within 30 minutes to the state’s population. These standards will help to identify the percent of the state’s population and land area that is within a typical drive time of each category of system airports and various key facilities and services.

The development of an airport system that serves the largest number of citizens and businesses possible is an important goal. The primary benchmark by which accessibility to Kansas’ NPIAS airports is measured is proximity to the state’s population centers. This is true not only of Kansas’ commercial service airports, which are important to businesses and individuals for airline travel worldwide, but also of its general aviation airports, which accommodate a far wider set of aviation activities. Thus, the proximity of airports that accommodate a full range of general aviation fleet to Kansas’ populated areas is key.

Air accessibility is also an important factor when measuring system performance. Air accessibility is influenced by factors such as approach capabilities and the presence on on-site weather reporting equipment. Airports that are equipped and capable of supporting operations in all weather conditions also determine a system's air accessibility.

The following performance measures are used to evaluate accessibility to the Kansas system of NPIAS airports:

- Population and area within 90 minutes of a NPIAS Commercial Service airport
- Population and area within 45 minutes of a NPIAS Commercial Service or Regional airport
- Population and area within 30 minutes of a NPIAS airport
- Population and area within 30 minutes of a NPAIS airport capable of supporting air ambulance service
- Hospitals within 30 minutes of a NPIAS airport
- Population and area within 30 minutes of a NPIAS airport capable of supporting physician aircraft
- Population and area within 30 minutes of a NPIAS airport with an instrument approach
- Population and area within 30 nautical miles of a NPIAS airport with on-site weather reporting

Much of the Kansas system's performance under the accessibility goal was determined using geographic information systems (GIS). Using GIS and data on current road networks, it is possible to measure drive time market areas for each airport, with the exact travel time determined by the individual performance measures.

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 90 MINUTES OF A NPIAS COMMERCIAL SERVICE AIRPORT

BENCHMARK: 75 PERCENT OF KANSAS POPULATION AND 50 PERCENT OF LAND AREA

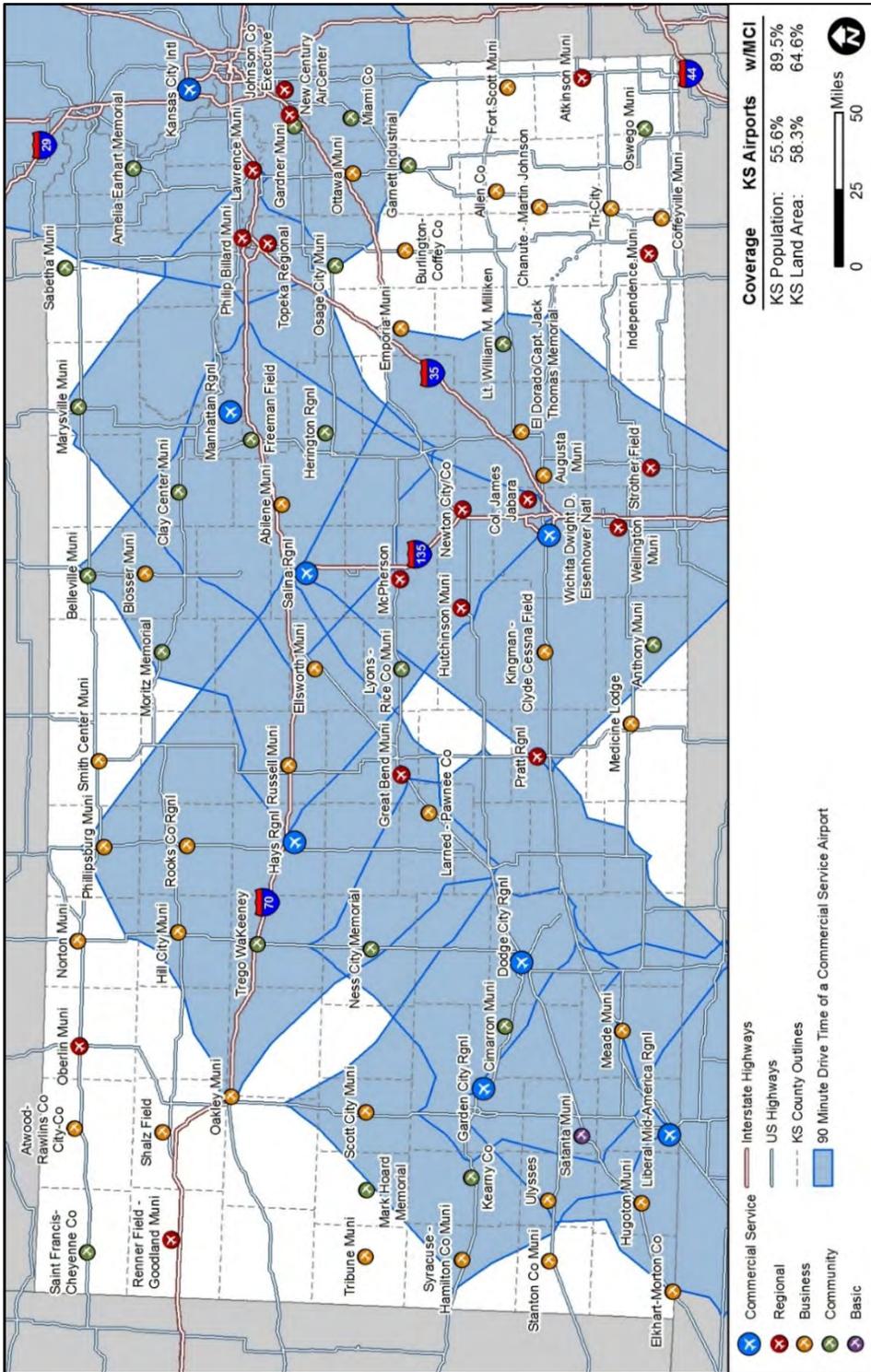
To the general public, perhaps the most important measure of an airport system's accessibility is the extent to which it is served by commercial airlines. As the most prominent segment of air transportation, and the segment most used by individual consumers, the degree to which commercial service is conveniently accessible has a large bearing on how satisfactorily the system is viewed.

The KASP benchmark is for 75 percent of Kansas' population and 50 percent of its land area to be located within a 90-minute drive time of a Commercial Service airport. There are currently seven airports in Kansas that offer scheduled commercial passenger service. Customers of scheduled service in Kansas are not only dependent upon airports within the state, many of the state's

residents use Kansas City International (MCI) just across the river in Missouri. As a result, this airport is also included in this analysis.

Figure 6-12 shows the coverage of the 90-minute drive time areas of these airports, along with MCI in Missouri. On their own, Kansas' Commercial Service Airports serve only 55.6 percent of Kansas population and 58.3 percent of its land area. When including MCI, current coverage increases to 89.5 percent of the state's total population and 64.6 percent of its land area, both exceeding the benchmark.

Figure 6-12 Population and Area Within 90 Minutes of a NPIAS Commercial Service Airport



Source: CDM Smith, 2015

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 45 MINUTES OF A NPIAS COMMERCIAL SERVICE OR REGIONAL AIRPORT

BENCHMARK: 90 PERCENT OF KANSAS POPULATION AND 70 PERCENT OF LAND AREA

Airports in the Commercial Service and Regional roles are those offering among the highest levels of service and facility capabilities to general aviation users. These airports often possess features sought by users of corporate aircraft, such as FBOs with extensive service offerings, ground transportation, and terminal services. It is therefore important for Commercial Service and Regional airports to be distributed geographically such that they are near population centers. The convenience and flexibility of general aviation aircraft are key to their appeal, and a state with a large selection of airports where business aircraft can be accommodated enhances the utility of such aircraft.

Because of these factors, a KASP benchmark is for 90 percent of Kansas' population and 70 percent of its land area to be located within a 45-minute drive time of a Commercial Service or Regional airport. Figure 6-13 reveals the Kansas population and land area located with 45 minutes of these airports. Currently, 87.5 percent of the state's population and 40.2 percent of its total land area is located within these market areas. When including Kansas City International, coverage increases slightly to 87.7 percent of Kansas population and 40.3 percent of land area.

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 30 MINUTES OF A NPIAS AIRPORT

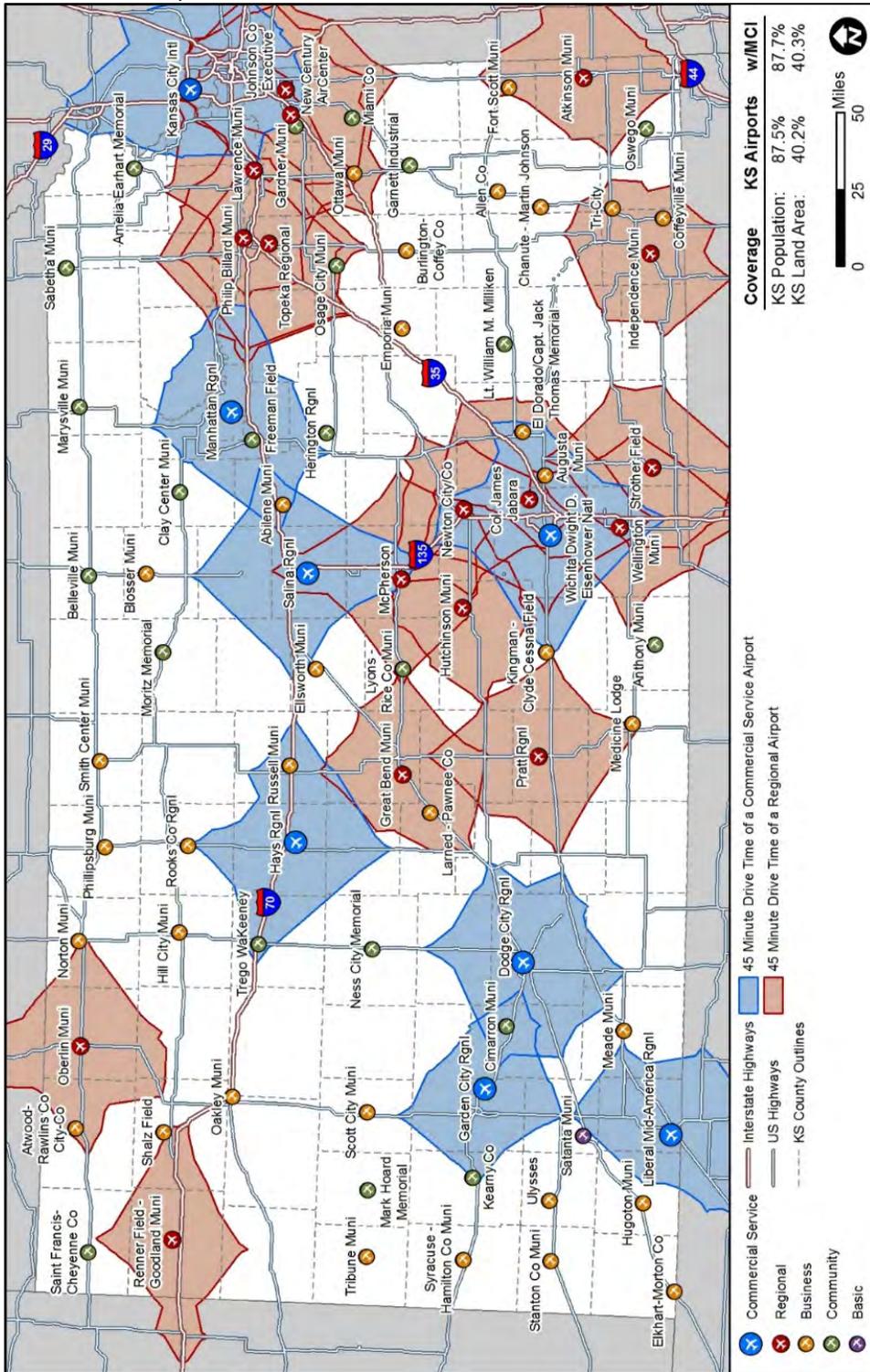
BENCHMARK: 95 PERCENT OF KANSAS POPULATION AND 70 PERCENT OF LAND AREA

An important goal of any airport system is to maximize the extent to which the overall system is geographically distributed to serve the state's population. As a result, the FAA has issued guidelines that recommend general aviation should be accessible within 30 minutes. Because the KASP is primarily concerned with Kansas' system of 80 NPIAS airports, it is a benchmark that 95 percent of the state's population and 70 percent of its land area is located within a 30 minute drive time of any Kansas NPIAS airport.

Source: CDM Smith, 2015

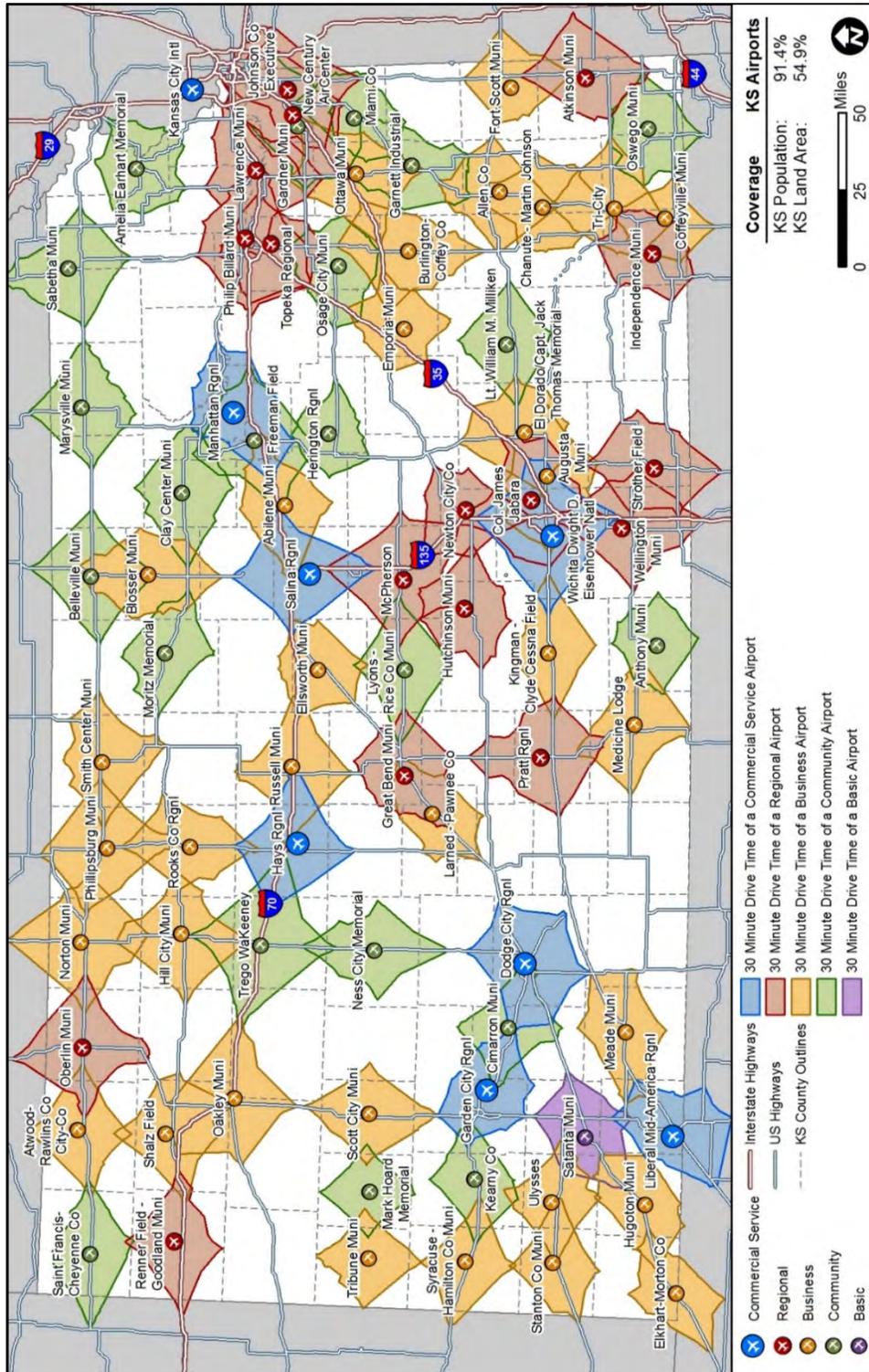
Figure 6-14 shows this coverage. The Kansas system of 80 NPIAS airports is currently accessible within a 30-minute drive time of 91.4 percent of the state's population and 54.9 percent of its land area, both of which fall short of the benchmark. In 2008, 93 percent of the state's population and 69 percent of its land area was located within 30 minutes of one of its NPIAS airports. However, this small decrease in coverage is not attributed to a decrease in performance, but rather a refinement of the techniques used to develop the drive time market areas.

Figure 6-13 Population and Area Within 45 Minutes of a NPIAS Commercial or Regional Airport



Source: CDM Smith, 2015

Figure 6-14 Population and Land Area Within 30 Minutes of a NPIAS Airport



Source: CDM Smith, 2015

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 30 MINUTES OF A NPIAS AIRPORT CAPABLE OF SUPPORTING AIR AMBULANCE SERVICE

BENCHMARK: 94 PERCENT OF KANSAS POPULATION AND 72 PERCENT OF LAND AREA

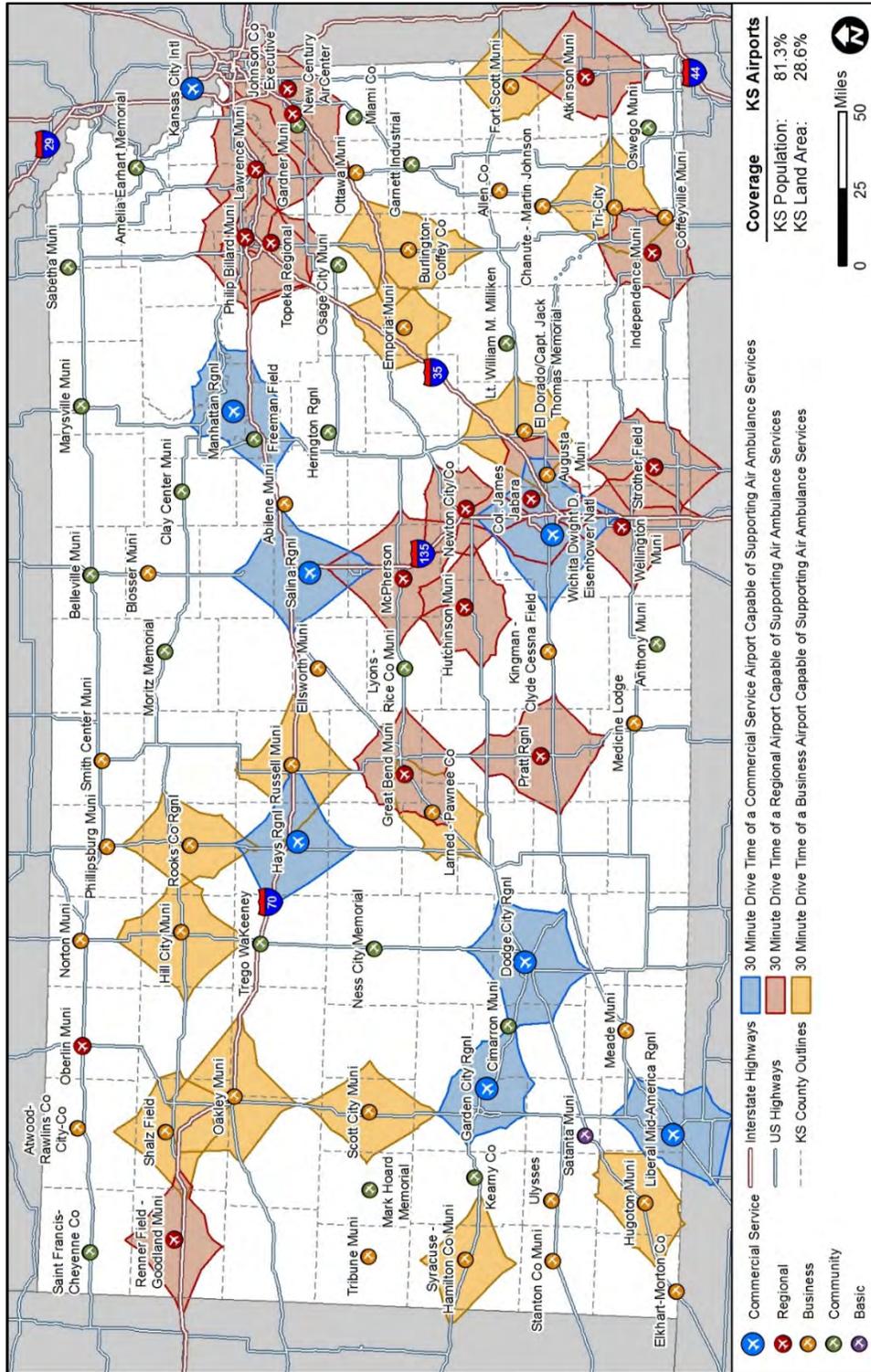
In a state like Kansas, where the nearest hospital could be more than an hour away by ground transportation, the services provided by air ambulance agencies are crucial to the health of the state's residents. These agencies transfer critically injured or ill patients from remote areas to hospitals with advanced trauma capabilities or to specialist care centers in major cities both within Kansas and in nearby states. It is important that, wherever applicable, the state's airport system be developed to handle the aircraft flown by these agencies.

The aircraft flown by air ambulance agencies are capable of using a wide variety of airports, but nonetheless typically require a minimum level of facilities to operate safely. The following facilities are typically required by airports supporting air ambulance service:

- B-II runway length (4,200 feet) and width (75 feet)
- On-site weather reporting capabilities
- Precision or near-precision APV approach

It is a benchmark of the KASP that 90 percent of Kansas' population and 70 percent of its land area be located within a 30-minute drive time of an airport meeting these minimum facilities. Figure 6-15 reveals that currently, 81.3 percent of Kansas' total population and 28.6 percent of the state's land area is within 30-minute access of airports capable of supporting air ambulance services. Both of these figures fall short of the benchmark.

Figure 6-15 Population within 30 Minutes of a NPIAS Airport Capable of Supporting Air Ambulance Service



Source: CDM Smith, 2015

PERFORMANCE MEASURE: HOSPITALS WITHIN 30 MINUTES OF A NPIAS AIRPORT

BENCHMARK: 100 PERCENT OF KANSAS HOSPITALS

Similar to air ambulance accessibility, it is important for Kansas' hospitals be accessible to its system of airports. It is therefore a benchmark of the KASP that the Kansas system of NPIAS airports maximizes its coverage of hospitals within the state. Figure 6-16 shows the locations of 205 hospitals and major clinics in Kansas and their relations to Kansas NPIAS airports. In total, 85.4 percent of these facilities are located within a 30-minute drive time of one of the state's 80 NPIAS airports.

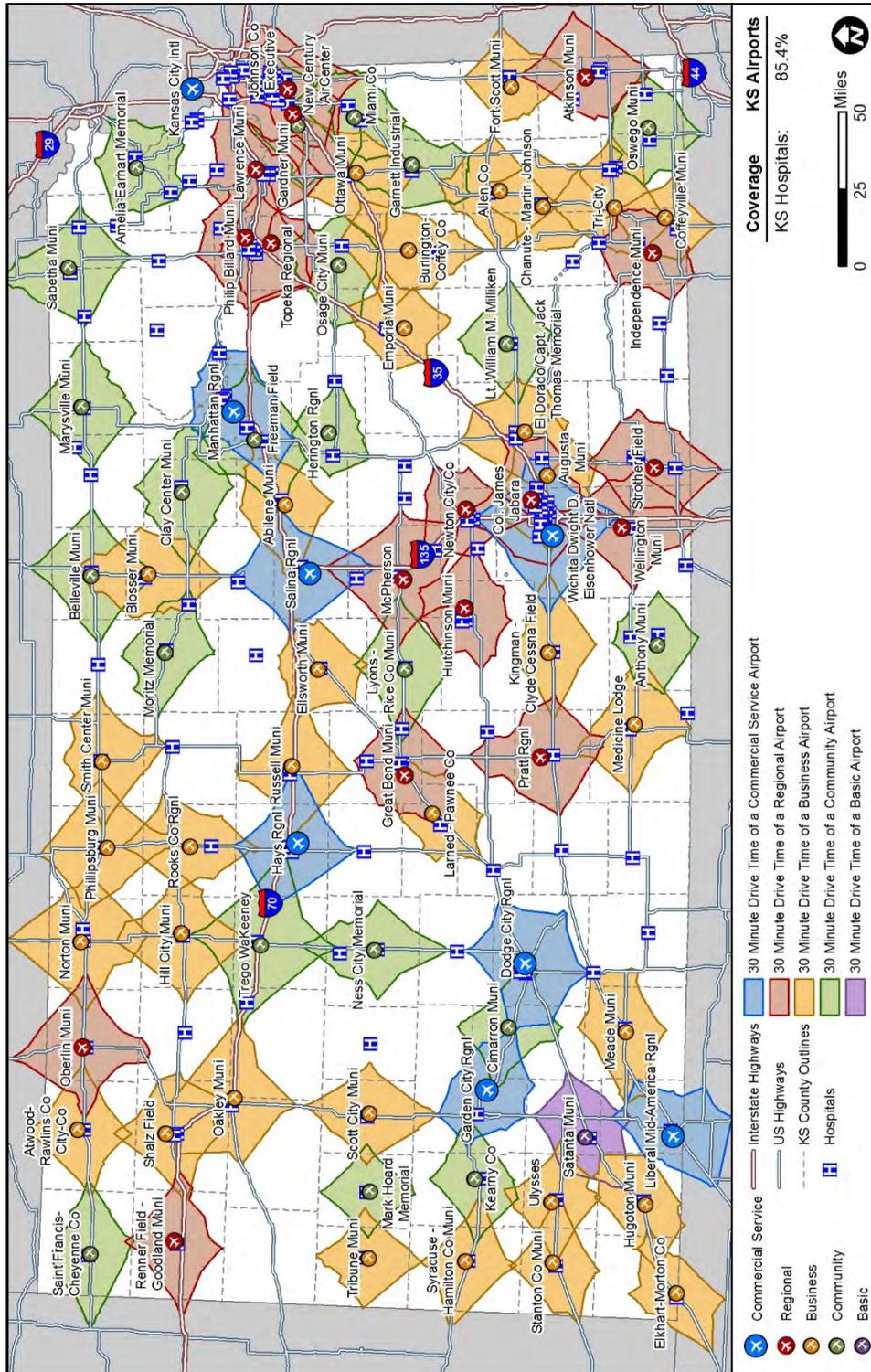
PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 30 MINUTES OF A NPIAS AIRPORT CAPABLE OF SUPPORTING PHYSICIAN (FLOWN) AIRCRAFT

BENCHMARK: 97 PERCENT OF POPULATION AND 81 PERCENT OF LAND AREA

While emergency medical access to hospitals via air ambulance are key to the health and welfare of Kansas residents, many rural and remote communities rely on doctors from larger metropolitan areas that visit for specialty clinics and routine medical care. Frequently, small towns in rural areas are served by perhaps a handful of general practitioners, with few, if any, local specialists. While this generally means that patients with ongoing medical problems have little or no access to nearby specialist care, it also occasionally leaves entire communities without local opticians, dentists, and other standard-care specialists.

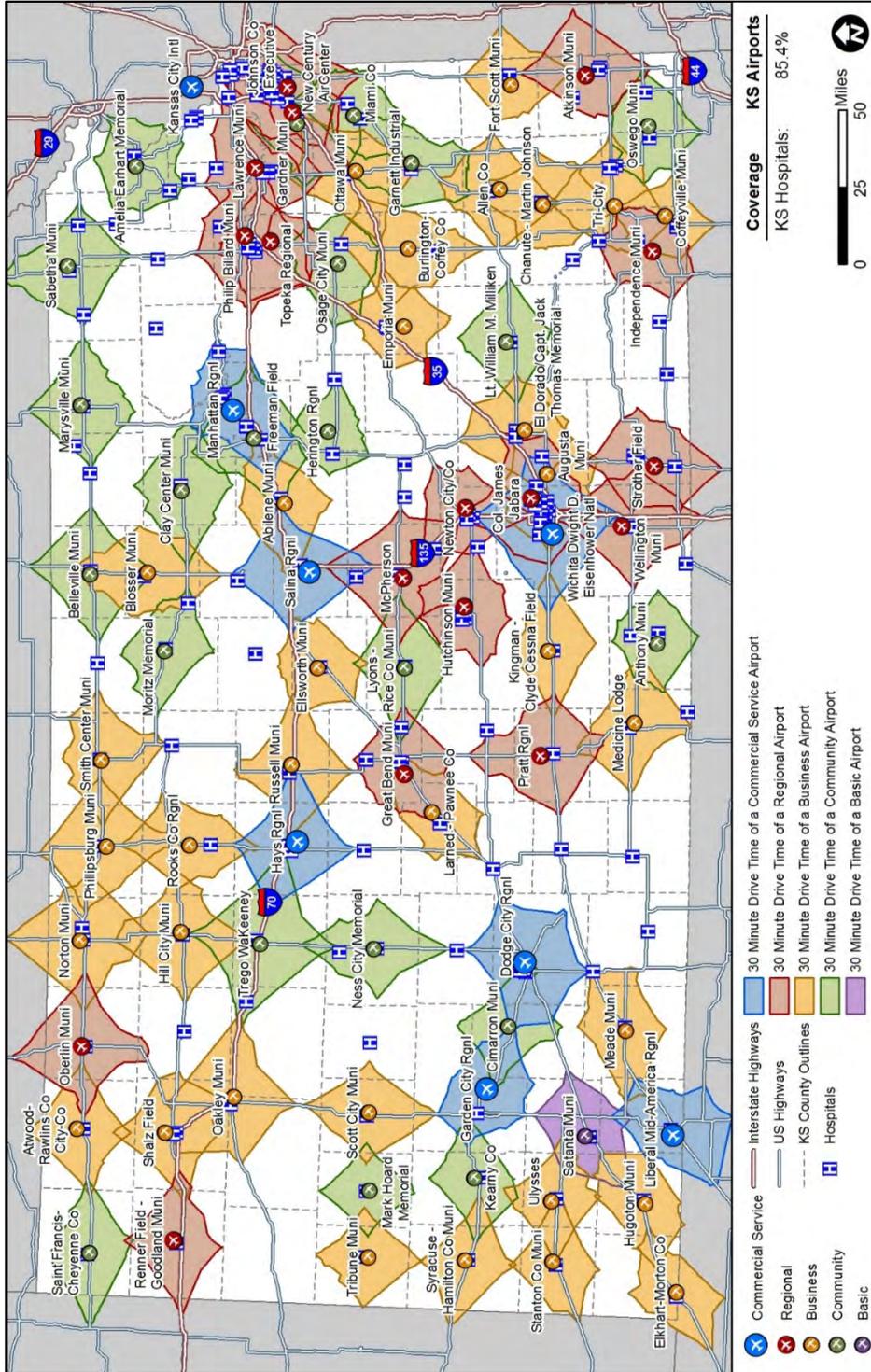
Fortunately, many doctors avail themselves of either personal aircraft or aviation businesses that work to shuttle doctors by air to hold specialty clinics in rural communities. In total, 63 of Kansas' 80 NPIAS airports are deemed capable of supporting physician aircraft. The benchmark of the KASP is for 97 percent of the state's population and 81 percent of its land area to be located within a 30-minute drive time of these airports. Figure 6-17 shows the 30-minute market areas of Kansas NPIAS airports capable of supporting physician aircraft. Currently, these areas cover 88.0 percent of the state's total population and 44.7 percent of its land area.

Figure 6-16 Hospitals within 30-Minutes of a NPIAS Airport



Source: CDM Smith, 2015

Figure 6-17 Population and Area within 30 Minutes of a NPIAS Airport Capable of Supporting Physician Flown Aircraft



Source: CDM Smith, 2015

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 30 MINUTES OF A NPIAS AIRPORT WITH AN INSTRUMENT APPROACH

BENCHMARK: 95 PERCENT OF KANSAS POPULATION AND 90 PERCENT OF LAND AREA

As discussed under the modernization goal, the presence of an instrument approach at a NPIAS airport allows the airport to remain open and accommodate landings of properly equipped aircraft in marginal weather conditions and at night. A network of airports that can continue to serve aircraft during such periods promotes accessibility of the airport system as a whole, and can be more attractive to transient aircraft. For these reasons, it is a benchmark of the KASP that 95 percent of Kansas' population and 90 percent of its land area be accessible within a 30-minute drive time to airports with an instrument approach. Figure 6-18 shows 30-minute market areas of all Kansas NPIAS airports with an instrument approach. Currently, 89.3 percent of the state's population and 47.4 percent of its land area is located within these areas.

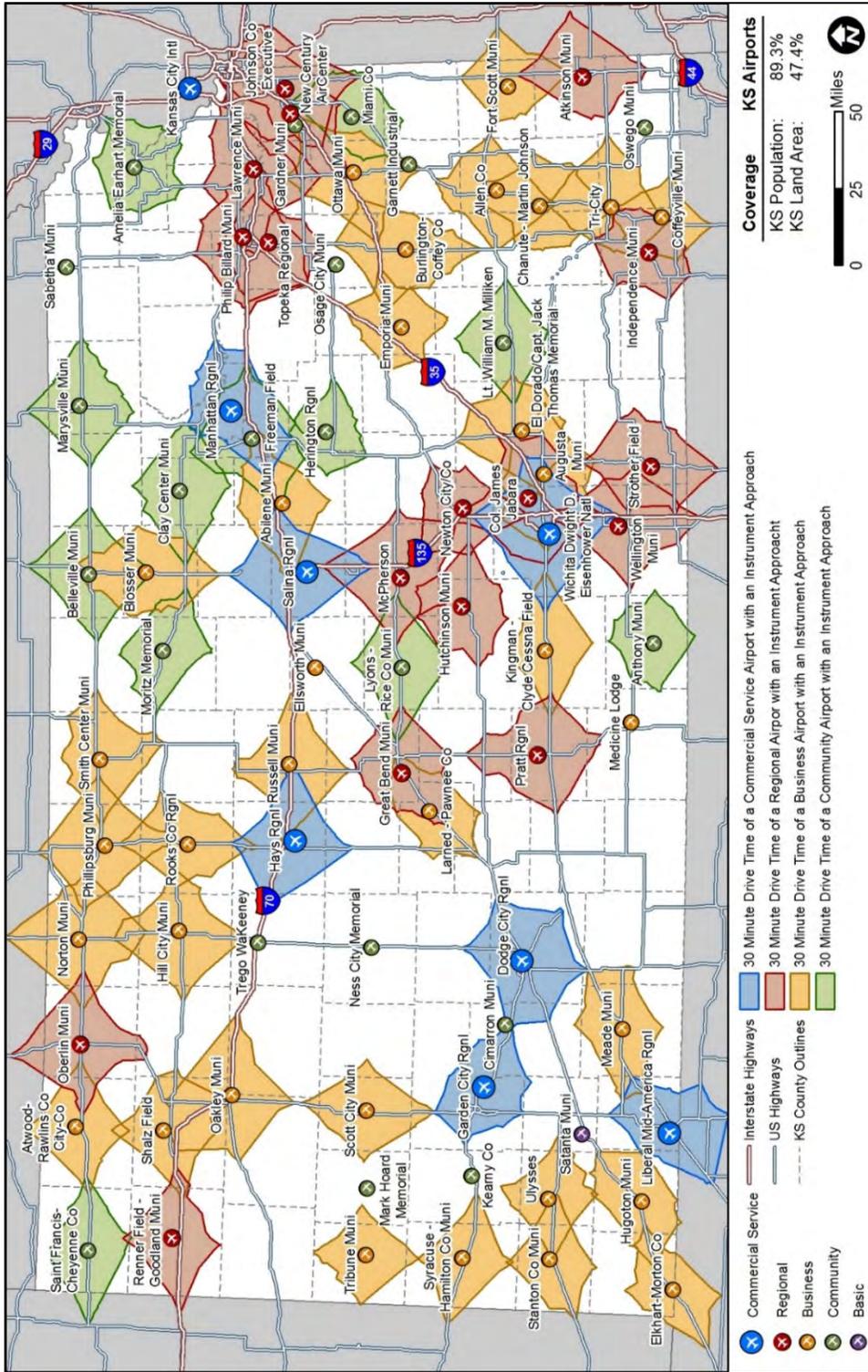
PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 30 NAUTICAL MILES OF A NPIAS AIRPORT WITH ON-SITE WEATHER REPORTING

BENCHMARK: 100 PERCENT OF KANSAS POPULATION AND LAND AREA

Widespread on-site weather reporting is important to the accessibility of a NPIAS airport system in that it removes uncertainty among pilots about weather conditions at and near airports equipped with such systems. The availability of such systems across the airport system prevents pilots from having to guess local weather conditions from observations taken at distant airports. Automated weather reporting systems come in a variety of forms. Those employed at Kansas NPIAS airports include the automated weather observing system (AWOS), automated surface observing system (ASOS), and automated terminal information system (ATIS).

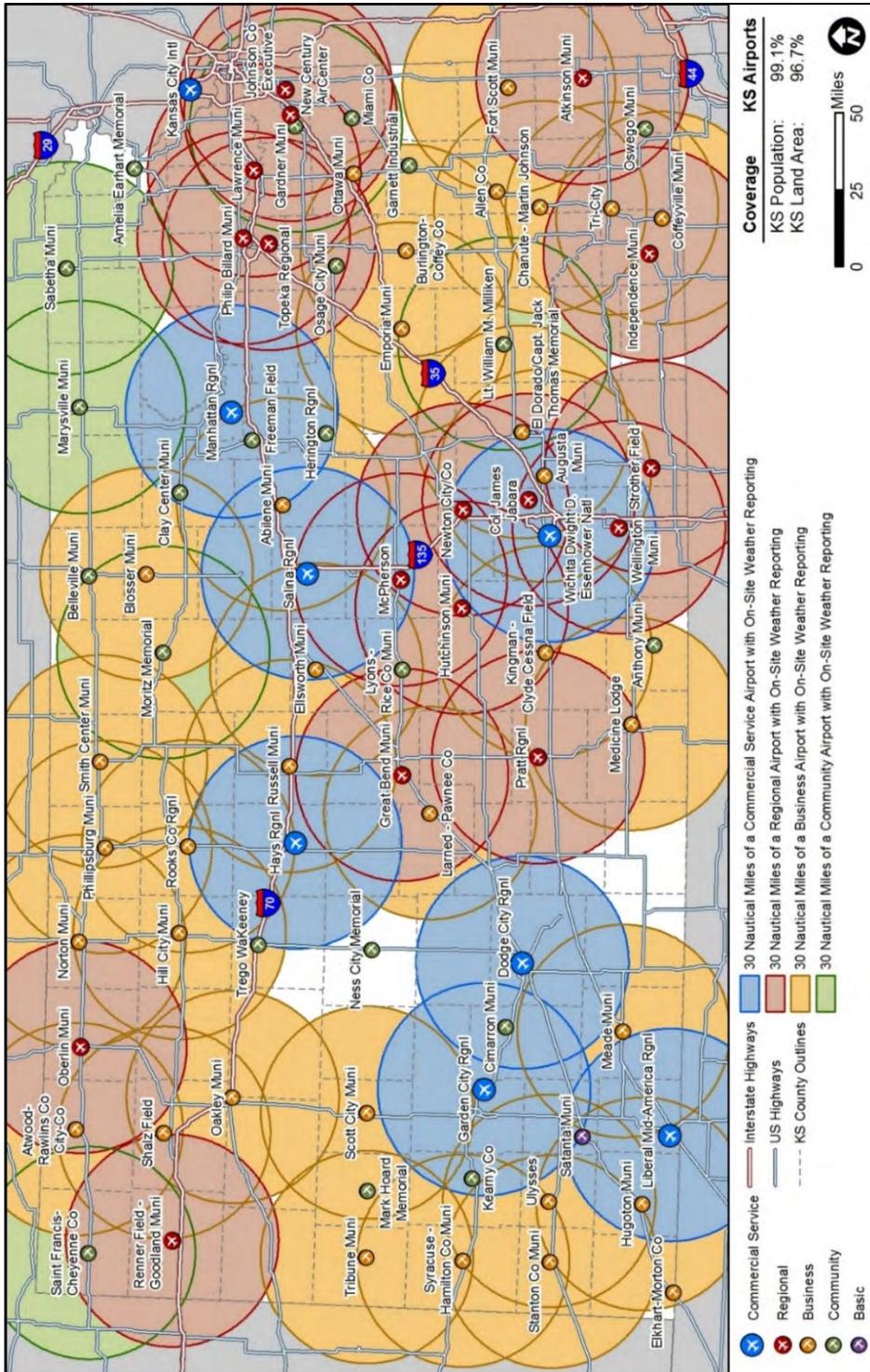
The benchmark of the KASP is for 100 percent of Kansas' land area and population located within 30 nautical miles of an airport with on-site weather reporting. A range in nautical miles has been set as to analyze the coverage of these systems both on land and in the air, as this performance measure applies to both land and air accessibility. Figure 6-19 reveals that 99.1 percent of the state's total population and 96.7 percent of its land area are located within 30 nautical miles of a Kansas NPIAS airport with on-site weather reporting capabilities.

Figure 6-18 Population/Area within 30-Minutes of a NPIAS Airport with an Instrument Approach



Source: CDM Smith, 2015

Figure 6-19 Population/Area within 30 NM of a NPIAS Airport with On-Site Weather Reporting



Source: CDM Smith, 2015

GOAL: SUPPORT LOCAL AND STATEWIDE ECONOMIC GROWTH

An important goal of an airport system is for it to support the economic growth and diversification of its local community, state, and region. Employers typically consider the existence and efficiency of air transportation facilities when expanding or developing in a given geographic area, but airports alone do not always spur economic growth and diversification. In addition to adequate airport facilities, market areas must possess other characteristics that make them candidates for the retention and attraction of various economic activities such as agriculture, energy, and tourism.

The following are performance measures associated with the KASP goal of economic support:

- Kansas population and area within 45 minutes of a NPIAS airport with a 5,000-foot, or greater, runway
- NPIAS Airports with a link to ground transportation
- Kansas population and area within 45 minutes of a NPIAS airport meeting business user needs

The following sections detail these performance measures and their associated benchmarks.

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 45 MINUTES OF A NPIAS AIRPORT WITH A 5,000-FOOT, OR GREATER, RUNWAY

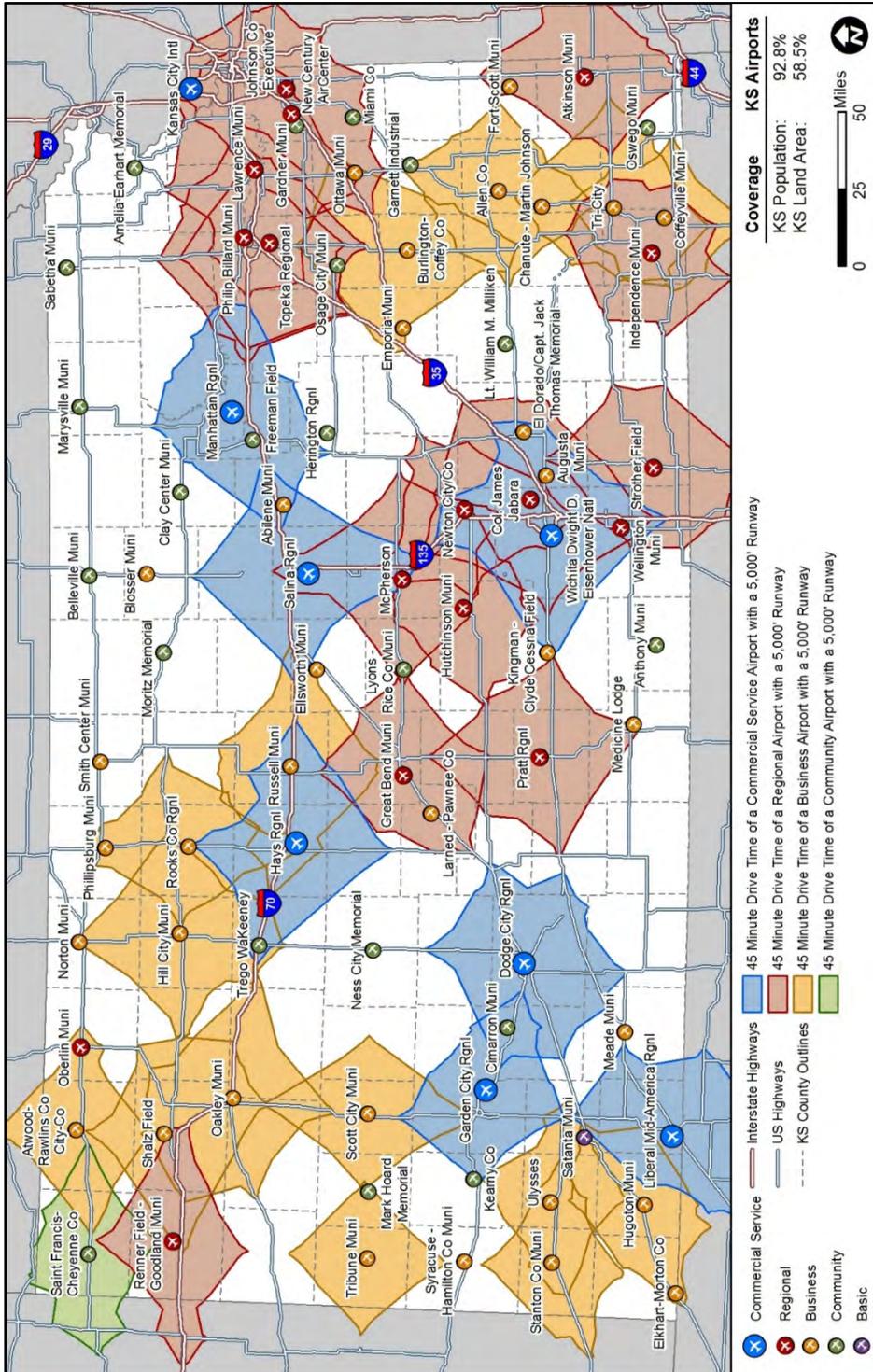
BENCHMARK: 95 PERCENT OF KANSAS POPULATION AND 65 PERCENT OF LAND AREA

A major factor in Kansas' airport system's ability to support the state's economy is its ability to accommodate a wide variety of aircraft. Airports that have facilities flexible enough to handle larger aircraft make themselves available for such segments as corporate jets, air taxi, air cargo, and charter activity.

While a number of factors enhance an airport's ability to attract various aircraft fleet types, a minimum requirement is a runway long enough for larger and faster aircraft to land and takeoff safely. In Kansas, a runway length of 5,000 feet or longer has a greater propensity to support the local economy in terms of accommodating larger business aircraft. Communities within a 45-minute drive of an airport with a 5,000-foot runway are those whose economies tend to benefit from aviation the most.

It is a benchmark of the KASP for 95 percent of the state's population and 65 percent of its land area to have accessibility within 45 minutes of Kansas NPIAS airports with a runway at least 5,000 feet in length. Figure 6-20 shows these airports and their 45-minute drive time areas. Currently, these market areas serve 92.8 percent of Kansas' total population and 58.5 of its land area.

Figure 6-20 Population/Area within 45 Minutes of a NPIAS Airport with a 5,000-Foot, or Greater, Runway



Source: CDM Smith, 2015



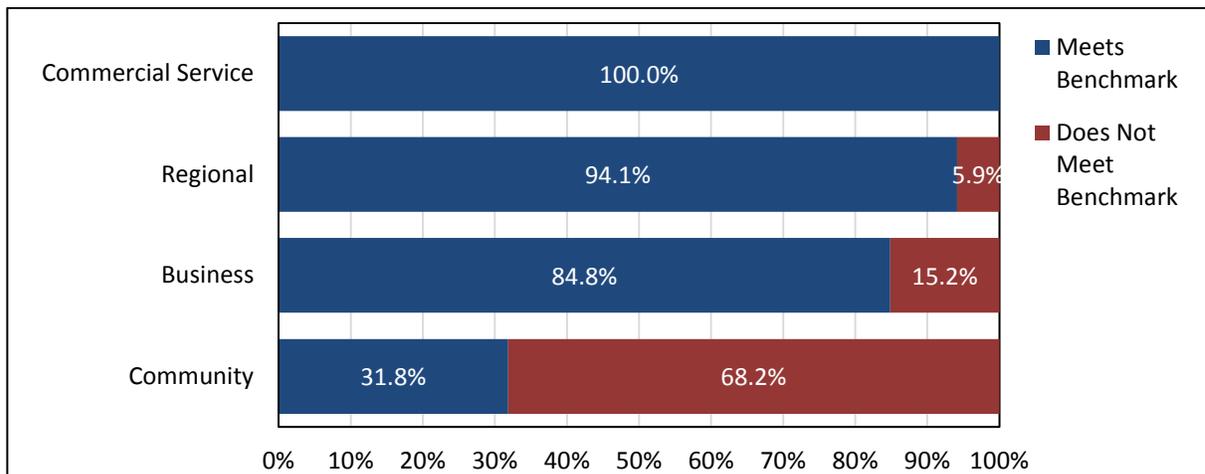
PERFORMANCE MEASURE: NPIAS AIRPORTS WITH AVAILABLE GROUND TRANSPORTATION

BENCHMARK: 100 PERCENT OF COMMERCIAL SERVICE, REGIONAL, BUSINESS, AND COMMUNITY AIRPORTS

The availability of ground transportation at airports is critical to the usefulness of each facility, particularly for business users. Airports that can offer rental cars, courtesy cars, or links to intermodal public transportation allow visitors arriving via aircraft to leave the airport and conduct business in town or visit local attractions. It is a benchmark of the KASP that all airports in the Commercial Service, Regional, Business, and Community roles have at least one of the above links to ground transportation.

Figure 6-21 shows the percentage of airports by role that have a link to ground transportation. Nearly all airports in the Commercial Service, Regional, and Business airports have ground transportation, while one third of Community airports meet this benchmark. The most common form of ground transportation reported was crew car, with 56 Kansas NPIAS airports indicating they provide this service.

Figure 6-21 NPIAS Airports by Role with Available Ground Transportation



Source: CDM Smith, 2015

PERFORMANCE MEASURE: POPULATION AND AREA WITHIN 45 MINUTES OF A NPIAS AIRPORT MEETING BUSINESS USER NEEDS

BENCHMARK: 91 PERCENT OF KANSAS POPULATION AND 56 PERCENT OF LAND AREA

Companies around the world are increasingly employing business jets and other aircraft to enhance their ability to quickly and efficiently conduct business with regional operations, clients, and suppliers. Kansas airports that can accommodate these aircraft benefit their communities through

increased access by large corporations with business aircraft fleets. Similarly, an airport that can act as a base for such aircraft are assets to their respective communities, and can be used to help attract new businesses.

As with supporting air ambulance operations, business aircraft typically require minimum facilities and services. Per the KASP, an airport is seen as supporting business user needs if it has the following:

- 5,000 foot runway
- Jet-A fuel
- Precision or near-precision APV approach

It is a benchmark of the KASP that 91 percent of the state's population and 56 percent of its land area be located within a 45-minute drive time of airports with these facilities. Figure 6-22 shows this coverage. Currently, 91.1 percent of Kansas' population and 49.2 percent of its land area is within a 45-minute drive time of an airport meeting business user needs.

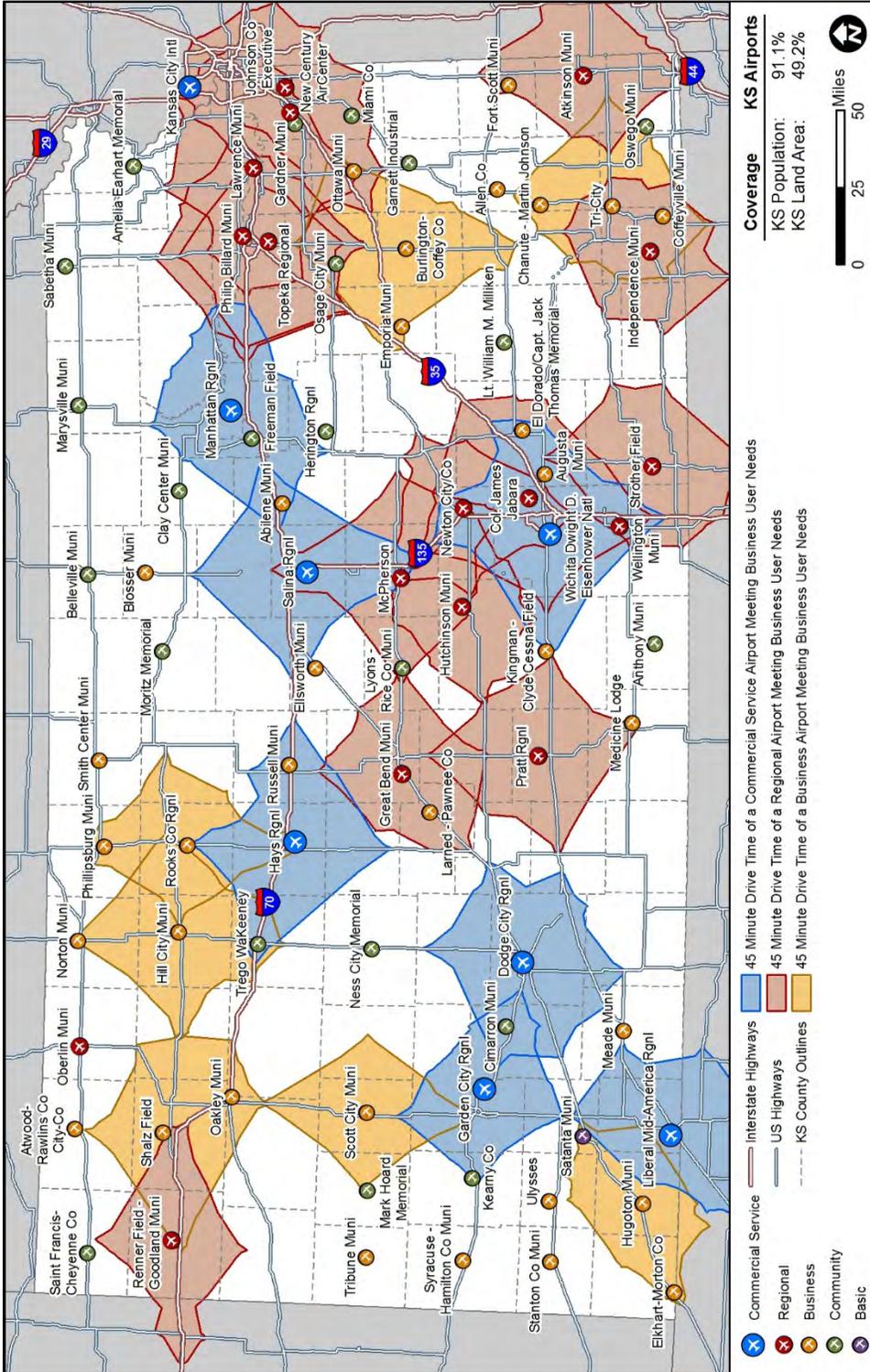
GOAL: SUPPORT THE PROMOTION OF AVIATION EDUCATION

The KASP recognizes that airports can be aviation classrooms, and are valuable learning resources and centers. Traditional educational programs and curricula typically do not prepare students for the wide variety of careers that exist in the aviation industry. The following performance measures will help to assess aviation education at Kansas NPIAS airports:

- Airports with community outreach programs
- Airports supporting flight training
- Airports supporting airframe and powerplant (A&P) mechanic programs

The following sections discuss these performance measures and their associated benchmarks.

Figure 6-22 NPIAS Airports Meeting Business Users Needs



Source: CDM Smith, 2015

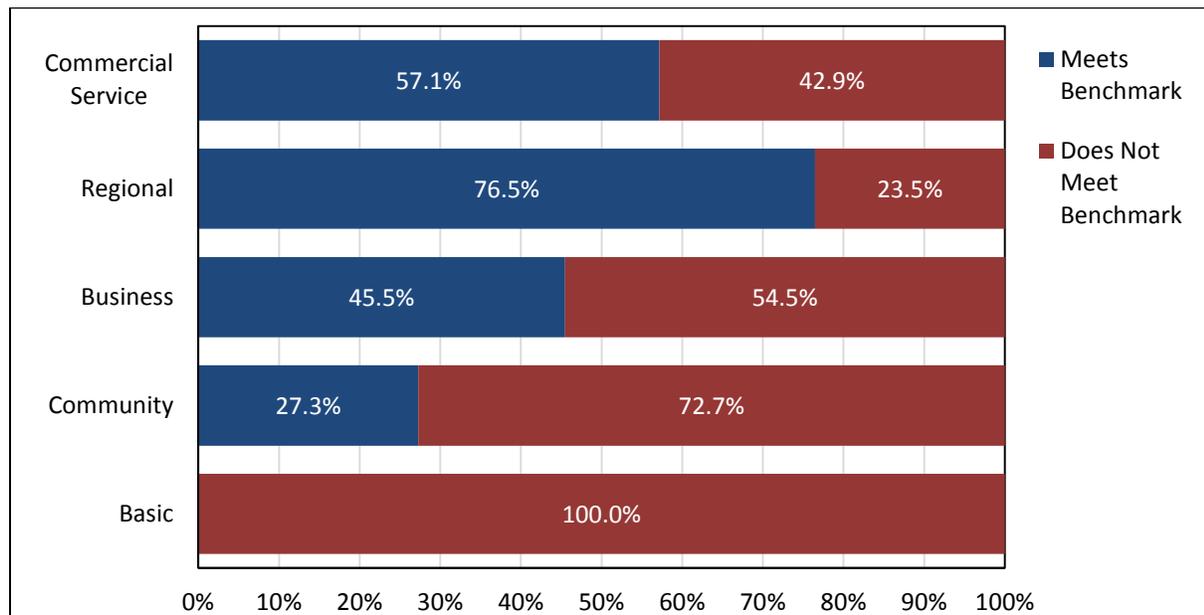
PERFORMANCE MEASURE: NPIAS AIRPORTS WITH COMMUNITY OUTREACH PROGRAMS

INFORMATIONAL – NO BENCHMARK

Airports that maintain a good working relationship with their local communities typically have outreach programs to educate the public about the airport while simultaneously receiving comments and/or concerns. Such outreach efforts take a variety of forms, from airport tours, fly-ins, and youth programs to public airport board meetings and participation in local community councils by airport staff. These programs and events can both educate the community of activities at the airport while giving airport management notice of concerns among the public.

It is a KASP benchmark that Kansas’ system of NPIAS airports maximizes its public outreach efforts through any of the above approaches. Figure 6-24 shows the percentage of airports by role that have community outreach programs. More than half of airports in the Commercial Service and Regional airports take part in some form of community outreach, while nearly half of the Business role also has community outreach programs.

Figure 6-23 NPIAS Airports by Role with Community Outreach Programs



Source: CDM Smith, 2015



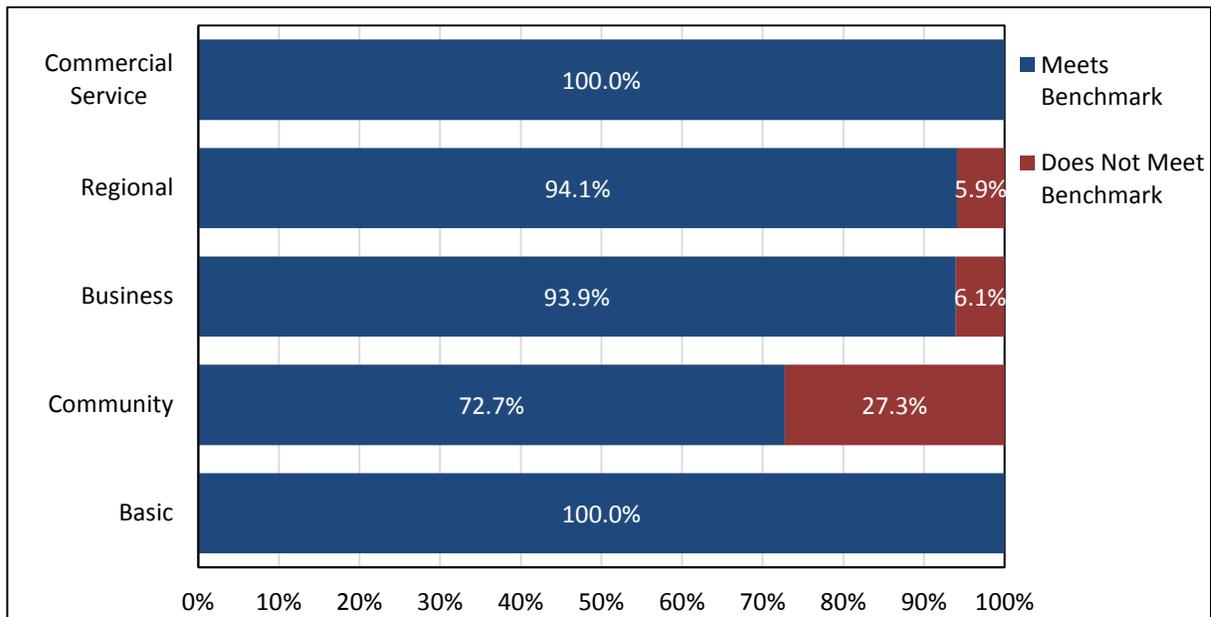
PERFORMANCE MEASURE: NPIAS AIRPORTS SUPPORTING FLIGHT TRAINING

INFORMATIONAL - NO BENCHMARK

Flight training is essential for educating the next generation of aviation enthusiasts, as well as forming the basis for a career as a pilot. Flight training at airports ranges from individual certified flight instructors operating part time at small airports to advanced commercial pilot training facilities sponsored by airlines. Colleges and universities also have their own flight training programs and degrees.

It is a KASP benchmark that the Kansas system of NPIAS airports maximizes the availability of flight training in the state. As shown in Figure 6-24, nearly all NPIAS airports in Kansas have based flight training available to airport users.

Figure 6-24 NPIAS Airports by Role that Support Flight Training



Source: CDM Smith, 2015

PERFORMANCE MEASURE: NPIAS AIRPORTS SUPPORTING A&P PROGRAMS

INFORMATIONAL - NO BENCHMARK

Airframe and powerplant (A&P) technicians are professional aircraft mechanics that have received skilled training in the maintenance and repair of airplane engines and airframes. These technicians are highly skilled and must earn and maintain certification from the FAA to perform their work. Continuing education in aviation technologies and repair techniques is required to maintain this certification. A&P mechanics must also stay up to date on FAA-mandated repairs and inspections.

A&P mechanics are typically trained in dedicated programs at trade schools, community colleges, and universities. Often, A&P programs are offered by institutions that also offer flight training, where A&P mechanics-in-training work to maintain the school’s aircraft fleet. Occasionally, these student mechanics work for FBOs at their local airports as apprentices. Currently, the only airport in Kansas with a dedicated A&P program is Col. James Jabara Airport in Wichita.

6.1 SUMMARY

This chapter of the KASP has provided an overview of how the Kansas system of 80 NPIAS airports serves the state. To do so, performance measures and benchmarks were established under the five goals of preservation, modernization, accessibility, economic support, and education. The results of this system evaluation are summarized in Table 6-2, which lists all goals, performance measures, benchmarks, and results.

Previous chapters of the KASP, particularly the inventory and stratification chapters, have built to this point. For example, many of the benchmarks have been set only for specific roles. Similarly, the results of this chapter and analysis build directly into the next steps of the KASP. Facility and service benchmarks set up under the preservation goal will be directly tied to airport recommendations, including runway extensions, hangar construction, and fuel farm construction, among others.

In addition, the analyses of various geographic coverages, primarily under the accessibility goal, help to identify gaps in service. As a result, certain airports may be recommended for a role upgrade in the future system, if the particular facilities and services recommended for that role will provide the aviation services that the underserved region currently lacks.

Table 6-2 System Evaluation Summary

Performance Measure	Benchmark	Performance
GOAL: PRESERVE THE AVIATION SYSTEM		
NPIAS Airports with primary runways meeting a minimum pavement condition index (PCI)	100% of primary runways to have a PCI of 70 or higher	Commercial Service: 42.9% Regional: 76.5% Business: 75.8% Community: 54.5% Basic: 100%
NPIAS Airports with clear approaches to their primary runway	100% of primary runway approaches to have clear obstructions	Commercial Service: 71.4% Regional: 47.1% Business: 21.2% Community: 9.1% Basic: 100%

Performance Measure	Benchmark	Performance
NPIAS Airports with an adopted emergency response plan	100% of Commercial Service, Regional, and Business Airports	Commercial Service: 100% Regional: 47.1% Business: 0.0%
NPIAS Airports with an adopted wildlife management plan	100% of Commercial Service and Regional Airports	Commercial Service: 42.9% Regional: 17.6%
NPIAS Airports with an adopted security plan	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 71.4% Regional: 64.7% Business: 9.1% Community: 4.5%
NPIAS Airports with an adopted snow removal plan	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 100% Regional: 100% Business: 90.9% Community: 77.3%
NPIAS Airports meeting minimum facility and service objectives	100% of airports to meet benchmarks for their airport role	Performance varies by benchmark

GOAL: PROVIDE A MODERN NETWORK OF AIRPORTS

NPIAS Airports within 50 NM of an alternate airport with a precision or near-precision APV approach	95% of study airports	98.8% of study airports
NPIAS Airports with 24-hour access to aircraft fuel	100% of Commercial Service and Regional Airports	Commercial Service: 100% Regional: 100%
NPIAS Airports with jet fuel	100% of Commercial Service and Regional Airports	Commercial Service: 100% Regional: 94.1%

GOAL: PROVIDE A NETWORK OF AIRPORTS ACCESSIBLE BY AIR AND GROUND

Population and area within 90 minutes of a NPIAS Commercial Service airport	Population: 75% Area: 50%	Population: 55.6% (89.5% with MCI) Area: 58.3% (64.6% with MCI)
Population and area within 45 minutes of a NPIAS Commercial Service or Regional airport	Population: 90% Area: 70%	Population: 87.5% (87.7% with MCI) Area: 40.2% (40.3% with MCI)
Population and area within 30 minutes of a NPIAS airport	Population: 95% Area: 70%	Population: 91.4% Area: 54.9%
Population and area within 30 minutes of a NPIAS airport capable of supporting air ambulance service	Population: 94% Area: 72%	Population: 81.3% Area: 28.6%
Hospitals within 30 minutes of a NPIAS airport	100% of hospitals	85.4% of hospitals

Performance Measure	Benchmark	Performance
Population and area within 30 minutes of a NPIAS airport capable of supporting physician aircraft	Population: 97% Area: 81%	Population: 88.0% Area: 44.7%
Population and area within 30 minutes of a NPIAS airport with an instrument approach	Population: 95% Area: 90%	Population: 89.3% Area: 47.4%
Population and area within 30 nautical miles of a NPIAS airport with on-site weather reporting	Population: 100% Area: 100%	Population: 99.1% Area: 96.7%

GOAL: SUPPORT LOCAL AND STATEWIDE ECONOMIC GROWTH

Kansas population and area within 45 minutes of a NPIAS airport with a 5,000-foot, or greater, runway	Population: 95% Area: 65%	Population: 92.8% Area: 58.5%
Airports with available ground transportation	100% of Commercial Service, Regional, Business, and Community Airports	Commercial Service: 100% Regional: 94.1% Business: 84.8% Community: 31.8%
Kansas population and area within 45 minutes of a NPIAS airport meeting business user needs	Population: 91% Area: 56%	Population: 91.1% Area: 49.2%

GOAL: SUPPORT THE PROMOTION OF AVIATION EDUCATION

NPIAS Airports with community outreach programs	Informational - no benchmark	Commercial Service: 57.1% Regional: 76.5% Business: 45.5% Community: 27.3% Basic: 0.0%
NPIAS Airports supporting flight training	Informational - no benchmark	Commercial Service: 100% Regional: 94.1% Business: 93.9% Community: 72.7% Basic: 100%
NPIAS Airports supporting airframe and powerplant (A&P) programs	Informational - no benchmark	1 airport: Col. James Jabara

Source: CDM Smith, 2015



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SECTION 7 SYSTEM RECOMMENDATIONS

The previous section of the KASP, System Evaluation, analyzed the system of 80 Kansas NPIAS airports based on five goals established at the beginning of the plan. Each goal included several performance measures, which in turn have established benchmarks upon which the Kansas system could be evaluated for its current performance. The purpose of this evaluation is to determine the extent to which airports in the system serve the respective markets of their KASP roles, in addition to determining the extent to which the Kansas system as a whole serves the state’s aviation needs.

This chapter of the KASP identifies actions that are desirable to raise the overall level of system performance as it relates to targets set for study benchmarks. Targeted actions, based on recommendations, will enhance the overall performance of the airport system and enable individual airports to better serve the respective markets of their system roles. System plan recommendations in no way indicate eligibility for federal or state funding. Each airport’s master plan, as well as unique circumstances, will dictate what types of facilities are needed at an individual airport.

Certain performance measures are strictly informational while others are action-oriented, meaning they have specific airport recommendations attached to them. Table 7-1 lists all goals and performance measures of the KASP, and details those performance measures that are informational and those that involve a recommendation. Performance measures described as “Future system GIS analysis” do not have recommendations, but are presented with additional analysis based on how the implementation of other recommendations will influence their performance in the future. For example, this analysis shows how all airports meeting their facility benchmark for runway length would affect the coverage of airports with a 5,000 foot runway.

Table 7-1 Performance Measures with Associated Recommendations or Future Systems Analysis

Performance Measure	Performance Type
GOAL: PRESERVE THE AVIATION SYSTEM	
Airports with primary runways meeting a minimum pavement condition index (PCI)	Action-oriented
Airports with clear approaches to their primary runway	Action-oriented
Airports with an adopted emergency response plan	Action-oriented
Airports with an adopted wildlife management plan	Action-oriented
Airports with an adopted security plan	Action-oriented
Airports with an adopted snow removal plan	Action-oriented
Airports meeting minimum facility and service objectives	Action-oriented with cost estimates
GOAL: PROVIDE A MODERN NETWORK OF AIRPORTS	

Performance Measure	Performance Type
Airports within 50 nautical miles of an alternate airport with a precision or near-precision APV approach	Informational
Airports with 24/7 fuel	Action-oriented
Airports with jet fuel	Action-oriented

GOAL: PROVIDE A NETWORK OF AIRPORTS THAT IS ACCESSIBLE BY THE AIR AND THE GROUND

Kansas population and area within 90 minutes of a Commercial Service airport	Informational
Kansas population and area within 45 minutes of a Commercial Service or Regional airport	Informational
Kansas population and area within 30 minutes of a NPIAS airport	Informational
Kansas population and area within 30 minutes of an airport capable of supporting air ambulance service	Future system GIS analysis
Hospitals within 30 minutes of a NPIAS airport	Informational
Kansas population and area within 30 minutes of an airport capable of supporting physician aircraft	Informational
Kansas population and area within 30 minutes of an airport with an instrument approach	Future system GIS analysis
Kansas population and area within 30 nautical miles of an airport with on-site weather reporting	Future system GIS analysis

GOAL: SUPPORT LOCAL AND STATEWIDE ECONOMIC GROWTH

Kansas population and area within 45 minutes of an airport with a 5,000-foot, or greater, runway	Future system GIS analysis
Airports with a link to ground transportation	Action-oriented
Kansas population and area within 45 minutes of an airport meeting business user needs	Future system GIS analysis

GOAL: SUPPORT THE PROMOTION OF AVIATION EDUCATION

Airports with community outreach programs	Informational
Airports supporting flight training	Informational
Airports supporting airframe and powerplant (A&P) programs	Informational

Source: CDM Smith, 2016

The following sections detail recommendations and future system analysis associated with KASP goals and performance measures. The majority of airport-specific recommendations are a result of the facility and service benchmarks. For these recommendations, planning-level cost estimates were developed.

RECOMMENDATIONS: PRESERVATION GOAL

The Preservation Goal of the KASP focuses on preserving the facilities and functions of the airport system and maximizing the investment of KDOT and the FAA. All performance measures associated with this goal are action-oriented. The following sections detail recommendations related to preserving the airport system, including detailed facility and service recommendations and cost estimates.

RECOMMENDATIONS: AIRPORTS WITH PRIMARY RUNWAYS MEETING A MINIMAL PAVEMENT CONDITION INDEX

Benchmark: 100 percent of primary runways with a PCI of 70 or higher

All NPIAS airports in Kansas have a paved primary runway. Therefore, this performance measure applies to the entire system. Currently, 67.5 percent of the system has a PCI of at least 70 on their primary runway. While continual maintenance and upkeep of all airport pavements is necessary to limit major rehabilitation projects over the long term, it is the specific recommendation of the KASP that all airports with a primary runway PCI under 70 should prioritize primary runway maintenance. The airports that do not meet the PCI threshold of 70, along with their current primary runway PCI, are listed in Table 7-2, from KDOT Aviation’s two-part Pavement Management Study conducted between 2011-2012.

Table 7-2 Airports Recommended to Prioritize Primary Runway Maintenance

ID	Associated City	Airport	Current Primary Runway PCI
Commercial Service			
DDC	Dodge City	Dodge City Regional	38
HYS	Hays	Hays Regional	56
MHK	Manhattan	Manhattan Regional	53
SLN	Salina	Salina Regional	52
Regional			
GBD	Great Bend	Great Bend Municipal	64
LWC	Lawrence	Lawrence Municipal	49
FOE	Topeka	Topeka Regional	51
WLD	Winfield	Strother Field	59
Business			
3AU	Augusta	Augusta Municipal	58
CFV	Coffeyville	Coffeyville Municipal	64
CNK	Concordia	Blosser Municipal	39
EHA	Elkhart	Elkhart-Morton County	67
9K7	Ellsworth	Ellsworth Municipal	56
LQR	Larned	Larned - Pawnee County	53
OWI	Ottawa	Ottawa Municipal	52
PHG	Phillipsburg	Phillipsburg Municipal	51
Community			
K59	Atchison	Amelia Earhart Memorial	60
CYW	Clay Center	Clay Center Municipal	67
13K	Eureka	Lt. William M. Milliken	65
K34	Gardner	Gardner Municipal	36
K68	Garnett	Garnett Industrial	50
3K7	Leoti	Mark Hoard Memorial	61
48K	Ness City	Ness City Memorial	56
53K	Osage City	Osage City Municipal	54
K81	Paola	Miami County	63
K83	Sabetha	Sabetha Municipal	35

Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: AIRPORTS WITH CLEAR APPROACHES TO THE PRIMARY RUNWAY

Benchmark: 100 percent of primary runway approaches clear of obstructions

Having clear approaches to runway ends is an important element of airport safety and efficiency. Approach obstructions, which are any items that penetrate the approach slope, are listed in the Airport Facility Directory. The previous chapter identified the percentage of airports by KASP role that currently have no obstructions on their primary runway. While it is the aim of the KASP that all approaches be free of obstructions, it is often not feasible to remove these structures due to a number of factors. The recommendation of the KASP is that additional analysis be performed on known approach obstructions, so that they can be eliminated where realistically feasible. Table 7-3 lists airports with known approach obstructions on their primary runway.

Table 7-3 Airports Recommended to Remove Obstructions from Primary Runway Approaches

ID	Associated City	Airport	Obstructions in Primary Runway Approach
Commercial Service			
MHK	Manhattan	Manhattan Regional	Trees
SLN	Salina	Salina Regional	Ground
Regional			
GLD	Goodland	Renner Field - Goodland Municipal	Building
HUT	Hutchinson	Hutchinson Municipal	Tree/Road
IDP	Independence	Independence Municipal	Tree
LWC	Lawrence	Lawrence Municipal	Pole
OIN	Oberlin	Oberlin Municipal	Tree
OJC	Olathe	Johnson County Executive	Trees
PTS	Pittsburg	Atkinson Municipal	Trees
FOE	Topeka	Forbes Field	Trees
TOP	Topeka	Philip Billard Municipal	Tree
Business			
K78	Abilene	Abilene Municipal	Trees/Road
ADT	Atwood	Atwood-Rawlins County City-County	Tree
3AU	Augusta	Augusta Municipal	Building
UKL	Burlington	Burlington-Coffey County	Tree
CNU	Chanute	Chanute - Martin Johnson	Tree/Railroad
CFV	Coffeyville	Coffeyville Municipal	Tree
CNK	Concordia	Blosser Municipal	Tree
EHA	Elkhart	Elkhart-Morton County	Road/Tower
9K7	Ellsworth	Ellsworth Municipal	Pole
EMP	Emporia	Emporia Municipal	Trees
FSK	Fort Scott	Fort Scott Municipal	Trees
HLC	Hill City	Hill City Municipal	Road
HQG	Hugoton	Hugoton Municipal	Roads
K88	Iola	Allen County	Trees
9K8	Kingman	Kingman - Clyde Cessna Field	Road/Trees

ID	Associated City	Airport	Obstructions in Primary Runway Approach
LQR	Larned	Larned - Pawnee County	Trees/Road
MEJ	Meade	Meade Municipal	Roads
K51	Medicine Lodge	Medicine Lodge	Hill
OWI	Ottawa	Ottawa Municipal	Tree
PPF	Parsons	Tri-City	Road/Trees
PHG	Phillipsburg	Phillipsburg Municipal	Road/Pipeline
RSL	Russell	Russell Municipal	Railroad
TQK	Scott City	Scott City Municipal	Road
3K3	Syracuse	Syracuse - Hamilton County Municipal	Pipeline/Tower
5K2	Tribune	Tribune Municipal	Road/Pipeline
ULS	Ulysses	Ulysses	Pipeline

Community

ANY	Anthony	Anthony Municipal	Pipeline/Tree
K59	Atchison	Amelia Earhart Memorial	Tree/Road
RPB	Belleville	Belleville Municipal	Railroad/Trees
K61	Beloit	Moritz Memorial	Antenna/Trees
8K8	Cimarron	Cimarron Municipal	Road
CYW	Clay Center	Clay Center Municipal	Other/Road
K34	Gardner	Gardner Municipal	Pipeline/Tree
K68	Garnett	Garnett Industrial	Brush/Tree
3JC	Junction City	Freeman Field	Poles
36K	Lakin	Kearny County	Roads
3K7	Leoti	Mark Hoard Memorial	Roads
LYO	Lyons	Lyons - Rice County Municipal	Pole
MYZ	Marysville	Marysville Municipal	Trees
48K	Ness City	Ness City Memorial	Pipeline/Building
53K	Osage City	Osage City Municipal	Tree
K67	Oswego	Oswego Municipal	Railroad
K81	Paola	Miami County	Trees
K83	Sabetha	Sabetha Municipal	Pole
SYF	St. Francis	St. Francis-Cheyenne County	Trees
OH1	WaKeeney	Trego WaKeeney	Pole

Source: Airport Facility Directory, 2015

RECOMMENDATIONS: AIRPORTS WITH AN ADOPTED EMERGENCY RESPONSE PLAN

Benchmark: 100 percent of Commercial Service, Regional, and Business airports

An emergency response plan ensures that airports have established plans and procedures to deal with the wide variety of potential emergencies that airports may face. The benchmark set for the KASP is that all airports in the Commercial Service, Regional, and Business roles have an established emergency response plan. Currently, 26 percent of the airports in these roles have an emergency response plan. All other airports in these roles, listed in Table 7-4, are recommended to develop such a plan.

Table 7-4 Airports Recommended to Develop an Emergency Response Plan

ID	Associated City	Airport
Regional		
GLD	Goodland	Renner Field - Goodland Municipal
GBD	Great Bend	Great Bend Municipal
MPR	McPherson	McPherson
OIN	Oberlin	Oberlin Municipal
OJC	Olathe	Johnson County Executive
PTS	Pittsburg	Atkinson Municipal
PTT	Pratt	Pratt Regional
TOP	Topeka	Philip Billard Municipal
EGT	Wellington	Wellington Municipal
WLD	Winfield	Strother Field
Business		
K78	Abilene	Abilene Municipal
ADT	Atwood	Atwood-Rawlins County City-County
3AU	Augusta	Augusta Municipal
UKL	Burlington	Burlington-Coffey County
CNU	Chanute	Chanute - Martin Johnson
CFV	Coffeyville	Coffeyville Municipal
CBK	Colby	Shalz Field
CNK	Concordia	Blosser Municipal
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial
EHA	Elkhart	Elkhart-Morton County
9K7	Ellsworth	Ellsworth Municipal
EMP	Emporia	Emporia Municipal
FSK	Fort Scott	Fort Scott Municipal
HLC	Hill City	Hill City Municipal
HQG	Hugoton	Hugoton Municipal
K88	Iola	Allen County
JHN	Johnson	Stanton County Municipal
9K8	Kingman	Kingman - Clyde Cessna Field
LQR	Larned	Larned - Pawnee County
MEJ	Meade	Meade Municipal
K51	Medicine Lodge	Medicine Lodge
NRN	Norton	Norton Municipal
OEL	Oakley	Oakley Municipal
OWI	Ottawa	Ottawa Municipal
PPF	Parsons	Tri-City
PHG	Phillipsburg	Phillipsburg Municipal
RSL	Russell	Russell Municipal
TQK	Scott City	Scott City Municipal
K82	Smith Center	Smith Center Municipal
RCP	Stockton	Rooks County Regional
3K3	Syracuse	Syracuse - Hamilton County Municipal
5K2	Tribune	Tribune Municipal
ULS	Ulysses	Ulysses

Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: AIRPORTS WITH AN ADOPTED WILDLIFE MANAGEMENT PLAN

Benchmark: 100 percent of Commercial Service airports

Dedicated policies and procedures for limiting risks of and to wildlife are another important component of airport safety and security. In the KASP, all airports in the Commercial Service have Wildlife Management Plans (WHPs) per FAR Part 139 certification. Activity levels at airports in the Regional role suggest conducting an FAA site visit for a Wildlife Hazard Assessment (WHA). Table 7-5 summarizes locations of WHPs and suggestions for WHAs.

Table 7-5 Wildlife Management Plans (WHPs) and Suggestions for Wildlife Hazard Assessments (WHAs)

ID	Associated City	Airport
Commercial Service Part 139 Airports with WHPs		
GCK	Garden City	Garden City Regional
HYS	Hays	Hays Regional
LBL	Liberal	Liberal Mid-America Regional
SLN	Salina	Salina Regional
Regional Airports Where WHAs are Suggested		
GLD	Goodland	Renner Field - Goodland Municipal
HUT	Hutchinson	Hutchinson Municipal
IDP	Independence	Independence Municipal
LWC	Lawrence	Lawrence Municipal
MPR	McPherson	McPherson
EWK	Newton	Newton City/County
OIN	Oberlin	Oberlin Municipal
OJC	Olathe	Johnson County Executive
IXD	Olathe	New Century AirCenter
PTS	Pittsburg	Atkinson Municipal
PTT	Pratt	Pratt Regional
TOP	Topeka	Philip Billard Municipal
EGT	Wellington	Wellington Municipal
WLD	Winfield	Strother Field

Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: AIRPORTS WITH AN ADOPTED SECURITY PLAN

Benchmark: 100 percent of Commercial Service, Regional, Business, and Community airports

Aviation security is a major priority at all levels of aviation. Security measures such as preventing unauthorized access to airside facilities and aircraft, preventing criminal activity, and ensuring the safety of users, employees, and the general public are all important. Because of these reasons, a benchmark is set that all airports in the Commercial Service, Regional, Business, and Community roles have an adopted security plan. Currently, 25 percent of the airports in these roles have such a plan. Airports recommended to adopt a security plan are listed in Table 7-6.

Table 7-6 Airports Recommended to Develop a Security Plan

ID	Associated City	Airport
Regional		
GLD	Goodland	Renner Field - Goodland Municipal
MPR	McPherson	McPherson
OIN	Oberlin	Oberlin Municipal
PTS	Pittsburg	Atkinson Municipal
EGT	Wellington	Wellington Municipal
WLD	Winfield	Strother Field
Business		
K78	Abilene	Abilene Municipal
ADT	Atwood	Atwood-Rawlins County City-County
3AU	Augusta	Augusta Municipal
UKL	Burlington	Burlington-Coffey County
CNU	Chanute	Chanute - Martin Johnson
CFV	Coffeyville	Coffeyville Municipal
CBK	Colby	Shalz Field
CNK	Concordia	Blosser Municipal
EHA	Elkhart	Elkhart-Morton County
9K7	Ellsworth	Ellsworth Municipal
FSK	Fort Scott	Fort Scott Municipal
HLC	Hill City	Hill City Municipal
HQG	Hugoton	Hugoton Municipal
K88	Iola	Allen County
JHN	Johnson	Stanton County Municipal
9K8	Kingman	Kingman - Clyde Cessna Field
LQR	Larned	Larned - Pawnee County
MEJ	Meade	Meade Municipal
K51	Medicine Lodge	Medicine Lodge
NRN	Norton	Norton Municipal
OEL	Oakley	Oakley Municipal
OWI	Ottawa	Ottawa Municipal
PPF	Parsons	Tri-City
RSL	Russell	Russell Municipal
TQK	Scott City	Scott City Municipal
K82	Smith Center	Smith Center Municipal
RCP	Stockton	Rooks County Regional
3K3	Syracuse	Syracuse - Hamilton County Municipal
5K2	Tribune	Tribune Municipal
ULS	Ulysses	Ulysses
Community		
ANY	Anthony	Anthony Municipal
K59	Atchison	Amelia Earhart Memorial
RPB	Belleville	Belleville Municipal
K61	Beloit	Moritz Memorial
8K8	Cimarron	Cimarron Municipal
CYW	Clay Center	Clay Center Municipal
13K	Eureka	Lt. William M. Milliken
K68	Garnett	Garnett Industrial
HRU	Herington	Herington Regional

ID	Associated City	Airport
3JC	Junction City	Freeman Field
36K	Lakin	Kearny County
3K7	Leoti	Mark Hoard Memorial
LYO	Lyons	Lyons - Rice County Municipal
MYZ	Marysville	Marysville Municipal
48K	Ness City	Ness City Memorial
53K	Osage City	Osage City Municipal
K67	Oswego	Oswego Municipal
K81	Paola	Miami County
K83	Sabetha	Sabetha Municipal
SYF	St. Francis	St. Francis-Cheyenne County
OH1	WaKeeney	Trego WaKeeney

Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: AIRPORTS WITH AN ADOPTED SNOW REMOVAL PLAN

Benchmark: 100 percent of Commercial Service, Regional, Business, and Community airports

A snow removal plan lays out specific procedures for keeping a runway and other airport pavements operable during winter weather. It is the aim of the KASP that all airports in the Commercial Service, Regional, Business, and Community roles have an established snow removal plan. Currently, 89.9 percent of these airports have a snow removal plan. Those airports that do not have such a plan are recommended to develop a plan and are listed in Table 7-7.

Table 7-7 Airports Recommended to Develop a Snow Removal Plan

ID	Associated City	Airport
Business		
ADT	Atwood	Atwood-Rawlins County City-County
9K7	Ellsworth	Ellsworth Municipal
RCP	Stockton	Rooks County Regional
Community		
ANY	Anthony	Anthony Municipal
K59	Atchison	Amelia Earhart Memorial
8K8	Cimarron	Cimarron Municipal
36K	Lakin	Kearny County
48K	Ness City	Ness City Memorial

Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: AIRPORTS MEETING MINIMAL FACILITY AND SERVICE BENCHMARKS

For each airport role established by the KASP, a set of preferred minimum facilities and services has also been established. These facility and service benchmarks (shown in Table 7-8) are set so that each airport can best serve the needs of the market typically served by its role. Roles that typically serve more demanding aviation markets are recommended to have more complex and advanced aviation services and technology.

Table 7-8 Facility and Service Benchmarks by Airport Role

Facility and Service Benchmark Category	Commercial Service	Regional	Business	Community	Basic
Runway Length (feet)	5,500	5,000	4,000	3,200	Not an Objective
Runway Width (feet)	100	100	75	60	Not an Objective
Runway Surface	Paved	Paved	Paved	Paved	Not an Objective
Taxiway Type	Full Parallel	Full Parallel	Turnarounds	Turnarounds	Not an Objective
Best IAP	Precision	APV	Any IAP	Any IAP	Not an Objective
Rotating Beacon	Yes	Yes	Yes	Not an Objective*	Not an Objective
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Wind Sock*	Wind Sock
VGSI	PAPI or VASI	PAPI or VASI	PAPI or VASI	Not an Objective	Not an Objective
Runway Lighting	MIRL	MIRL	MIRL	MIRL	Not an Objective
ALS or REILs	ALS	ALS or REILs	ALS or REILs	Not an Objective	Not an Objective
Weather Reporting	Automated	Automated	Automated	Automated	Not an Objective
Restroom	Yes	Yes	Yes	Yes	Yes
Link to Ground Transportation	Yes	Yes	Yes	Yes	Not an Objective
Fuel	AvGas, Jet A, 24/7 Fuel	AvGas, Jet A, 24/7 Fuel	AvGas	Not an Objective	Not an Objective
Terminal	Terminal	Terminal	Terminal	Not an Objective	Not an Objective
Hangar Capacity	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft	Not an Objective
Apron Capacity (square feet)	10,000	10,000	10,000	10,000	Not an Objective

*Not an Objective for KASP/KAIP project planning, but beacons are required by AC 150/5300-13A with runway edge lighting, and wind socks should be lighted at airports with runway lighting (per FAA).

Source: CDM Smith. FAA, KDOT Aviation, 2015.

The facility and service performance measure represents the majority of the action-oriented benchmarks in the KASP. For every airport showing a deficiency in a facility and service benchmark, a recommendation is made. Planning-level cost estimates were made for each recommendation so that the FAA and KASP can best prioritize funding into the future.

The following summarizes recommendations by project type. Tables detailing projects and estimates costs by project type and airport follow:

Runway length and width: Table 7-9 details recommendations and cost estimates related to the primary runway length and width. These benchmarks are combined due to cost estimate calculations using full runway dimension, and therefore needing both ultimate recommended length and width. In total, 23 airports have recommendations related to runway dimensions, with 14 of these having a runway length recommendation and 20 having a width recommendation. The total estimated cost of these projects is \$39 million.

Runway surface: All NPIAS airports in the Kansas system meet benchmarks for runway surface type. Therefore, no recommendations are required for this benchmark.

Taxiway type: Table 7-10 details recommendations related to taxiway type. Three Kansas airports, all in the Regional role, are recommended for upgrades to a full parallel taxiway. The total estimated cost of these projects is \$7.1 million.

Best IAP: Table 7-11 details recommendations related to each airport's best instrument approach procedure (IAP). In total, 12 NPIAS airports in Kansas are recommended to upgrade to a more advanced approach capability. The total estimated cost of these projects is \$624,000.

Rotating beacon: Table 7-12 details recommendations and estimated costs related to the rotating beacon benchmark. Two airports, both in the Business role, are recommended to install a rotating beacon. The total estimated cost of these projects is \$120,000.

Wind sock: All NPIAS airports meet benchmarks related to wind indicators. Therefore, no recommendations are needed with this benchmark.

VGSI: Table 7-13 details recommendations and estimated costs for visual glide slope indicators (VGSI). Four airports, all in the Business airport role, are recommended for a PAPI system. The total estimated cost of these projects is \$332,800.

Runway lighting: Table 7-14 details recommendations and estimated costs related to benchmarks set for runway lighting. Twelve total airports - two in the Business role and 10 in the Community role - are recommended to upgrade to or install a MIRL system. The total estimated cost of these projects is \$3.4 million.

ALS or REILs: Table 7-15 details recommendations and estimated costs related to benchmarks set for approach lighting systems (ALS) and runway end indicator lights (REILs). A total of 13 NPIAS airports in Kansas are recommended to install these facilities. Since the minimum recommended lighting system is REILs, cost estimates are developed for that type of facility, instead of the more expensive ALS system. The total estimated cost for installation of REILs at these airports is \$473,200.

Weather reporting: Table 7-16 details recommendations and estimated costs related to automated weather reporting systems. In total, 19 airports are recommended for an AWOS or ASOS, including three Business airports, and 16 airports in the Community role. The total estimated cost for these projects is \$4.3 million.

Restroom: Table 7-17 details recommendations related to the public restroom benchmark. In total, 10 NPIAS airports in Kansas are recommended to add public restroom facilities. Of these, three airports have an existing terminal, and can be assumed to have a restroom, currently public or not. Another two airports are recommended to construct a new GA terminal, which will include restroom facilities. The recommendation for the remaining five airports is for long-term rental of portable facilities, which fall under airport operating expenses, not capital improvements. For these reasons, costs were not estimated for this benchmark.

Link to ground transportation: Table 7-18 details recommendations related to the ground transportation link. The need for and reality of links to ground transportation vary greatly by airport. Some airports may only need a courtesy car, while others have a need for a full time car rental facility. Because ground transportation needs are largely market-driven, costs were not estimated for this benchmark.

Fuel: Table 7-19 details recommendations and cost estimates related to aircraft fueling facilities. One airport in the Regional role and one in the Business role were recommended to add new fueling facilities. An individual fuel farm is recommended to be installed for each fuel type. For example, at Oberlin Municipal, fuel farms are recommended for both AvGas and Jet A fuel, while only an AvGas fuel farm is recommended at the two Business airports. For budgeting purposes, fuel farms with a 10,000-gallon capacity are recommended. The total estimated cost of these projects is \$630,000.

Terminal: Table 7-20 details recommendations and cost estimates related to GA terminal benchmarks. Two airports, both in the Business role, are recommended for GA terminal construction. For budgeting purposes, the terminal facilities were estimated at 3,000 square feet. The total estimated cost for constructing terminals at these airports is \$936,000.

Hangar capacity: Table 7-21 details recommendations and cost estimates related to benchmarks for hangar capacity. All airports in the system, regardless of role, were benchmarked to have enough hangar capacity for 100 percent of their based aircraft. However, airports of differing activity levels typically require different types of hangars. Airports that are primarily used by smaller, piston-engine aircraft will likely have more T-hangars for aircraft storage, while airports with larger jet aircraft require more conventional hangars. Existing ratios of T-hangars to conventional hangars were used to calculate estimated costs. Fifteen total NPIAS airports in Kansas are recommended for increases to hangar storage capacity. The total estimated cost of these projects is \$9 million.

Apron capacity: Table 7-22 details recommendations and cost estimates related to the apron capacity benchmark. All airports, regardless of role or activity level, are benchmarked to have at

least 10,000 square feet of apron space. Five airports are recommended to increase their apron storage capacity. The total estimated cost of these projects is \$887,400.

Table 7-9 Primary Runway Dimension Recommendations and Estimated Costs

Associated ID	City	Airport	Runway Length Recommendation	Runway Width Recommendation	Estimated Cost
Regional					
LWC	Lawrence	Lawrence Municipal	N/A	Widen Runway 25 ft	\$3,063,750
OIN	Oberlin	Oberlin Municipal	Extend Runway 1,499 ft	Widen Runway 40 ft	\$5,653,830
OJC	Olathe	Johnson County Executive	Extend Runway 902 ft	Widen Runway 25 ft	\$3,756,675
EGT	Wellington	Wellington Municipal	Extend Runway 799 ft	N/A	\$1,717,850
Regional Total					\$14,192,105
Business					
3AU	Augusta	Augusta Municipal	N/A	Widen Runway 15 ft	\$1,228,793
CNK	Concordia	Blosser Municipal	Extend Runway 399 ft	Widen Runway 15 ft	\$1,636,830
EHA	Elkhart	Elkhart-Morton County	N/A	Widen Runway 15 ft	\$1,433,250
9K7	Ellsworth	Ellsworth Municipal	N/A	Widen Runway 27 ft	\$2,044,508
K51	Medicine Lodge	Medicine Lodge	Extend Runway 800 ft	Widen Runway 33 ft	\$2,898,000
NRN	Norton	Norton Municipal	N/A	Widen Runway 15 ft	\$1,375,043
PHG	Phillipsburg	Phillipsburg Municipal	N/A	Widen Runway 15 ft	\$1,317,420
5K2	Tribune	Tribune Municipal	N/A	Widen Runway 15 ft	\$1,464,548
Business Total					\$13,398,390
Community					
K59	Atchison	Amelia Earhart Memorial	Extend Runway 200 ft	Widen Runway 12 ft	\$840,000
8K8	Cimarron	Cimarron Municipal	Extend Runway 400 ft	Widen Runway 28 ft	\$1,792,000
K34	Gardner	Gardner Municipal	Extend Runway 240 ft	Widen Runway 21 ft	\$378,000
K68	Garnett	Garnett Industrial	Extend Runway 540 ft	Widen Runway 15 ft	\$1,265,250
36K	Lakin	Kearny County	N/A	Widen Runway 20 ft	\$1,193,500
3K7	Leoti	Mark Hoard Memorial	N/A	Widen Runway 10 ft	\$848,445
LYO	Lyons	Lyons - Rice County Municipal	Extend Runway 201 ft	N/A	\$263,813
48K	Ness City	Ness City Memorial	Extend Runway 44 ft	Widen Runway 12 ft	\$708,960
53K	Osage City	Osage City Municipal	Extend Runway 640 ft	Widen Runway 20 ft	\$1,568,000
K67	Oswego	Oswego Municipal	Extend Runway 700 ft	Widen Runway 10 ft	\$1,306,500
K83	Sabetha	Sabetha Municipal	Extend Runway 100 ft	Widen Runway 20 ft	\$1,326,000
Community Total					\$11,490,468
Kansas System Total					\$39,080,963

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-10 Taxiway Recommendations and Estimated Costs

ID	Associated City	Airport	Taxiway Recommendation	Estimated Cost
Regional				
OIN	Oberlin	Oberlin Municipal	Construct full parallel taxiway	\$2,144,363
PTS	Pittsburg	Atkinson Municipal	Construct full parallel taxiway	\$3,946,250
TOP	Topeka	Philip Billard Municipal	Construct full parallel taxiway	\$1,075,533
Regional Total				\$7,166,145
Kansas System Total				\$7,166,145

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-11 Instrument Approach Recommendations and Estimated Costs

ID	Associated City	Airport	Instrument Approach Recommendation	Estimated Cost
Business				
9K7	Ellsworth	Ellsworth Municipal	Install non-precision approach	\$52,000
K51	Medicine Lodge	Medicine Lodge	Install non-precision approach	\$52,000
Business Total				\$104,000
Community				
8K8	Cimarron	Cimarron Municipal	Install non-precision approach	\$52,000
K34	Gardner	Gardner Municipal	Install non-precision approach	\$52,000
K68	Garnett	Garnett Industrial	Install non-precision approach	\$52,000
36K	Lakin	Kearny County	Install non-precision approach	\$52,000
3K7	Leoti	Mark Hoard Memorial	Install non-precision approach	\$52,000
48K	Ness City	Ness City Memorial	Install non-precision approach	\$52,000
53K	Osage City	Osage City Municipal	Install non-precision approach	\$52,000
K67	Oswego	Oswego Municipal	Install non-precision approach	\$52,000
K83	Sabetha	Sabetha Municipal	Install non-precision approach	\$52,000
OH1	WaKeeney	Trego WaKeeney	Install non-precision approach	\$52,000
Community Total				\$520,000
Kansas System Total				\$624,000

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-12 Rotating Beacon Recommendations and Estimated Costs

ID	Associated City	Airport	Rotating Beacon Recommendation	Estimated Cost
Business				
CFV	Coffeyville	Coffeyville Municipal	Install rotating beacon	\$60,000
RCP	Stockton	Rooks County Regional	Install rotating beacon	\$60,000
Business Total				\$120,000
Kansas System Total				\$120,000

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-13 VGSi Recommendations and Estimated Costs

ID	Associated City	Airport	VGSi Recommendation	Estimated Cost
Business				
CNK	Concordia	Blosser Municipal	Install PAPI	\$83,200
K51	Medicine Lodge	Medicine Lodge	Install PAPI	\$83,200
OEL	Oakley	Oakley Municipal	Install PAPI	\$83,200
5K2	Tribune	Tribune Municipal	Install PAPI	\$83,200
Business Total				\$332,800
Kansas System Total				\$332,800

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-14 Runway Lighting Recommendations and Estimated Costs

ID	Associated City	Airport	Runway Lighting Recommendation	Estimated Cost
Business				
K51	Medicine Lodge	Medicine Lodge	Install MIRL	\$332,000
OWI	Ottawa	Ottawa Municipal	Install MIRL	\$373,500
Business Total				\$705,500
Community				
K59	Atchison	Amelia Earhart Memorial	Install MIRL	\$265,600
8K8	Cimarron	Cimarron Municipal	Install MIRL	\$265,600
K34	Gardner	Gardner Municipal	Install MIRL	\$265,600
K68	Garnett	Garnett Industrial	Install MIRL	\$265,600
36K	Lakin	Kearny County	Install MIRL	\$283,030
48K	Ness City	Ness City Memorial	Install MIRL	\$265,600
53K	Osage City	Osage City Municipal	Install MIRL	\$265,600
K67	Oswego	Oswego Municipal	Install MIRL	\$265,600
K83	Sabetha	Sabetha Municipal	Install MIRL	\$265,600
OH1	WaKeeney	Trego WaKeeney	Install MIRL	\$332,664
Community Total				\$2,740,494
Kansas System Total				\$3,445,994

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-15 Approach Lighting Recommendations and Estimated Costs

ID	Associated City	Airport	Approach Lighting Recommendation	Estimated Cost
Regional				
OIN	Oberlin	Oberlin Municipal	Install REILs	\$36,400
Regional Total				\$36,400
Business				
CBK	Colby	Shalz Field	Install REILs	\$36,400
CNK	Concordia	Blosser Municipal	Install REILs	\$36,400
EHA	Elkhart	Elkhart-Morton County	Install REILs	\$36,400

ID	Associated City	Airport	Approach Lighting Recommendation	Estimated Cost
9K7	Ellsworth	Ellsworth Municipal	Install REILs	\$36,400
K88	Iola	Allen County	Install REILs	\$36,400
JHN	Johnson	Stanton County Municipal	Install REILs	\$36,400
MEJ	Meade	Meade Municipal	Install REILs	\$36,400
K51	Medicine Lodge	Medicine Lodge	Install REILs	\$36,400
NRN	Norton	Norton Municipal	Install REILs	\$36,400
TQK	Scott City	Scott City Municipal	Install REILs	\$36,400
3K3	Syracuse	Syracuse - Hamilton County Municipal	Install REILs	\$36,400
5K2	Tribune	Tribune Municipal	Install REILs	\$36,400
Business Total				\$436,800
Kansas System Total				\$473,200

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-16 Automated Weather Reporting Recommendations and Estimated Costs

ID	Associated City	Airport	Weather Reporting Recommendation	Estimated Cost
Business				
EHA	Elkhart	Elkhart-Morton County	Install AWOS or ASOS	\$225,000
K88	Iola	Allen County	Install AWOS or ASOS	\$225,000
OWI	Ottawa	Ottawa Municipal	Install AWOS or ASOS	\$225,000
Business Total				\$675,000
Community				
ANY	Anthony	Anthony Municipal	Install AWOS or ASOS	\$225,000
K59	Atchison	Amelia Earhart Memorial	Install AWOS or ASOS	\$225,000
RPB	Belleville	Belleville Municipal	Install AWOS or ASOS	\$225,000
8K8	Cimarron	Cimarron Municipal	Install AWOS or ASOS	\$225,000
CYW	Clay Center	Clay Center Municipal	Install AWOS or ASOS	\$225,000
K68	Garnett	Garnett Industrial	Install AWOS or ASOS	\$225,000
HRU	Herington	Herington Regional	Install AWOS or ASOS	\$225,000
3JC	Junction City	Freeman Field	Install AWOS or ASOS	\$225,000
36K	Lakin	Kearny County	Install AWOS or ASOS	\$225,000
3K7	Leoti	Mark Hoard Memorial	Install AWOS or ASOS	\$225,000
LYO	Lyons	Lyons - Rice County Municipal	Install AWOS or ASOS	\$225,000
48K	Ness City	Ness City Memorial	Install AWOS or ASOS	\$225,000
53K	Osage City	Osage City Municipal	Install AWOS or ASOS	\$225,000
K67	Oswego	Oswego Municipal	Install AWOS or ASOS	\$225,000
K81	Paola	Miami County	Install AWOS or ASOS	\$225,000
OH1	WaKeeney	Trego WaKeeney	Install AWOS or ASOS	\$225,000
Community Total				\$3,600,000
Kansas System Total				\$4,275,000

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-17 Public Restrooms Recommendations

ID	Associated City	Airport	Public Restroom Recommendation
Business			
EHA	Elkhart	Elkhart-Morton County	Make existing terminal restroom public
RCP	Stockton	Rooks County Regional	Include public restroom in new terminal
SK2	Tribune	Tribune Municipal	Include public restroom in new terminal
Community			
ANY	Anthony	Anthony Municipal	Make existing terminal restroom public
3K7	Leoti	Mark Hoard Memorial	Long-term portable facility rental
MYZ	Marysville	Marysville Municipal	Make existing terminal restroom public
48K	Ness City	Ness City Memorial	Long-term portable facility rental
53K	Osage City	Osage City Municipal	Long-term portable facility rental
K83	Sabetha	Sabetha Municipal	Long-term portable facility rental
OH1	WaKeeney	Trego WaKeeney	Long-term portable facility rental

Source: Airport Inventory and Data Survey, CDM Smith

Table 7-18 Ground Transportation Recommendations

ID	Associated City	Airport	Ground Transportation Recommendation
Regional			
WLD	Winfield	Strother Field	Add link to ground transportation
Business			
EHA	Elkhart	Elkhart-Morton County	Add link to ground transportation
MEJ	Meade	Meade Municipal	Add link to ground transportation
K51	Medicine Lodge	Medicine Lodge	Add link to ground transportation
RCP	Stockton	Rooks County Regional	Add link to ground transportation
SK2	Tribune	Tribune Municipal	Add link to ground transportation
Community			
ANY	Anthony	Anthony Municipal	Add link to ground transportation
K59	Atchison	Amelia Earhart Memorial	Add link to ground transportation
RPB	Belleville	Belleville Municipal	Add link to ground transportation
K61	Beloit	Moritz Memorial	Add link to ground transportation
8K8	Cimarron	Cimarron Municipal	Add link to ground transportation
HRU	Herington	Herington Regional	Add link to ground transportation
3JC	Junction City	Freeman Field	Add link to ground transportation
3K7	Leoti	Mark Hoard Memorial	Add link to ground transportation
LYO	Lyons	Lyons - Rice County Municipal	Add link to ground transportation
MYZ	Marysville	Marysville Municipal	Add link to ground transportation
48K	Ness City	Ness City Memorial	Add link to ground transportation
53K	Osage City	Osage City Municipal	Add link to ground transportation
K67	Oswego	Oswego Municipal	Add link to ground transportation
K83	Sabetha	Sabetha Municipal	Add link to ground transportation
OH1	WaKeeney	Trego WaKeeney	Add link to ground transportation

Source: Airport Inventory and Data Survey, CDM Smith

Table 7-19 Aircraft Fuel Recommendations and Estimated Costs

ID	Associated City	Airport	Aircraft Fuel Recommendation	Estimated Cost
Regional				
OIN	Oberlin	Oberlin Municipal	Add AvGas, Jet A, 24/7 fuel service	\$420,000
Regional Total				\$420,000
Business				
K51	Medicine Lodge	Medicine Lodge	Add AvGas service	\$210,000
Business Total				\$210,000
Kansas System Total				\$630,000

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-20 Terminal Recommendations and Estimated Costs

ID	Associated City	Airport	Aircraft Fuel Recommendation	Estimated Cost
Business				
RCP	Stockton	Rooks County Regional	Construct terminal	\$468,000
5K2	Tribune	Tribune Municipal	Construct terminal	\$468,000
Business Total				\$936,000
Kansas System Total				\$936,000

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-21 Hangar Capacity Recommendations and Estimated Costs

ID	Associated City	Airport	Hangar Recommendation	Estimated Cost
Regional				
MPR	McPherson	McPherson	Construct space for 12 aircraft	\$1,614,720
Regional Total				\$1,614,720
Business				
K78	Abilene	Abilene Municipal	Construct space for 2 aircraft	\$223,680
UKL	Burlington	Burlington-Coffey County	Construct space for 4 aircraft	\$447,360
9K7	Ellsworth	Ellsworth Municipal	Construct space for 4 aircraft	\$447,360
HLC	Hill City	Hill City Municipal	Construct space for 2 aircraft	\$223,680
K51	Medicine Lodge	Medicine Lodge	Construct space for 3 aircraft	\$267,360
OWI	Ottawa	Ottawa Municipal	Construct space for 22 aircraft	\$2,460,480
RCP	Stockton	Rooks County Regional	Construct space for 10 aircraft	\$1,118,400
3K3	Syracuse	Syracuse - Hamilton County Municipal	Construct space for 3 aircraft	\$267,360
5K2	Tribune	Tribune Municipal	Construct space for 4 aircraft	\$447,360
Business Total				\$5,903,040
Community				
8K8	Cimarron	Cimarron Municipal	Construct space for 4 aircraft	\$447,360
CYW	Clay Center	Clay Center Municipal	Construct space for 5 aircraft	\$491,040
13K	Eureka	Lt. William M. Milliken	Construct space for 3 aircraft	\$267,360

ID	Associated City	Airport	Hangar Recommendation	Estimated Cost
K68	Garnett	Garnett Industrial	Construct space for 1 aircraft	\$43,680
53K	Osage City	Osage City Municipal	Construct space for 3 aircraft	\$267,360
Community Total				\$1,516,800
Kansas System Total				\$9,034,560

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Table 7-22 Apron Capacity Recommendations and Estimated Costs

ID	Associated City	Airport	Apron Recommendation	Estimated Cost
Regional				
OIN	Oberlin	Oberlin Municipal	Construct 10,000 sq ft of apron space	\$180,000
Regional Total				\$180,000
Business				
K51	Medicine Lodge	Medicine Lodge	Construct 10,000 sq ft of apron space	\$180,000
PHG	Phillipsburg	Phillipsburg Municipal	Construct 9,300 sq ft of apron space	\$167,400
Business Total				\$347,400
Community				
K67	Oswego	Oswego Municipal	Construct 10,000 sq ft of apron space	\$180,000
K83	Sabetha	Sabetha Municipal	Construct 10,000 sq ft of apron space	\$180,000
Community Total				\$360,000
Kansas System Total				\$887,400

Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

RECOMMENDATIONS: MODERNIZATION GOAL

Modernization is established as a goal within the KASP, with performance measures aimed at determining the ability of the state’s system of NPIAS airport to provide up-to-date services and technology that best meet aviation demands. The Modernization Goal includes three performance measures. Two of these performance measures are also facility and service performance measures, and the details are found in the section pertaining to facility and services. The following details the analysis for each performance measure:

- Airports within 50 nautical miles of an alternate airport with a precision or near-precision approach (defined as having minimums of 300-foot ceiling and 1 mile visibility or better): Only Belleville Municipal is located further than 50 nautical miles from an alternate airport that has a precision or near-precision approach, and recommendations made under the facility and service benchmarks would not change this. However, Belleville Municipal itself has a near-precision APV approach and is fewer than 55 miles from Smith Center Municipal, which also has a near-precision APV approach. Current coverage is therefore viewed as being adequate.
- Airports with 24/7 aircraft fuel: The benchmark for this performance measure is that all Commercial Service and Regional airports have fueling available 24/7. While this performance

measure is action-oriented, it is also included in the facility and service benchmarks, and therefore its recommendations and cost estimates can be found in that section.

- Airports with jet fuel: The benchmark for this performance measure is that all Commercial Service and Regional airports have fueling available 24/7. While this performance measure is action-oriented, it is also included in the facility and service benchmarks, and therefore its recommendations and cost estimates can be found in that section.

For the reasons stated above, no other actions are listed within this section. Refer back to the section on facility and service benchmarks for details on aircraft fueling goals.

RECOMMENDATIONS: ACCESSIBILITY GOAL

An airport system need not only be modern, safe, and efficient, but must also be readily accessible to airport users from both land and air. The previous chapter performed an extensive geographic analysis of the Kansas system of NPIAS airports, based mostly on the NPIAS standard of 30 minute drive time accessibility. This approach was used to determine how well the Kansas system serves the population and total land area of the state, based on a number of factors such as commercial airline service, specific airport facilities, and the ability to meet the needs of emergency medical operations.

Performance measures under the Accessibility Goal are largely informational. Some of these performance measures are analyzed within a future system scenario; not all are specifically action-oriented:

- Kansas population and area within 90 minutes of a Commercial Service airport: It is not the aim of the KASP to recommend airports to add scheduled airline service. Therefore, this performance measure is strictly informational.
- Kansas population and area within 45 minutes of a Commercial Service or Regional airport: By recommending role changes for airports listed in Table 1-2, the KASP is nearing its goal of 90% population coverage. The goal of 70% land area may need reevaluation.
- Kansas population and area within 30 minutes of a NPIAS airport: This year's update has been confined to NPIAS airports, based on grant limits that were not a factor in the 2008 study. Since then, ASSET has been implemented by FAA in determining grant assistance once an airport is part of the NPIAS. Accordingly, a new airport for Greensburg remains recommended, assuming it can maintain at least 10 based aircraft; it fills a gap that cannot be met by Coldwater. Leavenworth remains recommended given population growth seen in the northwest Kansas City metro area. Meanwhile, Linn County Airport in Pleasanton replaced Gilmore in December 2015, but is too new to assess for NPIAS. Montezuma remains viable with 14 based aircraft reported at the time of this report's publication. Osborne is recommended because it can fill a void between Beloit and Ellsworth and sustain at least 10 based aircraft.

- Kansas population and area within 30 minutes of an airport capable of supporting physician aircraft: Facility and service benchmarks have no impact on this performance measure. Therefore, it is strictly informational.
- Hospitals within 30 minutes of a NPIAS airport: It is not the aim of the KASP to recommend airports for inclusion in the NPIAS. Nor is it the aim of the KASP to recommend the construction of new airports. Therefore, this performance measure is strictly informational.

For the other three performance measures under the Accessibility Goal, it is possible to further examine future performance based on the facility and service benchmarks. For example, if all airports were to meet their respective facility and service benchmarks, it would increase coverage of airports with an instrument approach, or airports with on-site weather reporting capabilities. The following sections examine these future system scenarios.

FUTURE SYSTEM: KANSAS POPULATION AND AREA WITHIN 30 MINUTES OF AN AIRPORT CAPABLE OF SUPPORTING AIR AMBULANCE SERVICE

Benchmark: 90 percent of Kansas population and 70 percent of land area

Serving emergency medical operations is an important task performed by airports and airport systems. In the KASP, the minimum standard for airports being able to serve air ambulance operations is having B-II runway length and width (4,200 feet by 75 feet), automated weather reporting capabilities, and a precision or near-precision APV instrument approach. Based on existing airport facilities, these airports currently serve 81.3 percent of Kansas' total population and 28.6 percent of its land area within a 30 minute drive time.

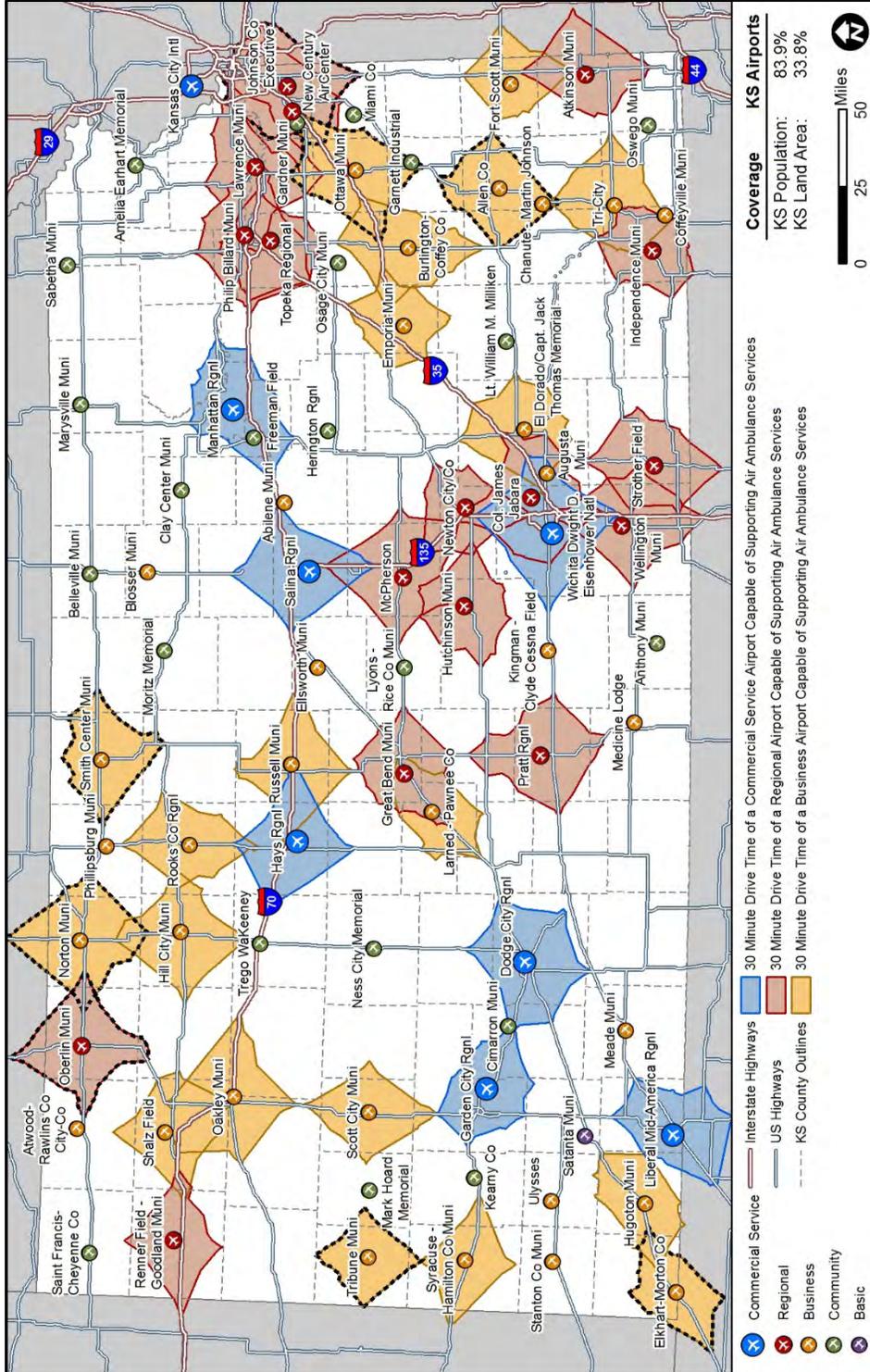
If all NPIAS airports in the state meet their facility and service benchmarks, this coverage would be increased. Specifically, facility and service benchmarks for weather reporting equipment and runway dimensions would increase the number of airports capable of supporting air ambulance operations. Table 7-23 lists airports that would have new capability to serve air ambulance operations based on facility and service benchmarks. As shown on Figure 7-1, adding these eight airports to existing coverage increases coverage to 83.9 percent of the state's total population and 33.8 percent of its land area.

Table 7-23 Airports Capable of Supporting Air Ambulance Operations

ID	Associated City	Airport
Regional		
OIN	Oberlin	Oberlin Municipal
OJC	Olathe	Johnson County Executive
Business		
EHA	Elkhart	Elkhart-Morton County
K88	Iola	Allen County
NRN	Norton	Norton Municipal
OWI	Ottawa	Ottawa Municipal
K82	Smith Center	Smith Center Municipal
5K2	Tribune	Tribune Municipal

Source: Airport Inventory and Data Survey, CDM Smith

Figure 7-1 Population and Land Area within 30 Minutes of an Airport Capable of Supporting Air Ambulance Services: Future System



Source: CDM Smith, 2016

FUTURE SYSTEM: KANSAS POPULATION AND AREA WITHIN 30 MINUTES OF AN AIRPORT WITH AN INSTRUMENT APPROACH

Benchmark: 95 percent of Kansas population and 90 percent of land area

The presence of an instrument approach at an airport is an important facility for not only serving aviation demands of a population and economy, but also for accessibility from the air during times of inclement weather and decreased visibility. Currently, 89.3 percent of Kansas' total population and 47.4 percent of its total land area are served within a 30 minute drive time of a Kansas NPIAS airport with an instrument approach.

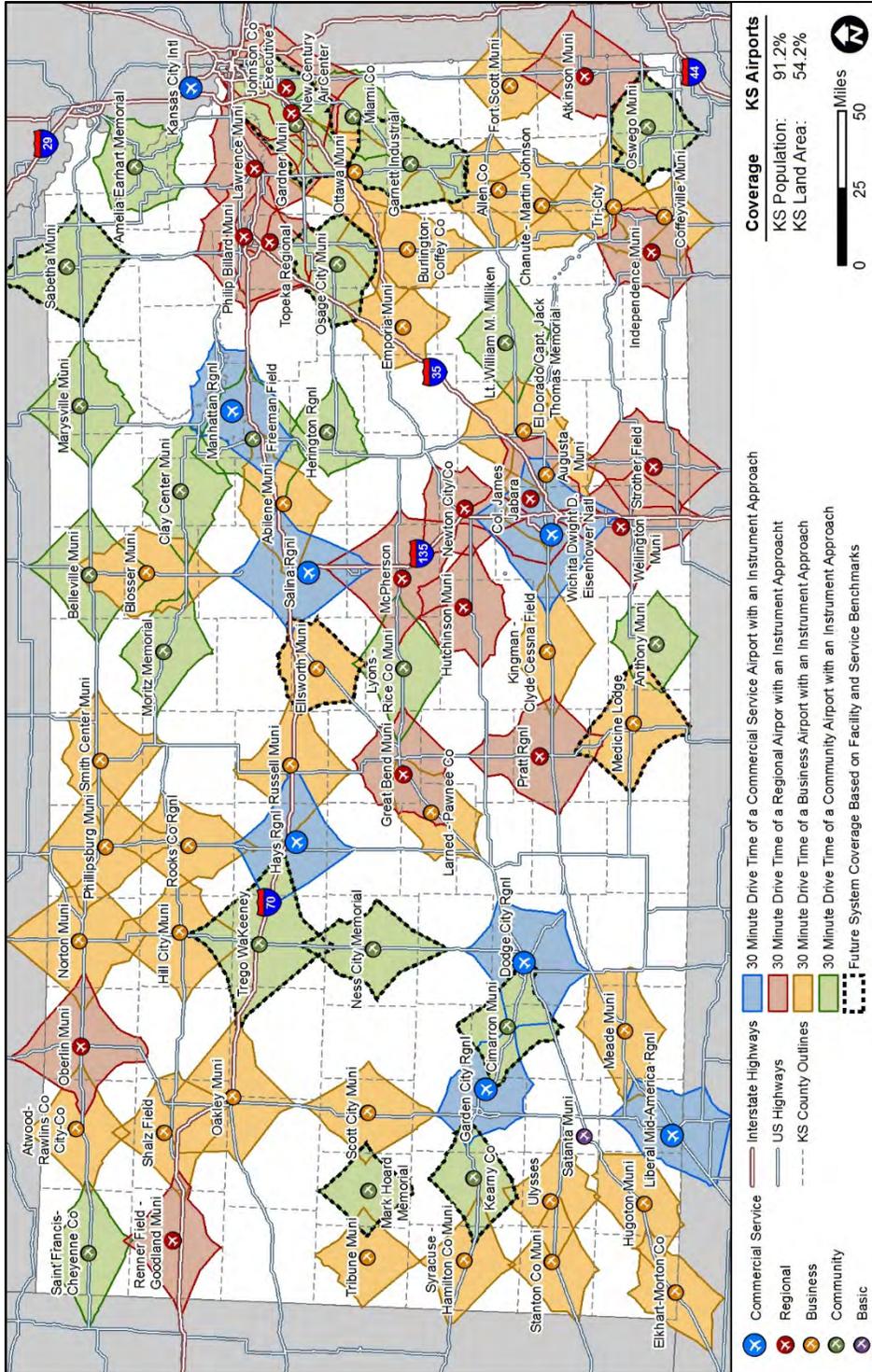
If all NPIAS airports in the state meet facility and service benchmarks for instrument approach capabilities, this coverage will be increased. Table 7-24 details airports with new, future system IAP coverage. As shown on Figure 7-2, adding these eight airports to existing coverage increases coverage to 91.2 percent of the state's total population and 54.2 percent of its land area.

Table 7-24 Airports with an IAP Based on Facility and Service Benchmarks

ID	Associated City	Airport
Business		
9K7	Ellsworth	Ellsworth Municipal
K51	Medicine Lodge	Medicine Lodge
Community		
8K8	Cimarron	Cimarron Municipal
K34	Gardner	Gardner Municipal
K68	Garnett	Garnett Industrial
36K	Lakin	Kearny County
3K7	Leoti	Mark Hoard Memorial
48K	Ness City	Ness City Memorial
53K	Osage City	Osage City Municipal
K67	Oswego	Oswego Municipal
K83	Sabetha	Sabetha Municipal
0H1	WaKeeney	Trego WaKeeney

Source: Airport Inventory and Data Survey, CDM Smith

Figure 7-2 Population and Land Area within 30 Minutes of an Airport with an Instrument Approach: Future System



Source: CDM Smith, 2016

FUTURE SYSTEM: KANSAS POPULATION AND AREA WITHIN 30 NAUTICAL MILES OF AN AIRPORT WITH ON-SITE WEATHER REPORTING

Benchmark: 100 percent of Kansas population and land area

On-site weather reporting removes uncertainty among pilots about conditions at or near airports equipped with systems such as the automated weather observing system (AWOS) or automated surface observing system (ASOS). Widespread coverage of these systems based on a 30 nautical mile radius is preferred in the KASP. Currently, 30 nautical mile radiuses of Kansas NPIAS airports with automated weather reporting capabilities serve 99.1 percent of the state's total population and 96.7 percent of its land area.

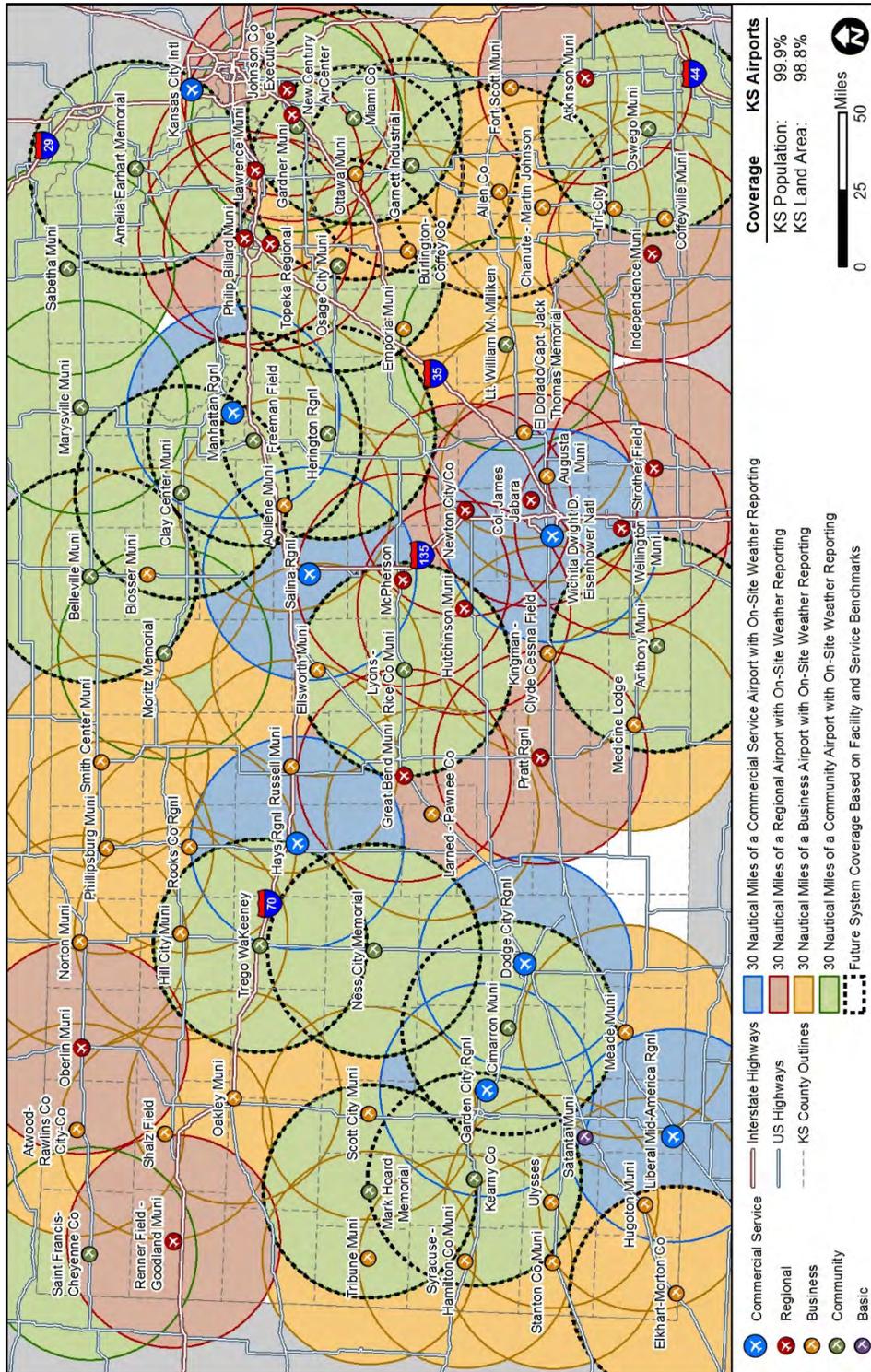
While these numbers cover virtually all of the state's population and nearly all of its land area, meeting facility and service benchmarks would push this coverage even higher. Table 7-24 details airports recommended to add an AWOS or ASOS. As shown in Figure 7-3, this would increase coverage to 99.9 percent of Kansas' total population and 98.8 percent of total land area.

Table 7-25 Airports with Automated Weather Reporting Capabilities Based on Facility and Service Benchmarks

ID	Associated City	Airport
Business		
EHA	Elkhart	Elkhart-Morton County
K88	Iola	Allen County
OWI	Ottawa	Ottawa Municipal
Community		
ANY	Anthony	Anthony Municipal
K59	Atchison	Amelia Earhart Memorial
RPB	Belleville	Belleville Municipal
8K8	Cimarron	Cimarron Municipal
CYW	Clay Center	Clay Center Municipal
K68	Garnett	Garnett Industrial
HRU	Herington	Herington Regional
3JC	Junction City	Freeman Field
36K	Lakin	Kearny County
3K7	Leoti	Mark Hoard Memorial
LYO	Lyons	Lyons - Rice County Municipal
48K	Ness City	Ness City Memorial
53K	Osage City	Osage City Municipal
K67	Oswego	Oswego Municipal
K81	Paola	Miami County
OH1	WaKeeney	Trego WaKeeney

Source: Airport Inventory and Data Survey, CDM Smith

Figure 7-3 Population and Land Area within 30 Nautical Miles of an Airport with On-Site Weather Reporting: Future System



Source: CDM Smith, 2016

RECOMMENDATIONS: ECONOMIC SUPPORT GOAL

The movement of people and goods through the air is essential to everyday operations for many businesses, making local aviation services an integral part of local and statewide economic activity. Because of this, the KASP has examined elements of aviation that are most in demand for the business aviation sector.

Two of the performance measures in the Economic Support Goal are not action-oriented, but analyzed within the future system based on facility and service benchmarks. The other performance measure, airports with a link to ground transportation, is also covered under the facility and service benchmarks, and those recommendations will not be repeated here. The following sections provide future system analysis for the geographic-based performance measures under the Economic Support Goal. This analysis is performed similarly to future system analysis under the Accessibility goal.

FUTURE SYSTEM: KANSAS POPULATION AND AREA WITHIN 45 MINUTES OF AN AIRPORT WITH A 5,000-FOOT, OR GREATER, RUNWAY

Benchmark: 95 percent of Kansas population and 65 percent of land area

Many businesses use jet aircraft in their operations, often requiring runways of a minimum length to operate safely. In the KASP, the benchmark is set for airports with runways at least 5,000 feet in length to maximize coverage of the state's population and land area within a 45 minute drive time. Currently, those drive time market areas serve 92.8 percent of the state's population and 58.5 percent of its total land area.

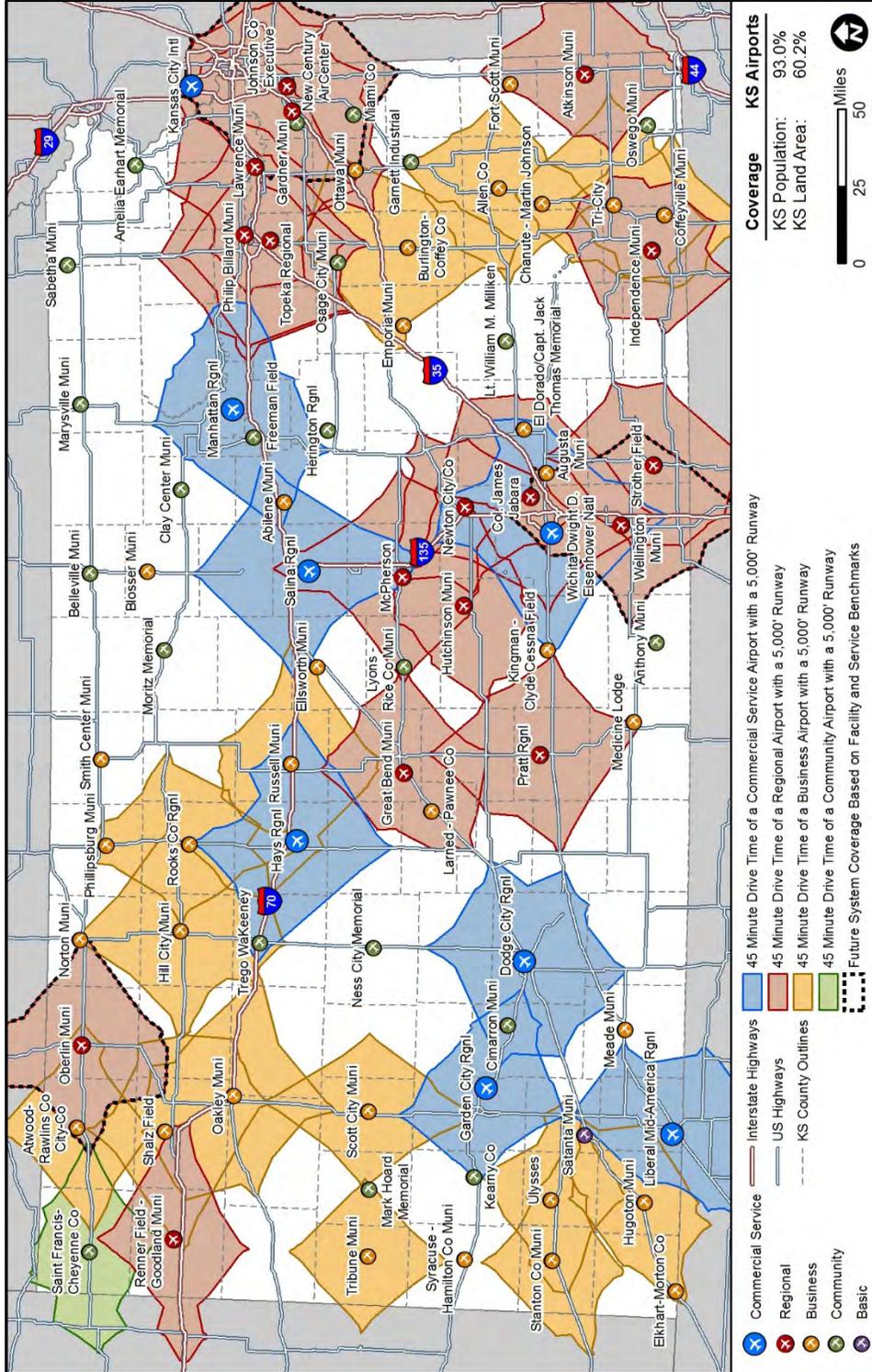
Airports in the Regional airport role are all recommended to have a primary runway length of at least 5,000 feet. Currently, three of these airports, shown in Table 7-25, do not currently meet this benchmark but are recommended for a runway extension under facility and service benchmarks. As shown in Figure 7-4, these airport improvements would increase coverage to 93.0 percent of the state's total population and 60.2 percent of its land area.

Table 7-26 Airports with a 5,000-Foot Runway Based on Facility and Service Benchmarks

ID	Associated City	Airport
Regional		
OIN	Oberlin	Oberlin Municipal
OJC	Olathe	Johnson County Executive
EGT	Wellington	Wellington Municipal

Source: Airport Inventory and Data Survey, CDM Smith

Figure 7-4 Population and Land Area within 45 Minutes of an Airport with a 5,000 Foot Runway: Future System



Source: CDM Smith, 2016

FUTURE SYSTEM: KANSAS POPULATION AND AREA WITHIN 45 MINUTES OF AN AIRPORT MEETING BUSINESS USER NEEDS

Benchmark: 91 percent of Kansas population and 56 percent of land area

Many businesses require additional aviation services and facilities in addition to an adequately long runway. To analyze this, the KASP has developed a list of business user needs, which, in addition to a 5,000 foot runway, include jet fuel services and a precision or near-precision APV approach. The benchmark set for the KASP is for the state to maximize coverage within a 45 minute drive time of airports with these facilities and services. Currently, these airports serve 91.1 percent of the state's population and 49.2 percent of its total land area.

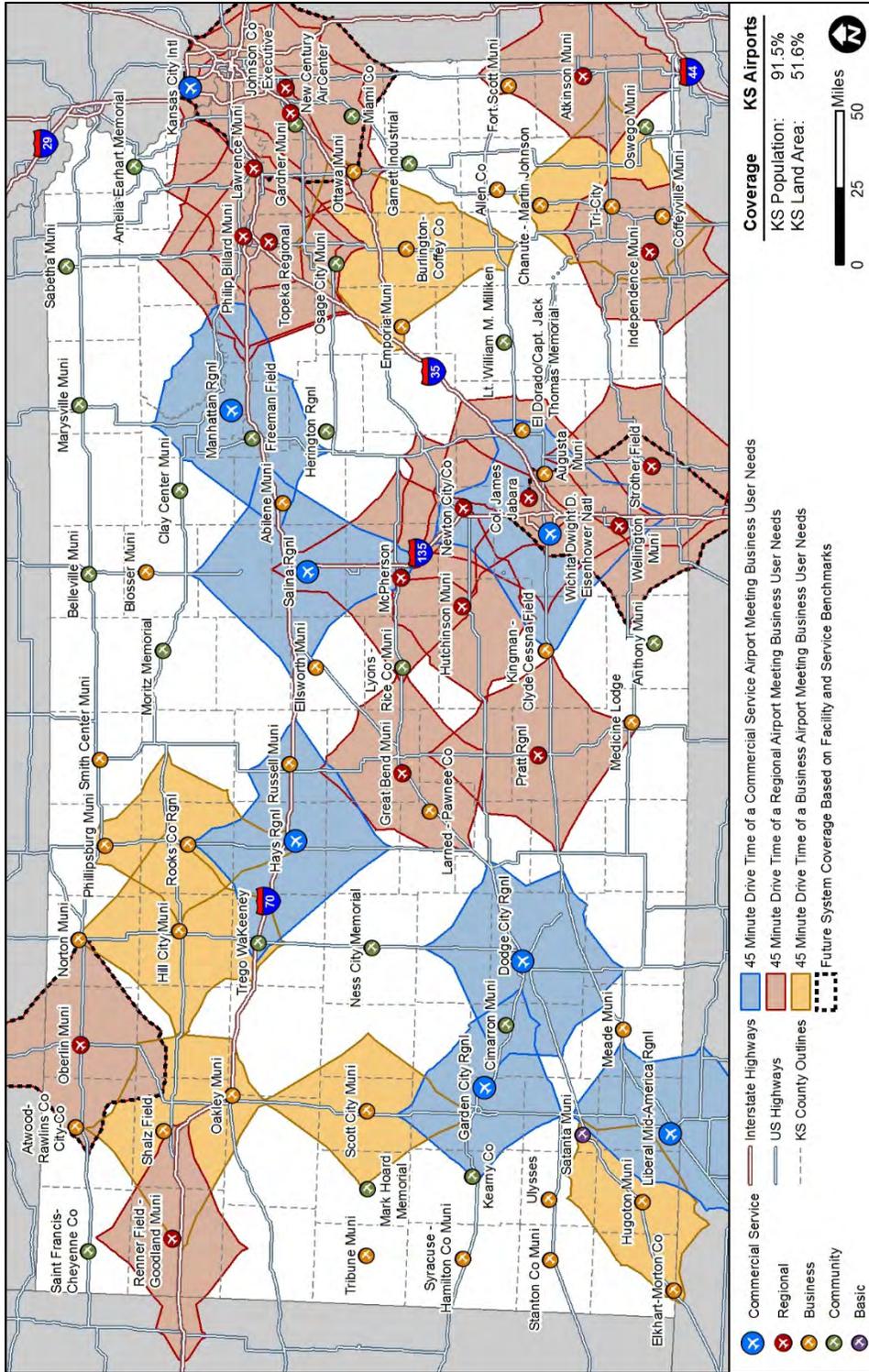
Only the runway length facility and service benchmark would impact this performance measure in the future, meaning that the future system would see the same three airports added to this coverage as with the 5,000 foot runway performance measure (shown again in Table 7-25). As shown on Figure 7-5, adding 45 minute drive time areas of these airports to existing coverage would increase coverage to 91.5 percent of Kansas' population and 51.6 of its land area.

Table 7-27 Airports Meeting Business User Needs Based on Facility and Service Benchmarks

ID	Associated City	Airport
Regional		
OIN	Oberlin	Oberlin Municipal
OJC	Olathe	Johnson County Executive
EGT	Wellington	Wellington Municipal

Source: Airport Inventory and Data Survey, CDM Smith

Figure 7-5 Population and Land Area within 45 Minutes of an Airport Meeting Business User Needs: Future System



Source: Airport Inventory and Data Survey, CDM Smith

RECOMMENDATIONS: EDUCATION GOAL

Airports are valuable learning resources and education centers, often providing aviation-based education that cannot be attained elsewhere. A goal of the KASP is for Kansas NPIAS airports to support the promotion of aviation education to not only individuals seeking a career in the aviation industry, but also to the general public. However, the three performance measures under the Education Goal are informational in nature, and therefore have no associated recommendations. The following explains why each of these performance measures is informational:

- Airports with community outreach programs: Outreach programs range from large activities such as fly-ins to small school tours and youth clubs and programs. These programs are important to not only increase public knowledge of aviation and to foster interest in the industry, but also to increase awareness of the importance of aviation to each community, large or small. Therefore, all airports are strongly urged to have some sort of community outreach. Due to the varying nature of community outreach, and the unique relationship that each airport has with its respective community, no specific recommendations are made as part of the KASP.
- Airports supporting flight training: Like outreach programs, flight training varies greatly from airport to airport. It may be an individual certified flight instructor operating out of a single hangar, or a large program run by a college or university. Because such programs are driven largely by market demand, no specific recommendations are made concerning based flight training.
- Airports supporting airframe and powerplant (A&P) mechanic programs: A&P technicians are aircraft mechanics that have received specialized training in the maintenance of engines and airframes. Like based flight training, A&P programs are largely driven by market demand, and therefore no specific recommendations are made as part of the KASP.

Despite no recommendations being made under the Education Goal, all airports are strongly urged to develop community outreach programs for the general public while providing an aviation environment that is welcome to aviation education in all of its forms.

SUMMARY OF SYSTEM RECOMMENDATIONS AND COSTS

The future safety, efficiency, and success of Kansas' system of NPIAS airports is intrinsically linked to achieving the five main goals of the KASP: Preservation, Modernization, Accessibility, Economic Support, and Education. Performance measures and benchmarks were set by the KASP specifically to meet these goals.

Many of the performance measures included in the KASP were strictly for informational purposes, but for several, specific airport recommendations can be made to improve both current and future system performance. A total of 365 airport-specific recommendations are made in this chapter, with 154 connected to facility and service benchmarks and the remaining 211 associated with other performance measures. Many recommendations, such as those related to airport policies and documents, help to ensure the safety, efficiency, and preparedness of the state's airports. The number of recommendations per airport are detailed in Table 7-26.

Table 7-28 Number of Recommendations by Kansas Airport

ID	Associated City	Airport	Recommendations Based on Facility and Service Benchmarks	Other Recommendations
Commercial Service				
DDC	Dodge City	Dodge City Regional	0	1
GCK	Garden City	Garden City Regional	0	1
HYS	Hays	Hays Regional	0	3
LBL	Liberal	Liberal Mid-America Regional	0	2
MHK	Manhattan	Manhattan Regional	0	2
SLN	Salina	Salina Regional	0	3
ICT	Wichita	Wichita Dwight D. Eisenhower National	0	0
Commercial Service Total			0	12
Regional				
GLD	Goodland	Renner Field - Goodland Municipal	0	4
GBD	Great Bend	Great Bend Municipal	0	1
HUT	Hutchison	Hutchinson Municipal	0	2
IDP	Independence	Independence Municipal	0	2
LWC	Lawrence	Lawrence Municipal	1	3
MPR	McPherson	McPherson	1	3
EWK	Newton	Newton City/County	0	1
OIN	Oberlin	Oberlin Municipal	6	4
OJC	Olathe	Johnson County Executive	2	3
IXD	Olathe	New Century AirCenter	0	1
PTS	Pittsburg	Atkinson Municipal	1	4
PTT	Pratt	Pratt Regional	0	2
FOE	Topeka	Forbes Field	0	2
TOP	Topeka	Philip Billard Municipal	1	3
EGT	Wellington	Wellington Municipal	1	3
AAO	Wichita	Col. James Jabara	0	0
WLD	Winfield	Strother Field	1	4
Regional Total			14	42
Business				
K78	Abilene	Abilene Municipal	0	3
ADT	Atwood	Atwood-Rawlins County City-County	0	4
3AU	Augusta	Augusta Municipal	2	4
UKL	Burlington	Burlington-Coffey County	1	3
CNU	Chanute	Chanute - Martin Johnson	0	3
CFV	Coffeyville	Coffeyville Municipal	0	4
CBK	Colby	Shalz Field	1	2
CNK	Concordia	Blosser Municipal	4	4
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	0	1
EHA	Elkhart	Elkhart-Morton County	5	4
9K7	Ellsworth	Ellsworth Municipal	3	5
EMP	Emporia	Emporia Municipal	0	2
FSK	Fort Scott	Fort Scott Municipal	0	3

ID	Associated City	Airport	Recommendations	
			Based on Facility and Service Benchmarks	Other Recommendations
HLC	Hill City	Hill City Municipal	0	3
HQG	Hugoton	Hugoton Municipal	0	3
K88	Iola	Allen County	2	3
JHN	Johnson	Stanton County Municipal	1	2
9K8	Kingman	Kingman - Clyde Cessna Field	0	3
LQR	Larned	Larned - Pawnee County	0	4
MEJ	Meade	Meade Municipal	2	3
K51	Medicine Lodge	Medicine Lodge	9	3
NRN	Norton	Norton Municipal	2	2
OEL	Oakley	Oakley Municipal	1	2
OWI	Ottawa	Ottawa Municipal	3	4
PPF	Parsons	Tri-City	0	3
PHG	Phillipsburg	Phillipsburg Municipal	2	3
RSL	Russell	Russell Municipal	0	3
TQK	Scott City	Scott City Municipal	2	3
K82	Smith Center	Smith Center Municipal	0	2
RCP	Stockton	Rooks County Regional	5	3
3K3	Syracuse	Syracuse - Hamilton County Municipal	2	3
5K2	Tribune	Tribune Municipal	7	3
ULS	Ulysses	Ulysses	0	3
Business Total			54	100
Community				
ANY	Anthony	Anthony Municipal	3	3
K59	Atchison	Amelia Earhart Memorial	5	4
RPB	Belleville	Belleville Municipal	2	2
K61	Beloit	Moritz Memorial	1	2
8K8	Cimarron	Cimarron Municipal	7	3
CYW	Clay Center	Clay Center Municipal	2	3
13K	Eureka	Lt. William M. Milliken	0	2
K34	Gardner	Gardner Municipal	4	2
K68	Garnett	Garnett Industrial	6	3
HRU	Herington	Herington Regional	2	1
3JC	Junction City	Freeman Field	2	2
36K	Lakin	Kearny County	4	3
3K7	Leoti	Mark Hoard Memorial	6	3
LYO	Lyons	Lyons - Rice County Municipal	3	2
MYZ	Marysville	Marysville Municipal	2	2
48K	Ness City	Ness City Memorial	7	4
53K	Osage City	Osage City Municipal	7	3
K67	Oswego	Oswego Municipal	7	2
K81	Paola	Miami County	1	3
K83	Sabetha	Sabetha Municipal	7	3
SYF	St. Francis	St. Francis-Cheyenne County	0	2
OH1	WaKeeny	Trego WaKeeney	5	2
Community Total			83	56

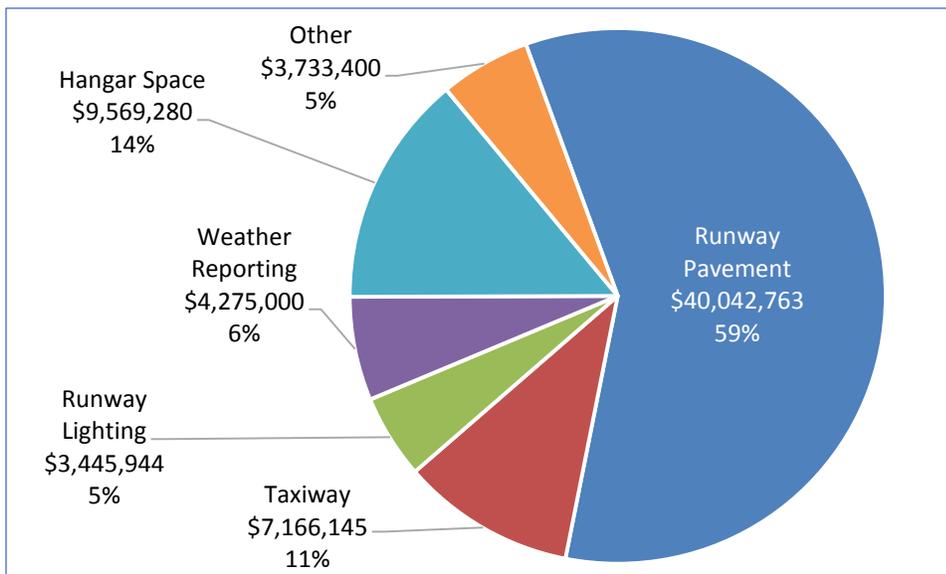
ID	Associated City	Airport	Recommendations Based on Facility and Service Benchmarks	Other Recommendations
Basic				
1K9	Satanta	Satanta Municipal	0	1
Basic Total			0	1
Kansas System Total			151	211

Source: Airport Inventory and Data Survey, CDM Smith

Meeting the 154 facility and service recommendations ensures that each of the 80 NPIAS airports in the Kansas system is best equipped to serve the market associated with its system role. Cost estimates were developed for most of these recommendations. Only recommendations for public restrooms and ground transportation links were not provided cost estimates.

Figure 7-6 summarizes estimated costs by project type. Projects related to runway extensions and widenings account for more than half of all estimated recommendation costs. Recommendations for new hangar space and taxiway developments have the next most expensive estimated costs, at approximately \$9 million and \$7 million, respectively. Recommendations for automated weather reporting capabilities are estimated to cost over \$4.2 million, while recommendations for new or expanded runway lighting are estimated at over \$3.4 million. Other facility and service recommendations had total estimated costs under \$1 million each, adding up to approximately \$4 million total.

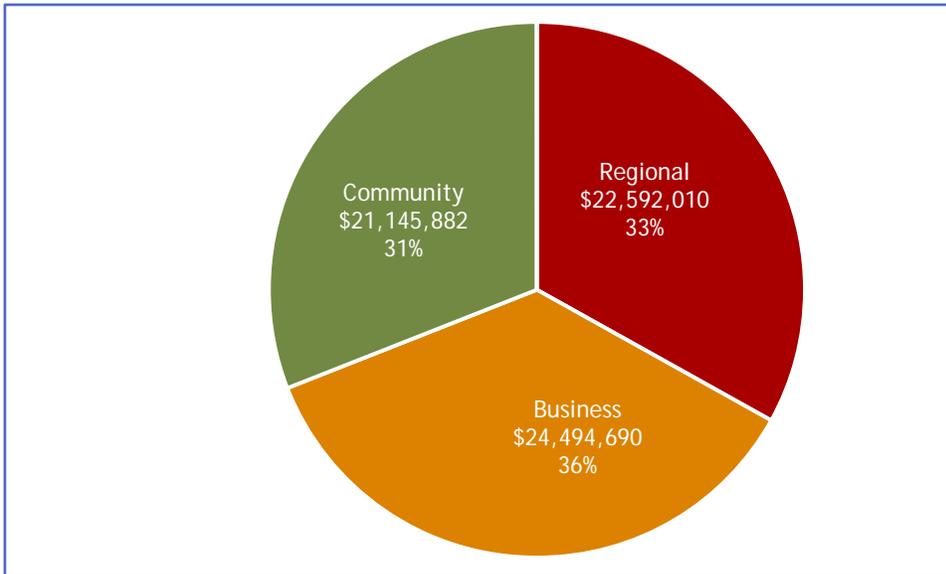
Figure 7-6 Estimated Costs by Project Type



Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

Figure 7-7 summarizes estimated costs by KASP airport role. Estimated costs are split fairly evenly between Regional, Business, and Community airports, with no recommended projects for Commercial Service or Basic airports. With a total estimated project cost of \$23.6 million, recommendations for Regional airports have the highest estimated costs. Recommendations for projects at Business airports would cost an estimated \$23.2 million, while projects at Community airports would cost an estimated \$20.2 million.

Figure 7-7 Estimated Costs by Airport Role



Source: Airport Inventory and Data Survey, Burns & McDonnell, CDM Smith

CONCLUSION

The system of NPIAS airports in Kansas provides the state with exceptional population coverage and significant geographic coverage. This system includes a variety of airport types with a full complement of facilities and available services serving all types of aircraft. This system plan has analyzed the Kansas NPIAS airports and identified key facility and service improvements that, if implemented, would serve to further enhance the performance of the airport system. These recommendations, which are not intended to supersede individual airport master plans, but rather help the state work in concert with those master plans, offer a pathway for the Kansas airport system to achieve any higher standards of performance.

**APPENDIX A - KANSAS AIRPORT SYSTEM
INVENTORY DATA**

Table A-1 NPIAS Airport Service Level and Roles, and ATCT

ID	Associated City	Airport	NPIAS Service		
			Level	Asset Study Role	ATCT
K78	Abilene	Abilene Municipal	GA	Local	No
ANY	Anthony	Anthony Municipal	GA	Basic	No
K59	Atchison	Amelia Earhart Memorial	GA	Local	No
ADT	Atwood	Atwood-Rawlins County City-County	GA	Basic	No
3AU	Augusta	Augusta Municipal	GA	Local	No
RPB	Belleville	Belleville Municipal	GA	Basic	No
K61	Beloit	Moritz Memorial	GA	Local	No
UKL	Burlington	Burlington-Coffey County	GA	Local	No
CNU	Chanute	Chanute - Martin Johnson	GA	Local	No
8K8	Cimarron	Cimarron Municipal	GA	Basic	No
CYW	Clay Center	Clay Center Municipal	GA	Local	No
CFV	Coffeyville	Coffeyville Municipal	GA	Local	No
CBK	Colby	Shalz Field	GA	Local	No
CNK	Concordia	Blosser Municipal	GA	Basic	No
DDC	Dodge City	Dodge City Regional	CS	Regional	No
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	GA	Local	No
EHA	Elkhart	Elkhart-Morton County	GA	Basic	No
9K7	Ellsworth	Ellsworth Municipal	GA	Basic	No
EMP	Emporia	Emporia Municipal	GA	Local	No
13K	Eureka	Lt. William M. Milliken	GA	Basic	No
FSK	Fort Scott	Fort Scott Municipal	GA	Local	No
GCK	Garden City	Garden City Regional	Primary CS	Primary CS	Yes
K34	Gardner	Gardner Municipal	GA	Local	No
K68	Garnett	Garnett Industrial	GA	Basic	No
GLD	Goodland	Renner Field - Goodland Municipal	GA	Local	No
GBD	Great Bend	Great Bend Municipal	GA	Local	No
HYS	Hays	Hays Regional	Primary CS	Primary CS	No
HRU	Herington	Herington Regional	GA	Basic	No
HLC	Hill City	Hill City Municipal	GA	Basic	No
HQG	Hugoton	Hugoton Municipal	GA	Local	No
HUT	Hutchinson	Hutchinson Municipal	GA	Regional	Yes
IDP	Independence	Independence Municipal	GA	Local	No
K88	Iola	Allen County	GA	Basic	No
JHN	Johnson	Stanton County Municipal	GA	Local	No
3JC	Junction City	Freeman Field	GA	Local	No

ID	Associated City	Airport	NPIAS Service		
			Level	Asset Study Role	ATCT
9K8	Kingman	Kingman - Clyde Cessna Field	GA	Local	No
36K	Lakin	Kearny County	GA	Basic	No
LQR	Larned	Larned - Pawnee County	GA	Basic	No
LWC	Lawrence	Lawrence Municipal	GA	Regional	No
3K7	Leoti	Mark Hoard Memorial	GA	Basic	No
LBL	Liberal	Liberal Mid-America Regional	Primary CS	Primary CS	No
LYO	Lyons	Lyons - Rice County Municipal	GA	Basic	No
MHK	Manhattan	Manhattan Regional	Primary CS	Primary CS	No
MYZ	Marysville	Marysville Municipal	GA	Basic	No
MPR	McPherson	McPherson	GA	Local	No
MEJ	Meade	Meade Municipal	GA	Basic	No
K51	Medicine Lodge	Medicine Lodge	GA	Basic	No
48K	Ness City	Ness City Memorial	GA	Basic	No
EWK	Newton	Newton City/County	Reliever	Regional	No
NRN	Norton	Norton Municipal	GA	Local	No
OEL	Oakley	Oakley Municipal	GA	Basic	No
OIN	Oberlin	Oberlin Municipal	GA	Local	No
OJC	Olathe	Johnson County Executive	Reliever	Regional	Yes
IXD	Olathe	New Century AirCenter	Reliever	Regional	Yes
53K	Osage City	Osage City Municipal	GA	Basic	No
K67	Oswego	Oswego Municipal	GA	Unclassified	No
OWI	Ottawa	Ottawa Municipal	GA	Local	No
K81	Paola	Miami County	GA	Local	No
PPF	Parsons	Tri-City	GA	Local	No
PHG	Phillipsburg	Phillipsburg Municipal	GA	Basic	No
PTS	Pittsburg	Atkinson Municipal	GA	Local	No
PTT	Pratt	Pratt Regional	GA	Local	No
RSL	Russell	Russell Municipal	GA	Basic	No
K83	Sabetha	Sabetha Municipal	GA	Basic	No
SLN	Salina	Salina Regional	CS	Regional	Yes
1K9	Satanta	Satanta Municipal	GA	Local	No
TQK	Scott City	Scott City Municipal	GA	Local	No
K82	Smith Center	Smith Center Municipal	GA	Basic	No
SYF	St. Francis	Saint Francis-Cheyenne County	GA	Basic	No
RCP	Stockton	Rooks County Regional	GA	Basic	No
3K3	Syracuse	Syracuse - Hamilton County Municipal	GA	Local	No
FOE	Topeka	Topeka Regional	GA	Regional	Yes

ID	Associated City	Airport	NPIAS Service		
			Level	Asset Study Role	ATCT
TOP	Topeka	Philip Billard Municipal	GA	Local	Yes
5K2	Tribune	Tribune Municipal	GA	Local	No
ULS	Ulysses	Ulysses	GA	Local	No
OH1	WaKeeney	Trego WaKeeney	GA	Basic	No
EGT	Wellington	Wellington Municipal	GA	Local	No
AAO	Wichita	Col. James Jabara	Reliever	Regional	No
ICT	Wichita	Wichita Dwight D. Eisenhower National	Primary CS	Primary CS	Yes
WLD	Winfield	Strother Field	GA	Local	No

Source: Airport Inventory and Data Survey, National Plan of Integrated Airport Systems (NPIAS) 2015-2019, FAA Asset 1 (2012), and Asset 2 (2014).

Table A-2 Runway and Taxiway Facilities

ID	Associated City	Airport	Primary Runway	Primary Runway Length	Primary Runway Width	Primary Runway Surface	Primary Runway PCI	RDC	Primary Runway Lighting	Taxiway Type
K78	Abilene	Abilene Municipal	17/35	4,100	75	Asphalt	73	A-I	MIRL	Full Parallel
ANY	Anthony	Anthony Municipal	18/36	3,598	60	Asphalt	100	A-I	MIRL	Turnarounds
K59	Atchison	Amelia Earhart Memorial	16/34	3,000	48	Asphalt	60	A-I	NSTD-LIRL	Partial Parallel
ADT	Atwood	Atwood-Rawlins County City-County	16/34	5,000	75	Asphalt	83	B-II	MIRL	Turnarounds
3AU	Augusta	Augusta Municipal	18/36	4,201	60	Asphalt	58	B-I	MIRL	Full Parallel
RPB	Belleville	Belleville Municipal	18/36	3,500	60	Asphalt	88	A-II	MIRL	Turnarounds
K61	Beloit	Moritz Memorial	17/35	3,610	60	Concrete	87	A-I	MIRL	Turnarounds
UKL	Burlington	Burlington-Coffey County	18/36	5,500	75	Concrete	76	C-II	MIRL	Turnarounds
CNU	Chanute	Chanute - Martin Johnson	18/36	4,255	75	Asphalt	70	A-II	MIRL	Full Parallel
8K8	Cimarron	Cimarron Municipal	01/19	2,800	32	Asphalt	71	A-I	LIRL	Turnarounds
CYW	Clay Center	Clay Center Municipal	17/35	4,199	75	Asphalt	67	B-II	MIRL	Turnarounds
CFV	Coffeyville	Coffeyville Municipal	17/35	5,868	100	Asphalt	64	C-II	HIRL	Partial Parallel
CBK	Colby	Shalz Field	17/35	5,110	75	Concrete	73	B-II	MIRL	Full Parallel
CNK	Concordia	Blosser Municipal	17/35	3,601	60	Asphalt	39	B-I	MIRL	Turnarounds
DDC	Dodge City	Dodge City Regional	14/32	6,899	100	Asphalt	38	D-II	MIRL	Full Parallel
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	04/22	4,204	75	Concrete	80	B-II	HIRL	Partial Parallel
EHA	Elkhart	Elkhart-Morton County	04/22	4,900	60	Asphalt	67	B-II	MIRL	Partial Parallel
9K7	Ellsworth	Ellsworth Municipal	17/35	4,327	48	Asphalt	56	A-I	MIRL	Turnarounds
EMP	Emporia	Emporia Municipal	01/19	4,999	100	Asphalt	100	C-II	MIRL	Full Parallel
13K	Eureka	Lt. William M. Milliken	18/36	3,504	60	Asphalt	65	A-I	HIRL	Turnarounds
FSK	Fort Scott	Fort Scott Municipal	18/36	4,403	75	Asphalt	77	B-II	MIRL	Full Parallel
GCK	Garden City	Garden City Regional	17/35	7,299	100	Concrete	79	D-III	HIRL	Full Parallel
K34	Gardner	Gardner Municipal	08/26	2,960	39	Asphalt	36	A-I	NSTD	Turnarounds
K68	Garnett	Garnett Industrial	01/19	2,660	45	Asphalt	50	A-I	LIRL	Partial Parallel
GLD	Goodland	Renner Field - Goodland Municipal	12/30	5,499	100	Concrete	70	C-III	HIRL	Full Parallel
GBD	Great Bend	Great Bend Municipal	17/35	7,851	100	Asphalt	64	D-III	HIRL	Full Parallel
HYS	Hays	Hays Regional	16/34	6,501	100	Asphalt	56	D-III	MIRL	Full Parallel

ID	Associated City	Airport	Primary Runway	Primary Runway Length	Primary Runway Width	Primary Runway Surface	Primary Runway PCI	RDC	Primary Runway Lighting	Taxiway Type
HRU	Herington	Herington Regional	17/35	4,184	75	Concrete	98	B-II	MIRL	Partial Parallel
HLC	Hill City	Hill City Municipal	18/36	5,000	75	Concrete	89	B-II	HIRL	Partial Parallel
HQG	Hugoton	Hugoton Municipal	02/20	5,000	75	Concrete	78	B-II	HIRL	Full Parallel
HUT	Hutchinson	Hutchinson Municipal	13/31	7,004	100	Asphalt	92	C-III	HIRL	Full Parallel
IDP	Independence	Independence Municipal	17/35	5,501	100	Asphalt	83	C-III	HIRL	Full Parallel
K88	Iola	Allen County	01/19	5,501	100	Concrete	87	A-I	MIRL	Partial Parallel
JHN	Johnson	Stanton County Municipal	17/35	5,200	75	Concrete	99	C-II	HIRL	Full Parallel
3JC	Junction City	Freeman Field	18/36	3,498	75	Asphalt	77	A-II	HIRL	Turnarounds
9K8	Kingman	Kingman - Clyde Cessna Field	18/36	4,300	75	Concrete	95	B-II	HIRL	Partial Parallel
36K	Lakin	Kearny County	14/32	3,410	40	Asphalt	80	A-I	NSTD	Turnarounds
LQR	Larned	Larned - Pawnee County	17/35	4,201	75	Concrete	53	B-II	HIRL	Turnarounds
LWC	Lawrence	Lawrence Municipal	15/33	5,700	75	Asphalt	49	C-III	MIRL	Full Parallel
3K7	Leoti	Mark Hoard Memorial	17/35	4,351	50	Asphalt	61	B-I	HIRL	Turnarounds
LBL	Liberal	Liberal Mid-America Regional	17/35	7,105	100	Concrete	93	C-III	HIRL	Full Parallel
LYO	Lyons	Lyons - Rice County Municipal	17R/35L	2,999	75	Concrete	90	A-II	MIRL	Turnarounds
MHK	Manhattan	Manhattan Regional	03/21	7,000	150	Concrete	53	D-III	HIRL	Full Parallel
MYZ	Marysville	Marysville Municipal	16/34	4,200	60	Asphalt	91	B-II	MIRL	Turnarounds
MPR	McPherson	McPherson	18/36	5,502	100	Concrete	97	C-III	MIRL	Full Parallel
MEJ	Meade	Meade Municipal	17/35	4,800	75	Concrete	80	B-II	MIRL	Turnarounds
K51	Medicine Lodge	Medicine Lodge	16/34	3,200	42	Asphalt	86	A-I	LIRL	Turnarounds
48K	Ness City	Ness City Memorial	17/35	3,156	48	Asphalt	56	A-I	LIRL	Turnarounds
EWK	Newton	Newton City/County	17/35	7,003	100	Concrete	100	D-III	HIRL	Full Parallel
NRN	Norton	Norton Municipal	16/34	4,701	60	Concrete	83	B-II	HIRL	Turnarounds
OEL	Oakley	Oakley Municipal	16/34	5,000	75	Concrete	95	C-II	MIRL	Turnarounds
OIN	Oberlin	Oberlin Municipal	17/35	3,501	60	Asphalt	100	B-I	MIRL	Turnarounds
OJC	Olathe	Johnson County Executive	18/36	4,098	75	Asphalt	83	B-II	MIRL	Full Parallel
IXD	Olathe	New Century AirCenter	18/36	7,339	150	Asphalt	76	C-II	HIRL	Full Parallel
53K	Osage City	Osage City Municipal	17/35	2,560	40	Asphalt	54	A-I	NSTD	Turnarounds

ID	Associated City	Airport	Primary Runway	Primary Runway Length	Primary Runway Width	Primary Runway Surface	Primary Runway PCI	RDC	Primary Runway Lighting	Taxiway Type
K67	Oswego	Oswego Municipal	17/35	2,500	50	Asphalt	83	B-I	LIRL	Turnarounds
OWI	Ottawa	Ottawa Municipal	17/35	4,500	75	Concrete	52	B-II	LIRL	Full Parallel
K81	Paola	Miami County	03/21	3,398	60	Asphalt	63	B-II	MIRL	Turnarounds
PPF	Parsons	Tri-City	17/35	5,000	75	Concrete	95	C-II	MIRL	Turnarounds
PHG	Phillipsburg	Phillipsburg Municipal	13/31	4,504	60	Asphalt	51	B-I	MIRL	Turnarounds
PTS	Pittsburg	Atkinson Municipal	16/34	5,500	100	Asphalt	70	C-II	MIRL	Turnarounds
PTT	Pratt	Pratt Regional	17/35	5,500	100	Concrete	95	C-II	MIRL	Full Parallel
RSL	Russell	Russell Municipal	17/35	5,000	75	Concrete	89	C-II	MIRL	Turnarounds
K83	Sabetha	Sabetha Municipal	01/19	3,100	40	Asphalt	35	B-II	LIRL	Turnarounds
SLN	Salina	Salina Regional	17/35	12,301	150	Asphalt	52	E-IV	HIRL	Full Parallel
1K9	Satanta	Satanta Municipal	03/21	3,250	50	Asphalt	100	A-I	MIRL	Turnarounds
TQK	Scott City	Scott City Municipal	17/35	5,002	75	Concrete	98	C-II	HIRL	Partial Parallel
K82	Smith Center	Smith Center Municipal	14/32	4,400	75	Concrete	93	B-I	MIRL	Turnarounds
SYF	St. Francis	Saint Francis-Cheyenne County	14/32	5,200	75	Asphalt	95	C-II	MIRL	Turnarounds
RCP	Stockton	Rooks County Regional	18/36	5,000	75	Concrete	99	C-II	MIRL	Turnarounds
3K3	Syracuse	Syracuse - Hamilton County Municipal	18/36	4,600	75	Concrete	98	B-II	MIRL	Turnarounds
FOE	Topeka	Topeka Regional	13/31	12,803	200	Concrete	51	D-VI	HIRL	Full Parallel
TOP	Topeka	Philip Billard Municipal	13/31	5,099	100	Asphalt	76	D-III	HIRL	Partial Parallel
5K2	Tribune	Tribune Municipal	17/35	5,007	60	Concrete	92	B-I	MIRL	Full Parallel
ULS	Ulysses	Ulysses	17/35	6,000	100	Concrete	82	D-III	MIRL	Full Parallel
0H1	WaKeeney	Trego WaKeeney	17/35	4,008	60	Concrete	100	B-I	LIRL	Turnarounds
EGT	Wellington	Wellington Municipal	17/35	4,201	100	Concrete	99	C-II	HIRL	Full Parallel
AAO	Wichita	Col. James Jabara	18/36	6,101	100	Concrete	98	D-III	MIRL	Full Parallel
ICT	Wichita	Wichita Dwight D. Eisenhower National	01L/19R	10,301	150	Concrete	70	D-IV	HIRL	Full Parallel
WLD	Winfield	Strother Field	17/35	5,506	100	Asphalt	59	C-III	HIRL	Full Parallel

Source: Airport Inventory and Data Survey

Table A-3 Instrument Approach Capabilities

ID	Associated City	Airport	Best IAP Category	Best IAP	Best Cloud Ceiling (feet)	Best Visibility (miles)
K78	Abilene	Abilene Municipal	APV	RNAV (GPS) RWY 35	400	1
ANY	Anthony	Anthony Municipal	APV	RNAV (GPS) RWY 18	400	1.125
K59	Atchison	Amelia Earhart Memorial	Non-Precision	VOR/DME RNAV or GPS RWY 16	500	1
ADT	Atwood	Atwood-Rawlins County City-County	APV	RNAV (GPS) RWY 16	400	1.25
3AU	Augusta	Augusta Municipal	Non-Precision	RNAV (GPS) RWY 36	400	1
RPB	Belleville	Belleville Municipal	Near-Precision APV	RNAV (GPS) RWY 18	300	1
K61	Beloit	Moritz Memorial	Non-Precision	RNAV (GPS) RWY 17/35	600	1
UKL	Burlington	Burlington-Coffey County	Near-Precision APV	RNAV (GPS) RWY 18/36	300	1
CNU	Chanute	Chanute - Martin Johnson	Non-Precision	RNAV (GPS) RWY 36	400	1
8K8	Cimarron	Cimarron Municipal	Visual	Visual	NA	NA
CYW	Clay Center	Clay Center Municipal	Non-Precision	RNAV (GPS) RWY 17/35	500	1
CFV	Coffeyville	Coffeyville Municipal	Non-Precision	RNAV (GPS) RWY 35	600	1
CBK	Colby	Shalz Field	Near-Precision APV	RNAV (GPS) RWY 35	300	1
CNK	Concordia	Blosser Municipal	Non-Precision	RNAV (GPS) RWY 17/35	400	1
DDC	Dodge City	Dodge City Regional	Precision	ILS or LOC RWY 14	200	0.5
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	Near-Precision APV	RNAV (GPS) RWY 04/22	200	1
EHA	Elkhart	Elkhart-Morton County	Near-Precision APV	RNAV (GPS) RWY 35	300	1
9K7	Ellsworth	Ellsworth Municipal	Visual	Visual	NA	NA
EMP	Emporia	Emporia Municipal	Near-Precision APV	RNAV (GPS) RWY 1	300	1
13K	Eureka	Lt. William M. Milliken	Non-Precision	RNAV (GPS) RWY 18	600	1
FSK	Fort Scott	Fort Scott Municipal	Near-Precision APV	RNAV (GPS) RWY 18/36	300	1
GCK	Garden City	Garden City Regional	Precision	ILS RWY 35	200	0.5
K34	Gardner	Gardner Municipal	Visual	Visual	NA	NA
K68	Garnett	Garnett Industrial	Visual	Visual	NA	NA
GLD	Goodland	Renner Field - Goodland Municipal	Precision	ILS or LOC RWY 30	200	0.5
GBD	Great Bend	Great Bend Municipal	Precision	ILS OR LOC RWY 35	200	0.5
HYS	Hays	Hays Regional	Precision	ILS or LOC RWY 34	200	0.5
HRU	Herington	Herington Regional	APV	RNAV (GPS) RWY 17/35	400	1.25

ID	Associated City	Airport	Best IAP Category	Best IAP	Best Cloud Ceiling (feet)	Best Visibility (miles)
HLC	Hill City	Hill City Municipal	Near-Precision APV	RNAV (GPS) RWY 18	300	1
HQG	Hugoton	Hugoton Municipal	Near-Precision APV	RNAV (GPS) RWY 02/20	300	1
HUT	Hutchinson	Hutchinson Municipal	Precision	ILS or LOC RWY 13	200	0.5
IDP	Independence	Independence Municipal	Precision	ILS or LOC RWY 35	200	0.5
K88	Iola	Allen County	Near-Precision APV	RNAV (GPS) RWY 1	300	1
JHN	Johnson	Stanton County Municipal	Non-Precision	RNAV (GPS) RWY 17/35	400	1
3JC	Junction City	Freeman Field	Non-Precision	RNAV (GPS) RWY 36	1100	1.25
9K8	Kingman	Kingman - Clyde Cessna Field	Non-Precision	RNAV (GPS) RWY 36	500	1
36K	Lakin	Kearny County	Visual	Visual	NA	NA
LQR	Larned	Larned - Pawnee County	Near-Precision APV	RNAV (GPS) RWY 35	300	1
LWC	Lawrence	Lawrence Municipal	Precision	ILS or LOC RWY 33	200	0.5
3K7	Leoti	Mark Hoard Memorial	Visual	Visual	NA	NA
LBL	Liberal	Liberal Mid-America Regional	Precision	ILS or LOC RWY 35	200	0.5
LYO	Lyons	Lyons - Rice County Municipal	Non-Precision	GPS RWY 17R/35L	500	1
MHK	Manhattan	Manhattan Regional	Precision	ILS or LOC/DME RWY 3	200	0.75
MYZ	Marysville	Marysville Municipal	APV	RNAV (GPS) RWY 34	400	1.125
MPR	McPherson	McPherson	Near-Precision APV	RNAV (GPS) RWY 36	300	0.75
MEJ	Meade	Meade Municipal	Non-Precision	RNAV (GPS) RWY 35	500	1
K51	Medicine Lodge	Medicine Lodge	Visual	Visual	NA	NA
48K	Ness City	Ness City Memorial	Visual	Visual	NA	NA
EWK	Newton	Newton City/County	Precision	ILS or LOC RWY 17	200	0.5
NRN	Norton	Norton Municipal	Near-Precision APV	RNAV (GPS) RWY 16	300	1
OEL	Oakley	Oakley Municipal	Near-Precision APV	RNAV (GPS) RWY 34	300	1
OIN	Oberlin	Oberlin Municipal	Near-Precision APV	RNAV (GPS) RWY 35	300	1
OJC	Olathe	Johnson County Executive	Near-Precision APV	RNAV (GPS) RWY 36	300	0.75
IXD	Olathe	New Century AirCenter	Precision	ILS or LOC/DME RWY 36	200	0.5
53K	Osage City	Osage City Municipal	Visual	Visual	NA	NA
K67	Oswego	Oswego Municipal	Visual	Visual	NA	NA
OVI	Ottawa	Ottawa Municipal	Near-Precision APV	RNAV (GPS) RWY 35	300	0.875

ID	Associated City	Airport	Best IAP Category	Best IAP	Best Cloud Ceiling (feet)	Best Visibility (miles)
K81	Paola	Miami County	APV	RNAV (GPS) RWY 03/21	400	1
PPF	Parsons	Tri-City	Near-Precision APV	RNAV (GPS) RWY 17/35	300	1
PHG	Phillipsburg	Phillipsburg Municipal	Non-Precision	RNAV (GPS) RWY 13	500	1
PTS	Pittsburg	Atkinson Municipal	Near-Precision APV	RNAV (GPS) RWY 4	300	0.875
PTT	Pratt	Pratt Regional	Near-Precision APV	RNAV (GPS) RWY 17/35	300	1
RSL	Russell	Russell Municipal	Near-Precision APV	RNAV (GPS) RWY 17/35	300	1
K83	Sabetha	Sabetha Municipal	Visual	Visual	NA	NA
SLN	Salina	Salina Regional	Precision	ILS or LOC RWY 35	200	0.5
1K9	Satanta	Satanta Municipal	Visual	Visual	NA	NA
TQK	Scott City	Scott City Municipal	Near-Precision APV	RNAV (GPS) RWY 35	300	1
K82	Smith Center	Smith Center Municipal	Near-Precision APV	RNAV (GPS) RWY 14/32	200	0.75
SYF	St. Francis	Saint Francis-Cheyenne County	Non-Precision	NDB or GPS RWY 32	600	1
RCP	Stockton	Rooks County Regional	Near-Precision APV	RNAV (GPS) RWY 18/36	300	1
3K3	Syracuse	Syracuse - Hamilton County Municipal	Near-Precision APV	RNAV (GPS) RWY 18/36	300	1
FOE	Topeka	Topeka Regional	Precision	ILS or LOC RWY 31	200	0.5
TOP	Topeka	Philip Billard Municipal	Precision	ILS or LOC RWY 13	200	0.5
5K2	Tribune	Tribune Municipal	Near-Precision APV	RNAV (GPS) RWY 35	300	1
ULS	Ulysses	Ulysses	APV	RNAV (GPS) RWY 35	400	1
OH1	WaKeeney	Trego WaKeeney	Visual	Visual	NA	NA
EGT	Wellington	Wellington Municipal	Near-Precision APV	RNAV (GPS) RWY 17/35	300	1
AAO	Wichita	Col. James Jabara	Precision	ILS or LOC/DME RWY 18	200	0.5
ICT	Wichita	Wichita Dwight D. Eisenhower National	Precision	ILS RWY 1L (CAT II)	100	0.25
WLD	Winfield	Strother Field	Near-Precision APV	RNAV (GPS) RWY 35	300	0.75

Source: Airport Inventory and Data Survey

Table A-4 Navigational Aids and Automated Weather Reporting

ID	Associated City	Airport	REILs (RW Ends)	VGSI (RW Ends)	ALS (RW Ends)	Rotating Beacon	Wind Indicator	On-Site Weather Reporting
K78	Abilene	Abilene Municipal	17/35	P2/P2	None	Yes	Yes-Lighted	Yes
ANY	Anthony	Anthony Municipal	None	P2/P2	None	Yes	Yes-Lighted	No
K59	Atchison	Amelia Earhart Memorial	None	None	None	Yes	Yes	No
ADT	Atwood	Atwood-Rawlins County City-County	16/34	P2/P2	None	Yes	Yes-Lighted	Yes
3AU	Augusta	Augusta Municipal	18/36	P4/V2	None	Yes	Yes-Lighted	Yes
RPB	Belleville	Belleville Municipal	None	P2/P2	None	Yes	Yes-Lighted	No
K61	Beloit	Moritz Memorial	None	None	None	Yes	Yes-Lighted	Yes
UKL	Burlington	Burlington-Coffey County	18/36	P4/P4	None	Yes	Yes-Lighted	Yes
CNU	Chanute	Chanute - Martin Johnson	18/36	P2/P2	None	Yes	Yes-Lighted	Yes
8K8	Cimarron	Cimarron Municipal	None	None	None	Yes	Yes-Lighted	No
CYW	Clay Center	Clay Center Municipal	None	None	None	Yes	Yes-Lighted	No
CFV	Coffeyville	Coffeyville Municipal	/35	P4/P4	None	No	Yes-Lighted	Yes
CBK	Colby	Shalz Field	None	P2/P2	None	Yes	Yes-Lighted	Yes
CNK	Concordia	Blosser Municipal	None	None	None	Yes	Yes-Lighted	Yes
DDC	Dodge City	Dodge City Regional	/32	V4/V4	MALSR/	Yes	Yes-Lighted	Yes
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	04/22	P4/P4	None	Yes	Yes-Lighted	Yes
EHA	Elkhart	Elkhart-Morton County	None	P4/P4	None	Yes	Yes-Lighted	No
9K7	Ellsworth	Ellsworth Municipal	None	/V4	None	Yes	Yes-Lighted	Yes
EMP	Emporia	Emporia Municipal	01/19	P4/P4	None	Yes	Yes-Lighted	Yes
13K	Eureka	Lt. William M. Milliken	None	P2/P2	None	Yes	Yes-Lighted	Yes
FSK	Fort Scott	Fort Scott Municipal	18/36	V4/P2	None	Yes	Yes-Lighted	Yes
GCK	Garden City	Garden City Regional	17/	V4/V4	/MALSR	Yes	Yes-Lighted	Yes
K34	Gardner	Gardner Municipal	None	None	None	Yes	Yes-Lighted	Yes
K68	Garnett	Garnett Industrial	None	None	None	Yes	Yes-Lighted	No
GLD	Goodland	Renner Field - Goodland Municipal	12/	P4L/P4L	/MALSR	Yes	Yes-Lighted	Yes
GBD	Great Bend	Great Bend Municipal	17/	P4/V4	/MALSR	Yes	Yes-Lighted	Yes
HYS	Hays	Hays Regional	16/	P4/P4	/MALSR	Yes	Yes-Lighted	Yes
HRU	Herington	Herington Regional	17/35	P4/P4	None	Yes	Yes-Lighted	No

ID	Associated City	Airport	REILs (RW Ends)	VGSI (RW Ends)	ALS (RW Ends)	Rotating Beacon	Wind Indicator	On-Site Weather Reporting
HLC	Hill City	Hill City Municipal	18/36	P4/P4	None	Yes	Yes-Lighted	Yes
HQG	Hugoton	Hugoton Municipal	02/20	P2/P2	None	Yes	Yes-Lighted	Yes
HUT	Hutchinson	Hutchinson Municipal	/31	/V4	MALSR/	Yes	Yes-Lighted	Yes
IDP	Independence	Independence Municipal	17/	P4/P4	/MALSR	Yes	Yes-Lighted	Yes
K88	Iola	Allen County	None	P4/P4	None	Yes	Yes-Lighted	No
JHN	Johnson	Stanton County Municipal	None	P4/P4	None	Yes	Yes-Lighted	Yes
3JC	Junction City	Freeman Field	None	P2/P2	None	Yes	Yes-Lighted	No
9K8	Kingman	Kingman - Clyde Cessna Field	18/36	P4/P4	None	Yes	Yes-Lighted	Yes
36K	Lakin	Kearny County	None	None	None	Yes	Yes-Lighted	No
LQR	Larned	Larned - Pawnee County	17/35	P4/P4	None	Yes	Yes-Lighted	Yes
LWC	Lawrence	Lawrence Municipal	None	P4/P4	/MALSR	Yes	Yes-Lighted	Yes
3K7	Leoti	Mark Hoard Memorial	None	None	None	Yes	Yes-Lighted	No
LBL	Liberal	Liberal Mid-America Regional	17/	V4/V4	/MALSR	Yes	Yes-Lighted	Yes
LYO	Lyons	Lyons - Rice County Municipal	None	None	None	Yes	Yes-Lighted	No
MHK	Manhattan	Manhattan Regional	/21	P4/P4	MALSR/	Yes	Yes-Lighted	Yes
MYZ	Marysville	Marysville Municipal	16/34	P2/P2	None	Yes	Yes-Lighted	Yes
MPR	McPherson	McPherson	18/36	P2/P2	None	Yes	Yes-Lighted	Yes
MEJ	Meade	Meade Municipal	None	P2/P2	None	Yes	Yes-Lighted	Yes
K51	Medicine Lodge	Medicine Lodge	None	None	None	Yes	Yes-Lighted	Yes
48K	Ness City	Ness City Memorial	None	None	None	Yes	Yes-Lighted	No
EWK	Newton	Newton City/County	/35	V4/V4	MALSR/	Yes	Yes-Lighted	Yes
NRN	Norton	Norton Municipal	None	P2/P2	None	Yes	Yes-Lighted	Yes
OEL	Oakley	Oakley Municipal	16/34	None	None	Yes	Yes-Lighted	Yes
OIN	Oberlin	Oberlin Municipal	None	P2/P2	None	Yes	Yes-Lighted	Yes
OJC	Olathe	Johnson County Executive	None	V2/V4	/MALSR	Yes	Yes-Lighted	Yes
IXD	Olathe	New Century AirCenter	18/	V4/	/MALSR	Yes	Yes-Lighted	Yes
53K	Osage City	Osage City Municipal	None	None	None	Yes	Yes	No
K67	Oswego	Oswego Municipal	None	None	None	Yes	Yes	No
OWI	Ottawa	Ottawa Municipal	17/35	P2/P2	None	Yes	Yes-Lighted	No

ID	Associated City	Airport	REILs (RW Ends)	VGSI (RW Ends)	ALS (RW Ends)	Rotating Beacon	Wind Indicator	On-Site Weather Reporting
K81	Paola	Miami County	03/21	P4/P4	None	Yes	Yes-Lighted	No
PPF	Parsons	Tri-City	17/35	V4/V4	None	Yes	Yes-Lighted	Yes
PHG	Phillipsburg	Phillipsburg Municipal	13/31	P2/P2	None	Yes	Yes-Lighted	Yes
PTS	Pittsburg	Atkinson Municipal	16/34	P4/P4	None	Yes	Yes-Lighted	Yes
PPT	Pratt	Pratt Regional	17/35	P4/P4	None	Yes	Yes-Lighted	Yes
RSL	Russell	Russell Municipal	17/35	P4/P4	None	Yes	Yes-Lighted	Yes
K83	Sabetha	Sabetha Municipal	None	None	None	Yes	Yes-Lighted	Yes
SLN	Salina	Salina Regional	None	P4/P4	MALS/MALSR	Yes	Yes-Lighted	Yes
1K9	Satanta	Satanta Municipal	None	None	None	Yes	Yes-Lighted	No
TQK	Scott City	Scott City Municipal	None	P2/P2	None	Yes	Yes-Lighted	Yes
K82	Smith Center	Smith Center Municipal	14/32	P4/P4	None	Yes	Yes-Lighted	Yes
SYF	St. Francis	Saint Francis-Cheyenne County	None	None	None	Yes	Yes-Lighted	Yes
RCP	Stockton	Rooks County Regional	18/36	P4/P4	None	No	Yes-Lighted	Yes
3K3	Syracuse	Syracuse - Hamilton County Municipal	None	P4/P4	None	Yes	Yes-Lighted	Yes
FOE	Topeka	Topeka Regional	13/	V4/V4	SALS/MALSR	Yes	Yes-Lighted	Yes
TOP	Topeka	Philip Billard Municipal	/31	/V4	MALSR/	Yes	Yes-Lighted	Yes
5K2	Tribune	Tribune Municipal	None	None	None	Yes	Yes-Lighted	Yes
ULS	Ulysses	Ulysses	17/35	P4/P4	None	Yes	Yes-Lighted	Yes
OH1	WaKeeney	Trego WaKeeney	None	None	None	Yes	Yes-Lighted	No
EGT	Wellington	Wellington Municipal	17/35	P2/P2	None	Yes	Yes-Lighted	Yes
AAO	Wichita	Col. James Jabara	/36	P4/P4	MALSR/	Yes	Yes-Lighted	Yes
ICT	Wichita	Wichita Dwight D. Eisenhower National	None	P4L/P4L	ALSF2/MALSR	Yes	Yes-Lighted	Yes
WLD	Winfield	Strother Field	17/35	P4/P4	None	Yes	Yes-Lighted	Yes

Source: Airport Inventory and Data Survey

Table A-5 Landside Facilities

ID	Associated City	Airport	Hangars	Aircraft Apron	GA Terminal	Public Restrooms	Pilot Lounge	Auto Parking
K78	Abilene	Abilene Municipal	Yes	Yes	Yes	Yes	Yes	Yes
ANY	Anthony	Anthony Municipal	Yes	Yes	Yes	No	No	Yes
K59	Atchison	Amelia Earhart Memorial	Yes	Yes	Yes	Yes	Yes	Yes
ADT	Atwood	Atwood-Rawlins County City-County	Yes	Yes	Yes	Yes	Yes	Yes
3AU	Augusta	Augusta Municipal	Yes	Yes	Yes	Yes	Yes	Yes
RPB	Belleville	Belleville Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K61	Beloit	Moritz Memorial	Yes	Yes	Yes	Yes	Yes	Yes
UKL	Burlington	Burlington-Coffey County	Yes	Yes	Yes	Yes	Yes	Yes
CNU	Chanute	Chanute - Martin Johnson	Yes	Yes	Yes	Yes	Yes	Yes
8K8	Cimarron	Cimarron Municipal	Yes	Yes	Yes	Yes	Yes	Yes
CYW	Clay Center	Clay Center Municipal	Yes	Yes	Yes	Yes	Yes	Yes
CFV	Coffeyville	Coffeyville Municipal	Yes	Yes	Yes	Yes	Yes	Yes
CBK	Colby	Shalz Field	Yes	Yes	Yes	Yes	Yes	Yes
CNK	Concordia	Blosser Municipal	Yes	Yes	Yes	Yes	Yes	Yes
DDC	Dodge City	Dodge City Regional	Yes	Yes	Yes	Yes	Yes	Yes
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	Yes	Yes	Yes	Yes	Yes	Yes
EHA	Elkhart	Elkhart-Morton County	Yes	Yes	Yes	No	Yes	Yes
9K7	Ellsworth	Ellsworth Municipal	Yes	Yes	Yes	Yes	Yes	Yes
EMP	Emporia	Emporia Municipal	Yes	Yes	Yes	Yes	Yes	Yes
13K	Eureka	Lt. William M. Milliken	Yes	Yes	Yes	Yes	Yes	Yes
FSK	Fort Scott	Fort Scott Municipal	Yes	Yes	Yes	Yes	Yes	Yes
GCK	Garden City	Garden City Regional	Yes	Yes	Yes	Yes	Yes	Yes
K34	Gardner	Gardner Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K68	Garnett	Garnett Industrial	Yes	Yes	Yes	Yes	Yes	Yes
GLD	Goodland	Renner Field - Goodland Municipal	Yes	Yes	Yes	Yes	Yes	Yes
GBD	Great Bend	Great Bend Municipal	Yes	Yes	Yes	Yes	Yes	Yes
HYS	Hays	Hays Regional	Yes	Yes	Yes	Yes	Yes	Yes
HRU	Herington	Herington Regional	Yes	Yes	Yes	Yes	Yes	Yes

ID	Associated City	Airport	Hangars	Aircraft Apron	GA Terminal	Public Restrooms	Pilot Lounge	Auto Parking
HLC	Hill City	Hill City Municipal	Yes	Yes	Yes	Yes	Yes	Yes
HQG	Hugoton	Hugoton Municipal	Yes	Yes	Yes	Yes	Yes	Yes
HUT	Hutchinson	Hutchinson Municipal	Yes	Yes	Yes	Yes	Yes	Yes
IDP	Independence	Independence Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K88	Iola	Allen County	Yes	Yes	Yes	Yes	Yes	Yes
JHN	Johnson	Stanton County Municipal	Yes	Yes	Yes	Yes	Yes	Yes
3JC	Junction City	Freeman Field	Yes	Yes	Yes	Yes	Yes	Yes
9K8	Kingman	Kingman - Clyde Cessna Field	Yes	Yes	Yes	Yes	Yes	Yes
36K	Lakin	Kearny County	Yes	Yes	Yes	Yes	Yes	Yes
LQR	Larned	Larned - Pawnee County	Yes	Yes	Yes	Yes	Yes	Yes
LWC	Lawrence	Lawrence Municipal	Yes	Yes	Yes	Yes	Yes	Yes
3K7	Leoti	Mark Hoard Memorial	Yes	Yes	No	No	No	Yes
LBL	Liberal	Liberal Mid-America Regional	Yes	Yes	Yes	Yes	Yes	Yes
LYO	Lyons	Lyons - Rice County Municipal	Yes	Yes	Yes	Yes	Yes	Yes
MHK	Manhattan	Manhattan Regional	Yes	Yes	Yes	Yes	Yes	Yes
MYZ	Marysville	Marysville Municipal	Yes	Yes	Yes	No	Yes	Yes
MPR	McPherson	McPherson	Yes	Yes	Yes	Yes	Yes	Yes
MEJ	Meade	Meade Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K51	Medicine Lodge	Medicine Lodge	Yes	No	Yes	Yes	Yes	Yes
48K	Ness City	Ness City Memorial	Yes	Yes	No	No	No	No
EWK	Newton	Newton City/County	Yes	Yes	Yes	Yes	Yes	Yes
NRN	Norton	Norton Municipal	Yes	Yes	Yes	Yes	Yes	Yes
OEL	Oakley	Oakley Municipal	Yes	Yes	Yes	Yes	Yes	Yes
OIN	Oberlin	Oberlin Municipal	Yes	No	Yes	Yes	Yes	Yes
OJC	Olathe	Johnson County Executive	Yes	Yes	Yes	Yes	Yes	Yes
IXD	Olathe	New Century AirCenter	Yes	Yes	Yes	Yes	Yes	Yes
53K	Osage City	Osage City Municipal	Yes	Yes	No	No	No	Yes
K67	Oswego	Oswego Municipal	Yes	No	Yes	Yes	Yes	Yes
OWI	Ottawa	Ottawa Municipal	Yes	Yes	Yes	Yes	Yes	Yes

ID	Associated City	Airport	Hangars	Aircraft Apron	GA Terminal	Public Restrooms	Pilot Lounge	Auto Parking
K81	Paola	Miami County	Yes	Yes	Yes	Yes	Yes	Yes
PPF	Parsons	Tri-City	Yes	Yes	Yes	Yes	Yes	Yes
PHG	Phillipsburg	Phillipsburg Municipal	Yes	Yes	Yes	Yes	Yes	Yes
PTS	Pittsburg	Atkinson Municipal	Yes	Yes	Yes	Yes	Yes	Yes
PTT	Pratt	Pratt Regional	Yes	Yes	Yes	Yes	Yes	Yes
RSL	Russell	Russell Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K83	Sabetha	Sabetha Municipal	Yes	No	No	No	No	Yes
SLN	Salina	Salina Regional	Yes	Yes	Yes	Yes	Yes	Yes
1K9	Satanta	Satanta Municipal	Yes	Yes	Yes	Yes	Yes	Yes
TQK	Scott City	Scott City Municipal	Yes	Yes	Yes	Yes	Yes	Yes
K82	Smith Center	Smith Center Municipal	Yes	Yes	Yes	Yes	No	Yes
SYF	St. Francis	Saint Francis-Cheyenne County	Yes	Yes	Yes	Yes	Yes	Yes
RCP	Stockton	Rooks County Regional	Yes	Yes	No	No	No	No
3K3	Syracuse	Syracuse - Hamilton County Municipal	Yes	Yes	Yes	Yes	Yes	Yes
FOE	Topeka	Topeka Regional	Yes	Yes	Yes	Yes	Yes	Yes
TOP	Topeka	Philip Billard Municipal	Yes	Yes	Yes	Yes	Yes	Yes
5K2	Tribune	Tribune Municipal	Yes	Yes	No	No	No	Yes
ULS	Ulysses	Ulysses	Yes	Yes	Yes	Yes	Yes	Yes
OH1	Wakeeney	Trego Wakeeney	Yes	Yes	No	No	No	Yes
EGT	Wellington	Wellington Municipal	Yes	Yes	Yes	Yes	Yes	Yes
AAO	Wichita	Col. James Jabara	Yes	Yes	Yes	Yes	Yes	Yes
ICT	Wichita	Wichita Dwight D. Eisenhower National	Yes	Yes	Yes	Yes	Yes	Yes
WLD	Winfield	Strother Field	Yes	Yes	Yes	Yes	Yes	Yes

Source: Airport Inventory and Data Survey

Table A-6 Aviation Services

ID	Associated City	Airport	FBO	AvGas	Jet-A	MoGas	24/7 Fuel	Aviation Maintenance	Rental Car	Courtesy or Crew Car	Public Transit	Based Flight Instruction
K78	Abilene	Abilene Municipal	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
ANY	Anthony	Anthony Municipal	No	Yes	No	No	Yes	No	No	No	No	Yes
K59	Atchison	Amelia Earhart Memorial	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes
ADT	Atwood	Atwood-Rawlins County City-County	No	Yes	No	No	Yes	No	No	Yes	No	Yes
3AU	Augusta	Augusta Municipal	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
RPB	Belleville	Belleville Municipal	No	Yes	No	No	Yes	No	No	No	No	Yes
K61	Beloit	Moritz Memorial	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes
UKL	Burlington	Burlington-Coffey County	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
CNU	Chanute	Chanute - Martin Johnson	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes
8K8	Cimarron	Cimarron Municipal	No	No	No	No	No	No	No	No	No	Yes
CYW	Clay Center	Clay Center Municipal	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
CFV	Coffeyville	Coffeyville Municipal	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
CBK	Colby	Shalz Field	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes
CNK	Concordia	Blosser Municipal	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes
DDC	Dodge City	Dodge City Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes
EHA	Elkhart	Elkhart-Morton County	No	Yes	No	No	Yes	No	No	No	No	Yes
9K7	Ellsworth	Ellsworth Municipal	Yes	Yes	No	No	Yes	No	No	Yes	No	Yes
EMP	Emporia	Emporia Municipal	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
13K	Eureka	Lt. William M. Milliken	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
FSK	Fort Scott	Fort Scott Municipal	No	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
GCK	Garden City	Garden City Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
K34	Gardner	Gardner Municipal	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	No
K68	Garnett	Garnett Industrial	No	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
GLD	Goodland	Renner Field - Goodland Municipal	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes

ID	Associated City	Airport	FBO	AvGas	Jet-A	MoGas	24/7 Fuel	Aviation Maintenance		Rental		Courtesy or		Based	
								Car	Car	Car	Car	Crew Car	Transit	Flight Instruction	
GBD	Great Bend	Great Bend Municipal	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
HYS	Hays	Hays Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
HRU	Herrington	Herrington Regional	No	Yes	No	No	Yes	No	No	No	No	No	No	No	Yes
HLC	Hill City	Hill City Municipal	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
HQG	Hugoton	Hugoton Municipal	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
HUT	Hutchinson	Hutchinson Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	No	No	Yes
IDP	Independence	Independence Municipal	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
K88	Iola	Allen County	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No	No	Yes
JHN	Johnson	Stanton County Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	No	No	Yes
3JC	Junction City	Freeman Field	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	No	No	Yes
9K8	Kingman	Kingman - Clyde Cessna Field	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	No	Yes
36K	Lakin	Kearny County	No	Yes	No	No	Yes	No	No	No	No	Yes	No	No	Yes
LQR	Larned	Larned - Pawnee County	No	Yes	No	No	Yes	No	No	No	No	Yes	No	No	Yes
LWC	Lawrence	Lawrence Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	No	No	Yes
3K7	Leoti	Mark Hoard Memorial	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No
LBL	Liberal	Liberal Mid-America Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
LYO	Lyons	Lyons - Rice County Municipal	Yes	Yes	No	No	Yes	Yes	No	No	No	No	No	No	Yes
MHK	Manhattan	Manhattan Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
MYZ	Marysville	Marysville Municipal	No	No	No	No	No	No	No	No	No	No	No	No	Yes
MPR	McPherson	McPherson	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No	Yes
MEJ	Meade	Meade Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	No	Yes
K51	Medicine Lodge	Medicine Lodge	No	No	No	No	No	No	No	No	No	No	No	No	Yes
48K	Ness City	Ness City Memorial	No	No	No	No	No	No	No	No	No	No	No	No	No
EWK	Newton	Newton City/County	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
NRN	Norton	Norton Municipal	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
OEL	Oakley	Oakley Municipal	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	No	Yes
OIN	Oberlin	Oberlin Municipal	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	No	Yes
OJC	Olathe	Johnson County Executive	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
IXD	Olathe	New Century AirCenter	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes

ID	Associated City	Airport	FBO	AvGas	Jet-A	MoGas	24/7		Aviation Maintenance	Rental		Courtesy or Crew Car	Public Transit	Based	
							Fuel	MoGas		Car	Flight Instruction				
53K	Osage City	Osage City Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No
K67	Oswego	Oswego Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	Yes
OWI	Ottawa	Ottawa Municipal	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	Yes
K81	Paola	Miami County	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
PPF	Parsons	Tri-City	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
PHG	Phillipsburg	Phillipsburg Municipal	No	Yes	No	No	Yes	No	No	No	Yes	Yes	No	Yes	Yes
PTS	Pittsburg	Atkinson Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
PTT	Pratt	Pratt Regional	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	No	No
RSL	Russell	Russell Municipal	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
K83	Sabetha	Sabetha Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No
SLN	Salina	Salina Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
1K9	Satanta	Satanta Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	Yes
TQK	Scott City	Scott City Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
K82	Smith Center	Smith Center Municipal	No	Yes	No	No	Yes	No	No	No	Yes	Yes	No	Yes	Yes
SYF	St. Francis	Saint Francis-Cheyenne County	No	Yes	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
RCP	Stockton	Rooks County Regional	No	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No
3K3	Syracuse	Syracuse - Hamilton County Municipal	No	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
FOE	Topeka	Topeka Regional	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TOP	Topeka	Philip Billard Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
5K2	Tribune	Tribune Municipal	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No
ULS	Ulysses	Ulysses	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
0H1	Wakeeey	Trego Wakeeey	No	No	No	No	No	Yes	No	No	No	No	No	No	No
EGT	Wellington	Wellington Municipal	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
AAO	Wichita	Col. James Jabara	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes
ICT	Wichita	Wichita Dwight D. Eisenhower National	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
WLD	Winfield	Strother Field	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	Yes

Source: Airport Inventory and Data Survey

Table A-7 Airport Planning and Policy Documents

ID	Associated City	Airport	Emergency Response Plan	Wildlife Management Plan	Security Plan	Snow Removal Plan
K78	Abilene	Abilene Municipal	No	No	No	Yes
ANY	Anthony	Anthony Municipal	No	No	No	No
K59	Atchison	Amelia Earhart Memorial	No	No	No	No
ADT	Atwood	Atwood-Rawlins County City-County	No	No	No	No
3AU	Augusta	Augusta Municipal	No	No	No	Yes
RPB	Belleville	Belleville Municipal	No	No	No	Yes
K61	Beloit	Moritz Memorial	No	No	No	Yes
UKL	Burlington	Burlington-Coffey County	No	No	No	Yes
CNU	Chanute	Chanute - Martin Johnson	No	No	No	Yes
8K8	Cimarron	Cimarron Municipal	No	No	No	No
CYW	Clay Center	Clay Center Municipal	Yes	No	No	Yes
CFV	Coffeyville	Coffeyville Municipal	No	No	No	Yes
CBK	Colby	Shalz Field	No	No	No	Yes
CNK	Concordia	Blosser Municipal	No	No	No	Yes
DDC	Dodge City	Dodge City Regional	Yes	Yes	Yes	Yes
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	No	No	Yes	Yes
EHA	Elkhart	Elkhart-Morton County	No	No	No	Yes
9K7	Ellsworth	Ellsworth Municipal	No	No	No	No
EMP	Emporia	Emporia Municipal	No	No	Yes	Yes
13K	Eureka	Lt. William M. Milliken	No	No	No	Yes
FSK	Fort Scott	Fort Scott Municipal	No	Yes	No	Yes
GCK	Garden City	Garden City Regional	Yes	No	Yes	Yes
K34	Gardner	Gardner Municipal	No	No	Yes	Yes
K68	Garnett	Garnett Industrial	No	Yes	No	Yes
GLD	Goodland	Renner Field - Goodland Municipal	No	No	No	Yes
GBD	Great Bend	Great Bend Municipal	Yes	Yes	Yes	Yes
HYS	Hays	Hays Regional	Yes	No	No	Yes
HRU	Herington	Herington Regional	No	No	No	Yes

ID	Associated City	Airport	Emergency Response Plan			Wildlife Management Plan		Security Plan	Snow Removal Plan
			Emergency Response Plan	Wildlife Management Plan	Security Plan	Snow Removal Plan			
HLC	Hill City	Hill City Municipal	No	No	No	No	No	Yes	
HQG	Hugoton	Hugoton Municipal	No	No	No	No	No	Yes	
HUT	Hutchinson	Hutchinson Municipal	Yes	No	Yes	No	Yes	Yes	
IDP	Independence	Independence Municipal	Yes	No	Yes	No	Yes	Yes	
K88	Iola	Allen County	No	No	No	No	No	Yes	
JHN	Johnson	Stanton County Municipal	No	No	No	No	No	Yes	
3JC	Junction City	Freeman Field	Yes	No	No	No	No	Yes	
9K8	Kingman	Kingman - Clyde Cessna Field	No	No	No	No	No	Yes	
36K	Lakin	Kearny County	No	No	No	No	No	No	
LQR	Larned	Larned - Pawnee County	No	No	No	No	No	Yes	
LWC	Lawrence	Lawrence Municipal	Yes	No	Yes	No	Yes	Yes	
3K7	Leoti	Mark Hoard Memorial	No	No	No	No	No	Yes	
LBL	Liberal	Liberal Mid-America Regional	Yes	No	Yes	No	No	Yes	
LYO	Lyons	Lyons - Rice County Municipal	No	No	No	No	No	Yes	
MHK	Manhattan	Manhattan Regional	Yes	Yes	Yes	Yes	Yes	Yes	
MYZ	Marysville	Marysville Municipal	No	No	No	No	No	Yes	
MPR	McPherson	McPherson	No	No	No	No	No	Yes	
MEJ	Meade	Meade Municipal	No	No	No	No	No	Yes	
K51	Medicine Lodge	Medicine Lodge	No	No	No	No	No	Yes	
48K	Ness City	Ness City Memorial	No	No	No	No	No	No	
EWK	Newton	Newton City/County	Yes	No	Yes	No	Yes	Yes	
NRN	Norton	Norton Municipal	No	No	No	No	No	Yes	
OEL	Oakley	Oakley Municipal	No	No	No	No	No	Yes	
OIN	Oberlin	Oberlin Municipal	No	No	No	No	No	Yes	
OJC	Olathe	Johnson County Executive	No	No	No	No	Yes	Yes	
IXD	Olathe	New Century AirCenter	Yes	No	Yes	No	Yes	Yes	
53K	Osage City	Osage City Municipal	No	No	No	No	No	Yes	
K67	Oswego	Oswego Municipal	No	No	No	No	No	Yes	
OWI	Ottawa	Ottawa Municipal	No	No	No	No	No	Yes	

ID	Associated City	Airport	Emergency Response Plan		Wildlife Management Plan		Security Plan	Snow Removal Plan
			Emergency Response Plan	Wildlife Management Plan	Security Plan	Snow Removal Plan		
K81	Paola	Miami County	No	No	No	No	Yes	
PPF	Parsons	Tri-City	No	No	No	No	Yes	
PHG	Phillipsburg	Phillipsburg Municipal	No	No	Yes	Yes	Yes	
PTS	Pittsburg	Atkinson Municipal	No	No	No	No	Yes	
PTT	Pratt	Pratt Regional	No	No	Yes	Yes	Yes	
RSL	Russell	Russell Municipal	No	No	No	No	Yes	
K83	Sabetha	Sabetha Municipal	No	No	No	No	Yes	
SLN	Salina	Salina Regional	Yes	No	Yes	Yes	Yes	
1K9	Satanta	Satanta Municipal	No	No	No	No	Yes	
TQK	Scott City	Scott City Municipal	No	No	No	No	Yes	
K82	Smith Center	Smith Center Municipal	No	No	No	No	Yes	
SYF	St. Francis	Saint Francis-Cheyenne County	No	No	No	No	Yes	
RCP	Stockton	Rooks County Regional	No	No	No	No	No	
3K3	Syracuse	Syracuse - Hamilton County Municipal	No	No	No	No	Yes	
FOE	Topeka	Topeka Regional	Yes	Yes	Yes	Yes	Yes	
TOP	Topeka	Philip Billard Municipal	No	No	Yes	Yes	Yes	
5K2	Tribune	Tribune Municipal	No	No	No	No	Yes	
ULS	Ulysses	Ulysses	No	No	No	No	Yes	
OH1	WaKeeney	Trego WaKeeney	No	No	No	No	Yes	
EGT	Wellington	Wellington Municipal	No	No	No	No	Yes	
AAO	Wichita	Col. James Jabara	Yes	Yes	Yes	Yes	Yes	
ICT	Wichita	Wichita Dwight D. Eisenhower National	Yes	Yes	Yes	Yes	Yes	
WLD	Winfield	Strother Field	No	No	No	No	Yes	

Source: Airport Inventory and Data Survey

Table A-8 GA Operations and Based Aircraft

ID	Associated City	Airport	Total GA Operations	Itinerant GA Operations	Total Based Aircraft	Based Jets
K78	Abilene	Abilene Municipal	37,500	20,000	19	1
ANY	Anthony	Anthony Municipal	6,200	2,976	6	0
K59	Atchison	Amelia Earhart Memorial	16,050	5,080	10	0
ADT	Atwood	Atwood-Rawlins County City-County	12,000	4,000	14	0
3AU	Augusta	Augusta Municipal	36,000	15,120	111	0
RPB	Belleville	Belleville Municipal	7,200	3,000	2	0
K61	Beloit	Moritz Memorial	20,000	8,000	9	0
UKL	Burlington	Burlington-Coffey County	20,000	8,000	16	0
CNU	Chanute	Chanute - Martin Johnson	25,000	9,072	17	0
8K8	Cimarron	Cimarron Municipal	3,500	500	9	0
CYW	Clay Center	Clay Center Municipal	22,000	12,400	14	0
CFV	Coffeyville	Coffeyville Municipal	2,000	800	32	0
CBK	Colby	Shalz Field	5,500	2,500	23	0
CNK	Concordia	Blosser Municipal	14,150	6,150	13	0
DDC	Dodge City	Dodge City Regional	18,000	15,900	27	0
EQA	El Dorado	El Dorado/Capt. Jack Thomas Memorial	13,200	3,500	36	0
EHA	Elkhart	Elkhart-Morton County	6,000	2,580	10	0
9K7	Ellsworth	Ellsworth Municipal	20,000	6,000	10	0
EMP	Emporia	Emporia Municipal	31,000	5,000	46	1
13K	Eureka	Lt. William M. Milliken	4,900	1,000	9	0
FSK	Fort Scott	Fort Scott Municipal	9,600	1,300	21	1
GCK	Garden City	Garden City Regional	9,436	7,750	67	3
K34	Gardner	Gardner Municipal	26,000	7,800	51	0
K68	Garnett	Garnett Industrial	1,500	300	18	0
GLD	Goodland	Renner Field - Goodland Municipal	42,400	32,000	23	5
GBD	Great Bend	Great Bend Municipal	21,159	3,600	31	0
HYS	Hays	Hays Regional	23,020	12,380	55	0
HRU	Herington	Herington Regional	11,600	6,000	9	0

ID	Associated City	Airport	Total GA Operations	Itinerant GA Operations	Total Based Aircraft	Based Jets
HLC	Hill City	Hill City Municipal	14,600	2,000	12	0
HQG	Hugoton	Hugoton Municipal	10,000	2,000	20	0
HUT	Hutchinson	Hutchinson Municipal	33,206	18,615	35	3
IDP	Independence	Independence Municipal	10,550	4,050	17	0
K88	Iola	Allen County	16,272	8,000	10	0
JHN	Johnson	Stanton County Municipal	23,100	8,700	32	2
3JC	Junction City	Freeman Field	28,000	14,000	13	0
9K8	Kingman	Kingman - Clyde Cessna Field	9,600	3,800	26	0
36K	Lakin	Kearny County	4,000	500	23	0
LQR	Larned	Larned - Pawnee County	11,900	4,800	12	0
LWC	Lawrence	Lawrence Municipal	32,550	19,053	50	1
3K7	Leoti	Mark Hoard Memorial	5,000	1,000	16	0
LBL	Liberal	Liberal Mid-America Regional	40,000	20,500	50	2
LYO	Lyons	Lyons - Rice County Municipal	12,000	6,986	11	0
MHK	Manhattan	Manhattan Regional	19,067	10,984	46	1
MYZ	Marysville	Marysville Municipal	9,308	5,019	9	0
MPR	McPherson	McPherson	14,000	4,000	25	0
MEJ	Meade	Meade Municipal	5,000	2,000	14	0
K51	Medicine Lodge	Medicine Lodge	2,400	1,200	0	0
48K	Ness City	Ness City Memorial	4,000	1,000	4	0
EWK	Newton	Newton City/County	64,894	25,675	129	5
NRN	Norton	Norton Municipal	5,000	1,000	20	1
OEL	Oakley	Oakley Municipal	12,100	5,100	9	1
OIN	Oberlin	Oberlin Municipal	7,000	3,500	17	0
OJC	Olathe	Johnson County Executive	51,681	28,283	110	0
IXD	Olathe	New Century AirCenter	46,541	22,723	72	1
53K	Osage City	Osage City Municipal	2,700	540	12	0
K67	Oswego	Oswego Municipal	600	300	4	0
OWI	Ottawa	Ottawa Municipal	3,350	250	41	5

ID	Associated City	Airport	Total GA Operations	Itinerant GA Operations	Total Based Aircraft	Based Jets
K81	Paola	Miami County	9,900	3,475	18	0
PPF	Parsons	Tri-City	3,050	1,074	16	0
PHG	Phillipsburg	Phillipsburg Municipal	9,000	3,500	15	0
PTS	Pittsburg	Atkinson Municipal	23,600	7,000	32	8
PPT	Pratt	Pratt Regional	11,300	3,800	20	0
RSL	Russell	Russell Municipal	12,000	6,000	12	0
K83	Sabetha	Sabetha Municipal	8,500	3,192	13	0
SLN	Salina	Salina Regional	63,432	8,627	105	2
1K9	Satanta	Satanta Municipal	3,000	500	18	0
TQK	Scott City	Scott City Municipal	8,000	3,200	33	0
K82	Smith Center	Smith Center Municipal	4,000	1,500	9	0
SYF	St. Francis	Saint Francis-Cheyenne County	3,800	800	13	0
RCP	Stockton	Rooks County Regional	0	0	8	0
3K3	Syracuse	Syracuse - Hamilton County Municipal	5,000	1,400	31	1
FOE	Topeka	Topeka Regional	6,342	5,400	31	5
TOP	Topeka	Philip Billard Municipal	40,484	35,095	56	0
5K2	Tribune	Tribune Municipal	2,650	270	14	0
ULS	Ulysses	Ulysses	21,500	6,450	40	0
OH1	Wakeeney	Trego Wakeeney	2,000	1,000	7	0
EGT	Wellington	Wellington Municipal	18,000	9,800	33	0
AAO	Wichita	Col. James Jabara	38,300	20,140	100	18
ICT	Wichita	Wichita Dwight D. Eisenhower National	64,449	55,142	213	87
WLD	Winfield	Strother Field	6,500	3,000	19	0

Source: Airport Inventory and Data Survey

**APPENDIX B - FORECAST OF AVIATION
DEMAND TABLES**

Table B-1 Based Aircraft Forecast Using Population Projections

Associated City	Airport	2014	2019	2024	2034
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COMMERCIAL SERVICE AIRPORTS

Dodge City	Dodge City Regional	27	27	27	27
Garden City	Garden City Regional	67	71	74	74
Hays	Hays Regional	55	55	55	55
Liberal	Liberal Mid-America Regional	50	51	52	52
Manhattan	Manhattan Regional	46	49	53	63
Salina	Salina Regional	105	116	128	159
Wichita	Wichita Dwight D. Eisenhower National	213	224	236	266
Commercial Service Airports Total		563	593	625	696

GENERAL AVIATION AIRPORTS

Abilene	Abilene Municipal	19	19	19	20
Anthony	Anthony Municipal	6	6	6	6
Atchison	Amelia Earhart Memorial	10	10	10	10
Atwood	Atwood-Rawlins County City-County	14	14	14	14
Augusta	Augusta Municipal	111	117	123	136
Belleville	Belleville Municipal	2	2	2	2
Beloit	Moritz Memorial	9	9	9	9
Burlington	Burlington-Coffey County	16	16	16	16
Chanute	Chanute - Martin Johnson	17	17	17	17
Cimarron	Cimarron Municipal	9	9	9	9
Clay Center	Clay Center Municipal	14	14	14	14
Coffeyville	Coffeyville Municipal	32	32	32	32
Colby	Shalz Field	23	23	23	23
Concordia	Blosser Municipal	13	13	13	13
El Dorado	El Dorado/Capt. Jack Thomas	36	38	40	44
Elkhart	Elkhart-Morton County	10	10	10	10
Ellsworth	Ellsworth Municipal	10	10	10	10
Emporia	Emporia Municipal	46	46	46	46
Eureka	Lt. William M. Milliken	9	9	9	9
Fort Scott	Fort Scott Municipal	21	21	21	21
Gardner	Gardner Municipal	51	54	56	62
Garnett	Garnett Industrial	18	18	18	18
Goodland	Renner Field - Goodland Municipal	23	23	23	23
Great Bend	Great Bend Municipal	31	31	31	31

Associated City	Airport	2014	2019	2024	2034
Herington	Herington Regional	9	9	9	9
Hill City	Hill City Municipal	12	12	12	12
Hugoton	Hugoton Municipal	20	20	20	20
Hutchinson	Hutchinson Municipal	35	35	35	35
Independence	Independence Municipal	17	17	17	17
Iola	Allen County	10	10	10	10
Johnson	Stanton County Municipal	32	32	32	32
Junction City	Freeman Field	13	14	14	16
Kingman	Kingman - Clyde Cessna Field	26	26	26	26
Lakin	Kearny County	23	23	23	23
Larned	Larned - Pawnee County	12	12	12	12
Lawrence	Lawrence Municipal	50	53	55	61
Leoti	Mark Hoard Memorial	16	16	16	16
Lyons	Lyons - Rice County Municipal	11	11	11	11
Marysville	Marysville Municipal	9	9	9	9
McPherson	McPherson	25	25	25	25
Meade	Meade Municipal	14	14	14	14
Medicine Lodge	Medicine Lodge	0	0	0	0
Ness City	Ness City Memorial	4	4	4	4
Newton	Newton City/County	129	136	143	158
Norton	Norton Municipal	20	20	20	20
Oakley	Oakley Municipal	9	9	9	9
Oberlin	Oberlin Municipal	17	17	17	17
Olathe	New Century AirCenter	72	76	80	88
Olathe	Johnson County Executive	110	116	122	134
Osage City	Osage City Municipal	12	12	12	12
Oswego	Oswego Municipal	4	4	4	4
Ottawa	Ottawa Municipal	41	41	42	43
Paola	Miami County	18	19	20	22
Parsons	Tri-City	16	16	16	16
Phillipsburg	Phillipsburg Municipal	15	15	15	15
Pittsburg	Atkinson Municipal	32	32	33	33
Pratt	Pratt Regional	20	20	20	20
Russell	Russell Municipal	12	12	12	12
Sabetha	Sabetha Municipal	13	13	13	13
Satanta	Satanta Municipal	18	18	18	18

Associated City	Airport	2014	2019	2024	2034
Scott City	Scott City Municipal	33	33	33	33
Smith Center	Smith Center Municipal	9	9	9	9
St. Francis	St. Francis-Cheyenne County	13	13	13	13
Stockton	Rooks County Regional	8	8	8	8
Syracuse	Syracuse - Hamilton County Municipal	31	31	32	32
Topeka	Topeka Regional	31	31	32	32
Topeka	Philip Billard Municipal	56	57	57	59
Tribune	Tribune Municipal	14	14	14	14
Ulysses	Ulysses	40	40	40	40
WaKeeny	Trego WaKeeny	7	7	7	7
Wellington	Wellington Municipal	33	33	33	33
Wichita	Col. James Jabara	100	105	111	122
Winfield	Strother Field	19	19	19	19
General Aviation Airports Total		1,840	1,879	1,919	2,002
Total Based Aircraft		2,403	2,472	2,544	2,698

Source: CDM Smith. Prepared February 2016.

Table B-2 Based Aircraft Forecast Using Employment Projections

Associated City	Airport	2014	2019	2024	2034
COMMERCIAL SERVICE AIRPORTS					
Dodge City	Dodge City Regional	27	27	27	27
Garden City	Garden City Regional	67	71	74	74
Hays	Hays Regional	55	55	55	55
Liberal	Liberal Mid-America Regional	50	51	52	52
Manhattan	Manhattan Regional	46	49	53	63
Salina	Salina Regional	105	116	128	159
Wichita	Wichita Dwight D. Eisenhower National	213	224	236	266
Commercial Service Airports Total		563	593	625	696
GENERAL AVIATION AIRPORTS					
Abilene	Abilene Municipal	19	20	20	21
Anthony	Anthony Municipal	6	6	7	7
Atchison	Amelia Earhart Memorial	10	10	11	11
Atwood	Atwood-Rawlins County City-County	14	14	15	16
Augusta	Augusta Municipal	111	117	124	138
Belleville	Belleville Municipal	2	2	2	2
Beloit	Moritz Memorial	9	9	10	10
Burlington	Burlington-Coffey County	16	17	18	20
Chanute	Chanute - Martin Johnson	17	17	18	19
Cimarron	Cimarron Municipal	9	10	10	11
Clay Center	Clay Center Municipal	14	14	15	16
Coffeyville	Coffeyville Municipal	32	33	34	36
Colby	Shalz Field	23	24	24	26
Concordia	Blosser Municipal	13	13	13	13
El Dorado	El Dorado/Capt. Jack Thomas	36	38	40	45
Elkhart	Elkhart-Morton County	10	11	11	12
Ellsworth	Ellsworth Municipal	10	10	11	11
Emporia	Emporia Municipal	46	47	49	51
Eureka	Lt. William M. Milliken	9	9	10	10
Fort Scott	Fort Scott Municipal	21	22	22	23
Gardner	Gardner Municipal	51	56	62	76
Garnett	Garnett Industrial	18	19	19	20
Goodland	Renner Field - Goodland Municipal	23	23	23	23
Great Bend	Great Bend Municipal	31	33	35	39

Associated City	Airport	2014	2019	2024	2034
Herington	Herington Regional	9	10	10	11
Hill City	Hill City Municipal	12	12	13	13
Hugoton	Hugoton Municipal	20	22	24	30
Hutchinson	Hutchinson Municipal	35	36	37	39
Independence	Independence Municipal	17	17	18	19
Iola	Allen County	10	10	11	11
Johnson	Stanton County Municipal	32	33	34	36
Junction City	Freeman Field	13	13	14	15
Kingman	Kingman - Clyde Cessna Field	26	27	29	32
Lakin	Kearny County	23	24	24	26
Larned	Larned - Pawnee County	12	13	13	15
Lawrence	Lawrence Municipal	50	53	56	62
Leoti	Mark Hoard Memorial	16	17	18	20
Lyons	Lyons - Rice County Municipal	11	11	12	12
Marysville	Marysville Municipal	9	10	10	11
McPherson	McPherson	25	26	26	28
Meade	Meade Municipal	14	15	16	17
Medicine Lodge	Medicine Lodge	0	0	0	0
Ness City	Ness City Memorial	4	4	4	4
Newton	Newton City/County	129	133	136	144
Norton	Norton Municipal	20	21	21	22
Oakley	Oakley Municipal	9	9	10	10
Oberlin	Oberlin Municipal	17	17	17	17
Olathe	New Century AirCenter	72	79	88	107
Olathe	Johnson County Executive	110	121	134	163
Osage City	Osage City Municipal	12	12	13	13
Oswego	Oswego Municipal	4	4	4	4
Ottawa	Ottawa Municipal	41	43	46	51
Paola	Miami County	18	19	19	20
Parsons	Tri-City	16	16	17	18
Phillipsburg	Phillipsburg Municipal	15	15	15	15
Pittsburg	Atkinson Municipal	32	34	36	40
Pratt	Pratt Regional	20	21	22	25
Russell	Russell Municipal	12	12	12	12
Sabetha	Sabetha Municipal	13	13	14	15
Satanta	Satanta Municipal	18	19	19	20

Associated City	Airport	2014	2019	2024	2034
Scott City	Scott City Municipal	33	34	35	37
Smith Center	Smith Center Municipal	9	9	9	9
St. Francis	St. Francis-Cheyenne County	13	13	13	13
Stockton	Rooks County Regional	8	8	8	8
Syracuse	Syracuse - Hamilton County Municipal	31	33	35	39
Topeka	Topeka Regional	31	33	35	39
Topeka	Philip Billard Municipal	56	59	62	70
Tribune	Tribune Municipal	14	15	16	17
Ulysses	Ulysses	40	42	45	50
WaKeeny	Trego WaKeeny	7	7	7	7
Wellington	Wellington Municipal	33	33	33	33
Wichita	Col. James Jabara	100	106	112	125
Winfield	Strother Field	19	20	20	21
General Aviation Airports Total		1,840	1,927	2,025	2,221
Total Based Aircraft		2,403	2,520	2,650	2,917

Source: CDM Smith. Prepared February 2016.

Table B-3 Based Aircraft Forecast Using FAA Forecast Growth Rates

Associated City	Airport	2014	2019	2024	2034
COMMERCIAL SERVICE AIRPORTS					
Dodge City	Dodge City Regional	27	27	27	27
Garden City	Garden City Regional	67	71	74	74
Hays	Hays Regional	55	55	55	55
Liberal	Liberal Mid-America Regional	50	51	52	52
Manhattan	Manhattan Regional	46	49	53	63
Salina	Salina Regional	105	116	128	159
Wichita	Wichita Dwight D. Eisenhower National	213	224	236	266
Commercial Service Airports Total		563	593	625	696

GENERAL AVIATION AIRPORTS					
Abilene	Abilene Municipal	19	19	19	20
Anthony	Anthony Municipal	6	6	6	6
Atchison	Amelia Earhart Memorial	10	10	10	11
Atwood	Atwood-Rawlins County City-County	14	14	14	15
Augusta	Augusta Municipal	111	111	112	119
Belleville	Belleville Municipal	2	2	2	2
Beloit	Moritz Memorial	9	9	9	10
Burlington	Burlington-Coffey County	16	16	16	17
Chanute	Chanute - Martin Johnson	17	17	17	18
Cimarron	Cimarron Municipal	9	9	9	10
Clay Center	Clay Center Municipal	14	14	14	15
Coffeyville	Coffeyville Municipal	32	32	32	34
Colby	Shalz Field	23	23	23	25
Concordia	Blosser Municipal	13	13	13	14
El Dorado	El Dorado/Capt. Jack Thomas	36	36	36	38
Elkhart	Elkhart-Morton County	10	10	10	11
Ellsworth	Ellsworth Municipal	10	10	10	11
Emporia	Emporia Municipal	46	46	47	49
Eureka	Lt. William M. Milliken	9	9	9	10
Fort Scott	Fort Scott Municipal	21	21	21	22
Gardner	Gardner Municipal	51	51	52	54
Garnett	Garnett Industrial	18	18	18	19
Goodland	Renner Field - Goodland Municipal	23	23	23	25

Associated City	Airport	2014	2019	2024	2034
Great Bend	Great Bend Municipal	31	31	31	33
Herington	Herington Regional	9	9	9	10
Hill City	Hill City Municipal	12	12	12	13
Hugoton	Hugoton Municipal	20	20	20	21
Hutchinson	Hutchinson Municipal	35	35	35	37
Independence	Independence Municipal	17	17	17	18
Iola	Allen County	10	10	10	11
Johnson	Stanton County Municipal	32	32	32	34
Junction City	Freeman Field	13	13	13	14
Kingman	Kingman - Clyde Cessna Field	26	26	26	28
Lakin	Kearny County	23	23	23	25
Larned	Larned - Pawnee County	12	12	12	13
Lawrence	Lawrence Municipal	50	50	51	53
Leoti	Mark Hoard Memorial	16	16	16	17
Lyons	Lyons - Rice County Municipal	11	11	11	12
Marysville	Marysville Municipal	9	9	9	10
McPherson	McPherson	25	25	25	27
Meade	Meade Municipal	14	14	14	15
Medicine Lodge	Medicine Lodge	0	0	0	0
Ness City	Ness City Memorial	4	4	4	4
Newton	Newton City/County	129	129	131	138
Norton	Norton Municipal	20	20	20	21
Oakley	Oakley Municipal	9	9	9	10
Oberlin	Oberlin Municipal	17	17	17	18
Olathe	New Century AirCenter	72	72	73	77
Olathe	Johnson County Executive	110	110	111	118
Osage City	Osage City Municipal	12	12	12	13
Oswego	Oswego Municipal	4	4	4	4
Ottawa	Ottawa Municipal	41	41	42	44
Paola	Miami County	18	18	18	19
Parsons	Tri-City	16	16	16	17
Phillipsburg	Phillipsburg Municipal	15	15	15	16
Pittsburg	Atkinson Municipal	32	32	32	34
Pratt	Pratt Regional	20	20	20	21
Russell	Russell Municipal	12	12	12	13
Sabetha	Sabetha Municipal	13	13	13	14

Associated City	Airport	2014	2019	2024	2034
Satanta	Satanta Municipal	18	18	18	19
Scott City	Scott City Municipal	33	33	33	35
Smith Center	Smith Center Municipal	9	9	9	10
St. Francis	St. Francis-Cheyenne County	13	13	13	14
Stockton	Rooks County Regional	8	8	8	9
Syracuse	Syracuse - Hamilton County Municipal	31	31	31	33
Topeka	Topeka Regional	31	31	31	33
Topeka	Philip Billard Municipal	56	56	57	60
Tribune	Tribune Municipal	14	14	14	15
Ulysses	Ulysses	40	40	40	43
WaKeeny	Trego WaKeeny	7	7	7	7
Wellington	Wellington Municipal	33	33	33	35
Wichita	Col. James Jabara	100	100	101	107
Winfield	Strother Field	19	19	19	20
General Aviation Airports Total		1,840	1,840	1,851	1,967
Total Based Aircraft		2,403	2,433	2,476	2,663

Source: FAA Aerospace Forecasts Fiscal Year 2015-2035 and CDM Smith. Prepared February 2016.

Table B-4 General Aviation Operations Forecast Using Operations per Based Aircraft

Associated City	Airport	2014	2019	2024	2034
COMMERCIAL SERVICE AIRPORTS					
Dodge City	Dodge City Regional	18,000	18,000	18,000	18,000
Garden City	Garden City Regional	9,436	12,024	12,193	12,561
Hays	Hays Regional	23,020	23,020	23,020	23,020
Liberal	Liberal Mid-America Regional	40,000	40,000	40,000	40,000
Manhattan	Manhattan Regional	19,067	20,446	20,701	21,222
Salina	Salina Regional	63,432	64,813	65,531	66,993
Wichita	Wichita Dwight D. Eisenhower National	64,449	53,260	54,215	56,182
Commercial Service Airports Total		237,404	231,563	233,660	237,978
GENERAL AVIATION AIRPORTS					
Abilene	Abilene Municipal	37,500	37,500	37,500	39,470
Anthony	Anthony Municipal	6,200	6,200	6,200	6,200
Atchison	Amelia Earhart Memorial	16,050	16,050	16,050	16,050
Atwood	Atwood-Rawlins County City-County	12,000	12,000	12,000	12,000
Augusta	Augusta Municipal	36,000	37,950	39,890	44,110
Belleville	Belleville Municipal	7,200	7,200	7,200	7,200
Beloit	Moritz Memorial	20,000	20,000	20,000	20,000
Burlington	Burlington-Coffey County	20,000	20,000	20,000	20,000
Chanute	Chanute - Martin Johnson	25,000	25,000	25,000	25,000
Cimarron	Cimarron Municipal	3,500	3,500	3,500	3,500
Clay Center	Clay Center Municipal	22,000	22,000	22,000	22,000
Coffeyville	Coffeyville Municipal	2,000	2,000	2,000	2,000
Colby	Shalz Field	5,500	5,500	5,500	5,500
Concordia	Blosser Municipal	14,150	14,150	14,150	14,150
El Dorado	El Dorado/Capt. Jack Thomas	13,200	13,930	14,670	16,130
Elkhart	Elkhart-Morton County	6,000	6,000	6,000	6,000
Ellsworth	Ellsworth Municipal	20,000	20,000	20,000	20,000
Emporia	Emporia Municipal	31,000	31,000	31,000	31,000
Eureka	Lt. William M. Milliken	4,900	4,900	4,900	4,900
Fort Scott	Fort Scott Municipal	9,600	9,600	9,600	9,600
Gardner	Gardner Municipal	26,000	27,530	28,550	31,610
Garnett	Garnett Industrial	1,500	1,500	1,500	1,500

Associated City	Airport	2014	2019	2024	2034
Goodland	Renner Field - Goodland Municipal	42,400	42,400	42,400	42,400
Great Bend	Great Bend Municipal	21,159	21,160	21,160	21,160
Herington	Herington Regional	11,600	11,600	11,600	11,600
Hill City	Hill City Municipal	14,600	14,600	14,600	14,600
Hugoton	Hugoton Municipal	10,000	10,000	10,000	10,000
Hutchinson	Hutchinson Municipal	33,206	33,210	33,210	33,210
Independence	Independence Municipal	10,550	10,550	10,550	10,550
Iola	Allen County	16,272	16,270	16,270	16,270
Johnson	Stanton County Municipal	23,100	23,100	23,100	23,100
Junction City	Freeman Field	28,000	30,150	30,150	34,460
Kingman	Kingman - Clyde Cessna Field	9,600	9,600	9,600	9,600
Lakin	Kearny County	4,000	4,000	4,000	4,000
Larned	Larned - Pawnee County	11,900	11,900	11,900	11,900
Lawrence	Lawrence Municipal	32,550	34,500	35,810	39,710
Leoti	Mark Hoard Memorial	5,000	5,000	5,000	5,000
Lyons	Lyons - Rice County Municipal	12,000	12,000	12,000	12,000
Marysville	Marysville Municipal	9,308	9,310	9,310	9,310
McPherson	McPherson	14,000	14,000	14,000	14,000
Meade	Meade Municipal	5,000	5,000	5,000	5,000
Medicine Lodge	Medicine Lodge	2,400	2,400	2,400	2,400
Ness City	Ness City Memorial	4,000	4,000	4,000	4,000
Newton	Newton City/County	64,894	68,420	71,940	79,480
Norton	Norton Municipal	5,000	5,000	5,000	5,000
Oakley	Oakley Municipal	12,100	12,100	12,100	12,100
Oberlin	Oberlin Municipal	7,000	7,000	7,000	7,000
Olathe	New Century AirCenter	46,541	49,130	51,710	56,880
Olathe	Johnson County Executive	51,681	54,500	57,320	62,960
Osage City	Osage City Municipal	2,700	2,700	2,700	2,700
Oswego	Oswego Municipal	600	600	600	600
Ottawa	Ottawa Municipal	3,350	3,350	3,430	3,510
Paola	Miami County	9,900	10,450	11,000	12,100
Parsons	Tri-City	3,050	3,050	3,050	3,050
Phillipsburg	Phillipsburg Municipal	9,000	9,000	9,000	9,000
Pittsburg	Atkinson Municipal	23,600	23,600	24,340	24,340
Pratt	Pratt Regional	11,300	11,300	11,300	11,300
Russell	Russell Municipal	12,000	12,000	12,000	12,000

Associated City	Airport	2014	2019	2024	2034
Sabetha	Sabetha Municipal	8,500	8,500	8,500	8,500
Satanta	Satanta Municipal	3,000	3,000	3,000	3,000
Scott City	Scott City Municipal	8,000	8,000	8,000	8,000
Smith Center	Smith Center Municipal	4,000	4,000	4,000	4,000
St. Francis	St. Francis-Cheyenne County	3,800	3,800	3,800	3,800
Stockton	Rooks County Regional ¹	0	4,720	4,720	4,720
Syracuse	Syracuse - Hamilton County Municipal	5,000	5,000	5,160	5,160
Topeka	Topeka Regional	6,342	6,340	6,550	6,550
Topeka	Philip Billard Municipal	40,484	41,210	41,210	42,650
Tribune	Tribune Municipal	2,650	2,650	2,650	2,650
Ulysses	Ulysses	21,500	21,500	21,500	21,500
WaKeeny	Trego WaKeeny	2,000	2,000	2,000	2,000
Wellington	Wellington Municipal	18,000	18,000	18,000	18,000
Wichita	Col. James Jabara	38,300	40,220	42,510	46,730
Winfield	Strother Field	6,500	6,500	6,500	6,500
General Aviation Airports Total		1,090,737	1,115,900	1,133,860	1,177,970
Total Based Aircraft		1,328,141	1,347,463	1,367,520	1,415,948

¹Rooks County Regional used the average OPBA for all general aviation airports of 560 since it did not have sufficient historical data to estimate its OPBA.

Source: FAA TAF and CDM Smith. Prepared February 2016.

Table B-5 General Aviation Operations Forecast Using Socioeconomic Growth Rates

Associated City	Airport	2014	2019	2024	2034
COMMERCIAL SERVICE AIRPORTS					
Dodge City	Dodge City Regional	18,000	18,000	18,000	18,000
Garden City	Garden City Regional	9,436	12,024	12,193	12,561
Hays	Hays Regional	23,020	23,020	23,020	23,020
Liberal	Liberal Mid-America Regional	40,000	40,000	40,000	40,000
Manhattan	Manhattan Regional	19,067	20,446	20,701	21,222
Salina	Salina Regional	63,432	64,813	65,531	66,993
Wichita	Wichita Dwight D. Eisenhower National	64,449	53,260	54,215	56,182
Commercial Service Airports Total		237,404	231,563	233,660	237,978
GENERAL AVIATION AIRPORTS					
Abilene	Abilene Municipal	37,500	38,890	40,040	41,380
Anthony	Anthony Municipal	6,200	6,580	6,940	7,530
Atchison	Amelia Earhart Memorial	16,050	16,540	16,920	17,260
Atwood	Atwood-Rawlins County City-County	12,000	12,470	12,850	13,370
Augusta	Augusta Municipal	36,000	38,250	40,350	43,900
Belleville	Belleville Municipal	7,200	7,300	7,350	7,280
Beloit	Moritz Memorial	20,000	20,860	21,590	22,530
Burlington	Burlington-Coffey County	20,000	21,730	23,380	26,400
Chanute	Chanute - Martin Johnson	25,000	25,820	26,450	27,050
Cimarron	Cimarron Municipal	3,500	3,690	3,870	4,190
Clay Center	Clay Center Municipal	22,000	23,010	23,860	25,020
Coffeyville	Coffeyville Municipal	2,000	2,080	2,140	2,230
Colby	Shalz Field	5,500	5,660	5,780	5,890
Concordia	Blosser Municipal	14,150	14,410	14,540	14,480
El Dorado	El Dorado/Capt. Jack Thomas	13,200	14,030	14,790	16,100
Elkhart	Elkhart-Morton County	6,000	6,310	6,570	6,950
Ellsworth	Ellsworth Municipal	20,000	20,660	21,220	21,830
Emporia	Emporia Municipal	31,000	32,310	33,420	34,920
Eureka	Lt. William M. Milliken	4,900	5,060	5,200	5,370
Fort Scott	Fort Scott Municipal	9,600	10,050	10,440	10,960
Gardner	Gardner Municipal	26,000	29,090	32,350	39,160
Garnett	Garnett Industrial	1,500	1,550	1,590	1,630

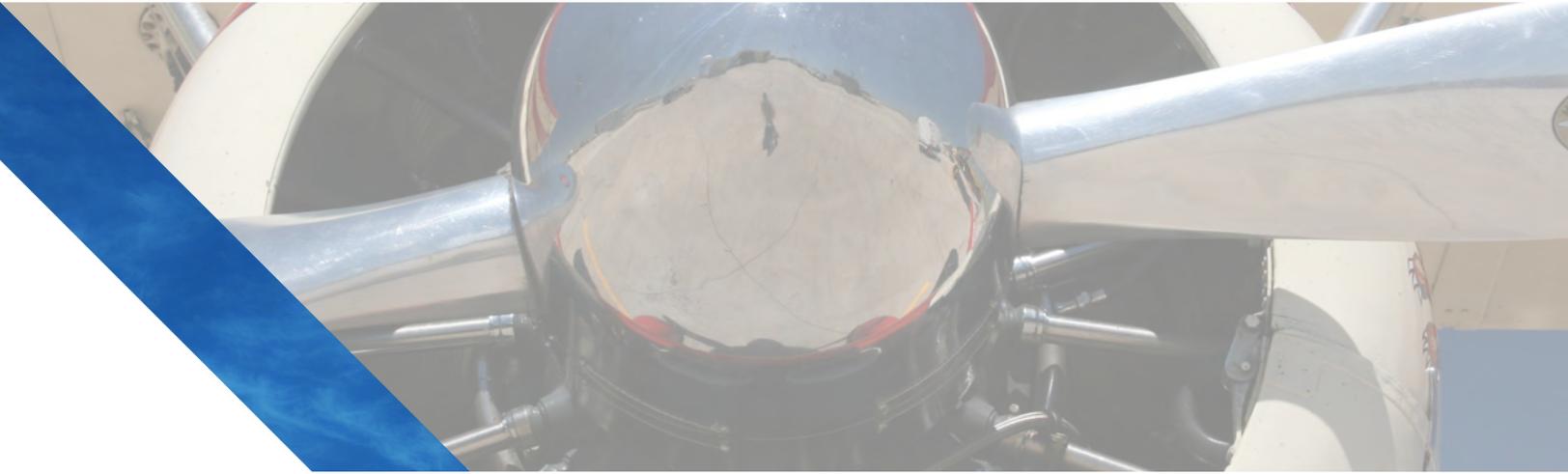
Associated City	Airport	2014	2019	2024	2034
Goodland	Renner Field - Goodland Municipal	42,400	43,500	44,250	44,760
Great Bend	Great Bend Municipal	21,159	21,160	21,160	21,160
Herington	Herington Regional	11,600	12,130	12,620	13,350
Hill City	Hill City Municipal	14,600	15,000	15,300	15,630
Hugoton	Hugoton Municipal	10,000	10,900	11,800	13,480
Hutchinson	Hutchinson Municipal	33,206	34,350	35,280	36,360
Independence	Independence Municipal	10,550	10,950	11,290	11,760
Iola	Allen County	16,272	16,960	17,530	18,200
Johnson	Stanton County Municipal	23,100	23,940	24,710	25,690
Junction City	Freeman Field	28,000	28,610	29,130	29,890
Kingman	Kingman - Clyde Cessna Field	9,600	10,080	10,530	11,200
Lakin	Kearny County	4,000	4,180	4,320	4,540
Larned	Larned - Pawnee County	11,900	12,550	13,120	13,960
Lawrence	Lawrence Municipal	32,550	34,890	37,070	40,930
Leoti	Mark Hoard Memorial	5,000	5,240	5,460	5,800
Lyons	Lyons - Rice County Municipal	12,000	12,530	12,960	13,580
Marysville	Marysville Municipal	9,308	9,790	10,220	10,850
McPherson	McPherson	14,000	14,470	14,860	15,290
Meade	Meade Municipal	5,000	5,300	5,560	5,980
Medicine Lodge	Medicine Lodge	2,400	2,500	2,590	2,710
Ness City	Ness City Memorial	4,000	4,180	4,330	4,570
Newton	Newton City/County	64,894	67,790	70,350	74,050
Norton	Norton Municipal	5,000	5,200	5,360	5,560
Oakley	Oakley Municipal	12,100	12,650	13,120	13,790
Oberlin	Oberlin Municipal	7,000	7,160	7,260	7,310
Olathe	New Century AirCenter	46,541	52,080	57,910	70,100
Olathe	Johnson County Executive	51,681	57,830	64,300	77,840
Osage City	Osage City Municipal	2,700	2,800	2,880	2,980
Oswego	Oswego Municipal	600	630	650	690
Ottawa	Ottawa Municipal	3,350	3,530	3,690	3,940
Paola	Miami County	9,900	10,340	10,690	11,120
Parsons	Tri-City	3,050	3,190	3,310	3,510
Phillipsburg	Phillipsburg Municipal	9,000	9,230	9,380	9,490
Pittsburg	Atkinson Municipal	23,600	24,840	25,940	27,570
Pratt	Pratt Regional	11,300	11,840	12,300	13,000

Associated City	Airport	2014	2019	2024	2034
Russell	Russell Municipal	12,000	12,160	12,210	12,040
Sabetha	Sabetha Municipal	8,500	8,840	9,120	9,450
Satanta	Satanta Municipal	3,000	3,130	3,230	3,390
Scott City	Scott City Municipal	8,000	8,210	8,380	8,520
Smith Center	Smith Center Municipal	4,000	4,030	4,040	3,970
St. Francis	St. Francis-Cheyenne County	3,800	3,860	3,890	3,860
Stockton	Rooks County Regional ¹	0	4,720	4,720	4,720
Syracuse	Syracuse - Hamilton County Municipal	5,000	5,310	5,590	6,070
Topeka	Topeka Regional	6,342	6,660	6,950	7,380
Topeka	Philip Billard Municipal	40,484	42,520	44,340	47,090
Tribune	Tribune Municipal	2,650	2,840	3,020	3,390
Ulysses	Ulysses	21,500	22,590	23,520	24,940
WaKeeny	Trego WaKeeny	2,000	2,020	2,030	2,000
Wellington	Wellington Municipal	18,000	18,460	18,810	19,080
Wichita	Col. James Jabara	38,300	40,610	42,760	46,260
Winfield	Strother Field	6,500	6,690	6,830	6,940
General Aviation Airports Total		1,090,737	1,151,320	1,202,310	1,285,170
Total Based Aircraft		1,328,141	1,382,883	1,435,970	1,523,148

¹Rooks County Regional used the same forecast as found in the OPBA methodology since it did not have sufficient historical data to project operations using a socioeconomic growth rate.

Source: FAA TAF and CDM Smith. Prepared February 2016.





KANSAS AVIATION SYSTEM PLAN

TREGO WAKEENEY AIRPORT WAKEENEY

OH1

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

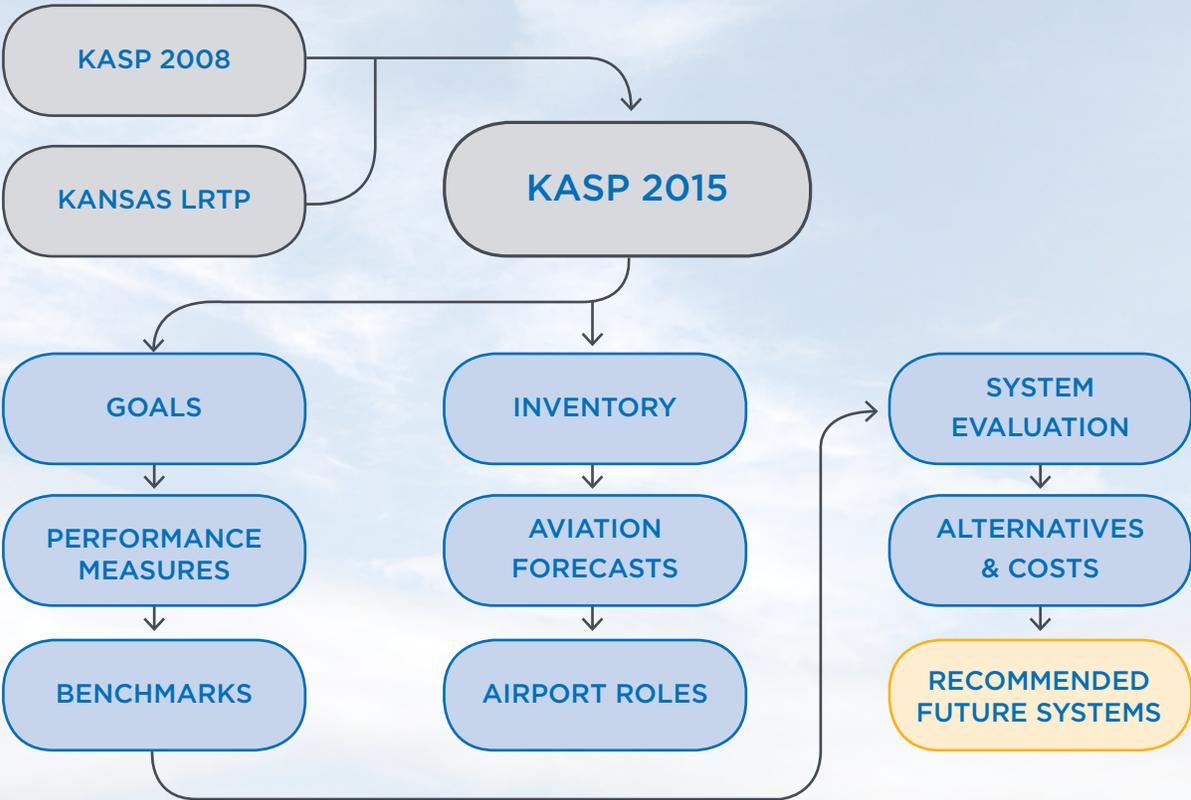
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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	7	7	7	7
ANNUAL OPERATIONS	2,000	2,000	2,000	2,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Trego WaKeeney Airport**.

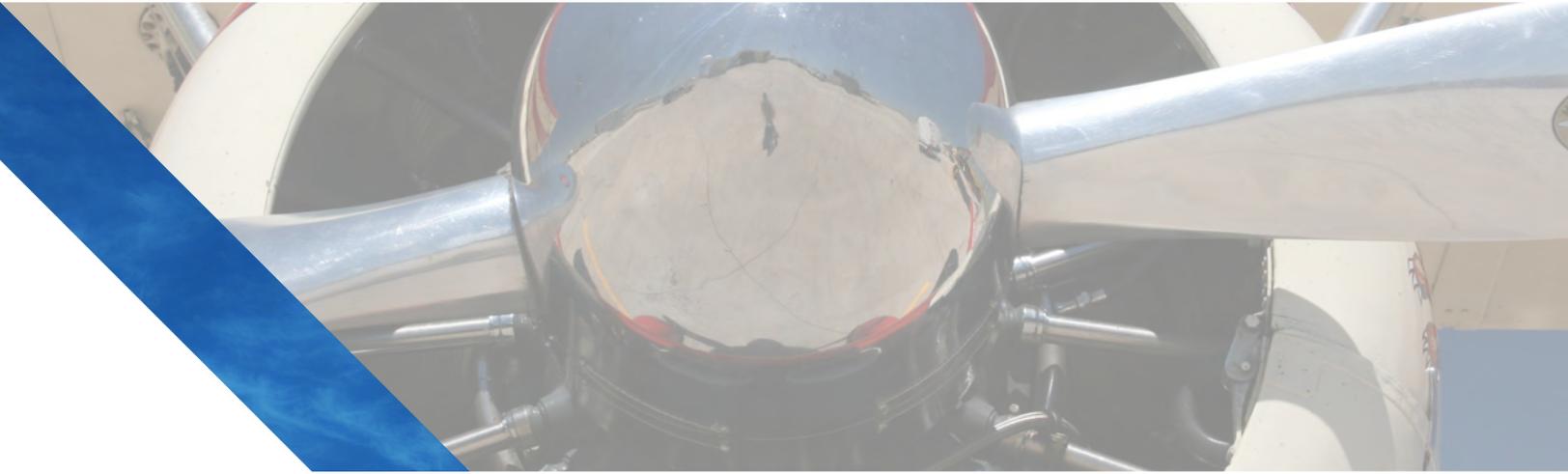
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,008	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$332,664
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	No	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	143%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	15,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	No	Not an Objective	No Recommendation	N/A
AvGAS	No	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$609,664

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

SATANTA MUNICIPAL AIRPORT SATANTA

1K9

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

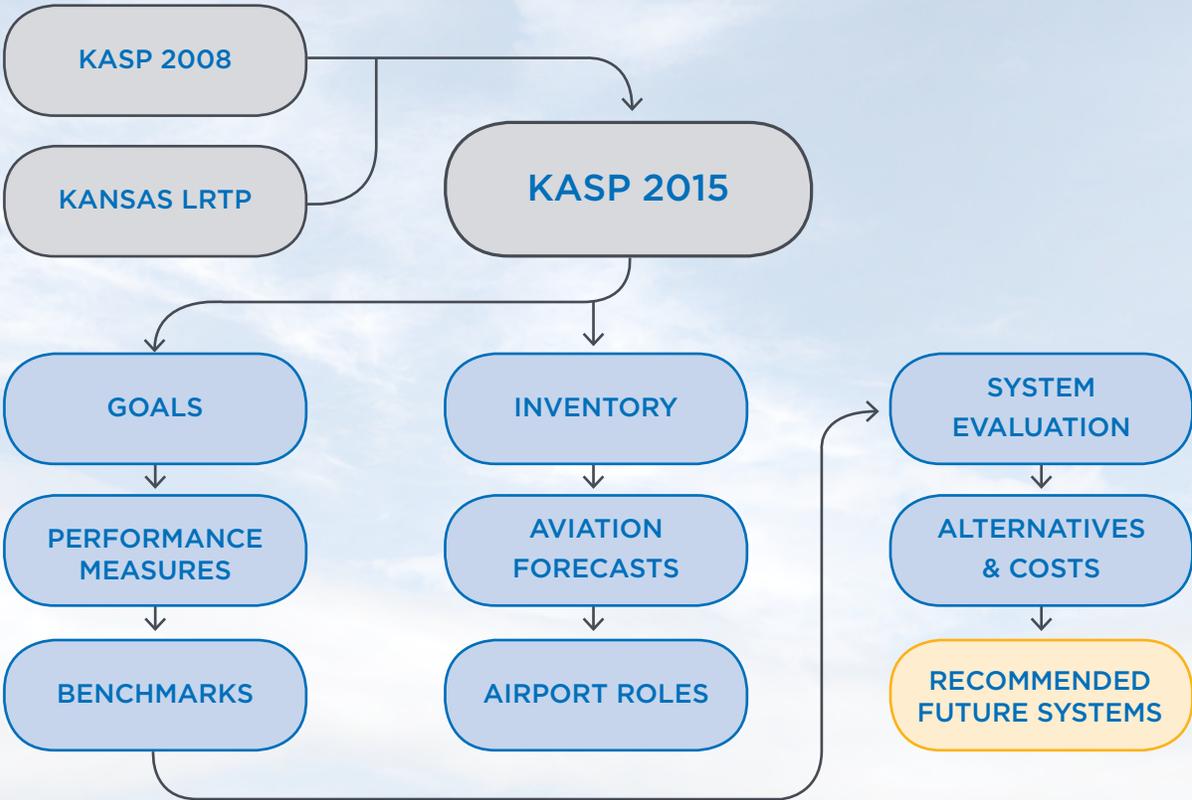
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Basic

FEDERAL ROLE
GA
NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	18	18	18	18
ANNUAL OPERATIONS	3,000	3,000	3,000	3,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Satanta Municipal Airport**.

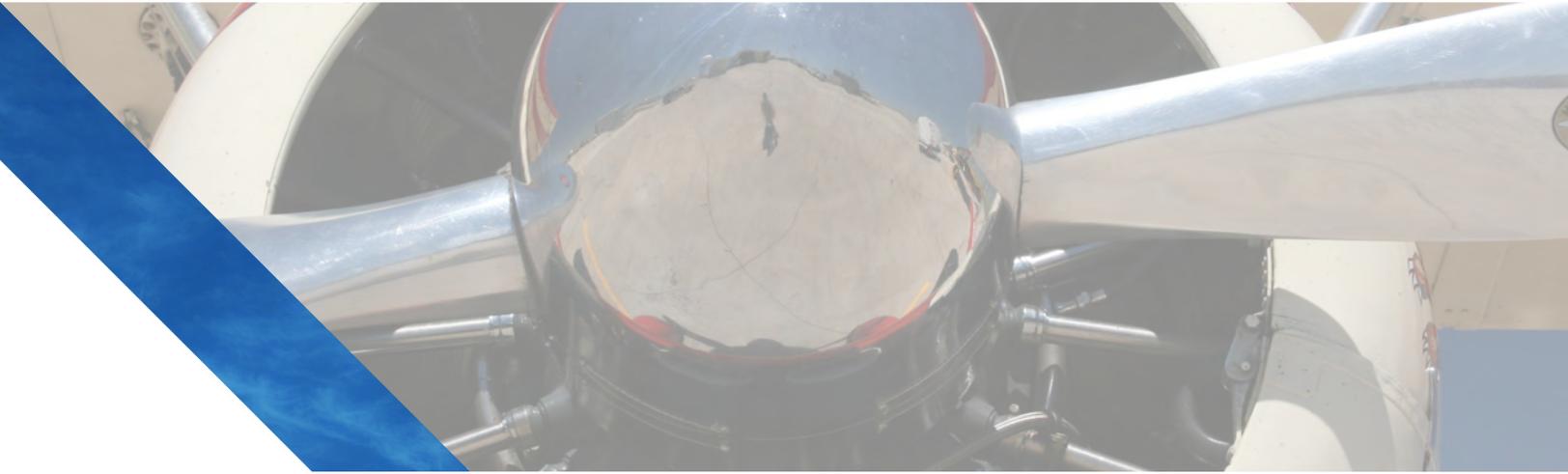
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,250	Not an Objective	No Recommendation	N/A
Primary Runway Width (Feet)	50	Not an Objective	No Recommendation	N/A
Primary Runway Surface	Asphalt	Not an Objective	No Recommendation	N/A
Taxiway Type	Turnarounds	Not an Objective	No Recommendation	N/A
Best IAP	Visual	Not an Objective	No Recommendation	N/A
Rotating Beacon	Yes	Not an Objective	No Recommendation	N/A
Wind Sock	Yes	Wind Sock	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	Not an Objective	No Recommendation	N/A
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Not an Objective	No Recommendation	N/A
LANDSIDE FACILITIES				
Terminal	Yes	Not an Objective	No Recommendation	N/A
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	121% Based Aircraft	Not an Objective	No Recommendation	N/A
Apron Capacity (SF)	50,000	Not an Objective	No Recommendation	N/A
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Not an Objective	No Recommendation	N/A
Total				\$0

¹Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

²FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

AUGUSTA MUNICIPAL AIRPORT AUGUSTA

3AU

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

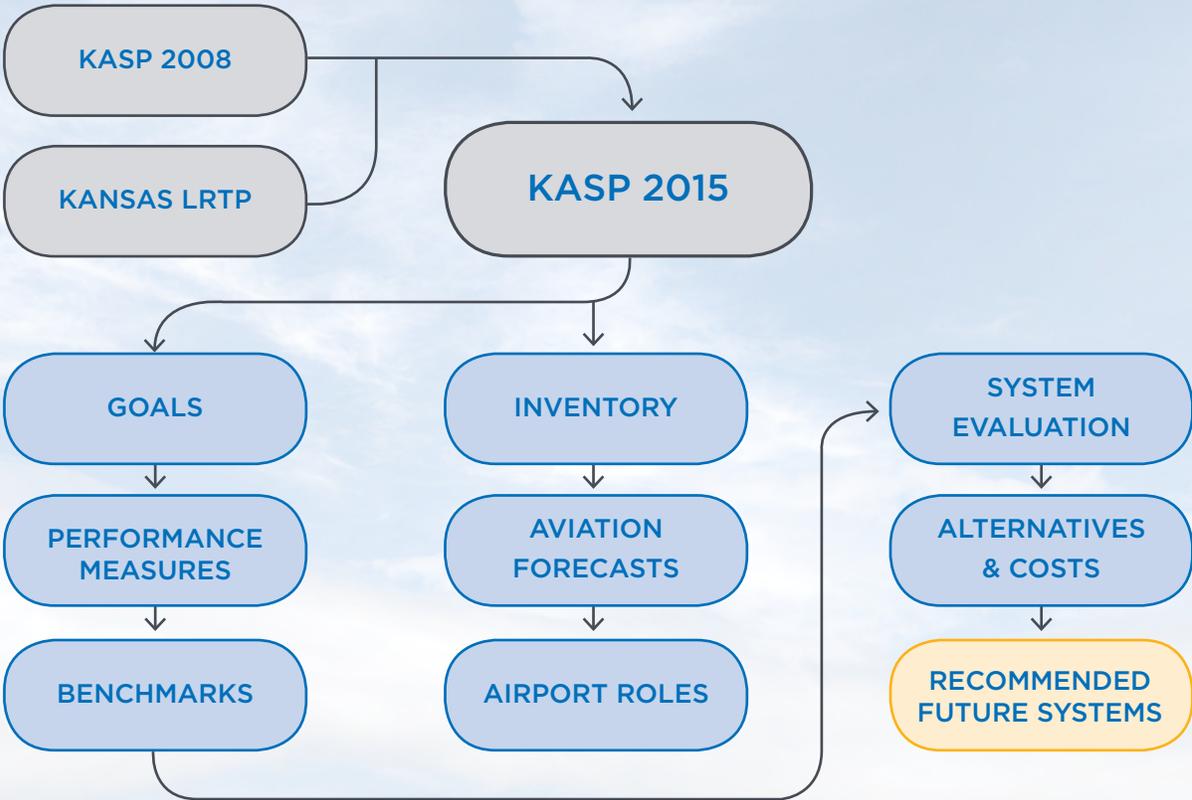
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

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- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	111	117	123	136
ANNUAL OPERATIONS	36,000	37,950	39,890	44,110

AIRPORT PERFORMANCE AND RECOMMENDATIONS

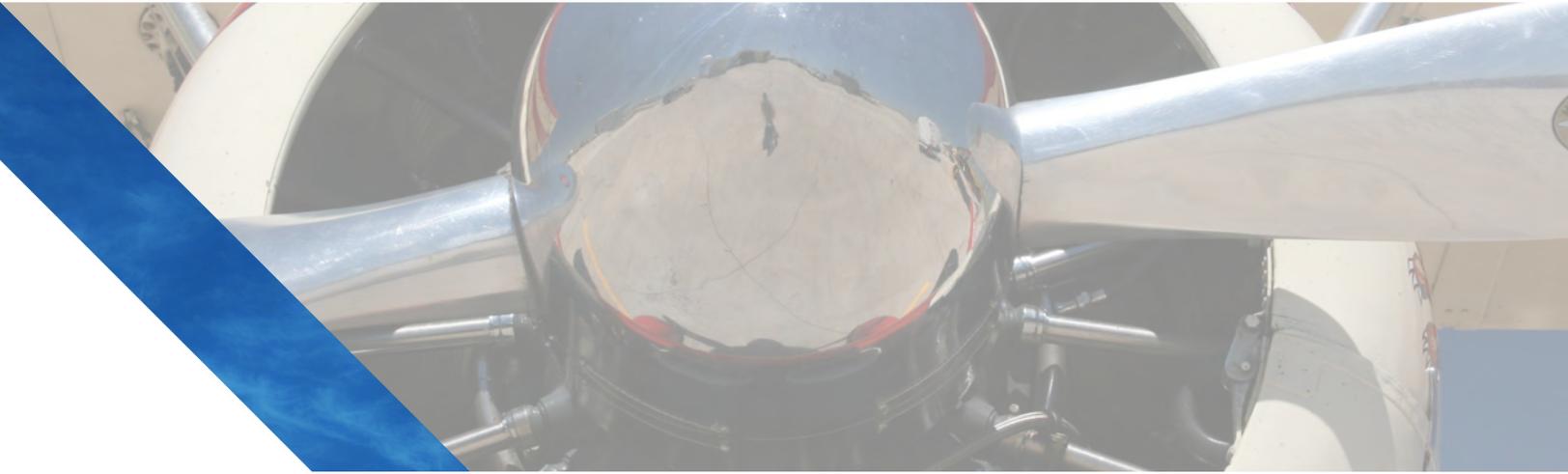
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Augusta Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,201	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Widen 15 Feet	\$1,228,793
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI/VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	80%	100% Based Aircraft	Construct Space for 22 Aircraft	\$2,460,480
Apron Capacity (SF)	180,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvgAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$3,689,273



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KANSAS AVIATION SYSTEM PLAN

FREEMAN FIELD
JUNCTION CITY

3JC

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

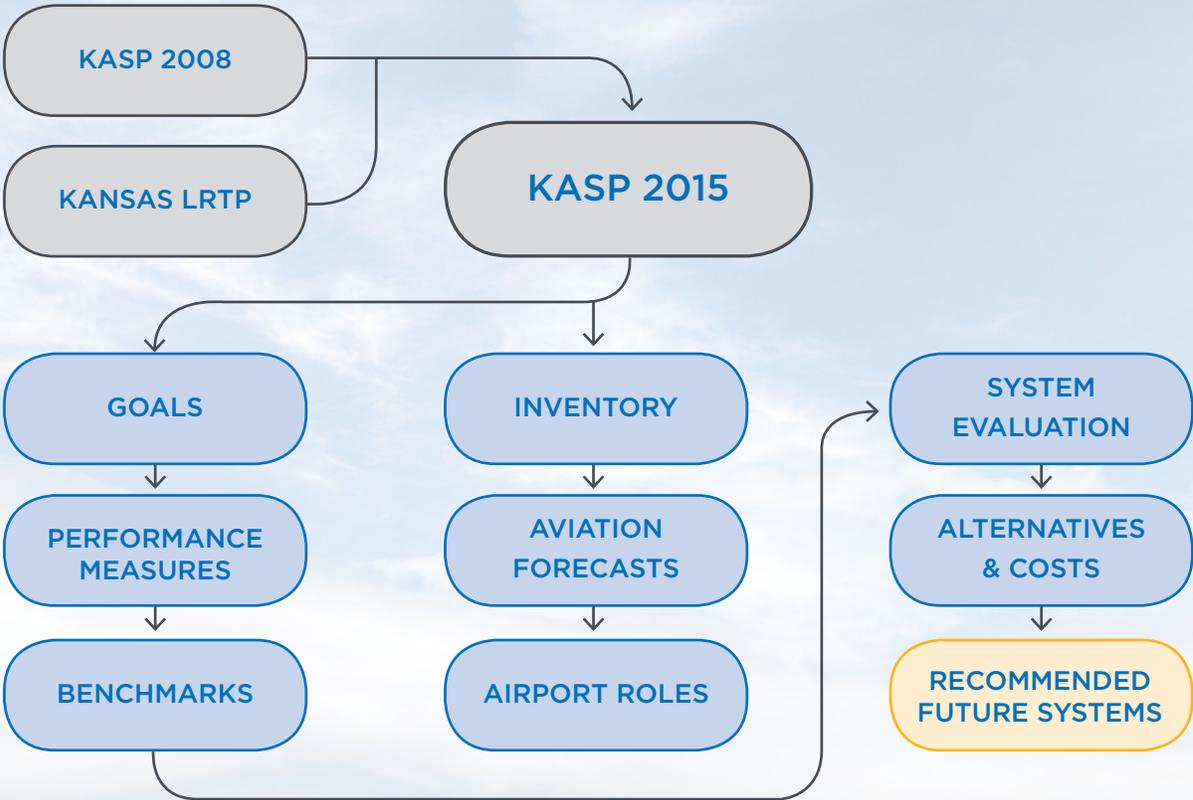
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	13	14	14	16
ANNUAL OPERATIONS	28,000	30,150	30,150	34,460

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Freeman Field**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,498	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	75	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	N/A
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	206%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	35,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$225,000

⁽¹⁾Not an Objective for KASP/KAIP, but beacons are required by AC 150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

HAMILTON COUNTY MUNICIPAL AIRPORT SYRACUSE

3K3

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In association with



KASP OVERVIEW

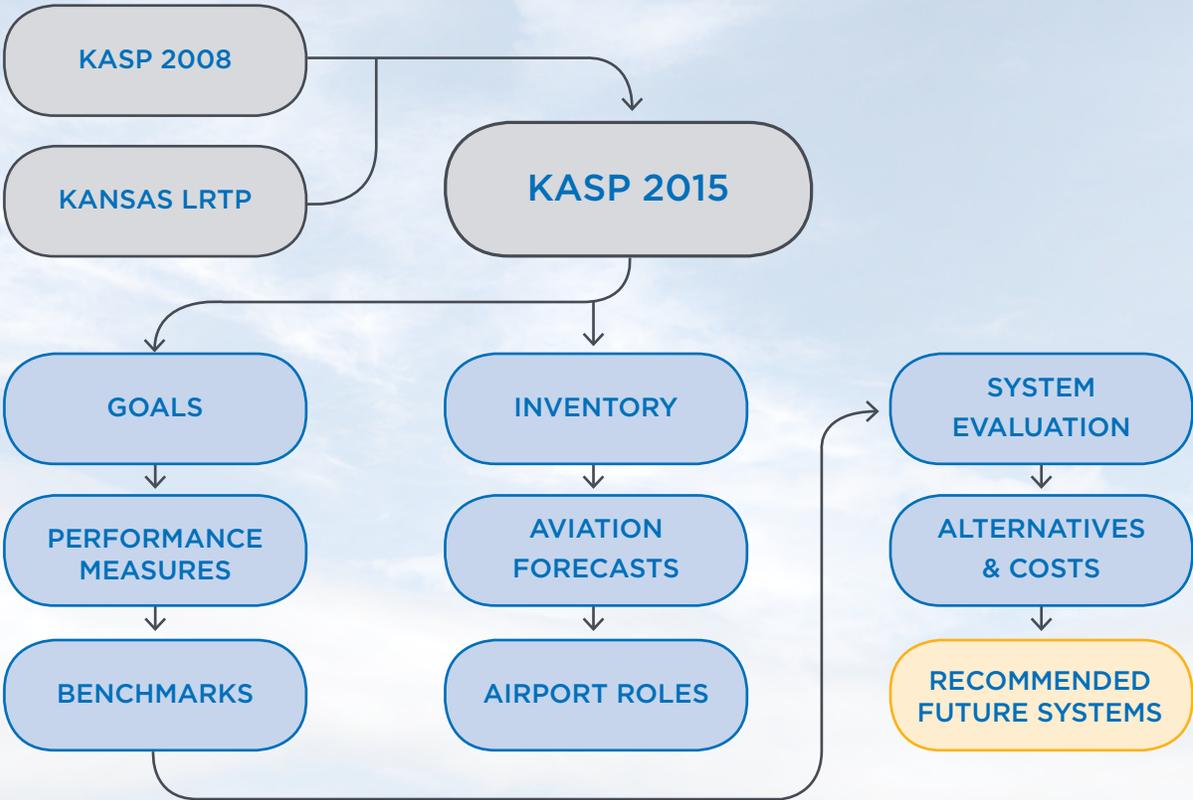
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	31	31	32	32
ANNUAL OPERATIONS	5,000	5,000	5,160	5,160

AIRPORT PERFORMANCE AND RECOMMENDATIONS

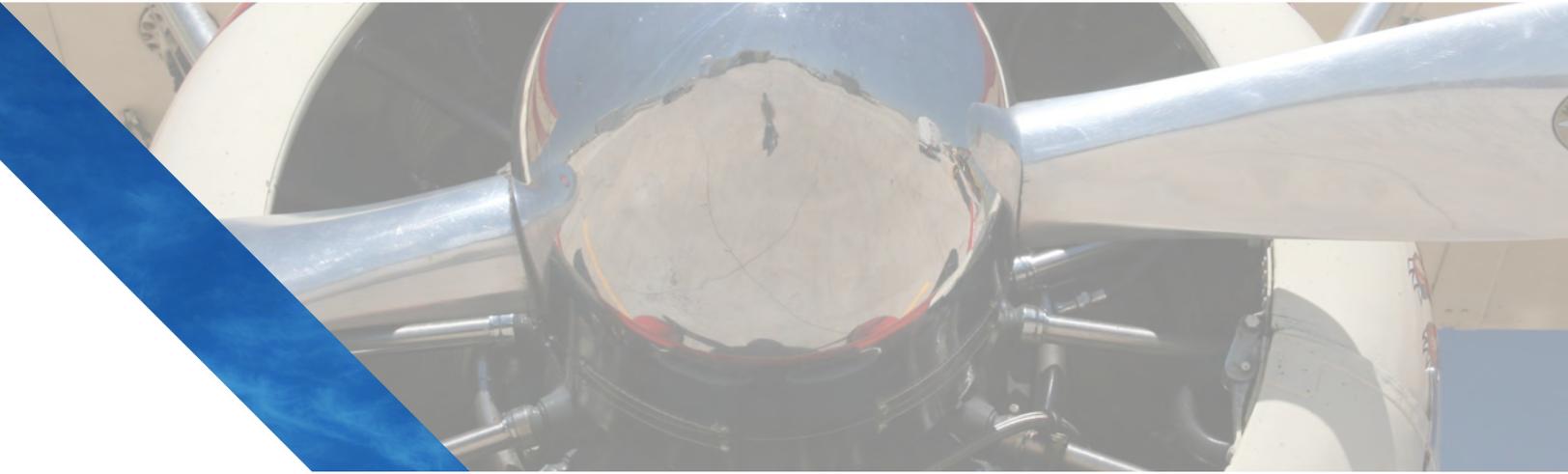
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Syracuse-Hamilton County Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,600	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	94%	100% Based Aircraft	Construct Space for 2 Aircraft	\$223,680
Apron Capacity (SF)	50,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$260,080



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KANSAS AVIATION SYSTEM PLAN

MARK HOARD MEMORIAL AIRPORT LEOTI

3K7

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

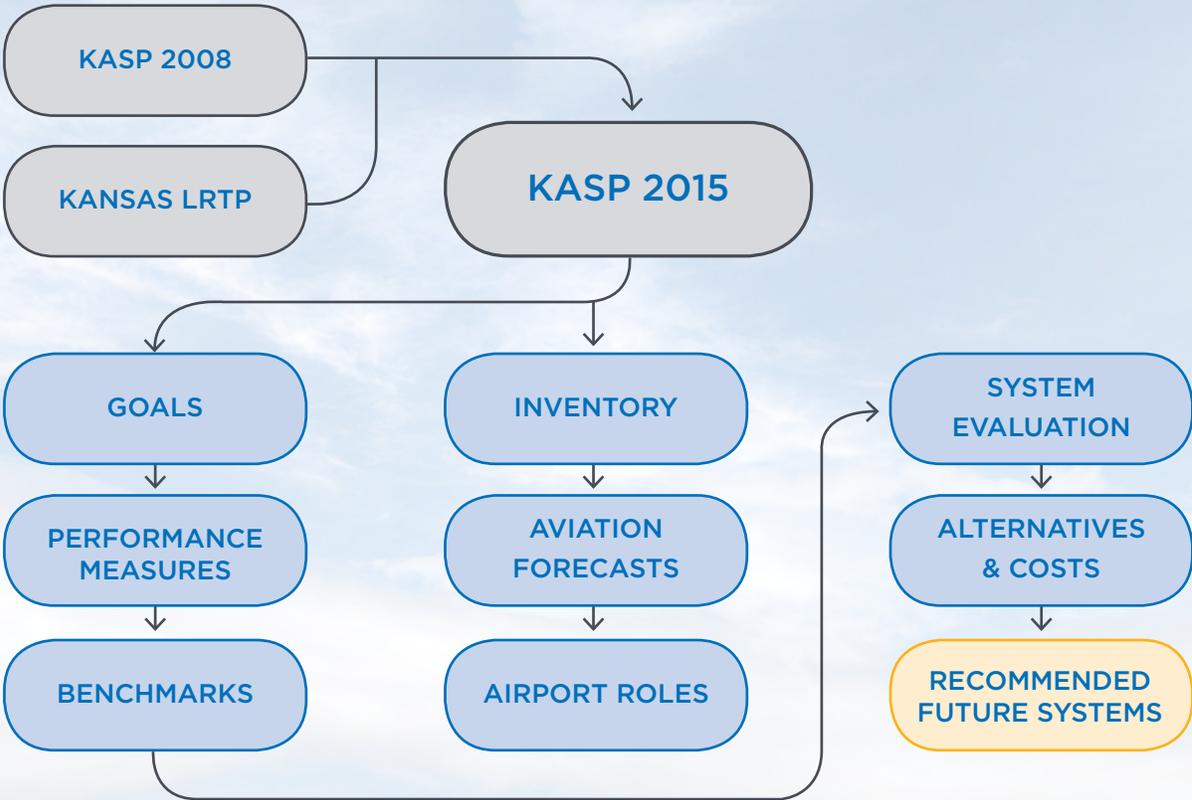
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1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	16	16	16	16
ANNUAL OPERATIONS	5,000	5,000	5,000	5,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Mark Hoard Memorial Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,351	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	50	60	Widen 10 Feet	\$848,445
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	No	Not an Objective	No Recommendation	N/A
Restroom	No	Yes	Maintain Standard	\$0
Hangar Capacity	75%	100% Based Aircraft	Construct Space for 4 Aircraft	\$447,360
Apron Capacity (SF)	45,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,572,805

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

TRIBUNE MUNICIPAL AIRPORT TRIBUNE

5K2

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KASP OVERVIEW

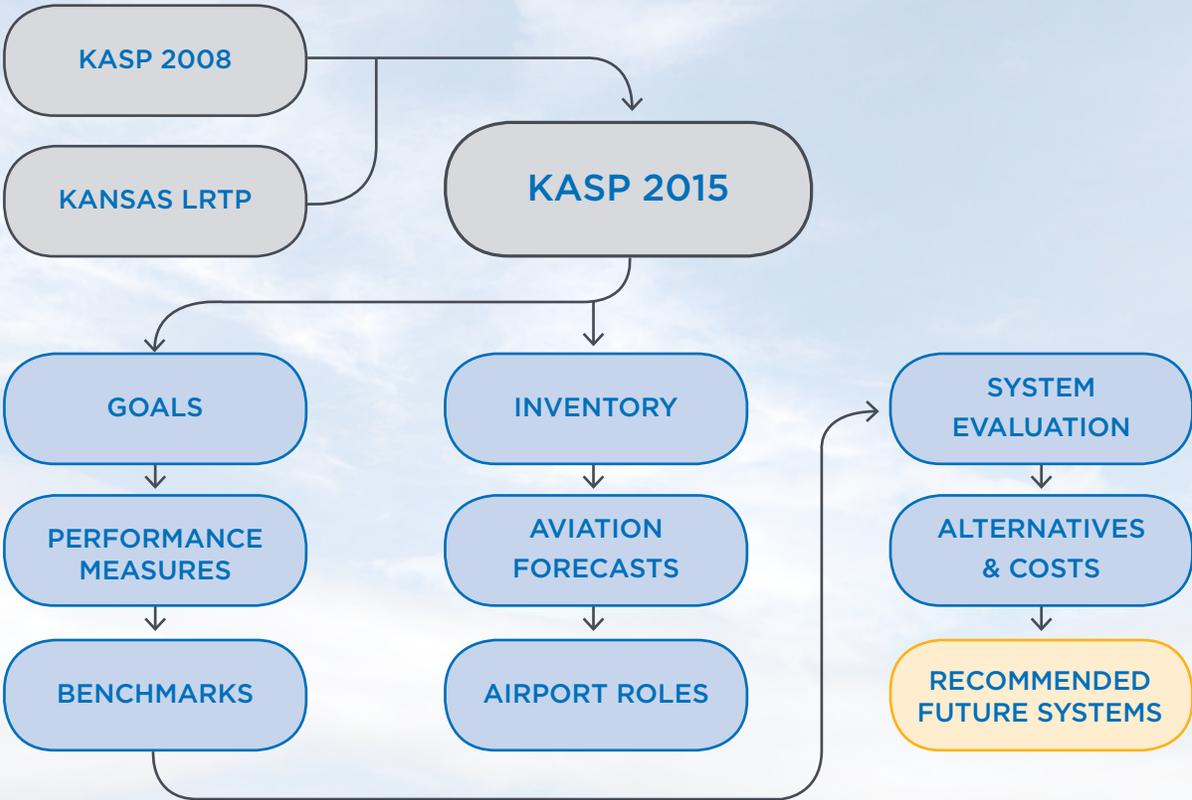
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS



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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	14	14	14	14
ANNUAL OPERATIONS	2,650	2,650	2,650	2,650

AIRPORT PERFORMANCE AND RECOMMENDATIONS

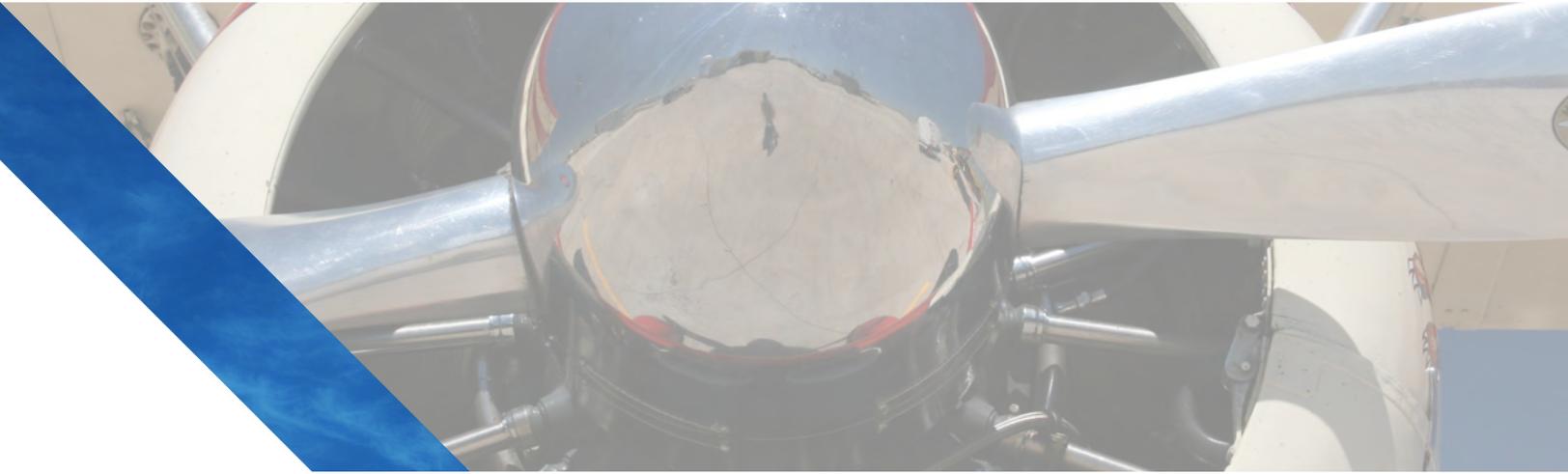
System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Tribune Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,007	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Widen 15 Feet	\$1,464,548
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	None	PAPI or VASI	Install PAPI	\$83,200
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	No	Yes	Construct Terminal	\$468,000
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	50%	100% Based Aircraft	Construct Space for 7 Aircraft	\$714,720
Apron Capacity (SF)	40,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	Maintain Standard	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$2,766,868



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KANSAS AVIATION SYSTEM PLAN

CIMARRON MUNICIPAL AIRPORT CIMARRON

8K8

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In association with



KASP OVERVIEW

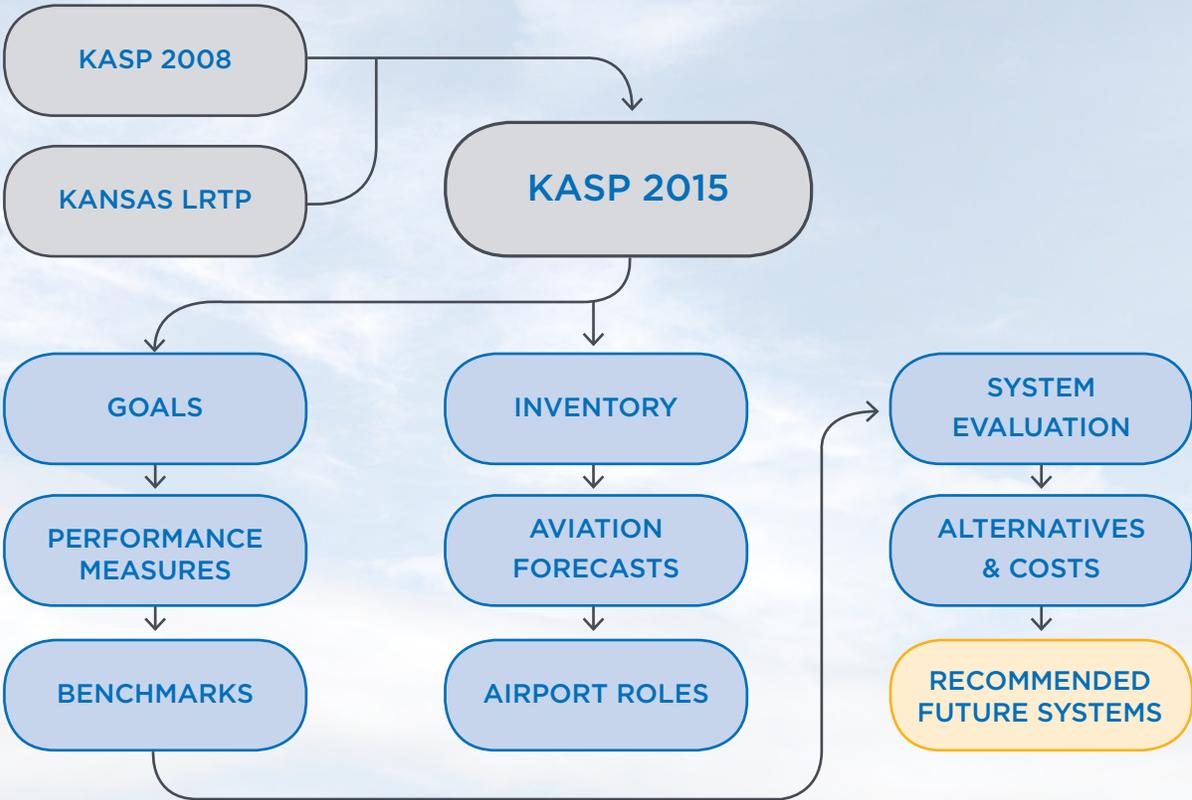
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Support the promotion of aviation education

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STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	3,500	3,500	3,500	3,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Cimarron Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,800	3,200	Extend 400 Feet	-
Primary Runway Width (Feet)	32	60	Widen 28 Feet	\$1,792,000
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	67%	100% Based Aircraft	Construct Space for 3 Aircraft	\$267,360
Apron Capacity (SF)	62,235	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	No	Not an Objective	No Recommendation	N/A
AvGAS	No	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$2,601,960

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway edge lighting



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KANSAS AVIATION SYSTEM PLAN

ELLSWORTH MUNICIPAL AIRPORT ELLSWORTH

9K7

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

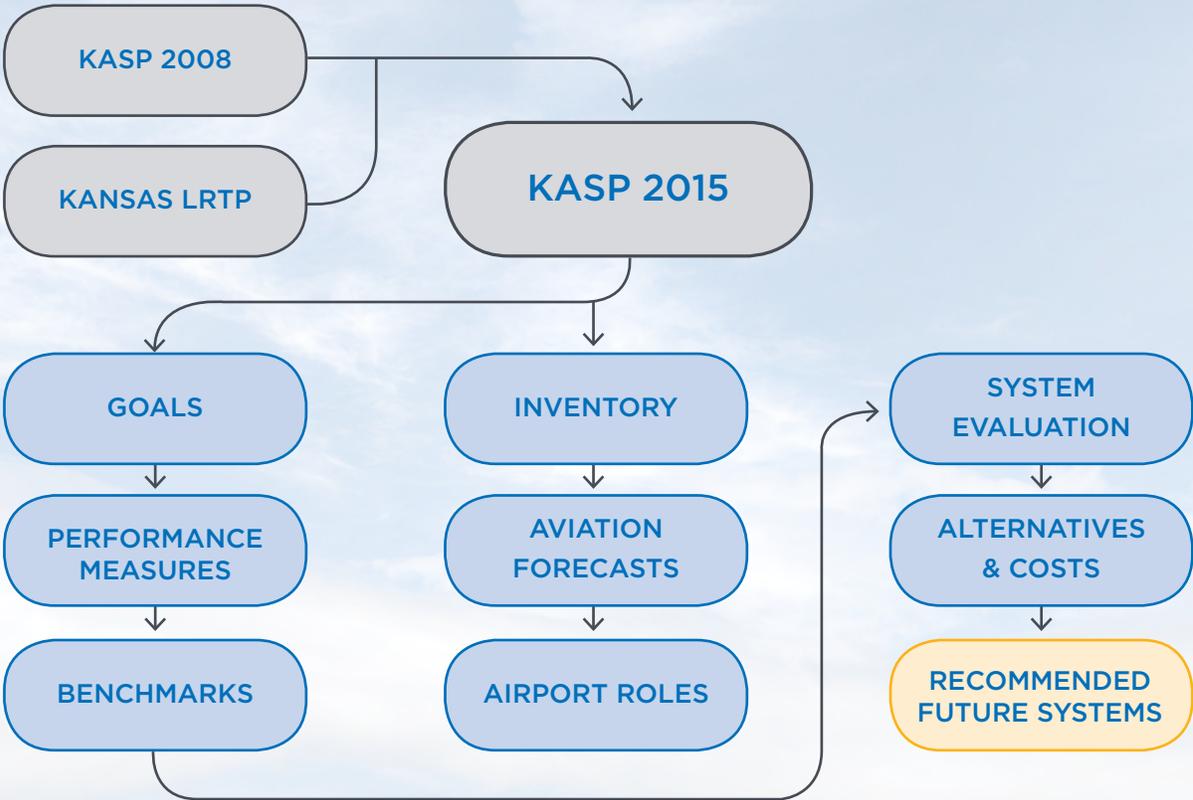
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS



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These goals are as follows:

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- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	10	10	10	10
ANNUAL OPERATIONS	20,000	20,000	20,000	20,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Ellsworth Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,327	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	48	75	Widen 27 Feet	\$2,044,508
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$35,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	120%	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	25,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$2,132,908



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KANSAS AVIATION SYSTEM PLAN

KINGMAN-CLYDE CESSNA FIELD KINGMAN

9K8

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KASP OVERVIEW

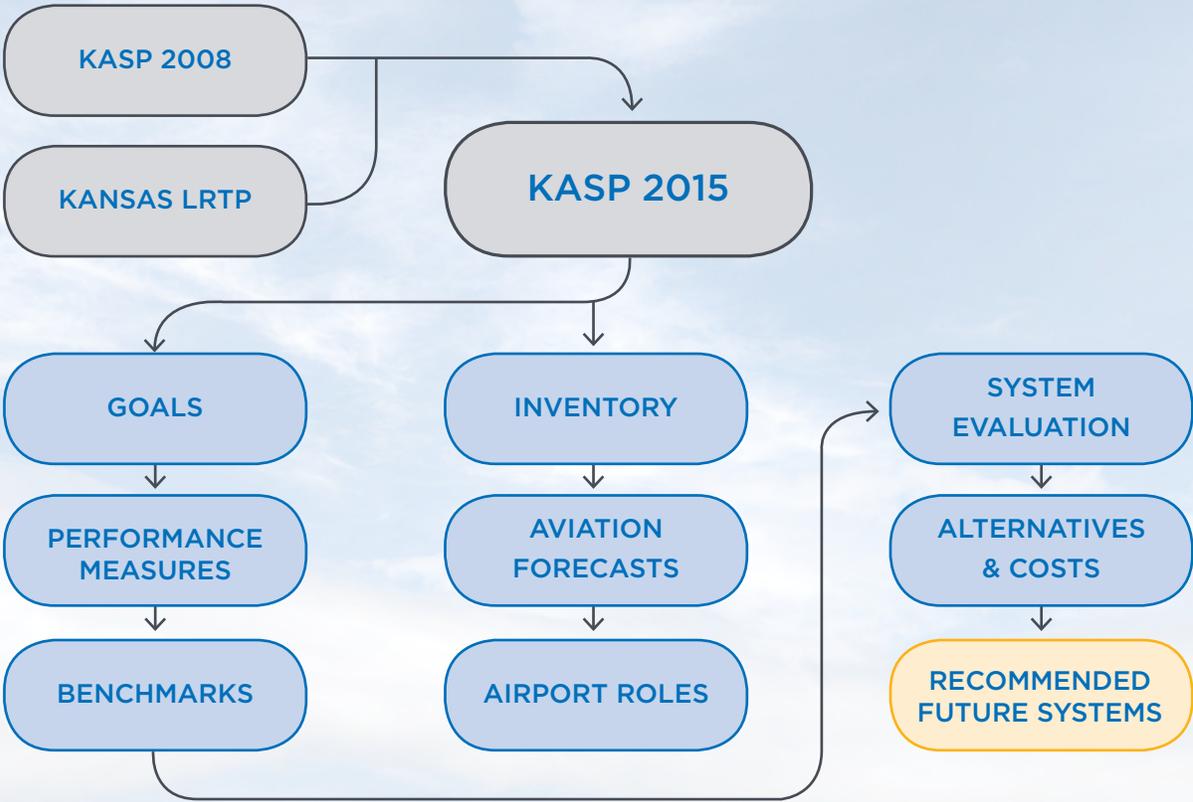
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Support the promotion of aviation education

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STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	26	26	26	26
ANNUAL OPERATIONS	9,600	9,600	9,600	9,600

AIRPORT PERFORMANCE AND RECOMMENDATIONS

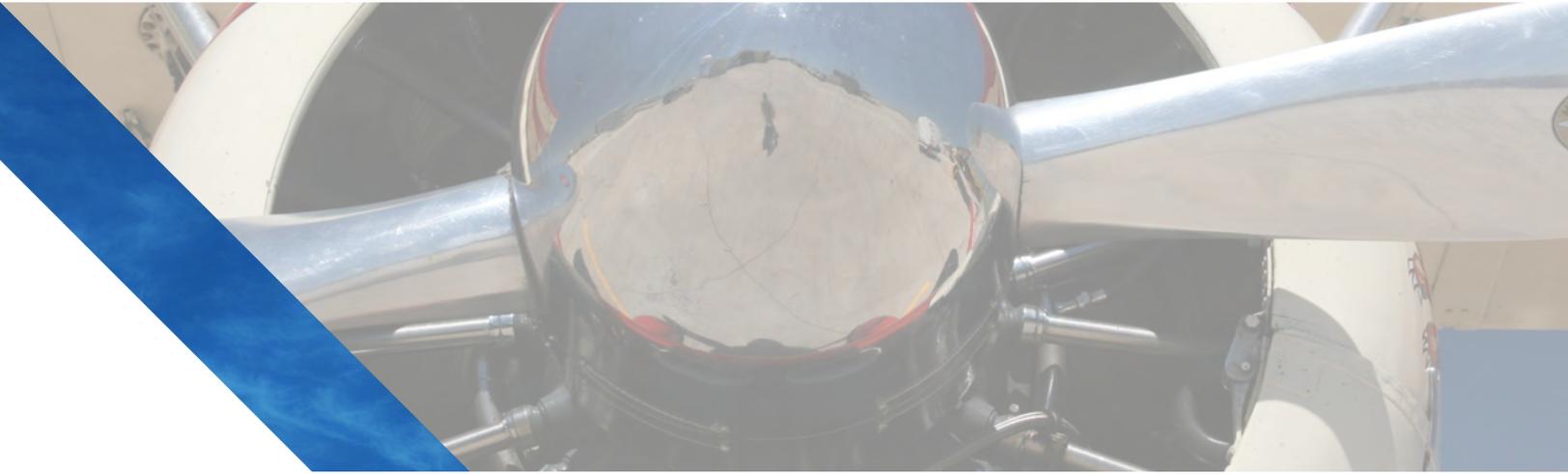
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Kingman-Clyde Cessna Field**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,300	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	\$0
Hangar Capacity	235%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	75,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	No Recommendation	N/A
AvGAS	Yes	Yes	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	No Recommendation	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

LT. WILLIAM M. MILLIKEN AIRPORT
EUREKA

13K

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

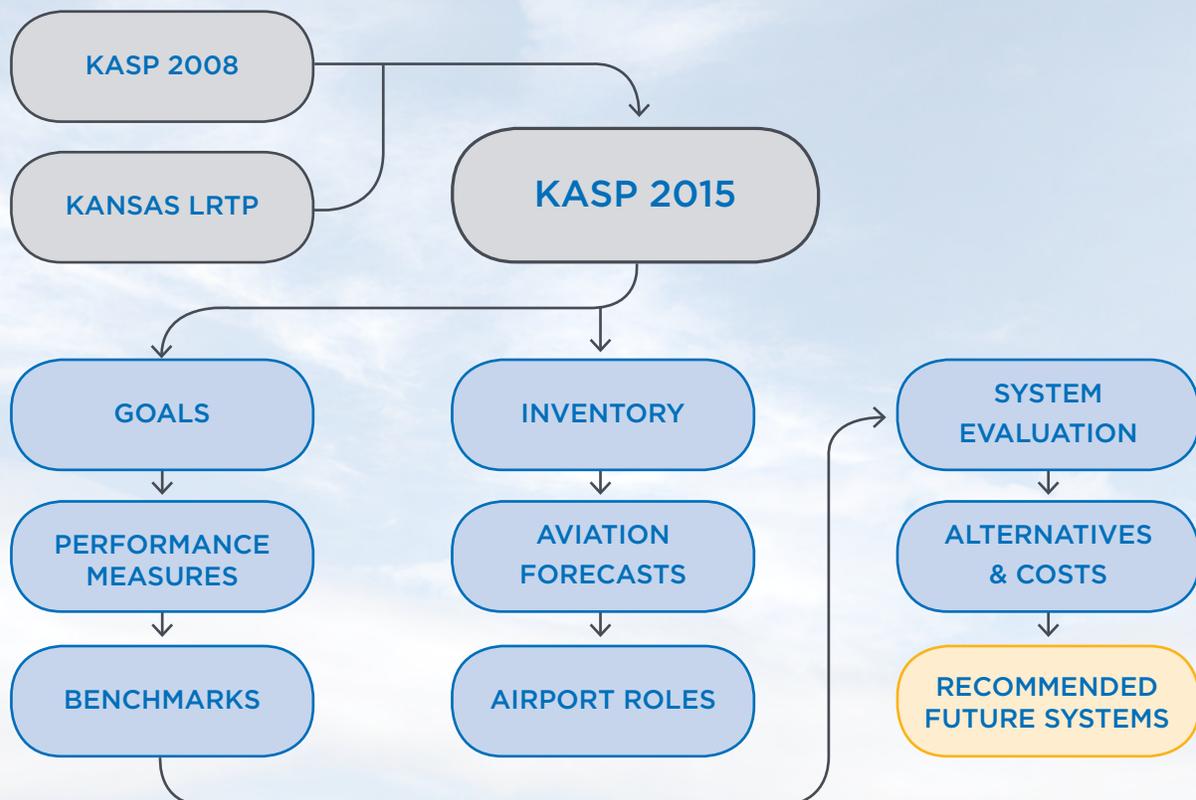
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	4,900	4,900	4,900	4,900

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Lt. William M. Milliken Airport**.

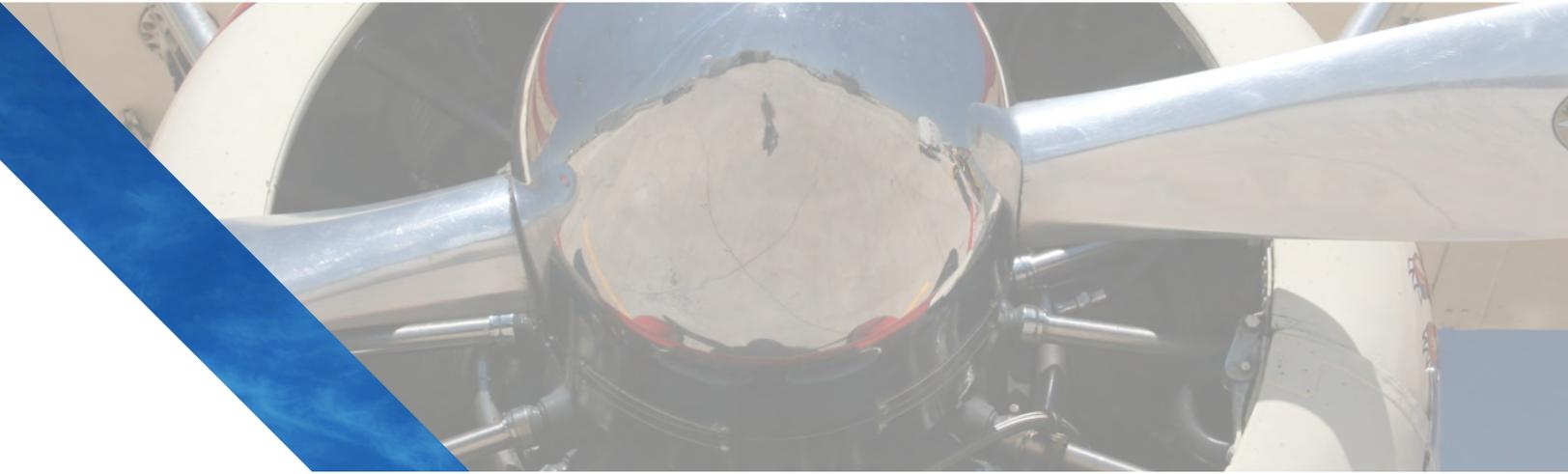
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,504	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	N/A
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	\$0
Hangar Capacity	111%	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	30,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	\$0
Total				\$0

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

KEARNY COUNTY AIRPORT LAKIN

36K

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

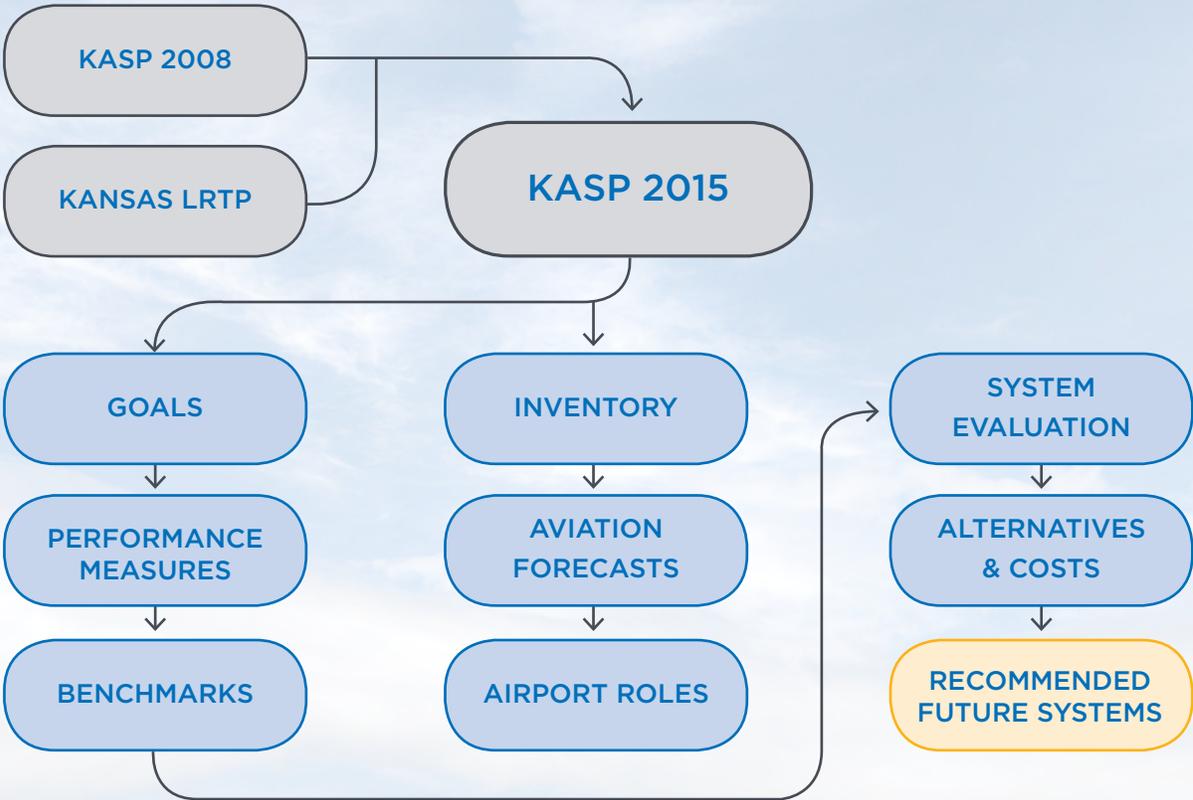
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	23	23	23	23
ANNUAL OPERATIONS	4,000	4,000	4,000	4,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Kearny County Airport**.

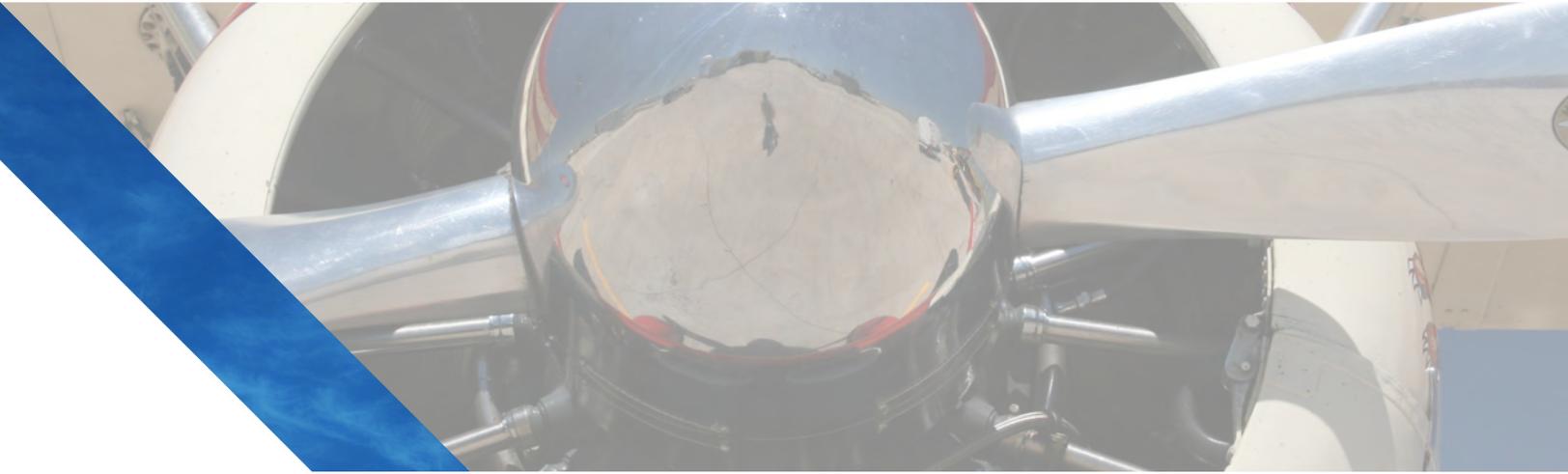
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,410	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	40	60	Widen 20 Feet	\$1,193,500
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Install Non-Precision Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	NSTD	MIRL	Install MIRL	\$283,030
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	\$0
Hangar Capacity	118%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	18,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	\$0
Total				\$1,753,530

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

NESS CITY MEMORIAL AIRPORT
NESS CITY

48K

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

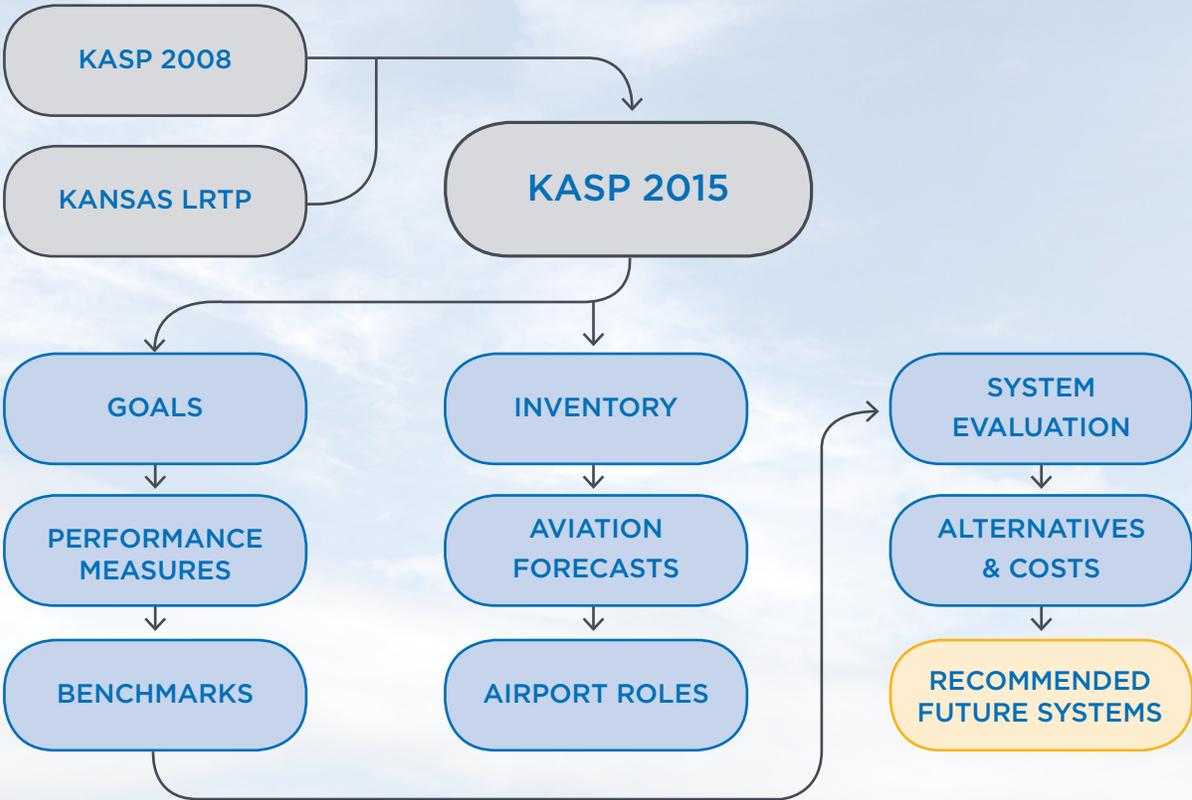
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	4	4	4	4
ANNUAL OPERATIONS	4,000	4,000	4,000	4,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Ness City Memorial Airport**.

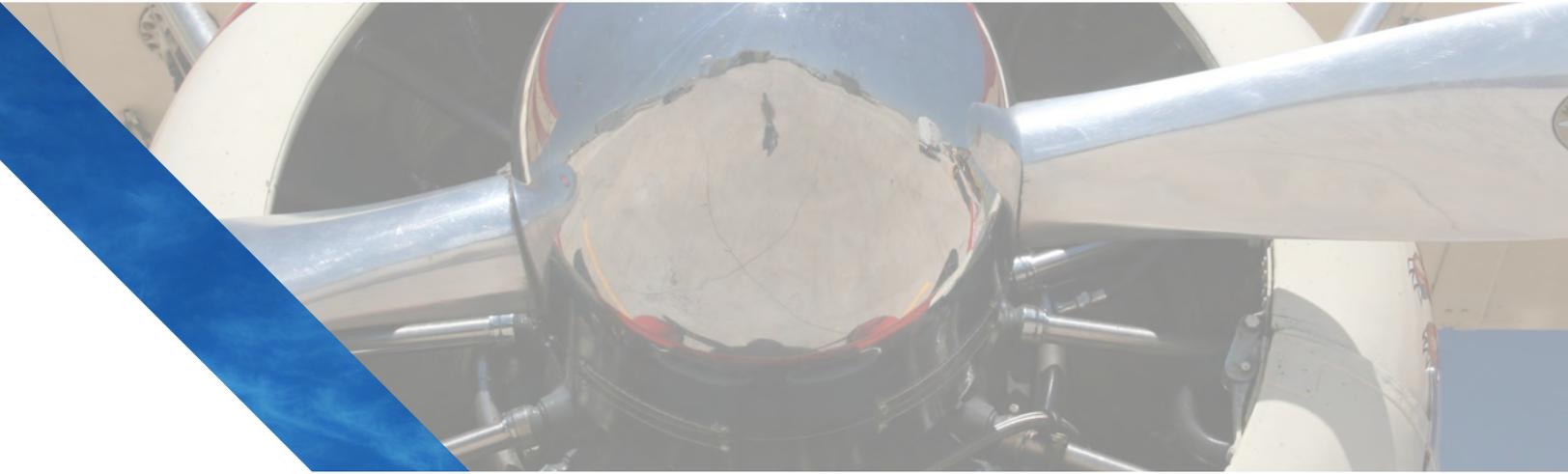
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,156	3,200	Extend 44 Feet	-
Primary Runway Width (Feet)	48	60	Widen 12 Feet	\$708,960
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Install Non-Precision Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	No	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	240%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	24,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	No	Not an Objective	No Recommendation	N/A
AvGAS	No	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,251,560

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

OSAGE CITY MUNICIPAL AIRPORT OSAGE CITY

53K

Prepared by



In association with



KASP OVERVIEW

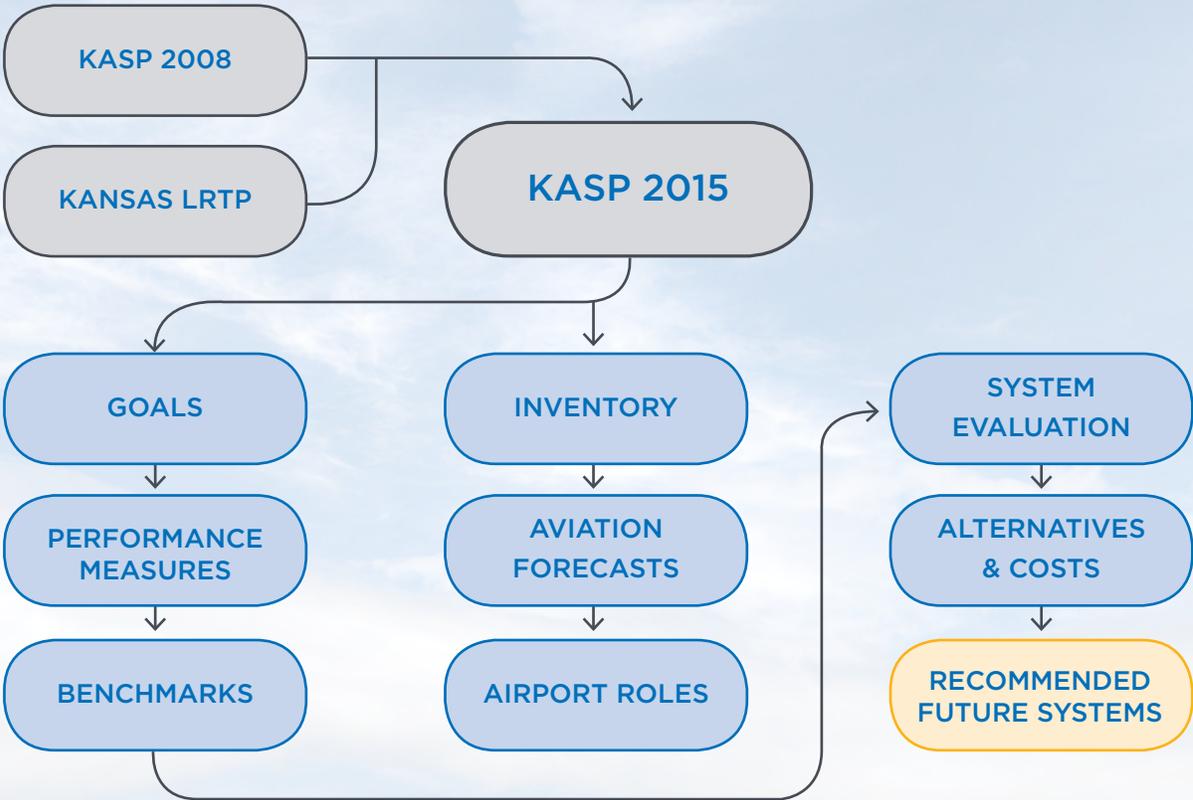
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The KASP has three primary objectives:

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- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	12	12	12	12
ANNUAL OPERATIONS	2,700	2,700	2,700	2,700

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Osage City Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,560	3,200	Extend 640 Feet	-
Primary Runway Width (Feet)	40	60	Widen 20 Feet	\$1,568,000
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	NSTD	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or SWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	No	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	\$0
Hangar Capacity	117%	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	35,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$2,110,600

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

COL. JAMES JABARA AIRPORT
WICHITA

AAO

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

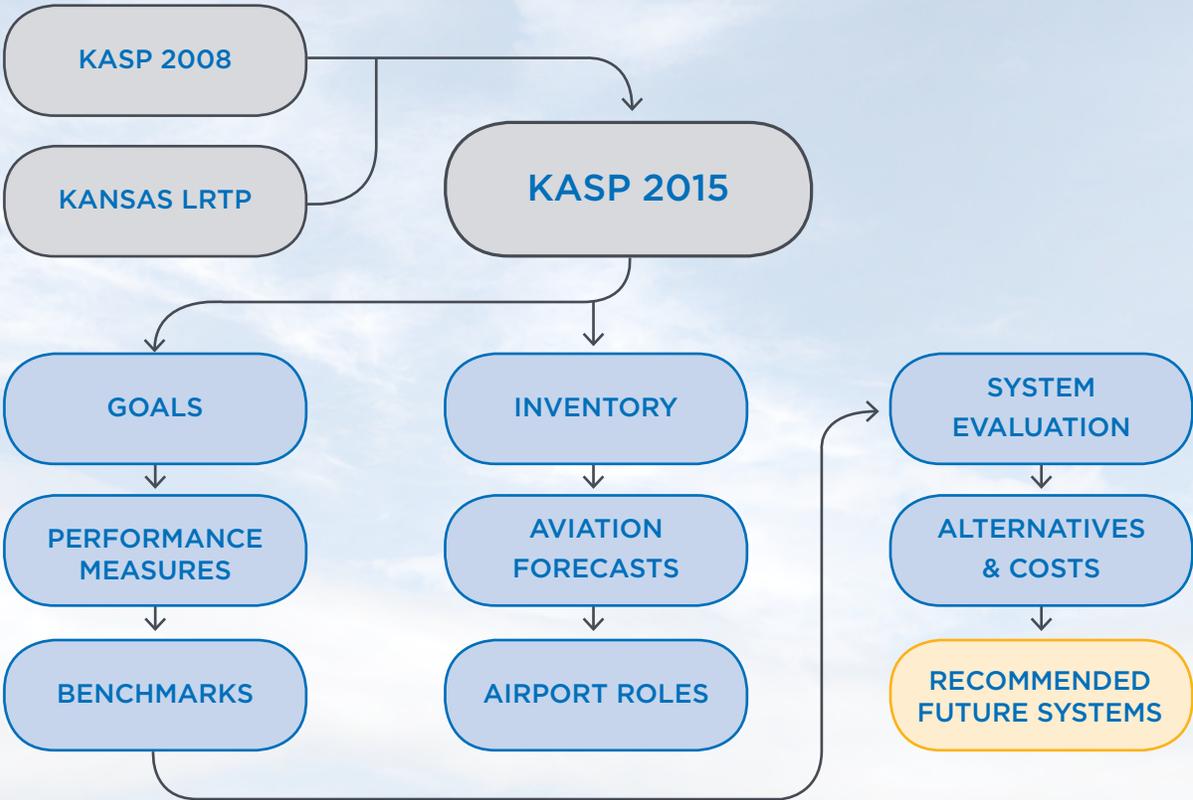
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
Reliever

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	100	105	111	122
ANNUAL OPERATIONS	38,300	40,220	42,510	46,730

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Col. James Jabara Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	6,101	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	168%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	350,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

ATWOOD-RAWLINS COUNTY-CITY AIRPORT ATWOOD

ADT

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


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KASP OVERVIEW

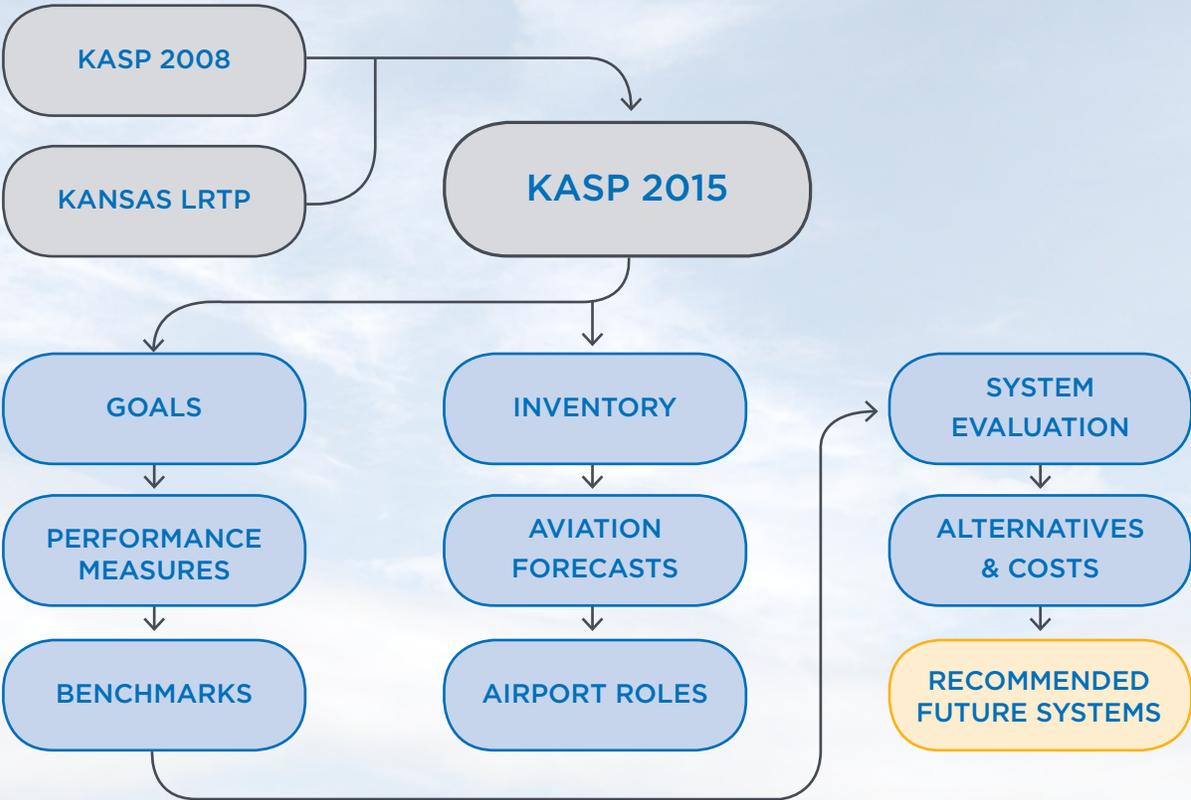
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	14	14	14	14
ANNUAL OPERATIONS	12,000	12,000	12,000	12,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

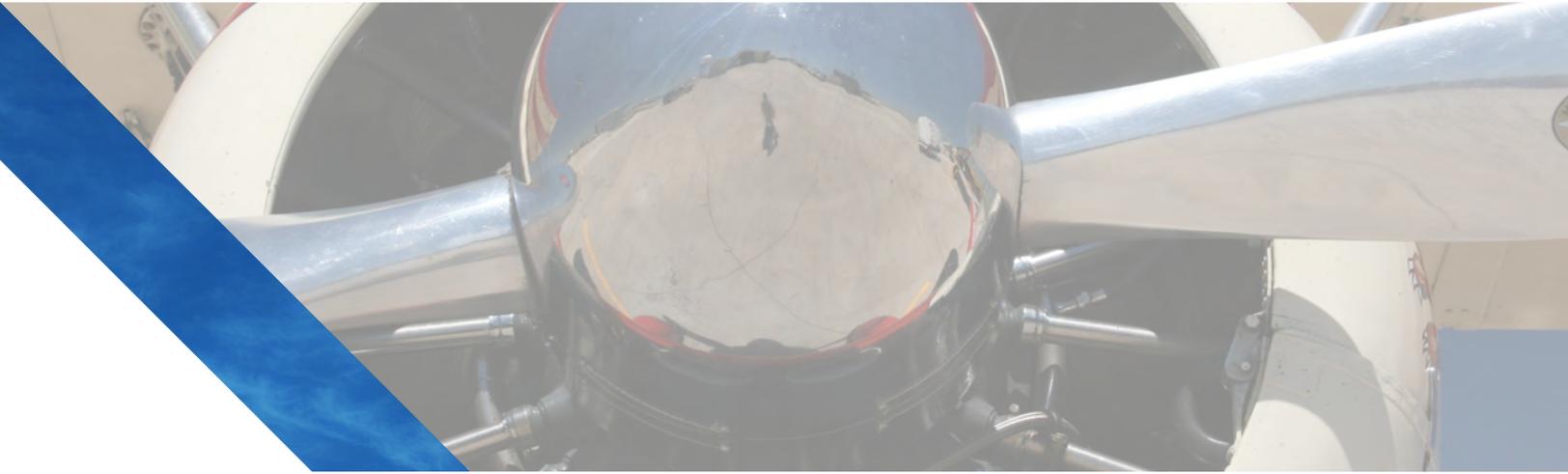
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Atwood-Rawlins County-City Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Non-Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	120%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	46,800	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

ANTHONY MUNICIPAL AIRPORT
ANTHONY

ANY

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

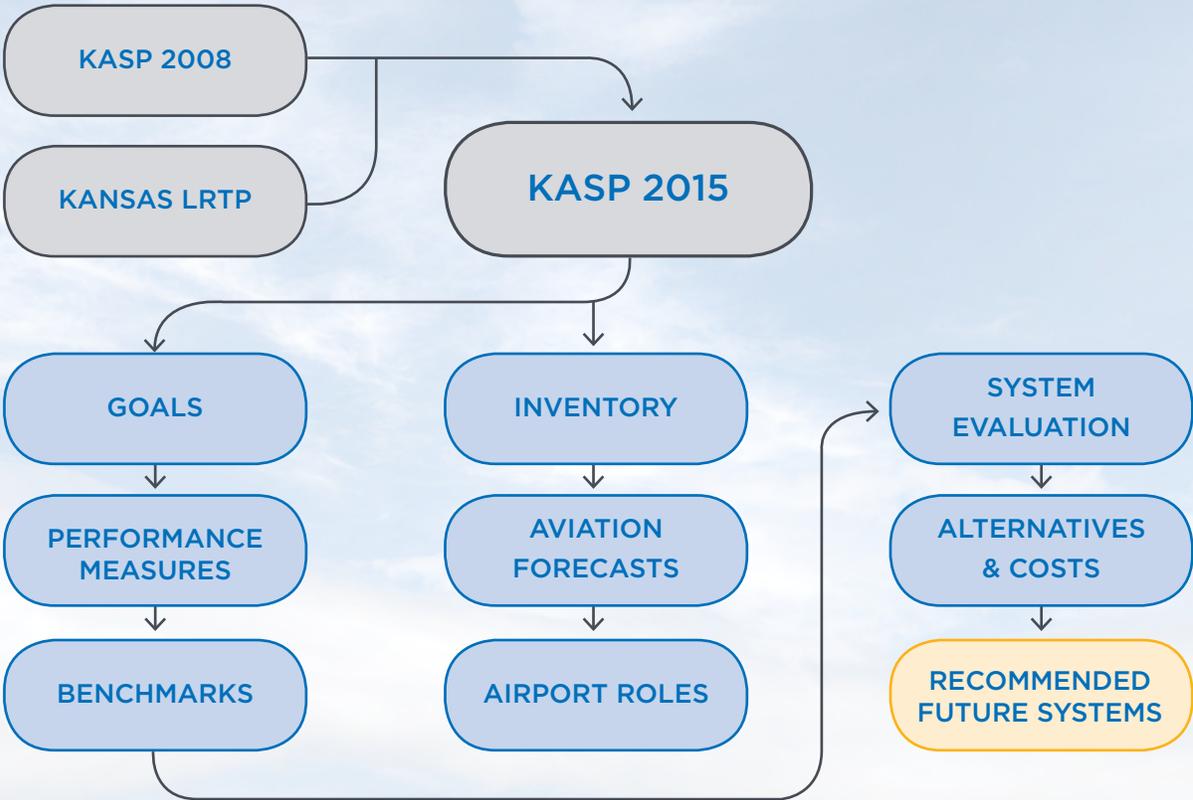
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	6	6	6	6
ANNUAL OPERATIONS	6,200	6,200	6,200	6,200

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Anthony Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,598	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Non-Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	\$0
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	\$0
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	\$0
Hangar Capacity	467% of Based Aircraft	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	70,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$225,000

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

SHALZ FIELD
COLBY

CBK

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

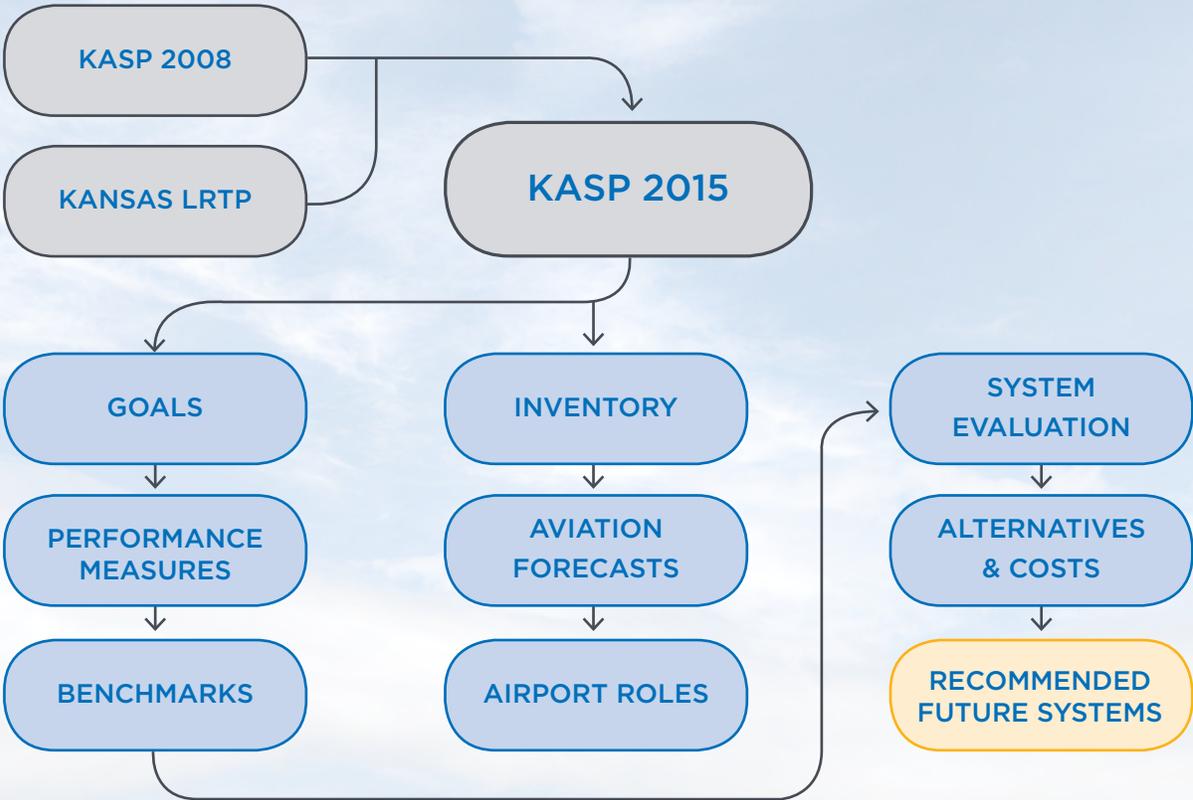
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- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	23	23	23	23
ANNUAL OPERATIONS	5,500	5,500	5,500	5,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Shalz Field**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,110	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Non-Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	146%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	100,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$36,400



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KANSAS AVIATION SYSTEM PLAN

COFFEYVILLE MUNICIPAL AIRPORT COFFEYVILLE

CFV

Prepared by



In association with



KASP OVERVIEW

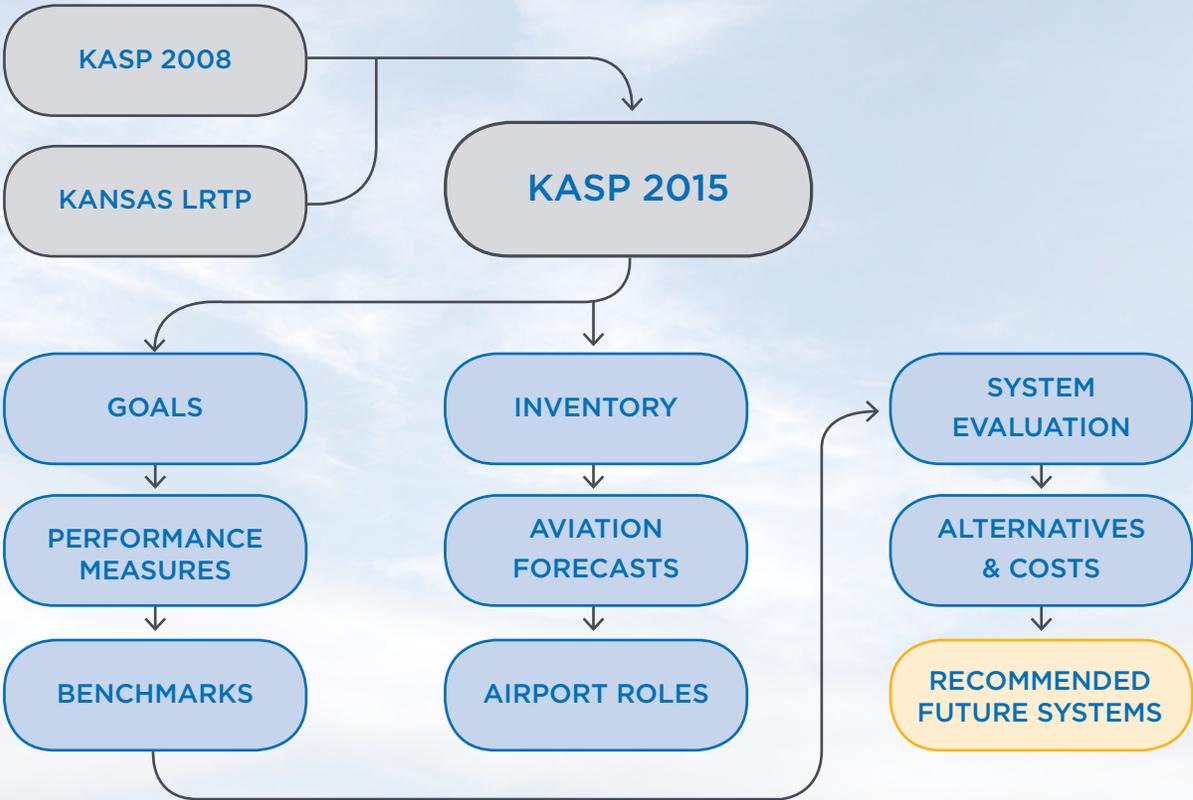
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	32	32	32	32
ANNUAL OPERATIONS	2,000	2,000	2,000	2,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Coffeyville Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,868	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	206%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	116,798	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standards	\$0
AvGAS	Yes	Yes	Maintain Standards	\$0
Jet A	Yes	Yes	Maintain Standards	\$0
Ground Transportation Link	Yes	Yes	Maintain Standards	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

BLOSSER MUNICIPAL AIRPORT CONCORDIA

CNK

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

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KASP OVERVIEW

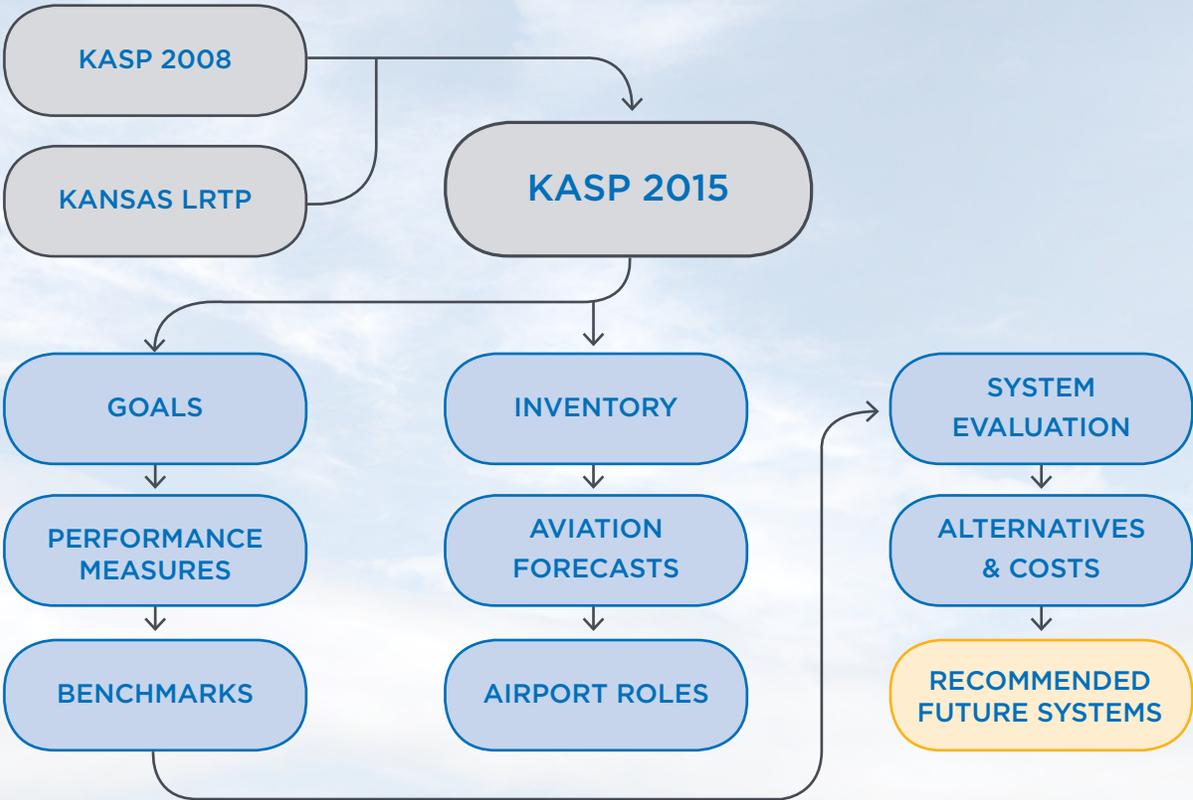
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	13	13	13	13
ANNUAL OPERATIONS	14,150	14,150	14,150	14,150

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Blosser Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,601	4,000	Extend 399 Feet	-
Primary Runway Width (Feet)	60	75	Widen 15 Feet	\$1,636,830
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	None	PAPI or VASI	Install PAPI	\$83,200
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS	Install REILs	\$36,400
Weather Reporting	ASOS	Automated	Install ASOS	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	206%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	10,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standards	\$0
AvGAS	Yes	Yes	Maintain Standards	\$0
Jet A	Yes	Yes	Maintain Standards	\$0
Ground Transportation Link	Yes	Yes	Maintain Standards	N/A
Total				\$1,756,430



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KANSAS AVIATION SYSTEM PLAN

CHANUTE-MARTIN JOHNSON AIRPORT CHANUTE

CNU

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

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Division of Aviation

KASP OVERVIEW

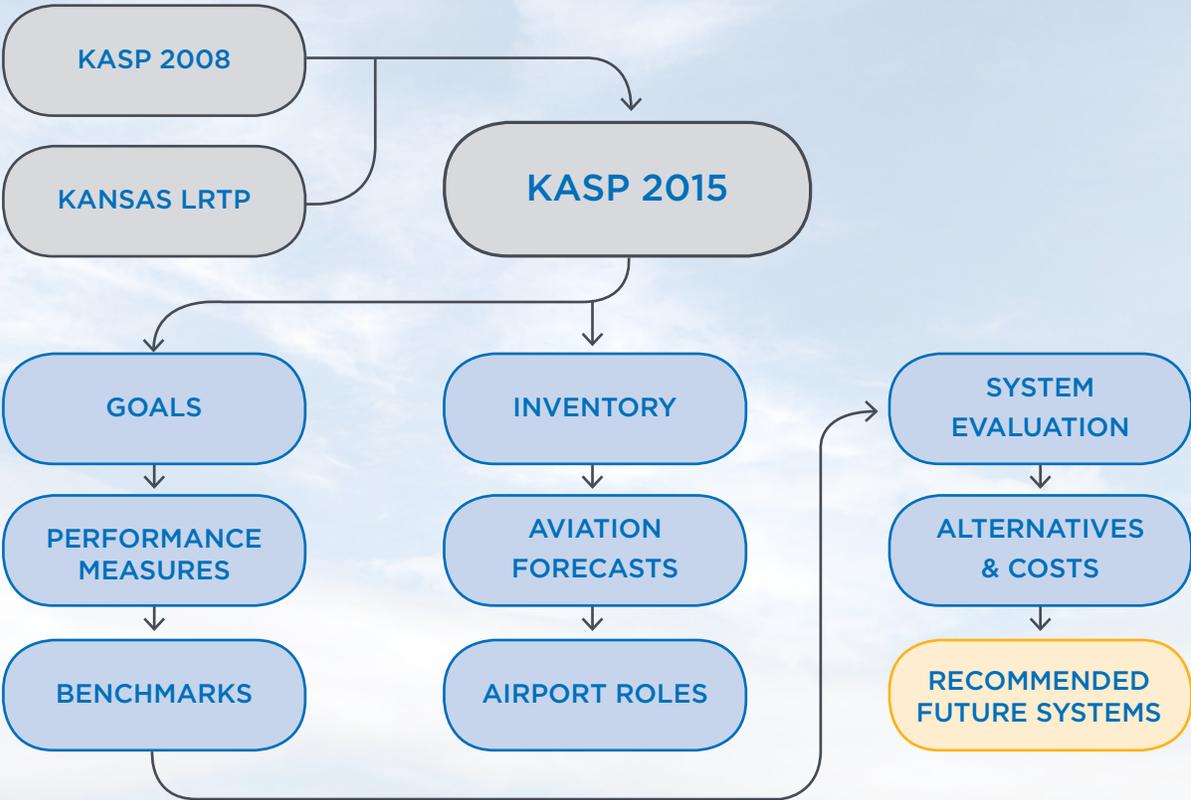
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	17	17	17	17
ANNUAL OPERATIONS	25,000	25,000	25,000	25,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

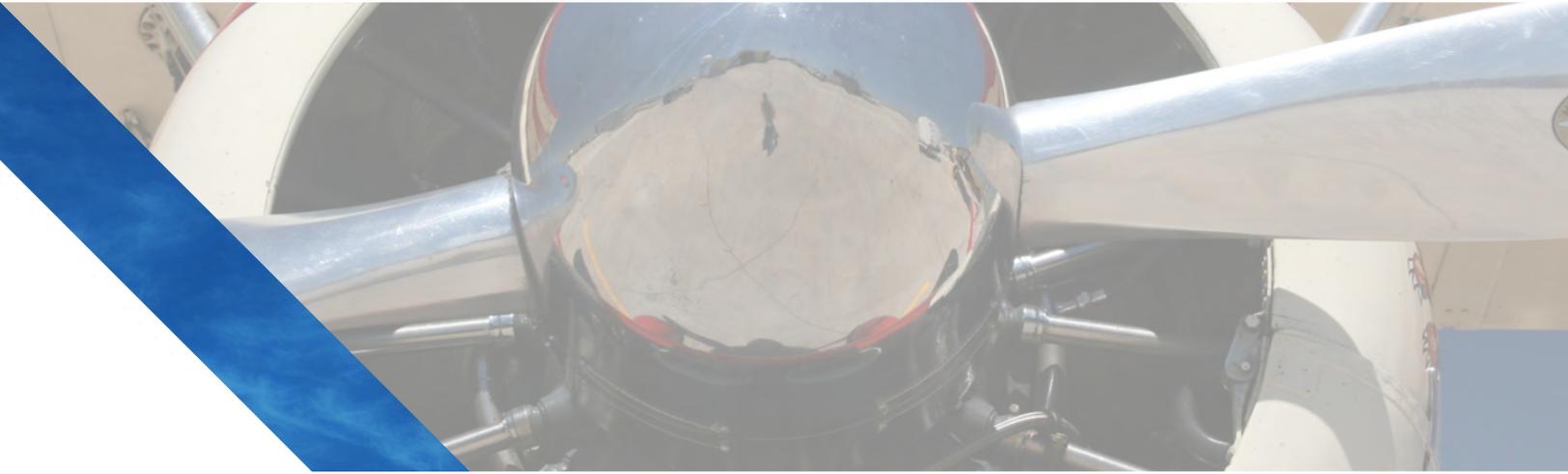
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Chanute-Martin Johnson Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,255	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	120%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	103,560	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

CLAY CENTER MUNICIPAL AIRPORT CLAY CENTER

CYW

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

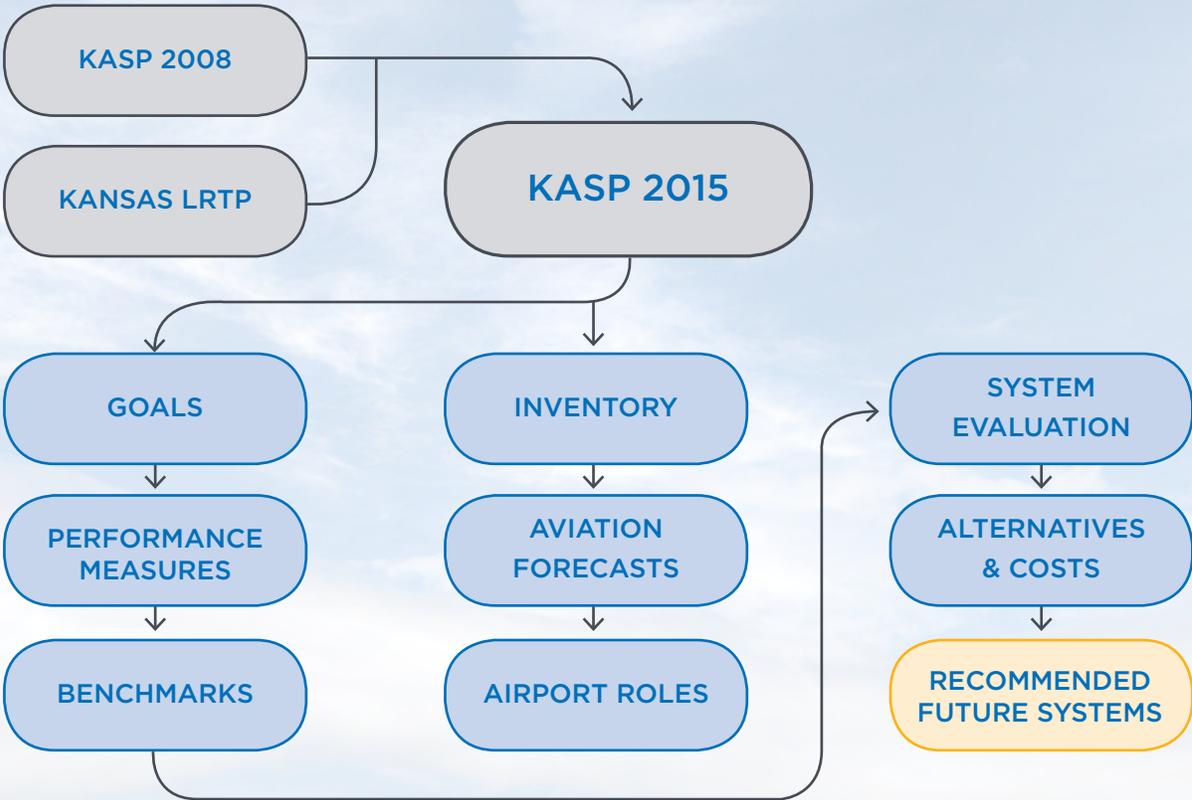
The Kansas Aviation System Plan (KASP) is an update of a previous plan completed in 2008, and works in concert with other important planning documents that include the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), KDOT’s Long Range Transportation Plan (LRTP), and individual airport capital improvement programs, layout plans, and master plans.



The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	14	14	14	14
ANNUAL OPERATIONS	22,000	22,000	22,000	22,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Clay Center Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,199	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	75	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	40
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	64%	100% Based Aircraft	Construct 5 Spaces	\$491,040
Apron Capacity (SF)	90,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Link to Ground Transportation	Maintain Standard	N/A
Total				\$716,040

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

DODGE CITY REGIONAL AIRPORT DODGE CITY

DCC

Prepared by

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Smith**

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KASP OVERVIEW

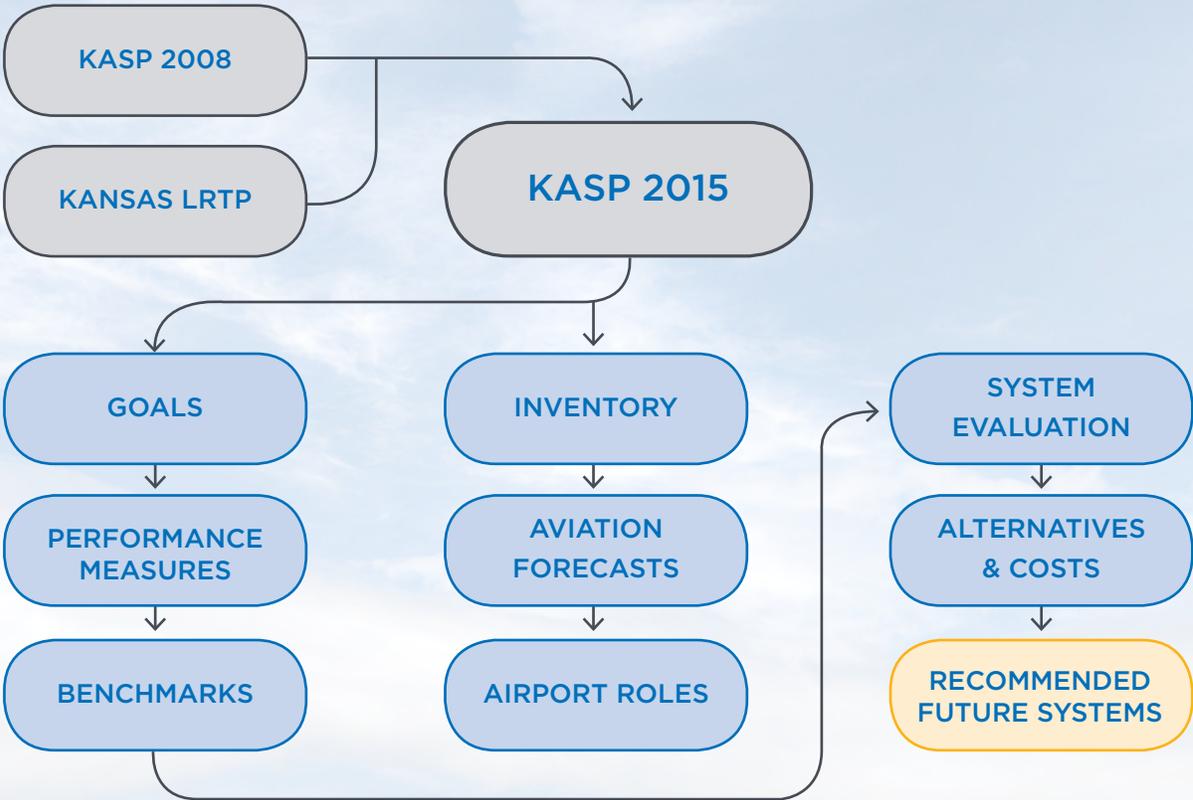
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Nonprimary CS

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	27	27	27	27
ANNUAL OPERATIONS	18,000	18,000	18,000	18,000
ANNUAL ENPLANEMENTS	3,828	2,277	2,317	2,397

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Dodge City Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	6,899	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	171%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	12,873	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

WELLINGTON MUNICIPAL AIRPORT WELLINGTON

EGT

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Department of Transportation
Division of Aviation

KASP OVERVIEW

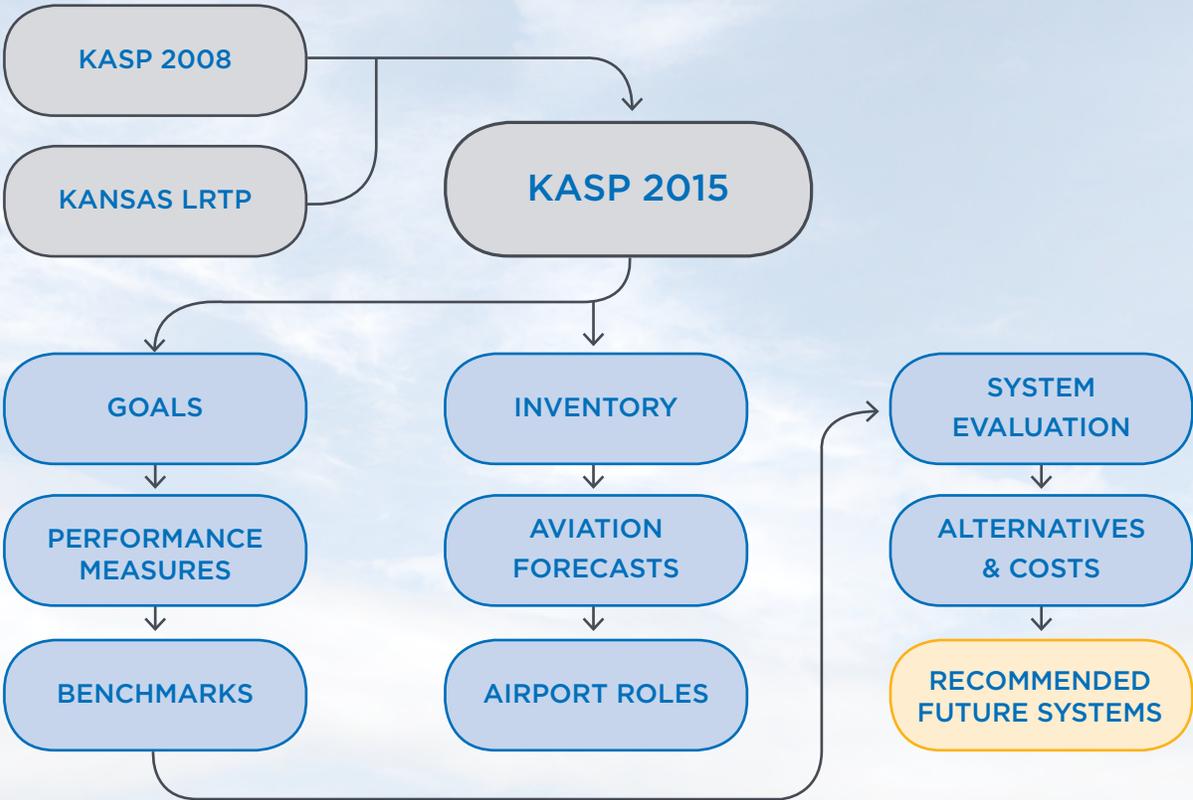
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	33	33	33	33
ANNUAL OPERATIONS	18,000	18,000	18,000	18,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Wellington Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,201	5,000	Extend 799 Feet	\$1,717,850
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	APV	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	195%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	131,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$1,717,850



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KANSAS AVIATION SYSTEM PLAN

ELKHART-MORTON COUNTY AIRPORT ELKHART

EHA

Prepared by

BURNS  **MCDONNELL**SM

**CDM
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In association with


Kansas
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KASP OVERVIEW

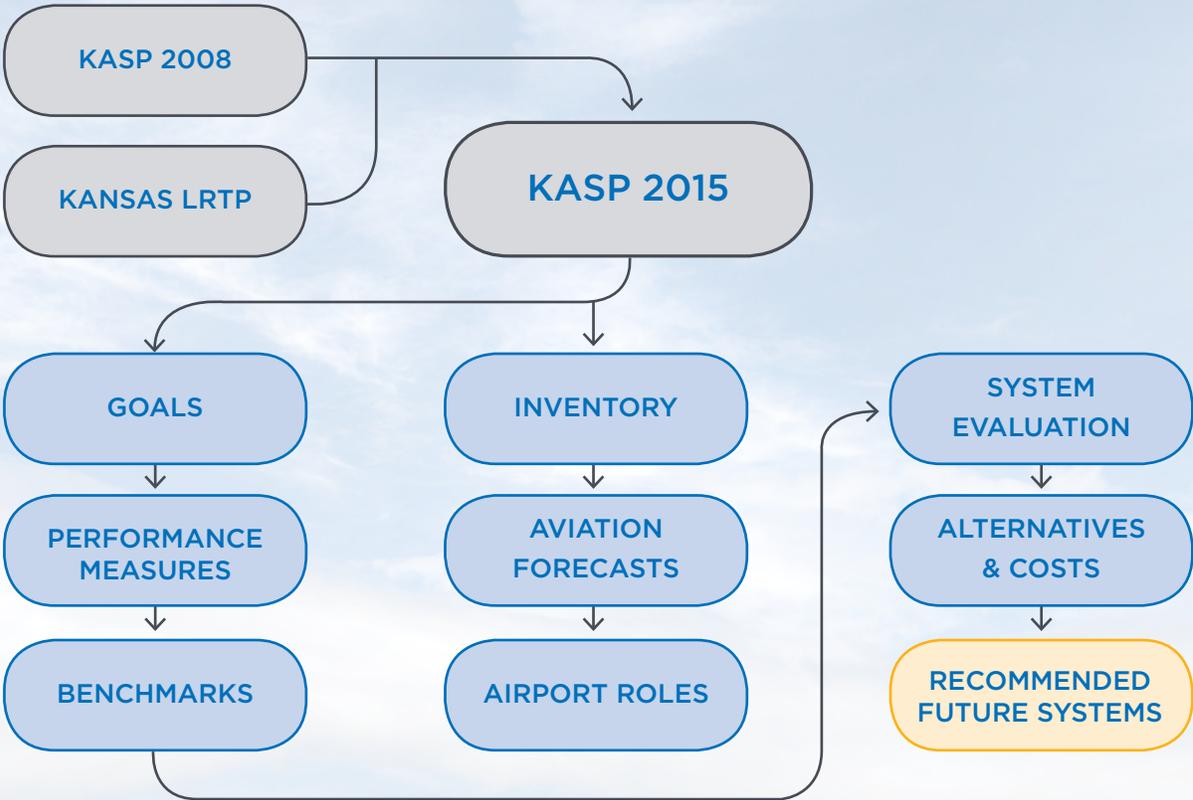
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	10	10	10	10
ANNUAL OPERATIONS	6,000	6,000	6,000	6,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Elkhart-Morton County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,900	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Widen 15 Feet	\$1,433,250
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	155%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	45,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,694,650



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KANSAS AVIATION SYSTEM PLAN

EMPORIA MUNICIPAL AIRPORT EMPORIA

EMP

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KASP OVERVIEW

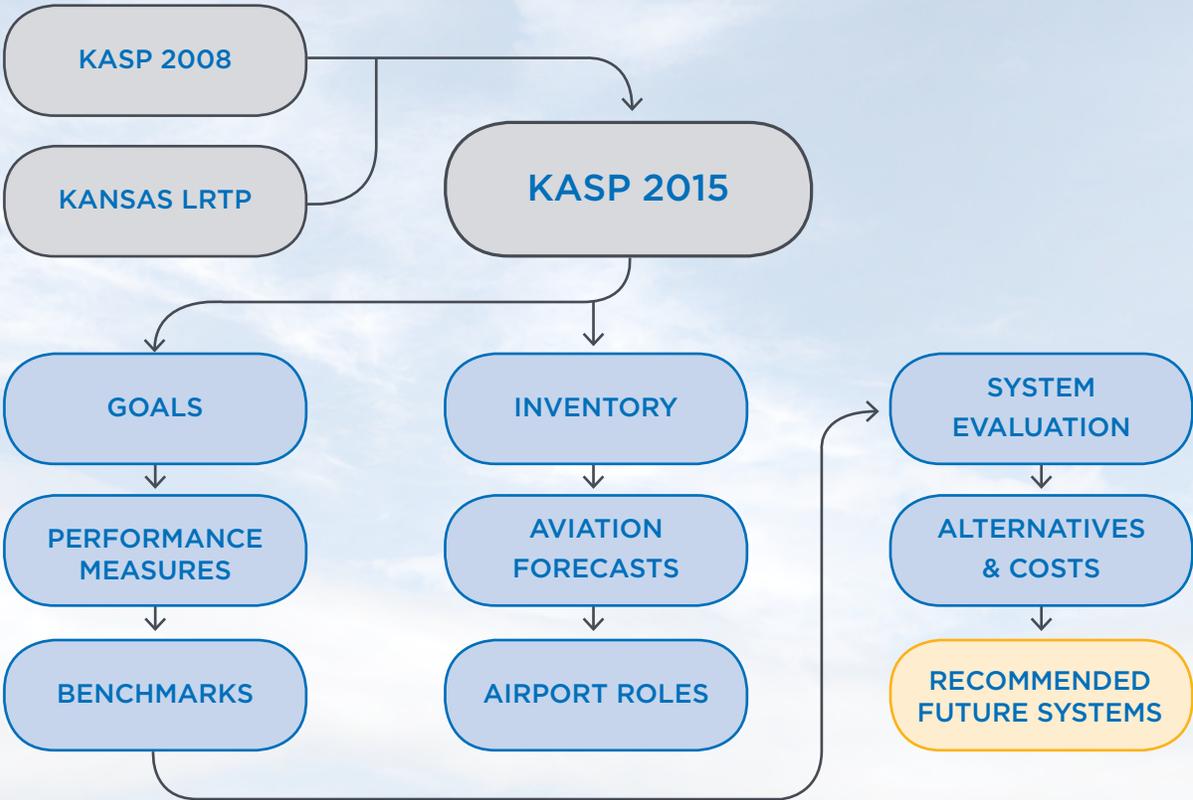
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

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- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	46	46	46	46
ANNUAL OPERATIONS	31,000	31,000	31,000	31,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Emporia Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,999	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turn Arounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	115%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	120,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	No	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

EL DORADO/
CAPT. JACK THOMAS MEMORIAL AIRPORT
EL DORADO

EQA

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

In association with


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KASP OVERVIEW

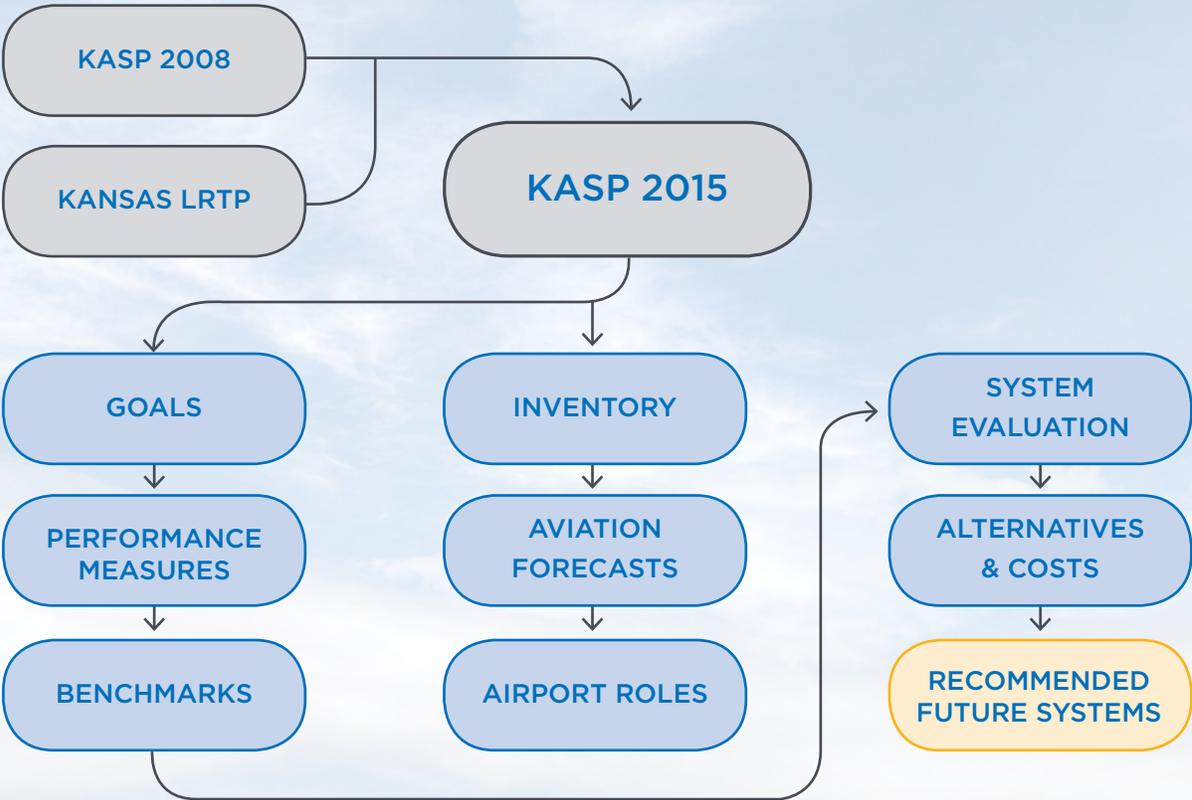
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

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- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	36	38	40	44
ANNUAL OPERATIONS	13,200	13,930	14,670	16,130

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **El Dorado/Capt. Jack Thomas Memorial**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,204	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	126%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	36,861	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

NEWTON CITY/COUNTY AIRPORT NEWTON

EWK

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

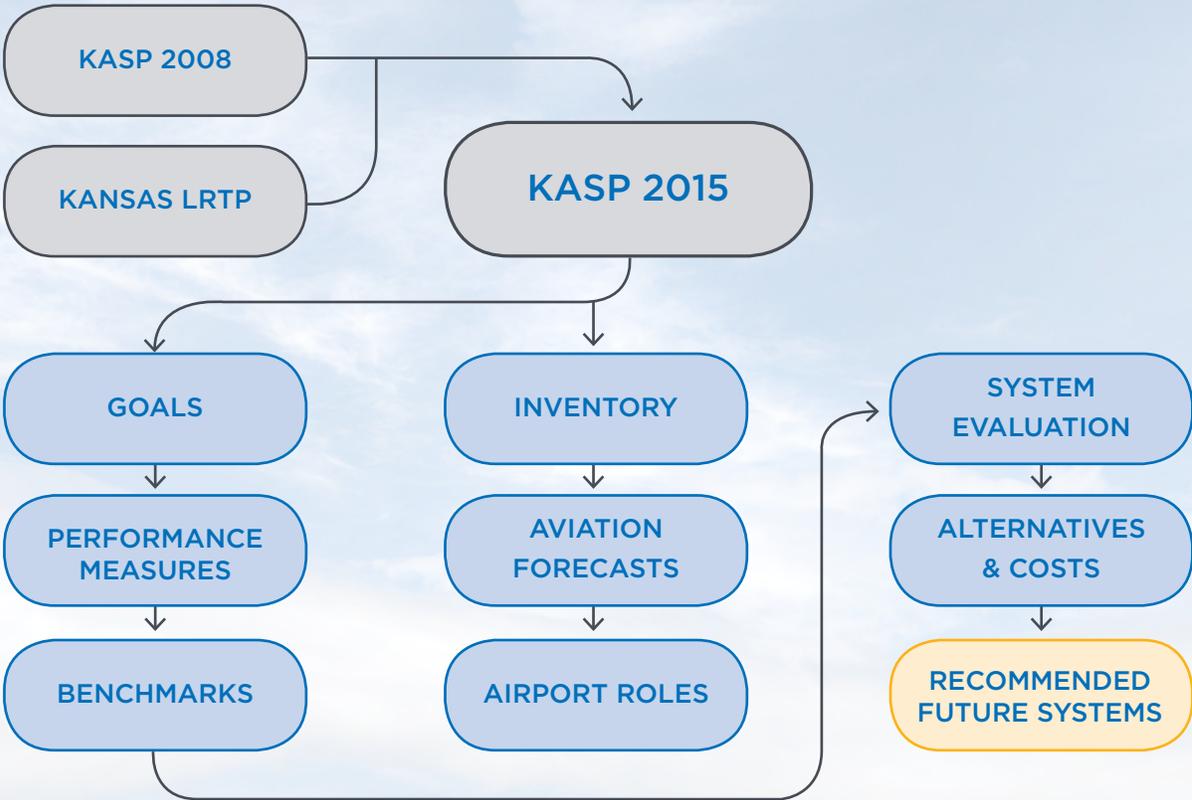
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
Reliever

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	129	136	143	158
ANNUAL OPERATIONS	64,894	68,420	71,940	79,480

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Newton City/County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,003	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	186%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	121,500	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

TOPEKA REGIONAL AIRPORT TOPEKA

FOE

Prepared by



In association with



KASP OVERVIEW

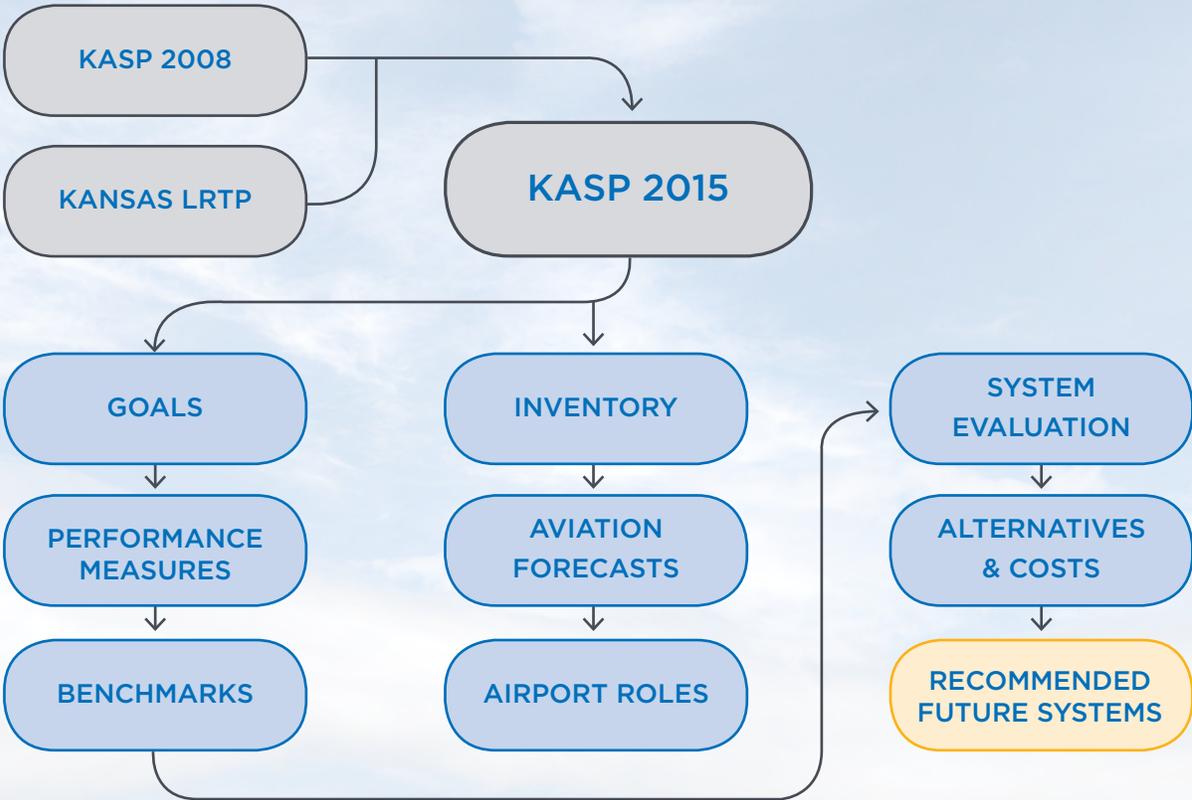
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The KASP has three primary objectives:

- 1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
- 2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	31	31	32	32
ANNUAL OPERATIONS	6,342	6,340	6,550	6,550

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Topeka Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	12,803	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	200	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ATIS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	167%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	7,000,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

FORT SCOTT MUNICIPAL AIRPORT FORT SCOTT

FSK

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

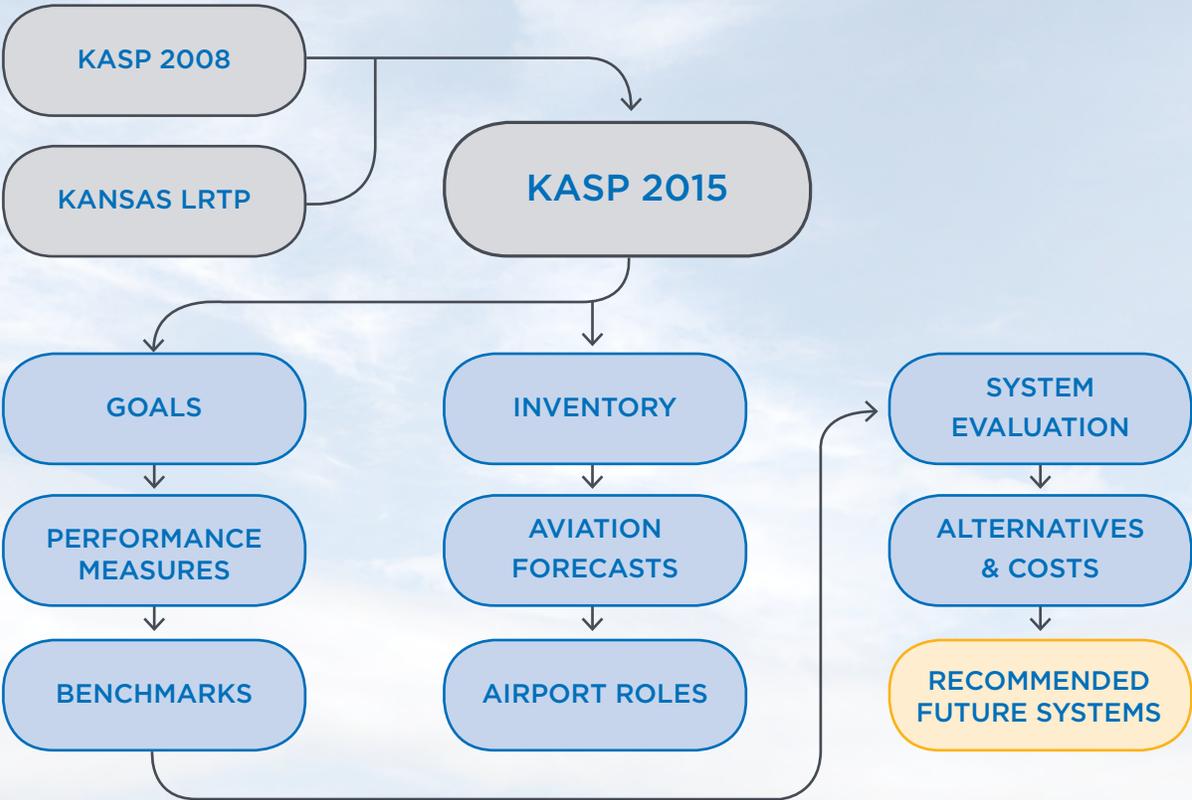
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	21	21	21	21
ANNUAL OPERATIONS	9,600	9,600	9,600	9,600

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Fort Scott Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,403	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI/PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	160%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	25,600	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	No	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	No Recommendation	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

GREAT BEND MUNICIPAL AIRPORT GREAT BEND

GBD

Prepared by



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KASP OVERVIEW

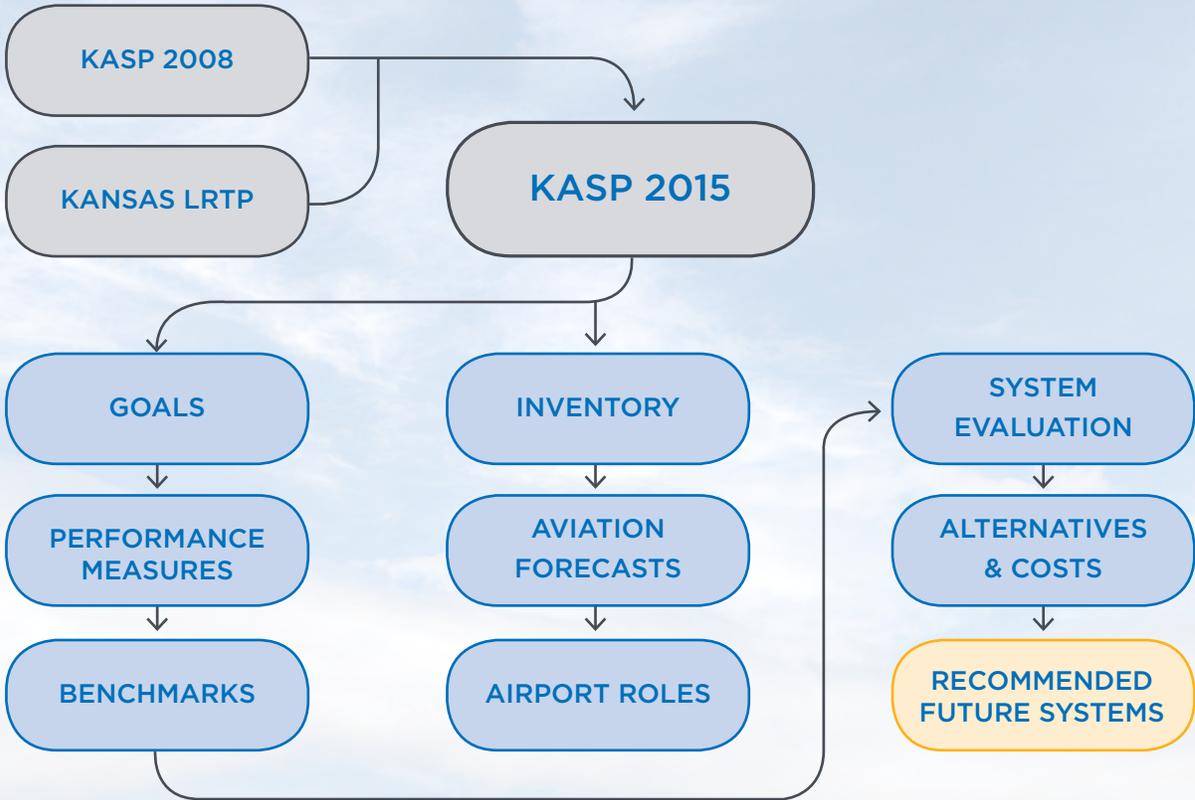
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	31	31	31	31
ANNUAL OPERATIONS	21,159	21,160	21,160	21,160

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Great Bend Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,851	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI and VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	151%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	1,000,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

GARDEN CITY REGIONAL AIRPORT GARDEN CITY

GCK

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

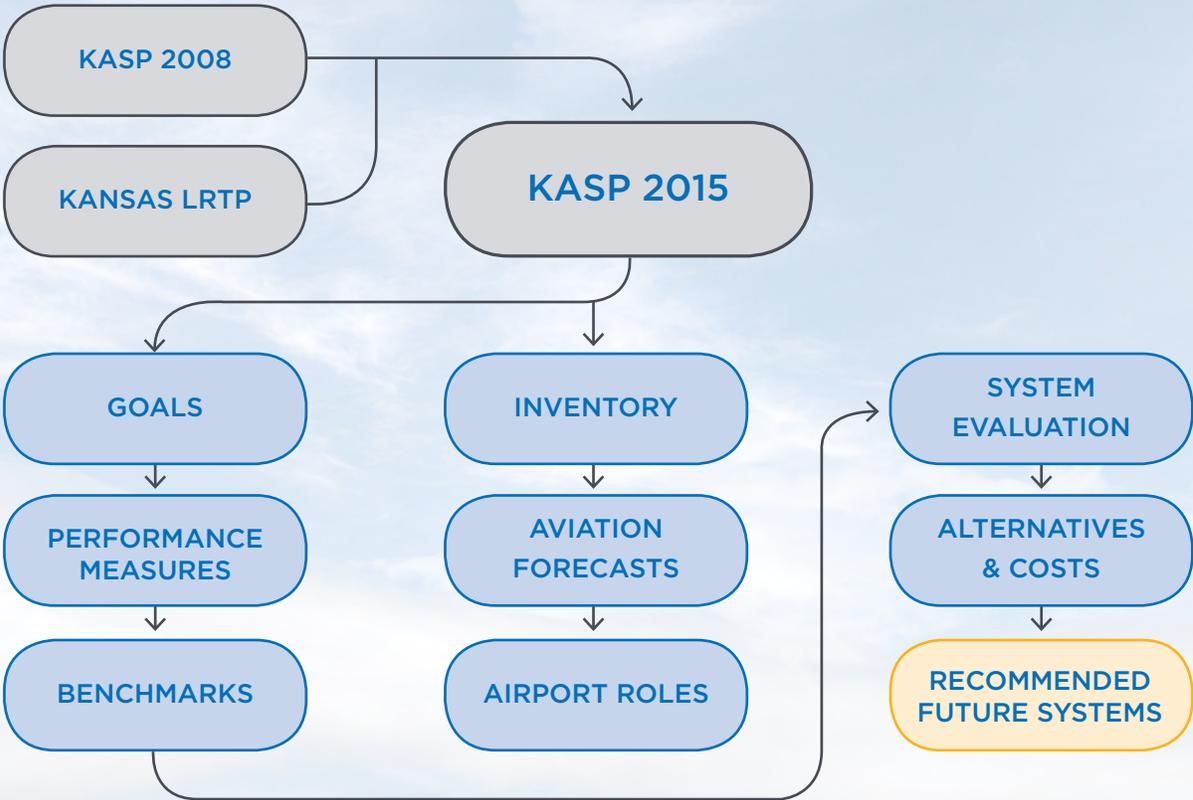
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Primary Nonhub

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	67	71	74	74
ANNUAL OPERATIONS	9,436	12,024	12,193	12,561
ANNUAL ENPLANEMENTS	26,071	28,586	31,398	37,880

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Garden City Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,299	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	133%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	1,416,700	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

RENNER FIELD-GOODLAND MUNICIPAL AIRPORT GOODLAND

GLD

Prepared by

BURNS  **MCDONNELL**SM

**CDM
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In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

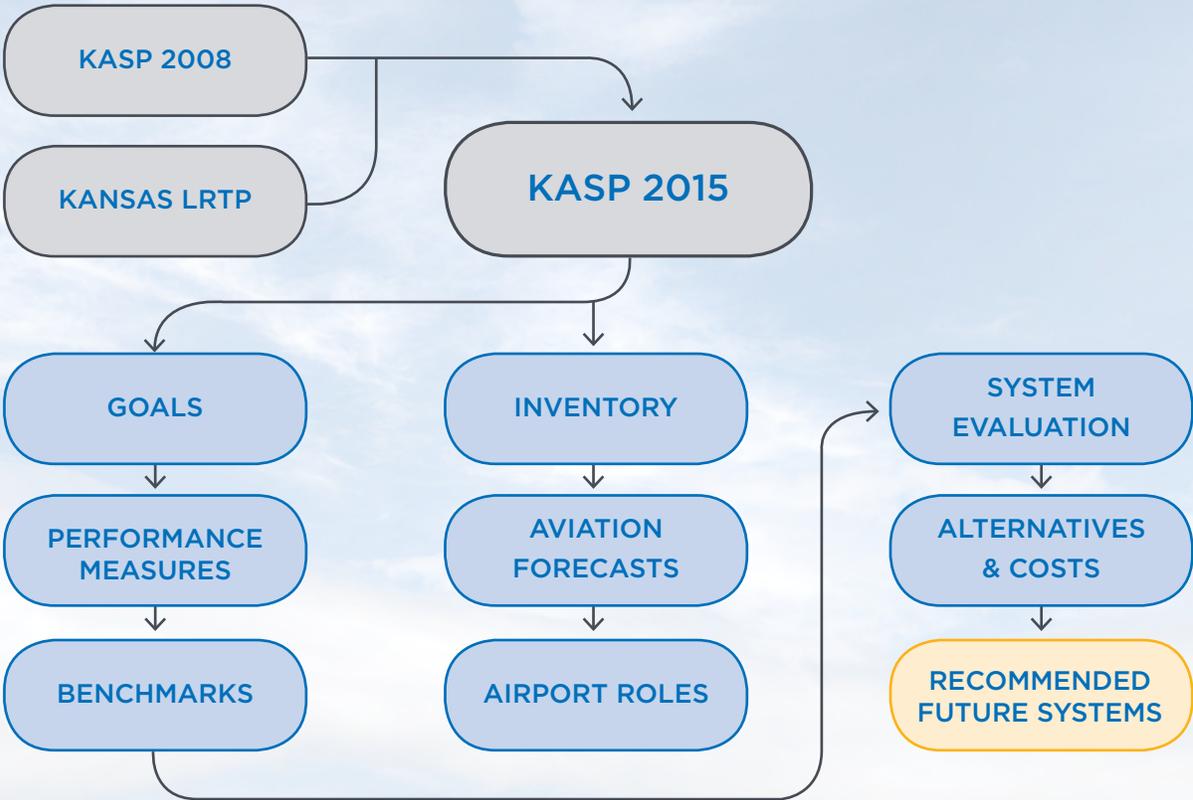
The Kansas Aviation System Plan (KASP) is an update of a previous plan completed in 2008, and works in concert with other important planning documents that include the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), KDOT's Long Range Transportation Plan (LRTP), and individual airport capital improvement programs, layout plans, and master plans.



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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	23	23	23	23
ANNUAL OPERATIONS	42,400	42,400	42,400	42,400

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Renner Field-Goodland Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,499	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	170%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	112,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

HILL CITY MUNICIPAL AIRPORT
HILL CITY

HLC

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

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KASP OVERVIEW

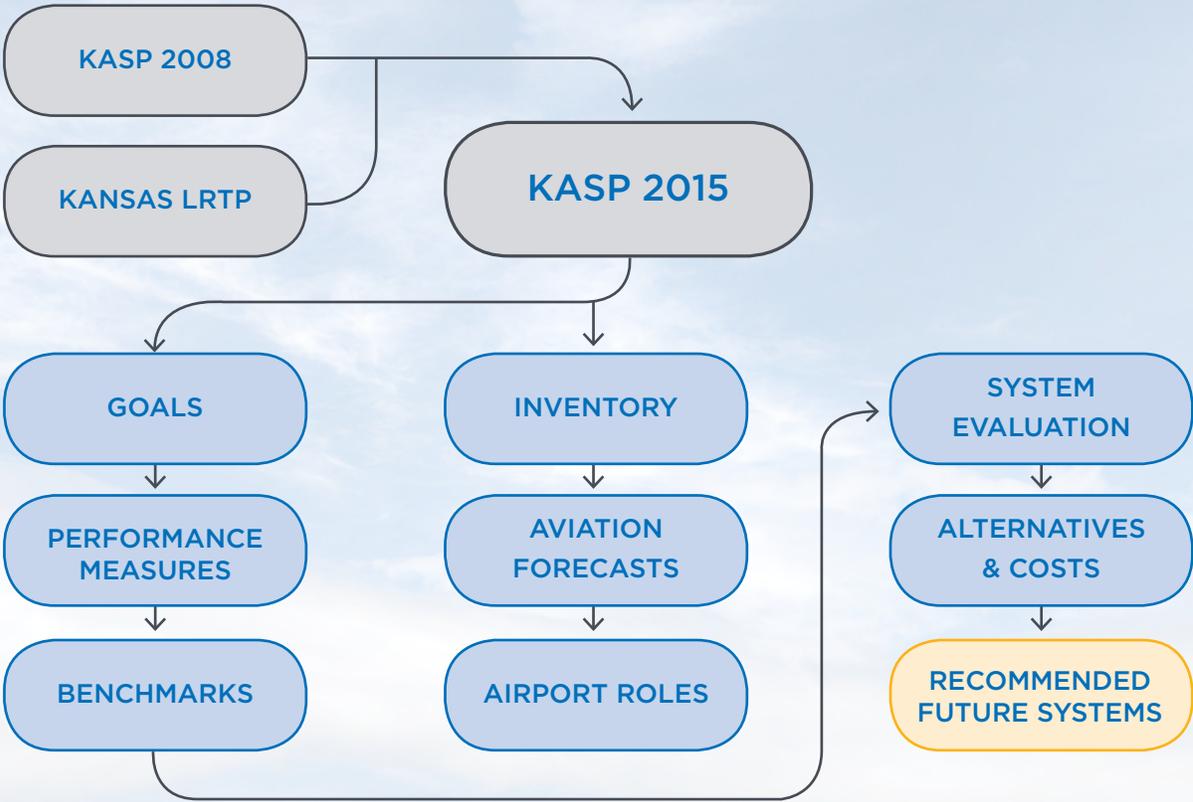
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	12	12	12	12
ANNUAL OPERATIONS	14,600	14,600	14,600	14,600

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Hill City Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	108%	100% Based Aircraft	No recommendation	\$0
Apron Capacity (SF)	60,000	10,000	No Recommendation	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

HUGOTON MUNICIPAL AIRPORT HUGOTON

HQG

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

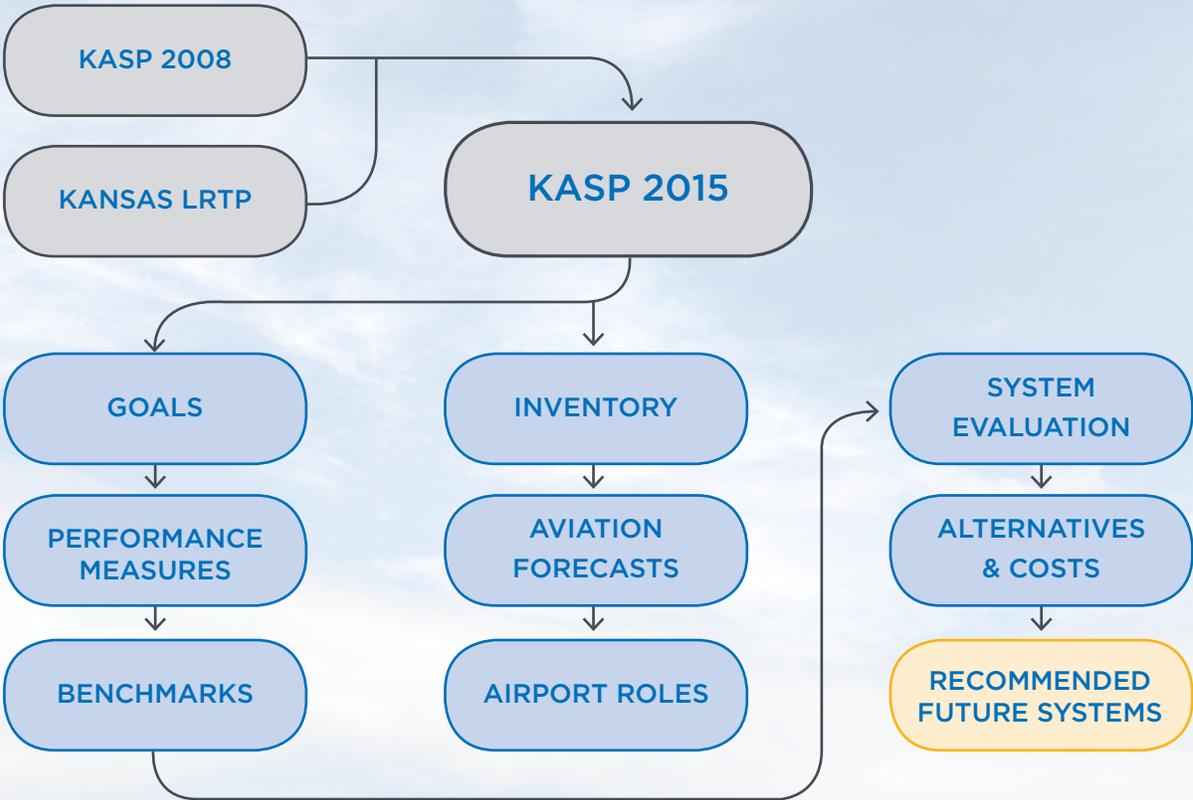
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

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- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	20	20	20	20
ANNUAL OPERATIONS	10,000	10,000	10,000	10,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

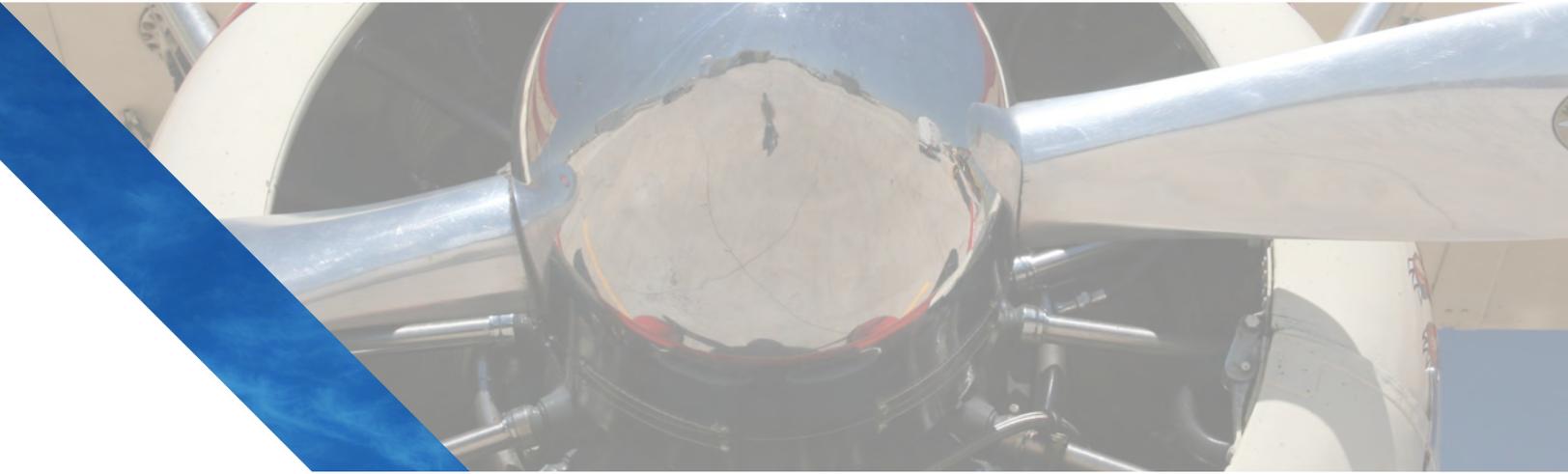
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Hugoton Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	135%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	52,500	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

HERINGTON REGIONAL AIRPORT HERINGTON

HRU

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

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Division of Aviation

KASP OVERVIEW

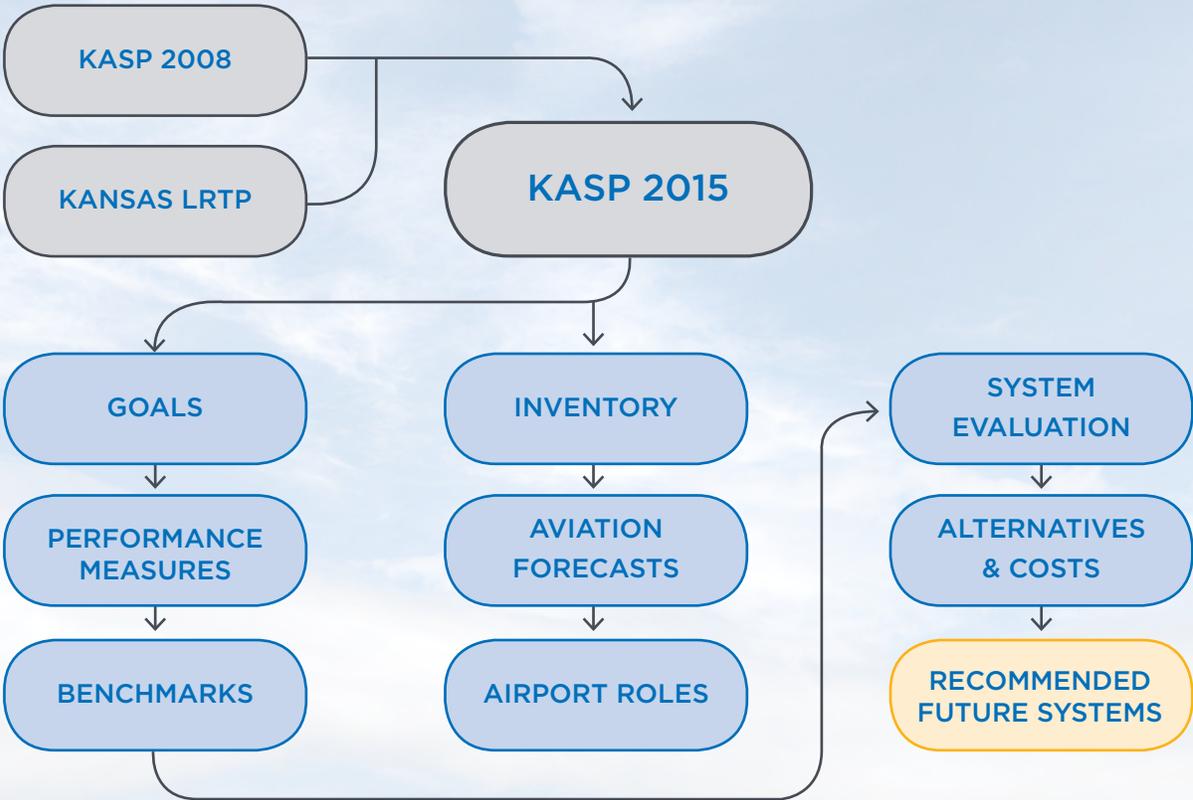
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	11,600	11,600	11,600	11,600

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Herington Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,184	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	75	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Yes	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	940%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	40,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$225,000

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

HUTCHINSON MUNICIPAL AIRPORT HUTCHINSON

HUT

Prepared by

BURNS  **McDONNELL**SM

**CDM
Smith**

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KASP OVERVIEW

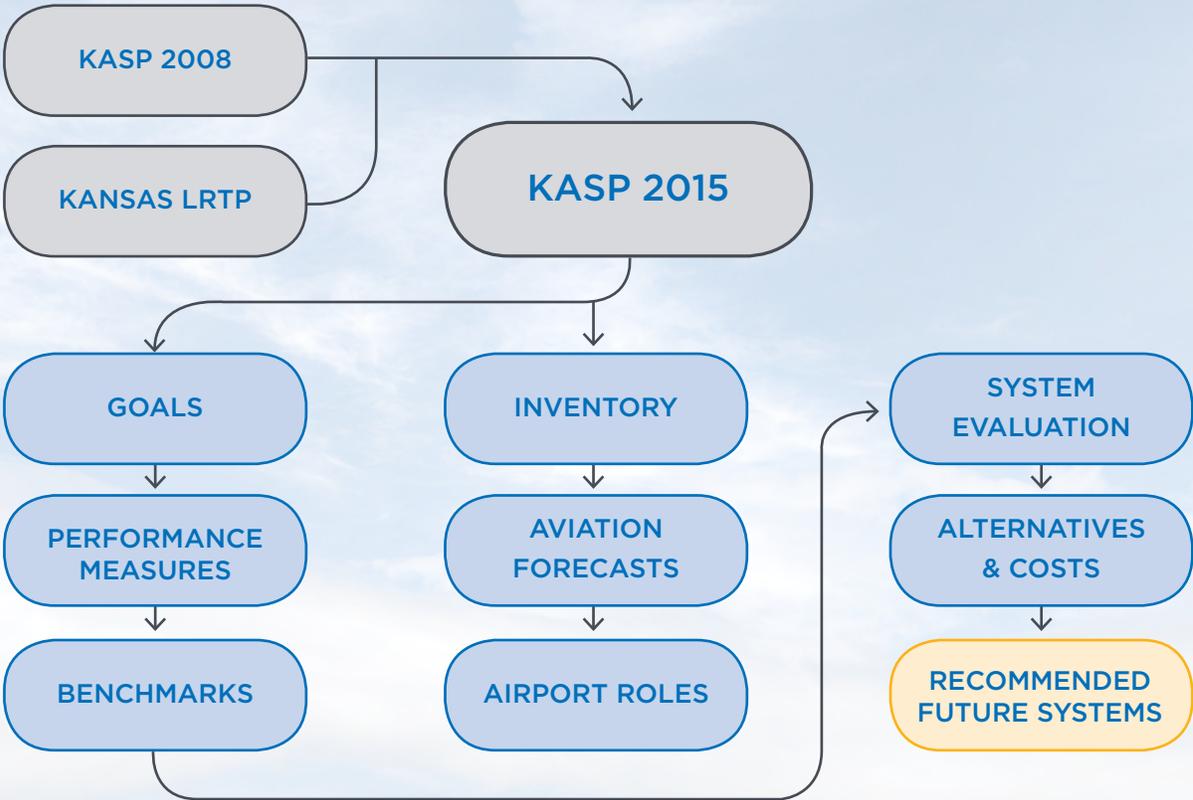
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	35	35	35	35
ANNUAL OPERATIONS	33,206	33,210	33,210	33,210

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Hutchinson Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,004	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ATIS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	150%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	286,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

HAYS REGIONAL AIRPORT
HAYS
HYS

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
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Division of Aviation

KASP OVERVIEW

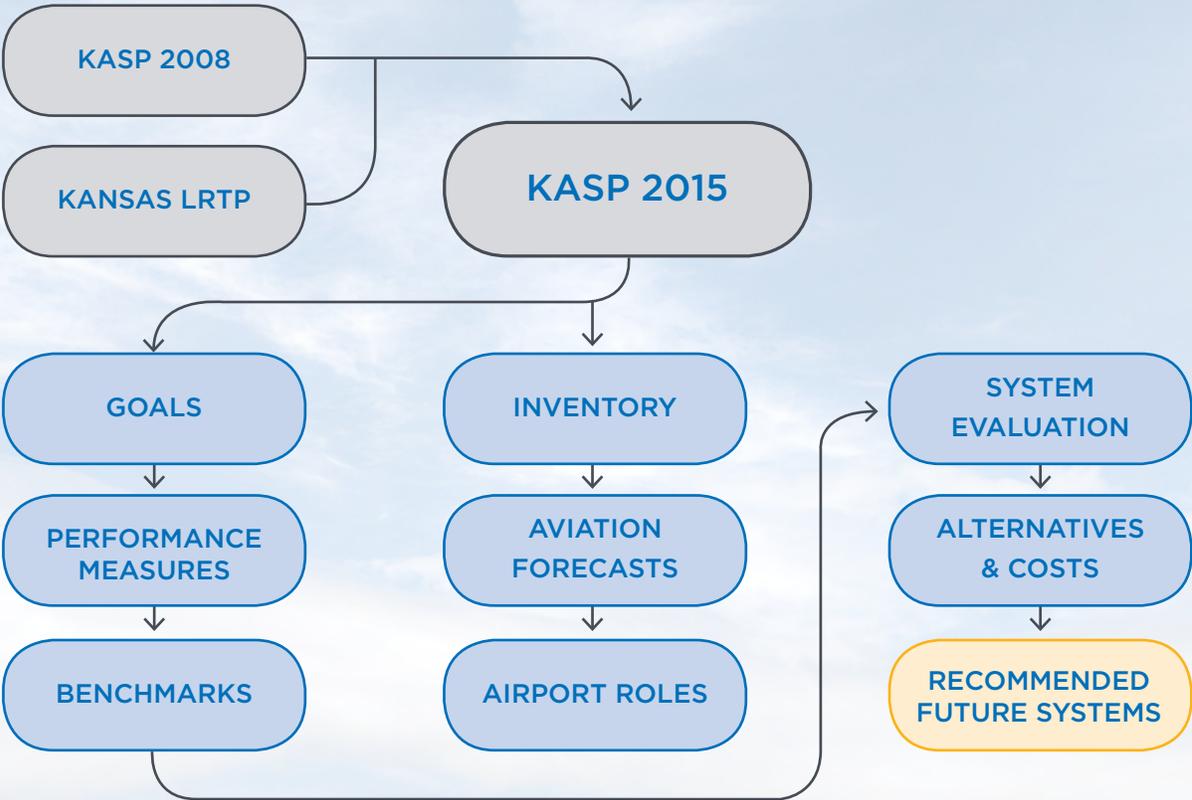
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Primary Nonhub

NPIAS
Yes

OWNERSHIP
Public

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- Population served
- Employment served
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- Industry groups served
- Gross Regional Product
- Retail sales
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- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	55	55	55	55
ANNUAL OPERATIONS	23,020	23,020	23,020	23,020
ANNUAL ENPLANEMENTS	8,405	8,405	8,405	8,405

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Hays Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	6,501	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	122%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	250,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

WICHITA DWIGHT D. EISENHOWER
NATIONAL AIRPORT
WICHITA
ICT

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

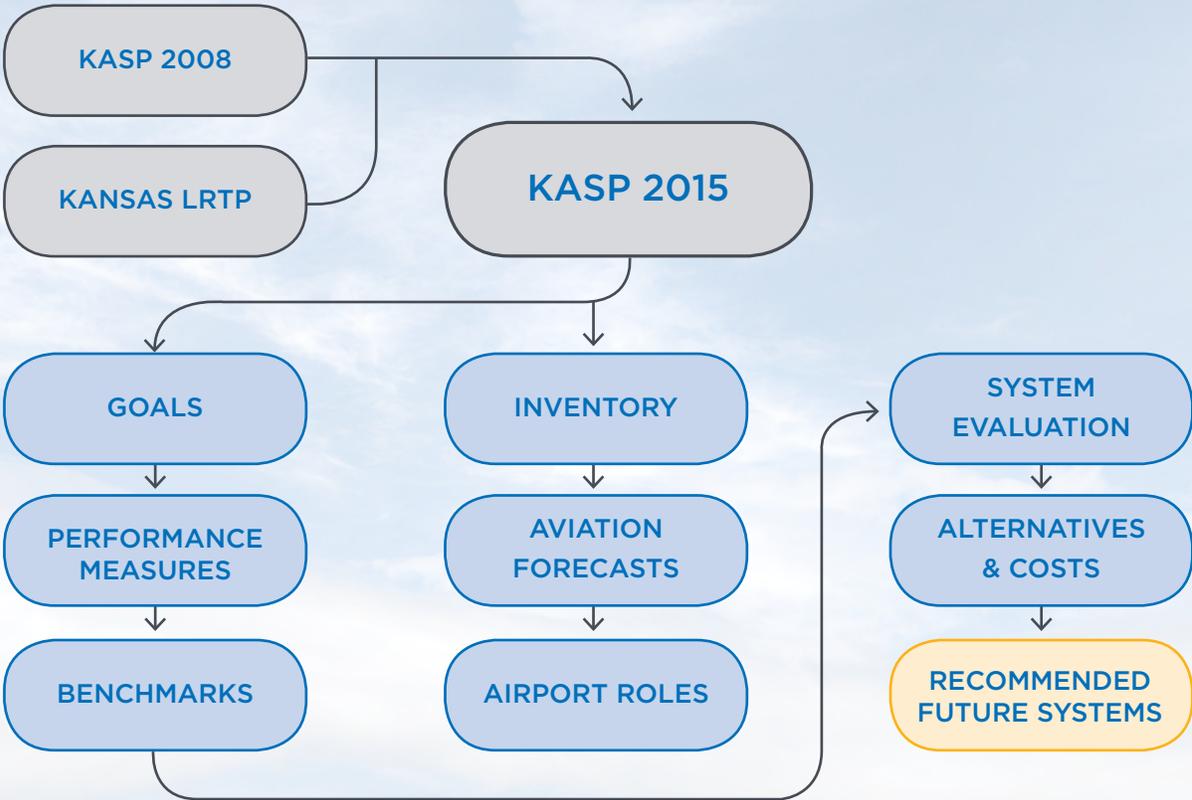
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Small Hub

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	213	224	236	266
ANNUAL OPERATIONS	64,449	53,260	54,215	56,182
ANNUAL ENPLANEMENTS	754,954	792,660	865,486	997,838

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Wichita Dwight D. Eisenhower National Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	10,301	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	150	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	610%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	3,000,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

INDEPENDENCE MUNICIPAL AIRPORT INDEPENDENCE

IDP

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

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KASP OVERVIEW

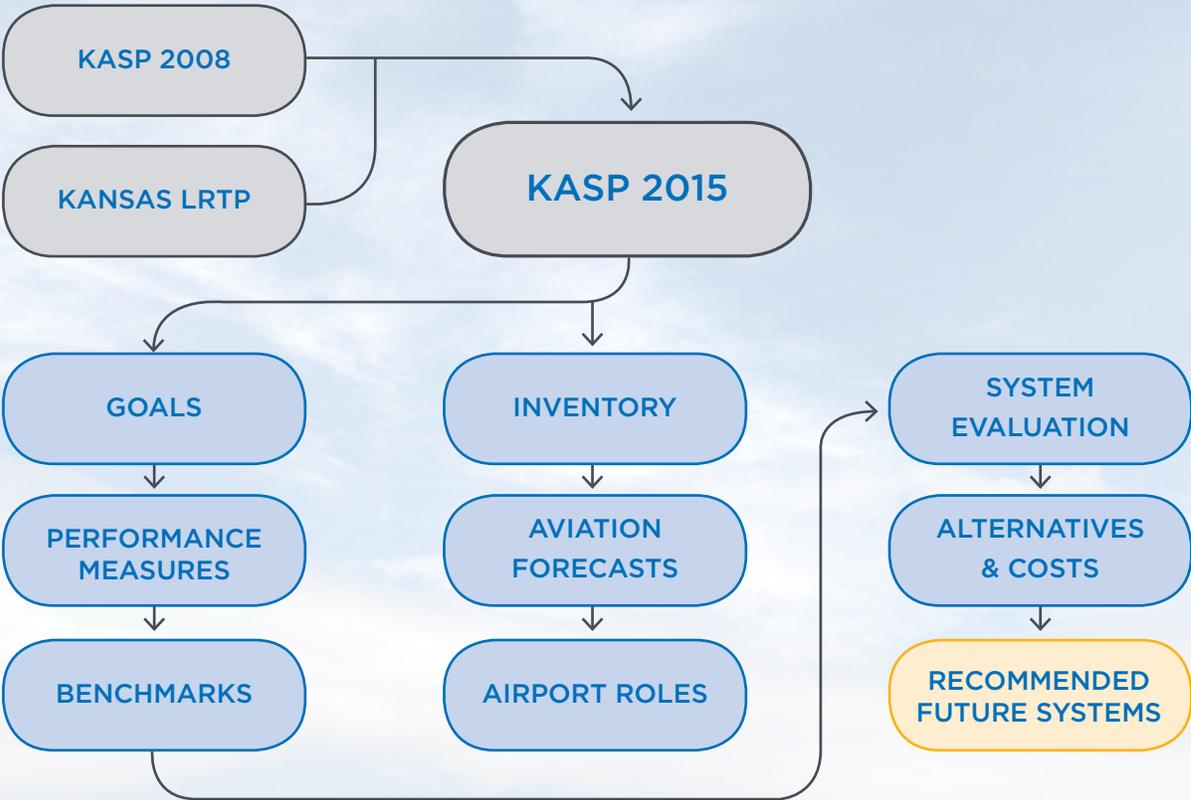
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The KASP has three primary objectives:

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- 2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	17	17	17	17
ANNUAL OPERATIONS	10,550	10,550	10,550	10,550

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Independence Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,501	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Yes	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	150%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	95,625	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

NEW CENTURY AIRCENTER OLATHE

IXD

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

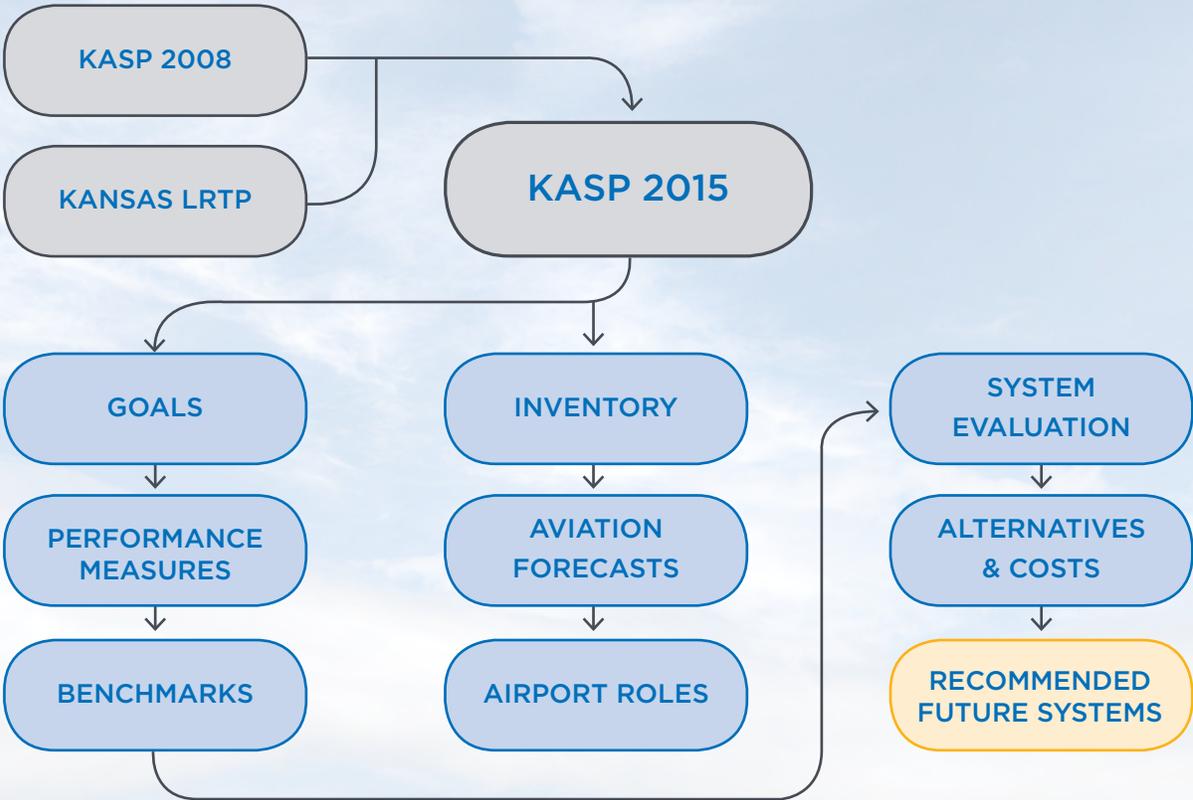
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
Reliever

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	72	76	80	88
ANNUAL OPERATIONS	46,541	49,130	51,710	56,880

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Olathe New Century AirCenter**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,339	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	150	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	260%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	545,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

STANTON COUNTY MUNICIPAL AIRPORT JOHNSON

JHN

Prepared by



In association with



KASP OVERVIEW

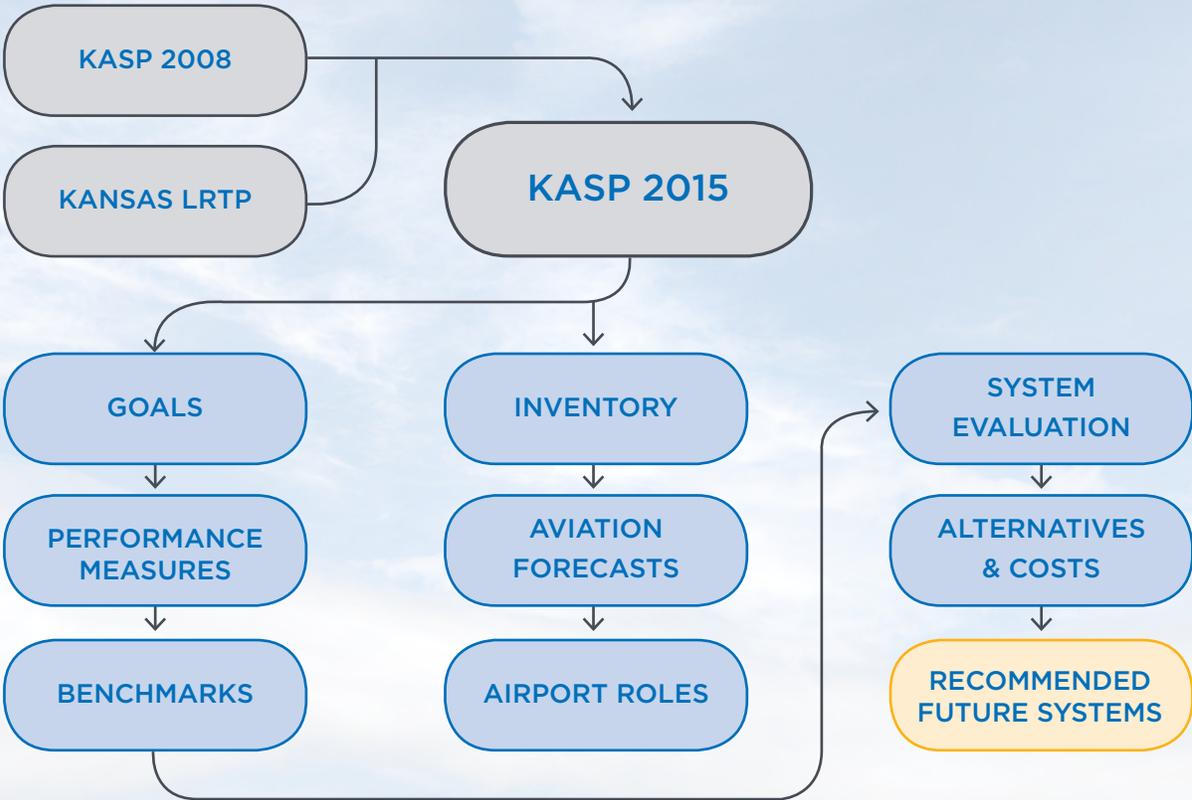
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	32	32	32	32
ANNUAL OPERATIONS	23,100	23,100	23,100	23,100

AIRPORT PERFORMANCE AND RECOMMENDATIONS

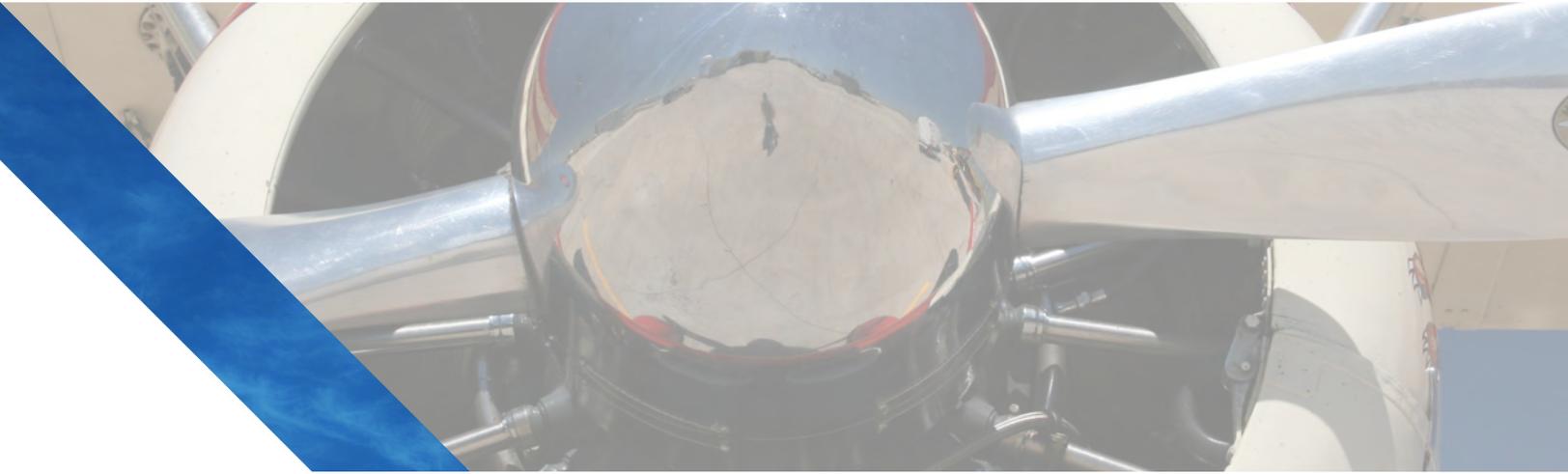
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Stanton County Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,200	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	176%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	50,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	\$0
AvGAS	Yes	Yes	Maintain Standard	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$36,400



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KANSAS AVIATION SYSTEM PLAN

GARDNER MUNICIPAL AIRPORT GARDNER

K34

Prepared by

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**CDM
Smith**

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KASP OVERVIEW

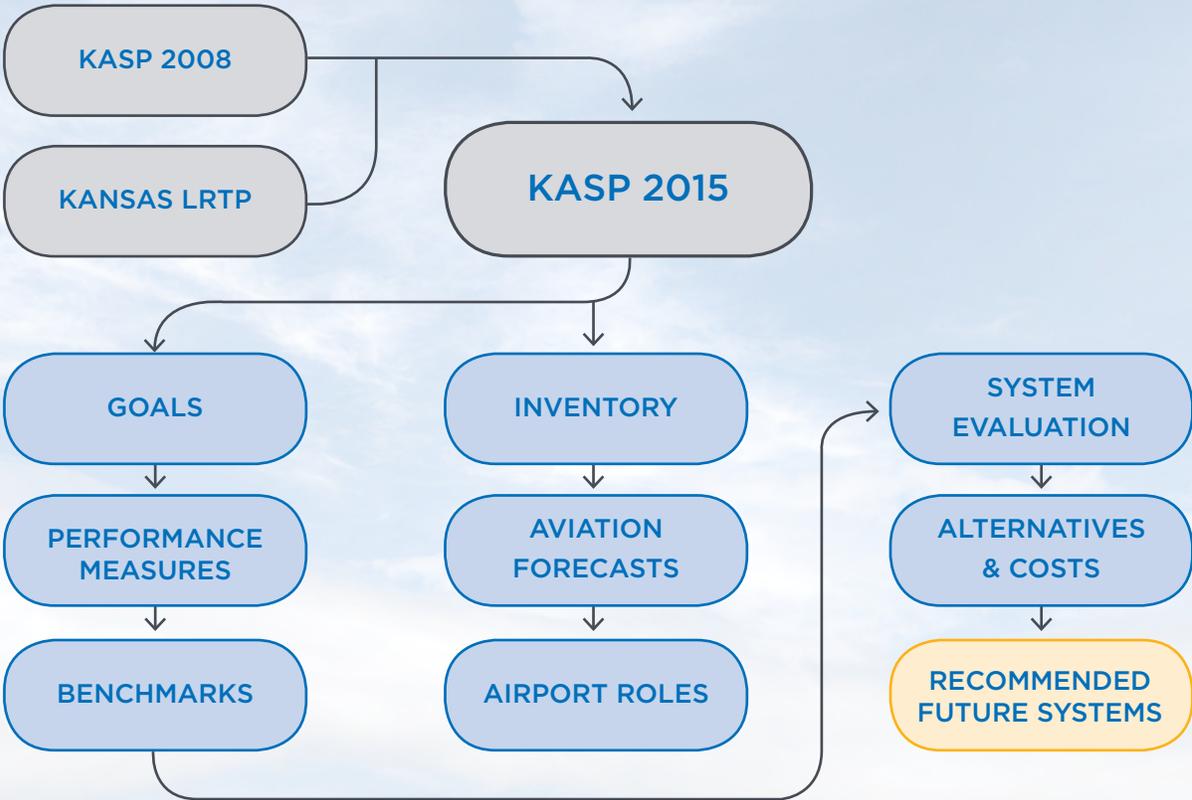
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	51	54	56	62
ANNUAL OPERATIONS	26,000	27,530	28,550	31,610

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Gardner Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,960	3,200	Extend 240 Feet	-
Primary Runway Width (Feet)	39	60	Widen 21 Feet	\$1,339,800
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	NSTD	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	163%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	80,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	No Recommendation	N/A
Total				\$1,657,400

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

MEDICINE LODGE AIRPORT MEDICINE LODGE

K51

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

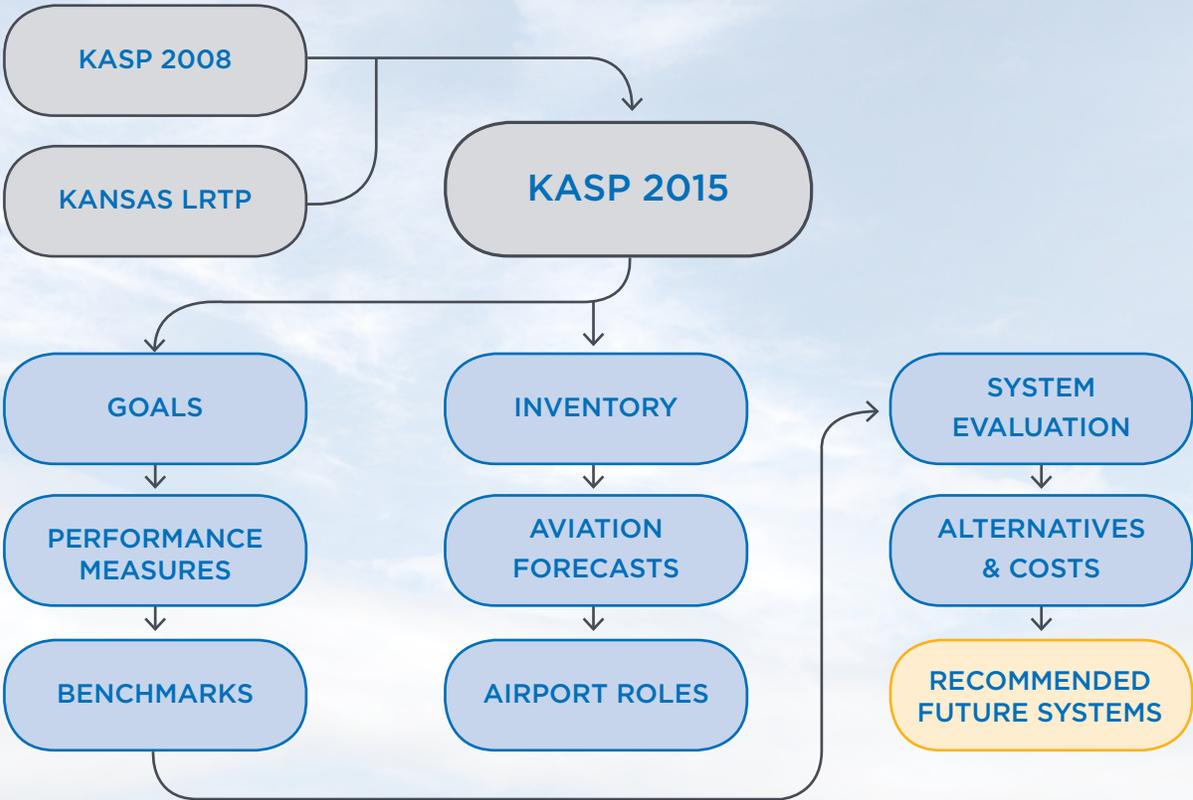
The Kansas Aviation System Plan (KASP) is an update of a previous plan completed in 2008, and works in concert with other important planning documents that include the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), KDOT's Long Range Transportation Plan (LRTP), and individual airport capital improvement programs, layout plans, and master plans.



The KASP has three primary objectives:

- 1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
- 2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	0	0	0	0
ANNUAL OPERATIONS	2,400	2,400	2,400	2,400

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

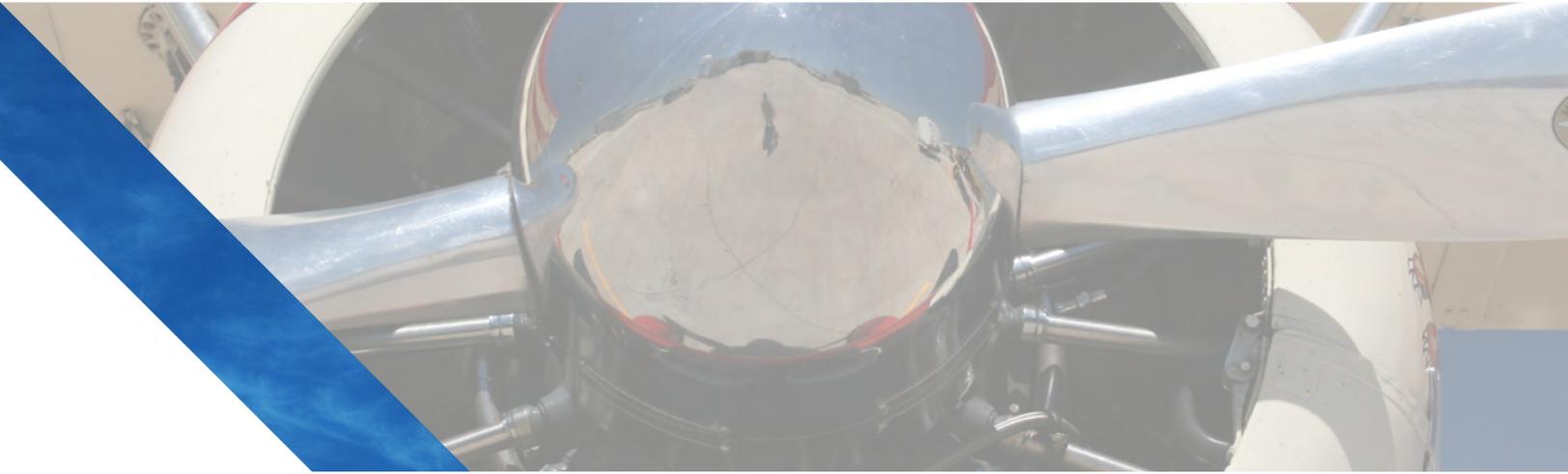
individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Medicine Lodge Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,200	4,000	Extend 800 Feet	-
Primary Runway Width (Feet)	42	75	Widen 33 Feet	\$2,898,000
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop IAP Approach	\$52,000
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	None	PAPI or VASI	Install PAPI	\$83,200
Runway Lighting	LIRL	MIRL	Install MIRL	\$332,000
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	See Note (1)	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	0	10,000	Construct 10,000 SF Apron	\$180,000
SERVICES				
Fuel				
Available 24/7	No	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Install AvGas	\$210,000
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$3,791,600

⁽¹⁾No Based Aircraft reported.



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KANSAS AVIATION SYSTEM PLAN

AMELIA EARHART MEMORIAL AIRPORT ATCHISON

K59

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In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

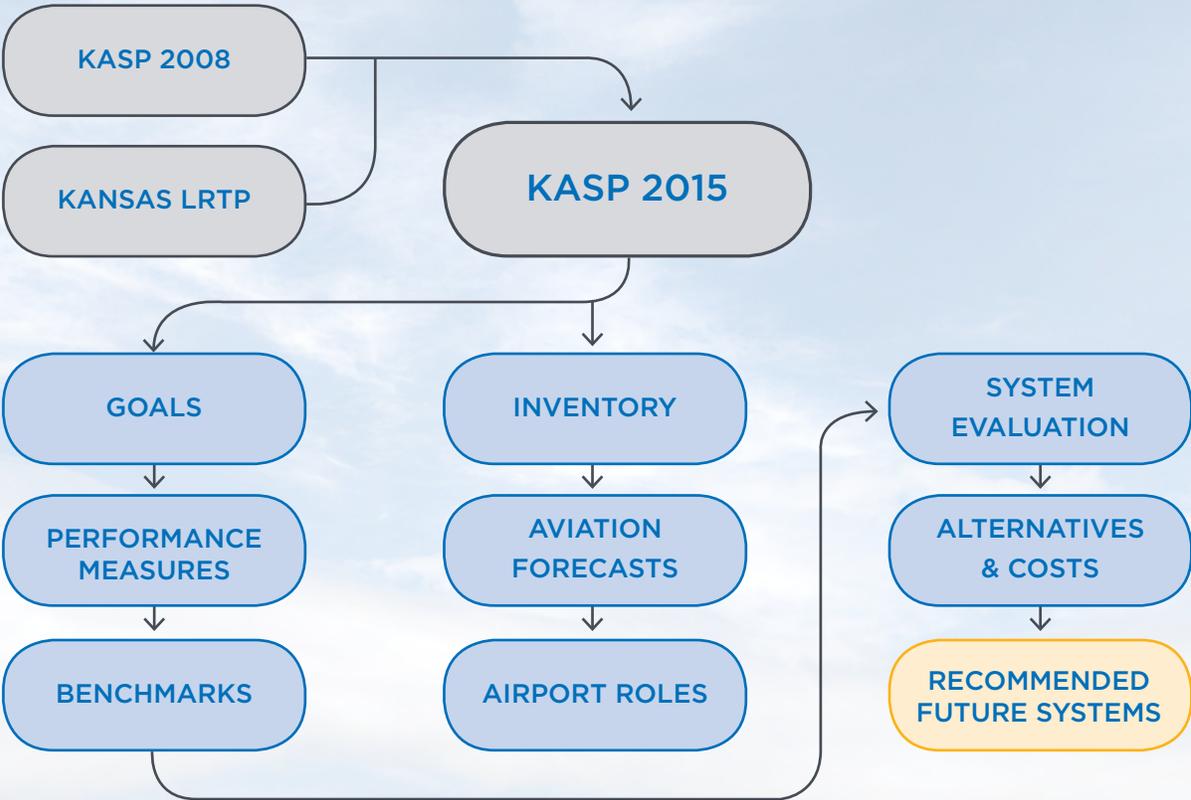
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2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	10	10	10	10
ANNUAL OPERATIONS	16,050	16,050	16,050	16,050

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Amelia Earhart Memorial Airport**.

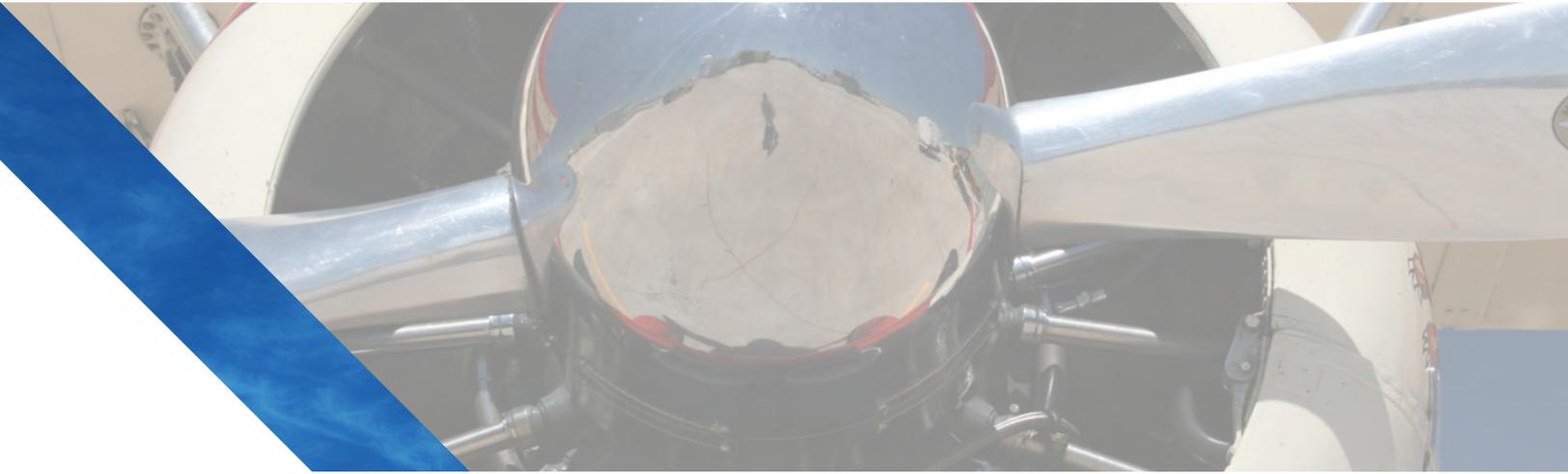
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,000	3,200	Extend 200 Feet	-
Primary Runway Width (Feet)	48	60	Widen 12 Feet	\$840,000
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	Maintain Standard	\$0
Wind Sock	Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	Maintain Standard	\$0
Runway Lighting	NSTD-LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	Maintain Standard	\$0
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	136%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	50,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	Maintain Standard	\$0
Jet A	No	Not an Objective	Maintain Standard	\$0
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,330,600

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

MORITZ MEMORIAL AIRPORT BELOIT

K61

Prepared by



In association with



KASP OVERVIEW

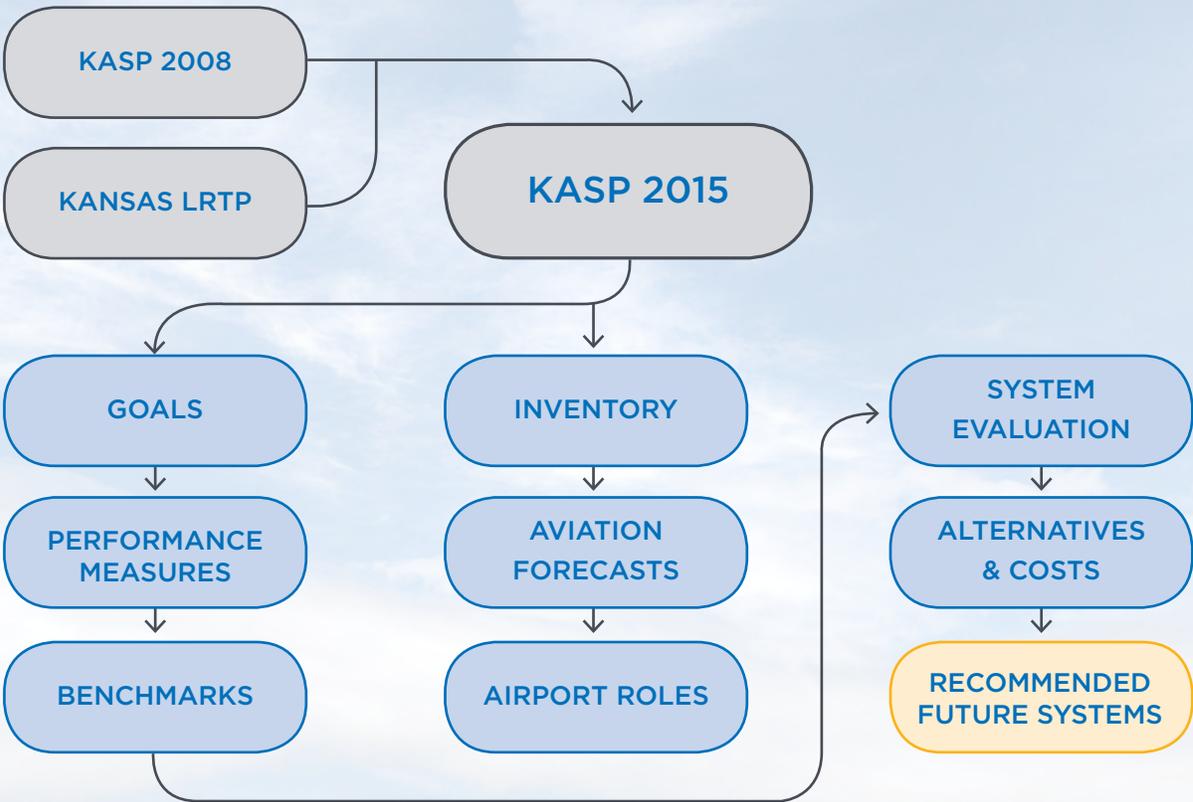
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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	20,000	20,000	20,000	20,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Moritz Memorial Airport**.

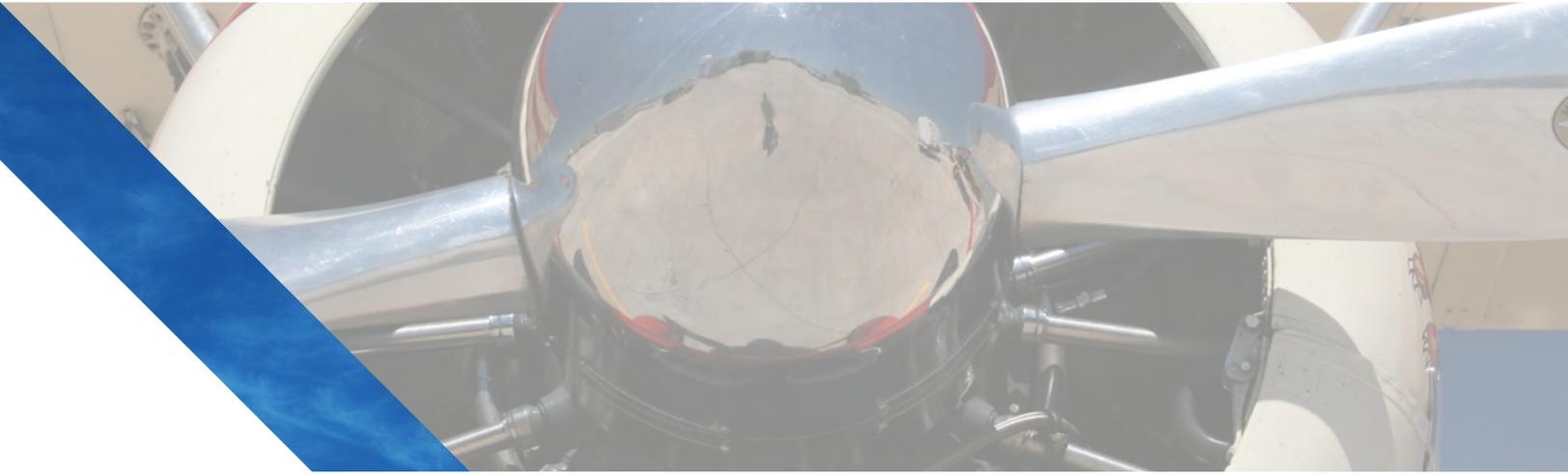
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,610	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	169%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	80,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$0

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

OSWEGO MUNICIPAL AIRPORT OSWEGO

K67

Prepared by

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**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

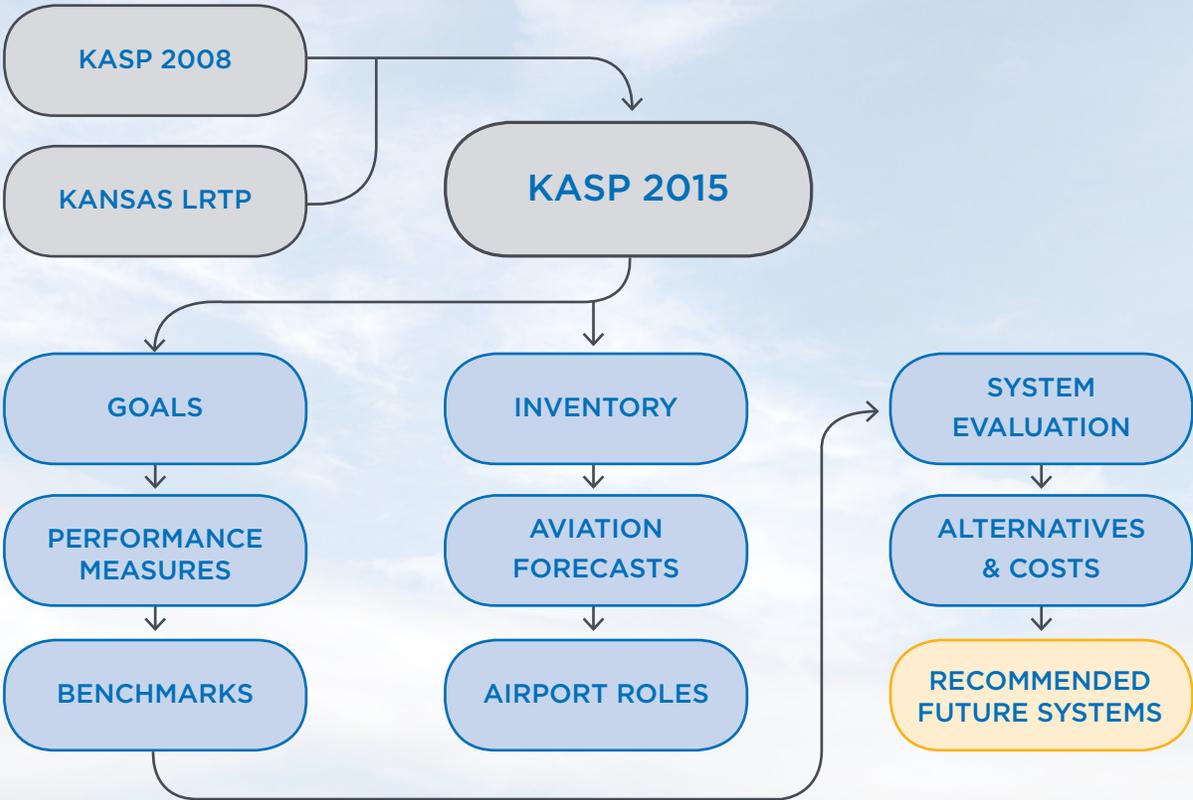
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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	4	4	4	4
ANNUAL OPERATIONS	600	600	600	600

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Oswego Municipal**.

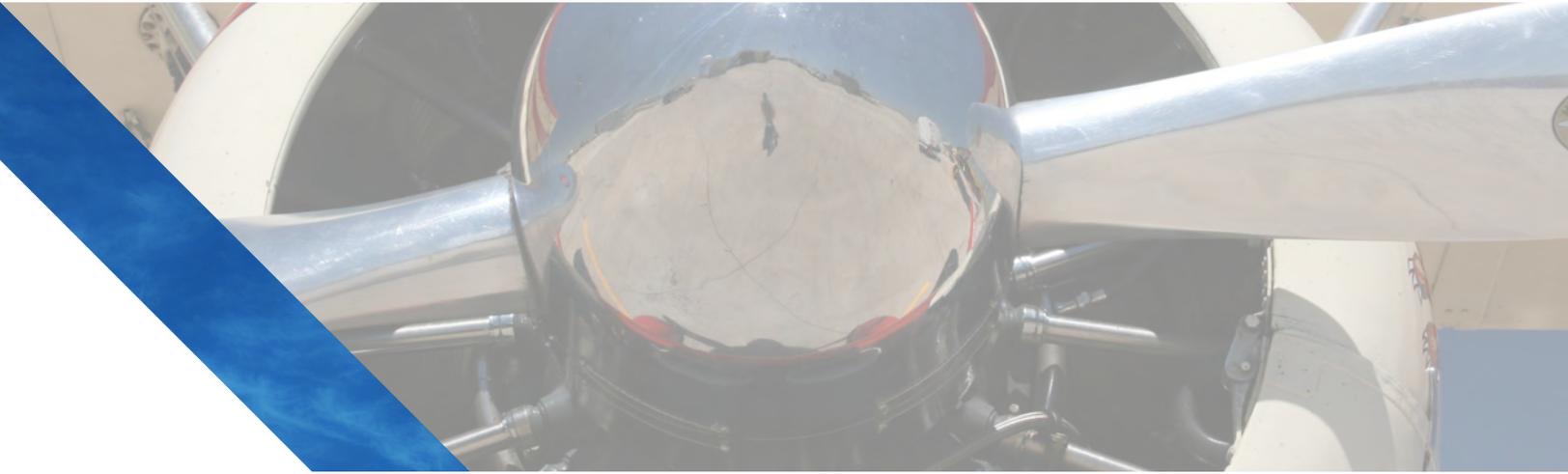
PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,500	3,200	Extend 700 Feet	-
Primary Runway Width (Feet)	50	60	Widen 10 Feet	\$1,306,500
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Add NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	400%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	0	10,000	Construct 10,000 Square Feet	\$180,000
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$2,029,100

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

GARNETT INDUSTRIAL AIRPORT GARNETT

K68

Prepared by

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In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

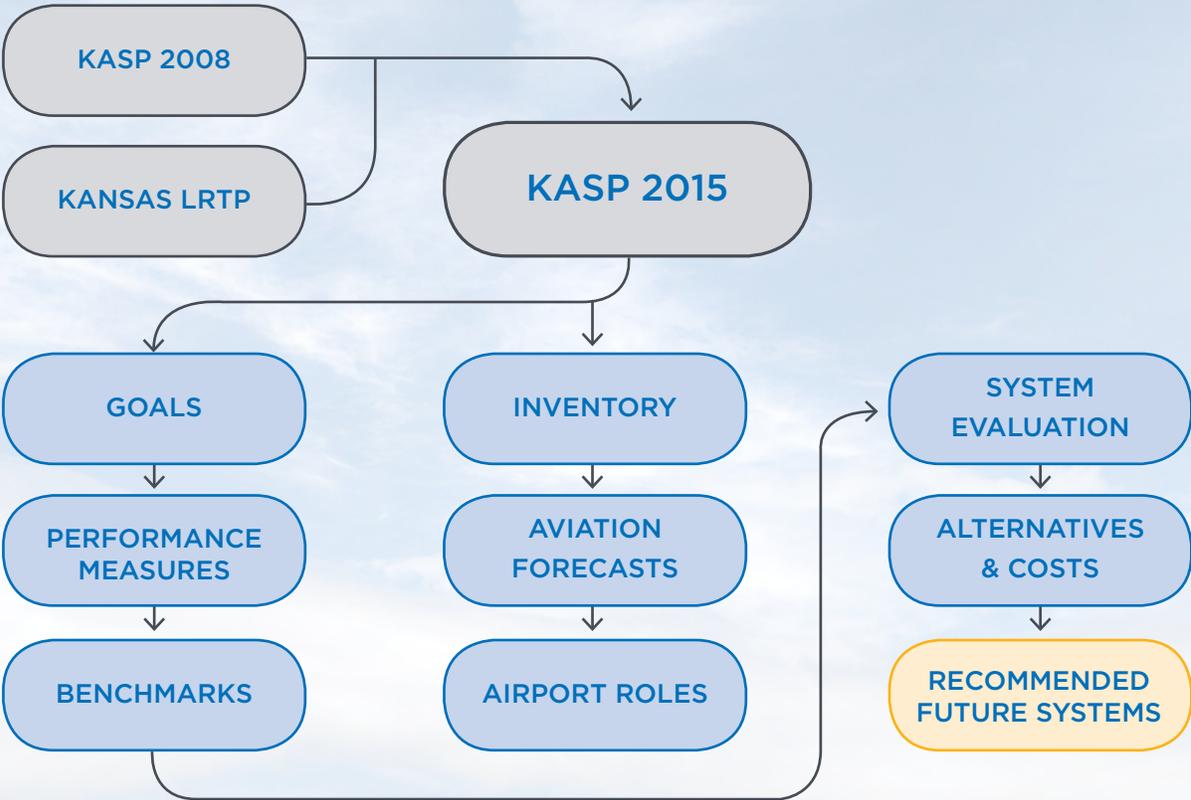
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	18	18	18	18
ANNUAL OPERATIONS	1,500	1,500	1,500	1,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Garnett Industrial Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,660	3,200	Extend 540 Feet	-
Primary Runway Width (Feet)	45	60	Widen 15 Feet	\$1,265,250
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Light Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	83%	100% Based Aircraft	Construct Space for 3 Aircraft	\$267,360
Apron Capacity (SF)	87,500	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$2,075,210

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

ABILENE MUNICIPAL AIRPORT ABILINE

K78

Prepared by

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**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

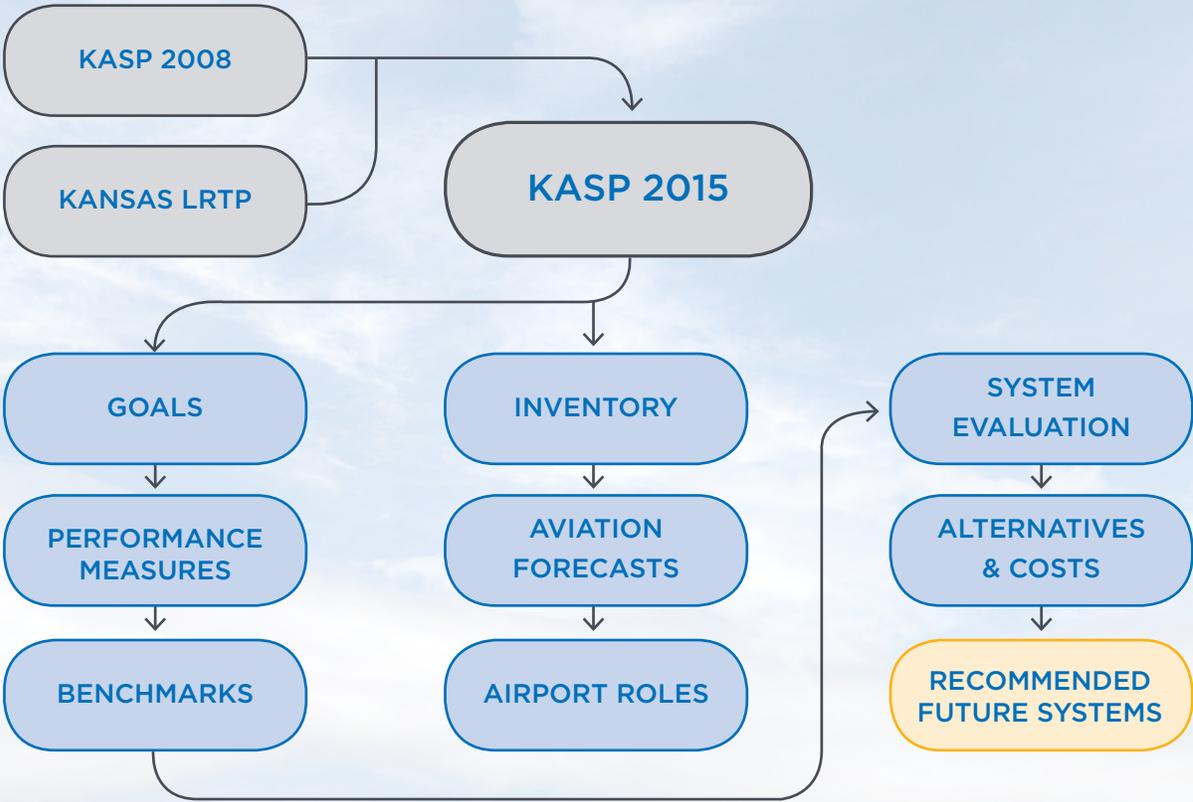
The Kansas Aviation System Plan (KASP) is an update of a previous plan completed in 2008, and works in concert with other important planning documents that include the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), KDOT’s Long Range Transportation Plan (LRTP), and individual airport capital improvement programs, layout plans, and master plans.



The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	19	19	19	20
ANNUAL OPERATIONS	37,500	37,500	37,500	39,470

AIRPORT PERFORMANCE AND RECOMMENDATIONS

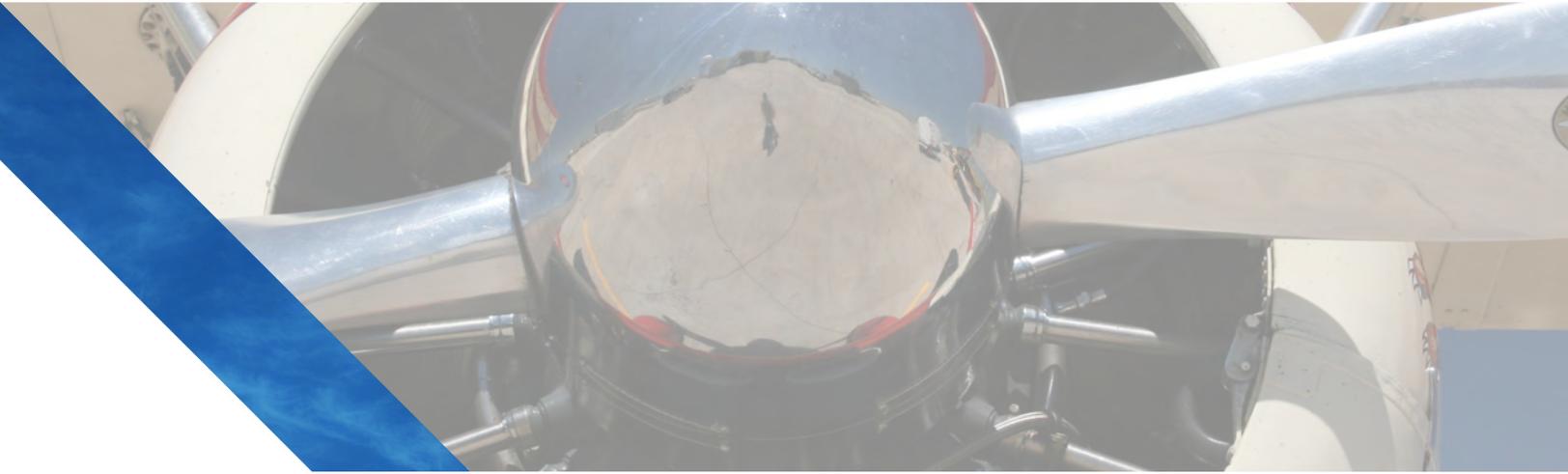
System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Abilene Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,100	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	100%	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	40,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	\$0
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

MIAMI COUNTY AIRPORT PAOLA

K81

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

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KASP OVERVIEW

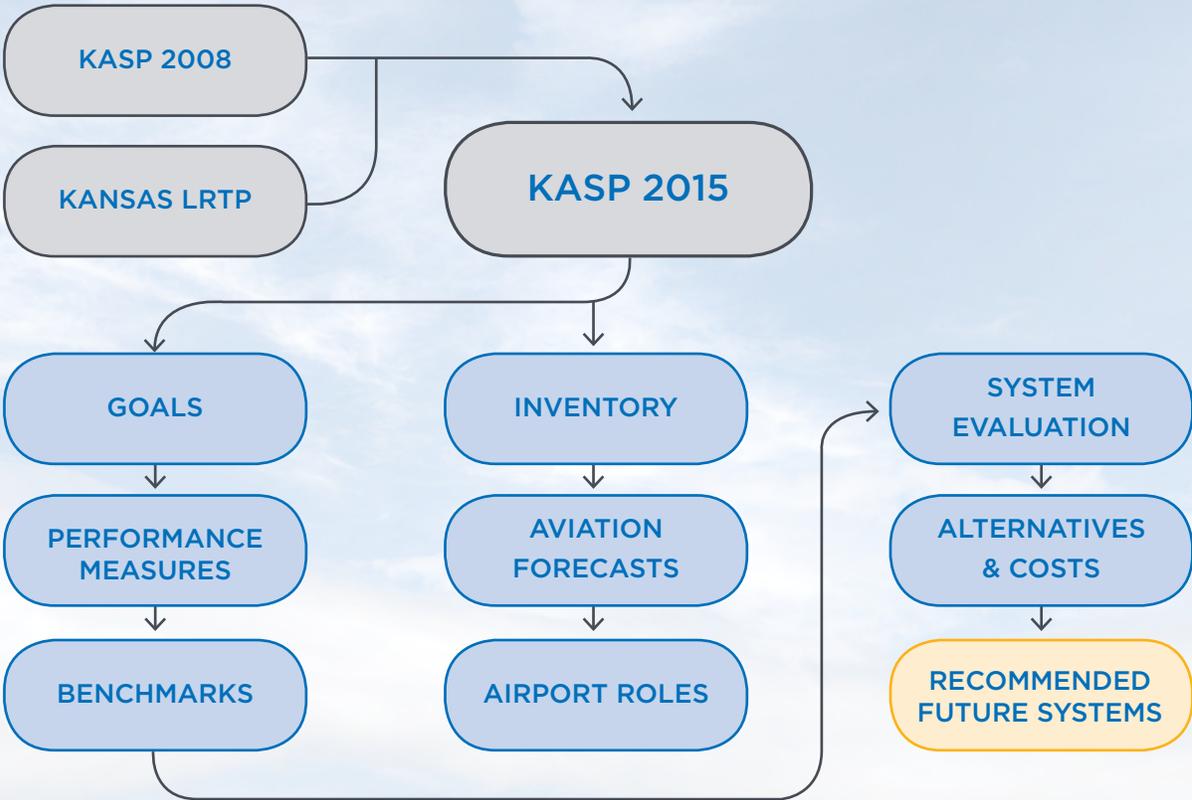
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The KASP has three primary objectives:

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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	18	19	20	22
ANNUAL OPERATIONS	9,900	10,450	11,000	12,100

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Miami County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,398	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Light Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	253%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	60,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$225,000

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

SMITH CENTER MUNICIPAL AIRPORT SMITH CENTER

K82

Prepared by

BURNS  **MCDONNELL**

**CDM
Smith**

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Kansas
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Division of Aviation

KASP OVERVIEW

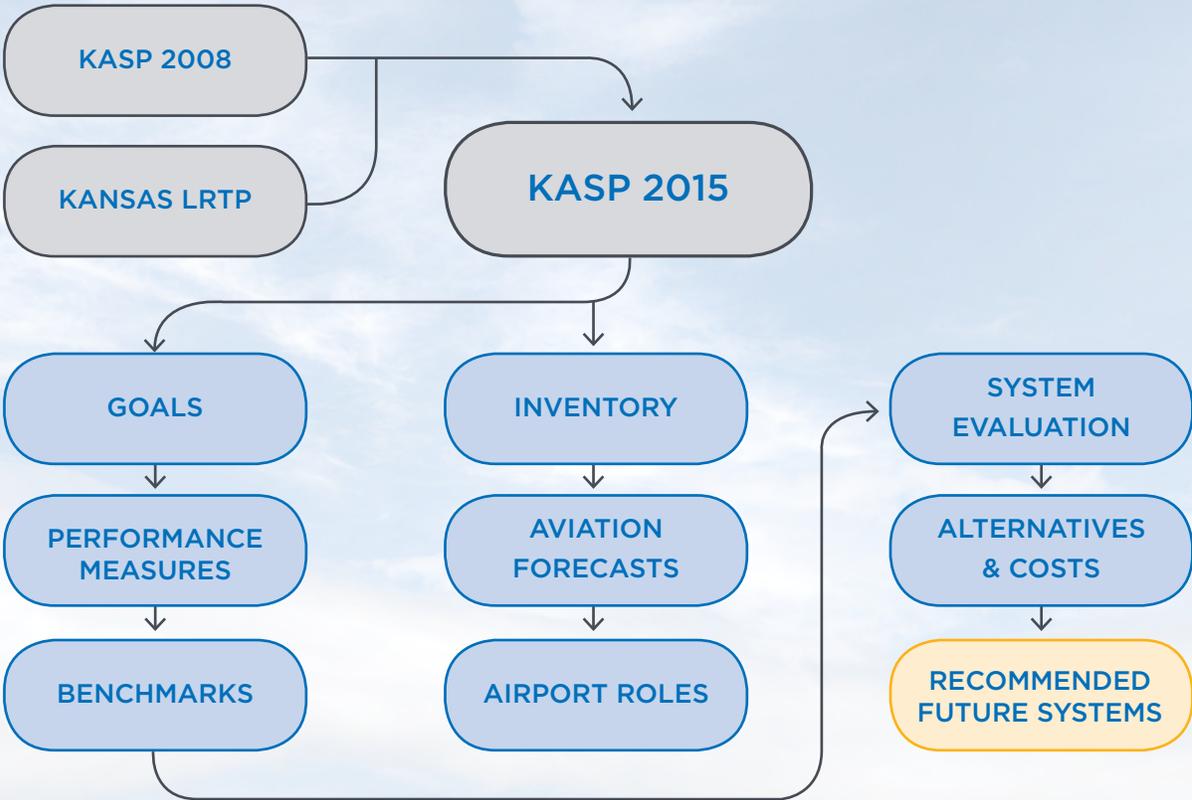
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS



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These goals are as follows:

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- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education
- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	4,000	4,000	4,000	4,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

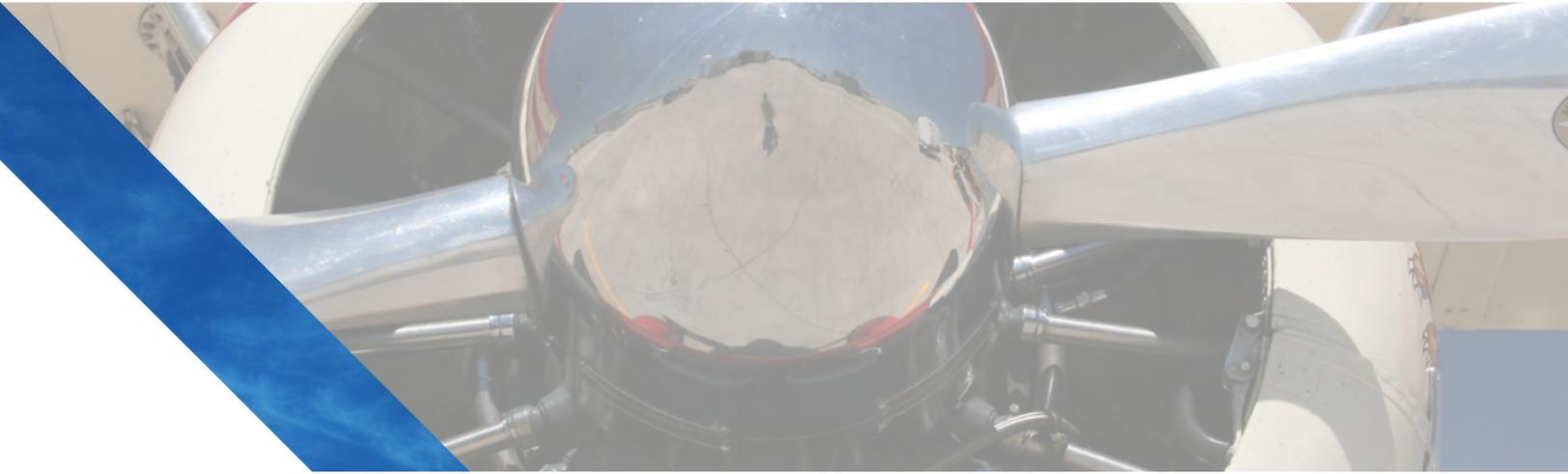
System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Smith Center Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,400	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	142%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	75,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

SABETHA MUNICIPAL AIRPORT SABETHA

K83

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

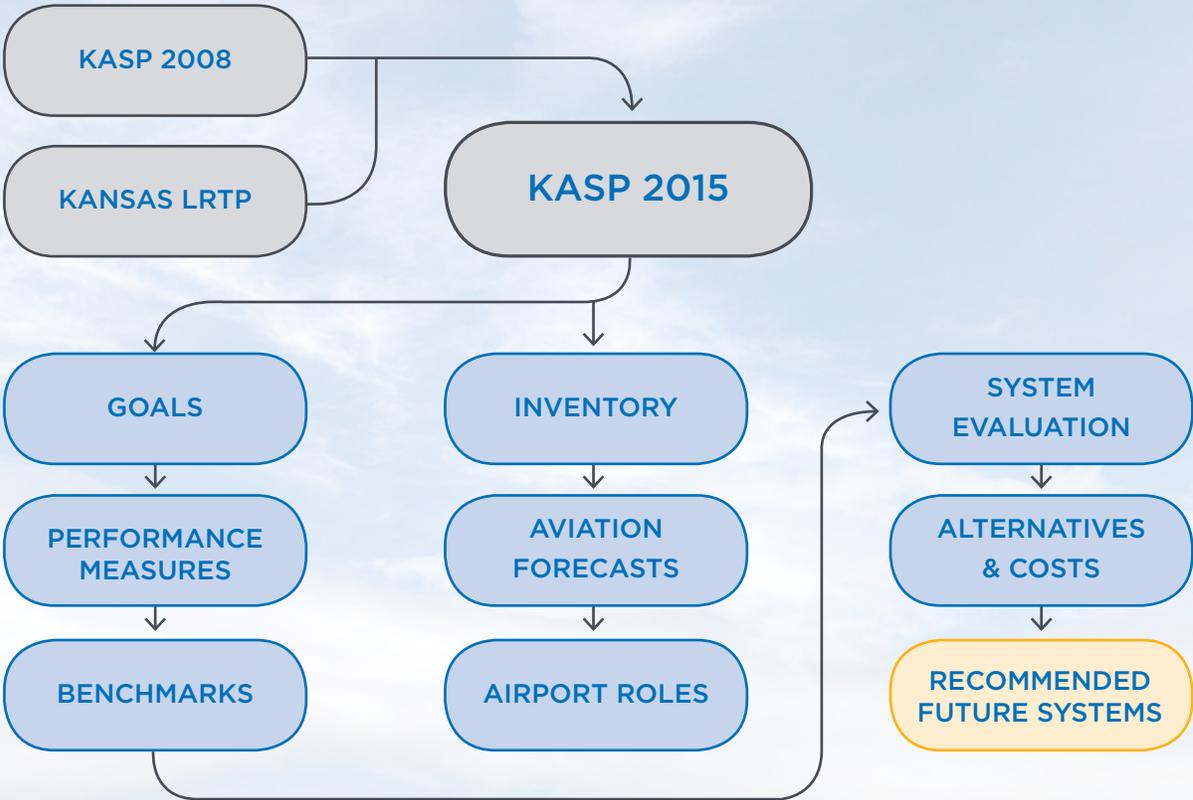
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	13	13	13	13
ANNUAL OPERATIONS	8,500	8,500	8,500	8,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Sabetha Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,100	3,200	Extend 100 Feet	-
Primary Runway Width (Feet)	40	60	Widen 20 Feet	\$1,326,000
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Visual	Any IAP	Develop NPI Approach	\$52,000
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	LIRL	MIRL	Install MIRL	\$265,600
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	No	Yes	Maintain Standard	\$0
Restroom	No	Yes	Maintain Standard	N/A
Hangar Capacity	138%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	0	10,000	Construct 10,000 SF of Apron Space	\$180,000
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,823,600

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

ALLEN COUNTY AIRPORT IOLA

K88

Prepared by

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**CDM
Smith**

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Division of Aviation

KASP OVERVIEW

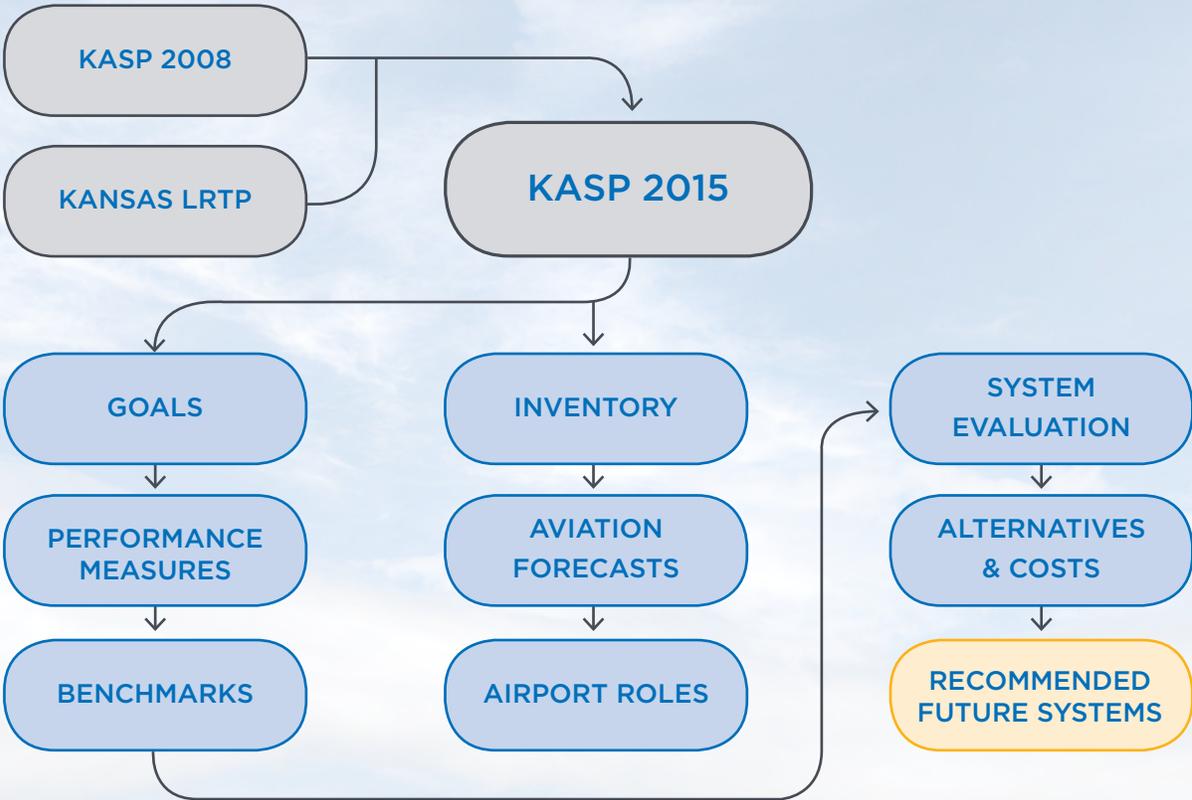
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

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- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	10	10	10	10
ANNUAL OPERATIONS	16,272	16,270	16,270	16,270

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Allen County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,501	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	230%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	57,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$261,400



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KANSAS AVIATION SYSTEM PLAN

MID-AMERICA REGIONAL AIRPORT LIBERAL

LBL

Prepared by

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**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

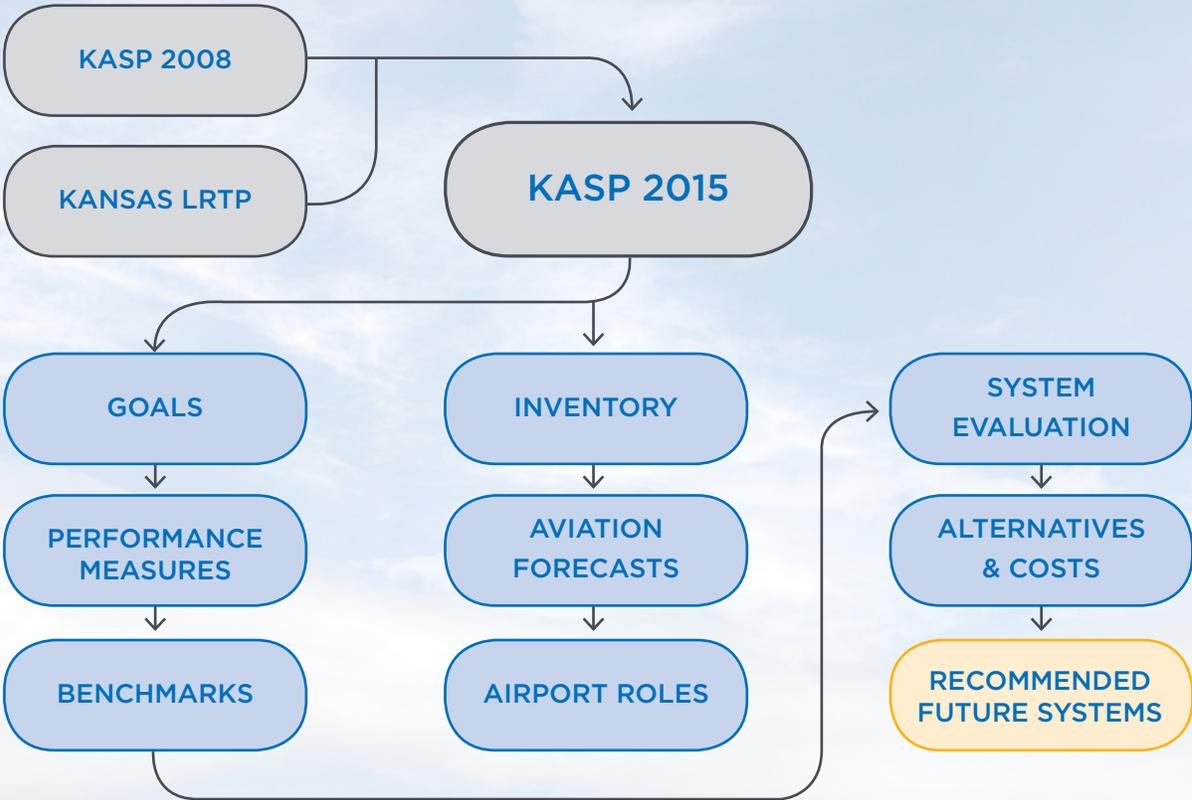
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Primary Nonhub

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

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- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	50	51	52	52
ANNUAL OPERATIONS	40,000	40,000	40,000	40,000
ANNUAL ENPLANEMENTS	4,331	2,915	2,985	3,125

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Mid-America Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,105	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	314%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	700,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

LARNED-PAWNEE COUNTY AIRPORT LARNED

LQR

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

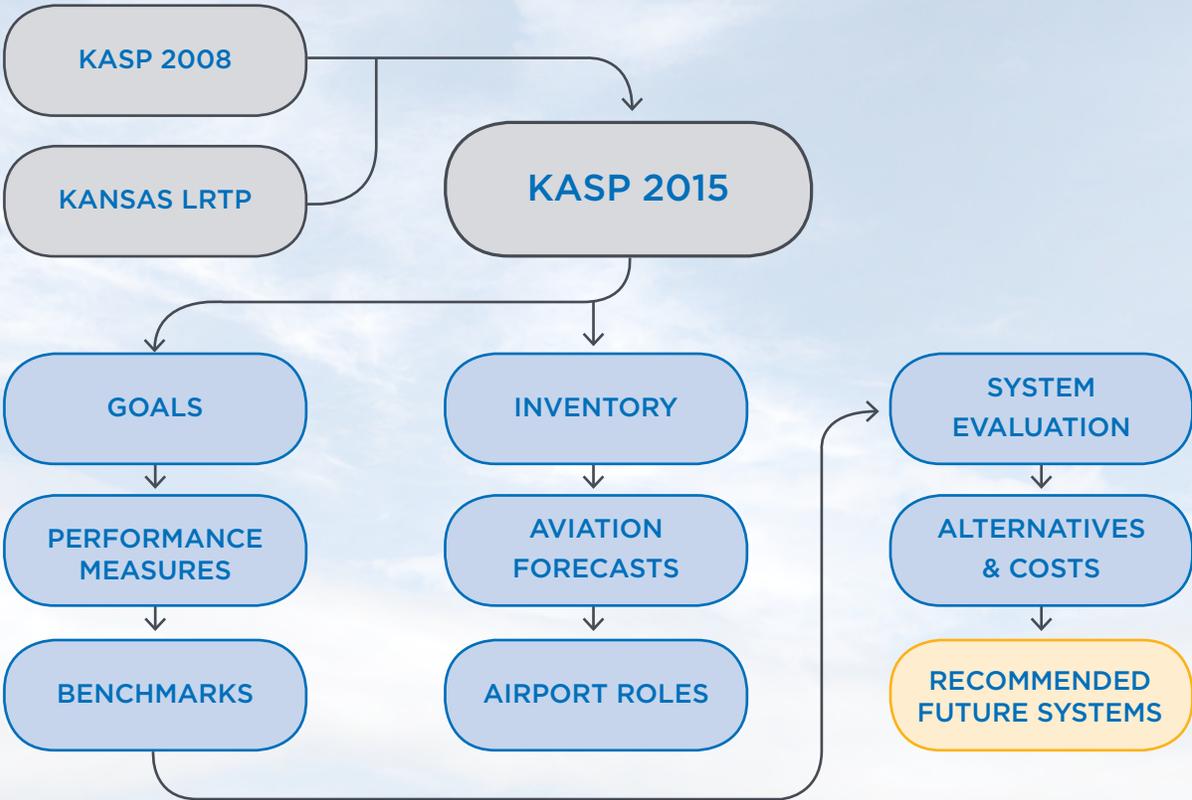
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The KASP has three primary objectives:

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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	12	12	12	12
ANNUAL OPERATIONS	11,900	11,900	11,900	11,900

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Larned-Pawnee County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,201	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	246%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	120,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

LAWRENCE MUNICIPAL AIRPORT LAWRENCE

LWC

Prepared by

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**CDM
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KASP OVERVIEW

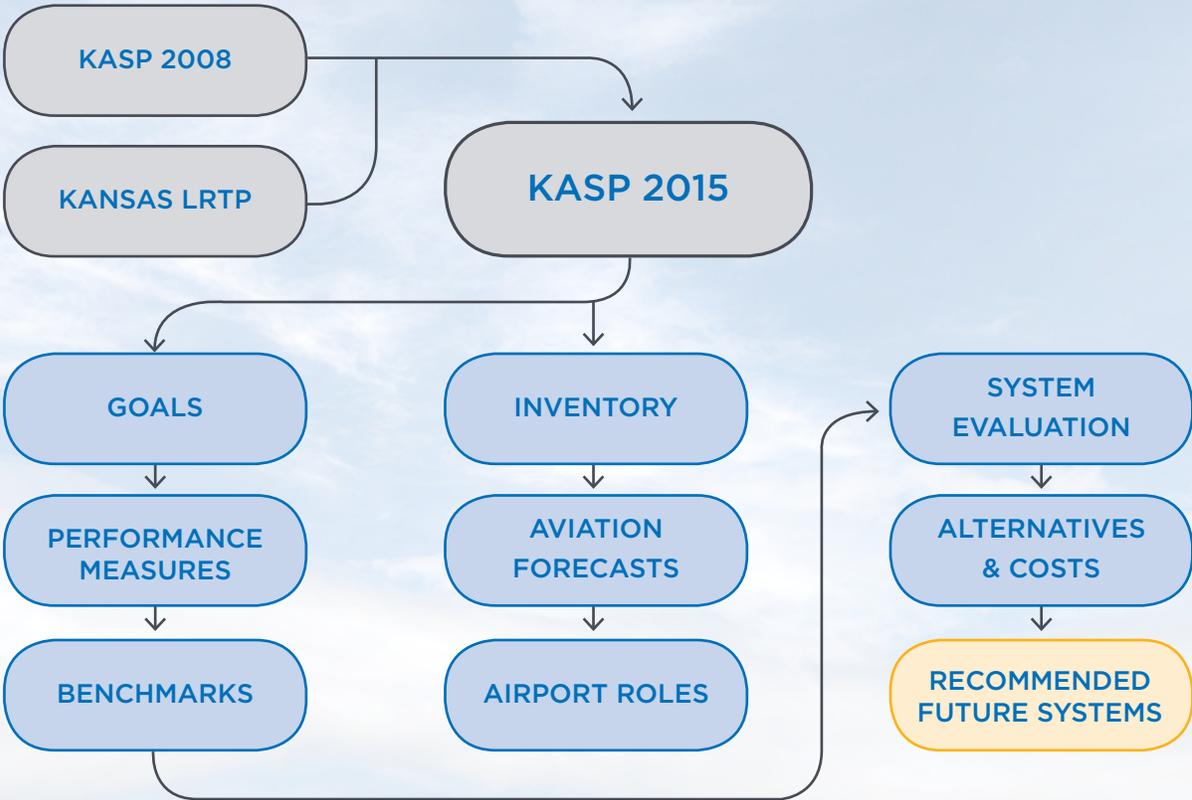
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The KASP has three primary objectives:

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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	50	53	55	61
ANNUAL OPERATIONS	32,550	34,500	35,810	39,710

AIRPORT PERFORMANCE AND RECOMMENDATIONS

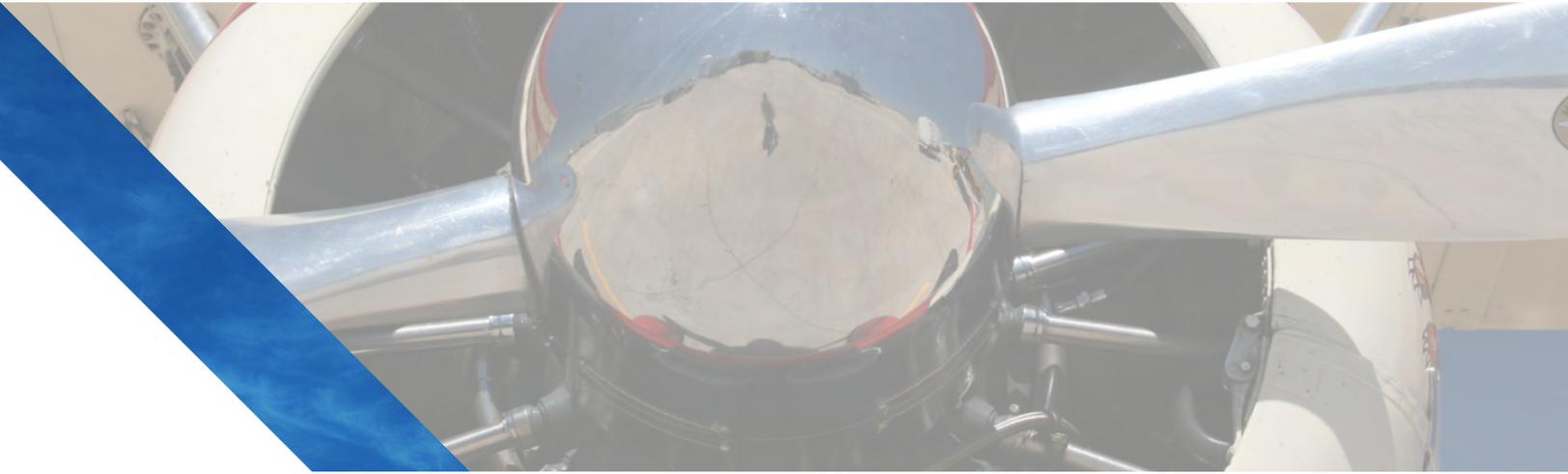
System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Lawrence Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,700	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	100	Widen 25 Feet	\$3,063,750
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	151%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	280,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$3,063,750



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KANSAS AVIATION SYSTEM PLAN

LYONS-RICE COUNTY MUNICIPAL AIRPORT

LYONS

LYO

Prepared by



In association with



KASP OVERVIEW

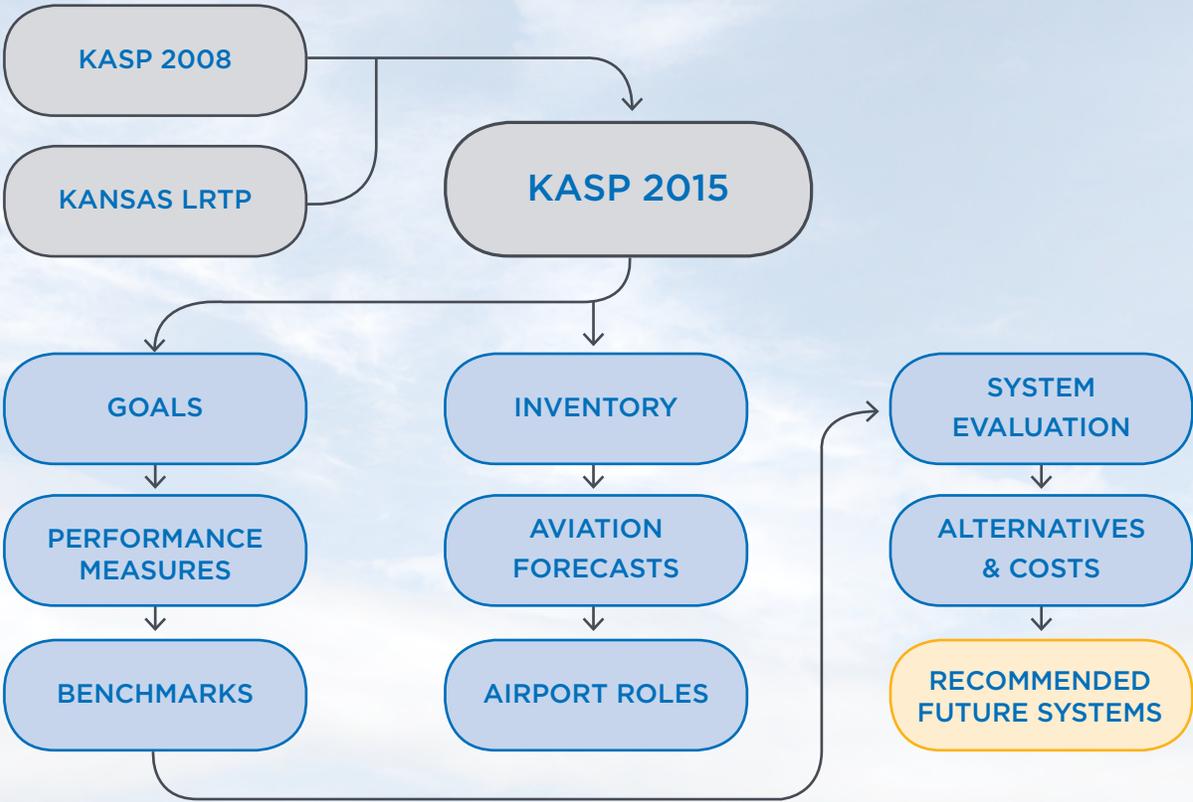
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	11	11	11	11
ANNUAL OPERATIONS	12,000	12,000	12,000	12,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Lyons-Rice County Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	2,999	3,200	Extend RW 17R/35L 201 Feet	\$263,813
Primary Runway Width (Feet)	75	60	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	108%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	72,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$488,813

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

MEADE MUNICIPAL AIRPORT MEADE

MEJ

Prepared by

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**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

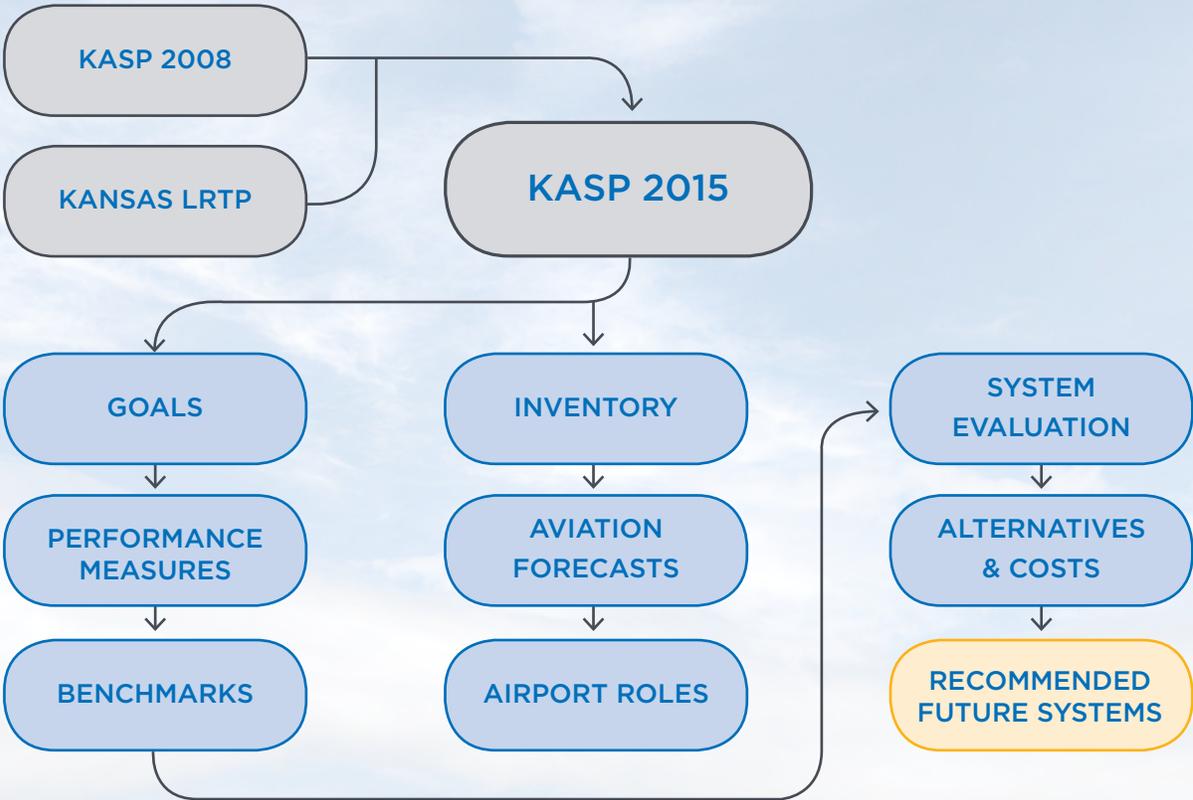
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	14	14	14	14
ANNUAL OPERATIONS	5,000	5,000	5,000	5,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Meade Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,800	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turn Arounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	136%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	43,420	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$36,400



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KANSAS AVIATION SYSTEM PLAN

MANHATTAN REGIONAL AIRPORT MANHATTAN

MHK

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**CDM
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KASP OVERVIEW

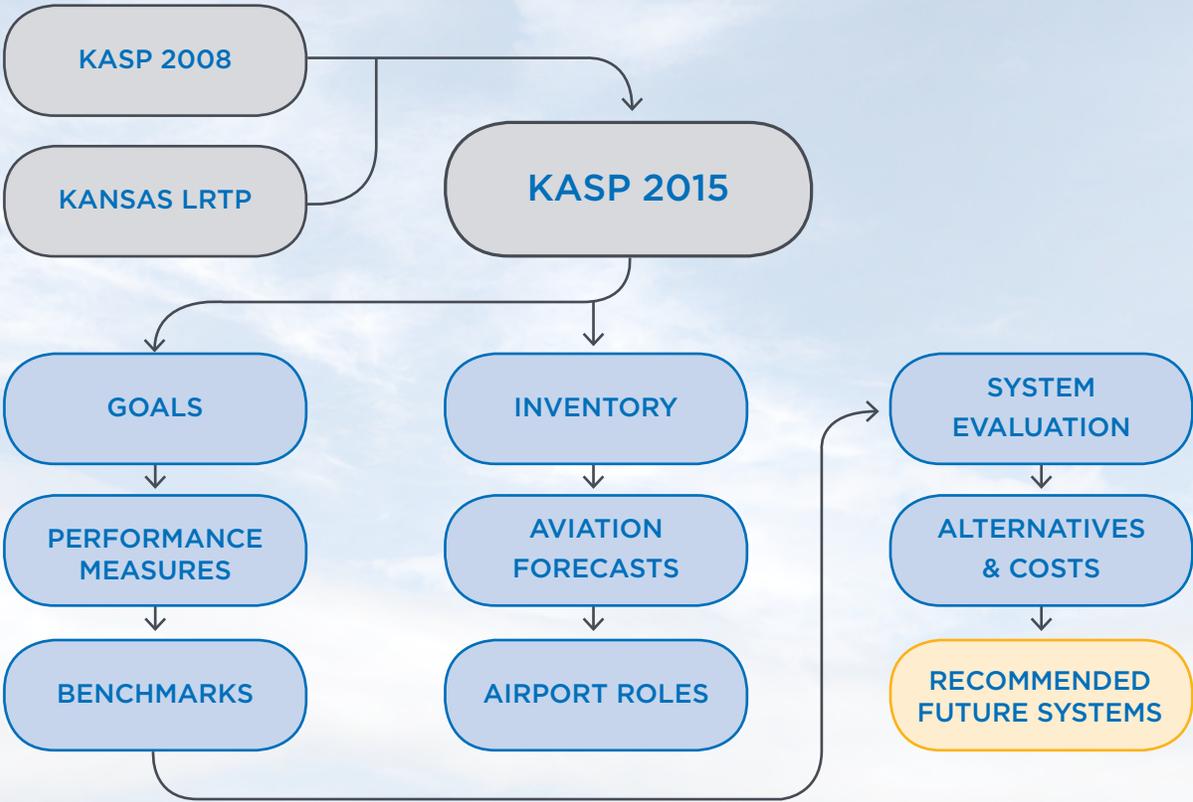
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Primary Nonhub
NPIAS
Yes

OWNERSHIP
Public

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- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	46	49	53	63
ANNUAL OPERATIONS	19,067	20,446	20,701	21,222
ANNUAL ENPLANEMENTS	66,249	70,904	80,005	101,981

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Manhattan Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	7,000	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	150	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	148%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	700,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AVGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

McPHERSON AIRPORT
McPHERSON

MPR

Prepared by

BURNS  **McDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

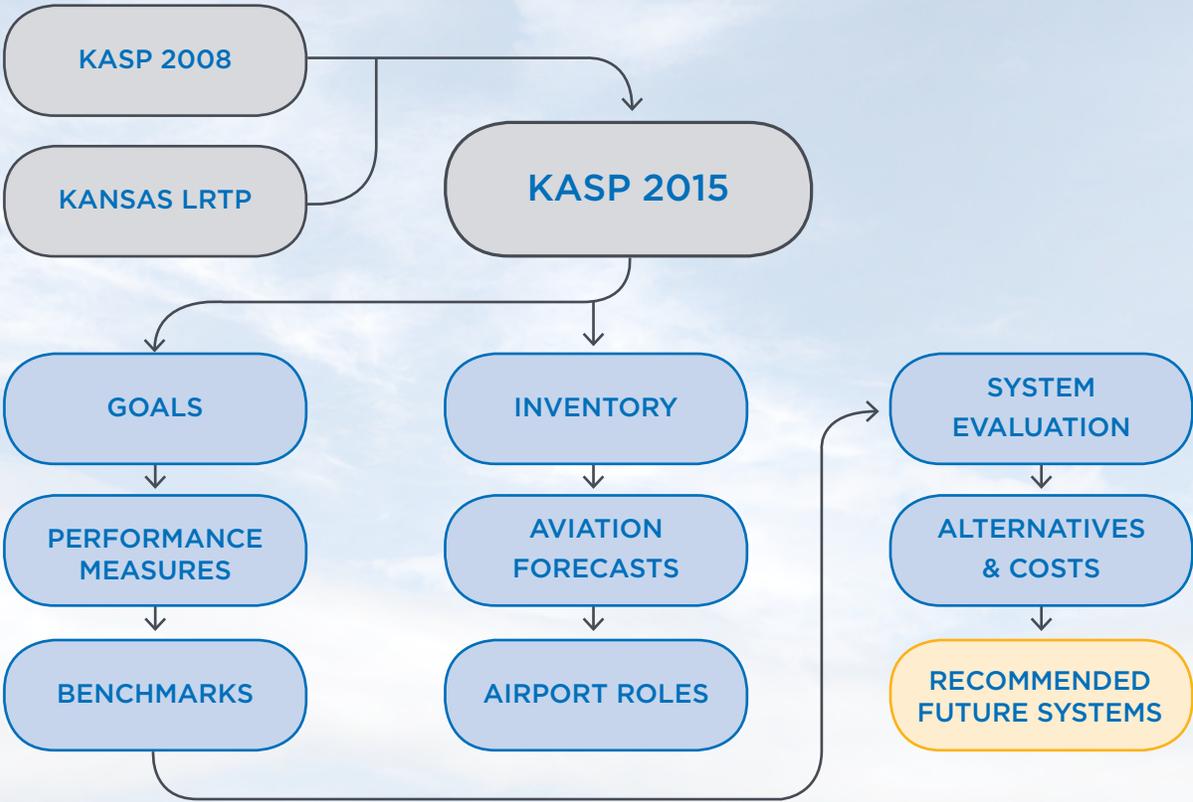
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	25	25	25	25
ANNUAL OPERATIONS	14,000	14,000	14,000	14,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **McPherson Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,502	5,000	No Recommendation	\$0
Primary Runway Width (Feet)	100	100	No Recommendation	\$0
Primary Runway Surface	Concrete	Paved	No Recommendation	\$0
Taxiway Type	Full Parallel	Full Parallel	No Recommendation	\$0
Best IAP	APV	APV	No Recommendation	\$0
Rotating Beacon	Yes	Yes	No Recommendation	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	No Recommendation	\$0
VGSI	PAPI	PAPI or VASI	No Recommendation	\$0
Runway Lighting	MIRL	MIRL	No Recommendation	\$0
ALS or REILs	REILs	ALS or REILs	No Recommendation	\$0
Weather Reporting	AWOS-3	Automated	No Recommendation	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	No Recommendation	\$0
Restroom	Yes	Yes	No Recommendation	N/A
Hangar Capacity	61%	100% Based Aircraft	Construct Space for 6 Aircraft	\$807,360
Apron Capacity (SF)	140,000	10,000	No Recommendation	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	No Recommendation	\$0
AvGAS	Yes	Yes	No Recommendation	\$0
Jet A	Yes	Yes	No Recommendation	\$0
Ground Transportation Link	Yes	Yes	No Recommendation	N/A
Total				\$807,360

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KANSAS AVIATION SYSTEM PLAN

MARYSVILLE MUNICIPAL AIRPORT MARYSVILLE

MYZ

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
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Division of Aviation

KASP OVERVIEW

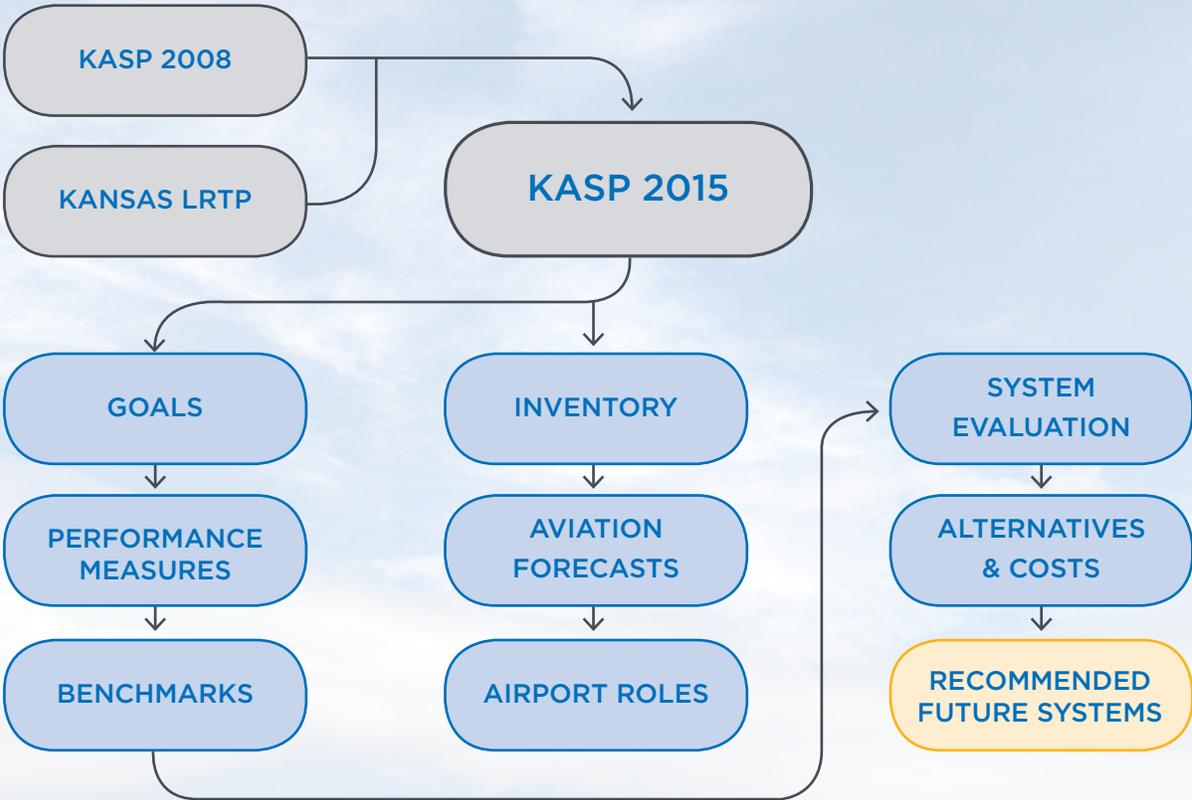
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2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	9,308	9,310	9,310	9,310

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Marysville Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,3200	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	175%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	18,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	No	Yes	Maintain Standard	\$0
AvGAS	No	Yes	Maintain Standard	\$0
Jet A	No	Yes	Maintain Standard	\$0
Ground Transportation Link	No	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

NORTON MUNICIPAL AIRPORT NORTON

NRN

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

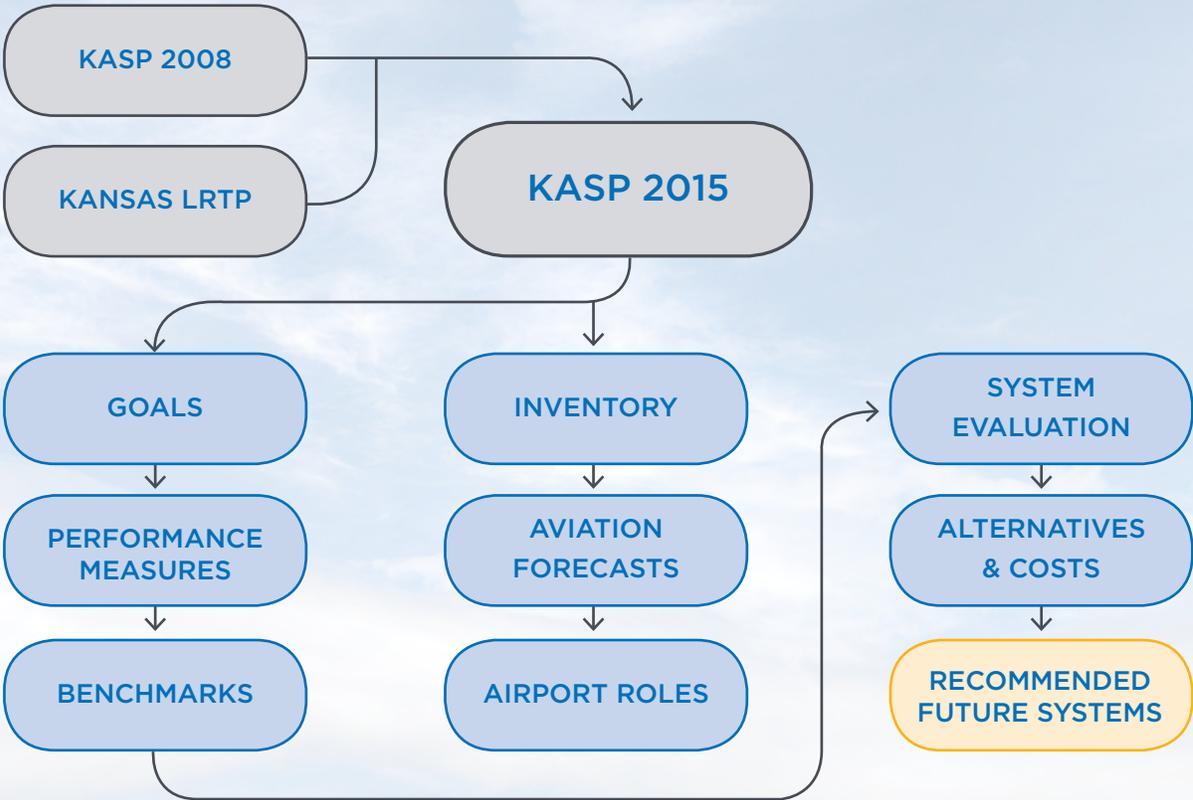
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	20	20	20	20
ANNUAL OPERATIONS	5,000	5,000	5,000	5,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Norton Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,701	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Widen 15 FT	\$1,375,043
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	105%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	60,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$1,411,443



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KANSAS AVIATION SYSTEM PLAN

OAKLEY MUNICIPAL AIRPORT OAKLEY

OEL

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

In association with


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Division of Aviation

KASP OVERVIEW

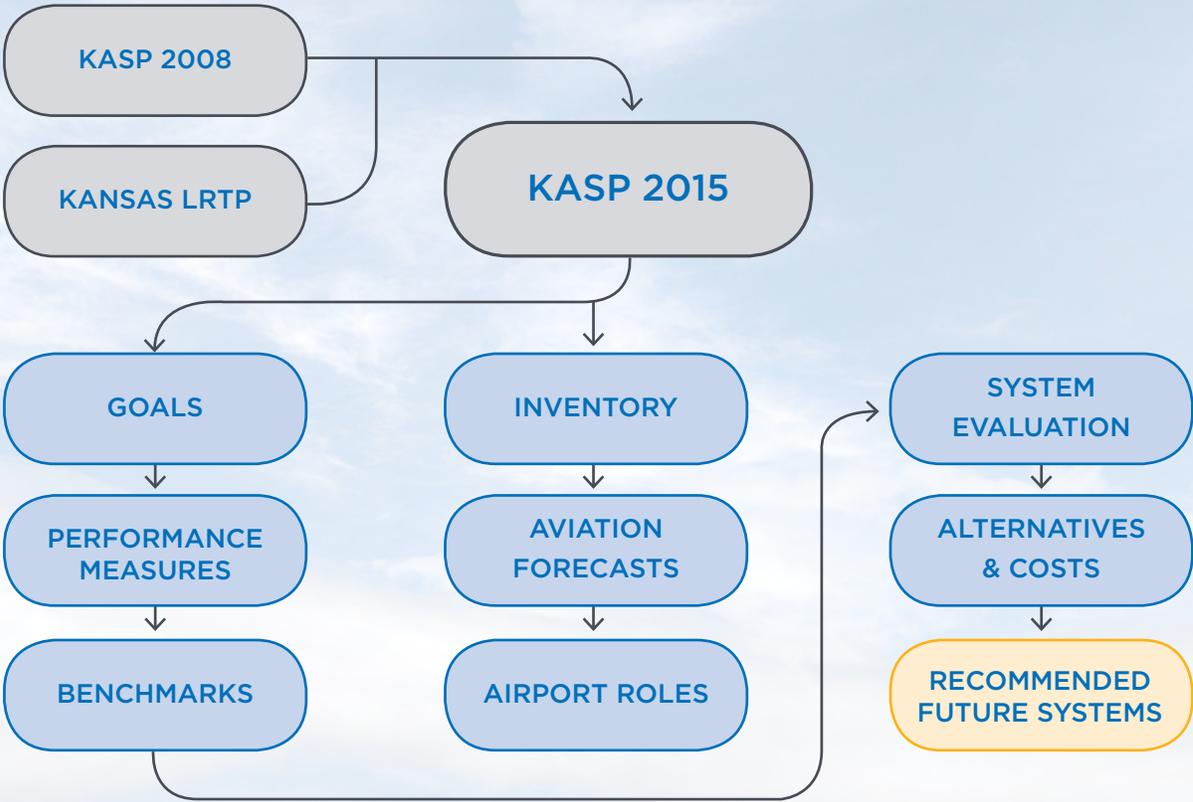
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS



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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	9	9	9	9
ANNUAL OPERATIONS	12,100	12,100	12,100	12,100

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Oakley Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	None	PAPI or VASI	Install PAPI	\$83,200
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	227%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	60,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/
Total				\$83,200



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KANSAS AVIATION SYSTEM PLAN

OBERLIN MUNICIPAL AIRPORT OBERLIN

OIN

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

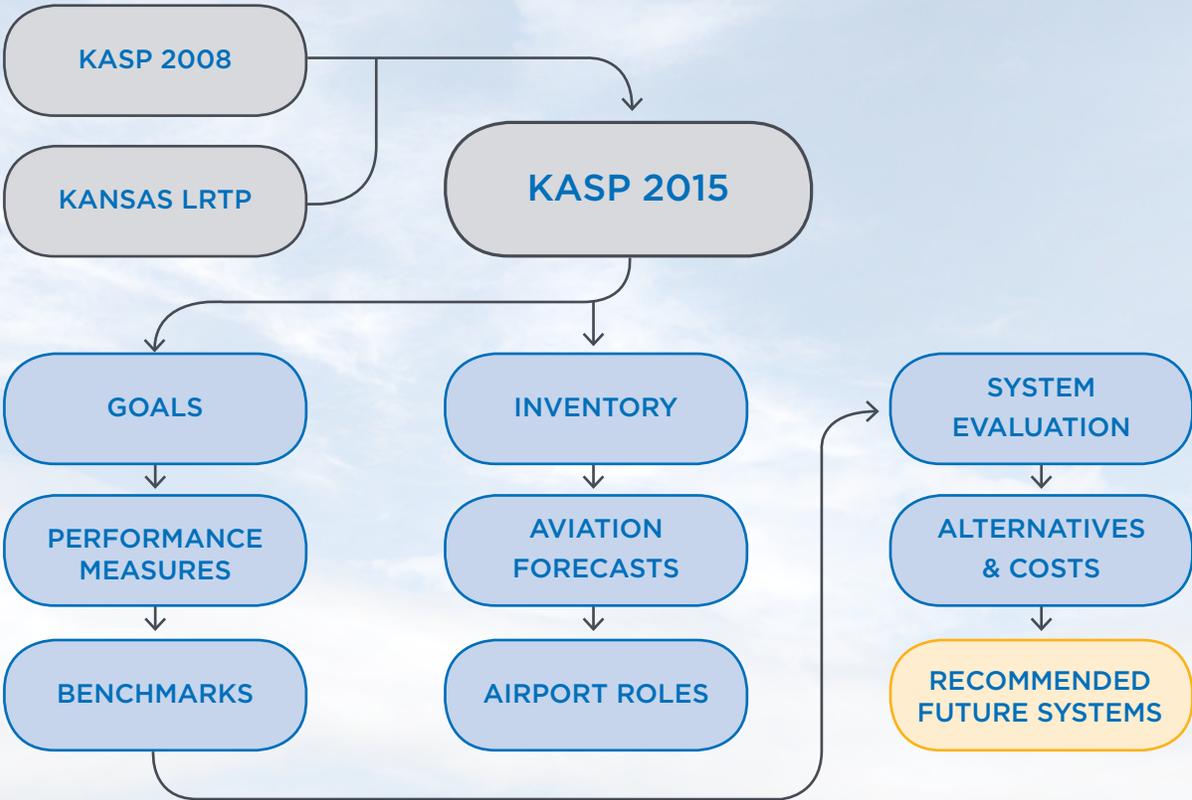
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	17	17	17	17
ANNUAL OPERATIONS	7,000	7,000	7,000	7,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Oberlin Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,501	5,000	Extend 1,499 FT	-
Primary Runway Width (Feet)	60	100	Widen 40 FT	\$5,653,830
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Construct Parallel Taxiway	\$2,144,363
Best IAP	APV	AVP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	147%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	0	10,000	Construct 10,000 SF Apron	\$180,000
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Yes	Add Jet-A Service	\$210,000
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$8,224,593



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KANSAS AVIATION SYSTEM PLAN

JOHNSON COUNTY EXECUTIVE AIRPORT OLATHE

OJC

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

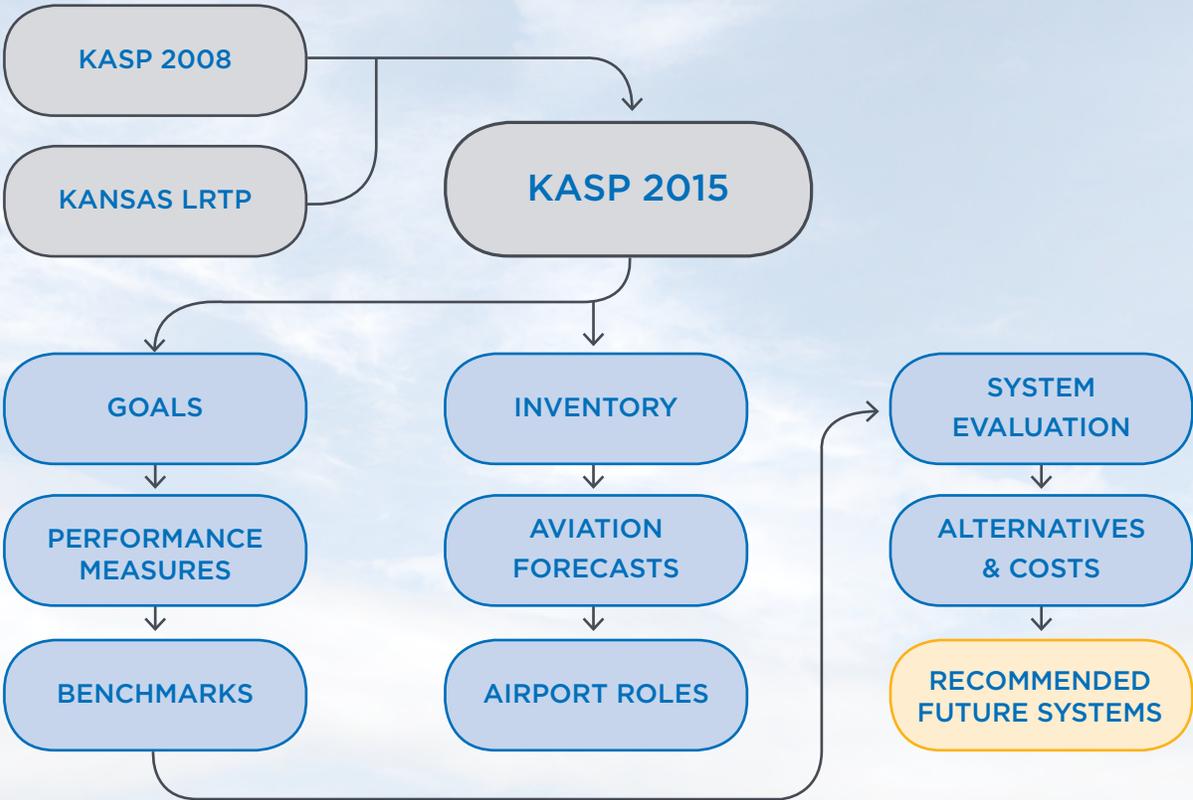
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
Reliever

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	110	116	122	134
ANNUAL OPERATIONS	51,681	54,500	57,320	62,960

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Johnson County Executive Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,098	5,000	Extend RW 902 ft	-
Primary Runway Width (Feet)	75	100	Widen RW 25 ft	\$3,756,675
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	APV	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	207%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	446,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$3,756,675



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KANSAS AVIATION SYSTEM PLAN

OTTAWA MUNICIPAL AIRPORT
OTTAWA

OWI

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

In association with


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Division of Aviation

KASP OVERVIEW

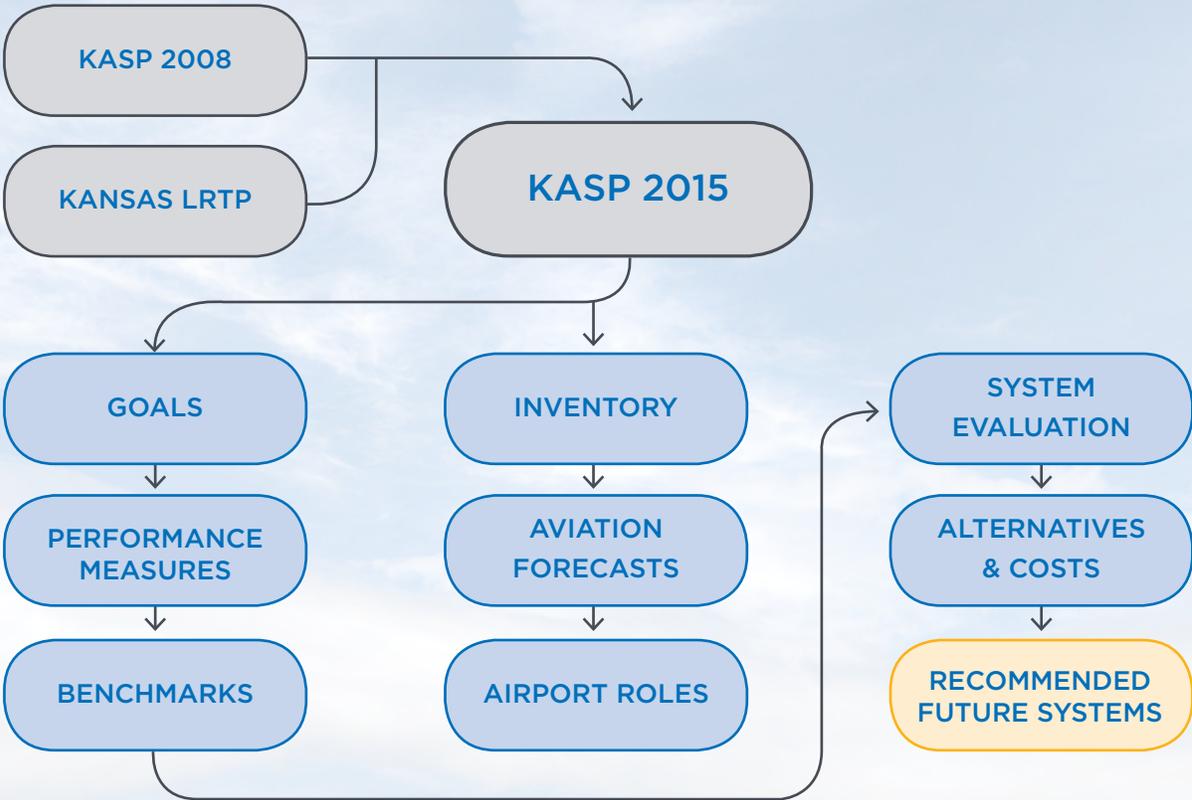
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The KASP has three primary objectives:

- 1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
- 2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	41	41	42	43
ANNUAL OPERATIONS	3,350	3,350	3,430	3,510

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Ottawa Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,500	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turn Arounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	LIRL	MIRL	Install MIRL	\$373,500
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	None	Automated	Install AWOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	49%	100% Based Aircraft	Construct Space for 20 Aircraft	\$2,236,800
Apron Capacity (SF)	78,828	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$2,835,300



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KANSAS AVIATION SYSTEM PLAN

PHILLIPSBURG MUNICIPAL AIRPORT PHILLIPSBURG

PHG

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

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KASP OVERVIEW

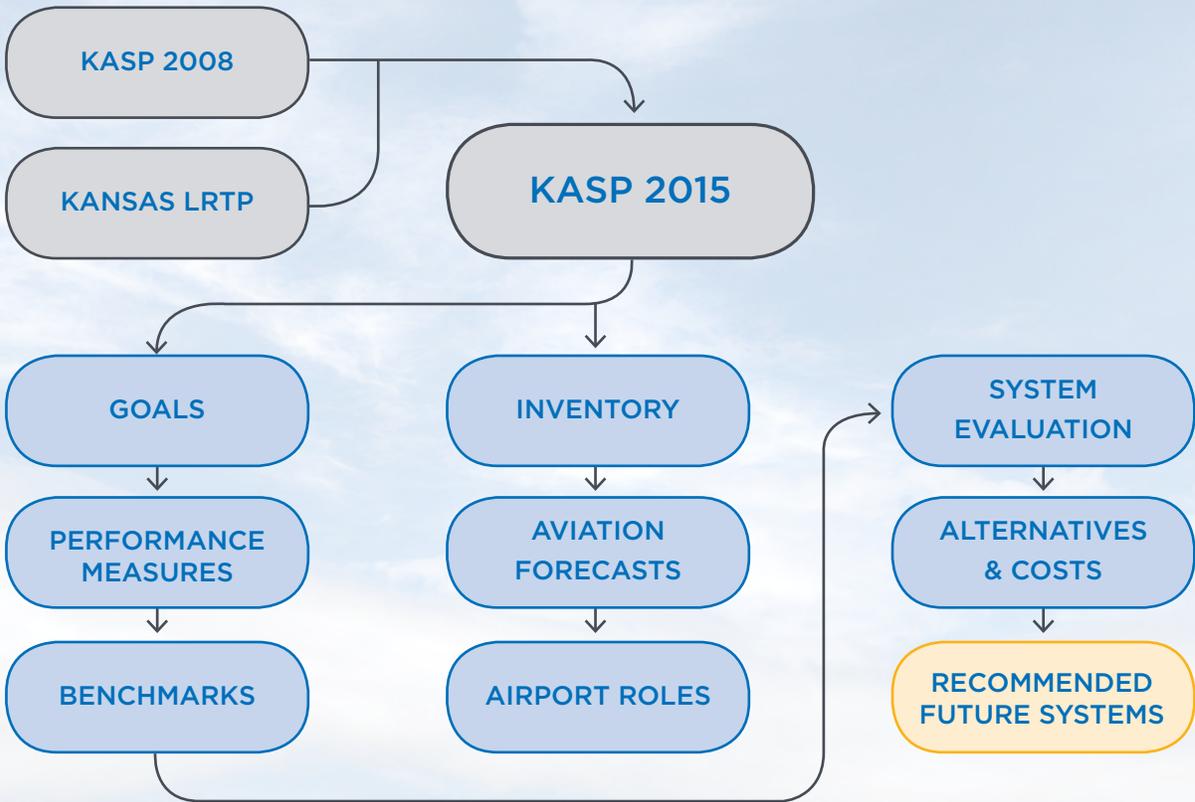
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	15	15	15	15
ANNUAL OPERATIONS	9,000	9,000	9,000	9,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Phillipsburg Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	4,504	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	60	75	Widen 15 Feet	\$1,317,420
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	178%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	700	10,000	Construct 9,300 SF Apron	\$167,400
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$1,484,820



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KANSAS AVIATION SYSTEM PLAN

TRI-CITY AIRPORT
PARSONS

PPF

Prepared by

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KASP OVERVIEW

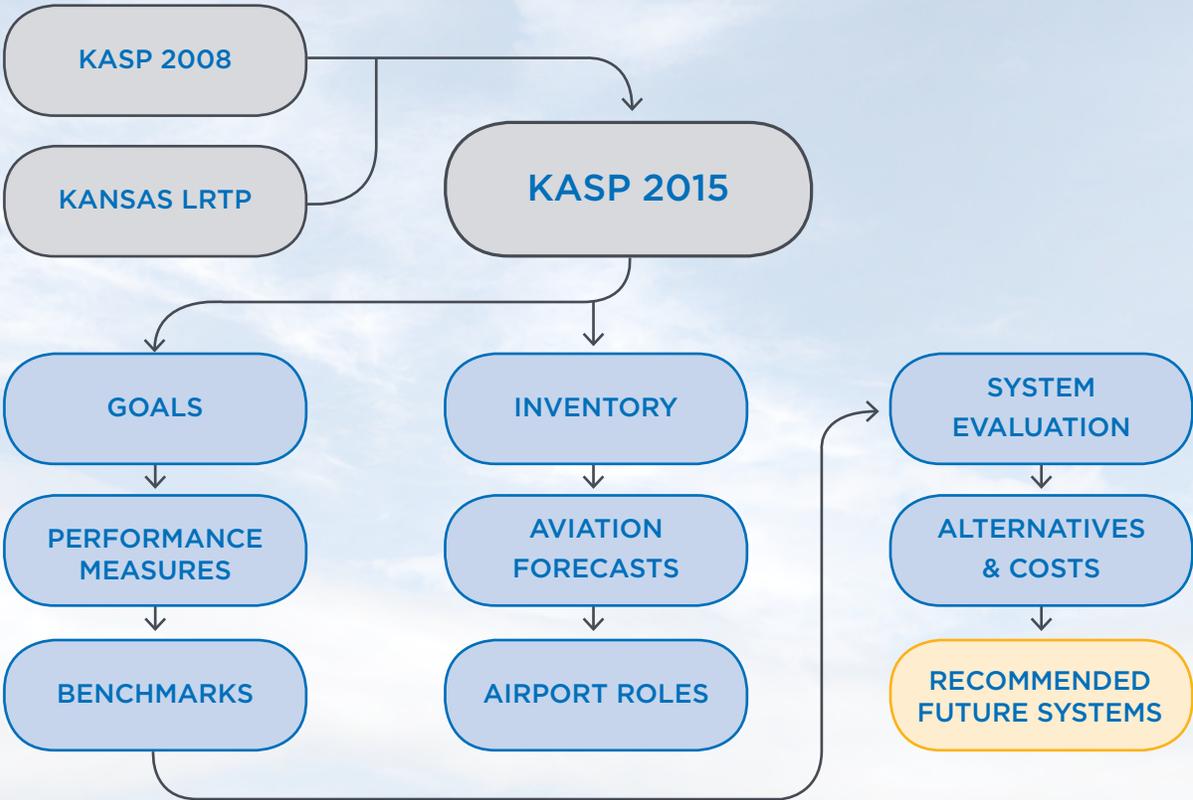
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- 2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	16	16	16	16
ANNUAL OPERATIONS	3,050	3,050	3,050	3,050

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Tri-City Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Non-Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	162%	100% of Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	75,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

ATKINSON MUNICIPAL AIRPORT PITTSBURG

PTS

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KASP OVERVIEW

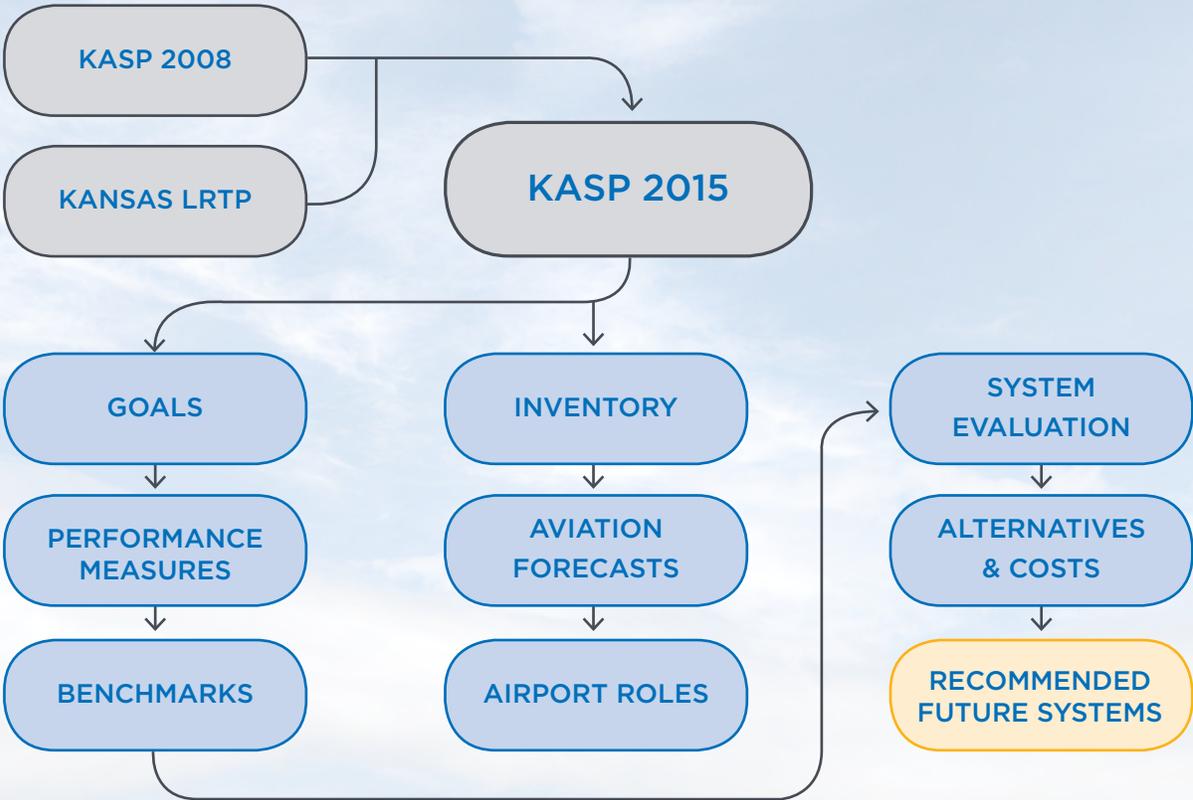
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA
NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education
- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	32	32	33	33
ANNUAL OPERATIONS	23,600	23,600	24,340	24,340

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Atkinson Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,500	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Full Parallel	Construct Parallel Taxiway	\$3,946,250
Best IAP	APV	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	213%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	48,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$3,946,250



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KANSAS AVIATION SYSTEM PLAN

PRATT REGIONAL AIRPORT
PRATT

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KASP OVERVIEW

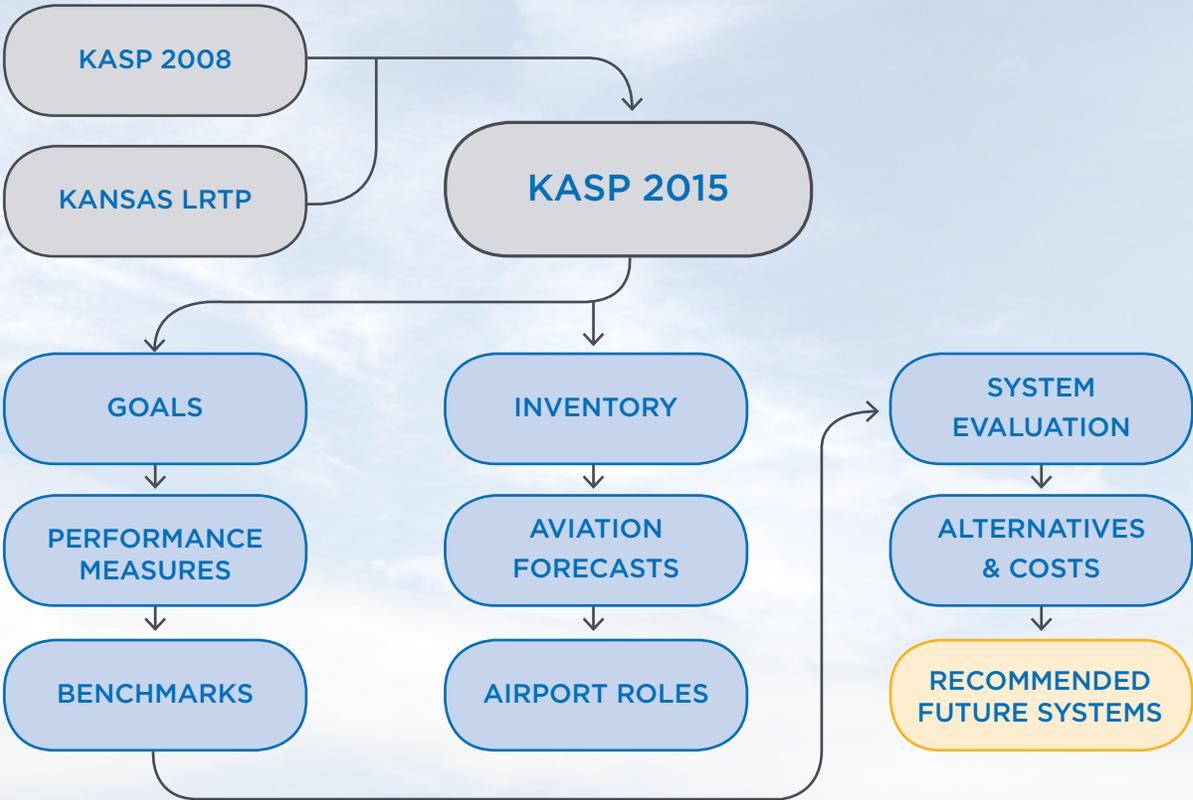
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	20	20	20	20
ANNUAL OPERATIONS	11,300	11,300	11,300	11,300

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Pratt Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,500	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	APV	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	171%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	100,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



700 SW Harrison
Topeka, KS 66603
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KANSAS AVIATION SYSTEM PLAN

ROOKS COUNTY REGIONAL AIRPORT STOCKTON

RCP

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

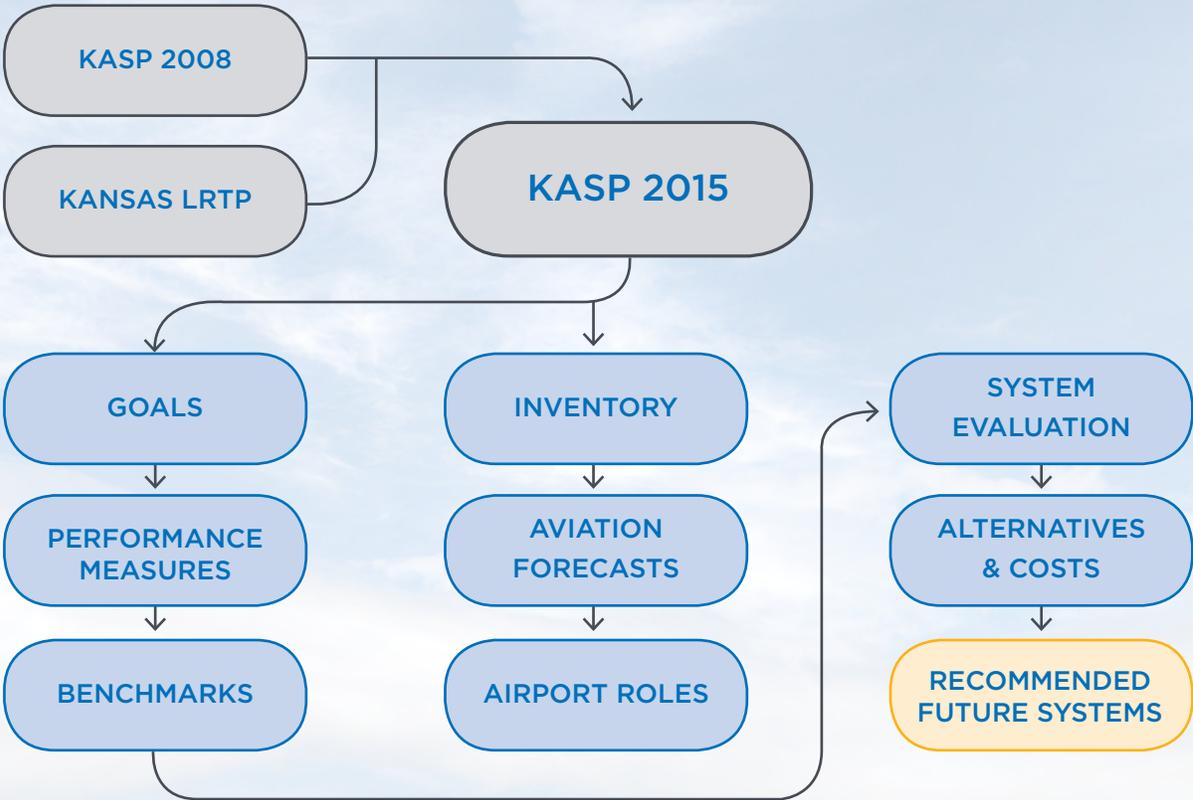
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The KASP has three primary objectives:

1. Determine those system airports that are most essential to Kansas transportation needs and economic objectives
2. Identify projects that have the greatest potential to improve the performance of the Kansas airport system
3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	8	8	8	8
ANNUAL OPERATIONS	0	4,720	4,720	4,720

AIRPORT PERFORMANCE AND RECOMMENDATIONS

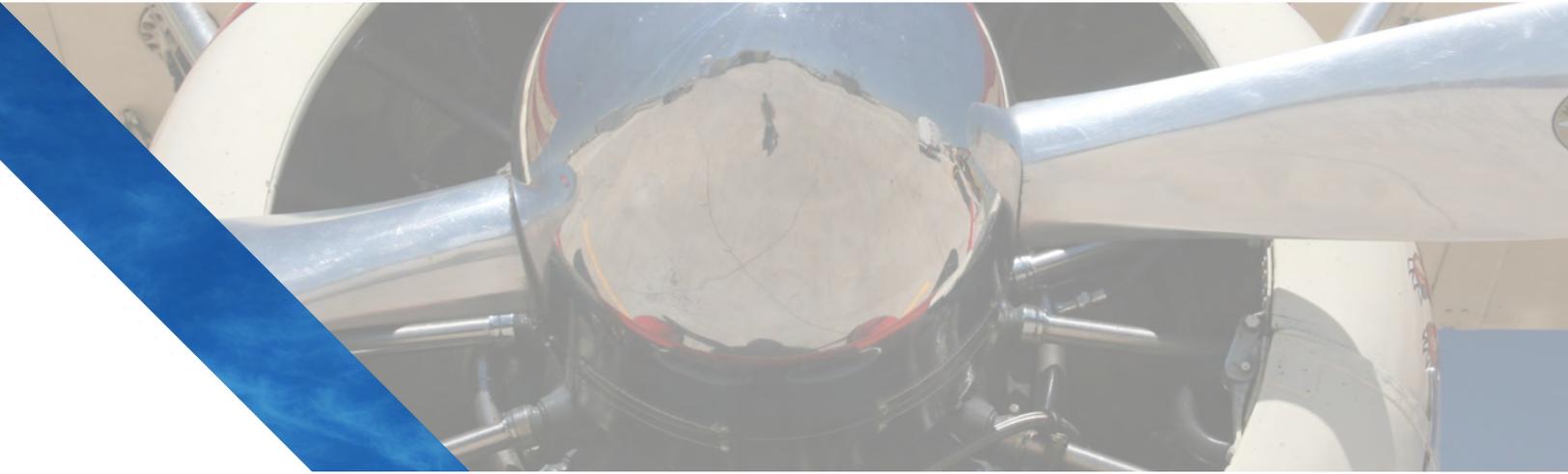
System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Rooks County Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	No	Yes	Install Rotating Beacon	\$60,000
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	No	Yes	Construct Terminal	\$468,000
Restroom	No	Yes	Construct Public Restroom	N/A
Hangar Capacity	13%	100% Based Aircraft	Construct Space for 7 Aircraft	\$714,720
Apron Capacity (SF)	100,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$1,242,720



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KANSAS AVIATION SYSTEM PLAN

BELLEVILLE MUNICIPAL AIRPORT BELLEVILLE

RPB

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

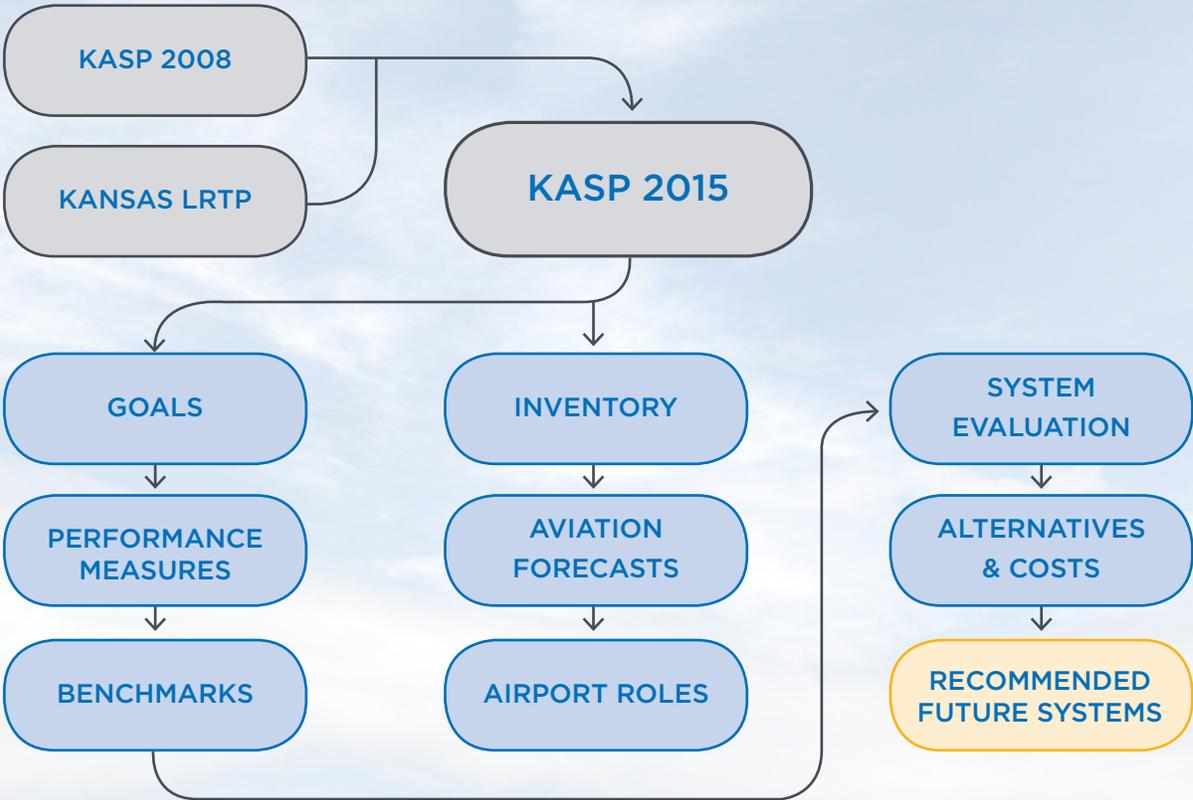
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The KASP has three primary objectives:

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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	2	2	2	2
ANNUAL OPERATIONS	7,200	7,200	7,200	7,200

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Belleville Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	3,500	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	60	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	\$0
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	PAPI	Not an Objective	No Recommendation	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	\$0
Weather Reporting	None	Automated	Install AWOS or ASOS	\$225,000
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	109%	100% Based Aircraft	No Recommendation	\$0
Apron Capacity (SF)	11,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	\$0
AvGAS	Yes	Not an Objective	No Recommendation	\$0
Jet A	No	Not an Objective	No Recommendation	\$0
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$225,000

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends lighted wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

RUSSELL MUNICIPAL AIRPORT RUSSELL

RSL

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
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Division of Aviation

KASP OVERVIEW

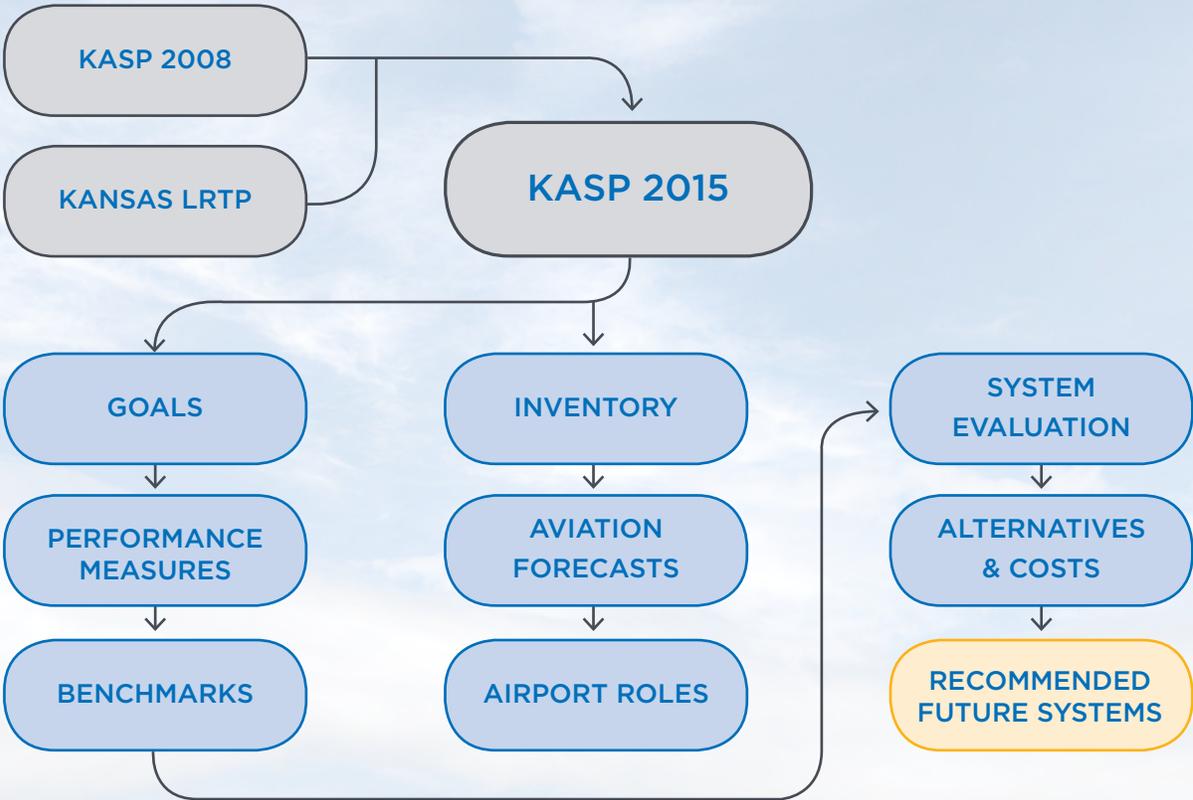
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

The previous KASP identified and adopted five goals using the LRTP and input from KDOT Division of Aviation. Because each of these goals remains important for the future of the Kansas airport system, they remain the five main goals of the KASP.

These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	12	12	12	12
ANNUAL OPERATIONS	12,000	12,000	12,000	12,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Russell Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	193%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	40,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

SALINA REGIONAL AIRPORT SALINA

SLN

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

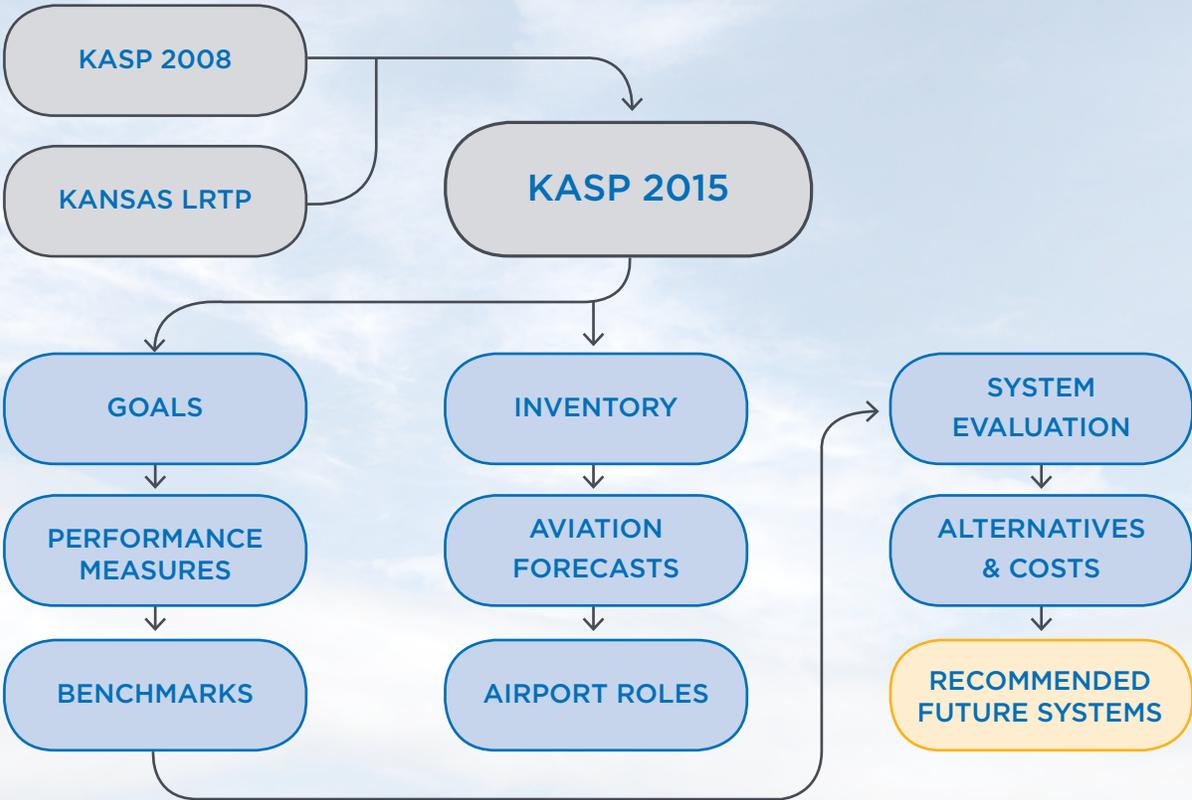
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Commercial Service

FEDERAL ROLE
Nonprimary CS

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	105	116	128	159
ANNUAL OPERATIONS	63,432	64,813	65,531	66,993
ANNUAL ENPLANEMENTS	2,253	1,691	1,732	1,799

AIRPORT PERFORMANCE AND RECOMMENDATIONS

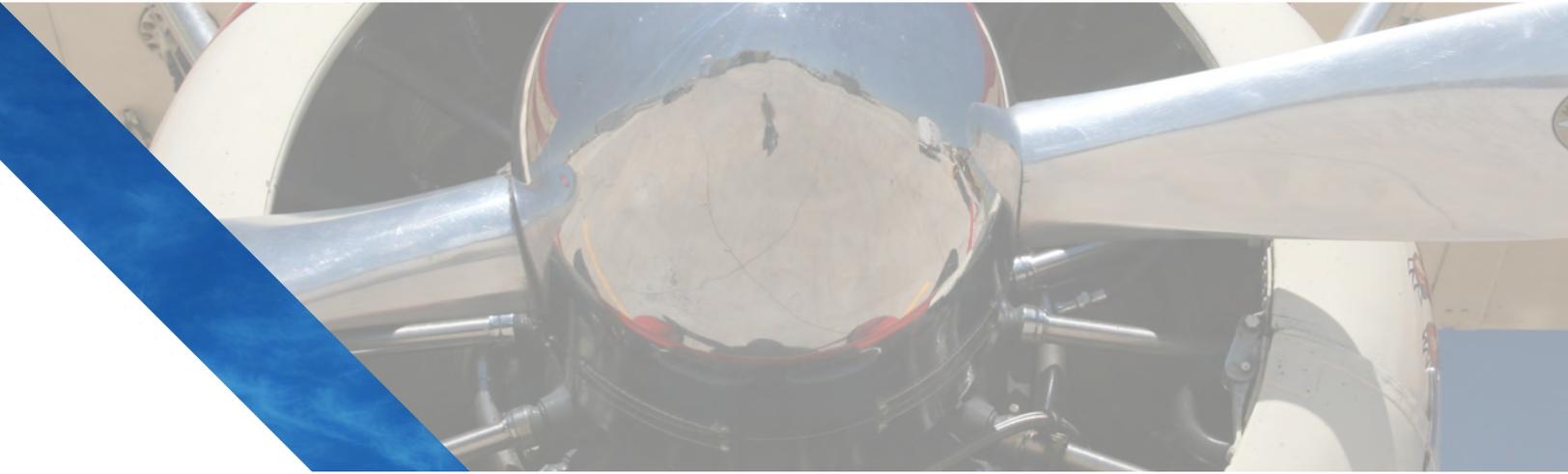
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individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Salina Regional Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	12,301	5,500	Maintain Standard	\$0
Primary Runway Width (Feet)	150	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	Precision	Precision	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS	ALS	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	358%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	3,000,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

SAINT FRANCIS-CHEYENNE AIRPORT
ST. FRANCIS
SYF

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
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Division of Aviation

KASP OVERVIEW

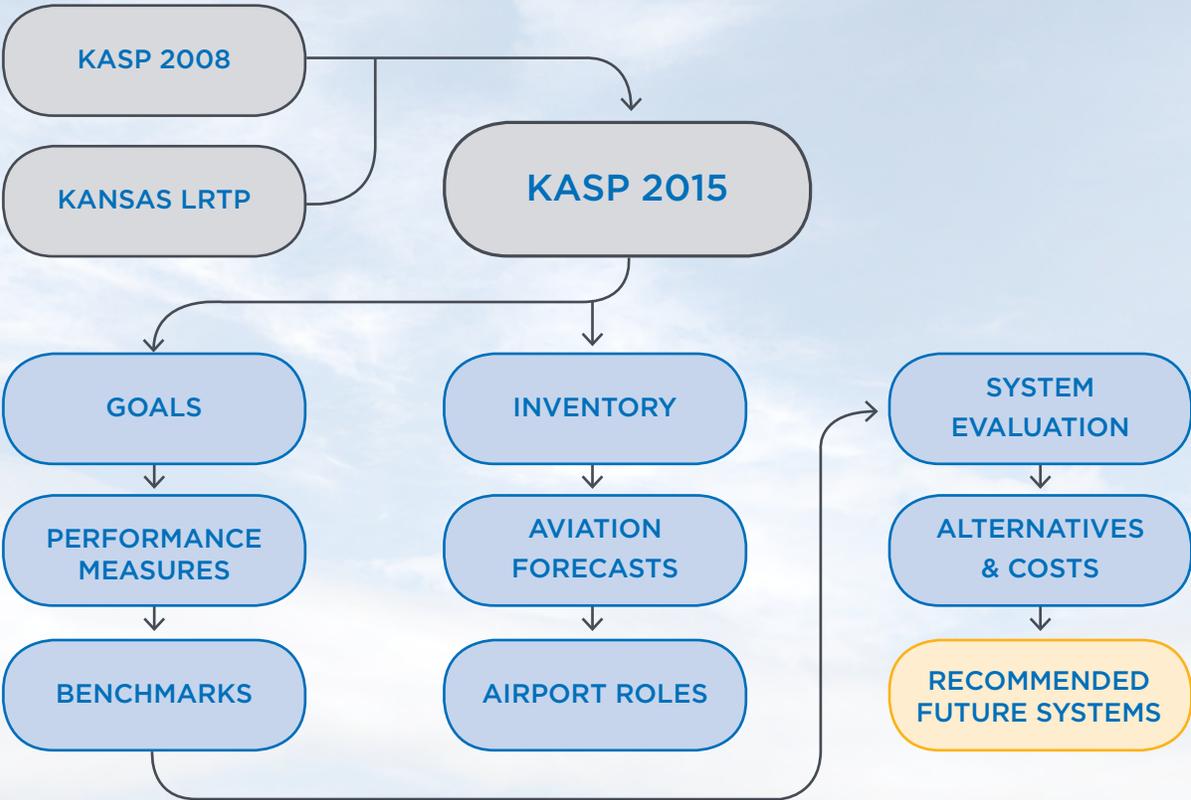
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3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Community

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	13	13	13	13
ANNUAL OPERATIONS	3,800	3,800	3,800	3,800

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Saint Francis-Cheyenne County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,200	3,200	Maintain Standard	\$0
Primary Runway Width (Feet)	75	60	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	Non-Precision	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Not an Objective ⁽¹⁾	No Recommendation	N/A
Wind Sock	Lighted Wind Sock	Wind Sock ⁽²⁾	Maintain Standard	\$0
VGSI	None	Not an Objective	No Recommendation	N/A
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	Not an Objective	No Recommendation	N/A
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	127%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	35,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	No	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	No	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0

⁽¹⁾Not an Objective for KASP/KAIP project planning, but beacons are required by AC150/5300-13A with runway edge lighting

⁽²⁾FAA recommends wind socks at airports with runway lighting



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KANSAS AVIATION SYSTEM PLAN

PHILIP BILLARD MUNICIPAL AIRPORT
TOPEKA

TOP

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

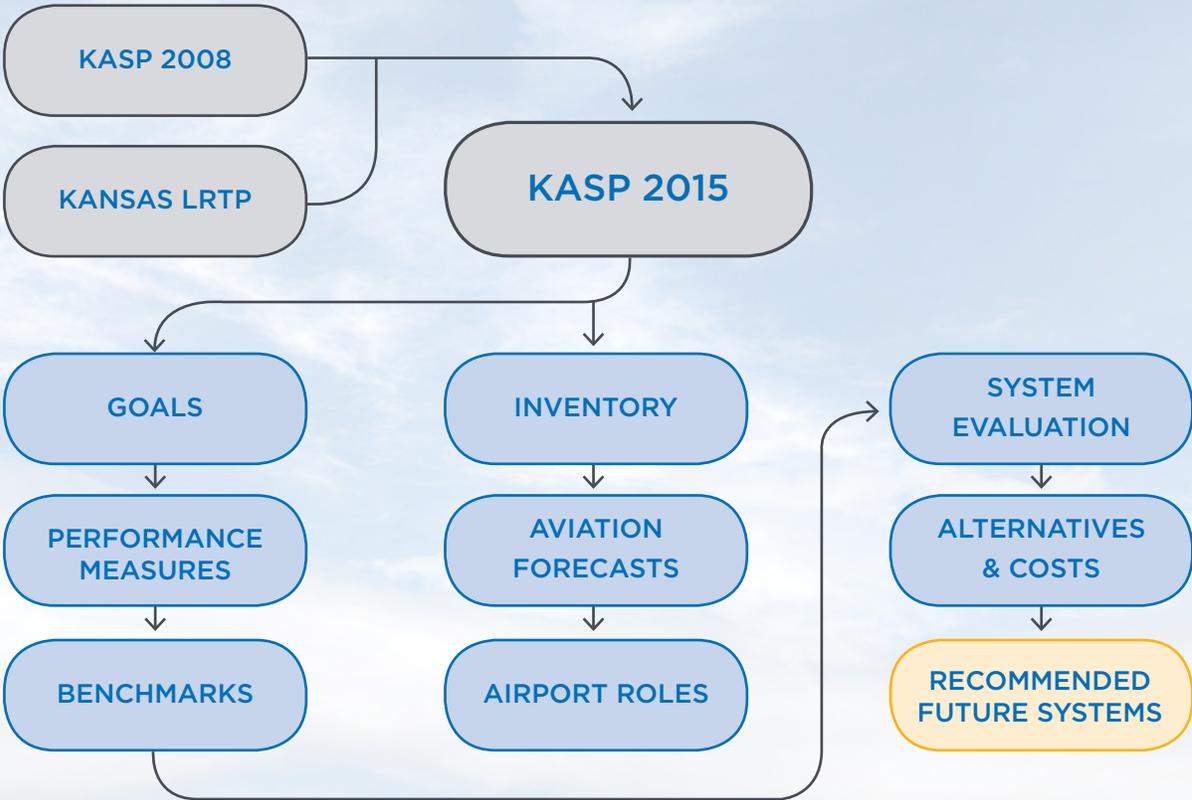
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA
NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	56	57	57	59
ANNUAL OPERATIONS	40,484	41,210	41,210	42,650

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Philip Billard Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,099	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Full Parallel	Construct Parallel Taxiway	\$1,075,533
Best IAP	Precision	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	VASI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	ALS and REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	218%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	170,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$1,075,533



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KANSAS AVIATION SYSTEM PLAN

SCOTT CITY MUNICIPAL AIRPORT SCOTT CITY

TQK

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


Kansas
Department of Transportation
Division of Aviation

KASP OVERVIEW

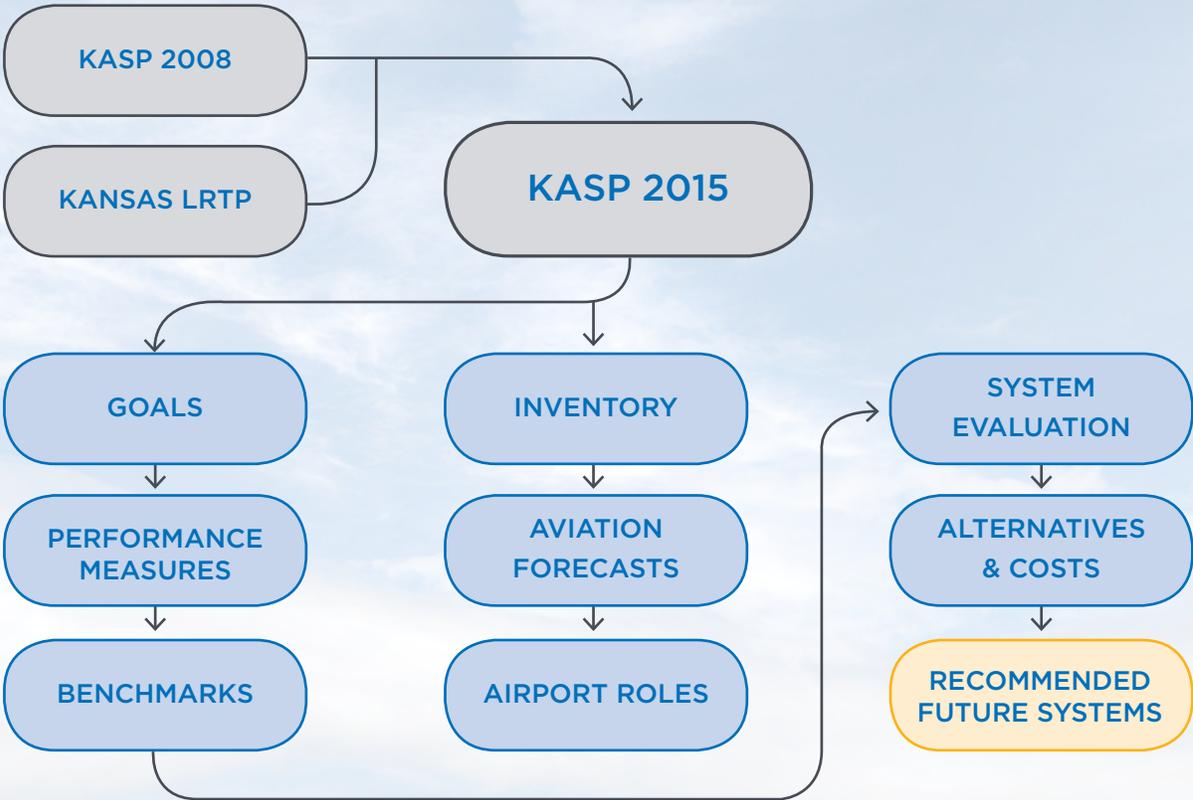
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- 3. Demonstrate how investment improves the performance of the Kansas airport system relative to established measures and benchmarks

KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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These goals are as follows:

- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	33	33	33	33
ANNUAL OPERATIONS	8,000	8,000	8,000	8,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Scott City Municipal Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,002	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Partial Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	None	ALS or REILs	Install REILs	\$36,400
Weather Reporting	AWOS-3	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	88%	100% Based Aircraft	Construct Space for 4 Aircraft	\$447,360
Apron Capacity (SF)	80,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$483,760



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KANSAS AVIATION SYSTEM PLAN

BURLINGTON-COFFEY COUNTY AIRPORT BURLINGTON

UKL

Prepared by

BURNS  **MCDONNELL**SM

**CDM
Smith**

In association with


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Division of Aviation

KASP OVERVIEW

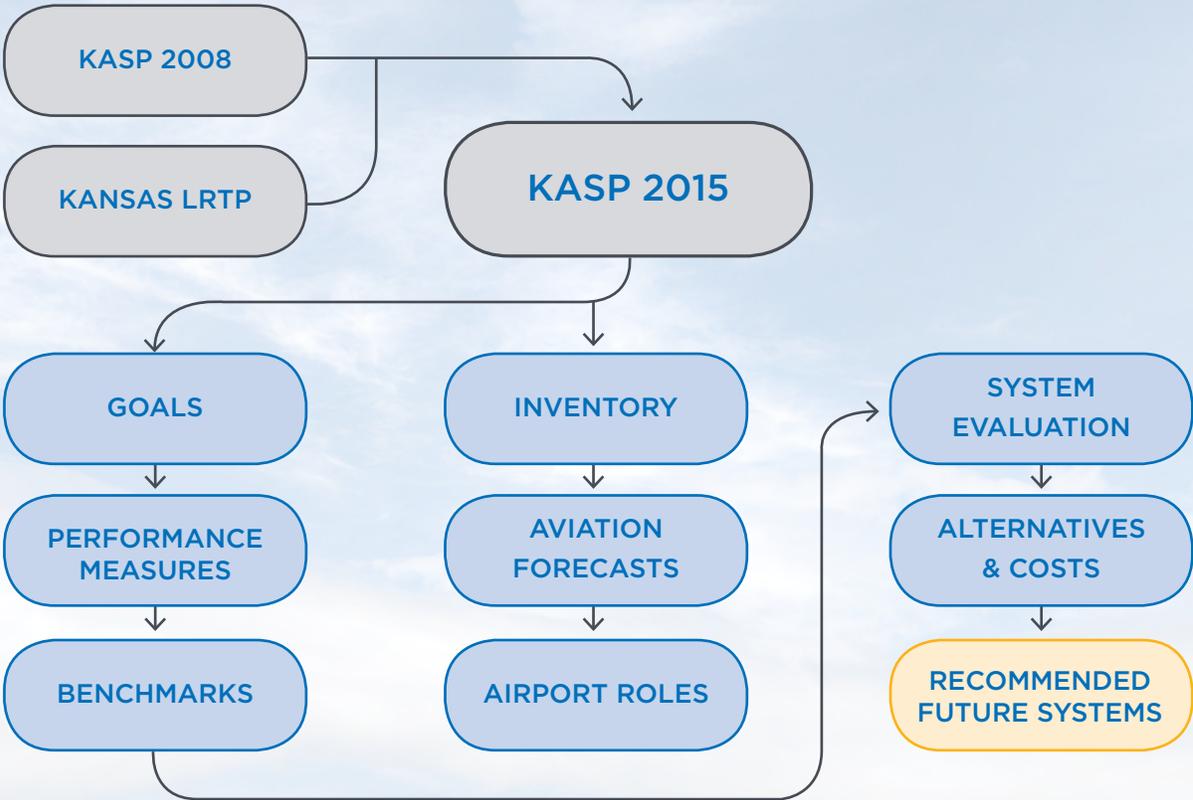
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Preserve the aviation system
- Provide a modern network of airports
- Provide a network of airports that is accessible by air and ground
- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

Forecasts of based aircraft and general aviation operations were developed for each airport from the system level. Several forecasts of based aircraft and general aviation operations were developed and compared for purposes of selecting a preferred forecast. Forecasts of commercial service operations and enplanements were obtained from recent master plans or, if a master plan was not available, from the FAA Terminal Area Forecast.

FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	16	16	16	16
ANNUAL OPERATIONS	20,000	20,000	20,000	20,000

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Burlington-Coffey County Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,500	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	75	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Turnarounds	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	69%	100% Based Aircraft	Construct Space for 5 Aircraft	\$491,040
Apron Capacity (SF)	90,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvgAS	Yes	Not an Objective	No Recommendation	N/A
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$491,040



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KANSAS AVIATION SYSTEM PLAN

ULYSSES AIRPORT
ULYSSES

ULS

Prepared by

BURNS  **MCDONNELL**SM

CDM
Smith

In association with


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KASP OVERVIEW

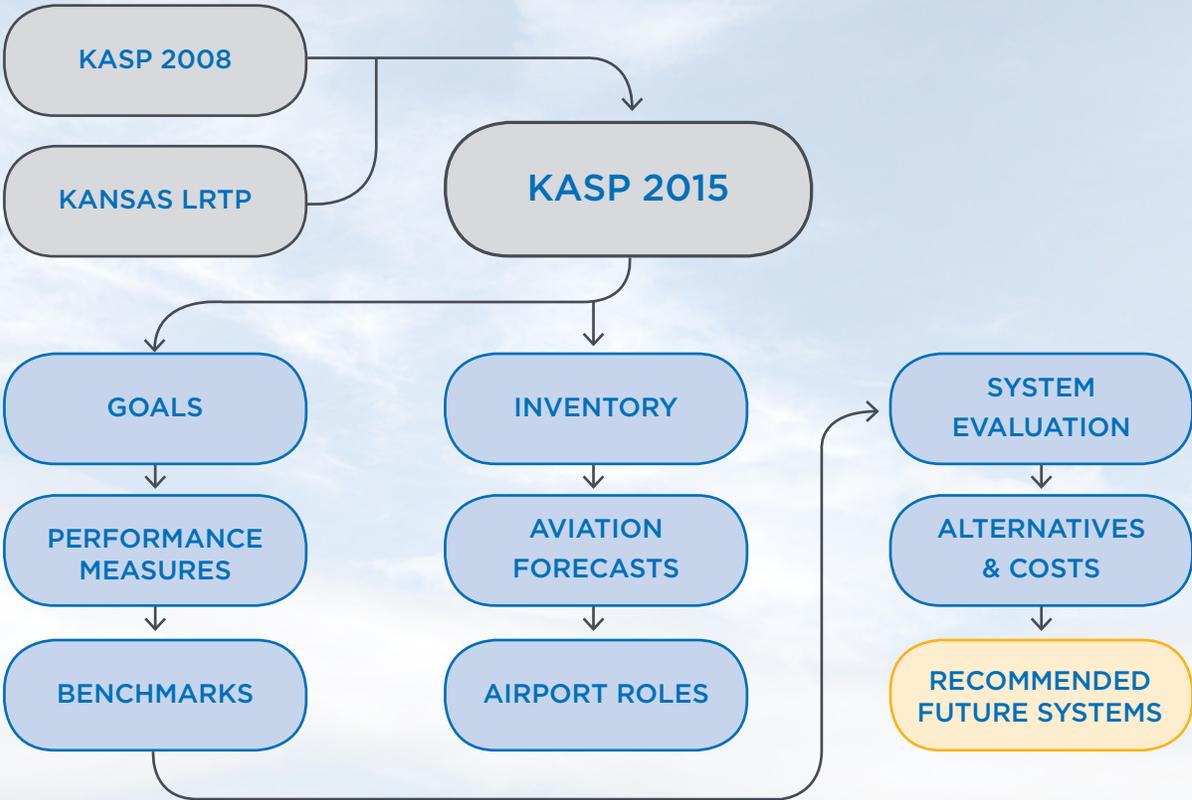
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Business

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Support local and statewide economic growth
- Support the promotion of aviation education

- Fuel facilities
- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

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STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	40	40	40	40
ANNUAL OPERATIONS	21,500	21,500	21,500	21,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Ulysses Airport**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	6,000	4,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	75	Maintain Standard	\$0
Primary Runway Surface	Concrete	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Turnarounds	Maintain Standard	\$0
Best IAP	APV	Any IAP	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	MIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	AWOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	145%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	60,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Not an Objective	No Recommendation	N/A
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Not an Objective	No Recommendation	N/A
Ground Transportation Link	Yes	Yes	Maintain Standard	N/A
Total				\$0



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KANSAS AVIATION SYSTEM PLAN

STROTHER FIELD
WINFIELD

WLD

Prepared by

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KASP OVERVIEW

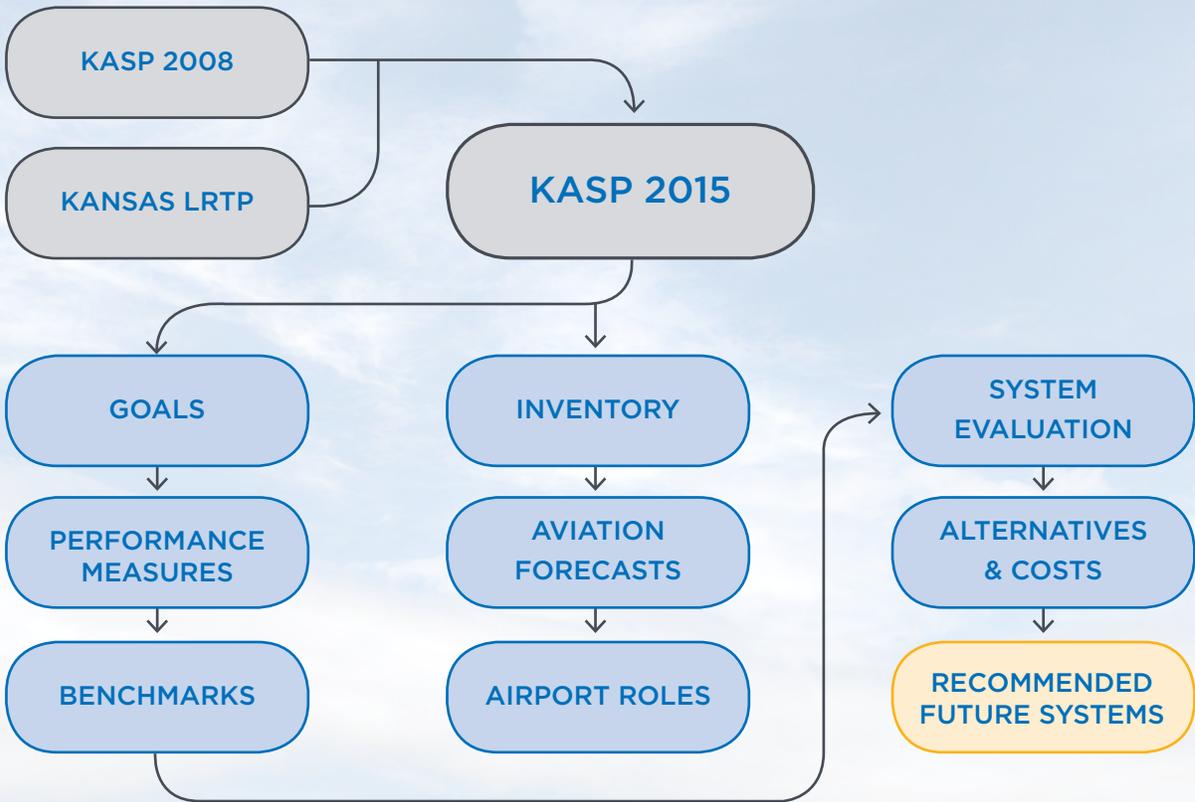
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KASP PROCESS OVERVIEW:



GOALS, STRATIFICATION AND FORECASTS

KASP ROLE
Regional

FEDERAL ROLE
GA

NPIAS
Yes

OWNERSHIP
Public

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- Support the promotion of aviation education

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- ASOS/AWOS presence
- Based jet aircraft
- Population served
- Employment served
- Geographic area served
- Industry groups served
- Gross Regional Product
- Retail sales
- Registered pilots served

The KASP evaluates system adequacies and deficiencies using their goals, associated performance measures, and benchmarks.

STRATIFICATION

Airport roles were determined using the same methodology that was used in the previous system plan. Commercial service airports were identified as per the NPIAS. General aviation airports were assigned roles by scoring each airport in the following categories:

- Primary runway length
- Total based aircraft
- Percent of itinerant operations
- Airport approach type

FORECASTS

Scores for the 14 categories were added together for each airport and the airports ranked by total score. Airport roles of Regional Airport, Business Airport, Community Airport, and Basic Airport were assigned in decreasing order of scores. The results were compared to the previous study and only those airports that experienced a significant shift were identified as having a role change.

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FORECAST SUMMARY:

	2014	2019	2024	2034
BASED AIRCRAFT	19	19	19	19
ANNUAL OPERATIONS	6,500	6,500	6,500	6,500

AIRPORT PERFORMANCE AND RECOMMENDATIONS

System goals were used to guide the process to establish current system performance. The system evaluation focused on determining where the system is currently adequate, where the system is deficient, and where duplications or surpluses in the system exist. This evaluation analyzes the extent to which

individual airports best serve their respective markets, and makes recommendations for improvements to airport facilities and services. The following table details facility and service benchmark performance, recommendations, and planning-level cost estimates for **Strother Field**.

PERFORMANCE	EXISTING	SYSTEM OBJECTIVE	RECOMMENDATION	ESTIMATED COST
AIRSIDE FACILITIES				
Primary Runway Length (Feet)	5,506	5,000	Maintain Standard	\$0
Primary Runway Width (Feet)	100	100	Maintain Standard	\$0
Primary Runway Surface	Asphalt	Paved	Maintain Standard	\$0
Taxiway Type	Full Parallel	Full Parallel	Maintain Standard	\$0
Best IAP	APV	APV	Maintain Standard	\$0
Rotating Beacon	Yes	Yes	Maintain Standard	\$0
Wind Sock	Lighted Wind Sock	Lighted Wind Sock	Maintain Standard	\$0
VGSI	PAPI	PAPI or VASI	Maintain Standard	\$0
Runway Lighting	HIRL	MIRL	Maintain Standard	\$0
ALS or REILs	REILs	ALS or REILs	Maintain Standard	\$0
Weather Reporting	ASOS	Automated	Maintain Standard	\$0
LANDSIDE FACILITIES				
Terminal	Yes	Yes	Maintain Standard	\$0
Restroom	Yes	Yes	Maintain Standard	N/A
Hangar Capacity	211%	100% Based Aircraft	Maintain Standard	\$0
Apron Capacity (SF)	150,000	10,000	Maintain Standard	\$0
SERVICES				
Fuel				
Available 24/7	Yes	Yes	Maintain Standard	\$0
AvGAS	Yes	Yes	Maintain Standard	\$0
Jet A	Yes	Yes	Maintain Standard	\$0
Ground Transportation Link	No	Yes	Add Transportation Link	N/A
Total				\$0



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