Salina Regional SLN Airport

Chapter One

INVENTORY

The initial step in the preparation of the master plan update for Salina Regional Airport (SLN) is the collection of information pertaining directly to or influencing the airport and the area it serves. The information summarized in this chapter will be used in subsequent analyses within this study and includes:

- Physical inventories and descriptions of the facilities and services currently provided at the airport, including regional airspace, air traffic control, and aircraft operating procedures.
- Background information related to the City of Salina and Saline County, Kansas, including descriptions of the regional climate and surface transportation systems.
- Salina Regional Airport's role in regional, state, and national aviation systems. Development at the airport since the completion of the previous master plan will also be presented.
- Population and other significant socioeconomic data which can provide an indication of future trends that could influence aviation activity at the airport.
- A review of existing local and regional plans and studies to determine their potential influence on the development and implementation of the airport master plan.

The information outlined in this chapter provides a foundation for all subsequent chapters. Some of the information was obtained through on-site inspections of the airport and interviews with airport staff and tenants. Other useful sources of information include documents prepared by the Federal Aviation Administration (FAA), Kansas Department of Transporta-

tion (KDOT) – Division of Aviation, Saline County, the City of Salina, military resources, and regional planning agencies.

REGIONAL SETTING

Salina Regional Airport is located in Saline County, Kansas in the southwestern portion of the City of Salina. Saline County and the City of Salina are located in north central Kansas, near the geographic center of the United States. The City of Salina is located at the intersection of U.S. Interstates 70 and 135 and centered in one of the largest wheat producing areas of the world.

With a population of nearly 50,000 residents, Salina is the State of Kansas' seventh largest city. Larger population centers are situated 95 miles south in Wichita, Kansas, 180 miles east in Kansas City, Missouri, and 425 miles west in Denver, Colorado. Salina is home to Kansas State University (KSU) Salina.

AIRPORT LOCATION

As depicted on **Exhibit 1A**, Salina Regional Airport is located in the southwestern quadrant of the City of Salina, approximately three miles southwest of the city's Central Business District (CBD). Salina Regional Airport encompasses 2,502 acres which includes aviation uses as well as an Airport Industrial Center. Several contiguous properties are utilized by KSU Salina, the military, and other industrial/commercial entities. The airport is situated at 1,288 feet above mean sea level (MSL).

REGIONAL TRANSPORTATION NETWORK

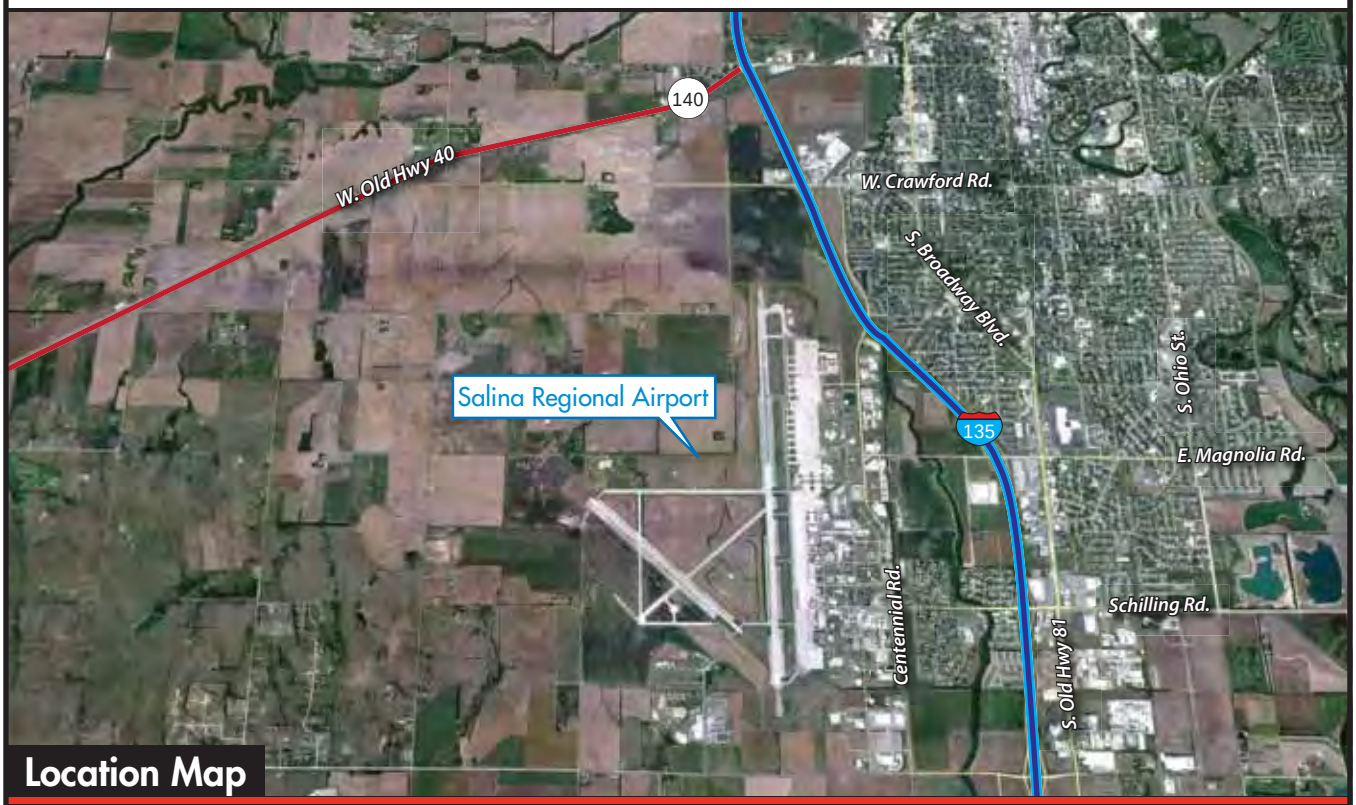
Primary regional access to the City of Salina is provided by two U. S. Interstate systems. I-70 is a national east/west interstate route linking Salina to regional cities such as Kansas City to the east and Denver to the west. In its entirety, I-70 extends between its westernmost point in Cove Fort, Utah to the east through Colorado, Kansas, Missouri, Illinois, Indiana, Ohio, and Pennsylvania, before finally terminating at its easternmost location in Baltimore, Maryland. I-135 is a north/south regionalized interstate spanning between I-70 in Salina to I-35 in Wichita through the Kansas cities of McPherson and Newton. The region is also served by Kansas Highway 140, a 33-mile stretch of road linking I-135 in Salina with Kansas Highway 14 just north of Ellsworth, Kansas.

Locally, the City of Salina is served by a complex network of city streets. There are three primary city roads which link the airport with the City of Salina: West Schilling Road, West Magnolia Road, and Centennial Road. West Shilling and West Magnolia are east/west roadways that connect the airport with the city to the east. Centennial Road is a north/south thoroughfare which serves as the eastern boundary to much of the airport, but also extends north to West Crawford Street.

Salina Regional Airport is a large, ex-military installation with most of airport facilities aligned east of the runway system. As depicted on **Exhibit 1A**, West Schilling Road offers direct access from the City of Salina to southern airport facilities, while West Magnolia Road offers direct access to northern airport facilities. As previously mentioned, Centennial Road is aligned along the east side of the

Salina Regional
SLN Airport

Vicinity Map



Location Map

Exhibit 1A
Location/Vicinity Map

airport. The airport is also served by several "on-airport" roads which provide a link between Centennial, West Shilling, and West Magnolia Roads.

CLIMATE

Weather conditions are important to the planning and development of an airport. Temperature is an important factor in determining runway length requirements, while wind direction and speed are used to determine optimum runway orientation. The need for navigational aids and lighting is determined by the percentage of time that visibility is impaired due to cloud coverage or other conditions. **Table 1A** summarizes climatic data for the City of Salina obtained from the weather reporting station at the Salina Regional Airport.

TABLE 1A
Climate Summary
Salina Regional Airport

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Mean Daily High Temp. (F)	42	47	57	67	77	87	93	91	82	69	55	42
Mean Daily Low Temp. (F)	21	25	34	43	54	64	69	68	58	46	33	22
Mean Precip. (in.)	0.63	1.17	2.39	3.05	4.75	4.11	4.29	3.95	2.70	2.27	1.25	0.94

Source: Climactic Normals 1981-2010 reported by National Climactic Data Center; Weather reporting station located at Salina Regional Airport.

Temperatures

The local climate is considered humid continental, with hot summers and cold winters. Summers are warm and hot with occasional showers and thunderstorms being the only real variation in weather. The hottest month on average is July, with a 30-year mean maximum high of 93.3 degrees Fahrenheit (F). Periods of very hot weather exceeding 100 degrees F can occur sporadically. Winter months can expect highs above freezing with lows below freezing. Temperatures can fall much lower but rarely below 4 degrees F. January is the coldest month with a mean daily high of 42 degrees F and a mean daily low of 21 degrees F.

Precipitation

Salina experiences an average of 31.5 inches of precipitation throughout the year. May is the wettest month, having a mean of 4.75 inches of rain. Heavy rainfall events, especially in the spring and early summer months, are usually accompanied by moderate to severe thunderstorm activity. During the warm season, which lasts from June 4 to September 13, there is a 34 percent average chance that precipitation will be observed at some point during a given day. When precipitation does occur, it is most often in the form of thunderstorms (67 percent), light rain (22 percent), and moderate rain (6 percent). During the cold season, which lasts from November 25 to February 25, there is a 28 percent average chance that precipitation will be observed at some point during a given day. When precipitation occurs during this timeframe, it is most often in the form of light snow (41 percent), light rain (20 percent), moderate snow (14 percent), and drizzle (9 percent). Snow and ice conditions can be expected between December and February, but excessive accumulation of either is rare.

Wind

Over the course of the year, typical wind speeds for the City of Salina area can vary from two miles per hour (mph) to 21 mph. Winds exceeding 30 mph are rare. The highest average wind speed of 13 mph occurs in early April, whereas the average daily maximum wind speed is 21 mph. The lowest average wind speed of 10 mph occurs in early August, whereas the average daily maximum wind speed is 17 mph. Typical wind patterns are from the north/south. The wind is most often out of the south constituting 30 percent of the time, from the north 14 percent of the time, from the southeast 11 percent of the time, and from the northwest 11 percent of the time.

Cloud Cover

The median cloud covers for Salina range from 17 percent being mostly clear to 50 percent as partly cloudy. The sky is cloudiest in early May and clearest in late September. Cloudier days can be expected between early January and late May while less cloudy days can be expected between early June and late September.

AIRPORT HISTORY

The development of the Salina Municipal Airport began in 1942. The construction of airfields during World War (WW) II resulted in the development of Smoky Hill Army Airfield on 2,600 acres, situated southwest of the Salina urbanized area. Construction began in May of 1942 with the aid of nearly 7,000 construction workers. The first military B-17s arrived in September of that same year.

The B-17s were eventually replaced with B-29s, and the base was used as a processing and staging area for heavy bombardment units going overseas. Upon completion of WWII, the base was home to 45 B-29s and 20 tanker planes comprising the 301st Bombardment Wing. The name of the base was changed to Smoky Hill Air Force Base in January 1948.

The Defense Department deactivated the base in August 1949 with the 301st Bombardment Wing being relocated to another Air Force Base; however, in 1951 the Department of Defense reopened the base as a prestigious Strategic Air Command Base that would be home to new B-47 jet bombers and Atlas F Missiles. In 1955, the base was named a "Golden Anniversary of Flight Base" primarily as a result of good base-community relations. In 1957, the base was renamed again, this time to Schilling Air Force Base, in honor of Col. David C. Schilling, the famed WWII fighter pilot and native Kansan.

The Department of Defense began a major renovation of the base in 1959 and also began construction of the 12 Silo Intercontinental Ballistic Missile Complex. During the next year, millions of dollars were spent preparing the runways and taxiways for the next generation of bombers and tankers, namely the B-52 and KC-135. Overall spending at the base during this era amounted to $250 million.

On November 19, 1964, the Department of Defense announced that Schilling Air Force Base along with 574 other bases around the world would be closed. At this time the base was home to approximately 5,090 men. Within the next six months, all aircraft and men were relocated, in-

cluding the Atlas F ICBM Squadron, and the base was closed on June 30, 1965. Also within those six months, the City of Salina worked to formulate a plan that would minimize the economic blow to the community due to the base closure. The newly created Schilling Development Council announced plans for an airport-education-industry complex to replace the military operations. Special enabling legislation allowed the city to acquire, own, maintain, operate, improve and dispense with portions of the base.

By May 1965, the Salina Airport Authority had been created and the conversion of Schilling Air Force Base to the Salina Airport and Salina Airport Industrial Center began. Since that time, the airport has served as an important and valuable asset to the Salina region, state of Kansas, and national airspace system. The airport has been provided commercial airline service and served military and general aviation operations. It serves as a primary training facility for KSU Salina and several military units.

SLN was also at the center of a very historic moment in aviation history. It was the launch point of the Virgin Atlantic Global Flyer, piloted by Steven Fosset, being the first non-stop flight to circumnavigate the world. Steven Fosset departed SLN on February 28, 2005 and returned on March 2, 2005. Total flight time for the trip was two days, nineteen hours, one minute, and 46 seconds. The distance flown was determined to be 36,912 kilometers (km).

The airport has served a continued key role in military operations in the state of Kansas. The airport serves as a forward operating location (FOL) for State, Federal, and international military personnel training, including those using the Great Plains Joint Training Center (GPJTC). The GPJTC is comprised of several facilities, including the Kansas Training Center Campus (KSTC) facility which is located on the airport. The GPJTC is an essential part of the education and training certification, now the responsibility of the National Guard resting with The Adjutant General of Kansas. The facility hosts training missions for military and civilian organizations. The GPJTC also includes the Smoky Hill Weapons Range 10 miles southwest of SLN.

SLN has also functioned as an itinerant military training facility and refueling location. Due to its close proximity to the Smoky Hill Weapons range, the airport hosts military units regularly. Recently, the Canadian Forces have utilized the airport for training in CF-18 Hornet aircraft.

The airport also hosted the Deep Convective Clouds and Chemistry (DC_3) field campaign from May 15 through June 30, 2012. The DC_3 is investigating the impact of large-scale thunderstorms on upper tropospheric composition and chemistry making use of extensively instrumented aircraft platforms and ground-based observations. DC_3 is studying the role of thunderstorms on the concentration of ozone in the upper troposphere. SLN served as the base location for the three research aircraft and the project operations center, while a network of ground-based radar, lightning antenna stations, and instrumentation in Colorado, Oklahoma, and Alabama were used to support DC_3 during the project.

Today, Salina Regional Airport is a vibrant and significant aviation complex offering passenger commercial service, pilot training programs, military FOL support, and a full range of aviation services and facilities airport that support SLN's moniker as

"America's Fuel Stop." The associated Airport Industrial Center also plays a key role in the regional economy. SLN is a vital economic engine for the City of Salina, Saline County, and the North Central Kansas region.

CAPITAL IMPROVEMENT HISTORY

Salina Regional Airport is eligible for various development grants from the FAA. **Table 1B** presents a summary of those projects dating back to fiscal year 2000. Since then, the airport has received approximately $17.6 million in grants. One of the grants received in fiscal year 2009 was part of the American Recovery and Reinvestment Act (ARRA) of 2009, commonly referred to as the Stimulus Program. As detailed in the table, the majority of grant monies received were utilized for pavement rehabilitation projects associated with the runway and taxiway system. Other projects included the design and construction of the recently constructed aircraft rescue and firefighting (ARFF) building, acquisition of ARFF and snow removal (SRE) equipment, and installation of beacons and guidance signs.

TABLE 1B
FAA Grant History
Salina Regional Airport

Fiscal Year	Grant Number	Grant Description	Total Federal Grant Funding
2000	N/A	No grant for this year	$0
2001	N/A	No grant for this year	$0
2002	3-20-0072-020	Rehabilitate Runway; Acquire Snow Removal Equipment	$562,349
2002	3-20-0072-021	Update Airport Master Plan Study	$26,010
2003	3-20-0072-022	Rehabilitate Runway; Install Runway Lighting	$2,416,016
2004	3-20-0072-023	Rehabilitate Runway and Taxiway	$206,869
2004	3-20-0072-024	Acquire Aircraft Rescue and Firefighting Vehicle	$621,747
2005	3-20-0072-025	Install Airport Beacons; Install Guidance Signs; Rehabilitate Runway and Taxiway	$4,039,731
2006	N/A	No grant for this year	$0
2007	3-20-0072-026	Acquire Snow Removal Equipment	$181,678
2007	3-20-0072-027	Rehabilitate Taxiway	$254,505
2008	3-20-0072-028	Rehabilitate Taxiway	$2,001,067
2008	3-20-0072-029	Rehabilitate Taxiway	$1,328,523
2009	3-20-0072-030	Rehabilitate Taxiway	$48,693
2009	3-20-0072-031	Rehabilitate Taxiway	$2,400,388
2009*	3-20-0072-032	Rehabilitate Taxiway	$823,996
2010	3-20-0072-033	Design New Aircraft Rescue and Firefighting Building	$216,733
2011	3-20-0072-034	Construct New Aircraft Rescue and Firefighting Building	$1,982,364
2012	3-20-0072-035	Conduct Airport Master Plan Study and 18B Aeronautical Survey	$475,182

* SLN received a grant from the American Recovery and Reinvestment Act (ARRA) of 2009 (Stimulus Program)
Source: FAA Records

As presented in the table, significant efforts have been made to improve pavement conditions at the airport. In 2008 and 2009, approximately $5.6 million dol-

lars was expended on pavement rehabilitation. This included work on Runway 17-35, Taxiways A/B/C/H, as well as pavement removal on Taxiways D and E. The airport's six helipads were also constructed at that time.

HISTORICAL AIRPORT ACTIVITY

At non-primary commercial service airports, the number of enplanements, based aircraft, and the total annual operations (takeoffs and landings) are the primary indicators of aeronautical activity. These indicators will be used in subsequent analyses in this master plan to project future aeronautical activity and determine future facility needs.

Passenger Enplanements

Commercial service airports provide local and regional access to the national aviation system. As such, these airports are considered vital to interstate commerce. This is especially true for regionalized and/or rural commercial service airports supporting communities with relatively long drive times to larger hub airports. As such, the U.S. Department of Transportation (DOT) and FAA developed the Essential Air Service (EAS) program which subsidizes airline operational costs for small community airports. SLN participates in the EAS program and as such, the current airline is provided an EAS subsidy. This program is instrumental in continuing commercial service for small, regionalized communities as it enables airlines a better chance to be profitable and moderates airfares.

SLN is currently served by one regularly scheduled airline, SeaPort Airlines, which operates three daily flights. The current airline schedule includes three weekday and Sunday departures/arrivals directly to and from Kansas City International Airport (MCI). The flights include an early morning, mid-day, and late afternoon departure. The early morning flight originates at SLN having "remained overnight" (RON) from the previous days final arriving flight. The three arrivals include a mid-morning, late afternoon, and late evening flight. There are no scheduled flights on Saturdays.

A key statistic kept for commercial service airports is passenger enplanements, also referred to as boardings. An enplanement includes any revenue passengers that board an aircraft for a fare at the airport. This statistic is important in that it is utilized by the FAA to determine the level of annualized entitlement funding to distribute to the airport. An airport must reach 10,000 annual enplanements to be eligible for one million dollars in annual entitlement funds. Historical enplanement data is provided on **Exhibit 1B**.

Data presented on **Exhibit 1B** ranges between 1980 and 2012. The 2012 figure included actual data from January through October only due to data availability at time of preparing this report. A historical outline accompanies the enplanement levels as well. As detailed on the exhibit, SLN had a high of nearly 30,000 enplanements in 1980 when served by Frontier Airlines to Denver. At that time, the airline industry had recently been deregulated by the U.S. Government and was operating without government subsidies.

Since 1980, enplanement levels at SLN have followed a generally decreasing trend with few intermittent peaks. This trend is very common for regionalized airports across the county. Post deregulation, the airlines established a network of

hub and spoke airport systems versus the previous point-to-point systems during deregulation. Small airport service was not profitable and the airlines opted to forego serving them. SLN enplanements have reached and exceeded 10,000 over the period as recently as 2000; however, since 2001, enplanements have not even reached 5,000.

Annual Operations

Aircraft operations, being a take-off or landing, are classified as local or itinerant. Local operations consist mostly of aircraft training operations conducted within the airport traffic pattern and touch-and-go and stop-and-go operations. Itinerant operations are arriving or departing aircraft which have an origin or destination away from the airport.

Aircraft operations are further classified in four general categories: air carrier, air taxi, general aviation, and military. Air carrier operations are defined as those conducted commercially by aircraft having a seating capacity of 60 or more and/or a maximum payload capacity of 18,000 pounds. Air taxi operations can include small commercial service aircraft operations as well as general aviation type aircraft for the "on-demand" commercial transport of persons and property in accordance with 14 Code of Federal Regulations (CFR) Part 135 and Subchapter K of 14 CFR Part 91.

Exhibit 1C presents historical aircraft operations for SLN since 1990. The exhibit includes two categories of itinerant operations: instrument flight rules (IFR) and visual flight rules (VFR) operations. IFR operations are those conducted during instrument weather conditions or under a completed instrument flight plan. Local operations are generally training operations conducted as touch-and-go, stop-and-go, low approach, etc. where the aircraft remains in the traffic pattern.

Commercial service operations at SLN by SeaPort Airlines fall under air taxi, except those large aircraft operations by private charter or airline diversions. General aviation operations include a wide array of aircraft use ranging from personal to business and corporate uses. General aviation operations comprise the majority of operations at SLN. Military operations also occur at the airport as detailed on **Exhibit 1C**.

Based Aircraft

Identifying the current number of based aircraft is important to master plan analysis, yet it can be challenging because of the transient nature of aircraft storage. The airport maintains a record of aircraft based on the airport. There are currently 105 aircraft based at the airport, including four turboprop and two jet aircraft. Historical based aircraft information is also presented on **Exhibit 1C**.

AIRPORT ADMINISTRATION

Salina Regional Airport is owned and managed by The Salina Airport Authority (SAA). The SAA is a corporate and political body created by the City of Salina in April 1965 pursuant to the authority granted by the City by the Surplus Property and Public Airport Authority Act of the State of Kansas. The Authority is managed and controlled by a five-member Board of Directors appointed by the Salina City Commission. Day-to-day operations of the airport are managed by the Executive Director of Aviation who is assisted by professional administrative staff.

Salina Regional SLN Airport

PASSENGER ENPLANEMENTS (in thousands)

30
25
20
15
10
5
0

1980 / 28,282
Frontier Airlines Service to Denver with C-580.

1981 / 17,383
Frontier Airlines Service to Denver with B-737.

1982 / 12,021
Frontier Airlines

1983 / 7,241
January - Frontier suspended service
January - Air Midwest initiated service

1984 / 6,272
Air Midwest Metroliner service to K.C.I.

1985 / 7,353
Air Midwest Metroliner service to K.C.I.

1986 / 6,987
February - Air Midwest initiated Eastern Express service

1987 / 8,721
Air Midwest operated as Eastern Express the full year.

1988 / 9,159
August - Eastern Express service ended
September - Air Midwest initiated Braniff Express service

1989 / 10,252
Air Midwest operated as Braniff Express until October, 1989. October through December, Air Midwest operated under its own name, Salina to Kansas City, 3 flights per day.

1990 / 5,707
Air Midwest operated as TW Express from Salina to St. Louis - 3 flights/day

1991 / 4,760
Air Midwest sold its TW Express service to Trans States Airlines.
May - Trans States terminates it service and Air Midwest again services Salina, this time as US Air Express. Three flights per day connecting with USAir flights in Kansas City.

1992 / 5,649
March - Air Midwest completes transition to new Beech 1900C aircraft.

1993 / 5,098
Summer - Salina Area Travel Agency survey completed. Proposal for new SLN-MCI fare structure is made. The new SLN fare would be based upon a $40 add-on to USAir MCI fares. This is consistent with the MHK $30 add-on.

1994 / 7,175
January - USAir implements a $40 add on to USAir MCI fares for USAir Express.
February, the Salina Journal begins a weekly airfare comparison in the Sunday business section.
April/May - the SAA sponsors a travel agency promotion. The fly Salina Challenge pays participating agencies $5 for each passenger ticketed above an established agency base.

1995 / 7,840
USAir Express begins to replace Beech 1900C Airliners with the stand-up cabin Beech 1900D Airliner.
August 6 - The fourth USAir Express flight is added.

1996 / 8,652
USAir Express reduces service to three flights per day during April, 1996.

1997 / 9,153

1998 / 13,021
April - Great Lakes Aviation replaces Mesa as the operator of United Express Air Service.

1999 / 13,638
September - Great Lakes Aviation reduces flights to 2 flights daily.

2000 / 10,270
Great Lakes pairs SLN with HYS instead of GLD.
December - Air Midwest reduces flights to two per day.

September 11

2001 / 6,407
July 11 - Great Lakes' Notice to Terminate on October 9. Air Midwest announces 4 flights per day starting October 7, 2001.
October 6 - Great Lakes ends SLN-DEN Service.
October 7 - Air Midwest SLN-MCI service is reduced to 3 flights per day instead of the planned 4 flights per day.
December 18 - Air Midwest cancels flight #5674 for an indefinite period of time, cutting SLN from 3 flights per day to 2 flights per day.

2002 / 2,565
January 16 - Mesa Air Group files a 90 day notice to discontinue scheduled non-subsidized EAS between SLN & MCI effective April 20, 2002 (OST-2002-11376-1)

2003 / 2,319
January 5 - Air Midwest adds a third flight.

2004 / 2,974

2005 / 2,805
Department of Transportation Essential Air Service renewed in March 2006 for 3 flights per day SLN-MHK-MCI. MHK takes majority of the seats.

2006 / 2,029
March 15 - DOT awards EAS contract for SLN/MHK for a two-year period ending February 28, 2008. Three roundtrip flights per day SLN-MHK-MCI (OST-2006-11376)

2007 / 2,495
April 4 - DOT approves request for 2 non-stop flights at SLN and 3 non-stop flights at MHK effective June 1
December 21 - DOT awards a 2-year EAS contract to Air Midwest (3/1/08 - 2/28/10)

2008 / 4,654
January 22 - Air Midwest files a 90 day notice to terminate its SLN service
February 1 - DOT issues order selecting Great Lakes for the 2008 - 2010 SLN EAS Contract.
February 5 - Great Lakes announces that it will replace Air Midwest on March 30, with 2 daily flights to Kansas City and 2 daily flights to Denver.
March - Great Lakes starts SLN service to MCI & DEN

2009 / 2,839
Great Lakes drops SLN-DEN service

2010 / 2,941
April - Seaport Airlines awarded EAS contract and replaces Great Lakes with 3 daily flights to MCI.

2011 / 2,705

2012 / 2,723
April - Seaport awarded 4 year EAS contract

2013 / 2,853

1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Economic Recession

Economic Recession

Economic Recession

KEY:

Year / Enplanements
Description of circumstances

Exhibit 1B
Historical Enplanements

Salina Regional SLN Airport

YEAR	IFR ITINERANT OPERATIONS					VFR ITINERANT OPERATIONS					TOTAL ITINERANT OPERATIONS					LOCAL OPERATIONS			TOTAL
	AC	AT	GA	MIL	SUB	AC	AT	GA	MIL	SUB	AC	AT	GA	MIL	SUB	GA	MIL	SUB	OPERATIONS
1990	0	1,241	8,161	3,298	12,700	20	796	26,232	5,602	32,650	20	2,037	34,393	8,900	45,350	38,548	12,370	50,918	96,268
1991	1	1,103	8,766	2,441	12,311	4	452	22,491	4,199	27,146	5	1,555	31,257	6,640	39,457	36,208	8,121	44,329	83,786
1992	3	1,366	9,598	2,183	13,150	35	665	20,171	4,534	25,405	38	2,031	29,769	6,717	38,555	25,702	7,369	33,071	71,626
1993	25	1,305	9,083	1,279	11,692	93	750	18,918	4,317	24,078	118	2,055	28,001	5,596	35,770	24,283	6,091	30,374	66,144
1994	27	1,737	9,034	1,194	11,992	110	1,440	17,753	2,642	21,945	137	3,177	26,787	3,836	33,937	23,672	3,606	27,278	61,215
1995	13	2,185	9,603	1,279	13,080	85	845	19,747	2,474	23,151	98	3,030	29,350	3,753	36,231	26,598	5,467	32,065	68,296
1996	8	2,199	9,727	1,173	13,107	71	982	18,153	2,063	21,269	79	3,181	27,880	3,236	34,376	22,120	5,503	27,623	61,999
1997	44	2,593	10,788	1,520	14,945	121	786	19,245	1,958	22,110	165	3,379	30,033	3,478	37,055	25,111	6,657	31,768	68,823
1998	15	3,726	12,118	1,308	17,167	89	843	21,175	1,961	24,068	104	4,569	33,293	3,269	41,235	30,954	8,138	39,092	80,327
1999	23	3,956	12,466	2,111	18,556	80	716	26,538	2,051	29,385	103	4,672	39,004	4,162	47,941	31,399	11,052	42,451	90,392
2000	34	4,607	12,544	2,315	19,500	116	585	26,000	1,885	28,586	150	5,192	38,544	4,200	48,086	28,739	10,778	39,517	87,603
2001	72	5,004	10,759	2,005	17,840	74	731	29,013	1,620	31,438	146	5,735	39,772	3,625	49,278	38,268	5,426	43,694	92,972
2002	129	5,581	11,476	1,957	19,143	0	139	29,531	1,958	31,628	129	5,720	41,007	3,915	50,771	39,789	5,241	45,030	95,801
2003	161	5,702	11,421	1,351	18,635	24	436	26,682	1,977	29,119	185	6,138	38,103	3,328	47,754	35,624	2,836	38,460	86,214
2004	32	5,173	11,216	1,080	17,501	53	723	24,323	1,632	26,731	85	5,896	35,539	2,712	44,232	33,034	4,199	37,233	81,465
2005	171	4,931	11,361	1,020	17,483	0	602	24,803	1,282	26,687	171	5,533	36,164	2,302	44,170	38,925	3,246	42,171	86,341
2006	28	4,892	11,277	985	17,182	3	743	23,941	734	25,421	31	5,635	35,218	1,719	42,603	36,120	2,660	38,780	81,383
2007	40	4,676	10,816	878	16,410	0	366	22,559	1,305	24,230	40	5,042	33,375	2,183	40,640	33,195	2,531	35,726	76,366
2008	63	5,879	8,243	598	14,783	3	5,503	14,503	1,271	21,280	66	11,382	22,746	1,869	36,063	33,472	1,877	35,349	71,412
2009	17	5,614	6,362	706	12,699	0	9,245	9,484	1,486	20,215	17	14,859	15,846	2,192	32,914	30,614	1,703	32,317	65,231
2010	38	4,963	6,450	689	12,140	1	11,341	6,577	1,659	19,578	39	16,304	13,027	2,348	31,718	26,953	1,805	28,758	60,476
2011	66	4,670	6,041	675	11,452	4	15,037	5,681	1,318	22,040	70	19,707	11,722	1,993	33,492	33,639	1,967	35,606	69,098
2012	37	3,989	5,923	741	10,690	2	19,714	5,890	1,455	27,061	39	23,703	11,813	2,196	37,751	56,385	3,002	59,387	97,138
2013	37	4,162	4,865	597	9,661	7	18,908	4,978	1,190	25,083	44	23,070	9,843	1,787	34,744	52,494	2,893	55,387	90,131

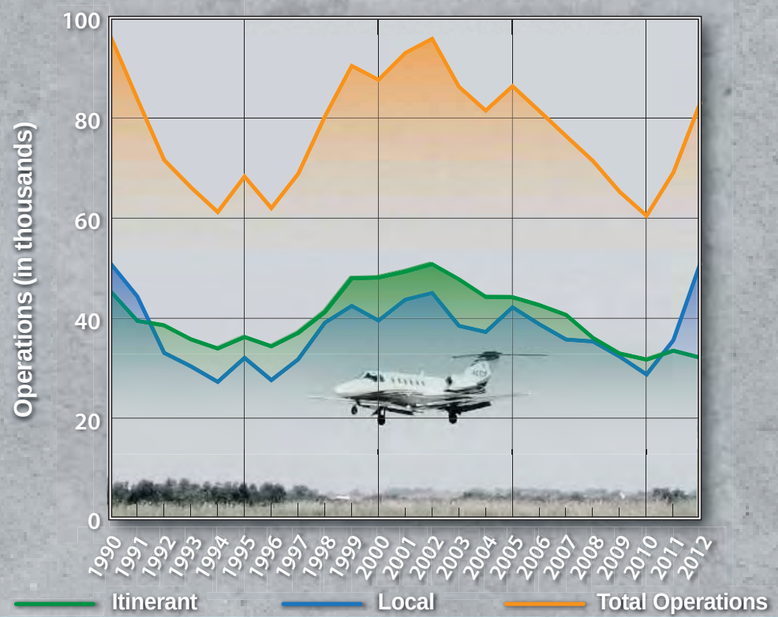
Source: FAA Air Traffic Activity Data System (ATADS) as reported by the SLN ATCT

KEY

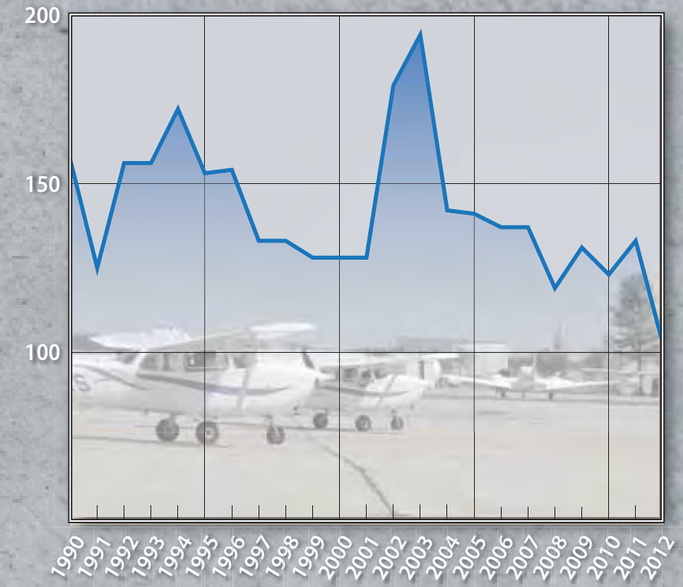
GA General aviation
MIL Military
SUB Subtotals

AC Air Carrier (commercially operated aircraft having seating capacity more than 60 seats or a maximum payload capacity of 18,000 pounds)
AT Air Taxi (commercially operated aircraft having 60 or fewer passenger seats or less than 18,000 pounds maximum payload capacity)

ANNUAL OPERATIONS



BASED AIRCRAFT



BASED AIRCRAFT FLEET MIX

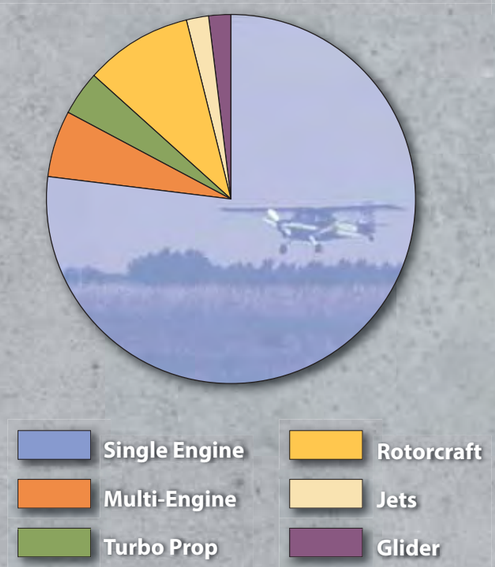


Exhibit 1C
Historical Operations and Based Aircraft

AIRPORT SYSTEM PLANNING ROLE

Airport planning exists on many levels: national, state, and local. Each level has a different emphasis and purpose. On the national level, the Salina Regional Airport is included in the *National Plan of Integrated Airport Systems* (NPIAS) and within an FAA report published in 2012 entitled *General Aviation Airports: A National Asset*. On the state level, the airport is included in *Kansas Aviation System Plan* (2008). The most recent local planning document is the Airport Layout Plan Update and Narrative Report which was last updated in 2010. The last full master plan update was completed in the 1990s.

FEDERAL AIRPORT PLANNING

The role of the federal government in the development of airports cannot be overstated. Many of the nation's existing airports were either initially constructed by the federal government or their development and maintenance was partially funded through various federal grant-in-aid programs to local communities. In large measure, the system of airports existing today is due, in part, to the existence of federal policy that promotes the development of civil aviation. As part of a continuing effort to develop a national airport system to meet the needs of civil aviation and promote air commerce, the United States Congress has continually maintained a national plan for the development and maintenance of airports.

On the national level, the Salina Regional Airport is included in the NPIAS as a non-primary commercial service airport. This designation includes 121 airports nationwide that provide regularly scheduled passenger commercial service with more than 2,500 passenger boardings but fewer than 10,000 annually. Overall, the NPIAS identifies 3,332 existing airports which are considered significant to the national air transportation system. The NPIAS is published and used by the FAA in administering the Airport Improvement Program (AIP), which is the source of federal funds for airport improvement projects across the country. The AIP program is funded exclusively by user fees and user taxes, such as those on fuel and airline tickets. The 2013-2017 NPIAS estimates that $42.5 billion worth of needed airport improvements are eligible for AIP funding across the country over the next five years. An airport must be included in the NPIAS to be eligible for federal funding assistance through the AIP.

The NPIAS supports the FAA's strategic goals for safety, system efficiency, and environmental compatibility by identifying specific airport improvements. The current issue of the NPIAS identifies approximately $10.3 million in development needs over the next five years for Salina Regional Airport. This figure is not a guarantee of federal funding; instead, this figure represents development needs as presented to the FAA by the airport administration in the annual airport capital improvement program. Of the $42.5 billion in airport development needs identified by the NPIAS nationally, approximately two percent, or $670 million, is listed for the 121 non-primary commercial service airports, which includes SLN.

Airports that apply for and accept AIP grants must adhere to various grant assurances. These assurances include maintaining the airport facility safely and efficiently in accordance with specific conditions. The duration of the assurances depends on the type of airport, the useful life of the facility being developed, and other factors. Typically, the useful life for an airport development project is a minimum of 20 years. Thus, when an airport accepts AIP grants, they are obligated to

maintain that facility in accordance with FAA standards for at least that long.

In 2012, the FAA published a document titled *General Aviation Airports: A National Asset*. An outcome of the report was further classification of general aviation airports into four categories: national, regional, local, and basic airports. Of the 2,952 general aviation airports included in the study, 497 were not specifically classified due to types of activity and characteristics that did not provide for clear classification within one of the four groups. **Exhibit 1D** summarizes the key findings of the NPIAS and General Aviation Asset Studies.

With this report, which has been integrated into the NPIAS, the FAA promotes the important contribution that general aviation airports provide to the national aviation system and economy. General aviation contributed $38.8 billion in economic output in 2009. When factoring in manufacturing and visitor expenditures, general aviation accounted for an economic contribution of $76.5 billion.

The new categories for general aviation airports are intended to help guide policy makers when making decisions regarding airports. The study recognized that categorizing all general aviation airports the same did not properly identify the important role of each airport within a community and the benefits of a large and diverse aviation system.

While SLN is classified in the NPIAS as a non-primary commercial service airport, it has also been identified in the General Aviation National Asset Study as a Regional Airport. As defined by the study, 467 airports were classified within the regional grouping. The FAA describes the regional group as airports that support regional economies by connecting communities to statewide and interstate markets. These airports have high levels of activity including jet and multi-engine aircraft operations and average 90 based aircraft, including three jets. The following criterion was used to classify SLN as Regional:

- Within a metropolitan statistical area (MSA) (metro or micro) and 10+ domestic flights over 500 miles, 1,000+ instrument operations, 1+ based jet, or 100+ based aircraft; or

- The airport is located in a MSA (metro or micro) and the airport meets the definition of a NPIAS commercial service airport.

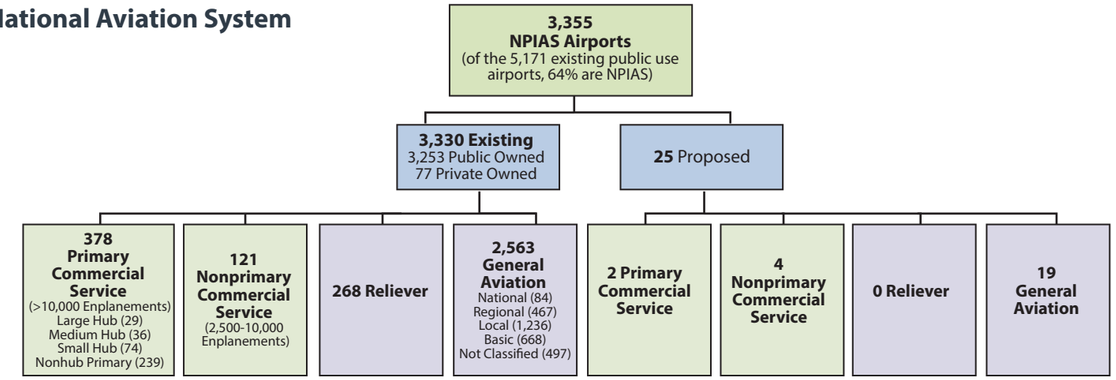
The Asset Study identifies ten regional airports in the State of Kanas to include airports in Dodge City, Hays, Hutchison, Lawrence, Liberal, Newton, Johnson County (Executive and New Century), Salina, and Wichita (Colonel James Jabara). Regional airports account for 16 percent of the general aviation airports that are eligible for federal funding. They also account for 37 percent of total flying activity at the studied general aviation airports and 42 percent of flying activity with flight plans. There is a substantial amount of air taxi, jet, and rotorcraft operations at these airports.

STATE AIRPORT PLANNING

The primary planning document for the State of Kansas is the *Kansas Airport System Plan (2008 KASP).* The plan provides the KDOT's Aviation Division staff with a tool to assess the needs of the state's airports; help justify funding for airport improvements; and provides information to airport sponsors and others concerning

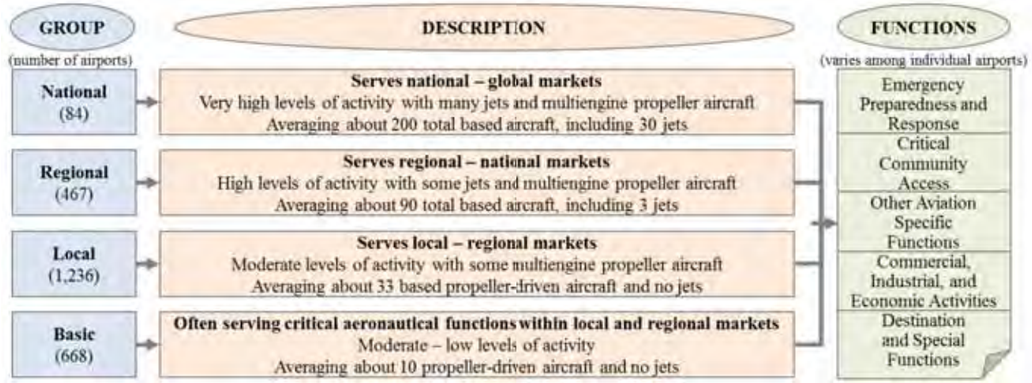
Salina Regional SLN Airport

National Aviation System

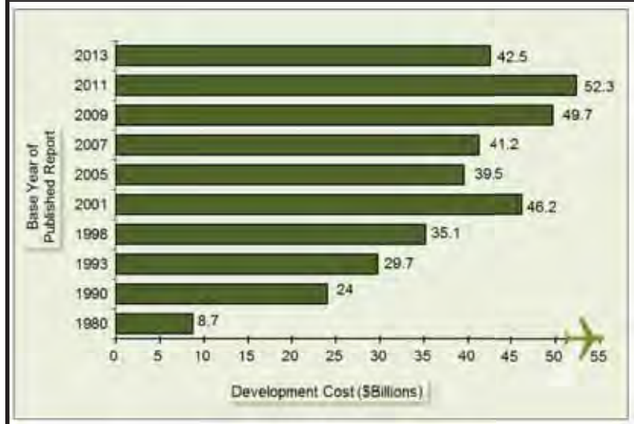


There are more than 19,800 aviation facilities in the United States. 5,171 of those are public use facilities. The National Plan of Integrated Airport Systems (NPIAS) includes 3,355 public use landing facilities, of which 3,330 are existing and 25 are proposed.

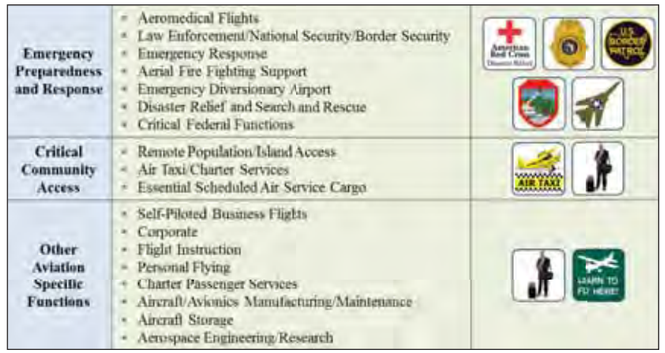
General Aviation Airports

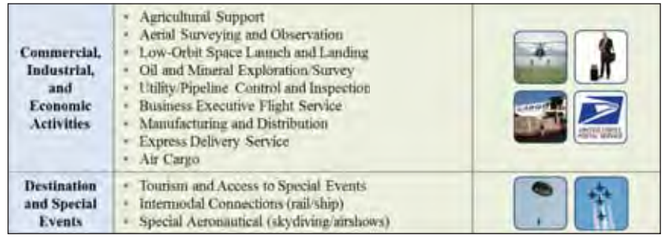


The FAA has further categorized general aviation airports to help guide policy makers when making decisions regarding airport development.

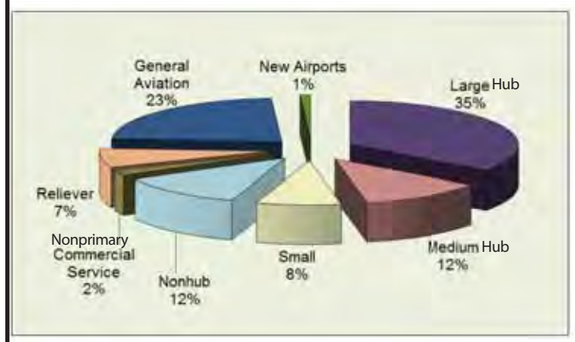


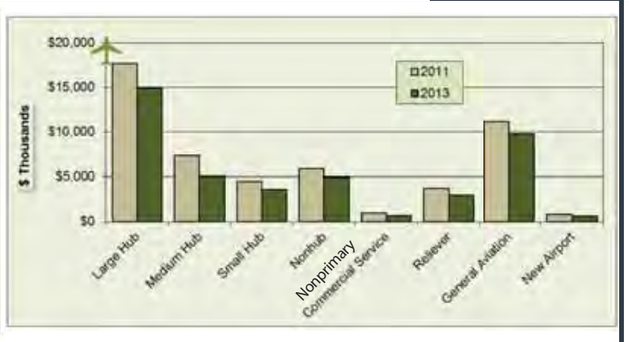
The FAA estimates that over the next five years, (2013-2017), there will be $42.5 billion airport infrastructure projects eligible for Airport Improvement Program (AIP) funding.





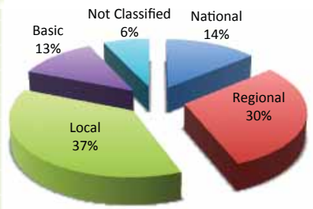
General aviation airports provide important services for both local communities and the national aviation system.





The 449 commercial service (primary and nonprimary) airports account for 69% of the total development in the NPIAS. The 2,563 general aviation and 268 reliever airports account for 30% of development.

Category	National	Regional	Local	Basic	Not Classified	TOTAL
Safety	$75,705,614	$86,710,307	$70,021,759	$16,866,556	$7,026,559	$256,330,795
Security	$30,588,072	$70,028,017	$116,979,036	$54,635,381	$42,428,521	$314,659,027
Reconstruction	$566,808,683	$1,151,264,524	$1,408,160,656	$505,127,646	$225,522,854	$3,856,884,363
Standards	$824,339,636	$2,215,374,810	$2,967,664,186	$1,013,246,603	$533,257,040	$7,553,882,275
Environmental	$15,797,438	$9,895,920	$25,330,900	$13,827,647	$4,270,342	$69,122,247
Noise	$59,033,952	$12,492,106	$4,410,211	$0	$0	$75,936,269
Capacity	$167,431,296	$218,153,518	$168,522,546	$56,143,576	$32,282,883	$642,533,819
Terminal	$48,187,551	$61,979,002	$70,218,522	$21,798,925	$9,867,688	$212,051,688
Access	$47,984,641	$109,815,827	$104,412,928	$42,708,943	$13,451,896	$318,374,235
Other	$7,571,000	$27,813,731	$49,226,059	$26,995,300	$15,686,691	$127,292,781
Total	$1,843,447,883	$3,963,527,762	$4,984,946,803	$1,751,350,577	$883,794,474	$13,427,067,499



Airports in the general aviation categories account for $13.4 billion of the $42.5 billion in identified development need over the next five years.

Exhibit 1D
NPIAS and FAA Asset Study

Source: National Plan of Integrated Airport Systems 2013-2017

Source: General Aviation Airports: A National Asset (May 2012)

the value, use, and needs of the state's public use airports.

The 2008 *KASP* identified five roles for Kansas airports which are defined as follows:

Commercial Service Airports: These airports accommodate scheduled major/national or regional/commuter commercial air service.

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: 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.

Salina Regional Airport is classified as a Commercial Service Airport in the *2008 KASP*. The minimum facility and service requirements are listed in **Table 1C.** The airport layout and available services meet the minimum recommendations in the 2008 KASP for all criteria.

TABLE 1C
Minimum Facility and Service Criteria
KASP Regional Airports

Airport Criteria	Minimum Objective
Runway Length	5,500 feet
Runway Width	100 feet
Taxiway	Full Parallel
Surface	Paved/All Weather Surface
Pavement Condition Index (PCI)	70 or Greater
Approach Capability	Precision
Visual Aids	Rotating Beacon, Lighted Wind Sock, REILS, VASI/PAPI
Lighting	MIRL/MITL
Approach Lighting System	ALS Desired
Weather	AWOS, ASOS, ATCT
Planning documents	Security Plan, Snow Removal Plan
Services	Limited Service FBO, Restrooms, Links to Ground Transportation, AvGas and Jet A Fuel
Facilities	Terminal Building, Pilots' Lounge, Hangars for 100% of based aircraft, Apron 100' x 100', Auto Parking

REIL: Runway End Identification Lights
VASI: Visual Approach Slope Indicator
PAPI: Precision Approach Path Indicator
AWOS: Automated Weather Observation System
MIRL: Medium Intensity Runway Lighting
MITL: Medium Intensity Taxiway Lighting
ALS: Approach Lighting System
ASOS: Automated Surface Observation System
ATCT: Airport Traffic Control Tower
FBO: Fixed Base Operator

Source: Kansas Airport System Plan (2008 KASP)

LOCAL AIRPORT PLANNING

The airport master plan is the primary local planning document. The master plan is intended to provide a 20-year vision for airport development based on aviation demand forecasts. The most recent update to the airport planning doc-

ument is the 2010 Airport Layout Plan (ALP) Update and Narrative Report. The last master plan study was completed in the 1990s. Over time, the forecast element of an airport master plan typically becomes less reliable due to changes in aviation activity and/or the economy. As a result, the FAA recommends that airports update their master plans every seven to ten years, or as necessary to address any significant changes. Therefore, this is an appropriate time to update the airport master plan and revisit the development assumptions from the previous planning study.

14 CFR PART 139 CERTIFICATION

An airport must have an Airport Operating Certificate (AOC) if it is serving air carrier aircraft with more than nine seats or serving unscheduled air carrier aircraft with more than 30 passenger seats. 14 CFR Part 139 (Part 139) describes the requirements for obtaining and maintaining an AOC. This includes meeting various Federal Aviation Regulations (FARs) now codified under the CFR.

Airports are classified in the following categories based on the type of air carrier operations served:

- **Class I Airport** – an airport certificated to serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft.

- **Class II Airport** – an airport certificated to serve scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.

- **Class III Airport** – an airport certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.

- **Class IV Airport** – an airport certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled air carrier aircraft regulated under CFR Part 121.

SLN is currently classified as a Class IV CFR Part 139 commercial service airport. This designation supports the regularly scheduled CFR Part 135 passenger service offered by SeaPort Airlines as well as non-scheduled larger CFR Part 121 commercial service operations.

Part 139 regulation (which implemented provisions of the *Airport and Airway Development Act of 1970*, as amended on November 27, 1971) set standards for: the marking and lighting of areas used for operations; firefighting and rescue equipment and services; the handling and storing of hazardous materials; the identification of obstructions; and safety inspection and reporting procedures. It also required airport operators to have an FAA-approved Airport Certification Manual (ACM).

The ACM is a required document that defines the procedures to be followed in the routine operation of the airport and for response to emergency situations. The ACM is a working document that is updated annually as necessary. It reflects the current condition and operation of the airport and establishes the responsibility, authority, and procedures as required.

There are required sections for the ACM covering administrative detail and procedural detail. Salina Regional Airport has a current, approved ACM. The ACM includes the following information:

- General Information
- Inspection Authority
- Deviation to Part 139 Requirements
- ACM Maintenance/Revisions
- Personnel Information
- Paved/Unpaved Areas
- Safety Areas
- Marking, Signs, and Lighting
- Snow and Ice Control
- ARFF Index, Equipment, Agents, and Operational Requirements
- Hazardous Materials
- Traffic and Wind Indicators
- Airport Emergency Plan
- Self-inspection Program
- Pedestrians and Ground Vehicles
- Obstructions
- Protection of NAVAIDS
- Public Protection
- Airport Condition Reporting
- Identifying, Marking, and Lighting Construction and Unserviceable Areas
- Wildlife Hazard Plan

AIRFIELD FACILITIES

Airfield facilities are those which facilitate aircraft movements between the air and ground. Generally, these facilities include runways, taxiways, airport lighting and markings, and navigational aids. **Exhibit 1E** summarizes airfield facility data, while **Exhibit 1F** depicts airfield facilities on an aerial photograph for visual reference.

RUNWAYS

Salina Regional Airport is served by four runways, two of which intersect. Runway 17-35 is the airport's primary runway and Runway 12-30 is the primary crosswind runway. Both runways are capable and certified to accommodate air carrier aircraft operations. Runway 18-36 is a parallel outboard runway located at the western portion of airport property and is primarily designed to accommodate small aircraft training operations. Runway 4-22 is a relatively short runway designed for small aircraft operations during infrequent strong crosswind conditions.

Runway 17-35

Runway 17-35 is 12,300 feet long by 150 feet wide, oriented in a north-south manner. The runway is a remnant of the original Schilling Air Force Base when the runway was over 13,000 feet long. Runway 17-35 is certified to accommodate passenger commercial service aircraft operations.

The pavement is constructed of asphalt and is reported as being in good condition by official FAA publications. Runway 17-35 is served with precision markings providing threshold bars, runway end designations, touchdown zone, aiming point, centerline, and edge markings. As the airport's longest runway and being served by precision instrument landing equipment, Runway 17-35 serves as the primary runway, especially for turboprop and jet aircraft.

Runway 17-35 has pavement strength of 75,000 pounds single wheel loading (SWL) which refers to the design of certain aircraft landing gear that has a single wheel on each main landing gear strut. The runway pavement has also been strength-rated at 200,000 pounds dual wheel (DWL), 360,000 pounds for dual tandem wheel (DTWL), and 600,000

pounds double dual tandem wheel (DDTWL). This pavement strength will accommodate most aircraft in the commercial and military fleet today.

Runway 12-30

Oriented in a northwest-southeast manner, crosswind Runway 12-30 is 6,510 feet long and 100 feet wide. Runway 12-30 is the only other runway at SLN certified to accommodate passenger commercial service aircraft operations. The runway is situated so as not to intersect with the primary runway; however, it does intersect Runway 18-36. The runway is constructed of asphalt pavement and is reported in FAA publications as in excellent condition. Runway 12-30 has non-precision markings which include threshold bars, runway end designations, touchdown zone, and centerline markings. The published pavement strength is 55,000 pounds SWL, 68,000 pounds DWL, and 125,000 pounds DTWL.

Runway 18-36

Runway 18-36 is a parallel outboard runway situated approximately 4,434 feet west of primary Runway 17-35 (centerline to centerline). Constructed of asphalt and reported in excellent condition, Runway 18-36 is 4,300 feet long by 75 feet wide. The runway was commissioned in 2003 and primarily serves as a training runway for KSU Salina pilot training operations; however, it is also the designated runway for unmanned aircraft system (UAS) flights due to its remote location allowing for segregation of UAS and other aircraft operations. Runway 18-36 is pavement strength rated at 30,000 pounds SWL.

Runway 4-22

Runway 4-22 is 3,648 feet long and 75 feet wide, generally oriented in a northeast to southwest manner. Runway 4-22 is situated between Runway 12-30 and Runway 17-35 but intersects neither. In fact, the Runway 4 threshold is located on the northeastern pavement shoulder of Runway 12-30 and the Runway 22 threshold is located on the western pavement shoulder for Runway 17-35.

Wind conditions for the region do not generally support the use of Runway 4-22; however, it is utilized by small aircraft when winds dictate. It is considered a day-time use runway only having no runway lights and basic markings only. Runway 4-22 has published pavement strength ratings of 100,000 pounds SWL, 135,000 pounds DWL, and 230,000 pounds DTWL. The pavement is reported to be in fair condition.

TAXIWAYS

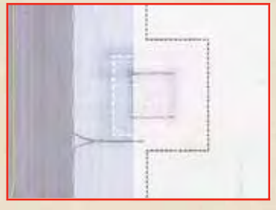
The taxiway system at SLN consists of parallel, connector, and entrance/exit taxiways. The width of each taxiway varies based on aircraft design and usage. Taxiway A is the airport's only full length parallel taxiway located on the east side of Runway 17-35. Between Runway 35 and Taxiway F, it is situated approximately 670 feet from the runway (centerline to centerline). North of Taxiway F, Taxiway A jogs slightly east then parallels Runway 17-35 at a separation of approximately 778 feet from the runway (centerline to centerline). Taxiway A is constructed of asphalt and is 75 feet wide.

The Taxiway A designator is also given to the entrance/exit taxiways at the north and south ends of Runway 17-35. These

Salina Regional
SLN Airport

RUNWAYS	Runway 17-35	Runway 12-30	Runway 18-36	Runway 4-22
Runway Length (feet)	12,300′	6,510′	4,300′	3,648′
Runway Width (feet)	150′	100′	75′	75′
Runway Pavment Surface Material	Asphalt	Asphalt	Asphalt	Asphalt
Runway Pavment Surface Treatment	None	None	None	None
Runway Pavement Condition (Reported)	Good	Excellent	Excellent	Fair
Runway Pavement Markings	Precision	Non-precision	Non-precision	Basic
Runway Lighting	HIRL	MIRL	None	None
Usable for Air Carrier Operations	Yes	Yes	No	No
Traffic Pattern	Left (17); Right (35)	Right (12); Left (30)	Right (18); Left (36)	Left (4-22)
Runway Pavement Load Bearing Strength (lbs.)				
-Single Wheel Loading (S)	75,000	55,000	30,000	100,000
-Dual Wheel Loading (D)	200,000	68,000	N/A	135,000
-Double Tandem Wheel Loading (DT)	360,000	125,000	N/A	230,000
-Dual Double Tandem Wheel Loading (DDT)	600,000	N/A	N/A	N/A
RUNWAY SAFETY MEASURES				
RSAT Initiatives	Hot Spot Brochure; Runway guard lights installed on Twys B and E	Hot Spot Brochure; Runway guard lights for Runway 12 installed on Twy E	NONE	NONE
TAXIWAYS				
Taxiway Lighting	Medium Intensity (MITL) on all air carrier taxiways including all taxiways associated with Runways 17-35 and 12-30			
Markings	Centerline, leadoff taxilanes, continuous edge along shoulders, dashed edge along Twy A apron, and reflectors (east of Twy A and north of Twy E)			
VISUAL APPROACH AIDS	MALS (17); MALSR (35) PAPI-4L (17), PAPI-4R (35)	PAPI-4L (12, 30)	NONE	NONE
INSTRUMENT APPROACH AIDS	ILS OF LOC RWY 35 RNAV (GPS) RWY 17 RNAV (GPS) RWY 35 VOR RWY 17 NDB RWY 35	RNAV (GPS) RWY 12 RNAV (GPS) RWY 30	NONE	NONE
WEATHER AND NAVIGATIONAL AIDS	Automated Surface Obeservation System (ASOS), Lighted Wind Cones, Airport Beacon, Airport Traffic Control Tower (ATCT), Automated Terminal Information System (ATIS) CTAF/UNICOM			

HELIPADS	H1	H2	H3	H4	H5	H6
Design Aircraft	Large > 12,000 lbs.	Small 6,000 lbs.	Small 6,000 lbs.	Large > 12,000 lbs.	Large > 12,000 lbs.	Small 6,000 lbs.
Airspace Planned	Visual	Visual	Visual	Precision	Visual	Visual






CTAF - Common Traffic Advisory Frequency
GPS – Global Positioning System
HIRL - High Intensity Runway Lighting
ILS - Instrument Landing System
LOC - Localizer
MALS – Medium Intensity Approach Lighting System
MALSR – Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
MIRL - Medium Intensity Runway Lighting
RSAT - FAA Runway Safety Action Team
UNICOM - Universal Communication
VASI – Visual Approach Slope Indicator
VOR/DME – Very High Frequency Omni-directional Range/Distance Measuring Equipment

Exhibit 1E
Airfield Facility Data

Salina Regional
SLNAirport

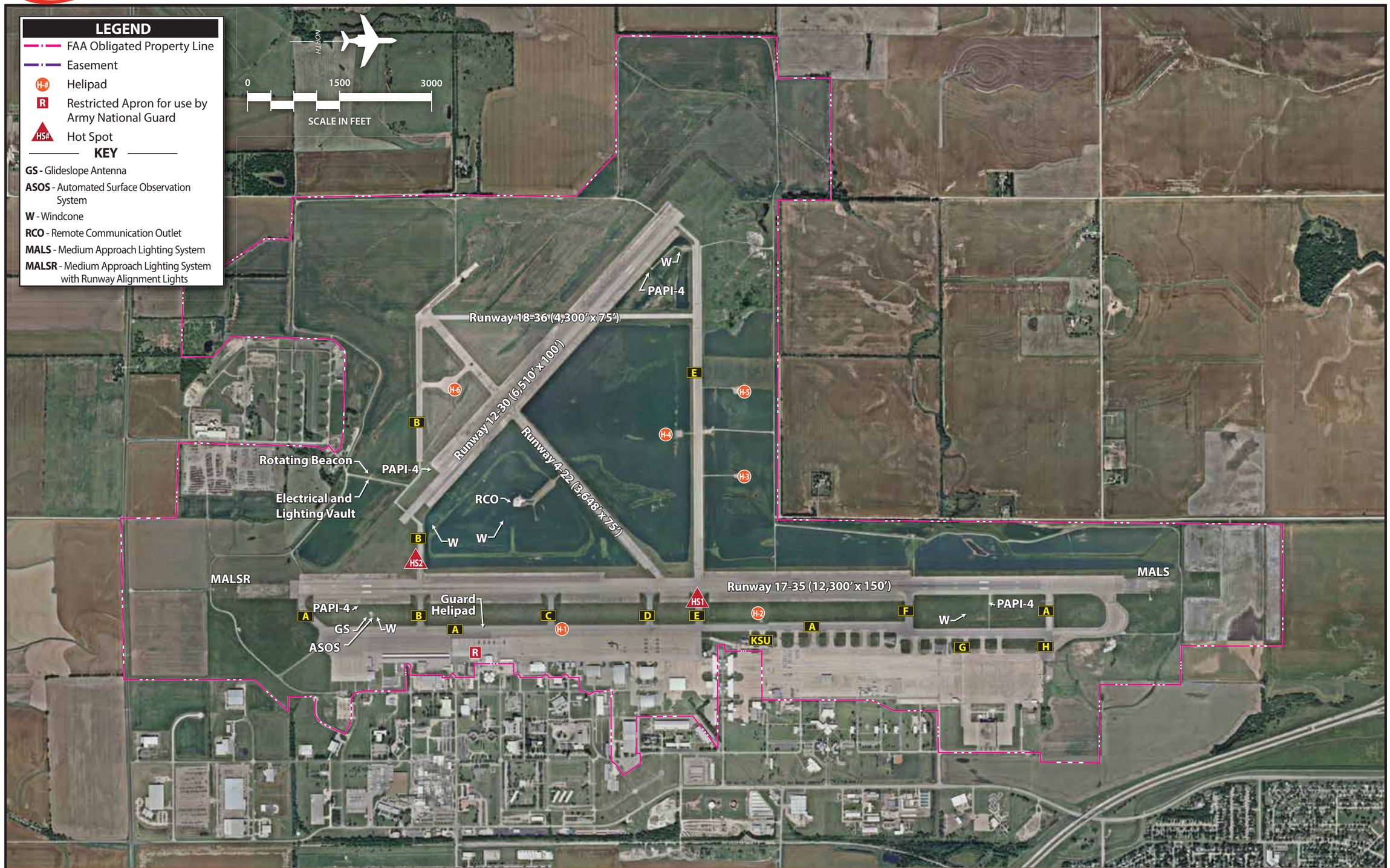


Exhibit 1F
Exisiting Airside Facilities

taxiways simply connect the two runway ends with the parallel taxiway. The northern entrance/exit Taxiway A is aligned at a 90 degree angle interface with Runway 17 and Taxiway A. The southern entrance/exit Taxiway A is aligned with Runway 35 in an angular fashion sometimes referred to as a spiral exit.

There are five other entrance/exit taxiways connecting Runway 17-35 with parallel Taxiway A. These taxiways are designated B, C, D, E, and F moving from the south to the north, as depicted on **Exhibit 1F**. Taxiways B, C, and D are constructed of asphalt and are 50 feet wide. Taxiways E and F are also constructed of asphalt but are 75 feet wide.

Taxiways B and E also provide extended routing to other runways on the airfield. Taxiway B continues through Runway 17-35 and then turns to intersect Runway 30 at a 90 degree angle. This portion of the taxiway is constructed of asphalt and is 50 feet wide. Beyond Runway 30, Taxiway B continues southwest, then turns 90 degrees to parallel the southwestern portion of Runway 12-30, then turns again extending to the Runway 36 threshold. This portion of Taxiway B is 35 feet wide and constructed of asphalt. Taxiway E extends through Runway 17-35 until it turns to intersect Runway 12 at a 90 degree angle. The entire stretch of taxiway pavement is marked at 50 feet wide. Taxiway E also provides connection access to the Runway 18 threshold along this route.

Taxiways G and H are connector taxiways which link parallel Taxiway A to the north ramp. These taxiways are constructed of asphalt and are 75 feet wide. There is a designated taxiway serving the KSU aviation ramp immediately north of the ARFF facility. It is designated as the KSU taxiway leading to the KSU aircraft apron which is not on airport property.

Pavement Markings

Pavement markings aid in the movement of aircraft along airport surfaces and identify closed or hazardous areas on the airport. Runway 17-35 has precision markings which identify the runway designation, edges, centerline, threshold, touchdown zone, and aiming point. Runways 12-30 and 18-36 have non-precision markings that include threshold, designation, centerline, and aiming point. It should be noted that the non-precision marking on Runway 18-36 is not in support of an instrument approach, and instead was provided to allow for KSU flight training programs. Runway 4-22 has basic markings which include runway designation and centerline.

Taxiway and taxilane centerline markings are provided to assist pilots in maintaining proper clearance from pavement edges and objects near the taxiway/taxilane edges. The Airport Authority opted for thermoplastic markings in a recent project. Thermoplastic markings are purported to be more durable and require less maintenance then conventional paint/glass beads. The thermoplastic markings contain glass beads and are now FAA approved. Taxiway markings at SLN include the following:

- Centerline;
- Leadoff lines on normally used exits;
- Continuous type edge markings along paved shoulders; and
- Dashed type edge markings along the portion of Taxiway A which is contiguous to the terminal apron.

Taxiway markings also include aircraft holding positions located on the entrance/exit and connecting taxiways. Enhanced taxiway centerline markings have been installed at all holding positions. All holding position markings are glass beaded, highlighted in black, and double sized in accordance to FAA regulations. The hold-line positions function to keep aircraft from entering the runway environment without clearance. The location of hold-lines is established by the design aircraft for a runway. The hold-lines at SLN are set at 250 feet from runway centerline.

Aircraft movement areas on various aprons are identified with centerline markings. Aircraft tie-down positions are identified on various apron surfaces.

Airfield Safety

In response to runway incursions reported in 2007 and 2008, the FAA Office of Airports and Runway Safety and Runway Safety Action Team (RSAT) developed a "hot spot" alert diagram to raise pilot awareness. The diagram was placed in official FAA publications so as to highlight the area for local and itinerant pilots.

The FAA defines an "airport surface hot spot" as a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary. A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1," "HS 2," etc.

At SLN, two hot spots have been identified. HS1 is located at the hold-line for Runway 17-35 on Taxiway E. This location is a commonly utilized departure point for "intersection take-offs," especially for small aircraft which do not need the full runway length. HS2 is located on the section of Taxiway B between Runway 17-35 and Runway 30. The pavement section has two hold-line positions, one 250 feet west of Runway 17-35 and one 250 feet from the Runway 30 centerline. As such, aircraft taxiing from the main apron to Runway 30 are routed on Taxiway B and must remain clear of both hold-line positions to hold for departure clearance on Runway 30. The hot spot locations are depicted on **Exhibit 1F**.

AIRFIELD LIGHTING

Airfield lighting systems extend an airport's usefulness into periods of darkness and/or poor visibility. A variety of lighting systems are installed at the airport for this purpose. These lighting systems, categorized by function, are summarized as follows.

Identification Lighting: The location of the airport at night is universally identified by a rotating beacon. The rotating beacon projects two beams of light, one white and one green, 180 degrees apart. The rotating beacon at Salina Regional Airport is located approximately 1,000 feet southwest of the Runway 30 threshold, as depicted on **Exhibit 1F**.

Runway and Taxiway Lighting/Signage: Runway and taxiway edge lighting utilizes light fixtures placed near the edge of the pavement to define the lateral limits of the pavement. This lighting is essential for safe operations during night and/or times of low visibility in order to maintain safe and efficient access to and from the runways and aircraft parking areas.

Runway 17-35 is equipped with high intensity runway lights (HIRL). Runway 12-30 is served by medium intensity runway lights (MIRL). The runway light lenses are split white-yellow to mark the caution zone on the last 2,000 feet of each runway end. Neither Runway 18-36 nor Runway 4-22 are served by edge lighting. All taxiways associated with Runways 17-35 and 12-30 are equipped with medium intensity taxiway edge lighting (MITL). Supplemental taxiway reflectors are provided on the east side of Taxiway A north of Taxiway E.

The airport also has a runway/taxiway signage system. The presence of runway/taxiway signage is an essential component of a surface movement guidance control system necessary for the safe and efficient operation of the airport. The signage system installed at Salina Regional Airport includes runway and taxiway designations, holding positions, instrument landing system (ILS) critical areas, routing/directional, runway end and exits, and runway distance remaining. All airfield signs are lit. **Exhibit 1G** depicts the existing airfield signage system for SLN on an aerial base map.

In response to the historical runway incursion events and identification of two hot-spot locations on the airport, supplemental lighting has been installed. Runway guard lights (RGLs) serve to raise situational awareness but do not provide or preclude authority to pass. They are commonly referred to as "wig-wags." In their basic form, they consist of a pair of unidirectional yellow lights which flash continuously. They are positioned at each side of a taxiway at the marked and signed holding position. Both aircraft and vehicles are required to wait at this point until given clearance by air traffic control (ATC) to proceed. RGLs have been installed on Taxiways B and E at the holding positions for Runways 30 and 17-35 respectively.

Visual Approach Lighting: A four-box precision approach path indicator (PAPI-4) system is installed on both ends of Runways 17-35 and 12-30. The PAPI-4 is located on the left side of the approach end of Runway 17 and the right side of Runway 35. The systems consist of four light box units that alert approaching pilots of their position relative to the desired three-degree glide slope. There are no visual approach lighting aids installed on Runway 18-36 or Runway 4-22.

Runway 17 is equipped with a medium intensity approach lighting system (MALS) which offers a lighted, visual grid for pilots to identify the runway end while on final approach. Runway 35 is equipped with a MALS supplemented with runway alignment indicator lights (RAIL). The combined MALS and RAIL is referred to as a MALSR. The RAIL portion of the MALSR is a linear progression of strobe lights which provides pilots with a rapid, visual cue of the runway centerline. The MALSR, in conjunction with the localizer antenna and glide slope antenna, form the instrument landing system (ILS) approach to Runway 35.

After-Hours Lighting: When the airport traffic control tower (ATCT) is closed, pi-

lots can activate airfield lights utilizing the pilot control lighting (PCL) system. The PCL will activate runway edge lights, PAPI-4 (all equipped runways), MALS, and the MALSR through a series of clicks with their transponder on the common traffic advisory channel (CTAF) frequency 119.3 MHz.

WEATHER AND COMMUNICATION AIDS

Salina Regional Airport is equipped with five windcones. The windcones provide information to pilots regarding wind conditions, such as direction and intensity and are rated for 40 knot winds. Each of the four windcones located at the approach ends of Runways 12, 17, 30, and 35, are lighted. The fifth windcone is not lit and is located north of Runway 30 and west of Runway 17-35, as depicted on **Exhibit 1F**.

Salina Regional Airport is served by an Automated Surface Observing System (ASOS). An ASOS automatically records weather conditions such as temperature, dew point, wind speed, altimeter setting, visibility, sky condition, and precipitation. The ASOS updates observations each minute, 24 hours a day, and this information is transmitted to pilots in the airport vicinity via an FAA very high frequency (VHF) ground-to-air radio transmitter. Pilots can receive these broadcasts on the automated terminal information service (ATIS) frequency or via a local telephone number (785.823.3402), where a computer-generated voice will present airport weather information. ATIS broadcasts are updated hourly and provide arriving and departing pilots the current surface weather conditions, communication frequencies, and other important airport-specific information. The ATIS frequency at Salina Regional Airport is 120.15 MHz. Salina Regional Airport has access to the common advisory traffic frequency (CTAF). This radio frequency (119.3 MHz) is used by pilots in the vicinity of the airport to communicate with each other about approaches to or departures from the airport when the airport traffic control tower is closed. In addition, a UNICOM frequency is also available (122.95 MHz), where a pilot can obtain information pertaining to the airport.

West of Runway 17-35 and north of Runway 12 is an antenna array owned by the FAA. The antenna array, called a remote communications outlet (RCO) is an unmanned facility that enhances communication range of air traffic control services. The RCO is linked to Wichita radio on frequency 122.4 MHz.

AREA AIRSPACE AND AIR TRAFFIC CONTROL

The *Federal Aviation Administration Act of 1958* established the FAA as the responsible agency for the control and use of navigable airspace within the United States. The FAA has established the National Airspace System (NAS) to protect persons and property on the ground and to establish a safe and efficient airspace environment for civil, commercial, and military aviation. The NAS covers the common network of U.S. airspace, including: air navigation facilities; airports and landing areas; aeronautical charts; associated rules, regulations, and procedures; technical information; and personnel and material. The system also includes components shared jointly with the military.

Salina Regional
SLN Airport

LEGEND
Airport Property Line

NORTH

0 1000 2000
SCALE IN FEET

Runway 18-36 (4,300' x 75')

Runway 12-30 (6,510' x 100')

Runway 4-22 (3,648' x 75')

Runway 17-35 (12,300' x 150')

Exhibit 1G
Airfield Signage

AIRSPACE STRUCTURE

Airspace within the United States is broadly classified as either "controlled" or "uncontrolled." The difference between controlled and uncontrolled airspace relates primarily to requirements for pilot qualifications, ground-to-air communications, navigation and air traffic services, and weather conditions. Six classes of airspace have been designated in the United States, as shown on **Exhibit 1H**. Airspace designated as Class A, B, C, D, or E is considered controlled airspace. Aircraft operating within controlled airspace are subject to varying requirements for positive air traffic control.

Class A Airspace: Class A airspace includes all airspace from 18,000 feet mean sea level (MSL) to flight level (FL) 600 (60,000 feet MSL). This airspace is designated in Federal Aviation Regulation (F.A.R.) Part 71.193, for positive control of aircraft. The Positive Control Area (PCA) allows flights governed only under IFR operations. The aircraft must have special radio and navigation equipment, and the pilot must obtain clearance from an ATC facility to enter Class A airspace. In addition, the pilot must possess an instrument rating.

Class B Airspace: Class B airspace has been designated around some of the country's busiest commercial service airports, such as the Kansas City International Airport. Class B airspace is designed to regulate the flow of uncontrolled traffic, above, around, and below the arrival and departure airspace required for high-performance, passenger-carrying aircraft at busy commercial service airports. This airspace is the most restrictive controlled airspace encountered by pilots operating under VFR.

In order to fly within Class B airspace, an aircraft must be equipped with special radio and navigation equipment and must obtain clearance from air traffic control. Moreover, a pilot must have at least a private pilot's certificate or be a student pilot who has met the requirements of F.A.R. Part 61.95, which requires special ground and flight training for Class B airspace. Helicopters do not need special navigation equipment or a transponder if they operate at or below 1,000 feet and have made prior arrangements in the form of a Letter of Agreement with the FAA controlling agency. Aircraft are also required to have and utilize a Mode C transponder within a 30-nautical mile (NM) range of the center of Class B airspace. A Mode C transponder allows the ATCT to track the altitude of the aircraft.

Class C Airspace: The FAA has established Class C airspace at 120 airports around the country, as a means of regulating air traffic in these areas. Class C airspace is designed to regulate the flow of uncontrolled traffic above, around, and below the arrival and departure airspace required for high-performance, passenger-carrying aircraft at some commercial service airports. In order to fly inside Class C airspace, the aircraft must have a two-way radio, an encoding transponder, and have established communication with the ATC. Aircraft may fly below the floor of the Class C airspace, or above the Class C airspace ceiling without establishing communication with ATC. The closest Class C airspace surrounds Wichita Mid-Continent Airport.

Class D Airspace: Class D airspace is controlled airspace surrounding airports with an ATCT such as at SLN. The Class D airspace typically constitutes a cylinder with a horizontal radius of five miles from the airport, extending from the surface up

to a designated vertical limit, typically set at approximately 2,500 feet above the airport elevation. If an airport has an instrument approach or departure, the Class D airspace sometimes extends along the approach or departure path. During periods when the ATCT is closed, Class D airspace reverts to Class E airspace.

Class E Airspace: Class E airspace consists of controlled airspace designed to contain IFR operations near an airport, and while aircraft are transitioning between the airport and en route environments. Unless otherwise specified, Class E airspace terminates at the base of the overlying airspace. Only aircraft operating under IFR are required to be in contact with air traffic control when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio communications with air traffic control facilities, visual flight can only be conducted if minimum visibility and cloud ceilings exist. There are several airports supported by Class E airspace in the vicinity of Salina Regional Airport.

Class G Airspace: Airspace not designated as Class A, B, C, D, or E is considered uncontrolled, or Class G, airspace. Air traffic control does not have the authority or responsibility to exercise control over air traffic within this airspace. Class G airspace lies between the surface and the overlaying Class E airspace (700 to 1,200 feet above ground level [AGL]).

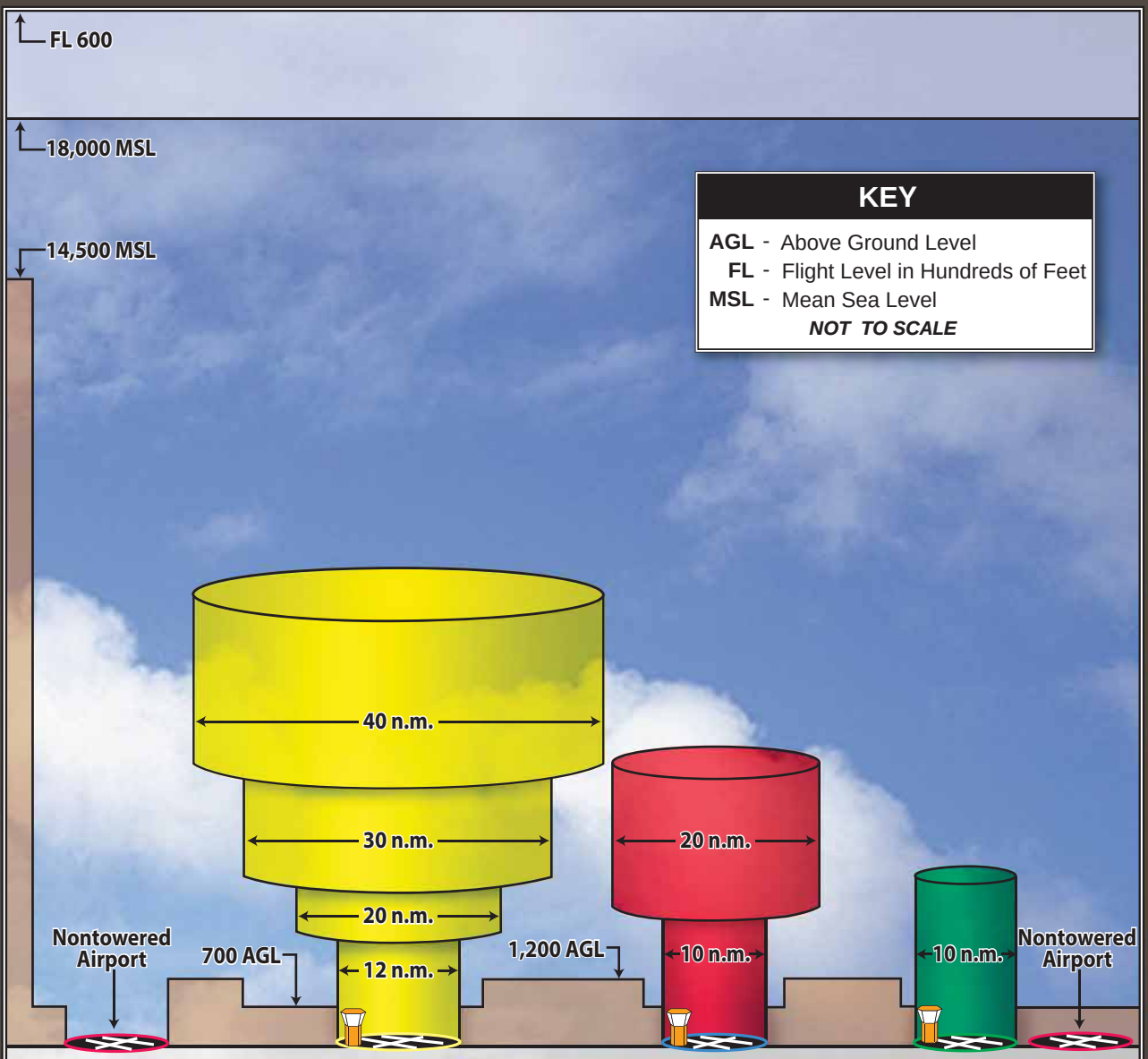
Exhibit 1J shows the Class D and Class E airspace surrounding Salina Regional Airport. The Class D airspace consists of controlled airspace extending upward from the surface to and including 3,800 feet MSL within a five-mile radius of Salina Regional Airport. A second ring of Class E airspace is designated approximately two miles outside of the Class D airspace ring.

When the ATCT at Salina Regional Airport is open, the airport operates under Class D airspace. When the ATCT is closed, the airport operates under Class E airspace with a floor of 700 feet AGL. Airspace below 700 feet AGL is Class G when the tower is closed.

SPECIAL USE AIRSPACE

Special use airspace is defined as airspace where activities must be confined because of their nature or where limitations are imposed on aircraft not taking part in those activities. The designation of special use airspace identifies for other users the areas where military activity occurs, provides for segregation of that activity from other fliers, and allows charting to keep airspace users informed. These areas are depicted on **Exhibit 1J**.

Restricted Airspace: Restricted areas contain airspace identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. Activities within these areas must be confined because of their nature or limitations imposed upon aircraft operations that are not a part of those activities or both. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft such as artillery firing, aerial gunnery, or guided missiles. Penetration of restricted areas without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants. Restricted areas are published in the Federal Register and constitute 14 CFR Part 73.



CLASSIFICATION	DEFINITION
CLASS A	Generally airspace above 18,000 feet MSL up to and including FL 600.
CLASS B	Generally multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports.
CLASS C	Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.
CLASS D	Generally airspace from the surface to 2,500 feet AGL surrounding towered airports.
CLASS E	Generally controlled airspace that is not Class A, Class B, Class C, or Class D.
CLASS G	Generally uncontrolled airspace that is not Class A, Class B, Class C, Class D, or Class E.

Source: "Airspace Reclassification and Charting Changes for VFR Products," National Oceanic and Atmospheric Administration, National Ocean Service. Chart adapted by Coffman Associates from AOPA Pilot, January 1993.

Exhibit 1H
Airspace Classification