

LEGEND

- | | | | |
|--|---|--|---|
| | Airport with hard-surfaced runways 1,500' to 8,069' in length | | Class D Airspace |
| | Airports with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069' | | Class E Airspace |
| | VORTAC | | Class E Airspace with floor 700 ft. above surface |
| | VOR-DME | | Victor Airways |
| | VOR | | Military Training Routes |
| | Class B Airspace | | Compass Rose |
| | Class C Airspace | | Wilderness Area |
| | Non-directional Radiobeacon (NDB) | | Prohibited, Restricted, Warning and Alert Areas |
| | | | Military Operations Area (MOA) |



NOT TO SCALE

Restricted airspace R-3601A and R-3601B is located immediately southwest of the Class D airspace ring for SLN. This airspace has been established to support the mission of the Smoky Hill Air National Guard bombing range. Smoky Hill ANG Range is the largest of 15 bombing ranges in the Air National Guard. It is operated by the Kansas ANG, 184th Regional Support Group of the 184th Intelligence Wing at McConnell Air Force Base in Wichita, Kansas. Smoky Hill ANG Range functions to support US military combat flying units of all the armed services in both the Active Component and the Reserve Component, to include the Air National Guard and Army National Guard.

Within the 34,000 acre installation is a 12,000 acre target area which includes dual conventional ranges and three large tactical ranges. The tactical ranges provide realistic air-to-ground training available for all types of military aircraft. Smoky Hill also has four drop zones for cargo aircraft. The range can accommodate a variety of military weapons and munitions training, including the release of high altitude bombs.

R-3601A has a floor of the surface and extends up to 18,000 feet, while R-3601B continues from 18,000 feet, or FL 180, up to FL 230. The restricted airspace is in effect Monday through Saturday between 9:00 a.m. and 5:00 p.m. Additional times can be added via Notice to Airmen (NOTAM) alerts with at least six hours advance notice.

Military Operations Areas (MOA): An MOA is "airspace established outside Class A airspace to separate or segregate certain nonhazardous military activities from IFR Traffic and to identify for VFR traffic where these activities are conducted." (14 CFR §1.1, U.S.A.) MOAs are often

positioned over isolated, rural areas to provide ground separation for any noise nuisance or potential accident debris. Each designated MOA appears on the relevant sectional charts, along with its normal hours of operation, lower and upper altitudes of operation, controlling authority contact, and using agency.

There are several MOAs within close proximity of Salina Regional Airport. The Smoky Hill MOA wraps around the southern and western borders of Restricted Airspace R-3601A then extends west and abuts the Bison MOA which continues to the west, as depicted on **Exhibit 1J**. To the north, northwest, and northeast of SLN are three designated MOAs: ADA West, ADA East, and Riley.

Military Training Routes: Military training routes (MTR) are designated airspace that has been generally established for use by high performance military aircraft to train below 10,000 feet AGL and in excess of 250 knots. There are VR (visual) and IR (instrument) designated MTRs. MTRs with no segment above 1,500 feet AGL will be designated with the "VR" or "IR," followed by a four digit number (e.g., VR1520, IR 1521). MTRs with one or more segments above 1,500 feet AGL are identified by the route designation, followed by a three-digit number (e.g., VR531). The arrows on the route show the direction of travel. There are numerous MTRs in close proximity to Salina Regional Airport, as depicted on **Exhibit 1J**.

Victor Airways: For aircraft arriving or departing the regional area using very high frequency omni-directional range (VOR) facilities, a system of Federal Airways, referred to as Victor Airways, has been established. Victor Airways are corridors of airspace eight miles wide that

extend upward from 1,200 feet AGL to 18,000 feet MSL and extend between ground-based VOR navigational facilities. There are seven Victor Airways leading to and from the Salina VORTAC including V4, V4-508, V244-508, V532, V551, V553, and V73.

AIRSPACE CONTROL

Salina Regional Airport has an ATCT, which is operated on a contract basis by a private contracting firm, Midwest Air Traffic Control. The tower is open from 7:00 a.m. until 11:00 p.m. daily. ATCT can be raised on the frequency 119.3 MHz or 124.35 MHz while ground control is available on frequency 121.9 MHz. Tower personnel direct and separate aircraft movements in the airspace surrounding the airport and on the ground.

Approach and departure control is provided by the Kansas City region Air Route Traffic Control Center (ARTCC) on frequency 134.9 MHz utilizing the Salina remote control air/ground (RCAG) communication. RCAGs were established for the express purpose of providing air-to-ground communications between air traffic control specialists and pilots located at a remote airport for delivering en route clearances, issuing departure authorizations, and acknowledging instrument flight rules cancellations or departure/landing times. As a secondary function, they may be used for advisory purposes whenever the aircraft is below the coverage of the primary air/ground frequency.

NAVIGATIONAL AIDS

Navigational aids are electronic devices that transmit radio frequencies, which

pilots of properly equipped aircraft can translate into point-to-point guidance and position information. The types of electronic navigational aids available for aircraft flying to or from Salina Regional Airport include a very high frequency omni-directional range (VOR) facility and the global positioning system (GPS). All navigational aids at the airport are owned and maintained by the FAA.

The VOR, in general, provides azimuth readings to pilots of properly equipped aircraft transmitting a radio signal at every degree to provide 360 individual navigational courses. Frequently, distance measuring equipment (DME) is combined with a VOR facility (VOR-DME) to provide distance as well as direction information to the pilot. Military tactical air navigation aids (TACANs) and civil VORs are commonly combined to form a VORTAC. The VORTAC provides distance and direction information to both civil and military pilots. The Salina VORTAC is located approximately eight miles to the north of the airport.

GPS is an additional navigational aid for pilots. GPS was initially developed by the United States Department of Defense for military navigation around the world. GPS differs from a VOR, in that pilots are not required to navigate using a specific facility. GPS uses satellites placed in orbit around the earth to transmit electronic radio signals, which pilots of properly equipped aircraft use to determine altitude, speed, and other navigational information. With GPS, pilots can directly navigate to any airport in the country and are not required to navigate to a specific ground-based navigation facility.

Many commercial service airports are equipped with an Instrument Landing System (ILS). The ILS at SLN is comprised

of a localizer antenna, a glide slope antenna, and a MALSR. Approaches utilizing the ILS can be completed when cloud ceilings are as low as 200 feet and visibility is down to ½-mile. Runway 35 at Salina Regional Airport is equipped with an ILS approach.

INSTRUMENT APPROACH PROCEDURES

Instrument approach procedures are a series of predetermined maneuvers established by the FAA, using electronic navigational aids that assist pilots in locating and landing at an airport, especially during instrument flight conditions. There are currently seven published instrument approaches, including a precision ILS instrument approach, to Runway 35 as previously noted. Precision instrument approaches provide vertical descent information and course guidance information to the pilot. Non-precision approaches only provide course guidance to the pilot; however, the relatively new GPS localizer performance with vertical guidance (LPV) is currently categorized by the FAA as a non-precision approach which does provide vertical guidance.

The capability of an instrument approach is defined by the visibility and cloud ceiling minimums associated with the approach. Visibility minimums define the horizontal distance the pilot must be able to see in order to complete the approach. Cloud ceilings define the lowest level a cloud layer (defined in feet above the ground) can be situated for the pilot to complete the approach. If the observed visibility or cloud ceilings are below the minimums prescribed for the approach, the pilot cannot complete the instrument approach. **Exhibit 1K** summarizes FAA approved and published instrument ap-

proach procedures, including associated weather minimums for Salina Regional Airport.

The most sophisticated instrument approach at Salina Regional Airport is the ILS approach to Runway 35. The ILS Runway 35 approach provides visibility minimums as low as ½-mile and cloud ceilings of 200 feet (referred to as a Category I approach). Generally, this type of approach is considered the minimum for a commercial service airport. Larger medium and large hub airports will typically have even more sophisticated instrument approaches offering lower visibility minimums (Categories II and III).

Instrument approaches based on the global positioning system (GPS) have become very common across the country. GPS is inexpensive, as it does not require a significant investment in ground based systems by the airport or FAA. Salina Regional Airport is served by GPS approaches to each end of Runway 17-35 and Runway 12-30, as presented on **Exhibit 1K**.

GPS LPV approaches provide both horizontal and vertical guidance information to pilots. Advancements in GPS technology has allowed for instrument approach procedures to provide minimums nearly as low as more traditional ILS systems. Currently, the GPS approaches to Runways 17 and 35 include an LPV component, while those to Runways 12- and 30 do not offer LPV.

The LPV approach to Runway 35 provides the same ½-mile visibility minimum as does the ILS approach; however, the cloud height for the Runway 35 LPV approach is increased to 250 feet AGL. The LPV approach to Runway 17 provides for one mile visibility and 250-foot cloud ceilings.

The VOR Runway 17 approach utilizes the Salina VORTAC facility located approximately eight miles to the north of the airport. A non-directional radio beacon (NDB) approach is offered on Runway 35 as well. This ground based facility emits frequencies that properly equipped aircraft can utilize to track to the airport.

AIRPORT TRAFFIC PATTERN

While aircraft can be expected to operate over most areas of the region, the density of aircraft operations is higher near the airport. This is the result of aircraft following the established traffic patterns for the airport. A traffic pattern is the directional traffic flow that is prescribed for aircraft landing or taking off from an airport. Essentially, the traffic pattern defines which side of the runway aircraft will operate.

The traffic patterns for the runways at Salina Regional Airport are all published as standard left-hand patterns; however, discussions with ATCT personnel indicate that non-standard right-hand patterns are often used during busy periods. Runway 17-35 and Runway 18-36 are parallel to each other with helipads H3, H4, H5, and H6 between the runways. In order to segregate aircraft during busy times, traffic on Runway 17-35 is generally routed to the east, while traffic on Runway 18-36 is routed to the west. This would include standard left patterns for Runways 17 and 36 and right patterns for Runways 18 and 35. For Runway 12-30 during busy days, the ATCT directs the pattern to the southwest, with Runway 12 having a right pattern and Runway 30 a left pattern.


REGIONAL AIRPORTS

A review of public-use airports within the vicinity of Salina Regional Airport has been made to identify and distinguish the type of air service provided in the area surrounding the airport. Information pertaining to each airport was obtained from FAA records with a summary provided on **Exhibit 1L**. Typically, airports within a 30-mile radius can influence aviation demand at the airport.

There are five public-use airports within a 30-mile radius, as presented on the exhibit. None of these facilities offer similar facilities and/or aviation services as SLN. Moreover, SLN is the only airport served by commercial passenger service in the 30-mile radius. There are several commercial passenger service options at more distant locations in Hays, Great Bend, Manhattan, Wichita, and Kansas City. It should be noted that there are also ten private use airports within the same 30-mile radius. All of these facilities have relatively short turf runways and are operated by private entities.

LANDSIDE FACILITIES

Landside facilities are the facilities that support the aircraft and pilot/passenger handling functions. These facilities include the passenger terminal complex, general aviation facilities, military facilities, and support facilities such as fuel storage, automobile parking, roadway access, and aircraft rescue and firefighting. The landside facilities at Salina Regional Airport are identified on **Exhibits 1M (south facilities)** and **1N (north facilities)**.

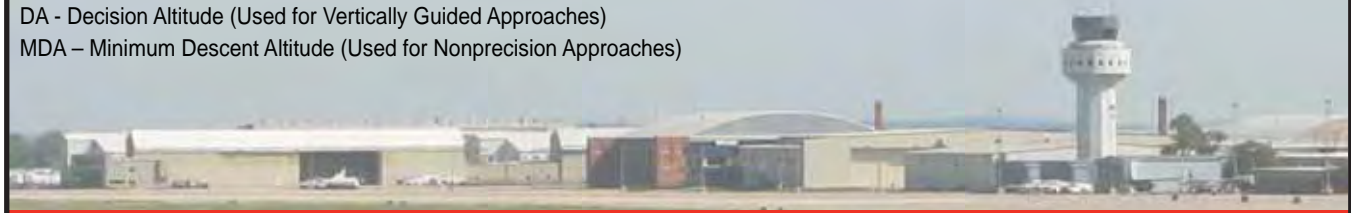
	Weather Minimums by Aircraft Type									
	Category A		Category B		Category C		Category D		Category E	
	Cloud Height (feet AGL)	Visibility (miles)	Cloud Height (feet AGL)	Visibility (miles)	Cloud Height (feet AGL)	Visibility (miles)	Cloud Height (feet AGL)	Visibility (miles)	Cloud Height (feet AGL)	Visibility (miles)
ILS or LOC Runway 35										
Straight ILS	200	0.5	200	0.5	200	0.5	200	0.5	200	0.5
Straight LOC	409	0.5	409	0.5	409	0.75	409	1	409	1
Circling	532	1	532	1	552	1.5	552	2	552	2
RNAV (GPS) Runway 17										
LPV	250	1	250	1	250	1	250	1	N/A	N/A
LNAV/VNAV DA	495	1.75	495	1.75	495	1.75	495	1.75	N/A	N/A
LNAV MDA	534	1	534	1	534	1.5	534	1.75	N/A	N/A
Circling	532	1.75	532	1	552	1.75	552	2	N/A	N/A
RNAV (GPS) Runway 35										
LPV	250	0.5	250	0.5	250	0.5	250	0.5	N/A	N/A
LNAV/VNAV DA	352	0.75	352	0.75	352	0.75	352	0.75	N/A	N/A
LNAV MDA	409	0.5	409	0.5	409	0.75	409	1	N/A	N/A
Circling	532	1.25	532	1.25	552	1.5	552	2	N/A	N/A
RNAV (GPS) Runway 12										
LNAV MDA	435	1	435	1	435	1.25	435	1.5	N/A	N/A
Circling	532	1	532	1	552	1.5	552	2	N/A	N/A
RNAV (GPS) Runway 30										
LNAV MDA	407	1	407	1	407	1.25	407	1.25	N/A	N/A
Circling	532	1	532	1	552	1.5	552	2	N/A	N/A
VOR Runway 17										
Straight	614	0.75	614	0.75	614	1.75	614	2	614	2.25
Circling	572	1	572	1	572	1.75	572	2	632	2.25
NDB Runway 35										
Straight	469	0.75	469	0.75	469	0.75	469	1.25	N/A	N/A
Circling	532	1	532	1	552	1.5	552	2	N/A	N/A

Aircraft categories are established based on 1.3 times the stall speed in landing configuration as follows:

- Category A: 0-90 knots
- Category B: 91-120 knots
- Category C: 121-140 knots
- Category D: 141-166 knots
- Category E: 167+ knots

Abbreviations:

- AGL - Above Ground Level
- ILS - Instrument Landing System
- LOC - Localizer
- NDB - Non-Directional Beacon
- GPS - Global Positioning System
- LPV - Localizer Performance Vertical Guidance (GPS Approach Providing Vertical Guidance)
- LNAV - Lateral Navigation
- VNAV - Vertical Navigation
- RNAV - Area Navigation
- DA - Decision Altitude (Used for Vertically Guided Approaches)
- MDA - Minimum Descent Altitude (Used for Nonprecision Approaches)



MINNEAPOLIS CITY COUNTY AIRPORT (45K)

Airport NPIAS Classification: General Aviation
 FAA Asset Study Classification: Not Classified
 Location: 19 miles N of SLN
 Elevation: 1,246
 Weather Reporting: None
 ATCT: No
 Annual Operations: 10,950
 Based Aircraft: 2

RUNWAY	16-34
Length	3,970'
Width	20'

PAVEMENT STRENGTH	
SWL	N/A
DWL	N/A
DTWL	N/A

Lighting	None
Marking	Basic
Instrument Approach Aids	None
Instrument Approaches	None

Services Provided: Parking tie-downs


ABILENE MUNICIPAL AIRPORT (K78)

Airport NPIAS Classification: General Aviation
 FAA Asset Study Classification: Local
 Location: 21 miles E-NE of SLN
 Elevation: 1,153
 Weather Reporting: AWOS-III
 ATCT: No
 Annual Operations: 35,770
 Based Aircraft: 21

RUNWAYS	17-35
Length	4,100'
Width	75'

PAVEMENT STRENGTH	
SWL	13,000
DWL	16,000
DTWL	N/A

Lighting	MIRL
Marking	Nonprecision (12)
Instrument Approach Aids	PAPI-2 (17-35); RNAV (GPS) -17, 35;
Instrument Approaches	VOR/DME-A

Services Provided: Full service including AvGas/Jet A fuel, parking, hangars, flight training, aircraft rental, major aircraft maintenance


McPHERSON AIRPORT (KMPR)

Airport NPIAS Classification: General Aviation
 FAA Asset Study Classification: Local
 Location: 26 miles S of SLN
 Elevation: 1,498
 Weather Reporting: AWOS-III
 ATCT: No
 Annual Operations: 40,150
 Based Aircraft: 33

RUNWAYS	18-36	8-26
Length	5,502'	2,511'
Width	100'	75'

PAVEMENT STRENGTH		
SWL	30,000	N/A
DWL	N/A	N/A
DTWL	N/A	N/A

Lighting	MIRL	None - Turf
Marking	Nonprecision	None - Turf
Instrument Approach Aids	PAPI-2L	PAPI-2L
Instrument Approaches	RNAV (GPS) - 18, 36; VOR/DME - 36; NDB - 18	None

Services Provided: Full service GA including AvGas/Jet A fuel, parking, hangars, flight training, aircraft rental, aircraft maintenance


ELLSWORTH MUNICIPAL AIRPORT (9K7)

Airport NPIAS Classification: General Aviation
 FAA Asset Study Classification: Basic
 Location: 27 miles W of SLN
 Elevation: 1,615
 Weather Reporting: AWOS-III
 ATCT: No
 Annual Operations: 20,075
 Based Aircraft: 16

RUNWAYS	17-35	12-30
Length	3,919'	2,229'
Width	48'	250'

PAVEMENT STRENGTH		
SWL	N/A	N/A
DWL	N/A	N/A
DTWL	N/A	N/A

Lighting	MIRL	None - Turf
Marking	Basic	None - Turf
Instrument Approach Aids	Tricolor VASI -35	None
Instrument Approaches	None	None

Services Provided: Limited GA - 100LL fuel, tie-down parking hangars, pilots lounge


LINCOLN MUNICIPAL AIRPORT (K71)

Airport NPIAS Classification: General Aviation
 FAA Asset Study Classification: Not Classified
 Location: 29 mi W/NW of SLN
 Elevation: 1,412
 Weather Reporting: None
 ATCT: No
 Annual Operations: 14,235
 Based Aircraft: 6

RUNWAYS	12-30	17-35
Length	2,700'	2,700'
Width	130'	370'

PAVEMENT STRENGTH		
SWL	N/A	N/A
DWL	N/A	N/A
DTWL	N/A	N/A

Lighting	None - Turf	None - Turf
Marking	None - Turf	None - Turf
Instrument Approach Aids	None	None
Instrument Approaches	None	None

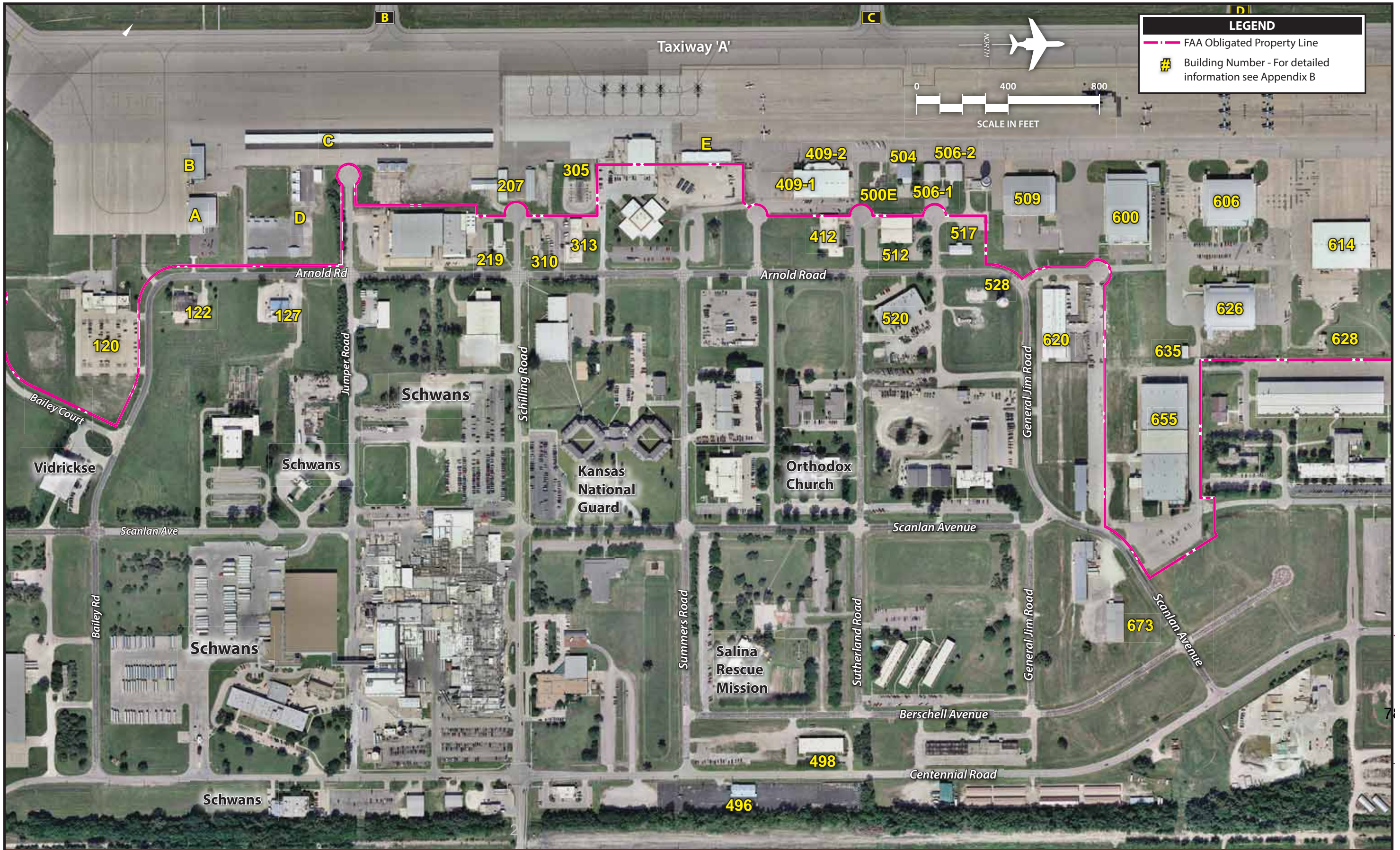
Services Provided: Limited GA - 100LL fuel, tie-down parking, light maintenance

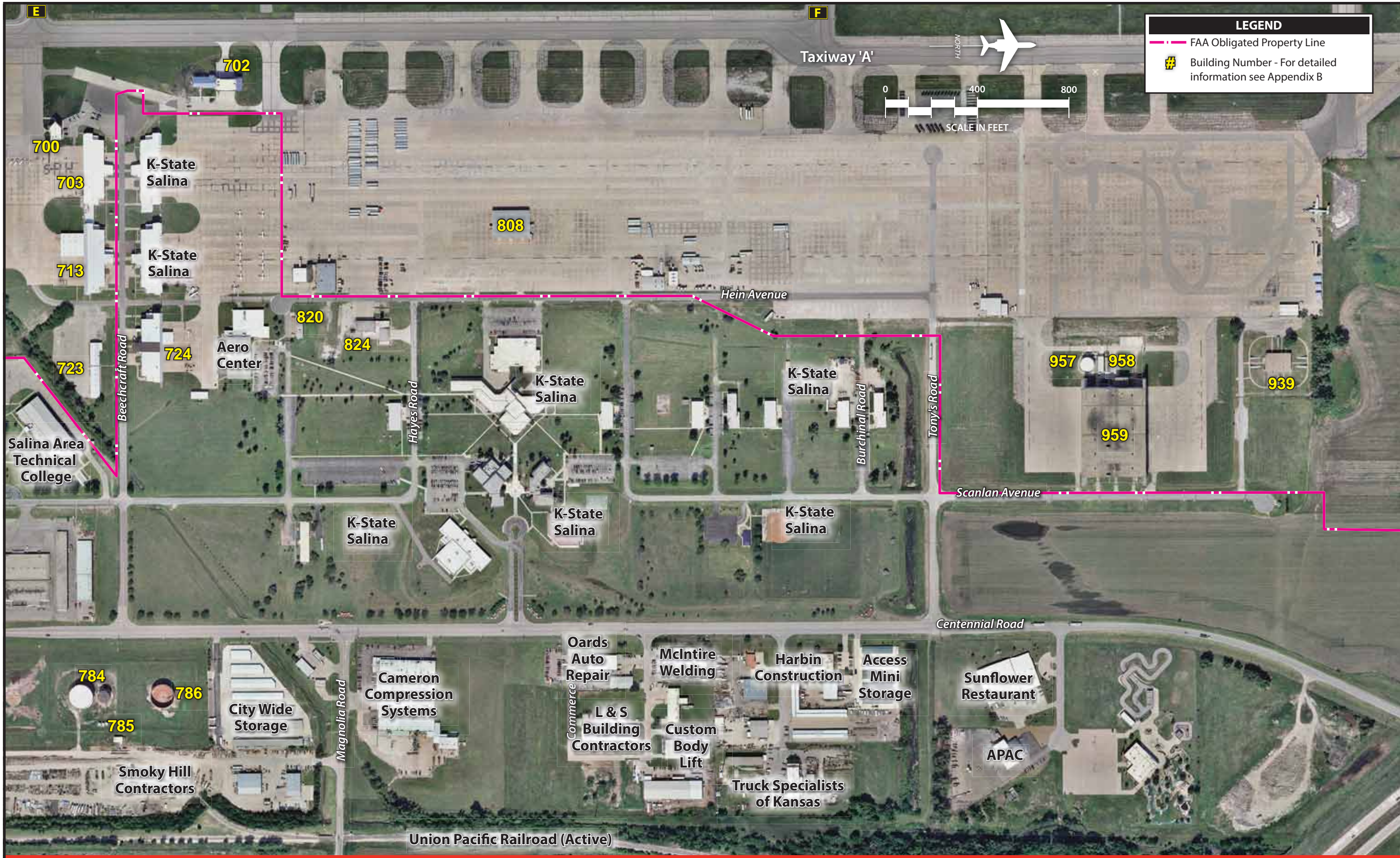


KEY
 ATCT: Airport Traffic Control Tower
 DTWL: Dual Tandem Wheel Gear Loading
 DWL: Dual Wheel Loading
 GPS: Global Positioning System

MIRL: Medium Intensity Runway Lights
 NDB: Non-Directional Beacon
 NPIAS: National Plan of Integrated Airport System
 PAPI: Precision Approach Path Indicator

RNAV: Area Navigation
 SWL: Single Wheel Loading
 VASI: Visual Approach Slope Indicator
 VOR: Very High Frequency Omni-Directional Range and Distance Measuring Equipment





PASSENGER TERMINAL BUILDING

The M. J. Kennedy Air Terminal building is located on the southernmost portion of the aircraft parking apron, presented on **Exhibit 1M** as Building 120. It is directly accessible from Bailey Road which stems from Centennial Road to the east. The two-story building encompasses approximately 10,750 square feet of space.

The first floor of the building houses SeaPort Airlines, passenger waiting areas, Airport Authority offices and conference room, two SAA administrative offices, Hertz rental car office counter/office space, and public restrooms. SeaPort Airlines offers daily passenger service to Kansas City International Airport utilizing Pilatus PC-12 aircraft. The terminal building offers SeaPort Airlines passenger ticketing counter space as well as office space for administrative and baggage make-up areas. Passengers departing and arriving the terminal building are offered a covered enclosed walkway which extends from the building onto the commercial aircraft apron. The second floor of the terminal building is dedicated exclusively to SAA administrative offices.

AUTOMOBILE PARKING

Vehicle parking for the passenger terminal complex includes public, employee, and rental car space. The southern end of the parking lot is reserved for rental cars, with the remainder of spaces for public use. There are 123 total parking spaces in the terminal lot. There are 18 additional parking spaces on the southwest side of the passenger terminal reserved for airport administration and operations.

APRONS AND RAMPS

As a converted military airport, SLN has an abundance of aircraft apron area. A large section of original ramp space in the northern portion of the terminal area is currently not used for aviation purposes, but is utilized for non-aviation activities. The remainder of original ramp areas is currently available for aviation uses as needed.

There are three designated aircraft apron areas on the airport, all constructed of concrete pavement. According to the ACM, the commercial service apron adjacent the terminal building is dimensioned at 550 feet by 300 feet, encompassing approximately 18,333 square yards of pavement.

The general aviation apron is listed in the ACM as being 6,000 feet by 400 feet, encompassing approximately 266,666 square yards of pavement. This apron extends from the south end of Runway 17-35 to Taxiway E. It should be noted, however, that the portion of the ramp adjacent to the Army Guard – Army Aviation Support Facility (AAF) Number 2 is designated and marked as “restricted.” The restricted area is purposed only for military, primarily helicopter, aircraft parking and movement.

The north apron is located at the north end of the terminal area and can be accessed via connector Taxiways G and H. The apron is sized as being approximately 1,200 feet by 500 feet, encompassing 66,666 square yards of concrete pavement. It should be noted that the north apron is not currently being used for aviation purposes as the hangar adjacent the

apron is not in use. As such, the north apron has been utilized for other uses, including a driver training course.

FIXED BASE OPERATOR (FBO) AND SPECIALTY OPERATORS

A fixed base operator (FBO) provides services to general aviation and military airport users. SLN is served by one FBO operation: Avflight Salina Corp.

Avflight Salina is a full service FBO which offers aviation fuel (Jet A and 100LL), aircraft maintenance, hangar rental, aircraft rental, catering, de-icing/lavatory services, etc. Avflight Salina is located on the general aviation apron in Building 409 east of Taxiway C and south of the ATCT as depicted on **Exhibit 1M** and Building 700 as depicted on **Exhibit 1N**. This FBO maintains a fueling contract with the military and also offers Jet A and 100LL fuel service to civilian aircraft. The American Jet facility is a combination building that includes general aviation terminal amenities as well as hangar space. The terminal facilities include a pilot's lounge, flight planning, conference room, restrooms, and lobby area. Courtesy cars are also provided as needed.

The FBO and other aviation businesses comprise the Salina Aviation Service Center (SASC). The SASC includes a wide variety of aviation businesses offering flight training, aircraft part and technology manufacturing, corporate flight departments, specialty aircraft maintenance operators, and others. Current aviation businesses which operate at SLN include:

- Airflight Salina
- TDM AeroTek
- Civil Air Patrol
- Kansas Highway Patrol

- KSU – Salina
- Plains Environmental
- Professional Flight Training, LC
- Salina Aircraft Sales
- Sojka Aviation

Exhibit 1M (Landside South) and **Exhibit 1N** (Landside North) depict the locations of all landside facilities at SLN, while Appendix B offers a picture of most facilities on the airport.

AIRCRAFT HANGARS

Most of the hangars on the airport are owned by the SAA. These include large conventional hangars (10,000 square feet or larger), executive box hangars (less than 10,000 square feet), and T-hangars/Port-a-Port hangars offering individual aircraft storage in one contiguous or connected linear facility. Some hangars are also privately owned with a ground lease arrangement with the SAA. All airport hangars are depicted on **Exhibits 1M** and **1N**.

MILITARY FACILITIES

SLN is widely used by the military as it functions as an FOL for several military units. The airport is home to the Kansas Guard Army Aviation Support Facility (AASF) #2 which is based on the center of the general aviation apron. The AASF houses five Blackhawk helicopters as well as 27 full-time soldiers.

SLN also supports the Kansas National Guard GPJTC with its KSTC facilities located on airport property. Smoky Hill Weapons Range is also a part of the GPJTC located approximately 10 miles to the southwest of SLN. According to the Kansas National Guard website, "*The Great*

Plains Joint Training Center affords both military and civilian organizations an unprecedented opportunity to function jointly using real world technology to train and respond to missions both here and abroad. It is the backbone of the Kansas Army National Guard's ability to conduct pre-mobilization training for its soldiers here at home prior to deployment overseas. This keeps Kansans in the community during this extensive training rather than away from friends and family at military installations outside our state. It is an essential part of the training certification that is now a National Guard responsibility resting with The Adjutant General of Kansas, a transformation initiative of the Department of Defense."

As previously mentioned, the Smoky Hill Weapons Range and Crisis City are located approximately ten miles to the southwest of SLN. These facilities are world-class training facilities which are also supported by operations at SLN.

SLN is regularly used for training operations by several military units including:

- 160th Special Operations Aviation Regiment (SOAR) - Fort Campbell, KY
- 601st Aviation Support Battalion, Combat Aviation Brigade – Fort Riley, KS
- Canadian Royal Air Force 400 Tactical Helicopter Squadron – Bordon, Ontario (Canada)
- Canadian Royal Air Force 409 Tactical Fighter Squadron – Cold Lake, Alberta (Canada)
- Canadian Royal Air Force 425 Tactical Fighter Squadron – Alouette, Quebec (Canada)
- JSOC Jaded Thunder Exercises

SUPPORT FACILITIES

Several support facilities serve as critical links in providing the necessary efficiency to aircraft ground operations, such as ARFF, snow/ice control, airport maintenance, and fuel storage.

Aircraft Rescue and Firefighting Facilities (ARFF)

Part 139 airports are required to provide ARFF services during air carrier operations. Each certificated airport maintains equipment and personnel based on an ARFF index established according to the length of aircraft and scheduled daily flight frequency. There are five indices, A through E, with A applicable to the smallest aircraft and E the largest (based on wingspan). Salina Regional Airport is required to meet ARFF index A based on scheduled air carrier service offered by SeaPort Airlines. As such, Salina Regional Airport is required to maintain a fleet of equipment and properly trained personnel consistent with this standard; however, SLN provides a minimum of Class IV, Index B ARFF capabilities.

The Salina Regional Airport ARFF facility is a newly constructed, state of the art 9,200 square-foot facility. It is located immediately east of Taxiways A and west of the KSU ramp in Building 702, as depicted on **Exhibit 1N**. The ARFF facility is manned from 6:30 a.m. to 11:00 p.m. to service scheduled air carrier operations; however, with prior approval, ARFF services are provided at any time and will remain until 15 minutes following the last flight of the day. The ARFF facility is owned and staffed by the SAA and houses the following equipment:

- Primary ARFF Vehicle – ARFF 1 (2004 Rosenbauer 4x4 Panther) with:
 - 1,500 gallons of water
 - 150 gallons of three percent aqueous fire fighting foam (AFFF)
 - 500 pounds of Dry Chemical (Purple K)
 - 400 or 800 gallon-per-minute (GPM) roof turret-dual agent
 - 300 GPM bumper turret
 - 30 to 125 GPM left side preconnect
 - 60 to 125 GPM dual agent, hydro-chem

- Secondary ARFF Vehicle – ARFF 2 (1992 E-One Titan Crash Truck) with:
 - 1,000 gallons of water
 - 130 gallons of three percent AFFF
 - 500 pounds of Dry Chemical (Purple K)
 - 250 or 500 GPM roof turret-dual agent
 - 60 GPM front booster line-dual agent

- Secondary ARFF Vehicle – ARFF 3 (1985 Oshkosh P-19) with:
 - 1,000 gallons of water
 - 180 gallons of three percent AFFF
 - 500 GPM roof turret
 - 250 GPM bumper turret

- Secondary ARFF Vehicle – ARFF 4 (2010 Danko Rapid Intervention Vehicle) with:
 - 500 gallons of water
 - 12 gallons of three percent AFFF
 - 500 pounds of Dry Chemical (Purple K)
 - 45 GPM bumper turret
 - 24 GPM rear booster line

Snow and Ice Control

Snow and ice removal is a necessary function at times for SLN. While significant accumulation is relatively rare, snow and ice events require immediate and coordinated efforts to ensure that the airfield system can accommodate aircraft movements. In support of snow and ice control, the airport has acquired several pieces of snow removal equipment (SRE) which are housed in a 6,300 SRE Building 305, as depicted on **Exhibit 1M**. SRE equipment includes:

- Snowplow #1 – 1980 Mack runway plow with:
 - 27-foot rubber blade

- Snowplow #2 – 1983 Idaho runway plow with:
 - 27-foot carbide blade

- Snowplow #3 – 2002 Oshkosh runway plow with:
 - 18-foot carbide blade
 - Urea spreader (5 tons)
 - Potassium acetate pre-wet system

- Snowplow #4 – 2002 Oshkosh runway plow with:
 - 18-foot carbide blade
 - Urea spreader (5 tons)
 - Potassium acetate pre-wet system

- Blower #1 – 1986 Idaho snow blower with:
 - Capability to move 3,000 tons per hour

- Loader #1 – 1989 Large front end loader

Runway 17-35, being the primary and only precision instrument runway, is considered top priority for SRE operations. The ACM lists the normal snow removal priority as follows:

1. Runway 17-35
2. Airline terminal apron
3. Taxiways A, B, C, D, and E
4. General aviation ramps
5. Airport service road
6. Fuel Farm
7. Taxiways G and H
8. Runway 12-30

Maintenance Facilities

The airport's maintenance equipment and facilities are housed in Building 614, a converted conventional hangar, as depicted on **Exhibit 1M**. This facility was recently converted to airport maintenance operations which were previously housed in Building 207.

Fuel Storage

All airport fueling storage facilities are owned and operated by SAA. The fuel facilities are housed within a 4,600 square-foot metal and brick structure (Building 305 on **Exhibit 1M**) located adjacent to the general aviation apron and north of the SRE building. The fuel storage facility contained within the structure houses 12 underground storage tanks (UST). Each of the USTs has a 25,000 gallon capacity with ten tanks used for Jet A fuel storage and two tanks for 100LL fuel storage. The tanks are equipped with equipment necessary to meet fuel specifications for military aircraft fueling.

The airport also offers self-service 100LL fueling via the self-serve fuel island west

of the fuel farm. The self-serve island is supported by a 1,000 gallon above-ground storage tank.

Fencing

In support of airport security and wildlife prevention, the airport is supported by six-foot perimeter fencing. The fencing is supplemented with three-strand barbed wire on top. There are 44 access gates with 14 electrically operated via keycard reading devices.

Utilities

The availability and capacity of the utilities serving the airport are factors in determining the development potential of the airport property, as well as the land immediately adjacent to the facility. Of primary concern in the inventory investigation is the availability of water, gas, sewer, and power sources.

Water and sanitary sewer services are provided to the airport by the City of Salina. Natural gas is provided by Kansas Gas Service and electrical service is offered by Westar Energy.

SALINA AIRPORT INDUSTRIAL CENTER

Airport property holdings can be described with two distinctions. The majority of property owned by the airport was acquired via federal transaction and contains FAA obligations. The FAA obligated property is shown on all exhibits with a dashed magenta line. The SAA does, however, own additional property which is not federally obligated. These proper-

ties are located in the Airport Industrial Center.

The Salina Airport Industrial Center is located on the east side of the FAA obligated airport property line. It is generally, but not exactly, bound by airport aviation facilities on the west (FAA obligated property line), Waterwell Road to the south, Centennial Road to the east, and I-135 to the northwest. The Industrial Center includes property owned by the SAA as well as others that are privately owned. **Exhibits 1M** and **1N** depict SAA-owned property in the Industrial Center with blue (leased property) and red (vacant property) shading. The remainder of the industrial center not shaded is privately owned property with industrial, commercial, educational, and military uses.

Some of the world-class operations located at the Salina Airport Industrial Center include:

- Kansas State University – Salina
- Salina Area Technical College
- Vortex Valves
- El Dorado National, Inc.
- Geoprobe Systems
- Kansas Army National Guard
- Power Ad Company
- Ovation Cabinetry, Inc.
- Federal Express
- Schwan's Global Supply Chain, Inc.
- Scientific Engineering
- Cameron Compression Systems
- Tischlerei - Fine Woodworking
- Universal Forest Products

SOCIOECONOMIC CHARACTERISTICS

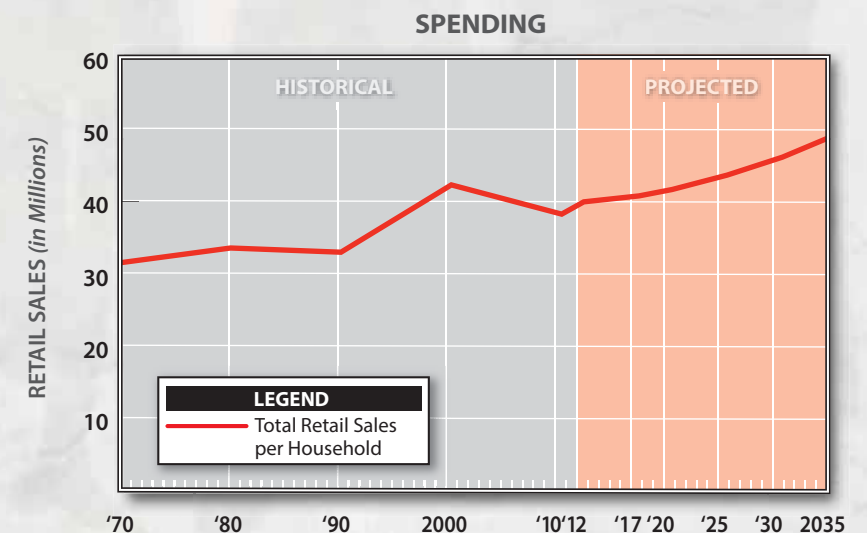
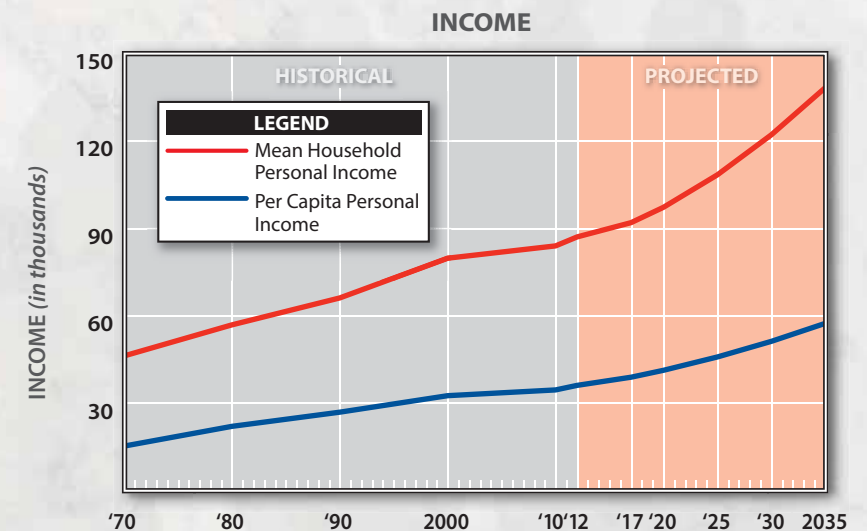
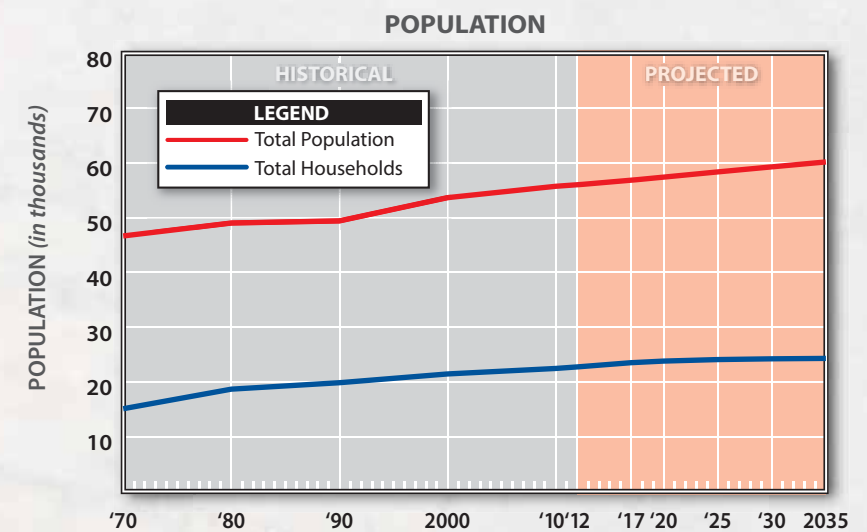
For an airport planning study, socioeconomic characteristics are collected and

examined to derive an understanding of the dynamics of growth within the study area. Socioeconomic information related to the approximate airport service area is an important consideration in the master planning process. The primary service area for SLN has been and will continue to be Saline County. There are six counties contiguous to Saline County which function as secondary service areas; however, these communities are relatively distant and are without significant population centers such as the City of Salina. As such, this study will focus on the socioeconomic condition of Saline County.

The historic trend in elements such as population, employment, income, and earnings provides insight into the long term socioeconomic condition of the region. This information is essential in determining aviation service level requirements, as well as forecasting aviation demand elements for airports. Aviation forecasts are typically related to the population base, economic strength of the region, and the ability of the region to sustain a strong economic base over an extended period of time.

Historical and forecast socioeconomic data for Saline County was obtained from Woods & Poole Economics - *Complete Economic and Demographic Data Source*, 2012. Woods & Poole utilizes information from the U.S. Census Bureau as well as other national and state organizations for historic data to project future conditions. The information is presented on **Exhibit 1P**.

	HISTORICAL							PROJECTED					
	1970	1980	1990	2000	2010	2012	AAGR	2017	2020	2025	2030	2035	AAGR (2012-35)
EMPLOYMENT													
Total Employment	21,893	29,652	32,420	39,338	37,806	38,104	1.33%	40,939	42,766	46,036	49,606	53,491	1.26%
Farm	990	1,028	851	835	661	632	-1.06%	584	556	511	468	428	-1.43%
Forestry, Fishing, Related Activities And Other	93	84	175	155	155	143	1.03%	146	148	151	155	158	0.37%
Mining	87	172	202	212	567	589	4.66%	686	755	888	1,049	1,242	2.80%
Utilities	172	212	152	172	139	139	-0.51%	138	138	137	135	133	-0.16%
Construction	1,676	1,702	1,739	2,203	1,819	1,764	0.12%	1,896	1,975	2,106	2,232	2,352	1.07%
Manufacturing	2,404	4,923	5,738	6,890	5,271	5,238	1.87%	5,316	5,359	5,423	5,477	5,521	0.20%
Wholesale Trade	1,245	1,755	1,592	1,444	768	703	-1.35%	711	715	721	724	726	0.12%
Retail Trade	3,511	4,620	4,922	5,731	4,873	4,921	0.81%	5,209	5,389	5,699	6,022	6,355	0.95%
Transportation And Warehousing	667	819	584	991	1,544	1,521	1.98%	1,720	1,852	2,095	2,370	2,679	2.12%
Information	291	441	507	686	350	353	0.46%	387	408	445	483	522	1.46%
Finance And Insurance	1,053	1,256	1,025	1,303	1,566	1,442	0.75%	1,454	1,456	1,453	1,439	1,415	-0.07%
Real Estate And Rental And Lease	573	683	558	774	980	1,080	1.52%	1,175	1,237	1,348	1,470	1,603	1.47%
Professional And Technical Services	673	903	1,121	1,421	1,703	1,754	2.31%	2,008	2,177	2,490	2,845	3,245	2.30%
Management Of Companies And Enterprises	141	190	235	246	631	691	3.86%	851	960	1,166	1,406	1,683	3.35%
Administrative And Waste Services	478	630	717	1,160	1,426	1,607	2.93%	1,869	2,046	2,374	2,749	3,174	2.55%
Educational Services	227	304	378	529	649	681	2.65%	765	819	916	1,022	1,137	1.92%
Health Care And Social Assistance	1,943	2,606	3,235	4,317	4,528	4,548	2.05%	5,078	5,424	6,048	6,735	7,487	1.86%
Arts, Entertainment, And Recreation	253	337	392	489	442	436	1.30%	466	485	517	550	582	1.08%
Accommodation And Food Services	1,589	2,112	2,454	3,047	2,979	3,145	1.64%	3,333	3,450	3,650	3,860	4,078	0.97%
Other Services, Except Public Administration	1,211	1,610	2,022	2,304	2,124	2,156	1.38%	2,240	2,291	2,381	2,477	2,580	0.67%
Federal Civilian Government	415	377	340	314	280	274	-0.98%	274	273	272	270	268	-0.08%
Federal Military	325	330	343	258	218	210	-1.03%	212	212	213	214	214	0.07%
State And Local Government	1,876	2,558	3,138	3,857	4,133	4,077	1.87%	4,421	4,641	5,032	5,454	5,909	1.38%
POPULATION													
Total Population	46,665	49,026	49,413	53,659	55,733	56,011	0.44%	56,853	57,406	58,352	59,281	60,181	0.27%
Median age	26.59	29.62	33.53	36.14	37.82	37.62	0.83%	37.6	38.03	38.45	39.17	38.5	0.09%
Total Households	15,115	18,689	19,866	21,466	22,469	22,752	0.98%	23,525	23,816	24,093	24,229	24,305	0.24%
Persons per Household	3	2.56	2.44	2.43	2.41	2.39	-0.54%	2.35	2.34	2.35	2.37	2.39	0.00%
INCOME & SPENDING													
Per Capita Personal Income (2005 dollars)	\$15,326	\$22,106	\$26,972	\$32,630	\$34,605	\$36,169	2.07%	\$38,968	\$41,337	\$45,913	\$51,270	\$57,447	1.73%
Mean Household Personal Income (2005 dollars)	\$46,277	\$56,934	\$66,176	\$79,812	\$84,028	\$87,116	1.52%	\$92,011	\$97,272	\$108,415	\$122,141	\$138,317	1.73%
Total Earnings (millions of 2005 dollars)	\$603.20	\$890.89	\$1,075.50	\$1,498.38	\$1,461.71	\$1,559.86	2.29%	\$1,762.96	\$1,898.42	\$2,149.92	\$2,437.57	\$2,766.53	2.14%
Gross Regional Product (millions of 2005 dollars)	\$876.47	\$1,369.07	\$1,670.53	\$2,231.70	\$2,194.02	\$2,253.48	2.27%	\$2,543.39	\$2,736.73	\$3,095.71	\$3,506.30	\$3,975.91	2.13%
Total Retail Sales (millions of 2005 dollars)	\$474.63	\$624.94	\$652.74	\$905.05	\$856.57	\$905.93	1.55%	\$956.04	\$988.89	\$1,048.46	\$1,114.44	\$1,187.25	1.01%
Total Retail Sales per Household (millions of 2005 dollars)	\$31,401	\$33,439	\$32,857	\$42,162	\$38,122	\$39,818	0.57%	\$40,639	\$41,522	\$43,517	\$45,996	\$48,848	0.76%



AREA ZONING

FEDERAL LEGISLATION AND REGULATIONS

There are numerous federal laws and regulations related to airport land use compatibility. Airports that accept federal development grants are required to make every reasonable effort to comply with the laws and regulations. The following is a summary of the federal laws and regulations related to land use compatibility surrounding airports.

Airport and Airway Improvement Act of 1982 - United States Code (USC), Title 49

Upon acceptance of Federal funds, this Act obligates the airport owners to operate and maintain the airport and comply with specific assurances, including maintenance of compatible land uses around airports. The implementation of this Act is handled through stipulations outlined in the grant documents signed by airport owners when they accept federal funds for a project.

Objects Affecting Navigable Airspace - Federal Code of Federal Regulations (CFR) Title 14, Part 77

This federal regulation establishes standards for determining obstructions in navigable airspace. It sets forth requirements for construction and alteration of structures (i.e., buildings, towers, etc.). It also provides for studies of obstructions to determine their effect on the safe and efficient use of airspace, as well as providing for public hearings regarding these obstructions, along with provisions for the

creation of antenna farm areas. It also establishes methods of identifying surfaces that must be free from penetration by obstructions, including buildings, cranes, cell towers, etc., in the vicinity of an airport. This regulation is predominately concerned with airspace related issues. Implementation and enforcement of the elements contained in this regulation are a cooperative effort between the FAA and the individual state aviation agencies or the airports themselves.

The imaginary surfaces defined in FAR Part 77 include the Primary Surface, Transitional Surface, Approach Surface, Horizontal Surface, and the Conical Surface. **Exhibit 1Q** depicts a model example of the application of the FAR Part 77 surfaces.

Airport Noise Compatibility Planning - Title 14 CFR Part 150

Noise, by definition, is sound that is loud, unpleasant, unexpected, or undesired. The sound produced by aircraft becomes noise when it disturbs people. The best way to minimize the adverse impact of noise is to separate people from that noise. This set of federal regulations establishes the Yearly Day-Night Average Sound Level (DNL) as the metric for measuring noise impacts. DNL represents the average noise received at a given location during the time measured.

Exhibit 1R lists land uses and the DNL level at which those uses are compatible. Below the 65 DNL level, all land uses are normally compatible. Above 65 DNL level, residences and places of public assembly are not compatible unless sound level reduction paraphernalia are installed.

**Airport Land Use Compatibility
Planning – FAA Advisory Circular (AC)
150/5060-6**

This document guides the development of a compatibility plan to ensure the environs surrounding an airport are not developed in a manner that could pose a risk to the airport's operations. This document specifically looks at land use and noise issues.

**Airport Master Plans – FAA Advisory
Circular (AC) 150/5070-6A**

This document guides the development of airport master plans. The guiding principle of the airport planning process is to develop a safe and efficient airport through the use of acceptable standards. While there are many steps in the planning process, none of these steps should be treated in a piecemeal manner. The airside and landside issues must be equally evaluated to create a plan that provides for compatible airport and community development where possible.

**A Model Zoning Ordinance to Limit
Height of Objects Around Airports
FAA Advisory Circular (AC)
150/5190-4A**

This advisory circular concerns itself with developing zoning ordinances to control the height of objects. It is based upon the surfaces described in Subpart C of FAR Part 77, Objects Affecting Navigable Airspace. This document provides sample language and model ordinances for use by local airports.

**Airport Design - Advisory Circular (AC)
150/5300-13A**

This document provides the basic standards and recommendations for airport design. Topics include various runway and taxiway safety areas, the runway protection zones, threshold siting surfaces, runway length, and facility separation standards.

Grant Assurances

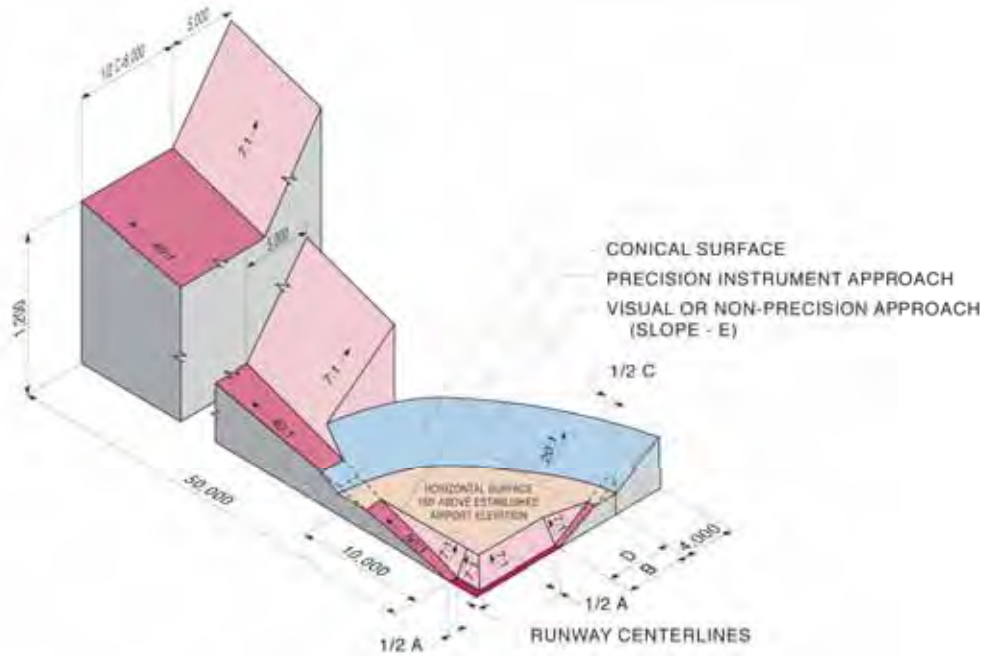
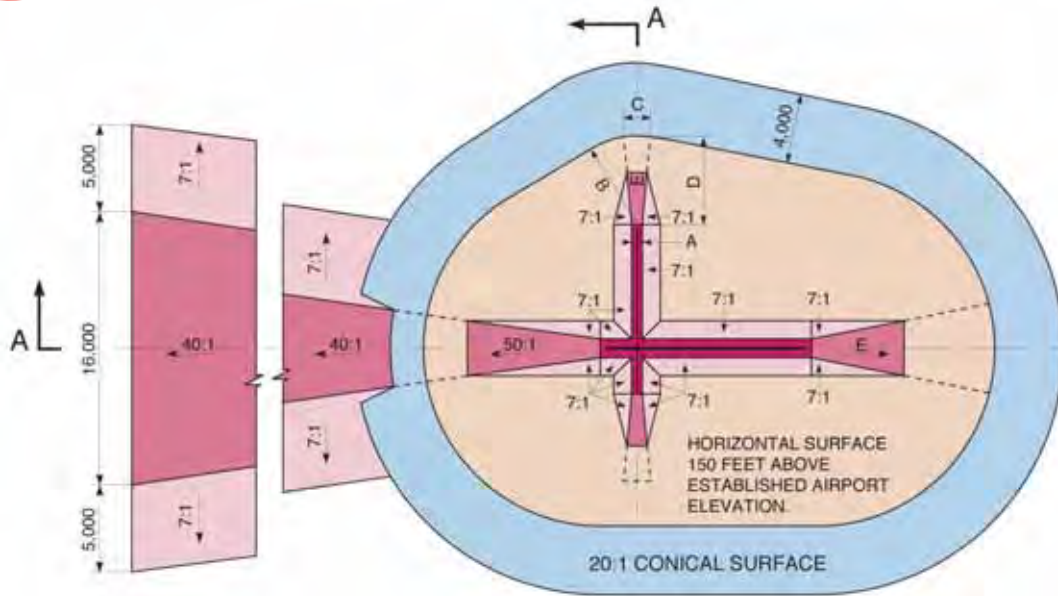
Pursuant to the provisions of Title 49, U.S.C., subtitle VII, as amended, assurances are required to be submitted as part of a project application by sponsors requesting funds. Upon acceptance of the grant offer by the sponsor, these assurances are incorporated in, and become part of, the grant agreement. There are 39 grant assurances, several of which address airport planning. The following are the primary land use compatibility grant assurances:

- Grant Assurance 21 requires, in part, that the sponsor:

“...take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.”

- Grant Assurance 20 relates to an airport sponsor's obligation for hazard removal and mitigation to address potential obstructions to the airspace around the airport. Grant Assurance 20 states that the airport sponsor will:

“...take appropriate action to assure that such terminal airspace as is re-



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B		
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A - UTILITY RUNWAYS
 B - RUNWAYS LARGER THAN UTILITY
 C - VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
 D - VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
 * - PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000' AND 40:1 FOR AN ADDITIONAL 40,000'

LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N ¹	N ¹	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N ¹	N ¹	N ¹	N	N
PUBLIC USE						
Schools	Y	N ¹	N ¹	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y ²	Y ³	Y ⁴	Y ⁴
Parking	Y	Y	Y ²	Y ³	Y ⁴	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y ²	Y ³	Y ⁴	N
Retail trade-general	Y	Y	25	30	N	N
Utilities	Y	Y	Y ²	Y ³	Y ⁴	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y ²	Y ³	Y ⁴	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y ⁶	Y ⁷	Y ⁸	Y ⁸	Y ⁸
Livestock farming and breeding	Y	Y ⁶	Y ⁷	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y ⁵	Y ⁵	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally-determined land uses for those determined to be appropriate by local authorities in response to locally-determined needs and values in achieving noise compatible land uses.

See other side for notes and key to table.

KEY

Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor-to-indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

- 1 Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB, respectively, should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- 2 Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 3 Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 4 Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 5 Land use compatible provided special sound reinforcement systems are installed.
- 6 Residential buildings require an NLR of 25.
- 7 Residential buildings require an NLR of 30.
- 8 Residential buildings not permitted.

Source: **14 CFR Part 150**, Appendix A, Table 1.

quired to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.”

In addition to appropriate land use zoning, communities are responsible for protecting airports from obstruction to the airspace. Most communities develop height and hazard regulations surrounding airports.

STATE OF KANSAS AIRPORT ZONING ACT

According to Article 3 of Section 7 in the Kansas Statutes, an airport proprietor has the right to enact and engage airport hazard zoning and is referred to as the Airport Zoning Act. As stated in Article 3 Section 7 paragraph 3-703:

“In order to prevent the creation or establishment of airport hazards, any political subdivision or subdivisions owning, controlling, or operating an airport, or those within or partly within fifty thousand (50,000) feet of a military airfield control tower, may adopt, administer, and enforce, in the manner and upon the conditions hereinafter prescribed, airport zoning regulations for such airport hazard area, whether such hazard area is located within or without the territorial limits of such subdivision, which regulations may divide such area into zones, and, within such zones, specify the land uses permitted and regulate and restrict the height to which structures and trees may be erected or al-

lowed to grow: provided, that the governing body of any political subdivision within the boundaries of which, or within five (5) miles of the territorial limits of which is located a privately owned airport which uses its facilities to provide a service to the public, may exercise zoning powers granted herein if in the opinion of said governing body such action is necessary to protect the public interests in the services afforded by said privately owned airport.”

In order to implement airport hazard zoning, the statute first requires the formation of an Airport Zoning Commission. As noted in the statute, *“Prior to the initial zoning of any airport hazard area under this act, the political subdivision or subdivisions which are to adopt the regulations shall appoint a commission, to be known as the airport zoning commission, to recommend the boundaries of the various zones to be established and the regulations to be adopted therefore.”*

The City of Salina has established an Airport Zoning Commission. According to the Salina Code, Codified up to Ordinance No. 12-10667 – December 26, 2012, *“The airport zoning commission shall consist of all of the members of the city planning commission as created in accordance with article II of chapter 29; and that appointment by the board of commissioners to the city planning commission shall automatically constitute appointment to the airport zoning commission for the same term as provided for in article II of chapter 29.”* In keeping with its powers, the Salina Airport Zoning Commission has adopted a Height and Hazard Zoning Ordinance that is depicted on **Exhibit 1S**.

Saline County has also adopted the Height and Hazard Zoning Ordinance that is depicted on **Exhibit 1S**.

LOCAL ORDINANCES

The City of Salina and Saline County have adopted zoning for all airport owned property and private property surrounding the airport. The City of Salina zoning map is depicted on **Exhibit 1T**. As depicted, the airport's airfield system is zoned as A-1 for agricultural uses. Most of the remainder of zoning falls within three categories of industrial uses (industrial, light industrial, and heavy industrial). Kansas State University property is categorized as U zoning. The zoning does include a small area identified for multi-family residential identified on the exhibit as R-3. One small section is zoned as PC-5 to allow for planned commercial district uses.

To the east of Centennial Road and west of I-35, an array of zoning district designations exist, including planned development, residential, manufactured home park, agricultural, and industrial. It is important to provide a "buffer" between aviation uses and possible incompatible land uses. At Salina Regional Airport, this "buffer" is provided, as mainly industrial development separates residential-related development from aviation activities farther west.

In addition, the City of Salina and Saline County zoning ordinances require a conditional use permit for all construction and development within the sections identified on **Exhibit 1U**.

ENVIRONMENTAL INVENTORY

A review of the potential environmental impacts associated with proposed airport projects is an essential consideration in the Airport Master Plan process. The intent of this inventory is to identify poten-

tial environmental sensitivities or resources that might affect future improvements at the airport. The information contained in this section was obtained from internet resources, agency maps, and existing literature.

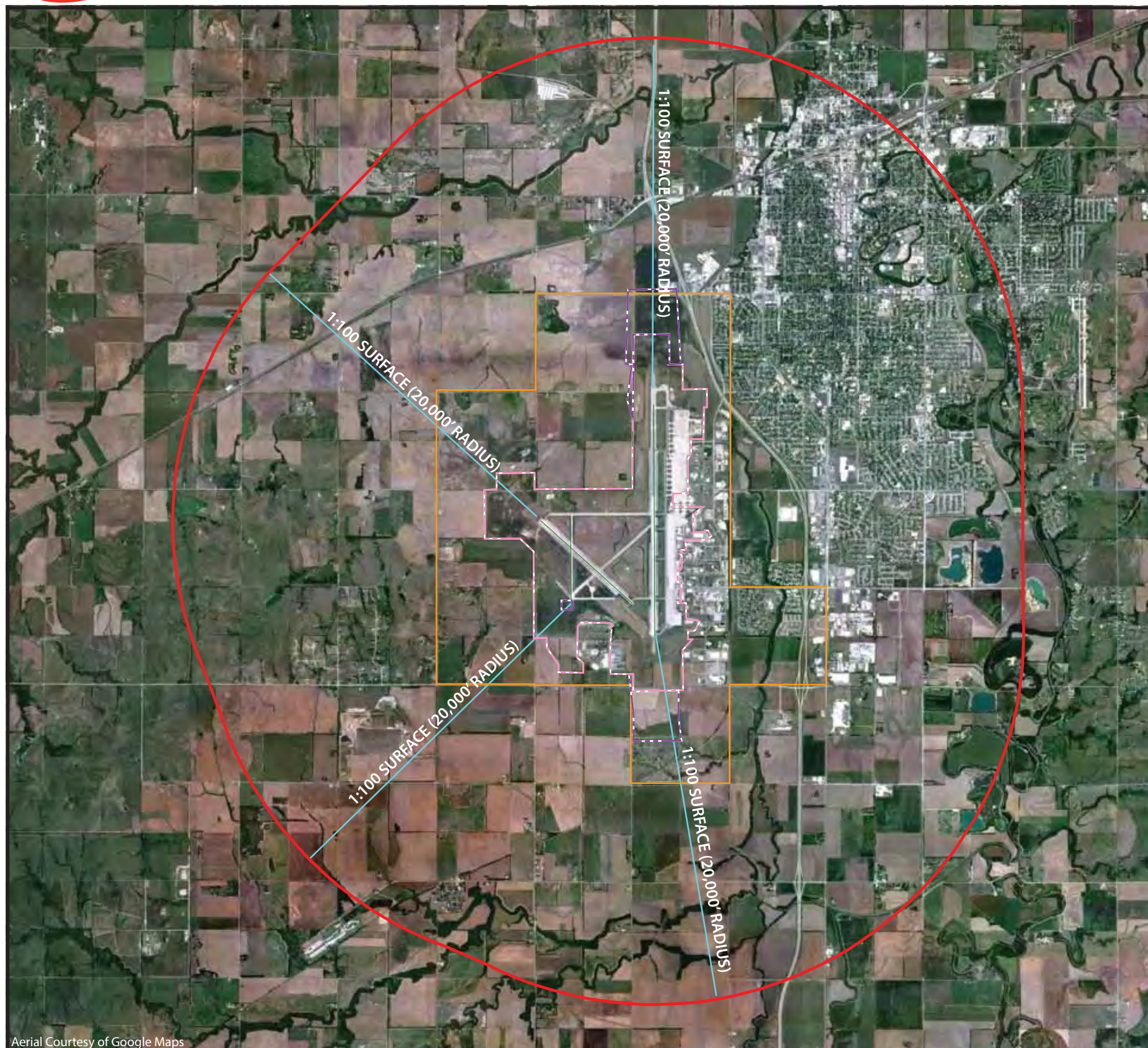
Research was done for each of the 18 environmental impact categories described within the FAA's Order 1050.1E *Environmental Impacts: Policies and Procedures*. It was determined that the following resources are not present with the airport environs or cannot be inventoried:

- Resources Not Present:
 - Coastal Resources (Coastal Barriers and Coastal Zones) – the Airport is inland and not subject to any coastal restrictions.
 - Wild and Scenic Rivers – The nearest Wild and Scenic River segment to the Airport is a segment of the Niobrara River, located approximately 346 miles north of the Airport in Nebraska.
- Resources that are not inventoried but will be discussed in the Environmental Overview of this Master Plan:
 - Construction Impacts
 - Natural Resources and Energy Supply
 - Noise
 - Secondary/Induced Impacts

The following sections provide a discussion of the remaining resource categories.

AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has adopted air quality standards that specify the maximum permissible short-term and long-term concentrations of various air contaminants. The National Ambient Air Quality Standards



Aerial Courtesy of Google Maps

LEGEND

- FAA Obligated Property Line
- Easements
- Runway Surfaces - Existing
- 1:100 Surface - 20,000' Radius Construction Notification Area
- Requires a Saline County Conditional Use Permit for Construction or Development

AIRPORT ZONING ORDINANCES/STATUTES

THE CITY OF SALINA ADOPTED THE SALINA MUNICIPAL AIRPORT ZONING ORDINANCE (ORD. NO. 92-9534, SECT. 1, 9-21-92), WHILE SALINE COUNTY ALSO ADOPTED THE APPENDIX A-ZONING AND MASTER PLAN RESOLUTION ORDINANCE (AMENDMENT NO. 1, 12-10-91, RES. NO. 1254-4, 9-14-93) BASED UPON FAR 77 TO REGULATE AND RESTRICT THE HEIGHT OF STRUCTURES, OBSTRUCTIONS, AND OBJECTS OF NATURAL GROWTH, TO ASSURE THE RIGHT-OF-FLIGHT OF AIRCRAFT, AND TO REGULATE THE LAND USES ADJACENT TO AND IN THE VICINITY OF THE SALINA MUNICIPAL AIRPORT.

APPENDIX A - ZONING AND MASTER PLAN RESOLUTION

THE FOLLOWING SECTIONS ARE WITHIN THE FLIGHT PATH OF THE SALINA AIRPORT AND ALL CONSTRUCTION AND DEVELOPMENT IS SUBJECT TO CONDITIONAL USE: SECTIONS 21, 22, 28, 29, 32, TOWNSHIP 14 SOUTH, RANGE 3 WEST AND SECTIONS 2, 3, 4, 5 AND 10, TOWNSHIP 15 SOUTH, RANGE 3 WEST.

WHERE A USE OR BUILDING IS NOT AUTHORIZED OR WHERE AMBIGUITY EXISTS, SAID USES OR BUILDING MAY BE AUTHORIZED BY CONDITIONAL USE PERMIT IN ACCORDANCE WITH SECTION 13.05 [13.06]. (AMEND. NO. 1, 12-10-91; RES. NO. 1254-6, 2-14-95; AMEND. 1254-17, 6-20-00; AMEND. 1254-19, 11-28-00)

FAR PART 77

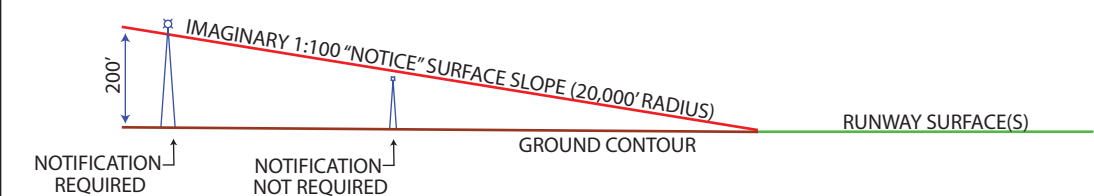
SECTION 77.13(A)(2) - NOTICE REQUIREMENT RELATED TO AIRPORTS

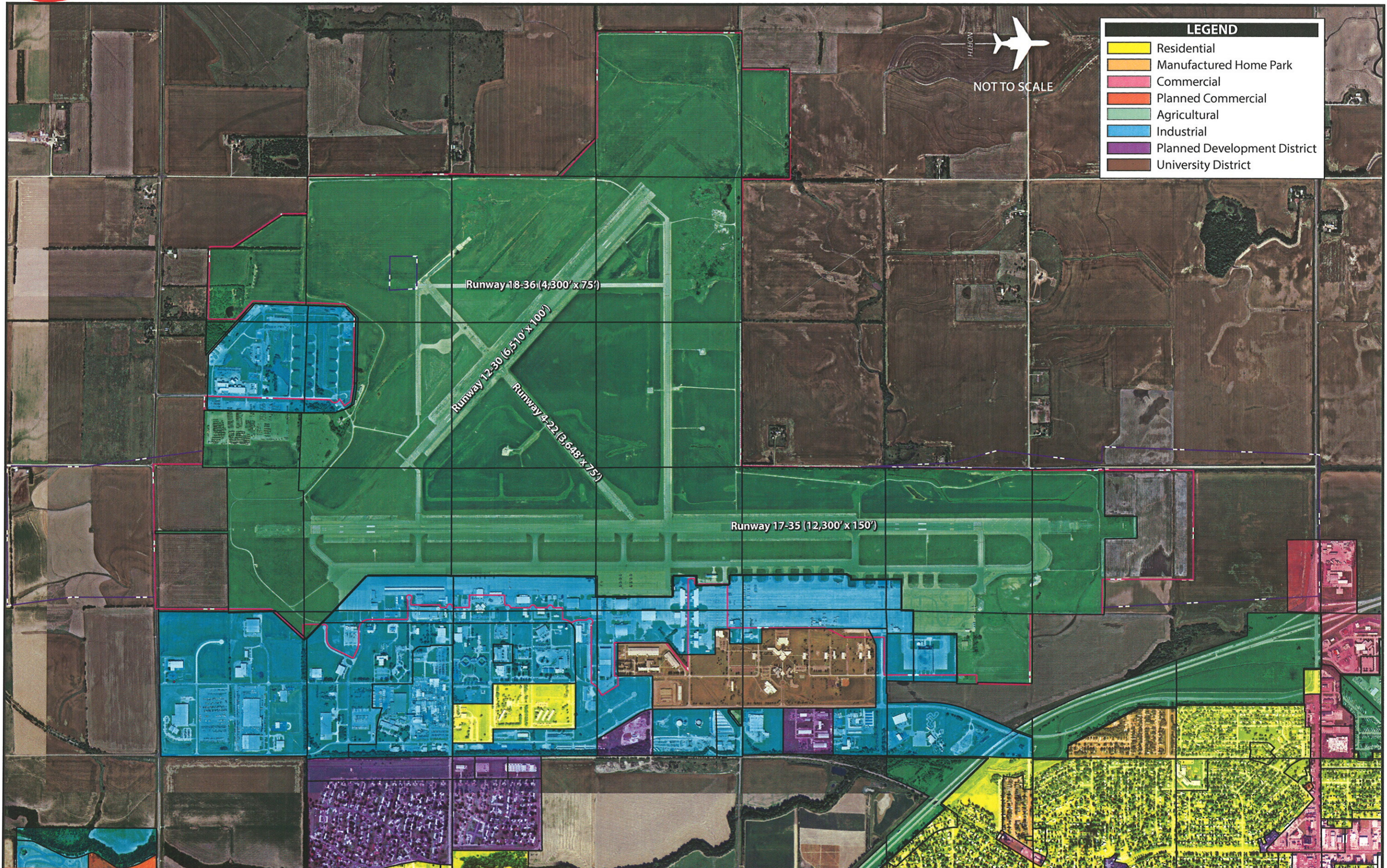
SUBPART B - NOTICE OF CONSTRUCTION OR ALTERATION

SECTION 77.13(A)(2) - A NOTICE IS REQUIRED FOR ANY PROPOSED CONSTRUCTION OR ALTERATION THE WOULD BE OF GREATER HEIGHT THAN THE IMAGINARY SURFACE EXTENDING OUTWARD AND UPWARD AT THE FOLLOWING SLOPE--

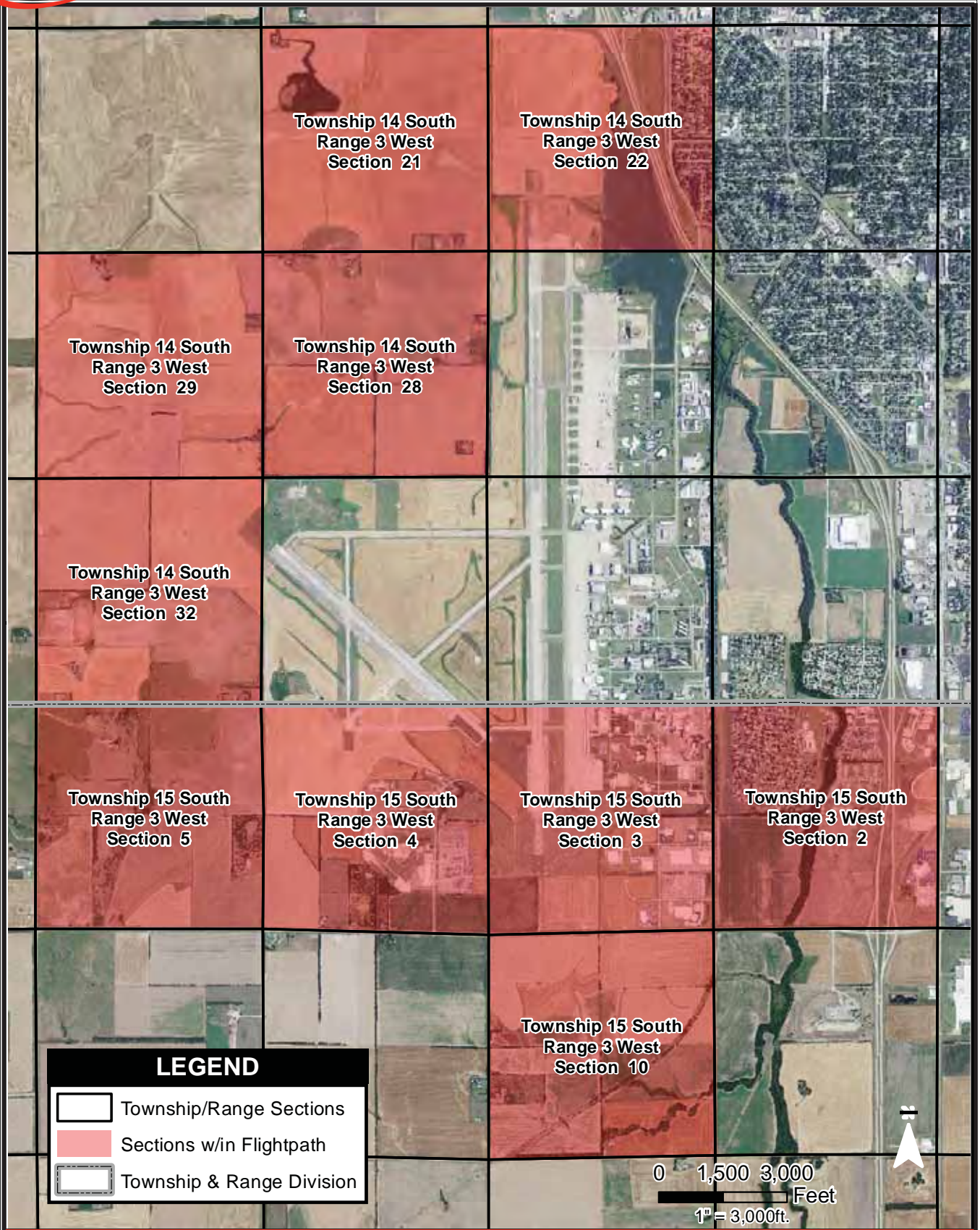
(1) 100 TO 1 FROM A HORIZONTAL DISTANCE OF 20,000 FEET FROM THE NEAREST POINT OF THE NEAREST RUNWAY OF EACH AIRPORT WITH AT LEAST ONE RUNWAY MORE THAN 3,200 FEET IN ACTUAL LENGTH

OFFICIAL NOTIFICATION IS PROVIDED TO THE FEDERAL AVIATION ADMINISTRATION (FAA) BY COMPLETING AND SUBMITTING FAA FORM 7460-1, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION.





LEGEND	
	Residential
	Manufactured Home Park
	Commercial
	Planned Commercial
	Agricultural
	Industrial
	Planned Development District
	University District



(NAAQS) consist of primary and secondary standards for six criteria pollutants which include: Ozone (O₃), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Nitrogen Oxide (NO), Particulate matter (PM₁₀ and PM_{2.5}), and Lead (Pb). Various levels of review apply within both NEPA and permitting requirements. Potentially significant air quality impacts, associated with an FAA project or action, would be demonstrated by the project or action exceeding one or more of the NAAQS for any of the time periods analyzed.

According to the Environmental Protection Agency's (EPA) Greenbook, a part of Saline County is a non-attainment area for the 2008 lead standard. The portion of Saline County that is in non-attainment for the 2008 lead standard is bounded by Schilling Road on the north, ¼-mile west of S. Ohio Street on the east, Water Well Road on the south, and 9th Street on the west. The Airport is located approximately 1.5 miles west of this non-attainment area boundary. Saline County is an attainment area for all other criteria pollutants.

COMPATIBLE LAND USE

The compatibility of existing and planned land uses in the vicinity of an airport is generally associated with the extent of the airport's noise impacts. Typically, significant impacts occur if noise-sensitive land uses are located within the 65 DNL noise contour, based upon the FAA's Integrated Noise Model (INM). Noise contours will be developed and discussed in the Environmental Overview of this Master Plan.

Existing land uses surrounding the Airport are as follows: northwest – primarily agricultural/open space and rural residential; northeast – primarily residential

with areas of commercial/industrial development; south – agricultural/open space and rural residential; east – commercial/industrial and residential; west – agricultural/open space and rural residential.

The City of Salina City Commission adopted the *Salina Kansas Comprehensive Plan – 2010* on September 20, 2010 to serve as the community's core planning document for future growth. The Future Land Use Map from this document, depicted on **Exhibit 1V**, identifies the Airport as a public/semi-public land use with plans for land to the northwest, west, south, and east surrounding the Airport to be developed as an employment area. Land north and northeast of the Airport is planned for conservation and suburban land uses.

Additionally, the 2008 *Updated Comprehensive Plan for Saline County* identifies the areas located to the north, south, and west of the airport as Urban Service Area. These areas are within the land use planning jurisdiction of the county, rather than the City of Salina. The Updated Comprehensive Plan for Saline County defines the Urban Service Area as an area of mutual interest identified for immediate urban growth around the City of Salina. The type of development discussed for the Urban Service Area includes residential development dependent on the availability of centralized water and wastewater systems and non-residential development limited to circumstances under which the City of Salina would annex the subject property. Based on the policies outlined in the *Plan* all potential development within the Urban Service Area would need to be coordinated through the City of Salina.

Compatible land use also addresses nearby features that could pose a threat to

safe aircraft operations by attracting wildlife (e.g., landfills and ponds). The nearest landfill to the Airport is the City Landfill approximately three miles to the southwest. The nearest pond is a five-acre pond located approximately 1,400 feet to the west of the Runway 36 touch-down markings.

DEPARTMENT OF TRANSPORTATION ACT: SECTION 4(f)

Section 4(f) of the DOT Act, which was recodified and renumbered as Section 303(c) of 49 USC, provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly owned land from a historic site, public parks, recreation areas, or waterfowl and wildlife refuges of national, state, regional, or local importance unless there is no feasible and prudent alternative to the use of such land, and the project includes all possible planning to minimize harm resulting from the use.

The City of Salina has several parks and recreation sites, as depicted on **Exhibit 1W**. The public park nearest the Airport is Schilling Park, located approximately $\frac{3}{4}$ -mile to the east. The nearest historic site listed on the National Register of Historic Places (NRHP) is the John H. Prescott House, located at 211 W Prescott Avenue, approximately 2.5 miles northeast of the Airport. There are no State or National recreation areas/parks within a five-mile radius of the Airport.

FARMLAND

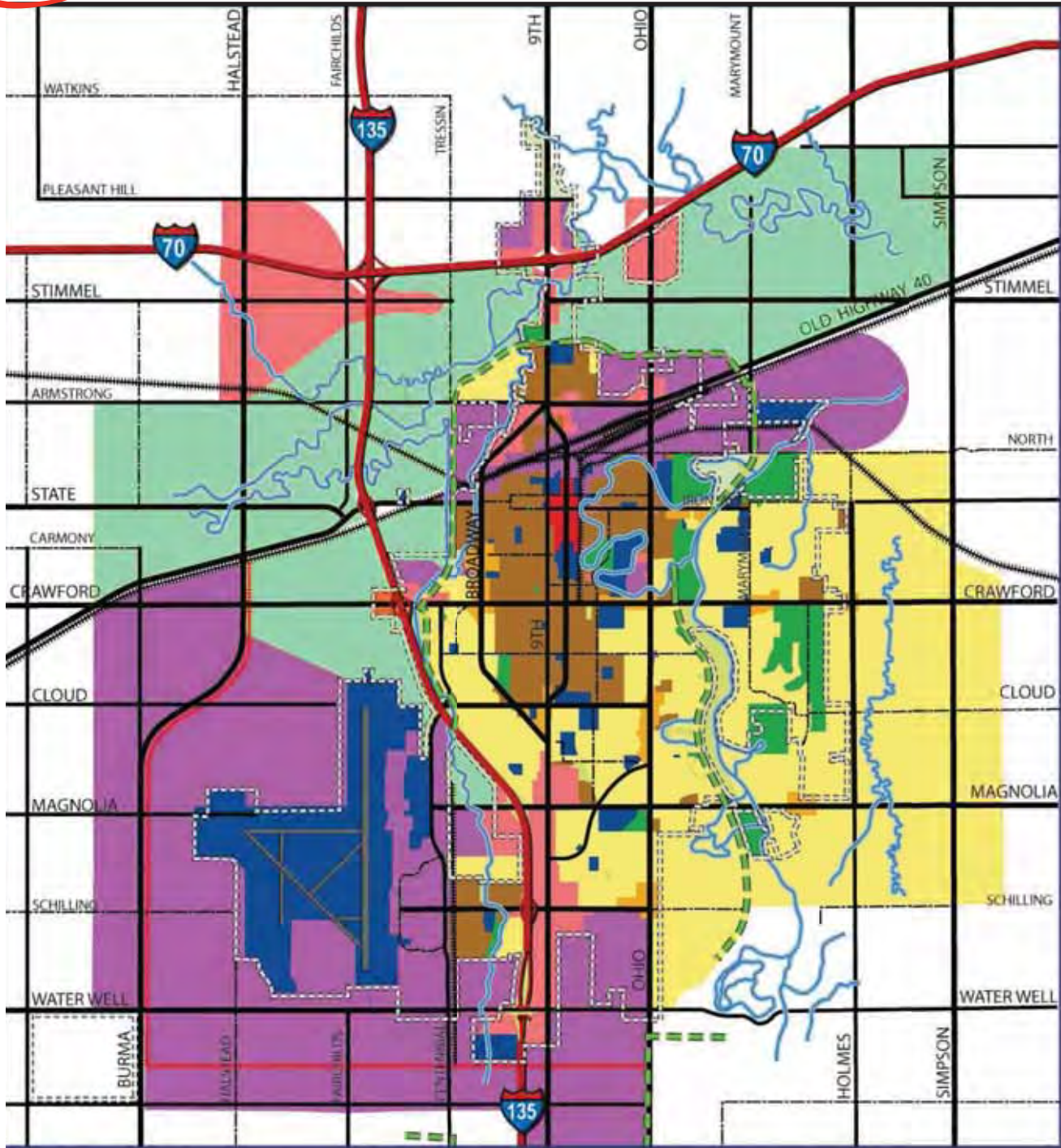
Under the *Farmland Protection Policy Act* (FPPA), federal agencies are directed to identify and take into account the adverse effects of federal programs on the preser-

vation of farmland, to consider appropriate alternative actions which could lessen adverse effects, and to assure that such federal programs are, to the extent practicable, compatible with state or local government programs and policies to protect farmland. The FPPA guidelines developed by the U.S. Department of Agriculture (USDA) apply to farmland classified as prime or unique, or of state or local importance as determined by the appropriate government agency, with concurrence by the Secretary of Agriculture.

Information obtained from the Natural Resource Conservation Service's (NRCS) Web Soil Survey indicates that the majority of soil on Airport property and immediately surrounding the Airport is considered prime farmland or farmland of statewide importance. If the Master Plan proposes projects that will convert farmland to non-farm uses, a Form AD 1006 Farmland Conversion Impact Rating will need to be completed to measure the severity of impact on farmlands. The completion of this form will need to be coordinated with the USDA National Resources Conservation Service (NRCS).

FISH, WILDLIFE, AND PLANTS

A number of regulations have been established to ensure that projects do not negatively impact protected plants, animals, or their designated habitat. Section 7 of the *Endangered Species Act* (ESA), as amended, applies to federal agency actions and sets forth requirements for consultation to determine if the proposed action may affect a federally endangered or threatened species. The *Sikes Act* and various amendments authorize states to prepare statewide wildlife conservation plans for resources under their jurisdiction.



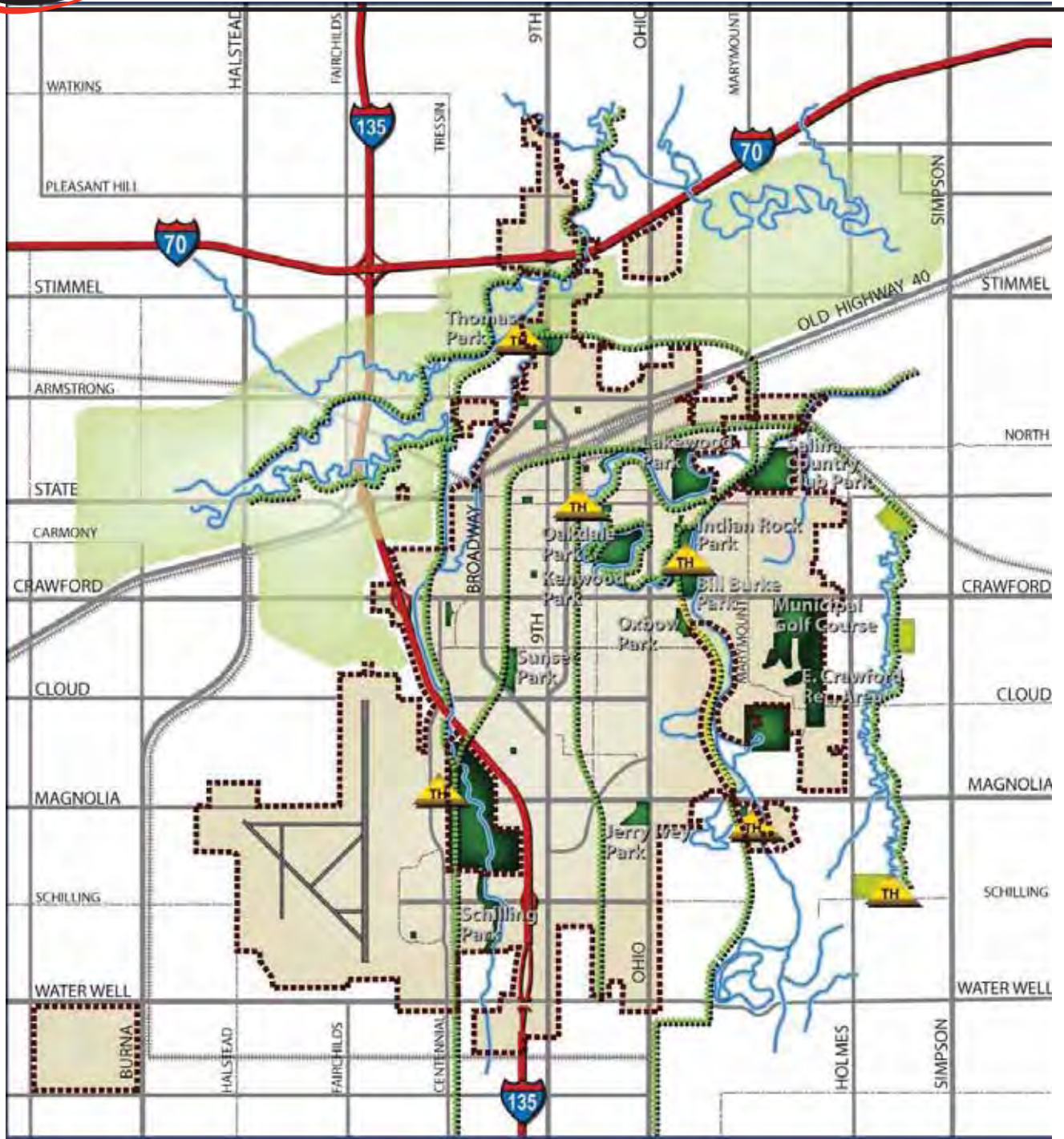
	INTERSTATES		DOWNTOWN		RURAL RESIDENTIAL
	ROAD NETWORK		COMMUNITY CENTER		SUBURBAN RESIDENTIAL
	EXISTING RAILROAD		NEIGHBORHOOD CENTER		URBAN RESIDENTIAL
	PROPOSED RAILROAD		COMMERCIAL		PARK / OPEN SPACE
	RIVERS		EMPLOYMENT		CONSERVATION
	FLOODPLAIN LEVEE		PUBLIC / SEMI-PUBLIC		
	CITY LIMITS				




N

 Not to Scale

Exhibit 1V
Future Land Use Map

Source: Salina Kansas Comprehensive Plan – 2010



	PARKS & RECREATION		INTERSTATE
	NEW PARKS (GENERAL LOCATION)		ARTERIAL
	CONSERVATION AREA		MINOR ARTERIAL
	TRAIL HEAD		COLLECTOR STREET
	EXISTING LINEAR PARKS		RAILROAD
	PROPOSED LINEAR PARKS		WATER
			CITY LIMITS

Not to Scale

**Exhibit 1W
Parks Map**

According to the U.S. Fish and Wildlife Service’s (USFWS) Information, Planning, and Conservation System (IPaC) web tool, there is one federally listed species that has potential habitat in Saline County: the whooping crane. A description of the habitat of the whooping crane is provided

in **Table 1D**. Since habitat for this species, including ponds, wetlands, and agricultural fields, do occur in the vicinity of the Airport, further field investigations may be necessary prior to construction activities at the Airport.

TABLE 1D Threatened or Endangered Species in Saline County, Kansas			
Common Name	Species	Federal Status	Habitat
Whooping Crane	<i>Grus americana</i>	Endangered	Wetland habitats including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields.

Source: U.S. Fish and Wildlife Service, <http://ecos.fws.gov/ipac/wizard/trustResourceList!prepare.action>.

FLOODPLAINS

Executive Order 11988 directs federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by the floodplains.

A review of Federal Emergency Management Agency (FEMA) floodplain information indicates that portions of the Airport are located within the 100-year floodplain. The location of the floodplain is depicted on **Exhibit 1X**.

The City of Salina Building Services and Planning Divisions are responsible for enforcing local floodplain regulations. If projects proposed in this Master Plan should occur in the 100-year floodplain, a building permit for construction within the floodplain will need to be acquired from the City of Salina.

HAZARDOUS MATERIALS, POLLUTION PREVENTION AND SOLID WASTE

Federal, state, and local laws regulate hazardous materials use, storage, transport, and disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality, and the organisms using these resources.

The EPA’s *EJView* and *MyWATERS Mapper* web tools were consulted regarding the presence of impaired waters or regulated hazardous sites. According to these sources, Dry Creek (EPA Water ID# KS-SS-10-640_29), located approximately one mile east of the Airport, is impaired. Copper and phosphorus are listed as the causes of impairment. Several businesses on and near the Airport, primarily on the east side, report to the EPA regarding handling of hazardous waste.

According to *EJView*, there are no Superfund sites within a five-mile radius of the Airport; however, extensive groundwater contamination has occurred as a result of the military's operation of the Former Schilling Air Force Base (now Salina Regional Airport), which was closed in 1965. The source of contamination on the Airport includes 107 underground fuel storage tanks left behind by the military after Schilling Air Force Base (AFB) was closed. These underground storage tanks ultimately leaked jet fuel, contaminating the soil and groundwater. The underground storage tanks have since been removed by the Army Corps of Engineers; however, remediation of groundwater contamination is still in the beginning stages. In December 2012, it was announced that an agreement had been reached between the Salina Public Entities (made up of the City of Salina, Salina Airport Authority, USD 305, and Kansas State University) and the United States on the first steps towards a comprehensive environmental cleanup of the Former Schilling AFB in accordance with the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Determination of a project's environmental impact to historic and cultural resources is made under guidance in the *National Historic Preservation Act* (NHPA) of 1966, as amended, the *Archaeological and Historic Preservation Act* (AHPA) of 1974, the *Archaeological Resources Protection Act* (ARPA), and the *Native American Graves Protection and Repatriation Act* (NAGPRA) of 1990. In addition, the *Antiquities Act* of 1906, the *Historic Sites Act* of 1935, and the *American Indian Reli-*

gious Freedom Act of 1978 also protect historical, architectural, archaeological, and cultural resources. Impacts may occur when a proposed project causes an adverse effect on a property which has been identified (or is unearthed during construction) as having historical, architectural, archaeological, or cultural significance. In Kansas, the State Historic Preservation Officer has oversight of Kansas laws and regulations regarding historical, architectural, archeological and cultural resource laws and regulations.

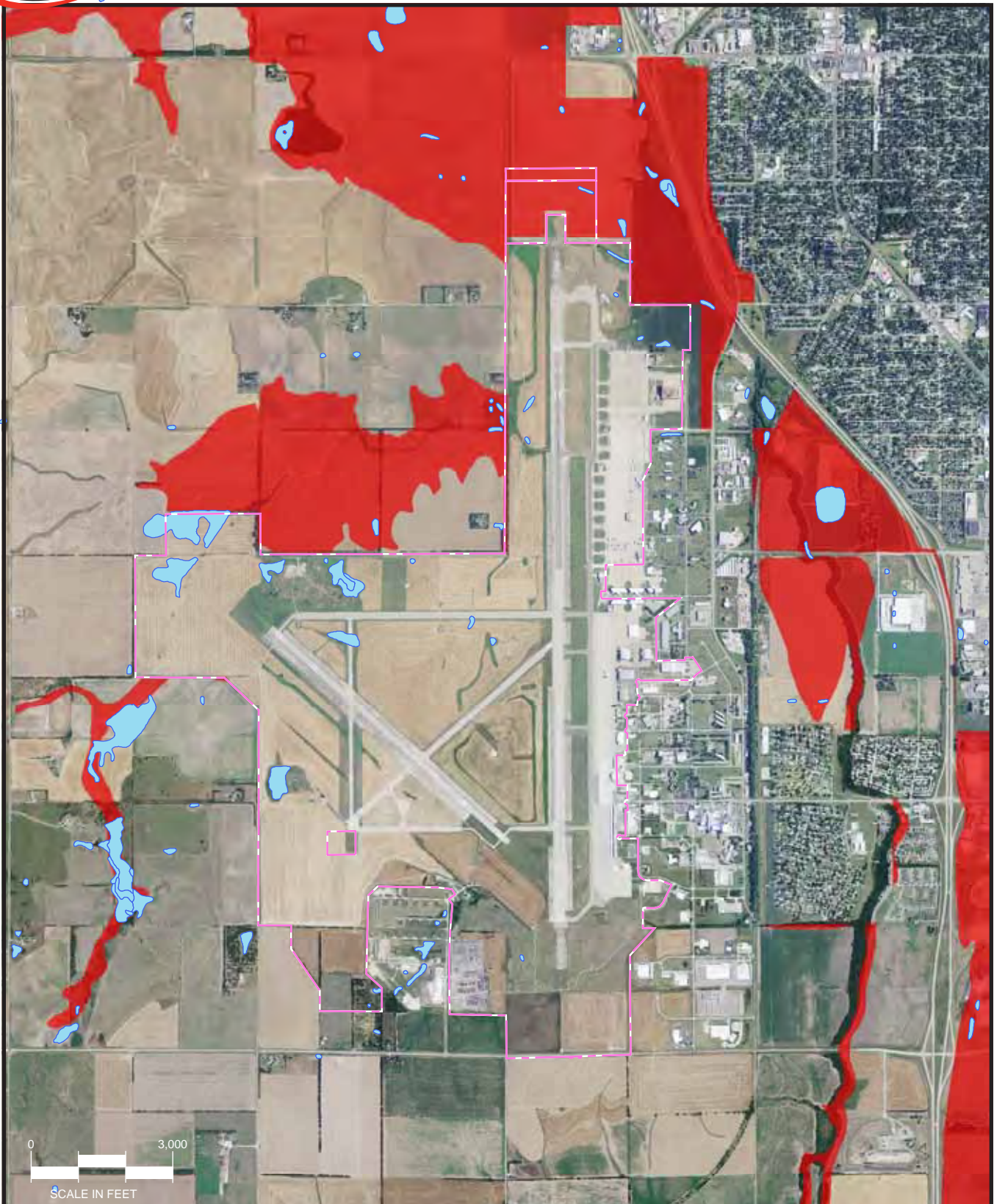
A review of the National Register of Historic Places (NRHP) indicates that the nearest site listed on the NRHP is the John H. Prescott House, located at 211 W. Prescott Avenue, approximately 2.5 miles northeast of the Airport.

LIGHT EMISSIONS AND VISUAL IMPACTS

Airport lighting is characterized as either airfield lighting (i.e., runway, taxiway, approach and landing lights) or landside lighting (i.e., security lights, building interior lighting, parking lights, and signage). Generally, airport lighting does not result in significant impacts unless a high intensity strobe light, such as a MALSR or Runway End Identifier Lighting (REIL), would produce glare on any adjoining site, particularly residential uses. The existing light features of the Airport were described in detail previously in this chapter.

ENVIRONMENTAL JUSTICE

Environmental justice can be defined as insuring that an action does not unfairly impact a minority race or families living under the poverty level. The EPA's *EJview*



FAA OBLIGATED
PROPERTY LINE



WETLANDS



FLOODPLAIN



Exhibit 1X
Floodplain and Wetlands

web tool was consulted regarding the presence of environmental justice areas within the Airport environs. According to the tool, the U.S. Census blockgroup that contains the Airport has a minority population of 25 percent and 19 percent of the population lives below the poverty level.

WATER QUALITY

The *Clean Water Act* provides the authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent or minimize the loss of wetlands, and regulate other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc. Additionally, Congress has mandated (under the Clean Water Act) the National Pollutant Discharge Elimination System (NPDES). This program addresses non-agricultural storm water discharges. Through the use of NPDES permits, certain procedures are required to prevent contamination of water bodies from storm water runoff. The EPA can delegate this permit authority to individual states. The Kansas Department of Health and Environment administers the NPDES program. Development at the Airport may be subject to permitting requirements.

According to a 2010 EPA water body report, Dry Creek (EPA Water ID# KS-SS-10-640_29), located approximately one mile east of the Airport, is listed as an impaired waterway. The causes of impairment listed include copper and phosphorus.

WETLANDS

The U.S. Army Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the United States, including adjacent wetlands, under Section 404 of the *Clean Water Act*. Wetlands are defined in Executive Order 11990, *Protection of Wetlands*, as “those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction.” Wetlands can include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mud flats, natural ponds, estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Wetlands exhibit three characteristics: the soil is inundated or saturated to the surface at some time during the growing season (hydrology), has a population of plants able to tolerate various degrees of flooding or frequent saturation (hydrophytes), and soils that are saturated enough to develop anaerobic conditions during the growing season (hydric).

A review of the U.S. Fish and Wildlife Service National Wetland Inventory (NWI) maps indicates the presence of several small areas of potential freshwater emergent wetlands and freshwater ponds on or in the vicinity of Airport property, as depicted on **Exhibit 1X**. The NWI wetlands depicted on Airport property are based on analysis of aerial imagery dated May 1985, and may not reflect existing conditions. Further analysis would be needed to determine if the wetlands are considered jurisdictional by the U.S. Army Corps of Engineers. Additionally, a review of the NRCS soil survey for the area including the Airport indicates that a ma-

jority of the soils on Airport property are classified as partially hydric, which indicates the potential for wetlands within the Airport area.

DOCUMENT SOURCES

A variety of sources were used during the inventory process. The following listing reflects a partial compilation of these sources. In addition, considerable information was provided directly to the consultant by Salina Regional Airport.

Airport/Facility Directory North Central U.S., U.S. Department of Transportation, Federal Aviation Administration, National Aeronautical Charting Office. Effective November 15, 2012 – January 10, 2013

Wichita Sectional Aeronautical Chart, U.S. Department of Transportation, Federal Aviation Administration, National Aeronautical Charting Office. Effective November 15, 2012

U.S. Terminal Procedures, North Central U.S., U.S. Department of Transportation, Federal Aviation Administration, National Aeronautical Charting Office. Effective December 13, 2012.

National Plan of Integrated Airport Systems (NPIAS), U.S. Department of Transportation, Federal Aviation Administration, 2013-2017.

General Aviation Airports: A National Asset U.S. Department of Transportation, Federal Aviation Administration, May 2012.

Salina Regional Airport Layout Plan Update – Final Report, February 2011. Prepared by BWR.

A number of internet websites were also used to collect information for the inventory chapter. These include the following:

Salina Airport Authority
<http://salinaairport.com/>

KDOT-Aviation Division
<http://www.ksdot.org/divaviation/default.asp>

Kansas Guard
http://www.kansastag.gov/gpjtc_default.asp
http://www.kansastag.gov/rti_default.asp
<http://www.184iw.ang.af.mil/units/index.asp>

KSU-Salina
<http://salina.k-state.edu/>

U.S. Census Bureau
<http://www.census.gov>

U.S. Bureau of Labor Statistics
<http://www.bls.gov>

FAA 5010 Data:
<http://www.airnav.com>
<http://www.gcr1.com/5010Web>

City of Salina
<http://www.ci.salina.ks.us/>

Saline County
<http://www.saline.org/>