

CAPITAL IMPROVEMENT PROGRAM

Chapter Six

The analyses completed in previous chapters evaluated development needs at the airport over the next 20 years and beyond, based on forecast activity and operational efficiency. Next, basic economic, financial, and management rationale is applied to each development item so that the feasibility of each item contained in the plan can be assessed.

The presentation of the capital improvement program (CIP) has been organized into two sections. First, the airport development schedule and CIP cost estimate is presented in narrative and graphic form. Second, capital improvement funding sources on the federal, state, and local levels are identified and discussed.

AIRPORT DEVELOPMENT SCHEDULES AND COST SUMMARIES

Now that the recommended concept has been developed and specific needs and improvements for the airport have been established, the next step is to determine a realistic schedule (implementation timeline) and associated costs for the plan. The recommended improvements are grouped by planning horizon: short term, intermediate term, and long term. The short term planning horizon is further subdivided into yearly increments. **Table 6A** summarizes key activity milestones for the three planning horizons.



TABLE 6A**Aviation Demand Forecast Summary
Salina Regional Airport**

	BASE YEAR (2012)	SHORT TERM	INTERMEDIATE TERM	LONG TERM
ANNUAL PASSENGER ENPLANEMENTS	2,660	3,100	4,300	6,000
ANNUAL OPERATIONS	96,663	106,530	116,077	134,769
Itinerant				
Air Carrier	40	60	90	140
Commuter Airline	1,780	1,720	1,912	1,904
Other Air Taxi	21,920	26,000	28,000	32,800
General Aviation	11,814	12,500	13,300	16,000
<u>Military</u>	<u>2,074</u>	<u>2,650</u>	<u>3,100</u>	<u>3,650</u>
Total Itinerant	37,628	42,930	46,402	54,494
Local				
General Aviation	56,329	60,000	65,000	75,000
<u>Military</u>	<u>2,706</u>	<u>3,600</u>	<u>4,675</u>	<u>5,275</u>
Total Local	59,035	63,600	69,675	80,275
BASED AIRCRAFT	105	116	129	162

A key aspect of this master plan is the use of demand-based planning milestones. Many projects should be considered based on actual demand levels. As short term horizon activity levels are reached, it will then be time to program for the intermediate term based upon the next activity milestones. Similarly, when the intermediate term milestones are reached, it will be time to program for the long term activity milestones. As a result, capital expenditures will be made on an as-needed basis, which leads to a more responsible use of capital assets.

Construction of hangars is an important consideration for airport operators. In order to accommodate forecast growth, additional hangar space will be required to support aviation business operations and aircraft storage. Without an allowance for additional hangars, pilots will look to house their aircraft (and potential-

ly their businesses) at other airports or in other municipalities. In the past, airport operators constructed hangars with airport financial resources (not eligible for grants) and served as the lessor of those hangars. The cost of construction was often considered a regular expense of operating an airport, even if rental fees did not fully cover the cost of construction over a typical 20-year loan amortization schedule.

In more recent times, airport sponsors are looked upon to be more self-sufficient, a financial position encouraged by the Federal Aviation Administration (FAA). As a result, new hangar construction undertaken by airport sponsors is becoming less common. The most significant problem is that the market rate for renting a hangar in many areas of the country (including Salina) is less than the amount necessary to break even on a typical con-

struction loan. Salina Regional Airport is no different in this respect.

Because of these economic realities, fewer general aviation airports are constructing hangars on their own, instead relying on private developers. In some cases, private developers can keep construction costs lower, which in turn lowers the monthly fee necessary to amortize a loan.

The CIP for this master plan does not include construction cost estimates for hangar development. The CIP only considers projects which may be associated with hangar construction such as apron and taxilane construction which is eligible for federal grants. Obviously, the CIP as presented does not preclude the Salina Airport Authority (SAA) from constructing hangar facilities in the future. If the SAA cannot fund construction of any of the new hangars planned, then private developers will have a baseline cost estimate from which to determine if they can proceed with construction.

The airport sponsor's responsibility related to new hangars is to provide public access taxilanes, typically in conjunction with FAA development grants. These taxilanes are then able to be utilized by private developers to provide aircraft access to the runway/taxiway system. The CIP presented in this master plan includes construction of several taxilanes.

Some development items do not depend specifically on demand. Safety-related projects, such as modification of Taxiway B and relocation of the Taxiway A holding positions, should be programmed in a timely manner regardless of the forecast growth in activity. Other items, such as pavement maintenance, should be addressed in a scheduled manner and are

not dependent on reaching aviation demand milestones.

As a master plan is a conceptual document, implementation of the capital projects should only be undertaken after further refinement of their design and costs through architectural and engineering analyses. Moreover, some projects may require additional infrastructure improvements (i.e., drainage improvements, extension of utilities, etc.) that may take more than one year to complete.

Once the list of necessary projects was identified and refined, project-specific cost estimates were developed. The cost estimates include design, engineering, construction administration, and contingencies that may arise on the project. Capital costs presented here should be viewed only as estimates subject to further refinement during design. Nevertheless, these estimates are considered sufficient for planning purposes. Cost estimates for each of the development projects in the CIP are in current (2013) dollars. Specific detail for each proposed project cost estimate is provided in Appendix E

Exhibit 6A presents the proposed CIP for Salina Regional Airport. As presented, the CIP has been broken up into three periods: short term, intermediate term, and long term. The short term program has been further expanded to include projects by year for each year between 2014 and 2019. The intermediate and long term projects have been grouped according to priorities only and not by individual years.

The CIP considers three cost categories: total project cost, FAA/KDOT eligible share, and local share. Total cost represents the costs associated with the entire-

ty of the project. The FAA/KDOT eligible share is the amount which could be funded via federal and/or state grant mechanisms. The grant mechanisms will be explained in greater detail later in this chapter. It is very important to point out that the analysis here does not imply a guarantee of funding from either FAA or KDOT. The information simply indicates that a project is eligible via each grant mechanism. Moreover, in some cases the project could attract federal funding, whereas in other cases, the FAA may not have funding available and state funding could be sought. As such, there is no distinction being made at this time from which grant source the project will be potentially funded. All costs not funded via federal and/or state grants are the responsibility of SAA.

The FAA and KDOT utilize a priority ranking system to help objectively evaluate potential airport projects. Projects are weighted toward safety, infrastructure preservation, standards, and capacity enhancement. Either agency will participate in the highest priority projects before considering lower priority projects, even if a lower priority project is considered a more urgent need by the local sponsor. Nonetheless, the project should remain a priority for the airport and funding support should continue to be requested in subsequent years.

The following sections will describe in greater detail the projects identified for the airport over the next 20 years. The short term (0-5 years) projects are presented in yearly increments. The intermediate (years 6-10) and long term (years 10-20) are grouped by local priority.

SHORT TERM IMPROVEMENTS

The projects identified for the short term planning period have been prioritized based on airport need and potential to be funded. If any of these projects cannot be funded in the timeframe indicated, the airport sponsor should consider the project for the following year.

The major objective of the short term CIP is to redesign existing airfield geometry that does not meet design standards. These areas may be confusing to pilots and can lead to safety concerns. Another significant goal is to maintain existing pavements. Projects for each year of the short term are presented on **Exhibit 6A** and graphically depicted on **Exhibit 6B**.

2014 Projects

The first project identified is engineering and design for the rehabilitation of Taxiways B and E.

2015 Projects

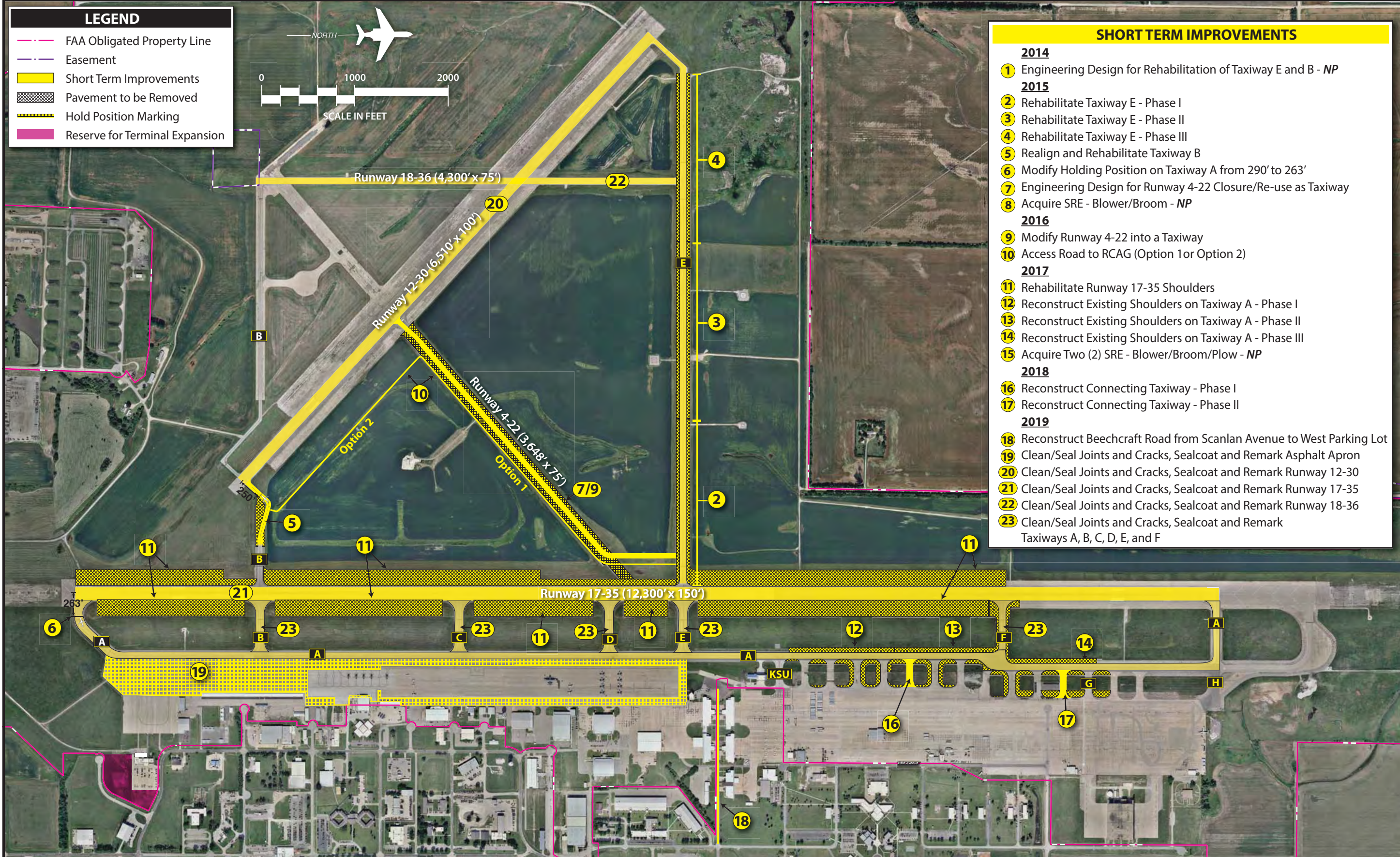
Once the engineering and design for Taxiways B and E has been provided and approved, the rehabilitation process is planned. The rehabilitation of Taxiway E is proposed in three phases, and the project includes the portion of taxiway between Runway 17-35 and Runway 12. The total cost of Taxiway E rehabilitation is projected at \$2.85 million.

The rehabilitation of Taxiway B between Runway 17-35 and Runway 30 is also planned for 2015. The plan also includes realignment of the western section of the

PROJECT DESCRIPTION	Project Cost	FAA/KDOT Eligible	Local Share
FISCAL YEAR 2014			
1. Engineering Design for Rehabilitation of Taxiway E and B	\$670,000	\$603,000	\$67,000
2014 Subtotal	\$670,000	\$603,000	\$67,000
FISCAL YEAR 2015			
2. Rehabilitate Taxiway E - Phase I	\$1,050,000	\$945,000	\$105,000
3. Rehabilitate Taxiway E - Phase II	1,050,000	945,000	105,000
4. Rehabilitate Taxiway E - Phase III	1,050,000	945,000	105,000
5. Realign and Rehabilitate Taxiway B	1,402,000	1,261,800	140,200
6. Modify Holding Position on Taxiway A from 290' to 263'	37,000	33,300	3,700
7. Engineering Design for Runway 4-22 Closure/Re-use as Taxiway	826,300	293,670	32,630
8. Acquire SRE - Blower/Broom	950,000	855,000	95,000
2015 Subtotal	\$5,865,300	\$5,278,770	\$586,530
FISCAL YEAR 2016			
9. Modify Runway 4-22 into a Taxiway	\$3,050,000	\$2,745,000	\$305,000
10. Access Road to RCAG	197,200	177,480	19,720
2016 Subtotal	\$3,247,200	\$2,922,480	\$324,720
FISCAL YEAR 2017			
11. Rehabilitate Runway 17-35 Shoulders	\$6,063,000	\$5,456,700	\$606,300
12. Reconstruct Existing Shoulders on Taxiway A - Phase I	593,600	534,240	59,360
13. Reconstruct Existing Shoulders on Taxiway A - Phase II	677,300	609,570	67,730
14. Reconstruct Existing Shoulders on Taxiway A - Phase III	631,500	568,350	63,150
15. Acquire Two (2) SRE - Blower/Broom/Plow	950,000	855,000	95,000
2017 Subtotal	\$8,915,400	\$8,023,860	\$891,540
FISCAL YEAR 2018			
16. Reconstruct Connecting Taxiway - Phase I	\$263,000	\$236,700	\$26,300
17. Reconstruct Connecting Taxiway - Phase II	292,200	262,980	29,220
2018 Subtotal	\$555,200	\$499,680	\$55,520
FISCAL YEAR 2019			
18. Reconstruct Beechcraft Road from Scanlan Avenue to West Parking Lot	\$1,080,000	\$0	\$1,080,000
19. Clean/Seal Joints and Cracks, Sealcoat and Remark Asphalt Apron	353,000	317,700	35,300
20. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 12-30	449,000	404,100	44,900
21. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 17-35	625,000	562,500	62,500
22. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 18-36	297,000	267,300	29,700
23. Clean/Seal Joints and Cracks, Sealcoat and Remark Taxiways A, B, C, D, E, and F	551,000	495,900	55,100
2019 Subtotal	\$3,355,000	\$2,047,500	\$1,307,500
SHORT TERM TOTALS	\$22,608,100	\$19,375,290	\$3,232,810

PROJECT DESCRIPTION	Project Cost	FAA/KDOT Eligible	Local Share
INTERMEDIATE TERM PROJECTS			
1. Construct No-Taxi Islands on Main Ramp Adjacent to Taxiway B, C, and D	\$224,000	\$201,600	\$22,400
2. North Apron Improvements - Realign Hein Avenue	315,000	283,500	31,500
3. North Apron Improvements - Rehab Apron Phase I	3,162,000	2,845,800	316,200
4. North Apron Improvements - Auto Parking/Roads - Phase I	2,725,000	0	2,725,000
5. North Apron Improvements - T-hangar and Corporate Hangar Aprons - Phase I	2,365,000	2,128,500	236,500
6. North Apron Improvements - Far North Apron Rehabilitation - Phase I	2,780,000	2,502,000	278,000
7. Mill, Overlay, and Remark Runway 12-30	1,683,000	1,514,700	168,300
8. Mill, Overlay, and Remark Runway 17-35	3,582,000	3,223,800	358,200
9. Mill, Overlay, and Remark Taxiways A, B, C, D, E, and F	2,789,000	2,510,100	278,900
10. Mill, Overlay, and Remark Runway 18-36; Add Runway Lights (Medium)	1,636,000	1,472,400	163,600
11. Rehabilitate/Reconstruct Taxiway B West	1,460,000	1,314,000	146,000
12. Mill, Overlay, and Remark Runway Asphalt Apron	2,780,000	2,502,000	278,000
13. Repair Panels, Seal Joints, and Remark Concrete Apron	1,623,000	1,460,700	162,300
INTERMEDIATE TERM PROJECTS SUBTOTALS	\$27,124,000	\$21,959,100	\$5,164,900
LONG TERM PROJECTS			
1. Install RAIL to Existing MALS on Runway 17	\$250,000	\$225,000	\$25,000
2. Construct Parallel Taxiway to Runway 12-30	4,973,000	4,475,700	497,300
3. Runway 12-30 Pavement Removal	392,000	352,800	39,200
4. Install MALSR - Runway 12	850,000	765,000	85,000
5. North Apron Improvements - Rehab Apron Phase II	3,162,000	2,845,800	316,200
6. North Apron Improvements - Auto Parking/Roads - Phase II	2,725,000	0	2,725,000
7. North Apron Improvements - T-hangar and Corporate Hangar Aprons - Phase II	5,560,000	5,004,000	556,000
8. North Apron Improvements - Far North Apron Rehabilitation - Phase II	2,780,000	2,502,000	278,000
9. Clean/Seal Joints and Cracks, Sealcoat and Remark Asphalt Apron	353,000	317,700	35,300
10. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 12-30	449,000	404,100	44,900
11. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 17-35	625,000	562,500	62,500
12. Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 18-36	297,000	267,300	29,700
13. Clean/Seal Joints and Cracks, Sealcoat and Remark Taxiways A, B, C, D, E, and F	551,000	495,900	55,100
LONG TERM PROJECTS SUBTOTALS	\$22,967,000	\$18,217,800	\$4,749,200
TOTAL PROGRAM COSTS	\$72,699,100	\$59,552,190	\$13,146,910





- SHORT TERM IMPROVEMENTS**
- 2014**
- 1 Engineering Design for Rehabilitation of Taxiway E and B - NP
- 2015**
- 2 Rehabilitate Taxiway E - Phase I
 - 3 Rehabilitate Taxiway E - Phase II
 - 4 Rehabilitate Taxiway E - Phase III
 - 5 Realign and Rehabilitate Taxiway B
 - 6 Modify Holding Position on Taxiway A from 290' to 263'
 - 7 Engineering Design for Runway 4-22 Closure/Re-use as Taxiway
 - 8 Acquire SRE - Blower/Broom - NP
- 2016**
- 9 Modify Runway 4-22 into a Taxiway
 - 10 Access Road to RCAG (Option 1 or Option 2)
- 2017**
- 11 Rehabilitate Runway 17-35 Shoulders
 - 12 Reconstruct Existing Shoulders on Taxiway A - Phase I
 - 13 Reconstruct Existing Shoulders on Taxiway A - Phase II
 - 14 Reconstruct Existing Shoulders on Taxiway A - Phase III
 - 15 Acquire Two (2) SRE - Blower/Broom/Plow - NP
- 2018**
- 16 Reconstruct Connecting Taxiway - Phase I
 - 17 Reconstruct Connecting Taxiway - Phase II
- 2019**
- 18 Reconstruct Beechcraft Road from Scanlan Avenue to West Parking Lot
 - 19 Clean/Seal Joints and Cracks, Sealcoat and Remark Asphalt Apron
 - 20 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 12-30
 - 21 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 17-35
 - 22 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 18-36
 - 23 Clean/Seal Joints and Cracks, Sealcoat and Remark Taxiways A, B, C, D, E, and F

taxiway and removal of unused pavement. The realignment is being undertaken to allow aircraft to establish a Runway 30 holding position at 90 degrees from the runway.

The relocation of the Taxiway A holding position at Runway 35 is also planned in 2015. This project will shift the holding position from 290 feet from runway centerline to 263 feet from runway centerline. The project includes relocation of the signage, lighting, and marking.

A project planned in 2016 will require engineering/design work prior. As such, the Runway 4-22 closure/taxiway modification project engineering and design is programmed for 2105. The final project included in 2015 is the acquisition of snow removal equipment (SRE), specifically a blower/broom unit. *Total costs associated with 2015 projects are estimated at approximately \$5.87 million.*

2016 Projects

Two projects are included in 2016 and both are associated with the proposed closure of Runway 4-22. As detailed earlier in this report, the runway pavement is aged and failing. Its orientation and length do not support the overall goals and mission of the airport. Moreover, if it is to remain a runway, significant investments would be needed to improve the pavement and alleviate its design flaws. As such, the plan is for its closure in 2016.

The plan also includes the development of a 50-foot wide taxiway spanning between Runway 12-30 and Taxiway A in the location of Runway 4-22. This could be accomplished via pavement reconditioning or removal and reconstruction. The taxiway conversion project is estimated to

cost approximately \$3.05 million, which is the second highest project total in the short term.

The second project included in 2016 is the creation of a new remote communication air to ground (RCAG) antenna array facility access road. Currently, FAA technicians utilize taxiways and Runway 4-22 to access the road leading to the array. The plan offers two alternative road options, one that routes traffic from the facility north to Taxiway E, or another routing traffic southwest then east to Taxiway B. The options will be further evaluated during the engineering and design process to determine the optimum choice.

2017 Projects

Two major pavement projects and another SRE acquisition are proposed in the 2017 list. The reconstruction of Taxiway A shoulders is planned. The shoulders to be reconstructed are along Taxiway A and north of the KSU taxiway extending farther north just beyond Taxiway F.

2017 projects include the short term's single largest project expense: rehabilitation of the Runway 17-35 shoulder pavements. This project is projected to cost \$6.063 million and includes rehabilitating 20 feet of shoulder and removal of the remaining excess pavements; however, some of these costs could be recaptured if the removed pavements could be reconditioned and resold as basic materials or other usable products. Until that is known, however, the cost of the project remains. The removal of airfield pavements was targeted as a high priority earlier in the report. As identified in chapter three, the airfield contains over 200 acres of abandoned pavement which could be removed. Removal is necessary to mini-

mize ground water discharge/drainage issues. Moreover, the removal of abandoned pavements will allow for new impervious construction (e.g., roofs, pavements, etc.) without the construction of large detention facilities.

2018 Projects

Only two projects are included in the 2018 project list and both are pavement maintenance related. As identified on **Exhibit 6B**, two connecting taxiways serving the northern ramp are planned to be rehabilitated. These taxiways would allow for aircraft movements to be routed from parallel Taxiway A to the north ramp, thereby promoting the growth and development of additional hangar facilities.

2019 Projects

All projects included in the year 2019 target pavement maintenance. First, the reconstruction and improvement of Beechcraft Road from Scanlan Avenue to the West Parking Lot is planned. This project is specifically designed to improve the road that serves existing airport businesses, KSU, and the Wings Over Salina Museum. The project includes reconditioned pavement as well as drainage improvements (curb and gutters). It is intended that the improved road would present a first class aesthetic appearance to the area as it will be highly trafficked by airport users and the museum viewing public. The entire cost of this project will require local funds to which the City of Salina via city and/or local/regional economic development funds could offer aid. The project is designed to promote local travel and tourism and attract travelers from all over the world. As such, the pro-

ject should rate high for local funding resources.

The remaining projects in 2019 include airfield pavement reconditioning, primarily seal coat (asphalt pavements) and seal crack (concrete pavements). These projects are intended to extend the useful life of the pavements. The pavements include:

- Runways 12-30, 17-35, and 18-36
- Main apron
- Taxiways A and exit taxiways linking Taxiway A and Runway 17-35

It should be noted that the pavement maintenance of Runway 18-36 would not be eligible for federal funding as the runway was constructed by the SAA to serve a purpose not supported by the FAA. As such, only state funding would be available. If state funding is not offered, the entire cost of the project would fall to local financial responsibility.

Short Term Summary

The short term CIP addresses three priorities for the airport. The majority of costs are associated with pavement maintenance. Second, new construction and acquisition, to include the conversion of Runway 4-22 into a connecting taxiway and SRE purchases, is included. Third, safety enhancements such as the relocation of the Taxiway A and B holding positions and realignment of Taxiway B is planned.

The short term projects total approximately \$22.6 million. Approximately \$19.4 million is eligible for FAA and/or KDOT grant funding. The remaining \$3.2 million would be the responsibility of the local airport sponsor, which assumes full

federal and/or state funding of eligible projects. Obviously, if federal and/or state funds are not acquired for any of the projects, the local share would be higher or project delayed.

INTERMEDIATE TERM IMPROVEMENTS

Intermediate term projects generally relate to those planned for years 7 through 10 of the CIP. Due to the fluid nature of funding availability and the possibility of changing priorities, these projects have been grouped together. While they are generally listed in order of priority, circumstances should be analyzed at the time to determine which projects should be pursued first.

Three overarching project types were included in the intermediate term. First, the construction of “No Taxi Islands” is planned. The islands serve to impede direct access linking of runway and apron. These islands are proposed on the main apron perpendicular to Taxiways B, C, and D as depicted on **Exhibit 6C**.

The second project type includes redevelopment and improvements aimed at promoting landside development of the north apron. As depicted on the exhibit, three areas of the north apron are planned for rehabilitation to promote aviation business development, aircraft storage hangar development, and large aviation tract developments (industrial and/or commercial opportunities). The plan also includes improving roads to the area and the addition of automobile parking. Automobile and road construction is not eligible for federal and/or state grant funding.

The final group of projects includes the rehabilitation of airfield and landside pavements as illustrated on **Exhibit 6C**. These projects are similar to those listed in the 2019 program, except they include more intensive overlay of asphalt pavements instead of simple seal coats.

The total estimated cost of intermediate term projects is \$27.1 million. Of this total, \$22.0 million is eligible for FAA and/or KDOT grants. The remaining \$5.1 million would be the responsibility of SAA. Local costs include any financial participation by KDOT.

LONG TERM IMPROVEMENTS

Long term projects are those generally considered for years 11 through 20. The most significant project planned is the grouping of Phase II projects associated with improving the north apron. These projects are illustrated on **Exhibit 6D**. Also, the same grouping of airside and landside pavement rehabilitation projects as planned in the short and intermediate term (2019) are also included in the long term program. For Runway 18-36, however, the long term also includes the installation of medium intensity runway lights (MIRL).

The long term program projects the opportunity for Runway 12 to be served by a precision instrument approach. As detailed in the previous chapter, the installation of a medium intensity approach light system (MALS) with runway alignment indicator lights (RAIL), or MALSR, will be required to support the approach. Moreover, the runway will need to be served by a full length parallel taxiway separated from the runway by 400 feet as proposed. The parallel runway construction will add impervious surface and, as

such, additional drainage unless other impervious surfaces are removed. Thus, the long term program includes removal of all extra pavement adjacent to Runway 12-30 which had historically been part of the runway. The long term plan also considers the upgrade of the Runway 17 approach to become precision, requiring the addition of the RAIL system to the existing MALS.

The long term projects total approximately \$22.97 million, of which approximately \$18.22 million is eligible for FAA funding. Approximately \$4.75 million would be the responsibility of the airport sponsor. As before, the local share approximation assumes all grant eligible projects would receive funding via FAA and/or KDOT.

CAPITAL IMPROVEMENT SUMMARY

The CIP is intended as a road map of airport improvements to help guide the airport sponsor, the FAA, and the state aviation division on needed projects. The plan as presented will meet the forecast demand over the next 20 years and, in many respects, beyond. The first five years of the CIP are separated into yearly installments, and the intermediate and long term projects are grouped together. It should be noted that the sequence of projects will likely change due to availability of funds or changing priorities. Nonetheless, this is a comprehensive list of capital projects the airport should consider in the next 20 years.

The total 20-year CIP proposes approximately \$72.7 million in airport development. Of this total, approximately \$59.6 million would be eligible for FAA grant funding. The local funding requirement for the proposed 20-year CIP is \$13.1 mil-

lion, assuming all eligible projects are funded by federal and state programs.

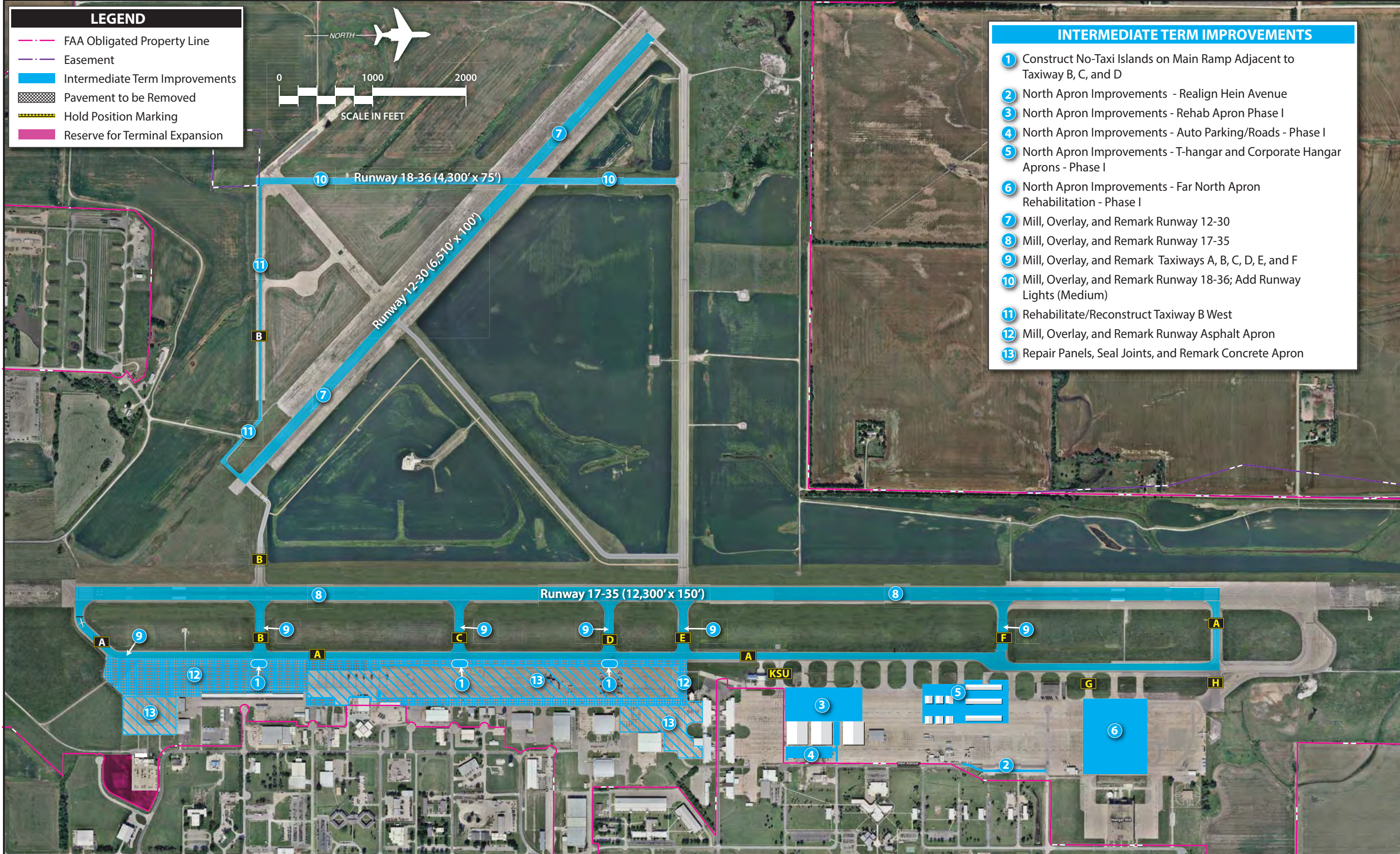
CAPITAL IMPROVEMENT FUNDING SOURCES

There are generally four sources of funds used to finance airport development: airport cash flow, revenue and general obligation bonds, federal/state/local grants, and passenger facility charges (PFCs), which are reserved for commercial service airports. Access to these sources of financing varies widely among airports, with some large airports maintaining substantial cash reserves and most small commercial service and general aviation airports often requiring subsidies from local and state governments to fund operating expenses and to finance modest improvements.

Financing capital improvements at the airport will not rely solely on the financial resources of the airport or the taxpayers. Capital improvement funding is available through various grant-in-aid programs on both the state and federal levels. Historically, Salina Regional Airport has received federal and state grants. While some years more funds could be available, the CIP was developed with project phasing in order to remain realistic and within the range of anticipated grant assistance. The following discussion outlines key sources of funding potentially available for capital improvements at Salina Regional Airport.

FEDERAL GRANTS

Through federal legislation over the years, various grant-in-aid programs have been established to develop and maintain a system of public-use airports across the United States. The purpose of this system

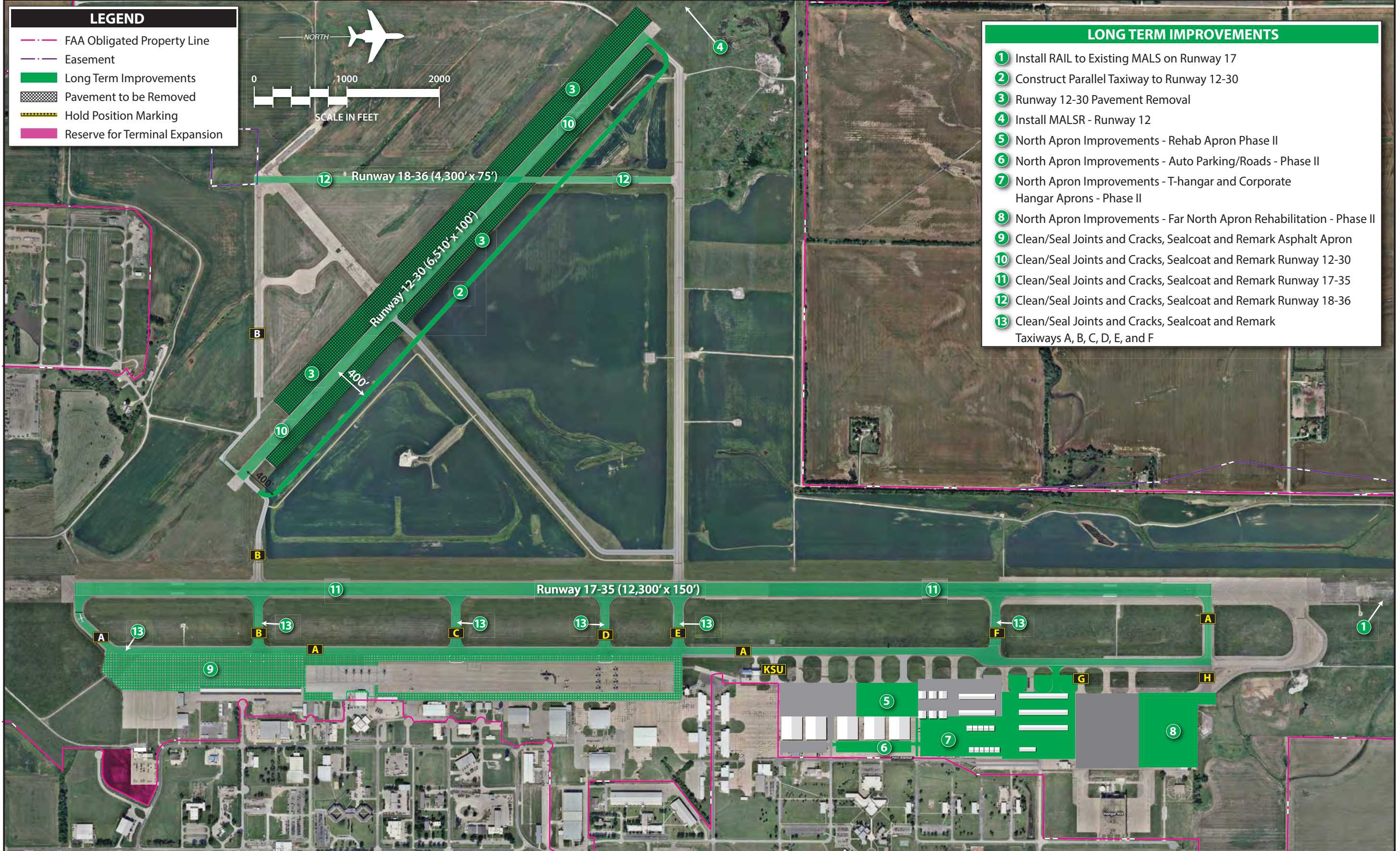


LEGEND

- - - FAA Obligated Property Line
- - - Easement
- Intermediate Term Improvements
- Pavement to be Removed
- Hold Position Marking
- Reserve for Terminal Expansion

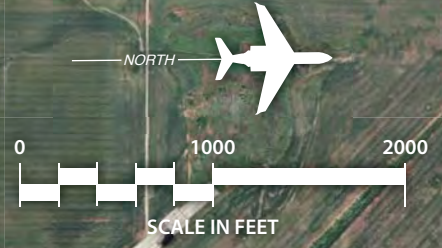
INTERMEDIATE TERM IMPROVEMENTS

- 1 Construct No-Taxi Islands on Main Ramp Adjacent to Taxiway B, C, and D
- 2 North Apron Improvements - Realign Hein Avenue
- 3 North Apron Improvements - Rehab Apron Phase I
- 4 North Apron Improvements - Auto Parking/Roads - Phase I
- 5 North Apron Improvements - T-hangar and Corporate Hangar Aprons - Phase I
- 6 North Apron Improvements - Far North Apron Rehabilitation - Phase I
- 7 Mill, Overlay, and Remark Runway 12-30
- 8 Mill, Overlay, and Remark Runway 17-35
- 9 Mill, Overlay, and Remark Taxiways A, B, C, D, E, and F
- 10 Mill, Overlay, and Remark Runway 18-36; Add Runway Lights (Medium)
- 11 Rehabilitate/Reconstruct Taxiway B West
- 12 Mill, Overlay, and Remark Runway Asphalt Apron
- 13 Repair Panels, Seal Joints, and Remark Concrete Apron



LEGEND

- FAA Obligated Property Line
- Easement
- Long Term Improvements
- Pavement to be Removed
- Hold Position Marking
- Reserve for Terminal Expansion



LONG TERM IMPROVEMENTS

- 1 Install RAIL to Existing MALS on Runway 17
- 2 Construct Parallel Taxiway to Runway 12-30
- 3 Runway 12-30 Pavement Removal
- 4 Install MALSR - Runway 12
- 5 North Apron Improvements - Rehab Apron Phase II
- 6 North Apron Improvements - Auto Parking/Roads - Phase II
- 7 North Apron Improvements - T-hangar and Corporate Hangar Aprons - Phase II
- 8 North Apron Improvements - Far North Apron Rehabilitation - Phase II
- 9 Clean/Seal Joints and Cracks, Sealcoat and Remark Asphalt Apron
- 10 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 12-30
- 11 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 17-35
- 12 Clean/Seal Joints and Cracks, Sealcoat and Remark Runway 18-36
- 13 Clean/Seal Joints and Cracks, Sealcoat and Remark Taxiways A, B, C, D, E, and F

and its federally based funding is to maintain national defense and to promote interstate commerce. The most recent legislation affecting federal funding, the *FAA Modernization and Reform Act of 2012*, was enacted on February 17, 2012

The law authorizes the FAA's Airport Improvement Program (AIP) at \$3.35 billion for fiscal years 2012 through 2015. Eligible airports, which include those in the *National Plan of Integrated Airport Sys-*

tems (NPIAS) can apply for airport improvement grants. **Table 6B** presents the approximate distribution of the AIP funds. Currently, Salina Regional Airport is eligible to apply for grants which may be funded through state apportionments, the small airport fund, and/or discretionary categories. If the airport passenger enplanements reach and/or exceed 10,000 annually, the airport would also be eligible for \$1.0 million in annual entitlement funds as well.

Funding Category	Percent of Total	Funds*
Apportionment/Entitlement		
Passenger Entitlements	29.19%	\$977,865,000
Cargo Entitlements	3.00%	\$100,500,000
Alaska Supplemental	0.65%	\$21,775,000
State Apportionment for Nonprimary Entitlements	10.35%	\$346,725,000
State Apportionment Based on Area and Population	9.65%	\$323,275,000
Carryover	10.77%	\$360,795,000
Small Airport Fund		
Small Hubs	1.67%	\$55,945,000
Nonhubs	6.68%	\$223,780,000
Nonprimary (GA and Reliever)	3.34%	\$111,890,000
Discretionary		
Capacity/Safety/Security/Noise	11.36%	\$380,560,000
Pure Discretionary	3.79%	\$126,965,000
Set Asides		
Noise	8.40%	\$281,400,000
Military Airports Program	0.99%	\$33,165,000
Reliever	0.16%	\$5,360,000
Totals	100.00%	\$3,350,000,000
* FAA <i>Modernization and Reform Act of 2012</i> AIP: Airport Improvement Program Source: <i>FAA Order 5100.38C, Airport Improvement Program Handbook</i>		

Funding for AIP-eligible projects is undertaken through a cost-sharing arrangement in which FAA provides up to 90 percent of the cost and the airport sponsor invests the remaining 10 percent. In exchange for this level of funding, the airport sponsor is required to meet various grant assurances, including maintaining

the improvement for its useful life, usually 20 years.

The source for AIP funds is the Aviation Trust Fund. The Aviation Trust Fund was established in 1970 to provide funding for aviation capital investment programs (aviation development, facilities and

equipment, and research and development). The Aviation Trust Fund also finances, in part, the operation of the FAA. It is funded by user fees, including taxes on airline tickets, aviation fuel, and various aircraft parts.

Apportionment (Entitlement) Funds

Federal AIP funds are distributed each year by the FAA from appropriations by Congress. A portion of the annual distribution is to primary commercial service airports based upon minimum enplanement levels of at least 10,000 passengers annually. If the airport exceeds the enplanement threshold, then it would receive a minimum of \$1.0 million in entitlement funds. Other entitlement funds are distributed to cargo service airports, states and insular areas (state apportionment), and Alaska airports.

General aviation airports included in the NPIAS can receive up to \$150,000 each year in Non-Primary Entitlement (NPE) funds. These funds can be carried over and combined for up to four years, thereby allowing for completion of a more expensive project.

The FAA also receives a state apportionment based on a federal formula that takes into account area and population. The FAA then distributes these funds for projects at various airports throughout the state.

Small Airport Fund

If a large or medium hub commercial service airport chooses to institute a PFC, which is a fee of up to \$4.50 on each airline ticket, for funding of capital improvement projects, then their appor-

tionment is reduced. A portion of the reduced apportionment goes to the small airport fund. The small airport fund is reserved for small-hub primary commercial service airports, non-hub commercial service airports, and general aviation airports. SLN is eligible for small airport funds.

Discretionary Funds

The remaining AIP funds are distributed by the FAA based on the priority of the project for which they have requested federal assistance through discretionary apportionments. A national priority ranking system is used to evaluate and rank each airport project. Those projects with the highest priority from airports across the country are given preference in funding. High priority projects include those related to meeting design standards, capacity improvements, and other safety enhancements.

Under the AIP program, examples of eligible development projects include the airfield, public aprons, and access roads. Additional buildings and structures may be eligible if the function of the structure is to serve airport operations in a non-revenue generating capacity, such as maintenance facilities. Some revenue-enhancing structures, such as T-hangars, may be eligible if all airfield improvements have been made; however, the priority ranking of these facilities is very low.

Whereas entitlement monies are guaranteed on an annual basis, discretionary funds are not assured. If the combination of entitlement, discretionary, and airport sponsor match does not provide enough capital for planned development, projects may be delayed.

Set-Aside Funds

Portions of AIP funds are set-asides designed to achieve specific funding minimums for noise compatibility planning and implementation, select former military airfields (Military Airport Program), and select reliever airports. Salina Regional Airport does not qualify for set-aside funding.

FAA Facilities and Equipment (F&E) Program

The Airway Facilities Division of the FAA administers the Facilities and Equipment (F&E) Program. This program provides funding for the installation and maintenance of various navigational aids and equipment of the national airspace system. Under the F&E program, funding is provided for FAA Airport Traffic Control Towers (ATCTs), enroute navigational aids, on-airport navigational aids, and approach lighting systems.

While F&E still installs and maintains some navigational aids, on-airport facilities at small commercial service airports have not been a priority. Therefore, airports often request funding assistance for navigational aids through AIP and then maintain the equipment on their own. At Salina Regional Airport, all navigation aids are owned and maintained by the FAA.

KANSAS AIRPORT IMPROVEMENT PROGRAM

The State of Kansas recognizes the valuable contribution to the state's transportation economy that airports make. Therefore, the Kansas Department of Transportation – Aviation Division administers the

Kansas Airport Improvement Program (KAIP). The program provided approximately \$3 million annually through fiscal year 2013, which will increase to \$5 million annually beginning in fiscal year 2014.

All public-use airports are eligible to apply for KAIP funding. There are several criteria for project consideration:

1. Scope of eligible project:
 - a) Projects addressing safety and preservation concerns
 - b) Projects focused on development needs identified in the Kansas Airport System Plan (KASP)
 - c) All projects deemed by the sponsor to be critical to the airport's ability to support the community
2. Projects should be capable of completion in one year
3. State funding cannot be used to leverage federal assistance projects

All KAIP funding requests are reviewed by the Project Evaluation Team whose members are designated by the Secretary of Transportation and consist of members with aviation, construction, and maintenance knowledge. All grant requests are evaluated objectively through a priority rating system. The factors used in evaluating projects are:

- a. Safety
- b. System Preservation
- c. KASP Recommendation
- d. Geographic remoteness
- e. Discretionary
 - i) willingness of sponsor to exceed minimum match requirements
 - ii) previous project experience
 - iii) other considerations

A financial match is required of the airport sponsors. The sponsor participation levels are as follows:

1. Design and Planning projects are funded 95 percent state and 5 percent sponsor match.
2. Privately owned, public-use airport projects will be funded 90 percent state and 10 percent sponsor match.
3. For publicly owned airports, the state/sponsor match is determined by the population of the associated city. Cities with less than 3,000 people will participate at 90 percent state and 10 percent sponsor match. Cities with between 3,000 and 10,000 people will participate at 75 percent state and 25 percent sponsor match. Cities larger than 10,000 people will participate at a 50 percent state and 50 percent sponsor match.

In addition, the airport sponsor must agree to keep the airport open to the public for a minimum of ten years. The maximum level of state participation is \$800,000, unless the project is a new runway, which is eligible for up to \$1.6 million or a full-depth replacement runway, which is eligible for up to \$1.2 million.

SUMMARY

The best means to begin implementation of the recommendations in this master plan is to first recognize that planning is a continuous process that does not end with completion and approval of this document. Rather, the airport should implement measures that allow them to track various demand indicators, such as based aircraft and operations, as well as

those times when the main apron is full. Operations, particularly by transport and business jet aircraft types, will be important when providing justification for several projects in the future. The issues upon which this master plan is based will remain valid for a number of years. The primary goal is for the airport to best serve the air transportation needs of the region, while continuing to be economically self-sufficient.

The actual need for facilities is most appropriately established by airport activity levels rather than a specified date. For example, projections have been made as to when additional hangars may be needed (north apron development) at the airport. In reality, however, the timeframe in which the development is needed may be substantially different. Actual demand may be slower to develop than expected. On the other hand, high levels of demand may establish the need to accelerate development. Although every effort has been made in this master planning process to conservatively estimate when facility development may be needed, aviation demand will dictate when facility improvements need to be delayed or accelerated.

The real value of a usable master plan is in keeping the issues and objectives in the minds of the managers and decision-makers so that they are better able to recognize change and its effect. In addition to adjustments in aviation demand, decisions made as to when to undertake the improvements recommended in this master plan will impact the period that the plan remains valid. The format used in this plan is intended to reduce the need for formal and costly updates by simply adjusting the timing. Updating can be done by the manager, thereby improving the plan's effectiveness.

In summary, the planning process requires the airport management to consistently monitor the progress of the airport in terms of aircraft operations and based aircraft. Analysis of aviation demand elements is important to ascertain so as to properly assess the timing and

need for new airport facilities. The information obtained from continually monitoring airport activity will provide the data necessary to determine if the development schedule should be accelerated or decelerated.