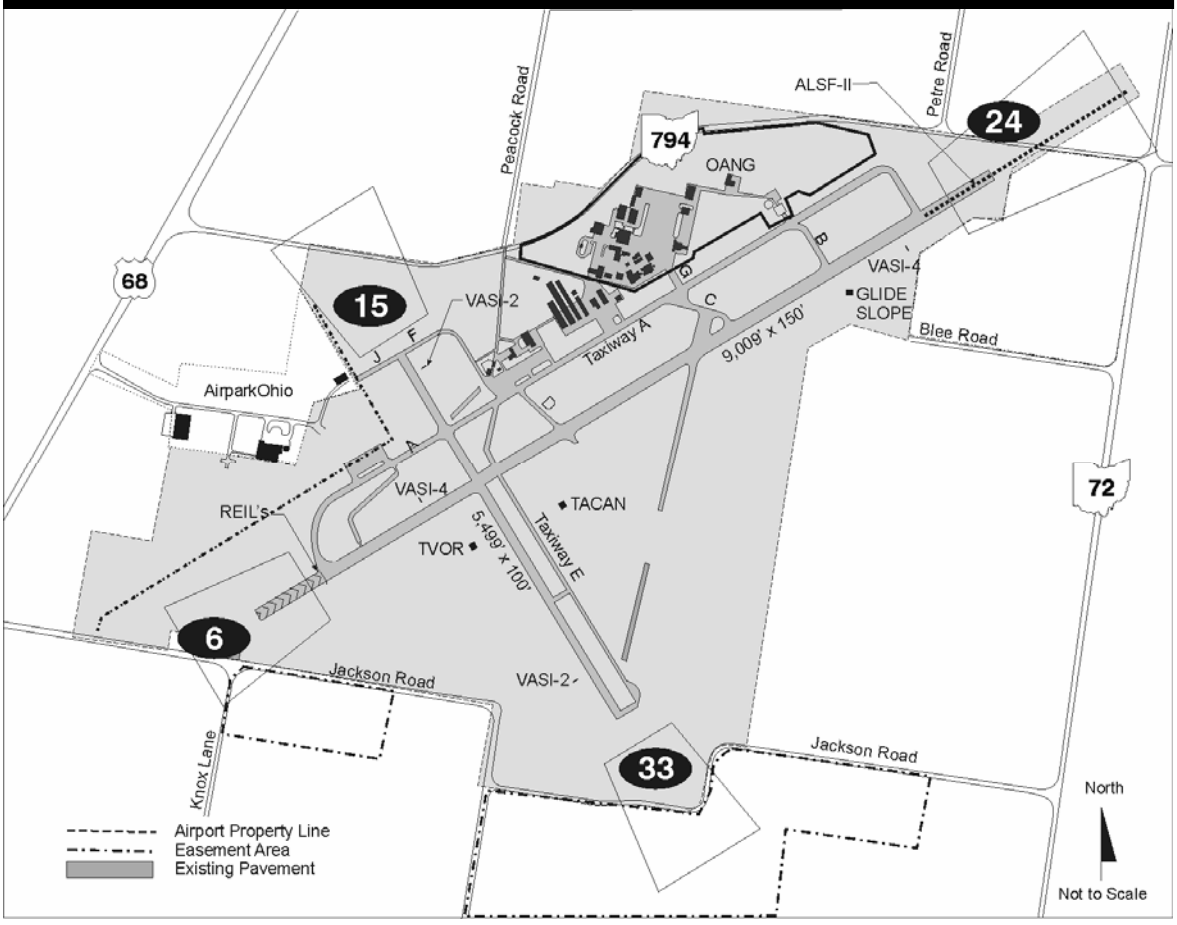
EXECUTIVE SUMMARY

Since opening in August 1946 as a defense project potential landing field for World War II support, the Springfield-Beckley Municipal Airport has evolved into a joint-use airport. Named after an early airport advocate, Mr. Henry Addison Beckley, the airport supports more than 60 general aviation based aircraft primarily from Clark and Greene counties, and a fleet of more than 20 F-16s operating as a training unit by the Ohio Air National Guard (OANG). Since the first Guard units were established at the airport in the 1950s, the City has partnered with the OANG to improve and expand airport facilities to support civil general aviation and the OANG mission, including a 9,000-foot primary runway with an instrument landing system and 5,500-foot crosswind runway. In addition, the airport is also home to the AirparkOhio industrial park.

EXISTING FACILITIES



Source: Airport Layout Plan 1995, Aviation Planning Associates; Aerofinity, Inc., 2004.

Since the 1990s, the OANG has identified that some of the area currently supporting general aviation would be needed for their long-term growth. Thus, the City has limited civilian hangar development until the future of the terminal area was known. Compatible plans for the OANG and City have been developed through this master plan update that allow both entities to grow.

AVIATION FORECASTS

The first step in planning for the future is to identify the activity levels that will need to be accommodated. Aviation forecasts are developed as a reasonable prediction of present and future activity levels. At Springfield-Beckley Municipal Airport, there are two primary measures of aviation activity: general aviation and military-based aircraft and operations. The general aviation aircraft are all the civilian-owned aircraft operated for business and personal use; the military aircraft are primarily the F-16s operated by the OANG 178th Fighter Wing.

Existing data and prior forecasts were used as the baseline for current activity at the airport. These data reflected the recent growth in operations related to the growing flight school, and increasing use of the airfield for instrument flight training. After examining past studies, local socioeconomic factors, and national trends, it was determined that the most appropriate forecasting method for general aviation activity was to use national growth rates. Future military activity was forecast based on data from the OANG. The forecast activity was then divided into local and itinerant operations based on historical trends.

FORECAST SUMMARY

	2007			2012			2017			2022		
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Based General Aviation Aircraft												
Single-engine	50	59	78	52	61	81	54	63	83	54	64	85
Multi-engine	5	6	8	5	6	8	5	6	8	6	7	8
Turbo Prop	6	7	9	6	7	9	6	7	9	6	7	10
Jet	2	2	3	2	2	3	2	2	3	2	2	3
Military	20	20	20	20	20	20	20	20	20	20	20	20
Total	83	94	118	85	96	121	87	98	124	88	100	126
Annual Aircraft Operations												
Air Taxi (Itinerant)	2,450	2,615	2,780	2,500	2,680	2,865	2,550	2,750	2,955	2,600	2,815	3,045
General Aviation (Itinerant)	19,110	20,397	21,684	19,500	20,904	22,347	19,890	21,450	23,049	20,280	21,957	23,751
Military (Itinerant)	13,000	14,000	15,000	13,000	14,000	15,000	13,000	14,000	15,000	13,000	14,000	15,000
General Aviation (Local)	27,440	29,288	31,136	28,000	30,016	32,088	28,560	30,800	33,096	29,120	31,528	34,104
Total Airport Operations	62,000	66,300	70,600	63,000	67,600	72,300	64,000	69,000	74,100	65,000	70,300	75,900

Source: Aerofinity, Inc., 2002.

FACILITY REQUIREMENTS

The approximately 1,400 acres that comprise Springfield-Beckley Municipal Airport can be divided into four airport areas: airside, landside, Ohio Air National Guard (OANG) leasehold, and AirparkOhio. The master plan used the aviation forecasts to conduct a future needs analysis for the airside and landside portions of the airport. The OANG has prepared an independent master plan for their operation. Future facility needs were identified qualitatively based on information learned during a users survey process, and quantitatively based on the application of Federal Aviation Administration (FAA) planning standards.

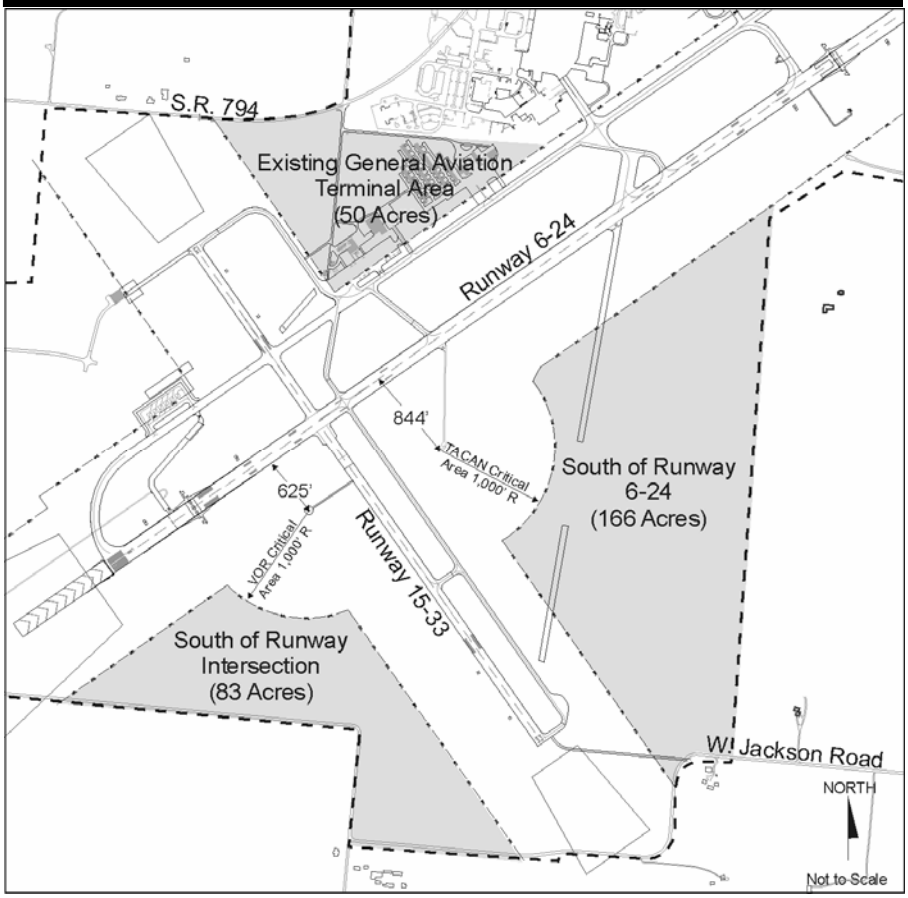
The runways at the airport are ample in length. The wind coverage and runway marking/lighting are also adequate. Thus, the facility requirements analysis of the airfield focused on improvements to further increase the utility or efficiency of the airfield. There is a need for safety area improvements on Runway 15-33, minor taxiway system improvements, and evaluating potential improved instrument approach capabilities resulting from new technology. Also, the Ohio Department of Transportation's Pavement Condition Index study results should be used to monitor the pavement condition and program the necessary pavement improvements.

With the OANG's interest in the general aviation terminal area, the landside general aviation requirements were viewed from two perspectives. First, from the traditional perspective of identifying what additional facilities are needed to support long-term general aviation growth within the existing terminal area. Second, to identify what facilities would be needed to replace existing facilities and support long-term general aviation growth at another location on the airport. As a result, the need for additional aircraft parking apron, t-hangars, conventional hangars, terminal building space, and auto parking area to accommodate future growth in general aviation activity has been identified.

LANDSIDE ALTERNATIVES ANALYSIS

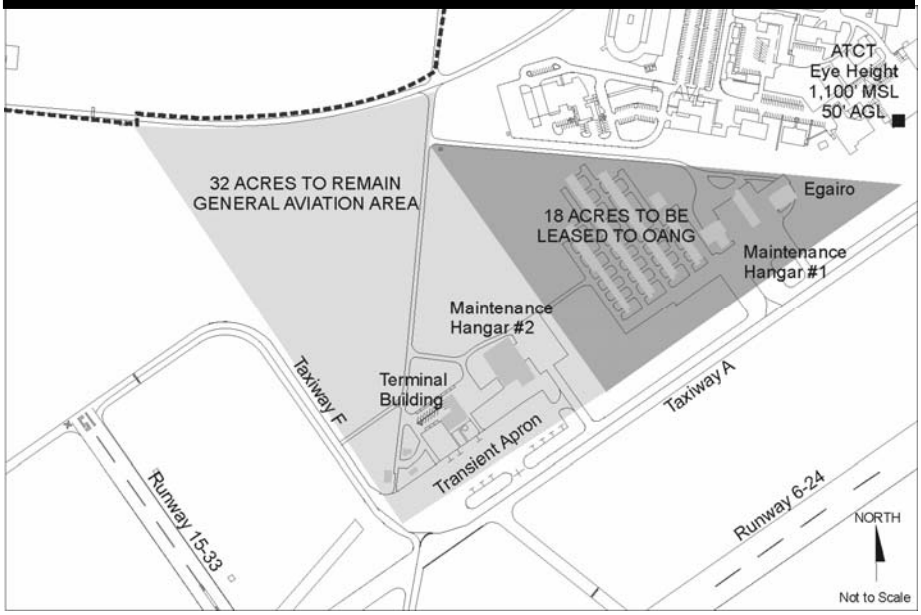
With the dual interest in the existing general aviation terminal area, an extensive landside alternatives analysis was conducted. Three potential areas were initially identified to accommodate the general aviation terminal area. Two of those areas, the existing terminal area and the area south of Runway 6-24 and east of Runway 15-33, were identified as viable. These two areas were examined in more detail to identify their long-term potential and any constraints to development. The existing terminal area was examined through two alternatives, maintaining the status quo and sharing the terminal area with the OANG.

POTENTIAL GENERAL AVIATION TERMINAL FACILITIES DEVELOPMENT AREAS



Source: 1991 Springfield-Beckley Municipal Airport Layout Plan; Aerofinity, Inc., 2004.

SHARE EXISITNG TERMINAL AREA

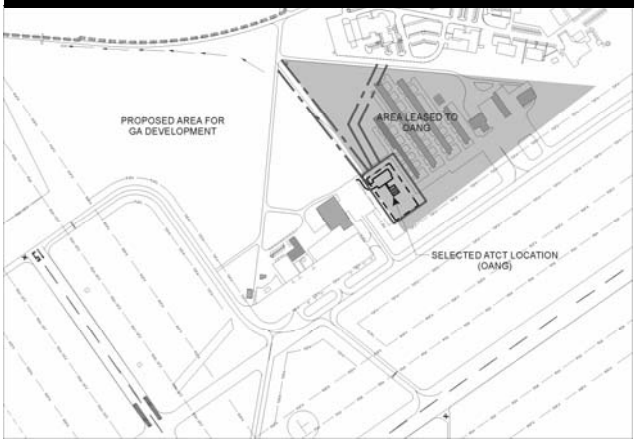


Source: Aerofinity, Inc., 2004.

One of the constraints impacting all development on the airport is providing a clear line-of-sight view for the air traffic controllers from the airport traffic control tower (ATCT) to all runways and taxiways. The ATCT at Springfield-Beckley Municipal Airport is owned and operated by the OANG. Maintenance Hangar #2 currently obscures the line-of-sight view of Taxiway F.

The OANG identified the need to replace the existing ATCT, which is too small to accommodate equipment modernization. The initial master plan landside alternatives analysis used potential ATCT locations from the OANG siting study. During the course of this master planning process, the OANG selected and the City concurred with the preferred future ATCT site located between the fixed base operator (FBO) apron and existing t-hangars.

SELECTED ATCT SITE OANG

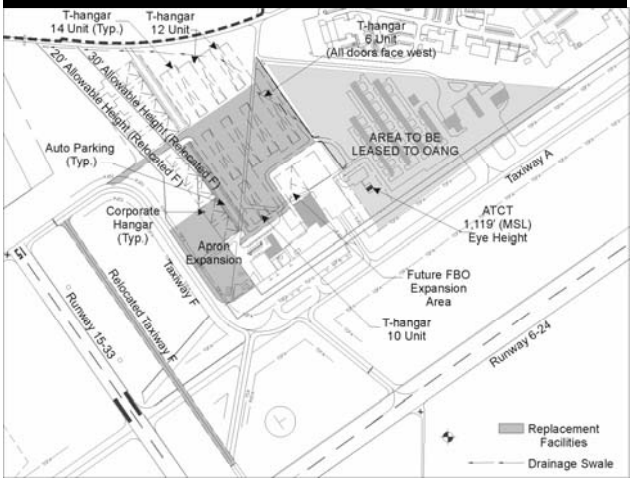


Source: Aerofinity, Inc., 2004.

Three distinct alternatives were identified to accommodate the future general aviation terminal development, ranging from the status quo to all new general aviation facilities. Any viable alternative needed to provide the same operational efficiency as the existing terminal area: general aviation facilities in close proximity to one another for economical operations, and taxiway access to Runway 24 without crossing Runway 6-24.

Since any change from the landside status quo would be driven by the OANG's need for the land and thus is anticipated to be funded by the OANG, the City coordinated with the OANG to understand the financial feasibility of each general aviation terminal alternative and the OANG's long-term plans. Through this coordination, the "share existing terminal area" alternative – relocating the t-hangars and two corporate hangars – is the most financial feasible alternative, meeting the OANG's development needs and providing adequate facilities for general aviation.

PROPOSED LAYOUT FOR REPLACING HANGAR FACILITIES



Source: Aerofinity, Inc., 2005.

IMPLEMENTATION PLAN

A master plan is just a report without a strategy to make the proposed improvements occur. The Airport Layout Plan (ALP) developed as part of the Master Plan provides a blue print for future development. The development shown on the ALP has also been incorporated into an implementation plan that prioritizes the development into short term (0-5 years), intermediate term (6-10 years) and long term (11-20 years). It also provides a current dollar development cost estimate. The implementation plan is a summary to guide the proposed development; however, it needs to remain flexible since user needs and available funding will drive the actual timing of the development. The plan is generally more detailed for the near-term than for the longer-term development, because the need and timing for the near-term development is known in more detail.

Short Term
Implementation Plan

Project	Trigger	Estimated Cost
Airport Utility		
Land acquisition for glide slope critical area and approach protection	Additional Runway 24 glide slope and approach protection	$400,000
Runway 6-24 Obstruction Removal (Tree Topping/Tree Removal 5 trees)	Obstructions in approach surface	5,000
Rehabilitate Taxiway A (3,525 lft)	Worst pavement condition on airport	930,000
Seal Coat Terminal Apron	Preserve existing usable apron	55,000
Land acquisition for airport and base expansion and road realignment	Co-location of Army Guard and Reserve Units	700,000
Acquire Runway 15 Protection Zone Land (15 acres north of 794, 4.5 acres south of 794)	Need ownership interest in RPZ	430,000
Runway 15 Safety Area Improvements	Federal funding of runway improvements	250,000
Runway 33 Safety Area Improvements	Federal funding of runway improvements	80,000
General Aviation Facility Relocation		
Relocate Taxiway F, add taxiway connector	Build out of existing terminal area space	$850,000
Relocate electrical vault (new building, existing equipment)	Relocation of Taxiway F, need for additional apron area	240,000
Extend new entrance road*	Connect auto parking to new entrance road	200,000
Replace unusable apron (5,600 syd)*	OANG relocation of existing GA facilities	720,000
Replace t-hangars (site prep, taxilane, 61 units, parking lot)*	OANG relocation of existing GA facilities	3,160,000
Develop corporate hangar site (utilities, access road, parking lot)*	OANG relocation of existing GA facilities	290,000
Replace Maintenance Hangar #1 and apron*	OANG relocation of existing GA facilities	1,340,000
Replace Egairo hangar and apron*	OANG relocation of existing GA facilities	1,050,000
Fence new terminal area*	Security for relocated GA facilities	170,000
Demolition of t-hangars and pavement*	OANG relocation of existing GA facilities	390,000
Short-term Subtotal		$11,260,000

Source: Woolpert LLP, 2003; Aerofinity, Inc., 2005.

Increasing airport utility and general aviation facility relocation are the two focuses for short-term development. Land acquisition is needed to protect the critical area next to Runway 24. The northern end of Taxiway A needs to be rehabilitated as soon as funds are available. The general aviation facility relocation is being driven and anticipated to be funded by the OANG. To maximize the area available for general aviation development and provide space for replacement apron construction Taxiway F should be relocated toward Runway 15-33. Then the t-hangars, Maintenance Hangar #1, the Egairo hangar would be relocated.

Intermediate-term development addresses increasing the airport security and meeting additional user needs. The proposed projects during this phase of the development include fencing the airport, acquiring additional land off the end of Runway 6, and expanding the terminal area facilities as needed.

Most of the pavements on the airport are currently in good condition. With ongoing maintenance, most of the pavements will not need rehabilitation until the end of the intermediate-term or during the long-term period. The primary runway will likely be one of the first pavements in need of rehabilitation in the longer term because of its heavy use and high level of jet operations.

SUMMARY

Springfield-Beckley Municipal Airport is a large general aviation airport. It has airfield facilities the size of an air carrier airport, but a budget and funding resources the size of a general aviation airport. One way the City has been able to address this funding challenge is to partner with the OANG for mutual benefit. This master plan provides the groundwork for continued successful partnering. The landside development proposed in the master plan represents a significant opportunity to develop an almost completely new general aviation area. In return, the OANG will be able to develop the facilities they need to continue their strong presence in the community. Together the City and OANG will be able to move into the future and utilize the airport to maximize its value for the community.

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