



## **Chapter 7**

# **Implementation Plan**

### **7.0 OVERVIEW**

Smith Reynolds Airport (INT) is a significant economic catalyst for North Carolina and the triad area surrounding Winston-Salem and provides essential aviation services to meet community and regional demand; therefore, it is important that the Airport Commission of Forsyth County (ACFC) be able to undertake the Capital Improvement Program (CIP) discussed herein such that it can continue to develop, grow and provide these services to the community. The primary objective of this chapter is to analyze the financial feasibility of developing the projects included in the CIP for INT in Winston-Salem, North Carolina. The proposed implementation plan was developed after evaluating the basic financial structure and capability of the Smith Reynolds Airport and identifying potential sources of revenue that may be available to fund the various projects within the CIP. These funding sources were then matched with projects over an estimated phasing schedule to determine the financial implications of undertaking the recommended capital improvements. The implementation plan presented herein presents the sequencing and phasing of proposed improvements, and identifies various means of funding these improvements. It is the intent of this implementation plan to provide general financial guidance to the ACFC and airport staff in making policy decisions regarding the recommended development of the airport over the 20-year planning period.

### **7.1 PROJECT FEASIBILITY ASSESSMENT**

The approach taken by the ACFC for airport and airfield development included improvement and development schemes that assessed low, middle and high cost options. From that initial assessment, a preferred alternative approach was established, adopted and pursued based on the development needs of the airport and cost considerations.

The preferred alternative, shown in Chapter 6, allows the ACFC to develop airport property and reserve existing and future identified land for the long term development of the airport. The preferred alternative, in comparison to the low and high cost options, allows the airport to pursue development alternatives while meeting the needs and demands of the airport, being fiscally responsible with development, as well as maintaining development flexibility for unexpected opportunities that may arise over the planning period.

It is important to note that the various funding sources identified in the following CIP plan are in no way a guarantee of funding. The availability of funding is dependent upon a number of factors including the federal, state and local budgets, revenue sources, nationwide needs of airports, identified demand, and also the type of projects being pursued, i.e. safety projects typically take priority over other types of development.





## **7.2 FINANCIAL PLAN**

Estimates of airport operating revenues (income) and expenses provide a measure of an airport's ability to fund its operation. Airport revenues are derived from a variety of sources including activities conducted by aircraft users and businesses at the airport facility. Cost centers include airport administration/management, operation, maintenance and associated expense. Capital improvement projects funded with or without the support of state and federal grants are not included in the evaluation of an airport's operating expenses. Net operating income (revenues minus expenses) is available for direct payment for capital improvements, or for debt service programs used to implement capital improvement projects. Also available for future expenditures is net operating income surpluses realized and accumulated during the year, over accumulated over a period of time.

### **Operating Revenues (Income)**

The Smith Reynolds Airport generates operating revenue (income) from a variety of sources, including, but not necessarily limited to:

- Rental of facilities owned by the airport such as Terminal Building space for rental car companies, air traffic control tower, and various office suites
- Income from T-hangar leases
- Income from tie-downs
- Income from other airport property facilities/leases/tenants, including FBO, corporate hangars, etc.
- Other income from fuel flowage and rental car commissions
- Miscellaneous other sources including aviation events, earnings on investments

### **Operating Expenses**

The Smith Reynolds Airport incurs costs to manage, operate and maintain the facilities it owns. The larger categories of operating expenses for the airport include, but not necessarily limited to:

- Personnel (wages, salaries, and benefit costs)
- Property expenses, utilities, repairs and maintenance, equipment, fuel, etc.
- Administrative expenses, supplies, contracted services, promotion, insurance, etc.
- Other expenses (ACFC meetings, sales taxes, aviation event expenses, etc.)

Operating expenses do not necessarily reflect and track operating revenues consistently. Unlike operating revenues that generally increase at rates associated to the consumer price index, the operating costs to manage, run and maintain the airport generally increase at different rates. The effects of the ever changing security rules and regulations, rates for insurance and utilities, staff increases and related costs, the maintenance and upgrades of airport facilities as they age (before replacement) all contribute to the fundamental reasons for increased growth rates in operating expenses over operating revenues. **Table 7-1** presents the airport's operating revenues and





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expenses for the last three years based on information provided by airport staff, as well as a 5-year projection of Total Income, Total Expenses and Net Operating Income.

### **7.3 PROBABLE DEVELOPMENT COSTS**

The estimated total project costs presented for each identified airport improvement reflects a preliminary opinion of the probable implementation costs for the projects listed herein. In addition to the estimated construction costs, anticipated costs for design, construction phase services, permitting, surveying, geotechnical investigations and testing, and project administration have also been included in the overall estimate where applicable. Costs projections are based on constant 2011 dollars and include the above noted items, as well as a contingency. A contingency amount of 15 percent of the estimated construction cost was added to account for uncertainties and unknowns associated with each project at the time. A detailed environmental analysis may be required to recognize the full potential environmental and budgetary impacts associated with the proposed development. Some projects may also require mitigation measures to offset impacts to environmentally sensitive areas whereas others may require some level of environmental remediation based on conditions that may or may not have been identified during this planning study. For this reason, it is important to note that the estimates shown are planning level estimates, based on current industry standards and anticipated impacts calculated at the time of this writing and should be revisited with updated costs regularly to ensure an accurate CIP program.

### **7.4 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

The North Carolina Department of Transportation (NCDOT) administers federal funding for general aviation airports (including airports not served by air carriers, but still holding Part 139 Certification) under the Block Grant Program of the Federal Aviation Administration. Through an approved NCDOT Transportation Improvement Program (TIP), Smith Reynolds Airport is able to plan and develop the airport through criteria such as safety needs, forecast and demands, economic development, and financial feasibility. Smith Reynolds Airport's approved TIP is also the basis and mechanism used for funding projects through the NCDOT – Division of Aviation.

Based on the facility requirements and selected preferred alternative developed in previous chapters of this report, a CIP and phasing plan have been identified for the 20-year planning period. Although the planning period was previously defined as the time frame spanning 2008 through 2028, the CIP planning period in this chapter is defined as 2012 through 2032 and beyond. This adjustment was made to account for the time which had already elapsed during the Master Plan Update process. The Smith Reynolds Airport CIP has been developed to coincide with the NCDOT TIP.



# SMITH REYNOLDS AIRPORT MASTER PLAN UPDATE



**Table 7-1**  
**INT Operating Revenues and Expenses**  
**Fiscal year July 1<sup>st</sup> to June 30<sup>th</sup>**

	Actual FYE 2009	Actual FYE 2010	Actual FYE 2011	Estimated FYE 2012	Projected FYE 2013	Projected FYE 2014	Projected FYE 2015	Projected FYE 2016	Notes:
<b>Income</b>									
Total 4100 TERMINAL BUILDING	\$75,524.04	\$65,892.17	\$79,010.72	\$70,000.00	\$72,000.00	\$73,000.00	\$74,000.00	\$74,500.00	Restaurant
Total 4200 T-HANGAR	\$92,547.10	\$85,258.95	\$91,644.50	\$92,000.00	\$92,000.00	\$95,000.00	\$95,000.00	\$97,000.00	Modest increases in rent
Total 4300 TIE DOWN	\$3,599.26	\$2,650.04	\$2,889.17	\$3,300.00	\$3,100.00	\$3,100.00	\$3,000.00	\$3,000.00	Piston Engine market declining
Total 4400 PROPERTY INCOME	\$2,365,771.08	\$607,896.86	\$818,566.31	\$1,100,000.00	\$1,260,000.00	\$1,450,000.00	\$1,750,000.00	\$1,900,000.00	Piedmont Propulsion lease and North State Aviation growth
Total 4500 -4600 OTHER INCOME /									
SPECIAL EVENTS	\$453,627.89	\$690,559.70	\$1,001,598.88	\$750,000.00	\$750,000.00	\$750,000.00	\$750,000.00	\$750,000.00	Unknown - Includes Air Show
Total Income	\$2,991,069.37	\$1,452,257.72	\$1,993,709.58	\$2,015,300.00	\$2,177,100.00	\$2,371,100.00	\$2,672,000.00	\$2,824,500.00	
<b>Expenses</b>									
Total 5100 PERSONNEL	\$704,222.33	\$635,556.84	\$768,965.35	\$617,000.00	\$650,000.00	\$660,000.00	\$680,000.00	\$700,000.00	Salary increases and one new employee
Total 5200 PROPERTY EXPENSES	\$968,739.16	\$573,345.46	\$661,966.71	\$675,000.00	\$675,000.00	\$735,000.00	\$745,000.00	\$770,000.00	Increase expenses with full service lease
Total 5300 ADMINISTRATIVE EXPENSES	\$601,053.06	\$466,522.84	\$250,428.59	\$300,000.00	\$350,000.00	\$360,000.00	\$380,000.00	\$400,000.00	Increase expenses with full service lease
Total 5400 -5500 OTHER EXPENSES /									
SPECIAL EVENTS	\$266,330.54	\$303,358.83	\$322,637.36	\$350,000.00	\$360,000.00	\$370,000.00	\$380,000.00	\$390,000.00	Includes Air Show
Total Expenses	\$2,540,344.09	\$1,978,783.97	\$2,003,998.01	\$1,942,000.00	\$2,035,000.00	\$2,125,000.00	\$2,185,000.00	\$2,260,000.00	
Net Operating Income	\$450,725.28	(\$526,526.25)	(\$10,288.43)	\$73,300.00	\$142,100.00	\$246,100.00	\$487,000.00	\$564,500.00	



## **7.5 INT'S CAPITAL IMPROVEMENT PROGRAM (CIP)**

Each project within the CIP has been assigned to a particular planning phase (i.e., short-term, intermediate term, and long-term). Phase I – Short Term Development period extends from 2012-2016; whereas Phase II – Intermediate Term Development extends from 2017-2021. Phase III – Long Term Development spans a 10 year time frame from 2021 through 2032 and Phase IV – Ultimate Development extends beyond 2032. Project cost information and phasing has been included for short-term projects; however, intermediate and long-term projects include only an estimated cost and “I” or “L” which represents that the project, as planned, would be scheduled for implementation sometime within the intermediate or long-term planning periods respectively. Cost estimates and sequencing of work for Phase IV – Ultimate Development were not calculated or specifically planned due to the development time frame of beyond the 20 year planning period of this Master Plan Update.

The Capital Improvement Plan (CIP) for the Smith Reynolds Airport for the years 2012 through 2016 is presented in **Table 7-2**. It should be noted that the CIP includes a number of maintenance type projects and equipment purchases that have not been covered in the Master Plan, and are not shown on the Airport Layout Plan (ALP) because there will be no change in layout. The CIP lists the Phase I Projects, the highest priority projects over the next five years, and identifies estimated project costs, and potential funding sources for each project. For general aviation airports within non-block grant states and for all commercial service airports that desire consideration for funding from the FAA, those airports must submit and/or update their five-year CIP to the FAA on an annual basis. For general aviation and non-commercial airports within North Carolina, the updated five-year CIPs are submitted to, and processed by the NCDOT-Division of Aviation (NCDOT-DOA). The annual CIP update process is used by NCDOT-DOA and the FAA to prioritize their funding programs on a state-wide basis in light of system-wide considerations. These planning-level cost estimates are used for program development. Projects which enhance airport and airfield safety and capacity, as well as projects that correct airfield design standard deficiencies remain high priority projects for both the FAA and NCDOT-DOA, and compete well for available, but limited, grant funds. The CIP does not constitute a commitment on behalf of the FAA, NCDOT-DOA or the airport sponsor to fund any of the projects, nor does it take into consideration any costs that may incurred as necessary to obtain any permits and/or environmental approvals.

## **7.6 PROJECT PHASING AND ESTIMATED COSTS**

Although the Airport Master Plan Update charts a course for planned development, it must be emphasized that the planning and development of an airport is a continuous process. The rehabilitation of existing facilities and development of new facilities must be predicated on sustained demand, which justifies the costs of improvements. Therefore, periodic re-evaluation of project implementation schedules will be necessary to accommodate variations from the aviation forecasts and to adjust for other unexpected factors, such as economic development opportunities and the airport's direct attraction of businesses to the airport. This re-evaluation process will ensure flexibility in that any change in aviation demand or within the local area will be fully considered as the development of the Smith Reynolds Airport continues. It is also





possible that other improvements not identified within this study may also be required to facilitate safe and efficient airport operations. All future improvement projects identified in this report or otherwise shall be compatible with the development strategies proposed in the Airport ALP for INT. **Tables 7-2, 7-3, and 7-4** illustrate the costs, phasing and funding sources for each development project shown in the program, excluding Phase IV – Ultimate Development.

As presented in **Tables 7-2, 7-3, and 7-4**, the CIP includes a list of projects and their estimated cost for each phase of the 20-year planning period. These estimated costs were derived from various sources and are considered appropriate for planning purposes. Before construction of a specific project is commenced, the financial feasibility of the project should be re-examined and then detailed costs should be developed as part of a design and engineering study. The total probable cost for the 20-year planning period is estimated at approximately \$82 million. This figure includes all studies, infrastructure improvements, and proposed construction costs necessary to achieve the developments shown on the Airport Layout Plan. The CIP includes the development schedule and project cost summaries in the following sections. The CIP for each period presents the improvements slated for during that period, but it does not assume how financially feasible it will be for INT to undertake those projects or whether or not funding will be available. Therefore these projections should be used for planning purposes only. All total project costs shown in the tables are based on 2012 dollar values.

Since actual activity levels may vary, it is important that staging of proposed improvement projects remain sensitive to such variations. Some projects may take precedence over others, depending on their level of priority or due to the availability of funding. Thus, a list of prioritized improvements was established based upon the urgency of need, ease of implementation, logic of project sequencing, and input from the ACFC and airport staff. The objective was to establish an efficient order for project development and implementation that exceeded the forecasted aviation activity for INT while meeting the needs of the ACFC. As mentioned earlier, the development schedule is divided into four general phases: Phase I – Short Term Development (2012-2016), Phase II – Intermediate Term Development (2017-2021), Phase III – Long Term Development (2021, 2032) and Phase IV – Ultimate Development (Beyond 2032). Cost estimates and sequencing of work for Phase IV – Ultimate Development were not calculated or specifically planned due to the development time frame of beyond the 20 year planning period of this Master Plan Update.

# SMITH REYNOLDS AIRPORT MASTER PLAN UPDATE



Table 7-2 Phase I - Short Term Development (2012-2016)					
Year	Development Projects	Total Project Cost	NCDOT-DOA	Local	Other
2012	Reconstruct Runway 22 North (2,000')	\$2,000,000	\$1,800,000	\$200,000	\$0
2012	Land Acquisition (8.1 Acres)	\$40,000	\$36,000	\$4,000	\$0
2012	Obstruction Removal and Easement (Runway 15 Approach)	\$100,000	\$90,000	\$10,000	\$0
2013	Reconstruct Terminal Apron	\$2,450,000	\$2,205,000	\$245,000	\$0
2014	Runway 15-33 Terrain Obstruction Removal (includes fencing)	\$2,100,000	\$1,890,000	\$210,000	\$0
2015	Taxilane Extension (1,650') (Design and Site Prep)	\$1,600,000	\$1,440,000	\$160,000	\$0
2016	Landside Terminal Improvements	\$400,000	\$200,000	\$100,000	\$100,000
	<b>Total Phase I Cost</b>	<b>\$8,690,000</b>	<b>\$7,661,000</b>	<b>\$929,00</b>	<b>\$100,000</b>

Source: AVCON Inc.

Table 7-3 Phase II - Intermediate Term Development (2017-2021)					
Year	Development Projects	Total Project Cost	NCDOT-DOA	Local	Other
I-0	Rehabilitate Taxiway A	\$3,000,000	\$2,700,000	\$300,000	\$0
I-1	Consolidated Fuel Farm	\$700,000	\$0	\$700,000	\$0
I-2	Taxilane Extension (1,650') (Paving & Lighting)	\$1,300,000	\$1,170,000	\$130,000	\$0
I-3	MRO Development Landside and Concrete Apron (Site Prep)	\$2,000,000	\$1,800,000	\$200,000	\$0
I-4	Rehabilitate/Overlay Taxiway F (North)	\$600,000	\$540,000	\$60,000	\$0
I-5	MRO Development Landside and Concrete Apron (Paving)	\$2,700,000	\$0	\$2,700,000	\$0
I-6	Pave MRO Development Landside Area	\$500,000	\$0	\$500,000	\$0
I-7	Construct MRO Facility (50,000 SF)	\$4,250,000	\$0	\$0	\$4,250,000
I-8	Rehabilitate Runway 4 (1,800') and Demolish Overrun Pavement	\$1,725,000	\$1,552,500	\$172,500	\$0
I-9	Develop Corporate, Rec. Multi-use Aviation Use Facility (Site Prep)	\$1,000,000	\$900,000	\$100,000	\$0
I-10	Develop Corporate, Rec. Multi-use Aviation Use Facility (Paving and Lighting)	\$4,370,000	\$2,433,000	\$437,000	\$1,500,000
I-11	Construct T-Hangars in Corp, Rec, Multi-Use Development Area	\$400,000	\$360,000	\$40,000	
I-12	Land Easement (Runway 33 Approach, 21.4 Acres)	\$150,000	\$135,000	\$15,000	\$0
I-13	Land Easement (Runway 15 Approach, 14.8 Acres)	\$100,000	\$90,000	\$10,000	\$0
	<b>Total Phase II Cost</b>	<b>\$22,795,000</b>	<b>\$11,680,500</b>	<b>\$5,364,500</b>	<b>\$5,750,500</b>

Source: AVCON Inc.





Table 7-4 Phase III - Long Term Development (2022-2032)					
Year	Development Projects	Total Project Cost	NCDOT-DOA	Local	Other
L	Land Acquisition (13.4 Acres – Eastside Development Area)	\$48,400	\$43,560	\$4,840	\$0
L	Construct Eastside Perimeter Road (9,300')	\$3,348,000	\$3,013,200	\$334,800	\$0
L	Construct East Parallel Taxiway	\$3,311,000	\$2,979,900	\$331,100	\$0
L	Construct MRO Facilities (2 @ 50,000 SF)	\$8,500,000	\$0	\$0	\$8,500,000
L	Construct MRO Apron	\$5,400,000	\$0	\$5,400,000	\$0
L	Construction MRO Landside Facilities	\$1,000,000	\$0	\$1,000,000	\$0
L	Runway 15-33 Rehab	\$4,000,000	\$3,600,000	\$400,000	\$0
L	Develop East Corporate MRO and Air Cargo (Site Prep)	\$5,000,000	\$4,500,000	\$500,000	\$0
L	Develop East Corporate MRO and Air Cargo (Paving and Lighting)	\$9,000,000	\$0	\$0	\$9,000,000
L	Land Acquisition (8.2 Acres – West of Runway 15-33)	\$4,000,000	\$3,600,000	\$400,000	\$0
L	Realign/Reconstruct Taxiway F (South)	\$373,800	\$336,420	\$37,380	\$0
L	Construct Executive Terminal	\$3,375,000	\$3,037,500	\$337,500	\$0
L	Construct Executive Terminal Apron	\$2,772,000	\$2,494,800	\$277,200	\$0
L	Land Acquisition (4.6 Acres, Runway 4 Approach)	\$40,000	\$36,000	\$4,000	\$0
L	Construct T-Hangars in Corp, Rec, Multi-Use Development Area	\$400,000	\$360,000	\$40,000	\$0
	<b>Total Phase III Cost</b>	<b>\$50,568,200</b>	<b>\$24,001,380</b>	<b>\$9,066,820</b>	<b>\$17,500,000</b>

Source: AVCON Inc.

## 7.7 CIP SUMMARY

Having presented the highlights of each of these development periods, a summary of the related financial needs for these projects is presented in **Table 7-5**. This combined development program will provide the facilities needed at INT to meet the forecasted demands through the end of the 20-year planning period. This 20-year TIP is estimated to cost approximately \$87 million. These estimated costs were determined in 2012 dollars; thus, as time goes by these values should be adjusted for the annual inflation rate, which can be accomplished by converting the interim change in the Consumer Price Index (CPI) into a multiplier ratio as follows:

$$\text{CPI Multiplier Ratio} = X / \text{CPI}$$

Where X = CPI in any given future year; and CPI = National CPI for 2011

By using the multiplier ratio approach above, any 2011 based cost or income figure presented in this study will yield the adjusted dollar amounts appropriate in any future year re-evaluation. However, only National CPI data should be used, as local or regional measures may vary.



Table 7-5 20-Year Capital Improvement Program Summary		
Development Phase	Time Frame	Total Phase Cost
Phase I – Short Term Development	(2012-2016)	\$8,690,000
Phase II – Intermediate-Term Development	(2017-2021)	\$22,795,000
Phase III – Long-Term Development	(2022-2032)	\$50,568,200
<b>Total Development Cost</b>		<b>\$82,053,200</b>

## 7.8 MEANS OF FINANCING PROJECT DEVELOPMENT

Smith Reynolds Airport is a valuable asset and key mechanism to the region’s economic growth and development. As such, it is important that investments be made at the airport and adequate funding levels be maintained, or increased, to solidify and enhance its role in the region. Preserving and modernizing existing airport facilities, as well as building new airport development, facilities and infrastructure is vital to the future of Smith Reynolds Airport and the triad area.

Airport development is funded by a combination of public and private sources. Major sources may include the Airport Improvement Program (AIP), state and local funding programs, airport revenue bonds, and airport user charges. Generally speaking, state and federal grants comprise a majority of the capital funding, while user hangar revenues, fuel sales, and often local subsidies cover an airport’s operating expenses and ideally its debt service.

Grants for airport capital improvements are generally financed from state and federally imposed user taxes, and from funds generated from airport operations, including fuel taxes, space-leasing fees and other similar sources. Airport capital improvements are not funded from tax levies on the general public. The airport CIP is typically budgeted separately and independently of the airport’s operating fund. It is important to note that the sequencing of key subordinate projects such as permitting, utility infrastructure, environmental planning studies, drainage plans, and similar work generally must first be completed prior to the design and construction of dependent larger facilities such as runway improvements, taxiways, and hangar construction. For this reason, it may be prudent to break some projects into multiple phases. Four categories of potential funding sources exist for the capital improvements at INT. These categories include federal, state, local (sponsor) and private funding sources.

### Federal Funding

In 1982, the passage of the Federal Airport and Airway Improvement Act enabled the federal government to provide financial assistance to airports in support of its broad objective to assist in the development of a nationwide system of public-use airports as necessary to meet projected growth of civil aviation. The Act provides funds for airport planning and development projects at airports included in the National Plan of Integrated Airport Systems (NPIAS) in the form of the AIP grants.



# *SMITH REYNOLDS AIRPORT*

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User fees collected under the Airport and Airway Trust Fund Act provide a source of revenues used to fund AIP projects. Entitlement funds are divided among primary airports, cargo service airports and state block grants based on aviation activity and service levels. Airports may receive AIP discretionary funding for federally eligible projects such as:

- New runways, taxiways and non-exclusive use aprons
- Reconstruction of runways, taxiways and non-exclusive aprons
- Navigation Aids
- Federal air traffic control towers (ATCT)
- Passenger terminal buildings (non-revenue areas only)
- Primary airport access roads, and
- Land acquisition

In North Carolina, Federal funding, via the means detailed above, is administered through the NCDOT – Division of Aviation under the Block Grant Program. The Block Grant Program for North Carolina is based on 90 percent State funding and 10 percent local match.

### **State Funding – North Carolina Department of Transportation Division of Aviation (NCDOT-DOA)**

The NCDOT through the DOA administers federal funding for airports under the Block Grant Program of the Federal Aviation Administration. The intent of the Block Grant Program is to demonstrate the ability of the states to administer federal funds to airport throughout the state. Through an approved TIP, Smith Reynolds Airport is able to layout the needs of the airport through criteria such as safety needs, forecast and demands, and financial feasibility. Smith Reynolds Airport's approved TIP is also the basis for funding through the NCDOT.

The NCDOT provides grant funds for various types of airport maintenance and improvement projects; however, they do not participate in revenue-generating projects or for facilities that are not available to the aviation public. The amount of participation varies by type of project and also depending upon whether or not there is federal participation.

### **Local Match (Sponsor) Funding**

Local or sponsor funding is otherwise referred to as the out-of-pocket expenses paid for by the airport owner. These funds can be obtained from a variety of sources including through airport revenues, the city/county's general fund, or capital can be acquired through the issuance of bonds. A bond is simply an 'IOU' in which an investor agrees to loan money in exchange for a predetermined interest rate. Investors purchase bonds with the understanding that the borrower will pay back their original principal (the amount loaned) plus any interest that is due by a set date, otherwise known as the "maturity" date.



## **Other Funding Sources and Opportunities**

In addition to NCDOT assistance, additional funding may also be available to INT. Some of these sources include:

Private Development – Capital improvement projects that benefit only a private tenant or group of private tenants will normally not be funded by the NCDOT or from the airport sponsor itself. However, projects that serve aviation functions and that have potential to generate self-sustaining revenues can be attractive to private investors. Although hangar developments for new on-airport aviation businesses are prime candidates for private funding, the potential of constructing t-hangars and corporate hangars is another method to increase activity and airport revenues without expending airport funds.

Other Grant Programs – There are a number of federal and state grant programs that can be utilized for transportation improvements, economic development, historic preservation, etc. that the ACFC can take advantage of to pay for various maintenance and construction improvements at or near the airport. The proper use of and execution of these grants is critical to preserving ACFC revenues for future CIP and TIP uses.

Land leasing – The leasing of airport land requires little to no investment by the ACFC and therefore provides a very positive return. Private developers of airport property typically require long-term leases that may extend more than 30 years in order for the developer to recover his investment costs. Improvements made by private developers typically revert to the airport at the end of the lease term. Since the average lifespan of a building is often more than 40 years, facilities reverted to the airport could potentially generate years of revenues provided that the airport maintain these reverted facilities. The ACFC should not maintain privately developed buildings until ownership has been transferred at the end of the land lease term.

Marketing – The ACFC should continue to market the airport and its surrounding property by using all available methods and resources. The effective marketing of airport property could potentially attract new airport tenants and ultimately lead to additional revenues for the airport.

Leases – Leases should be written responsibly with the airport's best interest in mind and should include escalation clauses to allow the airport recover cost of living and maintenance expenses. Furthermore, leases should require tenants to possess insurances to prevent the airport from any product or service liability. In addition, developers and on-airport investors should be required to have insurance to cover their payments should they become incapable of making them. Generally speaking, long-term leases should be avoided unless such a lease clearly demonstrates a benefit to the airport. One viable example of such a lease would include the development of a private hangar facility which would revert to the airport at the end of the lease term.

Non-Aviation Development – Many financially successful general aviation airports throughout the country have achieved financial independence through the collection of non-aviation related revenues. It is becoming increasingly common to see industrial/business parks, restaurants, gas stations, and retail outlets located within airport's boundaries of ownership. It is important to





note that although revenues could be recognized through the development of non-aviation facilities, these developments should not occur at the expense of meeting aviation-related demand. Non-aviation related developments are typically contracted through long-term land leases, similar to private party developments. All future non-aviation developments located near or on airport property should be compatible with aviation activities. In general, commercial, industrial, or agricultural developments are desired in comparison to schools, residences, or churches etc.

## **7.9 CONCLUSION**

Smith Reynolds Airport is a significant economic catalyst to the Winston-Salem, Forsyth County and overall triad region of North Carolina. Although the airport's days serving as a commercial service airport have passed, it continues to provide an important and essential aviation service that meets the needs of the community. Airports, especially dependable, all-weather airports like INT are what businesses look for and rely on when considering locations/sites to start a new endeavor, or grow an existing business.

Based on the general financial information presented in this chapter, the ACFC will have to maximize and optimize all available outside potential funding sources to achieve the project implementation plan and schedule identified. As discussed earlier, the actual implementation schedule for the capital projects identified in the CIP may need to be adjusted according to development triggers and the actual demand experienced. As the airport seeks to move forward with these developments, an additional analysis may be required which takes into account the financial situation of the airport at that time. The actual funding for specific projects will be determined as implementation becomes more imminent, and will depend on the airport's development schedule, its financial health, and the overall local economic conditions.