CHAPTER SEVEN – FACILITY IMPLEMENTATION PLAN

OVERVIEW

Knox County Regional Airport (RKD) is an important economic catalyst for County and the area surrounding the airport. It provides essential aviation services to meet community and regional demand; therefore, it is important that the Airport 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 RKD in Knox County. The proposed implementation plan was developed after evaluating the basic financial structure and capability of the 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 County and airport staff in making policy decisions regarding the recommended development of the airport over the 20-year planning period.

PROJECT FEASIBILITY ASSESSMENT

The approach taken by the County for airport and airfield development included improvement and development schemes that assessed all 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 County 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 various 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 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.

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 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 possible 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.

OPERATING REVENUES (INCOME)

The Knox County Regional Airport generates operating revenue (income) from a variety of sources, including, but not necessarily limited to a number of sources including:

- Passenger Facility Charges (PFC) (discussed in more detail below)
- Rental of facilities owned by the airport such as Terminal Building space for rental car companies, airlines, and eateries
- Income from 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

PASSENGER FACILITY CHARGE

The federal passenger facility charge (PFC) program allows the collection of fees up to $4.50 for every enplaned passenger at commercial airports controlled by public agencies. Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition. Federal law limits use of PFC funds strictly to the above categories. Knox County Regional Airport submitted a PFC application to the FAA, which is currently under review and expected to be approved by early 2015. The estimated revenue from PFC charges (currently for passengers boarding Cape Air flights only) is expected to amount to approximately $35,000 per year.

OPERATING EXPENSES

The Knox County Regional Airport incurs costs to manage, operate and maintain the facilities it owns. The larger categories of operating expenses for the airport include a number of different expense types, with four major areas dominating, which include:

- 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 (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. Moreover, the operating costs to manage, run and maintain the airport 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 2.9 presented earlier in Chapter 2 (page 21) listed the airport's operating revenue and expenses for the period 2000 through 2011. This trend provides a reasonable idea about how the airport's finances have trended over the course of this 12-year period.

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 2014 dollars and include the items discussed earlier, 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.

RKD'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 2015-2019; whereas Phase II – Intermediate Term Development extends from 2020-2024. Phase III - Long Term Development spans a 10-year period from 2025 through 2034.

The Capital Improvement Plan (CIP) for the Knox County Regional Airport for the years 2015 through 2033 is presented in Table 7.1 (page 113). It should be noted that the CIP includes 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 (which includes RKD) 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. The annual CIP update process is used by the FAA to prioritize their funding programs on a region-wide basis in light of system-wide considerations. These planning-level cost estimates are used for program development. Projects that enhance airport and airfield safety and capacity, as well as projects that correct airfield design standard deficiencies remain high priority projects for the FAA, and compete well for available, but limited, grant funds. The CIP does not constitute a commitment on behalf of the FAA or the County 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.

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 Knox County Regional Airport continues. It is also possible that other improvements not identified within this study will 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 RKD. Table 7-1 illustrates the costs, phasing and funding sources for each development project shown in the program.

As presented in Table 7-1, 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 $19.7 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 RKD 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 2014-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 County and airport staff. The objective was to establish an efficient order for project development and implementation that exceeded the forecasted aviation activity for RKD while meeting the needs of the County. As mentioned earlier, the development schedule is divided into three general phases: Phase I - Short Term Development (2015-2019), Phase II - Intermediate Term Development (2020-2024), and Phase III - Long Term Development (2025-2034).

Table 7.1 - Airport Development Costs (2015-2033)

YEAR	DEVELOPMENT PROJECTS	TOTAL PROJECT COST	FAA	LOCAL	OTHER
2015	Runway 13-31 Rehabilitation	$2,000,000	$1,800,000	$200,000	
2016	Displace Runway and add 200' with Taxiway Extension	$1,061,111	$955,000	$106,111	
2016	Acquire Snow Removal Equipment	$50,000	$45,000	$5,000	
2016	Acquire Mowing Equipment	$50,000		$50,000	
2017	Rehabilitation of Aircraft Apron	$1,111,111	$1,000,000	$111,111	
2018	Runway 3-21 Improvements	$1,111,111	$1,000,000	$111,111	
2018	Construct Hangars	$2,435,000			$2,435,000
2019	Easement Acquisition (4-5 parcels)	$90,000	$81,000	$9,000	
2022	Install EMAS	$2,000,000	$1,800,000	$200,000	
2023	Runway 3-21 Rehabilitation	$1,500,000	$1,350,000	$150,000	
2024	Master Plan Update	$200,000	$180,000	$20,000	
2025	Runway 13-31 Rehabilitation	$2,600,000	$2,340,000	$260,000	
2030	Construct Runway 3-21 Taxiway	$5,540,000	$4,986,000	$554,000	
	TOTAL	**$19,748,333**	**$15,537,000**	**$1,776,333**	**$2,435,000**

CIP SUMMARY

Having presented the highlights of each of these development periods, a summary of the related financial needs for these projects is presented above in Table 7.2. This combined development program will provide the facilities needed at RKD to meet the forecasted demands through the end of the 20-year planning period. This 20-year CIP is estimated to cost approximately $19 million. These estimated costs were determined in 2014 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:

CPI Multiplier Ratio = X / CPI

Where X = CPI in any given future year; and CPI = National CPI for 2015

By using the multiplier ratio approach above, any 2014 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.

MEANS OF FINANCING PROJECT DEVELOPMENT

Knox County Regional 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 Knox County Regional Airport and the surrounding Mid-Coast region.

Airport development is funded by a combination of public and private source. Major sources may include the Airport Improvement Program (AIP), local funding programs, airport revenue bonds, and airport user charges. Federal grants comprise a majority of the capital funding, while user hangar revenues, fuel sales, and 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 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. Three categories of potential funding sources exist for the capital improvements at RKD. These categories include federal, local (sponsor) and private funding sources. It is important to note that Knox County Regional Airport is not eligible for state funding because of its classification as a commercial service airport.

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.

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 (where eligible)
- Passenger terminal buildings (non-revenue areas only)
- Primary airport access roads, and
- Land acquisition

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 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 FAA assistance, additional funding may also available to RKD. Some of these sources include:

<u>Private Development</u> - Capital improvement projects that benefit only a private tenant or group of private tenants will normally not be funded by 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 tee-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 County 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 County revenues for future CIP uses.

Land leasing - The leasing of airport land requires little to no investment by the County 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 if the airport maintain these reverted facilities. The County should not maintain privately developed buildings until ownership has been transferred at the end of the land lease term.

Marketing - The County 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 that permit 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. 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 that would revert to the airport at the end of the lease term.

Non-Aviation Development - Many financially successful 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.

CONCLUSION

Knox County Regional Airport is a significant economic catalyst to Knox County and overall Mid-Coast region of Maine. As the only commercial service airport within 100 miles, it provides an important and essential aviation service that meets the needs of the community. Airports, especially dependable, all-weather airports like RKT 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 County 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 imminent, and will depend on the airport's development schedule, its financial health, and the overall local economic conditions.