

# CHAPTER 9

## CAPITAL FUNDING PLAN

### 9.1 INTRODUCTION

This chapter of the Airport Master Plan outlines the financial strategy to assist the Duluth International Airport in implementing the 20-year projects identified in the previous chapter. This section reports on the financial structure of the Airport, along with the potential sources and timing of capital funding in order to implement the recommended Airport Development Plan projects.

#### 9.1.1 Key Considerations

This section presents the Airport's financial structure, historical budgeting patterns, and other influencing factors regarding the Airport's revenue position with regards to funding the Airport Development Plan described in the previous chapter. As a federally obligated Airport, the financial plan has been developed consistent with federal and state grant programs and funding policies.

The overarching financial plan is subject to the following key considerations:

- The funding analysis proposes the Airport Development Plan can be funded over the 20-year Master Plan time frame; in that all projects are demand or necessity driven and will be constructed only as activity grows; as activity grows, increased user fees or other funds become available; and the FAA provides funding for necessary airfield projects from nationwide user fees on aviation activity and such airfield projects with FAA funding comprise the majority of the Airport's capital needs.
- The Airport's pavement improvements are substantial over the next 10 to 20 years, as identified in the 2010 Pavement Condition Index (PCI) study. Significant runway rehabilitation projects are imminent, as required to properly maintain infrastructure to support and retain airport users, commercial operators and business tenants.
- The Airport will rely heavily on federal and state funding programs to implement the major eligible capital improvement projects. Consequently, the Airport will depend heavily on discretionary and appropriated funds for the major airfield infrastructure improvements.
- The Airport may implement tenant rate increases and/or new user charges to generate the Airport revenue levels necessary to provide for the local grant match. However, the Airport does not anticipate any future reliance on supplemental revenues as part of the Airport's financial plan.

#### 9.1.2 General Funding Plan Approach

This section assesses Airport budget information to identify a reasonable expectation for implementation of the 20-year Airport Development Plan projects. Airport budgets for fiscal years 2008 to 2011 were reviewed to identify budget trends, income patterns and major operating revenue and expense factors. Summaries of revenues and expenses are included and the annual cash operating surplus or deficit is identified.

Like most airports, DLH derives local revenues from three broad categories of activities:

- Passenger-related activities including parking, concessions, and rental cars;
- Airline leases and fees received directly from the airline tenants; and

- Land and building rentals to non-airlines parties.

Due to the fluctuations of revenues from year to year and the adherence to strict budgetary requirements, DLH does not project revenues beyond the current fiscal year. Decisions regarding the upcoming year's CIP is based on anticipated federal and state funding availability as well as the specific projects for a given year which requires varying levels of local funds. As circumstances may dictate, CIP projects may be adjusted according to funding availability and the capability of the DAA to provide the appropriate levels of local funding.

Airport financial situations can vary, perhaps significantly, over short spans principally due to changes in user activity, the number of tenants, lease rate changes, maintenance/construction cost increases, unexpected operating expenses, and other factors. In addition to the Airport's financial situation, the financial plan also recognizes the possibility for future changes to the federal and state airport funding programs, as subject to reoccurring legislative authorizations. Therefore, the financial plan assumes the continued FAA and Mn/DOT funding support for capital projects, stability of cost estimates, and the viability of sustained tenant and user revenues as affirmed by the airport activity forecasts.

Since the Airport's activity levels, capital plan, and funding strategy may change, this general funding plan should be reviewed and adjusted periodically to allow for changing circumstances. That is, the same assumptions that anticipate growth of aviation activity at the Airport recognize that those same users or tenants must pay a portion of the costs for the facilities provided. Further, the Federal, State, local, and other funds that historically have been provided for Airport improvements (particularly critical airfield renewal) will continue.

## **9.2 AIRPORT FINANCIAL STRUCTURE AND POSITION**

The Duluth International Airport is owned by the City of Duluth, but operated as an independent public entity controlled by the Duluth Airport Authority. The Duluth Airport Authority has a Board of Directors, appointed by the City of Duluth, which govern the Duluth International Airport and Sky Harbor Airport.

The Authority operates as an independent operation without taxing authority or financial support from the City of Duluth. Therefore, the Authority's funds are accounted for separately and the financial statements prepared as if the airports were a stand-alone entity. Such independent reports meet the FAA's requirement that airport funds be identified separately from the City of Duluth, St. Louis County, State of Minnesota, or any other governmental units.

While the Airport Authority administers ownership control, the principal users of the Airport are private businesses entered into various lease agreements. This means the Airport Authority is essentially a proprietor, and dependent upon the success of its tenants and users to remain financially self-sufficient.

### **9.2.1 Historical Net Assets**

**Table 9-1** summarizes the past four years of Authority change in net assets. Over the long term, the Authority has recorded annual increases in net assets. Total operating expenses in the 2008-2011 period have ranged from \$8.2 to \$9.2 million. Excluding depreciation (which is a non-cash expense), salaries and wages was the largest category of expense representing approximately 40 percent of annual operating costs.

Approximately 95 percent of 2011 revenue was from Duluth International Airport and 5 percent from Sky Harbor Airport. Authority revenues have ranged from \$3.6 to \$3.0 million in the 2008-2011 period. The largest sources of revenue were:

- Terminal building space rent
- Land rent
- Rental car commission fees
- Aircraft landing fees

*Table 9-1*  
**HISTORICAL OPERATING RESULTS**

	2011	2010	2009	2008
<b>Operating Revenue</b>				
Charges for Services	\$ 3,644,913	\$ 3,607,373	\$ 3,002,023	\$ 3,429,700
<b>Total Operating Revenue</b>	<b>\$ 3,644,913</b>	<b>\$ 3,607,373</b>	<b>\$ 3,002,023</b>	<b>\$ 3,429,700</b>
<b>Operating Expenses</b>				
Personal Services	\$ 1,487,320	\$ 1,521,869	\$ 1,544,675	\$ 1,589,639
Supplies	76,407	77,449	60,828	57,231
Utilities	589,256	579,672	519,345	632,231
Other Service/Charges	1,344,040	1,477,605	1,127,123	1,393,009
Depreciation	5,595,951	5,121,608	4,828,206	4,495,883
Amortization	133,233	104,750	119,921	126,492
<b>Total Operating Expense</b>	<b>\$ 9,226,207</b>	<b>\$ 8,882,953</b>	<b>\$ 8,200,098</b>	<b>\$ 8,294,485</b>
<b>Operating Income (Loss)</b>	<b>\$ (5,581,294)</b>	<b>\$ (5,275,580)</b>	<b>\$ (5,198,075)</b>	<b>\$ (4,864,785)</b>
<b>Nonoperating Revenues (Expenses)</b>				
Investment Earnings	\$ 6,873	\$ 8,841	19,039	\$ 27,950
Passenger Facility Charge Receipts	563,245	582,047	463,654	524,767
Gain (Loss) on Capital Asset Disposal	8,441	(791)	(45,492)	17,194
Interest Expense	(51,550)	(45,772)	(40,481)	(46,300)
Marketing Grant	-	-	41,426	83,540
<b>Total Nonoperating Revenues (Expenses)</b>	<b>\$ 527,009</b>	<b>\$ 544,325</b>	<b>\$ 438,146</b>	<b>\$ 607,151</b>
<b>Net Income (Loss) Before Capital Items</b>	<b>\$ (5,054,285)</b>	<b>\$ (4,731,255)</b>	<b>\$ (4,759,929)</b>	<b>\$ (4,257,634)</b>
<b>Capital Contributions</b>				
Federal Grants	\$ 8,778,088	\$ 6,803,173	\$10,350,361	\$ 2,994,251
State Grants	3,597,579	3,084,243	2,384,889	1,662,896
Local Grant	-	-	250,000	-
Contributed Capital	1,047,357	35,598	-	94,992
<b>Total Capital Contribution</b>	<b>\$13,423,024</b>	<b>\$ 9,923,014</b>	<b>\$12,985,250</b>	<b>\$ 4,752,139</b>
<b>Change in Net Assets</b>	<b>\$ 8,368,739</b>	<b>\$ 5,191,759</b>	<b>\$ 8,225,321</b>	<b>\$ 494,505</b>

Source: Audited Financial Statements

## 9.2.2 Historical Cash Flow

**Table 9-2** summarizes the Authority's Statement of Cash Flow for 2008 through 2011. Based upon receipt of grant funds and expenditures for capital projects, the level of cash surplus or deficit can vary substantially between years. The surplus of operating cash in 2008 was approximately \$1.0 million. In 2009, a deficit of \$1.4 million was recorded; the amounts in 2010 and 2011 were roughly off-setting at a \$650,000 increase and \$440,000 decrease.

*Table 9-2*  
**STATEMENT OF CASH FLOW**

	2011	2010	2009	2008
<b>Cash Flow from Operating Activity</b>				
Cash Received from Customers	\$ 3,430,810	\$ 3,236,417	\$ 3,022,397	\$ 3,394,317
Cash Paid to Suppliers	(2,082,866)	(2,328,014)	(1,733,357)	(1,749,398)
Cash Paid to Employees	(1,371,315)	(1,508,596)	(1,540,680)	(1,571,433)
Other Cash Receipts	300,465	258,316	220,427	244,592
<b>Net Cash Provided (Used) in Operating Activities</b>	<b>\$ 277,094</b>	<b>\$ (341,877)</b>	<b>\$ (31,213)</b>	<b>\$ 318,078</b>
<b>Cash Flow from Noncapital Financing Activity</b>				
Principal Paid on Revenue Note	\$ (36,719)	\$ (33,673)	\$ (22,170)	\$ -
Interest Paid on Revenue Note	(38,281)	(41,327)	(52,830)	-
<b>Net Cash Provided (Used) in Noncapital Financing Activity</b>	<b>\$ (75,000)</b>	<b>\$ (75,000)</b>	<b>\$ (75,000)</b>	<b>\$ -</b>
<b>Cash Flow from Capital Related Activity</b>				
Principal Paid on Loans	\$ (26,667)	\$ (26,667)	\$ (26,667)	\$ (26,667)
Federal Grants	8,754,942	7,030,779	7,721,361	4,458,391
State Grants	3,622,105	2,547,176	2,206,830	1,769,767
Local Grant	-	250,000	-	-
Advance from Fixed Base Operator	-	371,033	-	-
Passenger Facility Charge Receipts	568,193	559,538	442,992	539,785
Proceeds from Sales of Capital Assets	-	-	-	46,750
Acquisition or Construction of Capital Assets	(13,567,543)	(9,675,956)	(11,687,649)	(6,159,466)
<b>Net Cash Provided (Used) in Capital Related Activity</b>	<b>\$ (648,970)</b>	<b>\$ 1,055,903</b>	<b>\$ (1,343,133)</b>	<b>\$ 628,560</b>
<b>Cash Flow from Investing Activity</b>				
Interest on Investments	\$ 6,873	\$ 8,841	\$ 19,039	\$ 27,950
<b>Net Cash Provided (Used) by Investing</b>	<b>\$ 6,873</b>	<b>\$ 8,841</b>	<b>\$ 19,039</b>	<b>\$ 27,950</b>
<b>Net Increase (Decrease) in Cash or Equivalents</b>	<b>\$ (440,003)</b>	<b>\$ 647,867</b>	<b>\$ (1,430,307)</b>	<b>\$ 974,588</b>

Source: Audited Financial Statements

### **9.3 SOURCES OF AIRPORT CAPITAL FUNDING**

There are numerous potential sources of airport capital; however, FAA grants and local funds, such as airport revenue, typically provide most of the money. The various types of FAA and local funds are discussed below, as well as the other potential capital fund sources.

#### **9.3.1 FAA Funding**

The Federal government has been involved in supporting aviation development since 1946. FAA grants are funded through the Aviation Trust Fund as collected through user-generated taxes (airline passenger tax, aircraft parts and fuel) and distributed in accordance with the FAA Airport Improvement Program (AIP) by entitlement formula or discretionary provisions. FAA Order 5100.38C, "Airport Improvement Program Handbook" provides guidance and sets forth policies and procedures for the administration of the Airport Improvement Program (AIP) by the Federal Aviation Administration (FAA).

The Airport and Airway Improvement Act of 1982 established the current federal funding mechanism, known as the Airport Improvement Program (AIP), which provides capital support for eligible planning, development, and noise compatibility projects at public-use airports. Airport sponsors are eligible for FAA funding for specifically approved projects through the FAA’s AIP.

At the national level, the public pays Federal Excise Taxes on commercial airline ticket purchases. The current level of such fees is shown in Table 9-3. In addition, airlines pay other fees on fuel and aircraft tires. In total, these aviation-related fees/taxes fund the FAA and are “returned” to public airports in the form of grants for appropriate capital improvements.

*Table 9-3*  
**FEDERAL EXCISE TAXES**

<b>Type of Charge</b>	<b>Amount</b>
Passenger Ticket Fee (Percentage of sale price)	7.5%
Domestic Segment Fee (Per flight leg)	\$ 3.90
International Arrival Fee (Per person)	\$ 17.20
Hawaii/Alaska Segment Fee (Per flight)	\$ 8.60

Source: FAA, Effective Jan. 1, 2013

While the AIP has been reauthorized several times since established, including the adjustment of the appropriated amount and funding formulas to reflect current national priorities, the basic AIP program has remained essentially the same. The latest funding extension continues the program through September 30, 2015. For the purposes of this analysis, it is assumed that the federal government will continue to participate in funding airport capital projects over the next 20 years based on the levels similar to those currently authorized by AIP for the following FAA sources:

- **FAA Entitlement** – funds for commercial service and air cargo airports based on the number of annual enplaned passengers and (for the very largest airports) amount of air cargo handled. Other allocations of AIP funds go to states, general aviation airports, and other commercial service airports, as well as for noise compatibility planning and programs. As part of the 2012 FAA Reauthorization Act (PL 112-95), FAA entitlements provide for 90 percent of total federal eligible project cost, with the remaining 10 percent match typically split between the State and Airport Sponsor. Prior to 2012, the FAA entitlements were a 95%-2.5%-2.5% program. The FAA entitlements can fund AIP-eligible projects per Mn/DOT approval, and can be carried over and accumulate for up to four years. It is anticipated that future non-primary entitlements will continue at the current levels for general aviation airports under future aviation FAA re-authorization acts.
- **FAA Discretionary** – Any remaining AIP funds at the national level not mandated by set-asides or assigned to entitlements are designated as discretionary funds, and may be used for funding eligible FAA projects. Discretionary funds are airport and project specific, and based on the national priority system. Eligible discretionary projects are typically those that enhance airport capacity, address noise, or enhance safety and security, or are directed to certain national project priorities. The more expensive projects in the Airport Development Program and ACIP, such as airfield pavement rehabilitation, are expected to be funded from FAA discretionary funds. Discretionary funds, which vary from year-to-year, provide for 90 percent of the cost of eligible projects with local or state funds providing the 10 percent match. In addition, the sponsor must be able to commence the work on projects using discretionary funds during the same fiscal year as the grant agreement or within 6 months, whichever is later.

- FAA Apportionment – FAA funds made available to states under various conditions, as apportioned based on an area/population formula within the 50 states.

### **9.3.2 FAA Project Priorities**

FAA distributes Airport Improvement Program (AIP) monies to commercial service airports in accordance with project priority and the degree of need. The FAA uses the ACIP National Priority Rating system for the distribution of AIP grant funds, which is a value generated equation that takes into consideration the airport and project role in accordance with FAA goals and objectives.

The following are the point system assigned for project purpose categories:

- Safety/Security = 10 points
- Statutory Emphasis Programs = 9 points
- Planning = 8 points
- Reconstruction = 8 points
- Environment = 8 points
- Capacity = 7 points
- Standards = 6 points
- Other = 4 points

### **9.3.3 State of Minnesota**

The State of Minnesota Department of Transportation provides funding to public airport sponsors for certain types of projects. The key driver for major capital improvements identified in this Master Plan is the State Construction Grant Program. For capital improvements that provide a justifiable benefit to the traveling public, the State will pay up to 70 percent of eligible costs. Projects that have a revenue generating potential are funded at 50 percent.

Outside the scope of the Master Plan, other Department of Transportation funding is provided to airports for specific routine maintenance activities, maintenance equipment, hangars (by means of a revolving loan fund), and marketing. In addition, the State Legislature provides grant funds for major capital improvements of significant regional importance. For example, the new passenger terminal received State funding. This financial plan assumes State funding will continue throughout the 20-year planning period at current levels. However, other than for major capital improvements, such State funding is typically in fairly small amounts and for specific types of projects.

### **9.3.4 Passenger Facility Charge (PFC)**

The Aviation Safety and Capacity Expansion Act of 1990 authorized the Secretary of Transportation to grant public agencies the authority to impose a passenger facility charge (PFC) to fund eligible airport projects. The initial legislation set the maximum PFC level at \$3.00 per enplaned passenger. AIR-21 increased the maximum PFC level from \$3.00 to \$4.50. Although the FAA is required to approve PFCs, the program allows for local collection of PFC revenue through the airlines operating at an airport and provides more spending flexibility to airport sponsors versus AIP funds. PFCs provide funding for certain projects that are not permitted under normal FAA grants and their revenue is allowed to be used for the local matching share of FAA grants. In addition, airports can borrow against their expected PFC collections. Therefore, PFCs are often a critical factor in funding major airport capital projects. The Airport has implemented a PFC at the \$4.50 level which is committed for specifically approved projects.

### **9.3.5 Airport Revenues**

The Airport funds some or all of the cost of capital projects by generating revenue from tenants, users, or other sources. These Airport funds can come from reserves, annual surplus, or borrowing. While capital projects are usually funded from a variety of sources, in the end, Airport funds have a role in almost every project, particularly as seed money to initiate projects.

### **9.3.6 Other “Local” Funds**

The funds provided by a PFC or an airport itself are often called “local” sources because they represent the local match to FAA grants or pay for some projects ineligible for FAA funding. Additional local funds are often provided to airports by cities, counties, other taxing districts, or a collection of public agencies. These government agencies support airports because of their public-use nature, their regional influence, and their critical value in supporting economic development. External public support for airports is particularly important when a new airport is constructed or an existing airport builds a runway or terminal that represents a once-in-a-lifetime capital expenditure. Public financial support for airports comes in forms such as grants, interest free loans, or loans under the umbrella of states, counties, cities, taxing districts, or public financing agencies.

### **9.3.7 Other Sources**

In addition to the “traditional” sources of airport capital funds listed above, there are other potential suppliers of money to construct capital improvements. These include tenants, users, investors, and public agencies. Tenants often construct their own facilities, particularly hangar and air cargo facilities. Airport users such as airlines sometimes contribute funds for projects or agree to increased rents to recover the costs of improvements. Private capital can also be used for facilities such as cargo buildings or hangars; in a similar manner, vehicle parking lots or other revenue generating facilities can be privatized with the use of venture capital. Due to the shortage of public capital, as well as the desire of investors to seek more innovative uses for their funds, airports are seeing increased use of external funding for capital projects.

## **9.4 SPECIFIC ISSUES OF AIRPORT CAPITAL FUNDING**

This section will discuss the specific sources of capital funds expected to support completion of the projects identified in this Master Plan Update.

### **9.4.1 Major Funding Sources**

Each major type of funding is presented below.

- **Federal Aviation Administration, Entitlement Funding** – The Airport “earns” capital funds each year based upon its volume of passengers. Utilizing the current formula, the current passenger traffic, and assuming full appropriation by Congress, this amount for the Duluth International Airport is approximately \$1.6 million per year. These funds can be used for any eligible project under AIP and must be matched with a 10 percent local contribution.
- **Federal Aviation Administration, Discretionary Funding** – The FAA provides addition funds for capital projects on a need and priority basic. These funds are focused on improving the capacity and safety of the national transportation system and competition is intense for the funds available. The amounts available are substantial; however, grants may be phased over a number of years due to the high national demand for discretionary funding. Only certain types of capital expenditures are eligible and the amounts must be matched at the 10 percent level.

- **Minnesota Department of Transportation, Office of Aeronautics** – The State provides grants for equipment and general aviation facilities based on an annual appropriation. Typically, the State provides 70 percent of the project funds and the Airport provides 30 percent. In addition, airport projects of regional significance or critical importance to Minnesota aviation are funded by the State under special allowances.
- **Passenger Facility Charges (PFC)** – The Airport has a PFC, presently collected at the maximum \$4.50 per enplaning passenger rate. This PFC revenue must be used for specific, pre-approved capital projects. Based on the recent volume of approximately 160,000 annual enplaned passengers, the Airport can generate approximately \$675,000 annually from this source. Like other funding associated with the FAA, the use of PFC funds is limited to eligible types of projects, but the funds can be used to match FAA Entitlement and Discretionary dollars.
- **Customer Facility Charge (CFC)** – In association with the on-airport rental car firms, the Airport can implement charges on rental car customers that are used to fund rental car facility improvements. Necessary rental car facility improvements are anticipated to be funded from this source.
- **Airport Operating Funds** – The Airport charges users and tenants for the privilege of operating at their facility. These revenues cover Airport operating costs and help fund capital projects. The Airport currently has certain funds in reserve accounts and can earn additional funds in the future. A portion of these funds can be used to fund the proposed capital program.
- **Other Sources of Capital** – There are other sources of funds such as private investment or grants from foundations that might be available for capital projects. The likelihood of contributions from these sources is unknown; however, community organizations in a number of cities have helped fund public-use projects such as new airport terminals.

#### **9.4.2 Operating Revenue Factors:**

The Airport continually seeks tenants to utilize the Airport's facilities. However, there are limitations on operating revenues brought about by the Airport's physical and demand traits.

- Terminal Building Cost
- Scarcity of functional hangar and building lease space, which is a limiting factor in enhancing additional rental revenues in the future.
- The north side business development area is poised to accommodate future aviation-related tenants. Demand for this area has been sluggish due to economic conditions. Also, business development is planned south of Lackland Street.

#### **9.4.3 Expect Sources of Airport Capital Funding**

Based on this analysis, a combination of sources will likely be available to fund the capital plan. Each projected source is described in this section.

- **Federal Aviation Administration, Entitlement Funding** – As a primary commercial service facility, the Airport currently receives approximately \$1.6 million annually in FAA Entitlement

funding. Over the 20-year planning period, this source is expected to provide approximately \$32 million.

- **Federal Aviation Administration, Discretionary Funding** – In the past, the Airport has applied for and received FAA Discretionary funding. Over the next 20 years, the Airport expects to need substantial funds for runway reconstruction and other projects. Therefore, it is estimated in this analysis that substantial amounts of FAA Discretionary funding will be requested and received.
- **Minnesota Department of Transportation, Office of Aeronautics** – State matching funds for Federal grants are identified in this long-term plan. No unusually State funding requests are programmed.
- **Passenger Facility Charge (PFC)** – The Airport generates approximately \$675,000 annually from PFCs. In the next 20 years, approximately \$13.5 million in new collections is possible for new capital projects.
- **Customer Facility Charge (CFC)** – This charge on rental car contracts is being collected and is used for rental car specific capital improvements.
- **Airport Operating Funds** – The Airport has current capital funding reserves and the ability to generate annual surplus revenues over expenses. Over the 20 year planning period, there is a requirement for capital funding from Authority revenue to match Federal grants and fund FAA-ineligible projects.
- **Other Sources of Capital** – Several of the proposed projects such as new hangar facilities appear eligible for private funding. While the amount of such funding is unknown, this is another potential revenue source. State economic development grants or private funding may also be available.

In total, there are a number of potential sources of funds for the Airport's proposed capital development plan. Certainly there are issues of project justification, levels of increased demand, project eligibility, and approvals that must be met. However, if demand materializes and proper application provided, it appears that sufficient funds are potentially available over the long-term to fund the proposed projects. The major assumptions of financial feasibility are presented below.

- **Most Capital Projects Are Demand Driven** – Few of the capital projects identified are required immediately or are without currently identified funding; rather, most are needed as demand increases and later in the 20-year planning period. Therefore, projects will be constructed as required and not by an arbitrary, pre-established time schedule. This need for a verification of demand before construction provides a natural brake on unnecessary building; alternatively, it provides a stimulus to needed projects that will occur if Airport activity levels grow faster than anticipated.
- **The Capital Plan Is Flexible** – Construction of the projects identified in this analysis can be accelerated or decelerated as funding becomes available or as other factors influence both the facility and its financial situation. In reality, projects that are more important can be implemented and less important ones delayed, as necessary, to match available funding.
- **Partial or Staged Funding Is Possible** – In a similar manner, certain projects can be scaled back in scope or built on an incremental schedule to match the available funding.

- **Innovative Funding Methods Are Available** – This analysis addresses the “traditional” sources of airport capital project funding. If necessary, the Airport can identify and implement new and/or innovative sources such as leasing or partial privatization. That is, use of private sector type tools, in order to fund necessary infrastructure, can occur. Parking, hangar, and rental car facilities appear most likely to benefit from innovative funding methods.
- **Increased Support from Governmental Agencies Is Possible** – This analysis assumes Federal, State, and/or local funds are provided at past levels. It does not address the fact that the Airport has identified a number of proposed capital projects that are that are perhaps beyond the ability of the Airport, by itself, to fund. In recent times, special funding for airports has been made available for runways, terminals, security projects, or other facilities that are beyond the scope of normal airport operations. Upon request, additional Federal, State, or local funding may be made available.
- **Department of Defense Funding for Military Facilities** – This analysis assumes that there may be projects to support the Minnesota Air National Guard that would need to consider the U.S. Department of Defense as a funding source. All projects that provide for joint or sole use by the 148th Fighter Wing is eligible for funding participation by the DOD proportionate to the 148th's use of the proposed project. To best prepare for participation, the 148th Fighter Wing requests five years notice prior to a project's anticipated requirement.

In summary, both tradition project funding and other means may be used to accommodate future aviation activity at the Airport.

#### **9.4.4 Airport Project Responsibilities**

Airport capital projects are typically closely coordinated with the FAA and Mn/DOT, particularly when Airport Improvement Program (AIP) funding or NEPA environmental documentation is required. Therefore, in addition to the typical project procurement and execution responsibilities that most Airports address on a wide variety of non-airport projects, additional consideration of FAA requirements is needed for the projects listed in the ACIP. In general, for each project the Airport will be responsible for the following:

- Update the Airport Capital Improvement Program (ACIP) and financial documentation
- Verify the justification supporting the project and request FAA/Mn/DOT participation for projects using AIP funding.
- Assure completion of the necessary environmental processing through agency coordination
- Prepare and submit grant applications
- Prepare and issue a Request For Qualification and selecting the consultant/engineer for the project planning, design, or environmental analysis, as applicable
- Prepare and issue a Request For Proposals and selection for project construction, management, and related construction services; these services may be provided or assisted by the design engineer
- Provide project administration including FAA grant maintenance and close out

This financial analysis is based on continued FAA and State funding at current levels. However, there is a competition for FAA funds, so the Airport will need to aggressively market its development plan to FAA, Mn/DOT and other relevant agencies as opportunities arise. Regular coordination with the FAA and Mn/DOT is important to facilitate and gain acceptance of the responsibilities.

## **9.5 CAPITAL PROJECT FEASIBILITY SUMMARY**

The following is a summary of the Airport's financial position as related to the eight-year FAA Airport Capital Improvement Program (ACIP) and 20-year Airport Master Plan Development Plan.

This analysis indicates that funding will likely be available to plan, design, and construct the projects identified in the Master Plan. This financial analysis is based on continued FAA and State funding at current levels. However, there is a competition for public funds, so the Airport will need to aggressively market the need for its proposed capital projects to the FAA, State of Minnesota, and other agencies as opportunities arise. Innovative sources, including other federal funding sources, may be required to address all the proposed projects if they are to be completed in the recommended time frame.

ACIP Capital projects of approximately \$30 million have been identified of which roughly half are programmed in the next five-year period. The funding for the relocated terminal building, new aircraft apron, parking lots/structure, and certain other projects associated with the new passenger terminal are assumed to be completed or outside the scope of the Master Plan analysis. Funding for projects in the nine-20 year time frame or the sequencing of those projects has yet to be determined. As almost all of these projects are airfield pavements, traditional funding is anticipated.

Based on the assumptions and the financial analyses presented herein, the capital plan is considered practicable and it is anticipated that the Duluth International Airport will be able to construct necessary aviation facilities over the 20-year planning period to accommodate demand. Of course, the continued monitoring of the Airport's financial status is necessary to adapt and adjust as conditions change.

It should be noted that project costs are planning estimates and are used for programming purposes. For those projects included in the FAA ACIP, the costs reflect engineering-level cost opinions, based on current year values, and not adjusted for inflation. Also, it is important to note that the review of funding eligibility produces an estimate of the minimum local share funds that must be available through the sponsor to undertake the various projects. Actual funding received is often less than the maximum eligible due to competition for limited funds, low project priority rankings, or incomplete lobbying efforts to secure maximum funding.

### **9.5.1 Project Costs – FAA Airport Capital Improvement Program (ACIP)**

**Table 9-4** at the end of this chapter summarizes the estimated project costs and funding share, by planning phase and anticipated funding entity, for the projects identified in the Phase 1 and 2 Airport Development Plan periods which have been defined as coincident with the ACIP 2014-2021. This period involves four major projects and 26 individual projects at a total cost of over \$32 million. The federal share, which includes entitlements, apportionment and discretionary, assumes nearly 86 percent of the allowable funding total. As mentioned above, projects in the Phase 3 Airport Development Plan period are those for which construction timing has not yet been identified and consist almost exclusively of airfield pavement projects. Given that sufficient demand and environmental justification for these projects will be required prior to design and construction, the hypothetical breakdown shown in Table 9-5 is based upon traditional funding methods for projects of this type.

### 9.5.2 Project Costs – Local

**Table 9-4** summarizes the Airport’s estimated local costs, by planning phase, for all projects in the eight-year ACIP airport development program. The local Airport share, which includes eligible and non-eligible project costs, totals nearly \$3.5 million and accounts for 10.8 percent of the total costs. The local funding portion of a project typically ranges between 2.5 and 50 percent. Several projects have high local costs due to limited or non-allowable grant eligibility.

### 9.5.3 Project Costs – Airport Master Plan Development Plan

**Table 9-4** summarizes the anticipated funding cost for the Airport’s 20-year Airport Development Plan as it exists by the Airport prepared at the time of preparation of this document. These nine-20 year projects are significant to the airport master plan implementation but not yet identified with any specific year. Project costs are planning estimates and place holders. Stage 1 refers to projects that may be accomplished within the next five years (2014-2018) and Stage II projects that may be accomplished over the period (2019-2021).

*Table 9-4*  
**AIRPORT MASTER PLAN DEVELOPMENT PROGRAM**  
*Stage 1 and 2 (2014-2020)*

<b>Airport Capital Improvement Program (2014-2021)</b>				
<b>Project Description</b>	<b>FAA Funding (90%)</b>	<b>State Funding (70%)</b>	<b>Local Funding (10% match Fed; 30% match State)</b>	<b>Total Project Cost</b>
<b>2014 Projects</b>				
Replace Equipment #14/#15/#36 (replace with multi-purpose)	\$744,000		\$86,000	\$860,000
Air Traffic Control Tower Repairs – HVAC		\$185,500	\$79,500	\$265,000
Terminal Bid Pack 2D (Overhead Walkway)(constructed)	\$711,000		\$79,000	\$790,000
<b>Total 2014</b>	<b>\$1,485,000</b>	<b>\$185,500</b>	<b>\$244,500</b>	<b>\$1,915,000</b>
<b>2015 Projects</b>				
Airfield Electrical Manhole Drainage	\$315,000		\$35,000	\$350,000
New Equipment Purchase 972 Loader w/Snow Box, buckets	\$450,000		\$50,000	\$500,000
Replace Equipment #19 Grader w/160M, Wing, Molboard Extension, Angle Plow	\$337,500		\$37,500	\$375,000
Air Traffic Control Tower Repairs – Phase I (Roof & Building Management System)		\$72,160	\$30,925	\$103,085
<b>Total 2015</b>	<b>\$1,102,500</b>	<b>\$72,160</b>	<b>\$153,425</b>	<b>\$1328,085</b>
<b>2016 Projects</b>				
Airfield Sign Upgrade	\$90,000		\$10,000	\$100,000
TXY A Rehab Design and Construction Phase I	\$1,350,000		\$150,000	\$1,500,000
Pavement Maintenance (allowance)		\$35,000	\$15,000	\$50,000

Obstruction Removal, Runway 9 end	\$90,000		\$10,000	\$100,000
<b>Total 2016</b>	\$1,530,000	\$35,000	\$185,000	\$1,750,000
<b>2017 Projects</b>				
RWY 3/21 Extension, TXY C/TXY B Environmental Assessment	\$360,000		\$40,000	\$400,000
TXY A Rehabilitation Construction Phase II	\$1,350,000		\$150,000	\$1,500,000
<b>Total 2017</b>	\$1,710,000		\$190,000	\$1,900,000
<b>2018 Projects</b>				
Air Traffic Control Tower Repairs – Phase II (Tuck Pointing, Exterior Paint, Siding)		\$51,166	\$21,929	\$73,095
RWY 3/21 Extension TXY C/TXY B, Design and Land Acquisition (Approach Protection RWY 3/21)	\$1,350,000		\$150,000	\$1,500,000
Pavement Maintenance (allowance)		\$35,000	\$15,000	\$50,000
<b>Total 2018</b>	\$1,350,000	\$86,166	\$186,929	\$1,623,095
<b>2019 Projects</b>				
Replace Equipment #42 Tandem Dump with Sander Insert	\$360,000		\$40,000	\$400,000
Pavement Maintenance (allowance)		\$35,000	\$15,000	\$50,000
Hangar 104 Repair – Roof & Hangar Doors		\$175,000	\$75,000	\$250,000
Access Road Paving and Repair		\$35,000	\$15,000	\$50,000
<b>Total 2019</b>	\$360,000	\$245,000	\$145,000	\$750,000
<b>2020 Projects</b>				
Pavement Maintenance (allowance)		\$35,000	\$15,000	\$50,000
RWY 3-21 Reconstruction and Extension Phase I (Grading, Paving, Drainage)	\$9,000,000		\$1,000,000	\$10,000,000
Municipal Hangar #2 Repairs–Roof & Hangar Doors		\$245,000	\$105,000	\$350,000
<b>Total 2020</b>	\$9,000,000	\$280,000	\$1,120,000	\$10,400,000
<b>2021 Projects</b>				
Midfield Ramp – Apron Repair	\$630,000		\$70,000	\$700,000
RWY 3/21 Reconstruction & Extension Phase II (Grading, Paving, Drainage)	\$9,000,000		\$1,000,000	\$10,000,000
Arrivals/Departures Building (1)	\$1,800,000		\$200,000	\$200,000
<b>Total 2021</b>	\$11,430,000		\$1,270,000	\$12,700,000
<b>Total ACIP (2014-2021)</b>	\$27,967,500	\$903,826	\$3,494,854	\$32,366,180
<b>Notes:</b>				
(1) ACIP cost represents approximately 51% of total cost of building. The source of funding for the remaining portion of the building cost has yet to be determined.				

*Table 9-5*  
**AIRPORT MASTER PLAN DEVELOPMENT PROGRAM**  
**STAGE 3 (BEYOND 2021)**

Project Description	FAA Funding (90%)	State Funding (70%)	Local Funding (10% match Fed; 30% match State)	Total Estimated Project Cost
<b>Beyond 2021</b>				
Runway 9-27 Reconstruction, East End	\$18,630,000		\$2,070,000	\$20,700,000
Runway 9-27 Reconstruction, West End	\$6,480,000		\$720,000	\$7,200,000
Runway 9-27 Reconstruction, Center Portion	\$20,520,000		\$2,280,000	\$22,800,000
General Aviation Apron	\$8,100,000		\$900,000	\$9,000,000
Relocate/Realign Parallel Taxiway 'C', north	\$4,702,500		\$522,500	\$5,225,000
Relocate/Realign Parallel Taxiway 'C', south	\$3,330,000		\$370,000	\$3,700,000
Reconstruct Taxiway 'D' System, south end	\$2,925,000		\$325,000	\$3,250,000
Taxiway 'B' east extension to Taxiway 'C'	\$1,125,000		\$125,000	\$1,250,000
Construct Air Traffic Control Tower	\$5,000,000			\$5,000,000
Reconstruct Taxiway 'A'	\$16,200,000		\$1,800,000	\$18,000,000
Develop A GPS Based Satellite Precision Instrument Approach to Runway 21				N/A
Taxiway 'B' extension west to Taxiway 'A-3' intersection	\$7,200,000		\$800,000	\$8,000,000
Future Air Cargo Ramp Expansion	\$4,950,000		\$550,000	\$5,500,000
Helicopter hangar facility			\$1,500,000 (1)	\$1,500,000
Terminal taxiway/apron fillet enlargement along Taxiway 'D'	\$1,080,000		\$120,000	\$1,200,000
Site development for Unmanned Vehicles/General Aviation Expansion	\$7,200,000		\$800,000	\$8,000,000
Expanded snow dump area	\$4,050,000		\$450,000	\$4,500,000
Midfield apron expansion	\$6,300,000		\$700,000	\$7,000,000
Environmental Assessment, Taxiway 'F'	\$67,500		\$7,500	\$75,000
Environmental Assessment, Runway extension 9/27	\$202,500		\$22,500	\$225,000
Environmental Assessment, Runway extension 3/21	\$202,500		\$22,500	\$225,000
Construct/realign Taxiway 'F'	\$5,850,000		\$650,000	\$6,500,000
Extension of Runway 9/27 to 11,600'	\$13,500,000		\$1,500,000	\$15,000,000
Extension of Runway 3/21 to 8,000'	\$7,245,000		\$805,000	\$8,050,000
<b>Total Estimated Cost 2009-2020</b>	<b>\$144,860,000</b>		<b>\$15,540,000</b>	<b>\$161,900,000 (2)</b>
<b>Notes:</b> (1) Project is anticipated to be 100% privately funded; it's project cost is not part of the Total Estimate Cost for this column.				
(2) Total Estimated Costs over the period do include the cost for the privately funded helicopter hangar.				