

7.1 Introduction

The analyses completed in previous chapters evaluated development needs at the airport over the next 20 years and beyond, based on forecast activity and operational efficiency. Next, basic economic, financial, and management rationale is applied to each development item of the recommended alternative so that the feasibility of each item contained in the plan can be assessed. The capital program has been organized into five sections. The first section is the 20-year capital needs program (CNP). This section identifies capital projects anticipated to be needed within each planning horizon. The second section is a discussion of various local, state, federal, and private sources of funding for airport improvements. The third section is a twenty-year capital improvement program (CIP). The CIP will identify priority projects, by year, from 2012 to 2032. The CIP estimates are based upon probable levels of FAA, state, and local funding. The resulting twenty-year CIP will thus consist of those projects with the highest priority and the highest probability of receiving funding. The fourth section is an Airport Financial Plan to assist with identifying, planning, and managing airport revenues and operational expenses. The fifth and final section will discuss the economic benefits of the airport.

7.2 Capital Needs Program

Now that the specific needs and improvements for the airport have been established, the next step is to determine a realistic schedule and the associated costs for implementing the plan. This section will examine the overall cost of each item in the development schedule. The recommended improvements are grouped by planning horizon: short term, intermediate term, and long term. The short term planning horizon contains items of highest priority and need. As short term horizon activity levels are reached, it will then be time to program for the intermediate term based upon the next activity milestones. Similarly, when the intermediate term milestones are reached, it will be time to program for the long term activity milestones.

Some development items included in the recommended concept will need to follow demand indicators. For example, the plan includes construction of ramp areas and taxilanes. Based aircraft will be the indicator for additional ramp areas and tie-down facilities. If based aircraft growth occurs as projected, additional ramp areas and the supporting facilities will need to be constructed to meet the demand.

If growth slows or does not occur as projected, ramp expansion projects can be delayed. As a result, capital expenditures will be undertaken as needed, which leads to a responsible use of capital assets. Some development items do not depend on demand, such as projects intended to meet FAA design standards (initial runway/taxiway construction) and pavement maintenance. These types of projects typically are associated with day-to-day operations and compliance, and should be monitored and identified by airport management.

All federally funded airport projects are subject to environmental review. Some projects may be covered by a Categorical Exclusion, while others will require an Environmental Assessment (EA). The conclusions of an EA are generally valid for three years after completion of the study. Any

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projects considered after this timeframe would require updated environmental documentation. The recommended development included in the Capital Needs Program would certainly require an Environmental Assessment or more specifically, an Environmental Assessment Update to the 2002 EA. Future development occurring more than three years after the EA would then require a Categorical Exclusion Checklist.

As a master plan is a conceptual document, implementation of these capital projects should only be undertaken after further refinement of their design and costs through architectural and engineering analyses. Moreover, some projects may require further environmental study such as runway widening and extension. The cost estimates presented in this chapter have been increased by 5 percent to allow for contingencies that may arise on the project. The cost estimates also include 12 percent for design and engineering, and an additional 13 percent for construction, inspection, and project management. Capital costs presented here should be viewed only as estimates subject to further refinement during design. Nevertheless, these estimates are considered reasonable for planning purposes. Cost estimates for each of the development projects listed in the capital program are in 2012 dollars. A 2 ½ percent annual inflation factor has been accounted for in the estimates based on the planned year for development.

The proposed Capital Needs Program (CNP) has been divided into three planning horizons: short, intermediate, and long term. By grouping the projects, the City of Kalispell can accelerate projects that become critical or delay projects that are not priorities.

7.2.1 Airside Development Needs

Airside development facilities are those specifically needed for the departure and arrival of aircraft. At the Kalispell City Airport, these facilities include the runway, taxiways, hazard mitigation, the land required to construct the facilities, and navigational aides (lighting, approach aids, signage, marking, etc.) Specific airside development requirements are identified on **Exhibit 7-1**. Improvements depicted on Exhibit 7-1 are numerically keyed to development items in Tables 7-1, 7-2, 7-3, and 7-4.

7.2.1.1 Land Acquisition and Relocations

Prior to proceeding with any development, approximately 76 acres of land adjoining the airport must be acquired in fee or controlled by the City through easements or other measures. This will likely require the acquisition of the full parcels so as not to leave any uneconomic remnants. Actual land acquisition acreage is estimated to be 114.35 acres. Twenty-seven (27) tracts of land owned by seventeen (17) property owners would be affected by the land acquisition requirements for the recommended alternative.

According to a preliminary relocation plan report, prepared by Olson Land Services in March of 2002 (in conjunction with the 2002 EA), the proposed development would displace five businesses, nine residential units (including three owner-occupied residences, two mobile homes, and four rentals), and require approximately twenty-three property moves. This relocation plan has not been formally updated since that time, but five of the tracts originally required have since been acquired by the City. Acquisition of these five parcels combined with changes of occupancy on some of the other required tracts would warrant an update to the relocation plan. Based on information obtained during this planning study, it is estimated that the proposed development would displace three businesses and five residential units.

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Exhibit 7-1

7.2.1.2 Elimination of Hazards Posed by KGEZ Radio Towers

The 2002 Environmental Assessment included an investigation by the City of Kalispell on options to eliminate the airspace penetrations associated with the KGEZ radio towers. Technical options reviewed included lowering, relocating, or removing the towers. Lowering relies on replacing each tall tower with an array of four substantially shorter towers, called a “paran array.” Relocating the towers could be accomplished by constructing a completely new set of broadcast towers or by sharing an existing radio tower and building one new tower at the same site. Removing the existing towers by outright purchase could be accomplished through a willing sale by the current owner or condemnation. With a willing owner, the station’s license could be down graded, but continue transmitting from a single tower that would open more options for relocation. FAA funding participation will be limited to the costs required for the physical removal or demolition of the structures, less any salvage value received from the materials. The difference in cost between the final purchase price and the estimated value of removal or demolition of the towers must be entirely funded by the City.

The radio station, buildings, and property (and towers) are currently owned by Todd and Davar Gardner who acquired the station and property through a bankruptcy settlement with the previous owner. The Gardner’s are presently leasing the radio station to John Hendricks who controls the operations and programming for the station. According to a Flathead Beacon article by Meyers Reece (February 10, 2011) and informal discussions with the new owner, the Gardner’s are aware of the airspace hazard the tower penetrations present to the airport and the need to lower or remove them. From the Flathead Beacon article, ‘Gardner said he’s spoken with the city about its need to purchase the radio towers in order to address a long-running concern over municipal air space. But city officials have indicated such a move is years away. When it happens, Gardner is confident a deal will be struck that pleases all parties. “We’ve always communicated with them that we’re good neighbors and we’ll be glad to work with them,” Gardner said.’ Active negotiations with the Gardner’s to lower the towers and mitigate the hazard are expected to begin once an official decision by the City Council is made to concur with the Recommended Alternative presented in this Master Plan Update.

7.2.1.3 Reconstruct Runway 13/31 to Runway 14/32 Orientation

The primary development goal for the Kalispell City Airport is the reconstruction of Runway 13/31 to ensure that a future upgrade to ARC B-II design standards can be accomplished as depicted and described in the Site 1, Option B alternative. At its current location, Runway 13/31 can not effectively be upgraded to fully comply with FAA design standards for ARC B-II aircraft. Of primary consideration is meeting increased FAA design standards for Design Group II aircraft for the runway safety area (RSA), object free area (OFA), obstacle free zone (OFZ), and runway protection zone (RPZ) as well as the increased separation standards between the runway and parallel taxiway, aircraft parking areas, and structures. Reconstruction of the runway in a different location and orientation is essentially required to accommodate the increased design standards.

The critical aircraft determination developed in Chapter 4 of this report indicates that the current critical aircraft operating at the Kalispell City Airport is typical of aircraft in Approach Category B, Design Group I, but will likely increase to Approach Category B, Design Group II during the 20-year planning period. Because of this anticipated increase in use by Design Group II aircraft during the 20-year planning period, development at the airport must plan and protect for ARC B-II standards.

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Typically this would mean that all separation standards, safety areas, and object free areas would be planned, designed, and constructed to ARC B-II standards while initial development of paved surfaces may be scaled back to ARC B-I widths. However, in the case of Kalispell City Airport, the FAA will support initial development of Runway 14/32 to full B-II standards. To meet Design Group II standards at the Kalispell City Airport, the current runway alignment and orientation must be shifted to the south and west; and rotated 5.3 degrees in a clockwise direction. These changes are necessary to allow meet FAA requirements for Runway Protection Zones, Runway/Taxiway Object Free Areas, and to mitigate FAR Part 77 airspace obstructions.

Phased construction projects are a more frequent requirement by the FAA to allow for limited annual appropriations to fund more projects during any given year. Under the current funding bill, the FAA will only receive \$4.7 million in State Apportionment funding for the entire state of Montana (compared with \$5.5 to \$6.0 million in prior years). With rising construction costs, it has become a common occurrence for runway improvement projects to cost upwards of \$3 million or more. Because of capital needs required to reconstruct Runway 14/32 to the full B-II width of 75 feet, a phased development plan may be necessary. With a phased development plan, initial development might be planned to meet all ARC B-II design standards except for pavement widths. Reconstruction of Runway 14/32 would initially be done to a width of 60-feet and the minimum recommended length of 4,200-feet. Although the initial pavement width only meets ARC B-I design standards, the grading and clearing for the RSA, ROFA, and ROFZ would be performed to meet the more stringent ARC B-II standards. When the initial development phase is properly designed, a future widening project can easily be accomplished. The future upgrade of Runway 14/32 to the ARC B-II width would likely be accomplished by widening 12.5-feet on both sides of the runway in order to maintain a center crown on the pavement. Pavement edge drains would not be installed during the initial construction phase but would be included on the future widening project.

In a similar manner, the initial runway length could be constructed to 4,200 feet which would accommodate 95 percent of the small airplane fleet with 10 or less passengers. When demand would warrant a longer runway, a runway extension would be constructed to the ultimate length of 4,700 feet. Although this ultimate runway extension is not anticipated during the 20-year planning period, it must be planned for and shown on the Airport Layout Plan. Since there does not appear to be much support for a longer runway at this location, a runway extension is not identified as a capital improvement during the planning period. It would be entirely up to the Sponsor to proceed with the runway extension.

To summarize the airport development strategy, the recommended development approach is to reconstruct Runway 13/31 to a new orientation of 14/32 that fully meets FAA design standards for ARC B-II, including a 75-foot runway width. Runway length would initially be constructed to 4,200 feet with no plan to extend the runway to its ultimate length of 4,700 feet during the 20-year planning period.

7.2.1.4 Reconstruct Parallel and Connector Taxiways

In conjunction with the reconstruction of Runway 14/32 will be the reconstruction of a west-side parallel taxiway and connector taxiways at mid-field and on Runway 14. Taxiway reconstruction will likely be performed in a similar phased manner as the runway construction. If funding limitations require a phased development plan, initial development would plan to meet all ARC B-II design standards except for pavement widths. Construction of the parallel taxiway could initially be done to a width of 25-feet and is planned to run the full 4,200-foot length of the runway. Although

the initial pavement width only meets ARC B-I design standards, taxiway separation and the grading and clearing for the safety area and object free area would be performed to meet the more stringent ARC B-II standards. When the initial development phase is properly designed, a future widening project can easily be accomplished. The future upgrade of the taxiway to the ARC B-II width would likely be accomplished by widening 10-feet on one side of the taxiway. The taxiway would likely be designed with a transverse grade to accommodate widening on one side only. Pavement edge drains would not be installed during the initial construction phase but would be included on the future widening project. **Similar to the runway development approach, the recommended development approach for parallel and connector taxiways is to initially construct to the requirements that fully meet FAA design standards for ARC B-II, including a 35-foot taxiway width. The parallel taxiway would also be initially constructed the full 4,200 feet length of Runway 14/32 and there would be no plan for a taxiway extension during the 20-year planning period.**

7.2.1.5 Extend Runway 32

As discussed in Chapter 4, the minimum recommended runway length to accommodate 95 percent of small airplanes with less than 10 passenger seats at Kalispell City Airport is 4,200 feet; a 600 foot increase in length from the existing runway. The need to lengthen the runway to 4,700 feet to accommodate 100 percent of small airplanes is not supported at this time or anticipated during the 20-year planning period. However, runway length may become an issue if the airport is frequented by higher performance aircraft in the future, especially if unanticipated use is the result of the airport being upgraded to ARC B-II standards. Although an ultimate runway extension from 4,200-feet to 4,700 feet is not anticipated during the 20-year planning period, it must be depicted on the Airport Layout Plan. However, it is not included in the proposed Capital Improvement Plan.

7.2.1.6 Other Improvements

Initial development would include installation of a new, ducted, medium-intensity lighting system for the runway, taxiway markers, new beacon, and segmented circle/wind sock. The lighting system would be installed in a manner that would easily facilitate the relocation of the runway lights and bases under the widening phase. The widening phase would include the relocation of the runway lights and bases and installation of PAPI's on both runway approaches.

7.2.2 Landside Development Needs

Examples of landside facilities include aircraft storage hangars, terminal buildings, aircraft parking aprons, hangar and apron access taxilanes, fuel storage facilities, and vehicle access roads and parking lots. The landside plan for Kalispell City Airport has been developed to efficiently accommodate potential, future aviation demand and provide revenue enhancement possibilities by designating the use of certain portions of airport property for aviation-related and non-aviation related businesses. At the Kalispell City Airport, development constraints surrounding the existing site limit options for landside facilities. The development of landside facilities will be demand-based. In this manner, the facilities will only be constructed if required by verifiable demand. For example, taxilanes to service new areas for private hangar development will only be constructed if new based aircraft owners desire sites to construct enclosed aircraft storage. The landside plan is based on projected needs that can change over time to ensure the orderly development of the airport should this demand materialize.

Chapter 5 – Facility Requirements identified a continuing need to provide aircraft parking ramp and tie-down areas. The existing west-side ramp is currently 70 to 80 percent of capacity and will likely exceed capacity in a few years. The recommended plan will consolidate landside facilities on the west side of the airport where the majority of apron and hangar development has been planned and constructed. Because of the development constraints at the existing site, expansion opportunities are somewhat limited. New apron and hangar spaces would be developed to the south of the existing facilities. A proposed ramp expansion would provide an additional 17 aircraft tie-downs and allow for development of several box hangars and an FBO area on the west side of the ramp. Development in this area would also include construction of new access roads and parking lots. New fueling facilities would also be developed on the west side of the airport near the FBO and ramp expansion. Also depicted on the proposed development plan is a future, short taxiway extension on the north end of the airport which will allow for development of a couple new hangars in this area. Specific development plans for the landside areas at Kalispell City Airport are summarized on Exhibit 7-1.

7.2.3 Phasing of Development

One important consideration with the proposed development of the recommended alternative is the phasing required to construct the improvements with the availability of funding and with the minimum impact to airport users. The FAA will not be able to fund the full development of the airport in one, or even two years. With a total estimated development cost of \$17 million (including land acquisition, hazard mitigation, and full airport development), federal funding will be made available over several years, as funding allows. Prior to funding any development, the FAA will require that the NEPA process be concluded (with a finding of “No Significant Impact”); that all required land necessary for development and protection of the approaches (as depicted on the approved Exhibit “A” Property Map) be held in fee by the City or controlled through easement; and that the radio tower hazards be mitigated. To accomplish this, the City will need to either “front” the costs for tower mitigation and land acquisition or execute contracts that defer payment (or partial payment) to the sellers until after federal reimbursement is processed by the FAA. With significant costs estimated for land acquisition and tower mitigation, reimbursement will likely take three to four years.

Once the required land acquisition and tower mitigation are completed, phased airport development can proceed. The first thing that will need to occur is the relocation of the FBO (Red Eagle Aviation) and support facilities that are presently located on the east side of the airport. Because of the higher safety standards associated with the proposed development, most of the FBOs facilities will have to be demolished and reconstructed or relocated to the new FBO location. The recommended alternative consolidates all land-side support facilities on the west side of the airport and there will be no aircraft access (taxiways) to the runway from the east side of the airport. In order to construct the new runway, relocation of the FBO to its new home will be required in advance of runway construction. Thus, the first phase on future development must be to construct the facilities necessary to support the FBO and minimize disruption to their normal business operations. Facilities required to support the relocation of the FBO to its new location include leased hangar and shop space, office space, ramp and tie-down areas, fueling facilities, access roads, and parking areas. These support facilities along with a portion of the future parallel taxiway needed to connect to existing pavements are the first proposed phase of development at the airport and are

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designated Phase II Improvements. Phase I improvements included the ramp, taxiway, and taxilane project constructed in 2006.

Phase III improvements include construction of Runway 14/32 (75' x 3,600') and the remaining segments of the parallel taxiway. Phase III would also include the runway lighting system, PAPIs, segmented circle, and Windcone.

TABLE 7-1
Capital Needs Program - Short Term Horizon

Item	Project Description	Category	Cost
1	Pavement Maintenance – Phase I Improvements	Maintenance	\$30,000
2	Environmental Assessment Update	Environmental	\$45,000
3	KGEZ Tower Mitigation incl. Consultant Assistance	Hazard Mitigation	\$420,000
4	Land Acquisition (Tract 2+)	Land for Development	\$600,000
5	Land Acquisition (Tract 2E)	Land for Development	\$180,000
6	Land Acquisition (Tract 2FA)	Land for Development	\$225,000
7	Land Acquisition (Tract 2G)	Land for Development	\$115,000
8	Land Acquisition (Tracts 2J, 2JA & 2JB)	Land for Development	\$270,000
9	Land Acquisition (Tract 2M)	Land for Development	\$60,000
10	Land Acquisition (Tract 7C)	Land for Development	\$30,000
11	Land Acquisition (Tract 5BB)	Land for Development	\$60,000
12	Land Acquisition (Tracts 5, 5GC, 5H, 5J & 12B)	Land for Development	\$809,100
13	Land Acquisition (Tract 5HA)	Land for Development	\$85,800
14	Land Acquisition (Tracts 6+, 6D, 6K, 13C, 13F & 13G)	Land for Development	\$1,275,000
15	Easement Acquisition (Tract 1)	Land for Approaches	\$20,000
16	Easement Acquisition (Tract 1A)	Land for Approaches	\$9,000
17	Easement Acquisition (Tracts 12A & 12AA)	Land for Approaches	\$267,500
18	Land Acquisition (Tracts 12+ & 12C)	Land for Approaches	\$323,047
--	Consultant Assistance for Land Acquisition	Land for Development	\$222,230
--	Preliminary Engineering & Preliminary Design	Safety/Demand	\$178,428
19	Phase II Ramp Expansion	Demand	\$897,380
20	Phase II Taxiway Improvements	Safety	\$448,000
21	Phase II FBO Facilities, Access Road & Parking	Demand	\$996,140
22	Phase II Self Service Fuel Facilities	Revenue	\$421,880
23	Relocate Utilities (SS, FM & Gas)	Safety	\$168,750
<i>Total Short Term Development Costs</i>			<i>\$8,127,285</i>

Note: All costs are estimated in 2012 prices

7.2.4 Pavement Maintenance

Although not a particular improvement, pavement maintenance is an important element to a Capital Improvement Plan, particularly with respect to funding. Crack sealing and fog coats should

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generally be performed every five to six years to preserve existing pavements and extend pavement life. Full rehabilitation such as an overlay should generally be performed when a pavement reaches 20 years in age. Pavement maintenance is currently due on the new ramps and taxilanes constructed in 2006 and is planned for the summer of 2012. To meet the five to six year time frame, pavement maintenance would again be required on these pavements in 2017 or 2018. A similar schedule for pavement maintenance will be included for all new pavements proposed in the Capital Improvement Plan.

7.2.5 Short Term Improvements

In the short term, priority projects would include all the preliminary requirements necessary to comply with FAA development requirements and the development necessary to relocate the FBO to its new location. Short term projects include an Environmental Assessment Update, radio tower mitigation, land acquisition necessary for development and approaches, and Phase II airport development. Specific projects are summarized in **Table 7-1**.

7.2.6 Intermediate Term Improvements

In the intermediate term, priority projects are focused on completing initial airport development and construction of the perimeter wildlife fence. The Phase II Airport Improvements project will include construction of Runway 14/32 (75' x 4,200') including the installation of pavement edge drains, runway lighting and signage, and the installation of PAPIs on both runway ends. Phase II will also include the completion of the parallel and connector taxiways (35' wide). The west side ramp and taxilanes constructed in 2006 will also require an overlay during this planning period to prolong the life of the pavements. Specific projects are summarized in **Table 7-2**.

TABLE 7-2
Capital Needs Program - Intermediate Term Horizon

Item	Project Description	Category	Cost
1	Phase III Runway Improvements	Safety	\$2,844,030
2	Phase III Taxiway Improvements	Safety	\$679,005
3	Pavement Rehabilitation – Phase I Improvements	Safety	\$756,000
4	Perimeter Wildlife/Security Fence	Safety	\$351,450
5	Land Acquisition (Tract 3AB)	Land for Development	\$315,000
<i>Total Intermediate Term Development Costs</i>			<i>\$4,945,485</i>

Note: All costs are estimated in 2012 prices

7.2.7 Long Term Improvements

In the long term, priority projects will be limited to pavement maintenance. Long-term projects will also include several pavement maintenance projects. Specific projects are summarized in **Table 7-3**.

TABLE 7-3
Capital Needs Program - Long Term Horizon

Item	Project Description	Category	Cost
1	Pavement Maintenance – Phase I, II & III	Maintenance	\$292,500
2	Pavement Rehabilitation – Phase I, II & III	Maintenance	\$2,370,380
<i>Total Long Term Development Costs</i>			<i>\$2,662,880</i>

Note: All costs are estimated in 2012 prices

7.3 Federal, State, and Local Funding Sources

Financing capital improvements at the airport will not rely solely on the financial resources of the airport. Capital improvement funding is available through various grant-in-aid programs on both the state and federal levels. The following discussion outlines key sources of funding potentially available for capital improvements at Kalispell City Airport.

7.3.1 Federal Grants

Through federal legislation over the years, various grant-in-aid programs have been established to develop and maintain a system of public airports across the United States. The purpose of this system and its federally based funding is to maintain national defense and to promote interstate commerce.

After several years of reauthorizing the Century of Aviation Re-authorization Act, or Vision 100 aviation bill, a new four-year bill was authorized on February 14, 2012. The new bill covers FAA fiscal years 2012, 2013, 2014, and 2015. This bill authorizes \$63.4 billion in Federal funding to the FAA over the next four-years. With a four-year authorization, the FAA has the opportunity to plan for longer term projects versus one-year reauthorizations.

The source for aviation funding was the Aviation Trust Fund. The Aviation Trust Fund was established in 1970 to provide funding for aviation capital investment programs (aviation development, facilities and equipment, and research and development). The Aviation Trust Fund also finances the operation of the FAA. It is funded by user fees, including taxes on airline tickets, aviation fuel, and various aircraft parts.

Funds are distributed each year by the FAA from appropriations by Congress. With this new authorization, eligible general aviation airports will receive up to \$150,000 of funding each year in *Non-Primary Entitlement (NPE)* funds (National Plan of Integrated Airport Systems [NPIAS] - inclusion is required for general aviation entitlement funding). Kalispell City Airport is a NPIAS airport and would qualify for full NPE funding provided it proceeds with the necessary improvements to meet current FAA design standards and mitigate hazards to air navigation. To specifically qualify for the funding, the City of Kalispell will need to mitigate the two KGEZ radio towers and acquire the necessary property required to construct a facility which meets FAA design standards. The costs to remove the towers and acquire the necessary land would be federally reimbursable costs that the City would need to front.

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The remaining AIP funds are distributed by the FAA based upon the priority of the project for which they have requested federal assistance through discretionary apportionments. A national priority ranking system is used to evaluate and rank each airport project. Those projects with the highest priority are given preference in funding. These funds are distributed through the local Airports District Offices for the projects being funded in each district and are termed *State Apportionment* funds.

Under the AIP program, examples of eligible development projects include the airfield, public aprons, and access roads. Additional buildings and structures may be eligible if the function of the structure is to serve airport operations in a non-revenue generating capacity such as maintenance facilities. Whereas entitlement monies are guaranteed on an annual basis, discretionary funds are not assured. Discretionary funds are typically not applicable to general aviation facilities. If the combination of entitlement, discretionary, and airport sponsor match does not provide enough capital for planned development, projects may be delayed. Other supplemental funding sources are described in the following subsections.

One of the key funding changes in the new aviation bill is the reduction of the federal share from 95 percent to 90 percent for most airports. In 2004, when the federal share was increased from 90 percent to 95 percent, competition for these funds increased. The 5 percent local match made it much easier for more for cash-strapped airports to meet their local match requirements and fund projects. It is anticipated that a reverse situation will occur with the increase in local match. The higher local share required to develop projects and acquire equipment is likely to deter some airport sponsors from proceeding with some projects. Important safety projects and needed expansion projects will likely continue but the less needed development and equipment projects are likely to taper off. Another important in change is that the amount of State Apportionment funding for the entire State of Montana has been reduced from \$5.5 - \$6.0 million to \$4.7 million. It is likely that this funding reduction will increase competition for the limited amount of federal funding. The combined affect of these two key changes on funding availability for the Kalispell City Airport is difficult to predict.

7.3.2 State Loans and Grants

In support of the state aviation system, the State of Montana also participates in airport improvement projects. The Airport Loan and Grant Program, which is administered by the MDT Aeronautics Division, can provide low interest loans and grants to eligible airports and aviation facilities in the State of Montana. Any airport that is publicly owned and is public-use is eligible to apply for loans and grants. Projects that are typical of airport improvements usually include maintenance, pavement rehabilitation, and/or construction, lighting, communications and/or infrastructure, terminal or pilots lounge construction, and many other projects.

7.3.2.1 State Grants

Aeronautics grants are eligible to provide funding for up to half of the airport's share of Federal airport (NPIAS) project costs, or, 100 percent of the total airport's cost of non-Federal and/or outside supported costs. Grants are primarily funded by a 2-cent per gallon tax on general aviation fuel. On average, this tax generates approximately \$350,000 of Aeronautics grant funding each year.

7.3.2.2 State Loans

Montana Aeronautics Division Loans can be used to fund up to 100 percent of the airport's share of any airport related project. Loans are repaid over a ten year period, with a fixed interest rate. The interest rate for loans is ½ of the national prime lending rate as reported by the Montana Board of Investments as of the first Monday in January of the applicable calendar year. The amount of funds available for Aeronautics Division loans is also variable but is typically around \$250,000 per year.

Aeronautics grants and loans are awarded on a discretionary basis by the Montana Aeronautics Board. Applications must be submitted by the airport no later than the 4th Friday in November each year. The Aeronautics Board typically meets in late January to review applications and make awards. The Aeronautics Board has complete discretion in determining which projects to award loan and grants to including the amount and type of funding to award. It is advantageous for representatives of the airport to attend the annual loan and grant meeting and provide supplemental information on their project(s). The recent reduction in federal funding from 95 percent to 90 percent will likely make State grant and loans far more competitive among airports. Historically the goal on any large project was to seek half the of the 10 percent local match in grant funds and half in loan funds. Since the local match is essentially doubling, this split is likely very optimistic. It will likely vary year to year as to how much the State can assist on these large projects.

7.3.3 Local Funding

The balance of project costs, after consideration has been given to grants, must be funded through local resources. Kalispell City Airport is owned and operated by the City of Kalispell. Daily operations at the airport are presently managed by a part-time airport manager, employed by the City of Kalispell with guidance provided by an Airport Advisory Council. Normal airport operations are funded through an enterprise fund; no funds are used from the City's general fund to operate the airport. Normal operating revenues are generated from aviation fuel taxes, ground leases, commercial business fees, and related on-airport revenues. Airport improvements, land acquisition, and planning studies have been locally funded through TIF funds and an Urban Renewal Bond 'B' that was issued in 2005.

7.4 Capital Improvement Program

A detailed breakdown of costs associated with Site 1, Option B was previously presented in Chapter 6. Based on these improvements, a Capital Improvement Plan has been established to identify anticipated development costs and engineering costs throughout the 20-year planning period with anticipated funding needs from Federal, State, and Local Sources. **Table 7-4** summarizes the Capital Improvement Plan for the Kalispell City Airport for the 20-year planning period.

One of the requirements that the FAA will have prior to funding or reimbursing any development for the Kalispell City Airport is that the City will have mitigated the KGEZ radio tower penetrations and acquired all of the land needed for development of the improvements and protection of the approaches, as depicted on the approved Exhibit "A" Property Map. Although the removal/demolition of the towers and the cost of acquiring the land are eligible for federal funding, the FAA will not participate in funding any land or tower mitigation until the City has controlling interest in all of the required land and the airspace obstructions caused by the radio towers are mitigated. It is an all or nothing requirement. The only work that can be federally funded prior to

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meeting these two criteria is the update to the Environmental Assessment. Thus it will be paramount to the success of this project to proceed with all land acquisition efforts and tower mitigation negotiations immediately following the National Environmental Protection Act (NEPA) process. The NEPA process will include the preparation of the Environmental Assessment Update which will need to lead to a Finding of No Significant Impact (FONSI). Only following the FONSI determination can the Sponsor enter into active land acquisition efforts with the needed property owners.

There will be challenges for the City as a result of these requirements. The City will likely need to fund the costs associated with land acquisition and tower mitigation up front in order to demonstrate to the FAA that they have controlling interest in these properties and have either removed the tower penetrations or can demonstrate the legal authority to do so. Again, it is important to convey that this is an all or nothing requirement; even one missing piece of required property could derail or postpone reimbursement of any costs the City may have incurred on land, tower mitigation, and prior development. Only after the City provides the FAA with a legal opinion of clear title for all required properties and the City has completed the removal of the radio tower penetrations will the FAA make the first of multiple grant offers for reimbursement of these costs. The FAA has also indicated that they will not likely be able to fund the reimbursement of all of the land acquisition costs and tower mitigation costs in one year. Rather, reimbursement will have to stretch out over several years and will be dependent on availability of Federal funds.

In addition, the costs directly associated with the relocation of the FBO (construction of new hangar, office, and parking areas) will not be eligible for federal reimbursement; the ramp and taxiway expansion are eligible items however. Since these facilities would be City-owned for the purpose of revenue generation at the airport, the FBO would not be responsible for providing them. The City will need to consider options to fund this work as the relocation of the FBO to the west side of the airport is an essential component needed prior to reconstruction of the runway. Although the costs required to install a new fueling facility are eligible costs, they cannot be funded (AIP requirement) until the airside improvements (runway and taxiway) are completed. Therefore, the City will also need to “front” the cost for this work but will ultimately be reimbursed at a later date.

The reimbursement schedule presented in **Table 7-4** has been developed with input from the FAA and shows the reimbursement of land acquisition costs extending from 2014 through 2016. Also included in 2014 is the reimbursement of prior professional services and the Phase I Ramp Expansion project completed in 2006. The intent in 2014 is to leverage as much federal reimbursement from past expenditures to assist in contractual land obligations and construction of the Phase II FBO facilities. This schedule is aggressive and is entirely dependent on obtaining a FONSI in the Fall of 2012 so that land acquisition negotiations can begin in late 2012. An aggressive land acquisition schedule will be needed to secure all of the required properties by the spring of 2014 in order to receive the first FAA grant offer in 2014. If there is even one difficult landowner that stalls the process, the timing of FAA reimbursement funding will need to slide accordingly. Negotiations with the radio station owner to remove the towers should advance in conjunction with the Environmental Assessment however; as soon as the City Council makes a decision to proceed with the recommended development on the Airport Layout Plan. Efforts to remove the tower obstructions would not require completion of the NEPA process unless the towers will be relocated to another location and partially funded with federal grant funds. Assuming the towers will simply be removed or demolished, the City should proceed with negotiations and plans to complete this work immediately.

Table 7-4

7.5 Airport Financial Plan

7.5.1 Annual Operating Expenses

Airport operating funds are used to cover the day-to-day operation of the airport facility. Sufficient funds must be available to pay for normal operating expenses and ensure that the facilities and operations are in compliance with FAA rules and regulations. Major drivers for this category are field maintenance, electricity, wages, and operating supplies. It is also important to ensure that sufficient funds are planned for to properly maintain both the property and infrastructure, including vehicles, equipment, airport buildings, and structures. Anticipated operating and maintenance expenses include salaries and wages, repair and maintenance, utilities, oil and gas, insurance, and debt obligation.

7.5.1.1 Salaries and Wages

Kalispell City Airport presently has a half-time airport manager that is on-call 24-hours per day, 7-days per week. The person serving in this role, presently splits his time equally between airport management duties and other City responsibilities that are not tied to the airport. This airport manager earns an annual salary of \$40,793 for his airport management responsibilities which is paid for directly out of the Airport Enterprise Fund. There is also a seasonal employee budgeted into the airport operations fund that is budgeted at \$3,267. Total salaries and wages budgeted for fiscal year 2011-2012 is \$44,060.

7.5.1.2 Operations

Operations costs include expenses for supplies, postage, dues, training, data processing from City staff, and administrative transfer. Operations costs for the airport have varied between \$12,000 and \$14,000 per year. Budget cuts have been planned for airport operations and the current budget for these expenses is \$8,545.

7.5.1.3 Utilities

Electrical costs for runway lighting and other NAVAIDs are budgeted at \$1,500 for fiscal year 2011-2012. Electrical costs typically fluctuate and have run \$1,372 and \$1,249 for the past two years. The only other normal utility costs are telephone, cell phone, and internet services for the airport manager's office at the airport. These costs are budgeted at \$1,000 annually and have historically come in pretty close to this number. It is not likely that the proposed development will impact utility costs very much. Much of the newer runway lighting systems and NAVAIDs are more efficient than those currently in use so there is likely to be some offset in energy use caused between the installation of more devices versus the higher efficiency of the new devices. The initial utility budget for utilities will be \$2,500 annually.

7.5.1.4 Repair and Maintenance

Annual repair and maintenance expenses are budgeted each year. These expenses typically include contract services for repairs, contract services for snow removal, materials for repairs, equipment rental for repairs and maintenance, and maintenance provided by the City of Kalispell Public Works Department. Repair and maintenance costs for the airport fluctuate year to year but have ranged

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between \$14,000 and \$22,000 annually over the last two years. The 2011-2012 fiscal year has a budget of \$19,800 for repairs and maintenance.

7.5.1.5 Insurance

Property and general liability insurance carried for the airport has been costing between \$6,000 and \$7,000 per year. The current budget has projected a cost \$5,000 for fiscal year 2011-2012.

7.5.2 Annual Revenue

The Kalispell City Airport derives all of its revenue at the airport from a number of different sources. These include commercial fees, tie-down fees, hangar leases, ground leases, FBO lease, fuel royalty, and interest on investment earnings.

AIP grant assurances require that the Sponsor “will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for which a grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.”

To comply with this grant assurance, a review of current airport fees and lease rates should be performed to ensure that the airport is charging fees consistent with other airports in the area. Continued periodic review of fees and lease rates should be performed every few years to ensure that the airport is current with similar charges in the region.

7.5.2.1 Commercial Fees

User and business fees are one of several revenue sources generated directly on through operations at the Airport. The combined revenue from user and business fees are budgeted to be \$7,200 for the current fiscal year. The airport needs to ensure that new development locations for business are available at the airport to continue growth in this segment.

7.5.2.2 Ramp (Tie-Down) Fees

A parking fee is charged to aircraft using the main apron for parking. Tie-down fees are not nearly as significant a revenue source as some of the other fees at the airport. Tie-down fees are budgeted at \$3,500 for the current fiscal year. A review of these fees should be undertaken and increased to the market average. These increased fees could be used to offset the cost of construction of the expanded apron project.

7.5.2.3 Hangar Leases

Several of the hangars on airport property are owned and leased by the City of Kalispell. Most of the hangars owned and leased by the City were acquired during land acquisition in an effort to eliminate “through the fence” operations. The airport is currently leasing dry hangar space to several tenants. These hangar leases are budgeted at \$12,000 for the current fiscal year. This is another important revenue source for the airport and it is important that the airport continue to maintain occupancy of these hangars.

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7.5.2.4 Ground Leases

The airport also receives a significant revenue stream from ground leases. The airport is currently leasing ground space to private hangar owners and the Hilton Garden Inn for its parking lot. Private hangar ground leases are budgeted at \$15,600; the Hilton ground lease is budgeted at \$11,385 for the current fiscal year. These ground leases combine for a total, budgeted revenue of \$26,985. As new private hangar development increases, this revenue source will continue to grow. It is important that the airport continue to develop new areas for hangar growth as demand warrants.

7.5.2.5 FBO Lease – Red Eagle Aviation

One of Kalispell City Airport's main revenue sources is the lease to Red eagle Aviation. This lease includes use of the buildings, the ramp and tie-down areas, and the fueling system. The FBO Business Lease to Red Eagle Aviation is budgeted to be \$17,000 for current fiscal year.

7.5.2.6 Fuel Flowage Royalty

As indicated previously, the Kalispell City Airport receives a royalty of \$0.06 per gallon from fuel flowage at the airport. This revenue source is budgeted to generate approximately \$5,500 for the current fiscal year. The existing fuel system, although owned by the City, is operated by Red Eagle Aviation under specific terms of their FBO Lease contract. Although the City could, at some future time, take over the operation of the fuel system to generate more profit from fuel sales, the increased revenue is not likely to be significant enough to outweigh the oversight and daily operations of the facility.

7.5.2.7 Interest Income

Interest income is generated from the Airport TIF fund which is budgeted at \$16,500 for the current fiscal year. Interest earned from this fund will vary year to year as projects are developed that use the funds from TIF.

7.5.2.8 Landing Fees

Landing fees are another minor and inconsistent revenue component occasionally assessed at some general aviation airports. These fees are rarely charged at non-towered airports due to the difficulty in monitoring and collecting the fees. Since there is no current program for charging and collecting landing fees, it will not be planned for in the annual budget. This item may be a potential source of additional revenue however, and should be explored in greater depth.

7.5.3 Annual Operating Budget

A projected annual operating budget for the next six years has been prepared based on the estimated operational expenses and revenues described above. **Table 7-5** provides a detailed look at the airports anticipated cash flow during a common year. This budget does not include any expenses or revenues associated with capital improvements or Federal and State grant revenue streams. Neither does it include any depreciation expenses of past improvements and infrastructure acquisition; an accounting requirement for an accrual based accounting system.

The current budget shows that the Airport Enterprise Fund will be operating in with a profit ranging from \$8,780 to \$10,400 during this time frame. The Enterprise Fund is intended to cover the general operating and maintenance expenses associated with operating the airport. This would include

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minor repair and improvement costs to maintain the facility. The Enterprise Fund does not generate enough revenue to fund the major improvement and land acquisition projects established in the Capital Improvement Plan. The local match required by the City of Kalispell for these projects would be funded through TIF funds and the Urban Renewal Bond.

TABLE 7-5
Annual Operating Budget

Budget Item	Year					
	2012	2013	2014	2015	2016	2017
Revenues						
Commercial Fees	\$7,200	\$7,500	\$7,800	\$8,100	\$8,400	\$8,700
Tie-Down Fees	\$3,500	\$3,600	\$3,700	\$3,800	\$4,000	\$4,200
Hangar Leases	\$12,000	\$12,500	\$13,000	\$13,500	\$14,000	\$14,600
Hangar Ground Leases	\$15,600	\$16,200	\$16,800	\$17,500	\$18,200	\$18,900
FBO Lease - Red Eagle Aviation	\$17,000	\$17,700	\$18,400	\$19,100	\$19,900	\$20,700
Ground Lease - Hilton	\$11,385	\$11,800	\$12,300	\$12,800	\$13,300	\$13,800
Fuel Flowage Royalty	\$5,500	\$5,700	\$5,900	\$6,100	\$6,300	\$6,600
Investment Earnings	<u>\$16,500</u>	<u>\$17,200</u>	<u>\$17,900</u>	<u>\$18,600</u>	<u>\$19,300</u>	<u>\$20,100</u>
<i>Total Revenue</i>	<i>\$88,685</i>	<i>\$92,200</i>	<i>\$95,800</i>	<i>\$99,500</i>	<i>\$103,400</i>	<i>\$107,600</i>
Expenses						
Salaries & Wages	\$44,060	\$45,800	\$47,600	\$49,500	\$51,500	\$53,600
Utilities	\$2,500	\$2,600	\$2,700	\$2,800	\$2,900	\$3,000
Operations	\$8,545	\$8,900	\$9,300	\$9,700	\$10,100	\$10,500
Repair and Maintenance	\$19,800	\$20,600	\$21,400	\$22,300	\$23,200	\$24,100
Insurance	<u>\$5,000</u>	<u>\$5,200</u>	<u>\$5,400</u>	<u>\$5,600</u>	<u>\$5,800</u>	<u>\$6,000</u>
<i>Total Expenses</i>	<i>\$79,905</i>	<i>\$83,100</i>	<i>\$86,400</i>	<i>\$89,900</i>	<i>\$93,500</i>	<i>\$97,200</i>
Operating Budget Surplus	\$8,780	\$9,100	\$9,400	\$9,600	\$9,900	\$10,400

One of the early challenges the City will face is how to fund the required land acquisition. Since the FAA will not reimburse for any costs other than the Environmental Assessment until all the land is under contract, the City will need a detailed plan on how they will acquire the necessary properties within the planned time frame. With seventeen different property owners, there will likely be a wide range of expectations regarding the timing of compensation for land purchases. Ideally, compensation would be tied to the timing of available grant funding (ie. the contract for the purchase of the land would include a schedule for payment). However, there may be circumstances through land acquisition negotiations that require compensation at the time of contract. It will be important for the City to have a plan for these unforeseen circumstances. In addition, there will be professional

services fees for land acquisition assistance, attorney fees, appraisal fees, title fees, etc. that will be needed during the process. Although these are reimbursable costs at the time the land is reimbursed, payment for these services will be required when the work is performed. As indicated earlier in this chapter, there may also be some funding challenges for the construction of new FBO facilities on the west side of the airport. Since the FAA will not be able to fund the specific facilities used exclusively by the FBO, an alternative funding source such as the TIF may be required. These are all important considerations that will need future resolution as the City moves into land acquisition and development.

7.6 Conclusions

The Kalispell City Airport has significant improvement needs in the near, intermediate, and long term future to improve the existing airport in a manner that will comply with FAA Design Standards and be eligible for federal funding assistance. Most of these improvements would be eligible for Federal funding at a 90 percent federal share. With the foresight of the City of Kalispell planners and policy makers, the funding available through the TIF will provide the local resources needed to proceed with the acquisition of land and the phased development proposed in the Capital Improvement Plan.

Proposed development at the Kalispell City Airport is heavily front-loaded over the 20-year planning period with the majority of the costs coming in the first six years. All of the initial costs for land acquisition and tower mitigation will likely need to be fronted by the City early in the process. Only after the tower obstructions are mitigated and all of the required land is under the control of the City will the FAA offer any grant funding to reimburse these costs. To accomplish these goals, as proposed in the Capital Improvement Program, an aggressive schedule and effort by both the City and its consultants will be needed to complete the NEPA process, negotiate the removal of the radio towers, and acquire all of the necessary land by the spring of 2013.

