McMinnville Municipal Airport
Airport Layout Plan Report

Chapter Six

Financial Management and Development Program

CHAPTER SIX
FINANCIAL MANAGEMENT AND DEVELOPMENT PROGRAM

The analyses conducted in the previous chapters have evaluated airport development needs based on forecast activity and the associated facility requirements. One of the most important elements of the master planning process is the application of basic economic, financial and management rationale so that the feasibility of implementation can be assured. The amount of local and outside funding (state, federal, etc.) that will be available during the current twenty-year planning cannot be guaranteed. In cases when the overall capital needs of an airport exceed available funding, projects will be deferred until funding can be obtained. In this situation, it is particularly important to establish and maintain priorities so that completion of the most essential improvements is assured.

Historically, the primary source of funding for major capital projects at the airport has been federal aviation trust fund monies with local matching funds provided by the City. Hangar construction, which has not been eligible for FAA funding in the past, has typically been funded privately at MMV. Utility improvements at the airport are also not typically eligible for FAA funding and have been locally funded.

The maintenance of airfield pavements ranges from very minor items such as crack filling to fog seals or patching. Minor pavement maintenance items such as crackfilling are not included in the capital improvement program, but will need to be undertaken by the airport sponsor on an annual or semi-annual basis. The Pavement Management and Maintenance Program (PMMP) managed by the Oregon Department of Aviation (ODA) provides funding assistance for airfield pavement maintenance on established multi-year cycles. This program is intended to preserve and maintain existing airfield pavements in order to maximize their useful lives and the economic value of the pavement. As noted earlier, several short-term pavement maintenance projects are identified for MMV in the current PMMP, which will require local matching funds.

AIRPORT DEVELOPMENT SCHEDULE AND COST ESTIMATES

The analyses presented in Chapters Four and Five, described the airport's overall development needs for the next twenty years. Estimates of project costs were developed for each project based on 2004 dollars. A 30 percent contingency overhead for engineering, administration, and unforeseen circumstances has been included in the estimated component and total costs. In future years, as the plan is carried out, these cost estimates can continue to assist management by adjusting the 2004-based figures for subsequent inflation. This may be accomplished by converting the interim change in the United States Consumer Price Index (USCPI) into a multiplier ratio through the following formula:

$$\frac{X}{I} = Y$$

Where:

X = USCPI in any given future year
Y = Change Ratio
I = Current Index (USCPI)

USCPI
189.1
(1982-1984 = 100)
May 2004

Multiplying the change ratio (Y) times any 2004-based cost figures presented in this study will yield the adjusted dollar amounts appropriate in any future year evaluation.

The following sections outline the recommended development program and funding assumptions. The scheduling has been prepared according to the facility requirements determined earlier. The projected staging of development projects is based upon anticipated needs and investment priorities. Actual activity levels may vary from projected levels; therefore, the staging of development in this section should be viewed as a general guide. When activity does vary from projected levels, implementation of development projects should occur when demand warrants, rather than according to the estimated staging presented in this chapter. In addition to major development projects, the airport will require regular facility maintenance.

A summary of development costs during the twenty-year capital improvement plan is presented in **Table 6-1**. The twenty-year CIP is divided between short-term and long-term projects. The table provides a listing of the major capital projects included in the twenty-year CIP, including each project's eligibility for FAA funding.

The short-term phase of the capital improvement program includes the highest priority projects recommended during the first five years. Long-term projects are expected to occur beyond the next five years, although changes in demand or other conditions could accelerate or slow demand for some improvements. As with most airports, pavement related improvements represent the largest portion of CIP needs at MMV during the current planning period.

Short Term Projects

Short-term projects at MMV include expansion of the terminal apron (2004) to accommodate the growing itinerant business aircraft parking demand. Several pavement maintenance or rehabilitation projects are scheduled in the short-term period for Runway 4/22, the parallel taxiway and various apron areas. A project is recommended to upgrade the west hangar area access taxiway (widen to 35 feet with standard shoulders). Additional hangar taxilanes are also planned for the west T-hangar area.

Beginning in 2005, several short-term projects will potentially be combined into a single project (for design, environmental and funding purposes). These include the construction of a new access taxiway to the west hangar area; a new infield access taxiway and parallel taxiway for Runway 17/35; and reconstruction of Runway 17/35 to ADG II design standards. The actual construction of the projects will depend on funding and clearing any environmental issues. The proposed west hangar taxiway will cross an existing drainage that will require a culvert or bridge (to be determined during design). Environmental evaluations associated with these projects are expected to focus primarily on the potential impacts and any necessary mitigation, to the drainage and potential wetland areas that are located within the affected project area.

The reconstruction of Runway 17/35 is the most costly short-term project; the runway is in poor condition and will require reconstruction, rather than a simple overlay. A replacement infield taxiway is recommended for construction in conjunction with the runway reconstruction project and the existing infield taxiway (D) will be permanently closed.

The first phase of the east landside development is included as a short-term project. This project involves site grading east of the terminal area and the initial development of hangar sites and taxiway access. The area is intended to initially accommodate future demand for conventional

hangars. Demand for new T-hangar space will continue to be met in the west hangar area until it reaches full capacity.

Long Term Projects

The majority of long-term projects at MMV involve pavement preservation, resurfacing, reconstruction or new construction associated with expanded landside facilities. This includes periodic slurry seals for all airfield pavements on a five-year cycle. Asphalt overlays will be required for most existing pavements within the twenty-year planning period.

Other long-term projects (beginning in six years) include:

- West hangar area taxilanes
- Replacement general aviation terminal/FBO building and terminal area roadway/vehicle parking reconfiguration
- MIRL and PAPI for Runway 17/35
- East Apron and Hangar Area Expansion
- Airport fencing w/ electronic gates
- Runway 4/22 and Taxiway A narrowing to C/D-II standards[33]

[33] Decision on narrowing will be made based on cost-benefit analysis conducted at the time the next major reconstruction or rehabilitation project is required.

TABLE 6-1:
20-YEAR CAPITAL IMPROVEMENT PROGRAM
2004 TO 2023

Project	Qty.	Unit	Unit $	Total Cost*	FAA Eligible	Local
Short Term Projects (Years 1-5)						
2004						
Terminal Apron Expansion	1	LS	-	$382,000	$362,900	$19,100
Subtotal - Year 1				**$382,000**	**$362,900**	**$19,100**
2005						
West Hangar Taxiway w/Culvert; Environmental	1	LS	-	$617,710	$586,825	$30,886
Reconstruct Runway 17/35 (4,400x75')	1	LS	-	$2,001,958	$1,901,860	$100,098
Property Acquisition (Rwy 35 RPZ)	12	acres	$5,000	$85,000	$76,500	$8,500
New Infield Access Taxiway (1,500x35') w/ Reflective Edge Markers	1	LS	-	$450,190	$427,681	$22,510
Rwy 17/35 Parallel Txy w/ Edge Markers (2,700x35')	1	LS	-	$1,112,410	$1,001,169	$111,241
Subtotal - Year 2				**$4,267,268**	**$3,994,034**	**$273,234**
2006						
Runway 4/22 Fog Seal w/ New Markings	93,833	SY	$0.60	$96,300	$91,485	$4,815
Taxiway A (4/22 Parallel) Fog Seal	41,389	SY	$0.60	$24,833	$23,592	$1,242
East Terminal Apron Fog Seal	5,099	SY	$0.60	$3,059	$2,906	$153
Subtotal -Year 3				**$124,193**	**$117,983**	**$6,210**
2007						
East GA Tiedown Apron (Reconstruct East Sect.)	1,944	SY	$30.00	$58,333	$55,417	$2,917
East GA Tiedown Apron (Fog Seal West Sect.)	2,917	SY	$0.60	$1,750	$1,663	$88
West Terminal Apron (Reconstruct)	9,350	SY	$30.00	$280,490	$266,466	$14,025
East Terminal Area Site Grading (6 acres)	29,040	SY	$1.00	$29,040	$27,588	$1,452
East Corporate Hangar Apron/Taxiway Access (Ph.1)	3,583	SY	$30.00	$107,500	$102,125	$5,375
Overlay/Widen West Hangar Access Taxiway	1,613	SY	$18.00	$29,036	$27,584	$1,452
NW Terminal Area Hangar Taxilanes Fog Seal	1,151	SY	$0.60	$691	$656	$35
Subtotal - Year 4				**$506,840**	**$481,498**	**$25,342**
2008						
West Hangar Taxilanes Fog Seal	19,093	SY	$0.60	$11,456	$10,310	$1,146
West Hangar Area Taxilanes (new)	3,333	SY	$30.00	$100,000	$90,000	$10,000
Taxiway B&C (Terminal Apron Access) Fog Seal	2,470	SY	$0.60	$1,482	$1,334	$148
Subtotal - Year 5				**$112,938**	**$101,644**	**$11,294**
Total Short Term Projects				**$5,393,239**	**$5,058,059**	**$335,179**

Project	Qty.	Unit	Unit $	Total Cost*	FAA Eligible	Local
Long Term Projects (Years 6 - 20)						
GA Tiedown Apron Expansion (Phase 1)	5,556	SY	$30.00	$166,667	$150,000	$16,667
GA Terminal Expansion/Replacement	3,000	SF	$100.00	$325,200	$0	$325,200
Terminal Area Roadway Reconfiguration	500	LF	$50.00	$50,200	$45,180	$5,020
Flood Lighting - Terminal Apron	4	ea	$7,500	$30,000	$27,000	$3,000
MIRL - Runway 17/35	4,400	LF	$40.00	$176,000	$158,400	$17,600
Precision App. Path Indicators (PAPI) Rwy 17 & 35	2	ea	$60,000	$120,000	$108,000	$12,000
Lighted Wind Sock (Rwy 35)	1	ea	$10,000	$10,000	$9,000	$1,000
Terminal Apron (PCC Section) Joint Replacement	6,511	SY	$3.00	$19,533	$17,580	$1,953
East T-Hangar Taxilanes (new)	7,667	SY	$30.00	$233,000	$209,700	$23,300
Fencing Airport Perimeter w/ 4 vehicle gates	16,500	LF	$15.00	$287,500	$258,750	$28,750
Flood Lighting - East Apron	4	ea	$6,000	$24,000	$21,600	$2,400
Terminal Apron (West Sections) Slurry Seal 2010)	9,350	SY	$3.60	$33,659	$30,293	$3,366
West Hangar Taxilanes Slurry Seal (2010)	22,425	SY	$3.60	$80,730	$72,657	$8,073
Rwy 17/35 Slurry Seal, Visual Markings (2011)	37,056	SY	$3.60	$145,400	$130,860	$14,540
West Hangar Access Taxiways - Slurry Seal (2011)	1,620	SY	$3.60	$5,832	$5,249	$583
GA Tiedown Apron Slurry Seal (2011)	4,850	SY	$3.60	$17,460	$15,714	$1,746
Rwy 4/22 Slurry Seal, PIR Markings (2011)	93,833	SY	$3.60	$377,800	$340,020	$37,780
Taxiway A Slurry Seal (2011)	41,389	SY	$3.60	$149,000	$134,100	$14,900
Terminal Apron (East Sections) Slurry Seal (2012)	5,099	SY	$3.60	$18,357	$16,521	$1,836
GA Tiedown Apron Expansion (Phase 2)	4,556	SY	$30.00	$136,667	$123,000	$13,667
West Hangar Taxilanes Overlay (east/center taxilanes)	8,800	SY	$12.00	$105,600	$95,040	$10,560
Taxiway B&C Slurry Seal (2014)	2,470	SY	$3.60	$8,892	$8,003	$889
East Corporate Hangar Apron/Taxiway Access (Ph.2)	2,083	SY	$30.00	$62,500	$56,250	$6,250
Terminal Apron (West Sections) Slurry Seal 2015)	9,350	SY	$3.60	$33,659	$30,293	$3,366
West Hangar Taxilanes Slurry Seal (2015)	22,425	SY	$3.60	$80,730	$72,657	$8,073
West Hangar Access Taxiways - Slurry Seal (2016)	4,800	SY	$3.60	$17,280	$15,552	$1,728
Rwy 17/35 Slurry Seal, Visual Markings (2016)	37,056	SY	$3.60	$145,400	$130,860	$14,540
GA Tiedown Apron Slurry Seal (2016)	10,400	SY	$3.60	$37,440	$33,696	$3,744
East Airport Access Road (around Rwy 22 RSA)	3,800	LF	$25.00	$120,200	$108,180	$12,020
Terminal Apron (East Sections) Slurry Seal (2017)	5,099	SY	$3.60	$18,357	$16,521	$1,836
Taxiway A Slurry Seal (2017)	41,389	SY	$3.60	$149,000	$134,100	$14,900
Rwy 4/22 Slurry Seal, PIR Markings (2017)	93,833	SY	$3.60	$377,800	$340,020	$37,780
Taxiway B&C Slurry Seal (2019)	2,470	SY	$3.60	$8,892	$8,003	$889
Terminal Apron (West Sections) Slurry Seal (2020)	9,350	SY	$3.60	$33,659	$30,293	$3,366
West Hangar Access Taxiways - Slurry Seal (2021)	4,800	SY	$3.60	$17,280	$15,552	$1,728
GA Tiedown Apron Slurry Seal (2021)	14,960	SY	$3.60	$53,856	$48,470	$5,386
Rwy 17/35 Slurry Seal, Visual Markings (2021)	37,056	SY	$3.60	$145,400	$130,860	$14,540
Reconstruct Parallel Taxiway A (35')	28,970	SY	$45.00	$1,328,650	$1,195,785	$132,865
Taxiway A MITL (replacement system)	5,500	LF	$40.00	$220,000	$198,000	$22,000
Reconstruct Rwy 4/22, Exits, Drainage (5,420x100')	69,250	SY	$45.00	$3,141,250	$2,827,125	$314,125
Rwy 4/22 HIRL (replacement system)	5,500	LF	$50.00	$275,000	$247,500	$27,500
Relocate 4/22 Guidance Signs & PAPI	1	LS	$75,000.00	$75,000	$67,500	$7,500
Total Long Term Projects				**$8,862,849**	**$7,683,884**	**$1,178,965**
TOTAL SHORT & LONG TERM PROJECTS				**$14,256,087**	**$12,741,943**	**$1,514,144**
* Project costs include 30% engineering and contingency.						

FINANCING OF DEVELOPMENT PROGRAM

Federal Grants

A primary source of potential funding identified in this plan is the Federal Airport Improvement Program (AIP). As proposed, approximately 89 percent of the airport's 20-year CIP will be eligible for federal funding. Funds from this program are derived from the Aviation Trust Fund, which is the depository for all federal aviation taxes collected on such items as airline tickets, aviation fuel, lubricants, tires, aircraft registrations, and other aviation-related fees. These funds are distributed under appropriations set by Congress to all airports in the United States that have certified eligibility through the National Plan of Integrated Airport Systems (NPIAS). The funds are distributed through grants administered by the Federal Aviation Administration (FAA).

As a NPIAS airport, MMV is eligible AIP to receive discretionary grants and general aviation entitlement grants. Some changes in funding levels and project eligibility were included in the current AIP legislation (extending through FY 2007). FAA funding levels have been increased from 90 percent to 95 percent. The general aviation entitlement funding level is established up to $150,000 per year, with a maximum rollover of four years. Projects such as hangar construction or fuel systems, which have not traditionally been eligible for funding are now eligible, although the FAA indicates that this category of project would be funded only if there were no other higher priority project needs at a particular airport. The future availability and levels of federal participation of the GA non-primary entitlement funding is dependent on congressional reauthorization and may change during the planning period. However, these grants have become a very significant source of FAA funding for general aviation airports. Discretionary grants are also available to fund larger projects that require additional funding. The FAA will not participate in vehicle parking, utilities, building renovations or projects associated with non-aviation developments.

The constraints of AIP funding availability will dictate in large part, the actual schedule for completing airport improvement projects through the planning period. As a result, some projects included in the twenty-year CIP may be deferred beyond the twenty-year time frame.

State Funding

The Oregon Department of Aviation (ODA) manages a pavement management and maintenance program (PMMP) to enable consistent investment in airfield pavements. The program funds pavement maintenance and associated improvements (crack filling, repair, sealcoats, etc.), which

have not traditionally been eligible for FAA funding. The PMMP may also be expanded to include pavement overlays. ODA also provides limited funding assistance through its Financial Assistance to Municipalities (FAM) grant program. FAM grants are available for amounts up to $25,000 per year, with varying levels of local match required.

Financing the Local Share of Capital Improvements

As currently defined, the locally funded portion of the CIP is approximately 11 percent. For local airport sponsors, one of the most challenging aspects of financial planning is generating enough revenue to match available state or federal grants for large projects. As noted earlier, FAA AIP grants usually represent the single largest source of funding for major capital projects. However, the local match level for AIP grants was reduced to 5 percent in the current legislation (currently in place through FY 2007).

As currently defined, the local share for projects included in the twenty year planning period is estimated to be just over $1.5 million. The general aviation terminal replacement has an estimated cost of $325,000 that would likely require local funding. This type of project would also meet ODA's criteria for FAM grants. New hangar construction at MMV is expected to continue being privately funded by tenants.

The ability of the City to work with airport tenants and users to fund future airport improvement projects offers great potential for MMV. The current and historic relationship between MMV and Evergreen International is long-established and unique in its complexity. The proposal made by Evergreen in 2004 to contribute private funds toward airport improvement projects reflects the potential value of a public-private partnership that can produce significant benefits for both parties and the entire community.