CHAPTER F.

Implementation Plan

INTRODUCTION. The Implementation Plan is intended to establish a strategy that implements the necessary improvements to satisfy the forecast aviation demand at Olympia Regional Airport, while also providing guidance on what will be required to demonstrate the Airport Sponsor's ability to fund the identified improvement projects. The overall concept is to maximize the opportunities to receive federal and state grants, within the context of, and in recognition of, the amount of local funds available for capital needs.

Implementation Schedule and Project List

A list of capital improvement projects has been assembled from the facility requirements documentation previously presented. The project list has been coordinated with airport management and the FAA. The projects have been placed into three phases: short-range (0-5 years); intermediate-range (6-10 years); and long-range (11-20 years). The short-range projects are listed in priority order by year; the intermediate- and long-range projects are listed in priority order without year designators. Olympia Regional Airport's phased project list and associated costs are presented in Tables F1, F2, and F3 in this chapter. It should be noted that, as soon as this long-range planning document is published, the implementation schedule starts to be out of date, and will always differ to some degree with the Airport's priorities list in the coming years.

Cost Estimates

Cost estimates for individual projects have been prepared for improvements that have been identified as necessary during the 20-year planning period. Facility costs have been formulated using unit prices extended by the size of the particular facility and tempered with specific considerations related to the region, the Airport, and the development site. That being said, these estimates are intended for planning purposes only and should not be construed as construction cost estimates, which can only be compiled following the preparation of detailed



engineering plans and specifications. All cost estimates presented in this report are based on 2011 costs.

The estimates are presented by the total cost for each development project, that part of the total cost anticipated to have FAA funding, that part to be borne by the Port of Olympia, and that portion expected from private individuals or businesses. In addition to the Port of Olympia funds, the local share can include sources such as state or local economic development funds, regional commissions and organizations, and other units of local government.

As presented in the respective tables, the cost estimates for the 20-year planning period amount to approximately \$65,062,804. The anticipated FAA share is some \$30,441,527 and the local funding is approximately \$34,621,277. Of the local share, approximately \$18,050,000 is expected to be spent on projects that will generate revenue and are typically funded by tenants or private developers. However, in some cases where it is justified by projected revenue, these projects might be financed by revenue bonds or special tax assessments.

As identified in the following tables, the federal share includes expenditures of \$7,114,727 during the first five years (i.e., 2013-2017), \$5,248,500 during the second five-year time period (i.e., 2018-2023), and \$18,078,300 during the last ten-year time period (i.e., 2023-2032). This equates to an average annual expenditure of approximately \$1,522,076 in federal monies to fund the 20-year development plan.

Of the local share, approximately \$5,494,411 is required during the first five-year time frame, \$10,208,166 during the second five-year time frame, and approximately \$18,918,700 during the final ten-year time frame. For the entire 20-year planning period, an estimated \$1,731,064 per year will be required from local funding mechanisms. Of these projects identified as generating revenue and potentially financed by private third-party sources, none are in the first phase, \$5,510,000 in the second phase, and \$12,540,000 in the third phase, which equals approximately \$902,500 per year.

Table F1 Phase I (1-5 Years) Development Plan Project Costs

FAA ACIP Port of Olympia Only ACIP **Project Description** Note **Total Cost** Federal(a) Local(b) 2013 Projects A.1 Airport Master Plan Update (2011 Carryover) \$100,000 \$95,000 \$5,000 A.2 Rehabilitate Taxiway "C", North "W", and Terminal Connector, Including Pavement Removal, Reflectors, Signage, Lighting, and \$2,789,474 \$2,510,527 \$278,947 Segment Circle Relocation A.3 Rubber Removal and Paint Runway 17/35 \$166,666 \$166,666 A.4 Hangar D Gutter Replacement \$10,000 \$10,000 (d) A.5 Overlay Hangar F Taxilane \$300,000 \$300,000 A.6 Hangars A, B, C Roofs, Gutters, Siding \$600,000 \$600,000 A.7 Reconstruct Glacier FBO Generator Shack \$6,000 \$6,000 A.8 Glacier FBO Sewer Connect \$20,000 \$20,000 A.9 Purchase Snow Plow for Maintenance Work Truck \$10,000 \$10,000 Sub-Total/2013Projects \$4,002,140 \$2,605,527 \$1,396,613 2014 Projects A.10 Design Taxiway "F" North of Runway 8/26 Rehabilitation \$48,500 \$43,650 \$4,850 (d) A.11 Rehabilitate/Seal Coat Hangars A, B, and C Taxilanes \$400,000 \$400,000 A.12 WSP Hangar Electrical Rehabilitation \$100,000 \$100,000 A.13 Plane Port Roof Rehabilitation \$130,000 \$130,000 A.14 Hangar F Gutter Replacement \$10,000 \$10,000 A.15 Implement Critical Areas Mitigation Measures \$200,000 \$200,000 A.16 Purchase New Zero Turn Power Riding Mower 12,000 @12,000 \$900,500 \$856,850 Sub-Total/2014 Projects \$43,650 2015 Projects A.17 Construct Taxiway "F" North of Runway 8/26 Rehabilitation \$673,500 \$606,350 \$67,150 (c) A.18 Design Service Road Rehabilitation \$166,666 \$150,000 \$16,666 (d) A.19 Overlay/Seal Coat Hangar G Taxilane \$225,000 \$225,000 A.20 7600 Terminal Street Hangar Siding \$30,000 \$30,000 A.21 Hangar F Roof and Gutter \$100,000 \$100,000 A.22 Hangar D Roof \$100,000 \$100,000 Sub-Total/2015 Projects \$1,295,166 \$756,350 \$538,816

Notes: (a) Eligible for FAA AIP, Non-Primary Entitlement (NPE), and Discretionary Grants.

Cost estimates, based on 2011 data, are intended for preliminary planning purposes and do not reflect a detailed engineering



⁽b) Sponsor Match or Private Funding.

⁽c) Projects currently identified in the Airport's Capital Improvement Program (CIP).

⁽d) Project cost is based on rehabilitation option determined by the Airport's PCI index.

Table F1 (Continued)

Phase I (1-5 Years) Development Plan Project Costs

FAA ACIP

Port of Olympia Only ACIP

Project Description	Note	Total Cost	Federal ^(a)	Local ^(b)
2016 Projects				
A.23 Construct Service Road Rehabilitation	(c)	\$2,475,000	\$2,2350,000	\$225,000
A.24 Conduct Wildlife Hazard Assessment (Contingency)	(c)	\$166,666	\$150,000	\$16,666
A.25 Overlay Runway 08/26 and Reduce Width to 75 Feet	(d)	\$1,625,000		\$1,625,000
A.26 Install Runway 26 Precision Approach Path Indicator (PAPI) Lights		\$120,000		\$120,000
A.27 Rehabilitate/Seal Coat Hangar E Taxilane	(d)	\$400,000		\$400,000
A.28 Hangar G Roof and Gutter		\$100,000		\$100,000
A.29 Purchase New Maintenance Pickup Truck With Snow Plow		\$70,000		\$70,000
Sub-Total/2016 Projects		\$4,956,666	\$2,400,000	\$2,556,666
2017 Projects				
A.30 Conduct EA for Taxiway "F" Realignment and Rehabilitation	(c)	\$75,000	\$67,500	\$7,500
A.31 Rehabilitate Taxiway "A" From Intersection With Taxiways "W" and "B", to Old Runway 17 Threshold		\$873,000	\$785,700	\$87,300
A.32 Acquire Runway 26 Runway Protection Zone (RPZ) & Tree Easements for Obstruction Removal Within the Runway 26 Approach Area		\$180,000	\$162,000	\$18,000
A.33 Construct Helipad and Implement Final Approach and Takeoff Area (FATO)		\$160,000	\$144,000	\$16,000
A.34 Design Southeast GA Vehicle Access Road		\$166,666	\$150,000	\$16,666
Sub-Total/2017 Projects		\$1,454,666	\$1,309,200	\$145,466
Total/Phase I (2013-2017)		\$12,609,138	\$7,114,727	\$5,494,411

Notes:

Cost estimates, based on 2011 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.



⁽a) Eligible for FAA AIP, Non-Primary Entitlement (NPE), and Discretionary Grants.

⁽b) Sponsor Match or Private Funding.

⁽CIP).

 $^{^{(}d)}$ Project cost is based on rehabilitation option determined by the Airport's PCI index.

Table F2 Phase II (6-10 Years) Development Plan Project Costs

FAA ACIP

Port of Olympia Only ACIP Federal^(a) Local(b) **Project Description** Note **Total Cost** B.1 Design and Construct Taxiway "F" Realignment and \$2,641,666 \$2,400,000 \$241,666 Rehabilitation \$360,000 \$36,000 B.2 Install Taxiway Lighting on Taxiway "E" \$324,000 B.3 Construct Southeast GA Vehicle Access Road \$800,000 \$720,000 \$80,000 B.4 Update Airport Airspace Analysis Survey for Runway 26 GPS \$150,000 \$135,000 \$15,000 (LPV) Instrument Approach Procedure (IAP) B.5 Conduct Environmental Assessment (EA) for Runway 26 GPS \$150,000 \$135,000 \$15,000 (LPV) IAP B.6 Remark Runway 26 With Non-Precision Markings and Install \$800,000 \$800,000 Medium Intensity Runway Lights (MIRL)on Runway 08/26 B.7 Purchase 9030 Airport Mower Deck \$40,000 \$40,000 B.8 Construct T-hangar, Including Taxilanes and Automobile \$1,700,000 \$1,700,000 Access/Parking B.9 Construct Corporate Hangars, Including Automobile \$2,850,000 \$2,850,000 Access/Parking B.10 Construct Corporate Hangar, Including Automobile \$960,000 \$960,000 Access/Parking \$1,500,000 \$1,500,000 B.11 Taxiway Pavement Rehabilitation B.12 Roadway Pavement Rehabilitation \$900,000 \$900,000 B.13 Implement Critical Areas Mitigation Measures \$200,000 \$200,000 B.14 Purchase New Operation Pickup Truck With Snow Plow \$50,000 \$50,000 B.15 Terminal Expansion and Rehabilitation (Contingent on Tenant) \$500,000 \$500,000 B.16 Overlay Terminal Ramp \$1,100,000 \$990,000 \$110,000 B.17 Overlay Fuel Farm Access Road \$150,000 \$150,000 B.18 Conduct EA for Runway 35 GPS (LPV) IAP \$150,000 \$135,000 \$15,000 B.19 Purchase One Parcel of Property (Approximately 2.6 Acres) \$235,000 \$211,500 \$23,500 Within and Adjacent to the Runway 35 RPZ B.20 Remark Runway 35 With Precision Markings \$220,000 \$198,000 \$22,000

(a) Eligible for FAA AIP, Non-Primary Entitlement (NPE), and Discretionary Grants. Notes:

Total/Phase II (2018-2021)

Cost estimates, based on 2011 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation



\$15,456,666

\$5,248,500

\$10,208,166

⁽b) Sponsor Match or Private Funding.

⁽CIP).

⁽d) Project cost is based on rehabilitation option determined by the Airport's PCI index.

Table F3 Phase III (11-20 Years) Development Plan Project Costs

FAA ACIP Port of Olympia Only ACIP Federal^(a) Local(b) **Project Description** Note **Total Cost** C.1 Construct Runway 08/26 North Side Partial Parallel Taxiway \$700,000 \$630,000 \$70,000 From Taxiway "F" to Runway 17/35, Including MITL and Signage C.2 Construct Taxiway "F" From Taxiway "G" to Runway 08/26 North Side Partial Parallel Taxiway, Including Pavement Removal, \$950,000 \$855,000 \$95,000 Reflectors, and Signage C.3 Construct T-hangar, Including Taxilanes and Automobile \$3,000,000 \$3,000,000 Access/Parking C.4 Construct Corporate Hangars, Including Automobile \$5,840,000 \$5,840,000 Access/Parking C.5 Construct Runway 08/26 North Side partial Parallel Taxiway From Taxiway "F" to Runway 26 Threshold, Including Reflectors \$1,422,000 \$1,580,000 \$158,000 and Signage C.6 Construct Taxiway "F" From Taxiway "C" to Runway 08/26 North \$970,000 \$873,000 \$97,000 Side Partial Parallel Taxiway, Including Reflectors and Signage C.7 Update Airport Airspace Analysis Survey fro Runway 17 Runway Visual Range (RVR) and/or Require Navigation Performance \$170,000 \$153,000 \$17,000 (RNP) IAP C.8 Runway 08/26 Pavement Rehabilitation \$220,000 \$220,000 \$270,000 C.9 Runway 17/35 Pavement Rehabilitation \$2,700,000 \$2,430,000 C.10 Taxiway Pavement Rehabilitation \$2,600,000 \$2,340,000 \$260,000 C.11 Roadway Pavement Rehabilitation \$940,000 \$846,000 \$94,000 C.12 Install Runway 17 Touchdown Zone (TDZ) RVR Sensor, TDZ \$2,680,000 \$2,412,000 \$268,000 Lights, and Runway Centerline Lights (RCL) C.13 New Hangar Roof D \$150,000 \$150,000 C.14 Purchase Index A Airport Rescue Fire Truck (Contingent on \$700,000 \$630,000 \$70,000 Commercial Air Service) C.15 Replacement Fencing – Old Highway 99 South \$77,000 \$69,300 \$7,700 C.16 Acquire Tree Easement and Remove/Trim Obstructions Within \$450,000 \$405,000 \$45,000 the Runway 35 Approach Area C.17 Rehabilitate Taxiway "W" From Taxiway "L" to Taxiway "B" \$3,400,000 \$3,060,000 \$340,000 C.18 Install MALSR and Publish GPS (LPV) IAP to Runway 35 \$130,000 \$1,300,000 \$1,170,000 C.19 Construct T-hangar, Including Taxilanes and Automobile \$2,200,000 \$2,200,000 Access/Parking C.20 Construct Corporate District Access Road \$600,000 \$540,000 \$60,000 C.21 Construct T-hangar, Including Taxilanes and Automobile \$1,500,000 \$1,500,000 Access/Parking C.22 Construct Fire Rescue Gate to Old Highway 99 (Contingent on \$270,000 \$243,000 \$27,000 Road Reconstruction) C.23 Construct City/Port Joint Use Fire Station \$4,000,000 \$4,000,000 Total/Phase III (2022-2031) \$36,997,000 \$18,078,300 \$18,918,700 **GRAND TOTAL** \$65,062,804 \$30,441,527 \$34,621,277

Notes: (a) Eligible for FAA AIP, Non-Primary Entitlement (NPE), and Discretionary Grants.

Cost estimates, based on 2011 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.

MASTER PLAN UPDATE



⁽b) Sponsor Match or Private Funding.

Phasing Plan

The cost estimates indicate the suggested phasing for projects during the short-, intermediate-, and long-range planning periods. The proposed improvements for each phase are illustrated graphically by time period on the following figure entitled *PHASING PLAN*. These are suggested schedules and variance from them will almost certainly be necessary, especially during the latter time periods. Attention has been given to the first five years as being the most critical, and the scheduled projects outlined in that time frame should be adhered to as much as is possible and feasible. The demand for certain facilities and the economic feasibility of their development are the prime factors influencing the timing of individual project implementation. Care must be taken to provide for adequate lead-time for detailed planning and construction of facilities in order to meet aviation demands. It is also important to minimize the disruptive scheduling where a portion of the facility may become inoperative due to construction, and to prevent extra costs resulting from improper project scheduling.

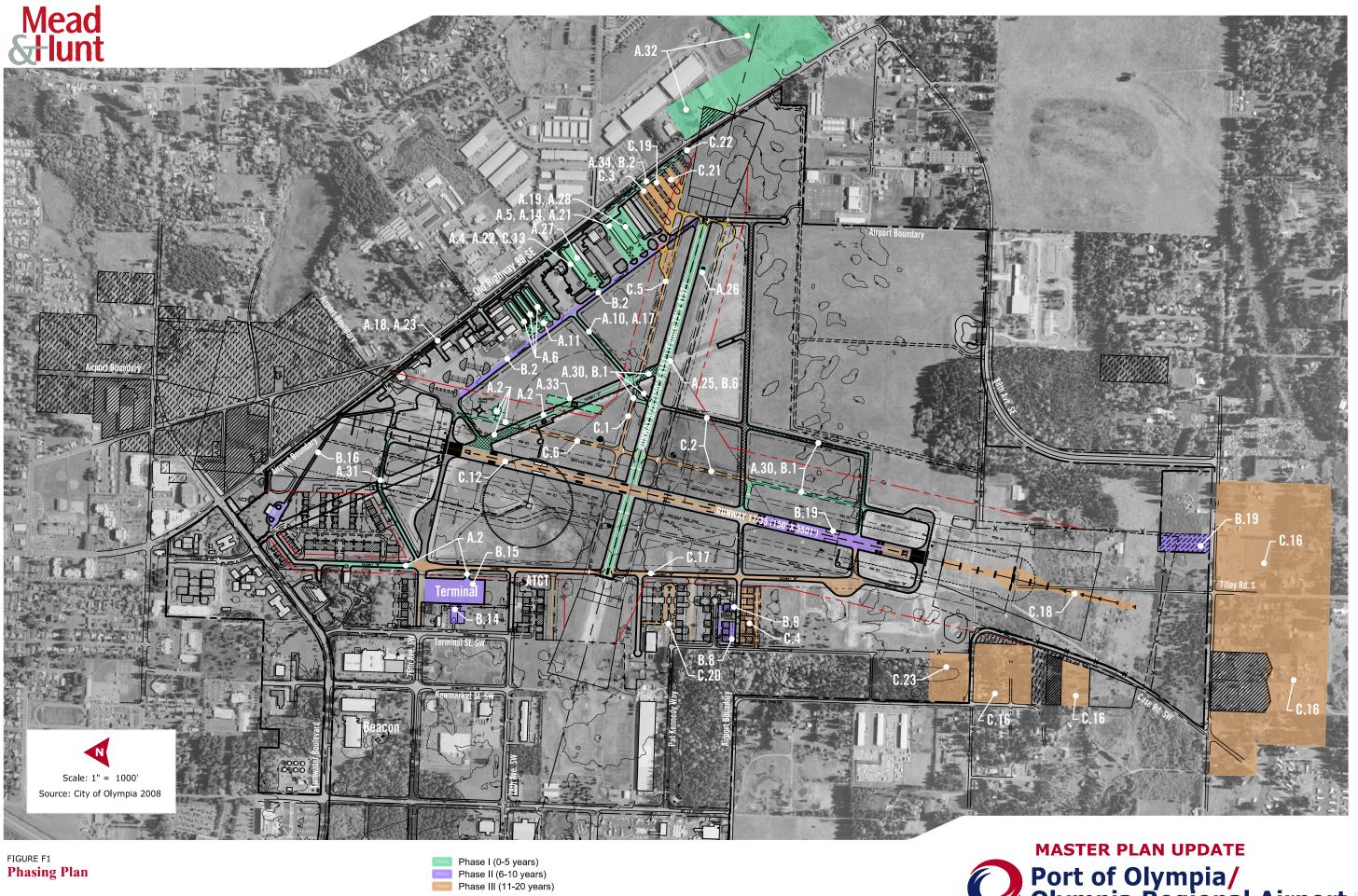
Capital Improvement Program (CIP)

To assist in preparation of the FAA's effort to provide grant funding to the most needed projects, the Port of Olympia staff keeps on file and up to date with the FAA a Capital Improvement Program (CIP). The purpose of the CIP is to provide a progressive projection of capital needs that can then be used in local and federal financial programming. From the FAA's perspective, the CIP provides a detailed listing of projects and costs that is critical for their use in establishing priorities and budgeting expenditures at Olympia Regional Airport, when compared with the needs at other airports. From the Port of Olympia's perspective, the CIP identifies improvement needs and allows budgeting/financial decisions to be made with a comprehensive understanding of financial implications. It should be noted that, although the CIP will be used for programming by the FAA, there is no financial commitment on the part of the FAA or the Port of Olympia to provide funding for the CIP.

Financial Plan

Funding sources for the improvement projects depend on many factors, including project eligibility, the ultimate type and use of facilities to be developed, debt capacity of the Airport, the availability of other financing sources, and the priorities for scheduling project completion. For planning purposes, assumptions were made related to the funding sources of each capital





improvement. The various funding options available for airport facility improvements are detailed in the following narrative.

Federal Sources of Capital Funding

Airport Improvement Program (AIP) Entitlement Grants. The federal government initially embarked on a grant-in-aid program to promote the development of a system of airports shortly after World War II. Over the years, the program has been through several iterations and names. The current program was established by the Airport and Airway Improvement Act of 1982 and was, and still is, known as the Airport Improvement Program (AIP). Funds obligated for the AIP are drawn from the Airport and Airway Trust Fund, which is supported by the user fees, fuel taxes, and other similar aviation revenue sources.

The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21) enacted in April 2000, established the first ever Non-Primary Airports Entitlement (NPE) Program. AIR-21 sets aside grant funding for general aviation airports can each receive up to \$150,000 per year based on the FAA's assessment of development needs over a five-year period. For the convenience of airport sponsors, if a project is anticipated to cost in excess of \$150,000, participating airports can rollover (i.e., save) the NPE funds for up to four years, at which time the accumulated total of rolled-over funds can be used for larger projects.

The Vision 100 – Century of Aviation Reauthorization Act enacted in December 2003, raised the federal share of AIP funding for airports classified as smaller than medium hub commercial service airports from 90% to 95%. However, the recently enacted FAA Modernization and Reformation Act of 2012 reduced the federal share back to 90%. Based upon these specified funding guidelines, the anticipated future FAA grants will be based on a 90%/10% FAA/local split basis.

AIP Discretionary Grants. The FAA also provides discretionary grants on a 90%/10% basis to airports similar to Olympia Regional Airport. This funding source is over and above entitlement funding, and is provided to airports for projects that have a high federal priority for enhancing safety, security, and capacity of the airport and would be difficult to fund otherwise. The dollar amounts of individual grants vary and can be significant in comparison to entitlement funding. Discretionary grants are awarded at the FAA's sole prerogative. Discretionary grant applications are evaluated based on need, the FAA's project priority ranking system, and the FAA's assessment of a project's significance within the national airport and airway system.



Further, per the FAA, discretionary funds are those established in various set-asides, plus any appropriate funding remaining after all apportionment funds have been allocated. These funds are assigned at the discretion of the FAA Administrator, to support noise mitigation projects and the highest-priority development that will benefit the National Airspace System (NAS). These discretionary set-aside funds are designed to achieve specific funding minimums for the noise program, reliever airports, and the conversion of military airports. The Capacity/Safety/ Security/Noise (CSSN) fund is to be used to preserve and enhance capacity, safety, and security, and to carry out noise compatibility programs, and include Letters of Intent (LOIs). The noise or CSSN funds are used towards FAR Part 150 Noise Compatibility Programs (NCPs). The remaining discretionary funding is also referred to as "pure discretionary" and is assigned to projects at the administrator's discretion.

FAA Facilities and Equipment Funds. Within the FAA's budget appropriation, money is available in the Facilities and Equipment (F&E) Fund to purchase navigational aids and air safety-related technical equipment, including Airport Traffic Control Towers (ATCT) for use at commercial service airports in the NAS. Each F&E development project is evaluated independently through a cost/benefit analysis to determine funding eligibility and priority ranking. The qualified projects are 100% funded by the FAA, with the remaining projects likely being AIP eligible. In addition, the airport will apply for NAVAID maintenance funding through the F&E program for those facilities that are not F&E funded. It is possible that some of the proposed navigational aid-related development projects for Olympia Regional Airport would qualify for F&E funding, if available.

The percentage costs borne by the FAA is subject to change depending upon current funding legislative and policy at the time of construction. The relationship between local and anticipated federal funding as shown in this document is based on current FAA participation of 95% of the total project cost, but this ratio does vary according to some anticipated state funding participation on various projects. Before detailed planning on any particular project is developed, the funding structures and requirements should be identified to determine the current funding policies by the various entities.

State Sources of Capital Funding

State Grants. The Washington State Department of Transportation Aviation Division (WSDOT Aviation) does provide some grant money for airport projects and, as with many states, these funds have been primarily utilized to provide assistance on pavement "maintenance" oriented



projects, such as crack seals and marking. However, in recent years, WSDOT Aviation has been able to fund additional items in excess of those that are pavement maintenance related.

In working with the above-mentioned FAA NPE Program, WSDOT Aviation allows for several grant administration options in an effort to leverage these federal grant funds to the maximum extent possible. They are as follows:

- Federal grant agreement between WSDOT Aviation and the FAA for state distribution to airport sponsors.
- Federal grant agreements between WSDOT Aviation and FAA for project completion by WSDOT Aviation work force, or by WSDOT Aviation, contracting for services.
- Federal grant agreement between WSDOT Aviation and FAA for state distribution to local agencies for project completion by local agency work force.

Local Sources of Capital Funding

Airport Generated Revenue Financing. Typically, the revenues generated by airports are used to support the local match of eligible state and federal projects. However, some projects are either not eligible for state or federal funding participation, or do not compete well for eligible funding. In these cases, Airport Sponsors would be responsible for 100% of the project cost to implement the proposed development. As with many general aviation airports, generating the necessary cash flow to balance the operations and maintenance costs of an airport is a constant battle. Many airports often rely upon supplemental funding from a municipal or county government to assist with funding the capital needs of their facilities. Local governments often recognize the economic benefits an airport brings to the community and are, largely, amenable to such a funding strategy. It should be noted that the Airport will be competing with other capital improvement needs for scarce local funding resources.

Private Third Party Financing. Many airports use private third-party financing when the planned improvements will be primarily used by a private business or other organization. Such projects are not ordinarily eligible for federal funding. Projects of this kind typically include hangars, FBO facilities, fuel storage facilities, exclusive aircraft parking aprons, industrial aviation-use facilities, non-aviation office/commercial/industrial development, and various other projects. Private development proposals are considered on a case-by-case basis. Often, airport funds are



required for infrastructure, preliminary site work, and site access to facilitate privately developed projects on airport property.

Implementation Strategy

This development plan is aggressive; the monetary commitments are significant. It is a solid plan that represents the Airport's best opportunity to meet its potential. However, the plan also represents a series of choices and alternatives for the Airport. The ultimate success of Olympia Regional Airport does not rely upon the completion of every capital item contained in the development plan. To meet realistic funding expectations, it may be necessary to weigh the items of the development plan in a thoughtful and global manner. In other words, to keep from being short-sighted in its choices, the Port of Olympia may be required to selectively implement the capital items. Knowing the full scope of development possibilities enables the Port to capitalize on opportunities, respond to financial realities, and select development items that are in harmony with the overall development plan.

The projects represented as potentially needed are based on forecast demand; only those projects that are required by actual demand will be proposed for construction. If the actual demand does not increase as rapidly as anticipated, a number of the proposed projects should be revised, delayed, or potentially eliminated. It should be noted that the level of FAA funding is governed by congressional appropriations to the AIP, and the amount dedicated to any one specific airport is determined by demonstrated need compared to need at other airports within the regional and national airport system. The object of this MP Update for Olympia Regional Airport is to provide a flexible planning document useful for directing airport development that meets future aviation demand safely, efficiently, and property as it occurs.

Summary

It is recognized that maintenance and operation expenses will increase as the Airport develops and additional facilities are completed. Revenues generated by additional airport facilities should also increase and help offset increased maintenance and operation expenses. It is a worthy and feasible goal that operational expenses and revenues should balance at the Airport. This relationship should be monitored closely so that future imbalances can be anticipated and provided for in the budgeting and capital improvement processes.



If aviation demands continue to indicate that improvements are needed, and if the proposed improvements prove to be environmentally acceptable, the financial implications presented in this chapter are likely to be acceptable for both the FAA and the Port of Olympia. However, it must be remembered that this is only a programming analysis and not a commitment on the part of the FAA or the Port. If the cost of an improvement project is not financially feasible, it will not be pursued at that time.