Chapter 8 – Financial and Development Program

Introduction

The purpose of this chapter is to present the projects identified in the twenty-year Airport Capital Improvement Program (ACIP) that have been developed and assembled based on the analyses conducted in the Facility Requirements and Development Alternatives evaluations (Chapters 4 and 5). The ACIP projects are summarized in **Table 8-1** later in the chapter. The ACIP is organized into short, intermediate, and long-term planning periods that reflect both project prioritization and financial capabilities. Several factors were considered in determining project prioritization, including safety, forecast demand, the need to maintain/replace existing airfield facilities, and financial capabilities of both the city and FAA to support the development program based on existing funding mechanisms.

The Master Plan preferred alternative includes both airside elements and landside elements. Minor pavement maintenance items such as vegetation removal and crack filling are not included in the ACIP, but will need to be undertaken by the City on an annual or semi-annual basis.

A brief environmental review was prepared and is presented in Chapter 2 – Inventory of Existing Conditions. The review provides an overview of areas of potential concern associated with proposed development. In addition, all federally funded projects will require some level of project-specific environmental study, as determined by FAA.

Individual projects for the first five years of the planning period are listed in order of priority by year. Projects for the intermediate and long-term phases of the planning period (years 6-20) are listed in order of priority but have not been assigned a year. Each project's eligibility for FAA funding is noted, based on

Chapter 8 – Financial and Development Program

Introduction

The purpose of this chapter is to present the projects identified in the twenty-year Airport Capital Improvement Program (ACIP) that have been developed and assembled based on the analyses conducted in the Facility Requirements and Development Alternatives evaluations (Chapters 4 and 5). The ACIP projects are summarized in **Table 8-1** later in the chapter. The ACIP is organized into short, intermediate, and long-term planning periods that reflect both project prioritization and financial capabilities. Several factors were considered in determining project prioritization, including safety, forecast demand, the need to maintain/replace existing airfield facilities, and financial capabilities of both the city and FAA to support the development program based on existing funding mechanisms.

The Master Plan preferred alternative includes both airside elements and landside elements. Minor pavement maintenance items such as vegetation removal and crack filling are not included in the ACIP, but will need to be undertaken by the City on an annual or semi-annual basis.

A brief environmental review was prepared and is presented in Chapter 2 – Inventory of Existing Conditions. The review provides an overview of areas of potential concern associated with proposed development. In addition, all federally funded projects will require some level of project-specific environmental study, as determined by FAA.

Individual projects for the first five years of the planning period are listed in order of priority by year. Projects for the intermediate and long-term phases of the planning period (years 6-20) are listed in order of priority but have not been assigned a year. Each project's eligibility for FAA funding is noted, based on

current federal legislation and funding formulas. Specific project details are depicted on the updated Airport Layout Plan and Terminal Area Plan drawings contained in Chapter 6.

A primary source of potential funding identified in this plan is the FAA's Airport Improvement Program (AIP). As proposed, approximately 95 percent of the airport's twenty-year ACIP 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 by FAA under appropriations set by Congress for all airports in the United States included in the federal airport system (National Plan of Integrated Airport Systems – NPIAS).

However, as noted in **Table 8-1**, the projected twenty-year total for FAA eligible projects in the ACIP significantly exceeds current FAA funding levels through the non-primary entitlement program, which is $150,000 annually. While other types of FAA funding may be available for some projects, it is reasonable to assume not all eligible projects are likely to be funded despite establishing FAA funding eligibility. The City must maximize the use of available FAA and other outside funding sources as it manages its ACIP. In some cases, the limited availability of outside funds may require deferring some projects, or increasing funding with additional local, state, or private funding.

Airport Development Schedule and Cost Estimates

Cost estimates for each individual project were developed in 2019 dollars based on typical construction costs associated with the specific type of project. The project costs listed in the ACIP represent order-of-magnitude estimates that approximate design, engineering, environmental, other related costs, and contingencies. The estimates are intended only for preliminary planning and programming purposes. Specific project analysis and detailed engineering design will be required prior to project implementation to provide more refined and detailed estimates of the development costs.

These cost estimates can continue to assist management through adjustments to the 2019-dollar amounts to account for subsequent inflation as the plan is carried out in future years. This can be accomplished by converting the appropriate change in the United States Consumer Price Index (USCPI) to a multiplier using the following formula:

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

Where:
X = USCPI in any given future year
Y = Change Ratio
I = Current Index (USCPI)[1]

USCPI-U
267.370
(1982-1984 = 100)
March 2019

Multiplying the change ratio (Y) times any 2019-based cost estimate presented in this study will yield the adjusted dollar amounts appropriate in any future year evaluation. Several different CPI-based indices are available for use and any applicable index may be substituted by the city in its financial management program.

The following sections outline the recommended development program and funding assumptions. The scheduling has been prepared according to the facility requirements determined through the master plan evaluation. The projected staging of development projects is based on 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 projects, the airport will continue to require regular facility maintenance such as pavement maintenance, vegetation control, sweeping, lighting repair, and fuel system maintenance.

The following summary describes the key projects.

[1] U.S. Consumer Price Index for All Urban Consumers (USCPI-U)

Short-Term Projects

The short-term program contains highest priority work items including safety related improvements. These items will need to be incorporated into the State Capital Improvement Program (SCIP) managed by the FAA Seattle Airport District Office and the Oregon Department of Aviation (ODA). To assist with this process, the short-term projects are scheduled in specific calendar years for the first five years of the planning period (2019-2024).

The primary focus for short-term development is to address security, resolution of the existing hotspot situation, and taxiway and taxilane improvement. Specific short-term projects are listed below.

SHORT-TERM PROJECTS (YEARS 2019-2024):

- Design - Main apron rehabilitation for the asphalt west of the fixed base operator (FBO) and east of the FBO and fuel island including reconfiguration of tiedowns and taxilanes;
- Construction - Main apron rehabilitation for the asphalt west of the fixed base operator (FBO) and east of the FBO and fuel island including reconfiguration of tiedowns and taxilanes;
- Construction - Pavement Management Plan (PMP) maintenance work;
- Environmental Assessment - Land Acquisition of the Runway 23 RPZ including realignment of Ott Road;
- Tree removal - Runway 5 approach (obstructions noted on applicable ALP drawing sheets);
- Acquisition- Land Acquisition of the Runway 23 RPZ; and
- Construction – Realign Ott Road outside of the Runway 23 RPZ.

Intermediate & Long-Term Projects

Several intermediate - or long-term projects are considered to be current needs. However, it was necessary to shift some projects to subsequent planning periods based on the limited funding resources available. Individual projects may be completed sooner in the event additional funding can be obtained.

INTERMEDIATE-TERM PROJECTS (YEARS 2025-2028):

- Construction – Runway 5/23 pavement maintenance including crackfill, sealcoat, and repaint Non-precision instrument markings;
- Construction – Construct the west FBO apron, adjacent to the FBO hangar;
- Construction – Rehabilitate the terminal area center hangar taxilane (1,080'x25');
- Construction – Rehabilitate the terminal area south hangar taxilane (800'x25');

- Construction – Taxiways A, A1-A5, and Runway 23 hold area pavement maintenance including crackfill, sealcoat, and repaint the markings;
- Construction – Realign and pave the north airport road between the vehicle parking lot and the aircraft agricultural pad (2,100 LF);
- Construction – Install fencing along the north airport road between the vehicle parking lot and the aircraft agricultural pad, and install three vehicle gates;
- Construction – Expand the main apron to the north with additional tiedowns and taxilanes;
- Construction – Construct a north hangar taxilane to meet ADG-II standards (820'x35');
- Construction – Expand the main apron to the east between the shade hangars and Taxiway A, to provide two large aircraft parking positions with taxilane connections to Taxiway A;
- Construction – Construct a tiedown apron and access taxilane on the northwest corner of the airfield;
- Construction – Construct a gravel airport service road connecting the northwest landside area around the Runway 5 end to the ASOS and future south apron and hangar area; and
- Construction – Rehabilitate (overlay) Runway 5/23 and repaint markings.

LONG-TERM PROJECTS (YEARS 2029-2037):

- Construction – Construct an aircraft hold area for Runway 5 at Taxiway A1;
- Construction – North apron and taxilanes pavement maintenance including crackfill, sealcoat, and repaint markings;
- Construction – In the north landside area, construct the center hangar taxilane (900'x35'/25');
- Construction – Construct a new taxilane between Taxiway A and the agricultural pad (200'x35');
- Construction – Realign and gravel the north airport access road between the agricultural pad and S. Highland Ave (2,065' LF);
- Construction – Construct a hangar taxilane on the northwest corner of the airfield for future development;
- Construction – Construct a south tiedown apron (162'x325');
- Construction – Construct a south hangar taxilane (200'x25') for future development;
- Construction – Construct a south parallel taxiway (future Taxiway B) and four connector taxiways (future Taxiways B1-B4), and an aircraft hold area at each runway end along Taxiway B;

- Construction – Construct the south airport access road that connects Highway 395 to the future south apron and hangar area (4,100 LF);
- Construction – Upgrade the existing 4-foot chain link fencing to 6-foot fencing along North Airport Road to the terminal area and extend the fencing around the west end of the airport;
- Construction – Runway 5/23 pavement maintenance including crackfill, sealcoat, and repaint Non-precision instrument markings;
- Construction – Taxiways A, A1-A5, and Runway 23 hold area pavement maintenance including crackfill, sealcoat, and repaint the markings;
- Construction – North apron and taxilanes pavement maintenance including crackfill, sealcoat, and repaint markings;
- Construction – Replace the taxiway edge reflectors on Taxiway A and connector taxiways (A1-A5);
- Construction – Replace the rotating beacon (roof mounted on northwest hangar);
- Construction – Install two supplemental unlighted wind cones near each runway end;
- Construction – Replace and relocate the segmented circle and lighted wind cone;
- Construction – Install medium intensity taxiway lighting (MITL) and lighted signage on Taxiway A, and connectors A1-A5;
- Construction – Expand the future south tiedown apron (162'x325');
- Construction – Construct a gravel airport access road from S. Ott Road to the future south apron and hangar area (2,800 LF);
- Construction – Install vehicle gates and modify the existing fencing on S. Ott Road;
- Planning – Update the 2019 Airport Master Plan;
- Construction – Northwest apron and taxilanes pavement maintenance including crackfill, sealcoat, and repaint markings;
- Construction – Install perimeter fencing on the north landside area from the agricultural pad to S. Highland Ave;
- Construction – Replace the medium intensity runway lighting (MIRL); and
- Construction – Install two vehicle gates to the south landside areas.

HERMISTON MUNICIPAL AIRPORT
20-YEAR CAPITAL IMPROVEMENT PROGRAM

Prepared by Century West Engineering & Precision Approach Engineering

FY2018 NPE $ Accumulation: $166,390

Short-Term	ID	Project	Project Category	Unit	Quantity	Unit Cost	Subtotal Cost	Contingency (Env./Eng.)	Total Cost	FAA GA Entitlement	Other FAA **	Local Costs ***	
								(see note)					
2019		Design - Main Apron Rehabilitation	Design	LS	1	$160,000	$160,000	$0	$160,000	$144,000	$0	$16,000	FY 2019 NPE + Accum. $316,390
													NPE Used $144,000
Subtotal - Year 1									$160,000	$144,000	$0	$16,000	NPE Remaining $172,390
2020		No projects											FY 2020 NPE + Accum. $322,390
													NPE Used $0
Subtotal - Year 2									$0	$0	$0	$0	NPE Remaining $322,390
2021	**1**	Rehabilitate Main Apron (west of FBO, east of FBO/Fuel Island; reconfigure tiedowns and taxilanes) - Asphalt (2022 PCI: 22-74)	Rehabilitation	LS	1	$2,000,000	$2,000,000	$300,000	$2,300,000	$454,390	$1,615,610	$230,000	
	2	Pavement Management Plan	Planning	LS	1	$20,000	$20,000	$0	$20,000	$18,000	$0	$2,000	FY 2021 NPE + Accum. $472,390
													NPE Used $472,390
Subtotal - Year 3									$2,320,000	$472,390	$1,615,610	$232,000	NPE Remaining $0
2022	**0**	Environmental Assessment for Land Acquisition, Ott Road Realignment	Environmental	LS	1	$165,000	$165,000	$0	$165,000	$150,000	$0	$15,000	FY 2022 NPE +Accum. $150,000
	00	Runway 5 Approach & RPZ Tree Clearing	Environ/Design/Const.	LS	1	$20,000	$20,000	$0	$20,000	$18,000	$0	$2,000	NPE Used $168,000
													NPE Remaining -$18,000
									$185,000	$168,000	$0	$17,000	
2023		No projects											FY 2023 NPE + Accum. $132,000
													NPE Used $0
Subtotal - Year 5									$0	$0	$0	$0	NPE Remaining $132,000
2024	**3**	Land Acquisition (RWY 23 RPZ)	Property	AC	140	$15,000	$2,100,000	$75,000	$2,175,000	$282,000	$1,675,500	$217,500	
	4	Realign S. Ott Road outside RWY 23 RPZ (3,980 LF - Paved)	Design/Construction	LS	1	$1,400,000	$1,400,000	$250,000	$1,650,000	$0	$1,485,000	$165,000	FY 2024 NPE + Accum. $282,000
													NPE Used $282,000
Subtotal - Year 6									$3,825,000	$282,000	$3,160,500	$382,500	NPE Remaining $0
						Years 0-6			**$6,490,000**	**$1,066,390**	**$4,776,110**	**$647,500**	

** Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

*** Local (City) costs at 10% (City may apply for a ODA grant for a portion of matching funds)

Short-Term CIP Note: Project engineering and environmental contingencies are included in lump sum project costs, unless otherwise noted (and calculated separately)

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

AC = Asphalt Concrete; PCC - Portland Cement Concrete

HERMISTON MUNICIPAL AIRPORT
20-YEAR CAPITAL IMPROVEMENT PROGRAM

FY2018 NPE $ Accumulation: $166,390

Prepared by Century West Engineering & Precision Approach Engineering

Intermediate-Term	ID	Project	Project Category	Unit	Quantity	Unit Cost	Subtotal Cost	30% Contingency (Env./Eng.)	Total Cost	FAA GA Entitlement	FAA Eligible **	Local Costs***
Non-Primary Entitlements Accumulation Total (5-Years)										**$750,000**		
2025-2028	**5**	AC Pavement Maintenance (RWY 5/23 4,500'x75') Crackfill, Sealcoat, and Repaint Markings (NPI Rwy 23) (2022 PCI: 68-73)	Rehabilitation	SY	37,500	$7.50	$281,250	$84,375	$365,625		$329,063	$36,563
	8	Construct West FBO Apron (Adj. to FBO Hangar)	Construction	LS	1	$160,000	$160,000	$48,000	$208,000		$187,200	$20,800
	9	Terminal Area/Center Hangar Taxilanes Rehab/Reconstruct (1,080' x 25')	Construction	LS	1	$480,000	$480,000	$144,000	$624,000		$561,600	$62,400
	10	Terminal Area/South Hangar Taxilane Rehab/Reconstruct (800' x 25')	Construction	LS	1	$375,000	$375,000	$112,500	$487,500		$438,750	$48,750
	11	Pavement Maintenance (Taxiways A, A1-A5; AC Hold @ Rwy 23 end) Crackfill, Sealcoat, and Repaint Markings (2022 PCI 92; AC Hold: 84)	Rehabilitation	SY	28,803	$7.50	$216,023	$64,807	$280,829		$252,746	$28,083
	12	Realign & Upgrade North Airport Road - Phase 1 - Parking Lot to Ag Pad (2,100 LF Paved)	Construction	LF	2,100	$220	$462,000	$138,600	$600,600		$540,540	$60,060
	13	Perimeter Fencing (North Landside to AG Pad w/ 3 Automated Vehicle Gates)	Other	LF	2,250	$135	$303,750	$91,125	$394,875		$355,388	$39,488
	15	Main Apron Expansion - Phase 1 (North Expansion Tiedowns & Taxilanes)	Construction	LS	1	$1,100,000	$1,100,000	$330,000	$1,430,000		$1,287,000	$143,000
	16	Construct Terminal Area/North Hangar Taxilane (820' x 35')	Construction	LS	1	$630,000	$630,000	$189,000	$819,000		$737,100	$81,900
	17	Main Apron Expansion - Business AC Parking w/ 2 Taxilane Connections to Parallel Taxiway	Construction	LS	1	$520,000	$520,000	$156,000	$676,000		$608,400	$67,600
	18	Construct NW Tiedown Apron & Access Taxilane (Phase 1)	Construction	LS	1	$575,000	$575,000	$172,500	$747,500		$672,750	$74,750
	19	Construct Airport Service Road (Connecting the NW landside area to the ASOS and future South Apron/Hangars) - Gravel	Construction	LF	4,500	$50	$225,000	$67,500	$292,500		$263,250	$29,250
	20	RWY 5/23 Maintenance Overlay (4,500'x75') (2027 PCI 68)	Rehabilitation	LS	1	$1,560,000	$1,560,000	$468,000	$2,028,000		$1,825,200	$202,800
Subtotal - Year 7-10									**$8,588,804**	**$750,000**	**$7,729,924**	**$858,880**

** Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

*** Local (City) costs at 10% (City may apply for a ODA grant for a portion of matching funds)

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

AC = Asphalt Concrete; PCC - Portland Cement Concrete

Long-Term	ID	Project	Project Category	Unit	Quantity	Unit Cost	Subtotal Cost	30% Contingency (Env./Eng.)	Total Coast	FAA GA Entitlement	FAA Eligible **	Local Costs***
Non-Primary Entitlements Accumulation Total (10-Years)										**$1,500,000**		
2029-2037	**23**	Construct AC Hold Area (Rwy 5 @ A1)	Construction	LS	1	$205,000	$205,000	$61,500	$266,500		$239,850	$26,650
	24	Pavement Maintenance (North Aprons & Taxilanes) Crackfill, Sealcoat, and Repaint Markings	Rehabilitation	SY	32,434	$7.50	$243,255	$72,977	$316,232		$284,608	$31,623
	25	Construct Terminal Area/North & Center Hangar. Taxilane Ends (900' x 35'/25')	Construction	LS	1	$920,000	$920,000	$276,000	$1,196,000		$1,076,400	$119,600
	26	New Taxilane for AG Pad (200' x 35' - Asphalt)	Construction	LS	1	$225,000	$225,000	$67,500	$292,500		$263,250	$29,250
	27	Realign & Upgrade North Airport Access Road - Phase 2 (East connection to S. Highland Ave) - (2,065 LF Gravel)	Construction	LF	2,065	$75	$154,875	$46,463	$201,338		$181,204	$20,134
	28	Construct NW Hangar Access Taxilane (Phase 2)	Construction	LS	1	$250,000	$250,000	$75,000	$325,000		$292,500	$32,500
	29	Construct South Tiedown Apron - Phase 1 (162' x 325' - Asphalt)	Construction	LS	1	$850,000	$850,000	$255,000	$1,105,000		$994,500	$110,500
	30	Construct South Hangar Taxilane (200' x 25' - Asphalt)	Construction	LS	1	$170,000	$170,000	$51,000	$221,000		$198,900	$22,100
	31	Construct South Parallel Taxiway (4,500'x35'), Connectors (4), 2 Holding Areas - Asphalt	Construction	LS	1	$4,130,000	$4,130,000	$1,239,000	$5,369,000		$4,832,100	$536,900
	32	South Airport Access Road (HWY 395 to S. Apron/Hangar Area) (4,100 LF - Asphalt)	Construction	LF	4,100	$165	$676,500	$202,950	$879,450		$791,505	$87,945

HERMISTON MUNICIPAL AIRPORT
20-YEAR CAPITAL IMPROVEMENT PROGRAM

FY2018 NPE $ Accumulation: $166,390

Prepared by Century West Engineering & Precision Approach Engineering

	33	Fencing - (upgrade to standard height chain link along North Airport Road to terminal area and extend around west end of airport)	Other	LF	1,850	$75	$138,750	$41,625	$180,375		$162,338	$18,038
	34	Perimeter Fencing (North PL Highland - S. Ott Rd)	Other	LF	2,095	$75	$157,125	$47,138	$204,263		$183,836	$20,426
	35	AC Pavement Maintenance (RWY 5/23 4,500'x75') Crackfill, Sealcoat, and Repaint Markings (NPI Rwy 23)	Rehabilitation	SY	37,500	$7.50	$281,250	$84,375	$365,625		$329,063	$36,563
	36	Pavement Maintenance (Taxiways A, A1-A5; AC Hold @ Rwy 23 end) Crackfill, Sealcoat, and Repaint Markings (2027 PCI 82; AC Hold: 75)	Rehabilitation	SY	28,803	$7.50	$216,023	$64,807	$280,829		$252,746	$28,083
	37	Pavement Maintenance (North Aprons & Taxilanes) Crackfill, Sealcoat, and Repaint Markings	Rehabilitation	SY	32,434	$7.50	$243,255	$72,977	$316,232		$284,608	$31,623
	38	Replace Taxiway Reflectors (A, A1-A5)	Lighting	EA	100	$350	$35,000	$10,500	$45,500		$40,950	$4,550
	39	Replace Rotating Beacon (Roof Mounted)	Lighting	LS	1	$45,000	$45,000	$13,500	$58,500		$52,650	$5,850
	40	Install Supplemental (Unlighted) Wind Cones (2)	Other	EA	2	$20,000	$40,000	$12,000	$52,000		$46,800	$5,200
	41	Relocate/Replace Segmented Circle & Lighted Wind Cone	Lighting	LS	1	$50,000	$50,000	$15,000	$65,000		$58,500	$6,500
	42	Install MITL & Lighted Signs (Taxiway A, A1-A5)	Lighting	LS	1	$780,000	$780,000	$234,000	$1,014,000		$912,600	$101,400
	44	Construct South Tiedown Apron - Phase 2 (162' x 325' - Asphalt)	Construction	LS	1	$835,000	$835,000	$250,500	$1,085,500		$976,950	$108,550
	45	South Airport Access Road (S. Ott Road to S. Apron/Hangar Area) (2,800 LF - Gravel)	Construction	LS	2,800	$75	$210,000	$63,000	$273,000		$245,700	$27,300
	46	Install Vehicle Access Gate/Modify Existing Fencing (Ott Road, Controlled Access to SE Landside Area)	Reserve	LS	1	$75,000	$75,000	$22,500	$97,500		$87,750	$9,750
	47	Update Airport Master Plan	Planning	LS	1	$500,000	$500,000	$150,000	$650,000		$585,000	$65,000
	48	Pavement Maintenance (NW Tiedown Apron & Taxilanes) Crackfill, Sealcoat, and Repaint Markings	Rehabilitation	SY	10333.333	$7.50	$77,500	$23,250	$100,750		$90,675	$10,075
	49	Perimeter Fencing North Landside (AG Pad to Highland; extend to northern corner of airport property (adjacent to canal))	Other	LF	2,070	$75	$155,250	$46,575	$201,825		$181,643	$20,183
	50	Replace MIRL (4,500')	Lighting	LS	1	$145,000	$145,000	$43,500	$188,500		$169,650	$18,850
	52	Automated Vehicle Gates (2 south @ new entrances on property line)	Other	EA	2	$40,000	$80,000	$24,000	$104,000		$93,600	$10,400
Subtotal Year 11-20									**$15,455,417**	**$1,500,000**	**$13,909,876**	**$1,545,542**
						20-Yr Total			**$30,534,222**	**$3,316,390**	**$26,415,909**	**$3,051,922**

** Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

*** Local (City) costs at 10% (City may apply for a ODA grant for a portion of matching funds)

Lump sum project costs include contingency for engineering and environmental, unless otherwise calculated separately

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

AC = Asphalt Concrete; PCC - Portland Cement Concrete

Capital Funding Sources & Programs

Federal Grants

Federal funding is provided through the Federal Airport Improvement Program (AIP). The Airport Improvement Program is the latest evolution of a funding program originally authorized by Congress in 1946 as the Federal Aid to Airports Program (FAAP). The AIP provides Entitlement funds for commercial service and cargo airports based on the number of annual enplaned passengers and amount of air cargo handled. Other appropriations of AIP funds go to states, general aviation airports, reliever airports, and other commercial service airports, as well as for noise compatibility planning. Any remaining AIP funds at the national level are designated as Discretionary funds and may be used by the FAA to fund eligible projects. Discretionary funds are typically used to enhance airport capacity, safety, and/or security and are often directed to specific national priorities such as the recent program to improve Runway Safety Areas. These annual entitlement funds can only be used for eligible capital improvement projects and may not be used to support airport operation and maintenance costs.

AIP funding programs include:

- AIP Non-primary Entitlement Grants: The FAA Reauthorization Act of 2018 was signed into law on October 5, 2018, extending authorization for Federal Aviation Administration (FAA) programs and related revenue authorities through September 30, 2023.
- Hermiston Municipal Airport is classified in the current NPIAS as a National/Regional Airport. FAA Order 5100.38D, Airport Improvement Handbook, adjusts the percentage of Federal shares for allowable project costs for certain states. Table 4-8 "Federal Shares by Airport Classification in Public Land States", stipulates that the Federal match in the State of Oregon is 90-percent for Non-primary General Aviation airports.
- AIP Discretionary Grants: The FAA also provides Discretionary grants to airports for projects that have a high Federal priority and enhance safety, security, or capacity. These grants are over and above Entitlement funding. Discretionary grant amounts can vary significantly compared to Entitlements and are awarded at the FAA's sole discretion. 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.
- FAA Facilities and Equipment Funds. Additional funds are available under the FAA Facilities and Equipment Program. Money is available in the FAA Facilities and Equipment (F&E) program to purchase navigation aids and air safety-related technical equipment, including

Airport Traffic Control Towers (ATCTs) for use at commercial service airports in the National Airport System. Each F&E project is evaluated independently using a cost-benefit analysis to determine funding eligibility and priority ranking. Qualified projects are funded in total (i.e., 100 percent) by the FAA, while remaining projects would likely be eligible for funding through the AIP or PFC programs. In addition, an airport can apply for NAVAID maintenance funding through the F&E program for those facilities not funded through the F&E program

FAA funding is limited to projects that have a clearly defined need and are identified through preparation of an FAA approved Airport Layout Plan (ALP). Periodic updates of the ALP are required when new or unanticipated project needs or opportunities exist that require use of FAA funds and to reflect the status of completed projects. The FAA will generally not participate in projects involving vehicle parking, utilities, building renovations, or projects associated with non-aviation development.

Projects such as hangar construction or fuel systems are eligible for funding, although the FAA considers this category of project to be considered a much lower priority than other airfield needs.

State of Oregon

No specific level of Oregon Department of Aviation (ODA) funding has been assumed in the CIP presented in **Table 8-1**. It is recommended that the city maximize use of any ODA or other State funding available in the planning period. Existing airport programs managed by ODA are summarized below.

PAVEMENT MAINTENANCE PROGRAM

The Pavement Management Program (PMP) programs airfield pavement maintenance funds on established multi-year cycles. The PMP is funded by a portion of the fuel tax revenues. Forty-five percent of the original fuel taxes collected (\$0.01/gallon on Jet-A and \$0.09/gallon on AVGAS) are used to fund the PMP. (It should be noted that the remainder of the revenues collected from the original \$0.01/gallon Jet-A and \$0.09/gallon AVGAS fuel taxes equaling 55 percent are used to fund the operation of Oregon's 28 state owned airports and ODA administrative costs.) 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. Several short-term pavement maintenance projects are identified in the most recent PMP as noted earlier. The program funds pavement maintenance and associated improvements (crack filling, repair, sealcoats, etc.), including some items that have not traditionally been eligible for FAA funding.

Funding for the PMP is generated through collection of aviation fuel taxes. ODA manages the PMP through an annual consultant services contract and work is programmed on a three-year regional rotation. The program includes a regular schedule of inspections and subsequent field work. Benefits from the PMP include:

- Economy of scale in bidding contracts;
- Federal/State/Local partnerships that maximize airport improvement funds; and
- PMP is not a grant program and local match is on a sliding scale (50% - 5% required).

The PMP includes the following features:

- Review prior year's Pavement Condition Index (PCI) reports;
- Only consider PCIs below 70;
- Apply budget;
- Limit work to patching, crack sealing, fog sealing, slurry sealing;
- Add allowance for markings; and
- Program to include approximately 20 airports per year, depending on funding levels.

FINANCIAL AID TO MUNICIPALITIES (FAM) GRANTS

ODA's Financial Aid to Municipalities (FAM) grant program has been suspended in recent years due to a lack of funding. House Bill 2075 (discussed later in this chapter) established a new source of funding revenue for aviation programs within the state. This bill resulted in the creation of three new programs that have essentially replaced FAM Grants. In order to facilitate these new programs, the rules used to administer funds under FAM have been amended to incorporate the language of House Bill 2075 and serve as the funding mechanism for these new programs.

CONNECT OREGON GRANTS

The Oregon Legislature authorized funding for air, marine, rail, and transit infrastructure, known as Connect Oregon in 2005. This program is intended to improve commerce, reduce delay, and enhance safety for the state's multi-modal transportation system.

Lottery-based bonds, sold by the Oregon Department of Administrative Services are used to fund the program. The funds are deposited into Oregon's Multimodal Transportation Fund and administered by the Oregon Department of Transportation Local Government Section. Connect Oregon funds cannot be used for projects eligible for Oregon's Highway Fund, thereby providing less competition for aviation projects seeking Connect Oregon funding.

In 2014, after the fifth installment of funding, the Legislature had provided $382 million to the program. Connect Oregon grants fund up to 80-percent of project costs with a 20-percent sponsor match and loans up to 100-percent of project costs.

HOUSE BILL 2075

House Bill 2075 (HR 2075) increased the tax on aircraft fuels, providing new revenues for the State Aviation Account. HR 2075 increased the fuel tax on both Jet-A and AVGAS by $0.02/gallon resulting in a new tax on Jet-A of $0.03 per gallon and AVGAS of $0.11 per gallon. The additional $0.02/gallon in revenues on Jet-A and AVGAS generated by HR 2075will be distributed to fund a variety of aviation needs through ODA's new Aviation System Action Program (ASAP) fund.

ASAP allocates and distributes the additional $0.02/gallon revenues generated by HR 2075 among three new programs: COAR - Critical Oregon Airport Relief Program; ROAR – Rural Oregon Aviation Relief Program; and SOAR – State Owned Airports Reserve Program. The specific programs are outlined below. COAR - Fifty percent of the revenues from the $0.02/gallon fuel tax increase will be distributed as follows:

(A) To assist airports in Oregon with match requirements for Federal Aviation Administration (FAA) Airport Improvement Program grants;
(B) To make grants for emergency preparedness and infrastructure projects, in accordance with the Oregon Resilience Plan, including seismic studies, emergency generators, etc.;
(C) To make grants for:
    1. Services critical or essential to aviation including, but not limited to, fuel, sewer, water and weather equipment.
    2. Aviation-related business development including, but not limited to, hangars, parking for business aircraft and related facilities.
    3. Airport development for local economic benefit including, but not limited to, signs and marketing.

ROAR – Twenty-five percent of the revenues from the $0.02/gallon fuel tax increase will be distributed to assist commercial air service to rural Oregon.

SOAR – Twenty-five percent of the revenues from the $0.02/gallon fuel tax increase will be distributed to state owned airports for:

(A) Safety improvements recommended by the Oregon State Aviation Board and local community airports;
(B) Infrastructure projects at public use airports.

STATE CAPITAL IMPROVEMENT PROGRAM (SCIP)

The FAA's Seattle Airport District Office (ADO) is working with state aviation agencies in Oregon and Washington to develop a coordinated "State" Capital Improvement Program, known as the SCIP. The SCIP is intended to become the primary tool used by FAA, state aviation agencies, and local airport sponsors to

prioritize funding. The program has reached full implementation with current and near-term future funding decisions prioritized through evaluation formulas. Airport sponsors are asked to provide annual updates to their short-term project lists in order to maintain a current system of defined project needs. The short-term priorities identified in the master plan CIP will be imported into the SCIP and will be subject to additional prioritization for funding in competitive statewide evaluations.

Local Funding

The locally funded (city/tenant) portion of the CIP for the twenty-year planning period is estimated to be approximately $3,050,000 as currently defined. Hangar and building construction and maintenance costs have not been included in the CIP, since no FAA funding is assumed.

A portion of local matching funds are generated through airport revenues, including fuel sales, land leases, and hangar rentals. Airport sponsors occasionally fund infrastructure and revenue-generating development, including hangars and buildings, either through an inter fund loan or the issuance of long-term debt (revenue or general obligation bonds).

Airport Rates and Fees

The primary aviation use rates and fees at Hermiston Municipal Airport are summarized in **Table 8-2**. A review of existing rates and fees indicates that the airport's fee structure is generally comparable with other similarly sized Oregon airports. Rates at individual general aviation airports vary based primarily on market conditions. For example, hangar rental rates in the Portland metro area or in the Bend-Redmond area are typically higher than at airports in other parts of the state. An airport's ability to effectively raise rates must consider local and regional market conditions and the potential for nearby competitive airports to attract tenants through more economical rates. The rates and fees structure should be subject to regular review and adjustment to reflect inflation, market conditions and specific facility improvements.

TABLE 8-2: AIRPORT LEASE RATES

Ground Lease Rate per square foot:	$0.15
Fuel Flowage Fee (Jet-A) per gallon:	No Charge
Fuel Flowage Fee (100LL) per gallon:	No Charge
Landing Fee (Large GA) per 1,000lbs MGLW:	No Charge
T-Hangar Lease Rate (Monthly): Open T-Hangar Lease Rate (Monthly):	$130 & $185 $65

Cash Flow Analysis

A projection of airport operating revenues and expenses for the twenty-year planning period is presented in **Table 8-3,** based on data provided by the city and the noted assumptions on future events. According to the City of Hermiston's 2018-2019 budget, the airport is currently operating in a deficit (based on operating revenues and expenses only). The general operating position of the airport is expected to improve as specific facility improvements occur and overall airport activity increases. Basic business decisions will need to be made regarding the financial feasibility of renovating individual city-owned buildings. These decisions should be made based on market conditions, expected return on investment, and any intangible benefits provided to the community that would result from the project.

The airport has two primary revenue categories: airport leases including ground leases, hangar leases, and tiedown leases as well as fuel sales. The current rates and fees structure appear to be generally in line with market rates at other general aviation airports in the region. However, Hermiston currently does not charge a fuel flowage fee on their fuel sales. This is a revenue source many airports rely on and could be initiated in the future. As an example, nearby Eastern Oregon Regional Airport in Pendleton currently has a 5 cent per gallon fuel flowage fee on both Avgas (100LL) and Jet-A. In 2016, Hermiston sold 13,631 gallons of 100LL and 17,469 gallons of Jet-A. With a flowage fee of 5 cents per gallon, this would have brought in $1,555 in airport revenue.

For the purposes of projecting future revenues, it is assumed that revenues will increase at an average rate of 3.5 percent annually, through the twenty-year planning period. This rate assumes both an increase in revenue-producing activities on the airport (new leases, fuel sales, etc.) and periodic increases in current rates and fees to account for inflation and market conditions.

The current level of maintenance and operating expenses is considered to be reasonable based on the size of the facility and reflects the efficient use of staff and outside resources. For the purposes of projecting future revenues, it is assumed that expenses will increase at an average rate of 3 percent annually, through the twenty-year planning period. Additional maintenance expenses are also anticipated as the airfield continues to expand physically. Although the precise staging of facility expansion will depend on market demand and availability of funding the new facilities identified in the twenty-year CIP. The costs of maintaining the airfield can be reasonably expected to increase incrementally as the facility expands.

Ongoing capital improvement expenditures will include local match for state and federal grants and the full or partial cost of projects not eligible for FAA or state funding.

Revenue Assumptions:

A. Land leases increase at 3.5% per year (inflation factor) with specific bumps for additional leases estimated two or three new conventional hangar every 5 years (based on Facility Requirements hangar needs). *These numbers may vary based on the actual size of future hangars and actual year of construction.*

   1. (2020) Two new 50x50 foot hangar ground lease (initial revenue $750/yr. at current $.15sq/ft. lease rates).

   2. (2025) Two new 50x50 foot hangar ground lease (initial revenue $850/yr. at future estimated $.17 sq/ft. lease rates).

   3. (2030) Three new 50x50 foot hangar ground lease (initial revenue $1,425/yr. at future estimated $.19 sq/ft. lease rates).

   4. (2035) Three new 50x50 foot hangar ground lease (initial revenue $1,575/yr. at future estimated $.21 sq/ft. lease rates).

B. Building leases increase at 3.5% per year (inflation factor). No plans of any future City owned hangar buildings to be constructed in the next 20 years.

C. Fuel sales increase at 3.5% per year (inflation factor). It is recommended that the City consider adding a fuel flowage fee to their fuel sales in order to provide additional funding for the airport.

Expense Assumptions:

A. Operating expenses assumed to increase at 3% per year (inflation factor).

B. No increase in airport staffing assumed. Note that between 2017 and 2018 the City transitioned from having an Airport Caretaker to an Airport Manager, which increased the "Other Professional Services" expenses from $39,000 annually to $83,000 annually.

This page intentionally left blank

TABLE 8-3: 20-YEAR OPERATING REVENUES AND EXPENSES

OPERATING EXPENSES*	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**
MATERIALS AND SERVICES																					
Other Professional Services	$83,000	$85,490	$88,050	$90,690	$93,410	$96,210	$99,100	$102,070	$105,130	$108,280	$111,530	$114,880	$118,330	$121,880	$125,540	$129,310	$133,190	$137,190	$141,310	$145,550	$149,920
Property & Liability Insurance	$10,770	$11,090	$11,420	$11,760	$12,110	$12,470	$12,840	$13,230	$13,630	$14,040	$14,460	$14,890	$15,340	$15,800	$16,270	$16,760	$17,260	$17,780	$18,310	$18,860	$19,430
Electricity	$11,000	$11,330	$11,670	$12,020	$12,380	$12,750	$13,130	$13,520	$13,930	$14,350	$14,780	$15,220	$15,680	$16,150	$16,630	$17,130	$17,640	$18,170	$18,720	$19,280	$19,860
Telephone	$2,800	$2,880	$2,970	$3,060	$3,150	$3,240	$3,340	$3,440	$3,540	$3,650	$3,760	$3,870	$3,990	$4,110	$4,230	$4,360	$4,490	$4,620	$4,760	$4,900	$5,050
Misc. Contractual	$10,000	$10,300	$10,610	$10,930	$11,260	$11,600	$11,950	$12,310	$12,680	$13,060	$13,450	$13,850	$14,270	$14,700	$15,140	$15,590	$16,060	$16,540	$17,040	$17,550	$18,080
Licenses & Permits	$300	$310	$320	$330	$340	$350	$360	$370	$380	$390	$400	$410	$420	$430	$440	$450	$460	$470	$480	$490	$500
Office Supplies	$200	$210	$220	$230	$240	$250	$260	$270	$280	$290	$300	$310	$320	$330	$340	$350	$360	$370	$380	$390	$400
Clean & Sanitation Supplies	$300	$310	$320	$330	$340	$350	$360	$370	$380	$390	$400	$410	$420	$430	$440	$450	$460	$470	$480	$490	$500
Food & Miscellaneous	$500	$520	$540	$560	$580	$600	$620	$640	$660	$680	$700	$720	$740	$760	$780	$800	$820	$840	$870	$900	$930
Airport Courtesy Car	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Minor Safety Equipment	$1,000	$1,030	$1,060	$1,090	$1,120	$1,150	$1,180	$1,220	$1,260	$1,300	$1,340	$1,380	$1,420	$1,460	$1,500	$1,550	$1,600	$1,650	$1,700	$1,750	$1,800
Motor Vehicle Fuel & Oil	$140,000	$144,200	$148,530	$152,990	$157,580	$162,310	$167,180	$172,200	$177,370	$182,690	$188,170	$193,820	$199,630	$205,620	$211,790	$218,140	$224,680	$231,420	$238,360	$245,510	$252,880
Parts & Operating Equipment	$2,000	$2,060	$2,120	$2,180	$2,250	$2,320	$2,390	$2,460	$2,530	$2,610	$2,690	$2,770	$2,850	$2,940	$3,030	$3,120	$3,210	$3,310	$3,410	$3,510	$3,620
TOTAL FUND EXPENDITURES	**$261,870**	**$269,730**	**$277,830**	**$286,170**	**$294,760**	**$303,600**	**$312,710**	**$322,100**	**$331,770**	**$341,730**	**$351,980**	**$362,530**	**$373,410**	**$384,610**	**$396,130**	**$408,010**	**$420,230**	**$432,830**	**$445,820**	**$459,180**	**$472,970**

OPERATING REVENUES**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**
SERVICES																					
Airport Lease Income	$70,000	$72,450	$75,740	$78,390	$81,130	$83,970	$86,910	$90,800	$93,980	$97,270	$100,670	$104,190	$109,265	$113,090	$117,050	$121,150	$125,390	$131,355	$135,950	$140,710	$145,630
Airport Gas & Oil Sales	$160,000	$165,600	$171,400	$177,400	$183,610	$190,040	$196,690	$203,570	$210,690	$218,060	$225,690	$233,590	$241,770	$250,230	$258,990	$268,050	$277,430	$287,140	$297,190	$307,590	$318,360
TOTAL FUND REVENUES	**$230,000**	**$238,050**	**$247,140**	**$255,790**	**$264,740**	**$274,010**	**$283,600**	**$294,370**	**$304,670**	**$315,330**	**$326,360**	**$337,780**	**$351,035**	**$363,320**	**$376,040**	**$389,200**	**$402,820**	**$418,495**	**$433,140**	**$448,300**	**$463,990**
NET OPERATING REVENUE	**$ (31,870)**	**$ (31,680)**	**$ (30,690)**	**$ (30,380)**	**$ (30,020)**	**$ (29,590)**	**$ (29,110)**	**$ (27,730)**	**$ (27,100)**	**$ (26,400)**	**$ (25,620)**	**$ (24,750)**	**$ (22,375)**	**$ (21,290)**	**$ (20,090)**	**$ (18,810)**	**$ (17,410)**	**$ (14,335)**	**$ (12,680)**	**$ (10,880)**	**$ (8,980)**

Source: City of Hermiston Adopted Budget Fiscal Year 2018-2019

**Operating expenses were calculated at a 3% average annual growth rate over the next 20 years.*

***Operating revenues were calculated at a 3.5% average annual growth rate over the next 20 years.*

Additional increases in aviation rent revenues in years 2020, 2025, 2030, and 2035, see Revenue Assumptions in Chapter 8 Airport Financial Plan for details.