Paine Field Master Plan 2040

Chapter 6 | Development Plan

6

May 2024

PREPARED FOR
Snohomish County

PREPARED BY
Landrum & Brown, Incorporated

Contents

Page

List of Tables

Page

List of Exhibits

6 Development Plan

6.1 Introduction

The previous chapters of the Paine Field (PAE) Master Plan 2040 evaluated the existing facilities, projected future activity levels, identified potential facility needs, evaluated alternatives, and made recommendations for addressing those facility needs. This chapter presents the initial recommended Master Plan projects, an assessment of financial feasibility, and the final recommended implementation plan based on the financial analysis. Because actual aviation activity rarely occurs as forecast, especially over a 20+ year planning horizon, this recommended implementation plan should only be used as a general guide for project timing; projects should not be implemented until actual activity justifies the project and funds are available.

The recommended Master Plan projects were grouped into three phases that correspond to the Planning Activity Levels (PALs) presented in Chapter 4, *Facility Requirements*. The requirements are tied to activity levels, not specific years. The annual forecast activity levels that correspond to each PAL are shown in **Table 6.1-1, *Planning Activity Levels***.

Table 6.1-1 Planning Activity Levels

Planning Activity Level	Million Annual Passengers (MAP)	Annual Operations[1]	Passenger Operations	General Aviation Operations
PAL 1 (1.0 MAP)	1,022,046	148,473	16,660	125,131
PAL 2 (1.5 MAP)	1,535,412	155,028	18,741	129,350
PAL 3 (4.3 MAP)	4,322,426	187,303	41,506	138,282

[1] Includes Passenger, General Aviation, Air Cargo, Air Taxi, Military, and all other air carrier operations
Source: Landrum & Brown

6.2 Recommended Projects and Phasing

This section provides the list of recommended major capital projects that resulted from the Chapter 4, *Facility Requirements*, and Chapter 5, *Concepts and Alternatives* analyses. The recommended projects were categized by development type (airfield, terminal, landside, and support facilities) as shown in **Table 6.2-1, *Recommended Projects and Phases***. Each project shown in the table was assigned a phase (PAL 1 through PAL 3) based on the timing identified in the Chapter 4 facility requirements analysis. The list of recommended projects includes both airport capital and third-party funded projects. Major maintenance projects are specifically identified in Section 6.4.3 Capital Improvement Program.

Some projects have multiple PALs listed because they were assumed to be implemented incrementally throughout the planning period based on forecasted demand. For example, terminal expansion is shown in PALs 1, 2, and 3 because the Chapter 4 facility requirements analysis identified a need for incremental expansion.

Table 6.2-1 Recommended Projects and Phases

Project	PAL
Airfield	
Implement Airport Preferred Alternative to Resolve Hot Spot 2	1
Construct Remote Pad (ADG-V)	1
Provide High-Speed Exit for Runway 16R Arrivals (removes Taxiway A6)	3
Provide High-Speed Exit for Runway 16R Arrivals (removes Taxiway A8)	3
Remove Taxiway A9	3
Develop Flexible Ramp in Decommissioned Runway Site	3
Provide High-Speed Exit for Runway 34L Arrivals (removes Taxiway A4/A5)	3
Relocate Taxiway A3	3
Reconfigure Intersection - Taxiway G5 and Runway 34R End	3
Relocate Taxiways A7 and K7	3
Terminal	
Reconfigure Terminal Area Taxilanes**	1
Expand Passenger Terminal Building to the North (+4 Contact Gates)*	2
Construct Apron to Accommodate Four Additional Remote Gates*	2
Ground Transportation	
Expand Terminal Curb*	1
Expand Premier Surface Lot*	1
Expand Terminal Loop Road - 100th St. SW	1,3
Expand Signalized Intersection - Airport Road and 100th St. SW Intersection	3
Expand Entrance Road - 100th St. SW*	3
Reprogram Access and Construct Back-of-House Road (associated fence, gate)*	3
Construct Parking Structure*	3
Convert Economy Lot 4 into Staging Lot for Ride-Share/Valet/Shuttles*	3
Support Facilities	
Relocate Airport Administration to ERC	1
ARFF Expansion	1
Expand Ground Service Equipment (GSE) Staging*	2,3
Expand Police/Security Facilities	2,3
Relocate and Develop Aircraft Deicing Facilities*	2
Reserve Land for Additional GA Facilities (no additional actions are required until a business case can be undertaken)*	2,3

Project	PAL
Develop Flight Catering Facilities*	3
Expand Airport Maintenance (to Air National Guard Site)	3
Expand Aircraft Maintenance*	3

*These projects are funded by third parties and not included in the financial analysis.
** Project funding underdetermined
Note: Alternative to implement cameras to resolve Hot Spot #1 not included, timing unknown.
Source: Landrum & Brown

6.3 Phasing Plan

In practice, future airport improvement projects will be undertaken only when demand warrants and actual funding is available, rather than in accordance with a specific projected scheduled timeframe. Factors that can trigger the need to proceed with a particular airport development project can range from tenant demands for landside and support facilities, to airside and terminal capacity requirements (passenger demand). FAA planning criteria and the need to enhance safety on the airfield must also be considered. The following section presents the recommended implementation plan for the PAE Master Plan 2040.

PAE Return to Aviation Forecast Baseline (Post-Covid)

The COVID-19 pandemic disrupted the aviation industry in an unprecedented manner. In the immediate aftermath of the spread of COVID-19 in 2020, travel restrictions were implemented, flights were suspended, business travel effectively disappeared, and airports were brought to a virtual halt in the U.S. and throughout the world. PAE was no exception to this trend. PAE exceeded one million annual passengers in their first 12-months of operation (started in March 2019) until the pandemic hit.

Although the magnitude of COVID-19's effect within the national aviation system has no precedent, the industry has experienced sudden system impacts before and has shown resilience for efficient recovery. Every major worldwide incident, pandemic, or recession experienced in the aviation industry has had immediate and significant impacts to aviation. However, once the event passed, the aviation system has consistently recovered during subsequent years, showing resilience due to the underlying demand for air transportation for both leisure and business. Just as the national aviation system is expected to recover, PAE is as well; however, it is unknown how long it will take to return to 2019 levels.

The timing of the Master Plan projects could therefore potentially be delayed as the airport returns to 2019 levels and meet their anticipated PAL 1 demand of 1.0 MAP. Snohomish County and PAE staff will monitor actual trends in airport operations and passenger movements, in addition to short-term forecasts, to determine the most appropriate timing to implement the Master Plan projects. It is recommended that PAE prioritize maintenance related projects as the demand related projects are not needed until 2019 levels are realized. Considering this, it may be prudent to initiate design and construction for such projects before operations return to 2019 levels to take advantage of a less congested airport which would result in fewer operational impacts during construction.

6.3.2 PAL 1

The first phase of the Master Plan implementation strategy recommends several projects to support the projected PAL 1 demand of 1.0 MAP.

6.3.2.1 Airfield

The PAL 1 airfield program includes the implementation of a project to resolve Hot Spot #2 that removes the ability for aircraft to travel from Taxiway A northbound past Taxiway A1 and accessing Taxiway AA. Independent of the recommended Master Plan projects, these improvements are planned to begin the summer of 2023.

Additionally, the PAL 1 airfield program also includes the construction of a new ADG-V remote pad parking position located at the intersection of Taxiways A and W. The new remote pad (estimating 100,000 sf of new apron) gives PAE the ability to handle ADG-IV and ADG-V aircraft as needed. The remote pad would be accessed from Taxiway A and is not dependent on the construction of future projects.

6.3.2.2 Terminal

Terminal projects in the PAL 1 program focus on developing the terminal airside to allow the terminal to be expanded at a later phase. The existing terminal area taxilanes and remote aircraft parking positions will be reconfigured to provide dual ADG-III taxilanes (from C1 Hangar to Taxiway A). The project will allow the terminal to expand independently in the future and maintain acceptable operational levels for commercial service. No new gates are provided in PAL 1 because there are currently sufficient gates to accommodate PAL 1 demand.

6.3.2.3 Ground Transportation

Landside projects in the PAL 1 program focus on developing the terminal loop road (100th St. SW) and terminal curb to allow for the terminal to be expanded at a later phase. The northern limits of the terminal loop road will be extended beyond its current northern limit (the Airport Traffic Control Tower [ATCT]) and be aligned with the future terminal expansion envelope. The number of lanes will be expanded from two to three lanes. Additionally, a new curb will be developed on the north side of the ATCT, in connection with the future terminal expansion. The existing premier parking lot will be expanded within the new limits of the terminal loop road. Sidewalks and curb fronts should be designed to accommodate various modes of transportation including private vehicles, ride-share vehicles, taxis, limousines, mass transit buses, potential shuttles from light rail stops, buses for rental cars, lodging and remote lots.

6.3.2.4 Support Facilities

The PAL 1 support facility project includes the relocation and expansion of airport administration to a recently acquired building at 9901 24th Pl W known as the ERC. A portion of the airport administration staff will relocate the former ERC building in the Bomarc office park. The County is also expanding the existing ARFF facility within the limits of its existing site.

6.3.2.5 Summary of PAL 1 Program

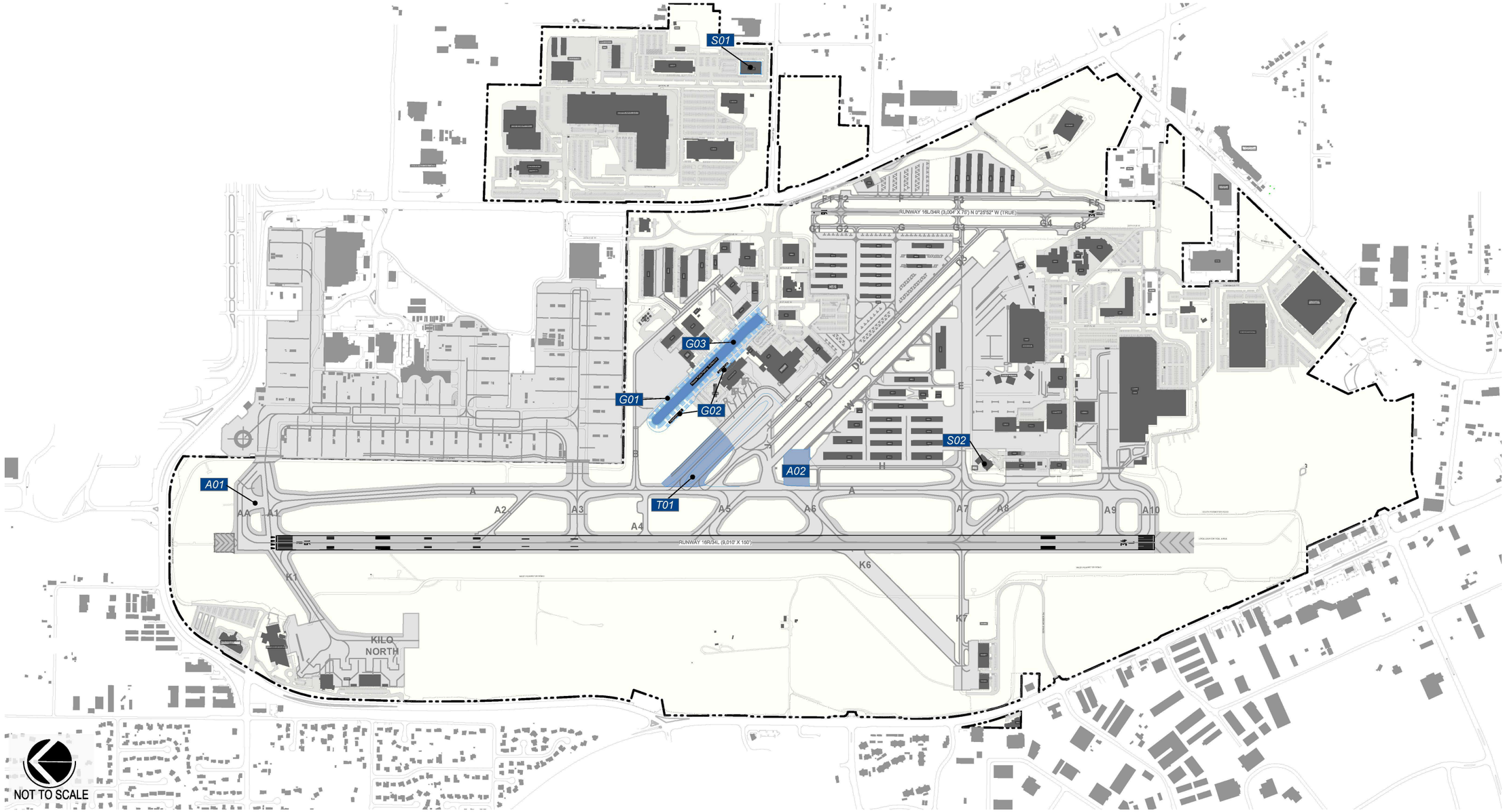
A complete list of the projects recommend for PAL 1 implementation is shown on **Table 6.3-1, *PAL 1 Recommended Projects***, and their locations are depicted on **Exhibit 6.3-1, *PAL 1 Program***.

Table 6.3-1 PAL 1 Recommended Projects

#	PAL 1 Project List
Airfield	
A01	Implement Airport Preferred Alternative to Resolve Hot Spot 2
A02	Construct Remote Pad (ADG-V)
Terminal	
T01**	Reconfigure Terminal Area Taxilanes
Ground Transportation	
G01	Expand Terminal Loop Road - 100 St. SW
G02*	Expand Terminal Curb
G03*	Expand Premier Surface Lot
Support Facilities	
S01	Relocate Airport Administration to 9901 24th Pl W (Former Boeing ERC Bldg.)
S02	ARFF Expansion

*These projects are funded by third parties and not included in the financial analysis.
** Project funding underdetermined
Source: Landrum & Brown

Exhibit 6.3-1 PAL 1 Program



Source: Landrum & Brown

6.3.3 PAL 2

The second phase of the Master Plan implementation strategy recommends several projects to support the projected PAL 2 demand of 1.5 MAP.

6.3.3.1 Airfield

No capacity enhancement airfield projects are programed for PAL 2. However, a significant runway rehabilitation project is included in the Capital Investment Plan.

6.3.3.2 Terminal

The PAL 2 terminal program expands the passenger terminal building, connected apron, and gates. The expansion may be done in two phases, however, depending on timing, it may be combined into just one. The first project includes a single contact gate expansion to the north, as well as the conversion of the existing remote gate into a contact gate. The resulting four total active (contact) gates will serve the projected initial demand of PAL 2. It is assumed an elevated bridge will be constructed to connect passengers from the existing terminal facility to the 40,000-sf north expansion.

The second terminal facility project will construct an additional three contact gates. The projects assume the terminal expansion to the north will be two levels. Additionally, the PAL 2 program expands the apron to the north to develop space for four ADG-III remote aircraft parking positions to satisfy the inactive demand. The Master Plan assumes the terminal expansion to be completed in PAL 2, ahead of the projected forecasted demand need. The exact timing and design of a terminal expansion at PAE will be a decision for the privately owned and operated terminal developer.

6.3.3.3 Ground Transportation

No ground transportation projects are programmed for PAL 2.

6.3.3.4 Support Facilities

The PAL 2 support facility program includes the demand-based expansion of Ground Service Equipment (GSE) staging and maintenance capacity to support the terminal facility and apron expansion. It is estimated the GSE expansion will occur in the C-1 hangar. Additionally, the PAL 2 support facility program includes the development of a centralized deicing facility, relocating the deicing operations away from the contact gates into a dedicated area.

Further, the PAL 2 program includes land reservations to accommodate general aviation (GA) expansion in a few areas. The exact timing and growth of GA facilities will be determined by third-party markets. PAL 2 also includes the expansion of police and security staff facilities to support the terminal expansion.

6.3.3.5 Summary of PAL 2 Program

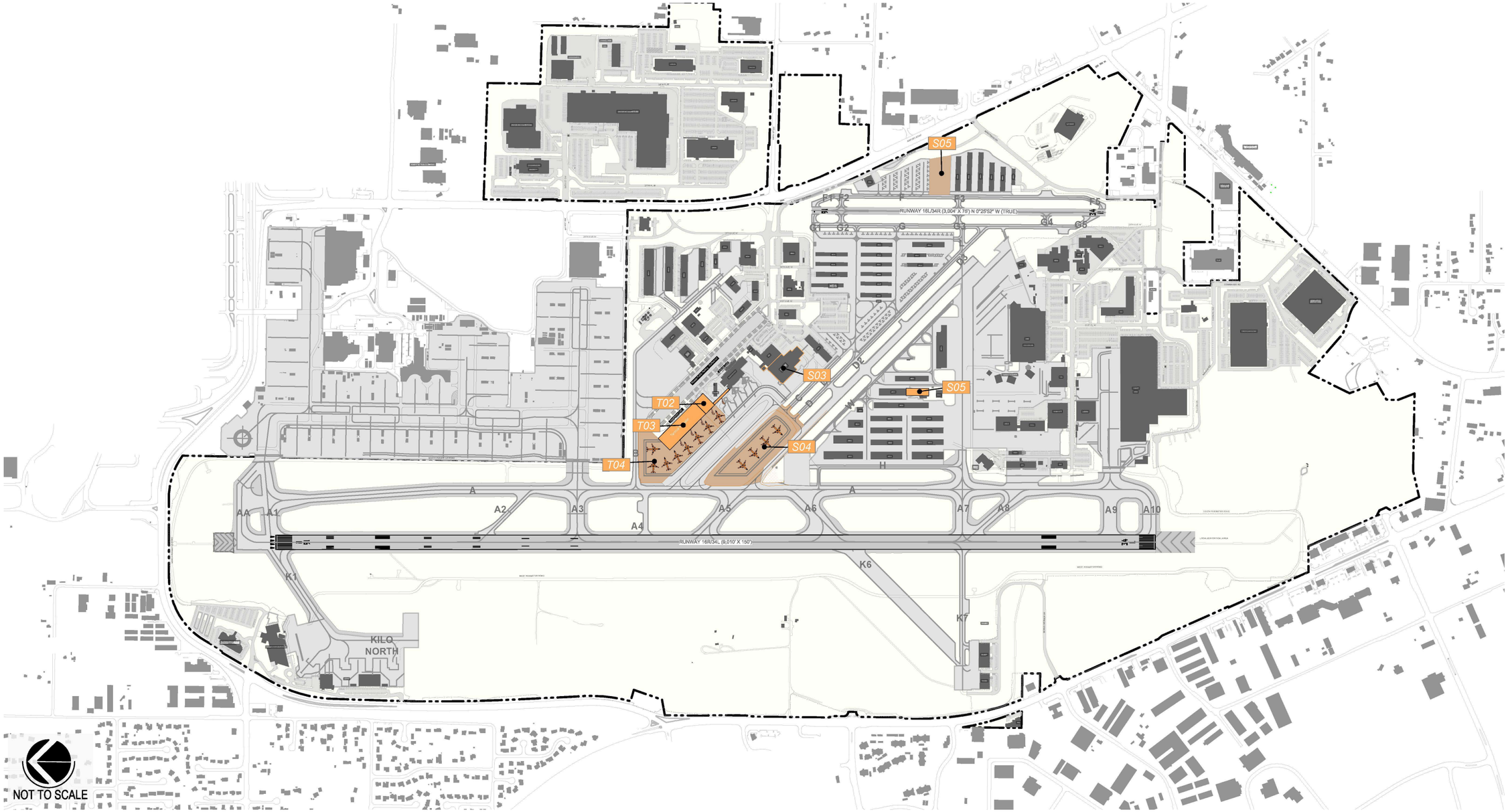
A complete list of the projects recommended for PAL 2 implementation is shown on **Table 6.3-2, *PAL 2 Recommended Projects***, and their locations are depicted on **Exhibit 6.3-2, *PAL 2 Program***.

Table 6.3-2 PAL 2 Recommended Projects

#	PAL 2 Project List
	Airfield
-	None
	Terminal
T02*	Expand Passenger Terminal Building to the North (+1 Contact Gate)
T03*	Expand Passenger Terminal Building to the North (+3 Contact Gates)
T04*	Construct Apron to Accommodate Four Additional Remote Gates
	Ground Transportation
-	None
	Support Facilities
S03*	Expand Ground Service Equipment (GSE) Staging
S04*	Relocate and Develop Aircraft Deicing Facilities
S05*	Reserve Land for Additional GA Facilities (no additional actions are required until a business case can be undertaken)
-	Expand Police/Security Facilities (not depicted)

*These projects are funded by third parties and not included in the financial analysis.
Source: Landrum & Brown

Exhibit 6.3-2 PAL 2 Program



Source: Landrum & Brown

6.3.4 PAL 3

The third and final of the Master Plan implementation strategy recommends several projects to support the projected PAL 3 demand of 4.3 MAP. The demand gap between PAL 2 and PAL 3 increases from 1.5 MAP to 4.3 MAP. It is anticipated that this demand growth may span beyond 10 years and will require development of many Master Plan projects to provide capacity. The exact timing of these projects should be evaluated in the future as demand grows beyond 1.5 MAP.

6.3.4.1 Airfield

The PAL 3 airfield program focuses on improving the safety and capacity of the airfield system. To improve the non-standard direct access conditions, PAL 3 recommends the relocation of Taxiways A7 and K7. The PAL 3 airfield program also includes the construction of a flexible ramp in the location of the decommissioned Runway 11/29 (now called the Midfield Ramp). The project will give the airport additional ramp space for operational flexibility. The PAL 3 airfield program includes the construction of three new high-speed exits to optimize arrival operations. Finally, the PAL 3 airfield program includes the reconfiguration of the runway intersection at Taxiway G5 and the Runway 34R end.

6.3.4.2 Terminal

No terminal projects are programed for PAL 3.

6.3.4.3 Ground Transportation

Significant upgrades to the airport access and entrance roads, terminal loop, and parking facilities are included in PAL 3. Expanded portions of Airport Road and the intersection of Airport Road and 100th St. SW will require expansion. The PAL 3 program also recommends additional signage promoting alternative egress options (intersection of Airport Road and Minuteman Drive) and the construction of a *back-of-house* road (with the associated fence and gate) to improve the demand pressures on the airport entrance road (100th St. SW). Additionally, expansion is required to a few of the airport parking facilities. To maintain proximity to the terminal facility and provide a level-of-service comparable to what is offered today, the Master Plan recommends the construction of a parking structure on the existing P2 lot. Assuming a multi-level parking structure is constructed, the PAL 3 program recommends the conversion of Economy Lot 4 into a staging lot for ride-share, valet, and shuttles. Finally, the development of additional vehicle parking/staging facilities with shuttle service to the terminal area must be considered as portions of 100th St. SW near acceptable level of service thresholds toward the end of the planning period. Sidewalks and curb fronts should be designed to accommodate various modes of transportation including private vehicles, ride-share vehicles, taxis, limousines, mass transit buses, potential shuttles from light rail stops, buses for rental cars, lodging and remote lots.

6.3.4.4 Support Facilities

The PAL 3 support facility program identifies a location to accommodate flight catering facilities on-airport, a function that does not exist today. Based on the alternatives analysis in Chapter 5, flight catering may occur in the C-1 hangar.

The demand-based expansion of GSE staging and maintenance capacity to support the terminal facility and apron expansion is also projected in PAL 3. Additionally, the PAL 3 support facility program includes the opportunity to expand airport support or commercial/industrial airport compatible development in the east (current Air National Guard Site). The Master Plan assumes the County has gained control of the Air National Guard Site and may develop the consolidated site either there or on a greenfield site south of the EMC. The PAL 3 support facilities program also includes land reservations to accommodate GA expansion in a few areas. The exact timing and growth of GA facilities will be determined by third-party markets. Police and security staff facilities will also be expanded in PAL 3 to support the terminal expansion. Finally, the PAL 3 program includes an expansion located to the east to accommodate aircraft maintenance (MRO) growth for Aviation Technical Services Incorporated (ATS).

6.3.4.5 Summary of PAL 3 Program

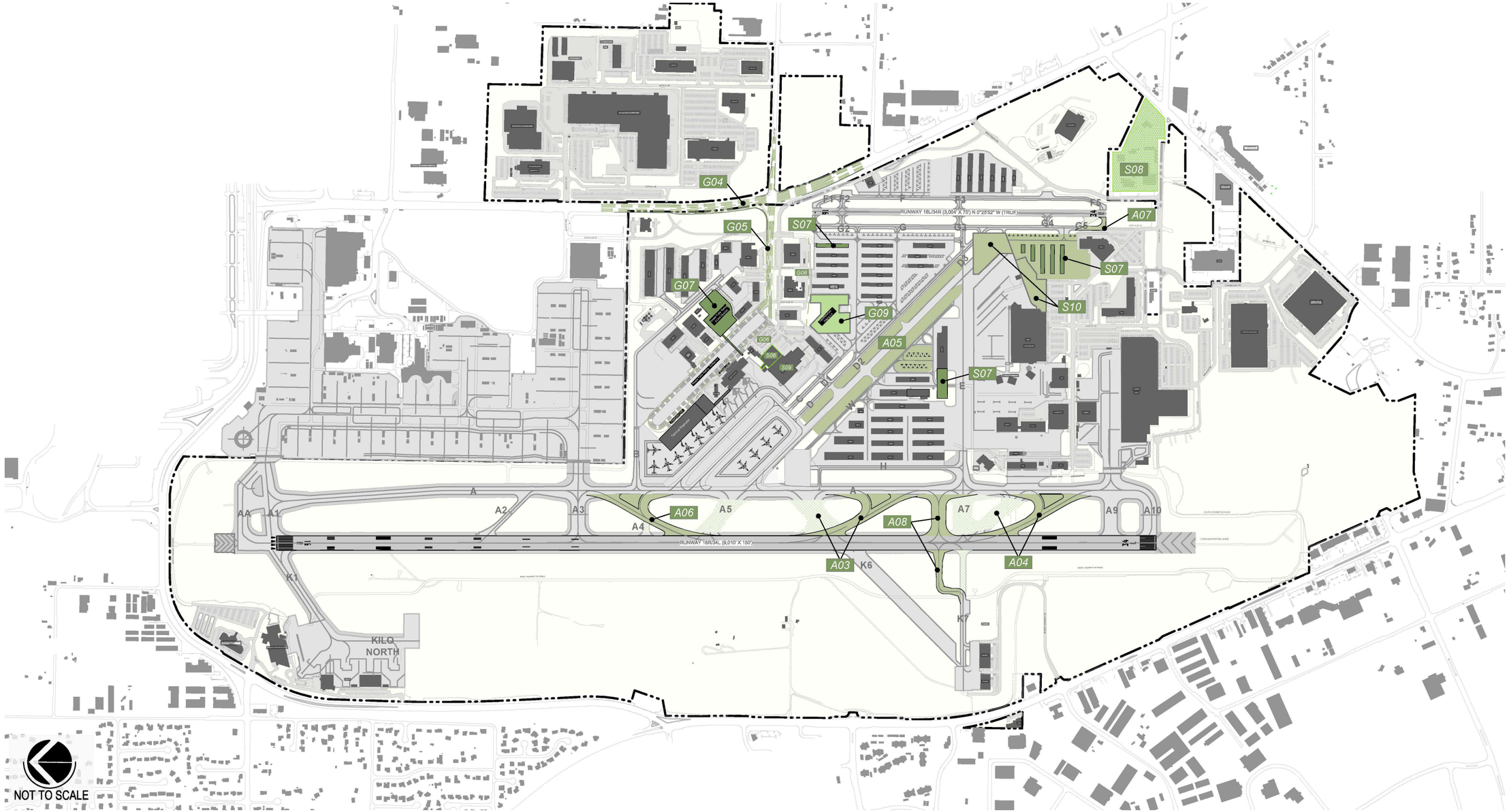
A complete list of the projects recommended for PAL 3 implementation is shown on **Table 6.3-3, *PAL 3 Recommended Projects***, and their locations are depicted on **Exhibit 6.3-3, *PAL 3 Program***.

Table 6.3-3 PAL 3 Recommended Projects

#	PAL 3 Project List
	Airfield
A03	Provide High-Speed Exit for Runway 16R Arrivals (removes Taxiway A6)
A04	Provide High-Speed Exit for Runway 16R Arrivals (removes Taxiway A8)
A05	Develop Flexible Ramp in Decommissioned Runway Site
A06	Provide High-Speed Exit for Runway 34L Arrivals (removes Taxiway A4/A5)
A07	Reconfigure Intersection - Taxiway G5 and Runway 34R End
A08	Relocate Taxiway A7 and K7
	Terminal
-	None
	Ground Transportation
G04	Expand Terminal Loop Road - 100th St. SW
G05	Expand Signalized Intersection - Airport Road and 100th St. SW Intersection
G06*	Expand Entrance Road - 100th St. SW
G07*	Construction Multi-level Parking Structure
G08	Reprogram Access and Construct Back-of-House Road (associated fence, gate)
G09*	Convert Economy Lot 4 into Staging Lot for Ride-Share/Valet/Shuttles
	Support Facilities
S06*	Develop Flight Catering Facilities
S07*	Reserve Land for Additional GA Facilities (no additional actions are required until a business case can be undertaken)
S08	Expand Airport Support or Commercial/Industrial (Air National Guard Site)
S09*	Expand Ground Service Equipment (GSE) Staging
S10*	Expand Aircraft Maintenance
-	Expand Police/Security Facilities (Not Depicted)

*These projects are funded by third parties and not included in the financial analysis.
** Project funding underdetermined
Source: Landrum & Brown

Exhibit 6.3-3 PAL 3 Program



Source: Landrum & Brown

6.4 Financial Analysis

6.4.1 Introduction

This section addresses the financial implications of the proposed Master Plan improvements.

Following an overview of both the federal grant programs, and a general overview of potential funding sources, each project's eligibility relative to federal funding programs is highlighted. The projected net operating position of PAE is presented, along with a review of the PAE's capital fund cash balances that may assist in meeting the local funding requirements.

The financial plan for the Master Plan was conducted as follows:

- An overview of the PAE's financial structure was prepared to present the current accounting practices, historical financial performance, financial operating environment, and key provisions of certain governing documents.
- Rough order of magnitude (ROM) cost estimates for each project in the development program are summarized in this chapter, along with proposed timing for the short-, intermediate-, and long-term development periods.
- Potential funding sources were identified, including the FAA's Airport Improvement Program (AIP) and other funding sources. Project costs not funded by these sources are expected to be funded by some combination of Passenger Facility Charges (PFCs), rental car customer facility charges (CFCs), PAE funds and/or airport debt.
- PAE's existing financial operating results were projected over the next 5 years (through FY 2026) to determine primary revenue generating sources, its major expenses, and the ability of PAE to fund the costs of the Capital Improvement Program (CIP) through the short- and intermediate-term of the projection period.

6.4.2 Existing Financial Overview

This section discusses the County and PAE's accounting practices and a summary of key airport tenant agreements at PAE.

6.4.2.1 County and Airport Accounting

PAE is an important asset of Snohomish County (County). The County's focus is to operate PAE as a financially self-sustaining facility. PAE is an Enterprise Fund, financially self-sufficient and uses no County general fund tax dollars. PAE derives most of its income from tenant leases, user fees, and other real estate activities. It reinvests profits to maintain the airport and advance further redevelopment.

The County's fiscal year ends on December 31 of each year, and its financial statements are presented on the full accrual basis in accordance with Generally Accepted Accounting Practices (GAAP). This basis of accounting takes into consideration all the current year's revenues and expenses, regardless of when the cash is received or paid. All of PAE's activities are accounted for within a single proprietary fund (Enterprise Fund) within Snohomish County. The County's Airport Enterprise Fund accounts for the operations, capital improvements, and debt service of PAE, and is supported by fees for services

derived from its tenants and user fees. Additional capital funding is received from federal grants, PFCs, and bond issues to help fund and finance capital improvements.

6.4.2.2 Key Airport Tenants

PAE is home to several large and small tenants, the most notable of which is The Boeing Company. In total, PAE has roughly 51 private tenants, not including the County itself, the FAA, and other public tenants. In total, the County has just over 100 different leases in place with its various tenants at PAE. Several key tenant leases at PAE are summarized below.

- **The Boeing Company** – Boeing's Everett site is heralded as containing the largest manufacturing building in the world, producing the 747, 767, 777, 787 and the KC-46A airplanes in recent years. Boeing's facilities are located primarily off airport property, adjacent to airport property, east of Runway 16R/34L, north of the North Ramp. Boeing negotiated an agreement with Snohomish County for the use of PAE in 1966 and constructed the Everett 747 plant. Boeing's facilities were expanded in 1978 with the decision to add the 767 to their family of jets. In 1988, Snohomish County sold 68 acres of airport property to Boeing so that the company could expand its flight line. This has resulted in an on-going expansion of office and plant facilities. Boeing operates at PAE primarily under the terms of the Joint Use Agreement (JUA) between the County and Boeing. The 75-year JUA with Boeing was originally executed in 1966 and extends through June 2041. Boeing's JUA fees are based on a cost recovery formula based on Boeing's share of costs allocated to the airfield. The JUA has been amended numerous times to reflect a re-negotiated "capped amount" that Boeing is required to pay to the County to land and operate its aircraft at PAE (most recently amended for 2022 through 2023). In addition to the JUA, Boeing also has several facility and land leases with the County within the property of PAE. These leases consist of various building and/or land rent associated with their facilities, the lease terms of which expire at various dates ranging from 2021 to 2049.
- **FedEx Corporation** – The Boeing Dreamlifter Operations Center was constructed in 2013 and funded through a 20-year bond issued by the County. The facility was originally leased to the Boeing Company with a set annual lease amount at fair market value which funds the building's debt service. Boeing assigned their lease to FedEx in 2021. In addition, FedEx now pays a land rent for the facility and additional ramp area, with rent adjusted to fair market value every three years.
- **Boeing's Future of Flight** – The Future of Flight Aviation Center & Boeing Tour Facility (FoF) was seeded and developed by PAE as a Public Facility District (PFD) Regional Center in 2005. Beginning October 17, 2018, the County leased the FoF Aviation Center to The Boeing Company exclusively for an initial term of five (5) years and has recently exercised their option for an additional five (5) years. Boeing has the option to extend their lease two (2) additional five (5) year terms which brings their full lease term past the maturity date of the refinanced bonds. The FoF general obligation tax exempt bonds were refinanced to taxable bonds per the new lease agreement.
- **Propeller Airports** – On March 4, 2019, Propeller Airports Paine Field, LLC (Propeller) opened a new passenger terminal serving two (2) airlines and over 500,000 enplaned passengers

annually. PAE entered a 30-year land lease with Propeller and the option to renew for two (2) additional periods of ten (10) years each. The land lease is set at fair market value and is adjusted every three years to current fair market value. In addition, PAE receives two and a half (2.5) percent of annual gross revenues. Propeller owns and operates the terminal which provides auto-parking; access to rental cars and ground transportation; aircraft ground handling services; concessionaires (food); baggage handling services; airline common use gates and check in kiosks; and aircraft parking. Starting in the fifth year of operation, which is March 2023, PAE will receive five (5.0) percent of Propeller's annual gross revenues for the remainder of the term of the contract. In addition to the concession fee, Propeller also reimburses PAE and the County for Surface Water Management (SWM) fees, Storm Water Facilities (SWF) fees, utilities, the cost of two (2) Aircraft Rescue and Firefighting (ARFF) personnel, and all costs associated with PAE security and Law Enforcement associated with securing commercial passenger facilities.

- **Aviation Technical Services, Inc. (ATS)** – Paine Field is also home to ATS, one of the nation's largest aviation maintenance facilities. ATS operates a 950,000-square foot facility; formerly operated by Goodrich. ATS is the largest third-party aircraft inspection and repair facility in North America and provides repair and maintenance services for airlines such as Alaska, American, Delta, Southwest, UPS, and the United States Air Force (USAF). ATS has several facility and land leases which pay the County various building and/or land rent. The lease terms of which expire at various dates ranging from the end of October 2022 to September 2028. In addition, ATS also pays the County for the use of designated taxiways and apron at PAE.
- **Wartime History Museum (previously Flying Heritage Combat Armor Museum)** – The Flying Heritage Combat Armor Museum (FHCAM) relocated to PAE in 2008 and operated a museum dedicated to showing various military artifacts from countries around the world, including 26 aircraft and over 25 vehicles and tanks. The FHCAM lease was recently assigned to the Wartime History Museum, Inc (WHM). The WHM leases two hangars, aircraft ramp, and auto parking space from the County, the lease terms of which expire near the end of 2023 and 2024.
- **Alaska Airlines** – To support its commercial flight operations at PAE, Alaska Airlines leases a hangar, office and warehouse space, and auto parking space from the County. Alaska Airlines is renovating a new maintenance facility on the airfield in the C1 hangar directly adjacent to the passenger terminal to be completed in early 2023 at which time their current lease will terminate in the C5 building. Their newly renovated hangar and auto parking space lease will expire at the end of 2031.

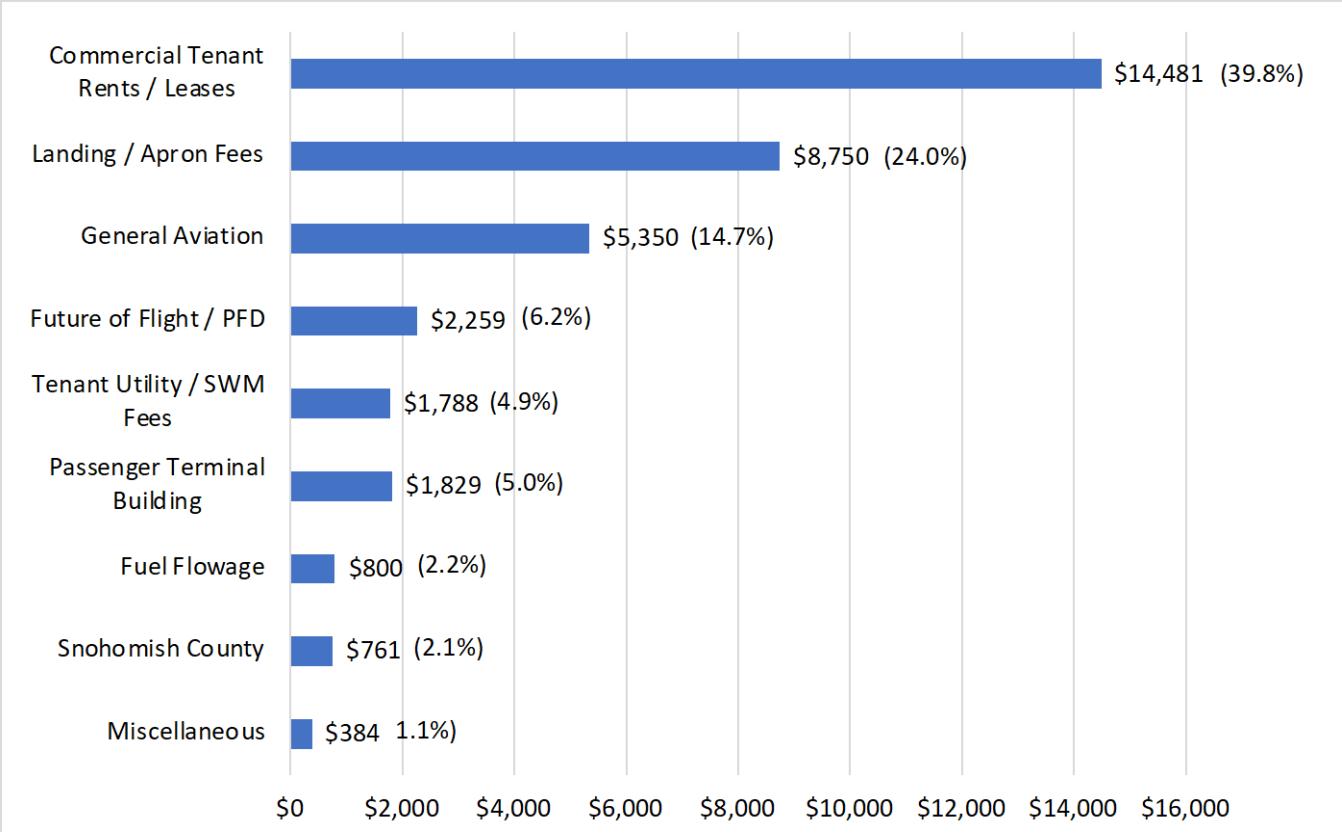
6.4.2.3 Historical Airport Revenues

As discussed above, PAE contains a diverse revenue stream from several different sources driven primarily by its key tenant leases. These revenue sources include revenues from aeronautical and nonaeronautical tenant rents, landing fees, GA facilities, the FoF museum, Boeing JUA, tenant utility, sewer fees, water management fees, and the passenger terminal, among others. In total, operating revenues for FY 2023 are budgeted to be approximately $36.4 million (not including grant funds or PFC revenues used for capital).

A breakdown of PAE's historical operating revenues by type is presented in **Exhibit 6.4-1, *Breakdown of Airport Operating Revenues – Budget FY 2023 ($ in thousands)***. As shown, in FY 2023, $14.5 million, or just under 40 percent of PAE's revenue was derived from commercial tenant leases and rents. Approximately $8.8 million (24.0 percent) was derived from landing/apron fee revenues assessed to PAE's commercial passenger airlines. Landing/apron fee revenues also include the through-the-fence fees that are assessed to Boeing pursuant to the JUA. Revenues derived from GA facilities accounted for $5.4 million (14.7 percent) of all revenues generated at PAE.

PAE's remaining 21.5 percent of revenues in FY 2023 are generated from various sources shown in **Exhibit 6-4-1**. It should be noted that these figures represent budgeted amounts from FY 2023 and there will be some variances between the revenue categories once final audited figures are prepared.

Exhibit 6.4-1 Breakdown of Airport Operating Revenues – Budget FY 2023 ($ in thousands) [1]



[1] Does not include PFC revenues or grant funds used to fund capital projects.

Sources: Snohomish County, PAE

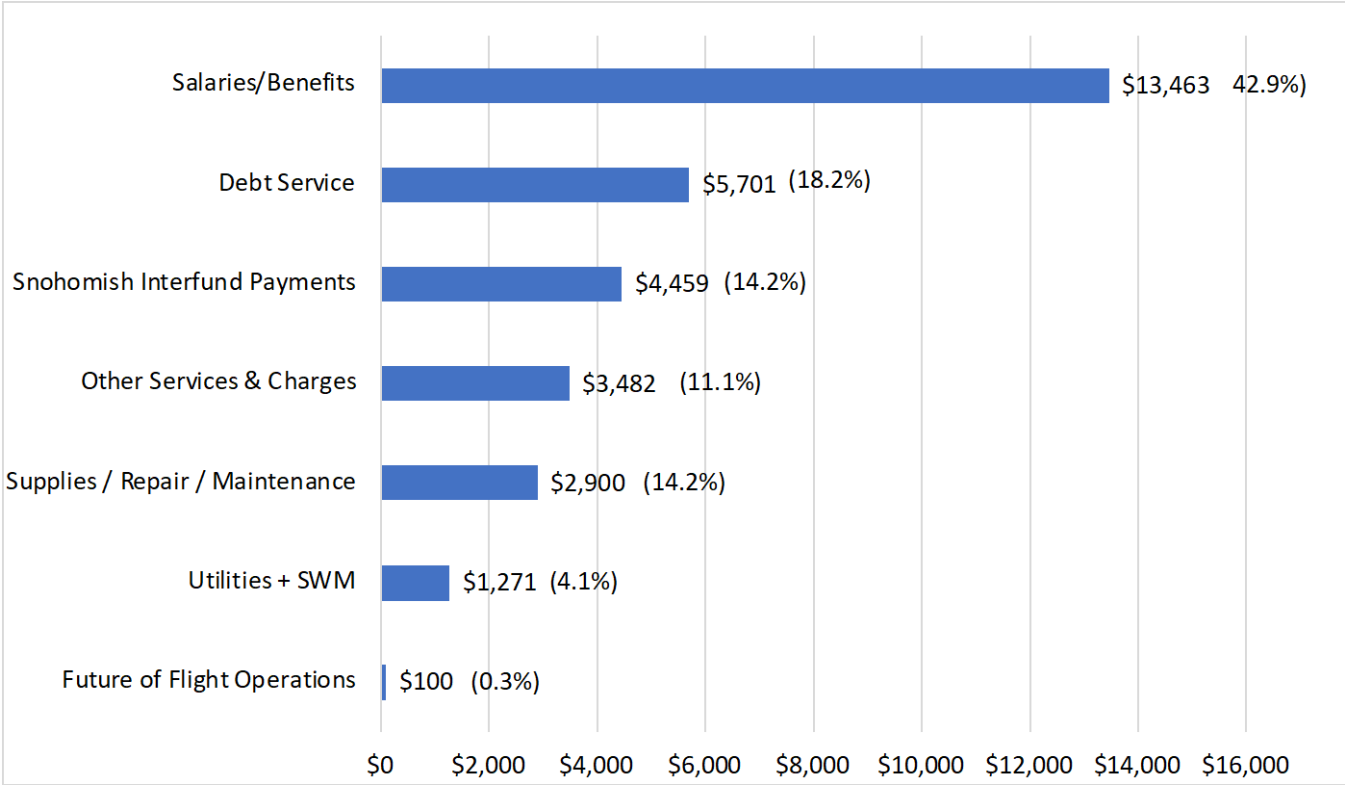
6.4.2.4 Historical Airport Operating Expenses

Operating Expenditures at PAE are assigned to various expense categories including salaries/benefits, debt service, County Interfund Payments, supplies/repair/minor maintenance, contract services, utilities, and FoF operations. Operating expenses at PAE also include minor maintenance and support

of the airfield to FAA standards, existing buildings, roadways and utility systems at PAE. In total, O&M Expenses and debt service for FY 2023 are budgeted to be approximately $31.4 million.

A breakdown of PAE's O&M expense and debt service by type is presented in **Exhibit 6.4-2, *Breakdown of Airport O&M Expense and Debt Service – Budget FY 2023 ($ in thousands)***. As shown, in FY 2022, $13.5 million, or 42.9 percent of PAE's expenses were derived from salaries/benefits. Approximately $5.7 million (18.2 percent) were derived from debt service (discussed in the next section). Approximately $4.5 million (14.2 percent) were from Snohomish County Interfund payments that are for costs incurred by the County for various PAE services such as law enforcement, legal, information technology, and other various administrative functions and reimbursable services provided by the County.

Exhibit 6.4-2 Breakdown of Airport O&M Expense and Debt Service – Budget FY 2023 ($ in thousands) [1]



[1] Does not include expenditures for capital project costs.

Sources:Snohomish County, PAE

6.4.2.5 Historical Airport Operating Income

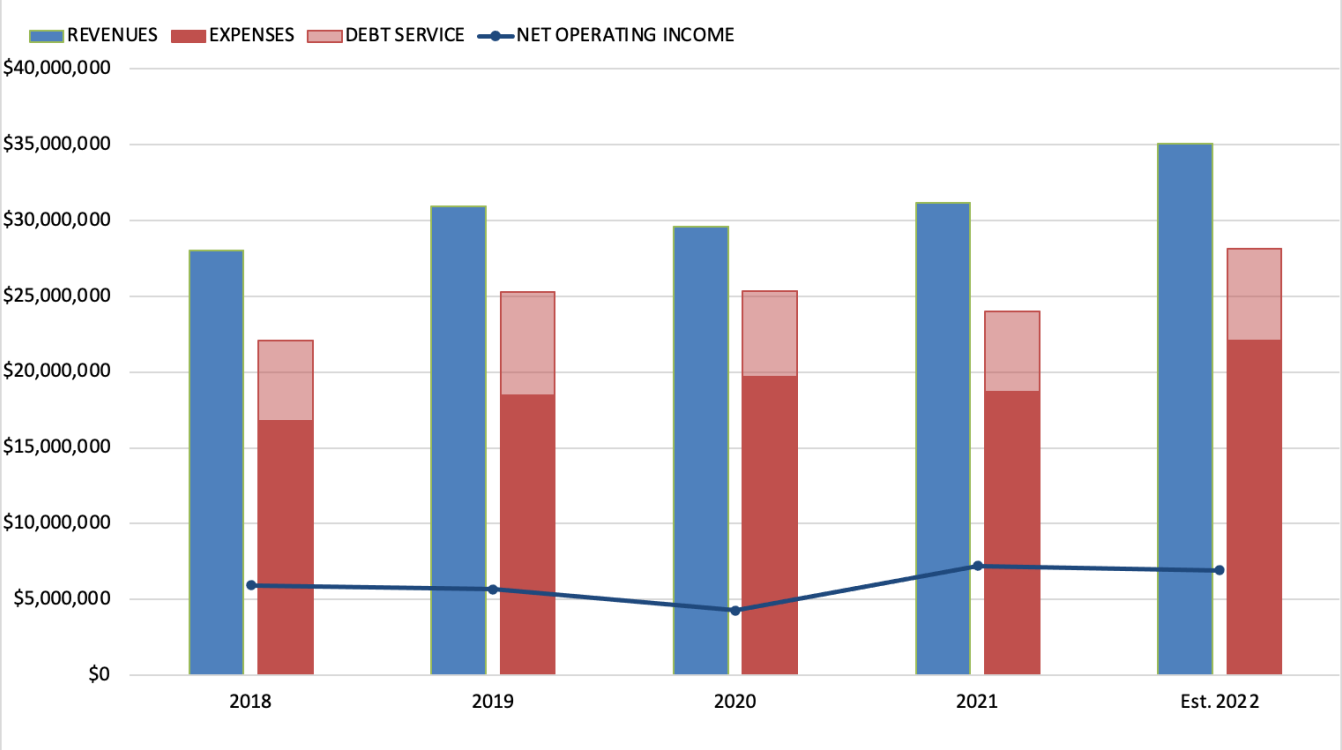
Exhibit 6.4-3, *Historical Airport Operating Income*, presents the historical operating income (i.e., revenues minus O&M expenses and debt service) generated at PAE from 2018 through estimated FY 2022. Operating revenues decreased in FY 2020 due to the impacts of the COVID-19 pandemic on airline operations and decreased landing fee revenues, however, since then, the Airport's operating

revenues have once again continued to increase. As shown, the PAE's total revenues have increased from approximately $28.0 million in FY 2019 to approximately $35.1 million in FY 2022. Overall, PAE revenues have increased at a compounded annual growth rate (CAGR) of 5.8 percent from FY 2019 to FY 2022.

As also shown, similarly, PAE's historical O&M expenses and debt service has also increased since FY 2019, from approximately $16.8 million in FY 2019 to $22.1 million in FY 2022, representing a CAGR of 7.1 percent from FY 2019 to FY 2022. This higher growth rate of PAE's O&M expenses is primarily a result of the additional expenses incurred by the County for additional firefighters, police/security, operations, and various administrative staff needed associated with the new commercial passenger service that started in March 2019. Since the start of commercial service at PAE in early 2019, the County has hired an additional 36 full-time equivalent staff at PAE.

Finally, as shown, with the exception of FY 2020 when net income decreased due to the impact of the COVID-19 pandemic, net income at PAE has generally increased over the last five years from approximately $5 million in FY 2019 to approximately $7 million in FY 2021 and FY 2022.[1]

Exhibit 6.4-3 Historical Airport Operating Income [1]



[1] Does not include PFC revenues, grant funds, or expenditures for capital project costs.

Sources: Snohomish County, PAE

[1] Revenue and net operating income figures do not include federal grants or passenger facility charge (PFC) revenues which are reserved for capital projects at PAE.

6.4.3 Capital Improvement Program

PAE's CIP consists of both Master Plan CIP and existing five-year CIP projects the total of which are estimated to be approximately $297 million in 2023 dollars and approximately $406 million in inflated future dollars. **Table 6.4-1, *Summary of Master Plan Capital Improvement Program (2023 $ in millions)*** and **Exhibit 6.4-4, Summary of *Master Plan Capital Improvement Program (2023 $ in millions)*** present a summary of PAE's Master Plan 2040, their ROM cost estimates, by PAL, and by project type in 2023$. The capital costs include hard construction costs as well as 30% for soft costs, 25% for contingencies, and 10% for taxes. Airfield projects total almost 55% of the total capital costs, with the runway rehabilitation being the largest component of the airfield costs. **Appendix G** contains detailed capital cost estimate spreadsheets.

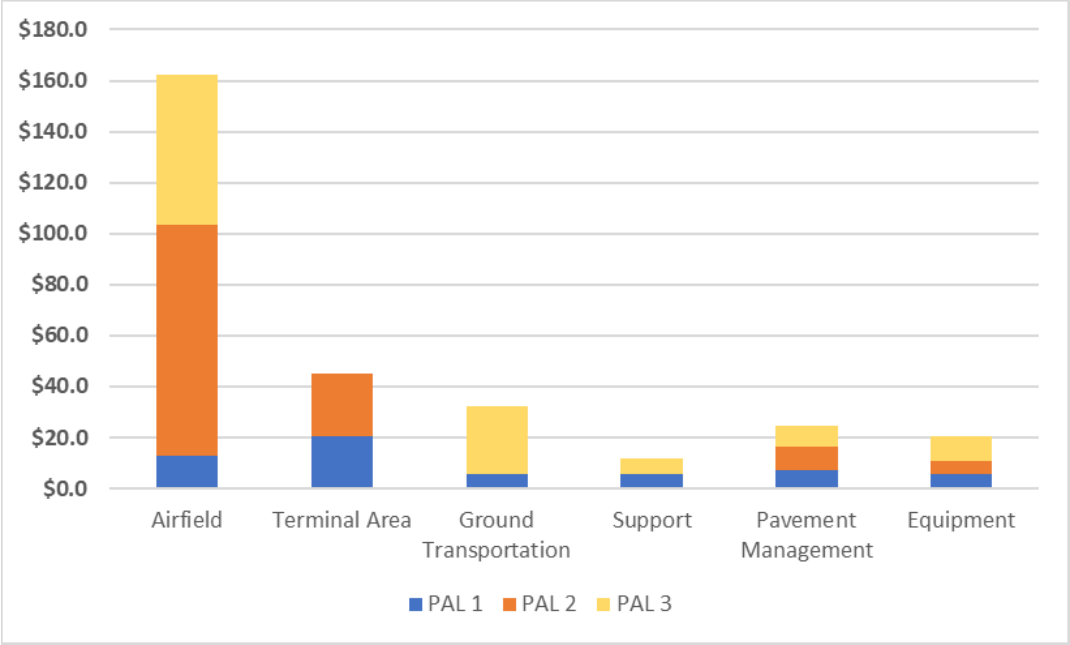
Table 6.4-1 Summary of Master Plan Capital Improvement Program (2023$ in millions)

Projects	PAL 1	PAL 2	PAL 3	Total
Airfield	$12.9	$90.5	$59.1	$162.5
Terminal Area	$20.4	$24.8	$0.0	$45.2
Ground Transportation	$5.5	$0.0	$26.8	$32.3
Support Facilities	$5.9	$0.0	$6.0	$11.9
Pavement Management	$7.0	$9.2	$8.4	$24.6
Equipment	$5.9	$5.0	$9.7	$20.6
Total	**$57.6**	**$129.5**	**$110.0**	**$297.1**

Source: Landrum & Brown

Note: Totals may not equal due to rounding

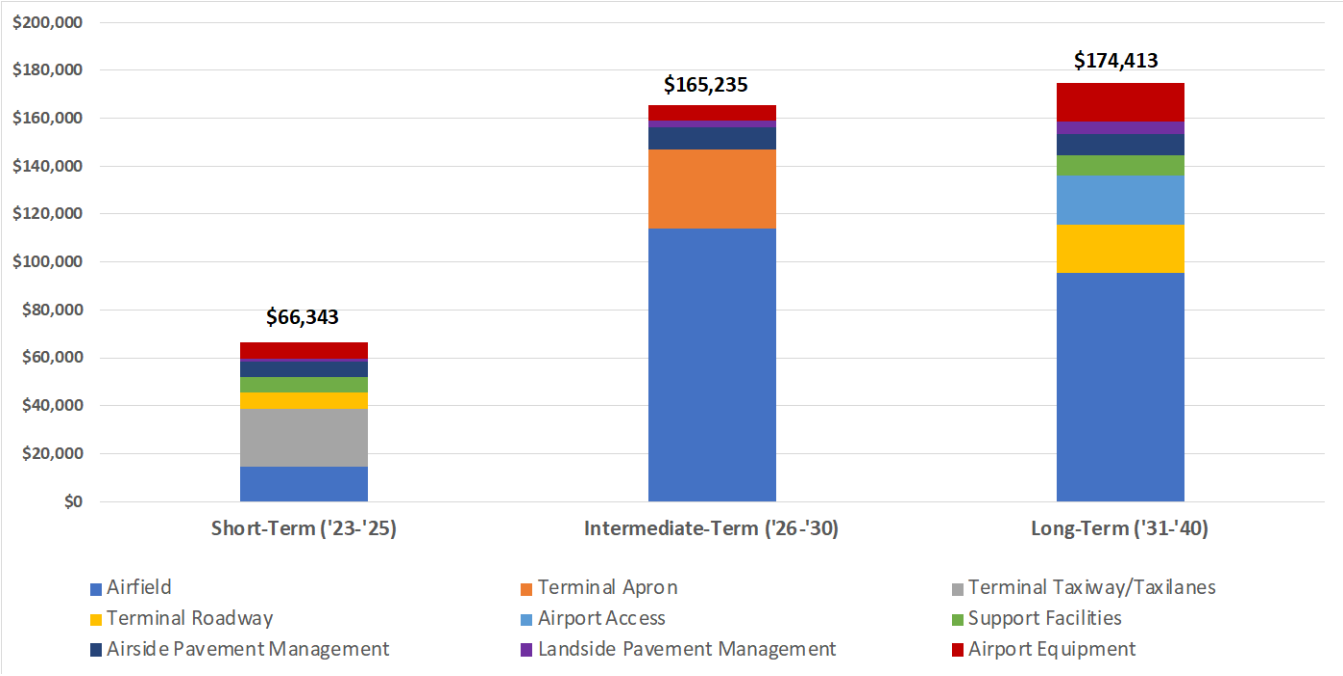
Exhibit 6.4-4 Summary of Master Plan Capital Improvement Program (2023$ in millions)



Source: Landrum & Brown

Exhibit 6.4-5, *Summary of Master Plan Capital Improvement Program (Future $ in thousands)* and **Table 6.4-2, *Master Plan Capital Improvement Program (Future $ in thousands)*** present a summary of PAE's Master Plan 2040 and existing five-year CIP projects, their ROM cost estimates in inflated future dollars, and eligible funding sources.

Exhibit 6.4-5 Summary of Master Plan Capital Improvement Program (Future $ in thousands)



Note: Assumes inflation of project costs to the mid-point of construction.
Source: Landrum & Brown

It is important to note that the CIP cost estimates, and timing developed for PAE must be viewed as preliminary, reflecting a master plan level of detail subject to refinement in subsequent implementation steps.

The Master Plan's CIP for the short-, intermediate-, and long-term development periods are summarized below.

- **(PAL1) Short-Term Master Plan Improvements (2023-2025)** – Within the short-term planning period, PAE anticipates the need for a variety of existing and Master Plan and Five-Year CIP projects totaling an estimated $66 million in future dollars. Master Plan projects in the short-term include the construction of a high-speed taxiway, rehab of a portion of Taxiway E, construction of taxiways/taxilanes to the passenger terminal, expansion of the terminal loop roadway, landside and airside pavement management, and the purchase of various Airport equipment.
- **(PAL2) Intermediate-Term Improvements (2026-2030)** – As shown in **Exhibit 6.4-5**, the intermediate capital projects total an estimated $165 million in future dollars. Several airfield projects are anticipated to be needed in the intermediate-term including reconstruction of Runway 16R-34L, expansion of the passenger terminal building aircraft gates, landside and airside pavement management, and the purchase of various Airport equipment.
- **(PAL3) Long-Term Improvements – (2031-2040)** – Approximately $174 million of capital projects in future dollars are anticipated to be undertaken in the long-term. Long-term projects anticipated to be undertaken include various taxiway, high speed exit and airside ramp projects,

terminal loop roadway expansion, implementation of a signalized intersection at 100th Street and Airport Road, landside and airside pavement management, and the purchase of various Airport equipment.

Table 6.4-2 Master Plan Capital Improvement Program (Future $ in thousands)

Summary by Project Type	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	GRAND TOTAL
Airfield	$1,350	$13,377	$0	$37,650	$31,274	$34,853	$8,958	$957	$3,238	$6,526	$29,650	$8,939	$0	$0	$6,220	$21,281	$5,172	$14,145	$223,590
Terminal Apron	$0	$0	$0	$121	$1,439	$5,412	$12,210	$13,943	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$33,125
Terminal Taxiway/Taxilanes	$0	$2,748	$21,260	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$24,008
Terminal Roadway	$0	$1,202	$5,212	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,852	$17,187	$0	$0	$0	$0	$26,453
Airport Access	$0	$0	$0	$0	$0	$0	$0	$0	$2,816	$18,127	$0	$0	$0	$0	$0	$0	$0	$0	$20,943
Support Facilities	$378	$1,145	$5,306	$0	$0	$0	$0	$0	$8,448	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,277
Airside Pavement Management	$5,842	$0	$534	$988	$0	$425	$1,593	$6,216	$0	$1,066	$201	$2,283	$935	$1,307	$329	$866	$892	$919	$24,396
Landside Pavement Management	$270	$520	$529	$664	$862	$504	$398	$410	$422	$435	$448	$462	$475	$490	$504	$519	$535	$551	$9,087
Airport Equipment	$2,047	$2,731	$1,892	$2,410	$1,938	$1,571	$247	$103	$317	$305	$1,904	$1,237	$1,276	$2,710	$462	$2,615	$2,132	$3,215	$29,112
TOTAL	**$9,887**	**$21,723**	**$34,733**	**$41,833**	**$35,513**	**$42,765**	**$23,406**	**$21,629**	**$15,241**	**$26,459**	**$32,203**	**$12,921**	**$5,538**	**$21,694**	**$7,515**	**$25,281**	**$8,731**	**$18,830**	**$405,991**

Note: Assumes inflation of project costs to the mid-point of construction. Totals may not add due to rounding.
Source: Landrum & Brown

PAL 1
PAL 2
PAL 3

6.4.4 CIP Funding Sources

Based on the estimated CIP projects and their costs, a proposed funding plan was developed for PAE. In developing the funding plan, the overriding objective was to maximize the use of external resources and minimize the amount of funding from local public resources. It is assumed that the costs for Airport CIP projects will be funded from a combination of sources, including:

- FAA Grants
- Third Party/Private Funds
- Local Airport Funds (including PFCs, Airport cash, and bond funds)

Table 6.4-3, *Master Plan Capital Improvement Program Funding Eligible Funding Sources (Future $ in thousands)*, presents the CIP project costs and the estimated funding amounts for federal, third party, and local funding sources by year through 2040. As shown, total Master Plan CIP costs are estimated to total $406 million. Of this total, a maximum of approximately $262 million is estimated to be eligible for federal investment through the FAA's AIP Program, $33 million from private 3rd party sources, and the remaining $111 million are estimated to be covered through local Airport funds, which include PFCs.

Table 6.4-3 Master Plan Capital Improvement Program Funding Eligible Funding Sources (Future $ in thousands)

Year	Eligible FAA AIP Grants (Maximum)	Third Party	Local Funds (Airport Cash & PFCs)	Total
2023	$6,619	$0	$3,268	**$9,887**
2024	$12,798	$0	$8,925	**$21,723**
2025	$24,512	$0	$10,221	**$34,733**
2026	$35,813	$121	$5,899	**$41,833**
2027	$29,581	$1,439	$4,493	**$35,513**
2028	$32,852	$5,412	$4,501	**$42,765**
2029	$9,520	$12,210	$1,676	**$23,406**
2030	$6,456	$13,943	$1,230	**$21,629**
2031	$2,914	$0	$12,327	**$15,241**
2032	$6,833	$0	$19,626	**$26,459**
2033	$28,345	$0	$3,858	**$32,203**
2034	$10,923	$0	$1,998	**$12,921**
2035	$1,005	$0	$4,533	**$5,538**
2036	$2,572	$0	$19,122	**$21,694**
2037	$5,894	$0	$1,621	**$7,515**
2038	$21,958	$0	$3,323	**$25,281**
2039	$7,015	$0	$1,716	**$8,731**
2040	$16,327	$0	$2,503	**$18,830**
GRAND TOTAL	**$261,937**	**$33,125**	**$110,840**	**$405,902**

Source: Landrum & Brown

It is important to note that these funding estimates represent the amount of project costs that are eligible for federal and PFC funding. Depending on actual federal funding appropriations made each year; competition with other airport funding needs throughout region; and prior commitments of PFCs, these levels of funding may not be attainable.

A description of the eligible funding sources for PAE's CIP is presented in the following paragraphs.

6.4.4.1 FAA Grants

Federal participation is based on the AIP as reauthorized under the FAA Reauthorization Act of 2018 (H.R. 302 (P.L. 115-354)) signed into law on October 5, 2018. The bill extended FAA's funding and authorities through Fiscal Year 2023. As part of the AIP, Federal grants are provided in the form of entitlement grants (based on annual enplaned passenger levels), discretionary grants, and letter-of-intent (LOI) grants. FAA AIP entitlement funds are distributed each year based on the Airport's number of enplaned passengers each year. The FAA distributes the remaining funds to a discretionary fund. The funds that remain after funding of entitlements, noise and environmental, and the Military Airports

Program (MAP) are true discretionary funds the FAA distributes based on a national prioritization system, with highest priority given to safety, security, reconstruction, capacity and standards. Each project is given a priority ranking based on these program objectives. The ranking priority and calculation are defined FAA Order 5100.39 (Airport Capital Improvement Plan).

In addition to the FAA AIP grants that are normally provided to airports, the Federal government and the FAA have also provided additional federal relief funds to airports because of air traffic impacts associated with the COVID-19 pandemic. These federal relief programs are described briefly below.

- **CARES Act** – The Coronavirus Aid, Relief, and Economic Security (CARES) Act (H.R. 748, Public Law 116-136) was approved by the U.S. Congress and signed by the President on March 27, 2020. It is one of the legislative actions taken to address the crisis associated with the COVID-19 pandemic and includes among its relief measures direct aid in the form of grants for U.S. airports, as well as direct aid, loans and loan guarantees for passenger and cargo airlines. The CARES Act provides $10 billion of grant assistance to airports.
- The FAA announced in April 2020 that it had allocated approximately $157,000 to the County for PAE.
- **Coronavirus Response and Relief Supplemental Appropriation Act** – On December 27, 2020, the Consolidated Appropriations Act, 2021 was signed by the President. Division M of that Act is the Coronavirus Response and Relief Supplemental Appropriation Act, 2021 (CRRSAA). Title IV of CRRSAA provides approximately $2 billion in economic relief to airports to prevent, prepare for, and respond to the COVID-19 public health emergency, including relief from rent and minimum annual guarantees (MAGs) for eligible airport concessions at primary airports.
- The FAA announced on February 12, 2021, that it had allocated approximately $3.1 million to the County. Of that amount, approximately $83,480 must be used for concessionaire relief.
- **American Rescue Plan Act** – On March 11, 2021, the President signed the American Rescue Plan Act of 2021 (ARPA), a $1.9 trillion economic stimulus package designed to help the United States' economy recover from the adverse impacts of the COVID-19 pandemic. In addition to other economic relief, ARPA includes financial relief for certain eligible airports. For eligible airports, ARPA appropriates $8 billion to assist such airports to prevent, prepare for, and respond to COVID-19, and such amounts remain available until September 30, 2024.
- The FAA announced on June 22, 2021, that it had allocated approximately $5.4 million to the County. Of that amount, approximately $334,000 must be used for concessionaire relief.

The allocation and eligibility of funds from the FAA to the nation's airports is based upon several eligibility criteria and tied to a priority system that is used to rank each request and determine which projects will be funded and which will not during any given fiscal year. The priority system employed by the FAA has different criteria for different projects. For instance, planning projects are assessed using specific criteria that are applicable to planning types of projects. Generally, projects that enhance the safety of aircraft operations and those that enhance capacity in the system are higher priority projects. The priority system also ranks projects based on the size of the airport and the number of aircraft and aircraft operations at the facility. Discretionary and LOI grants are distributed by each FAA region, on the basis of availability and project priorities. Discretionary grants are generally made available to fund

project costs on an annual basis, while LOI grants are used to fund capacity enhancement projects and are distributed to the Airport over a number of years at defined annual funding levels.

Guidance on issues of eligibility is provided in FAA Order 5100.38A, *Airport Improvement Program Handbook*. The Federal funding share for these projects is generally 90 percent for small commercial service airports such as PAE. In general, only those projects that are related to non-revenue producing items, such as land acquisition, airfield construction, certain public areas of the terminal area building, and safety/security projects are eligible for FAA AIP funding. Under most circumstances, projects which qualify for FAA AIP funding are eligible for up to 90 percent of total project costs. Close agency coordination is often required to address more complex issues relative to project eligibility. Additionally, it is reasonable to assume that there may be changes in eligibility criteria over the course of the planning period.

As shown in **Table 6.4-3**, a maximum of approximately $262 million (64.5%) of PAE's Master Plan 2040 CIP are estimated to be eligible to be funded by FAA grant funds. If these additional FAA discretionary funds are not successfully secured, PAE will need to either defer project costs until later years or secure additional funding from alternative funding sources including PFCs, Airport cash, bonds, or other sources.

To date, most of PAE's FAA grant funds have been in the form of airport discretionary grants. Dating back to 2005, PAE has received a total of approximately $69.1 million in FAA discretionary grants through 2021, which equates to an average of approximately $4.1 million a year. The availability of FAA AIP discretionary grant funding for projects at PAE depends directly on the type of project, its priority ranking, and the funding availability at other similar sized airports and can vary each year.

In addition, with the new commercial passenger airline service at the Airport that started in early 2019, PAE is also now receiving annual FAA entitlement grants, which are calculated based on the number of annual commercial service enplaned passengers. Based on PAE's Baseline forecast of annual enplaned passengers presented earlier in Chapter 2, PAE is projected to generate approximately $3.2 million of AIP entitlement funds in FY 2023 and increase to approximately $5 million annually by FY 2040. In total, PAE is projected to collect a total of approximately $71 million of AIP entitlement funds from FY 2023 to FY 2040.

6.4.4.2 Third Party

Third-Party funding can be available for certain revenue-producing facilities at an airport, including private hangars, aircraft maintenance, or cargo facilities. In the case of PAE, it is assumed that all of the passenger terminal apron expansion needed to accommodate future expansion of the passenger terminal facilities will be funded by the third-party operator of the facility, Propeller Airports Paine Field, LLC or another third party if Propeller Aviation does not agree to undertake any future expansion of the terminal facilities. As shown in **Table 6.4-3**, approximately $33.1 million of project funds are anticipated to be funded from third party/private funds over the 20-year forecast period.

6.4.4.3 Local Funds

The balance of project costs after consideration of FAA and other funding sources must be funded by PAE. Local funding of airport improvements can come from PFCs, Airport cash, or through the issuance of bonds or other debt.

6.4.4.4 Passenger Facility Charges (PFCs)

PFCs may be used by PAE to fund the local share of eligible project costs. PFC eligibility for projects generally follows the same general guidelines for determining AIP grant eligibility outlined earlier but can also provide more eligibility toward terminal development projects. In accordance with the Aviation Safety and Capacity Expansion Act of 1990, as amended by the Aviation Investment and Reform Act for the 21st Century, PAE is currently imposing a $4.50 PFC that started on November 1, 2020, toward three PFC projects totaling just under $6.4 million. As of the end of the 3rd quarter of 2023, PAE had collected a total approximately $2.5 million of PFCs (including interest) since it started. Over the last 12-month period, PAE collected approximately $1.1 million in PFCs.

Beyond these currently approved PFC amounts, PFC revenues may be used in the future to help fund certain eligible capital project costs at PAE. Over time, as enplanements recover to pre-pandemic levels and continue to grow at PAE more PFC funding capacity will be available in the future. **Table 6.4-4, *Projected Airport Passenger Facility Charge Revenue (Baseline Forecast)*** presents projected PFC revenue collections at the Airport through FY 2040 based on PAE's Baseline forecast of annual enplaned passengers presented earlier in Chapter 2. As shown, PAE is projected to generate approximately $1.2 million of PFCs in FY 2023 and increase to approximately $8.5 million annually by FY 2040. In total, PAE is projected to collect a total of approximately $71.7 million of PFCs from FY 2023 to FY 2040.

Table 6.4-4 Projected Airport Passenger Facility Charge Revenue (Baseline Forecast)

Fiscal Year	Baseline PFC Enplaned Passengers [1]	PFC Rate [2]	PFC Collections	Interest Earnings	Total PFC Revenue
2023	300,000	$4.39	$1,185,300	$4,741	$1,190,041
2024	485,472	$4.39	$1,918,100	$7,672	$1,925,772
2025	511,023	$4.39	$2,019,052	$8,076	$2,027,128
2026	554,360	$4.39	$2,190,274	$8,761	$2,199,035
2027	601,371	$4.39	$2,376,015	$9,504	$2,385,519
2028	652,369	$4.39	$2,577,508	$10,310	$2,587,818
2029	707,692	$4.39	$2,796,089	$11,184	$2,807,273
2030	767,706	$4.39	$3,033,206	$12,133	$3,045,339
2031	832,810	$4.39	$3,290,430	$13,162	$3,303,592
2032	903,435	$4.39	$3,569,470	$14,278	$3,583,748
2033	980,049	$4.39	$3,872,172	$15,489	$3,887,660
2034	1,063,160	$4.39	$4,200,543	$16,802	$4,217,345
2035	1,153,319	$4.39	$4,556,761	$18,227	$4,574,988
2036	1,251,124	$4.39	$4,943,189	$19,773	$4,962,962
2037	1,434,381	$4.39	$5,667,237	$22,669	$5,689,906
2038	1,644,480	$4.39	$6,497,339	$25,989	$6,523,328
2039	1,885,353	$4.39	$7,449,030	$29,796	$7,478,826
2040	2,161,213	$4.39	$8,538,953	$34,156	$8,573,108
Totals			**$70,680,668**	**$282,723**	**$70,963,390**

[1] Assumes the Airport collects PFCs from 90% of total enplaned passengers.
[2] Less an $0.11 PFC administrative fee paid to the airlines.
Source: Landrum & Brown

6.4.4.5 Airport Funds

All remaining local funds not funded with PFCs or CFCs must be funded from airport cash available or through the issuance of airport bonds. PAE has unrestricted funds that it can use towards capital projects at its sole discretion. These various funds are funded from any remaining net revenues after the payment of operating expenses, outstanding debt service, and funding of other reserves. At the end of FY 2021, PAE had an unencumbered cash balance of approximately $24 million in its fund balance that could be used to fund CIP projects.

As presented previously, approximately $111 million of project funds are anticipated to be funded from local funds generated by the Airport over the planning period. Any additional local funding beyond what can be funded from the Airport's cash reserves would require the issuance of Airport bonds. Depending on the exact timing and magnitude of future capital expenditures, it may be necessary to issue future debt to help defray upfront expenditures and mitigate the impacts to its available cash balances (discussed further below in the "Projection Airport Cash Flow" section).

6.4.5 Financial Analysis

This section discusses the financial analysis conducted for PAE, including forecasts of Operating Revenues, Operating Expenses, debt service, debt service coverage, and other key financial metrics.

6.4.5.1 Airport Revenues

As discussed previously, PAE contains a diverse revenue stream from several different sources driven primarily by its key tenant leases. These revenue sources include revenues from tenant rents, landing fees, GA facilities, the FoF museum, tenant utility and sewer and water management payments, the passenger terminal building, among others. In total, operating revenues for FY 2023 are budgeted at approximately $36.3 million (not including grant funds or PFC revenues used for capital).

A summary of the key revenue categories at PAE is provided below.

- **Commercial Tenant Rents/Lease** – Revenues derived from commercial tenant rents/lease consist of those associated with the various building and ground rents assessed to PAE's various commercial tenants described above.
- **Landing/Apron Fees** – Landing/apron fee revenues consist of the through-the-fence fees charged to Boeing as part of the JUA, and landing fees and remain overnight (RON) apron fees charged to the commercial passenger carriers at PAE. The commercial passenger carriers at PAE are assessed a landing fee per thousand pounds of aircraft landed weight, which is currently set at $4.50 per 1,000 pounds of maximum gross landed weight for all aircraft with empty weights over 30,000 pounds. RON fees are charged to the commercial passenger airlines at a rate of $155 for up to 12 hours and $300 for each additional 12-hour increment over the first 12 hours.
- **General Aviation** – Revenues derived from general aviation include rents from fixed base operators (FBOs) and various general aviation facilities including T-hangars, conventional hangars, and apron tiedown parking fees. It also includes revenues derived from the Wartime

History Museum buildings and ramp, and the various hangar condo associations located at PAE.

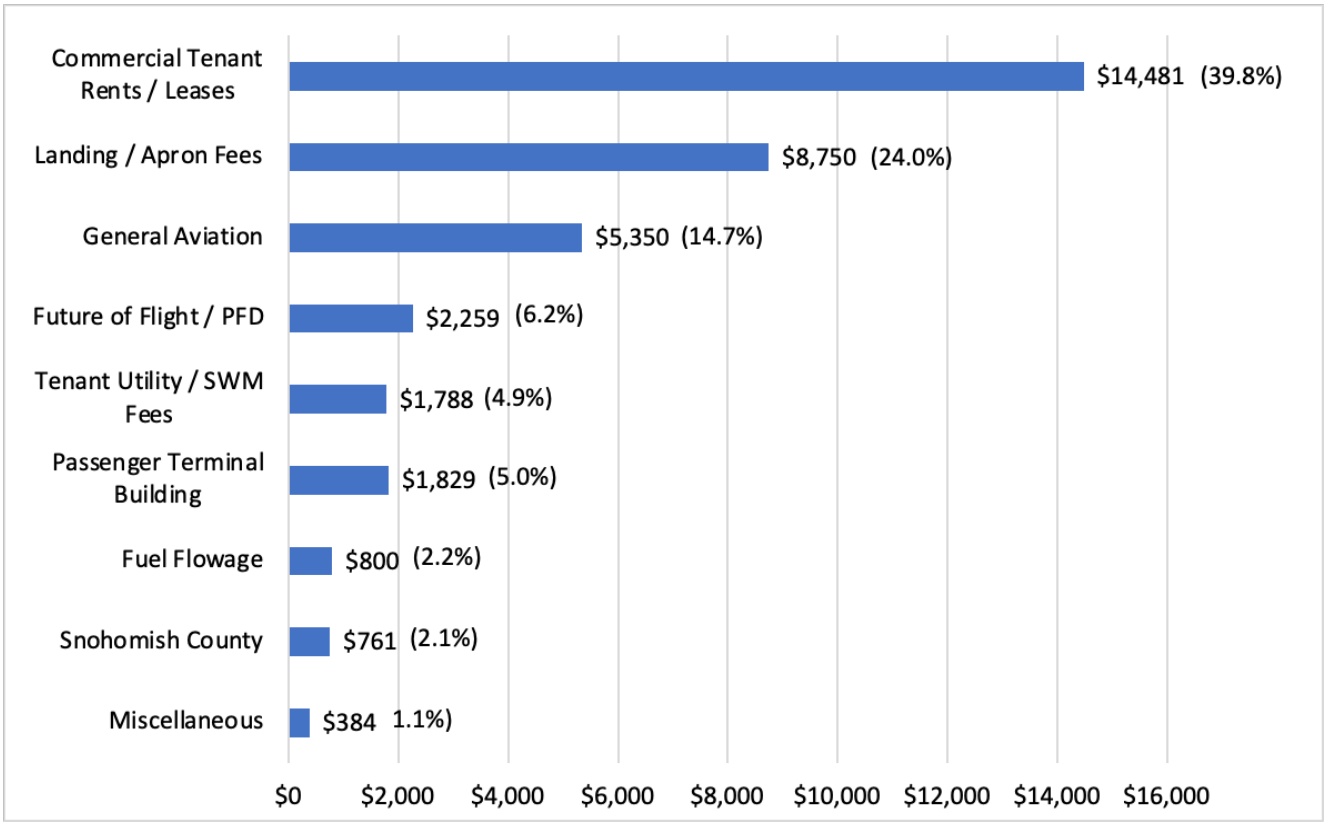
- **Tenant Utility/SWM Fees** – These revenues represent fees that are paid by PAE's tenants to pay for the reimbursement of tenants' utility and sewer and water management (SWM) fees assessed by the County.
- **Passenger Terminal Building** – Passenger terminal building revenues represent revenues paid by Propeller associated with their 2.5 percent concession fee and for the partial reimbursement of certain security and firefighting expenses that are included in Propeller's lease with the County.[2]
- **Fuel Flowage** – Fuel flowage fee revenues are generated from fees assessed to the FBO's for providing aircraft fueling services. Currently, PAE's fuel flowage fees are $0.05 per gallon for AvGas and $0.12 per gallon for jet A fuel.
- **Miscellaneous** – Miscellaneous revenues represent revenues from various items at PAE such as interest income and other miscellaneous sources.

A breakdown of PAE's budgeted operating revenues by type for FY 2023 is presented in **Exhibit 6.4-6, *Breakdown of Airport Operating Revenues - FY 2023 ($ in thousands)***. As shown, $14.5 million, or nearly 40 percent of PAE's revenue is derived from commercial tenant leases and rents. Approximately $8.8 million (24.1 percent) is derived from landing/apron fee revenues assessed to PAE's commercial passenger airlines. Landing/apron fee revenues also include the through-the-fence fees that are assessed to Boeing pursuant to the JUA. Revenues derived from general aviation facilities account for $5.4 million (14.7 percent) of all revenues generated at PAE. PAE's remaining 22 percent of revenues are generated from various sources.

It should be noted that these figures represent budgeted amounts from FY 2023 and there will be some variances between the revenue categories once final audited figures are prepared.

[2] Starting March 2023 PAE will receive 5% of Propeller's annual gross revenues for the remainder of the term of the contract.

Exhibit 6.4-6 Breakdown of Airport Operating Revenues - FY 2023 ($ in thousands)



Sources: PAE and Landrum & Brown

Table 6.4-5, *Projected Airport Operating Revenues ($ in thousands),* presents budgeted and projected operating revenues at PAE for each year from FY 2023 through FY 2040. In general, projections of future operating revenues were based on a review of historical trends, the anticipated impacts of inflation, and impacts due to the CIP. As shown, operating revenues are estimated to increase from approximately $36 million in FY 2023 to approximately $62 million in FY 2040, representing a compounded annual growth rate of 3.2 percent.

Table 6.4-5 Projected Airport Operating Revenues ($ in thousands)

Fiscal Year	Commercial Tenant Rents / Leases	Landing / Apron Fees	General Aviation	Future of Flight / PFD	Tenant Utility / SWM Fees	Passenger Terminal Building	Snohomish County	Fuel Flowage	Misc.	Total Revenues
2023	$14,481	$8,750	$5,350	$2,259	$1,788	$1,829	$761	$800	$384	**$36,402**
2024	$15,198	$8,891	$5,605	$2,339	$1,842	$2,321	$783	$829	$396	**$38,204**
2025	$15,950	$9,033	$5,872	$2,366	$1,898	$2,421	$806	$858	$407	**$39,611**
2026	$16,739	$9,122	$6,152	$2,401	$1,956	$2,557	$829	$866	$419	**$41,041**
2027	$17,568	$9,212	$6,446	$2,431	$2,015	$2,702	$853	$874	$432	**$42,533**
2028	$18,438	$9,303	$6,754	$2,464	$2,075	$2,859	$878	$882	$445	**$44,098**
2029	$19,351	$9,394	$7,076	$2,496	$2,137	$3,027	$903	$890	$458	**$45,732**
2030	$20,309	$9,486	$7,414	$2,527	$2,202	$3,208	$929	$898	$471	**$47,444**
2031	$20,918	$9,535	$7,637	$2,567	$2,267	$3,404	$957	$917	$485	**$48,687**
2032	$21,545	$9,584	$7,866	$2,602	$2,335	$3,614	$986	$936	$499	**$49,967**
2033	$22,191	$9,633	$8,101	$2,640	$2,406	$3,842	$1,016	$955	$513	**$51,297**
2034	$22,856	$9,682	$8,345	$2,678	$2,478	$4,088	$1,047	$974	$528	**$52,676**
2035	$23,541	$9,731	$8,595	$2,718	$2,552	$4,353	$1,078	$993	$544	**$54,105**
2036	$24,246	$9,780	$8,852	$2,762	$2,629	$4,640	$1,110	$1,012	$560	**$55,591**
2037	$24,973	$9,829	$9,118	$1,454	$2,706	$5,114	$1,143	$1,031	$578	**$55,946**
2038	$25,721	$9,878	$9,392	$1,498	$2,786	$5,655	$1,177	$1,050	$596	**$57,753**
2039	$26,492	$9,927	$9,675	$1,543	$2,870	$6,274	$1,211	$1,069	$614	**$59,675**
2040	$27,286	$9,976	$9,966	$1,589	$2,956	$6,980	$1,247	$1,088	$632	**$61,720**

Sources: PAE and Landrum & Brown

6.4.5.2 Airport Operating Expenses

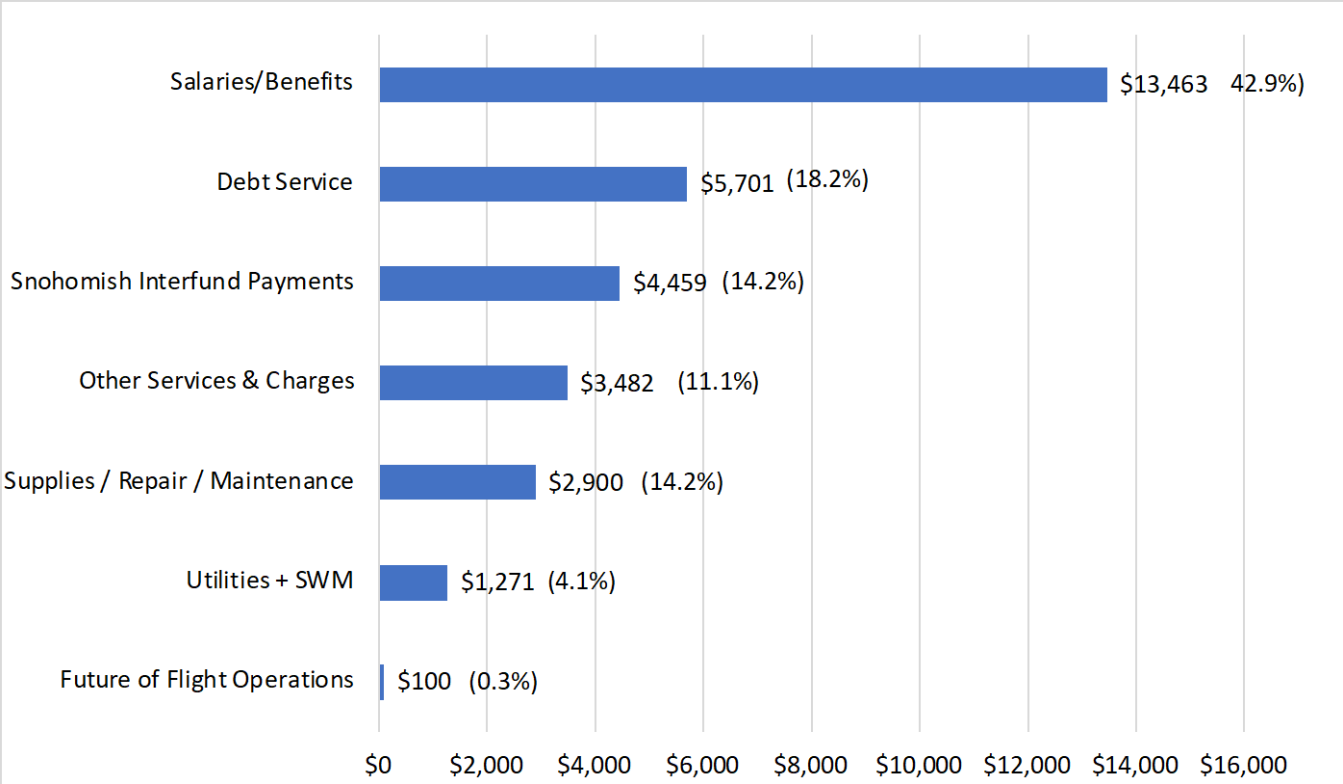
Operating expenditures at PAE are assigned to various expense categories including salaries/benefits, debt service, County Interfund Payments, supplies/repair/minor maintenance, contract services, utilities, and FoF operations. Operating expenses at PAE also include minor maintenance and support of the airfield to FAA standards, existing buildings, roadways, and utility systems at PAE. In total, O&M Expenses (including debt service) for FY 2023 are budgeted at approximately $25.7 million.

A summary of the key O&M expense categories at PAE is provided below.

- **Salaries/Benefits** – Salaries/benefits expenses at PAE are for expenses related to PAE staff personnel salaries and benefits.
- **Snohomish Interfund Payments** – Operating and maintenance expenses for Snohomish Interfund Payments represent costs that are reimbursed by PAE to the County for providing certain services and performing functions at PAE such as law enforcement, legal, information technology, and other various administrative functions and reimbursable services provided by the County.
- **Supplies/Repair/Maintenance** – These expenses represent costs associated with the purchase of various supplies and equipment at PAE, as well as the costs associated with performing various minor maintenance needs. (Major maintenance or rehabilitation capital is not included in this category but rather as a capital investment expense.)
- **Utilities/SWM** – Utilities/SWM expenses represent expenses paid by PAE to for utilities and to the County for sewer and water management fees.
- **Future of Flight Operations** – Expense for the Future of Flight facility represents costs associated with the operation of the museum at PAE.

A breakdown of the PAE's O&M expense and debt service by type is presented in **Exhibit 6.4-67, *Breakdown of Airport O&M Expense and Debt Service - FY 2023 ($ in thousands)***. As shown, nearly $13.5 million, or 42.9 percent of PAE's expenses are derived from salaries/benefits. Approximately $5.7 million (18.2%) are from debt service and $4.5 million (14.2 percent) are from Snohomish County Interfund payments. PAE's remaining 24.7 percent of expenses are shown in **Exhibit 6.4-67**.

Exhibit 6.4-7 Breakdown of Airport O&M Expense and Debt Service - FY 2023
($ in thousands)



Source: PAE and Landrum & Brown, 2022

Table 6.4-6, *Projected Airport O&M Expenses ($ in thousands),* presents budgeted and forecast O&M expenses for the Airport for FY 2023 through FY 2040. O&M expense projections were prepared based on budgeted expenses for FY 2023 and expected inflationary impacts and historical O&M expense trends. As shown, through FY 2040, O&M expenses are estimated to increase from approximately $26 million in FY 2023 to approximately $56 million in FY 2040, representing a compounded annual growth rate of 4.7 percent.

Table 6.4-6 Projected Airport O&M Expenses ($ in thousands)

Fiscal Year	Salaries & Wages	Personnel Benefits	Supplies, Repair & Maintenance	Utilities + SWM	Future of Flight Operations	Other Services & Charges	Snohomish Interfund Payments	Total O&M Expenses
2023	$10,120	$3,343	$2,900	$1,271	$100	$3,482	$4,459	**$25,674**
2024	$10,373	$3,510	$3,118	$1,366	$113	$3,656	$5,016	**$27,152**
2025	$10,632	$3,686	$3,352	$1,468	$127	$3,839	$5,643	**$28,747**
2026	$10,898	$3,870	$3,603	$1,578	$143	$4,031	$6,348	**$30,471**
2027	$11,170	$4,064	$3,873	$1,696	$161	$4,233	$7,142	**$32,339**
2028	$11,449	$4,267	$4,163	$1,823	$181	$4,445	$8,035	**$34,363**
2029	$11,735	$4,480	$4,475	$1,960	$204	$4,667	$9,039	**$36,560**
2030	$12,028	$4,704	$4,811	$2,107	$230	$4,900	$10,169	**$38,949**
2031	$12,329	$4,892	$5,003	$2,191	$242	$5,047	$10,677	**$40,381**
2032	$12,637	$5,088	$5,203	$2,279	$254	$5,198	$11,211	**$41,870**
2033	$12,953	$5,292	$5,411	$2,370	$267	$5,354	$11,772	**$43,419**
2034	$13,277	$5,504	$5,627	$2,465	$280	$5,515	$12,361	**$45,029**
2035	$13,609	$5,724	$5,852	$2,564	$294	$5,680	$12,979	**$46,702**
2036	$13,949	$5,953	$6,086	$2,667	$309	$5,850	$13,628	**$48,442**
2037	$14,298	$6,191	$6,329	$2,774	$324	$6,026	$14,309	**$50,251**
2038	$14,655	$6,439	$6,582	$2,885	$340	$6,207	$15,024	**$52,132**
2039	$15,021	$6,697	$6,845	$3,000	$357	$6,393	$15,775	**$54,088**
2040	$15,397	$6,965	$7,119	$3,120	$375	$6,585	$16,564	**$56,125**

Sources: PAE and Landrum & Brown

6.4.5.3 Existing Airport Debt Service

As of the end of FY 2021, PAE had a total of approximately $51.3 million of outstanding general obligation (GO) debt to pay for certain capital projects at PAE, consisting of nine different series of GO bonds that have been issued or refunded since FY 2010. In total, PAE is scheduled to pay approximately $5.4 million to $4.7 million a year in annual debt service payments (including both principal and interest payments) through FY 2032, decreasing to approximately $2.6 million a year in FY 2033 through FY 2035, with the final payment of approximately $436,000 in FY 2041.

6.4.5.4 Projected Airport Cash Flow

The results of the financial plan are presented in terms of the resulting airport cash flow, or the net operating income generated by PAE. PAE's net operating income is calculated after subtracting total operating expenses and existing annual debt service from PAE's total operating revenues. PAE's net operating income based on existing debt service is useful to help determine the amount of future debt that PAE can afford. Future annual debt service capacity is discussed in **Section 7.5.5** below.

As shown in **Table 6.4-7, *Projected Airport Operating Income ($ in thousands)***, after payment of O&M expenses and existing debt service, PAE's net operating income is estimated to be approximately $5.7 million in FY 2023. By FY 2040, PAE's net operating income is projected to increase slightly to approximately $5.8 million. The projected increase in PAE's net operating income is largely a function of passenger terminal-related concession revenues driven by the projected enplaned passenger activity at PAE. In total, PAE is projected to generate a total of approximately $84.7 million of net operating income from FY 2023 to FY 2040 that can be used to pay for capital project costs or future debt service.

PAE's financial projections and overall feasibility of the Master Plan CIP are highly dependent on receiving a majority or all its eligible grant funding from the FAA and PFCs. Any reduction in the amount of FAA AIP grants received from the FAA will require PAE to either defer projects or issue additional debt.

Table 6.4-7 Projected Airport Operating Income ($ in thousands)

Fiscal Year	Airport Revenues	Airport O&M Expenses	Existing Airport Debt Service	Net Operating Revenues (for Capital Projects and/or Future Debt Service)
2023	$36,835	($25,674)	($5,467)	**$5,694**
2024	$39,868	($27,152)	($7,239)	**$5,478**
2025	$41,276	($28,747)	($7,236)	**$5,293**
2026	$42,702	($30,471)	($7,243)	**$4,988**
2027	$44,198	($32,339)	($6,624)	**$5,235**
2028	$45,757	($34,363)	($6,623)	**$4,771**
2029	$47,394	($36,560)	($6,399)	**$4,435**
2030	$49,109	($38,949)	($6,445)	**$3,715**
2031	$50,348	($40,381)	($6,450)	**$3,517**
2032	$51,630	($41,870)	($6,450)	**$3,311**
2033	$52,899	($43,419)	($4,320)	**$5,159**
2034	$53,108	($45,029)	($3,117)	**$4,962**
2035	$54,539	($46,702)	($3,116)	**$4,721**
2036	$55,591	($48,442)	($2,403)	**$4,746**
2037	$55,946	($50,251)	($957)	**$4,738**
2038	$57,753	($52,132)	($958)	**$4,663**
2039	$59,675	($54,088)	($958)	**$4,629**
2040	$61,720	($56,125)	($958)	**$4,637**
TOTALS	**$900,349**	**($732,694)**	**($82,963)**	**$84,692**

Source: Landrum & Brown

6.4.6 Future Airport Financial Capacity

A financial capacity analysis for an airport is a useful tool to estimate the level of financial resources available to undertake capital infrastructure projects. This analysis is helpful early in the master planning process to provide an understanding of what level of capital spending is affordable based on an airport operator's strategic financial goals and objectives. A financial capacity analysis is intended to be high level in nature, with subsequent, more detailed financial analyses performed as the future CIP is better defined and more detailed cost estimates and construction timing estimates are developed.

Based on projections of PFCs, PAE's net operating income, and historical FAA funding discussed earlier, L&B prepared a financial capacity analysis for PAE. This financial capacity analysis will help to measure PAE's ability to fund the future Master Plan CIP projects presented earlier. As part of the debt capacity analysis, two approaches were examined:

- **Pay-As-You-Go Funding** – Under this approach, it was assumed that PAE would use all its PFCs and net operating income generated each year to pay for the local share of CIP project costs, and that it would not finance any project costs with future debt. This approach would minimizing future debt financing costs but would also require PAE to pay for its local share of CIP project costs each year from its available PFCs and net operating income cash flow. As a result, in those years where PAE has large capital program expenditures, PAE would likely be required to delay those expenditures or find alternative funding sources until such time that it can pay for them through its annually generated cash flow.
- **Bond Debt Financing** – Under this approach, it was assumed that PAE would leverage all its future PFC revenues and net operating income through the issuance of new future debt. This approach would allow PAE to pay for larger capital projects up front but would result in additional bond financing interest costs.

Table 6.4-8, *Estimated Airport Financial Capacity (2023 – 2040) ($ in millions),* summarizes the estimated total financial capacity of PAE based on the Baseline, Low, and High enplaned passenger forecasts and includes FAA AIP grants, PFCs, and net operating income projections presented in the previous sections. As shown, PAE's total Baseline financial capacity under the "Pay-As-You-Go" approach is estimated to be approximately $282 million over the entire period from FY 2023 through FY 2040. Under the Bond Debt Financing approach, it is estimated that PAE would have a Baseline financial capacity of approximately $280 million from FY 2023 through FY 2040.

As shown in **Table 6.4-8**, depending on the level of commercial enplaned passengers and funding approach utilized, PAE's estimated total financial capacity ranges from a low of approximately $236 million to a high of approximately, $323 million from FY 2023 to FY 2040.

Table 6.4-8 Estimated Airport Financial Capacity (2023 – 2040) ($ in millions)

Funding Source	Baseline		Low		High	
	"Pay-As-You-Go"	Bond Debt Financing	"Pay-As-You-Go"	Bond Debt Financing	"Pay-As-You-Go"	Bond Debt Financing
FAA AIP Entitlement Grants	$71	$71	$68	$68	$73	$73
FAA AIP Discretionary Grants [1]	72	72	72	72	72	72
PFC Pay-As-You-Go	54		41		65	
PFC-Backed Bonds [2]		89		62		115
Airport Net Income	85		78		91	
General Obligation Bonds [2]		48		33		62
Total Financial Capacity	**$282**	**$278**	**$259**	**$236**	**$301**	**$323**

[1] Assumes an average of $4.0 million of FAA Discretionary Grants received per year.
[2] Assumes 30-year bonds; 6% coupon rate, 1.00x debt service coverage, funded debt service reserve, and cost of issuance of $10 per bond.
Note: Totals may not add due to rounding.
Source: Landrum & Brown

6.4.7 Conclusions and Recommendations

Implementing and funding PAE's Master Plan 2040 CIP will largely be a function of federal, PFC, and local funding sources available at the time of specific project implementation. Due to the conceptual nature of this financial analysis, implementation of most of these capital projects should occur only after further refinement of their costs and timing. The financial feasibility of PAE's Master Plan 2040 CIP is based on several factors, most notably of which is the level of external funding sources PAE can secure to fund the Master Plan CIP projects. While the previous sections identified the maximum eligibility levels available for the CIP projects from the FAA, PFCs, and other local sources, there is no guarantee that these funds will be made available in any given year, or if they are, that they will be funded at the full eligibility levels.

In the event PAE were to receive less than the maximum eligible grant levels from the FAA, there are several approaches that PAE can explore in order to undertake the Master Plan CIP, including:

- **Defer, Delay, or Reduce Capital Project Cost Expenditures** – In the event that certain funding sources are not available for the CIP projects and/or if financial feasibility cannot be achieved when certain major CIP projects are needed, PAE may need to defer certain projects until appropriate funding sources can be obtained. In addition, rather than deferring whole projects, in some cases, projects can be completed in smaller phases over several years to help increase the participation from other funding sources and spread-out local funding requirements. Finally, as certain projects become closer to being designed and implemented, the County should consider performing a 'value engineering' exercise to try to reduce project

costs while still maintaining operational efficiencies. Constant monitoring and updating of PAE's capital needs and available funding sources will be critical to successful implementation of PAE's CIP projects.

- **Seek FAA Discretionary Grant Funds** – As discussed previously, based on PAE's annual FAA entitlement grant collections and the estimated level of eligible CIP project costs, PAE would need to apply for additional discretionary funding from the FAA to fully fund all its AIP eligible project costs. The County should make every effort to secure FAA discretionary grants wherever possible. If these additional FAA discretionary funds are not successfully secured, PAE will need to either defer project costs until later years or secure additional funding from other funding sources including PFCs, Airport cash, bonds, or other sources. Accordingly, the County should make every effort to utilize federal and state representatives to support PAE's capital initiatives.
- **Focus on Revenue-Producing Opportunities** – In an effort to improve Airport revenues and generate additional operating income needed to support additional local funding for PAE's CIP projects, PAE could focus on additional revenue-producing efforts. These efforts could include the expansion of the fixed base operator services, fuel sales, hotel development, hangar expansions, non-aeronautical land development, and other revenue-producing projects. As such, it will be important for PAE to thoroughly review any revenue-producing projects to ensure that they will be supported by anticipated demand and generate positive cash flow at PAE.
- **Consider Private Funding** – Third-party funding may also be available for certain revenue-producing facilities at an airport, including Airport tenant private hangar operators, aircraft maintenance operators, and/or cargo operators as demand warrants. While private funding comes in many different forms, a typical approach is for private parties to fund and construct the development of hangar facilities, cargo buildings, and maintenance hangars at an airport and pay ground rents to the County. General aviation hangars, maintenance facilities, cargo facilities, and hangars for aircraft typically are built as market demand warrants. As presented earlier in **Table 6.4-2**, approximately $33 million of the Master Plan CIP is potentially funded through third-party or other sources, as demand for such projects is required.
- A growing trend in the airport industry, is Public-Private Partnerships (P3s). In general, P3s are arrangements whereby some of the services that historically have been the responsibility of the public sector is now provided by the private sector. These are typically longer-term arrangements with an agreement on shared objectives for the delivery of public infrastructure including terminal buildings and parking facilities. With airports being critical infrastructure assets within the U.S. transportation network, use of the private sector in developing, funding, and/or operating various airport assets may provide critically needed improvements outside of airport financial means to provide. P3 arrangement models come in various forms and generally include service contracts, management contracts, developer financing/operation, and long-term lease or sale.
- **Issue Airport Revenue Bonds** – As discussed earlier, to fund the local share of large capital projects, airports typically will issue long-term debt to help defray upfront expenditures and mitigate the impacts to its available cash balances. While issuing long-term debt can be an effective approach for implementing certain projects and minimizing up-front cash expenditures, it is important to ensure that PAE's expected net operating income (revenues minus expenses) will be enough to not only pay for the expected annual debt service.

As previously mentioned, due to the conceptual nature of this financial study, implementation of most of these capital projects should occur only after further refinement of their costs. As a result, the Master Plan CIP project costs developed for PAE must be viewed as preliminary, reflecting a planning level of detail subject to refinement in subsequent implementation steps.

6.5 Land Use Plan

The Land Use Plan is an essential component of the Master Plan. The Land Use Plan is developed to accommodate all airport functions, their expansion within the given constraints of the airport site, and the siting of each function to allow for adequate adjacencies and proximity to other functions with which they may interact. The Land Use Plan also reserves areas for future development and protects the ability of PAE to grow in a logical manner and serve its objectives within the County.

The prior on-airport Land Use Plan was developed in 2002. This Land Use Plan provides guidance to the County in terms of reserving appropriate land areas and land designations to ensure adequate flexibility for the future development of PAE. The 2022 Land Use Plan reserves land using similar designated Land Use categories as the 2002 Plan.

- Airfield System
- Aviation Use Development
- Airport Compatible Development
- General Aviation

In total, there are 1,252 acres of land at PAE, broken down by future land uses in **Table 6.5-1, *Future Land Use Breakdown***.

Table 6.5-1 Future Land Use Breakdown

Future Land Use	Acres	%
Airfield System	470	37.5%
Aviation Use Development	260	20.8%
Airport Compatible Development	408	32.7%
General Aviation	114	9.0%
Total	**1,252**	**100.0%**

Source: Landrum & Brown

Airfield System – the airfield system includes all active aircraft movement areas at PAE including the runways, taxiways and taxilanes and protected aeronautical areas. These areas total 470 acres or approximately 37.5 percent of the total land area.

Aviation Use Development – these areas include all aviation or aerospace related commercial development as well as airport support related uses and functions that require direct airfield access.

These developments would be required to follow all FAA regulations with respect to height limitations, etc. These areas are for the following types of tenants and development:

- Commercial airlines
- Passenger terminal operations
- Corporate general aviation – jet aircraft
- Commercial maintenance operators
- Aircraft manufacturers
- Air cargo operators
- Aircraft museums
- Aircraft or airline support
- Airport support functions – airport maintenance, ARFF, fuel farms

These areas total 260 acres which represent nearly 21 percent of the total airport land area. In the near future (2 to 3 years), the Air National Guard site, located south and east of Runway 16L-34R may be acquired by the County and will be considered as an Aviation Use land use.

Aviation Compatible Development - this type of development includes aviation/aerospace development as well as non-aviation commercial or industrial or other transportation related development. It is land that does not necessarily require direct access to the airfield. It can include the following types of development.

- Small industrial land development – manufacturing, supply, aerospace
- Small commercial land development – hotels, museum, retail, educational, etc.
- Transportation related development – multi-modal, urban air, etc.

This area totals 408 acres, which represents approximately 33 percent of the total airport land area.

General Aviation - this type of development includes small general aviation operators (piston or small turbo-prop) that rent or lease airside land for T-hangars or box hangars. This area does not include larger jet and/or corporate aviation.

Future updates to the Master Plan may also include modifications to the General Aviation area, including its configuration and will reflect the future demand and business needs of the County.

This area totals 113 acres, which represents approximately 9 percent of the total airport land area.

6.5.1.1 Additional Development Strategies

As Snohomish County, City of Everett, and City of Mukilteo continue to grow, so too will PAE's role in the region as an economic driver of growth. PAE will therefore continue to attract private development. For this reason, the Master Plan recommends the following development strategies:

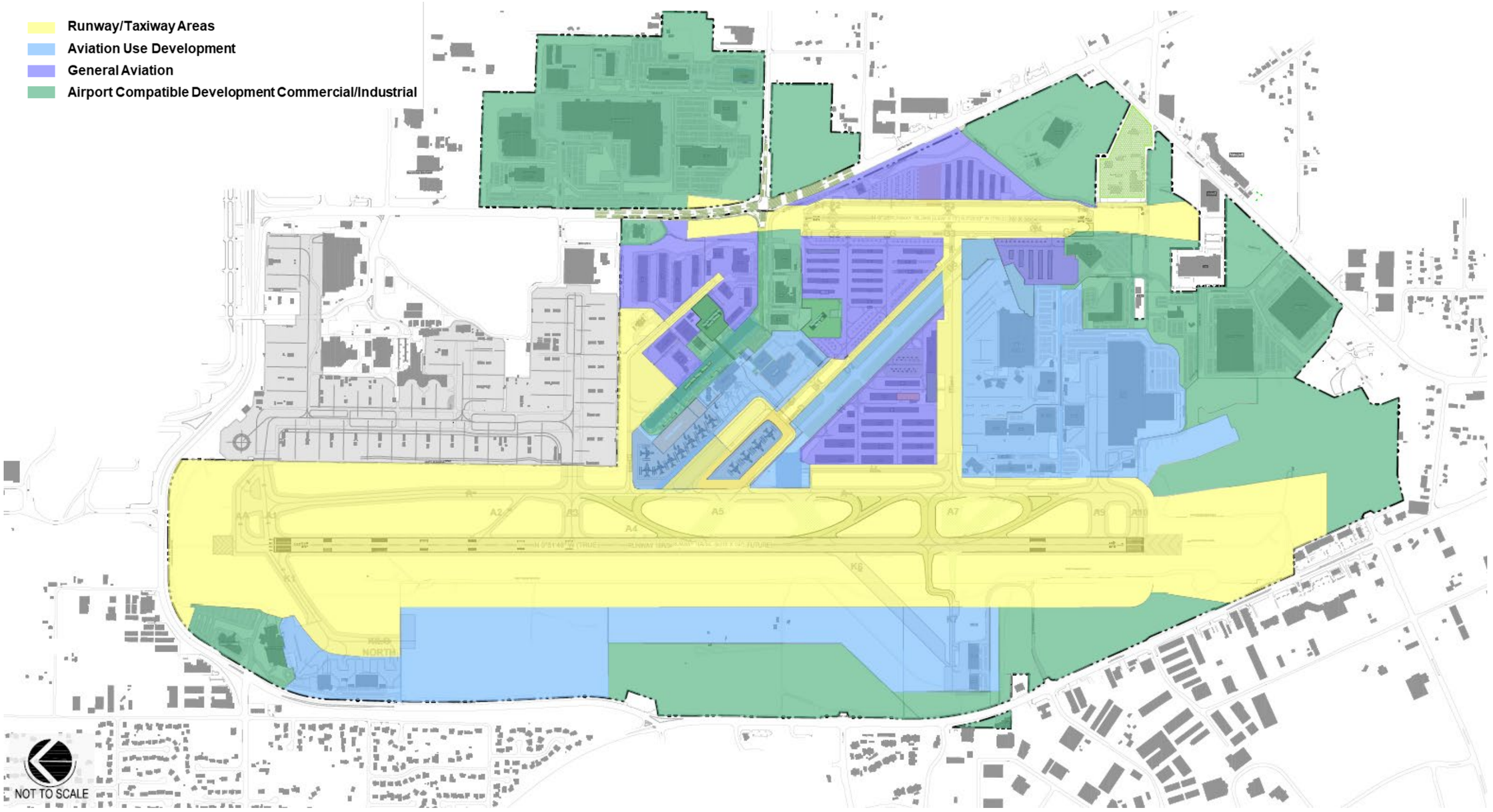
- **Consistent with Master Plan Guiding Strategies:** The County should continue to evaluate highest and best land use when reviewing potential new development proposing, prioritizing revenue generation and compatible land uses that reflect the guiding strategies outlined at the outset of this Master Plan.

- **Strategic Investment:** If passenger demand or other strategic aeronautical uses grow at a faster rate than projected in the Master Plan, considerations should be made to accommodate additional aeronautical facility expansion needs that are compatible with the Master Plan. Therefore the County should not extend existing leases beyond their existing terms. Future updates of the Master Plan may also necessitate revisions to the proposed land use designations and their boundaries.

Exhibit 6.5-1 provides a graphical depiction of the Future Land Use Plan for PAE.

This Land Use Plan should be coordinated with the County's Comprehensive Plan to ensure management of urban growth around the airport, with particular attention to FAA noise guidelines and specifically those with the 65DNL or higher noise contours. (See Exhibit 7-15 Off Airport Land Use Plan in Chapter 7 and Exhibit 8.4-3 2040 Noise Contours in Chapter 8.)

Exhibit 6.5-1 Future Land Use Plan



Source: Landrum & Brown