



Policy Guidance

Rev. 2013 (updated), Rev. 2021 (updated regions, map and funding), Rev. 2025 (updated)

Oregon Department of Aviation 3040 25th Street, S.E. Salem Oregon 97302



CONTENTS	
PMP Program Background	2
PMP Program Overview	2
PROGRAM OUTLINE	7
PMP/PEP	7
PEP	7
PEP/PMP Airport Specifics	12
PMP – Pavement Maintenance & Preservation Details	13
TYPE OF WORK FUNDED	17
PROGRAM ADMINISTRATION & FUNDING	19
Average PMP Program Activity Costs (rev. 2013) (rev 2025)	22

Background

Since its authorization by the Oregon Legislature in 1999, the Airport Pavement Preservation Program has played a critical role in maintaining and extending the lifespan of Oregon's airport infrastructure. Administered by the Oregon Department of Aviation (ODAV), the program funds two interconnected initiatives: the Pavement Maintenance Program (PMP) and the Pavement Evaluation Program (PEP). These programs provide essential support to public-use airports statewide, helping airport sponsors preserve and enhance their pavement assets while meeting FAA grant assurance requirements.

The PMP is a multi-year initiative designed to assist airports with regular, cost-effective maintenance activities that extend pavement life and reduce long-term capital costs. A 10-year program performance review conducted in 2012 demonstrated that the PMP can extend pavement lifespan by up to 20 years, showcasing the program's value in preventing premature pavement failure and deferring costly rehabilitation or reconstruction projects.

The program's overarching goal is to protect Oregon's aviation infrastructure by promoting proactive, data-driven maintenance practices. The 2007 Oregon Aviation Plan (OAP) emphasized the need for the PMP to address inconsistent and reactive maintenance practices, particularly at smaller airports with limited resources. Prior to the program's establishment, many airport sponsors deferred maintenance until pavement failure, relying on FAA Airport Improvement Program (AIP) funds and local matches to fund large-scale projects like overlays or full reconstructions — often at significantly higher costs.

The PMP has transformed this reactive approach into a structured, statewide maintenance strategy. Qualifying airports receive regularly scheduled maintenance, guided by technical evaluations from the PEP. This ensures maintenance is



based on real pavement conditions, using consistent methods and reporting standards. In exchange for PMP funding, airport sponsors commit to keeping their airport open and properly maintained for a minimum of 20 years, ensuring long-term public access and systemwide infrastructure resilience.

The Pavement Maintenance Program (PMP) was initially funded through an incremental increase in Oregon's aviation fuel taxes. In Fiscal Year (FY) 1999, the aviation gasoline tax was raised by 3 cents per gallon, followed by an additional 3-cent increase in FY 2000. Simultaneously, the jet fuel tax increased by 0.5 cents per gallon in the program's first year. These adjustments established the initial funding base for the PMP, enabling the program to launch and provide essential maintenance support to airports statewide.

However, despite rising infrastructure and construction costs, the PMP has not received additional revenue since its inception. As material costs, labor expenses, and inflation continue to grow, maintaining the program's effectiveness within existing funding constraints has become increasingly challenging. To address this, the ODAV program manager routinely evaluates the PMP's performance and funding allocation, identifying opportunities to optimize resources while sustaining essential maintenance activities. Any proposed policy or funding adjustments are presented to the State Aviation Board for review and approval, ensuring the program evolves to meet the changing needs of Oregon's airport system.

Sustained, reliable funding is essential to preserve the long-term benefits of the PMP, allowing airports to proactively maintain their infrastructure, prevent costly failures, and uphold Oregon's commitment to a safe and resilient statewide aviation network.

Today, the PMP remains a cornerstone of Oregon's aviation system, fostering a sustainable approach to pavement management that supports both local airports and the state's broader transportation network. With rising infrastructure costs and evolving aviation demands, continued investment in proactive maintenance is essential to preserving Oregon's airports as safe, reliable assets for communities across the state.

PMP Program Overview

The ODAV PMP, established under ORS 836.072, is a state-funded initiative designed to support public-use airports in preserving and maintaining their airfield pavements. The program uses a needs-based, data-driven approach to extend pavement life, enhance safety, and reduce long-term infrastructure costs.

Since its inception in 1999, the PMP has continually evolved to meet the changing needs of Oregon's airport system, guided by key principles:

- 1. **Asset Management:** Maintain airfield pavements to a consistent, statewide minimum condition standard, ensuring safe and reliable operations.
- 2. **Economy of Scale:** Leverage a centralized program to serve multiple airports, reducing individual costs and increasing efficiency.
- 3. **Funding Optimization:** Build strong federal, state, and local partnerships to maximize available funding for pavement preservation and improvements.
- 4. **Grant Compliance:** Provide airport sponsors with a structured pathway to meet FAA Grant Assurance #11 (Pavement Preventative Maintenance), protecting access to federal funding.



Program Goals

The PMP is designed to provide a sustainable, long-term solution for preserving Oregon's airport pavement infrastructure through:

- **Strategic Asset Management:** Implementing a systematic approach to maintain Oregon's airport pavements at a high level of serviceability.
- **Proactive Maintenance Scheduling:** Using regular evaluations to plan and schedule preventative maintenance and rehabilitation activities.
- Cost Efficiency & Optimization: Maximizing pavement lifespan while minimizing costs through timely, targeted
 interventions.
- **Data-Driven Decision-Making:** Conducting consistent, objective evaluations of pavement conditions to inform maintenance priorities.
- Budget Planning & Forecasting: Identifying the funding required to maintain various service levels, supporting long-term financial planning.
- **Comprehensive Documentation:** Tracking current pavement conditions and projecting future needs to guide infrastructure investment decisions.
- **Life-Cycle Cost Analysis:** Evaluating the long-term costs and benefits of different maintenance and rehabilitation strategies to determine the most cost-effective solutions.
- **Statewide Impact & Resiliency:** Addressing pavement maintenance needs across Oregon's entire airport system, enhancing operational resilience and regional connectivity.
- **Grant Assurance Support:** Helping airport sponsors maintain compliance with FAA requirements, safeguarding their eligibility for future federal funding.

Through ongoing evaluation, collaboration, and a commitment to innovation, ODAV's PMP remains a cornerstone of Oregon's aviation infrastructure strategy — preserving vital transportation links and supporting the state's economic and public safety needs.

The following policy provides details of the PEP and the PMP, and guidance required to implement and administer the program. The PMP Policy includes program funding and guidelines, type of work funded, specific funding information, and program management. The PEP and PMP programs occur at each public use airport once every four years, with the PEP defining the limits of the maintenance and construction work to be performed in the following year PMP implementation. This PMP Policy shall be reviewed every two years during the agency budget cycle.

PMP

The PMP provides pavement maintenance to public use airports in Oregon. The PMP has proven to extend the life of paved surfaces, while also fulfilling the requirement for federally funded airports to maintain an FAA approved pavement maintenance program.

The PMP is administered as follows:

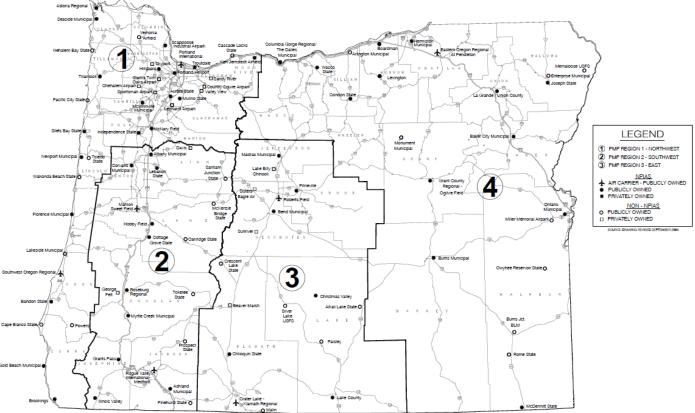
• Oregon Aviation Board (OAB) approves the PMP budget bi-annually when the Agency budget is approved.



- ODAV conducts the PEP per geographical region as shown on the PMP Regions map below. . PEP is done utilizing ODAV and an FAA System Plan grant, which funds National Plan of Integrated Airport Systems (NPIAS) airport evaluations and planning. ODAV Operations or State Owned Airport Reserve (SOAR) funds provide the match for state-owned, non-NPIAS airports to ensure all airports in the PMP program can address pavement maintenance needs.
- ODAV works with a consultant for the PMP. Contracting and procurement of the consultant meet all state and federal provisions and requirements. The PMP consultant shall upon request develop a scope of work for pavement maintenance activities based upon the latest PEP reports. This scope of work is created using input from the PEP reports and PAVER™ data. The yearly PMP work is further developed utilizing the latest pavement condition index (PCI) reports. PAVER™ captures the visual inspections and reports the analysis per FAA technical specifications. The details of the PEP report include a pavement inventory, pavement condition inspection results, future pavement condition analysis, and maintenance and rehabilitation recommendations. The individual reports contain a very thorough analysis of pavement maintenance which the airport sponsor may use to complete pavement maintenance work outside of the PMP.
- ODAV and its consultants review statewide CIP lists and may work with the FAA to determine project and CIP project overlap.
- ODAV drafts a yearly program with the Consultant for final quantification inspection. The Consultant conducts
 on-site inspections utilizing the PEP to confirm quantities for finalizing the scope of work. The scope of work will
 be used in the procurement and formal bidding process, and the associated contractor work, contracts, and
 agreements.
- ODAV completes the final scope of work and schedule. All airport sponsors may request additional work not
 eligible for PMP funding. The additional work is to be paid for 100% by the sponsor, and 50% of the estimated
 additional costs must be submitted to ODAV in advance of the contractor work.
- ODAV develops IGA's/Service Agreements with DOJ review if required, and routes them to the participating nonstate owned airports for signature. This allows ODAV to administer consulting, engineering, and contractor work, and become the Authorized Representative on the airport's behalf for the project. As per the PMP Policy, local sponsors agree to provide project match based upon each airport's categorization within Agency policy ODAV-33. Local match may derive from sources including but not limited to municipal funds, port funds, or other airport operating funds.
- ODAV develops an Invitation to Bid (ITB), submits to DOJ for approval, and publishes/advertises bid documents
 and specifications. If bids come in higher than approved PMP budget, bids and proposed contracts shall be
 presented to the OAB for approval. ODAV contracts with the successful low bid Contractor. Contractor
 completes required airport safety training provided by Consultant.
- The annual PMP program is completed when ODAV reviews and provides final acceptance of project file
 including inspection documentation, construction activity and unit measurement verification, project and
 inspection reports, contractor status reports and progress billings, final quantity update/billings, and project
 closeout documentation.



Oregon System Airports by PMP Region



4 Regions - As Revised and Approved August 5, 2021

Region 1 - Northwestern

Astoria Regional (AST), Aurora State (UAO), Bandon State (S05), Brookings (BOK), Cape Blanco State (5S6), Cascade Locks (CZK) State, Chehalem Airpark (17S), Country Squire Airpark (S48), Florence Municipal (6S2), Gold Beach Municipal (4S1), Hillsboro (HIO), Independence State (7S5), Ken Jernstedt – Hood River (4S2), Lenhardt Airpark (7S9), McMinnville Municipal (MMV), McNary Field – Salem (SLE), Mulino State (4S9), Nehalem Bay State (3S7), Newport Municipal (ONP), Pacific City State (PFC), Scappoose Industrial Airpark (Port of Columbia County) (SPB), Seaside Municipal (56S), Siletz Bay State (S45), Sportsman Airpark (2S6), Stark's Twin Oaks Airpark (7S3), Tillamook (TMK), Toledo State (5S4), Troutdale (TTD)

Region 2 - Southwestern

Albany Municipal (S12), Ashland Municipal (S03), Corvallis Municipal (CVO), Cottage Grove State (61S), Creswell – Hobby Field (77S), Grants Pass (Josephine County) (3S8), Illinois Valley Cave Junction (Josephine County) (3S4), Lebanon State (S30), Myrtle Creek (16S), Oakridge State (5S0), Pinehurst State (24S), Prospect State (64S), Roseburg Regional (RBG)



Region 3 - Central Region

Bend Municipal (BDN), Chiloquin State (2S7), Christmas Valley (62S), Crater Lake – Klamath Regional (LMT), Crescent Lake State (5S2), Lake County (LKV), Madras Municipal (S33), Malin (4S7), Paisley (22S), Prineville (S39), Sisters Eagle Airport (6K5), Sunriver (SUO)

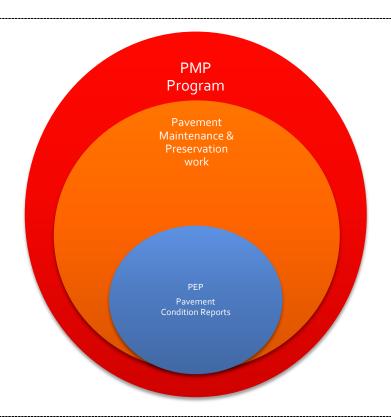
Region 4 - Eastern Region

Baker City Municipal (BKE), Boardman (M50), Burns Municipal (BNO), Columbia Gorge Regional – The Dalles (DLS), Condon State (3S9), Eastern Oregon Regional – Pendleton (PDT), Enterprise Municipal (8S4), Joseph State (JSY), Grant County Regional (GCD), Hermiston Municipal (HRI), LaGrande/Union County (LGD), Lexington (9S9), McDermitt State (26U), Miller Memorial Airpark (VALE) (S49), Monument Municipal (12S), Ontario Municipal (ONO), Wasco State (3SS)

Program Outline

PMP/PEP

The program consists of two phases that provide essential pavement maintenance using a needs-based approach. PEP provides technical PCI reports and maintenance recommendations. PMP is responsible for the work associated with the PEP recommendations including engineering analysis, quantity verification, bidding and solicitation, contracting, safety training, and construction management.



PEP

ODAV has been conducting the PEP since the mid-1980s. In 1995 the FAA began requiring airports requesting federal funds for pavement-improvement projects to have an implemented pavement-maintenance management program. ODAV was already ensuring that eligible Oregon airports met this requirement through the PEP. A review of the PEP was conducted at that time to formalize the work scope for each PEP project completed under the Oregon Continuous Aviation System Planning effort.



PEP's principal objective is to maintain a statewide pavement management program that assesses pavement condition at the included airports. The PEP serves to assist ODAV and the FAA to identify system needs, make and justify program decisions for project funding, provide information to assist in legislative decision making, and help local jurisdictions with their capital planning. The PEP develops a pavement inventory and identifies needed pavement maintenance, rehabilitation, and reconstruction projects at each included airport.

Under the PEP, every participating, paved public use airport in the state is evaluated once every four years. Airports are grouped based on four geographic regions to ensure efficiency in completing the yearly program.

PEP is done through a technical process using visual analysis (per professional specifications). In some cases, there may be a need to perform additional non-destructive testing or geotechnical analysis to show a structural failure

The following steps are undertaken during each PEP update:

PEP ANNUAL PROCESS

- > ODAV contracts with Consultant for the airports to be inspected based upon a 4 year regional map and schedule (prior to 2021, the region map included 3 regions and was done on a 3 year schedule).
- Consultant develops the pavement inspection schedule and coordinates with each individual airport.

RECORDS REVIEW

Consultant obtains most recent Airport Layout Plans (ALPs) from FAA, sponsor, or other appropriate sources. Consultant gathers relevant data on pavement design, construction, and maintenance history from FAA, State, and local airport authorities as available. Finally, the consultant gathers relevant data on construction bid prices for recent projects.

NETWORK DEFINITION

Consultant reviews historical data obtained, and divide each airport pavement network into branches, sections, and sample units and develops a drawing using AutoCAD or ArcGIS identifying all pavement boundaries, dimensions, and pavement cross-sections. Branches, sections, and sample unit locations are identified on ALPs.

VISUAL CONDITION SURVEY

Consultant performs visual inspection of all pavements at included airports in accordance with current ASTM D5340," Standard *Test Method for Airport Pavement Condition Index Surveys*"; FAA AC150/5380-6, "Guidelines and Procedures for Maintenance of Airport Pavements"; and other modifications released by the FAA Northwest Mountain Region. Consultant calculates the PCI for each sample unit and an average PCI for each pavement sections, and develops a pavement layout plan showing the PCI for each pavement section.

PAVER™ IMPLEMENTATION

Once the records review and visual inspections are complete, the data are entered into PAVER™ pavement maintenance management system which has been utilized for the PEP for over two decades.

Consultant inputs the new data gathered into PAVER™ including the following information:

- Updating the existing conditions for each pavement
- Updating unit price costs



- Updating the network definition for the pavement sections
- ➤ Entering the new data from the Visual Condition Survey
- > Calculate the Pavement Condition Index (PCI) for each pavement sample unit
- > Calculate an area-weighted average PCI for each pavement section.
- Develop a pavement condition drawing showing the PCI and its associated Pavement Condition Rating (PCR) for each pavement section. The drawing is color-coded for each category for ease of use.

COMPLETE PAVEMENT ANALYSIS REPORT

A pavement analysis (PCI report) for each airport is completed through condition analysis and prediction modeling. The prediction modeling is based on performance curves for the surface type, use, and airport functional category.

EXAMPLE PEP PAVEMENT CONDITION INDEX REPORT COVER

2023 ODAV Pavement Evaluation Program Aurora State Airport

Aurora, Oregon

December 29, 2023

Prepared for

State of Oregon Department of Aviation 3040 25th Street SE Salem, OR 97303-1125



PMP/PEP Details & Airport Specifics

Pavement Inspection Cycle and Airport Functional Category

Region 1 Northwestern	Region 2 Southwestern	Region 3 Central	Region 4 Eastern
Astoria Regional (2)	Albany Municipal (4)	Bend Municipal (2)	Baker City Municipal (3)
Aurora State (2)	Ashland Municipal (3)	Chiloquin State (5)	Boardman (4)
Bandon State (3)	Corvallis Municipal (2)	Christmas Valley (4)	Burns Municipal (3)
Brookings (4)	Cottage Grove State (4)	Crater Lake - Klamath Regional (2)	Columbia Gorge Regional (3)
Cape Blanco State (5)	Creswell - Hobby Field (4)	Crescent Lake State (5)	Condon State (4)
Cascade Locks State (5)	Grants Pass - Josephine County (3)	Lake County (3)	Easter Oregon Regional - Pendleton (1)
Chehalem Airpark (4)	Illinois Valley - Josephine County (4)	Madras Municipal (4)	Enterprise Municipal (5)
Country Squire Airpark (5)	Lebanon State (4)	Malin (5)	Joseph State (4)
Florence Municipal (4)	Myrtle Creek (4)	Paisley (5)	Grant County Regional (3)
Gold Beach Municipal (4)	Oakridge State (5)	Prineville (4)	Hermiston Municipal (3)
Hillsboro (2)	Pinehurst State (5)	Sisters Eagle Airport (4)	La Grande - Union County (3)
Independence State (4)	Prospect State (5)	Sunriver (4)	Lexington (4)
Ken Jernstedt - Hood River	Roseburg Regional (3)		McDermitt State (5)
(4)			
Lenhardt Airpark (4)			Miller Memorial Airpark - Vale (5)
McMinnville Municipal (2)			Monument Municipal (5)
McNary Field - Salem (1)			Ontario Municipal (3)
Mulino State (4)			Wasco State (4)
Nehalem Bay State (5)			
Newport Municipal (2)			
Pacific City State (5)			
Scappoose Industrial Airpark (2) Seaside Municipal (4)			
Siletz Bay State (4)			
Sportsman Airpark (4)			
Stark's Twin Oaks Airpark			
(5) Tillamook (3)			
Toledo State (5)			
Troutdale (2)			

^{*}Airports listed by category designated in policy ODAV-033

^{**}Sponsor Program Match percentage is determined by the airport functional category



No primary airports or Commercial service Airports are included in the inspection cycle (PEP), as they have their own pavement maintenance programs and FAA funding requirements and access to greater funding sources. Non-paved Category 5 airports that have turf/gravel runways (Alkali Lake State (R03), Arlington Municipal (1S8), Beaver Marsh (2S2), Owyhee Reservoir State (28U), Rome State (REO), Crescent Lake (5S2), McKenzie Bridge State (00S), Santiam Junction State (8S3), Toketee State (3S6), and Vernonia Airfield (05S)) are NOT qualified to participate in PEP or PMP as they are NOT paved. All GA airports qualify for both PEP & PMP.

Primary non-hub commercial service airports may qualify for PMP however those airports shall contract and pay for PEP inspections separate from the PEP program and provide the report to ODAV. Commercial service airports have a higher funding participation for match. ODAV determines commercial service airports based upon the yearly FAA snapshot. Primary airports that are considered small, medium or large hub do not qualify for the PEP under ODAV's process but can fund the inspection locally and forward ODAV the final report for incorporation into PMP for consideration. For non-hub primary airport qualifications or questions, contact the ODAV PMP Program Manager for additional information. This program is subject to periodic change.

PMP LOCAL MATCH BY AIRPORT CATEGORY (Policy ODAV-033)

CATEGORY	DESCRIPTION	RECOMMENDED LOCAL MATCH
1a	Commercial Service (Primary)	50%
1b	Other Commercial Service	35%
2	Urban General Aviation	25%
3	Regional General Aviation	10%
4	Local General Aviation	10%
5	Remote Access / Emergency Service	5%

Category I (1a and 1b)- Commercial Service

- Function: accommodate scheduled major/national or regional/commuter commercial air carrier service.
- Design Criteria: scheduled commercial service.

Category II - Business or High Activity General Aviation

- Function: accommodate corporate aviation activities, including business jets, helicopters, and other general aviation activities.
- Design Criteria: 30,000 or more annual operations, of which a minimum of 500 are business related aircraft; business use heliports.

Category III - Regional General Aviation

- Function: accommodate a wide range of general aviation users for large service areas in outlying areas of Oregon. Many also accommodate seasonal regional fire response activities.
- Design Criteria: generally less than 30,000 operations. Geographically significant location with multiple communities in the service area. Nearest Category 1 or 2 Airport is more than 90 minutes average travel time by road.



Category IV - Community General Aviation

- Function: accommodate general aviation users and local business activities.
- Design Criteria: 2,500 or more annual operations or more than ten based aircraft.

Category V - Low Activity General Aviation

- Function: accommodate limited general aviation use in smaller communities and remote areas of Oregon. Provide emergency and recreational use function.
- Design Criteria: less than 2,500 annual operations and 10 or fewer aircraft.

PAVEMENT CONDITION INDEX

Critical Pavement Condition Index (PCI) values are based upon Oregon specific deterioration curves in addition to the type of airport, airport attributes, and functional needs. While the original critical PCI index was set in 2000, analysis shows the critical PCI value has remained consistent with the airport functional category. The Ten- Year Pavement Maintenance Program Performance Review confirmed that there is a significant increase in the rate of pavement condition deterioration and much higher maintenance costs as PCI falls below the Critical PCI range (see the 10 Year Performance Review for additional information).

Projects are prioritized and ranked technically using the PCI data. A prioritization table is used to identify eligible projects will be based on a budget scenario of \$1,000,000/year. PAVER™ evaluates those pavements below the critical PCI value separately from those above the critical PCI value. PAVER™ will allocate funds to fixing those pavements below the critical PCI value before it allocates funds to fixing those pavements above the critical PCI value.

Critical PCI Values

	Airport Functional Category				
	1a & 1b	2	3	4	5
Runway	65	65	60	60	55
Taxiway	60	60	55	55	50
Apron / Helipad	50	50	50	50	45

Critical PCI Values = Pavement Failures

^{*}Pavement at or below Critical PCI Value should be scheduled for replacement. PCI is determined by visual inspection and strictly follows the FAA technical standards and advisory circulars.



PAVEMENT CONDITION MEASURES

PCI Rating Scale		
Pavement Condition Rating (PCR)	Pavement Condition Index (PCI)	
GOOD	85-100	
SATISFACTORY	70-85	
FAIR	55-70	
POOR	40-55	
VERY POOR	25-40	
SERIOUS	10-25	

PMP – Pavement Maintenance & Preservation Details

Since its inception in 2000, the intent of the PMP has been simple: keep pavements in a serviceable condition by slowing the decline of pavement. The program is designed to maintain pavements to a level above failure, so as to defer the need for costly pavement reconstruction or rehabilitation. The PMP program work has shown that this pavement maintenance can add many years to the pavement life cycle.

The PEP and PMP build upon each other and must be coordinated for seamless project delivery. PEP inspections and final reporting schedule runs from July through October. PMP programming and construction generally happens February through October, with preliminary programming January – February, inspections and field quantity verification for bid schedule March and April, final program and bid in May- June, and wrapping up with the maintenance construction June - September.

PMP is implemented by completing approximately \$1M in maintenance projects each year. The PMP completes work at all eligible airports in one of the four geographic regions in the state a year after the region has been evaluated by the PEP consultant. This combines the maintenance work at an average of 10-12 airports into a single package. To complete this work, ODAV selects an architectural/engineering (A/E) consultant to provide engineering services through a qualifications-based selection process for a multi-year, flexible-services price agreement. Once a year, ODAV issues a work order contract to the A/E consultant for the work that year. The A/E consultant then performs associated work leading up to bid documents. ODAV puts the project out for public bid and hires the successful low-bid contractor to complete the maintenance work. This work is explained in detail in the following steps:

YEARLY RESEARCH



Obtain background materials including PCI reports, airport-layout plans, aerial photos, FAA records, ODAV files, and airport contact information. The PEP prioritization list accomplishes this for the eligible airports.

Review CIP to identify the capital improvement projects on airside pavements planned at each airport in the next five years. These projects provide an opportunity to coordinate maintenance work with major construction work. For example, if the airport is planning a runway-pavement-rehabilitation project in two years, then maintenance work on the runway would be eliminated or significantly minimized.

After appropriate review and research ODAV will set the funding amount available for the projects that year. Generally, this has been between \$900,000 and \$1,000,000 of funding from aviation fuel taxes collected by ODAV in the previous year.

PMP PRELIMINARY PROGRAM DEVELOPMENT

Consultant reviews the PEP reports and generates a list that includes the prioritized list of pavement maintenance recommendations at each airport and the program priorities as defined. Airports with less than \$3,000 of work are eliminated from the cycle due to cost-prohibitive soft costs. Additionally, patching more than 10% by area of any pavement branch or section is no longer considered routine maintenance and therefore does not qualify for PMP.

Consultant reviews engineering analysis and recommendations of the existing condition of every runway, taxiway and apron pavement and the related maintenance. Engineering analysis and judgment decisions regarding surface sealing work is required, especially for runways. A draft of recommended project list is finalized and submitted to ODAV for review.

A draft spreadsheet is prepared using the recommended project list to estimate the cost of the work and assemble the preliminary program and costs. It involves the following:

- Maintenance recommendations for each airport according to the PEP reports and field inspections
- Contingency factors for various work types:
 - Approximately 32% for crack sealing and repair, joint sealing and repair, asphalt concrete patching
 - Approximately 40% 50% for surface sealing work and associated pavement marking
- Engineering costs
- Airport sponsor local match percentages
- Regional engineering analysis using historical data and as-builts.
- Total estimated cost of work at each airport
- Total estimated cost of PMP Program funding needed for the maintenance recommendations included

SOLICIT AIRPORT SPONSOR PARTICIPATION

Once the preliminary projects are defined, ODAV contacts the airport sponsors to solicit participation in the project.

ODAV can provide the following information:

- Airport inclusion in the program
- Preliminary scope of the maintenance work
- Estimated amount of the airport sponsor local match
- Discuss how the match will be funded (local money)
- Explain the project schedule



- Notify sponsors of pending engineering inspections and schedule needs
- Answer questions

If any airports drop out and significantly decreases the project costs then the process goes back to the PEP evaluations, and more maintenance work is added to the other eligible airports using the PEP priority list.

ODAV reviews and updates Intergovernmental Agreement/Service Agreement templates as needed.

FIELD INSPECTIONS

- Consultant contacts airport sponsors to notify them of pavement inspection
- Consultant conducts an in-person airport manager kick-off meeting
- Consultant obtains important information about the airport and answers sponsor questions about the PMP work recommendations
- Consultant conducts airport inspections to verify maintenance recommendations included in the preliminary program, and creates a photo log of existing conditions at airports
- Consultant measures quantities of maintenance work to firm up the cost estimate
 - Cracks 1/4" or greater are program eligible for crack seal & repair.
 - Cracking smaller than ¼" can be addressed via fog and slurry seal or other surface treatments if work is deemed program priority.

PRELIMINARY DESIGN

Consultant updates the preliminary program estimate based on actual field quantities obtained in the inspections and adjusts the program until the estimate matches the funding.

- ODAV Program Manager finalizes yearly preliminary program and budget and obtains director approval.
- Aviation Board approves preliminary program after director approval.
- ODAV and consultant identify project needs for additional Closing X's and Unicom radios.
- Preliminary plans and draft technical specifications are prepared by consultant.
- ODAV reviews and approves.

EXECUTE INTERGOVERNMENTAL AGREEMENT (IGA) or SERVICE AGREEMENT WITH AIRPORT SPONSORS

- Prepare draft Agreement documents.
- Obtain Oregon Department of Justice (DOJ) legal assistance, if needed, to support Agreement process.
- Prepare a summary cost estimate to supplement the Agreement, called an Exhibit A.
- Send Agreement to airport sponsors for signature.

FINAL DESIGN

Consultant prepares the final project plans, technical specifications, and final engineer's estimate, and submits final bid documents to ODAV for review. ODAV submits to DOJ for review and approval as necessary.

- Prepare final project plans.
- Prepare final technical specifications.
- Prepare the final engineer's estimate.
- Prepare the final bid schedule

ODAV will prepare the invitation to bid document (ITB) including:



- Obtain the most recent state contract documents for Oregon (state boilerplates)
- Prepare supplemental general conditions (as necessary)

BIDDING AND CONTRACT AWARD PERIOD

- Complete ITB through OregonBuys procurement system
- Answer bidder questions and prepare addenda as necessary per current procurement rules and practices
- Conduct pre-bid meeting
- Conduct bid opening and review bids
- Post notice of intent to award
- After protest period and DOJ review, award contract(s)
- Send out Notice to Proceed

CONSTRUCTION MANAGEMENT

Consultant will complete the following tasks:

- Conduct pre-construction conference.
- Conduct safety and operations training for contractor's staff on Airport operations including towered airport
 operations, temporary work zone management with special focus on runway safety, radio use and protocol,
 and written/verbal exam
- Review contractor submittals required by project specifications
- Complete work at each airport according to the project schedule:
 - Coordinate requests to close specific pavement areas and create contractor work zones using Notices to Airmen (NOTAMs)
 - Conduct mini-pre-con meetings at each airport
 - o Provide construction observation to verify conformance with the contract documents
 - Prepare daily inspection reports
 - Take/log photos during construction
 - Measure pay quantities
 - Prepare weekly construction summary emails
- Coordinate work with airport stakeholders including airport manager, fixed-base operators (FBOs), pilots, tenants, on-airport businesses, and emergency services
- Conduct weekly meetings between ODAV, Consultant, and Contractor during construction phase
- Prepare monthly pay estimates
- Prepare change orders as needed for approval by ODAV
- Provide engineering support and answer requests for information (RFI's) from the contractor
- Prepare close-out documents, including record drawings and close-out checklist/report
- Prepare final Exhibit A cost summary to illustrate final cost sharing amounts for airport sponsors and ODAV
- Conduct final acceptance inspections
- Complete any construction administration documentation
- Prepare and submit close-out documents for yearly program



TYPE OF WORK FUNDED

The type of work funded includes but is not limited to the following airport pavement maintenance:

- Crack Seal Treatments
- Fog Seal Treatments
- Wide Crack Repair
- AC Patching
- PCC Crack/Joint Seal
- PCC Repair
- Slurry Seal
- Pavement Marking*
- Small Area Maintenance Rehabilitation or Reconstruction Patching

*Pavement markings will be paid for under the program if deemed necessary as a part of the worked performed in accordance with engineering guidelines and FAA Advisory Circulars. Sponsor, ODAV and FAA approval may be necessary. Marking not approved will be paid for by the Sponsor at 100% share.

PROJECT ELIGIBILITY AND CRITERIA

Airport pavement maintenance projects will be prioritized based upon the type of facility. The facility priorities are as follows: Primary Runway, Primary Taxiway, Secondary Runway, Secondary Taxiway and Other Secondary facilities, and Apron. Exclusive Use and Privately Owned areas are not eligible to be included in this program. Program priorities follow FAA AIP eligibility guidelines.

The following criteria will be used in considering and determining project eligibility and funding the pavement maintenance projects:

- Pavement Condition Index (PCI) data must be provided through the PEP program and be current
- Project MUST be a technically warranted need based upon pavement condition
- Airport is recognized as a Public Use Airport and categorized in the ODAV-033 policy
- The need is not and will not be met through other programs or in upcoming FAA AIP projects
- Aggregated non-soft costs must exceed \$3,000 at a given airport to warrant mobilization in a particular year
- Airport sponsor MUST submit a signed IGA or Service Agreement
- The sponsor and/or local jurisdiction has established an airport overlay zoning and current with OAR 660-013
 Airport Planning
- All maintenance must be AIP eligible

Additionally, sponsor shall fund 100% match for non-AIP eligible work, and Non-NPIAS airport sponsors MUST submit 50% of the estimated local match prior to the start of the project. Airport sponsors invoiced for final cost-share amounts upon the contractor final project completion.

Once all airports in the PMP scheduled region have been evaluated for maintenance work based on the latest PCI report, a more in-depth computer run will be completed which will include all gross global work anticipated in the future at each airport.



FINAL PROJECT PLANNING AND PROGRAMMING PROTOCOLS

The current ALP and airport five year CIP will be used to assist in determining the preventative maintenance work to be scheduled. CIP coordination is critical. Preventative maintenance will not occur in an area that is scheduled for a CIP project. ODAV will confirm 5 year CIP with FAA.

ADDITIONAL WORK

The PMP Program can facilitate additional or extra work to be combined with program set work. This is a dynamic program and allows for additional and extra work to be added to a project to maximize the benefit of pavement preservation and utilize economy of scale. Additional or extra work shall be identified during the pre-construction inspection process and will be verified and quantified for bidding purposes.

Extra sponsor requested "add-on" work will not be funded through the program, but will be facilitated through the program. Additional work can be requested by the sponsor and will be funded by sponsor at 100%. All additional work MUST be approved by the ODAV Program Manager. Additional work MUST be added prior to finalizing the yearly program. No add on work is accepted after the bid or during construction. No change orders will be issued for sponsor add-on work. All additional work must be added into an agreement with the sponsor and clarify payment obligation. Sponsor requested additional work is called "add on" work and quantified separately for tracking and billing purposes.

SPONSOR PROGRAM REQUIREMENTS

An Airport Sponsor that receives FAA grant funding outside of the PMP has a legal and binding obligation to keep all aspects of its airport in a safe operating condition per their grant assurances. This includes all pavement areas as well as areas adjacent to the active pavements such as shoulders, safety areas, overruns, runways protection zones, and so on. In order to stay qualified for participation in the PMP, all airport sponsors must perform routine maintenance.

It is recommended that the following strategies be considered for a successful airport maintenance program:

- Regularly inspect all safety areas of the airport and document all inspection activity
- Provide ODAV with a method of tracking all maintenance activities that occur as a result of your inspections.
- Conduct an aggressive campaign against weed growth through timely herbicide applications and/or mowing programs. Vegetation growing in pavement cracks is very destructive and significantly increases the rate of pavement and shoulder deterioration.
- Implement a periodic crack sealing and joint sealing program. Keeping water and debris out of the pavement section by sealing cracks and joints is a proven method for cost-effectively extending the life of the pavement.
- Closely monitor the movement of heavy equipment, such as construction equipment, emergency equipment, and fueling equipment, to make sure that it is only operating on pavement designed to accommodate the heavy loads this type of equipment often applies. Failure to restrict heavy equipment to appropriate areas may result in the premature failure of airport pavements.

*Refer to: AC 150/5380-6B for more information.



PROGRAM ADMINISTRATION & FUNDING

The PMP Program funding is based upon an assumption of \$1 million per year including engineering and administration costs and considering sponsor matches. Actual program funding will vary depending upon program revenue and projections of work anticipated.

ODAV Program Manager shall review the preliminary program estimate and compare it to the available funding, and adjust the scope of work until the estimate matches the available funding. ODAV Program Manager will review and analyze the PEP reports and data as they become available as they are associated with the current year construction recommendations.

PEP FUNDING

The PEP Program is funded by the PMP Program funds and FAA AIP System Planning Grant funds. Funding is inclusive of the final work product of the individual Pavement Condition Index Reports and all associated consulting contract services. PMP funds pay 100% of PEP costs for non-NPIAS, public use airports. NPIAS Airports that are not General Aviation (GA) or that are Commercial Service airports are responsible for paying for and providing their own Pavement Evaluations (and reports) using PAVER™ and any other FAA required technical resources. Other PEP costs are funded through a yearly FAA AIP System Planning Grant for NPIAS, GA airports. This FAA grant is for statewide system needs facilitated by the Oregon Department of Aviation. FAA AIP Grants are typically funded at a 90% (FAA)/ 10% (sponsor) share. ODAV covers the 10% sponsor share in its entirety for the PEP.

PMP FUNDING AND AIRPORT SPONSOR MATCH

The majority of airport sponsors use locally derived funds (budget) for the PMP match. The amount of match required by the local airport sponsor is determined by the Oregon Aviation Plan airport classifications and Agency policy ODAV-033, and ranges from 5% to 50% of the individual airport's project cost.

PMP & PEP LOCAL MATCH BY AIRPORT CATEGORY (Policy ODAV-033)

CATEGORY	DESCRIPTION	RECOMMENDED LOCAL MATCH
1a	Commercial Service (Primary)	50%
1b	Other Commercial Service	35%
2	Urban General Aviation	25%
3	Regional General Aviation	10%
4	Local General Aviation	10%
5	Remote Access / Emergency Service	5%



LOCAL FUNDING

Local funds for a city, county, or port authority airport sponsor are typically sourced from on-airport generated revenue, such as fuel sales or lease revenues. The funds may also be derived from the local jurisdiction's general fund. Local funds for a privately owned airports are sourced similarly with the exception of receiving any funding from a local jurisdiction or public general fund.

PRIMARY AIRPORTS

Primary airports that qualify (non-hub), must contract and pay for a Pavement Condition Index (PCI) Report and provide the report to ODAV on the regional reporting cycle. Primary airports may get reimbursed for this cost from the FAA using their primary entitlement funds if available and approved by the FAA. The data provided to ODAV must be consistent with the current PEP program and use the same data sourcing in order to properly determine PMP project needs and priorities for that airport. The primary airport must also accept the current program determinations set for critical PCI to participate. PMP recommendations and work will then be reviewed using the PCI data to set project priorities or determine if any pavement maintenance work qualifies. Primary airports that are considered small, medium or large hub DO NOT QUALIFY for either program.



FUNDING EXAMPLES

The following examples are a general overview to show funding. Actual project accounting detail is based upon individual airport specific verified data including field verified quantities, contractor billings signed off by the project engineer and construction manager, engineering services invoices, etc. Actuals are used for all billings, FAA grant reimbursements, and sponsor agreements.

EXAMPLE 1 - Category 3 Airport 10% Match/Share

		TOTAL WORK \$	PMP Program Funded	Local Share (out of pocket)*
PMP Program Work	Description, Quantity & Unit Cost of Work	\$100,000	\$90,000	\$10,000
Additional Work - None	Description, Quantity & Unit Cost of Work	\$0	\$0	\$0
TOTAL		\$100,000	\$90,000	\$10,000

^{*}Airport sponsor shall be invoiced for \$10,000 by ODAV

EXAMPLE 2 - Category 3 Airport 10% Match/Share

		TOTAL WORK \$	PMP Program Funded	Local Share (out of pocket)*
PMP Program Work	Description, Quantity & Unit Cost of Work	\$100,000	\$90,000	\$10,000
Additional Work	Description, Quantity & Unit Cost of Work	\$20,000	\$0	\$20,000
TOTAL		\$120,000	\$90,000	\$30,000

^{*}Airport sponsor shall be invoiced for \$30,000 by ODAV. (Sponsor shall pay 50% of anticipated additional work costs prior to the work being performed)

^{**} PMP Funds will not be distributed or dispersed from the program to an individual airport or airport sponsor directly to do maintenance work outside of the PMP Program or with any other maintenance project. **



Average PMP Activity Costs (contractor work items)

Activity	FY 2000	FY 2013	FY 2025
Deep AC Patching	\$4.55/sf	\$15.00/sf	\$13.52/sf
AC Patching - Joint Repair		\$12.00/sf	\$49.79/sf
Shallow AC Patching	\$3.25/sf		
Full Depth PCC Patching	\$8.45/sf	\$17.00/sf	
PCC Spall Repair		\$11.00/sf	
Partial Depth PCC Patching	\$5.85/sf		
Leveling AC Patching	\$2.60/sf		
Patching w/ Coal Tar Seal	\$1.48/sf		
PCC Crack Sealing	\$1.95/lineal foot	\$5.00/lineal foot	
AC Crack Sealing	\$1.30/lineal foot	\$1.00/lineal foot	\$2.48/lineal foot
Slurry Seal		\$0.22/sf	
Fog Seal	\$0.03/sf	\$0.12/sf	
Pavement Marking		\$1.00/sf	\$5.60/sf
Pavement Marking Removal		\$1.50/sf	

This data is included to show original program construction activity costs. The FY 2000 activity costs listed above were validated and used to calculate work associated with this program at the program's inception and following 1st year. These FY 2000 activity costs were included in the original PMP policy document of FY 2000. The FY 2013 and FY 2025 Activity costs are a revised current average update of the activity rates (actuals are regionally influenced – see latest bid for documents for specific costs information).

This policy document has been approved by the Oregon Board of Aviation 08/07/2025