OREGON DEPARTMENT OF AVIATION

Pavement Maintenance Program

Ten-Year Performance Review

October 2012

WHPacific

Pavement Maintenance Program Ten-Year Performance Review

October 2012

Prepared for

OREGON DEPARTMENT OF AVIATION
3040 25th Street SE
Salem, OR 97302

Prepared by

WHPACIFIC, INC.
9755 SW Barnes Road, Suite 300
Portland, OR 97225

In association with:
PAVEMENTS CONSULTANTS, INC.
Seattle, WA

Acknowledgements

The following organizations and individuals contributed to this study. The study was funded by the Oregon Department of Aviation, along with a grant from the Federal Aviation Administration.

Oregon Department of Aviation

Mitch Swecker, Director
Heather Peck, Planning & Projects Manager
Sandra Larsen, Planning Analyst
Matthew Maass, State Airports Manager
John Wilson, Airport Operations Specialist

Federal Aviation Administration

Dave Roberts, Civil Engineer
Bruce Fisher, State Planner, Oregon & Idaho

WHPacific, Inc.

Rainse Anderson, Project Manager
Ed Chamberland, Project Engineer
James Kirby, Project Engineer
Derek Mayo, Project Engineer
Sarah Lucas, Aviation Planner

Pavement Consultants, Inc.

Jo Lary, Principal

Table of Contents

Executive Summary

Executive Summary ES-1

Chapters

Chapter 1 – Introduction and Purpose of the Study

Study Outline 1-1

Chapter 2 – Program History

Background: Legislative Phase 2-1
Background: Execution Phase 2-1
Program Management 2-2
Selection of Airports 2-3
Type of Work to be Funded and Project Eligibility 2-3
Program Goals 2-6

Chapter 3 – Program Description

Pavement Evaluation Program (PEP) 3-1
Overview 3-1
Implementation 3-1
Deliverables 3-4
PEP Participants 3-5
Pavement Maintenance Program (PMP) 3-5
Overview 3-5

Implementation 3-5
Deliverables 3-8
PMP Participants 3-9
Interaction with CIP Needs 3-9
Schedule 3-9

Chapter 4 - Program Funding

PEP Funding 4-1
PMP Funding 4-1
ODA Funds 4-1
Airport Sponsor Match 4-1
Typical Cash Flow Cycle 4-2
Extremes of PMP Cycle Length: Impact on Cash Flow 4-3

Chapter 5 - Results for the Period 2000 - 2009

Summary of Maintenance Work by Year, Airport, Type, and Cost 5-1
Airport Manager Survey 5-5
PCI Trends 5-8
Analysis Discussion 5-8
Airport selection 5-9
Pavement Area Selection 5-10
Analysis Metric Selection 5-11
Data Collection 5-11
Data Processing and Analysis 5-12
Data Analysis with Plotted Trend Lines 5-12
Coastal Combined Focus Areas Analysis Summary 5-13
Valley Combined Focus Areas Analysis Summary 5-14
Mountain Combined Focus Areas Analysis Summary 5-15
Central/East Combined Focus Areas Analysis Summary 5-16
Summary 5-17
Data Analysis Conclusions 5-18
Cost Effectiveness 5-18

Cost Benefit Analysis 5-18
Analysis Inputs 5-18
Cost Benefit Analysis Calculation – Coastal Region 5-20
Cost Benefit Analysis Calculation – Valley Region 5-23
Cost Benefit Analysis Calcuation – Mountain Region 5-26
Cost Benefit Analysis Calculation – Central/East Region 5-29
Cost Benefit Analysis Summary 5-32
Cost Benefit Analysis Calculation – Combined Statewide 5-33
Combined Statewide Cost Benefit Analysis Summary 5-34

Chapter 6 - Lessons Learned

Project Administration 6-1
ODA Administration 6-1
FAA Involvement 6-1
Airport Sponsor Participation 6-1
Late Scope Increases and Cost Overruns during Construction (2009) 6-1
100% Locally-Funded Work 6-2
Communications 6-2
Project Status Updates 6-2
Construction Progress Updates (2008) 6-3
Planning for Project Participation (2004) 6-3
PEP Coordination 6-3
Under-Budgeted List of Maintenance Recommendations (2003) 6-3
Timing of the PEP Reports Delaying the Start of PMP (2007) 6-4
Design 6-4
Refinement of Technical Specifications 6-4
Inspector's Project Information 6-4
Paint Curl (2001) 6-5
Proprietary Products and Sole-Source Procurement (2002) 6-5
Large, Wide Cracks (2003) 6-6
Striping Repair during Construction (2005) 6-6
Safety and Operations 6-6
NOTAMs Filed Incorrectly or Not At All (2000) 6-6

Contractor Safety Training (2004) 6-7
Radio Certification (2004) 6-7
Construction Work Plans (2004) 6-8
Airport Maps for Contractor Staff (2009) 6-8
FAA Review of Safety Training Program (2009) 6-8

Chapter 7 – Conclusion and Recommendations

Pavement Maintenance Program Goals 7-1
Asset Management 7-1
Economy of Scale 7-1
Maximizing Funding 7-1
Grant Compliance 7-1
Overall Program Benefits 7-2
Consequences of Losing the Program 7-2
Program Improvement Recommendations 7-2
Project Administration 7-2
Communications 7-3
PEP Coordination 7-3
Design, Bidding, and Construction 7-4
Safety and Operations 7-5
Program Funding 7-5
Closing Statement 7-6

Appendices

Appendix A: *Statewide Airport Pavement Maintenance Program*
Appendix B: *Sample PEP Deliverable (PCI Report for Grants Pass Airport)*
Appendix C: *Sample Engineer's Scope of Work*
Appendix D: *Example Checklist and Preliminary PMP Spreadsheet*
Appendix E: *Sample Intergovernmental Agreement (IGA)*

Appendix F: *Sample Safety Training Program*

Appendix G: *Final Construction Report (2008)*

Appendix H: *Airport Manager Survey Summary and Results*

Appendix I: *Evaluation of a Corrosion Control Material for Asphalt Preservation of DoD Airfield Facilities*

Appendix J: *Study Focus Area Maps*

Appendix K: *PCI Data Analysis*

Appendix L: *Pavement Maintenance Cost Inventory*

Executive Summary

In 1999, the Oregon Legislature authorized the Airport Pavement Preservation Program, which designated funds for the Pavement Maintenance Program (PMP). The authorization increased aviation fuel taxes for aviation gasoline ("av gas") and jet fuel sold within Oregon, thereby creating a funding source dedicated to preserving and maintaining airfield pavements on public-use airports. This fuel sales tax has generated approximately $1 million annually for the Pavement Maintenance Program, and the fund is administered and coordinated through the Oregon Department of Aviation (ODA).

The PMP is a multi-year program aimed at assisting Oregon public-use airports throughout the state with maintenance and preservation of their existing pavement infrastructure. Four overall goals of the PMP have been identified:

1. **Asset Management** – Maintain airfield pavements to a minimum condition standard
2. **Economy of Scale** – Create a single program to benefit numerous airports through lower unit costs
3. **Maximize Funding** – Create a federal, state, and local partnership to maximize airport pavement improvement funds
4. **Grant Compliance** – Create a program that gives airport sponsors an avenue to comply with FAA Airport Sponsor Grant Assurance #11

This study evaluates the effectiveness of the PMP from its inception to the present – a total of ten years – with the aim of assessing the program's strengths and weaknesses and recommending necessary improvements. The intent of this study is to help decision-makers determine where the program is getting the best return on the investment so they can capitalize on those successes, additionally, it provides recommendations for areas of improvement within the PMP. The Federal Aviation Administration (FAA) can also utilize this study as a best management practice for other states interested in developing similar pavement projects.

Report Outline

The report is organized into the following chapters:

1. Introduction and Purpose of the Study
2. Program History
3. Program Description
4. Program Funding
5. Results for the Period 2000-2009
6. Lessons Learned
7. Conclusions and Recommendations

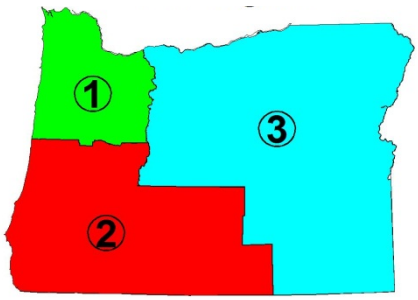


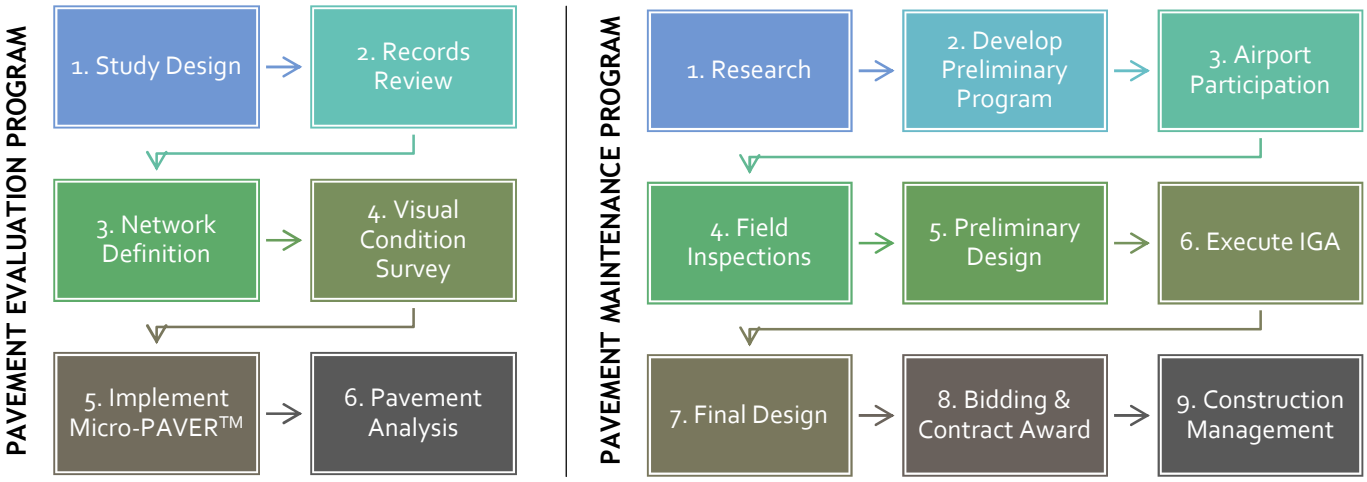
FIGURE 1. PMP GEOGRAPHIC REGIONS

Program Descriptions

To reduce contractor mobilization expenses, the state's airports are divided into three geographic regions as shown in **Figure 1**.

The Pavement Evaluation Program (PEP) is an accessory project to the PMP; its purpose is to inventory the airports' pavement condition. The PEP and PMP occur at each eligible airport once every three years, with the PEP occurring at each airport one year prior to the implementation of the PMP. **Figure 2** provides a flow chart of each program's components, which are discussed in greater detail within the report.

FIGURE 2. PEP AND PMP PROJECT COMPONENTS



Program Funding

PEP Funding. The majority of the PEP's $100,000 budget comes through an FAA statewide planning grant awarded to ODA, with the remaining funds coming from ODA. The FAA Modernization and Reform Act of 2012 changed the FAA/airport sponsor (ODA) share on grants to 90%/10%; therefore future FAA grants will be valued at $90,000, with ODA's share at $10,000.

PMP Funding. ODA's contribution to the PMP is generated by fuel taxes, and historically the revenue generated has been just under $1,000,000 per year. The majority of airport sponsors use either locally derived funds for the PMP match or federal Airport Improvement Program (AIP) funds. The pavement work performed under the PMP at National Plan of Integrated Airport Systems (NPIAS) airports is eligible for AIP funding participation. Many sponsors of AIP-eligible airports request that their non-primary entitlement (NPE) funds be used to fund a portion of the eligible costs associated with PMP. Public-use non-NPIAS and privately-owned airports must utilize other funding to provide the PMP match, as they are not eligible for FAA funding. Generally, privately-owned airport and ODA-owned (non-NPIAS) airport funding comes from operating budgets.

PMP Analysis

Summary of the program's first nine years (the period for which complete information is available):

- Total cost of maintenance work performed: $8,788,202
- Annual average: $976,466
- Number of airport projects undertaken: 126
- Average number of airport projects per year: 14
- Average amount spent at each airport per year: $69,747

A study sample of PMP airports was selected based on a variety of criteria, climatic diversity being the most valuable since pavement condition tends to depend more on climate than geographical location.

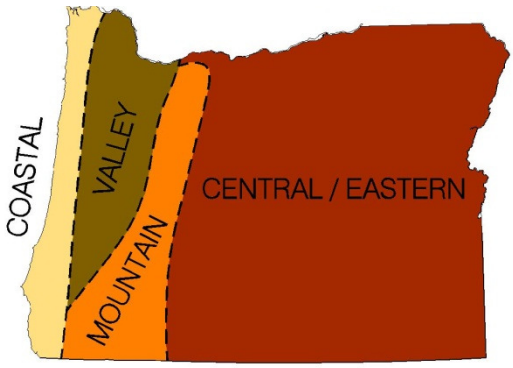
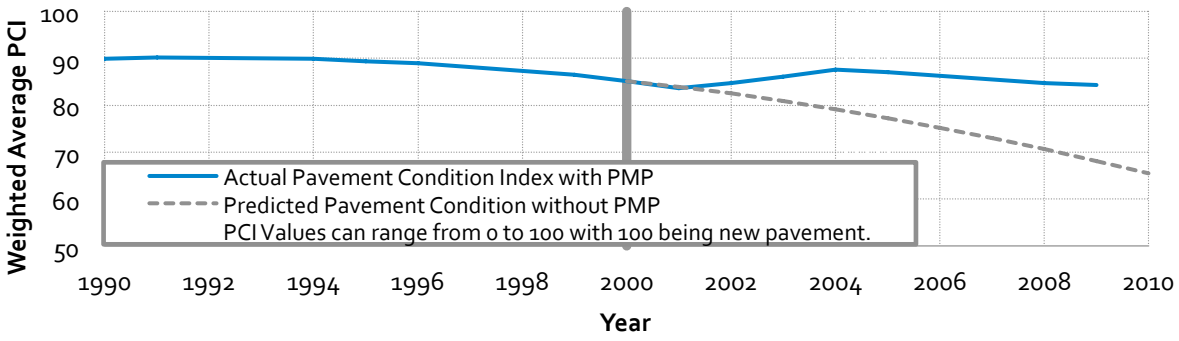


FIGURE 3. PMP CLIMATIC REGIONS

geographic location, our analysis grouped pavements by climate region (see **Figure 3**), a grouping that provides a better representation of pavement condition index (PCI) trends.

In each climate region summary, parabolic trend lines were added, projecting the PCI values beyond 2000 using data points from the 10 years prior to the PMP. These trend lines are a prediction of what the PCI would have been for each region had there not been any pavement maintenance inputs. A sample result of this analysis is shown in **Figure 4**. All trend lines by climatic regions show similarities, with PCI values decreasing more quickly in the central/east region as a result of climatic influences.

FIGURE 4. COMBINED COASTAL FOCUS AREAS



Cost Effectiveness

The study found unmaintained pavement life is 20 years, versus 40.88 years for maintained pavements – a 104.4% increase in pavement life. The cost per year for unmaintained pavement is $2.590 per square yard and $1.974 per square yard for maintained pavement, which equates to a cost avoidance of $0.617 per square yards or 23.8%. Oregon airports have approximately of 8,015,817 square yards of total maintainable pavements. Using the cost avoidance of $0.617 per square yard per year, **there is a total cost avoidance of approximately $5 million annually associated with the PMP, which amounts to $50 million in cost avoidance due to pavement maintenance inputs over the 10 year study life.**

Lessons Learned

Over the 10-year life of the PMP, the program has continuously improved. As a result, several best management practices have already been implemented. Additional lessons learned that were identified during this study are broken into separate categories representative of different phases of the PMP: Project Administration, Communications, PEP Coordination, Design, and Safety and operations.

Recommendations

This report found that all four of the program's initial goals have been met. As a result of data and experience gathered from ten years of the ODA's PEP/PMP program, many recommendations have been developed for these programs' future. Some are the result of lessons learned through the execution of the program; many others are continuations of ongoing improvements. Briefly, the recommendations are:

Project Administration

- The PMP consultant and ODA should adopt a more aggressive schedule.

- ODA should revise intergovernmental agreements (IGAs) with the goal of allowing modest cost changes to airport-specific project budgets.
- ODA should strive to maintain the continuity of project personnel to the greatest extent possible.

Communications

- Dissemination of information regarding schedule could be improved by the incorporation of easily implemented technology solutions.
- The PMP consultant should continue to improve communication with ODA during the construction phase.
- The consultant should develop a simple Operations Manual to answer questions airport sponsors may have about their pavement's post-PMP requirements.

PEP Coordination

- In order to streamline creation of the preliminary PMP and better utilize pre-design inspection field time, the PMP consultant must increase coordination with the PEP consultant.
- The consultants will work together to better tailor PEP data products to better fit field conditions.

Design, Bidding, and Construction

- The PMP consultant should continue to research new products and maintenance strategies.
- The PMP consultant should look for new and innovative ways to streamline the inspection and design processes.
- The inclusion of additional, locally sponsored work must be done in a timely fashion.
- The focus of maintenance efforts as part of the PMP should shift toward surface sealants.
- Wide crack repair methods should be reevaluated.
- The PMP consultant should continue to rework contract specifications, incorporating lessons learned from each PMP program year.
- The PMP consultant should work closely with ODA to coordinate the inclusion of pavement areas that drop below maintainable PCI thresholds into the proper State Capital Improvement Plan (SCIP) lists.
- The PMP consultant and ODA should develop ways to package the project for bidding to improve competition.
- The PMP consultant and ODA should work to aggressively complete final inspections to avoid delaying project closeout and release of contractor retainage held.

Safety and Operations

- The PMP consultant should continue to evaluate the safety training program.
- The PMP consultant should continue to improve contractor operational competency whenever possible.
- The PMP consultant should continue to instill a culture of quality in all aspects of construction.

Program Funding

- Funds should be redistributed based on the required inputs to keep all pavements in differing regions in a maintainable state.
- A substantial increase in the funding level is recommended through fuel tax increases.

By continuing to support the program and implementing the recommendations included in this report, the performance metrics will only improve the return on investment for the next decade.

Chapter 1
Introduction and Purpose of the Study

In 1999, the Oregon Legislature authorized the Airport Pavement Preservation Program, which designates funds for the Oregon Department of Aviation (ODA) to implement two related efforts, the Pavement Maintenance Program (PMP) and the Pavement Evaluation Program (PEP). The PMP is a multi-year program aimed at assisting Oregon public-use airports throughout the state with maintenance and preservation of their existing pavement infrastructure.

This study covers both PMP and the PEP elements; however, the focus of the analysis is directed toward the PMP portion, as it has the greatest impact on the state's airports and the revenue sourced from legislative action. This study evaluates the effectiveness of the PMP from its inception to the present – a total of ten years – with the aim of assessing the program's strengths and weaknesses, and recommending necessary improvements.

With ten years of operation in place, a review of the PMP is essential to determining if the program has achieved its objective of preserving Oregon's airfield pavements and if the cost of the PMP is a wise use of public funds. Funding sources at all levels – federal, state, and local – are stretched and competition for project funding is a reality all airports face. Therefore, this study will help decision makers determine where the program is getting the best return on the investment so they can capitalize on those successes; additionally, it provides recommendations for areas of improvement within the PMP. The Federal Aviation Administration (FAA) can also utilize this study as a best management practice for other states interested in developing similar pavement projects.

Study Outline

To provide context, this report begins by providing an in-depth history and background of the PMP, followed by a detailed description of the PEP – the PMP's sister program, and finally the PMP itself. The typical funding process and cycle will be presented, along with any past deviations that may have occurred over the program's history. The schedule for all phases of the PMP is also detailed prior to the actual program analysis.

The analysis of the PMP is multi-faceted. To determine the program's performance over the past decade, all aspects are examined:

- ODA administration
- Local sponsor participation
- FAA partnership
- Scheduling
- Funding
- Engineer/contractor performance
- Design implementation
- Construction coordination
- Safety

A thorough review of ODA records, airport sponsor surveys, engineering records, and pavement data will be undertaken to complete the analysis. Additionally, the PMP's ability to maintain Oregon's airfield pavements is be

tested by comparing pavement section performance, as quantified by pavement condition index (PCI) values, in their pre-PMP and post-PMP years. This information helps to determine the program's benefits, when compared to the overall program costs.

In the end, this study will produce an actionable list of "lessons learned" to improve the program and provide recommendations for its future course of action.

Chapter 2
Program History

The 1999 Oregon Aviation Plan (OAP) (published in 2000) recommended that ODA establish a state-level pavement preservation program to reduce the life-cycle cost of preserving the statewide airfield pavement system. The following sections provide an overview of the PMP's background and goals.

Background: Legislative Phase

The OAP presented a compelling argument that Oregon airports had a large and growing backlog of pavement maintenance needs. Without any new revenue to address these needs, the plan estimated there would be $177.5 million in pavement preservation needs over the next 20 years. By contrast, if a revenue source was created to address pavement lifecycle maintenance, that need would be decreased by $69.5 million – a 40% savings. Since most pavement maintenance does not rank high on the FAA's criteria for funding through the Airport Improvement Program (AIP)[1], the OAP recommended establishing a state funded program to address the statewide need.

Per the recommendation from the OAP, the 1999 Oregon Legislature passed Senate Bill 276 and House Bill 2199 to amend Oregon Revised Statute (ORS) 836.072 and ORS 319.020. These amendments allowed increased aviation fuel taxes for aviation gasoline ("Av Gas") and jet fuel sold within Oregon, thereby creating a funding source dedicated to preserving and maintaining airfield pavements on public-use airports. Per ORS 319.020, the tax rate for Av Gas is nine cents per gallon, and is one cent per gallon for jet fuel[2]. This fuel sales tax has generated approximately $1 million annually for the Pavement Maintenance Program, and the fund is administered and coordinated through ODA.

In addition to the creation of a funding source, the legislative action gave ODA authority to expend funds for administrative, engineering and construction expenses relative to pavement maintenance and preservation (ORS 836.072). It also mandated that ODA prepare a list of recommended projects for each cycle of the PMP that includes the age and condition of the pavement, the airport's role within the state's aviation system, and local match funds[3]. This list is then submitted to the State Aviation Board for their approval.

Background: Execution Phase

ODA was given the authority to adopt rules to implement the airport pavement preservation program, which were codified into the "Statewide Airport Pavement Maintenance Program," which was then used to develop the PEP and PMP (see **Appendix A**). Development of the PMP was headed by past ODA employees:

- Ann Crook, Director
- Daren Griffin, State Airports Manager

---

[1] An airport must be included in the National Plan of Integrated Airport Systems (NPIAS) for eligibility of AIP funding.
[2] The base rate prior to legislation was three cents per gallon of Av Gas and ½ cent per gallon of jet fuel. The tax was incrementally increased in FY 2000 by three cents per gallon of Av Gas and ½ cent per gallon of jet fuel. In FY 2001 an additional three cents was added to the Av Gas sales tax.
[3] The source of the local match funds are detailed in Chapter 4.

- Teddie Baker and Gary Viehdorfer, Aviation Project Specialists

These individuals were assisted in these efforts by Rainse Anderson at WHPacific, Inc., and Jo Lary of Pavement Consultants, Inc.

A summary of this document is detailed below.

Program Management

ODA has been solely responsible for managing the PMP. The Department has utilized their on-call engineering consultants to design, bid, and provide construction management services. WHPacific, Inc., has been the engineer of record contracted with the State for these services since the inception of the PMP.

ODA developed the Intergovernmental Agreement (IGA) process to secure pavement maintenance services with local airport sponsors[4]. The underpinnings of the agreement is that the airport sponsor would agree to keep the airport open to the public for 20 years, would render the full local match for services performed through the PMP, and would maintain records of pavement maintenance. ODA also developed guidance for the recommended local-match level, in accordance with the OAP's functional classification of airports. Based on the OAP's categorization, ODA staff believed that larger airports have more revenue available to address capital needs than smaller, general aviation airports. A tiered approach was recommended for an airport's local match, as reflected in **Table 2A**.

TABLE 2A. PMP RECOMMENDED LOCAL MATCH BY AIRPORT CATEGORY (2000 OAP)

CATEGORY	DESCRIPTION	RECOMMENDED LOCAL MATCH
1a	Commercial Primary	50%
1b	Other Non-Primary Commercial	35%
2	Business	25%
3	Regional	10%
4	Community	10%
5	Low Volume	10%
Non-NPIAS	Community and Low Volume	5%

An update to the OAP was published in 2007, resulting in revisions to the airport categories and recommended local match, because the 2000 OAP airport classification system provided limited guidance regarding what facilities each airport should offer to the flying public. This update is reflected in **Table 2B**.

[4] "Airport sponsors" is a collective term, representing the entity that owns and operates an airport.

TABLE 2B. UPDATED PMP RECOMMENDED LOCAL MATCH BY AIRPORT CATEGORY (2007 OAP)

CATEGORY	DESCRIPTION	RECOMMENDED LOCAL MATCH
1a	Commercial Service	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%

Selection of Airports

To reduce contractor mobilization expenses, ODA divided the state into three geographic regions (detailed in **Table 2C** and **Exhibit 2A)**:

- Eastern (east of the Cascade Range)
- Northwestern (northwest Oregon)
- Southern (southwest/south-central Oregon).

ODA designated that each airport in these regions should be inspected on a three-year cycle, ensuring that construction would take place at up to 20 airports per year.

Type of Work to be Funded and Project Eligibility

The program's pavement maintenance techniques were initially limited to crack seal, fog seal, and patching. As the PMP evolved, other methods have been employed, including slurry seal, wide-crack seal, joint seal, spall repair and restriping. In order to determine what pavements should be treated through the PMP, ODA chose to employ a needs-based prioritization approach. This approach utilized a pavement condition index (PCI) database that has been continually updated through the Pavement Evaluation Program (PEP), discussed in later sections of this report. Once PCI data was gathered, prioritization for pavement maintenance was determined to be:

1. Primary runway
2. Primary taxiway
3. Secondary runway
4. Primary apron
5. Secondary taxiway
6. Other airfield pavements

ODA also developed criteria to determine project eligibility through the PMP, as reflected in the Statewide Airport Pavement Maintenance Program, which were:

- PCI data must be compatible with the State's database[5]
- Project must be warranted based on PCI
- The airport must be designated in the core system of airports (per the original OAP[6])

[5] Portland International, Roberts Field (Redmond), and Rogue Valley International (Medford) Airports' data is incompatible.
[6] Select non-core airports were eventually eligible for the PMP, as the core designation was removed in the 2007 OAP Update, opening up all public-use airports in Oregon for inclusion in the program.

- Exclusive-use or privately-owned areas on airports are not eligible
- The pavement maintenance project is not eligible for funding through the FAA AIP, as a standalone project, because it does not rank high on the FAA's priority rating
- The aggregated project cost must exceed $5,000 at the airport to justify the contractor's mobilization costs
- The airport sponsor must submit a contract, via the IGA, that commits them to the local match and obligates them to keep the airport open to the public for 20 years
- The airport sponsor must provide 50% of the estimated local match to ODA prior to the project start date (although this condition has not been enforced, due to Sponsor limitations relative to the timing of FAA entitlement funding)
- The airport sponsor must have established a documented PEP on a three-year inspection cycle, which ODA provides via the PEP.
- The airport sponsor and/or zoning jurisdiction must have established airport overlay zoning per Oregon Administrative Rule 660-013

If an airport sponsor could exhibit compliance with these eligibility criteria, they would be included in the three-year PEP inspection cycle.

TABLE 2C. PMP THREE-YEAR INSPECTION CYCLE

EASTERN REGION *(OAP CATEGORY)*	NORTHWESTERN *(OAP CATEGORY)*	SOUTHERN *(OAP CATEGORY)*
Baker City Municipal *(3)*	Albany Municipal *(4)*	Ashland Municipal *(3)*
Bend Municipal *(2)*	Astoria Regional *(2)*	Bandon State *(3)*
Boardman *(5)*	Aurora State *(2)*	Brookings Municipal *(4)*
Burns Municipal *(3)*	Chehalem Airpark	Cape Blanco State *(5)*
Cascade Locks State *(5)*	Corvallis Municipal *(2)*	Chiloquin State *(5)*
Columbia Gorge Regional / The Dalles *(3)*	Country Squire Airpark *(5)*	Christmas Valley *(4)*
Condon State *(4)*	Hillsboro *(2)*	Cottage Grove State *(4)*
Enterprise Municipal *(5)*	Independence State *(4)*	Creswell Hobby Field *(4)*
Hermiston Municipal *(3)*	Lebanon State *(4)*	Florence Municipal *(4)*
Ken Jernstedt / Hood River *(4)*	Lenhardt Airpark *(4)*	Gold Beach Municipal *(4)*
Grant County Regional *(3)*	McMinnville Municipal *(2)*	Grants Pass *(3)*
Joseph State *(4)*	Mulino *(4)*	Illinois Valley *(4)*
La Grande / Union County *(3)*	Nehalem Bay State *(5)*	Lake County *(3)*
Lexington *(4)*	Newport Municipal *(2)*	Myrtle Creek Municipal *(4)*
Madras City-County *(4)*	Pacific City State *(5)*	Oakridge State *(5)*
McDermitt State *(5)*	Salem McNary Field *(1b)*	Pinehurst State *(5)*
Ontario Municipal *(3)*	Scappoose Industrial Airpark *(2)*	Prospect State *(5)*
Prineville *(4)*	Seaside Municipal *(4)*	Roseburg Regional *(2)*
Sisters Eagle Air *(4)*	Siletz Bay State *(4)*	Sunriver *(4)*
Wasco State *(4)*	Sportsman Airpark *(4)*	Paisley *(5)*
Pendleton – Eastern Oregon Regional *(1b)*	Stark's Twin Oaks Airpark *(5)*	-
-	Tillamook *(3)*	-
-	Toledo State *(5)*	-
-	Troutdale *(2)*	-
-	Valley View *(5)*	

Notes: No primary airports were included in the inspection cycle, they have their own pavement maintenance programs and access to greater funding sources, nor were several Category 5 airports that have turf/gravel runways (Alkali Lake State, Arlington Municipal, Beaver Marsh, Owyhee Reservoir State, Rome State, Crescent Lake, McKenzie Bridge State, Miller Memorial Airpark, Santiam Junction State, Toketee State, and Vernonia Airfield).

Program Goals

The overall goal of the PMP is to protect Oregon's airport investments by preserving airfield pavements, through preventative maintenance to extend the life of pavement. Furthermore, the OAP cited the program is needed to address stop-gap and inconsistent maintenance, to provide many smaller airports with the funding to address pavement maintenance issues, and to preserve the system's airport pavements through a cost-effective means. In the past, Oregon airport sponsors generally have not performed pavement maintenance using airport revenues, general funds or Airport Improvement Program (AIP) funds. Rather, the sponsors would wait for the pavements to reach a point of failure then utilize AIP funds along with a local match to either overlay, rehabilitate or totally reconstruct the pavement feature such as a runway or taxiway. Sponsors also use the AIP funds to construct new pavements such as runway extensions, taxiways/taxi lanes and apron tie-down areas.

Deferring pavement maintenance can cause safety issues for an airport and its users when pavement cracks appear, and if not treated they can, over time, cause the pavement areas to fail, resulting in Foreign Object Debris (FOD). FOD can cause aircraft tire, propeller and engine damage, which can translate to liability issues for the sponsor. Resultantly, the deferred maintenance then requires a more costly repair as further detailed in Chapter 5.

Furthermore, since the PMP clusters airports together into groups of 20 to 22 per region per three-year cycle, a larger pool of work is created, bringing the overall unit cost of construction down. Thus, these repair projects are more economical for the airport sponsor than projects initiated independently.

Furthermore, through Airport Sponsor Grant Assurance #11 (*Pavement Preventative Maintenance*), the FAA mandates that all federally-obligated airports that have received funding for pavement-related projects must have an effective pavement maintenance- management program. At a minimum, this must be a system that rates the condition of the pavement on a regular basis. ODA has undertaken this requirement as part of the State's System Planning Grant with the FAA, which funds the PEP. The FAA also requires airport sponsors to keep all pavement areas free from FOD and in a condition that is safe for the flying public. The PMP is the program that implements the recommendations from the PEP, allowing sponsors a method to maintain safe pavements.

Thus, four overall goals of the PMP emerge:

1. **Asset Management – Maintain airfield pavements to a minimum condition standard**
2. **Economy of Scale – Create a single program to benefit numerous airports**
3. **Maximize Funding – Create a federal, state, and local partnership to maximize airport pavement improvement funds**
4. **Grant Compliance – Create a program that gives airport sponsors an avenue to comply with FAA Airport Sponsor Grant Assurance #11**

The remaining chapters analyze the PMP's effectiveness and determine if the program is meeting the above-stated goals.

Chapter 3
Program Description

The following sections provide an overview of the Pavement Evaluation Program (PEP) and the Pavement Maintenance Program (PMP). The programs occur at each airport once every three years, with the PEP occurring at each airport one year prior to the implementation of the PMP.

Pavement Evaluation Program (PEP)

Overview

The principal objective of the PEP is to maintain a statewide pavement management program that assesses relative pavement condition at the included airports. The PEP serves to:

- Assist ODA and/or the FAA to identify system needs,
- Make program decisions for project funding,
- Provide information to assist in legislative decision making, and
- Help local jurisdictions with their capital planning.

For each airport, the PEP develops a pavement inventory and identifies needed pavement maintenance, rehabilitation and reconstruction projects.

ODA has been conducting the PEP since the mid-1980s. This program encompasses all paved, non-commercial service airports in the State – a total of 67 airports. In 1995 the FAA began requiring airports requesting federal funds for pavement-improvement projects to have an implemented pavement-maintenance management program. ODA was already ensuring that eligible Oregon airports met this requirement through the PEP. Nonetheless, 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.

Implementation

Under the PEP, every participating paved public use airport in the state is evaluated once every three years. Airports are grouped based on three geographic regions to ensure efficiency in completing the yearly program, as shown in Table 2B.

The following are the primary steps undertaken during each PEP update:

STEP 1 - STUDY DESIGN

- Confirm with ODA and FAA (using the airport list shown in Table 2B) airports to be inspected.
- Develop the pavement inspection schedule and coordinate with each individual airport.

STEP 2 - RECORDS REVIEW

- Gather relevant data on pavement design, construction and maintenance history from FAA, ODA, sponsors or airport consultants, as available. The focus is to obtain project plans from AIP, PMP and other projects completed in the last three years, or since the last evaluation.

- Update the airport layout plan for each site using the new information obtained from the project plans. This drawing becomes the base that is used for several subsequent purposes. These efforts are completed using the current version of AutoCAD.
- Develop a drawing of existing conditions for each airport including the updated airport layout plan, the dimensions of the pavement sections, and the construction and maintenance history for each section of pavement. This is valuable background information when analyzing current and future maintenance needs. An example of this deliverable is included in **Appendix B**, which was prepared for the Grants Pass Airport. Note: Landside pavements, which are those pavements not directly required for aircraft access to the runway, such as vehicle access roads, are not included because they are not eligible for the program.
- Gather relevant data on construction bid prices for recent projects. This primarily includes confirming the unit prices to use for cost estimating each type of maintenance work, such as the lineal foot cost for crack sealing. This information is obtained from the historical bid tabulation database maintained by the engineer. Unit price cost trends are monitored which provide a good basis for unit price cost estimating

STEP 3 - NETWORK DEFINITION

- Review the updated airport layout plan drawing and divide each airport pavement network into branches, sections and sample units.
- Develop a drawing that shows each branch, section and sample unit locations based on the updated airport layout plan prepared in Step 2. An example of Grants Pass Airport is included in Appendix B.

STEP 4 - VISUAL CONDITION SURVEY

- Visually inspect all pavements at each project airport in accordance with ASTM D5340, *Standard Test Method for Airport Pavement Condition Index Surveys* and FAA Northwest Mountain Region handout, *Pavement Condition Survey Program* (6/11/88). Following these standards maintains consistency in the pavement management database.

STEP 5 - MICROPAVER™ IMPLEMENTATION

- Once the records review and visual inspections are complete, the data are entered into MicroPAVER™ which has been utilized for the PEP for over two decades. Below is a description of MicroPAVER™ from the U.S. Army Engineer Research and Development Center who developed the program:
    - *MicroPAVER™ is a microcomputer version of PAVER™—a validated pavement maintenance management system for military installations, airports, cities, and counties, designed to optimize funds allocated for pavement maintenance and rehabilitation (M&R). MicroPAVER™ uses inspection data and a pavement condition index (PCI) rating from 0 to 100 (where a score of 100 represents the optimal condition) to consistently describe a pavement's condition and predict its M&R needs many years into the future. The PCI for airfield pavements became an ASTM standard in 1993. The PCI for roads and streets became an ASTM standard in 1999. The PAVER™ program performs multiple levels of analysis to show where to best allocate scarce M&R dollars, determine budget requirements for different levels of service, and help organizations formulate pavement M&R projects. For more information, see the link below:*
        - *http://www.cecer.army.mil/paver/*
- Input the new data gathered in Steps 2, 3, and 4 into MicroPAVER™. This includes the following:
    - 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, and utilizes the same updated airport layout plan prepared in Step 2. An example of Grants Pass Airport is included in Appendix B. The pavements are categorized according to standard PCI and PCR measures shown in **Table 3A**. The rating scale was modified in 2010, consistent with recommendations from the American Society for Testing and Materials (ASTM) for all pavement standards.

TABLE 3A: PAVEMENT CONDITION MEASURES

Current Rating Scale		**Prior Rating Scale (Pre-2010)**	
Pavement Condition Rating (PCR)	**Pavement Condition Index (PCI)**	**Pavement Condition Rating (PCR)**	**Pavement Condition Index (PCI)**
Good	85-100	Excellent	85-100
Satisfactory	70-85	Very Good	70-85
Fair	55-70	Good	55-70
Poor	40-55	Fair	40-55
Very Poor	25-40	Poor	25-40
Serious	10-25	Very Poor	10-25
Failed	0-10	Failed	0-10

STEP 6 - PAVEMENT ANALYSIS

- Perform a pavement analysis for each airport through condition analysis and prediction modeling. The prediction modeling is based on performance curves for the surface type, use, and airport functional category.
- Generate MicroPAVER™ reports including the following:
  - Branch condition report
  - Section condition report
  - Network maintenance report

- Develop a five-year project prioritization list and associated cost estimates for each airport. The list is generated without budget limitations to get the full scope of recommended maintenance and repair needs at the airport. The list includes the following:
    - Localized maintenance needs
    - Global maintenance needs
    - Capital improvement project needs.
- Evaluate the maintenance and repair needs for the entire airport system over a five-year period for several budget scenarios.
- Perform an analysis to identify and prioritize the pavement maintenance needs at each airport in support of the State's Pavement Maintenance Program.
- Determine eligibility for inclusion into the PMP. Rates of pavement condition deterioration and costs of maintenance activities increase significantly as pavement condition indices drop below the critical PCI values in the table below. Pavements' with PCI values falling below these critical values for a given Category and functional type are not eligible for PMP inclusion (see **Table 3B**).

TABLE 3B: CRITICAL PAVEMENT CONDITION INDEX (PCI) VALUES

Airport Category 1 & 2	Airport Category 3 & 4	Airport Category 5
Runways = 65	Runways = 60	Runways = 55
Taxiways = 60	Taxiways = 55	Taxiways = 50
Aprons = 50	Aprons = 50	Aprons = 45

Deliverables

The following deliverables are provided at the end of each PEP project (for an example of Grants Pass Airport, see Appendix B).

- A statewide summary report that describes the approach to completing the PEP, and provides results from the analysis of the data.
- Reports for each individual airport inspected including the branch condition, section condition, and network maintenance reports in both tabular and graphical format. The report also includes an inspection report that identifies the distress type, severity and extent observed for each sample unit inspected.
- One hard copy of all documents (forms, sketches, and reports) developed during the project. The completed reports are also provided as electronic media compatible with ODA and FAA computer systems. One hard copy of the individual airport report is provided to ODA for distribution to the airport sponsor.
- Electronic files of the updated airport layout plans in AutoCAD for use in the PMP.
- A report for the PMP that prioritizes pavement recommendations for the airports inspected. The report has two parts:

- Part 1 – A prioritized list of pavement maintenance recommendations at each airport based on anticipated PMP funding levels for that year. This is a cost-constrained list that includes crack sealing and repair, joint sealing and repair, asphalt/concrete patching and surface-sealing work.
- Part 2 – A prioritized list of pavement maintenance recommendations at each airport that includes surface sealing work over and above the Part 1 list. The Part 2 list is not cost-constrained and the intent is to provide additional maintenance recommendations should additional funding become available or other maintenance work in the Part 1 list get cancelled. For example, if the Part 1 list includes maintenance recommendations for a runway, but subsequent research shows the runway will be rehabilitated as a capital improvement project in the near future, then that money becomes available for some other work. The Part 2 list is used to select additional work to avoid continual revisions to the Part 1 list.

Both reports are prepared in spreadsheet format, and include costs for each pavement maintenance recommendation grouped by airport. The costs are based on the current unit prices previously mentioned. The report is prepared for up to three different funding levels to provide adequate information for the PMP design. This report becomes the starting point of the PMP project for that year.

PEP Participants

Pavement Consultants Inc. (PCI) has been assisting ODA with their PEP since its beginning in 1991. PCI interfaces with ODA, the FAA, airport sponsors and other consultants to ensure the PEP for each airport is up-to-date.

Pavement Maintenance Program (PMP)

Overview

Since its inception in 2000, the intent of the PMP has been simple: keep pavements in a serviceable condition by decelerating the decline of pavement. The program is designed so that pavements are maintained to a level above failure, so as to defer the need for costly pavement reconstruction or rehabilitation.

Implementation

PMP is implemented by completing approximately $1M in maintenance projects each year. Each year, the PMP completes work at all the airports in one of the three geographic regions in the state (identified in Table 2B), a year after the region has been evaluated by the PEP consultant. This combines the maintenance work at an average of 15 airports into a single package. To complete this work, ODA selects an architectural/engineering (A/E) consultant to provide engineering services through a qualifications-based selection process for a five-year, flexible-services price agreement. Once a year, ODA issues a work order contract to the A/E consultant for the work that year (a sample scope of work is included in **Appendix C**). The A/E consultant then performs all the work leading up to bid documents. ODA 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:

STEP 1 - RESEARCH

- Research and obtain background materials (including PCI reports), airport-layout plans, aerial photos, FAA records, ODA files, and airport contact information. (This would already have been accomplished for the airports on the PEP prioritized list.)
- Contact the airport sponsors, their A/E consultants, ODA and the FAA to identify the capital improvement projects on airside pavements planned at each airport in the next two to three years (or up

to five years if possible). 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.
    - Note: The new state capital improvement program (SCIP) is anticipated to streamline this process in the future.
- Obtain from ODA the funding amount that will be available for the project that year. Generally, this has been between $900,000 and $1,000,000 of funding from aviation fuel taxes collected by ODA in the previous year.

STEP 2 - PRELIMINARY PROGRAM DEVELOPMENT

- Review the PEP reports, specifically the Part 1 PEP list that includes the prioritized list of pavement maintenance recommendations at each airport.
- Eliminate airports with less than $5,000 of work due to cost-prohibitive soft costs.
- Review the existing condition of every runway and the related maintenance recommendations.
- Prepare a spreadsheet to estimate the cost of the work and assemble the preliminary program. It involves the following:
    - Key input:
        - Maintenance recommendations for each airport according to the PEP reports
        - Contingency factors for various work types:
            - 32% for crack sealing and repair, joint sealing and repair, asphalt concrete patching,
            - 45% for surface sealing work and associated pavement marking,
        - Engineering costs
        - Airport sponsor local match percentages
        - Engineering judgment decisions on the surface sealing work, especially the runways
    - Key output:
        - Total cost of work at each airport
        - Airport sponsor local match amount for each airport
        - Total cost of PMP funding needed for the maintenance recommendations included
- Review the preliminary program estimate and compare it to the available funding. Adjust the scope of work until the estimate matches the available funding. If needed, obtain a new PEP report, using an amount either higher or lower than the previous one, depending on whether the preliminary program cost is lower or higher than the available funding. For example, if the preliminary program estimate requires $900,000 of PMP funding but there is $1,000,000 available, then the scope of maintenance work needs to be increased by $100,000.
- Review the preliminary program with ODA. Revise as directed. (An example is included in **Appendix D**.)

STEP 3 - SOLICIT AIRPORT SPONSOR PARTICIPATION

- Once the preliminary program is flushed out, ODA contacts the airport sponsors to solicit participation in the project. ODA 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 or FAA entitlement grants),
  - Explain the project schedule,
  - Notify them of pending engineering inspections, and
  - Answer questions.
- If any airports drop out and significantly decrease the program (for example, changes greater than $50,000), then the process goes back to Step 2 and more maintenance work is added to the other airports using the Part 2 PEP list.

STEP 4 - FIELD INSPECTIONS

- Contact airport sponsors to notify them of pavement inspection
- Conduct an airport manager kick-off meeting in person
  - Obtain important information about the airport (see Airport Manager PMP Interview Checklist in **Appendix D**)
  - Answer questions about the PMP
- Conduct airport inspections to verify maintenance recommendations included in the preliminary program
- Create photo log of existing conditions
- Measure quantities of maintenance work to firm up the cost estimate

STEP 5 - PRELIMINARY DESIGN

- Update the preliminary program estimate based on actual field quantities obtained in the inspections. Adjust the program until the estimate matches the funding according to Step 2.
- Finalize the preliminary program with ODA.
- Obtain Aviation Board approval of preliminary program.
- Identify project needs for additional Closing X's and Unicom radios.
- Prepare preliminary plans and draft technical specifications. Submit to ODA and FAA for review.

STEP 6 - EXECUTE INTERGOVERNMENTAL AGREEMENT (IGA) WITH AIRPORT SPONSORS

- Prepare draft IGA documents for two options:
  - Local funding option, or
  - FAA entitlement funding option.
- Obtain Oregon Department of Justice (DOJ) legal assistance if needed to support IGA process.
- Prepare a summary cost estimate to supplement the IGA, called Exhibit A.
- Coordinate FAA entitlement amounts with FAA representatives.
- Send IGA to airport sponsors for signature. (An example IGA is included in **Appendix E**.)

STEP 7 - FINAL DESIGN

- Prepare final project plans.
- Prepare final technical specifications.
- Prepare the final engineer's estimate.
- Prepare the invitation to bid document (ITB):
  - Obtain the most recent state contract documents for Oregon (state boilerplates)
  - Obtain the most recent federal contract requirements for FAA (federal boilerplates)
  - Prepare supplemental general conditions (as necessary)

    - Prepare the final bid schedule
- Submit final bid documents to ODA and DOJ for review and approval. Revise as necessary.
- Prepare hard copies and electronic copies for bidding.

STEP 8 - BIDDING AND CONTRACT AWARD PERIOD

- Advertise project and upload the bid documents to the state procurement system (ORPIN).
- Answer bidder questions and prepare addenda as necessary for the three-week bid period.
- Conduct pre-bid meeting.
- Conduct bid opening and review bids.
- Post notice of intent to award.
    - After protest period and DOJ review, award contract.
- Send out Notice to Proceed.

STEP 9 - CONSTRUCTION MANAGEMENT

- Conduct pre-construction conference.
- Conduct safety and operations training for contractor's staff on (see **Appendix F** for further details of the training program):
    - Airport operations (especially towered airport operations if applicable)
    - Temporary work zone management, with special focus on runway safety
    - Radio use
    - Written and verbal exams for lead workers
- 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
    - Provide construction observation to verify conformance with the contract documents
    - Prepare daily inspection reports and take photo log
    - Measure pay quantities
    - Coordinate work with airport stakeholders (airport manager, fixed-base operators (FBOs), pilots, tenants, on-airport businesses, emergency services, others)
- Prepare monthly pay estimates and change orders (as needed). Final approval by ODA and the FAA.
- Provide engineering support and answer requests for information (RFI's) from the contractor.
- Prepare close-out documents, including record drawings and close-out report.
- Prepare final Exhibit A cost summary to illustrate final cost sharing amounts for airport sponsors, ODA and the FAA.
- Conduct final acceptance inspections.

Deliverables

- Preliminary program estimate.
- Preliminary bid documents.
- Final bid documents.
- Exhibit A cost summary.

- Intergovernmental agreements.
- Awarded construction contract.
- Construction administration documentation.
- Close-out documents (included as **Appendix G**).
- Status reports.

PMP Participants

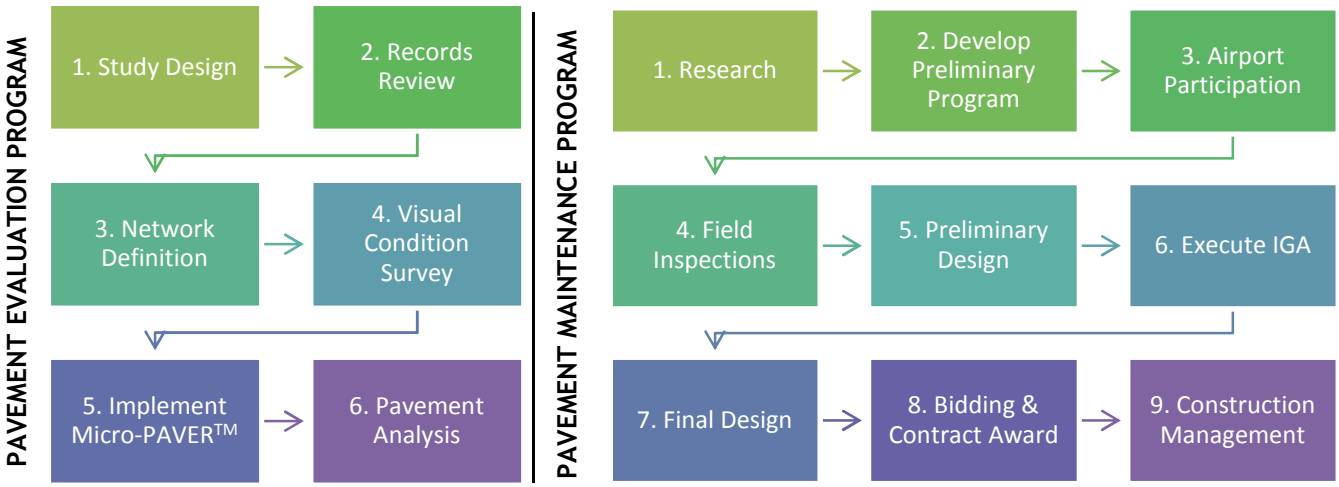
Similar to the PEP, ODA interfaces with a variety of players to accomplish the goals of the PMP. WHPacific, Inc. has been the engineer of record for the PMP since its inception in 2000. The FAA and individual airport sponsors also have a great amount of involvement in the PMP.

Interaction with CIP Needs

During the pre-design and design phases, significant outreach is performed to gain an understanding of each PMP airport's current capital improvement plan (CIP) program and needs. The consultant contacts the engineer of record for each PMP airport in that year's cycle as well as airport management staff to determine future plans and timelines for CIP projects. Maintenance strategies such as repair of large distresses are then designed for compatibility with future CIP projects. An example is the use of traditional cut and patch repair of wide cracks regardless of cost when an overlay project is scheduled within the five year FAA CIP planning horizon.

Another way PMP maintenance interacts with CIP lists is to address and "bridge" pavement's transition from PMP maintainable to CIP candidates. PMP maintenance is used in these cases to prolong the short term serviceability of marginal pavements in anticipation of their inclusion in CIP projects. This is especially critical when critical pavements such as runways near the end of the functional lives but no CIP project has been contemplated by the airport sponsor.

FIGURE 3A: PAVEMENT EVALUATION PROGRAM AND PAVEMENT MAINTENANCE PROGRAM PROCESS OVERVIEW



Schedule

The PEP and PMP build upon each other and must be coordinated for seamless project delivery. **Exhibit 3A** illustrates the ideal schedule for the project. It is approximately an 18-month project from the beginning of the

PEP to the end of the PMP. The schedule is driven by the typical construction season in Oregon, June through September. During this time, the weather conditions are most favorable for pavement maintenance work because of temperature and moisture limitations in the technical specifications.

Chapter 4
Program Funding

Funding for the PEP and PMP comes from several sources: ODA, the FAA and local airport sponsors. The following is a summary of these funding mechanisms.

PEP Funding

Between 2004 and 2012, the majority (95%) of the PEP's $100,000 budget came through an FAA Statewide Planning Grant awarded to ODA, with the remaining 5% ($5,000) coming from ODA. However, the FAA Modernization and Reform Act of 2012 (HR 658, enrolled February 14, 2012) reverted the FAA/airport sponsor (ODA) share on grants to 90%/10%, as they were prior to 2004; therefore the fiscal year 2012 grant will be $90,000, with ODA's share increasing to $10,000.

PMP Funding

ODA Funds

As described in Chapter 1, the 1999 Oregon Legislature passed amendments that allowed increased aviation fuel taxes for av gas and jet fuel sold within Oregon. The tax rate for av gas is nine cents per gallon, and is one cent per gallon for jet fuel. For comparative purposes, fuel tax rates for Western states are presented in **Table 4A**. Currently, Oregon has the lowest tax rate on jet fuel than all of the Western states shown and a moderate tax rate on aviation gas when compared with most states in the West.

TABLE 4A: COMPARISON OF FUEL TAX RATES FOR WESTERN STATES (2012)

State	Aviation Gas	Jet Fuel
Oregon	$0.09	$0.01
California	$.18	$0.02
Idaho	$0.07	$0.06
Montana	$0.04	$0.04
Nevada	$0.08	$0.02
Washington	$0.11	$0.11

The revenue from Oregon aviation fuel taxes was then used to create a funding source dedicated to the PMP. Of the fuel taxes, three cents of av gas fees and ½ cent of jet fuel fees are dedicated to fund the ODA's operations. Historically, the revenue generated has been just under $1,000,000 per year.

Airport Sponsor Match

The majority of airport sponsors use either locally derived funds for the PMP match or federal Airport Improvement Program (AIP) funds. The amount of match required by the local airport sponsor is determined by the Oregon Aviation Plan airport classifications (as reported in Table 2B), and ranges from 5% to 50% of the individual airport's project cost.

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.

AIP FUNDING

The pavement work performed under PMP at National Plan of Integrated Airport Systems (NPIAS) airports is eligible for AIP funding participation. Many sponsors of AIP-eligible airports request that their non-primary entitlement (NPE) funds be used to fund a portion of the eligible costs associated with PMP. This federal portion usually amounts to the PMP local match. NPIAS airports are allocated $150,000 per year in NPE funds and PMP work is an eligible expenditure. In recent years, the FAA has combined the AIP NPE funding for the PMP into one grant to ODA each year, rather than issuing several small grants to each individual NPIAS airport sponsor for the PMP. This method has evolved over the life of the PMP to enable a more streamlined grant, payment and reimbursement process. This is by far the most popular and convenient method for sponsors to match the PMP, which is typically done when local funds are not sufficient to fund the work. All that is required is correspondence to the FAA and ODA stating it is the sponsor's intention to match the PMP with NPE funds; then the FAA and ODA arrange the paperwork to administer the grant.

Regardless of the match funding mechanism, prior to performing maintenance through the PMP, the ODA and each sponsor execute an Intergovernmental Agreement (IGA), the legal document that enables the state to enter into a contract with the local airport sponsor. The IGA also stipulates conditions that must be met by the airport sponsor, reflecting the criteria in Chapter 2. (A sample IGA is included in **Appendix E** for reference.)

Timing of the development of the IGAs is also critical to most sponsors since, as public agencies, they plan their annual budgets in the spring. If project cost and the IGAs aren't presented in the January/February timeframe, the municipality can have difficulty getting the project approved in time. Therefore, it is critical that execution of the PMP follows the prescribed schedule, which is presented in Chapter 3.

NON-NPIAS AND PRIVATE AIRPORTS

Public-use non-NPIAS and privately-owned airports must utilize other funding to provide the PMP match, as they are not eligible for FAA funding. Generally, privately-owned airports' and ODA-owned airports' funding comes from operating budgets.

Typical Cash Flow Cycle

The PMP's cash flow is typically stretched over two years from planning through completion. The cost burden of the PMP is initially borne upfront by ODA from general operating funds or carry-over funds collected in the

previous year. The costs that are covered include engineering, construction and administration of the project. The cash flow cycle begins with a transfer to ODA from the ODOT Financial Services Fuel Tax Group, which initially collects the fuel taxes.

As mentioned previously, ODA gets a commitment from the airport sponsors for reimbursement of each airport's portion of the cost though use of an IGA. Upon completion of the project, ODA generates an itemized invoice for each airport. If a sponsor is using local funds to pay for their PMP match then they pay from the invoice submitted. If they are using NPE funds for their match, the invoice will be used by ODA to document the amount of funds to be reimbursed from the FAA grant on the airport sponsor's behalf.

Extremes of PMP Cycle Length: Impact on Cash Flow

The cash flow of the PMP can be stretched over multiple years because of numerous conditions affecting the project, including:

- The FAA grant cycle was interrupted because it wasn't reauthorized by Congress.
- IGAs aren't executed either by ODA or the sponsor.
- Because of inclement weather or a late start, construction has to be wintered over and will not be completed until the following year.
- A change in ODA personnel caused delays in requests for reimbursement from FAA and sponsors.

Suggestions for improvement are addressed in Chapter 7.

Chapter 5

Results for the Period 2000 – 2009

Summary of Maintenance Work by Year, Airport, Type, and Cost

The types of maintenance work performed under the program and the years in which the work was performed are summarized below in **Table 5A**. The work at each airport is listed separately by type and a total maintenance cost for each airport is included. Years where the program did not perform maintenance work, 2007 and 2010, are indicated. It should be noted that in 2000, the first year of the program, the ODA Director decided it would be beneficial to perform work at 22 selected airports in all three PMP regions around the state, in an effort to make the program as visible as possible. After that year the program used the three region cycle as previously explained.

In summary, between 2000-2009, the program has performed work in each region as follows:

- Region 1 (Northwestern) – Four times during 2000, 2002, 2005, 2009
- Region 2 (Southwestern) – Three times during 2000, 2003, and 2006
- Region 3 (Eastern) – Four times during 2000, 2001, 2004, and 2008

The total cost of maintenance work performed over the nine years equaled $8,788,202, an annual average of $976,466. A total of 126 airport projects were undertaken during the period, an average of 14 per year. The average amount spent at each airport was $69,747. The lowest amount spent was $7,114 at Prineville in 2000 and the highest was $285,855 at Salem in 2002. Project costs vary greatly due to a variety of considerations, including: geographic area, mobilization distance, length of construction season, number of airports in the cycle, and match funding variation. **Figure 5A** depicts the average distribution of project costs over the life of the program.

FIGURE 5A. 10-YEAR AVERAGE DISTRIBUTION OF PMP FUNDS BY COST CENTER

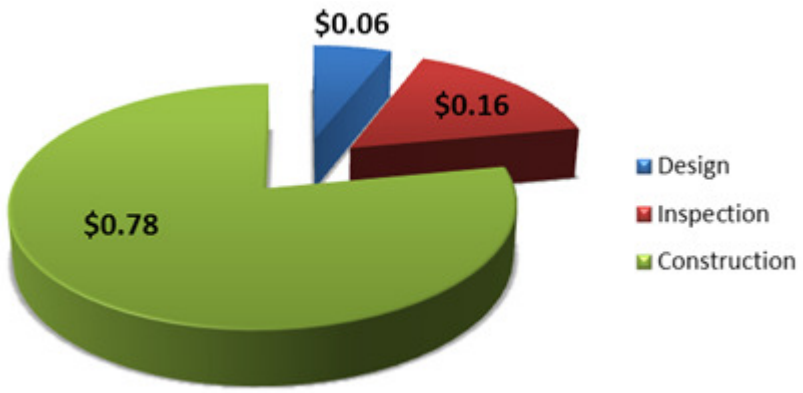


TABLE 5A. PMP WORK BY YEAR, AIRPORT, TYPE, AND COST

Airport	Crack Sealing	Wide Crack Repair	AC Patching	PCC Crack/ Joint Seal	PCC Repair	Fog Seal	Slurry Seal	Final Maintenance Costs
2000[1] Statewide								
Astoria	X					X		$63,585
Bandon						X		$18,519
Florence						X		$21,469
Newport	X					X		$30,974
Scappoose	X		X			X		$28,154
Albany	X		X			X		$25,763
Ashland	X		X			X		$28,032
Aurora	X					X		$32,237
Creswell	X		X			X		$31,289
Grants Pass	X					X		$21,362
Hood River	X							$18,105
McMinnville	X		X	X	X	X		$35,778
Myrtle Creek	X		X			X		$23,942
Bend	X					X		$26,253
Christmas Valley	X					X		$27,020
Condon	X			X				$49,415
Hermiston	X					X		$26,036
Lexington	X					X		$9,325
Madras	X					X		$42,746
Ontario	X							$15,330
Prineville	X							$7,114
Wasco						X		$16,221
							2000 PMP TOTAL	***$598,669***
2001 Region 3 - Eastern								
Baker City	X		X					$31,520
Boardman	X						X	$17,348
Burns	X		X				X	$148,176
Dalles	X			X	X	X		$48,026
John Day	X					X		$72,852
La Grande	X		X					$25,933
Lexington	X						X	$94,538
Madras	X							$45,978
Pendleton	X					X		$71,631
Prineville	X		X				X	$125,587
							2001 PMP TOTAL	***$681,589***

[1] Excludes engineering and administration cost, as the information was not readily available.

Airport	Crack Sealing	Wide Crack Repair	AC Patching	PCC Crack/ Joint Seal	PCC Repair	Fog Seal	Slurry Seal	Final Maintenance Costs
2002 Region 1 - Northwestern								
Albany	X						X	$39,552
Astoria	X		X	X		X		$57,598
Aurora	X		X			X		$82,555
Corvallis	X		X	X	X	X		$158,963
Cottage Grove	X						X	$46,372
Newport	X						X	$260,189
Salem	X		X			X		$285,855
Scappoose	X						X	$65,387
Siletz Bay	X						X	$69,955
							2002 PMP TOTAL	***$1,066,428***
2003 Region 2 - Southwestern								
Ashland	X		X				X	$114,365
Bandon	X						X	$104,441
Brookings	X						X	$66,417
Cottage Grove	X						X	$34,150
Creswell	X		X					$33,365
Florence	X						X	$65,481
Gold Beach	X		X				X	$113,070
Grants Pass	X						X	$104,269
Illinois Valley	X						X	$65,041
Roseburg	X		X				X	$172,251
Sunriver	X							$32,341
							2003 PMP TOTAL	***$905,190***
2004 Region 3 - Eastern								
Baker City	X							$36,384
Bend	X		X				X	$168,620
Burns	X						X	$119,313
The Dalles	X		X	X				$52,457
John Day	X							$20,883
Hermiston	X							$79,156
Hood River	X		X					$30,270
La Grande	X					X		$119,936
Madras	X			X	X			$38,901
McDermitt							X	$182,541
Prineville	X							$51,387
Sisters	X						X	$77,451
							2004 PMP TOTAL	***$977,299***
2005 Region 1 - Northwestern								
Albany	X						X	$108,231
Astoria	X					X		$156,219
Aurora	X		X					$28,448

Airport	Crack Sealing	Wide Crack Repair	AC Patching	PCC Crack/ Joint Seal	PCC Repair	Fog Seal	Slurry Seal	Final Maintenance Costs
Corvallis	X			X	X			$28,646
Lebanon	X		X					$31,176
McMinnville	X		X	X		X		$180,947
Mulino	X		X			X	X	$131,190
Nehalem	X						X	$50,610
Newport	X							$34,065
Pacific City	X						X	$29,308
Salem	X		X					$15,512
Scappoose	X					X		$144,658
Seaside	X		X				X	$93,303
The Dalles							X	$230,303
Tillamook	X			X	X			$93,422
							2005 PMP TOTAL	***$1,356,035***
2006 Region 2 - Southwestern								
Ashland	X		X					$73,965
Bandon	X						X	$71,981
Cape Blanco	X							$65,900
Chiloquin	X							$8,983
Christmas Valley	X	X					X	$98,843
Cottage Grove	X		X					$39,301
Creswell	X	X	X					$91,041
Florence	X						X	$21,757
Grants Pass	X						X	$45,526
Klamath Falls[2]							X	$41,548
Lake County	X						X	$271,230
Oakridge	X	X	X					$48,886
Pinehurst	X		X				X	$71,698
Prospect	X	X					X	$127,547
Roseburg	X		X					$50,898
							2006 PMP TOTAL	***$1,129,104***
2007 NO PMP								
2008 Region 3 - Eastern								
Baker City	X	X	X	X	X			$114,273
Bend	X	X	X					$74,002
Burns	X	X						$99,317
Columbia Gorge	X							$18,223
Condon	X			X				$32,041
Enterprise	X	X					X	$85,917
John Day	X	X						$40,192
Hermiston	X	X						$34,461
Hood River	X	X						$56,434

[2] Work done locally, then reimbursed through PMP

Airport	Crack Sealing	Wide Crack Repair	AC Patching	PCC Crack/ Joint Seal	PCC Repair	Fog Seal	Slurry Seal	Final Maintenance Costs
La Grande	X	X	X					$44,092
Lexington	X	X	X					$60,843
Madras	X	X	X					$218,579
Prineville	X	X						$23,161
Sunriver	X	X	X					$23,318
Wasco	X		X				X	$104,033
							2008 PMP TOTAL	***$1,028,886***
2009 Region 1 - Northwestern								
Albany	X							$35,665
Astoria	X		X					$59,910
Aurora	X					X[3]		$16,710
Corvallis	X				X	X		$73,814
Hillsboro	X					X		$210,135
Independence	X					X		$38,098
Lebanon	X							$7,349
McMinnville	X			X	X			$54,897
Mulino	X							$15,789
Newport	X							$61,839
Salem	X					X[3]		$241,184
Scappoose	X	X						$61,464
Seaside	X		X					$26,979
Siletz Bay	X							$19,033
Sportsman	X		X					$16,120
Tillamook	X			X	X			$62,978
Troutdale	X							$43,038
							2009 PMP TOTAL	***$1,045,001***
2010 NO PMP								
							2000-2010 PMP TOTAL	***$8,788,202***

Airport Manager Survey

A survey was prepared and distributed to various airports to understand the program's impacts at the local level. The PMP Study's Airport Manager Survey was distributed to the following airports as shown in **Table 5B**:

[3] Local Sponsor added 100% locally funded pavement maintenance work (included in Final Maintenance Costs)

TABLE 5B. PMP AIRPORT MANAGER SURVEY PARTICIPANTS

Airport	Representative(s)	Response?
Baker City Municipal	Michelle Owen	Yes
Bend Municipal	Gary Judd	Yes
Burns Municipal	Bryan Hutchison	Partial
Corvallis Municipal	Dan Mason	Yes
Creswell	Shelly Humble	Yes
Enterprise Municipal	Michele Young, City Administrator and Joe Spence (former mayor)	No
Port of Portland	Nathan Grimes and Steven Nagy	Yes
Salem McNary Field	Tom Franklin	Yes
Seaside	Neal Wallace and Randall Henderson	Partial
Sisters Eagle Air	Hobbs Magaret	Partial
State-Owned	John Wilson	Yes
Sunriver	Stephanie Hartung	Yes
The Dalles	Chuck Covert	Partial

A full print-out of the survey and the results are included as **Appendix H** for reference. The following section provides a brief overview of the survey questions and responses.

1. **Awareness of the Program's Goals and Objectives?**
    a. All respondents (10) are familiar with the PMP's goals and objectives.

2. **Typical Procedures/Methods used to Maintain Airfield Pavement?**
    a. The majority of respondents (10) rely heavily on the PMP to maintain their pavement surfaces. Some respondents apply herbicides, crack fill, and sweep the pavements as needed between PMP cycles.

3. **Pavement Changes Observed on Sections Treated by PMP?**
    a. Generally speaking, all respondents (10) reported a maintained – or prolonged – pavement condition/lifespan on those pavement sections treated by the PMP. One respondent reported their runway is in need of resurfacing, indicating the pavement condition has likely deteriorated beyond the scope of the PMP. Also, another manager recommended the crack filling schedule be amended, so as to fill the cracks during the cooler months (since they are typically narrowed due to the higher summer temperatures).

4. **Delay of Pavement Rehabilitation or Reconstruction as a result of PMP?**
    a. Respondents (10) mostly felt the PMP either kept good pavement in "good" condition, or that it delayed the need for major repair or reconstruction. The PMP was likened to a band-aid to hold the pavement over until funding became available for a larger project. One respondent reported there was no delay in the need for rehabilitation/reconstruction; while another reported it was unknown.

5. **Feedback from Airport Users on the PMP?**
    a. Generally, the nine respondents said that if they did receive comments from users, the remarks were general in nature and that the airport looked good. Again, it was noted that users of one airport felt the cracks should be sealed during the cooler months.

6. **Sufficient Notice given for NOTAMs and Operational Changes?**
    a. Of the ten respondents, seven reported that communication from the engineer and contractor was handled well. Another mentioned there have been a few last-minute NOTAMs, although the overall experience has been good. Another respondent reported the painting sub-contractor was a deviation from the typically professional experience of the PMP. Lastly, one response was "not applicable."

7. **Did the Contractor Operate Safely and Efficiently?**
    a. With two exceptions – a sweeper incursion and a "mess" left behind by the contractor – all eight respondents believed the maintenance was undergone in a safe and efficient manner. One response was "not applicable."

8. **Did WHP Provide Adequate Communication and Oversight?**
    a. There were ten responses, with one being "not applicable." The remaining responses were all favorable towards WHP's conduct during the PMP process.

9. **Estimated Annual Pavement Maintenance Budget?**
    a. Six responses were given; the remaining were left blank or listed as unknown. Several were unsure of a response, which would indicate their budget varies from year to year. Two airports have a budget of no more than $10,000.

10. **What is the Source of PMP Matching Funds?**
    a. Eight responses were given and varied greatly. Federal AIP funds, along with locally derived airport funds, were the most common source of matching funds.

11. **How did the PMP Impact Airport Budget or Cash Flow?**
    a. Eight responses were given; two of which did not provide any insight of the airport's operations. The remaining six airports reported there was a benefit derived from the PMP in their budgeting cycles. Four of the airports have incorporated the PMP into their budgets.

12. **Does the Airport's CIP Include PMP Matching Funds (Federal and Local CIP)?**
    a. Of the eight responses, five airport managers report they have included the PMP match funds into their CIP. For two of the three airports that have not, their reasons are: 1) consider the PMP a maintenance item, not a capital project, and 2) the airport is privately owned.

13. **Does the Intergovernmental Agreement (IGA) Process Work?**
    a. The respondents (7) were generally favorable of the IGA process. One airport would like to see more flexibility in the IGA's to allow for small cost changes, in an effort to avoid a special budget process at the City level. Another comment was that turnover at ODA has been an issue in the past.

14. **What is Your Experience with the Different Types of PMP Work?**
    a. Responses (7) varied greatly. Generally, the work completed was done satisfactorily. Suggestions for crack sealing and phasing were given.

15. **If no PMP, Would Maintenance be Undertaken?**
    a. Of the seven responses, all but one respondent did not believe the same level of maintenance would have been possible due to funding constraints.

16. **Has the PMP Been Used to Procure Additional Maintenance Projects?**
    a. Of the respondents (7), only two were able to leverage the PMP to procure additional pavement work. It does not appear that many airports are aware of this contracting potential.

17. **How can ODA Improve the PMP?**
    a. Several suggestions were cited in the responses (7): use the ODA website to broadcast every years' PMP efforts, improve on the financial budgeting/spending authority challenges, hire more (ODA) staff, keep to a schedule, keep the program well-funded, keep the program going, and expand the PMP to include other services needed by small GA airports.

The suggestions provided through the Airport Manager Survey will be considered and incorporated into the following chapters (*Lessons Learned* and *Recommendations*).

PCI Trends

Analysis Discussion

This section will present the historical Pavement Condition Indices (PCI) and trends for the focus pavement types selected by the project team, how these focus areas were selected, and also conclusions garnered during our analysis of the data.

Airport selection

The PEP evaluates approximately 67 airports covering the three regions of the state. Averaging approximately 25 pavement areas per airport with many years of construction and PCI assessment data for each of these, the PEP has collected a tremendous amount of PCI data for pavements across the state. In order to make a measured assessment of the impact that PMP maintenance inputs have on pavements that receive them, the potential list of airports was reduced based on the following criteria:

1. **PMP History:** The airports chosen have been through multiple PMP cycles.
2. **Oregon Aviation Plan:** The selection covers differing Oregon Aviation Plan categories.
3. **Climatic Diversity:** Finally, airports are compared based on similar climate regions. Since pavement condition depends more on climate than geographical location, this grouping provides a better representation of PCI trends. Where the PMP organizes the state into three regions based on geographic location (Eastern, Northwestern, and Southern - as depicted in Exhibit 2A), this analysis has grouped pavements by climate region (Coastal, Valley, Mountain, and Central/East - see **Exhibit 5A**).
    a. The coastal airports have a relatively low airfield elevation, ranging from 12 feet to 160 feet mean sea level (MSL), with an average elevation of 83 feet MSL The coastal region experiences mild temperature variations from lows in the high 30's (Fahrenheit) and the highs in the mid 60's, thus minimizing freeze/thaw cycles.
    b. Airports in the valley climatic region range in elevations from 58 feet to 538 feet MSL, with an average of 264 feet MSL. The region has lows in the mid 30's and highs in the mid 80's with minimal free/thaw cycles.
    c. The mountain region consists of airports near the Cascade Range, with higher airfield elevations ranging from 1,126 feet to 1,885 feet MSL with an average elevation of 1,468 feet MSL. The area experiences some variation from seasonal temperature highs in the low 90's and lows in the mid 30's, creating a situation of increased influence from freeze/thaw cycles .
    d. The eastern region is the vastest of the climatic regions, varying from highland desert to mountain settings. This region has the greatest variance in airfield elevations, ranging from 247 feet to 4,159 feet MSL (averaging 3,072 feet MSL). The temperature varies from highs in the mid 90's with extremes in the 100's and lows averaging in the low 20's, greatly increasing the occurrence of freeze/thaw cycles.

Additional airports were chosen to balance out the number of airports in each climate region while still keeping other selection criteria in mind.

The following **Table 5C** presents the Focus Airports by Category and Regions:

TABLE 5C. FOCUS AIRPORTS BY CATEGORY AND REGIONS

Focus Airports	OAP Category	PMP Region	Climate Region
Ashland	3	Southern	Mountain
Baker City	3	Eastern	Central/East
Bandon	3	Southern	Coast
Bend	2	Eastern	Central/East
Burns	3	Eastern	Central/East
Corvallis	2	Northwestern	Valley
Creswell	4	Southern	Valley
Enterprise	5	Eastern	Central/East
Grants Pass	3	Southern	Mountain
Illinois Valley	4	Southern	Mountain
Mulino	4	Northwestern	Valley
Newport	2	Northwestern	Coast
Prineville	4	Eastern	Central/East
Salem	1	Northwestern	Valley
Scappoose	2	Northwestern	Valley
Seaside	4	Northwestern	Coast
The Dalles	3	Eastern	Central/East
Tillamook	3	Northwestern	Coast

Exhibit 5A presents a graphical representation of the Focus Airports in the context of the overall Oregon aviation system.

Pavement Area Selection

Pavement focus areas were then selected from each of the focus airports based on functional type (runway, taxiway, or apron). Pavements were chosen based on their relative square footage with an overall area ratio of 65%for runways, 25% for taxiways, and 10% for aprons. This percentage distribution was chosen because the PMP does have a higher focus on airport runway pavements. Primary traffic areas of each airport, such as parallel taxiways and main aprons, were selected based on those areas with the greatest traffic impacts. Portions of each functional area such as a runway blast pad were eliminated due to their non-eligibility for program funding. Other areas also eliminated included vehicle parking areas on aprons and privately-owned aprons, among others.

The following **Table 5D** presents a summary of the Focus Areas selected:

TABLE 5D. SUMMARY OF PAVEMENT FOCUS AREAS BY AIRPORT AND FUNCTION

Climate Region	Focus Airports	PMP Region	OAP Category	Runway Focus Areas (sf)	Taxiway Focus Areas (sf)	Apron Focus Areas (sf)	Total Areas (sf)
Coast	Bandon	Southern	3	216,000	127,522	120,284	463,806
	Newport	Northwestern	2	1,021,618	126,725	87,190	1,235,533
	Seaside	Northwestern	4	111,850	70,830	23,090	205,770
	Tillamook	Northwestern	3	651,252	201,386	57,000	909,638
Valley	Corvallis	Northwestern	2	1,150,504	354,393	0	1,504,897
	Creswell	Southern	4	186,000	127,558	171,070	484,628
	Mulino	Northwestern	4	360,000	144,000	57,169	561,169
	Salem	Northwestern	1	0	47,509	177,886	225,395
	Scappoose	Northwestern	2	0	341,597	39,080	380,677
Mountain	Ashland	Southern	3	152,475	75,594	0	228,069
	Grants Pass	Southern	3	300,000	40,477	0	340,477
	Illinois Valley	Southern	4	405,546	0	30,194	435,740
Central/East	Baker City	Eastern	3	298,092	169,774	40,500	508,366
	Bend	Eastern	2	0	143,160	270,368	413,528
	Burns	Eastern	3	384,225	79,987	30,000	494,212
	The Dalles	Eastern	3	962,020	220,113	127,781	1,309,914
	Enterprise	Eastern	5	143,150	0	18,189	161,339
	Prineville	Eastern	4	374,993	0	50,096	425,089
TOTAL				6,717,725	2,270,625	1,299,897	10,288,247
TOTAL %				65.3%	22.1%	12.6%	100.0%

Analysis Metric Selection

The primary metric for evaluation of pavements in the PEP/Preliminary PMP program is the PCI value. The PEP consultant calculates these values and uses them for inclusion and then prioritization of work for each year's programs. These values are also used as reference data points indicating the relative location of the pavement in their lifecycle. Many years of PCI value data have been collected over the past few decades by the PEP consultant and was readily available for compilation. As this is one of the critical pieces of data used in the formation and execution of the program, it is appropriate that it be used in the evaluation of the program as well.

The *Evaluation of a Corrosion Control Material for Asphalt Preservation of DOD Airfield Facilities* (Cline, G., 2010, Sept.) was also consulted for reference, which researched the effectiveness of asphalt pavement preservation methods by analyzing the deterioration rate of PCI values over time. The full report is included as **Appendix I**.

Data Collection

Field measured PCI values for focus pavement areas and the dates for those assessments were supplied by the PEP consultant, Pavement Consultants, Inc. These values included the original dates of construction at a PCI value of 100. The area of each focus pavement in square feet was also supplied. The most recent PCI report figures that included a focus pavement area were collected to illustrate the location and functional class of each. These figures also included all available pavement history and cross section information. **Appendix J** presents graphical representations of focus area pavements on those figures in the overall context of the airport where they are located. The focus areas are color coded based on their functional types.

Data Processing and Analysis

Data supplied by the Pavement Consultants, Inc. spanned the years 1942 through 2010. Data prior to 1985 were considered unreliable as only dates of original construction, rehabilitation, or overlay were known. After 1985, more frequent pavement evaluations yielded more data points, better illustrating current pavement conditions. (All this data is included in the Pavement Condition Index Report Summaries located in **Appendix K)**. A date range for analysis of 1990 through 2010 was selected. This allowed analysis of trends in PCI values over a range of ten years prior to PMP and during the 10 year study period following the implementation of PMP and eliminated effects from prior unreliable data.

PCI values required interpolation to complete the data set so that the weighted average PCI values could be calculated. In cases where a pavement was replaced or rehabilitated after or near year 2000, the PCI data for that entire pavement was excluded from the weighted average. This prevented distortion of the PMP effectiveness after 2000 by eliminating the inflated PCI values of these pavements. In some cases where pavements were rehabilitated near the end of the study period, the PCI data was extrapolated to complete the combined weighted average PCI value rather than the new pavement PCI value of 100.Analysis Summaries and PCI Data trends

PCI values were combined to form representative summaries of each pavement type on each airport. To determine the PCI value, a number of sample areas based on the overall area of each section of pavement were evaluated. To incorporate the underlying samples a weighted average approach was selected. Runways for example, require many more samples to calculate a PCI value than would a short taxilane since it would be wider and longer, so in the summary, a weighted average carries these additional samples through to the total. All focus pavement types at each airport were then combined to form a representative summary of each airport. In addition, all focus airports in each region were then combined to form representative summaries for each climate region.

In each climate region summary, parabolic trend lines were added, projecting the PCI values past 2000 using data points from the 10 years prior to the PMP. These trend lines are a prediction of what the PCI would have been for each region had there not been any pavement maintenance inputs. The years selected to create the trend line vary for each region and range from 1986 to2000. Each region's range of data was selected to eliminate any outlying data points for a resultant parabolic decline in PCI value.

Data Analysis with Plotted Trend Lines

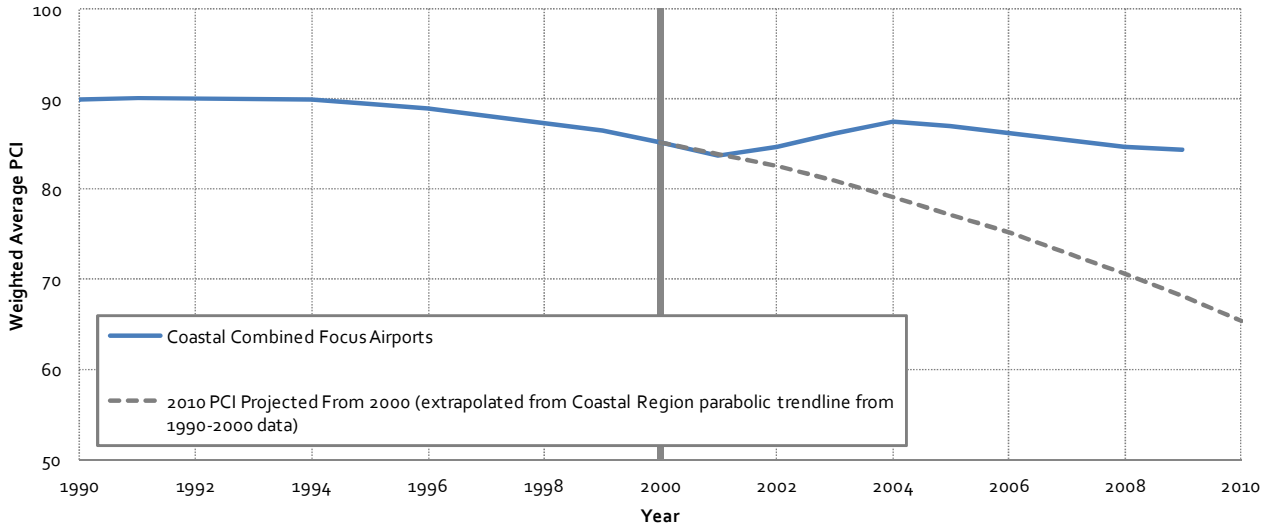
The Pavement Condition Index (PCI) Report Summary sheets for each focus area are in Appendix K. The summary sheet includes all available PCI data along with the combined calculated weighted averages in tabular format as well as graphically. The graph plots the weighted average PCI by year from 1990 to 2010Included in the summaries are combined Climate Region summaries, airport summaries, and a summary of each pavement functional class by Airport (see Appendix K for table of contents). Each Combined Region summary includes a statistical trend line using pre-2000 data, projected to year 2010.

The following sections review the summaries for each Climate Region beginning with the Coastal Focus Airports.

Coastal Combined Focus Areas Analysis Summary

The Coast Climate region is includes all airports west of the Cascade Mountain range, from Astoria to Brookings. The focus airports included in the analysis for the Coastal Region are Bandon, Newport, Seaside, and Tillamook.

FIGURE 5B. COMBINED COASTAL FOCUS AIRPORTS



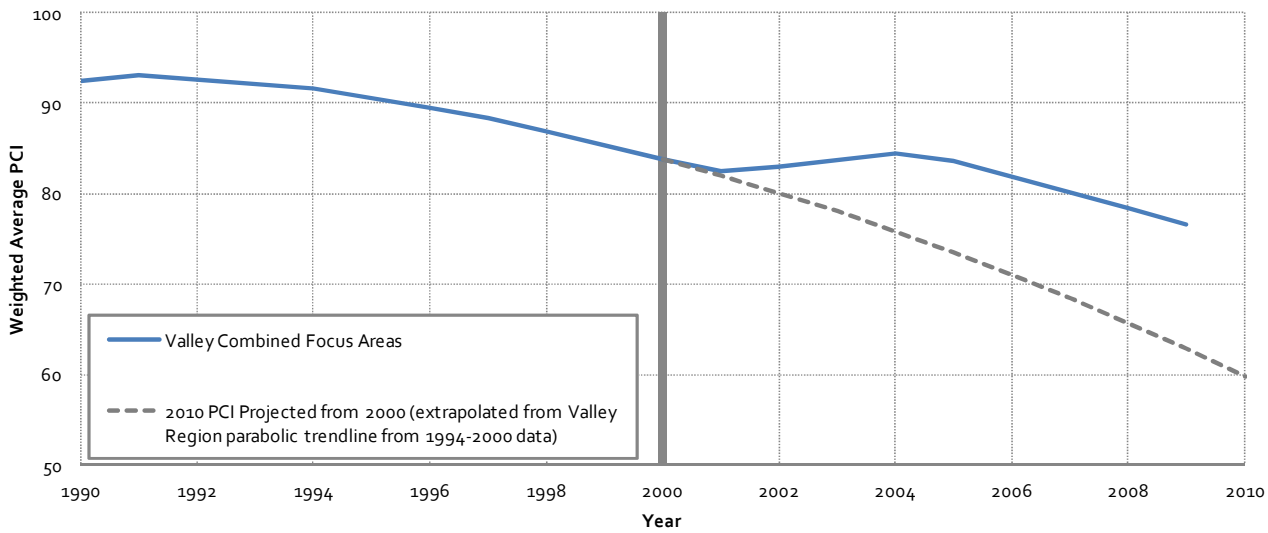
The preceding graph (**Figure 5B**) shows the calculated weighted average PCI by year for the combined coastal region. The blue line is the observed weighted average PCI data. The grey dashed line represents the projected parabolic trend line created from the PCI data from years 1990 to2000. This trend line is a prediction of what the PCI would have been had there been no pavement maintenance after 2000.

The PCI rating for the coastal focus airports began trending downward at 1994, then in 2001 raises from a PCI of 84 to 88 in 2004, then slowly trends back down to a PCI of 84 in 2009. The trend line indicates that the PCI would have been 68 in 2009 without any pavement maintenance. Comparing the two lines indicates a difference of 16 PCI points. With the Pavement Maintenance Program, the pavement rating is ""Satisfactory" for 2009, and without it would have been "Fair."

Valley Combined Focus Areas Analysis Summary

The valley climate region includes the airports in the Willamette Valley – from Scappoose in the north to just south of Roseburg. The focus airports included in the analysis for the Valley Region are Corvallis, Creswell, Mulino, Salem, and Scappoose.

FIGURE 5C. VALLEY COMBINED FOCUS AREAS



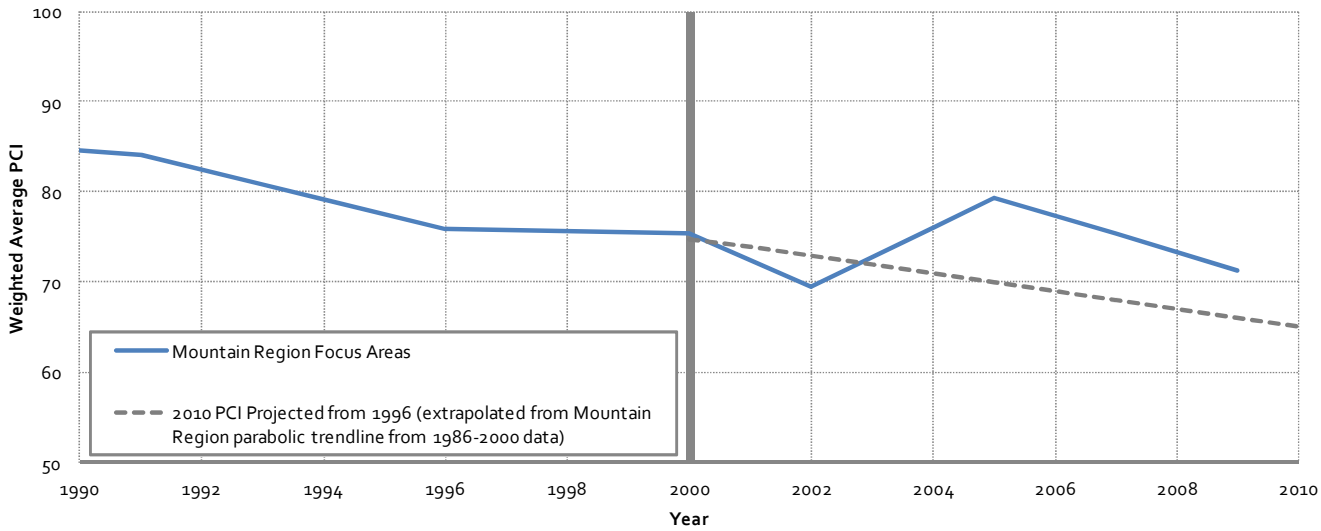
The preceding graph (**Figure 5C**) shows the calculated weighted average PCI by Year for the combined valley region. The blue line is the observed weighted average PCI data. The grey dashed line represents the projected parabolic trend line created from the PCI data from years 1994 to 2000. This trend line is a prediction of what the PCI would have been had there been no pavement maintenance after 2000.

The PCI rating for the valley focus airports began trending downward at 1991, then in 2001 raises from a PCI of 82 to 85 in 2004, and subsequently trends slowly back down to a PCI of 77 in 2009. The trend line indicates that the PCI would have been 63 in 2009 without any pavement maintenance. Comparing the two lines indicates a difference of 14 PCI points. With the Pavement Maintenance Program, the pavement rating is "Satisfactory" for 2009, and without it would have been "Fair".

Mountain Combined Focus Areas Analysis Summary

The mountain climate region includes the airports in the Cascade Mountain range and widens towards the south including Pinehurst and Illinois Valley. The focus airports included in the analysis for the mountain region are Ashland, Grants Pass, and Illinois Valley.

FIGURE 5D. MOUNTAIN REGION FOCUS AREAS



The preceding graph (**Figure 5D**) shows the calculated weighted average PCI by year for the combined mountain Region. The blue line is the observed weighted average PCI data. The grey dashed line represents the projected parabolic trend line created from the PCI data from years 1986 to2000. This trend line is a prediction of what the PCI would have been had there been no pavement maintenance after 2000.

The PCI rating for the mountain focus airports began trending downward at 2000, then in 2002 raises from a PCI of 70 to 76 in 2004, then slowly trends back down to a PCI of 71 in 2009. The trend line indicates that the PCI would have been 66 in 2009 without any pavement maintenance. Comparing the two lines indicates a difference of 5 PCI points. With the Pavement Maintenance Program, the pavement rating is "Fair" for 2009, and without it would have been "Fair".

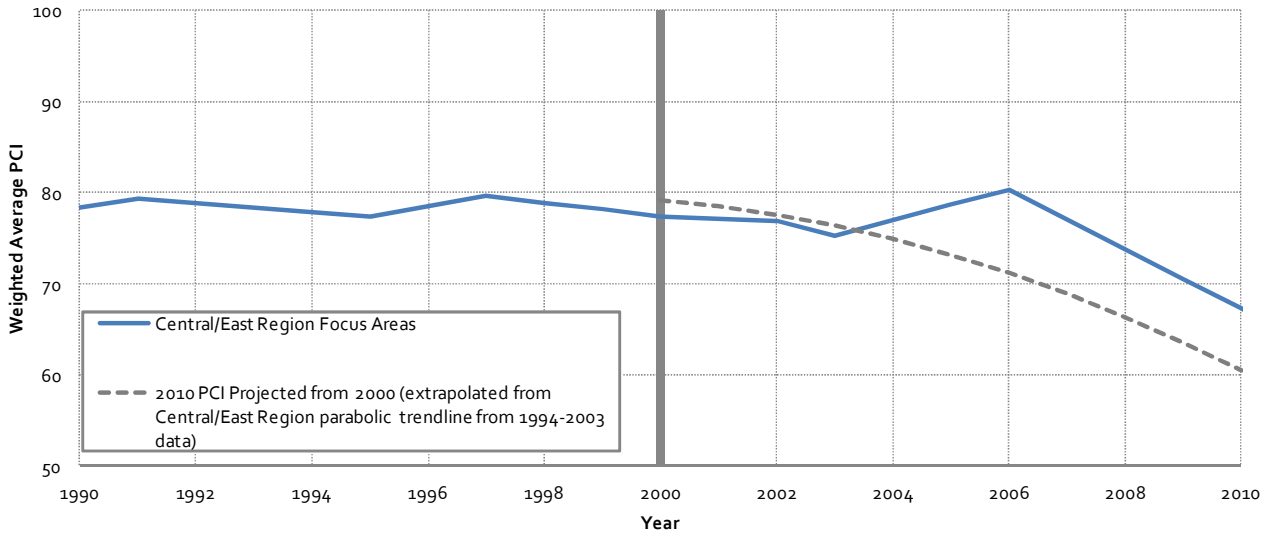
A notable feature of the above graph is the decrease in PCI value to less than that predicted by the trendline in the first 3 years of the PMP program. Two of the three focus airports in this region did not receive maintenance in the first few years of the PMP. Unaddressed maintenance needs then allowed the decline in PCI value from 2000 on to become worse. The advanced age of many of those focus pavements increased the rate of decline from what the trendline predicted from previous years to that shown from 2000 – 2002 above.

The first maintenance cycle to include maintenance on all focus airports was the 2003 cycle. This maintenance input resulted in an immediate rise in the PCI value to its peak in 2005. In the latter half of the PMP's ten years, the decline in PCI value is again evident with a similar rate to what was seen in the first couple of years. The similarities in the slope of the declines from 2000-2002 and 2005-2009 indicates that the type of maintenance inputs during those periods were not as effective as those from 2002-2005 in increasing observed PCI values.

Central/East Combined Focus Areas Analysis Summary

The central/east climate region includes the airports east of the Mountain region. The focus airports included in the analysis for the central/east region are Baker City, Bend, Burns, The Dalles, Enterprise, and Prineville.

FIGURE 5E. CENTRAL/EAST REGION FOCUS AREAS



The preceding graph (**Figure 5E**) shows the calculated Weighted Average PCI by Year for the combined central/east region. The blue line is the observed weighted average PCI data. The grey dashed line represents the projected parabolic trend line created from the PCI data from years 1994 to 2003. This trend line is a prediction of what the PCI would have been had there been no pavement maintenance after 2000.

The PCI rating for the Central/East Focus Airports began slightly trending downward at 2000, then in 2003 raises from a PCI of 75 to 80 in 2006, and subsequently slowly trends back down to a PCI of 67 in 2010. The trend line indicates that the PCI would have been 61 in 2010 without any pavement maintenance. Comparing the two lines indicates a difference of 6 PCI points. With the Pavement Maintenance Program, the pavement rating is "Fair" for 2010, and without it would have been "Fair".

Summary

A review of the Climatic Region Focus Area Summaries reveals a similar trend for each of the four regions. The PCI values for each region slow or stop declining between 2001 and 2004 and then begin to increase. This increase continues between 2004 and 2006, when the PCI values start to return to decline. The trends in PCI increase and subsequent decrease closely match the increase and decrease of the use of surface sealants in the PMP.

In the first year of the program most airports included for that year had a fog seal performed on some of their airport pavements. For that year, the quantities of cracks and striping earmarked for each airport was relatively low, allowing more project dollars to be spent on maintenance that would have otherwise remained unfunded. Typically the backlog of unfunded maintenance not able to be included in the program consists almost entirely of surface sealants. This is a direct result of the high priority placed on sealing of cracks. Once all of the cracks had been included in the Program, additional funds were allocated for surface sealants.

The heavy use of surface sealants continued to be an important part of the program until beginning to taper around the 2005 to 2006 program years. Program dollars allocated to surface sealants were reduced for a variety of factors, a discussion of which is important to gain an understanding of how the PMP scope became more limited.

In the early years of the program, cracks had to be greater than 1/8″ in width to be included for sealing. This meant a very large workload for inspection personnel. At that time, these personnel had to mark every crack to be sealed ahead of the contractor, assign them to one of three categories (1/8″ – ¾″, ¾″ +, and existing), mark the category on the ground, and tally each category of crack. This process led to many disagreements between the inspector and the contractor about what section of any given crack fell into each width category and the respective quantities of each. Inspectors were not able to effectively stay ahead of the contractor and contractor idle time resulted. When that requirement was lifted in subsequent years to simplify bidding and field inspection, there was an increase in the overall quantity of cracks requiring maintenance. Longer cycle times due to skipped program years (2007 and 2010 due to funding constraints) also contributed additional cracks requiring maintenance. Finally, pavements system wide that were nearing the end of their useful life also contributed an increase in the number of new incidents of cracking that required maintenance. Despite improvements in the sealing process and logistics that decreased contractor pricing for crack seal, the fraction of program budgets allocated to surface sealants continued to shrink. Other budget allocations for increased striping and repair of large distresses further eroded the sealants portion of the project budget. These contributing factors forced the program to become more focused on cracks and pavement distresses to the detriment of pavement surface sealant investment.

In general terms, the heavy emphasis on crack sealing has had the effect of decreasing overall PCI values. These most common types of distresses are in forms of longitudinal and transverse cracking, and raveling/weathering cracking. New cracks form from cycle to cycle as the pavements age. Previously sealed cracks will have reached the end of their functional life of around three to five years and typically require re-sealing. The result is that as the quantity of cracks will increase and the classification of the cracking may move to a higher severity rating, lower PCI values. Despite the cracks being maintained, the PCI value will continue to decline if crack sealing is the only maintenance performed from cycle to cycle. The surface treatments effectively repair both the longitudinal and transverse cracking as well as the raveling/weathering whereas the crack sealing does not address the raveling/weathering, which as it goes up in severity, significantly decreases the PCI value.

Cline's findings (2010, Sept) support the data presented above, which is that early intervention of pavement preservation technologies produces long-term pavement benefits. Furthermore, his data supports that application of certain surface treatments have, "significantly reduced the rate of pavement deterioration of airfield pavement surfaces; thereby extending pavement service life to well beyond the design expectations."

The above discussion should not be seen as a criticism of crack sealing as a maintenance strategy. Crack sealing is a critical component of the protection of base rock and subgrade layers from water intrusion and shortening of pavement life. Rather, this simply shows that crack sealing provides an insignificant contribution to the overall PCI rating of any given pavement – even though it provides a critical component of pavement preservation.

Data Analysis Conclusions

The trends summarized in the previous section lead to a number of conclusions that can be drawn about the best possible approach for future program years. Looking back at the Region Focus Area Summaries, it follows that as the program became more focused on activities that were not as effective at raising PCI values, the PCI values would begin to decline at a predictable rate. A refocusing of the program priorities should then be undertaken to make sure that selected maintenance strategies are raising PCI values and increasing pavement life. Maintenance strategies selected should address other concerns such as water intrusion that may not be adequately captured in a PCI value, but are important nonetheless.

Cost Effectiveness

Cost Benefit Analysis

The actual decline in the PCI values during the last five years of the PMP mirrors closely the predicted declination curve. The difference between those two curves provides an approximation of the effect that the program had on PCI values Region-wide. It can be inferred that the difference corresponds to an increase of pavement life based on the increase in PCI value.

To quantify the value of this differential, assumptions must be made and applied to a life cycle cost analysis. Rather than apply this analysis at the system level, a unit price analysis will be used, enabling more manageable calculations. The resulting cost benefit could then be applied generally to other airport pavements.

Analysis Inputs

The first variables required for the life cycle cost analysis are the Pavement lives for new and maintained pavements. A design pavement life of 20 years is typically used in the FAA's flexible pavement design process (FAA Advisory Circular 150/5320-6) for a new pavement. This 20 year design life was used in this lifecycle cost analysis as well.

$$n_{Design} = 20\ years$$

The life of those pavements that receive maintenance can be calculated using the plots of the combined focus area PCI data for each region. In the preceding sections of this chapter we have seen that a pavement which started at a given PCI value prior to receiving maintenance from PMP showed an increase in PCI value and then experienced some amount of decline in PCI value. The difference in years between the 2009 actual PCI value and where the projected unmaintained curve passes through that value is the number of years of additional life that

was added to the pavement in 10 years of maintenance. The calculation of the length of lifecycle for the maintained pavements will be shown later but the formula is as shown below:

$$n_{PMP} = \frac{n_{Design}}{1 - (y_i/10)}$$

$$Where \quad y_i = number\ of\ additional\ years\ of\ life\ added\ due\ to\ PMP\ maintenance$$

This formula assumes that when new, the pavement has a design life of 20 years. As it ages for the first ten years, it receives PMP maintenance that extends its life y_i years. This extension of life occurs on a continuous basis until the maintained pavement eventually reaches its end of life and is replaced. It is assumed further that the new pavement and maintained pavements would fail and be replaced when they had reached a similar PCI value.

Other inputs into our life cycle cost analysis include the costs for initial construction of a new pavement and the costs of yearly PMP maintenance. From ODA's Unit Cost Estimate Update (UCE) (updated in 2009) a statewide unit cost for light general aviation pavements was $22/SY. Assuming a cost markup of 60% for soft costs and contingency (25% for Engineering/Inspection/Admin, 20% contingency, and 15% survey/mob/marking) this unit price was increased to $35.20/SY.

$$UC_{NEW} = The\ unit\ cost\ (per\ SY)\ for\ a\ newly\ (re)constructed\ flexible\ pavement = \$35.20$$

In order to obtain an accurate accounting of the maintenance cost per square yard per year, an inventory was taken of the cost for each pavement at each focus airport. The detailed inventory can be found in the **Appendix L** of this report. Final Pay Estimates were used for a breakdown of how much was spent on each item of work for each focus airport. Then the construction drawings were used to distribute each item of work based on the as-bid quantity shown for each pavement. Where quantities for work were not specified on the construction drawings, the costs were distributed by area over all maintained pavements. Finally, the maintenance costs for each focus pavement at each focus airport were tallied and totaled.

For this ten year period the average maintenance cost per square yard per year during the study period is calculated thusly:

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}}$$

$$Where \quad C_{10yr} = Maintenance\ Costs\ for\ Study\ Focus\ Airports\ in\ this\ Region\ over\ 10\ year\ period$$

$$Area_{Total} = Total\ Focus\ Pavement\ area\ at\ Focus\ Airport(SY)$$

A discount rate was the last variable to be used as input into the life cycle cost analysis. A value of 4% was chosen based on its use by the Federal Highway Administration in evaluating life cycle costs for pavement assets. All costs are calculated in 2009 dollars.

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for maintained and unmaintained pavements to quantify the savings due to PMP maintenance on a unit price basis. These calculations are shown in the following sections for each study focus region and summarized for the state as a whole.

Cost Benefit Analysis Calculation – Coastal Region

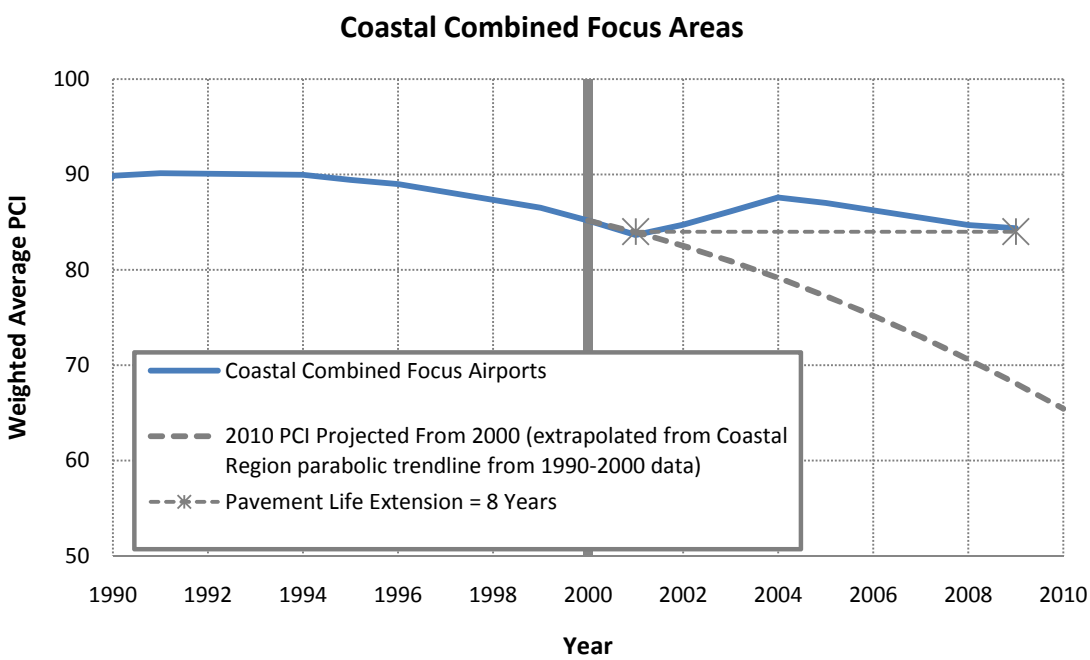
The first step in the analysis was to calculate the areas and maintenance costs for the study focus area pavements in this region. A summary is included below. The data from each airport in the focus region is included in Appendix L for reference.

Climate Region	Airport	PMP Construction Years	Total Maintenance Costs	Focus Pavement Total Maintenance Cost C_{10yr}	Total Airport Pavement Area (SY)	Total Airport Focus Pavement Area (SY) $Area_{Total}$
Coastal	**Bandon**	2000, 03, 06	$198,176	$174,074	59,530	51,530
Coastal	**Newport**	2000, 02, 05, 09	$387,067	$307,037	193,920	137,280
Coastal	**Seaside**	2005, 09	$120,282	$100,701	36,230	22,860
Coastal	**Tillamook**	2005, 09	$157,100	$146,638	139,750	101,400
COASTAL TOTAL			**$862,624**	**$728,450**	**429,430**	**313,070**

To determine the unit cost of maintenance performed during the study period, we use the formula previously described. Given a C_{10yr} = $728, 450 and a $Area_{Total}$ = 952,230 SY,

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}} = \frac{\$728,450}{10 \times 313,070 \text{ SY}} = \$0.233/SY$$

Next, we look at the Coastal Combined Focus Area graph to determine the value y_i:



The PCI value at 2001 (approximately 84) was reached again in year 2009 so y_i = 2001-2009 = 8 years.

Using our life formula for maintained pavements with y_i = 8,

$$n_{PMP} = \frac{20}{1-(y_i/10)} = \frac{20}{1-(8/10)} = 100\ years$$

Since a pavement life of 100 years is overly optimistic, the maintained life for this region will be tempered using engineering judgment. We will assume that from a starting life of 20 years, the increase in life of 8 years would be applied a more modest 4 times. This yields a much more reasonable and conservative estimate of 12 years remaining life after 40 years of maintenance. Summing these yields an expected life of 52 years.

$$n_{PMP} = 52\ years$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for maintained focus area pavements in this region. Typical functions using F = future value, P = present value, and A = annual series value (or in this case yearly maintenance cost) was applied as follows:

Coast Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{PMP}$) for Maintained Pavements				
	A	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Coast Yearly Maintenance Cost Per SY (UC_{PMP})	$0.233	4.0%	52	$5.067
	F	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Initial Construction Cost* (UC_{NEW} - UC_{PMP})	$34.967	4.0%	0	$34.967
Life Cycle Cost			$\boldsymbol{P_{total}}$	**$40.034**
	$\boldsymbol{P_{total}}$	$\boldsymbol{i_{discount}}$	$\boldsymbol{n_{PMP}}$	$\boldsymbol{EUAC_{PMP}}$
Coast With PMP Equivalent Uniform Annual Cost (per SY)	$40.034	4.0%	52	**$1.841**

* In order to calculate A as a uniform series UC_{PMP} was subtracted from UC_{NEW}, assuming the first year will not require maintenance.

We next calculate the Equivalent Uniform Annual Cost for unmaintained pavements using the following inputs:

The 20 year design life for a new pavement is assumed:

$$n_{Design} = 20\ years$$

The unit cost for a new pavement from ODA's UCE is assumed:

$$UC_{NEW} = The\ unit\ cost\ (per\ SY)\ for\ a\ newly\ (re)constructed\ flexible\ pavement = \$35.20/SY$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{no\ PMP}$) for Unmaintained Pavements				
	F	$i_{discount}$	n	**P**
Initial Construction Cost (UC_{NEW})	$35.200	4.0%	0	$35.200
			P_{total}	**$35.200**
Life Cycle Cost			P_{total}	**$35.200**
	P_{total}	$i_{discount}$	n_{Design}	$EUAC_{NO\ PMP}$
Unmaintained Equivalent Uniform Annual Cost (per SY)	$35.200	4.0%	20	**$2.590**

A comparison of the two equivalent uniform annual costs yields the following:

$$Coast\ Annual\ Cost\ Savings = \frac{EUAC_{NO\ PMP} - EUAC_{PMP}}{EUAC_{NO\ PMP}} = \frac{\$2.590/SY - \$1.841/SY}{\$2.590/SY}$$

$$\underline{Coast\ Annual\ Cost\ Savings = 28.9\ \%}$$

Cost Benefit Analysis Calculation – Valley Region

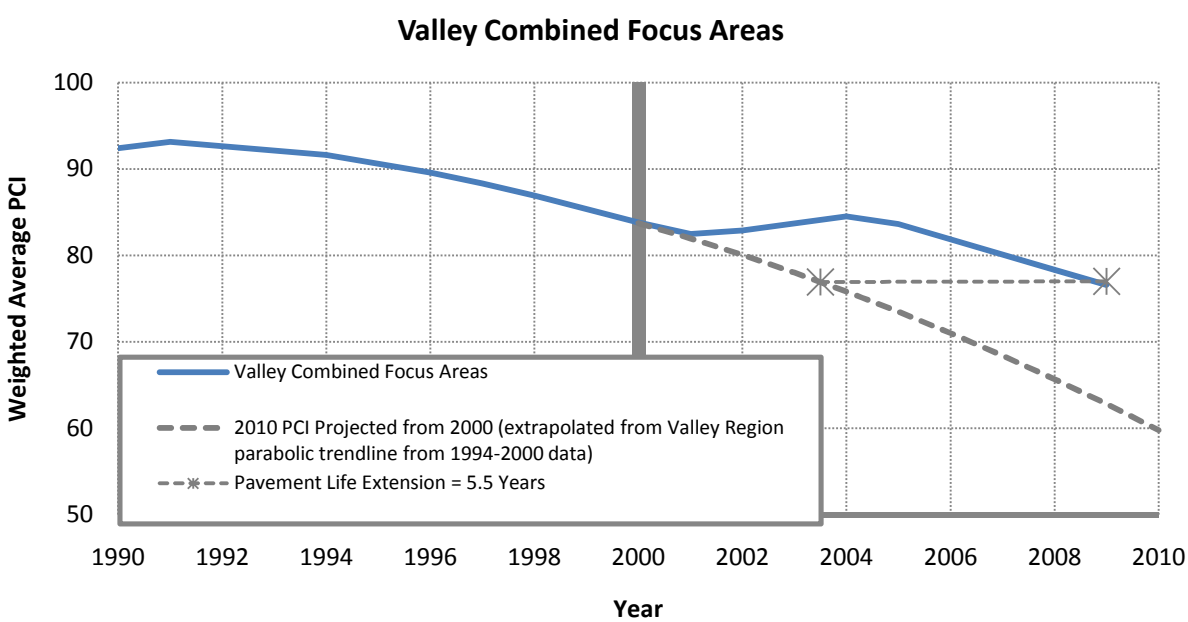
The first step in the analysis was to calculate the areas and maintenance costs for the study focus area pavements in this region. A summary is included below. The data from each airport in the focus region is included in Appendix L for reference.

Climate Region	Airport	PMP Construction Years	Total Maintenance Costs	Focus Pavement Total Maintenance Cost C_{10yr}	Total Airport Pavement Area (SY)	Total Airport Focus Pavement Area (SY) $Area_{Total}$
Valley	Corvallis	2002, 05, 09	$261,423	$126,134	280,137	147,971
Valley	Creswell	2000, 03, 06	$155,695	$113,546	67,574	53,848
Valley	Mulino	2005, 09	$146,979	$114,571	89,893	62,243
Valley	Salem	2002, 05, 09	$542,551	$87,287	434,010	25,044
Valley	Scappoose	2000, 02, 05, 09	$299,663	$97,400	162,158	42,298
VALLEY TOTAL			**$1,406,311**	**$538,938**	**1,033,772**	**331,403**

To determine the unit cost of maintenance performed during the study period, we use the formula previously described. Given a C_{10yr} = $538,938 and a $Area_{Total}$ = 331,403 SY,

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}} = \frac{\$538{,}938}{10 \times 331{,}403 \text{ SY}} = \$0.163/SY$$

Next, we look at the Valley Combined Focus Area graph to determine the value of y_i:



The PCI value at 2003.5 (approximately 77) was reached again in year 2009 so y_i = 2003.5-2009 = 5.5 years.

Using our life formula for maintained pavements with y_i = 5.5,

$$n_{PMP} = \frac{20}{1-(y_i/10)} = \frac{20}{1-(5.5/10)} = 44\ years$$

Since a pavement life of 44 years is within the range of what could be expected, the maintained life for this region will be as calculated:

$$n_{PMP} = 44\ years$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for maintained focus area pavements in this region. Typical functions using F = future value, P = present value, and A = annual series value (or in this case yearly maintenance cost) was applied as follows:

Valley Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{PMP}$) for Maintained Pavements				
	A	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Valley Yearly Maintenance Cost Per SY (UC_{PMP})	$0.163	4.0%	44	$3.349
	F	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Initial Construction Cost* (UC_{NEW} - UC_{PMP})	$35.037	4.0%	0	$35.037
Life Cycle Cost			$\boldsymbol{P_{total}}$	**$38.386**
	$\boldsymbol{P_{total}}$	$\boldsymbol{i_{discount}}$	$\boldsymbol{n_{PMP}}$	$\boldsymbol{EUAC_{PMP}}$
Valley With PMP Equivalent Uniform Annual Cost (per SY)	$38.386	4.0%	44	**$1.868**

* In order to calculate A as a uniform series UC_{PMP} was subtracted from UC_{NEW}, assuming the first year will not require maintenance.

We next calculate the Equivalent Uniform Annual Cost for unmaintained pavements using the following inputs:

The 20 year design life for a new pavement is assumed:

$$n_{Design} = 20\ years$$

The unit cost for a new pavement from ODA's UCE is assumed:

$$UC_{NEW} = The\ unit\ cost\ (per\ SY)\ for\ a\ newly\ (re)constructed\ flexible\ pavement = \$35.20/SY$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{no\ PMP}$) for Unmaintained Pavements				
	F	$i_{discount}$	n	P
Initial Construction Cost (UC_{NEW})	$35.200	4.0%	0	$35.200
			P_{total}	**$35.200**
Life Cycle Cost			P_{total}	**$35.200**
	P_{total}	$i_{discount}$	n_{Design}	$EUAC_{NO\ PMP}$
Unmaintained Equivalent Uniform Annual Cost (per SY)	$35.200	4.0%	20	**$2.590**

A comparison of the two equivalent uniform annual costs yields the following:

$$\boldsymbol{Valley\ Annual\ Cost\ Savings} = \frac{\boldsymbol{EUAC_{NO\ PMP} - EUAC_{PMP}}}{\boldsymbol{EUAC_{NO\ PMP}}} = \frac{\$\mathbf{2.590/SY} - \$\mathbf{1.868/SY}}{\$\mathbf{2.590/SY}}$$

$$\underline{\boldsymbol{Valley\ Annual\ Cost\ Savings} = \mathbf{27.9}\ \%}$$

Cost Benefit Analysis Calculation – Mountain Region

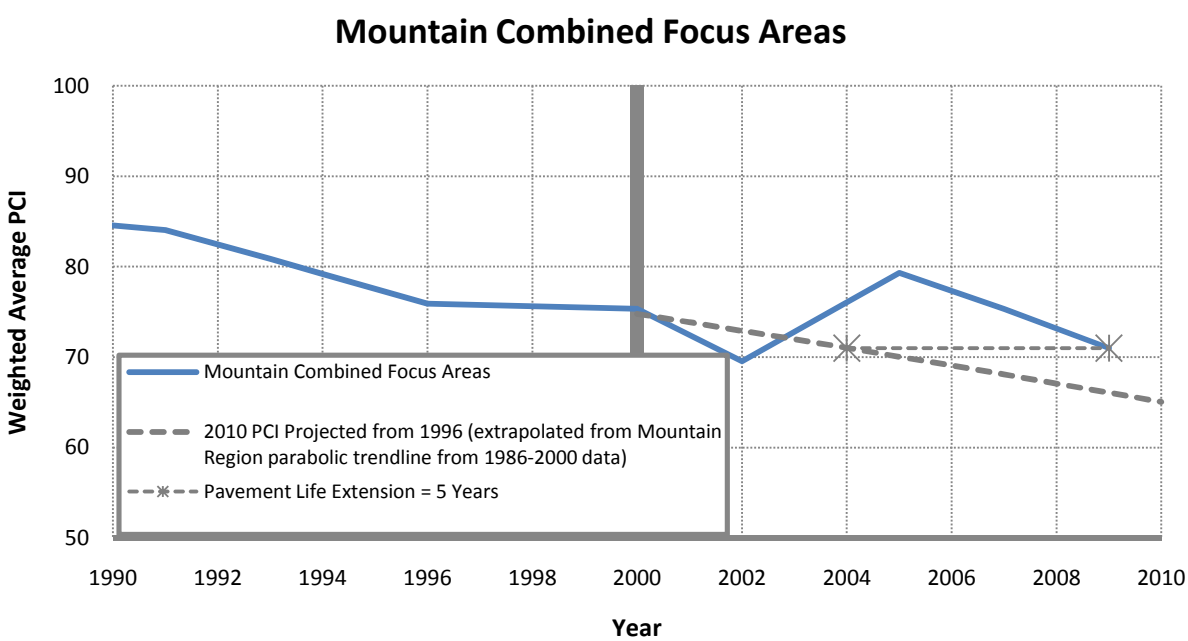
The first step in the analysis was to calculate the areas and maintenance costs for the study focus area pavements in this region. A summary is included below. The data from each airport in the focus region is included in Appendix L for reference.

Climate Region	Airport	PMP Construction Years	Total Maintenance Costs	Focus Pavement Total Maintenance Cost C_{10yr}	Total Airport Pavement Area (SY)	Total Airport Focus Pavement Area (SY) $Area_{Total}$
Mountain	**Ashland**	2002, 05, 09	$216,362	$99,550	92,549	25,341
Mountain	**Grants Pass**	2000, 03, 06	$171,157	$42,710	130,744	38,252
Mountain	**Illinois Valley**	2005, 09	$65,041	$65,041	61,001	48,416
MOUNTAIN TOTAL			**$452,560**	**$207,301**	**31,588**	**112,009**

To determine the unit cost of maintenance performed during the study period, we use the formula previously described. Given a C_{10yr} = $207,301 and a $Area_{Total}$ = 112,009 SY,

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}} = \frac{\$207{,}301}{10 \times 112{,}009 \text{ SY}} = \$0.185/SY$$

Next, we look at the Mountain Combined Focus Area graph to determine the value of y_i:



The PCI value at 2004 (approximately 71) was reached again in year 2009 so y_i = 2004-2009 = 5 years.

Using our life formula for maintained pavements with y_i = 5,

$$n_{PMP} = \frac{20}{1-(y_i/10)} = \frac{20}{1-(5/10)} = 40\ years$$

Since a pavement life of 40 years is within the range of what could be expected, the maintained life for this region will be as calculated:

$$n_{PMP} = 40\ years$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for maintained focus area pavements in this region. Typical functions using F = future value, P = present value, and A = annual series value (or in this case yearly maintenance cost) was applied as follows:

Mountain Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{PMP}$) for <u>Maintained Pavements</u>				
	A	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Mountain Yearly Maintenance Cost Per SY (UC_{PMP})	$0.185	4.0%	40	$3.662
	F	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Initial Construction Cost* (UC_{NEW} - UC_{PMP})	$35.015	4.0%	0	$35.015
Life Cycle Cost			$\boldsymbol{P_{total}}$	**$38.677**
	$\boldsymbol{P_{total}}$	$\boldsymbol{i_{discount}}$	$\boldsymbol{n_{PMP}}$	$\boldsymbol{EUAC_{PMP}}$
Mountain With PMP Equivalent Uniform Annual Cost (per SY)	$38.677	4.0%	40	**$1.954**

* In order to calculate A as a uniform series UC_{PMP} was subtracted from UC_{NEW}, assuming the first year will not require maintenance.

We next calculate the Equivalent Uniform Annual Cost for unmaintained pavements using the following inputs:

The 20 year design life for a new pavement is assumed:

$$n_{Design} = 20\ years$$

The unit cost for a new pavement from ODA's UCE is assumed:

$$UC_{NEW} = The\ unit\ cost\ (per\ SY)\ for\ a\ newly\ (re)constructed\ flexible\ pavement = \$35.20/SY$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{no\ PMP}$) for Unmaintained Pavements				
	F	$i_{discount}$	n	**P**
Initial Construction Cost (UC_{NEW})	$35.200	4.0%	0	$35.200
			P_{total}	**$35.200**
Life Cycle Cost			P_{total}	**$35.200**
	P_{total}	$i_{discount}$	n_{Design}	$EUAC_{NO\ PMP}$
Unmaintained Equivalent Uniform Annual Cost (per SY)	$35.200	4.0%	20	**$2.590**

A comparison of the two equivalent uniform annual costs yields the following:

$$Mountain\ Annual\ Cost\ Savings = \frac{EUAC_{NO\ PMP} - EUAC_{PMP}}{EUAC_{NO\ PMP}} = \frac{\$2.590/SY - \$1.954/SY}{\$2.590/SY}$$

$$\underline{Mountain\ Annual\ Cost\ Savings = 24.6\ \%}$$

Cost Benefit Analysis Calculation – Central/East Region

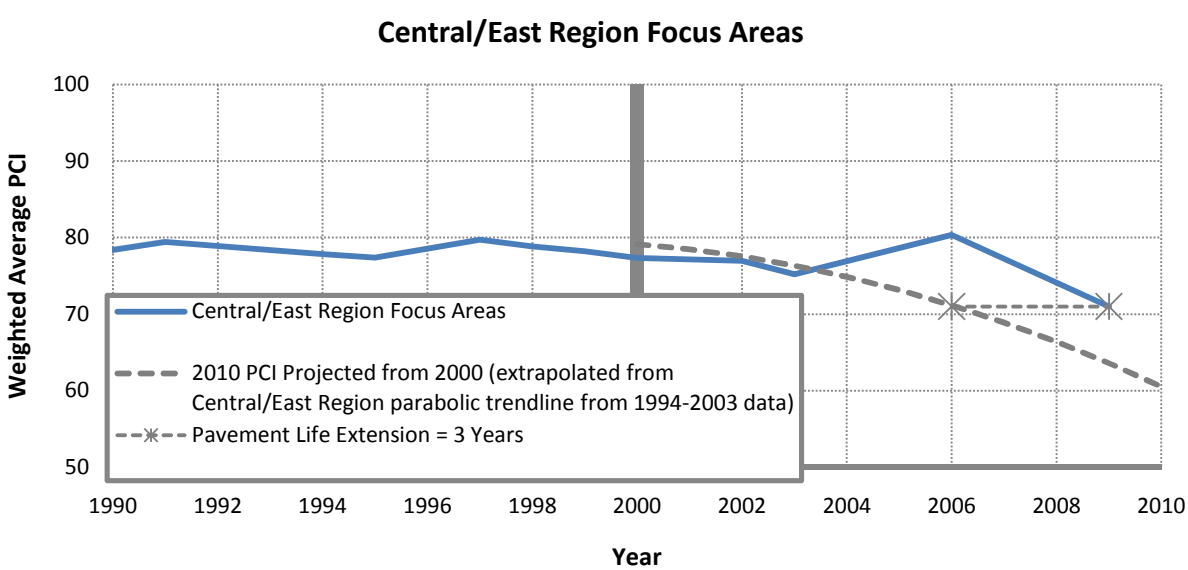
The first step in the analysis was to calculate the areas and maintenance costs for the study focus area pavements in this region. A summary is included below. The data from each airport in the focus region is included in Appendix L for reference.

Climate Region	Airport	PMP Construction Years	Total Maintenance Costs	Focus Pavement Total Maintenance Cost C_{10yr}	Total Airport Pavement Area (SY)	Total Airport Focus Pavement Area (SY) $Area_{Total}$
Central/East	Baker City	2001, 04, 08	$182,177	$112,712	222,539	56,639
Central/East	Bend	2000, 04, 08	$268,875	$118,427	201,670	45,948
Central/East	Burns	2001, 04, 08	$366,806	$335,100	105,574	54,916
Central/East	The Dalles	2001, 04, 05, 08	$300,983	$277,055	205,200	148,931
Central/East	Enterprise	2008	$85,917	$65,080	26,516	17,927
Central/East	Prineville	2000, 01, 04, 08	$207,249	$120,801	149,032	47,232
CENTRAL/EAST TOTAL			**$1,412,007**	**$1,029,174**	**910,532**	**371,592**

To determine the unit cost of maintenance performed during the study period, we use the formula previously described. Given a C_{10yr} = $1,029,174 and a $Area_{Total}$ = 371,592 SY,

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}} = \frac{\$1{,}029{,}174}{10 \times 371{,}592 \text{ SY}} = \$0.277/SY$$

Next, we look at the Central/East Combined Focus Area graph to determine the value of y_i:



The PCI value at 2006 (approximately 71) was reached again in year 2009 so y_i = 2006-2009 = 3 years.

Using our life formula for maintained pavements with y_i = 3,

$$n_{PMP} = \frac{20}{1-(y_i/10)} = \frac{20}{1-(3/10)} = 29\ years$$

Since a pavement life of 29 years is within the range of what could be expected, the maintained life for this region will be as calculated:

$$n_{PMP} = 29\ years$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for maintained focus area pavements in this region. Typical functions using F = future value, P = present value, and A = annual series value (or in this case yearly maintenance cost) was applied as follows:

Central/East Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{PMP}$) for <u>Maintained Pavements</u>				
	A	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Central/East Yearly Maintenance Cost Per SY (UC_{PMP})	$0.277	4.0%	29	$4.704
	F	$\boldsymbol{i_{discount}}$	$\boldsymbol{n}$	**P**
Initial Construction Cost* (UC_{NEW} - UC_{PMP})	$34.923	4.0%	0	$34.923
Life Cycle Cost			$\boldsymbol{P_{total}}$	**$39.627**
	$\boldsymbol{P_{total}}$	$\boldsymbol{i_{discount}}$	$\boldsymbol{n_{PMP}}$	$\boldsymbol{EUAC_{PMP}}$
Central/East With PMP Equivalent Uniform Annual Cost (per SY)	$39.627	4.0%	29	**$2.333**

* In order to calculate A as a uniform series UC_{PMP} was subtracted from UC_{NEW}, assuming the first year will not require maintenance.

We next calculate the Equivalent Uniform Annual Cost for unmaintained pavements using the following inputs:

The 20 year design life for a new pavement is assumed:

$$n_{Design} = 20\ years$$

The unit cost for a new pavement from ODA's UCE is assumed:

$$UC_{NEW} = The\ unit\ cost\ (per\ SY)\ for\ a\ newly\ (re)constructed\ flexible\ pavement = \$35.20/SY$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{no\ PMP}$) for Unmaintained Pavements				
	F	$i_{discount}$	n	**P**
Initial Construction Cost (UC_{NEW})	$35.200	4.0%	0	$35.200
			P_{total}	**$35.200**
Life Cycle Cost			P_{total}	**$35.200**
	P_{total}	$i_{discount}$	n_{Design}	$EUAC_{NO\ PMP}$
Unmaintained Equivalent Uniform Annual Cost (per SY)	$35.200	4.0%	20	**$2.590**

A comparison of the two equivalent uniform annual costs yields the following:

$$Central/East\ \ Annual\ Cost\ Savings = \frac{EUAC_{NO\ PMP} - EUAC_{PMP}}{EUAC_{NO\ PMP}} = \frac{\$2.590/SY - \$2.333/SY}{\$2.590/SY}$$

$$\underline{Central/EastAnnual\ Cost\ Savings\ = 9.9\ \%}$$

Cost Benefit Analysis Summary

In summary, the annual cost savings by Climate Region are:

- Coastal Climate Region
  - Maintained Pavement Cost per year = $1.841/SY
  - Maintained Pavement Life (n_{PMP}) = 52 years
  - Unmaintained Pavement Cost per year = $2.590/SY
  - Unmaintained Pavement Life (n_{Design}) = 20 years
  - Coastal Annual Cost Savings = 28.9%
- Valley Climate Region
  - Maintained Pavement Cost per year = $1.868/SY
  - Maintained Pavement Life (n_{PMP}) = 44 years
  - Unmaintained Pavement Cost per year = $2.590/SY
  - Unmaintained Pavement Life (n_{Design}) = 20 years
  - Valley Annual Cost Savings = 27.9%
- Mountain Climate Region
  - Maintained Pavement Cost per year = $1.954/SY
  - Maintained Pavement Life (n_{PMP}) = 40 years
  - Unmaintained Pavement Cost per year = $2.590/SY
  - Unmaintained Pavement Life (n_{Design}) = 20 years
  - Mountain Annual Cost Savings = 24.6%
- Central/East Climate Region
  - Maintained Pavement Cost per year = $2.333/SY
  - Maintained Pavement Life (n_{PMP}) = 29 years
  - Unmaintained Pavement Cost per year = $2.590/SY
  - Unmaintained Pavement Life (n_{Design}) = 20 years
  - Central/East Annual Cost Savings = 9.9%

The results from the cost benefit analysis are consistent across all regions, in that, spending money on pavement maintenance introduces a significant savings in the cost of an Airfield pavement over its life. The Coastal Climate region shows the greatest benefit with a 28.9% savings and the Valley is close behind at 27.9%. The Mountain Climate Region shows a savings of 24.6%, while the Central/East region has a savings of 9.9%. The significant decrease in cost savings in the Central/East region when compared to the others can be attributed to more significant temperature swings, which causes more severe and costly maintenance.

Cost Benefit Analysis Calculation - Combined Statewide

In addition to analyzing each climate region, a Combined Statewide cost benefit analysis was conducted. The table below is a summary of the input variables from each region.

Climate Region	Total Focus Pavement Area (SY) $Area_{Total}$	Focus Pavement Total Maintenance Cost (C_{10yr})	Maintained Pavement Life (n_{PMP})
Coastal	313,070	$728,450	52
Valley	331,403	$538,938	44
Mountain	112,009	$207,301	40
Central/East	371,592	$1,029,174	29
Statewide Combined	**1,128,074**	**$2,503,863**	**40.88***

*Pavement Life (n_{PMP}) for Statewide Combined was calculated by taking a weighted average based on the $Area_{Total}$s.

To determine the unit cost of maintenance performed during the study period, we use the formula previously described. Given a C_{10yr} = $2,503,863 and a $Area_{Total}$ = 1,128,074 SY,

$$UC_{PMP} = \frac{C_{10yr}}{10 \times Area_{Total}} = \frac{\$2{,}503{,}863}{10 \times 1{,}128{,}074\ \text{SY}} = \$0.222/SY$$

The Maintained Pavement Life (n_{PMP}) for the Combined Statewide analysis has been calculated as a weighted average of the Maintained Pavement Life for the 4 Climate regions:

$$n_{PMP} = 40.88\ years$$

A discount rate of 4% is assumed for both maintained and unmaintained pavements:

$$i_{discount} = 4\%$$

An Equivalent Uniform Annual Cost was then calculated for all maintained focus area pavements. Typical functions using F = future value, P = present value, and A = annual series value (or in this case yearly maintenance cost) was applied as follows:

Combined Statewide Life Cycle Cost Analysis and Equivalent Uniform Annual Cost ($EUAC_{PMP}$) for Maintained Pavements				
	A	$i_{discount}$	n	**P**
Combined Statewide Yearly Maintenance Cost Per SY (UC_{PMP})	$0.222	4.0%	40.88	$4.433
	F	$i_{discount}$	n	**P**
Initial Construction Cost* (UC_{NEW} - UC_{PMP})	$34.978	4.0%	0	$34.978
Life Cycle Cost			P_{total}	**$39.411**
	P_{total}	$i_{discount}$	n_{PMP}	$EUAC_{PMP}$
Combined Statewide With PMP Equivalent Uniform Annual Cost (per SY)	$39.411	4.0%	40.88	**$1.974**

* In order to calculate A as a uniform series UC_{PMP} was subtracted from UC_{NEW}, assuming the first year will not require maintenance.

From previous calculations, the Unmaintained Pavement Equivalent Uniform Annual Cost per square yard is:

$$EUAC_{NO\ PMP} = \$2.590$$

A comparison of the two equivalent uniform annual costs yields the following:

$$Combined\ Statewide\ Annual\ Cost\ Savings = \frac{EUAC_{NO\ PMP} - EUAC_{PMP}}{EUAC_{NO\ PMP}} = \frac{\$2.590/SY - \$1.974/SY}{\$2.590/SY}$$

$$\underline{Combined\ Statewide\ Annual\ Cost\ Savings\ = 23.8\ \%}$$

Combined Statewide Cost Benefit Analysis Summary

The costs associated with unmaintained and PMP maintained pavements are shown below:

Lifespan:

- Unmaintained Pavement: 20 years
- Maintained Pavement: 40.88 years
  - *Pavement lasts 104.4% longer*

Cost per Year (cost of pavement divided over lifespan):

- Unmaintained Pavement: $2.590 per square yard
- Maintained Pavement: $1.974 per square yard
  - *Cost avoidance of $0.617 per yard, or 23.8%*

A quick calculation of the total quantity of maintainable pavement at some of the focus airports considered in this report is shown in **Table 5E**.

TABLE 5E. AVERAGE MAINTAINABLE PAVEMENT AREA PER STUDY AIRPORT

Airport	Maintainable Pavement (sf)
Ashland	806,237
Baker City	1,369,886
Bandon	541,759
Bend	1,630,497
Creswell	586,204
Grants Pass	1,178,563
Mulino	810,108
Newport	1,821,275
Average	**1,093,066**

Extending this average to all of the 66 airports in the Program, the result is:

- Oregon airports have approximately of 8,015,817 square yards of total maintainable pavements.

- Using the cost avoidance of $0.617 per square yard per year**, there is a total cost avoidance of approximately $5 million annually associated with the PMP**.

This amounts to $50 million in cost avoidance due to pavement maintenance inputs over the 10 year study life. Continued investment in pavement maintenance and improvement of program strategies should increase these savings even further.

Chapter 6
Lessons Learned

Over the 10-year life of the Pavement Maintenance Program (PMP), the Program has evolved. As a resultant several best management practices have been developed. This section provides an overview of those lessons learned, along with a description of how the issues came about. The lessons learned are broken into separate categories representative of different phases of the PMP, which are project administration, communications, Pavement Evaluation Program (PEP) coordination, design, and safety and operations. The issues discussed within each of these categories are chronologically organized, when applicable, to give further understanding of the PMP's progression.

Project Administration

ODA Administration

ODA's role in the PMP includes administration and oversight spanning multiple levels of involvement. Unfortunately, employee turnover has been high during the program's history. To avoid inconsistencies and program delays, the timely training of ODA staff during times of transition has been essential. At times, the transitions have gone smoothly, while others have produced project delays. In some cases, ODA delegated portions of the administration to the engineer to meet schedule requirements.

FAA Involvement

At the PMP's onset, the FAA's role was a third party observer. Over the last ten years, the FAA has progressively increased its involvement. The FAA is now an active participant in PMP, providing an additional layer of oversight. The increase in involvement parallels the increase in federal participation through the Non-Primary Entitlement funding used by Airport Sponsors to meet their local match requirements. When the FAA began providing these grants in support of the PMP, they administered separate grants for each airport sponsor. After a few years, they recognized the value of bundling them into a single grant administered by ODA, which greatly increases the grant administration effectiveness.

Airport Sponsor Participation

Similar to the FAA, the local airport sponsor's participation in the PMP increased. The airport sponsors have become active participants, who are involved in program logistics, work planning, and the budget process. Increasing the local sponsor's role and ownership of the PMP at their individual airport has allowed projects to be tailored to the local needs, while continuing the goal of cost effectiveness. One area of significant change is with safety and operations during construction. Originally, the contractor and the inspector arrived at an airport and pretty much did the work as they chose. If there was input from the airport manager, it was generally reactive in nature, coming after problems developed. Currently, the airport manager is included in the pre-planning of the work during design. This includes haul routes, staging areas, special event days, and other items. He or she also has the opportunity to participate in the work planning for construction through NOTAM coordination and on-site pre-con meetings.

Late Scope Increases and Cost Overruns during Construction (2009)

During each PMP cycle, a scope and budget for the work at each airport is agreed upon and formalized in the IGA between ODA and the airport sponsor. Historically, there have been occasions when the airport sponsor would

request at a later date, perhaps during construction, that additional work be completed at their airport. This is known as 100% locally-funded work. Being able to add the work to the PMP was a strong benefit for the airport sponsor, but it strained the delivery of the project because it was added out of step with the project schedule. Another problem has occurred when a change of conditions caused cost overruns. In both cases, the extra work required any or all of the following: design revisions, additional field direction and inspection, staging changes, additional NOTAMs, change orders, IGA amendments, engineering contract adjustments, and additional funding.

In response to these concerns, the following best management practices have been developed. For scope additions, the airport sponsor was provided the opportunity to add work at the beginning of the design phase. After this time, work cannot be added to the PMP. Doing this allowed the project to firm up the scope and cost of the project for efficient execution and administration. To avoid cost overruns, the project team has focused on more accurate quantity estimates in design and cost controls during construction. The outcome of this effort has allowed the PMP to be completed within the original budget.

100% Locally-Funded Work

Per the previous section, the PMP has been available to local airports as a contracting vehicle for pavement maintenance not already included in the program, especially striping. There was an advantage to the local airports due to the size of the project, the mobilization of the contractor to remote areas, and the quality of the work.

Extra work requested by an airport sponsor had to be fully funded by sources other than the PMP. The work was designed, bid, and inspected as part of the PMP project. This work was tracked and accounted for separately. The work would be entirely paid for by the airport sponsor through some other funding mechanism (usually FAA monies such as Non-Primary Entitlement funds).

This practice increases the administration by ODA and the engineering by the consultant. While the hard construction costs are easily tracked and invoiced separately from the PMP, it is more difficult to account for the soft costs associated with administration and engineering. This causes additional administrative oversight and workload by ODA. This will be further discussed in Chapter 7, *Conclusion and Recommendations*.

Communications

Project Status Updates

During the annual cycle of the PMP, the project progresses through various stages of planning, design, and ultimately construction. During these phases, the airport sponsors wanted to know the status of the project so they could help coordinate a successful project. ODA, the engineer, and the contractor managed the project schedule but changes were often made for various reasons.

To improve the communication process, ODA took the lead on communications to the airport sponsors by providing project status updates on a regular basis. If they were short on staff, they delegated this role to the engineer. Engineering and construction staff supplemented ODA's effort by providing schedule updates as soon as possible to stakeholders. Electronic updates were employed including website updates, email updates, or other technology solutions.

Construction Progress Updates (2008)

During construction execution, the engineering and construction staff worked aggressively to maintain the project schedule. This required long work days to take advantage of good weather and meet airport sponsor operational constraints. ODA staff desired to be more aware of day-to-day progress, issues encountered, or resolutions.

In an effort to improve the communication during construction, the engineering staff now provides weekly project status reports to ODA. They prepare a summary of the week's work, with pictures included, during active periods of construction. This has kept ODA informed of progress, which has enabled staff to keep stakeholders informed as needed.

Planning for Project Participation (2004)

The PMP rotates on a three year cycle for each region of the state. Although this information is public knowledge, many individual airport sponsors have been unaware of the latest plan for the project and how much PMP work may occur at their airport that year. This presented surprises in the budgeting process due to variances between their local fiscal year cycles versus the PMP's project schedule.

As a result of this issue, it was evident the PMP needed to start earlier in the year to define the project scope and provide project cost estimates for use by airport sponsors in budgeting. Project scoping and estimating needed to occur in the fall so the airport sponsors could use the information in their budgeting process during the winter and spring, assuming a fiscal year cycle of July 1 – June 30.

Further recommendations to improve communication include regular PMP updates from ODA. This may include postings on ODA website, updates at Oregon Aviation Board meetings, updates at Oregon Airport Manager's Association meetings, direct mailings to sponsors, or through personal contact. Timely project knowledge and budgeting information also contributes to a successful intergovernmental agreement (IGA) process.

PEP Coordination

In order to produce a reliable, cost-effective PMP, products and estimates provided through the PEP have been more closely tailored to offer improved estimating for preliminary program budgets. In addition, schedule improvements have been made to reduce project delays.

Under-Budgeted List of Maintenance Recommendations (2003)

The PEP generates a prioritized list of maintenance recommendations each year. This list itemizes the type of work, the quantity of work, and provides a planning-level cost estimate for work at each airport. In the early years of the program, it was discovered that the PEP maintenance recommendations were often different than the PMP maintenance results. It turns out the PEP classified and estimated the crack sealing work with slightly different criteria than the PMP. For example, the PEP classified a certain section of taxiway pavement as having "low severity cracking" and calculate a certain square footage cost or linear footage cost to that area. However, supplemental field inspections during the PMP measured actual crack lengths using design criteria which provided more accurate data. The PMP estimates would then significantly exceed the original planning estimates, causing significant scope and budget revisions.

As a solution, the PEP inventory of pavement maintenance treatments were adjusted to match the bid items and unit prices that were utilized in the PMP contract documents. The naming conventions and scope of repairs were synchronized. In this way, the PEP reports and the PMP contract documents were more consistent and minimized significant variations in work scope and budget.

Timing of the PEP Reports Delaying the Start of PMP (2007)

Initially, the PEP work was completed the same year as the PMP based on a 12-month project delivery schedule. Often this caused project delays stemming from the date that the PEP deliverables were available for use in the design of the PMP. The delays caused acceleration during the design phase, the bid period to be late in the spring when prices are higher, and construction to be delayed until late in the summer. Sometimes this latter item caused construction to be completed in two seasons.

To reduce the chance of a project delay, the PEP work was moved up so that it is completed one year in advance of the PMP. This gave ample time for the PEP to be completed during the spring and summer. Now, the PMP is designed in the fall and winter, bid in the spring, and constructed in the following summer. This is consistent with the 18-month schedule illustrated in Chapter 3.

Design

Refinement of Technical Specifications

The original specifications for the PMP were based on FAA standard specifications. Project conditions and maintenance approaches have evolved over the last ten years and many lessons have been learned. This provided an opportunity to refine the standard specifications to improve performance on a pavement maintenance project in the variable Oregon weather climate and the construction industry.

From year to year the technical specifications are continually fine-tuned. From the basic FAA specification, additional sections have been added to address questions or problem areas to further clarify the scope of the project and the methods and materials used. Project specific sections on training, radio requirements, special materials, and alternate construction approaches have been added. This is where many lessons learned are incorporated for future projects. For example, FAA specification P-620 was modified to account for pavement markings around fog seals and slurry seals, something the standard specification didn't fully address.

Inspector's Project Information

Field inspection staff must make decisions and assessments of unanticipated field conditions on a daily basis. Initially, information was not readily available to aid field staff in decision making, so they had to call into the office engineer for resolution.

PMP inspectors now carry a library of information with them to the field. Over the years the list of reference material has grown to include pavement condition index (PCI) reports, design inspection photos/notes, airport manager interview forms, airport data, striping advisory circulars, aerial photos, cost estimates, quantity breakdowns, IGA budgets, training materials, maps, inspection checklists, and airport layout plans (ALPs). These reference materials travel with the inspectors throughout the project and enable them to make informed decisions in the field when necessary.

Paint Curl (2001)

In 2001, it was learned that a unique combination of weather conditions and material installation caused paint failure. Paint installed on newly placed slurry seal sometimes cracked and peeled off, even though the paint was applied per the manufacturer's recommendation to allow for slurry seal curing time. This ruined the striping, damaged the slurry seal, and caused foreign object debris (FOD) problems.

Upon close inspection, it was discovered that when paint was applied at or above the full rate to the slurry seal after less than a week of cure time, the paint would start peeling at the edges. Over several weeks of hot summer conditions, the paint would slowly shrink and peel off, taking the top layer of the slurry seal with it. Fixing this problem was time consuming, expensive, and the end result was never as good as the original installation. The fix required complete removal and re-painting. It was noted that this problem only happened when paint was heavily applied to fresh slurry seal, or where an adjoining pass overlapped the original pass. Through research into problems with water based paints on asphalt and surface tension during paint cure the engineering team realized that the thickness of the paint on fresh slurry was causing the problem. The slurry seal had not had time to completely cure to its full tensile strength when the paint was applied early. When the paint was placed at the full application rate, surface tension in the drying paint became much greater than the early tensile strength of the slurry seal. The paint would tear the surface layer of the slurry away as it contracted in the summer sun, leaving the rest of the layer and the substrate pavement behind.

The solution to this problem was to start with allowing the slurry an initial two week cure to gain tensile strength. Then the paint was applied in two coats. The first coat of paint was limited to a very light coat (30-50% of a full coat) which limited the tensile strength the paint could develop internally. Once the paint was allowed to cure for three or four weeks, the final, full coat of paint was applied. Overlaps were also limited to reduce excessive film depths. This procedure was added to the specifications and has resolved the problem.

Proprietary Products and Sole-Source Procurement (2002)

New products were always coming onto the market for pavement maintenance, claiming performance advantages compared to traditional materials. These specialty products sometimes did not have obvious competitors in the marketplace, nor did they have a long track record of demonstrated acceptability. Material suppliers were constantly lobbying for their products to be tried or allowed. This situation caused concern regarding quality, cost, and compliance problems with agency procurement procedures. Specific examples include fog seal and crack seal materials.

In an effort to continuously improve the quality of the program, research was conducted to identify alternate products that met performance requirements compared against previously specified materials. If the research was favorable, the new products were tested on a limited basis on pilot projects. If the pilot project was successful, the products were then allowed for general use on future projects. When there was only a single product qualified for a certain type of work, agency procurement rules were followed regarding sole source work. An example of this was fog seal materials. One product was approved for use in the specifications, GSB-88. Another supplier requested their product be allowed as an 'approved equal'. What seems like a simple request now was very complicated for various reasons. To resolve the issue, a side-by-side test was conducted at the Aurora State Airport. Half the runway was applied with GSB-88, and half the runway was applied with ERA-C, an alternate product. After several years of monitoring, no significant performance differences were found between the products. Following that finding, the alternate product was approved for general use.

Large, Wide Cracks (2003)

Cracks in asphalt greater than 1.5 inches in width did not perform well when filled with standard hot-pour crack sealant materials. This was especially true in eastern and central Oregon where the thermal expansion and contraction of cracks was high compared to western Oregon, thereby causing large, wide cracks. Full depth asphaltic concrete (AC) patching was also tried, but this approach was not cost effective or the right solution in all cases. An alternate construction approach was needed.

Through developments in the industry, an alternate hot-pour repair material and construction approach was discovered for use in wider cracks. The filler material incorporated aggregate to create a mastic system. This added additional structural support and reduced sagging in the completed repair. The product was first tested as a pilot project at the Ashland Municipal Airport. After monitoring performance over a full year, it was found that the cracks filled directly with the mastic did not perform as expected. A hybrid approach was then developed for use on subsequent years using a partial depth grind and a multi-step installation. This method of installation greatly improved performance. The industry also developed multiple products in this category which brought prices down through competitive bidding.

Striping Repair during Construction (2005)

When crack sealing work encountered existing striping, the striping was damaged. In the early years of the program, this was a minor problem that was ignored. However, as the program performed more and more crack sealing, this situation became more apparent. Airport sponsors requested that the striping be repaired as part of the project

To address this situation, the damaged areas of striping were re-painted. This, however, created another situation. For example, when a taxiway centerline was damaged by sealing a transverse crack, the line was re-painted for a length of perhaps one foot. This small amount of new paint then stood out as abnormal, which was a problem almost as bad as no paint at all. So, the solution was upgraded to re-painting the entire line that was damaged. The work was included in the bid documents. The result was that the airport was not operationally compromised by the crack sealing work and sponsors were happy that the work was completed as part of the PMP.

Safety and Operations

NOTAMs Filed Incorrectly or Not At All (2000)

Early in the program, NOTAMs were requested by phone and in person. Sometimes they were arranged by the inspector and sometimes by the contractor. This was not a dependable system for several reasons: inconsistency, authorized staff was not always available when needed, it promoted short-term planning by the contractor, and very little notice was given to airport users. An interim solution was to make requests in writing at least 48 hours in advance, so NOTAM requests were sent in by fax. However, this approach didn't always work because authorized staff didn't always receive the fax in a timely manner.

A unified approach to NOTAM requests was needed to assure NOTAMs were relayed to the airport sponsors, checked at multiple levels, and allowed for advance notice to airport users. It would reduce the incidence of surprises to all parties and promote better communication.

In response to this need, several improvements were implemented. First, the lead time for NOTAM requests was increased in the project specifications, with seven days required for runway closures and two days required for other facilities and work-planning required the week before the work. Second, a single point of contact was established in the engineer's office for NOTAM request scheduling. This person received requests directly from the contractor on a weekly or daily basis, as needed. NOTAM request information was screened against possible conflicts and passed on to the airport sponsors verbally, with verbal confirmation of acceptance. Next, a NOTAM confirmation was issued in writing to the airport sponsor, ODA, contractor, and field inspection staff. Finally, field inspection staff verified the NOTAM schedule on-site with the contractor and checked with the FAA Flight Service Station to verify NOTAM filing. This process greatly improved notice to pilots, FBOs, and airport sponsors as well as reduced delays for the contractor.

Contractor Safety Training (2004)

Early in the program, safety and operational requirements placed in the project specifications and plans did not always transition well to safe operations by contractor staff. Further instruction and constant reiteration was required by the engineering field inspection staff. Contractor staff were not familiar with working in the general aviation environment.

As a result, WHPacific developed a training program that highlighted and explored elements of safe construction operations on the airfield as required by the plans and specifications. This included work zone protection and avoidance of active air operations areas. In addition, an overview session on familiarization with general aviation airports was included. Emphasis in these sessions was placed on safety critical items such as situational awareness and not moving beyond hold lines without runway closure. This assisted the contractor staff in understanding what their responsibilities were and helped them feel comfortable working in potentially unfamiliar airport surroundings. The training manual continues to evolve annually and is customized for the airports included in that year's PMP cycle. Specifically, the training focuses on unique characteristics that can present themselves, such as an airport with extensive aerial firefighting activities or an airport with an air traffic control tower. (An example of the training program is included in Appendix F).

Radio Certification (2004)

Contractor staff did not want to perform radio communication duties and would rely on field inspection staff for radio communication whenever possible. Contractor staff tended to request escort for movement around airports. This reduced the available work time for everyone.

As part of the safety training program, a radio training section was included. This radio training targeted contractor staff in charge of the work including superintendents and foremen. It introduced contractor staff to the basics of handheld radio operation and usage. Contractor staff had their radio usage responsibilities reiterated very clearly and were required to become "certified" prior to usage on the project[1]. There was an interactive teaching session based on real life scenarios, as well as a written and verbal certification test. This also assisted the entire team when working on a towered airport where a safety and driver training program may be mandatory.

[1] Certification is an unofficial term and does not represent any actual certification; rather it is a sign-off from the engineer that the contractor has satisfactorily exhibited knowledge of proper radio procedures.

Construction Work Plans (2004)

Changing operations on unfamiliar airports and transitions to new work types required information to be relayed to contractor staff in a timely manner. Questions about safety, airport operations, construction operations and work phasing were answered many times during work days. The contractor relied heavily on the inspector for these items.

To reduce redundancy, a mini pre-construction conference was initiated for the information to be disseminated on all these issues. The conference was attended by all contractor staff, field inspection staff, and airport sponsor staff (if available). The conference was required prior to work at a new airport, prior to transitioning to a new work type, or when there is a significant operational change on the airport during construction. Field inspection staff and airport sponsor staff provide relevant information to all contractor staff at one time, and the contractor reviews his work phasing plan.

Airport Maps for Contractor Staff (2009)

During the completion of the contract, contractor crews navigated over a dozen airports in only a couple months, and constantly had to adapt to a new airport layout, varying levels of traffic, and different operational expectations. While the crews did gain a strong understanding of working at a general aviation airport, there were safety lapses related to this issue. Contractor crews unfamiliar with the airport drove in active traffic areas and caused potential conflicts with pilots. This especially created confusion for controllers on towered airports. At times, the field inspection staff was requested to escort contractor staff around the airport to various work zones.

To help contractors communicate their movements to airport users, increase safety during travel to and from work zones, and promote safety and efficiency, airport layout maps were provided for each contractor vehicle prior to start of work. The maps showed work zones and haul routes for various phases of work. These maps were also provided to airport and control tower staff for coordination of transitions between work zones. Contractor communication was also clearer due to the addition of taxiway and runway designations being clearly marked on the airport maps.

FAA Review of Safety Training Program (2009)

A contractor employee was involved in a safety incident at the Hillsboro Airport while working on the PMP project. They had been safety trained. On that day, after communicating with the tower that the driver was turning left, he turned right into an active movement area, which caused a runway incursion[2]. Because of the mistake, the PMP safety training program was reviewed by the FAA Safety and Standards Branch.

The FAA Safety and Standards staff reviewed the program and found it to be very good. The incident resulted from human error and not any inherent flaws in the training received by the contractor employee. FAA feedback from their training program audit was included for use in subsequent years' training programs. The training program continues to receive direct input and improvement from FAA Safety and Standards staff.

[2] The incident was officially classified by the FAA as a Class C incursion, which is defined as a decreased separation but with enough time to avoid collision.

Chapter 7
Conclusion and Recommendations

Pavement Maintenance Program Goals

In Chapter 2, four program goals were outlined and discussed:

1. **Asset Management – Maintain airfield pavements to a minimum condition standard**
2. **Economy of Scale – Create a single program to benefit numerous airports**
3. **Maximize Funding – Create a federal, state, and local partnership to maximize airport pavement improvement funds**
4. **Grant Compliance – Create a program that gives airport sponsors an avenue to comply with FAA Airport Sponsor Grant Assurance #11**

The following section is a determination of the program's success in meeting these goals.

Asset Management

Chapter 5 presented in great detail the Pavement Condition Index (PCI) data from the program over the past 10 years. The data and subsequent analysis indicate that the pavement maintenance provided by the PMP maintained the pavement to within a good to very good PCI rating throughout the system. In addition, the pavement life was extended an average of 7 years or 1/3 of the original design life.

Economy of Scale

All 67 eligible airports in the program have been continuously evaluated through the PEP with a total of 126 construction projects benefiting 56 different airports across the state. The total pavement maintenance dollars spent through the program from 2000-2009 is $8,788,202 which equates to an average of $69,747 per airport project. The program has met the goal of a single program benefiting numerous airports.

Maximizing Funding

The PMP program utilizes just under $1,000,000 in av gas and jet fuel taxes annually. In addition, local sponsors are able to use either the FAA Non-Primary Entitlement funds or their operating funds for their match portion. The program is very flexible in this sense and has created an excellent partnership with all participants.

Grant Compliance

As previously mentioned, Airport Sponsor Grant Assurance #11 (*Pavement Preventative Maintenance*), the FAA mandates that all federally-obligated airports that have received funding for pavement-related projects must have an effective pavement maintenance / management program. This State program is unique in that it not only performs the PEP evaluations, it also implements the pavement maintenance recommendations through the PMP. Providing the PMP readily enables airport sponsor compliance with FAA Grant Assurance #11. .

Overall Program Benefits

The State has gained:

- A program that has succeeded in extending the overall life span of its airport system pavements. Even in the economic downturn of the past four years, the program has been able to sustain itself while also increasing the amount of work performed and providing the best pavement maintenance products on the market. New airport pavement projects through the FAA Airport Improvement Program, since the PMP has postponed the need to rehabilitate numerous pavements. This has allowed the money to go to other projects such as runway/taxiway extensions, pavement strengthening projects, new and relocated taxiways and new aircraft parking aprons.
- An excellent communication tool with airport sponsors throughout the State.
- A program that airports want and now expect to be part of ODA's service to the community.
- Airports that are closer to becoming more financially sustainable, because this program is provided at a minimal cost, ensuring that they can maintain the majority of their airfield pavements.
- A smaller "carbon footprint," since the program extends the life of the pavements, reducing the use of scarce resources and energy on more intensive construction activities.
- A program that has effectively replaced the Financial Aid to Municipalities program by leveraging the State funds with local matching funds to stretch the construction work further.

Consequences of Losing the Program

The State would lose:

- An effective program that is extending the life of pavement at general aviation airports throughout the State
- Local airport sponsors would most likely revert back to a casual or minimalist approach to maintaining their pavements; thereby letting them fail and using AIP funds for reconstruction. This then reduces the amount of FAA funds for other airport projects and possibly new pavement.
- The good will and relationships with airport sponsors that the program has helped build over the past 10 years.

Program Improvement Recommendations

As a result of data and experience gathered from ten years of the ODA's PEP/PMP programs, many recommendations have been developed for their future. While some are the result of lessons learned through the execution of the programs, many others are continuations of ongoing improvements. The programs must continue to evolve and improve in order to realize the best possible use of the public funding that supports it. The recommendations below will aid ODA, FAA, Legislators, airport sponsors, and consultants alike in the continued pursuit of the program goals.

Project Administration

The PMP consultant and ODA should adopt a more aggressive schedule as referred to in this report as the "ideal schedule". This would improve Program delivery in many ways. Early contact with airport sponsors would increase Program awareness and early integration of budgeting for PMP matches into local budget processes. Early pre-design pavement inspections would allow assessment of distresses in temperatures more closely

matching the average temperature. Early bidding of the project would decrease pricing and allow the PMP to be "first in line" when contractors begin contemplating their projects for the next construction season.

ODA should revise IGAs with the goal of allowing modest cost changes to airport specific project budgets. There have been occasions when an airport with a large amount of work has had a reduction in the scope of their work after the IGA process has been completed. The redistribution of consultant costs resulted in a relative increase of costs to all other airports in the program. Depending on the local airport's budget protocol and match funding source, this can result in a need for approval for any additional funding required. A revision of the IGAs with this situation in mind would allow airport sponsors to avoid a special budget process due to budget "ripples" caused by changes in the program.

ODA should strive to maintain the continuity of project personnel to the greatest extent possible. Due to the time critical nature of many steps of the design process and the logistics involved in project execution, key personnel turnover in the past has introduced challenges in project delivery. Key personnel should use a team approach and disseminate institutional knowledge to other members of the team whenever possible.

Communications

Schedule dissemination information could be improved by the incorporation of easily implemented technology solutions. A simple website hosted by ODA could be created to house current schedules, periodic project updates and project documents during all phases of the project. Stakeholders would then have easy access to all public information and could sign up to receive project updates as they were released. This website could be maintained year-round to increase general program awareness outside of the immediate stakeholder group.

The PMP consultant should continue to improve communication with ODA during the construction phase. Weekly reporting should continue to be more closely tailored to meet ODA's needs. This could include additional or different information, more frequent written reporting, or reports through alternate electronic channels (social media/text/electronic project bulletin board).

The consultant should develop a simple Operations Manual to help airport sponsors answer questions they may have about their pavement's post-PMP requirements. Examples of information that could be included might be precautions on operations on new slurry seals and what to do should failures or warranty issues be noticed in sealed cracks. This would increase airport sponsor knowledge and could increase the lifespan of installed maintenance materials.

PEP Coordination

In order to streamline creation of the Preliminary PMP Program and better utilize Pre-Design Inspection field time, the PMP consultant must increase coordination with the PEP consultant.

The consultants will work together to tailor PEP data products to better fit field conditions. This would be especially valuable in the case of high severity cracks that require application of alternate repair strategies. Alternates to traditional crack sealing include wide crack repairs or cut and patch repairs that are much more expensive. These added costs are often not adequately quantified until the PMP consultant assesses these distresses in the field during the pre-design inspection phase. If a more expensive maintenance strategy is necessary to repair the distress, the resulting project cost for that airport will increase accordingly. This may require reduction of work at other airports to bring the overall Program budget back below that year's budget cap.

Additional time spent by the PMP consultant to inspect work that is eventually eliminated for budget cap reasons could be saved and used to increase the amount of maintenance work done during that year's program.

Another area that would benefit from greater consultant coordination is the depiction of accurate pavement edge line work on PCI drawing products. Errors in PCI pavement section reporting should be reported and corrected. Linework updates should be undertaken on a regular basis during the PEP process and checked during PEP field inspections. Corrections should also be noted during the PMP part of the process and relayed to the PEP consultant as part of the final reporting process. This information could then be incorporated into a file revision of PEP pavement edge line work for that year's airports.

Design, Bidding, and Construction

The PMP consultant should continue to research new products and maintenance strategies. Use of alternative products encourages competition and innovation in the pavement maintenance industry. This results in benefits to the owners in the form of reduced bid pricing, easier compliance with public contracting requirements, and better performing products being developed.

The PMP consultant should look for new and innovative ways to streamline the inspection and design processes. By looking for applications of new technology that might reduce workloads and improve the quality of project deliverables, more of the project budget can be used to maintain pavements. Specific applications might include the use of project specific software on mobile computing devices in the field. This would decrease the amount of inspector time spent away from the site on clerical tasks such as report writing, document filing and downloading of project information. Inspectors would also have immediate access to all project design data through wireless or cellular connections allowing streamlined decision making in the field.

Inclusion of additional, locally sponsored work must be done in a timely fashion. The airport sponsor should be given the opportunity to include additional work that falls within the PMP scope at their expense, early in the preliminary design phase. This might include work on pavements not normally eligible for the program. It might also include work that might be prohibitively expensive to include in a stand-alone project. An example might be the expense of assembling an airport restripe project for bid when a specialty PMP contractor already on that airport performing striping work could easily be utilized instead. As this work is included, the additional cost for design/coordination and ODA administrative time should be borne by the sponsor.

Based on the conclusions in Chapter 5 of this study, the focus of maintenance efforts as part of the PMP should shift toward surface sealants. Future programs should not spend as much money on repair of lower severity (narrow) cracks and instead shift priority to funding of fog and slurry seals to address shallow surface cracking. Also to this end, crack sealing specifications should also be rewritten to add a minimum width for cracks to be sealed of 1/8" or greater.

Methods of wide crack repair should be reevaluated. A lack of measureable difference in PCI value due to application of wide crack repairs primarily utilizing mastic materials may not justify the costs of these types of repairs. Traditional saw-cut and patch repairs should be considered more frequently for pavements where large cracks are present.

The PMP consultant should continue to rework contract specifications, incorporating lessons learned from each PMP program year. Specific paragraphs required for conditions encountered on individual airports should be indexed and referenced for inclusion in subsequent cycles that include those airports. Examples might include

references to airport sponsor requirements for site specific safety training of contractor staff at an airport prior to performing work.

The PMP consultant should work closely with ODA to coordinate the inclusion of pavement areas that drop below maintainable PCI thresholds into the proper SCIP lists. The PMP consultant may be, in many cases, the first to note the impending ineligibility of critical pavements such as Runways or Taxiways for PMP maintenance work. Due to the continued degradation of those pavements, airport sponsors must be made aware of the implications of PMP ineligibility in a timely fashion. This will allow adequate time to plan for AIP funding and the local match to rehabilitate or reconstruct the pavement.

The PMP consultant should work with ODA to develop new ways to package the project for bidding to allow greater competition, and increase the availability to small and disadvantaged firms. The contractors that typically perform this sort of work tend to be smaller firms. Feedback from potential bidders has been received in recent years that the large size of the project can be daunting from a bonding and staffing standpoint. A repackaged project that would be more attractive to smaller bidders might include several smaller projects or longer completion times.

Due to project end dates approaching winter weather and punch list work which may get pushed off to the next Spring, final inspections often get pushed back. The PMP consultant and ODA should work to aggressively complete final inspections to avoid delaying project closeout and release of contractor retainage held. This would also help reduce administrative costs on the project by avoiding wintering punch list work.

Safety and Operations

The PMP consultant should continue to evaluate the safety training program described in Chapter 3. Through collaboration with FAA Safety and Standards Branch and airport sponsors, the safety program should continue to incorporate the most current standards and safety practices. To maintain accountability, a regular safety program audit should be conducted by the FAA to determine if any changes should be incorporated into the program.

The PMP consultant should continue to improve the level of contractor operational competency whenever possible. Additional requirements to increase the number of contractor staff attending initial training sessions could be included in future specifications. Real time safety monitoring by the consultant in the field while providing retraining when required addresses immediate needs. Full time inspection and oversight should be maintained to assure best practices are being followed.

The PMP consultant should continue to instill a culture of quality in all aspects of construction. Inspectors should continue to encourage the contractor to improve workmanship and to enforce quality specifications at every opportunity. PMP contractors should be encouraged to evaluate their own processes and look for ways to improve their quality of work as well.

Program Funding

Performance of the PMP Program has been shown in previous chapters of this report to be as good as or better than expected. When examining the cost-benefit ratios, a solid rate of return has been shown for the investment. Many secondary benefits have also been demonstrated, such as meeting grant assurances for FAA Airport Improvement Projects. As detailed in the previous section, improvements are continual and ongoing to all

aspects of the project. Despite the favorable return on investments made in the first ten years of the PMP, the amount of program funding needs to be examined in this same light for the next ten years.

In chapter 3, the implementation of the PMP was detailed from research of background materials through closeout and acceptance. During the second step of this process, when the preliminary program is tailored to meet the available funding, a very important point may be become obscured to the reader. This point is that the funding that would be required to accomplish the complete list of maintenance recommendations always exceeds the available Program funding, by typically twice the fund's allowance. The Program then is not able to perform necessary maintenance work which is then deferred to the next cycle for that region. The opportunity for maintaining that pavement at a higher PCI number and extending the pavement life is lost.

Those maintenance needs that fall out of the Program due to lack of funding are placed on the "unfunded list". In recent years this list has been overwhelmingly made up of pavements requiring surface sealants such as slurry seals and fog seals. Some of these items may be added later if bids come in lower than expected or if requested by an owner and paid for locally, but usually are simply deferred.

As discussed in the preceding section of this chapter, one of our recommendations for improvement of the project is increased investment in surface sealants. The funding of surface sealants would have an immediate impact on PCI values system wide. Increases in PCI values would match or exceed what was documented in Chapter 5 of this document. Major pavement rehabilitation projects would be further deferred by this investment as well. Most of these surface sealants however, currently remain on the "unfunded list" from cycle to cycle, requiring an increase in PMP budget to fund them. The total cost of these unfunded items may make up half or more of the overall list of priorities.

To make up this budget shortfall and realize the full potential of the PMP, two major approaches would need to be taken.

- The first would be the redistribution of funds based on the required inputs to keep all pavements in differing regions in a maintainable state. Airports in arid regions with higher amounts of damaging UV rays and large swings in temperature would receive greater maintenance inputs than those on the coast, which last longer due to the milder climate. This could also be accomplished by keeping funding levels equal for each cycle, but dividing the PMP regions up in a different manner – possibly into four regions, rather than three – and more frequently visiting those regions that require more investment.
- The second approach would be to address the shortfalls in the overall PMP budget by making a substantial increase in the funding level. This would require doubling the Aviation Fuel taxes which are currently 9 cents a gallon for av gas and 1 cent a gallon for Jet fuel[1]. The benefit-cost ratio of the PMP would be expected to improve as a result of increased funding – further maximizing the already successful program.

Closing Statement

This report found that all four of the program's initial goals have been met and that the benefits of the PMP outweigh the costs. By continuing to support the program and implementing the recommendations included in

[1] Of the fuel taxes three cents of av gas fees and ½ cent of jet fuel fees are dedicated to fund the PMP.

this report – particularly those related to funding enhancements and surface treatments – the performance metrics will only improve the return on investment for the next decade.

P M P

<> <>

PROGRAM POLICY

Tom Franklin, Project Administrator
Oregon Department of Aviation
3040 25th Street SE
Salem, OR 97302-1125
503-378-8689 ext. 232
thomas.w.franklin@state.or.us

Tom F. — Here's another copy to mark up in case your's got misplaced!

Oregon Aeronautics

Statewide Airport Pavement Maintenance Program

YEAR 2000

■

I. Background

This document presents Aeronautics' recommended pavement maintenance program. This program, when funded, will protect Oregon's airport investments by preserving airport pavement consistent with the goals of the 1999 Oregon Aviation Plan. The economics are compelling. Pavement maintenance at airports extends the life of pavement by many years and saves money. Oregon airports have a large and growing backlog of pavement needs.

For many airports there is no way to fund pavement maintenance and it is therefore deferred. Repeated deferral of maintenance results in costly rehabilitation and reconstruction projects. The program detailed below addresses this problem and determines program funding, eligibility, and management/administrative procedures.

Only publicly-owned, public-use airports were evaluated, including airports within the National Plan of Integrated Airport Systems (NPIAS) and also Non-NPIAS airports. Category assignment for each airport was based on those developed in the Oregon Aviation Plan.

The first years' projects and the methodology and assumptions behind the model which determines pavement maintenance needs are presented as appendices.

II. Proposed Program

A state-funded aid program to assist airports in undertaking pavement maintenance is needed for the following reasons:

- There is limited or no funding available at many airports to address pavement maintenance.
- Pavement maintenance is the most cost-effective means to helping preserve the system's airport pavements.

A. Program Funding

The program will be funded by increasing the avgas tax by 3 cents and the jet fuel tax ½ cent in the first year (October 23, FY 2000); and an increase of 3 cents to the avgas tax in the second year (July 1, FY 2001).[1]

Total new revenues are forecast to be $1.9 million in the 1999-2001 biennium and $2.6 million in the 2001-2003 biennium. New revenues will be dedicated to the statewide airport pavement maintenance program.

Airport sponsors receiving program funds will be required to agree to keep the airport open for a minimum of twenty (20) years.

B. Type of Work to be Funded

Initially the maintenance projects will include crack sealing and fog seal treatments. After the initial program phase is completed, a regional approach will be initiated and maintenance projects will also include localized patching, slurry seals, runway and taxiway rehabilitation and/or reconstruction.

Dividing the state into three regions and bidding projects regionally, one region per year (approximately 20 airports), is the most cost efficient method of completing projects. This will enable more funds to be spent on pavement maintenance at each airport and less funds expended on contractor mobilization.

1. Needs-Based Prioritization Approach

The optimal time to perform pavement maintenance treatments is determined by use of a Pavement Condition Index (PCI) database, which contains most of Oregon's public use airports. The program will prioritize maintenance projects first (crack sealing and fog seals) because those treatments will extend pavement life and are cost effective. The program will then expand to a regional approach and will include as much work as can be allocated to each airport (localized patching, slurry seals, runway and taxiway rehabilitation and/or reconstruction). The goal of the program is to perform work at each airport as needed on a three-year cycle.

[1] There has been no increase in the state avgas tax since 1977, and no change in the jet fuel tax since 1959.

Airport pavement maintenance projects will be prioritized based on the type of facility. The facility priorities are: primary runway, primary taxiway, secondary runway, primary apron, secondary taxiway, and other secondary facilities. Exclusive use and privately owned areas are not included in this program.

2. Project Eligibility Criteria

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

- Pavement Condition Index (PCI) data must be compatible with the state's database.
- Project is a technically warranted need based on pavement condition.
- Airport is in the core system of airports identified by the 1999 Oregon Aviation Plan.
- Exclusive use or privately owned areas on airports are not eligible for funding.
- The need is not met through other projects committed in the federal Airport Improvement Program.
- Aggregated project costs must exceed $1,000 at a given airport to warrant mobilization in a particular year.
- Airport sponsor must submit Grant Agreement, agree to keep the airport open for twenty (20) years, and commit local match for the project.
- The sponsor must submit 50% of the estimated local match to Aeronautics prior to project start date.
- The sponsor has established a documented pavement maintenance program on a 3-year inspection cycle in accordance with the Oregon Aeronautics' pavement inspection cycle.
- The sponsor and/or controlling jurisdiction has established airport overlay zoning and is implementing OAR 660-013, Airport Planning.

III. Program Management

This section presents program management recommendations in the areas of airport local match, contracting out the maintenance work, and scheduling and administration of the work program.

A. Local Match

The local match should reflect the principles of ability to pay plus administrative simplicity. The Oregon Aviation Plan's analysis of revenue showed that, based on the plan's categorization of airports, Category 1 (commercial) and Category 2 (business) airports have significantly more revenue to address capital needs than those general aviation airports in Categories 3, 4 and 5. Further, within Category 1 revenues are significantly greater for the primary airports (Portland International, Medford, Eugene, Redmond, Klamath Falls, North Bend and Pendleton) than for the non-primary airports (Astoria and Newport). A tiered approach is recommended given the differing ability of airports to pay their local match.

Exhibit I

Category	Description	Recommended Local Match
1a	Commercial Primary Airports	50 percent
1b	Other Non-primary Commercial	35 percent
2	Business	25 percent
3	Regional	10 percent
4	Community	10 percent
5	Low Volume	10 percent
Non-NPIAS	Community and Low Volume	5 percent

Non-NPIAS airports are not eligible for federal Airport Improvement Program grants and typically have the lowest ability to pay. Therefore a reduced match is recommended for these airports.

B. Contracting Out the Work

Aeronautics will use existing multi-year contracts with consultant engineers to develop bid documents and specifications and to perform inspections. The maintenance projects will either be let under one construction contract statewide or multiple contracts on a regional basis. Aeronautics will review different contracting options in order to obtain the lowest bid and minimize administration costs. If there are multiple projects in a given year at an airport, they will be completed at one time to improve efficiency.

A one-time agreement between Aeronautics and airport sponsors will allow the state to perform maintenance work. Airport operators will be required to maintain records of pavement maintenance.

It is the intent of Aeronautics to develop all contract specifications and bid documents and to bid all projects through the Department of Administrative Services.

Funds will not be disbursed to individual airports to complete the pavement maintenance work with the following exception: When maintenance work is scheduled to be completed concurrent with a Federal Aviation Administration (FAA) Airport Improvement Project (AIP), the airport may elect to have their contractor complete the work as an FAA noneligible work item under the grant. Aeronautics will require verification the work was satisfactorily completed and accepted at the time of final inspection of the AIP project. After formal acceptance by the airport and its consulting engineer, Aeronautics will issue a reimbursement check to the airport based on unit costs established by Aeronautics and calculation of final quantities.

C. Scheduling and Administration of the Work Program

Project lists will be identified on an annual basis. The administration steps are summarized below.

Step 1: Identify and Prioritize Technically Eligible Projects. Use MicroPAVER [2] to establish and prioritize list of technically eligible projects.

Step 2: Notify Sponsors of Projects. Notify airports of their technically eligible projects. Sponsor to validate project need.

Step 3: Receive Sponsors Acceptance of Proposed Project. Sponsor to submit Grant Agreement and letter of acceptance of proposed projects to Aeronautics.

Step 4: Prepare Engineer's Estimates and Bid Documents. Aeronautics will use its contracted consultant engineers to inspect the airports to determine bid quantities, develop specifications and bid documents and cost estimates for the projects that meet eligibility requirements.

Step 5: Advertise and Let Projects. Pavement maintenance contracts will be advertised and let through the Department of Administrative Services according to Oregon statutory requirements for construction contracts.

[2] MicroPAVER is the pavement management system which contains most of Oregon's public-use airports. It is used to determine technical need for pavement maintenance.

Step 6: Provide Contract Administration and Quality Assurance. Aeronautics' contracted engineer will inspect projects to ensure conformity with specifications and to verify quantities for contract payments.

Step 7: Aeronautics to Invoice Sponsor. Aeronautic will invoice Sponsor for matching funds based on final construction quantities.

D. Cash Management

Aeronautics will forecast the timing of program revenues from the fuel tax increases against program expenditures based on project letting and work schedules. This will be necessary in the first and future years to ensure that the timing and amount of program revenue is sufficient to fund the program.

Appendix A

MicroPAVER Methodology and Assumptions

Project selection was undertaken with the Aeronautics Division's computerized pavement maintenance management program (MicroPAVER) which prioritizes projects based on the Pavement Condition Index (PCI). The Aeronautics Division evaluates airport pavements on a three-year cycle under an on-going FAA grant program.

The following methodology and assumptions were used in developing the maintenance program for the Oregon airport system.

1. Only publicly-owned, public-use airports were evaluated, but both NPIAS[3] and Non-NPIAS airports were included. Category assignment for each airport was based on those developed in the Oregon Aviation Plan by the Aeronautics Division.

2. Critical PCI values were used based on Oregon-specific deterioration curves. There is a significant increase in the rate of pavement condition deterioration and high preventative maintenance costs as PCI falls below the critical PCI range. These critical PCI values are as follows:

Categories 1 & 2	Runways = 65 Taxiways = 60 Aprons = 50
Categories 3 & 4	Runways = 60 Taxiways = 55 Aprons = 50
Category 5	Runways = 55 Taxiways = 50 Aprons = 45

3. A prioritization table was used to identify which projects would be funded if limited funds were available. An unlimited budget scenario and a $1,000,000/year budget scenario was run. Note that MicroPAVER evaluates those pavements below the critical PCI value separately from those above the critical PCI value.

[3] NPIAS is the acronym for National Plan of Integrated Airport Systems and refers to those airports that meet specific federal criteria in terms of activity levels and location. Such airports are eligible for grants through the FAA's Airport Improvement Program (AIP).

4. A maintenance and repair (M&R) policy was developed for use during the evaluation. This policy identifies the maintenance activities to be completed. The policy, called "Preventative", was applied to pavements above the critical PCI. This policy was applied to the defects that can reasonably be fixed using localized maintenance activities. During the first year, only those activities that were not eligible for FAA funding were included, i.e., crack sealing for localized repair and fog seals. Fog seals are considered in MicroPAVER as a global maintenance treatment. These global maintenance treatments are applied on a user-specified interval. The interval used was every seven years.[4] The following costs for the maintenance activities evaluated were used during this project:

Activity	Cost[5]
Deep AC Patching	$4.55/sf
Shallow AC Patching	$3.25/sf
Full Depth PCC Patching	$8.45/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
AC Crack Sealing	$1.30/lineal foot
Fog Seal	$0.03/sf

5. It was assumed for this analysis that a pavement section would receive cyclic preventative maintenance. MicroPAVER uses actual distress data to calculate the first year's maintenance needs, and then uses a $/sf cost to calculate needs in the out years.

[4] Note that fog seals are applied across an entire pavement section, not just in localized areas.
[5] These costs are basic costs with a 30% add-on for contingencies and engineering.

Pavement Evaluation/Maintenance Management Program 2009

Grants Pass Airport

Oregon

DEPARTMENT OF AVIATION

Pavement Evaluation/ Maintenance Management Program 2009

Pavement Consultants Inc.

Grants Pass Airport

Oregon Department of Aviation

2009 PAVEMENT EVALUATION / MAINTENANCE MANAGEMENT PROGRAM

Final Report – Individual Airports
Functional Category 3

Prepared for:

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

Prepared by:

Pavement Consultants Inc.
7530 Roosevelt Way N.E.
Seattle, Washington 98115-4221

June 2009

Table of Contents

Introduction 1

Pavement Inventory 3

- Records Review 3
- Network Definition 3
- Branch and Section Names 4
- Network Identifiers 5
  - Network Identification 5
  - Zone 5
  - Section Category 5
  - Functional Category 5
  - Funding Group 5
  - Ownership 6
- Branch or Section Identifiers 6
  - Branch Use 6
  - Pavement Rank 6
  - Surface Type 6
- Structural and Construction History Data 6
- Field Verification 7

Inspection Schedule 8

- Detailed Inspection 8
  - Methodology 8
  - Pavement Condition Index Calculation 9
- Monthly Drive-By Inspection 10

Record Keeping and Data Retrieval 12

- Pavement Condition Prediction 13

Typical Maintenance Requirements 19

Appendix: Your Airport Report

Table of Contents (continued)

List of Figures

1. Monthly Drive-By Inspection Form 11
2. Performance Curve for Category 3 AC Runways 13
3. Performance Curve for Category 3 AC Taxiways 14
4. Performance Curve for Category 3 AC Aprons 14
5. Performance Curve for Category 3 AAC Runways 15
6. Performance Curve for Category 3 AAC Taxiways 15
7. Performance Curve for Category 3 AAC Aprons 16
8. Performance Curve for Category 3 PCC Runways 16
9. Performance Curve for Category 3 PCC Aprons 17
10. Performance Curve for Category 3 APC Aprons 17
11. Performance Curve for Category 3 ST Taxiways 18

List of Tables

1. Pavement Condition Index Distress Types and Related Causes 9
2. Selection of Number of Sample Units to Inspect 10
3. Micro PAVER Reports 12
4. Unit Costs for the Various Work Plan Activities 19

Introduction

The Oregon Department of Aviation has been collecting pavement condition information at eligible airports since the mid 1980s. In January 1995 the Federal Aviation Administration (FAA) mandated that any airport sponsor receiving and/or requesting federal funds for pavement improvement projects must have implemented a pavement maintenance management program. Through the Department's system planning efforts, the airports included in the Department's Pavement Evaluation / Maintenance Management Program have been complying with the intent of the law since the mid 1980s, well ahead of the FAA mandate. The information collected during this study ensures that your airport continues to comply with the Federal mandate. The developed pavement maintenance management program, as it relates to an individual airport, is described in this report.

The Oregon Department of Aviation routinely provides information to airport owners and operators throughout the State that assists them in maintaining and operating their airports. The State addresses many issues as part of their planning process, one of which is to provide to each individual airport, on a three-year cycle, a report on pavement condition. Through the statewide study, pavement maintenance management programs for all eligible airports in the state are efficiently and economically completed through the Department of Aviation's Pavement Evaluation / Maintenance Management Program.

Each airport owner or operator makes frequent decisions about the timing and type of maintenance and repair activities that should be comleted on their pavements to maintain acceptable surface condition and adequate load-carrying capacity. The pavement maintenance management program described in this document, and supplemented by the information contained in the attached report prepared specifically for your airport, will assist you in making necessary decisions about pavement maintenance at your airport, and will ensure compliance with the Federal mandate.

To develop a pavement maintenance management program for each eligible airport, the Department of Aviation elected to conduct pavement evaluations (visual inspections), and to implement the Micro PAVER pavement maintenance management software. These activities were completed as part of the Department's Continuous Aviation System Plan efforts. Micro PAVER uses the evaluation results to efficiently identify pavements requiring maintenance and repair, and to establish project priorities. The software can also be used to assess overall pavement network condition, prepare and forecast the budgets required to maintain the network at an acceptable condition level, and identify required maintenance and repair activities.

The federally mandated pavement maintenance management program identifies four major requirements:

- **Pavement inventory**
- **Inspection schedule (detailed and monthly)**
- **Record keeping**
- **Information retrieval**

The approach taken to meet these program requirements for your airport is described in this report.

Pavement Inventory

The FAA-mandated Pavement Inventory requirement specifies that information about each piece of pavement at an airport be compiled. This information is to include, at a minimum: pavement location, pavement dimensions, pavement surface type, and last construction date. The process used to develop this information is discussed under “Records Review”.

Additionally, information is collected about the pavements at an airport so its pavement network can be defined. After the pavement network is defined, pavement inspections can be completed and a pavement maintenance management program can be developed. The methodology for defining the pavement network follows the Records Review discussion.

Records Review

The first step in meeting FAA’s pavement maintenance management program requirement is to develop a maintenance and construction history for all pavements at an airport. For the past 19years the Oregon Department of Aviation has, for its eligible airports, been conducting pavement evaluations to determine existing condition. In 1991 Pavement Consultants Inc. began assisting the Department in their efforts to compile and update that information. The information collected was used to develop a pavement maintenance management program for each eligible airport as described in this report, and your attached individual airport report.

Previous State-sponsored projects identified pavement layout, pavement construction history and pavement condition at each eligible airport. During this inspection cycle these documents were reviewed, and follow-up inquiries on pavement construction history were directed to the Oregon Department of Aviation, the FAA, and to airport sponsors. Based on this review, pavement boundaries were identified at your airport and were placed on an AutoCAD-generated base map (see Figure 1 in your attached airport report). ***The established base map fulfills the FAA "Pavement Inventory" requirement for locating pavements, identifying their dimensions, and identifying pavement type and age.***

Network Definition

Once the pavement history at an airport has been compiled, individual pavement features can be identified, a process called network definition. These pavement features are defined on the basis of: primary use, construction history, and traffic pattern. Each airport is divided into features according to the guidelines contained in the current edition of American Society of Testingmand Materials (ASTM) Standard D5340, *Standard Test Method for Airport Condition Index Surveys*. The pavement features used in this project are defined as follows.

Network: Each eligible airport constitutes a separate pavement network.

Branch: A branch is any identifiable part of a pavement network that has a distinct function. Airfield pavements such as runways, taxiways and aprons are each considered to be a separate branch.

Section: A section is a subdivision of a branch and has consistent characteristics throughout its length or area. These characteristics include: pavement layer material type and thickness, construction history, traffic, and pavement condition. A section is the basic management unit of a pavement network, and is that portion of a branch over which a maintenance and repair project is likely to be completed.

Sample Unit: A sample unit is an arbitrarily defined portion of a pavement section that is used when performing detailed pavement inspections. It is the smallest subdivision in a pavement network. For flexible airport pavements such as asphalt concrete or surface treatment, sample units are about 5,000 square feet in area. For rigid airport pavements such as portland cement concrete, sample units typically include approximately 20 contiguous pavement slabs.

Beginning 19years ago, branches, sections and sample units were established for each eligible airport in the Oregon system. During this project, these divisions were reviewed and modified as required, based on changed conditions (new pavements, demolished pavements), or completion of any pavement-related maintenance and repair projects.

Branch and Section Names

Each pavement feature is assigned a name that allows it to be uniquely identified in the statewide airport system. Each branch name consists of a series of characters. The first character indicates the branch type: “R” for Runway, “T” for Taxiway, “A” for Apron and “H” for Helipad. The last two characters in the branch name identify the airport to which the branch belongs and were taken from the airport name. All branches for your airport carry this airport-specific two-letter identifier. The individual runway, taxiway or apron referenced is identified by characters located between the branch type (“R”, “T”, “A” or “H”) and your two-letter airport identifier. To the extent possible, these identifying characters were chosen to reflect the facility names you use. If the facility does not have a name it was assigned a number. In the case of runways, numbers are used that are the lower of the two runway numbers corresponding to compass bearing.

Located after a hyphen following the branch name are two- or three alpha-numeric characters. These characters identify the section within the branch. An example illustrating the naming convention is:

R16AB-01

which is the name for Runway 16/34, Albany Municipal Airport, Section 01.

The branches, sections and sample units identified for your airport are shown on Figure 2 in your attached individual airport report.

Network Identifiers

Several designators are used to describe information about a particular airport included in the State System Plan. These designators include: network identification, zone, section category, functional category, funding group and ownership.

Network Identification

Each airport in the statewide system is assigned a unique network identifier (name). This name is typically the name of the city in which the airport is located. The network identification name for your airport can be found in the appendices attached to your airport report. This network identification name was assigned so that an individual airport or a group of airports contained in the statewide database can be selected for evaluation. The statewide database contains information for all eligible airports in the State.

Zone

Zones are used to allow individual airports within the statewide database to be separately selected for analysis. The FAA airport designator was used as the zone designator.

Section Category

Each airport is assigned a section category identifier based on a combination of climactic region, highway region and highway maintenance district. Four climatic zones were identified: Coastal, Willamette Valley, Rogue Valley and Eastern. There are 5 separate highway regions in the state and 14 maintenance districts. Section categories may be used within the statewide database to group airports together for data retrieval and analysis.

Functional Category

Each airport is assigned a functional category based on its classification within the State System Plan. Each airport was assigned a functional category of either 1, 2, 3, 4 or 5 in accordance with the criteria set forth in the System Plan. These categories correspond to the following airport types: commercial service, business or high activity general aviation, regional general aviation, community general aviation, and low activity general aviation. The category assigned to your airport is listed in the appendices attached to your airport report. This category assignment allows groups of airports in different functional categories to be separately evaluated.

Funding Group

Airports in the State were categorized as either NPIAS or non-NPIAS. NPIAS designated airports are eligible for project funding under the FAA's Airport Improvement Program (AIP). Being designated as NPIAS or non-NPIAS in the database allows the Department to evaluate funding alternatives for the State airport system.

Ownership

Airport ownership is designated as Public, State or Private. This designation allows the Department to evaluate funding allocations based on eligibility for State and/or Federal funding.

Branch or Section Identifiers

Several designators are used to describe a branch or section's function, importance or construction. These characteristics are: branch use, pavement rank, and surface type.

Branch Use

Branch use identifies the primary use of each distinct pavement area. For each airport pavement included in this study, a branch use of "Runway", "Taxiway", "Apron" or "Helipad" is assigned, as appropriate.

Pavement Rank

Pavement rank refers to the relative importance assigned to multiple facilities having the same branch use. Each pavement section is assigned a rank of primary ("P"), secondary ("S") or tertiary ("T") as appropriate. As an example, an airport with two runways might rank the more heavily used runway as primary and the lesser-used runway as secondary. The pavement rank assigned to each pavement section at your airport can be found in the appendices attached to your individual airport report.

Surface Type

Each pavement section is assigned a surface type designator based on the type of surface material present. Throughout the State eight surface types were encountered: asphalt overlay over asphalt concrete (AAC), asphalt concrete (AC), asphalt concrete over cement treated base (ACT), asphalt overlay over portland cement concrete (APC), asphalt concrete over pozzolanic base (APZ), portland cement concrete (PCC), surface treatment (ST), and other (X – generally a chip seal). The surface type assigned to each pavement at your airport is provided in the report appended to this document. ***Surface type identification fulfills one of FAA's "Pavement Inventory" requirements.***

Structural and Construction History Data

Available construction records for each airport were obtained from the Oregon Department of Aviation and/or Federal Aviation Administration. These records were reviewed to establish a last construction date for each pavement section. Additional information was requested from individual airport sponsors to update or clarify this information, as necessary. The last construction date and known construction history for each pavement section can be found on Figure 1 in your individual airport report. The last construction date is also identified in the reports found in the attached appendixes. For those pavement sections where information was not available, a last construction date was assigned based on pavement condition. ***Last construction date identification fulfills the final FAA "Pavement Inventory" requirement.***

Field Verification

Information obtained through the records review and discussions with airport sponsors, Department of Aviation staff, and FAA personnel was field-verified to ensure that each facility was accurately mapped and properly subdivided into branches and sections. Modifications to the maps, and/or branch and section divisions, were made as necessary wherever discrepancies in airport geometry, paving materials, or construction history were found during the visual inspections.

Inspection Schedule

The FAA's Pavement Maintenance Management Program guidelines require all airports seeking or receiving federal funds for pavement-related projects to complete both detailed and drive-by inspections. The guidelines require that detailed inspections be performed yearly, unless the inspections are conducted in accordance with the Pavement Condition Index methodology set forth in ASTM D5340, at which point detailed inspections are required once every three years. ***The Pavement Condition Index inspections for Oregon's airports are conducted on a three-year cycle thus complying with the FAA detailed inspections.***

The drive-by inspections required by the FAA are to be completed monthly. These inspections are cursory inspections that are performed to detect any unexpected changes in pavement condition.

A description of the detailed inspection methodology, as well as an approach to completing the monthly drive-by inspections, is provided.

Detailed Inspection

Methodology

Pavement condition index (PCI) surveys were performed in 2009 for all airports included in this year's project. The surveys were performed using the Pavement Condition Index (PCI) methodology developed by the U.S. Army Corps of Engineers, and outlined in the current edition of ASTM D 5340, *Standard Test Method for Airport Condition Index Surveys*. This document defines distress types, severity levels, and methods for measuring and recording distresses.

The PCI procedure was developed to collect data that would provide engineers and managers with a numerical value indicating overall pavement condition, and that would reflect both pavement structural integrity and operational surface condition. The procedure was designed to be highly repeatable and was found to be well-correlated with the judgment of experienced pavement engineers.

A PCI survey is performed by measuring the amount and severity of certain defined distresses (defects) observed in a sample unit. Table 1 lists both the asphalt concrete and portland cement concrete pavement distress types considered in the PCI method, and also identifies their most common cause (load, climate/durability, other). Load-related distresses are apparent where the pavement has been over-stressed by traffic loads applied to its surface. Climate/durability-related distresses arise due to exposure to the environment. Other-related distresses are caused by actions not related to load or climate such as fuel spills or construction deficiencies.

Table 1. Pavement Condition Index Distress Types and Related Causes.

Asphalt Concrete		Portland Cement Concrete	
Pavement Distress	**Related Cause**	**Pavement Distress**	**Related Cause**
Alligator Cracking	Load	Blow-Up	Climate/Durability
Bleeding	Other	Corner Break	Load
Block Cracking	Climate/Durability	Cracks: Longitudinal, Transverse, and Diagonal	Load
Corrugation	Other / Load	Durability ("D") Crack	Climate/Durability
Depression	Other / Load	Joint Seal Damage	Climate/Durability
Jet Blast Erosion	Other	Patching, Small	Other
Joint Reflection Cracking	Climate/Durability	Patching, Large and Utility Cuts	Other
Longitudinal and Transverse Cracking	Climate/Durability	Popouts	Other / Climate/Durability
Oil Spillage	Other	Pumping	Load
Patching and Utility Cut Patching	Other	Scaling, Map Cracking, Crazing	Other
Polished Aggregate	Other	Settlement or Faulting	Load
Raveling and Weathering	Climate/Durability	Shattered Slab / Intersecting Cracks	Load
Rutting	Load	Shrinkage Cracks	Other
Shoving	Other	Spalling (Longitudinal and Transverse Joint)	Other / Load
Slippage Cracking	Other / Load	Spalling (Corner)	Other / Load
Swell	Other		

To obtain a statistically reliable PCI for a given pavement section it is not necessary to inspect all sample units in that section. A pre-determined number of randomly chosen sample units are selected for inspection based on the total number of sample units in the section. The sampling rates used during this study are shown in Table 2. The sampling rates contained in Table 2 result in data that are reliable at a 92 percent confidence level.

Pavement Condition Index Calculation

To calculate a PCI for a given sample unit, each distress type observed is assigned a deduct value based on its density (frequency of occurrence) within that sample area, and its severity. All deducts are summed and subsequently adjusted (corrected) for the number of different distresses found. This corrected deduct value is subtracted from 100, the PCI for a "perfect" pavement, to arrive at a PCI for that particular sample unit. The PCI for a pavement section is the area-weighted average PCI value of all sample units evaluated in that section. Pavement Condition Ratings (PCRs) are associated with ranges of PCI values.

The color-coded Figure 3 in your attached individual airport report shows the PCRs and their associated PCI ranges, as well as the pavement condition at your airport in March 2009.

Table 2. Selection of Number of Sample Units to Inspect.

Flexible Pavement		Rigid Pavement	
N	n	N	n
1	1	1	1
2 - 3	2	2	2
4 - 6	3	3 - 4	3
7 - 13	4	5 - 6	4
14 - 38	5	7 - 8	5
39 +	6	9 - 11	6
		12 - 14	7
		15 - 19	8
		20 - 27	9
		28 - 38	10
		39 - 58	11
		59 - 104	12
		105 - 313	13
		314 +	14

Where: N = Total number of sample units in a pavement section
n = Number of sample units to be surveyed

Monthly Drive-By Inspection

As part of the FAA-mandated pavement maintenance management program, a monthly drive-by inspection is required. This inspection is intended to identify abrupt changes in condition occurring since the last monthly inspection, and to record any maintenance activities completed during the previous month. This inspection can easily be accomplished by driving your airport and noting any changes or maintenance performed on the form provided in Figure 1. Each drive-by inspection must note the date the inspection was completed, and record any maintenance performed since the last inspection. These records must be kept on-file for five years.

Figure 1. Monthly Drive-By Inspection Form.

Airport: _____

Date: _____

Inspector: _____

Facility*	Section*	Distresses Observed	Maintenance Performed Since Last Inspection

Refer to the “Airport Layout, Dimensions and Pavement Cross-Sections” or “Pavement Branch, Section and Sample Unit Layout” figures in your airport report.

Record Keeping and Data Retrieval

The FAA pavement maintenance management program requires that compiled records be kept for five years. To facilitate record keeping and data retrieval at the State level, the Micro PAVER pavement maintenance management software was implemented. Micro PAVER provides the Oregon Department of Aviation with a method for storing data and generating reports.

Micro PAVER was developed by the U.S. Army Construction Engineering Research Laboratory (USA-CERL). The program uses the guidelines contained in the current edition of ASTM D5340-04 as its basis. The current version, Version 6.1.2, is a Windows-based program that can store pavement condition information, construction and maintenance history information, traffic data, work required information, layer and material property data, and nondestructive testing data. Using the data stored in the Micro PAVER database the user has many capabilities, including: evaluating current condition, predicting future condition, determining maintenance and repair needs, scheduling future inspections, and preparing budget estimates.

The statewide database containing the information for all evaluated airports was updated during this project. Information for each individual airport can easily be extracted from the statewide database. The database allows required records to be stored indefinitely, thus meeting the FAA requirement that records be maintained for a five-year period. Additionally, the software allows data to be retrieved quickly and efficiently.

After data were entered for each airport into the State's Micro PAVER database, the software was used to analyze the stored data and to generate useful reports. The reports described in Table 3 were generated for your airport and are provided as appendices to your individual airport report.

Table 3. Micro PAVER Reports.

Report Name	Report Description
Branch Condition	Lists information about each branch, including: network identification, branch identification, name, use, number of sections, total branch area and the average PCI over the entire branch.
Section Condition	Provides information about each section, including: branch identification and section number, last construction date, surface type, use, rank, section area, last inspection date, age of pavement at last inspection and the PCI at the last inspection.
Network Maintenance	Applies the stored M&R policy to the pavement network. Used to estimate the type and cost of routine maintenance required across the entire network. Information in this report is listed by section.
Re-Inspection	Prints all distress data and the calculated PCI for each sample unit surveyed in a section, and summarizes the section identifying data.

Pavement Condition Prediction

To allow future pavement condition to be predicted, data collected throughout the State were used to generate "performance curves". The curves were developed based on surface type, use and airport functional category. These curves (models) are used to predict future pavement condition by assuming that the behavior of an individual pavement section is similar to the behavior of the pavement sections used to generate the "performance curve". Figures 2 through 11 show the “performance curves” used to model pavements in your airport’s functional category.

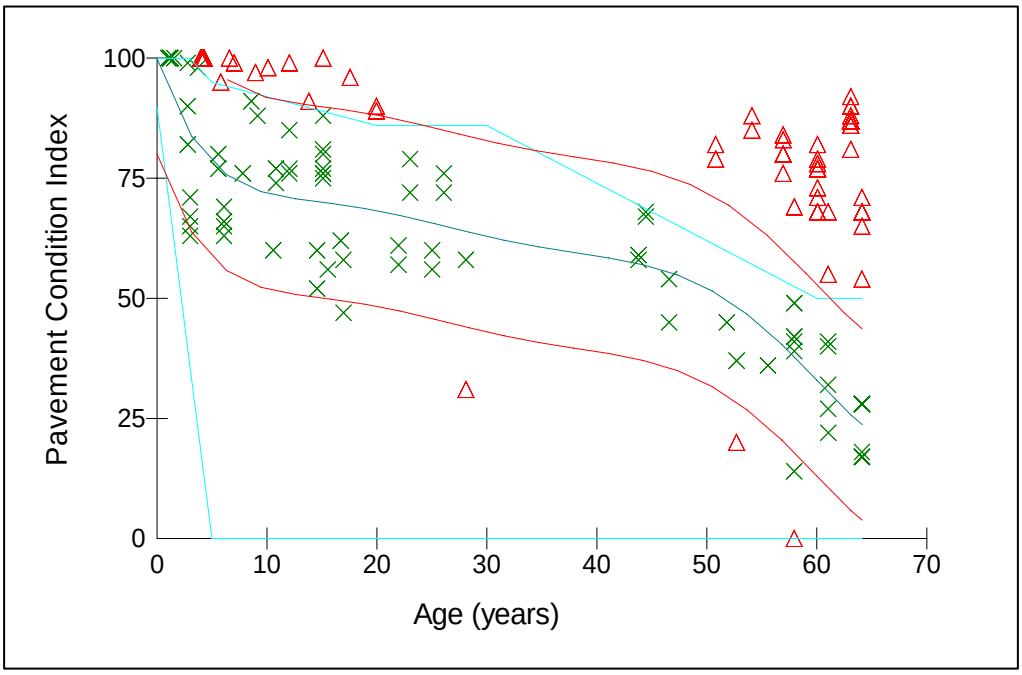


Figure 2. Performance Curve for Category 3 AC Runways.

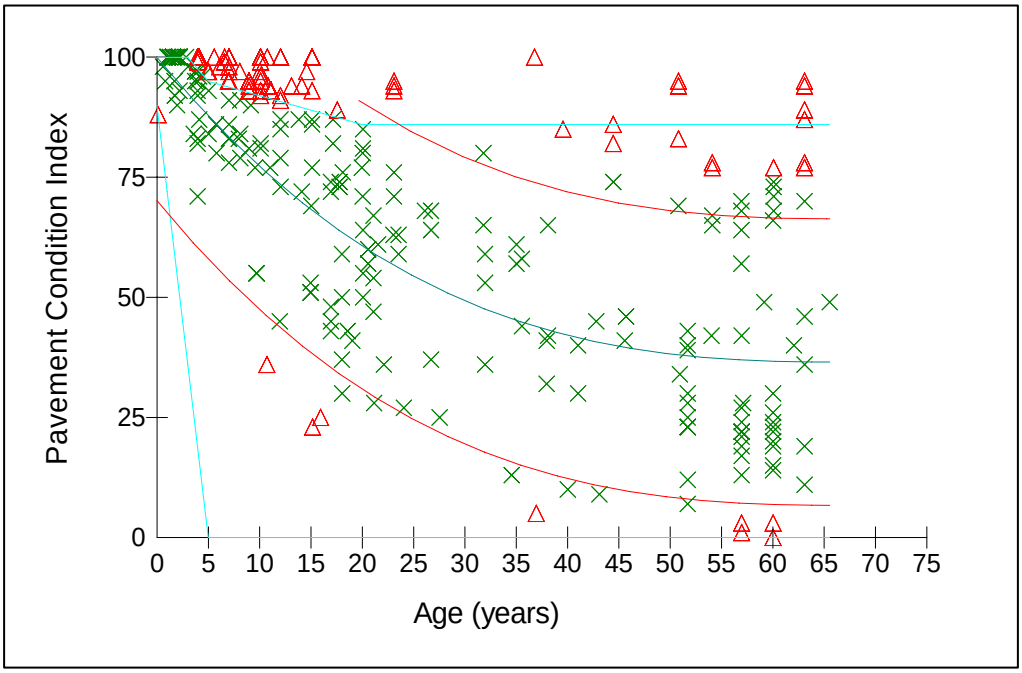


Figure 3. Performance Curve for Category 3 AC Taxiways.

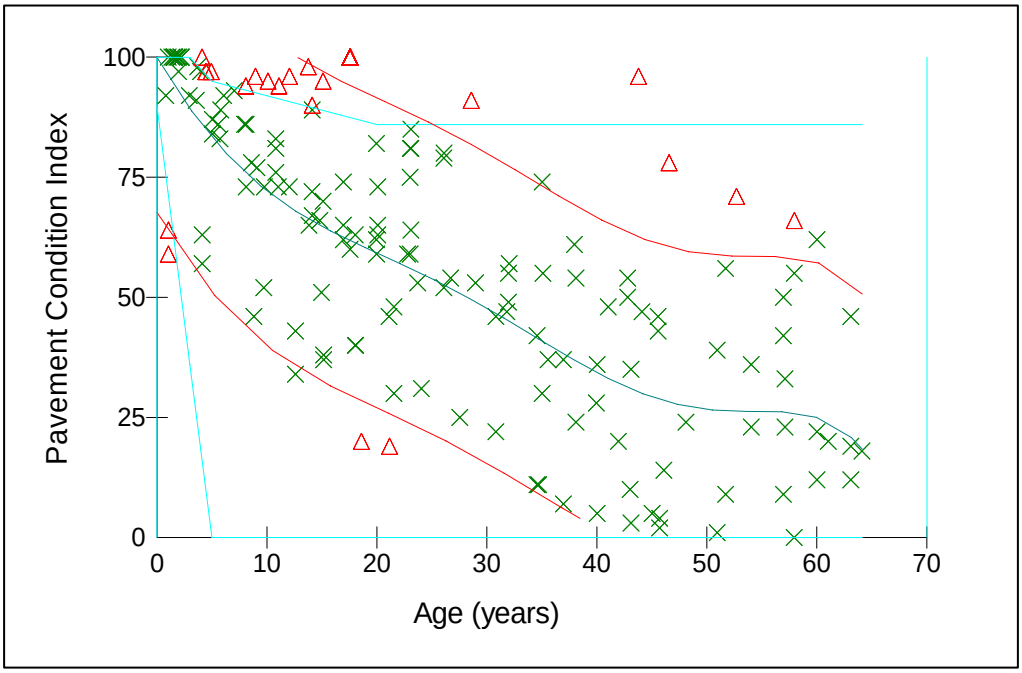


Figure 4. Performance Curve for Category 3 AC Aprons.

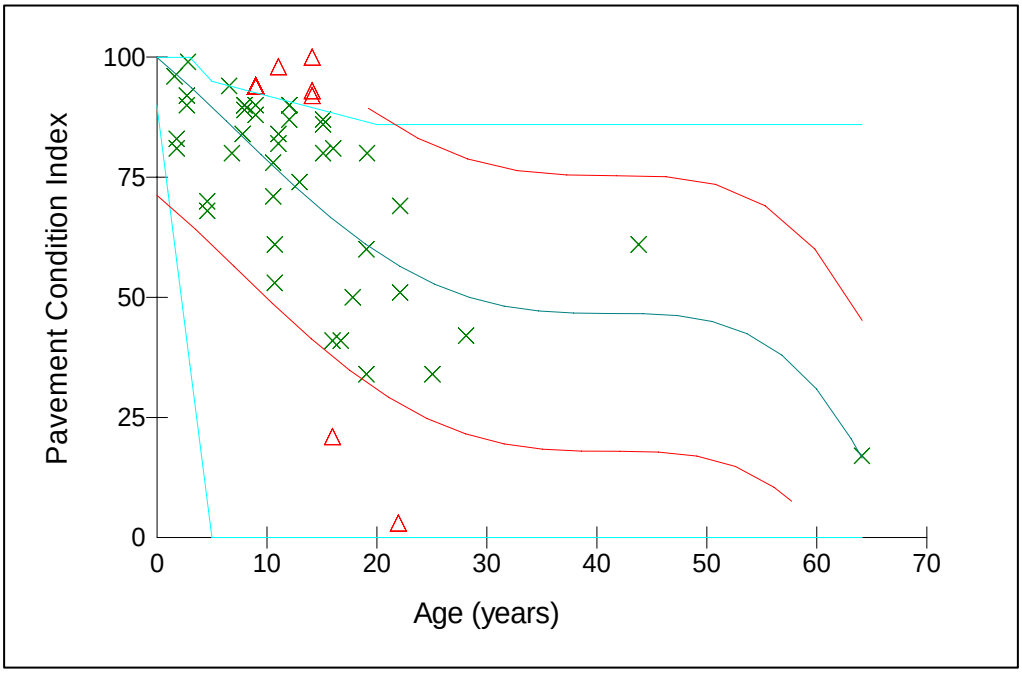


Figure 5. Performance Curve for Category 3 AAC Runways.

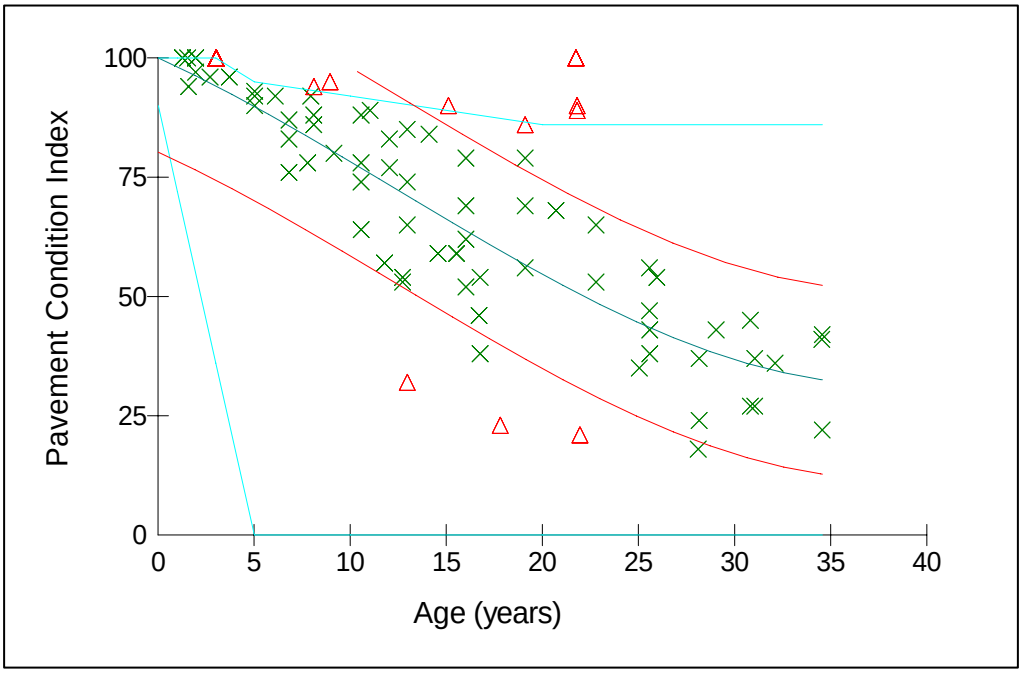


Figure 6. Performance Curve for Category 3 AAC Taxiways.

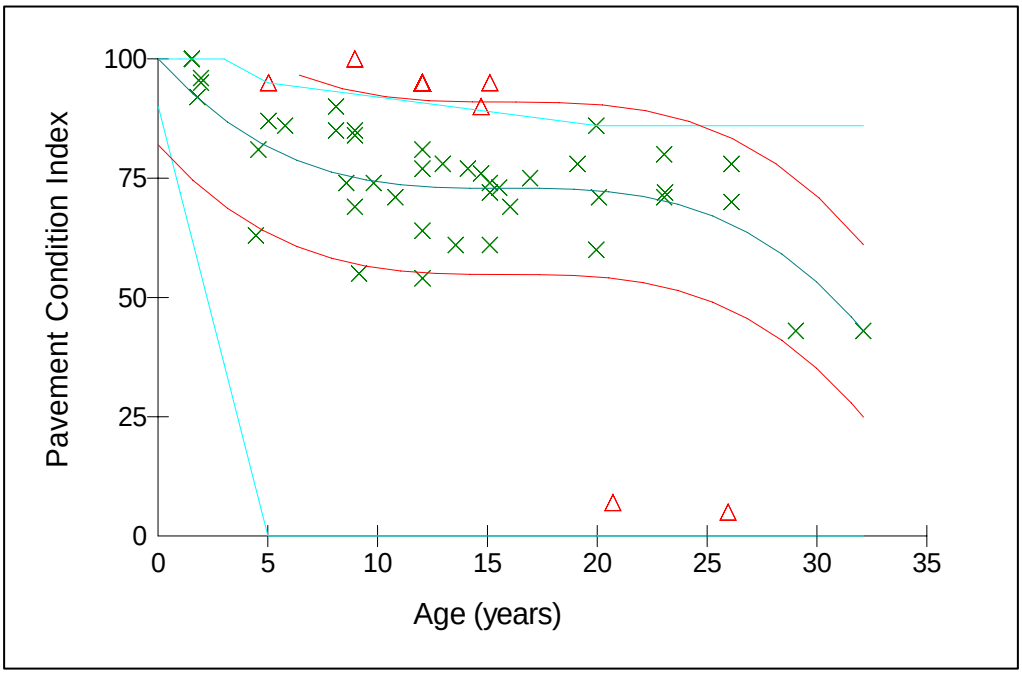


Figure 7. Performance Curve for Category 3 AAC Aprons.

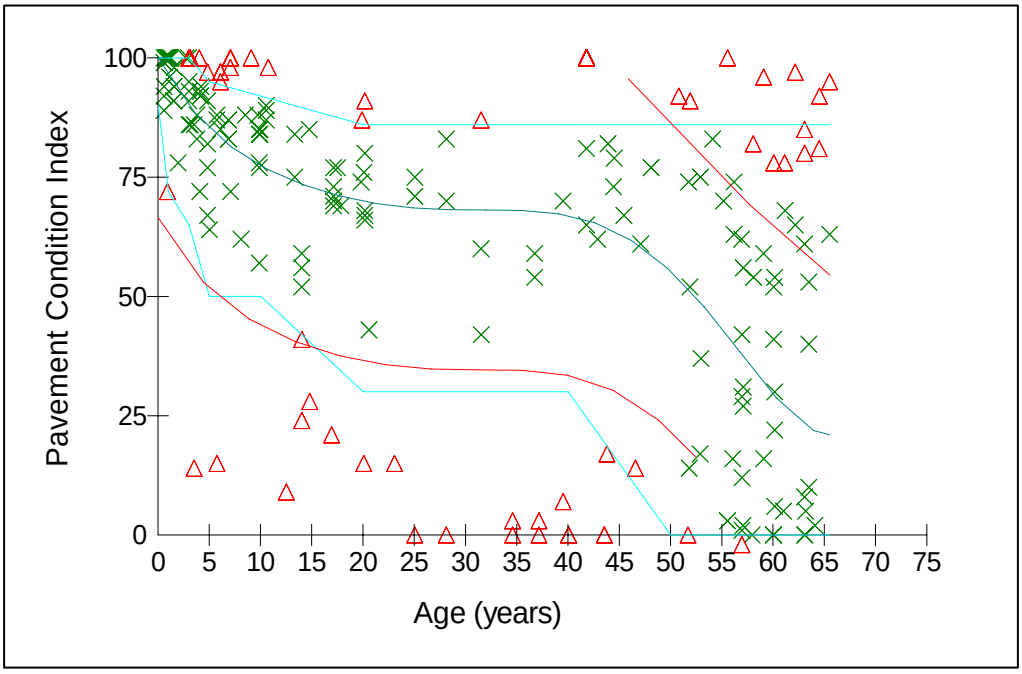


Figure 8. Performance Curve for Category 3 PCC Runways.

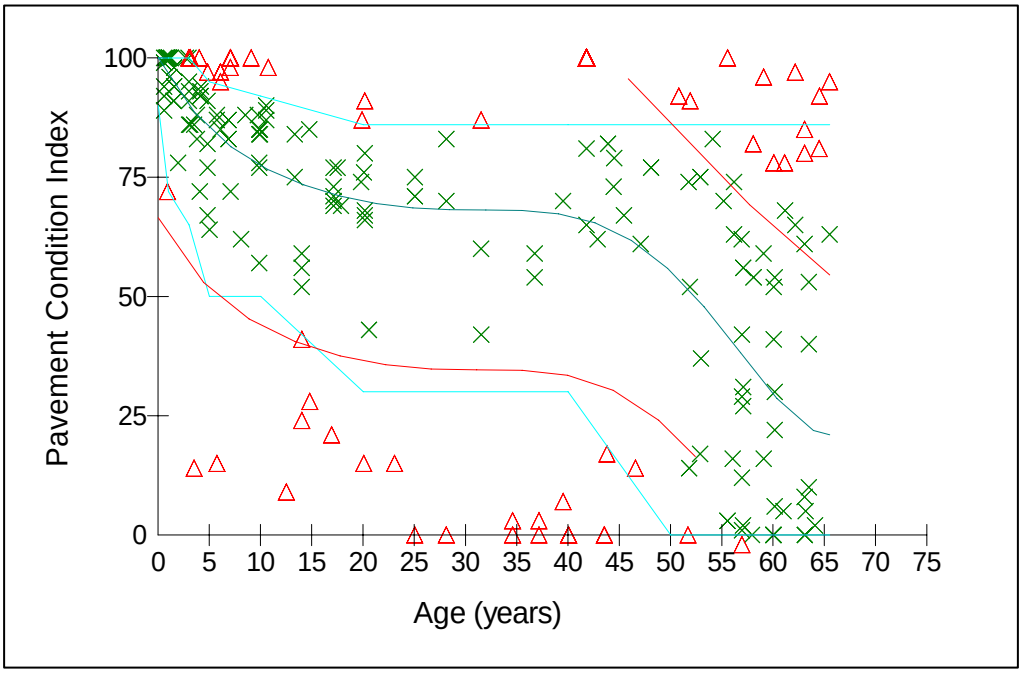


Figure 9. Performance Curve for Category 3 PCC Aprons.

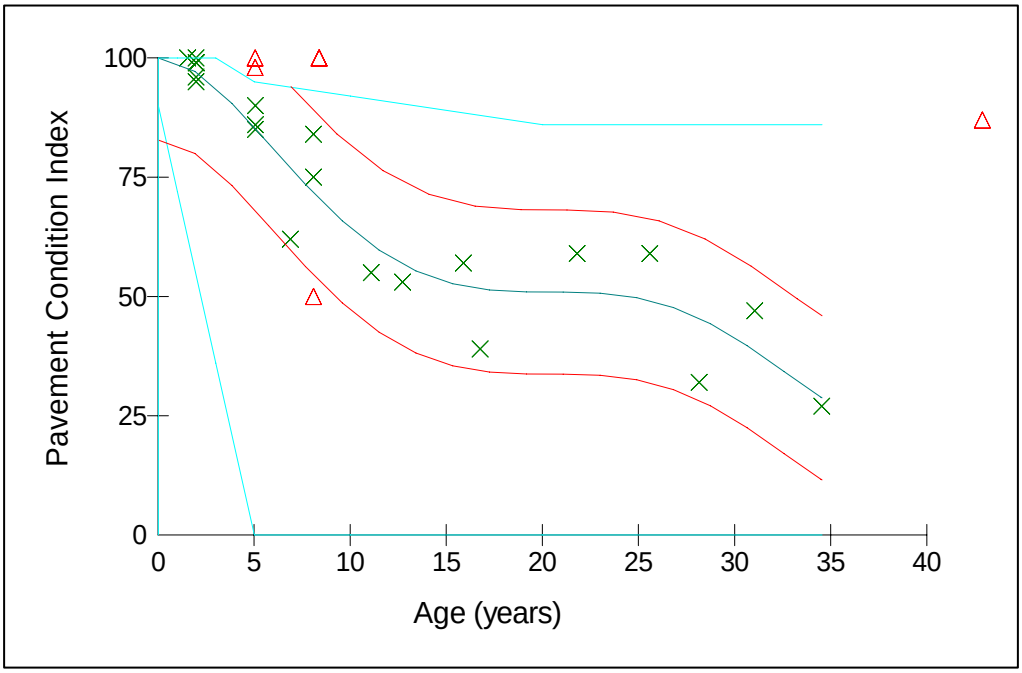


Figure 10. Performance Curve for Category 3 APC Aprons.

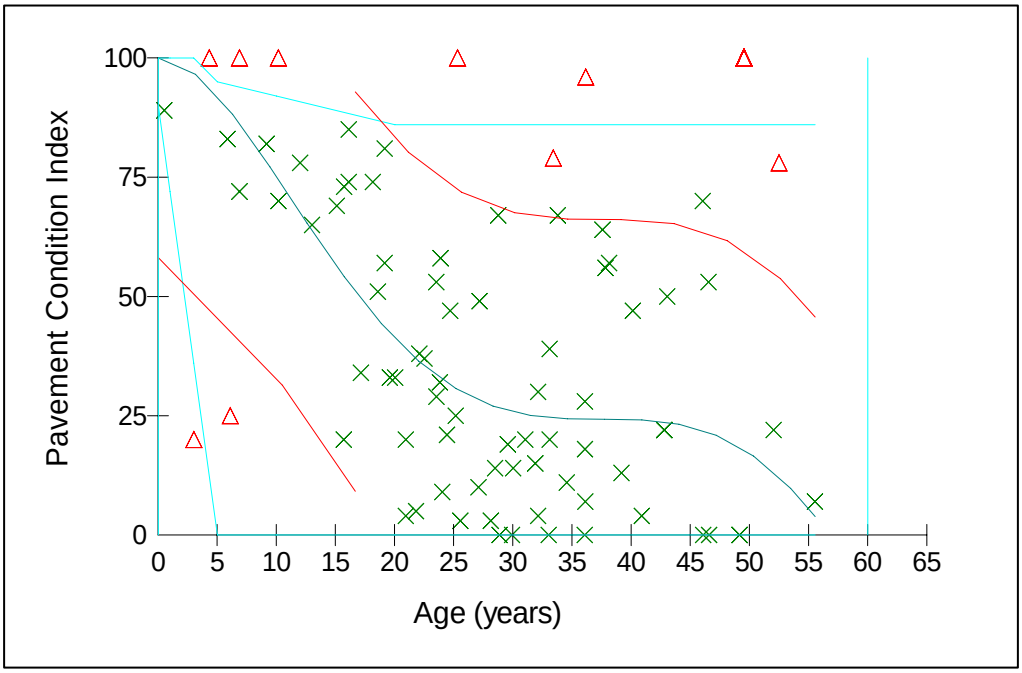


Figure 11. Performance Curve for Category 3 ST Taxiways.

Typical Maintenance Requirements

The Micro PAVER-generated M&R Plan Report was used to identify when pavement maintenance and rehabilitation projects are required for a given pavement section, and what repair type is most appropriate. The repair strategies evaluated were:

- Reconstruction (pavements with Pavement Condition Indices less than 40).
- Overlay flexible pavements (runways with Pavement Condition Indices between 40 and 60, taxiways between 40 and 55, aprons between 40 and 50, and pavements exhibiting significant load-related distress with PCIs above the critical PCI).
- Global maintenance (fog seal, slurry seal or thin (2 inch) overlay) applied on a user-specified interval (6 years for a fog seal, 6 years for a slurry seal, and 10 years for an overlay). The global maintenance type recommended is based on the distress types observed in the section during the visual inspections.
- Routine maintenance.

The M&R Plan Report was generated for a 5-year period beginning in June 2010. Included in the work plan are estimated costs for each recommended project. The costs are estimated by applying a unit cost for the recommended activity to the square foot area of the pavement section. The unit costs include adjustments for engineering and administration, mobilization, restriping and contingency. The unit costs used to develop the work plan activities are shown in Table 4. The recommended work plan for your airport is provided in your attached individual airport report.

Table 4. Unit Costs for the Various Work Plan Activities.

Activity	Unit	Unit Cost
Fog Seal	SF	$0.12
Slurry Seal	SF	$0.23
2” Asphalt Concrete Overlay	SF	$1.00
2” AC Mill and Replace	SF	$1.50
Reconstruction	SF	$2.28 - $4.14
Reseal PCC Joints w/ Hot Pour Sealant	LF	$2.00

Your Airport Report

GRANTS PASS AIRPORT

This report describes how your Pavement Maintenance Management Program (PMMP) was developed. Your Program was developed as part of the Oregon Continuous Aviation System Plan sponsored in part by the Oregon Department of Aviation and the Federal Aviation Administration (FAA). The information and data contained in this report ensures you are in compliance with the requirements of FAA Grant Assurance Number 11 which states that any airport requesting federal funds for pavement improvement projects must have implemented a pavement maintenance management program.

DATA COLLECTION

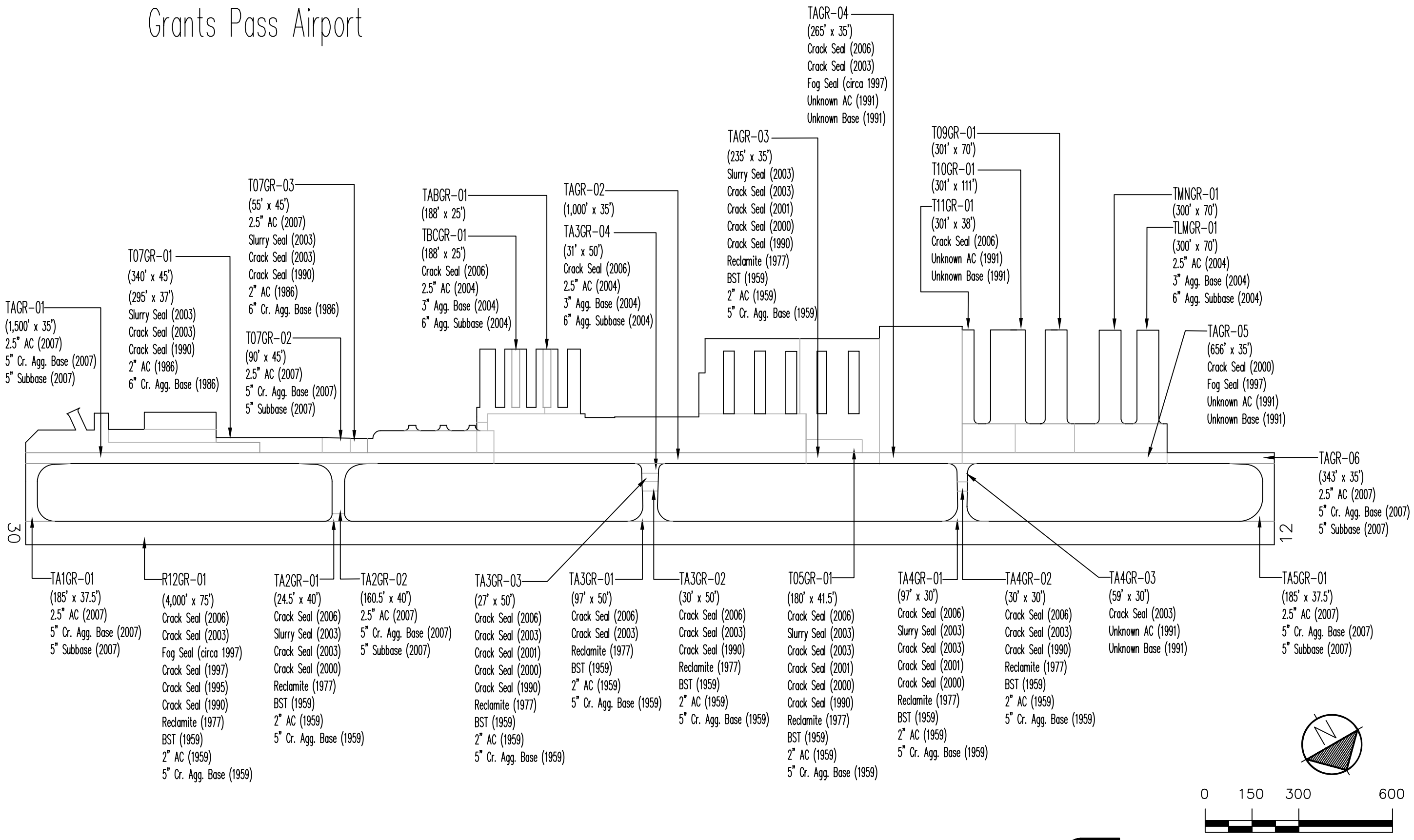
To determine how your pavements were constructed and their age, a records review was conducted. Figure GR-1 shows the records review results. This figure identifies pavement boundaries, dimensions, pavement layer types, thicknesses and dates of construction. The most recent construction date for each pavement can also be found in the Section Condition Report in Appendix 2. Figure GR-1 and the information contained in Appendices 1, 2 and 4 ensure that your airport complies with the "pavement inventory" requirement of FAA's PMMP guidelines.

The pavements at your airport were divided into branches, sections and sample units in accordance with the methodology outlined in the current edition of ASTM D5430, *Standard Test Method for Airport Condition Index Surveys*. The branches, sections and sample units established at your airport are shown in Figure GR-2. A Branch Condition Report showing all branches, their associated areas, and their area-weighted average condition is provided in Appendix 1. Additionally, the Appendix 2 Section Condition Report provides information used to define each branch and section in the Micro PAVER database.

Using the branch, section and sample unit divisions established, a visual condition survey was conducted at Grants Pass Airport on March 20, 2009. During the inspection, pavement defects were identified and measured in accordance with the methodology outlined in ASTM D5430. This inspection ensures your airport complies with the "detailed inspection" requirement of FAA's PMMP guidelines. After collection, the data were entered into the Micro PAVER software for analysis. These data are reproduced in the Re-Inspection Report attached as Appendix 4.

The Micro PAVER database updated during this project ensures your airport complies with the "record keeping and information retrieval" requirements of FAA's PMMP guidelines.

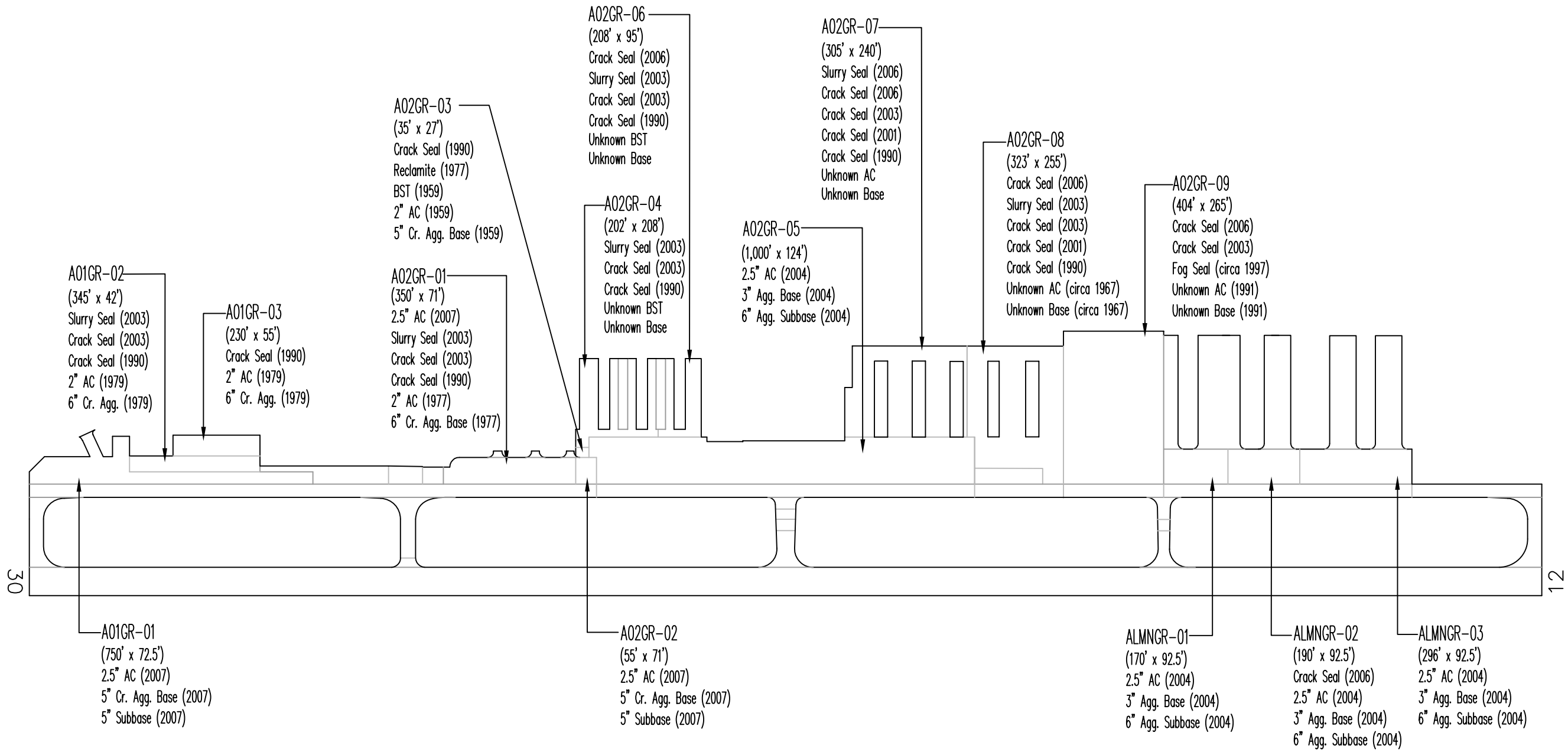
Figure GR-1A. Airport Layout, Dimensions and Pavement Cross-Sections - Runway and Taxiways.
Grants Pass Airport



Drawing Date: April 2009

PAVEMENT CONSULTANTS INC.

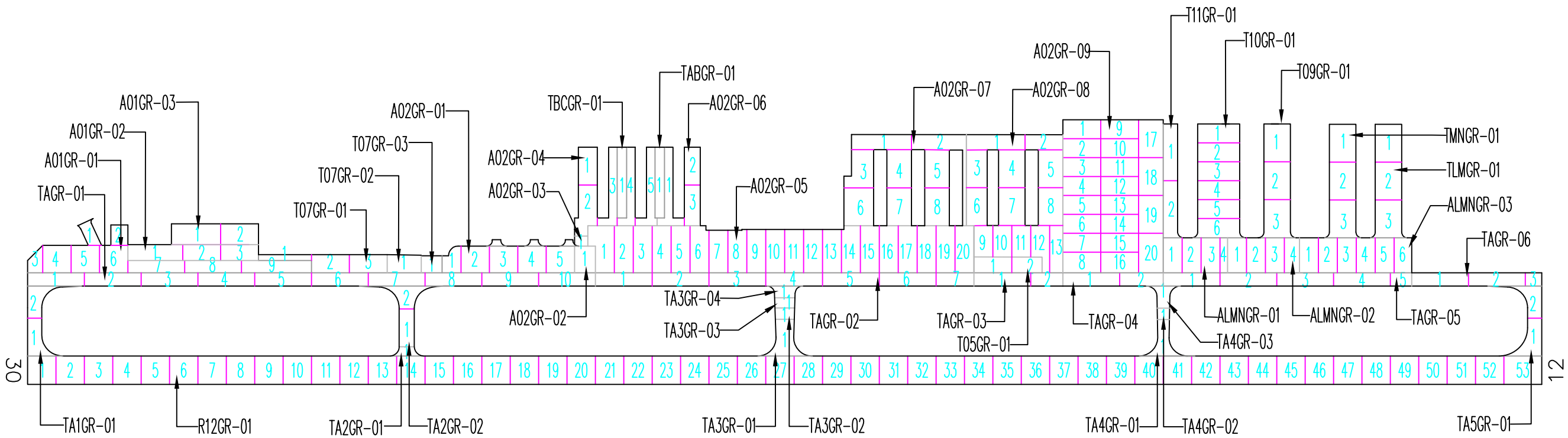
Figure GR-1B. Airport Layout, Dimensions and Pavement Cross-Sections - Aprons. Grants Pass Airport

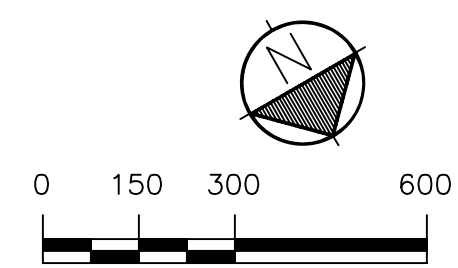


Drawing Date: April 2009

PAVEMENT CONSULTANTS INC.

Figure GR-2. Pavement Branch, Section and Sample Unit Layout. Grants Pass Airport





Drawing Date: April 2009

PAVEMENT CONSULTANTS INC.

RESULTS

Using the data collected during the visual inspection, the Micro PAVER software was used to calculate an area-weighted average Pavement Condition Index (PCI) for each pavement section inspected using the sample units evaluated. Using each section‘s PCI, a Pavement Condition Rating (PCR) was assigned. The PCIs measured during this inspection are shown in Table 1. The table also contains PCIs from past inspections as well as projected PCIs for 2015 and 2020. The projections were based on pavement deterioration models developed by Micro PAVER using the inspection data from other pavements in the same airport category as your airport, and with the same surface type and use.

The Branch Condition Report in Appendix 1 summarizes current pavement condition by branch while the Section Condition Report in Appendix 2 lists pavement condition by section. The current PCR is shown graphically in Figure GR-3.

Table 1. Past, Present and Future Pavement Condition Indices.

Branch	Section	Inspections			Forecast	
		2002	2005	2009	2015	2020
A01GR	01	-	-	100	80	70
	02	37	83	68	61	55
	03	-	79	69	61	56
A02GR	01	53	73	100	79	74
	02	-	100	100	80	70
	03	-	-	100	41	38
	04	52	64	64	39	17
	05	41	100	100	80	70
	06	13	64	59	32	9
	07	43	74	63	56	51
	08	61	74	57	50	43
	09	95	99	83	70	63
ALMNGR	01	-	100	100	80	70
	02	-	-	74	65	59
	03	-	-	100	80	70
R12GR	01	75	68	63	60	58
T05GR	01	50	86	98	80	62
T07GR	01	53	86	66	57	52
	02	-	-	100	85	75
	03	-	-	100	85	75
T09GR	01	93	87	85	73	64
T10GR	01	87	86	80	69	61
T11GR	01	-	86	81	69	62
TA1GR	01	-	-	100	85	75
TA2GR	01	30	81	72	50	36
	02	-	-	100	85	75
TA3GR	01	22	76	72	50	36
	02	56	66	59	40	30
	03	21	55	64	44	32

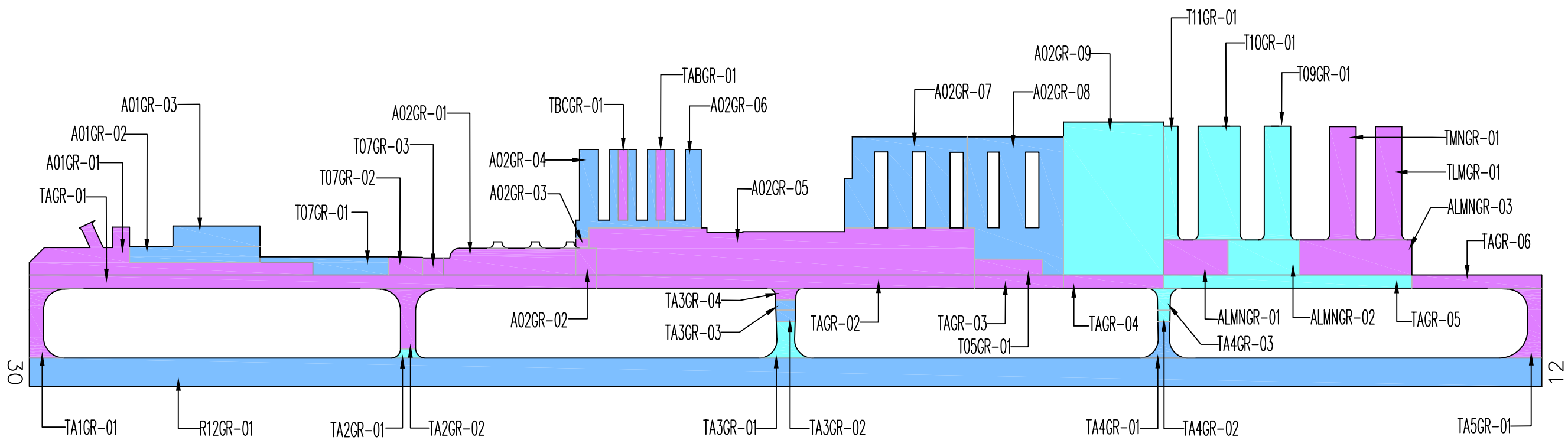
Table 1. Past, Present and Future Pavement Condition Indices –continued.

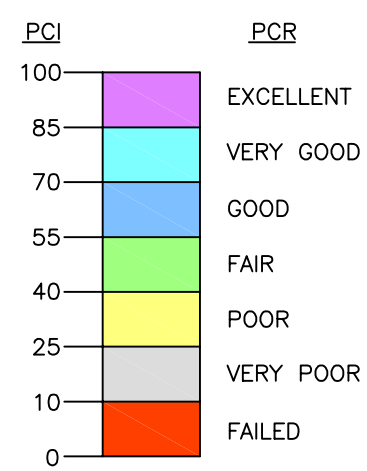
Branch	Section	Inspections			Forecast	
		2002	2005	2009	2015	2020
TA3GR	04	-	100	100	85	75
TA4GR	01	31	83	67	46	34
	02	-	-	71	49	36
	03	94	100	83	71	63
TA5GR	01	-	-	100	85	75
TABGR	01	-	100	100	85	75
TAGR	01	-	-	100	85	75
	02	-	100	100	85	75
	03	-	-	89	67	49
	04	-	-	89	76	67
	05	98	100	81	69	62
	06	-	-	100	85	75
TBCGR	01	-	100	100	85	75
TLMGR	01	-	100	100	85	75
TMNGR	01	-	100	100	85	75

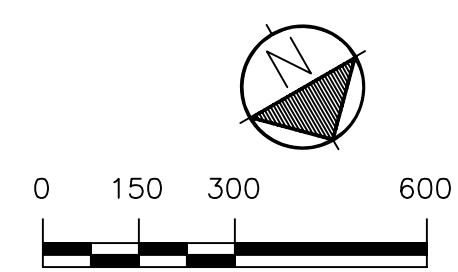
Section PCIs at Grants Pass Airport range from a low of 57 (a PCR of “Good”) to a high of 100 (a PCR of “Excellent”). The area-weighted average PCI for all airport pavements is 80, corresponding to an overall PCR of “Very Good”. Figure GR-4 shows how much pavement area is associated with each Pavement Condition Rating category and also shows pavement condition distribution from the inspections conducted in 2002 and 2005. The primary distresses observed during the inspection were: block cracking, weather/raveling, longitudinal and transverse cracking, and patching, with isolated occurrences of oil spillage, alligator cracking, and depression.

A graphical representation of the projected PCIs listed in Table 1 is shown in Figure GR-5.

Figure GR-3. Pavement Condition in March 2009.
Grants Pass Airport



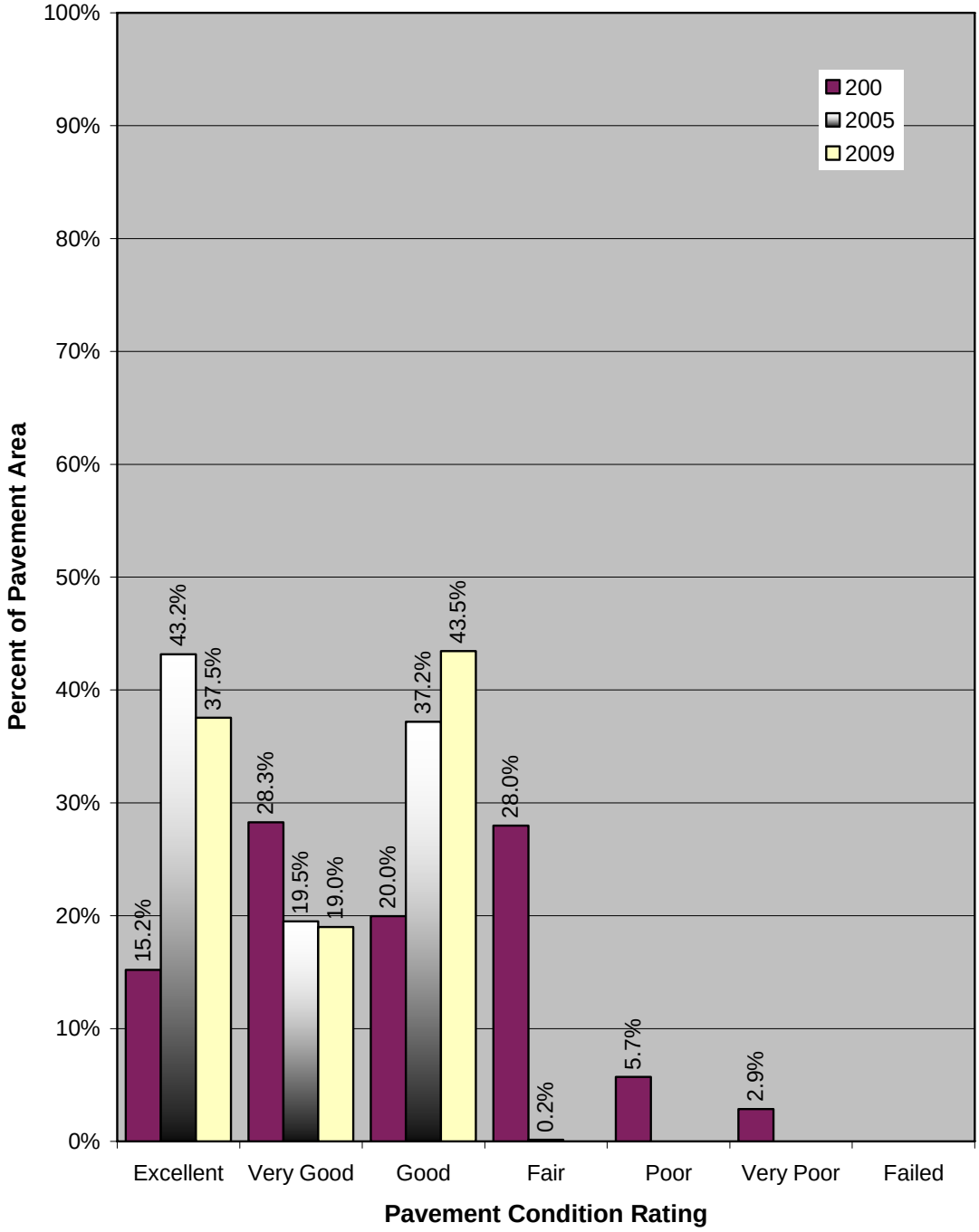




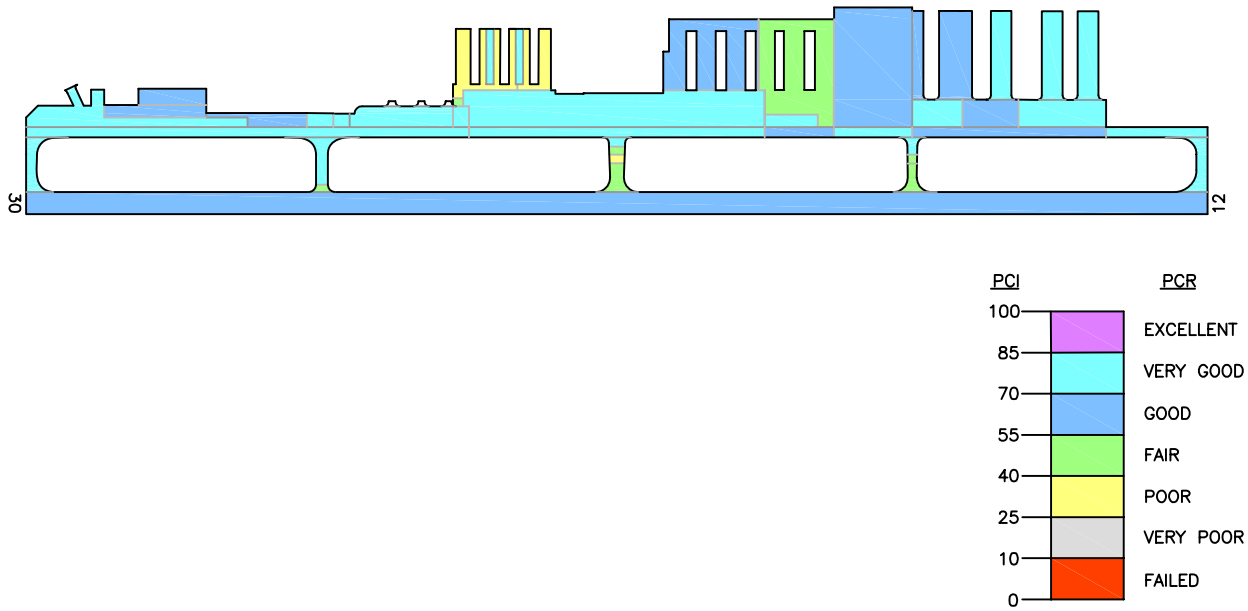
Drawing Date: April 2009

PAVEMENT CONSULTANTS INC.

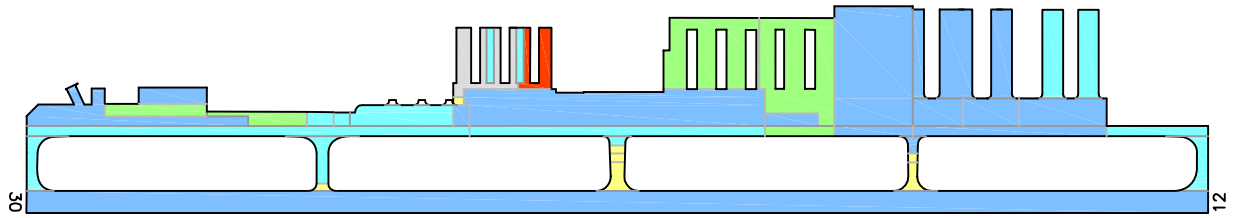
Figure GR-4. Distribution of Pavement Condition
Grants Pass Airport



Predicted Condition in 2015.



Predicted Condition in 2020.



Drawing Date: April 2009

PAVEMENT CONSULTANTS INC.

Figure GR-5. Future Pavement Condition.

RECOMMENDATIONS

Data collected during the visual condition survey were used by the Micro PAVER software to generate the Network Maintenance Report contained in Appendix 3. This report identifies, for each pavement section, the recommended localized maintenance activities (i.e.-crack sealing, patching) that should be completed to repair the defects observed during the visual inspection. The repair quantities identified in the report were extrapolated to cover the entire pavement section, based on the inspected sample units. If the repair activities identified are completed, the pavement deterioration rate will be slowed.

The recommended localized maintenance activities to be applied are selected by the Micro PAVER software based on a Distress Maintenance Policy established for the Oregon airport system. The report results indicate that, over your entire airport, the following quantities of localized maintenance are needed:

- 131,705 linear feet of asphalt concrete crack sealing.
- 10square feet of asphalt concrete shallow patching.
- 100 square feet of asphalt concrete deep patching.

The Micro PAVER software can also identify and schedule recommended global maintenance activities (applied over an entire section) such as fog seals, slurry seals and other surface treatments, as well as major rehabilitation activities such as asphalt concrete overlays and complete reconstruction. Micro PAVER schedules global maintenance on a user-defined interval. To schedule major rehabilitation Micro PAVER uses pavement deterioration models developed during this project. These models are used to estimate future pavement condition and to schedule rehabilitation based on a trigger PCI.

During this project a 5-year program outlining recommended global maintenance and rehabilitation was developed. The program begins in the year 2010 to allow time for project development. These recommendations are presented in Table 2, which identifies the pavement section requiring rehabilitation, the year the action should be completed, the type of action, and an associated cost. This information is also presented graphically in Figure GR-6.

Table 2. Five-Year Global Maintenance and Rehabilitation Plan.

Year	Branch	Section	Action	Area (sf)	Unit Cost ($/sf)	Total Cost ($)
2010	A01GR	02	Slurry Seal	14,440	$0.23	$3,321
	A01GR	03	Slurry Seal	12,650	$0.23	$2,910
	A02GR	03	Fog Seal	912	$0.12	$109
	A02GR	04	Slurry Seal	27,411	$0.23	$6,305
	A02GR	05	Fog Seal	121,555	$0.12	$14,587
	A02GR	06	Slurry Seal	14,394	$0.23	$3,311
	A02GR	07	Slurry Seal	54,626	$0.23	$12,564

Table 2. Five-Year Global Maintenance and Rehabilitation Plan – continued.

Year	Branch	Section	Action	Area (sf)	Unit Cost ($/sf)	Total Cost ($)
2010	A02GR	08	Slurry Seal	70,118	$0.23	$16,127
	A02GR	09	Slurry Seal	107,160	$0.23	$24,647
	ALMNGR	01	Slurry Seal	15,706	$0.23	$3,612
	ALMNGR	02	Slurry Seal	17,535	$0.23	$4,033
	ALMNGR	03	Fog Seal	27,346	$0.12	$3,282
	R12GR	01	Slurry Seal	300,000	$0.23	$69,000
	T05GR	01	Slurry Seal	7,483	$0.23	$1,721
	T07GR	01	Slurry Seal	11,697	$0.23	$2,690
	T09GR	01	Slurry Seal	21,174	$0.23	$4,870
	T10GR	01	Slurry Seal	33,508	$0.23	$7,707
	T11GR	01	Slurry Seal	11,486	$0.23	$2,642
	TA2GR	01	2" AC Overlay	1,238	$1.00	$1,238
	TA3GR	01	2" AC Overlay	5,571	$1.00	$5,571
	TA3GR	02	2" AC Overlay	1,525	$1.00	$1,525
	TA3GR	03	2" AC Overlay	1,424	$1.00	$1,424
	TA3GR	04	Fog Seal	1,868	$0.12	$224
	TA4GR	01	Slurry Seal	3,943	$0.23	$907
	TA4GR	02	Slurry Seal	974	$0.23	$224
	TA4GR	03	Slurry Seal	2,316	$0.23	$533
	TABGR	01	Slurry Seal	4,674	$0.23	$1,075
	TAGR	02	Fog Seal	35,000	$0.12	$4,200
	TAGR	03	Slurry Seal	8,225	$0.23	$1,892
	TAGR	04	Slurry Seal	9,275	$0.23	$2,133
	TAGR	05	Slurry Seal	22,977	$0.23	$5,285
	TBCGR	01	Slurry Seal	4,675	$0.23	$1,075
	TLMGR	01	Fog Seal	21,097	$0.12	$2,532
	TMNGR	01	Fog Seal	21,093	$0.12	$2,531
					2010 Total	$215,805
2013	A01GR	01	Fog Seal	38,729	$0.12	$4,647
	A02GR	01	Fog Seal	24,105	$0.12	$2,893
	A02GR	02	Fog Seal	3,869	$0.12	$464
	T07GR	02	Fog Seal	4,226	$0.12	$507
	T07GR	03	Fog Seal	2,480	$0.12	$298
	TA1GR	01	Fog Seal	8,436	$0.12	$1,012
	TA2GR	02	Fog Seal	8,126	$0.12	$975
	TA5GR	01	Fog Seal	8,998	$0.12	$1,080
	TAGR	01	Fog Seal	52,500	$0.12	$6,300
	TAGR	06	Fog Seal	12,018	$0.12	$1,442
					2013 Total	$19,618
2014	A02GR	03	2" AC Overlay	912	$1.00	$912
					2014 Total	$912
					TOTAL	$236,336

If the global maintenance and/or rehabilitation activities recommended in Table 2 are

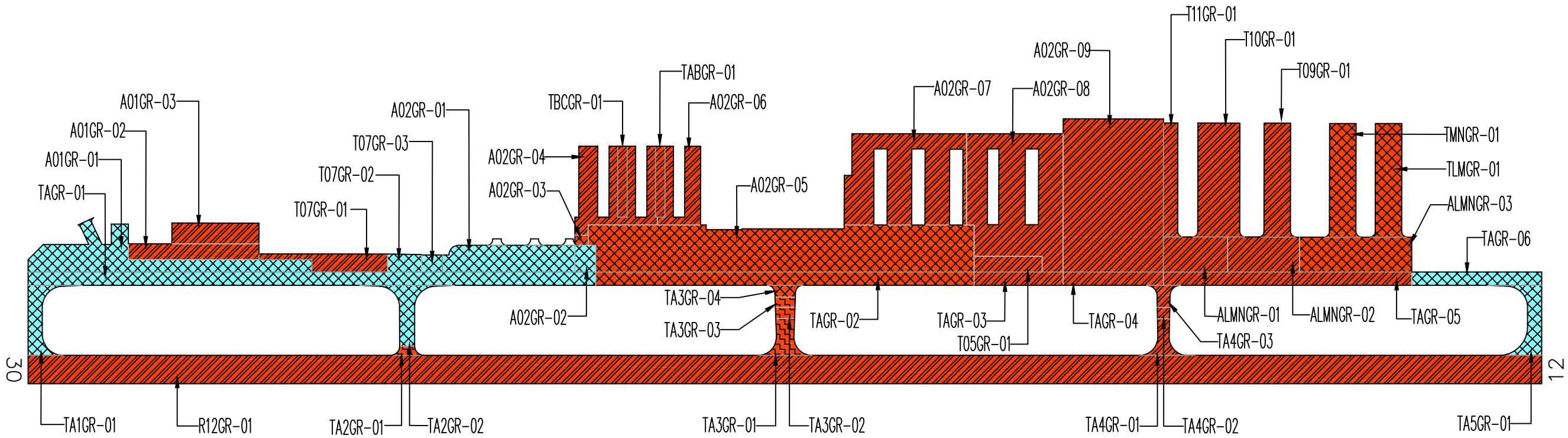
not completed, the localized maintenance activities identified in the Network Maintenance Report (Appendix 3) for that section should be done. Additionally, for those sections not listed in Table 2 as requiring global maintenance or rehabilitation, the localized maintenance activities outlined in the Network Maintenance Report should be completed. By completing the localized maintenance activities, pavement condition is improved, life is extended, deterioration is slowed and the length of time until major repair or rehabilitation is required is increased.

INSPECTION SCHEDULE

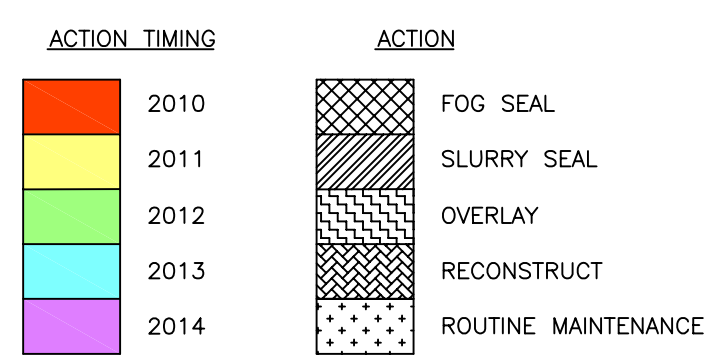
To comply with the inspection schedule requirement of FAA Grant Assurance Number 11, a detailed visual inspection should be conducted every 3 years using the methodology described in ASTM D5430. The next scheduled detailed visual inspection should take place during 2012.

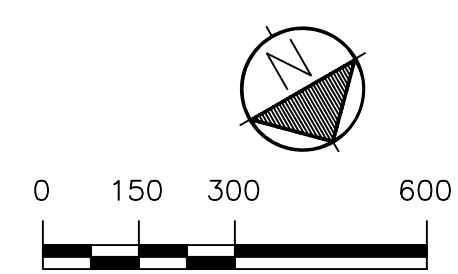
In addition, the FAA requires that a drive-by inspection be conducted monthly to detect unforeseen changes in pavement condition. The results of each drive-by inspection should be recorded and kept in a file. At a minimum, the date of the inspection and an indication of any maintenance performed since the last drive-by inspection should be recorded.

Figure GR-6. Five-Year Pavement Management Plan.
Grants Pass Airport



Note: Section A02GR-03 needs to be overlayed in 2014.





PAVEMENT CONSULTANTS INC.

Drawing Date: April 2009

Appendix 1
Branch Condition Report

Date: 6 /1/2009

Branch Condition Report

Pavement Database: NetworkID: Grants

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
A01GR (Apron 01 Grants Pass)	3	1,325.00	56.50	65,819.00	APRON	79.00	14.85	87.02
A02GR (Apron 02 Grants Pass)	9	2,881.00	150.67	424,150.00	APRON	80.67	18.62	80.11
ALMNGR (LMN Apron Grants Pass)	3	656.00	92.50	60,587.00	APRON	91.33	12.26	92.48
R12GR (Runway 12/30 Grants Pass)	1	4,000.00	75.00	300,000.00	RUNWAY	63.00	0.00	63.00
T05GR (Taxiway 05 Grants Pass)	1	180.00	41.50	7,483.00	TAXIWAY	98.00	0.00	98.00
T07GR (Taxiway 07 Grants Pass)	3	485.00	45.00	18,403.00	TAXIWAY	88.67	16.03	78.39
T09GR (Taxiway 09 Grants Pass)	1	301.00	70.00	21,174.00	TAXIWAY	85.00	0.00	85.00
T10GR (Taxiway 10 Grants Pass)	1	301.00	111.00	33,508.00	TAXIWAY	80.00	0.00	80.00
T11GR (Taxiway 11 Grants Pass)	1	301.00	38.00	11,486.00	TAXIWAY	81.00	0.00	81.00
TA1GR (Taxiway A1 Grants Pass)	1	185.00	37.50	8,436.00	TAXIWAY	100.00	0.00	100.00
TA2GR (Taxiway A2 Grants Pass)	2	185.00	40.00	9,364.00	TAXIWAY	86.00	14.00	96.30
TA3GR (Taxiway A3 Grants Pass)	4	185.00	50.00	10,388.00	TAXIWAY	73.75	15.85	74.03
TA4GR (Taxiway A4 Grants Pass)	3	186.00	30.00	7,233.00	TAXIWAY	73.67	6.80	72.66
TA5GR (Taxiway A5 Grants Pass)	1	185.00	37.50	8,998.00	TAXIWAY	100.00	0.00	100.00
TABGR (Taxiway AB Grants Pass)	1	188.00	25.00	4,674.00	TAXIWAY	100.00	0.00	100.00
TAGR (Taxiway A Grants Pass)	6	3,999.00	35.00	139,995.00	TAXIWAY	93.17	7.34	95.51

Date: 6 /1/2009

Branch Condition Report

Pavement Database: NetworkID: Grants

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
TBCGR (Taxiway BC Grants Pass)	1	188.00	25.00	4,675.00	TAXIWAY	100.00	0.00	100.00
TLMGR (Taxiway LM Grants Pass)	1	300.00	70.00	21,097.00	TAXIWAY	100.00	0.00	100.00
TMNGR (Taxiway MN Grants Pass)	1	300.00	70.00	21,093.00	TAXIWAY	100.00	0.00	100.00

Branch Condition Report

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	15	550,556.00	82.47	17.39	82.30
RUNWAY	1	300,000.00	63.00	0.00	63.00
TAXIWAY	28	328,007.00	87.75	13.77	91.62
All	44	1,178,563.00	85.39	15.54	79.98

Appendix 2
Section Condition Report

Date: 6 /1/2009

Section Condition Report

Pavement Database: *NetworkID: Grants*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
A01GR (Apron 01 Grants Pass)	01	09/03/2007	AC	APRON	S	0	38,729.00	03/20/2009	2	100.00
A01GR (Apron 01 Grants Pass)	02	09/01/1979	AC	APRON	S	0	14,440.00	03/20/2009	30	68.00
A01GR (Apron 01 Grants Pass)	03	09/02/1979	AC	APRON	S	0	12,650.00	03/20/2009	30	69.00
A02GR (Apron 02 Grants Pass)	01	09/01/2007	AAC	APRON	S	0	24,105.00	03/20/2009	2	100.00
A02GR (Apron 02 Grants Pass)	02	09/03/2007	AC	APRON	S	0	3,869.00	03/20/2009	2	100.00
A02GR (Apron 02 Grants Pass)	03	09/02/1959	ST	APRON	S	0	912.00	03/20/2009	50	100.00
A02GR (Apron 02 Grants Pass)	04	09/01/1960	AAC	APRON	S	0	27,411.00	03/20/2009	49	64.00
A02GR (Apron 02 Grants Pass)	05	08/01/2004	AC	APRON	P	0	121,555.00	03/20/2009	5	100.00
A02GR (Apron 02 Grants Pass)	06	09/02/1960	AAC	APRON	S	0	14,394.00	03/20/2009	49	59.00
A02GR (Apron 02 Grants Pass)	07	09/01/1960	AC	APRON	S	0	54,626.00	03/20/2009	49	63.00
A02GR (Apron 02 Grants Pass)	08	09/01/1967	AC	APRON	S	0	70,118.00	03/20/2009	42	57.00
A02GR (Apron 02 Grants Pass)	09	09/02/1991	AC	APRON	S	0	107,160.00	03/20/2009	18	83.00
ALMNGR (LMN Apron Grants Pass)	01	08/03/2004	AC	APRON	P	0	15,706.00	03/20/2009	5	100.00
ALMNGR (LMN Apron Grants Pass)	02	08/03/2004	AC	APRON	P	0	17,535.00	03/20/2009	5	74.00
ALMNGR (LMN Apron Grants Pass)	03	08/03/2004	AC	APRON	P	0	27,346.00	03/20/2009	5	100.00
R12GR (Runway 12/30 Grants Pass)	01	09/01/1959	X	RUNWAY	P	0	300,000.00	03/20/2009	50	63.00
T05GR (Taxiway 05 Grants Pass)	01	09/01/1959	ST	TAXIWAY	P	0	7,483.00	03/20/2009	50	98.00
T07GR (Taxiway 07 Grants Pass)	01	09/01/1986	AC	TAXIWAY	S	0	11,697.00	03/20/2009	23	66.00
T07GR (Taxiway 07 Grants Pass)	02	09/03/2007	AC	TAXIWAY	S	0	4,226.00	03/20/2009	2	100.00
T07GR (Taxiway 07 Grants Pass)	03	09/01/2007	AC	TAXIWAY	S	0	2,480.00	03/20/2009	2	100.00
T09GR (Taxiway 09 Grants Pass)	01	09/01/1991	AC	TAXIWAY	S	0	21,174.00	03/20/2009	18	85.00
T10GR (Taxiway 10 Grants Pass)	01	09/01/1991	AC	TAXIWAY	S	0	33,508.00	03/20/2009	18	80.00
T11GR (Taxiway 11 Grants Pass)	01	09/01/1991	AC	TAXIWAY	S	0	11,486.00	03/20/2009	18	81.00
TA1GR (Taxiway A1 Grants Pass)	01	09/03/2007	AC	TAXIWAY	P	0	8,436.00	03/20/2009	2	100.00
TA2GR (Taxiway A2 Grants Pass)	01	09/01/1959	ST	TAXIWAY	P	0	1,238.00	03/20/2009	50	72.00

Date: 6 /1/2009

Section Condition Report

Pavement Database: *NetworkID: Grants*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
TA2GR (Taxiway A2 Grants Pass)	02	09/03/2007	AC	TAXIWAY	P	0	8,126.00	03/20/2009	2	100.00
TA3GR (Taxiway A3 Grants Pass)	01	09/01/1959	ST	TAXIWAY	P	0	5,571.00	03/20/2009	50	72.00
TA3GR (Taxiway A3 Grants Pass)	02	09/01/1959	ST	TAXIWAY	P	0	1,525.00	03/20/2009	50	59.00
TA3GR (Taxiway A3 Grants Pass)	03	09/02/1959	ST	TAXIWAY	P	0	1,424.00	03/20/2009	50	64.00
TA3GR (Taxiway A3 Grants Pass)	04	08/03/2004	AC	TAXIWAY	P	0	1,868.00	03/20/2009	5	100.00
TA4GR (Taxiway A4 Grants Pass)	01	09/01/1959	ST	TAXIWAY	P	0	3,943.00	03/20/2009	50	67.00
TA4GR (Taxiway A4 Grants Pass)	02	09/01/1959	ST	TAXIWAY	P	0	974.00	03/20/2009	50	71.00
TA4GR (Taxiway A4 Grants Pass)	03	09/01/1991	AC	TAXIWAY	P	0	2,316.00	03/20/2009	18	83.00
TA5GR (Taxiway A5 Grants Pass)	01	09/03/2007	AC	TAXIWAY	P	0	8,998.00	03/20/2009	2	100.00
TABGR (Taxiway AB Grants Pass)	01	08/03/2004	AC	TAXIWAY	S	0	4,674.00	03/20/2009	5	100.00
TAGR (Taxiway A Grants Pass)	01	09/03/2007	AC	TAXIWAY	P	0	52,500.00	03/20/2009	2	100.00
TAGR (Taxiway A Grants Pass)	02	08/03/2004	AC	TAXIWAY	P	0	35,000.00	03/20/2009	5	100.00
TAGR (Taxiway A Grants Pass)	03	09/01/1959	ST	TAXIWAY	P	0	8,225.00	03/20/2009	50	89.00
TAGR (Taxiway A Grants Pass)	04	09/02/1991	AC	TAXIWAY	P	0	9,275.00	03/20/2009	18	89.00
TAGR (Taxiway A Grants Pass)	05	09/02/1991	AC	TAXIWAY	P	0	22,977.00	03/20/2009	18	81.00
TAGR (Taxiway A Grants Pass)	06	09/03/2007	AC	TAXIWAY	P	0	12,018.00	03/20/2009	2	100.00
TBCGR (Taxiway BC Grants Pass)	01	08/03/2004	AC	TAXIWAY	S	0	4,675.00	03/20/2009	5	100.00
TLMGR (Taxiway LM Grants Pass)	01	08/03/2004	AC	TAXIWAY	S	0	21,097.00	03/20/2009	5	100.00
TMNGR (Taxiway MN Grants Pass)	01	08/03/2004	AC	TAXIWAY	S	0	21,093.00	03/20/2009	5	100.00

Section Condition Report

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	2.00	163,487.00	10	100.00	0.00	100.00
03-05	5.00	270,549.00	10	97.40	7.80	98.31
16-20	18.00	207,896.00	7	83.14	2.85	82.66
21-25	23.00	11,697.00	1	66.00	0.00	66.00
26-30	30.00	27,090.00	2	68.50	0.50	68.47
over 40	49.21	497,844.00	14	71.29	13.68	63.28
All	22.00	1,178,563.00	44	85.39	15.54	79.98

Appendix 3
Network Maintenance Report

NETWORK MAINTENANCE REPORT
GRANTS PASS AIRPORT

Network	Branch	Section	Distress	Severity	Action	Maint. Quantity	Units	Unit Cost	Total Cost
Grants	A01GR	2	Alligator Cracking	L	No Localized M & R	42	SqFt	$0.00	$0.00
Grants	A01GR	2	Longitudinal & Transverse Cracking	M	Crack Sealing - AC	820	Ft	$0.75	$614.85
Grants	A01GR	2	Patching	L	No Localized M & R	340	SqFt	$0.00	$0.00
Grants	A01GR	2	Weathering/Raveling	H	Patching - AC Shallow	10	SqFt	$15.00	$150.00
								Total	$764.85
Grants	A01GR	3	Depression	L	No Localized M & R	144	SqFt	$0.00	$0.00
Grants	A01GR	3	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	550	Ft	$0.75	$412.50
Grants	A01GR	3	Longitudinal & Transverse Cracking	M	Crack Sealing - AC	450	Ft	$0.75	$337.50
Grants	A01GR	3	Oil Spillage	N	No Localized M & R	485	SqFt	$0.00	$0.00
								Total	$750.00
Grants	A02GR	4	Block Cracking	L	Crack Sealing - AC	7,715	Ft	$0.75	$5,786.10
Grants	A02GR	4	Patching	L	No Localized M & R	2,288	SqFt	$0.00	$0.00
								Total	$5,786.10
Grants	A02GR	6	BLOCK CR	L	Crack Sealing - AC	4,387	Ft	$0.75	$3,290.48
Grants	A02GR	6	Weathering/Raveling	L	No Localized M & R	2,879	SqFt	$0.00	$0.00
								Total	$3,290.48
Grants	A02GR	7	Alligator Cracking	L	No Localized M & R	146	SqFt	$0.00	$0.00
Grants	A02GR	7	Block Cracking	L	Crack Sealing - AC	16,650	Ft	$0.75	$12,487.50
								Total	$12,487.50
Grants	A02GR	8	Block Cracking	M	Crack Sealing - AC	5,343	Ft	$0.75	$4,007.10
Grants	A02GR	8	Block Cracking	L	Crack Sealing - AC	16,029	Ft	$0.75	$12,021.83
								Total	$16,028.93
Grants	A02GR	9	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	1,895	Ft	$0.75	$1,420.95
Grants	A02GR	9	Longitudinal & Transverse Cracking	M	Crack Sealing - AC	386	Ft	$0.75	$289.35
Grants	A02GR	9	Weathering/Raveling	L	No Localized M & R	10,716	SqFt	$0.00	$0.00
								Total	$1,710.30

NETWORK MAINTENANCE REPORT - continued
GRANTS PASS AIRPORT

Network	Branch	Section	Distress	Severity	Action	Maint. Quantity	Units	Unit Cost	Total Cost
Grants	ALMNGR	2	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	1,453	Ft	$0.75	$1,090.05
Grants	ALMNGR	2	Weathering/Raveling	L	No Localized M & R	3,507	SqFt	$0.00	$0.00
								Total	$1,090.05
Grants	R12GR	1	Block Cracking	L	Crack Sealing - AC	59,677	Ft	$0.75	$44,757.45
Grants	R12GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	10,088	Ft	$0.75	$7,566.30
Grants	R12GR	1	Weathering/Raveling	L	No Localized M & R	114,476	SqFt	$0.00	$0.00
								Total	$52,323.75
Grants	T05GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	30	Ft	$0.75	$22.50
								Total	$22.50
Grants	T07GR	1	Alligator Cracking	M	Patching - AC Deep	99	SqFt	$15.00	$1,483.50
Grants	T07GR	1	Longitudinal & Transverse Cracking	M	Crack Sealing - AC	462	Ft	$0.75	$346.35
Grants	T07GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	226	Ft	$0.75	$169.28
Grants	T07GR	1	Patching	L	No Localized M & R	1,517	SqFt	$0.00	$0.00
								Total	$1,999.13
Grants	T09GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	550	Ft	$0.75	$412.50
Grants	T09GR	1	Weathering/Raveling	L	No Localized M & R	2,117	SqFt	$0.00	$0.00
								Total	$412.50
Grants	T10GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	822	Ft	$0.75	$616.80
Grants	T10GR	1	Longitudinal & Transverse Cracking	M	Crack Sealing - AC	179	Ft	$0.75	$134.55
Grants	T10GR	1	Weathering/Raveling	L	No Localized M & R	3,351	SqFt	$0.00	$0.00
								Total	$751.35
Grants	T11GR	1	Alligator Cracking	L	No Localized M & R	49	SqFt	$0.00	$0.00
Grants	T11GR	1	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	175	Ft	$0.75	$131.25
Grants	T11GR	1	Weathering/Raveling	L	No Localized M & R	1,148	SqFt	$0.00	$0.00
								Total	$131.25
Grants	TA2GR	1	Block Cracking	L	Crack Sealing - AC	94	Ft	$0.75	$70.58
Grants	TA2GR	1	Weathering/Raveling	L	No Localized M & R	77	SqFt	$0.00	$0.00
								Total	$70.58

NETWORK MAINTENANCE REPORT - continued
GRANTS PASS AIRPORT

Network	Branch	Section	Distress	Severity	Action	Maint. Quantity	Units	Unit Cost	Total Cost
Grants	TA3GR	1	Block Cracking	L	Crack Sealing - AC	849	Ft	$0.75	$636.90
								Total	$636.90
Grants	TA3GR	2	Block Cracking	L	Crack Sealing - AC	465	Ft	$0.75	$348.60
Grants	TA3GR	2	Weathering/Raveling	L	No Localized M & R	381	SqFt	$0.00	$0.00
								Total	$348.60
Grants	TA3GR	3	Block Cracking	L	Crack Sealing - AC	434	Ft	$0.75	$325.50
								Total	$325.50
Grants	TA4GR	1	Block Cracking	L	Crack Sealing - AC	601	Ft	$0.75	$450.83
Grants	TA4GR	1	Weathering/Raveling	L	No Localized M & R	394	SqFt	$0.00	$0.00
								Total	$450.83
Grants	TA4GR	2	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	100	Ft	$0.75	$75.00
Grants	TA4GR	2	Weathering/Raveling	L	No Localized M & R	244	SqFt	$0.00	$0.00
								Total	$75.00
Grants	TA4GR	3	Depression	L	No Localized M & R	132	SqFt	$0.00	$0.00
								Total	$0.00
Grants	TAGR	3	Block Cracking	L	Crack Sealing - AC	320	Ft	$0.75	$240.00
Grants	TAGR	3	Weathering/Raveling	L	No Localized M & R	1,050	SqFt	$0.00	$0.00
								Total	$240.00
Grants	TAGR	4	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	300	Ft	$0.75	$225.00
								Total	$225.00
Grants	TAGR	5	Longitudinal & Transverse Cracking	L	Crack Sealing - AC	657	Ft	$0.75	$492.38
Grants	TAGR	5	Weathering/Raveling	L	No Localized M & R	4,595	SqFt	$0.00	$0.00
								Total	$492.38
								TOTAL	$100,413.45

Appendix 4
Re-Inspection Report

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A01GR Name: Apron 01 Grants Pass Use: APRON Area: 65,819.00SqFt

---

Section: 01 of 3 From: Taxiway A To: A01GR-02 Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 38,729.00SqFt Length: 750.00Ft Width: 72.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 9 Surveyed: 7
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 2,131.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 04 Type: R Area: 5,438.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 5,438.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 06 Type: R Area: 5,438.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 07 Type: R Area: 4,875.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 08 Type: R Area: 4,875.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 09 Type: R Area: 6,013.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A01GR Name: Apron 01 Grants Pass Use: APRON Area: 65,819.00SqFt

---

Section: 02 of 3 From: A01GR-01 To: A01GR-03 Last Const.: 9/1/1979
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 14,440.00SqFt Length: 345.00Ft Width: 42.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:68.00 |

Sample Number: 01 Type: R Area: 6,078.00SqFt PCI = 73

48	LONGITUDINAL/TRANSVERSE CRACKING	M	340.00 Ft

Sample Number: 02 Type: R Area: 4,183.00SqFt PCI = 64

48	LONGITUDINAL/TRANSVERSE CRACKING	M	220.00 Ft
50	PATCHING	L	270.00 SqFt
52	WEATHERING/RAVELING	H	10.00 SqFt

Sample Number: 03 Type: R Area: 4,183.00SqFt PCI = 66

41	ALLIGATOR CRACKING	L	20.00 SqFt
48	LONGITUDINAL/TRANSVERSE CRACKING	M	260.00 Ft

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A01GR Name: Apron 01 Grants Pass Use: APRON Area: 65,819.00SqFt

---

Section: 03 of 3 From: A01GR-02 To: Parking Last Const.: 9/2/1979
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 12,650.00SqFt Length: 230.00Ft Width: 55.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:69.00 |

Sample Number: 01 Type: R Area: 7,150.00SqFt PCI = 69

45	DEPRESSION	L	100.00 SqFt
48	LONGITUDINAL/TRANSVERSE CRACKING	L	250.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	250.00 Ft

Sample Number: 02 Type: R Area: 5,500.00SqFt PCI = 68

48	LONGITUDINAL/TRANSVERSE CRACKING	L	300.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	200.00 Ft
49	OIL SPILLAGE	N	400.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 01 of 9 From: Taxiway 07 To: A02GR-02 Last Const.: 9/1/2007
Surface: AAC Family: OR Cat 4 AAC A Zone: 3S8 Category: J Rank: S
Area: 24,105.00SqFt Length: 350.00Ft Width: 71.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 5 Surveyed: 4
Conditions: PCI:100.00 |

Sample Number: 02 Type: R Area: 5,288.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 5,288.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 04 Type: R Area: 5,288.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 5,288.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 02 of 9 From: Taxiway A To: A02GR-03 Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 3,869.00SqFt Length: 55.00Ft Width: 71.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 3,869.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 03 of 9 From: A02GR-02 To: A02GR-04 Last Const.: 9/2/1959
Surface: ST Family: OR Cat 4 ST A Zone: 3S8 Category: J Rank: S
Area: 912.00SqFt Length: 35.00Ft Width: 27.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 912.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 04 of 9 From: A02GR-03 To: A02GR-06 Last Const.: 9/1/1960
Surface: AAC Family: OR Cat 4 AAC A Zone: 3S8 Category: J Rank: S
Area: 27,411.00SqFt Length: 202.00Ft Width: 208.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 5 Surveyed: 5
Conditions: PCI:64.00 |

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 62

43	BLOCK CRACKING	L	2,900.00 SqFt
50	PATCHING	L	2,100.00 SqFt

Sample Number: 02 Type: R Area: 6,541.00SqFt PCI = 64

43	BLOCK CRACKING	L	6,541.00 SqFt

Sample Number: 03 Type: R Area: 5,292.00SqFt PCI = 64

43	BLOCK CRACKING	L	5,292.00 SqFt

Sample Number: 04 Type: R Area: 5,174.00SqFt PCI = 64

43	BLOCK CRACKING	L	5,174.00 SqFt

Sample Number: 05 Type: R Area: 5,404.00SqFt PCI = 64

43	BLOCK CRACKING	L	5,404.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 05 of 9 From: Central Ramp Area To: A02GR-08 Last Const.: 8/1/2004
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: P
Area: 121,555.00SqFt Length: 1,000.00Ft Width: 124.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 20 Surveyed: 6
Conditions: PCI:100.00 |

Sample Number: 02 Type: R Area: 6,221.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 6,221.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 08 Type: R Area: 5,716.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 11 Type: R Area: 5,716.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 14 Type: R Area: 6,212.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 18 Type: R Area: 6,212.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 06 of 9 From: A02GR-04 To: A02GR-05 Last Const.: 9/2/1960
Surface: AAC Family: OR Cat 4 AAC A Zone: 3S8 Category: J Rank: S
Area: 14,394.00SqFt Length: 208.00Ft Width: 95.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:59.00 |

Sample Number: 01 Type: R Area: 5,679.00SqFt PCI = 59

43	BLOCK CRACKING	L	5,679.00 SqFt
52	WEATHERING/RAVELING	L	1,136.00 SqFt

Sample Number: 02 Type: R Area: 4,200.00SqFt PCI = 59

43	BLOCK CRACKING	L	4,200.00 SqFt
52	WEATHERING/RAVELING	L	840.00 SqFt

Sample Number: 03 Type: R Area: 4,515.00SqFt PCI = 59

43	BLOCK CRACKING	L	4,515.00 SqFt
52	WEATHERING/RAVELING	L	903.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 07 of 9 From: A02GR-05 To: Hangars Last Const.: 9/1/1960
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 54,626.00SqFt Length: 304.00Ft Width: 240.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 8 Surveyed: 6
Conditions: PCI:63.00 |

Sample Number: 03 Type: R Area: 6,513.00SqFt PCI = 59

41 ALLIGATOR CRACKING	L	60.00	SqFt
43 BLOCK CRACKING	L	6,513.00	SqFt

Sample Number: 04 Type: R Area: 6,555.00SqFt PCI = 64

43 BLOCK CRACKING	L	6,555.00	SqFt

Sample Number: 05 Type: R Area: 6,528.00SqFt PCI = 64

43 BLOCK CRACKING	L	6,528.00	SqFt

Sample Number: 06 Type: R Area: 7,851.00SqFt PCI = 64

43 BLOCK CRACKING	L	7,851.00	SqFt

Sample Number: 07 Type: R Area: 6,500.00SqFt PCI = 59

41 ALLIGATOR CRACKING	L	15.00	SqFt
43 BLOCK CRACKING	L	6,500.00	SqFt

Sample Number: 08 Type: R Area: 6,500.00SqFt PCI = 64

43 BLOCK CRACKING	L	6,500.00	SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 08 of 9 From: A02GR-07 To: A02GR-09 Last Const.: 9/1/1967
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 70,118.00SqFt Length: 323.00Ft Width: 255.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 13 Surveyed: 6
Conditions: PCI:57.00 |

Sample Number: 01 Type: R Area: 6,200.00SqFt PCI = 57

43 BLOCK CRACKING	L	4,650.00 SqFt
43 BLOCK CRACKING	M	1,550.00 SqFt

Sample Number: 03 Type: R Area: 5,500.00SqFt PCI = 57

43 BLOCK CRACKING	L	4,125.00 SqFt
43 BLOCK CRACKING	M	1,375.00 SqFt

Sample Number: 05 Type: R Area: 6,500.00SqFt PCI = 57

43 BLOCK CRACKING	L	4,875.00 SqFt
43 BLOCK CRACKING	M	1,625.00 SqFt

Sample Number: 07 Type: R Area: 7,000.00SqFt PCI = 57

43 BLOCK CRACKING	L	5,250.00 SqFt
43 BLOCK CRACKING	M	1,750.00 SqFt

Sample Number: 10 Type: R Area: 4,173.00SqFt PCI = 57

43 BLOCK CRACKING	L	3,130.00 SqFt
43 BLOCK CRACKING	M	1,043.00 SqFt

Sample Number: 12 Type: R Area: 5,000.00SqFt PCI = 57

43 BLOCK CRACKING	L	3,750.00 SqFt
43 BLOCK CRACKING	M	1,250.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: A02GR Name: Apron 02 Grants Pass Use: APRON Area: 424,150.00SqFt

---

Section: 09 of 9 From: LMN Apron To: A02GR-08 Last Const.: 9/2/1991
Surface: AC Family: OR Cat 4 AC A Zone: 3S8 Category: J Rank: S
Area: 107,160.00SqFt Length: 404.00Ft Width: 265.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 20 Surveyed: 5
Conditions: PCI:83.00 |

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 82

48	LONGITUDINAL/TRANSVERSE CRACKING	L	200.00 Ft
52	WEATHERING/RAVELING	L	500.00 SqFt

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 85

48	LONGITUDINAL/TRANSVERSE CRACKING	L	95.00 Ft
52	WEATHERING/RAVELING	L	500.00 SqFt

Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 80

48	LONGITUDINAL/TRANSVERSE CRACKING	L	100.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	40.00 Ft
52	WEATHERING/RAVELING	L	500.00 SqFt

Sample Number: 10 Type: R Area: 5,000.00SqFt PCI = 86

48	LONGITUDINAL/TRANSVERSE CRACKING	L	37.00 Ft
52	WEATHERING/RAVELING	L	500.00 SqFt

Sample Number: 12 Type: R Area: 5,000.00SqFt PCI = 81

48	LONGITUDINAL/TRANSVERSE CRACKING	L	10.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	50.00 Ft
52	WEATHERING/RAVELING	L	500.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: ALMNGR Name: LMN Apron Grants Pass Use: APRON Area: 60,587.00SqFt

---

Section: 01 of 3 From: Taxiway A To: Taxiway 10 Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC A Zone: KUAO Category: F Rank: P
Area: 15,706.00SqFt Length: 170.00Ft Width: 92.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 4 Surveyed: 3
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: ALMNGR Name: LMN Apron Grants Pass Use: APRON Area: 60,587.00SqFt

---

Section: 02 of 3 From: Taxiway A To: Taxiway 09 Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC A Zone: KUAO Category: F Rank: P
Area: 17,535.00SqFt Length: 190.00Ft Width: 92.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 4 Surveyed: 3
Conditions: PCI:74.00 |

Sample Number: 01 Type: R Area: 4,625.00SqFt PCI = 74

48	LONGITUDINAL/TRANSVERSE CRACKING	L	400.00 Ft
52	WEATHERING/RAVELING	L	925.00 SqFt

Sample Number: 02 Type: R Area: 4,625.00SqFt PCI = 74

48	LONGITUDINAL/TRANSVERSE CRACKING	L	400.00 Ft
52	WEATHERING/RAVELING	L	925.00 SqFt

Sample Number: 03 Type: R Area: 4,625.00SqFt PCI = 75

48	LONGITUDINAL/TRANSVERSE CRACKING	L	350.00 Ft
52	WEATHERING/RAVELING	L	925.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: ALMNGR Name: LMN Apron Grants Pass Use: APRON Area: 60,587.00SqFt

---

Section: 03 of 3 From: Taxiway A To: Taxiway LM & MN Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC A Zone: KUAO Category: F Rank: P
Area: 27,346.00SqFt Length: 296.00Ft Width: 92.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 6 Surveyed: 4
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 04 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 4,625.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: R12GR Name: Runway 12/30 Grants Pass Use: RUNWAY Area: 300,000.00SqFt

---

Section: 01 of 1 From: Runway 12 End To: Runway 30 End Last Const.: 9/1/1959
Surface: X Family: OR Cat 4 ST RW Zone: 3S8 Category: J Rank: P
Area: 300,000.00SqFt Length: 4,000.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 53 Surveyed: 6
Conditions: PCI:63.00 |

Sample Number: 01 Type: R Area: 5,625.00SqFt PCI = 72

48	LONGITUDINAL/TRANSVERSE CRACKING	L	549.00 Ft
52	WEATHERING/RAVELING	L	1,406.00 SqFt

Sample Number: 14 Type: R Area: 5,625.00SqFt PCI = 70

48	LONGITUDINAL/TRANSVERSE CRACKING	L	649.00 Ft
52	WEATHERING/RAVELING	L	1,406.00 SqFt

Sample Number: 27 Type: R Area: 5,625.00SqFt PCI = 62

43	BLOCK CRACKING	L	4,500.00 SqFt
52	WEATHERING/RAVELING	L	1,406.00 SqFt

Sample Number: 40 Type: R Area: 5,625.00SqFt PCI = 59

43	BLOCK CRACKING	L	5,625.00 SqFt
52	WEATHERING/RAVELING	L	2,813.00 SqFt

Sample Number: 48 Type: R Area: 5,625.00SqFt PCI = 59

43	BLOCK CRACKING	L	5,625.00 SqFt
52	WEATHERING/RAVELING	L	2,813.00 SqFt

Sample Number: 53 Type: R Area: 7,500.00SqFt PCI = 59

43	BLOCK CRACKING	L	7,500.00 SqFt
52	WEATHERING/RAVELING	L	3,750.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T05GR Name: Taxiway 05 Grants Pass Use: TAXIWAY Area: 7,483.00SqFt

---

Section: 01 of 1 From: Taxiway A To: Apron 02 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: S47 Category: A Rank: P
Area: 7,483.00SqFt Length: 180.00Ft Width: 41.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:98.00 |

Sample Number: 01 Type: R Area: 4,158.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 3,325.00SqFt PCI = 95
48 LONGITUDINAL/TRANSVERSE CRACKING L 30.00 Ft

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T07GR Name: Taxiway 07 Grants Pass Use: TAXIWAY Area: 18,403.00SqFt

---

Section: 01 of 3 From: Apron 01 To: T07GR-02 Last Const.: 9/1/1986
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 11,697.00SqFt Length: 340.00Ft Width: 45.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:66.00 |

Sample Number: 01 Type: R Area: 2,144.00SqFt PCI = 49

41	ALLIGATOR CRACKING	M	60.00 SqFt
48	LONGITUDINAL/TRANSVERSE CRACKING	L	65.00 Ft
50	PATCHING	L	1,000.00 SqFt

Sample Number: 02 Type: R Area: 4,500.00SqFt PCI = 71

48	LONGITUDINAL/TRANSVERSE CRACKING	M	290.00 Ft

Sample Number: 03 Type: R Area: 4,500.00SqFt PCI = 69

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	150.00 Ft
50	PATCHING	L	300.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T07GR Name: Taxiway 07 Grants Pass Use: TAXIWAY Area: 18,403.00SqFt

---

Section: 02 of 3 From: T07GR-01 To: T07GR-03 Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 4,226.00SqFt Length: 90.00Ft Width: 45.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,226.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T07GR Name: Taxiway 07 Grants Pass Use: TAXIWAY Area: 18,403.00SqFt

---

Section: 03 of 3 From: T07GR-02 To: Apron 02 Last Const.: 9/1/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 2,480.00SqFt Length: 55.00Ft Width: 45.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 2,480.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T09GR Name: Taxiway 09 Grants Pass Use: TAXIWAY Area: 21,174.00SqFt

---

Section: 01 of 1 From: LMN Apron To: Hangars Last Const.: 9/1/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 21,174.00SqFt Length: 301.00Ft Width: 70.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:85.00 |

Sample Number: 01 Type: R Area: 7,000.00SqFt PCI = 85

48	LONGITUDINAL/TRANSVERSE CRACKING	L	200.00 Ft
52	WEATHERING/RAVELING	L	700.00 SqFt

Sample Number: 02 Type: R Area: 7,000.00SqFt PCI = 85

48	LONGITUDINAL/TRANSVERSE CRACKING	L	200.00 Ft
52	WEATHERING/RAVELING	L	700.00 SqFt

Sample Number: 03 Type: R Area: 7,174.00SqFt PCI = 85

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
52	WEATHERING/RAVELING	L	717.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T10GR Name: Taxiway 10 Grants Pass Use: TAXIWAY Area: 33,508.00SqFt

---

Section: 01 of 1 From: LMN Apron To: Hangars Last Const.: 9/1/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 33,508.00SqFt Length: 301.00Ft Width: 111.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 6 Surveyed: 4
Conditions: PCI:80.00 |

Sample Number: 03 Type: R Area: 5,550.00SqFt PCI = 80

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	10.00 Ft
52	WEATHERING/RAVELING	L	555.00 SqFt

Sample Number: 04 Type: R Area: 5,550.00SqFt PCI = 80

48	LONGITUDINAL/TRANSVERSE CRACKING	L	100.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	10.00 Ft
52	WEATHERING/RAVELING	L	555.00 SqFt

Sample Number: 05 Type: R Area: 5,550.00SqFt PCI = 79

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	50.00 Ft
52	WEATHERING/RAVELING	L	555.00 SqFt

Sample Number: 06 Type: R Area: 5,758.00SqFt PCI = 79

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
48	LONGITUDINAL/TRANSVERSE CRACKING	M	50.00 Ft
52	WEATHERING/RAVELING	L	576.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: T11GR Name: Taxiway 11 Grants Pass Use: TAXIWAY Area: 11,486.00SqFt

---

Section: 01 of 1 From: Apron 02 To: Hangars Last Const.: 9/1/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 11,486.00SqFt Length: 301.00Ft Width: 38.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:81.00 |

Sample Number: 01 Type: R Area: 5,700.00SqFt PCI = 86

48	LONGITUDINAL/TRANSVERSE CRACKING	L	45.00 Ft
52	WEATHERING/RAVELING	L	570.00 SqFt

Sample Number: 02 Type: R Area: 5,786.00SqFt PCI = 77

41	ALLIGATOR CRACKING	L	25.00 SqFt
48	LONGITUDINAL/TRANSVERSE CRACKING	L	130.00 Ft
52	WEATHERING/RAVELING	L	578.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA1GR Name: Taxiway A1 Grants Pass Use: TAXIWAY Area: 8,436.00SqFt

---

Section: 01 of 1 From: Runway 30 End To: Taxiway A Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 8,436.00SqFt Length: 185.00Ft Width: 37.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,400.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 4,036.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA2GR Name: Taxiway A2 Grants Pass Use: TAXIWAY Area: 9,364.00SqFt

---

Section: 01 of 2 From: Runway 12/30 To: TA2GR-02 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 1,238.00SqFt Length: 24.50Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:72.00 |

Sample Number: 01 Type: R Area: 4,965.00SqFt PCI = 72

43 BLOCK CRACKING	L	1,238.00 SqFt
52 WEATHERING/RAVELING	L	310.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA2GR Name: Taxiway A2 Grants Pass Use: TAXIWAY Area: 9,364.00SqFt

---

Section: 02 of 2 From: TA2GR-01 To: Taxiway A Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 8,126.00SqFt Length: 160.50Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,000.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 4,126.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA3GR Name: Taxiway A3 Grants Pass Use: TAXIWAY Area: 10,388.00SqFt

---

Section: 01 of 4 From: Runway 12/30 To: TA3GR-02 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 5,571.00SqFt Length: 97.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:72.00 |

Sample Number: 01 Type: R Area: 5,571.00SqFt PCI = 72

43 BLOCK CRACKING	L	2,786.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA3GR Name: Taxiway A3 Grants Pass Use: TAXIWAY Area: 10,388.00SqFt

---

Section: 02 of 4 From: TA3GR-01 To: TA3GR-03 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: KUAO Category: F Rank: P
Area: 1,525.00SqFt Length: 30.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:59.00 |

Sample Number: 01 Type: R Area: 1,525.00SqFt PCI = 59

43	BLOCK CRACKING	L	1,525.00 SqFt
52	WEATHERING/RAVELING	L	381.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA3GR Name: Taxiway A3 Grants Pass Use: TAXIWAY Area: 10,388.00SqFt

---

Section: 03 of 4 From: TA3GR-02 To: TA3GR-04 Last Const.: 9/2/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 1,424.00SqFt Length: 27.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:64.00 |

Sample Number: 01 Type: R Area: 1,424.00SqFt PCI = 64

```
43 BLOCK CRACKING                    L    1,424.00 SqFt
```

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA3GR Name: Taxiway A3 Grants Pass Use: TAXIWAY Area: 10,388.00SqFt

---

Section: 04 of 4 From: TA3GR-03 To: Taxiway A Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 1,868.00SqFt Length: 31.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 1,868.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA4GR Name: Taxiway A4 Grants Pass Use: TAXIWAY Area: 7,233.00SqFt

---

Section: 01 of 3 From: TA4GR-02 To: Runway 12/30 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 3,943.00SqFt Length: 97.00Ft Width: 30.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:67.00 |

Sample Number: 01 Type: R Area: 3,943.00SqFt PCI = 67

43	BLOCK CRACKING	L	1,972.00 SqFt
52	WEATHERING/RAVELING	L	394.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA4GR Name: Taxiway A4 Grants Pass Use: TAXIWAY Area: 7,233.00SqFt

---

Section: 02 of 3 From: TA4GR-01 To: TA4GR-03 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 974.00SqFt Length: 30.00Ft Width: 30.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:71.00 |

Sample Number: 01 Type: R Area: 974.00SqFt PCI = 71

```
48 LONGITUDINAL/TRANSVERSE CRACKING        L      100.00 Ft
52 WEATHERING/RAVELING                     L      244.00 SqFt
```

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA4GR Name: Taxiway A4 Grants Pass Use: TAXIWAY Area: 7,233.00SqFt

---

Section: 03 of 3 From: TA4GR-02 To: Taxiway A Last Const.: 9/1/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 2,316.00SqFt Length: 59.00Ft Width: 30.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:83.00 |

Sample Number: 01 Type: R Area: 2,316.00SqFt PCI = 83

45 DEPRESSION	L	90.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TA5GR Name: Taxiway A5 Grants Pass Use: TAXIWAY Area: 8,998.00SqFt

---

Section: 01 of 1 From: Runway 12 End To: Taxiway A Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 8,998.00SqFt Length: 185.00Ft Width: 37.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,957.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 4,041.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TABGR Name: Taxiway AB Grants Pass Use: TAXIWAY Area: 4,674.00SqFt

---

Section: 01 of 1 From: A02GR-04 To: A02GR-06 Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 4,674.00SqFt Length: 188.00Ft Width: 25.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,674.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 01 of 6 From: Taxiway A1 To: Apron 01 Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 52,500.00SqFt Length: 1,500.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 10 Surveyed: 5
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 07 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 09 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 02 of 6 From: TAGR-01 To: TAGR-03 Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 35,000.00SqFt Length: 1,000.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 7 Surveyed: 5
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 04 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 06 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 03 of 6 From: TAGR-02 To: TAGR-04 Last Const.: 9/1/1959
Surface: ST Family: OR Cat 4 ST TW Zone: 3S8 Category: J Rank: P
Area: 8,225.00SqFt Length: 235.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:89.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 100

```
<NO DISTRESSES>
```

Sample Number: 02 Type: R Area: 2,975.00SqFt PCI = 70

```
43 BLOCK CRACKING                    L    1,050.00 SqFt
52 WEATHERING/RAVELING               L    1,050.00 SqFt
```

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 04 of 6 From: TAGR-03 To: TAGR-05 Last Const.: 9/2/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 9,275.00SqFt Length: 265.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 2 Surveyed: 2
Conditions: PCI:89.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 90

```
48 LONGITUDINAL/TRANSVERSE CRACKING          L       150.00 Ft
```

Sample Number: 02 Type: R Area: 4,025.00SqFt PCI = 88

```
48 LONGITUDINAL/TRANSVERSE CRACKING          L       150.00 Ft
```

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 05 of 6 From: TAGR-04 To: TAGR-06 Last Const.: 9/2/1991
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 22,977.00SqFt Length: 656.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 5 Surveyed: 3
Conditions: PCI:81.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 81

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
52	WEATHERING/RAVELING	L	1,050.00 SqFt

Sample Number: 03 Type: R Area: 5,250.00SqFt PCI = 81

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
52	WEATHERING/RAVELING	L	1,050.00 SqFt

Sample Number: 04 Type: R Area: 5,250.00SqFt PCI = 81

48	LONGITUDINAL/TRANSVERSE CRACKING	L	150.00 Ft
52	WEATHERING/RAVELING	L	1,050.00 SqFt

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TAGR Name: Taxiway A Grants Pass Use: TAXIWAY Area: 139,995.00SqFt

---

Section: 06 of 6 From: TAGR-05 To: Taxiway A5 Last Const.: 9/3/2007
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: P
Area: 12,018.00SqFt Length: 343.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 5,250.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 1,519.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TBCGR Name: Taxiway BC Grants Pass Use: TAXIWAY Area: 4,675.00SqFt

---

Section: 01 of 1 From: Apron 02 To: End Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 4,675.00SqFt Length: 188.00Ft Width: 25.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 4,675.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TLMGR Name: Taxiway LM Grants Pass Use: TAXIWAY Area: 21,097.00SqFt

---

Section: 01 of 1 From: LMN Apron To: Hangars Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 21,097.00SqFt Length: 300.00Ft Width: 70.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 7,000.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 7,000.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 7,097.00SqFt PCI = 100
<NO DISTRESSES>

Re-inspection Report

ODOT2009A
Report Generated Date: 6/1/2009
Site Name:

Network: Grants Name: Grants Pass

Branch: TMNGR Name: Taxiway MN Grants Pass Use: TAXIWAY Area: 21,093.00SqFt

---

Section: 01 of 1 From: LMN Apron To: Hangars Last Const.: 8/3/2004
Surface: AC Family: OR Cat 4 AC TW Zone: 3S8 Category: J Rank: S
Area: 21,093.00SqFt Length: 300.00Ft Width: 70.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date3/20/2009 Total Samples: 3 Surveyed: 3
Conditions: PCI:100.00 |

Sample Number: 01 Type: R Area: 7,000.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 7,000.00SqFt PCI = 100
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 7,093.00SqFt PCI = 100
<NO DISTRESSES>

EXHIBIT A
STATEMENT OF WORK

Representatives of the Parties for this Contract and the Project shall be:

Consultant: WHPacific, Inc.	Telephone: (503) 362-4675 Fax: (503) 362-5078 E-Mail: echamberland@whpacific.com
Owner: Oregon Department of Aviation	Telephone: (503) 378-3168 Fax: (503) 373-1688 E-Mail: christopher.cummings@state.or.us

1.01 OVERVIEW OF CONSULTANT SERVICES

1. The Consultant commits to perform, oversee and direct the design phase, bidding phase, and construction administration phase services for the Project to obtain the greatest long-term value for the Agency and Airport Sponsor, and which reflects the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing this goal, the consultant, with the Agency and Airport Sponsor's assistance, commits to:

   a. Develop a design that is appropriate for the context of the Project and the nature of its function, both present and future.
   b. Avoid expenditures for aesthetic effect which are disproportionate to the Project as a whole.
   c. Help assure the Project is completed on time and within budget.
   d. Strive to reduce the construction cost of the Project, while keeping life-cycle costs low.
   e. Apprise the Agency and Airport Sponsor throughout the Project concerning the economic impact of all design decisions.

2. The Consultant shall maintain thorough and complete Project records and make regular status reports and briefings to the Agency. In addition, the Consultant shall coordinate the flow of information, communications and formal documents so that the Agency and Airport Sponsor have the material required for its timely action on policy, design and budget matters. The Consultant shall provide to Agency and Airport Sponsor documentation required for Agency and Airport Sponsor approval or actions.

3. The Consultant shall exhibit sound judgment in performing Services on behalf of the Agency and Airport Sponsor and in advising the Agency and Airport Sponsor of pending issues or actions on the Project. The Consultant shall show management leadership and initiative in keeping the Project on track for schedule and budget. Consultant shall confer with the Agency and Airport Sponsor on sensitive issues of design, Contract performance, budget and schedule.

4. The Consultant's project manager(s) assigned to the Project shall remain assigned for the duration of the Project, provided they remain in the employ of the Consultant, unless otherwise agreed by the Agency and Airport Sponsor. Substitute personnel provided by the Consultant

EXHIBIT A
STATEMENT OF WORK

shall be subject to the Agency and Airport Sponsor approval, which shall not be unreasonably withheld. Should the Consultant's project manager be absent from the Project for a period of three (3) or more consecutive working days during the performance of the Services, the Consultant shall notify the Agency and Airport Sponsor at least seven (7) days in advance, and take steps to satisfactorily perform all necessary Services under the Contract.

5. The Consultant should refer any press questions or other contacts from the media requesting information regarding specific projects under the Pavement Maintenance Program (PMP) to the Agency or Airport Sponsor. Any release of information to the press regarding projects in the PMP should be made only after review and approval by the Agency and Airport Sponsor.

1.02 SCOPE OF SERVICES

This Statement of Work describes the type of Architectural and Engineering (A&E) Services that Consultant will perform. The Owner and the Consultant agree that the following Services shall be provided by the Consultant for the design, bidding and construction administration services for Work Order #1.

Work Order # 1
Statement of Work
For
Oregon Department of Aviation
Pavement Maintenance Program 2009

General:

The Oregon Department of Aviation conducts pavement maintenance projects at numerous airports throughout the state. The list of airports has been developed using a pavement conditions software program that has been used to monitor airport pavements around the state since the mid-1990's. This Pavement Maintenance Program (PMP) is a multi-year program aimed at assisting airports to maintain and preserve their existing infrastructure.

Oregon Department of Aviation (Agency) will administer the statewide program and local airport owners (sponsors) will supply matching funds. WHPacific, Inc. (Consultant) will be responsible for design and construction phase services through the Agency's five-year Architectural & Engineering (A&E) Agreement-to-Agree (ATA). This Statement of Work (SOW) includes services for the design and construction phases.

Projects for year 2009 will include crack sealing, asphalt concrete pavement patching, fog sealing, and slurry sealing of airport runways, taxiways and aprons (aircraft parking areas). Selection of these projects is based on the most urgent needs at each of the airports identified according to the pavement management inventory inspection results.

For purposes of this SOW, Oregon has been divided into three regions: Northwest, Southern and Eastern. The airports included in this year's program are located in the Northwest region. The list of airports included in the project documents will be generated based on the preliminary pavement recommendations (by others) and the solicitation of local funding commitments (by the Agency). The preliminary list of airports is listed below. If changes are made to the preliminary list of airports, then a final list of airports will be documented in an amendment to the WOC.

Airports identified for participation in the PMP 2009 are: Albany, Astoria, Aurora, Corvallis, Hillsboro, Independence, Lebanon, McMinnville, Mulino, Newport, Salem, Scappoose, Seaside, Siletz Bay, Sportsman, Tillamook, Toledo, and Troutdale, a maximum of 18 airports.

The Consultant shall complete the following tasks in accordance with the fee estimates and delivery schedule listed herein. The tasks listed below include professional services from initial design to completion of construction. Design services and the Services During Construction shall be based on a time and materials not-to-exceed basis. Some assumptions have been made as to the number and location of airports as well as the construction schedule. The Consultant does not have direct control of the construction contractor's schedule which directly affects the number of inspection trips to each airport. Thus, amendments to this work order contract may be necessary at some future date to document unforeseen changes to the scope.

Task 1000 – Design Services:

1. Project Administration – Manage the scope, schedule, and budget for the project during design. Manage team members and coordinate work efforts to meet project milestones. Prepare monthly invoices and status reports.

   Deliverables: Invoices and status reports on a monthly basis, and schedule updates upon request. An allowance has been made for a four month design services period.

2. Review and analyze the preliminary pavement recommendations (by others). Assemble the recommendations into a reasonable project consistent with the available funding for the 2009 PMP. Develop a preliminary opinion of probable cost spreadsheet (i.e., cost estimate) to summarize the various components of the project. The components of the project consist of the preliminary pavement recommendations as well as allowances for mobilization, striping, engineering, contingencies, and local airport sponsor match amounts. The cost estimate spreadsheets will be based on historical bid data for similar work. Conduct work sessions (allowance for up to 3 meetings) to review the preliminary pavement recommendations and the cost estimate spreadsheets. Make adjustments to the cost estimate spreadsheets to balance the preliminary pavement recommendations and the available funding.

   Deliverables: Cost estimate that summarizes the total estimated cost by airport in spreadsheet format. The cost estimate and work sessions shall be completed within two weeks of receiving notice to proceed (NTP). Maintain project files that include the method of analysis, cost data, and meeting notes.

3. Inspect each airport to verify the initial pavement maintenance recommendations that have been made by others, develop a photo log of the selected work areas, and measure probable construction quantities. For each of the airports on the list, the following information will be gathered and documented:

   a. Length and classification of pavement cracks
   b. Severity of pavement oxidation in proposed "sealing areas"
   c. Location and size of pavement patching areas
   d. Condition and widths of existing pavement markings

   Deliverables: Assemble photo log and field notes and maintain in project files. The field inspections shall be completed within four weeks of the NTP. Allow for 28 man-days with a duration of 10 hrs/day.

4. Research the Pavement Conditions Index (PCI) information and pavement maintenance recommendations (a.k.a. Airport Priority Listing and PCI notebooks), airport layout plans (ALP's), Federal Aviation Administration (FAA) inspection records, aerial photos, airport improvement projects (AIP's), and ODA files for each of the airports on the list. The Agency shall supply the aerial photographs for use. The Consultant shall "check out" and borrow the aerial photos from the Agency. The photos shall be returned upon request or at the end of the design phase, whichever comes first.

   Deliverables: Assemble research materials and maintain in project files. The research shall be completed within two weeks of NTP.

5. Prepare the preliminary design of the project based on the initial pavement recommendations and the results of the field inspections. The preliminary design must include drawings that illustrates the proposed asphalt work at each airport, a preliminary spreadsheet that identifies the proposed asphalt work at each airport and summarizes the quantities, and a preliminary opinion of probable construction cost (i.e., cost estimate) for each airport. The Consultant shall participate with the Agency in a "plans-in-hand" review at each airport.

   Deliverables: The Agency will provide an AutoCAD basemap of the layout plans at each airport. Submit 75 percent complete preliminary layout plans (24 - 11x17 drawings prepared in AutoCAD), a preliminary quantities spreadsheet (prepared in MS Excel), and a preliminary opinion of probable construction cost (i.e., cost estimate) for each airport (prepared in MS Excel). The submittal shall be made within six weeks of the NTP. The Agency will complete a review of the preliminary design and provide comments to the Consultant in two weeks or less from the submittal date. An allowance has been made for the project manager to perform a "plans-in-hand" review during the preliminary design.

6. Prepare the final plans, specifications, and cost estimate. The final plans (24 - 11x17 AutoCAD drawings) must incorporate the Agency review comments from the previous 75 percent complete preliminary layout plan submittal, the results of the "plans-in-hand" inspection, and show the work items in sufficient detail for bidding and construction. The specifications (MS Word) must include the Division 1 specifications (as directed by the Agency) and the technical specifications (prepared by the Consultant). A separate bid schedule must be developed for each airport (prepared in MS Excel) according to Agency requirements. The plans, specifications, and bid schedule shall be assembled into an Agency approved format for contract documents for bidding and construction. The contract documents must be completed by or under the direction of a professional engineer registered to practice in the state of Oregon. The final cost estimate must represent the work items shown in the contract documents.

   Deliverables: 100 percent complete contract documents shall be submitted to the Agency for bidding within two weeks of the completion of the Agency preliminary design review period. The Agency will prepare the advertisement to bid and distribute contract documents through the Oregon Purchasing Information Network (ORPIN). An expense allowance has been made to provide 40 copies of the contract documents.

7. Develop a spreadsheet exhibit for each airport ("Exhibit A") that summarizes the project costs for each airport and calculates the local funding commitment based on the most recent cost estimate. The Agency will distribute the exhibit to each airport, verify funding commitments, and execute an Intergovernmental Agreement (IGA) with local Airport Sponsors.

   Deliverables: Exhibit A shall be submitted within one week after the preliminary design submittal and the final design submittals.

Task 2000 – Services During Construction

1. Provide assistance during the Bid and Contract Award Period. Answer bidder questions from construction contractors and material suppliers. Prepare for and conduct a pre-bid conference for construction contractors. Prepare addendums to the plans, specifications, and bid schedule at the request of the Agency. Attend the bid opening and assist the Agency in the evaluation of construction contractor bids. Review work program and make recommendations for adjustments to the project scope (increase or decrease) depending on bid results. Provide other services as requested by the Agency.

Deliverables: Maintain records of correspondence with bidders. Maintain sign-in sheet and meeting notes for pre-bid meeting.

2. Conduct the pre-construction conference (pre-con). Prepare the agenda, complete the sign-in sheet, record meeting notes, and provide hand-outs. Also, provide training for Construction Contractor staff regarding safety and operations at project airports including use of aviation radio.

Deliverables: Provide a conference room for the pre-construction conference. Assemble meeting notes, maintain a copy in project files, and make copies available upon request. The pre-construction conference shall be conducted as soon as the contract has been awarded to the construction contractor in accordance with the contract documents.

3. The Consultant shall provide construction observation services to the construction contract. Prepare daily reports of construction activities. Make tabulations of completed pay items and measured quantities. Coordinate the Notice to Airmen (NOTAMs) at each airport so that work areas are provided for the Construction Contractor in accordance with the construction schedule and Airport Sponsor requirements. Conduct a 'mini-precon' meeting at the beginning of work at each airport for review of safety and operations, project schedule, construction staging, and other items. Monitor the construction work activities and the safety / operational requirements of each airport. Communicate with aircraft and Fixed Base Operators (FBOs) to make them aware of work areas using the Unicom radio frequency for each airport.

Deliverables: Assemble daily reports, quantity tabulation sheets, and conversation records, maintain a copy in project files, and make copies available upon request.

Assumption: The Consultant shall provide construction observation services, in a full-time or part-time manner at the discretion of the Consultant, whenever the Construction Contractor is actively working on a runway, taxiway, or apron. A senior construction inspector will be dedicated to the project and he or she will be supplemented with junior construction inspectors at the discretion of the Consultant. An allowance has been made for full time construction observation based on an assumed construction schedule as part of the construction contractor's 90 day contract for substantial completion with an additional 30 days for punchlist work. An allowance of 148 man-days with duration of 10 hrs/day has been included. However, the supporting budget for construction observation is difficult to predict since the Consultant is not in charge of the Construction Contactor's schedule or their production rates. If the schedule should significantly change, an amendment to the WOC will be executed for additional time and/or money. Also, an assumption has been made for expenses while working at airports in the Northwest region including mileage, per diem, and miscellaneous field supplies.

4. The Consultant shall prepare and negotiate, on behalf of the Agency, the construction contract change orders with the Construction Contractor. The Agency shall retain approval authority. Prepare construction contract pay requests and submit to the Agency no later than the 15th of the month to facilitate payment of the Construction Contractor for completed work. Update the spreadsheet exhibit for each airport (Attachments 1-18 to this Exhibit A) that calculates the local funding commitment based on the final construction contract pay request. The Agency will distribute the exhibit to each airport and coordinate funding issues including collection.

Deliverables: Change orders and pay requests shall be completed in a timely manner in accordance with the contract documents and submitted to the Agency for review and processing. An Attachment for each airport shall be submitted within one week after a request by the Agency.

5. The Consultant shall provide daily coordination of and direction to the construction inspectors in the field with regard to technical inspection requirements, safety and operation coordination, work zone staging, and NOTAM coordination. The Consultant shall provide engineering support to the project to answer Requests for Information (RFI's) and clarify design intent to facilitate completion of the work.

Deliverables: Consultant shall maintain records of RFI's and conversations with the Construction Contractor.

6. The Consultant shall participate in an on-site inspection trip to each airport to review the substantial completion of the project. Prepare a punchlist to document outstanding work items for acceptance of the project by the Agency.

Deliverables: Preliminary punchlist shall be completed within one month of work stoppage. The final punchlist shall be completed within one week of the inspection trip.

Assumption: Airplane or vehicle transportation for the final inspection trips, if any, will be provided by the Agency.

7. The Consultant shall prepare record drawings documenting changes made during construction. Update the PCI pavement forms.

Deliverables: Record drawings (11x17 paper copy and one electronic CAD files on CD) and a final engineer's report shall be submitted within one month of final acceptance of the construction contract.

8. Project Administration – Manage the scope, schedule, and budget for the project during construction. Manage team members and coordinate work efforts to meet project milestones. Prepare monthly invoices and status reports.

Deliverables: Invoices and status reports on a monthly basis, and schedule updates upon request. An allowance has been made for an eight-month construction services period.

Schedule: Work Order #1 will be in effect until April 15, 2010.

Services not Provided: Materials Testing, Surveying, Pavement Design Studies

AIRPORT MANAGER CONFERENCE FOR:

Airport Owner Contact:

Phone:

FAX:

Airport FBO Contact:

Phone:

FAX:

Airport Tower/UNICOM Contact:

Phone:

FAX:

UNICOM/CTAF/Tower/Ground Frequencies to use:

Is UNICOM/CTAF monitored?

Who is the NOTAM issuing authority?

Gate keys/access codes?

Closure Cross availability (on airport)?

Work Area Review with APM

Any local striping work done (NON-AIP) that may have included oil-based paint?

Staging areas for potential slurry seal/fog seal (if contemplated)?

Airport operational concerns (limited radio use, strange traffic pattern, etc.)?

Any special pavement conditions noticed/concerns to check out?

Any other questions for WHPacific?

Distribute cards for as necessary. Write down cell # if not on your card!

Airport	Raw Construction Cost	Total Mark-up (%)	Total Construction Cost	Total Consultant Costs	Total Cost	Airport Sponsor Total Match (%)	Airport Sponsor Total Match ($)	PMP Program Contribution ($)	Verbal confirmation of participation	Notes
2012 Projects										
Baker City Municipal	$ 46,556.99	32%	$ 61,455.23	$ 18,249.33	$ 79,704.56	10%	$ 7,970.46	$ 71,734.10		
Bend Municipal	$ 41,750.78	32%	$ 55,111.03	$ 16,365.40	$ 71,476.43	25%	$ 17,869.11	$ 53,607.32		
Boardman	$ 120,120.20	45%	$ 174,174.29	$ 51,721.62	$ 225,895.91	10%	$ 22,589.59	$ 203,306.32		
Cascade Locks State	$ 13,505.40	45%	$ 19,582.83	$ 5,815.19	$ 25,398.02	5%	$ 1,269.90	$ 24,128.11		Non NPIAS
Columbia Gorge Regional	$ 148,125.90	47%	$ 217,745.07	$ 64,660.11	$ 282,405.18	10%	$ 28,240.52	$ 254,164.67		
Condon State	$ 20,125.75	32%	$ 26,565.99	$ 7,888.86	$ 34,454.85	10%	$ 3,445.48	$ 31,009.36		
Enterprise Municipal	$ 11,656.76	32%	$ 15,386.92	$ 4,569.20	$ 19,956.12	5%	$ 997.81	$ 18,958.31		Non NPIAS
Grant County Regional	$ 80,756.62	45%	$ 117,097.10	$ 34,772.37	$ 151,869.47	10%	$ 15,186.95	$ 136,682.52		
Hermiston Municipal	$ 3,475.68	32%	$ 4,587.90	$ 1,362.39	$ 5,950.29	10%	$ 595.03	$ 5,355.26		
Ken Jernstedt (Hood River)	$ 81,177.04	47%	$ 119,330.25	$ 35,435.51	$ 154,765.76	10%	$ 15,476.58	$ 139,289.18		
LaGrande/Union County	$ 33,230.20	32%	$ 43,863.86	$ 13,025.52	$ 56,889.38	10%	$ 5,688.94	$ 51,200.44		
Madras City-County	$ 27,333.39	32%	$ 36,080.07	$ 10,714.10	$ 46,794.17	10%	$ 4,679.42	$ 42,114.75		
Prineville	$ 19,096.36	32%	$ 25,207.20	$ 7,485.36	$ 32,692.55	10%	$ 3,269.26	$ 29,423.30		
Sunriver	$ 4,311.25	32%	$ 5,690.85	$ 1,689.92	$ 7,380.77	10%	$ 738.08	$ 6,642.69		
Wasco State	$ 9,751.99	32%	$ 12,872.63	$ 3,822.57	$ 16,695.20	10%	$ 1,669.52	$ 15,025.68		
Total	$ 660,974.31		$ 934,751.22	$ 277,577.43	$ 1,212,328.65		$ 129,686.62	$ 1,082,642.03		

Notes:
1. Preliminary program based on PCI run dated July 2011.
2. Construction costs include mark-up as shown. Striping markup dependant on surface treatment selected.
3. Engineering costs are based on past Statement of Work and Fee Estimates and will need to be updated upon WOC execution.

Notes:
1. Airport Sponsor match % obtained from latest PCI Region list at ODA.

COPY

INTERGOVERNMENTAL AGREEMENT
Airport
Statewide Airport Pavement Maintenance Program

The parties to this Agreement are THE STATE OF OREGON, acting by and through its Department of Aviation, hereinafter referred to as "ODA", and , acting by and through its City Council, hereinafter referred to as "City".

I. **PURPOSE:** The Statewide Airport Pavement Maintenance Program is a state-funded program to assist airports in undertaking pavement maintenance. This program will protect Oregon's airport investments by preserving airport pavement consistent with the goals of the 2000 Oregon Aviation Plan.

II. **RECITALS:**

A. Airport is a public use airport owned and operated by the .

B. By the authority granted in ORS 190.110, state agencies may enter into agreements with units of local government for the performance of any or all functions and activities that a party to the agreement, its officers, or agents have the authority to perform.

C. ODA may exercise this power jointly with any municipalities or agencies of the state government, other states or their municipalities, or the United States, by authority granted in ORS 836.040.

D. ORS 836.072 provides ODA the authority to establish and fund a program to maintain and preserve the pavements used for runways, taxiways, and aircraft parking areas at public use airports in this state.

E. City desires pavement maintenance work for the airport as further described in the attached Exhibit A, hereinafter the "Project". The Project may be subject to minor amendments after final contract documents are prepared.

F. Airport is in the core system of airports identified by the 2000 Oregon Aviation Plan.

G. The City and/or controlling jurisdiction has established airport overlay zoning and is implementing OAR 660-013, Airport Planning.

III. TERMS OF AGREEMENT:

A. ODA Obligations

1. ODA shall develop all contract specifications and bid documents for the Project through the Department of Administrative Services. When bid amount and Project are confirmed with contract specifications, ODA will send a revised Exhibit A, if necessary, to City, and request that City initial and return the final Exhibit A.

2. ODA shall negotiate with the selected engineer for a contract that includes the required price and services necessary to complete the Project.

3. ODA shall advertise for construction bids. Construction contract shall be awarded based on the lowest responsible bid received.

4. ODA's contracted engineer will inspect projects to ensure conformity with specifications and to verify quantities for contract payments.

5. ODA will invoice City for matching funds based on initial and final construction costs.

B. City Obligations:

1. City will review initial and return to ODA the revised Exhibit A, confirming its acceptance of the Project and the Project cost.

2. City must contribute ten percent (10%) in local matching funds toward the total Project cost. Prior to the start date of the Project upon request from ODA, City shall deliver fifty percent (50%) of the estimated local match to ODA. At the termination of the project, City shall deliver the remaining fifty percent (50%) of local matching funds to ODA immediately after receiving an invoice from ODA.

3. City has established and shall maintain a documented pavement maintenance program on a 3-year inspection cycle in accordance with the ODA pavement inspection cycle.

4. In consideration for receipt of program funds, City agrees to keep the airport open for public use for a minimum of 20 years from the date of this Agreement.

5. The Project shall not provide pavement maintenance for any areas of airport that are private or exclusive use areas.

6. City shall communicate through ODA with the contractor regarding contract administration and scope of the Project.

7. City agrees that, if problems with the contractor arise during construction, it shall communicate these concerns to ODA, which shall be responsible for resolving these concerns.

8. City shall, to the extent permitted by the Oregon Constitution and the Oregon Tort Claims Act, hold ODA harmless from liability for any costs, fees or expenses that may be incurred in the performance of this agreement.

9. Airport representative shall be available on arrival of contractor work crews to meet with project inspector to review work to be completed and to ensure appropriate NOTAM's (notice to Airmen) have been issued prior to commencement of work.

C. General Provisions:

1. This Agreement shall become effective on the date signed by all of the parties, and shall continue in effect until the improvements described in Exhibit A (as amended) are completed and City has delivered the required matching funds, or two years from the date of this Agreement whichever occurs first. Covenants of City made herein shall survive the termination or expiration of this Agreement.

2. The Project will be completed in accordance with applicable FAA and state design standards and regulations.

3. In performing or completing the Project, ODA shall assure compliance with all the regulations of the United States Department of Transportation relative to nondiscrimination in federally assisted programs. Further, ODA will not allow discrimination on the grounds of race, color, national origin or sex in the performance and completion of the Project.

4. The parties to this agreement will comply with all applicable federal, state, and local laws, regulations, executive orders and ordinances applicable to the work including, but not limited to, the provisions of ORS 279.312, 279.314, 279.316, 279.320, and 279.555, incorporated herein by reference and made a part of this agreement.

5. The parties, City's or ODA's subcontractors, if any, and all employers working under this agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers.

6. This agreement may be terminated by mutual written consent of both parties. ODA may, at its sole discretion, terminate this agreement, in whole or in part, upon thirty days written notice to City. ODA may terminate, in whole or in part, immediately upon notice to City, or at such later date as ODA may establish in such notice, upon the occurrence of any of the following events:

    a. If City fails to provide services or funds called for by this agreement within the time specified herein or any extension thereof;

    b. If City fails to perform any of the other provisions of this agreement, or so fails to pursue the work as to endanger performance of this agreement in accordance with its terms, and after receipt of written notice from ODA fails to correct such failures within 10 days or such longer period as ODA may authorize;

    c. If federal or state laws, regulations or guidelines are modified or interpreted in such a way that the work under this agreement is prohibited;

   Any termination of this agreement shall not prejudice any rights or obligations accrued to the parties prior to termination;

7. **THIS AGREEMENT** constitutes the entire agreement between the parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement. No waiver, consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of ODA to enforce any provision of this agreement shall not constitute a waiver by ODA of that or any other provision.

The city , with the approval of its City Council, has authorized the approval and execution of this agreement on behalf of Airport.

The Director of the Department of Aviation is authorized to act on behalf of the Department of Aviation in approving and executing this agreement.

State of Oregon, by and through its Department of Aviation

By: _____ Date: _____
Ann B. Crook, Director
Oregon Department of Aviation

City

By: _____ Date: _____

Reviewed for Legal Sufficiency for ODA

By: _____ Date: _____

Approved for the as to Legal Sufficiency

By: _____ Date: _____

General Aviation Airport Basics

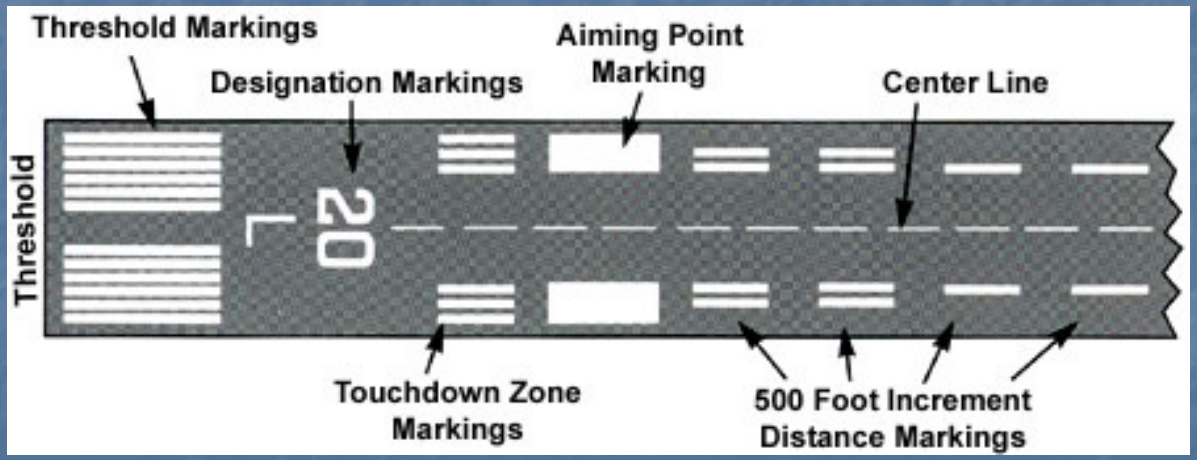
Airport Basics for Contractors
Working on General Aviation Airports

(FAA AC 150-5210-20, AGVO Guide)

Presented by WHPacific

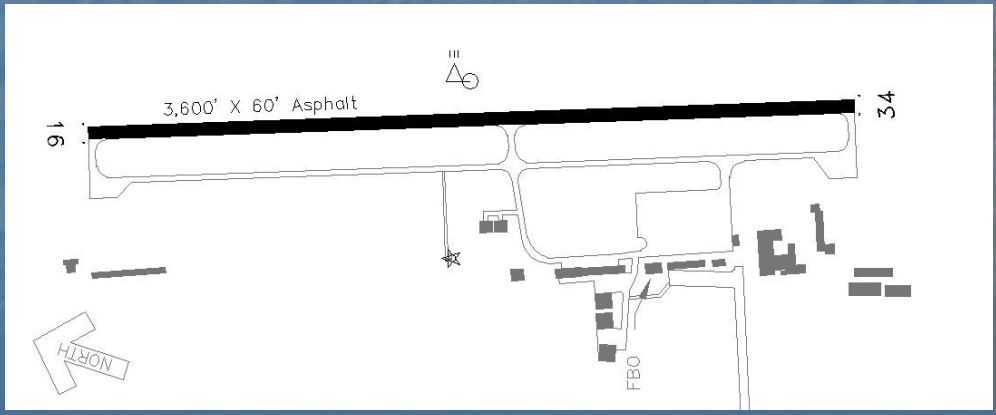
Airport Basics

- Runways
  - Most critical Airport pavement
  - White Markings
  - Numbered for Identification and Direction



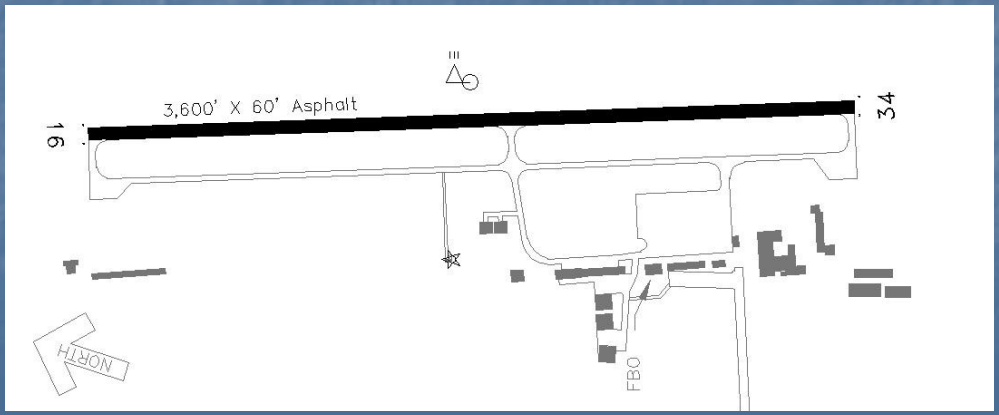
Airport Basics

- Taxiways/Taxilanes
  - Used by aircraft for transit/access to Runways
  - Yellow Markings
  - Number/Letter Designation



Airport Basics

- Aprons
  - Used for parking and storage
  - Yellow Markings
  - Startup and slow moving operations
  - Jetblast/propwash and beacons



Airport Marking/Equipment

- Signs
  - Types and colors
- Lights
  - Runway Lights
  - Navigational Aids
- Markings
  - Hold Lines
  - Centerlines

Signage when on taxiway A holding short of runway 16R

Guidance Sign

Location Sign

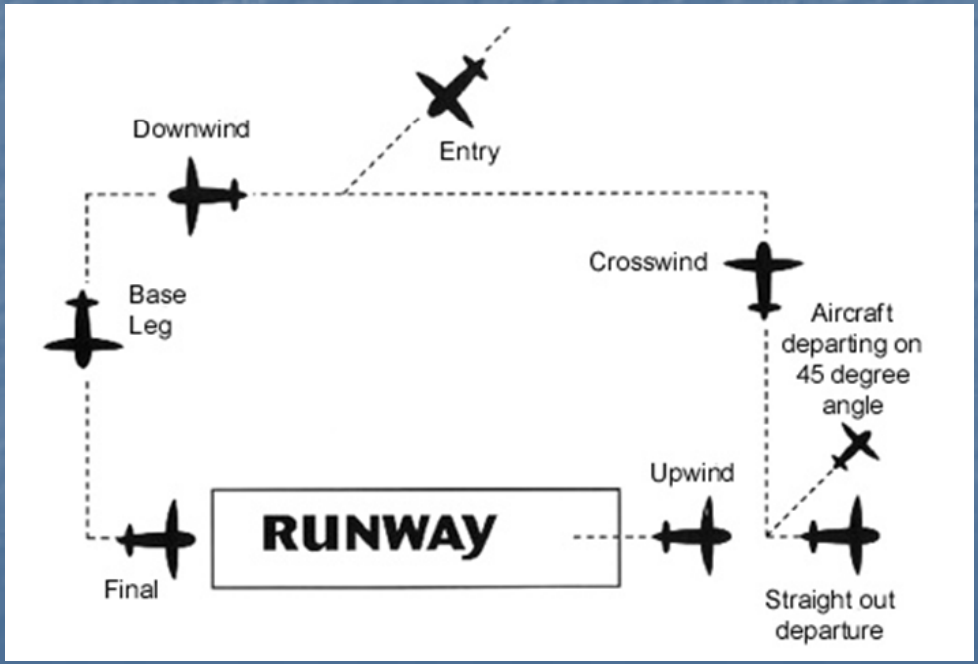
Hold Line Marking

Aircraft Basics

- General Aviation Aircraft
  - Small plane
  - Small Jets
  - Helicopters
  - Gliders/Ultralights
- Small and quiet
- Tail Numbers
- Always Yield Right of Way!!!

Airport Traffic Patterns

- Upwind Landings
- Typical Traffic Pattern:



Airport Traffic Patterns

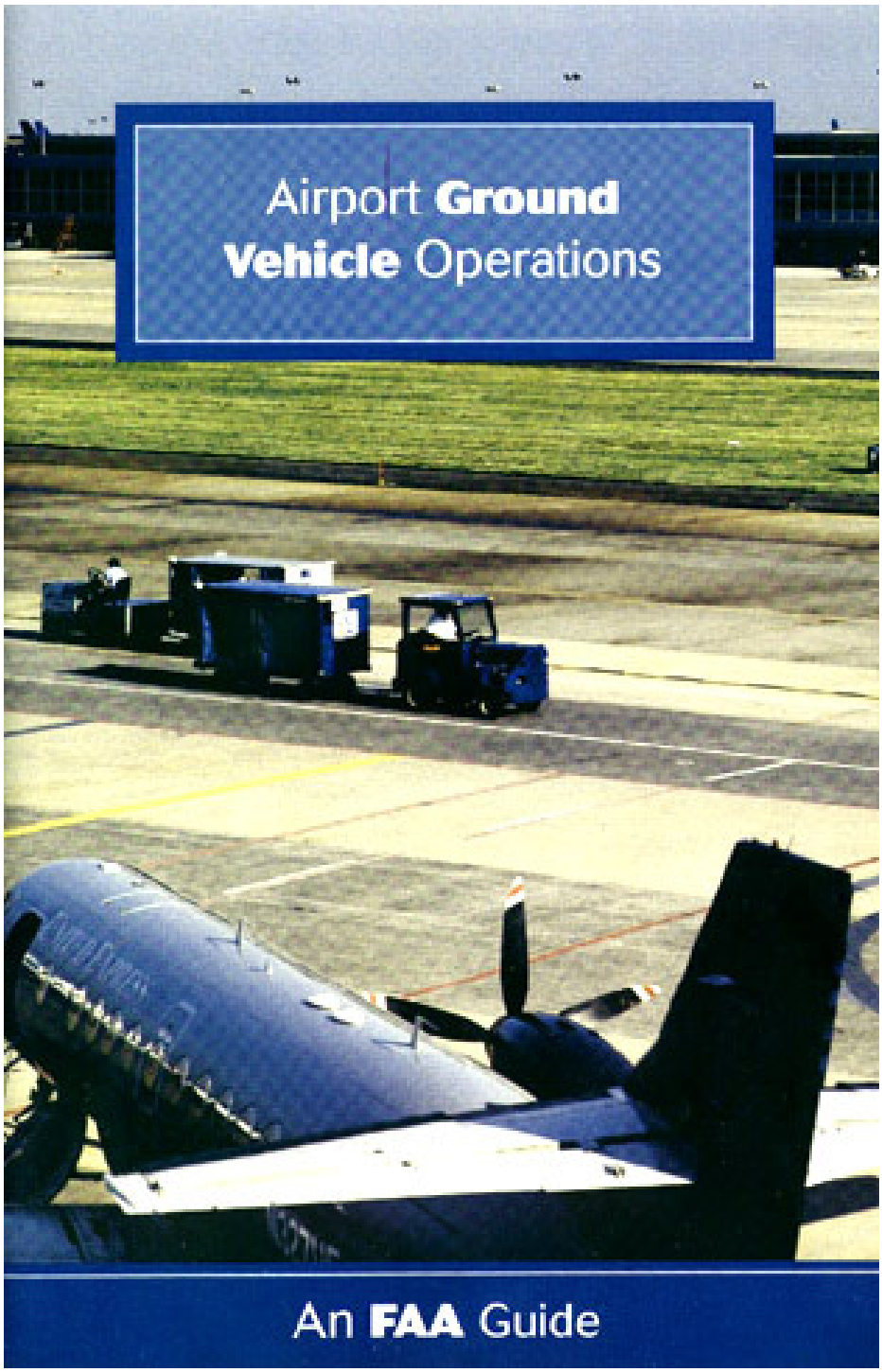
- Aircraft Communications
  - Use of UNICOM/CTAF
  - Aircraft <u>not</u> required to have radios
  - Movements "should be" communicated
- Towered Airports
  - Use of Tower or Ground Frequency
  - All movements directed/controlled
  - Movements and patterns dictated

Airport Traffic Patterns

- Touch and Go Landings
- Agricultural Operations
- Apron/Hangar Areas
- Transient Aircraft

Other Airport Related Concerns

- Foreign Object Debris (FOD)
- ARFF
- Security/Access
- Fixed Base Operators
  - Fueling
  - Charter
- Other Airport Users
  - Firefighters
  - Skydivers



Airport **Ground Vehicle** Operations

An **FAA** Guide

- This guide is intended for employees who drive vehicles or motorized equipment on airports.
- **Note to drivers:** Please keep this guide and use it for reference and as a refresher.

This guide provides a general overview of safe procedures for driving on an airport. It is not intended to cover specific conditions at all airports. Some local procedures are unique. If there are questions about differences between this guide and local procedures, they can be resolved by your supervisor or airport manager.

Foreward

Everyone's cooperation is necessary to prevent potentially serious accidents on airports. The FAA has an ongoing program aimed at pilots to help reduce runway incursions, pilot/controller miscommunications and airport surface mishaps. Employees who operate vehicles or equipment on airports also have key responsibilities in these efforts.

By its nature, it is necessary for this guide to be generic. In addition to orientation and operational information, the guide touches on some other areas that a ground vehicle operator may encounter, such as foreign object damage (FOD), security, and reporting emergencies. If this guide is used as a training document at a specific airport, be sure to include that airport diagram along with this guide. Some of the necessary supplemental information is listed below:

- Airport rules and regulations concerning ground vehicle operations.
- Airport diagram showing runways, taxiways, aprons, movement areas, vehicle roadways, location of the airport fire station, critical areas for electronic navigational aids, and areas where vehicles are permitted to operate.
- Airport security procedures that the employee should be aware of and the employees responsibility in this area.
- Procedures, person to contact, and telephone number for reporting emergencies and ground vehicle accidents.

Any comments or suggestions on improving this guide are welcome and should be sent to the following address:

Federal Aviation Administration
Office of System Safety, ASY-300
800 Independence Avenue, SW
Washington, DC 20591

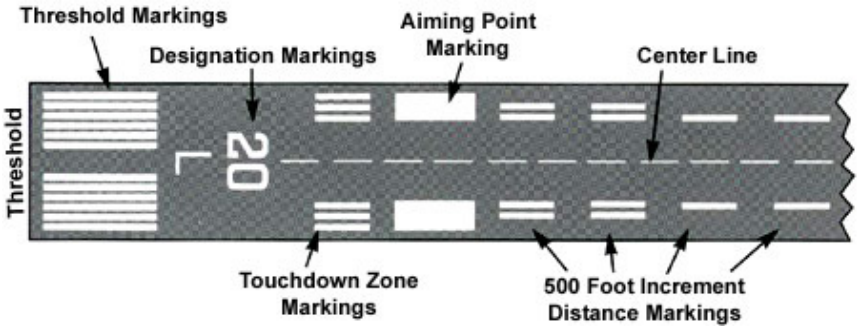
Section One - Airport Basics

The following information explains the basic features of any airport. There may be important unique aspects to the airports on which you drive, such as dedicated vehicle lanes, areas not visible to controllers, or nonstandard traffic patterns. Be aware and know the rules of your airport.

Runways

Runways have specific markings on them that are white. They will have numbers on each end and stripes down the middle with white lines on the edges. Runways that are served by an instrument approach will have more elaborate markings such as those shown in the figure. The most important thing to remember about a runway is that it is meant for aircraft use, so never drive your vehicle on it unless you are authorized to do so.

Runway Markings (not to scale)



Taxiways

Taxiways are areas used by the aircraft to get to and from the ramp and the runway. Taxiways look similar to runways, but are usually not as wide and they don't have the same kind of markings. Taxiway markings are yellow. Instead of numbers, taxiways use letters or letter/number combinations for designators. Like runways, taxiways are meant for aircraft use. Authorization is normally required before you operate a vehicle on runways or taxiways. Aircraft cockpit windows are designed for pilots to see other aircraft. It can be difficult or impossible for the flight crew of large aircraft to see vehicles, particularly behind the wings or under the nose of the aircraft.

Aprons or Ramps

Aprons or ramps are the areas where aircraft park, load, and unload. Your work may require you to drive on an apron. If so, be very careful. Watch out for aircraft that are moving and always yield the right-of-way to them. Don't assume the pilot will see you and stop. He or she may be busy with other things like radio

communications or checklist items.
In addition to watching for moving aircraft, be careful not to get too close to a parked aircraft. Aside from nicks and dents that are expensive to repair, you could be hurt if an aircraft suddenly started its engine and you were too close. You should also be aware of the problem of jet blast or prop wash. There have been several cases where vehicles have been overturned by jet blast. One way to tell if an aircraft is about to start its engine(s) or if the engine(s) is running is that the aircraft's flashing beacons will be on.

Signs

The colors and sizes of signs are important. If the sign has white numbers on a red background, it is a runway holding position sign. These signs are important because they mean you are on the edge of the protected area around a runway and must have permission to proceed.
A yellow sign with black letters is a guidance sign. A black sign with yellow letters is a location sign. The taxiways at your airport may have these signs next to them. Examples are CARGO or TERM to identify what the parking area ahead is used for, or the direction to go to find that area.

Guidance Sign

Location Sign

A driver would see these signs and markings when holding short of runway 18-36 at taxiway "G"

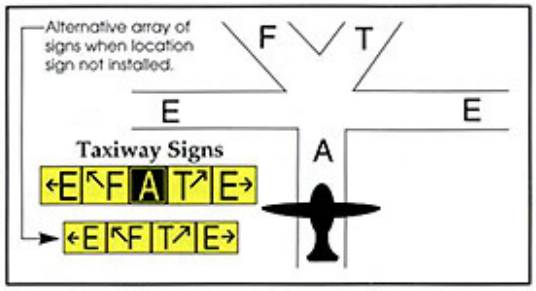


Figure 1

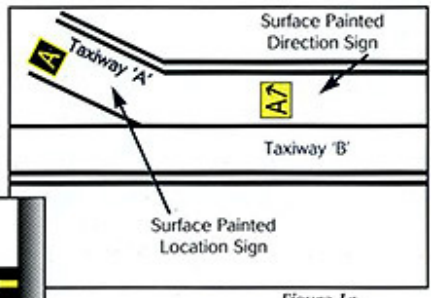


Figure 1a

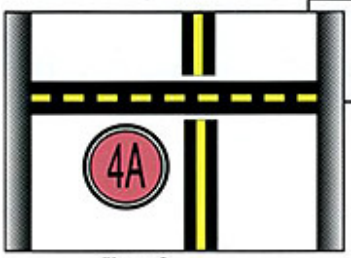


Figure 2

A taxiway sign with yellow letters and a black background will tell you which taxiway you are on and helps you determine your location. Some airports

have these signs painted on the taxiways (see Figure 1 and 1a). Other airports have geographic position markings to use in determining a point on a taxiway (see Figure 2). Not all airports have implemented location signs and geographic position markings.

Lights

Runways are edged with white lights and taxiways have blue lights. Near the ends of runways, the lights may be two-sided. Amber on one side, white on the other. At the end of the runway you may also see runway threshold lights. These are red on one side, green on the other. If the amber or red lights are visible you may be approaching the end of the runway. Remember, runway edge lights are white and taxiway edge lights are blue.

Signage when on taxiway A holding short of runway 16R

Markings

Runway markings are painted white. Taxiways have yellow markings. The center of the taxiway has a solid yellow stripe. The sides may have one or two solid yellow stripes along the edge. Again, not all airports have these markings. As the taxiway comes up to the edge of the runway, you may see what pilots call a "hold" line that looks like this.

Hold Line Marking

ILS Holding Mark

It is two solid yellow stripes followed by two broken yellow stripes. This is the airport version of a stop sign. Along the side of the taxiway next to the holdline, there may be a runway holding position sign (red and white) with the runway number. ILS hold markings advise pilots and vehicle operators where to stop to avoid interfering with aircraft navigational signals. At tower controlled airports, a clearance is required to pass either of these markers and enter the runway. When exiting the runway you may see hold signs with the same marks that appear on the taxiways. Be certain to go beyond these hold markings and signs.

Ramps have markings, as well, for aircraft parking and tie downs. Some airport ramps have special markings for vehicle operations. If there are vehicle or roadway markings, you should always drive your vehicle within those marked areas. Taxiways may also be marked on the apron to show aircraft routes to gates and parking areas.

Helicopter Landing Area Marking

Some airports have designated helicopter landing pads. This is depicted with an H inside of a square. Be especially careful when you drive near helipads and look up for landing helicopters. Like all aircraft, you must yield the right-of-way to a helicopter.

Navigational Aids

When driving near navigational aids, stay out of the protected areas around them to avoid interfering with their signals. If a road or taxiway is close enough to an ILS to affect it, there should be an ILS holding position sign like the one mentioned earlier.

More Signs

There may be signs to remind pilots of noise abatement procedures or warning signs that tell vehicle operators not to proceed beyond a certain point. You may see markings that identify the area of the airport under air traffic control. These markings are yellow and consist of two yellow lines, one solid one dashed. The dashed line faces the area controlled by ATC. Other signs include "distance remaining" signs on the runway to tell the pilot how much runway length is left.

3,000 feet remaining on runway

Section Two - Controlled Airports

If your airport has an air traffic control tower, it is called a "controlled" airport whenever the tower is operating. That means anyone wanting to fly into or out of the airport must first get permission from the controller. Aircraft on the ground and vehicles must also get permission from the controller to be on the runway or taxiways. (Controllers call these areas "movement areas"). As an operator of a vehicle, you must get the controller's permission before you go onto a runway or taxiway, their associated safety areas, or any other part of the movement area. There are at least two ways to get permission, by radio or advanced coordination with ATC. Check the airport diagram and be sure of the location of the movement areas.

Radio Communications Procedures

1. Use an air-to-ground radio with the airport's ground control frequency on it. Each vehicle should have a call sign identifying the vehicle.

2. Know the proper phraseology and never use Citizen's Band (CB) lingo or law enforcement "ten" codes.

3. Think about what you are going to say before calling the controller.

4. Use the proper sequence in calling the controller. Before you start talking, make sure that no one else is already talking. Then you should:
   a) say who you are calling and who you are (e.g., "Cincinnati ground, Vehicle One").
   b) wait for the controller to respond. Sometimes it takes a while if they are busy. When the controller responds, state where you are and where you want to go. For example "Vehicle One is on the terminal ramp and would like to cross 18 Right at taxiway Alpha and proceed to the VOR." Wait for the controller's response.
   c) the controller will either approve or deny your request, or issue special instructions. An example of the instructions would be "Vehicle One, proceed to, hold short of runway 18 Right." Acknowledge that you have heard the controller's instructions. For example "Vehicle One, cleared to VOR, Vehicle One will hold short of 18 Right." Always repeat a "hold short" clearance. The section titled "Aviation Phraseology" lists air traffic control phrases with definitions. You should know what they mean

before going onto any runway or taxiway. Note: Use extreme caution when you hear the phrase "go ahead." Controllers use this to mean "state your request." It never means "proceed!"

Communications are not difficult with a little practice. If you are ever unsure what the controller said, or if you don't understand an instruction, ASK THE CONTROLLER TO REPEAT IT WITH "SAY AGAIN." A controller, even one who is extremely busy, would rather repeat and explain something than to have a misunderstanding lead to an accident or runway incursion. Don't proceed thinking that the instructions will become clear once you go a little further.

Advanced Coordination

When you contact the tower, you will receive instructions on how to proceed and what signals to expect.

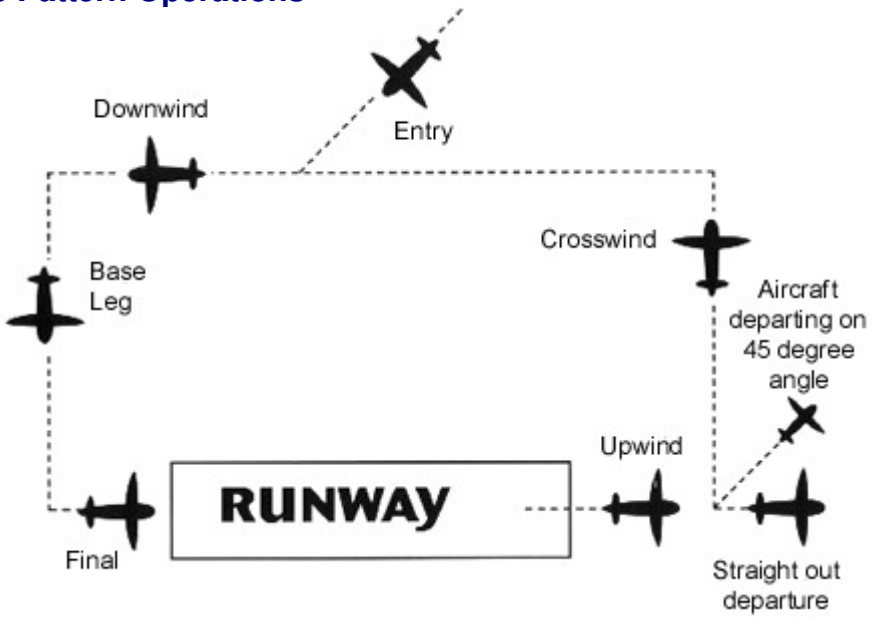
Section Three - Nontowered Aiports

When the tower is closed or if there is no tower, the airport is called nontowered. At a nontowered airport you don't have to get a controller's permission before going onto a runway or taxiway. You should, however, always carry a radio tuned to the airport's common traffic advisory frequency (CTAF) usually called UNICOM. When you get near the runways and taxiways, SLOW DOWN! Look both ways, and then look UP for aircraft that are landing or taking off. Always yield the right-of-way to taxiing aircraft and give them plenty of room. If an aircraft is on the same taxiway as you and headed in the opposite direction, move out of the aircraft's way. Be careful not to hit taxiway edge lights. If an aircraft is about to land on a runway that you need to cross, stop and yield to the aircraft until it has landed and taxied clear of the runway. Then proceed.

Traffic Patterns

Aircraft approaching a runway for landing follow a pattern. In most cases, the pattern is a rectangular box with the pilot making all turns to the left. In a few cases, airports will use right traffic patterns. Pilots announce their position using the names for segments of the traffic pattern (e.g., Woodbridge traffic, Cessna 83 Bravo downwind, approaching base runway 19, Woodbridge). Remember that some aircraft that are not equipped with radios will be operating at nontowered airports, so always visually scan for traffic.

Airport Traffic Pattern Operations



Aircraft at nontowered airports frequently make "touch and go" landings where immediately after landing, full power is applied and the aircraft takes off again. Before you cross a runway, make sure the aircraft has exited the runway or has gone past you.

Extra vigilance is key at nontowered airports. Aircraft do not have to communicate or announce their position in the pattern or on the surface. Some aircraft don't have radios. You can be lulled into complacency at nontowered airports because they usually aren't very busy, hence they don't justify a control tower. If you are used to not seeing any other traffic, don't expect this to always be the case. If your vehicle has a rotating beacon, be sure to turn it on anytime you are on the airport surface.

Sometimes the runway gradient makes it impossible to see the entire length of the runway and an aircraft can suddenly appear when you are crossing. It's best to cross runways at the end.

Section Four - Aviation Phraseology

Acknowledge - Let me know you have received and understand this message.
Advise intentions - Tell me what you plan to do.
Affirmative - Yes.
Confirm - My version is.. is that correct?
Correction - An error has been made in the tranmission and the correct version follows.
Go ahead - State your request (never means "proceed").
Hold - Stop where you are.
Hold short of... - Proceed to, but hold short of a specific point.
Negative - No, or permission not granted, or that is not correct.
Proceed - You are authorized to begin or continue moving.
Read back - Repeat my message back to me.
Roger - I have received all of your last transmission. (It should not be used to answer a yes or no question.)
Say again - Repeat what you just said.
Standby - Wait... I will get back to you. (Standby is not an approval or a denial. The caller should reestablish contact if the delay is lengthy.)
Unable - I can't do it.
Verify - Request confirmation of information.
Wilco - I have received your message, understand it, and will comply.

The Aviation Alphabet

Because some letters sound similar, the following words are used to reduce confusion. For example, taxiway B would be referred to as taxiway Bravo.

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

Light Signals

Air traffic controllers have a backup system for communicating with pilots if the aircraft's or controller's radios fail. Controllers use a light gun with different colors to tell pilots or vehicle drivers what to do. If you are ever working on a runway or taxiway and your radio quits, you should turn your vehicle towards the tower, start flashing your headlights and the controller will signal you with the light gun.
This may take some time if the controller's attention is directed towards another part of the airport. Alternatively, try another frequency (the tower or "local control" frequency) or telephone the tower if you have access to a phone. BE PATIENT! Even a failed radio is not an excuse for proceeding without a proper clearance.

Light signals and their meanings:

Light signals and their meanings:

Steady green -	Okay to cross runway or taxiway; proceed; go.	
Steady red -	Stop.	
Flashing red -	Clear the runway or taxiway.	
Flashing white -	Return to starting point on airport.	
Alternating red and green -	General warning signal. Use extreme caution. *Note:* The warning signal is not a prohibitive signal and can be followed by any other light signal as circumstances permit.	

Section Five - Other Important Information

Foreign Object Damage (FOD)

Trash or rocks sucked into a jet engine can shred parts of the engine in seconds. A rock caught by a propeller can damage the propeller, as well as become a deadly projectile. Make your airport a safer place by putting all trash in a covered container that won't be blown over. Get in the habit of picking up any trash and rocks near aircraft movement areas. Also pick up nails, bolts, or pieces of metal that could cause FOD or puncture tires. Avoid tracking mud and rocks onto the pavement surfaces.

Reporting Accidents

If you are involved in an accident, report it immediately to your supervisor. If a collision occurred between you and an aircraft, it's critical that the aircraft not be flown until the damage can be inspected and repaired.

Aircraft Rescue And Fire Fighting (ARFF)

Just as when you are in highway traffic, if you see an airport emergency vehicle with its lights on, pull out of its way and do not proceed until it is well clear of you.

Security

Depending on the type of airport you work on, the security system may be as simple as a fence or it may include items as complicated as computer controlled automatic gates with television screen monitors. At large air carrier airports, security may be provided by the airport's police department or a contractor. At smaller airports, the airport manager or the fixed base operator may be responsible for security.

If you see a gate left open, close it, and then report it to the airport security office. If you see a strange vehicle on the apron or a vehicle that appears lost, stop it and offer assistance. Or, if your airport has a security department, contact them for help. If you work at an air carrier airport, the airport manager has a complete security plan for the airport. Be sure you know what your responsibilities are and ask your supervisor if there is anything you are unsure about.

Nighttime or Bad Weather Driving

If you have to drive at night, it's a good idea to take someone with you the first couple of times who is familiar with how the airport looks at night. It will look very different. The same applies if you are driving in bad weather. In both cases, allow yourself a little extra travel time and drive slower than you normally would.

Under winter conditions, signs and marking may be obscured by snow. Snow equipment may be operating in low visibility conditions and may not see your vehicle. Use caution, remember there are extra risks present.

Section Six - Quiz

This quiz tests your knowledge of rules, signs, and aviation phraseology. This quiz is not difficult but if you read this guide you should get most of the answers correct. If you don't understand, ask your supervisor for an explanation.

1) A controller who says "go ahead" means:
   a. proceed as requested.
   b. continue straight ahead.
   c. state your message.

2) The red and white sign next to the taxiway is called a runway hold position sign. If you are next to this sign, it means:
   a. that you are about to go onto the protected area next to the runway.
   b. that you should follow the sign to get to the parking apron.
   c. nothing to me, it's only there for the pilot's use.

3) Two solid yellow stripes followed by two broken yellow stripes is the marking for a runway hold line. A hold line means:
   a. all aircraft must stop and be cleared before going onto the runway.
   b. everyone, including vehicles, must stop unless authorized to proceed onto the runway.
   c. that you are about to go next to some electronic signal equipment.

4) Runway markings are:
   a. white.
   b. yellow.
   c. red.

5) Taxiway marking are:
   a. white.
   b. yellow.
   c. red.

6) A "controlled" airport is one that has an operating airport traffic control tower.
   a. True
   b. False

7) FOD is caused by:
   a. bad weather conditions.
   b. the airport manager.
   c. trash and debris.

8) If I have to cross a runway, I should try to do so:
   a. at the end.
   b. in the middle.
   c. wherever I want.

9) If the air traffic controller signals me with a flashing red light, I should:
   a. stop.
   b. clear the runway or taxiway.
   c. ignore the signal as it is for aircraft only.

10) If the air traffic controller signals me with a steady red light, I should:
   a. stop.
   b. clear the runway or taxiway.

c. ignore the signal as it is for aircraft only.

11) Traffic patterns are used at controlled airports (those with towers) only.
a. True
b. False

12) When driving in the area immediately behind a large jet aircraft with its engines running, a driver should:
a. not be concerned about danger from the jet blast because a typical car/van is too heavy to be affected.
b. stop or stay well back and not proceed behind the aircraft until air traffic control has confirmed the aircraft is at idle power.
c. cross the area of jet blast at a perpendicular angle to minimize the hazard.

13) Unless contrary instructions have been received from air traffic control, a vehicle should always yield to an
aircraft.
a. True
b. False

14) If, at a nontowered airport, you see an aircraft approaching the runway to land when you are waiting to cross the same runway, you should:
a. hold short of the runway until the aircraft is past the point at which you will cross the runway then proceed when it is safe.
b. proceed across if the aircraft has not announced its position on the UNICOM frequency.
c. contact the pilot by radio and see if he or she intends to make a touch and go landing.
d. flash your headlights at the aircraft.

15) An aircraft that has announced its position on the UNICOM frequency as "downwind" at the nontowered airport on which you are driving, is flying:
a. perpendicular to the runway after initial climb and turn.
b. parallel to the runway in the direction opposite landing.
c. an approach to land with the wind instead of into the wind.
d. too fast to spot until the aircraft slows down to land.

16) If a controller gives you permission to do something which appears unsafe:
a. you must comply or face disciplinary action.
b. you should comply and then call your supervisor as soon as practicable.
c. you should tell the controller your concerns and get clarification before proceeding.
d. flash your headlights and proceed.

17) Aircraft usually land and takeoff:
a. into the wind.
b. with the wind at their back.

18) An aircraft that has announced its position as "short final" is:
a. nearing the runway threshold for landing.
b. about to make the last landing for the day.
c. well outside of the airport traffic pattern.

19) A touch and go landing involves:
a. a landing without bouncing.
b. a landing followed by immediate application of power to takeoff again without bringing the aircraft to a stop.
c. a lot of skill.
d. aircraft flying in formation.

20) Which of the following will make driving on an airport more difficult?
   a. snow and ice.
   b. night driving.
   c. congested ATC frequencies.
   d. all of the above.

21) An aircraft that has announced its position on the UNICOM frequency as "base leg" at the nontowered airport on which you are driving, is flying:
   a. perpendicular to the runway after initial climb and turn.
   b. parallel to the runway in the direction opposite landing.
   c. perpendicular to the runway about to turn final and land.
   d. with a pilot at the controls whose foot is asleep.

ANSWERS: 1.c, 2.a, 3.b, 4.a, 5.b, 6.a, 7.c, 8.a, 9.b, 10.a, 11.b, 12.b, 13.a, 14.a, 15.b, 16.c, 17.a, 18.a, 19.b, 20.d, 21.c

This guide has covered the basics of how to safely drive on an airport. Remember also to be courteous to your fellow drivers, pay attention, don't get distracted, follow the rules and regulations, and set a good example. Eventually you will attain a comfortable working knowledge of how to safely get around. That comes with experience. If there is something you don't understand, always ask before proceeding. As your knowledge and experience grows, share it with new employees or counsel drivers that you see doing something that is questionable or unsafe.

Other sources of information

FAA Videotape

- Runaway Incursions - "The Unseen Danger"

(Video tape and extra copies of this guide available from ASY-300, 202-267-7770)

Publications

Aeronautical Information Manual
(Available from Government Printing Office)

Airport/Facility Directory
Airport diagrams contained in U.S. Terminal Procedures (Instrument Approach Plates)
(The above publications are available from NOAA, 800-638-8972)

Advisory Circular AC 5370.2D - Operational Safety on Airports During Construction
(Available through DOT/FAA, 202-366-2795 Fax Request number)

Pamphlets

- Airport Markings, Signs and Introduction SMGCS, ASY-20, 95/001
- Runway Incursions, FAA/ASY-300 97/002

Operational Safety During Construction

Airport Safety Training for

Contractors Working on General Aviation Airports

(FAA AC 150-5370-2E)

Presented by WHPacific

CONTRACTOR/WHP RESPONSIBILITIES

Everyday Safety Responsibilities

Contractor

- Jobsite safety!!!!!
- Employee education
- Radio Monitoring
- Education of Subs
  - Prior to entering airfield
- Monitoring work areas
- Cleanup/FOD removal

WHP Inspector

- Quality Assurance
- Record/Report
- Safety Meetings/Pre-Con
- Coordination/Liason
  - ODA
  - Airport Owners
  - FBOs
  - Pilots

CONTRACTOR/WHP RELATIONSHIP
Pre-construction Conferences

- Prior to work at a new airport
- New personnel on-site
- New work type

- Involve Airport/Owner Personnel
- Involve Tower Personnel
- Airport specific training

CONTRACTOR/WHP RELATIONSHIP
Pre-con Conference Agenda

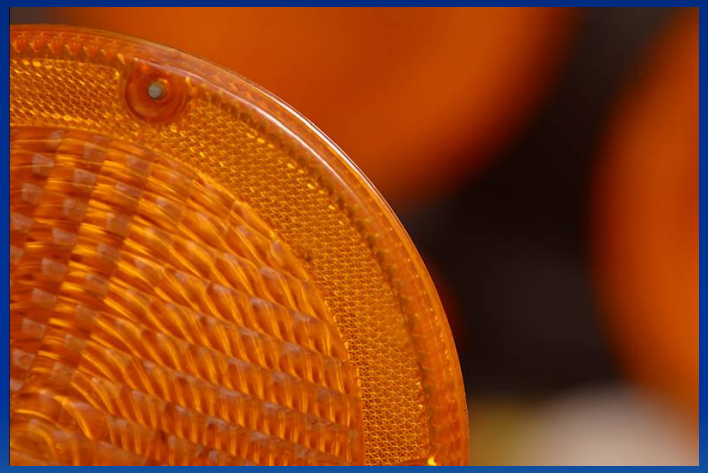
- Review Scope of Work for day
- Review NOTAMs in place and hours
- Verify radio frequency and radio monitoring
- Review work area phasing and haul route
- Confirm future work and NOTAM schedules
- Identify operational concerns
- Identify special operations/scheduled flights
- Discuss exclusion times

SAFETY DURING CONSTRUCTION
Basic Considerations

- Let's get to work

SAFETY DURING CONSTRUCTION
Basic Considerations

- Vehicle Marking/Lighting
- Work Area Protection
- Work Phasing
- Staging
- Security
- Radio Communication



SAFETY DURING CONSTRUCTION
Vehicle Marking/Lighting

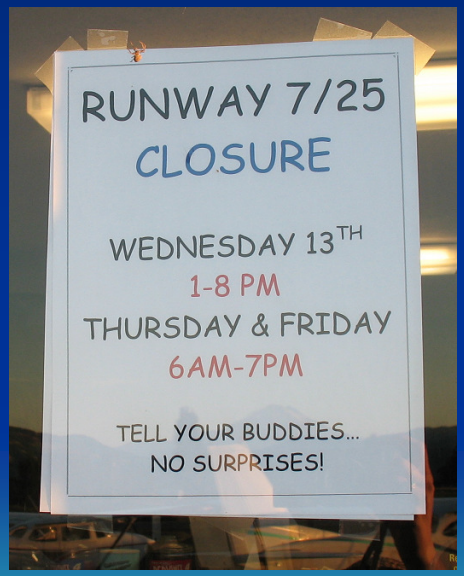
- Flashing Amber Beacon
- Orange/White Flags
- Vehicle Signage
- Escorts
- Lights/Flashers
  - Night Work

SAFETY DURING CONSTRUCTION
Work Area Protection

- NOTAMs!!!!!!!!
- Cones/Barricades
  - Red Flashers at night
  - 10’ Maximum Spacing
- Visibility
- Closure Crosses
- Haul Routes are work areas too!
  - Flaggers if necessary
  - Escorts if required

SAFETY DURING CONSTRUCTION
Work Phasing

- Operations Secondary to Safety!!!
- Open to greatest extent
- Access maintained if possible
- Tenant notification
- Tower/FBO Coordination
- Safety before speed



SAFETY DURING CONSTRUCTION
Staging

- Employee Parking Areas
- Stockpiles
- Equipment Storage
- Trailers/Hot Pots
- Capsule Style

SAFETY DURING CONSTRUCTION
Security

- Access Control
  - Perimeter Fencing
  - Gates
- Theft Issues
- Report Suspicious Activities

SAFETY DURING CONSTRUCTION
Radio Communication

- One of the most important tools on the job site
  - Requesting
  - Informing
  - Instructing
  - Warning
- Movement around the airport
- Radio Training
  - Can’t wait, can you?

SAFETY DURING CONSTRUCTION
The Critical Area

- Delineated by the Hold Line marking/signs
- Request permission to cross
- No work beyond it without full closure
- No open excavations
- Connector work phasing
  - Pull-Back
  - Full Closure

SAFETY DURING CONSTRUCTION
Runway Closures

- For any work inside a Critical Runway Area
- Closure NOTAMs
- Coned off at all intersections
- Closure Crosses
- Night Closures
  - Electrical Shutdown
- Lifting Closures

SAFETY DURING CONSTRUCTION
Incident Reporting

- Avoidance is best
- Information is Key
  - Tail Number
  - Pilot Name
  - Hanger Location
  - Destination
  - Description
- Incident Facts
- Diagrams
- Inform your supervisor immediately!!

SAFETY DURING CONSTRUCTION
Clean-up

- Staging areas restored
- No lips or holes remain
- FOD
- FOD
- FOD
- Sweeping or power brooming as necessary
  - Regenerative air sweeping

SAFETY DURING CONSTRUCTION

SAFETY DURING CONSTRUCTION

SAFETY DURING CONSTRUCTION

Safety is key to a successful project

Airport Radio Training

Airport Radio Training for
Contractors Working on General Aviation Airports

(AGVO Guide, Radio Cheat Sheet)

Presented by WHPacific

What Radios To Use?

- PMP Standard Radio – ICOM IC-A4/A14
  - Aviation band only
  - Able to tune in to each airport's frequency
    - Listed in Oregon Airport Directory
    - On the plans
- Must pass test to be certified

Call Signs

- Identifies each user
- Aircraft have a unique one
- FBOs
- Construction Crews
- Ground/Tower
- Area Traffic

When to use the radio?

- When opening/closing work areas
- Moving around the airport
- Talking to pilots/FBO/Engineer
  - Answering questions
- Emergencies

When not to use the radio?

- When not certified (except for emergency)
- Chatting about the weather
- Calling in lunch orders
- Commenting on crew member's personal hygiene

How to use the radio

- Charged and set to correct frequency
  - Radio Check
  - Spare Battery
- Basic Steps for <u>Uncontrolled Airports</u>
  - Identify who you are calling . . .
  - Identify yourself . . .
  - Make Announcement . . .
  - Identify Airport

How to use the radio

- Basic Steps for Controlled Airports
  - Identify who you are calling and . . .
  - Identify yourself
    - WAIT FOR CONTROLLER RESPONSE
  - Identify yourself and . . .
  - Make Thorough Request
    - WAIT FOR PERMISSION/INSTRUCTION
  - Repeat Back instruction

Radio Use Examples

Crossing active Runway 7-25 in Troutdale

1. Troutdale Tower, This is Contractor 1 . . .

   Contractor 1, this is Troutdale Tower

2. Contractor 1 would like to cross Runway 25 at midfield with red truck

   Contractor 1, proceed across Runway 25 at midfield

3. Contractor 1 is proceeding across Runway 25

Radio Use Examples

Clear of active Runway 14-32 in Mulino

1. Mulino Area Traffic
2. This is Contractor 1 . . . .
3. I'm off of Runway 32
4. Mulino

Radio Use Examples

Closing Runway 9-27 in Corvallis for Fog Seal

1. Corvallis Area Traffic
2. This is Contractor 1
3. We are closing Runway 9-27 for slurry sealing today. It will re-open tomorrow at 8am local time.
4. Corvallis

Radio Use Examples

Question from landing aircraft on taxiing to ramp

1. Siletz Bay Area Traffic
2. This is Contractor 1
3. Be advised that the parallel taxiway is closed near Runway 17. This may require aircraft to ”back taxi” on the runway to access the main ramp.
4. Siletz Bay

Radio Use Examples

Moving Crew to Taxiway B in Salem

1. Salem Tower, This is Contractor 1 . . .

   Contractor 1, this is Salem Tower

2. Contractor 1 would like to proceed to Taxiway Bravo and close it from Golf to Quebec for crack sealing

   Contractor 1, proceed to Taxiway Bravo via Foxtrot and 31 to Golf

3. Contractor 1 is proceeding to Bravo via Foxtrot and 31 to Golf

Radio Use Examples

Partially Closing Taxiway B in Salem

1. Salem Tower, This is Contractor 1 . . .

   Contractor 1, this is Salem Tower

2. Contractor 1 would like to close Taxiway Bravo from Golf to Quebec for crack sealing

   Contractor 1, proceed with Taxiway Bravo closure.

3. Contractor 1 is closing Bravo from Golf to Quebec

Radio Use Examples

Pilot complaining there is no NOTAM for closure

1. Scappoose Area Traffic
2. This is Contractor 1
3. We apologize for the inconvenience due to the construction work. The airport manager issued a NOTAM for the Runway 15-33 closure today from 7am to 7pm local time. Can we help you any other way?
4. Scappoose

Radio Use Examples

Pilot calling for airport advisory with no UNICOM

1. Lebanon Area Traffic
2. This is Contractor 1
3. Be advised the airport is currently closed for crack sealing. There is a NOTAM for this. The airport will reopen tomorrow. Please acknowledge.
4. Lebanon

What's the lingo?

- Phraseology
  - AVGO Section Four
    - No CB lingo or "ten" codes
- Alphabet
  - AVGO Section Four
- More Examples of the Basic Steps
  - Radio Cheat Sheet

Emergency Radio Use

- Always use the radio
  - Better to say something than risk an accident
  - Whether you know the “lingo” or not
- Safety means speaking up

Radio Cheat Sheet

For contractors using handheld radios at general aviation airports for the PMP Project

---

BASIC STEPS FOR RADIO USE ON NON-TOWERED AIRPORTS

Step 1 – Identify who you're calling
Step 2 – Identify yourself
Step 3 – Make announcement (state your business)
Step 4 – Identify airport

EXAMPLES

Example 1: general announcement

- Bend Area Traffic
- This is Engineer 1
- The parallel taxiway near Runway 34 will be closed today until 5pm local time for crack sealing. Be advised to taxi around the work area.
- Bend

Example 2: crossing active runway

- Bend Area Traffic
- This is Contractor 1 . . . .
- crossing Runway 34 with white truck
- Bend

Example 3: clear of active runway

- Bend Area Traffic
- This is Contractor 1
- I'm OFF of Runway 34
- Bend

Example 4: closing active runway

- Bend Area Traffic
- This is Contractor 1
- We are closing Runway 16-34 for slurry sealing today. It will re-open tomorrow at 8am local time.
- Bend

Example 5: question from aircraft taxiing to the north ramp (apron)

- Bend Unicom
- This is Engineer 1
- Be advised that the parallel taxiway is closed at the north end near Runway 16. Access to the north apron is open, planes can use the first access from the south.
- Bend

Example 6: question from landing aircraft on how to get off the runway to the ramp

- Bend Unicom
- This is Contractor 1
- Be advised that the parallel taxiway is closed near Runway 16. This may require aircraft to ”back taxi” on the runway to access the main ramp.
- Bend

Example 7: pilot confused about construction work

- Prineville Area Traffic
- This is Contractor 1
- We are crack sealing Runway 10-28 and it is closed today until 6pm local time. Sorry for the inconvenience. Runway 15-33 is open for your use. Please acknowledge.
- Prineville

Example 8: pilot complaining there is no NOTAM for closure

- Sisters Area Traffic
- This is Engineer 1
- We apologize for the inconvenience due to the construction work. The airport manager issued a NOTAM for the Runway 2-20 closure today from 7am to 7pm local time. Can we help you any other way?
- Sisters

Example 9: pilot 10 miles out calling for airport advisory, and Unicom radio does not reply (or fails to mention airport closure)

- McDermitt Area Traffic
- This is Engineer 1
- Be advised the airport is currently closed for slurry sealing. There is a NOTAM for this. The airport will reopen next week. Please acknowledge.
- McDermitt

(in this case, the handheld radio may not transmit 10 miles. You may have to repeat the message when the pilot is closer, such as less than 5 miles out)

Radio Cheat Sheet

For contractors using handheld radios at general aviation airports for the PMP Project

---

BASIC STEPS FOR RADIO USE ON TOWERED AIRPORTS

Step 1 – Identify who you're calling

Step 2 – Identify yourself

Wait for response

Step 2 – Identify yourself

Step 3 – Make Request (state your business)

Wait for permission or instruction

Step 4 – Repeat back

EXAMPLES

Example 1: general permission request

- Troutdale Tower,
- This is Contractor 1 . . .
    - *Contractor 1, this is Troutdale Tower*
- Contractor 1 . . .
- Would like to cross Runway 25 at midfield with red truck
    - *Contractor 1, proceed across Runway 25 at midfield*
- Contractor 1 is proceeding across Runway 25

Example 2: general work zone transit request

- Salem Tower,
- This is Contractor 1
    - *Contractor 1, this is Salem Tower*
- Contractor 1
- would like to proceed to Taxiway Bravo and close it from Golf to Quebec for crack sealing
    - *Contractor 1, proceed to Taxiway Bravo via Foxtrot and 31 to Golf*
- Contractor 1 is proceeding to Bravo via Foxtrot and 31 to Golf

Example 3: general work zone transit request

- Salem Tower,
- This is Contractor 1 . . .
    - *Contractor 1, this is Salem Tower*
- Contractor 1
- would like to close Taxiway Bravo from Golf to Quebec for crack sealing
    - *Contractor 1, proceed with Taxiway Bravo closure.*
- Contractor 1 is closing Bravo from Golf to Quebec

Basic Airport Knowledge Exam
PMP 2009

This exam This quiz tests your knowledge of rules, signs, and aviation phraseology. A score of 80% is required for supervision of construction activities in any Airport Operations Area.

1. A controller who says "go ahead" means:

    a. proceed as requested.
    b. continue straight ahead.
    c. state your message.

2. A runway is where aircraft

    a. Park.
    b. Land or take off.
    c. Re-Fuel

3. Two solid yellow stripes followed by two broken yellow stripes is the marking for a runway hold line. A hold line means:

    a. all aircraft must stop and be cleared before going onto the runway.
    b. everyone, including vehicles, must stop unless authorized to proceed onto the runway.
    c. that you are about to be next to some electronic signal equipment.

4. A "controlled" airport is one that has an operating airport traffic control tower.

    a. True.
    b. False.

5. Runway markings are:

    a. white.
    b. yellow.
    c. red.

6. Trash or Rocks (FOD) can remain in place in some cases because they will be removed by jet blast or prop wash later:

    a. True.
    b. False.

7. When crossing a runway, it is best to cross:

    a. at the end.
    b. in the middle.
    c. wherever I want.

8. If the air traffic controller signals me with a steady red light, I should:

    a. stop.
    b. clear the runway or taxiway.
    c. ignore the signal as it is for aircraft only.

9. The red and white sign next to the taxiway is called a runway hold position sign. If you are next to this sign, it means:

    a. that you are about to go onto the protected area next to the runway.
    b. that you should follow the sign to get to the parking apron.
    c. nothing to me, it's only there for the pilot's use.

10. Unless contrary instructions have been received from air traffic control, a vehicle should always yield to an aircraft.

    a. True.
    b. False.

11. Taxiway markings are:

    a. white.
    b. yellow.
    c. red.

12. Traffic patterns are used at controlled airports (those with towers) only.

    a. True.
    b. False.

13. Aircraft usually land and takeoff:

    a. into the wind.
    b. with the wind at their back.

14. If, at a nontowered airport, you see an aircraft approaching the runway to land when you are behind the Runway hold line, waiting to cross the same runway, you should:

    a. proceed across if the aircraft has not announced its position on the UNICOM frequency.
    b. contact the pilot by radio and see if he or she intends to make a touch and go landing.
    c. wait until the aircraft is past the point at which you will cross the runway then proceed when it is safe.
    d. flash your headlights at the aircraft before crossing.

15. An apron is where aircraft

    a. Land or take off.
    b. Practice “touch and gos”
    c. Park.

16. The minimum distance from an active Runway centerline to construction activity is:

    a. 100’ when a NOTAM is not in place.
    b. Inside the RSA
    c. Designated by the hold lines, when a NOTAM is in place
    d. Does not matter if you have a radio

17. A “touch and go” landing means:

    a. A landing without bouncing.
    b. A pilot pushing a plane to get it going again
    c. Practicing landing and taking off without coming to a full stop.
    d. Aircraft flying in formation.

18. If a controller gives you permission to do something which appears unsafe:

    a. You must comply or face disciplinary action.
    b. You must do the opposite.
    c. You should tell the controller your concerns and get clarification before proceeding.
    d. Insult his parentage via the tower frequency.

19. It is alright to use Citizen’s Band (CB) lingo when communicating on UNICOM:

    a. True.
    b. False.

20. An aircraft that has announced its position as "short final" is:

    a. nearing the runway threshold for landing.
    b. about to make the last landing for the day.
    c. well outside of the airport traffic pattern.

21. FBO stands for:

    a. Food Business Operation.
    b. Fixed Base Operator.
    c. Fly By Optics

22. An aircraft that has announced its position on the UNICOM frequency as "downwind" at the nontowered airport on which you are driving, is flying:

    a. perpendicular to the runway after initial climb and turn.
    b. parallel to the runway in the direction opposite landing.
    c. too fast to spot until the aircraft slows down to land.

23. Hangars are where:

    a. People who make safety mistakes are dealt with.
    b. Aircraft are stored and maintained.
    c. Aircraft practice maneuvers at stall speeds.

24. How many days are required to provide adequate notice of a Runway closure?
    a. 2 days
    b. 5 days
    c. 7 days
    d. 30 days

25. An FBO does <u>not</u> do which of the following:
    a. Provide aircraft fuel
    b. Conduct safety inspections on the airport
    c. Perform maintenance work on aircraft
    d. Provide pilot training

26. An aircraft that has announced its position on the UNICOM frequency as "base leg" at the nontowered airport on which you are driving, is flying:

    a. Perpendicular to the runway after initial climb out and turn.
    b. Parallel to the runway in the direction opposite landing.
    c. Perpendicular to the runway about to turn final and land.
    d. With a pilot at the controls whose foot is asleep.

27. Aircraft on a non-towered airport are required to communicate or announce their position in the pattern or when on the ground on the UNICOM frequency.

    a. True.
    b. False.

28. Construction at an airport is controlled by the rules and regulations of the:

    a. Oregon Department of Transportation (ODOT)
    b. Oregon Department of Aviation (ODA)
    c. Airport Owner (State, City, County, Port, etc.)
    d. Federal Aviation Administration (FAA)

29. Before doing excavation on airport property:

    a. Call for locates.
    b. Only call for locates when advised by the Engineer or Inspector
    c. Never call for locates since they're not required on FAA facilities.

30. When performing work at night on an airport runway, which of the following is not true?

    a. The runway lights must be shut off.
    b. Lighted closure crosses are required.
    c. Crack seal work may be performed by flashlight or headlamp light.
    d. Red flashing lights must be placed along with cones.

Basic Airport Knowledge Exam – Answer Key
PMP 2009

1	c
2	b
3	b
4	a
5	a
6	b
7	a
8	a
9	a
10	a
11	b
12	b
13	a
14	c
15	c
16	c
17	c
18	c
19	b
20	a
21	b
22	b
23	b
24	c
25	b
26	c
27	b
28	d
29	a
30	c

7 or more wrong answers results in a failing score

Airport Radio Practical Exam
PMP 2009

This exam tests your knowledge of aviation radio use. A score of 100% is required for supervision of construction activities in any Airport Operations Area. Three chances will be allowed to exhibit proper radio communication in each of the following situations:

1. Announce crack sealing at Albany on the parallel taxiway at the beginning of the day. Indicate Runway 16-34 access will be maintained.
2. Notify the FBO at McMinnville that the work on Runway 4-22 is complete and the contractor is off the runway.
3. Announce an all-day Runway 15-33 closure at Nehalem Bay for Slurry Sealing.
4. Request permission from Salem tower to close Runway 13-31 for crack sealing.
5. Announce crossing Runway 8-26 at Runway 13-31 at Astoria
6. Announce a crossing of Runway 9-27 at Corvallis at midfield.
7. Cessna N16773M is 5 miles out and announces a straight-in approach for runway 16-34. Advise this pilot that 16-34 is closed for crack sealing until 7 pm and that Runway 2-20 is open for use.
8. Advise Troutdale tower that crack sealing on Taxiway A is completed and request permission to travel to parking apron.
9. Advise landed aircraft at McMinnville that the parallel taxiway is closed at Runway 4. Further advise that back taxiing may be necessary to exit the Runway.
10. Cessna N2343J is 3 miles out of Seaside and asks if the runway is open. Advise this pilot that the taxiway is closed until 5 pm for construction but the runway is open. Further advise this pilot that the ramp may only be accessed at midfield.
11. An irate pilot questions whether or not a NOTAM has been filed for a closure of Runway 8-26 in Astoria. Advise this pilot that a NOTAM was filed and checked for this closure.
12. Request permission from Hillsboro tower to cross Runway 2-20 at Taxiway A.
13. Contractor 2 incorrectly states that Runway 2-20 in Newport is clear. Re-advise area traffic that the Runway is not yet clear and that you'll advise traffic shortly when it is.

Final Construction Report
Pavement Maintenance Program 2008
Oregon Department of Aviation
Project 109-1007-08

Oregon Department of Aviation
Pavement Maintenance Program 2008
Final Construction Report
July 2009

WHPacific

ENGINEER'S FINAL CONSTRUCTION REPORT

Oregon Department of Aviation
Pavement Maintenance Program 2008
Project 109-1007-08
July, 2009

Prepared By:

WH Pacific, Inc.
9755 SW Barnes Rd, Suite 300
Portland, OR 97225

Project Engineer:
James Kirby, P.E.

Prepared For:

Oregon Department of Aviation
3040 25th St. SE
Salem OR 97302-1125

TABLE OF CONTENTS

Section 1 – SCOPE OF WORK

Introduction 1-1
Final Report Objectives 1-1
Project Location 1-1
Work Constructed 1-2
Work Summary by Airport 1-2
Work Bid But Not Constructed Narrative 1-3

Section 2 – ADMINISTRATION

Costs of Administration 2-1

Section 3 – ENGINEERING

Engineering Cost and Contract Summary 3-1
Design Services 3-1
Construction Services 3-1

Section 4 – CONSTRUCTION

Bid Tabulation 4-1
Construction Narrative 4-1
Construction Activity Summary 4-1
Prime and Subcontractors List 4-6
Construction Contract Summary 4-7
Change Orders 4-7
Construction Schedule 4-8
Statement of Labor Related Clause 4-8
Final Quantities 4-8

Section 5 – SUMMARY OF PROJECT COSTS

Final Payment Summary Worksheet 5-1

APPENDICES

Appendix 1 -	**TABULATION OF BIDS** **Bid Abstract with Engineers Estimate**
Appendix 2 -	**NOTICES** **Notice of Award** **Notice to Proceed** **Project Punch List**
Appendix 3 -	**FINAL QUANTITY SUMMARY** **Final Pay Estimate** **Change Order No. 1** **Change Order No. 2** **Change Order No. 3**

INTRODUCTION

The Oregon Department of Aviation's Pavement Maintenance Project for the calendar year 2008 included maintenance work on sixteen airports in Eastern and Central Oregon. These airports were selected on the basis of pavement condition surveys, airport usage, and availability of funds. The work completed under this contract and future contracts will help curb pavement deterioration on these airports and allow continued public access to general aviation infrastructure.

The State contracted with WH Pacific to provide design services and construction support for the Pavement Maintenance Project. State of Oregon's Department of Administrative Services provided administrative services.

FINAL REPORT OBJECTIVES

The objective of this final report is to provide documentation of the design and construction activities associated with this maintenance project. The report is prepared in general conformance with FAA Engineer Guidance 99-03. This report will detail the engineering and administrative activities conducted during the project, the construction bidding and award, construction activity summary, construction costs, labor requirements and Disadvantaged Business Enterprise Program. Record drawings will also be submitted separate from this report, showing the completed project.

PROJECT LOCATIONS

The PMP 2008 Project focused on airports in Central Oregon. The project included the following airports:

1. Baker City Municipal Airport, Baker City, Oregon
2. Bend Municipal Airport, Bend, Oregon
3. Burns Municipal Airport, Burns, Oregon
4. Columbia Gorge Regional / The Dalles Municipal Airport, Dallesport, Washington
5. Condon State Airport, Condon, Oregon
6. Enterprise Municipal Airport, Enterprise, Oregon
7. Grant County Regional / Ogilve Field Airport, John Day, Oregon
8. Joseph State Airport, Joseph, Oregon
9. Ken Jernstedt Airfield / Hood River, Hood River, Oregon
10. La Grande / Union County Airport, La Grande, Oregon
11. Lexington Airport, Lexington, Oregon
12. Madras City-County Airport, Madras, Oregon
13. Prineville Airport, Prineville, Oregon
14. Wasco State Airport, Wasco, Oregon
15. Hermiston Municipal Airport, Hermiston, Oregon
16. Sunriver Airport, Sunriver, Oregon

WORK CONSTRUCTED

These airports were selected based on the Pavement Condition Index (PCI) reports run by Pavement Consultants, Inc. The reports ranked pavement sections at each airport using the PCI rating of the pavement, the appropriate maintenance recommendations, and the cost. The PCI ratings were based on field observations and analysis performed during the fall of 2006. WH Pacific performed follow-up engineering inspection on each airport to confirm the pavement maintenance recommendations. These inspections comprised taking photos of pavement conditions, conducting interviews with operations or maintenance staff, and measuring quantities in the field. Plans and specifications for the project were then developed using the PCI reports and drawings in conjunction with the follow-up inspections. Finally, the construction cost estimate was refined to ensure the project size would be consistent with available funding.

The project involves the design and construction of the following items on some or all of the above airports as directed by the plans and shown in the table below:

1. Full depth and asphaltic concrete pavement patching.
2. Crack cleaning and filling in asphaltic concrete pavement and Portland cement concrete pavement.
3. Bituminous slurry sealing.
4. Runway, taxiway, and apron painting.

WORK SUMMARY BY AIRPORT

	Location of Airport:							
Work Performed:	Baker	Bend	Burns	Columbia Gorge	Condon	Enterprise	Grant Cty John Day	Hermiston
Crack Sealing	✓	✓	✓	✓	✓	✓	✓	✓
B.S.T. Crack Sealing						✓		
Wide Crack Repair	✓	✓	✓			✓	✓	✓
Extra Wide Crack Repair			✓					
Reseal Wide Crack Repair	✓	✓	✓					
AC Patching	✓	✓						
PCC Crack Sealing	✓				✓			
PCC Spall Repair	✓							
Remove Existing Markings	✓					✓	✓	
Pavement Marking	✓	✓		✓	✓	✓	✓	
Pavement Marking-Restripe						✓		
Slurry Seal, Type 1						✓		

Work Performed:	Location by Airport: Joseph	Hood River	La Grande	Lexington	Madras	Prineville	Sunriver	Wasco
Crack Sealing		✓	✓	✓	✓	✓	✓	
B.S.T. Crack Sealing								✓
Wide Crack Repair		✓	✓	✓	✓	✓	✓	
Extra Wide Crack Repair								
Reseal Wide Crack Repair								
AC Patching			✓	✓	✓		✓	✓
AC Patching-Joint Repair					✓			
PCC Crack Sealing								
PCC Spall Repair								
Remove Existing Markings	✓	✓						✓
Pavement Marking	✓	✓	✓	✓	✓	✓		✓
Pavement Marking-Restripe								✓
Slurry Seal, Type 1								✓

WORK BID BUT NOT CONSTRUCTED

Joseph – Crack Sealing (H2); Hub Failure Patching (H3). Work was removed after an FAA inspection was done and it was decided the runway is past the point of maintenance and will be rehabbed in a Capital Improvement Program.

Wasco – Remove Existing Markings (O2). Work was removed per the Engineer as the B.S.T. pavement was too weak and would not withstand the use of a paint grinder.

Ontario – Mobilization (R1); Crack Sealing (R2); Wide Crack Repair (R3); Pavement Marking (R4). Work was removed due to Airport dropping out of the 2008 Pavement Maintenance Program.

ADMINISTRATION COSTS

Administrative costs were absorbed by ODA and are not included in this report.

ENGINEERING COST AND CONTRACT SUMMARY (WH PACIFIC)

A formal selection process for professional engineering services was conducted in 2002 as part of a flexible services contract for ODA. WH Pacific was selected to provide engineering design and construction services for the PMP per State contracting guidelines.

Work order #7 scope and budget was developed and negotiated to define the professional engineering services for the 2008 PMP. The work order authorized a budget of $273,534.70. A breakdown of the professional services contract and the associated scope of work items is summarized below:

DESIGN SERVICES

Design services included the following tasks: Review PCI information and ODA files for each airport, coordinate airport priority listing with ODA/finalize the 2008 program, assemble available information for each airport, inspect each airport to confirm pavement maintenance recommendations, measure quantities, prepare a layout plan for each airport including details where necessary, develop technical specifications, bid quantities, and cost estimate for each airport, and assemble contract documents for bidding. The total cost for design services was $66,759.33.

CONSTRUCTION SERVICES

Construction services included the following tasks: Conduct pre-bid and pre-construction meetings, prepare addenda, attend the bid opening, review bids, conduct pre-construction meeting, provide construction observation for each airport, prepare daily construction inspection reports, monitor quantities and prepare monthly pay estimates, assist ODA with safety coordination and communication (including NOTAMs) for each airport, conduct final inspections, prepare record drawings, update FAA pavement forms, update PCI pavement drawings for each airport, and prepare a final report. The total cost as for construction services was $195,817.85.

Work Order #7 authorization by ODA: 11/01/2007

BID TABULATION

The bid tabulation, including the Engineer's estimate, is shown in Appendix 1.

CONSTRUCTION NARRATIVE

Bidding and Award: The project was advertised for bids during the month of April 2008. A Pre-Bid Conference was conducted at the offices of WH Pacific (3470 Pipe Bend Place, NE, Suite 170, Salem, OR. 97301) on May 12, 2008.

Bids were opened on May 22, 2008 with the three bidders listed below:

Ashwood Construction	$834,972.19
Blackline	$964,808.50
Roger Langeliers Construction	$963,350.29

The Engineer's Estimate by WH Pacific was $939,653.88. After WH Pacific and ODA reviewed bids, a contract was awarded to the low bidder, Ashwood Construction, in the amount of $834,972.19.

CONSTRUCTION ACTIVITY SUMMARY

WEEK OF JULY 6th - 12th, 2008

This week Ashwood Construction began PMP work by performed crack sealing, wide crack repair, and asphalt patching in Bend. This was the only site active this week. Work previously scheduled for Prineville was cancelled pending rescheduling. Ashwood Construction spent the 10th – 12th working on aprons and minor taxiways to become familiar with airport. Work was very slow.

WEEK OF JULY 13th - 20th, 2008

This week Ashwood Construction continued performing crack sealing, wide crack repair, and asphalt patching in Bend. This was the only site active this week. Ashwood Construction worked on aprons and taxiways, but resorted to a split shift at the end of the week to get access to the parallel taxiway during a closure for Runway work being performed by another contractor. Striping work was performed by Hicks Striping on Wednesday. A final top off was performed on Thursday and Ashwood stopped work for the week. Ashwood returned and finished off the remaining taxiway crack sealing work. Work was again very slow.

WEEK OF JULY 21st - 26th, 2008

This week Ashwood Construction performed crack sealing, wide crack repair, and asphalt patching in Madras. The crews worked on runways, taxiways, and aprons. Work progressed

much more quickly with Ashwood and the pavement patching subcontractor working out a system to increase production. This was the only site active this week.

WEEK OF JULY 27th - AUGUST 2nd, 2008

This week Ashwood Construction again performed crack sealing, wide crack repair, and asphalt patching. The crews started out the week in Madras working on runways, taxiways, and aprons. A second crew began work on crack sealing in Wasco on Tuesday while the Madras work continued. Wasco crack sealing and asphalt patching was completed on Wednesday and that crew moved on to start work in Sunriver. Sunriver crack sealing and patching was completed by Friday. Work in Madras continued through Saturday when all AC patching and crack sealing was completed.

WEEK OF AUGUST 3rd – 9th, 2008

This week Ashwood Construction performed crack sealing and AC patching at Lexington, crack sealing and wide crack repair at Hermiston, and wide crack repair at Sunriver. Work in Sunriver and Lexington ran Monday through Wednesday and Hermiston work ran Thursday through Friday. Ashwood completed the above listed work at each of these airports.

WEEK OF AUGUST 10th – 17th, 2008

This week Ashwood Construction worked at several different airports. For the first time on the project, the Slurry Seal subcontractor was mobilized and performed slurry seal work in Wasco on Monday and Tuesday. Ashwood began the week with crack sealing and wide crack repair in Enterprise on runways, taxiways, and aprons. Once the work in Enterprise was finished on Tuesday, Ashwood moved on to perform crack sealing and wide crack repair on the runway, taxiways and aprons in Hood River. Originally work was scheduled for Joseph, but that work was cancelled prior to mobilization. They stopped work in Hood River on Friday with much of the work at the airport remaining.

Ashwood also assisted subcontractor Hicks Striping in painting work at several locations during the week. Hicks (along with an Ashwood superintendent) started the week by performing paint work in Wasco on Wednesday and Thursday. On Friday they moved on perform striping work in Lexington, and finished out their week by striping at Madras airport on Saturday and Sunday.

WEEK OF AUGUST 18th – 23rd, 2008

This week Ashwood Construction again worked at several different airports. Ashwood began the week with crack sealing and AC patching in LaGrande on taxiways and aprons. The work in LaGrande was finished on Friday. Ashwood then moved on to perform crack sealing and wide crack repair on the runway, taxiways and aprons in Baker City. Crack sealing and patching work was hampered by threatening weather throughout this week.

Ashwood also assisted subcontractor Hicks Striping in painting work at several locations during the week. Hicks (along with an Ashwood superintendent) started the week by performing paint

work in LaGrande on the apron. Rain stopped work and painting in LaGrande was completed on Thursday. Painting work on the runway and taxiways in Joseph was performed on Friday.

WEEK OF AUGUST 24th-30th, 2008

This week Ashwood Construction performed crack sealing, wide crack repair, and asphalt patching in Baker City. This was the only site active this week. Ashwood Construction spent the first half of the week working on Runway 17-35 exclusively, sealing cracks and doing wide crack repair. Equipment problems forced them to do more runway work later in the week while work was being performed on aprons and taxiways. All of the asphalt maintenance work at Baker City was completed, including patching on the apron in front of the FBO. The remaining work to finish at Baker City included PCC crack sealing and PCC Spall repair.

WEEK OF AUGUST 31st – SEPTEMBER 6th, 2008

This week Ashwood Construction did not have their crews working. Ashwood's subcontractors Asphalt Maintenance Associates and Hicks Striping performed slurry sealing and pavement marking at several locations. Hicks Striping shot the second coat of all pavement markings on Wasco State on Wednesday and then restriped Runway 17-35 in Baker City on Thursday. Asphalt Maintenance Associates then placed slurry seal on Friday in Enterprise. Hicks then placed the first coat of all pavement markings in Enterprise.

WEEK OF SEPTEMBER 7th-13th, 2008

This week Ashwood Construction worked a partial week. Ashwood's crack seal crew started out the week in Hood River performing crack seal and wide crack repairs on taxiways and aprons. They worked Monday and Tuesday but did not complete the work. Crack seal, wide crack repair and airport striping remained unfinished. Ashwood's crews went back to work again on Friday, hoping to complete all work in Prineville by working Friday and Saturday. Runway 15-33 was mostly completed on Friday. Ashwood then had some personnel and equipment issues that shut down work in Prineville early Saturday, leaving much of the work to be completed on a later date.

WEEK OF SEPTEMBER 14th – 21st, 2008

This week Ashwood Construction performed crack sealing and wide crack repair in Burns. This was the only site active this week. Ashwood worked exclusively on Runway 12-30, sealing cracks and doing wide crack repair. Weather moved in on Saturday afternoon and forced Ashwood to stop work earlier than planned.

WEEK OF SEPTEMBER 22nd - 28th, 2008

This week Ashwood Construction continued crack sealing and wide crack repair in Burns. This was the only site active this week. Ashwood worked on Runway 12-30, the apron, and taxiways, sealing cracks and doing wide crack repair. Slow progress due to a small crew (3 laborers and a

supervisor) required the cancellation of work scheduled for Prineville on Friday and Saturday. The remaining work from the prior week was completed by Saturday morning.

WEEK OF SEPTEMBER 29th – OCTOBER 5th, 2008

This week Ashwood Construction worked at several different airports. For the first time on the project, they brought in a crack sealing subcontractor, BCV Inc., to help them perform the work. This addressed the problem of being understaffed when using only their own employees.

Ashwood and BCV began the week with crack sealing in The Dalles on aprons and taxiways. Once the work in The Dalles was finished, they moved on to perform crack sealing in Condon (on AC pavements only). The final airport scheduled this week was Prineville. Ashwood attempted to finish all remaining crack seal and wide crack repair work here but was only able to finish the wide crack repair. Weather shut down the work on Thursday afternoon.

WEEK OF OCTOBER 6th – OCTOBER 12th, 2008

This week Ashwood Construction worked at Grant County and Prineville airports. They again brought in a crack sealing subcontractor, BCV Inc., to help them perform this week's work. Ashwood also brought out their own crews to work alongside the BCV.

Ashwood performed the wide crack repairs and BCV performed crack sealing in John Day on Runway 17-35. Due to Knife River's work on the runway extension project at the airport, Ashwood was not allowed to switch over to Runway 9-27 until late on Wednesday. They crews finished work on the aprons and taxiways in the mean time, but lack of coordination between the contractors caused delays. Weather moved in on Thursday and all but cancelled the remaining John Day work for the rest of the week. A small amount of crack sealing was completed during a weather window on Friday. This work stopped when the contractor ran out of crack seal material. Crack sealing on Runway 9-27 remains to be completed.

Ashwood also assisted subcontractor Hicks striping in painting work on Thursday in Prineville. Runway 15-33 and a hold line were to be re-lain out and striped. Neither Ashwood nor Hicks were prepared with the equipment to lay out a new runway centerline. A WHPacific survey crew was quickly utilized to provide the new centerline and keep the striping work from being cancelled. The hold line, Runway # 33 and most of centerline was striped prior to weather forcing striping work to stop for the day. An Ashwood crew stopped at Prineville in the morning (en route to John Day) to complete the remaining crack sealing. Painting of a runway centerline stripe and the Runway # 15 number remained to be completed.

WEEK OF OCTOBER 13th – OCTOBER 19th, 2008

This week Ashwood Construction worked at five different airports. Ashwood again brought in a crack sealing subcontractor, BCV Inc., to help them perform this week's work. This was in a bid to finish all the remaining crack seal and wide crack work that remained for this year's project.

Ashwood started the week by cancelling all work on Monday due to a schedule problem on their part. They began crack sealing work in Hood River on Tuesday and completed the crack sealing and wide crack on Wednesday. For Thursday, Ashwood performed the remaining wide crack repairs in Hood River while BCV completed the remaining crack sealing in Condon. BCV then moved on to finish the remaining crack seal in John Day on Runway 9-27. With completion of work at these sites, Ashwood and BCV had completed all AC crack seal and wide crack repair. All PCC work previously scheduled for Condon and Baker was cancelled as Ashwood's schedule for the week continued to slide.

Ashwood also assisted subcontractor Hicks Striping in painting work at several locations during the week. Hicks (along with an Ashwood superintendent) started the week by performing paint work in John Day on Tuesday. On Wednesday they completed the remaining Runway 15-33 painting in Prineville as well as the Taxilane striping in The Dalles. Hicks finished the week in Hood river with painting on the Runway, Taxiways and Aprons. All painting scheduled in Enterprise was cancelled and rescheduled by Hicks.

WEEK OF OCTOBER 20th – OCTOBER 25th, 2008

This week Ashwood Construction worked at three airports. With all the AC crack seal and wide crack work completed, all that remained for this year's project was PCC work and painting. Ashwood started that work in Condon. They began PCC crack sealing work on the PCC Runway and Taxiway pavements. This work went quickly and was completed during the day on Monday. Ashwood then moved on to Baker City and completed PCC crack sealing there on Tuesday.

The striping subcontractor, Hicks Striping (along with an Ashwood superintendent), started the week by performing paint work in Enterprise on Monday. This work was finished quickly and Hicks demobilized from the project. Hicks then returned to the project later in the week to revise apron markings in Hood River on Thursday. Since quantities for PCC work completed early in the week in Condon were significantly under the plan estimate, Ashwood provided a price for painting work to restripe markings located on PCC pavements. All markings would be restriped and get black backgrounds for enhanced safety. This price was discussed with ODA and agreed upon. Once Hicks finished in Hood River, they moved on and painted these markings to finish a long day on Thursday.

The work that week finished the final regularly scheduled work items. The only remaining work would consist of any items identified during the final inspection trips as punch list items. The work was completed ~2 1/2 weeks behind Ashwood's proposed schedule in 109 days, 11 days prior to the Substantial Completion date.

CONTRACTORS

A summary of the prime contractor and subcontractors is shown below:

Prime Contractor:	Work Completed:
Ashwood Construction Tualatin, OR	Crack Sealing B.S.T. Crack Sealing Wide and Extra Wide Crack Repair Resealing Existing Wide Crack Repair PCC Crack Sealing PCC Spall Repair Removal of Existing Markings

Subcontractors:	Work Completed:
Alex Hodge Construction Bend, OR	AC Patching and AC Patching- Joint Repair (Bend, Sunriver, and Madras)
Knife River Construction Bend, OR	AC Patching and AC Patching- Joint Repair (Bend, Sunriver, and Madras)
Asphalt Maintenance Associates Eugene, OR	Slurry Sealing
Hicks Striping & Curbing Salem, OR	Runway/Taxiway/Apron Painting and Painting-Restripe
Seal Kote Plus The Dalles, OR	AC Patching (Wasco)
BCV Burbank, WA	Crack Sealing (Prineville, John Day)
Blue Mountain Asphalt (Granite) Hermiston, OR	AC Patching

CONSTRUCTION CONTRACT SUMMARY

A summary of the construction contract is shown in the following table:

Construction Contract	Award Date	ODA Approval Date	Amount	Description
Base Contract - Ashwood Construction	6/12/08	6/23/08	$834,972.19	Bid Schedule
Change Order 1	7/31/08	8/01/08	$-8,540.51	**Madras** – Add pavement marking **Ontario** – Drop all work
Change Order 2	4/15/09		$-10,907.26	**Condon** – Add pavement marking **Joseph** – Drop crack sealing and hub repair and reimburse contractor for relocation of delivered materials.
Change Order 3	4/15/09		$-26,577.99	Final Quantity Adjustment
Total Revised Contract			$788,946.43	

CHANGE ORDERS

Change order #1 affected the work at the following two airports:

1) Madras – Pavement Marking was required to repair damage to existing markings caused by crack repairs and AC patches.

2) Ontario – The airport did not participate due to sponsor withdrawal from this years Pavement Maintenance Program.

Change order #2 affected the work at the following two airports

1) Condon – Existing runway and taxiway pavement markings on PCC pavement were faded and without a black background. Restriping was required for runway safety.

2) Joseph – Runway was programmed to receive a runway rehabilitation project within 1-2 years. Materials delivered to site prior to cancellation had to be relocated.

Change Order #3 was an adjustment to bid schedule to reflect final quantities.

CONSTRUCTION SCHEDULE

Open Bids	05/22/08
Construction Contract	06/23/08
Notice to Proceed	07/07/08
Contract Time	120 calendar days
Substantial Completion	10/23/08
Final Completion	04/20/2009

LABOR

Certified payrolls, Intent to Pay Prevailing Wages and Affidavits of Wages Paid and other documents related to federal labor requirements have been reviewed and found to be in compliance with the contract documents. They are available for review if necessary.

FINAL QUANTITIES

(1) A summary of bid quantities, change order quantities and actual total quantities at completion is shown on the final contractors pay estimate shown in Appendix 3.

(2) No liquidated damages were assessed during this project.

(3) Copies of the as-builts will be sent under separate cover.

(4) A copy of the final punchlist is contained in Appendix 2.

SUMMARY OF PROJECT COSTS

Costs of this project can be summarized as follows:

Engineering (WH Pacific):	
Design	$ 66,759.33
Construction Management	$ 195,817.85
Construction (Ashwood Construction):	
Bid Items	$ 788,946.43
Total Project Cost	$ 1,051,523.61

BID ABSTRACT WITH ENGINEER'S ESTIMATE

Bid Tab
Pavement Maintenance Program - 2008
Oregon Department of Aviation

	Base Bid - Schedule A: Baker City			Roger Langeliers Const.		Ashwood Construction		Blackline		Engineer's Estimate	
No.	Bid Item	Quantity	Unit	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price
A1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 5,500.00	$ 5,500.00	$ 10,000.00	$ 10,000.00	$ 8,536.42	$ 8,536.42
A2	Crack Sealing	44,307	LF	$ 0.78	$ 34,559.46	$ 0.62	$ 27,470.34	$ 0.55	$ 24,368.85	$ 0.85	$ 37,660.95
A3	Wide Crack Repair	1,934	LF	$ 13.12	$ 25,374.08	$ 11.95	$ 23,111.30	$ 9.20	$ 17,792.80	$ 12.00	$ 23,208.00
A4	Reseal Wide Crack Repair	322	LF	$ 2.72	$ 875.84	$ 4.00	$ 1,288.00	$ 0.55	$ 177.10	$ 0.85	$ 273.70
A5	AC Patching	1,018	SF	$ 21.73	$ 22,121.14	$ 19.25	$ 19,596.50	$ 25.00	$ 25,450.00	$ 16.67	$ 16,966.67
A6	PCC Crack Sealing	427	LF	$ 7.98	$ 3,407.46	$ 9.75	$ 4,163.25	$ 3.50	$ 1,494.50	$ 6.00	$ 2,562.00
A7	PCC Spall Repair	9	SF	$ 206.00	$ 1,854.00	$ 125.00	$ 1,125.00	$ 140.00	$ 1,260.00	$ 100.00	$ 900.00
A8	Remove Existing Markings	285	SF	$ 1.92	$ 547.20	$ 4.25	$ 1,211.25	$ 3.00	$ 855.00	$ 2.50	$ 712.50
A9	Pavement Marking	5,134	SF	$ 0.81	$ 4,158.54	$ 0.75	$ 3,850.50	$ 0.80	$ 4,107.20	$ 0.60	$ 3,080.40
	Subtotal				**$ 102,897.72**		**$ 87,316.14**		**$ 85,505.45**		**$ 93,900.64**
	Base Bid - Schedule B: Bend										
B1	Mobilization	1	LS	$ 7,500.00	$ 7,500.00	$ 4,500.00	$ 4,500.00	$ 5,000.00	$ 5,000.00	$ 6,416.89	$ 6,416.89
B2	Crack Sealing	39,214	LF	$ 0.82	$ 32,155.48	$ 0.59	$ 23,136.26	$ 0.55	$ 21,567.70	$ 0.85	$ 33,331.90
B3	Wide Crack Repair	1,477	LF	$ 12.39	$ 18,300.03	$ 12.40	$ 18,314.80	$ 9.20	$ 13,588.40	$ 12.00	$ 17,724.00
B4	Reseal Wide Crack Repair	1,780	LF	$ 1.21	$ 2,153.80	$ 0.75	$ 1,335.00	$ 0.55	$ 979.00	$ 0.85	$ 1,513.00
B5	AC Patching	550	SF	$ 12.16	$ 6,688.00	$ 12.40	$ 6,820.00	$ 40.00	$ 22,000.00	$ 20.00	$ 11,000.00
B6	Pavement Marking	1,000	SF	$ 1.83	$ 1,830.00	$ 1.55	$ 1,550.00	$ 1.70	$ 1,700.00	$ 0.60	$ 600.00
	Subtotal				**$ 68,627.31**		**$ 55,656.06**		**$ 64,835.10**		**$ 70,585.79**
	Base Bid - Schedule C: Burns										
C1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 5,200.00	$ 5,200.00	$ 5,000.00	$ 5,000.00	$ 7,516.10	$ 7,516.10
C2	Crack Sealing	39,678	LF	$ 0.82	$ 32,535.96	$ 0.60	$ 23,806.80	$ 0.55	$ 21,822.90	$ 0.85	$ 33,726.30
C3	Wide Crack Repair	2,120	LF	$ 12.64	$ 26,796.80	$ 11.95	$ 25,334.00	$ 9.20	$ 19,504.00	$ 12.00	$ 25,440.00
C4	Extra Wide Crack Repair	877	LF	$ 19.05	$ 16,706.85	$ 17.90	$ 15,698.30	$ 16.00	$ 14,032.00	$ 16.00	$ 14,032.00
C5	Reseal Wide Crack Repair	2,309	LF	$ 1.09	$ 2,516.81	$ 0.69	$ 1,593.21	$ 0.55	$ 1,269.95	$ 0.85	$ 1,962.65
	Subtotal				**$ 88,556.42**		**$ 71,632.31**		**$ 61,628.85**		**$ 82,677.05**
	Base Bid - Schedule D: Columbia Gorge										
D1	Mobilization	1	LS	$ 4,500.00	$ 4,500.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 5,000.00	$ 3,500.00	$ 3,500.00
D2	Crack Sealing	13,991	LF	$ 0.81	$ 11,332.71	$ 0.65	$ 9,094.15	$ 0.55	$ 7,695.05	$ 1.00	$ 13,991.00
D3	Pavement Marking	250	SF	$ 2.32	$ 580.00	$ 4.70	$ 1,175.00	$ 5.00	$ 1,250.00	$ 2.50	$ 625.00
	Subtotal				**$ 16,412.71**		**$ 12,769.15**		**$ 13,945.05**		**$ 18,116.00**
	Base Bid - Schedule E: Condon										
E1	Mobilization	1	LS	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,500.00	$ 3,500.00
E2	Crack Sealing	2,000	LF	$ 1.43	$ 2,860.00	$ 0.80	$ 1,600.00	$ 0.55	$ 1,100.00	$ 1.00	$ 2,000.00
E3	PCC Crack Sealing	3,200	LF	$ 6.71	$ 21,472.00	$ 5.80	$ 18,560.00	$ 4.50	$ 14,400.00	$ 6.00	$ 19,200.00
	Subtotal				**$ 29,332.00**		**$ 23,160.00**		**$ 18,500.00**		**$ 24,700.00**
	Base Bid - Schedule F: Enterprise										
F1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 5,500.00	$ 5,500.00	$ 5,000.00	$ 5,000.00	$ 9,000.00	$ 9,000.00
F2	B.S.T. Crack Sealing	9,729	LF	$ 0.72	$ 7,004.88	$ 0.69	$ 6,713.01	$ 0.55	$ 5,350.95	$ 1.00	$ 9,729.00
F3	Crack Sealing	141	LF	$ 1.99	$ 280.59	$ 4.00	$ 564.00	$ 0.55	$ 77.55	$ 1.00	$ 141.00
F4	Wide Crack Repair	275	LF	$ 15.65	$ 4,303.75	$ 15.00	$ 4,125.00	$ 9.20	$ 2,530.00	$ 15.00	$ 4,125.00
F5	Remove Existing Markings	1,910	SF	$ 0.58	$ 1,107.80	$ 0.65	$ 1,241.50	$ 3.00	$ 5,730.00	$ 1.25	$ 2,386.88
F6	Pavement Marking	3,450	SF	$ 1.07	$ 3,691.50	$ 0.85	$ 2,932.50	$ 0.90	$ 3,105.00	$ 0.60	$ 2,069.70
F7	Pavement Marking - Re-stripe	3,450	SF	$ 1.07	$ 3,691.50	$ 0.85	$ 2,932.50	$ 0.90	$ 3,105.00	$ 0.60	$ 2,069.70
F8	Slurry Seal, Type 1	21,313	SY	$ 1.55	$ 33,035.15	$ 1.91	$ 40,707.83	$ 1.40	$ 29,838.20	$ 2.00	$ 42,626.00
	Subtotal				**$ 63,115.17**		**$ 64,716.34**		**$ 54,736.70**		**$ 72,147.28**

Bid Tab
Pavement Maintenance Program - 2008
Oregon Department of Aviation

				Roger Langeliers Const.		Ashwood Construction		Blackline		Engineer's Estimate	
Base Bid - Schedule G:		**Grant County**									
No.	Bid Item	Quantity	Unit	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price
G1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 4,500.00	$ 4,500.00	$ 5,000.00	$ 5,000.00	$ 7,000.00	$ 7,000.00
G2	Crack Sealing	34,434	LF	$ 0.77	$ 26,514.18	$ 0.59	$ 20,316.06	$ 0.55	$ 18,938.70	$ 0.85	$ 29,268.90
G3	Wide Crack Repair	638	LF	$ 13.16	$ 8,396.08	$ 13.50	$ 8,613.00	$ 9.20	$ 5,869.60	$ 12.00	$ 7,656.00
G4	Remove Existing Markings	196	SF	$ 2.51	$ 491.96	$ 4.00	$ 784.00	$ 4.00	$ 784.00	$ 2.50	$ 489.38
G5	Pavement Marking	10,084	SF	$ 0.68	$ 6,857.12	$ 0.73	$ 7,361.32	$ 0.80	$ 8,067.20	$ 0.60	$ 6,050.40
	Subtotal				**$ 52,259.34**		**$ 41,574.38**		**$ 38,659.50**		**$ 50,464.68**
Base Bid - Schedule H:		**Joseph**									
H1	Mobilization	1	LS	$ 7,500.00	$ 7,500.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 5,000.00	$ 8,000.00	$ 8,000.00
H2	Crack Sealing	16,733	LF	$ 0.81	$ 13,553.73	$ 0.72	$ 12,047.76	$ 0.55	$ 9,203.15	$ 1.00	$ 16,733.00
H3	Hub Failure Patching	221	EA	$ 36.29	$ 8,020.09	$ 62.00	$ 13,702.00	$ 140.00	$ 30,940.00	$ 30.00	$ 6,630.00
H4	Remove Existing Markings	152	SF	$ 3.05	$ 463.60	$ 4.00	$ 608.00	$ 4.00	$ 608.00	$ 2.50	$ 378.75
H5	Pavement Marking	6,116	SF	$ 0.79	$ 4,831.64	$ 0.85	$ 5,198.60	$ 0.90	$ 5,504.40	$ 0.60	$ 3,669.75
	Subtotal				**$ 34,369.06**		**$ 34,056.36**		**$ 51,255.55**		**$ 35,411.50**
Base Bid - Schedule I:		**Ken Jernstedt**									
I1	Mobilization	1	LS	$ 5,000.00	$ 5,000.00	$ 1,200.00	$ 1,200.00	$ 5,000.00	$ 5,000.00	$ 5,170.72	$ 5,170.72
I2	Crack Sealing	23,050	LF	$ 0.83	$ 19,131.50	$ 0.62	$ 14,291.00	$ 0.55	$ 12,677.50	$ 0.85	$ 19,592.50
I3	Wide Crack Repair	2,149	LF	$ 12.51	$ 26,883.99	$ 11.95	$ 25,680.55	$ 9.20	$ 19,770.80	$ 12.00	$ 25,788.00
I4	Remove Existing Markings	320	SF	$ 1.72	$ 550.40	$ 4.00	$ 1,280.00	$ 4.00	$ 1,280.00	$ 2.50	$ 798.75
I5	Pavement Marking	9,213	SF	$ 0.69	$ 6,356.97	$ 0.81	$ 7,462.53	$ 0.90	$ 8,291.70	$ 0.60	$ 5,527.95
	Subtotal				**$ 57,922.86**		**$ 49,914.08**		**$ 47,020.00**		**$ 56,877.92**
Base Bid - Schedule J:		**LaGrande**									
J1	Mobilization	1	LS	$ 6,500.00	$ 6,500.00	$ 4,000.00	$ 4,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
J2	Crack Sealing	14,790	LF	$ 0.84	$ 12,423.60	$ 0.64	$ 9,465.60	$ 0.55	$ 8,134.50	$ 1.00	$ 14,790.00
J3	Wide Crack Repair	672	LF	$ 12.87	$ 8,648.64	$ 13.50	$ 9,072.00	$ 9.20	$ 6,182.40	$ 12.00	$ 8,064.00
J4	AC Patching	487	SF	$ 21.73	$ 10,582.51	$ 19.25	$ 9,374.75	$ 25.00	$ 12,175.00	$ 16.67	$ 8,116.67
J5	Pavement Marking	1,571	SF	$ 1.39	$ 2,183.69	$ 1.45	$ 2,277.95	$ 2.20	$ 3,456.20	$ 0.60	$ 942.60
	Subtotal				**$ 40,338.44**		**$ 34,190.30**		**$ 34,948.10**		**$ 36,913.27**
Base Bid - Schedule K:		**Lexington**									
K1	Mobilization	1	LS	$ 7,500.00	$ 7,500.00	$ 3,500.00	$ 3,500.00	$ 5,000.00	$ 5,000.00	$ 5,137.30	$ 5,137.30
K2	Crack Sealing	21,049	LF	$ 0.85	$ 17,891.65	$ 0.62	$ 13,050.38	$ 0.55	$ 11,576.95	$ 1.00	$ 21,049.00
K3	Wide Crack Repair	1,452	LF	$ 12.44	$ 18,062.88	$ 11.95	$ 17,351.40	$ 9.20	$ 13,358.40	$ 12.00	$ 17,424.00
K4	AC Patching	573	SF	$ 21.73	$ 12,451.29	$ 19.25	$ 11,030.25	$ 25.00	$ 14,325.00	$ 20.00	$ 11,460.00
K5	Pavement Marking	2,400	SF	$ 0.94	$ 2,256.00	$ 1.10	$ 2,640.00	$ 1.10	$ 2,640.00	$ 0.60	$ 1,440.00
	Subtotal				**$ 58,161.82**		**$ 47,572.03**		**$ 46,900.35**		**$ 56,510.30**
Base Bid - Schedule L:		**Madras**									
L1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 5,000.00	$ 10,000.00	$ 10,000.00
L2	Crack Sealing	38,716	LF	$ 0.81	$ 31,359.96	$ 0.59	$ 22,842.44	$ 0.55	$ 21,293.80	$ 0.85	$ 32,908.60
L3	Wide Crack Repair	6,276	LF	$ 12.05	$ 75,625.80	$ 11.90	$ 74,684.40	$ 9.20	$ 57,739.20	$ 12.00	$ 75,312.00
L4	AC Patching	403	SF	$ 12.54	$ 5,053.62	$ 13.20	$ 5,319.60	$ 50.00	$ 20,150.00	$ 16.67	$ 6,716.67
L5	AC Patching - Joint Repair	4,360	LF	$ 10.24	$ 44,646.40	$ 9.50	$ 41,420.00	$ 35.00	$ 152,600.00	$ 8.00	$ 34,880.00
	Subtotal				**$ 166,685.78**		**$ 146,766.44**		**$ 256,783.00**		**$ 159,817.27**
Base Bid - Schedule M:		**Prineville**									
M1	Mobilization	1	LS	$ 6,000.00	$ 6,000.00	$ 4,000.00	$ 4,000.00	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00
M2	Crack Sealing	6,824	LF	$ 0.84	$ 5,732.16	$ 0.70	$ 4,776.80	$ 0.55	$ 3,753.20	$ 1.00	$ 6,824.00
M3	Wide Crack Repair	366	LF	$ 13.55	$ 4,959.30	$ 18.00	$ 6,588.00	$ 9.20	$ 3,367.20	$ 15.00	$ 5,490.00
M4	Pavement Marking	3,027	SF	$ 0.89	$ 2,694.03	$ 0.74	$ 2,239.98	$ 0.80	$ 2,421.60	$ 0.60	$ 1,816.20
	Subtotal				**$ 19,385.49**		**$ 17,604.78**		**$ 14,542.00**		**$ 17,130.20**

Bid Tab
Pavement Maintenance Program - 2008
Oregon Department of Aviation

Base Bid - Schedule N: Wasco				Roger Langeliers Const.		Ashwood Construction		Blackline		Engineer's Estimate	
No.	Bid Item	Quantity	Unit	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price
N1	Mobilization	1	LS	$ 5,000.00	$ 5,000.00	$ 4,000.00	$ 4,000.00	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00
N2	B.S.T. Crack Sealing	4,906	LF	$ 0.74	$ 3,630.44	$ 0.85	$ 4,170.10	$ 0.55	$ 2,698.30	$ 1.00	$ 4,906.00
N3	AC Patching	225	SF	$ 21.73	$ 4,889.25	$ 13.85	$ 3,116.25	$ 50.00	$ 11,250.00	$ 20.00	$ 4,500.00
N4	Remove Existing Markings	327	SF	$ 1.68	$ 549.36	$ 4.00	$ 1,308.00	$ 4.00	$ 1,308.00	$ 2.50	$ 817.50
N5	Pavement Marking	654	SF	$ 1.23	$ 804.42	$ 3.00	$ 1,962.00	$ 3.00	$ 1,962.00	$ 0.60	$ 392.40
	Subtotal				$ 14,873.47		$ 14,556.35		$ 22,218.30		$ 13,615.90
Grand Total - Base Bid					$ 812,937.59		$ 701,484.72		$ 811,477.95		$ 788,867.78
Additive Alt. 1 - Schedule O: Wasco Slurry Seal											
O1	Mobilization	1	LS	$ 5,000.00	$ 5,000.00	$ 4,000.00	$ 4,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
O2	Remove Existing Markings	6,088	SF	$ 0.53	$ 3,226.64	$ 0.75	$ 4,566.00	$ 0.90	$ 5,479.20	$ 1.00	$ 6,087.70
O3	Pavement Marking	6,088	SF	$ 0.69	$ 4,200.72	$ 0.69	$ 4,200.72	$ 0.70	$ 4,261.60	$ 0.60	$ 3,652.62
O4	Pavement Marking - Re-stripe	4,887	SF	$ 0.67	$ 3,274.29	$ 0.74	$ 3,616.38	$ 0.80	$ 3,909.60	$ 0.60	$ 2,932.02
O5	Slurry Seal, Type 1	34,933	SY	$ 1.38	$ 48,207.54	$ 1.28	$ 44,714.24	$ 1.25	$ 43,666.25	$ 1.50	$ 52,399.50
	Subtotal				$ 63,909.19		$ 61,097.34		$ 62,316.65		$ 70,071.84
Grand Total - Additive Alternate 1					$ 63,909.19		$ 61,097.34		$ 62,316.65		$ 70,071.84
Additive Alt. 2 - Schedule P: Hermiston											
P1	Mobilization	1	LS	$ 6,000.00	$ 6,000.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 5,000.00	$ 3,047.10	$ 3,047.10
P2	Crack Sealing	18,243	LF	$ 0.84	$ 15,324.12	$ 0.62	$ 11,310.66	$ 0.55	$ 10,033.65	$ 1.00	$ 18,243.00
P3	Wide Crack Repair	1,019	LF	$ 13.14	$ 13,389.66	$ 12.50	$ 12,737.50	$ 9.20	$ 9,374.80	$ 12.00	$ 12,228.00
	Subtotal				$ 34,713.78		$ 26,548.16		$ 24,408.45		$ 33,518.10
Grand Total - Additive Alternate 2					$ 34,713.78		$ 26,548.16		$ 24,408.45		$ 33,518.10
Additive Alt. 3 - Schedule Q: Sunriver											
Q1	Mobilization	1	LS	$ 6,000.00	$ 6,000.00	$ 2,000.00	$ 2,000.00	$ 20,000.00	$ 20,000.00	$ 3,000.00	$ 3,000.00
Q2	Crack Sealing	5,264	LF	$ 0.83	$ 4,369.12	$ 0.68	$ 3,579.52	$ 0.55	$ 2,895.20	$ 1.00	$ 5,264.00
Q3	Wide Crack Repair	625	LF	$ 13.21	$ 8,256.25	$ 18.00	$ 11,250.00	$ 9.20	$ 5,750.00	$ 12.00	$ 7,500.00
Q4	AC Patching	745	SF	$ 12.54	$ 9,342.30	$ 13.20	$ 9,834.00	$ 30.00	$ 22,350.00	$ 16.67	$ 12,416.67
	Subtotal				$ 27,967.67		$ 26,663.52		$ 50,995.20		$ 28,180.67
Grand Total - Additive Alternate 3					$ 27,967.67		$ 26,663.52		$ 50,995.20		$ 28,180.67
Additive Alt. 4 - Schedule R: Ontario											
R1	Mobilization	1	LS	$ 10,000.00	$ 10,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 4,000.00	$ 4,000.00
R2	Crack Sealing	10,799	LF	$ 0.80	$ 8,639.20	$ 0.75	$ 8,099.25	$ 0.55	$ 5,939.45	$ 1.00	$ 10,799.00
R3	Wide Crack Repair	174	LF	$ 17.93	$ 3,119.82	$ 18.00	$ 3,132.00	$ 9.20	$ 1,600.80	$ 20.00	$ 3,480.00
R4	Pavement Marking	1,228	SF	$ 1.68	$ 2,063.04	$ 2.40	$ 2,947.20	$ 2.50	$ 3,070.00	$ 0.60	$ 736.50
	Subtotal				$ 23,822.06		$ 19,178.45		$ 15,610.25		$ 19,015.50
Grand Total - Additive Alternate 4					$ 23,822.06		$ 19,178.45		$ 15,610.25		$ 19,015.50
Grand Total - All Schedules					$ 963,350.29		$ 834,972.19		$ 964,808.50		$ 939,653.88

NOTICE OF AWARD

NOTICE TO PROCEED

PUNCH LIST

Oregon

Theodore R. Kulongoski, Governor

Oregon Department of Aviation
3040 - 25th Street SE ▫ Salem, OR 97302-1125
Phone: (503) 378-4880, ext. 223
Toll Free: (800) 874-0102
FAX : (503) 373-1688

June 12, 2008

LETTER OF INTENT TO AWARD

Ashwood Construction Inc.
Attn: Russell Davis
21100 SW 120th Street
Tualatin, OR 97162

RE: ITB # 109-1007-08

Mr. Davis:

Your firm is the apparent lowest responsible bidder for the aforementioned Invitation to Bid (ITB) for the Project "2008 Pavement Maintenance Program, Eastern Oregon Airports."

Total of Award: $834,972.19

The Oregon Department of Aviation will process the Notice to Proceed when the following requirements are met:

1. Resolution of any protest(s) submitted within the protest of intent to award period. This period will end on June 19, 2008. Any protest up held could result in the withdrawal of this intent to award.

2. Completion of the enclosed forms for Performance Bond Exhibit 3 and Payment Bond Exhibit 4 and the return of the originals, properly executed within seven (7) days of this letter.

3. As evidence of the insurance coverages required by the Contract, provide certificates of insurance indicated for the insurance coverages listed below. The certificate shall specify parties who are Additional Insureds or Loss Payees and shall indicate what endorsements are included and what exclusions are removed, within seven (7) days of the date of this letter.

4. Enclosed are two (2) copies of Exhibit 5 of the contract. Complete Sections two (2) and five (5) and sign both. A photocopy of the fully signed contract document will be provided when the Notice to Proceed is issued.

G.3 INSURANCE

G.3.1 Primary Coverage: Insurance carried by Contractor under this Contract shall be the primary coverage, and the Owner's Insurance is excess and solely for damages or losses for which the Owner is responsible. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

G.3.2 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than $100,000 for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

G.3.3 Builder's Risk Insurance:

G.3.3.1 Builder's Risk: During the term of this Contract, for new construction the Contractor shall maintain in force, at its own expense, Builder's Risk Insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed $50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or $50,000, whichever is more. The policy will include as loss payees the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.2 Builder's Risk Installation Floater: For other than new construction the Contractor shall obtain, at the Contractor's expense, and keep in effect during the term of this Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees the State of Oregon, the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

G.3.3.4 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

G.3.4 Liability Insurance:

G.3.4.1 Commercial General Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Commercial General Liability Insurance covering bodily injury and property damage in a form and with coverages that are satisfactory to the State. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnity provided under this Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis. Combined single limit per occurrence shall not be less than $1,000,000 for each job site or location. Each annual aggregate limit shall not be less than $1,000,000.

G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Automobile Liability Insurance covering owned, non-owned and/or hired vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Combined single limit per occurrence shall not be less than $1,000,000.00, or the equivalent.

G.3.4.3 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of this Contract for a duration of 24 months or the maximum time period available in the marketplace if less than 24 months. Contractor will be responsible for furnishing certification of "tail" coverage as described or continuous "claims made" liability coverage for 24 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of this Contract. This will be a condition of the final acceptance of Work or services and related warranty (if any).

G.3.5 Additional Insured: The liability insurance coverage, except Professional Liability if included, required for performance of this Contract shall include the State of Oregon, its departments, divisions, officers, and employees, as Additional Insureds but only with respect to the Contractor's activities to be performed under this Contract. If Contractor cannot obtain an insurer to name the State of Oregon, its departments, divisions, officers and employees as Additional Insureds, Contractor shall obtain at Contractor's expense, and keep in effect during the term of this Contract, Owners and Contractors Protective Liability Insurance, naming the State of Oregon, its departments, divisions, officers and employees as Named Insureds with not less than a $1,000,000.00 limit per occurrence. This policy must be kept in effect for 12 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to its issuance of a Notice to Proceed.

G.3.6 Notice of Cancellation or Change: There shall be no cancellation, material change, potential exhaustion coverages without thirty (30) Days' written notice from the Contractor or its insurer(s) to the Owner. Any failure to comply with the reporting provisions of this insurance, except for the potential exhaustion of aggregate limits, shall not affect the coverages provided to the State of Oregon, its Owner and their divisions, officers, and employees.

G.3.7 Certificate(s) of Insurance: As evidence of the insurance coverage required by this Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to its issuance of a Notice to Proceed. The certificate(s) will specify all of the parties who are Additional Insureds or Loss Payees. Insurance coverage required under this Contract shall be obtained from insurance companies or

entities acceptable to the Owner that are allowed to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been
issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to do an insurance business in the state of Oregon, and certain nonadmitted surplus
lines insurers that satisfy the requirements of applicable Oregon law and are approved by the Owner. The certificates will also specify that there shall be no cancellation, material change, potential exhaustion of aggregate limits or intent not to renew insurance coverages without thirty (30) Days' written notice from the insurer(s) to the Owner. To the extent Certificates of Insurance contain words to the effect that Contractor shall "endeavor to send notice of cancellation" or similar language, Contractor shall require its insurer to send such notice by making sure that the words "endeavor to" or similar words are removed from the Certificate. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of $50,000 shall be approved by the Owner in writing prior to issuance of a Notice to Proceed and is subject to Owner's approval.

Thank you. ODA looks forward to the successful completion of this project with your firm.

Sincerely,

Dan Clem

Dan Clem
Director

EXHIBIT 5

Sample Public Improvement Agreement Form

STATE OF OREGON PUBLIC IMPROVEMENT AGREEMENT
for
2008 Pavement Maintenance Program, Eastern Oregon Airports
(ITB #109-1007-08)

This Agreement for the **2008 Pavement Maintenance Program** (the "Agreement"), made by and between the State of Oregon, acting by and through the **Department of Aviation**, hereinafter called OWNER, and **(Insert Contractor's Name)** hereinafter called the CONTRACTOR (collectively the "Parties"), shall become effective on **(Insert contract award date)**, or the date this Agreement has been signed by all the Parties and all required State of Oregon governmental approvals have been obtained, whichever is later. Unless otherwise defined in the Invitation to Bid or in this Agreement, the capitalized terms used herein are defined in Section A 1 of the State of Oregon General Conditions for Public Improvement Contracts.

WITNESSETH:

1. Contract Price, Contract Documents and Work.
The CONTRACTOR, in consideration of the sum of 834 972.19 (the "Contract Price"), to be paid to the CONTRACTOR by OWNER in the manner and at the time hereinafter provided, and subject to the terms and conditions provided for in the Invitation to Bid, this Public Improvement Agreement Form and other Contract Documents, all of which are incorporated herein by reference, hereby agrees to perform all Work described and reasonably inferred from the Contract Documents

The Contract Price includes the following items: The work consists of, but is not limited to, the following:

1 Full depth asphalt concrete pavement patching
2 Crack sealing in asphalt concrete pavement.
3 Bituminous slurry sealing.
4 Runway, taxiway, and apron painting and paint removal

2. Representatives.
Unless otherwise specified in the Contract Documents, the OWNER designates **Chris Cummings**, as its Authorized Representative in the administration of this Contract. The above-named individual shall be the initial point of contact for matters related to performance payment, authorization and to carry out the responsibilities of the OWNER. CONTRACTOR has named John Olsen as its Authorized Representative to act on its behalf

3. Contract Dates.
PROJECT START DATE: **10** calendar days from issuance of Notice to Proceed.
SUBSTANTIAL COMPLETION: **120** calendar days from issuance of Notice to Proceed.
FINAL COMPLETION: **150** calendar days from issuance of Notice to Proceed

4 Liquidated Damages.
Failure to complete the project known as **2008 Pavement Maintenance Program** by the specified time will result in damage to the State of Oregon. Since actual damage will be difficult to determine, it is agreed that the Contractor shall pay to the State of Oregon, not as a penalty but as liquidated damages, **$ 700.00** per calendar day for each day elapsed in excess of the Substantial Completion date stated in Section 3 of this Agreement.

5. Integration
THE CONTRACT DOCUMENTS CONSTITUTE THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION OR CHANGE, IF MADE, SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO OTHER UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. CONTRACTOR, BY THE SIGNATURE BELOW OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT IT HAS READ THIS CONTRACT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

In witness whereof, the STATE OF OREGON, acting by and through the Department of Aviation executes this Agreement and the CONTRACTOR does execute the same as of the day and year of this Agreement first above written

CONTRACTOR DATA:

CONTRACTOR NAME Ashwood Const Inc.

CONTRACTOR ADDRESS PO Box 580 Sherwood Or. 97140

CONTRACTOR ADDRESS

CONTRACTOR'S FEDERAL ID # 93 0881819

CONTRACTOR'S CCB # 68498 Expiration Date: 9-16-09

Pursuant to ORS279C.836 Contractor shall have a $30,000 Public Works Bond on file with the Constructions Contractors Board Section G 2.3 Exhibit 6 General Conditions

Name of Public Works Bonding Company: Ohio Casualty Insurance Co.

Address of Public Works Bonding Company: 3400 188th St S.W Suite 635
(street)

Lynnwood, Wa. 98307
(city, state, zip)

Agent Name/Phone: Slatter and Assoc 503 6240466

Public Works Bond Number: 3904947

CONTRACTOR'S SIGNATURE: [signature] Date: 6-17-08

State of Oregon by and through its DEPARTMENT OF AVIATION

[signature] Date: June 23, 2008

Approved via e-mail by Glen Drivenes Date: 4/28/08
Assistant Attorney General

Assistant Attorney General
DOJ

Oregon

Theodore R. Kulongoski, Governor

Oregon Department of Aviation
3040 - 25th Street SE
Salem, OR 97302-1125
Phone: (503) 378-4880, ext. 223
Toll Free: (800) 874-0102
FAX : (503) 373-1688

July 7, 2008

Ashwood Construction, Inc.
Attn: Russell Davis
21100 SW 120th Street
Tualatin, OR 97162

RE: Notice to Proceed, ITB No. 109-1007-08
2008 Pavement Maintenance Program
Eastern Oregon Airports

Dear Mr. Davis:

Your firm was the low bidder in the formal Bid process used to award the public work contract necessary to complete the above-mentioned project. You are hereby authorized to proceed with the work identified as: "2008 Pavement Maintenance Program, Eastern Oregon Airports" as directed by project specifications and plans as permitted under OAR 137-049-0430.

Your Contract award is for **$834,972.19.** The Contract amount shall not change without a fully executed Change Order.

All work, and the indirect management of the work is to be performed in accordance with both the Standard and Supplemental General Conditions included in the above titled documents. Those documents, your bid, and this letter constitute the construction contract (the Contract). The reference number for the Contract is 109-1007-08.

It is understood that the Project Start Date shall be achieved not later than **July 17, 2008**. Substantial Completion shall be achieved not later than **November 4, 2008** with Final Completion by **December 4, 2008**. Any work added to this Contract by Change Order may include additional time to complete the work and extend the Substantial Completion date.

Please contact Chris Cummings at 503-378-3168 to discuss any contractual or related issues. The Department of Aviation looks forward to working with you towards a successful completion of this work.

Sincerely,

Dan Clem
Director
Oregon Department of Aviation

WHPacific

3470 Pipebend Place NE, Ste 170
Salem, OR 97301
503.362.4675 Fax: 503.362.5078

MEMORANDUM

Date: 1/14/2009

RE: Final Inspection Punchlist

To: Russ Davis
Company: Ashwood Construction
Phone: 503.691.2111
Fax: 503-362-5078
Address 29772 Heater Rd.
Sherwood, OR 97140

From: Ed Chamberland
Title: Project Manager
Phone: 503-428-5012
Fax:

Project#: 034832
Project Name: 2008 ODA PMP

The final inspection of the airports in the PMP 2008 was completed by Ed Chamberland and Chris Cummings. A site visit to each airport was conducted to accept the work and identify any punchlist items necessary for close out of the project. Items at three airports where added to the final punch list and one item was noted as future warranty work.

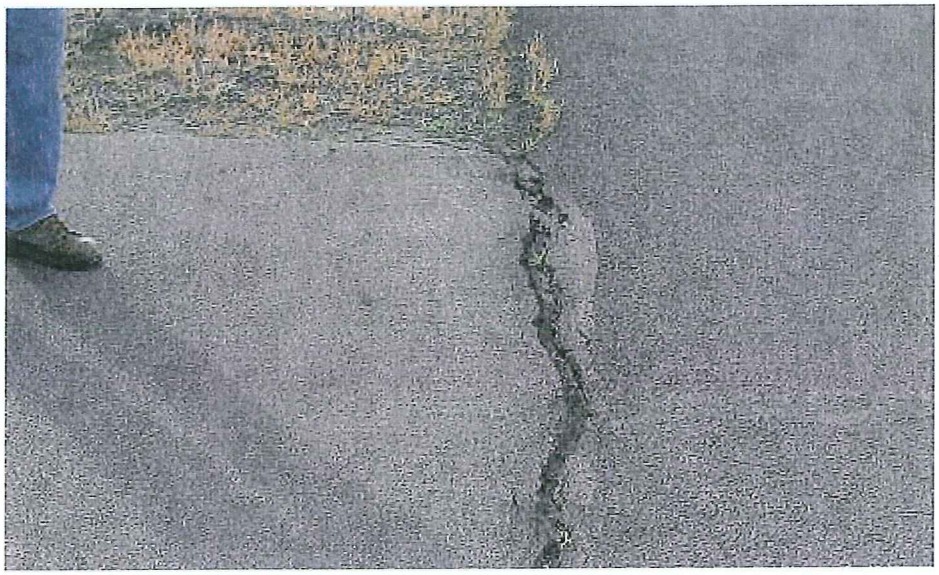
A summary of the items noted during these inspections and their locations follows:

Item	Airport	Location	Item	NW/PL/WI*
1	Bend	T01BE	Reseal Sunken Crack	PL
2		A01BE-05	Reseal Sunken Crack	PL
3		T17BE-01	Reseal Sunken Crack	PL
4		T01BE	Seal Crack	NW
5	Prineville	A04PR-01	Reseal Sunken Crack	PL
6		T02PR-02	Black Out Sloppy Hold Line Paint	PL
7		AFPR-01	Seal Crack	NW
8		R15PR-01	Seal Crack	NW
9	Ken Jernstedt	A02HR-01	Remove Debris Piles	PL
10	Wasco	Airport	Repair Peeling Paint	WI
11	All	N/A	Submit Certified Payrolls	PL
12		N/A	Address Wage Rate Errors	PL

* NW (New Work) indicates bid item work yet to be completed by the contractor that will be paid for at contract unit prices. PL (Punch List) indicates work previously undertaken but not completed. WI (Warranty Item) indicates work that was completed, but not accepted during the final inspection due to warranty issues.

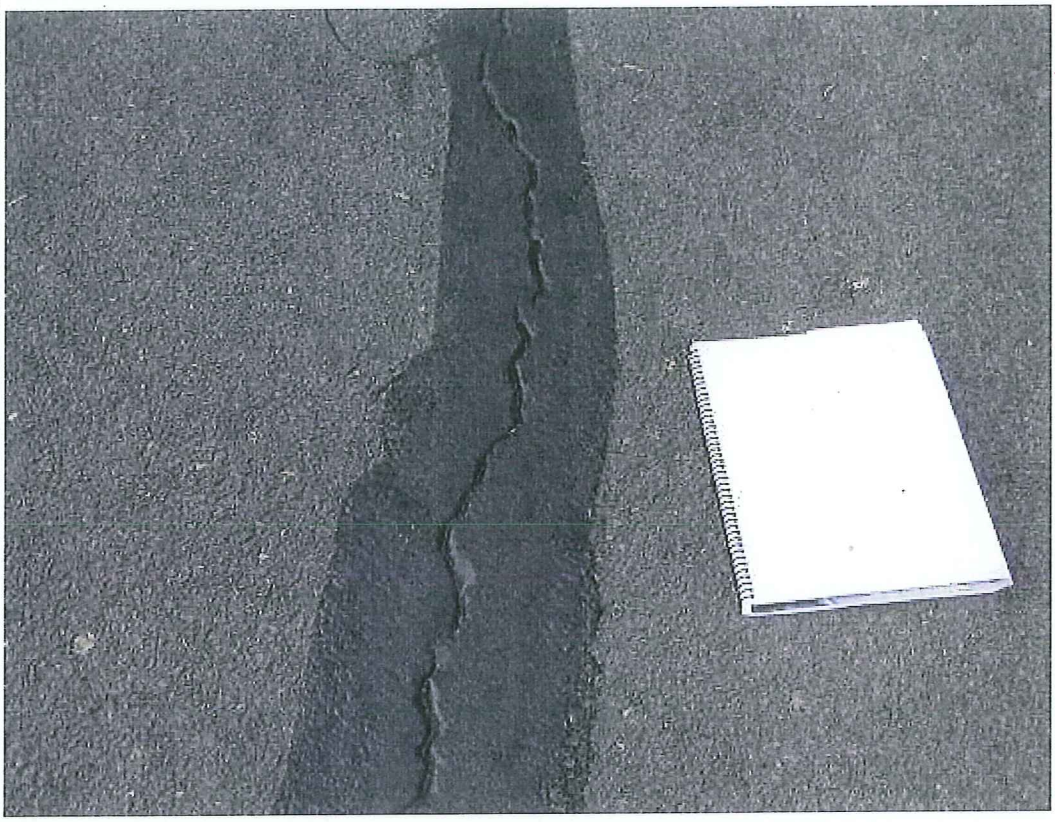
As of the date of this letter, the contractor shall proceed with the above items in accordance with the specifications laid out in the contract documents. The completion of these items is required within 30 days. To assist the contractor in identifying specific areas of work, a summary of inspections at each airport and each work item is included below:

The first airport where punch list items were noted was at Bend Municipal. Random sunken cracks to be sealed were noted along the length of T01BE, A01BE-05, and T17BE-01. There is also a large crack adjacent to T01BE which needs to be sealed:

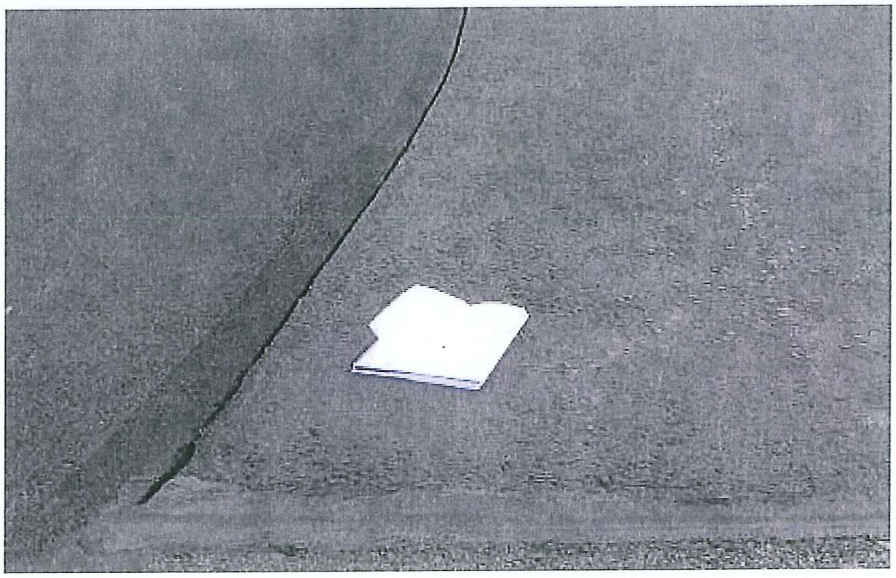


The next airport where punch list items were noted was Prineville Airport. There was 10' of crack located on the Runway that needs to be sealed:

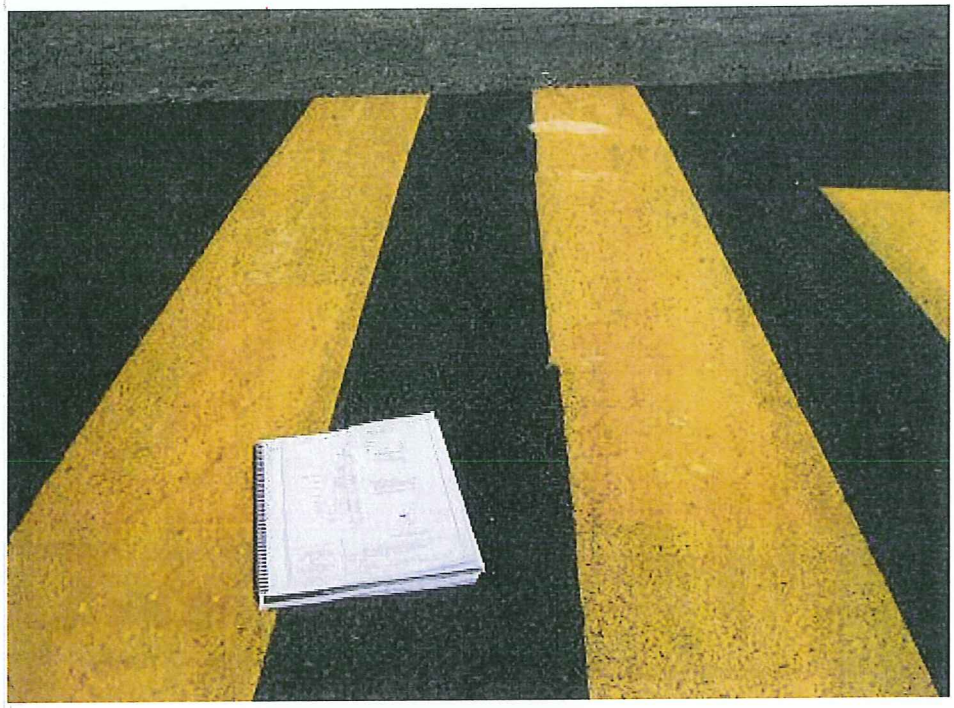
Two sunken cracks on A04PR-01 also require topping off (~50 LF total):



Adjacent to AFPR-01, the construction joint between the apron and the taxiway requires sealing as well. It looks as if it may have been partially routed, but was not sealed (~100'):



The hold line on T02PR-03 requires some black paint along the edges due to some sloppy initial painting:



The third airport where punchlist items were noted was at Ken Jernstedt Airfield in Hood River. There are large piles of swept up debris which were left on the airport near A02HR-01. In some cases, these piles are directly adjacent to wetlands. ALL of these piles shall be completely removed by the contractor and the ground under these piles shall be restored to its previous condition. This item shall be completed as soon as possible:

The one item noted for warranty work was at Wasco State Airport. There are many locations at this airport where the paint was applied too heavily in one or more of the coats and peeling of the paint has resulted. The final extent of the peeling will not be known until it is re-inspected in the summer of 2009. The contractor is advised to plan on visiting the site a minimum of one time during the summer of 2009.

Also, when the warranty paint repair work is undertaken in Wasco, cleanup of Hold Line markings must be performed at several Hold Line locations. Where paint dimensions exceeds plan dimensions, excess paint must be "blacked out":

The last two punch list items cover all airports under the 2008 program. To complete these items, the contractor must submit correct certified payrolls and corrections of previously submitted certified payrolls which did not use correct prevailing wages for Ashwood employees. A letter was previously sent out on this item, but no response has been received or remedy presented.

FINAL PAY ESTIMATE

CHANGE ORDER NO. 1

CHANGE ORDER NO. 2

CHANGE ORDER NO. 3

CONTRACT CHANGE ORDER NO. 001

AIRPORT Madras, Ontario DATE July 31, 2008

LOCATION Various PROJECT NO. 109-1007-08

CONTRACTOR Ashwood Construction

You are requested to perform the following described work upon receipt of an approved copy of this document or as directed by the engineer:

Item No.	Description	Unit	Unit Price	Quantity	Amount
L6	Pavement Marking	SF	$ 1.07	9942	$ 10,637.94
R1	Mobilization	LS	$ 5,000.00	-1	($ 5,000.00)
R2	Crack Sealing	LF	$ 0.75	-10,799	($ 8,099.25)
R3	Wide Crack Repair	LF	$ 18.00	-174	($ 3,132.00)
R4	Pavement Marking	SF	$ 2.40	-1,228	($ 2,947.20)
This Change Order Total		($ 8,540.51)			
Previous Change Order(s) Total		$ 0			
Revised Contract Total		$ 826,431.68			

The time provided for completion in the contract is unchanged. This document shall become an amendment to the contract and all provisions of the contract will apply.

Recommended by: 7/31/08
Engineer, WHPacific — Date

Approved by: 08/01/08
Owner, Department of Aviation — Date

Accepted by: 7-31-08
Contractor, Ashwood Construction — Date

CONTRACT CHANGE ORDER NO. 002

AIRPORT Condon State, Joseph State **DATE** March 6, 2009

LOCATION Various **PROJECT NO.** 109-1007-08

CONTRACTOR Ashwood Construction

You are requested to perform the following described work upon receipt of an approved copy of this document or as directed by the engineer:

Item No.	Description	Unit	Unit Price	Quantity	Amount
E4	Pavement Marking	SF	$ 1.30	11,025	$ 14,332.50
H1	Mobilization	LS	$ +510.00	1	$ 510.00
H2	Crack Sealing	LF	$ 0.72	-16,733	($ 12 ,047.76)
H3	Hub Failure Patching	EA	$ 62.00	-221	($ 13,702.00)
This Change Order Total		($ 10,907.26)			
Previous Change Order(s) Total		($ 8,540.51)			
Revised Contract Total		$ 815,524.42			

The time provided for completion in the contract is unchanged. This document shall become an amendment to the contract and all provisions of the contract will apply.

Recommended by:

Engineer, WHPacific — Date 4/15/09

Approved by:

Owner, Department of Aviation — Date

Accepted by:

Contractor, Ashwood Construction — Date 4-20-09

PROJECT NO. 109-1007-08 **CHANGE ORDER NO.** 002

AIRPORT Condon State, Joseph State **LOCATION** Various

JUSTIFICATION FOR CHANGE

1. Brief description of the proposed contract change(s) and location(s).

   Add Pavement Markings to Condon State Airport (Bid Schedule E).

   Add additional Joseph Mobilization costs (Bid Schedule H, Item 1).

   Delete Joseph State Airport AC work(Bid Schedule H, Item 2, 3).

2. Reason(s) for the change(s)

   Existing runway and taxiway pavement markings are faded and are on PCC pavements with no black background. Restripe is required for runway safety and to repair damage done by crack repairs on runway pavements.

   Crack seal material was delivered to the site immediately prior to the owners request to delete crack seal work at Joseph. This adjustment covers the cost of relocation of the crack seal material to another airport on the project.

   Joseph runway is programmed to receive a runway rehabilitation project within 1-2 years. Remaining crack seal work does not justify contractor's mobilization costs.

3. Justifications for unit prices or total cost.

   Condon State striping is based on unit price quoted by Ashwood Construction.

   Actual relocation cost incurred by the contractor

   Joseph State Airport bid item deletions are based on bid prices from Ashwood Construction.

PROJECT NO. 109-1007-08 **CHANGE ORDER NO.** 002

AIRPORT Condon State, Joseph State **LOCATION** Various

JUSTIFICATION FOR CHANGE (CONT.)

4. The sponsor's share of this cost is available from:

   Budget Funds

5. If this is a supplemental agreement involving more than $2,000, is the cost estimate based on the latest wage rate decision? Yes ☒ No ☐ Not Applicable ☐.

6. Has consent of surety been obtained? Yes ☐ Not Necessary ☒.

7. Will this change affect the insurance coverage? Yes ☐ No ☐ N/A ☒.

8. If yes, will the policies be extended? Yes ☐ No ☐ N/A ☒.

9. Has this Change Order been discussed with ODA officials?
   Yes ☒ No ☐ This Change Order has been discussed with Chris Cummings

Comment _____

CONTRACT CHANGE ORDER NO. 003

AIRPORT Various **DATE** April 6, 2008

LOCATION Various **PROJECT NO.** 109-1007-08

CONTRACTOR Ashwood Construction

You are requested to perform the following described work upon receipt of an approved copy of this document or as directed by the engineer:

Item No.	Description	Unit	Unit Price	Quantity	Amount
	Final Quantity Adjustment	LS	($ 26,577.99)	1	($ 26,577.99)
This Change Order Total		($ 26,577.99)			
Previous Change Order(s) Total		($ 19,447.77)			
Revised Contract Total		$ 788,946.43			

The time provided for completion in the contract is unchanged. This document shall become an amendment to the contract and all provisions of the contract will apply.

Recommended by: 4/15/09

Engineer, WHPacific **Date**

Approved by:

Owner, Department of Aviation **Date**

Accepted by: 4-20-09

Contractor, Ashwood Construction **Date**

PROJECT NO. 109-1007-08 **CHANGE ORDER NO.** 003

AIRPORT Various **LOCATION** Various

JUSTIFICATION FOR CHANGE

1. Brief description of the proposed contract change(s) and location(s).

   This item adjusts the contract amount to match the final pay quantities of the unit price contract.

2. Reason(s) for the change(s)

   The adjustment to contract amount is necessary to satisfy data requirements of the Agency accounting system and close out the project.

3. Justifications for unit prices or total cost.

   Final contract quantities

4. The sponsor's share of this cost is available from:

   Budget Funds

5. If this is a supplemental agreement involving more than $2,000, is the cost estimate based on the latest wage rate decision? Yes ☒ No ☐ Not Applicable ☐.

6. Has consent of surety been obtained? Yes ☐ Not Necessary ☒.

7. Will this change affect the insurance coverage? Yes ☐ No ☐ N/A ☒.
8. If yes, will the policies be extended? Yes ☐ No ☐ N/A ☒.
9. Has this Change Order been discussed with ODA officials?
10. Yes ☒ No ☐ This Change Order has been discussed with Chris Cummings

Comment _____

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule A: Baker City

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
A1	Mobilization	1	1	0	LS	$ 5,500.00	$ -
A2	Crack Sealing	44,307	45,384	1,077	LS	$ 0.62	$ 667.74
A3	Wide Crack Repair	1,934	1,836	-98	LS	$ 11.95	$ (1,171.10)
A4	Reseal Wide Crack Repair	322	322	0	LS	$ 4.00	$ -
A5	AC Patching	1,018	1,060.5	42.5	LS	$ 19.25	$ 818.13
A6	PCC Crack Sealing	427	270	-157	LS	$ 9.75	$ (1,530.75)
A7	PCC Spall Repair	9	4.5	-4.5	SF	$ 125.00	$ (562.50)
A8	Remove Existing Markings	285	285	0	SF	$ 4.25	$ -
A9	Pavement Marking	5,134	5,531	397	SF	$ 0.75	$ 297.75
	Subtotal						**$ (1,480.74)**

Base Bid - Schedule B: Bend

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
B1	Mobilization	1	1	0	LS	$ 4,500.00	$ -
B2	Crack Sealing	39,214	39,943	729	LF	$ 0.59	$ 430.11
B3	Wide Crack Repair	1,477	1,433	-44	LF	$ 12.40	$ (545.60)
B4	Reseal Wide Crack Repair	1,780	1,952	172	LF	$ 0.75	$ 129.00
B5	AC Patching	550	539	-11	SF	$ 12.40	$ (136.40)
B6	Pavement Marking	1,000	1,025	25	SF	$ 1.55	$ 38.75
	Subtotal						**$ (84.14)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule C: Burns

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
C1	Mobilization	1	1	0	LS	$ 5,200.00	$ -
C2	Crack Sealing	39,678	40,750	1,072	LF	$ 0.60	$ 643.20
C3	Wide Crack Repair	2,120	2,031	-89	LF	$ 11.95	$ (1,063.55)
C4	Extra Wide Crack Repair	877	1,055	178	LF	$ 17.90	$ 3,186.20
C5	Reseal Wide Crack Repair	2,309	2,596	287	LF	$ 0.69	$ 198.03
	Subtotal						**$ 2,963.88**

Base Bid - Schedule D: Columbia Gorge

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
D1	Mobilization	1	1	0	LS	$ 2,500.00	$ -
D2	Crack Sealing	13,991	15,253	1,262	LF	$ 0.65	$ 820.30
D3	Pavement Marking	250	264	14	SF	$ 4.70	$ 65.80
	Subtotal						**$ 886.10**

Base Bid - Schedule E: Condon

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
E1	Mobilization	1	1	0	LS	$ 3,000.00	$ -
E2	Crack Sealing	2,000	4,600	2,600	LF	$ 0.80	$ 2,080.00
E3	PCC Crack Sealing	3,200	564	-2,636	LF	$ 5.80	$ (15,288.80)
E4	Pavement Marking	11,025	10,837	-188	SF	$ 1.30	$ (244.40)
	Subtotal						**$ (13,453.20)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule F: Enterprise

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
F1	Mobilization	1	1	0	LS	$ 5,500.00	$ -
F2	B.S.T. Crack Sealing	9,729	9,089	-640	LF	$ 0.69	$ (441.60)
F3	Crack Sealing	141	141	0	LF	$ 4.00	$ -
F4	Wide Crack Repair	275	305	30	LF	$ 15.00	$ 450.00
F5	Remove Existing Markings	1,910	1,636	-274	SF	$ 0.65	$ (178.10)
F6	Pavement Marking	3,450	3,438	-12	SF	$ 0.85	$ (10.20)
F7	Pavement Marking - Re-stripe	3,450	3,438	-12	SF	$ 0.85	$ (10.20)
F8	Slurry Seal, Type 1	21,313	21,313	0	SY	$ 1.91	$ -
	Subtotal						**$ (190.10)**

Base Bid - Schedule G: Grant County

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
G1	Mobilization	1	1	0	LS	$ 4,500.00	$ -
G2	Crack Sealing	34,434	26,783	-7,651	LF	$ 0.59	$ (4,514.09)
G3	Wide Crack Repair	638	543	-95	LF	$ 13.50	$ (1,282.50)
G4	Remove Existing Markings	196	137	-59	SF	$ 4.00	$ (236.00)
G5	Pavement Marking	10,084	2,718	-7,366	SF	$ 0.73	$ (5,377.18)
	Subtotal						**$ (11,409.77)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule H: Joseph

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
H1	Mobilization	1	1.204	0.204	LS	$ 2,500.00	**CO #2**
H2	Crack Sealing	16,733	0	-16,733	LF	$ 0.72	**CO #2**
H3	Hub Failure Patching	221	0	-221	EA	$ 62.00	**CO #2**
H4	Remove Existing Markings	152	246	94	SF	$ 4.00	$ 376.00
H5	Pavement Marking	6,116	5,792	-324	SF	$ 0.85	$ (275.40)
	Subtotal						**$ 100.60**

Base Bid - Schedule I: Ken Jernstedt

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
I1	Mobilization	1	1	0	LS	$ 1,200.00	$ -
I2	Crack Sealing	23,050	21,042	-2,008	LF	$ 0.62	$ (1,244.96)
I3	Wide Crack Repair	2,149	2,263	114	LF	$ 11.95	$ 1,362.30
I4	Remove Existing Markings	320	257	-63	SF	$ 4.00	$ (252.00)
I5	Pavement Marking	9,213	9,231	18	SF	$ 0.81	$ 14.58
	Subtotal						**$ (120.08)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule J: LaGrande

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
J1	Mobilization	1	1	0	LS	$ 4,000.00	$ -
J2	Crack Sealing	14,790	12,123	-2,667	LF	$ 0.64	$ (1,706.88)
J3	Wide Crack Repair	672	655	-17	LF	$ 13.50	$ (229.50)
J4	AC Patching	487	554.5	67.5	SF	$ 19.25	$ 1,299.38
J5	Pavement Marking	1,571	1,255	-316	SF	$ 1.45	$ (458.20)
	Subtotal						**$ (1,095.21)**

Base Bid - Schedule K: Lexington

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
K1	Mobilization	1	1	0	LS	$ 3,500.00	$ -
K2	Crack Sealing	21,049	21,589	540	LF	$ 0.62	$ 334.80
K3	Wide Crack Repair	1,452	1,434	-18	LF	$ 11.95	$ (215.10)
K4	AC Patching	573	460	-113	SF	$ 19.25	$ (2,175.25)
K5	Pavement Marking	2,400	2,552	152	SF	$ 1.10	$ 167.20
	Subtotal						**$ (1,888.35)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule L: Madras

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
L1	Mobilization	1	1	0	LS	$ 2,500.00	$ -
L2	Crack Sealing	38,716	42,475	3,759	LF	$ 0.59	$ 2,217.81
L3	Wide Crack Repair	6,276	5,964	-312	LF	$ 11.90	$ (3,712.80)
L4	AC Patching	403	415	12	SF	$ 13.20	$ 158.40
L5	AC Patching - Joint Repair	4,360	5,148	788	LF	$ 9.50	$ 7,486.00
L6	Pavement Marking	9,942	10,564	622	SF	$ 1.07	$ 665.54
	Subtotal						**$ 6,814.95**

Base Bid - Schedule M: Prineville

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
M1	Mobilization	1	1	0	LS	$ 4,000.00	$ -
M2	Crack Sealing	6,824	7,609	785	LF	$ 0.70	$ 549.50
M3	Wide Crack Repair	366	313	-53	LF	$ 18.00	$ (954.00)
M4	Pavement Marking	3,027	3,251	224	SF	$ 0.74	$ 165.76
	Subtotal						**$ (238.74)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Base Bid - Schedule N: Wasco

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
N1	Mobilization	1	1	0	LS	$ 4,000.00	$ -
N2	B.S.T. Crack Sealing	4,906	8,947	4,041	LF	$ 0.85	$ 3,434.85
N3	AC Patching	225	225	0	SF	$ 13.85	$ -
N4	Remove Existing Markings	327	541	214	SF	$ 4.00	$ 856.00
N5	Pavement Marking	654	642	-12	SF	$ 3.00	$ (36.00)
	Subtotal						**$ 4,254.85**

Additive Alt. 1 - Schedule O: Wasco Slurry Seal

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
O1	Mobilization	1	1	0	LS	$ 4,000.00	$ -
O2	Remove Existing Markings	6,088	0	-6,088	SF	$ 0.75	$ (4,566.00)
O3	Pavement Marking	6,088	6,491	403	SF	$ 0.69	$ 278.07
O4	Pavement Marking - Re-stripe	4,887	7,133	2,246	SF	$ 0.74	$ 1,662.04
O5	Slurry Seal, Type 1	34,933	35,603	670	SY	$ 1.28	$ 857.60
	Subtotal						**$ (1,768.29)**

Additive Alt. 2 - Schedule P: Hermiston

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
P1	Mobilization	1	1	0	LS	$ 2,500.00	$ -
P2	Crack Sealing	18,243	18,299	56	LF	$ 0.62	$ 34.72
P3	Wide Crack Repair	1,019	961	-58	LF	$ 12.50	$ (725.00)
	Subtotal						**$ (690.28)**

Change Order #3 - Price Adjustment Summary

2008 ODA Pavement Maintenance Program

Additive Alt. 3 - Schedule Q: Sunriver

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
Q1	Mobilization	1	1	0	LS	$ 2,000.00	$ -
Q2	Crack Sealing	5,264	5,173	-91	LF	$ 0.68	$ (61.88)
Q3	Wide Crack Repair	625	304	-321	LF	$ 18.00	$ (5,778.00)
Q4	AC Patching	745	492	-253	SF	$ 13.20	$ (3,339.60)
	Subtotal						**$ (9,179.48)**

Additive Alt. 4 - Schedule R: Ontario

No.	Bid Item	Contract Quantity	Final Pay Quantity	Quantity Change	Unit	Contract Unit Price	Paid to date
R1	Mobilization	1	0	-1	LS	$ 5,000.00	**CO #1**
R2	Crack Sealing	10,799	0	-10,799	LF	$ 0.75	**CO #1**
R3	Wide Crack Repair	174	0	-174	LF	$ 18.00	**CO #1**
R4	Pavement Marking	1,228	0	-1,228	SF	$ 2.40	**CO #1**
	Subtotal						

Change Order #3 Adjustment Summary: All Schedules

Item	Paid to date
Total	**$ (26,577.99)**

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Base Bid - Schedule A: Baker City

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
A1	Mobilization	1	0	1	100%	LS	$ 5,500.00	$ -	$ 5,500.00
A2	Crack Sealing	44,307	0	45,384	102%	LS	$ 0.62	$ -	$ 28,138.08
A3	Wide Crack Repair	1,934	0	1,836	95%	LS	$ 11.95	$ -	$ 21,940.20
A4	Reseal Wide Crack Repair	322	0	322	100%	LS	$ 4.00	$ -	$ 1,288.00
A5	AC Patching	1,018	0.0	1,060.5	104%	LS	$ 19.25	$ -	$ 20,414.63
A6	PCC Crack Sealing	427	0	270	63%	LS	$ 9.75	$ -	$ 2,632.50
A7	PCC Spall Repair	9	0.0	4.5	50%	SF	$ 125.00	$ -	$ 562.50
A8	Remove Existing Markings	285	0	285	100%	SF	$ 4.25	$ -	$ 1,211.25
A9	Pavement Marking	5,134	0	5,531	108%	SF	$ 0.75	$ -	$ 4,148.25
	Subtotal							$ -	$ 85,835.41

Base Bid - Schedule B: Bend

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
B1	Mobilization	1	0	1	100%	LS	$ 4,500.00	$ -	$ 4,500.00
B2	Crack Sealing	39,214	48	39,943	102%	LF	$ 0.59	$ 28.32	$ 23,566.37
B3	Wide Crack Repair	1,477	0	1,433	97%	LF	$ 12.40	$ -	$ 17,769.20
B4	Reseal Wide Crack Repair	1,780	0	1,952	110%	LF	$ 0.75	$ -	$ 1,464.00
B5	AC Patching	550	0	539	98%	SF	$ 12.40	$ -	$ 6,683.60
B6	Pavement Marking	1,000	0	1,025	103%	SF	$ 1.55	$ -	$ 1,588.75
	Subtotal							$ 28.32	$ 55,571.92

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Base Bid - Schedule C: Burns

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
C1	Mobilization	1	0	1	100%	LS	$ 5,200.00	$ -	$ 5,200.00
C2	Crack Sealing	39,678	0	40,750	103%	LF	$ 0.60	$ -	$ 24,450.00
C3	Wide Crack Repair	2,120	0	2,031	96%	LF	$ 11.95	$ -	$ 24,270.45
C4	Extra Wide Crack Repair	877	0	1,055	120%	LF	$ 17.90	$ -	$ 18,884.50
C5	Reseal Wide Crack Repair	2,309	0	2,596	112%	LF	$ 0.69	$ -	$ 1,791.24
	Subtotal							$ -	$ 74,596.19

Base Bid - Schedule D: Columbia Gorge

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
D1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
D2	Crack Sealing	13,991	0	15,253	109%	LF	$ 0.65	$ -	$ 9,914.45
D3	Pavement Marking	250	0	264	106%	SF	$ 4.70	$ -	$ 1,240.80
	Subtotal							$ -	$ 13,655.25

Base Bid - Schedule E: Condon

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
E1	Mobilization	1	0	1	100%	LS	$ 3,000.00	$ -	$ 3,000.00
E2	Crack Sealing	2,000	0	4,600	230%	LF	$ 0.80	$ -	$ 3,680.00
E3	PCC Crack Sealing	3,200	414	564	18%	LF	$ 5.80	$ 2,401.20	$ 3,271.20
E4	Pavement Marking	11,025	0	10,837	98%	SF	$ 1.30	$ -	$ 14,088.10
	Subtotal							$ 2,401.20	$ 24,039.30

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Base Bid - Schedule F: Enterprise

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
F1	Mobilization	1	0	1	100%	LS	$ 5,500.00	$ -	$ 5,500.00
F2	B.S.T. Crack Sealing	9,729	0	9,089	93%	LF	$ 0.69	$ -	$ 6,271.41
F3	Crack Sealing	141	0	141	100%	LF	$ 4.00	$ -	$ 564.00
F4	Wide Crack Repair	275	0	305	111%	LF	$ 15.00	$ -	$ 4,575.00
F5	Remove Existing Markings	1,910	0	1,636	86%	SF	$ 0.65	$ -	$ 1,063.40
F6	Pavement Marking	3,450	0	3,438	100%	SF	$ 0.85	$ -	$ 2,922.30
F7	Pavement Marking - Re-stripe	3,450	0	3,438	100%	SF	$ 0.85	$ -	$ 2,922.30
F8	Slurry Seal, Type 1	21,313	0	21,313	100%	SY	$ 1.91	$ -	$ 40,707.83
	Subtotal							$ -	$ 64,526.24

Base Bid - Schedule G: Grant County

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
G1	Mobilization	1	0	1	100%	LS	$ 4,500.00	$ -	$ 4,500.00
G2	Crack Sealing	34,434	0	26,783	78%	LF	$ 0.59	$ -	$ 15,801.97
G3	Wide Crack Repair	638	0	543	85%	LF	$ 13.50	$ -	$ 7,330.50
G4	Remove Existing Markings	196	0	137	70%	SF	$ 4.00	$ -	$ 548.00
G5	Pavement Marking	10,084	0	2,718	27%	SF	$ 0.73	$ -	$ 1,984.14
	Subtotal							$ -	$ 30,164.61

Base Bid - Schedule H: Joseph

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
H1	Mobilization	1	0.204	1.2	120%	LS	$ 2,500.00	$ 510.00	$ 3,010.00
H2	Crack Sealing	16,733	0	0	100%	LF	$ 0.72	$ -	$ -
H3	Hub Failure Patching	221	0	0	100%	EA	$ 62.00	$ -	$ -
H4	Remove Existing Markings	152	0	246	162%	SF	$ 4.00	$ -	$ 984.00
H5	Pavement Marking	6,116	0	5,792	95%	SF	$ 0.85	$ -	$ 4,923.20
	Subtotal							$ 510.00	$ 8,917.20

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Base Bid - Schedule I: Ken Jernstedt

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
I1	Mobilization	1	0	1	100%	LS	$ 1,200.00	$ -	$ 1,200.00
I2	Crack Sealing	23,050	0	21,042	91%	LF	$ 0.62	$ -	$ 13,046.04
I3	Wide Crack Repair	2,149	0	2,263	105%	LF	$ 11.95	$ -	$ 27,042.85
I4	Remove Existing Markings	320	0	257	80%	SF	$ 4.00	$ -	$ 1,028.00
I5	Pavement Marking	9,213	0	9,231	100%	SF	$ 0.81	$ -	$ 7,477.11
	Subtotal							$ -	$ 49,794.00

Base Bid - Schedule J: LaGrande

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
J1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
J2	Crack Sealing	14,790	0	12,123	82%	LF	$ 0.64	$ -	$ 7,758.72
J3	Wide Crack Repair	672	0	655	97%	LF	$ 13.50	$ -	$ 8,842.50
J4	AC Patching	487	0.0	554.5	114%	SF	$ 19.25	$ -	$ 10,674.13
J5	Pavement Marking	1,571	0	1,255	80%	SF	$ 1.45	$ -	$ 1,819.75
	Subtotal							$ -	$ 33,095.10

Base Bid - Schedule K: Lexington

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
K1	Mobilization	1	0	1	100%	LS	$ 3,500.00	$ -	$ 3,500.00
K2	Crack Sealing	21,049	0	21,589	103%	LF	$ 0.62	$ -	$ 13,385.18
K3	Wide Crack Repair	1,452	0	1,434	99%	LF	$ 11.95	$ -	$ 17,136.30
K4	AC Patching	573	0	460	80%	SF	$ 19.25	$ -	$ 8,855.00
K5	Pavement Marking	2,400	0	2,552	106%	SF	$ 1.10	$ -	$ 2,807.20
	Subtotal							$ -	$ 45,683.68

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Base Bid - Schedule L: Madras

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
L1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
L2	Crack Sealing	38,716	0	42,475	110%	LF	$ 0.59	$ -	$ 25,060.25
L3	Wide Crack Repair	6,276	0	5,964	95%	LF	$ 11.90	$ -	$ 70,971.60
L4	AC Patching	403	0	415	103%	SF	$ 13.20	$ -	$ 5,478.00
L5	AC Patching - Joint Repair	4,360	0	5,148	118%	LF	$ 9.50	$ -	$ 48,906.00
L6	Pavement Marking	9,942	0	10,564	106%	SF	$ 1.07	$ -	$ 11,303.48
	Subtotal							$ -	$ 164,219.33

Base Bid - Schedule M: Prineville

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
M1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
M2	Crack Sealing	6,824	593	7,609	112%	LF	$ 0.70	$ 415.10	$ 5,326.30
M3	Wide Crack Repair	366	0	313	86%	LF	$ 18.00	$ -	$ 5,634.00
M4	Pavement Marking	3,027	0	3,251	107%	SF	$ 0.74	$ -	$ 2,405.74
	Subtotal							$ 415.10	$ 17,366.04

Base Bid - Schedule N: Wasco

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
N1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
N2	B.S.T. Crack Sealing	4,906	0	8,947	182%	LF	$ 0.85	$ -	$ 7,604.95
N3	AC Patching	225	0	225	100%	SF	$ 13.85	$ -	$ 3,116.25
N4	Remove Existing Markings	327	0	541	165%	SF	$ 4.00	$ -	$ 2,164.00
N5	Pavement Marking	654	0	642	98%	SF	$ 3.00	$ -	$ 1,926.00
	Subtotal							$ -	$ 18,811.20

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Additive Alt. 1 - Schedule O: Wasco Slurry Seal

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
O1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
O2	Remove Existing Markings	6,088	0	0	0%	SF	$ 0.75	$ -	$ -
O3	Pavement Marking	6,088	0	6,491	107%	SF	$ 0.69	$ -	$ 4,478.79
O4	Pavement Marking - Re-stripe	4,887	0	7,133	146%	SF	$ 0.74	$ -	$ 5,278.42
O5	Slurry Seal, Type 1	34,933	0	35,603	102%	SY	$ 1.28	$ -	$ 45,571.84
	Subtotal							$ -	$ 59,329.05

Additive Alt. 2 - Schedule P: Hermiston

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
P1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
P2	Crack Sealing	18,243	0	18,299	100%	LF	$ 0.62	$ -	$ 11,345.38
P3	Wide Crack Repair	1,019	0	961	94%	LF	$ 12.50	$ -	$ 12,012.50
	Subtotal							$ -	$ 25,857.88

Additive Alt. 3 - Schedule Q: Sunriver

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
Q1	Mobilization	1	0	1	100%	LS	$ 2,000.00	$ -	$ 2,000.00
Q2	Crack Sealing	5,264	0	5,173	98%	LF	$ 0.68	$ -	$ 3,517.64
Q3	Wide Crack Repair	625	0	304	49%	LF	$ 18.00	$ -	$ 5,472.00
Q4	AC Patching	745	0	492	66%	SF	$ 13.20	$ -	$ 6,494.40
	Subtotal							$ -	$ 17,484.04

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE
2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Additive Alt. 4 - Schedule R: Ontario

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
R1	Mobilization	1	0	0	100%	LS	$ 5,000.00	$ -	$ -
R2	Crack Sealing	10,799	0	0	100%	LF	$ 0.75	$ -	$ -
R3	Wide Crack Repair	174	0	0	100%	LF	$ 18.00	$ -	$ -
R4	Pavement Marking	1,228	0	0	100%	SF	$ 2.40	$ -	$ -
	Subtotal							$ -	$ -

Progress payment summary: All Schedules

Item	Pay this period	Paid to date
Total	$ 3,354.62	$ 788,946.43
Retainage Held - 5%	$ 167.73	$ 39,447.32
Progress payment	$ 3,186.89	$ 749,499.11

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE
2008 ODA Pavement Maintenance Program

Pay Estimate 5
Pay Period: 10/31/08 - Final

Prepared by (WHPacific): _____ Date 4/15/09

I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Concurrence by (Ashwood Construction): _____ Date 4-20-09

Approval by (Oregon Department of Aviation): _____ Date _____

Note: This progress payment shall not be construed to be final acceptance or approval of that portion of the work to which such partial payment relates nor shall it relieve the Contractor of any of its obligations of the contract.

Table 1: Retainage Calculations

Pay Estimate No.	Pay Estimate Amount	5% Retainage this period	5% Retainage to date	Pay Estimate minus Retainage
1	$ 148,537.15	$ 7,426.86	$ 7,426.86	$ 141,110.29
2	$ 389,197.62	$ 19,459.88	$ 26,886.74	$ 369,737.74
3	$ 145,318.63	$ 7,265.93	$ 34,152.67	$ 138,052.70
4	$ 102,538.41	$ 5,126.92	$ 39,279.59	$ 97,411.49
5	$ 3,354.62	$ 167.73	$ 39,447.32	$ 3,186.89
6				
subtotal	$ 788,946.43	$ 39,447.32		$ 749,499.11

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Base Bid - Schedule A: Baker City

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
A1	Mobilization	1	0	1	100%	LS	$ 5,500.00	$ -	$ 5,500.00
A2	Crack Sealing	44,307	0	45,384	102%	LS	$ 0.62	$ -	$ 28,138.08
A3	Wide Crack Repair	1,934	0	1,836	95%	LS	$ 11.95	$ -	$ 21,940.20
A4	Reseal Wide Crack Repair	322	0	322	100%	LS	$ 4.00	$ -	$ 1,288.00
A5	AC Patching	1,018	0.0	1,060.5	104%	LS	$ 19.25	$ -	$ 20,414.63
A6	PCC Crack Sealing	427	0	270	63%	LS	$ 9.75	$ -	$ 2,632.50
A7	PCC Spall Repair	9	0.0	4.5	50%	SF	$ 125.00	$ -	$ 562.50
A8	Remove Existing Markings	285	0	285	100%	SF	$ 4.25	$ -	$ 1,211.25
A9	Pavement Marking	5,134	0	5,531	108%	SF	$ 0.75	$ -	$ 4,148.25
	Subtotal							$ -	$ 85,835.41

Base Bid - Schedule B: Bend

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
B1	Mobilization	1	0	1	100%	LS	$ 4,500.00	$ -	$ 4,500.00
B2	Crack Sealing	39,214	0	39,943	102%	LF	$ 0.59	$ -	$ 23,566.37
B3	Wide Crack Repair	1,477	0	1,433	97%	LF	$ 12.40	$ -	$ 17,769.20
B4	Reseal Wide Crack Repair	1,780	0	1,952	110%	LF	$ 0.75	$ -	$ 1,464.00
B5	AC Patching	550	0	539	98%	SF	$ 12.40	$ -	$ 6,683.60
B6	Pavement Marking	1,000	0	1,025	103%	SF	$ 1.55	$ -	$ 1,588.75
	Subtotal							$ -	$ 55,571.92

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Base Bid - Schedule C: Burns

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
C1	Mobilization	1	0	1	100%	LS	$ 5,200.00	$ -	$ 5,200.00
C2	Crack Sealing	39,678	0	40,750	103%	LF	$ 0.60	$ -	$ 24,450.00
C3	Wide Crack Repair	2,120	0	2,031	96%	LF	$ 11.95	$ -	$ 24,270.45
C4	Extra Wide Crack Repair	877	0	1,055	120%	LF	$ 17.90	$ -	$ 18,884.50
C5	Reseal Wide Crack Repair	2,309	0	2,596	112%	LF	$ 0.69	$ -	$ 1,791.24
	Subtotal							$ -	$ 74,596.19

Base Bid - Schedule D: Columbia Gorge

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
D1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
D2	Crack Sealing	13,991	0	15,253	109%	LF	$ 0.65	$ -	$ 9,914.45
D3	Pavement Marking	250	0	264	106%	SF	$ 4.70	$ -	$ 1,240.80
	Subtotal							$ -	$ 13,655.25

Base Bid - Schedule E: Condon

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
E1	Mobilization	1	0	1	100%	LS	$ 3,000.00	$ -	$ 3,000.00
E2	Crack Sealing	2,000	0	4,600	230%	LF	$ 0.80	$ -	$ 3,680.00
E3	PCC Crack Sealing	3,200	0	564	18%	LF	$ 5.80	$ -	$ 3,271.20
E4	Pavement Marking	11,025	0	10,837	98%	SF	$ 1.30	$ -	$ 14,088.10
	Subtotal							$ -	$ 24,039.30

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Base Bid - Schedule F: Enterprise

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
F1	Mobilization	1	0	1	100%	LS	$ 5,500.00	$ -	$ 5,500.00
F2	B.S.T. Crack Sealing	9,729	0	9,089	93%	LF	$ 0.69	$ -	$ 6,271.41
F3	Crack Sealing	141	0	141	100%	LF	$ 4.00	$ -	$ 564.00
F4	Wide Crack Repair	275	0	305	111%	LF	$ 15.00	$ -	$ 4,575.00
F5	Remove Existing Markings	1,910	0	1,636	86%	SF	$ 0.65	$ -	$ 1,063.40
F6	Pavement Marking	3,450	0	3,438	100%	SF	$ 0.85	$ -	$ 2,922.30
F7	Pavement Marking - Re-stripe	3,450	0	3,438	100%	SF	$ 0.85	$ -	$ 2,922.30
F8	Slurry Seal, Type 1	21,313	0	21,313	100%	SY	$ 1.91	$ -	$ 40,707.83
	Subtotal							$ -	$ 64,526.24

Base Bid - Schedule G: Grant County

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
G1	Mobilization	1	0	1	100%	LS	$ 4,500.00	$ -	$ 4,500.00
G2	Crack Sealing	34,434	0	26,783	78%	LF	$ 0.59	$ -	$ 15,801.97
G3	Wide Crack Repair	638	0	543	85%	LF	$ 13.50	$ -	$ 7,330.50
G4	Remove Existing Markings	196	0	137	70%	SF	$ 4.00	$ -	$ 548.00
G5	Pavement Marking	10,084	0	2,718	27%	SF	$ 0.73	$ -	$ 1,984.14
	Subtotal							$ -	$ 30,164.61

Base Bid - Schedule H: Joseph

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
H1	Mobilization	1	0	1.2	120%	LS	$ 2,500.00	$ -	$ 3,010.00
H2	Crack Sealing	16,733	0	0	100%	LF	$ 0.72	$ -	$ -
H3	Hub Failure Patching	221	0	0	100%	EA	$ 62.00	$ -	$ -
H4	Remove Existing Markings	152	0	246	162%	SF	$ 4.00	$ -	$ 984.00
H5	Pavement Marking	6,116	0	5,792	95%	SF	$ 0.85	$ -	$ 4,923.20
	Subtotal							$ -	$ 8,917.20

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Base Bid - Schedule I: Ken Jernstedt

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
I1	Mobilization	1	0	1	100%	LS	$ 1,200.00	$ -	$ 1,200.00
I2	Crack Sealing	23,050	0	21,042	91%	LF	$ 0.62	$ -	$ 13,046.04
I3	Wide Crack Repair	2,149	0	2,263	105%	LF	$ 11.95	$ -	$ 27,042.85
I4	Remove Existing Markings	320	0	257	80%	SF	$ 4.00	$ -	$ 1,028.00
I5	Pavement Marking	9,213	0	9,231	100%	SF	$ 0.81	$ -	$ 7,477.11
	Subtotal							$ -	$ 49,794.00

Base Bid - Schedule J: LaGrande

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
J1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
J2	Crack Sealing	14,790	0	12,123	82%	LF	$ 0.64	$ -	$ 7,758.72
J3	Wide Crack Repair	672	0	655	97%	LF	$ 13.50	$ -	$ 8,842.50
J4	AC Patching	487	0.0	554.5	114%	SF	$ 19.25	$ -	$ 10,674.13
J5	Pavement Marking	1,571	0	1,255	80%	SF	$ 1.45	$ -	$ 1,819.75
	Subtotal							$ -	$ 33,095.10

Base Bid - Schedule K: Lexington

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
K1	Mobilization	1	0	1	100%	LS	$ 3,500.00	$ -	$ 3,500.00
K2	Crack Sealing	21,049	0	21,589	103%	LF	$ 0.62	$ -	$ 13,385.18
K3	Wide Crack Repair	1,452	0	1,434	99%	LF	$ 11.95	$ -	$ 17,136.30
K4	AC Patching	573	0	460	80%	SF	$ 19.25	$ -	$ 8,855.00
K5	Pavement Marking	2,400	0	2,552	106%	SF	$ 1.10	$ -	$ 2,807.20
	Subtotal							$ -	$ 45,683.68

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Base Bid - Schedule L: Madras

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
L1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
L2	Crack Sealing	38,716	0	42,475	110%	LF	$ 0.59	$ -	$ 25,060.25
L3	Wide Crack Repair	6,276	0	5,964	95%	LF	$ 11.90	$ -	$ 70,971.60
L4	AC Patching	403	0	415	103%	SF	$ 13.20	$ -	$ 5,478.00
L5	AC Patching - Joint Repair	4,360	0	5,148	118%	LF	$ 9.50	$ -	$ 48,906.00
L6	Pavement Marking	9,942	0	10,564	106%	SF	$ 1.07	$ -	$ 11,303.48
	Subtotal							$ -	$ 164,219.33

Base Bid - Schedule M: Prineville

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
M1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
M2	Crack Sealing	6,824	0	7,609	112%	LF	$ 0.70	$ -	$ 5,326.30
M3	Wide Crack Repair	366	0	313	86%	LF	$ 18.00	$ -	$ 5,634.00
M4	Pavement Marking	3,027	0	3,251	107%	SF	$ 0.74	$ -	$ 2,405.74
	Subtotal							$ -	$ 17,366.04

Base Bid - Schedule N: Wasco

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
N1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
N2	B.S.T. Crack Sealing	4,906	0	8,947	182%	LF	$ 0.85	$ -	$ 7,604.95
N3	AC Patching	225	0	225	100%	SF	$ 13.85	$ -	$ 3,116.25
N4	Remove Existing Markings	327	0	541	165%	SF	$ 4.00	$ -	$ 2,164.00
N5	Pavement Marking	654	0	642	98%	SF	$ 3.00	$ -	$ 1,926.00
	Subtotal							$ -	$ 18,811.20

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Additive Alt. 1 - Schedule O: Wasco Slurry Seal

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
O1	Mobilization	1	0	1	100%	LS	$ 4,000.00	$ -	$ 4,000.00
O2	Remove Existing Markings	6,088	0	0	0%	SF	$ 0.75	$ -	$ -
O3	Pavement Marking	6,088	0	6,491	107%	SF	$ 0.69	$ -	$ 4,478.79
O4	Pavement Marking - Re-stripe	4,887	0	7,133	146%	SF	$ 0.74	$ -	$ 5,278.42
O5	Slurry Seal, Type 1	34,933	0	35,603	102%	SY	$ 1.28	$ -	$ 45,571.84
	Subtotal							$ -	$ 59,329.05

Additive Alt. 2 - Schedule P: Hermiston

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
P1	Mobilization	1	0	1	100%	LS	$ 2,500.00	$ -	$ 2,500.00
P2	Crack Sealing	18,243	0	18,299	100%	LF	$ 0.62	$ -	$ 11,345.38
P3	Wide Crack Repair	1,019	0	961	94%	LF	$ 12.50	$ -	$ 12,012.50
	Subtotal							$ -	$ 25,857.88

Additive Alt. 3 - Schedule Q: Sunriver

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
Q1	Mobilization	1	0	1	100%	LS	$ 2,000.00	$ -	$ 2,000.00
Q2	Crack Sealing	5,264	0	5,173	98%	LF	$ 0.68	$ -	$ 3,517.64
Q3	Wide Crack Repair	625	0	304	49%	LF	$ 18.00	$ -	$ 5,472.00
Q4	AC Patching	745	0	492	66%	SF	$ 13.20	$ -	$ 6,494.40
	Subtotal							$ -	$ 17,484.04

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE

2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Additive Alt. 4 - Schedule R: Ontario

No.	Bid Item	Pay Quantity	Pay Quantity This Period	Pay Quantity To Date	Percent Complete	Unit	Contract Unit Price	Pay this period	Paid to date
R1	Mobilization	1	0	0	100%	LS	$ 5,000.00	$ -	$ -
R2	Crack Sealing	10,799	0	0	100%	LF	$ 0.75	$ -	$ -
R3	Wide Crack Repair	174	0	0	100%	LF	$ 18.00	$ -	$ -
R4	Pavement Marking	1,228	0	0	100%	SF	$ 2.40	$ -	$ -
	Subtotal							$ -	$ -

Progress payment summary: All Schedules

Item	Pay this period	Paid to date
Total	$ -	$ 788,946.43
Retainage Held - 5%	$ (39,447.32)	$ -
Progress payment	$ 39,447.32	$ 788,946.43

Ashwood Construction
29772 Heater Rd.
Sherwood, OR 97140

INVOICE
2008 ODA Pavement Maintenance Program

Pay Estimate 6
Pay Period: Release of Retainage

Prepared by (WHPacific): _____ Date 4/15/09

I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Concurrence by (Ashwood Construction): _____ Date 4-20-09

Approval by (Oregon Department of Aviation): _____ Date _____

Note: This progress payment shall not be construed to be final acceptance or approval of that portion of the work to which such partial payment relates nor shall it relieve the Contractor of any of its obligations of the contract.

Table 1: Retainage Calculations

Pay Estimate No.	Pay Estimate Amount	5% Retainage this period	5% Retainage to date	Pay Estimate minus Retainage
1	$ 148,537.15	$ 7,426.86	$ 7,426.86	$ 141,110.29
2	$ 389,197.62	$ 19,459.88	$ 26,886.74	$ 369,737.74
3	$ 145,318.63	$ 7,265.93	$ 34,152.67	$ 138,052.70
4	$ 102,538.41	$ 5,126.92	$ 39,279.59	$ 97,411.49
5	$ 3,354.62	$ 167.73	$ 39,447.32	$ 3,186.89
6		$ (39,447.32)	$ -	$ 39,447.32
subtotal	$ 788,946.43	$ -		$ 788,946.43

WHPacific

3470 Pipebend Place NE, Suite 170 | Salem, OR 97301 | www.whpacific.com

WHPacific

9755 SW Barnes Road, Suite 300
Portland, OR 97225
Office (503) 626-0455; Fax (503) 526-0775

Memorandum

To: Sandi Larsen, ODA

From: Sarah Lucas

Date: January 17, 2012

Re: **PMP Study – Survey Results**

The Pavement Maintenance Program (PMP) Study's Airport Manager Survey was distributed to the following airports on December 14, 2011 via an email invitation. A second email was sent on December 22, 2011 to those individuals who had not yet responded to the survey; follow-up phone calls were also conducted in January 2012. The following summarizes the collection results:

Airport	Representative(s)	Response?
Baker City Municipal	Michelle Owen	Yes
Bend Municipal	Gary Judd	Yes
Burns Municipal	Bryan Hutchison	Partial
Corvallis Municipal	Dan Mason	Yes
Creswell	Shelly Humble	No
Enterprise Municipal	Michele Young, City Administrator and Joe Spence (former mayor)	No
Port of Portland	Nathan Grimes and Steven Nagy	Yes
Salem McNary Field	Tom Franklin	Yes
Seaside	Neal Wallace and Randall Henderson	Partial
Sisters Eagle Air	Hobbs Magaret	Partial
State-Owned	John Wilson	Yes
Sunriver	Stephanie Hartung	Yes
The Dalles	Chuck Covert	Partial

A full print-out of the survey results is included for your reference. However, the following section will provide a brief overview of the responses.

Awareness of the Program's Goals and Objectives?
All respondents (9) are familiar with the PMP's goals and objectives.

Typical Procedures/Methods used to Maintain Airfield Pavement?
The majority of respondents (9) rely heavily on the PMP to maintain their pavement surfaces. Some respondents apply herbicides, crack fill, and sweep the pavements as needed between PMP cycles.

Pavement Changes Observed on Sections Treated by PMP?
Generally speaking, all respondents (9) reported a maintained – or prolonged – pavement condition/lifespan on those pavement sections treated by the PMP. One respondent reported their runway is in need of resurfacing, indicating the pavement condition has likely deteriorated beyond the scope of the PMP. Also, another manager recommended the crack filling schedule be amended, so as to fill the cracks during the cooler months (since they are typically narrowed due to the higher summer temperatures).

Delay of Pavement Rehabilitation or Reconstruction as a result of PMP?
Respondents (9) mostly felt the PMP either kept good pavement in "good" condition, or that it prolonged the need for major repair or reconstruction. The PMP was likened to a band-aid to hold the pavement over until funding became available for a larger project. One respondent reported there was no delay in the need for rehabilitation/reconstruction; while another reported it was unknown.

Feedback from Airport Users on the PMP?
Generally, the nine respondents said that if they did receive comments from users, the remarks were general in nature and that the airport looked good. Again, it was noted that users of one airport felt the cracks should be sealed during the cooler months.

Sufficient Notice given for NOTAMs and Operational Changes?
Of the nine respondents, six reported that communication from the engineer and contractor was handled well. Another mentioned there have been a few last-minute NOTAMs, although the overall experience has been good. Another respondent reported the painting sub-contractor was a deviation from the typically professional experience of the PMP. Lastly, one response was "not applicable."

Did the Contractor Operate Safely and Efficiently?
With two exceptions – a sweeper incursion and a "mess" left behind by the contractor – all eight respondents believed the maintenance was undergone in a safe and efficient manner. One response was "not applicable."

Did WHP Provide Adequate Communication and Oversight?
There were nine responses, with one being "not applicable." The remaining responses were all favorable towards WHP's conduct during the PMP process.

Estimated Annual Pavement Maintenance Budget?
Six responses were given; the remaining were left blank or listed as unknown. Several were unsure of a response, which would indicate their budget varies from year to year. Two airports have a budget of no more than $10,000.

What is the Source of PMP Matching Funds?
Eight responses were given and varied greatly. Federal AIP funds, along with locally derived airport funds, were the most common source of matching funds.

How did the PMP Impact Airport Budget or Cash Flow?
Eight responses were given; two of which did not provide any insight of the airport's operations. The remaining six airports reported there was a benefit derived from the PMP in their budgeting cycles. Four of the airports have incorporated the PMP into their budgets.

Does the Airport's CIP Include PMP Matching Funds (Federal and Local CIP)?
Of the eight responses, five airport managers report they have included the PMP match funds into their CIP. For two of the three airports that have not, their reasons are: 1) consider the PMP a maintenance item, not a capital project, and 2) the airport is privately owned.

Does the Intergovernmental Agreement (IGA) Process Work?
The respondents (7) were generally favorable of the IGA process. One airport would like to see more flexibility in the IGA's to allow for small cost changes, in an effort to avoid a special budget process at the City level. Another comment was that turnover at ODA has been an issue in the past.

What is Your Experience with the Different Types of PMP Work?
Responses (7) varied greatly. Generally, the work completed was done satisfactorily. Suggestions for crack sealing and phasing were given.

If no PMP, Would Maintenance be Undertaken?
Of the seven responses, all but one respondent did not believe the same level of maintenance would have been possible due to funding constraints.

Has the PMP Been Used to Procure Additional Maintenance Projects?
Of the respondents (7), only two were able to leverage the PMP to procure additional pavement work. It does not appear that many airports are aware of this contracting potential.

How can ODA Improve the PMP?
Several suggestions were cited in the responses (7): use the ODA website to broadcast every years' PMP efforts, improve on the financial budgeting/spending authority challenges, hire more (ODA) staff, keep to a schedule, keep the program well-funded, keep the program going, and expand the PMP to include other services needed by small GA airports.

EVALUATION OF A CORROSION CONTROL MATERIAL FOR ASPHALT PRESERVATION OF DOD AIRFIELD FACILITIES (A REVIEW FOR DOD OFFICIALS)

Gregory D. Cline, P.E.

Date: September, 2010

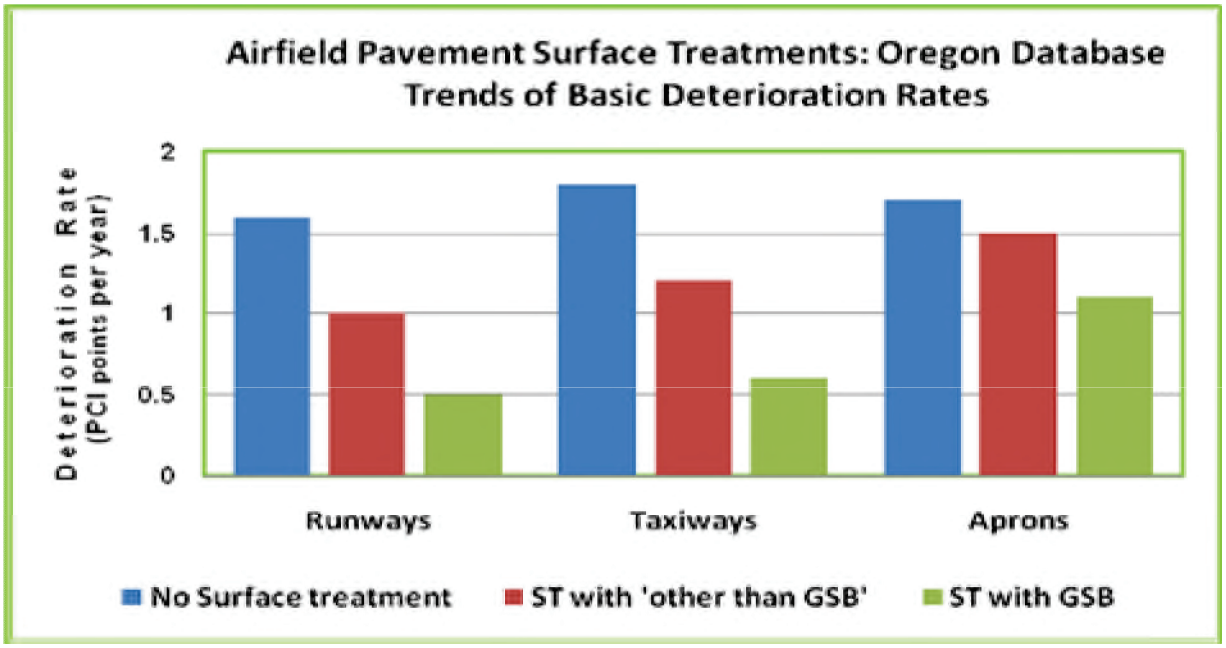
Preservation of the Department of Defense's (DOD) extensive asphalt pavement assets is critical to the DOD's ability to perform its mission. Preservation of these assets is significantly more cost effective, and readiness promoting, than costly corrective maintenance, or reconstruction. The cost of corrective maintenance to airfield asphalt pavements that could be greatly reduced with inexpensive early preventive maintenance is significant. Even a minimal 20% useful life extension of just DOD airfield asphalt assets could significantly increase readiness and save the DOD hundreds of millions of dollars a year in additional maintenance and replacement; however, it should be remembered that the vast majority of DOD asphalt pavement is not found on its airfields, but in its standard infrastructure, which was not addressed in this study.

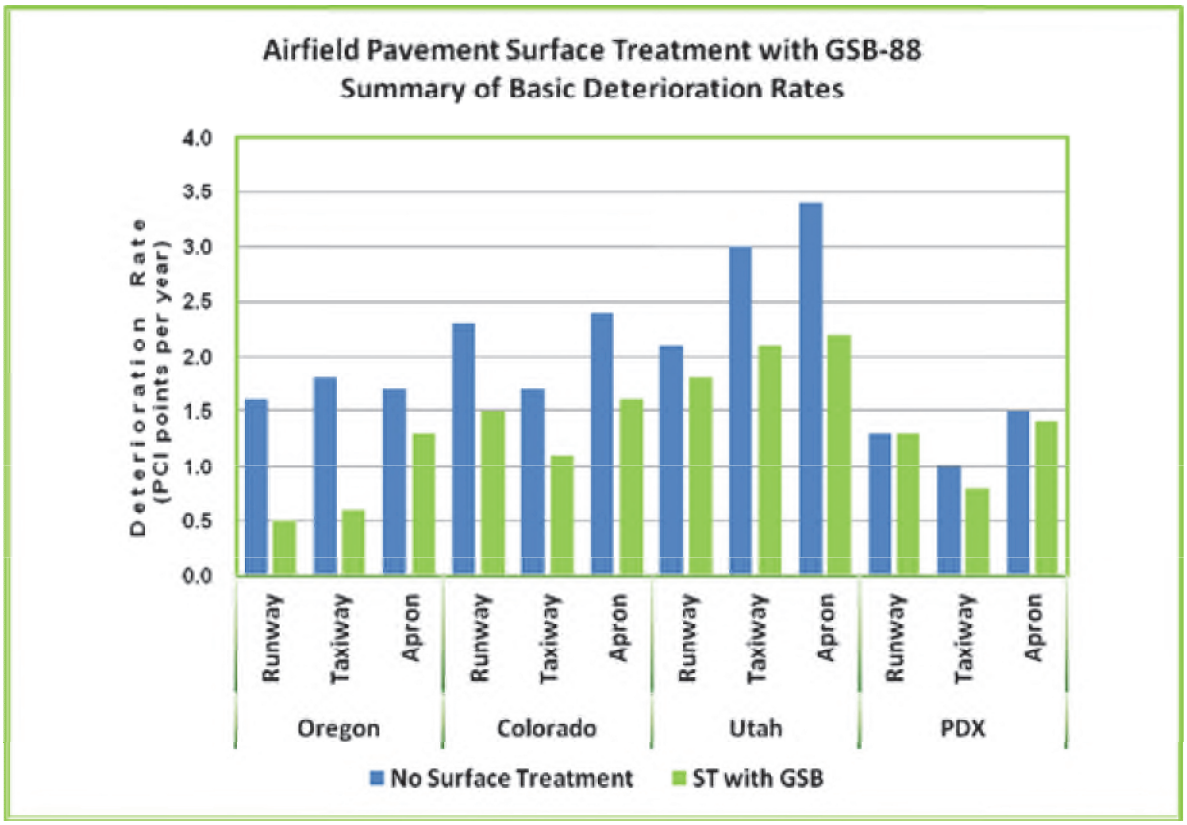
GSB-88 Sealer/Binder is a unique Gilsonite modified asphalt emulsion manufactured by Asphalt Systems, Inc. (ASI) Salt Lake City, Utah. It is claimed by the manufacturer that the addition of Gilsonite, light oils, and selected plasticizers used in the production of GSB-88 gives the emulsion unique binding and preservation characteristics. Previous evaluations of GSB-88 Sealer/Binder and widespread anecdotal evidences from multiple users of GSB-88 produced favorable possibilities for cost saving benefits from extensive application of GSB-88 to DOD asphalt assets, in particular mission critical asphalt airfield pavements. The study was a fulfillment of earlier recommendations from past Army Corps of Engineers' reports and was congressionally funded by a FY-05 DOD Appropriations Bill at $1.7 million. The first phase in the GSB-88 application evaluation program started in April 2007 at MCAS Cherry Point, NC, and continued through December 2007 at Avon Park AFR, FL, NASJRB Willow Grove, PA, NAS Fallon, NV, PMRF Barking Sands, HI, and final application at NAWS China Lake in May 2008. Evaluation of these applications were completed in early June, 2010 along with MicroPAVER database evaluation of 883 additional sections of GSB-88 applications on commercial airfields in three different states.

Based on engineering observations, data evaluation, and review of skid tests performed, GSB-88 is performing as well or better than expected based on both ASI's claims and literature, as well as past experience of the project engineer. Observations and discussions with facility personnel during field evaluations indicate that facility personnel had obviously evaluated the performance themselves because NAS Fallon, NAWS China Lake, MCAS Cherry Point, and PMRF Barking Sands had been satisfied with the previous applications of GSB-88 to the degree that they have completed additional GSB-88 projects with their own funding, are currently in the process of doing so, or both. Each facility has also become more preservation conscious as a result of the performance of the GSB-88 applications.

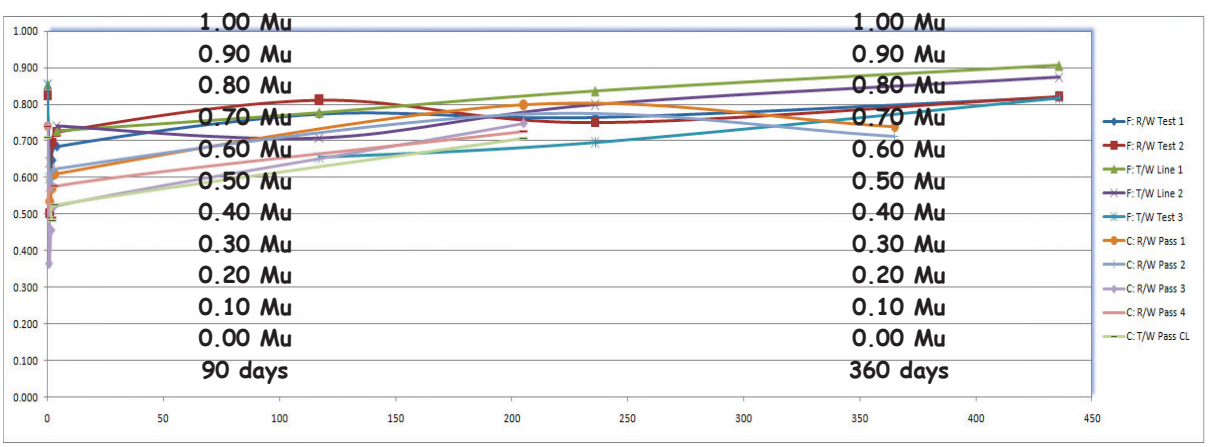
GSB-88 has been applied to more than 200 FAA/Commercial airfields. Review of this data from MicroPAVER databases by Applied Pavement Technologies, Inc., for the States of Oregon (including Portland International Airport, PDX), Utah, and Colorado, indicates application of GSB-88 has significantly reduced the rate of pavement deterioration of airfield pavement surfaces; thereby extending pavement service life to well beyond the design expectations. All databases (including PDX) for runways and taxiways with PCIs greater than 60 demonstrated

better (lower) deterioration rates for GSB-88 treated pavements than GBS-88 treated pavements with lower than 60 PCIs. This data tends to support the overall pavement philosophy that early intervention of proven pavement preservation technologies produces the greatest long term benefits. In addition, it is suggested from this sampling that pavements with a percent deduct due to load at less than 10 percent, and PCIs greater than 60, the lower the natural (untreated) deterioration rate of the pavement the greater the benefits of GSB-88 treatment. The Oregon average natural untreated deterioration rate for all three types of pavements was 1.7 PCI points per year with approximately 300% decrease in pavement deterioration for pavements treated with GSB-88. Colorado's average untreated deterioration rate was 2.1 PCI points per year with approximately 34% decrease in pavement deterioration for all three types of pavements treated with GSB-88. Utah had the highest natural rate of deterioration for untreated pavements with an average of 2.8 PCI points per year – with GSB-88 treatment there was a 16% deterioration reduction for runways, 29% for taxiways, and 36% for aprons. The database contained 776 sections treated with surface treatments different from GSB-88. Although no specific materials or procedures were identified, and therefore no direct comparisons can be made, it is interesting to note that GSB-88 treated runways and taxiways demonstrated roughly half the deterioration rate of other surface treatments (approx 30% better for aprons). Although the other surface treatments did not reduce the deterioration rate as much as GSB-88 the data does support the benefits of surface treatments in general. This analysis tends to support widespread anecdotal evidence that GSB-88 applications to airfield pavements can have a significant preservation influence on a wide variety of asphalt pavements and generally outperforms other standard surface treatments. The repeat widespread use of GSB-88 over other surface treatments taken from the subject databases is also supported by repeat use by most of the more than 200 commercial airfields that have had GSB-88 applications. For example, in the observed Oregon, Utah, and Colorado MicroPAVER databases it was found there were more overall GSB-88 applications (883) than there were overall combined surface treatments not GSB-88 (776). (Data depicted in the two graphs immediately below.)





The primary issue with the application of surface treatments on airfield pavement is the reduction in pavement friction and subsequent maintenance for skid-resistant airport pavement surfaces. Friction data from Skid Resistance testing performed at NAS Fallon, for example, indicated the friction coefficient was reduced from ~ 0.77 Mu to ~ 0.56 Mu after 24 hours, which was better than anticipated and above 0.50 Mu, the required minimum for asphalt pavement. After 4 days the average was ~ 0.7 Mu, and after 3 months, back to ~ 0.77 Mu. Additional friction testing produced similar satisfactory results. Graph below depicts actual friction testing for GSB-88 runway and taxiway applications. As can be seen, an initial drop in friction is followed by an immediate recovery to near previous numbers and a continued progressive increase in friction.



As previously stated ASI designed GSB-88 as an early intervention preventive maintenance material to be applied on pavement still in good condition to help maintain and preserve

pavement in that high quality state. However, the characteristics of GSB-88 that facilitate its ability to preserve pavement also appear to have some significant ability to mitigate certain pavement deficiencies such as raveling, issues with segregation, and other binder issues. At NAS Fallon, NV, Avon Park AFR, FL, NAWS China Lake, CA, PMRF Barking Sands, HI, Boeing Flight Test Facility, MT, and other locations, heavy applications of GSB-88 were able to rebind surface aggregate mitigating actual and potential Foreign Object Debris (FOD) and significantly retard accelerated surface deterioration. In addition, areas of concern such as pavement segregation which are likely to accelerate deterioration, and in time potentially contribute to FOD, appear to be controlled with GSB-88 applications. With the high inventory of aged and weathered asphalt pavements within the DOD, the ability to inexpensively rebind and protect such pavements, extending their useful life, could be of unique benefit to the DOD. As one example at NAS Fallon the "Inboard" runway had deteriorated from premature raveling and weathering. This resulted in concerns regarding pavement FOD and approximately $30M of emergency repairs and maintenance funding was requested; $3.5M to $10M specifically for the pavement repair. In September 2006, a heavy application of GSB-88 was directly recommended to be applied. Observations at 18 months indicate that rebinding of the surface with GSB-88 was successful and raveling was mitigated allowing the runway to meet design life expectations. A newly constructed surface was completed in 2008. Due to successful results from previous GSB-88 applications, in April 2010 NAS Fallon NAVFAC Engineers applied GSB-88 to the new pavement surface to minimize the degradation/oxidation of the overlay asphalts at an early age, thereby maximizing the new asphalt pavement life. Due to a lack of funding to re-apply airfield markings at NAWS China Lake, GSB-88 was not applied to areas immediately around the existing paint; as a result significant areas of runway and taxiway pavement were untreated. Site evaluation two years after application show multiple areas of pavement produced FOD on the runway in these untreated areas and no FOD in the GSB-88 treated areas; demonstrating the preservation and FOD-reducing benefits of GSB-88 for that pavement.

In summary, based on data evaluated and site observations, there is no doubt that the Navy and DOD would significantly benefit from applications of materials (with a proven record) such as GSB-88 Sealer/Binder. With a relatively low cost of approximately $1 per square yard applied for projects of 100K square yards or greater, GSB-88 appears to provide a unique solution, previously unavailable to the Navy/DOD, for long-term preservation of critical runways, taxiways, and other asphalt infrastructure. It is estimated that just a 20% increase in asphalt pavement life (from 20 to 25 years) of just Navy airfields could provide savings greater than $125M. Air Force (and Army) airfields would exceed that number. In addition, it should be noted the vast majority of DOD asphalt is not on airfields. MicroPAVER data demonstrated GSB-88 applications can significantly exceed 20% pavement life extensions by reducing the rate of deterioration. Economic calculations performed for this report show applications of proven materials such as GSB-88 could provide the DOD with significant cost savings. With approximately 20 Million Square Yards of asphalt concrete airfield pavements owned by the Navy and Marine Corps (not including shoulders, overruns or any vehicle traffic pavement) the Net Present Value (NPV) savings of $34.5M per million yards represents a life cycle cost savings of approximately $700M. The analysis also shows a Savings-to-Investment Ratio (SIR) of 5.0 and a Return on Investment (ROI) of 400%. Additional benefits would include increased sustainment and operational readiness while decreasing potential damage to aircraft and flight personnel from asphalt produced FOD and inexpensive correction of some potentially serious pavement issues. Therefore, a unified facility guide specification (UFGS) covering 'Fog Seals' is

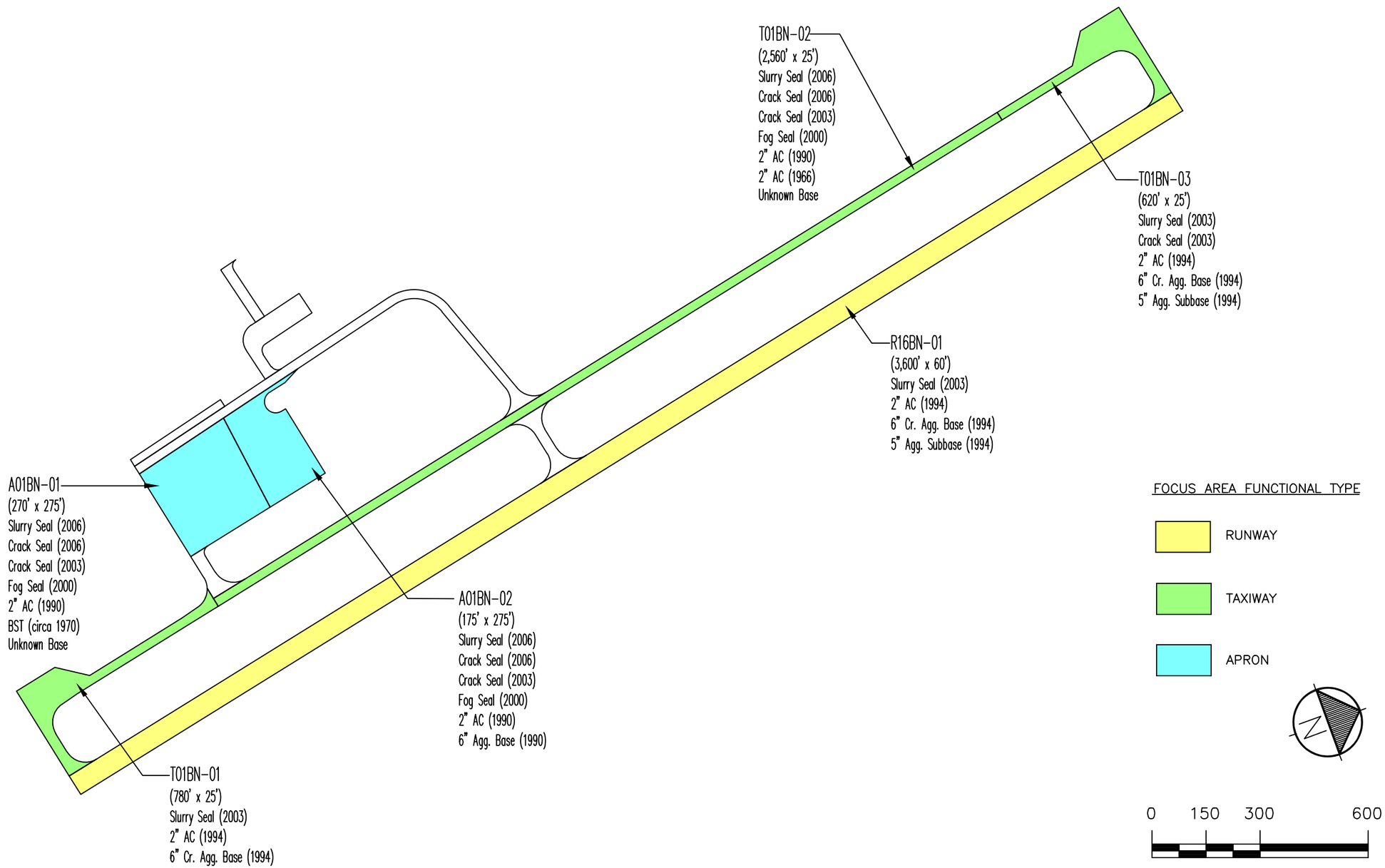
currently being completed to include the use of GSB-88 on Airfield Pavements and will include past performance requirements and equipment requirements specific for runway and taxiway application.

At present there are bureaucratic obstacles preventing widespread use of unique materials such as GSB-88 within the DOD. Though GSB-88 is not a proprietary material because it is not patented, ASI is the sole manufacturer of the specific formula for production of GSB-88. In addition, the use of surface treatments on DOD airfield pavements has not been common practice, particularly for mission critical runways and taxiways; therefore, overcoming previous practice and funding surface treatments is frequently an issue. As clearly pointed out in the 2003 GAO report on corrosion control within the DOD, limited maintenance funding at most facilities is being used to correct problems, meaning few if any funds are being used to prevent those problems. In other words in some cases the DOD is spending $5 to correct a problem that could have been prevented for $1. It should be noted that as inexpensive as GSB-88 appears to be (approximately $220k for a 10,000-foot standard runway), particularly when compared to standard pavement maintenance and replacement costs, serious consideration should be given to overcoming the inherent obstacles and streamlining processes to allow more aggressive use of cost saving, readiness increasing, unique proven materials such as GSB-88.

Systemic obstacles inherent to design life philosophies of the past have created processes and budgeting that make it difficult for DOD pavement specialists to use modern cost saving preventive maintenance materials and technologies. O&M budgets are primarily structured for repair and replace philosophies with little to no emphasis on preventive maintenance. Often those in control of budgets have greater focus on repair projects and immediacy overwhelms necessary prevention programs. Reasonable budget additions and requirements for preventive maintenance would likely facilitate significant improvement. The size and type of project surface treatments fall between the O&M funding and Project Funding. Therefore it is recommended that efforts be made to open-up the possibility of preservation by increasing budgets of bases with airfields and develop a way through contracting personnel to assist in regularly scheduled preservation programs. Reasonable changes in budget and policy should be developed that would require the Services and their various facilities to adopt standardized asphalt preservation programs.

In addition, DOD purchasing requirements tend not to be small business friendly, particularly for sole source type materials such as GSB-88. As a result, the DOD is often required to use materials on the back end of the innovation curve. The DOD should provide ways for proven, uniquely beneficial, and environmentally friendly materials such as GSB-88 to be more easily integrated into the procurement process.

Figure BN-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Bandon State Airport



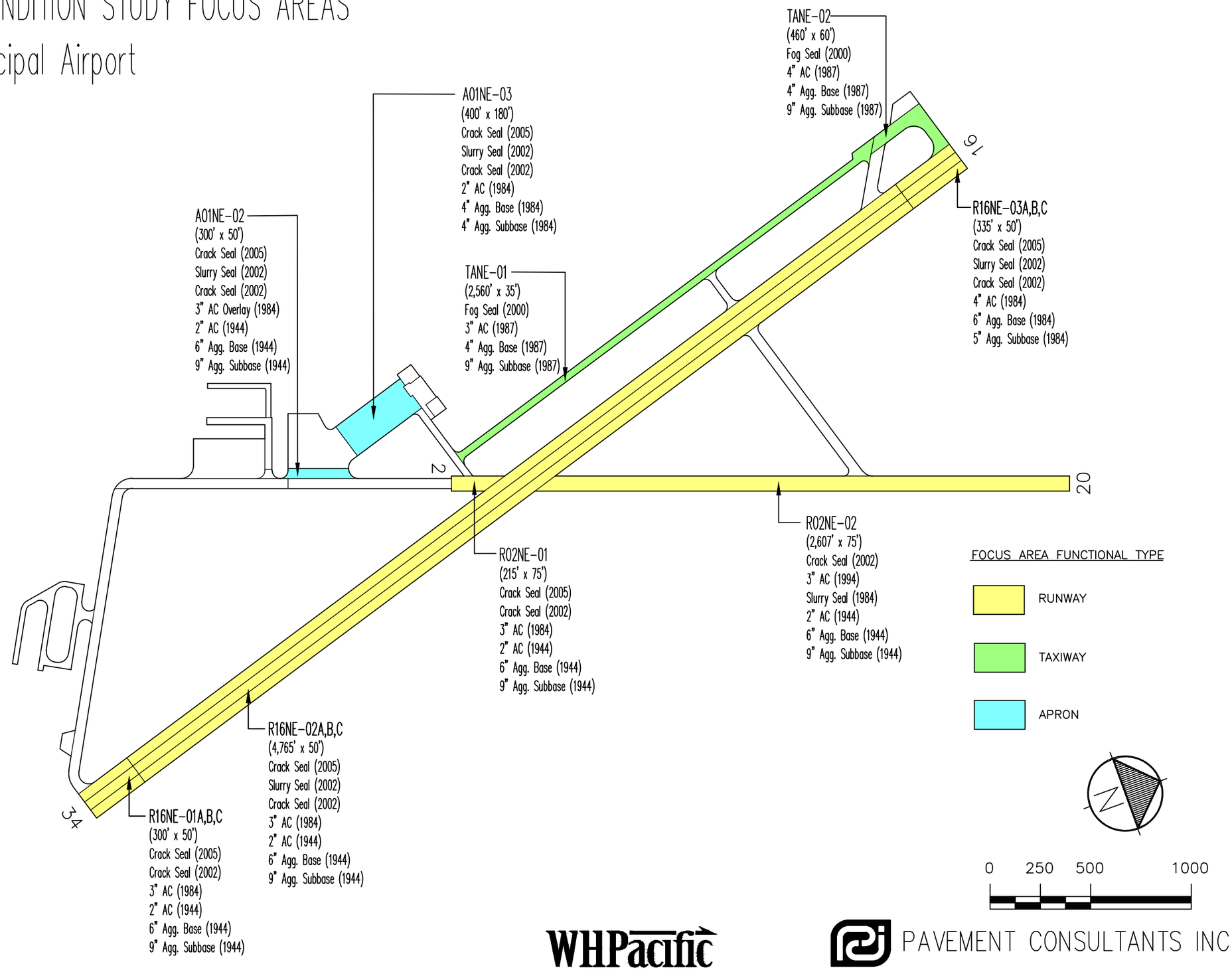
Source Drawing Date: April 2009

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE BN-1 - BANDON STUDY FOCUS AREAS.DWG 03/28/12

Figure NE-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Newport Municipal Airport



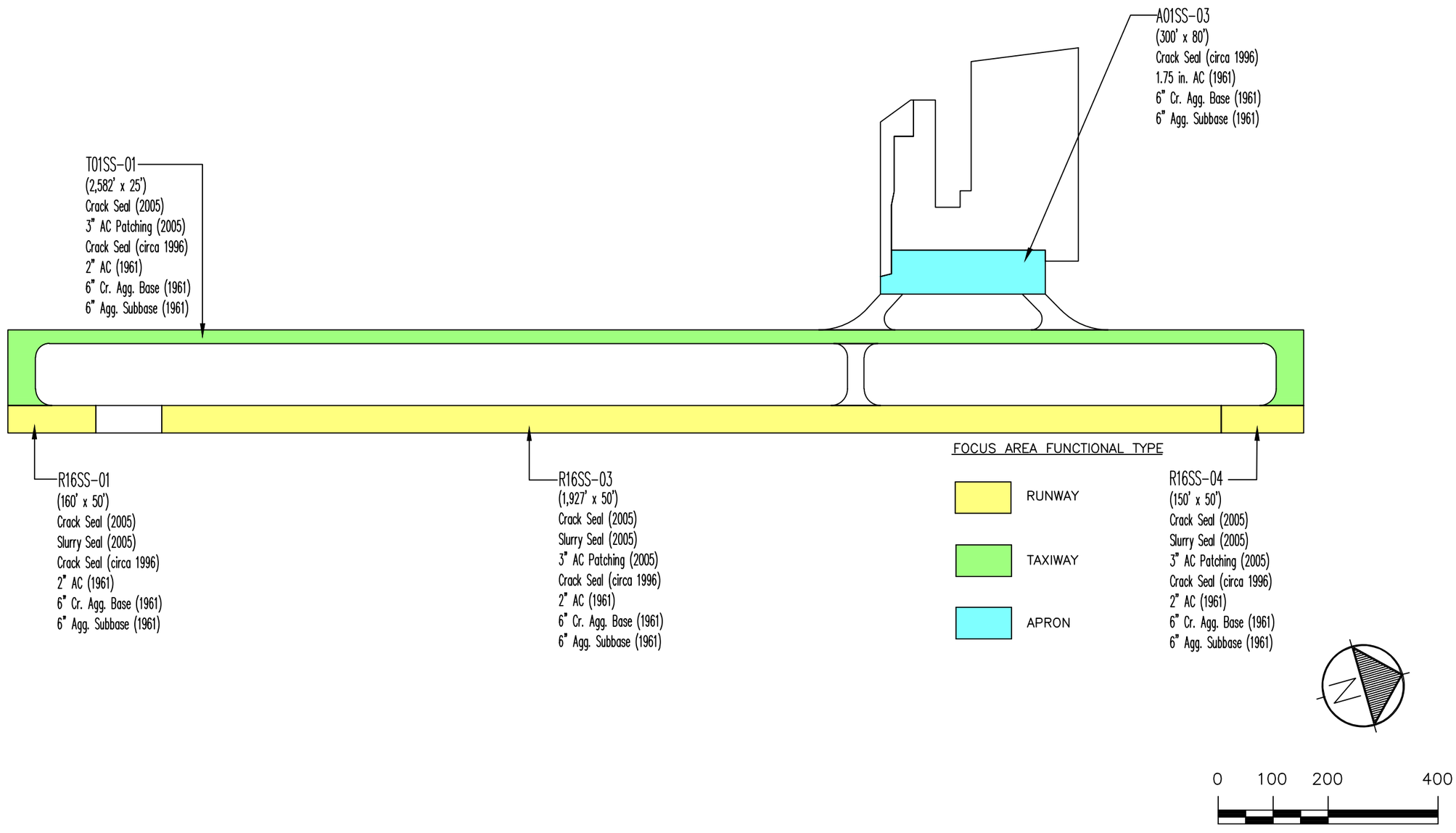
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE NE-1 - NEWPORT STUDY FOCUS AREAS.DWG 03/28/12

Figure SS-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Seaside Municipal Airport



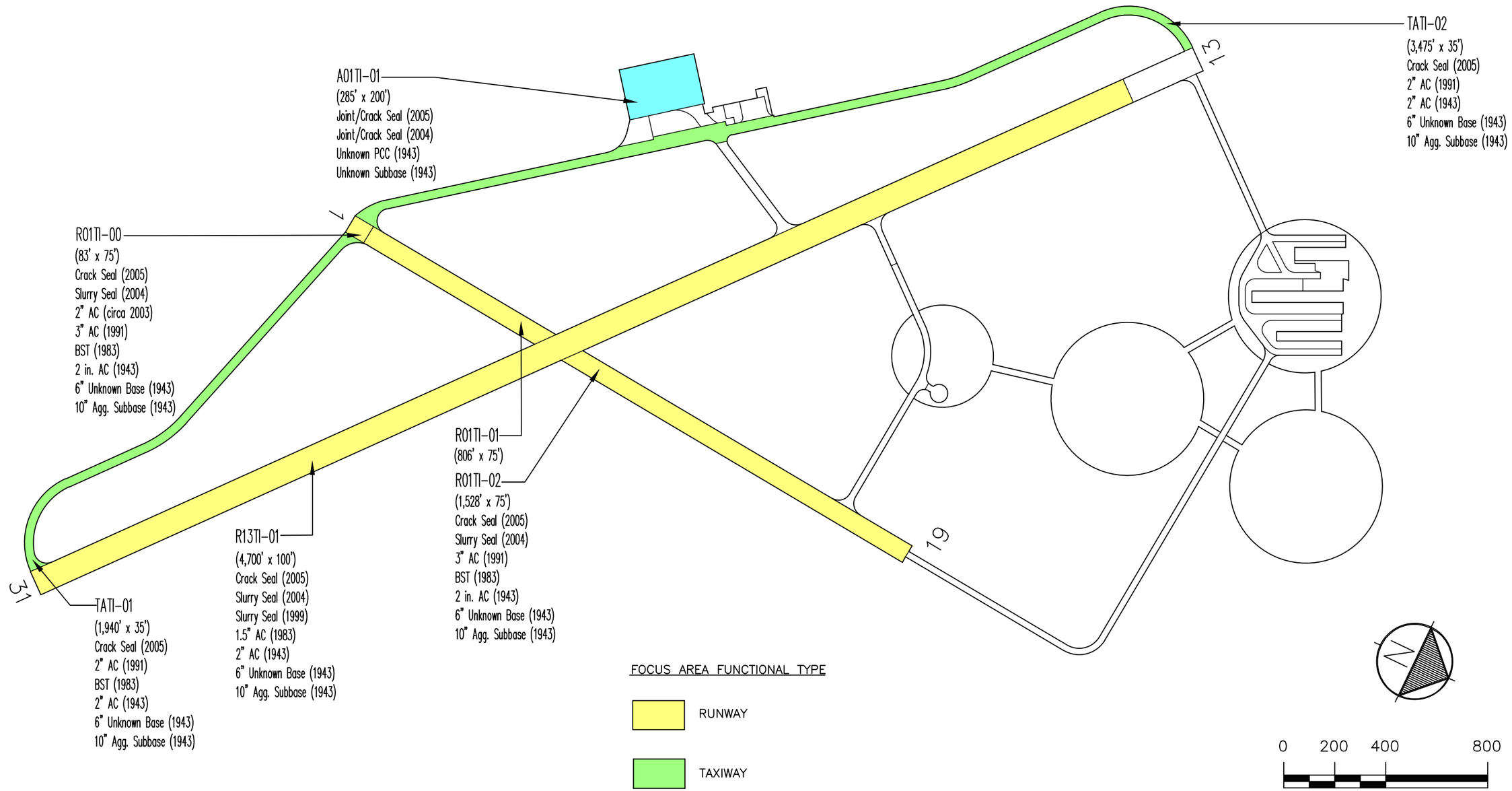
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE SS-1 - SEASIDE STUDY FOCUS AREAS.DWG 03/28/12

Figure TI-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Tillamook Airport



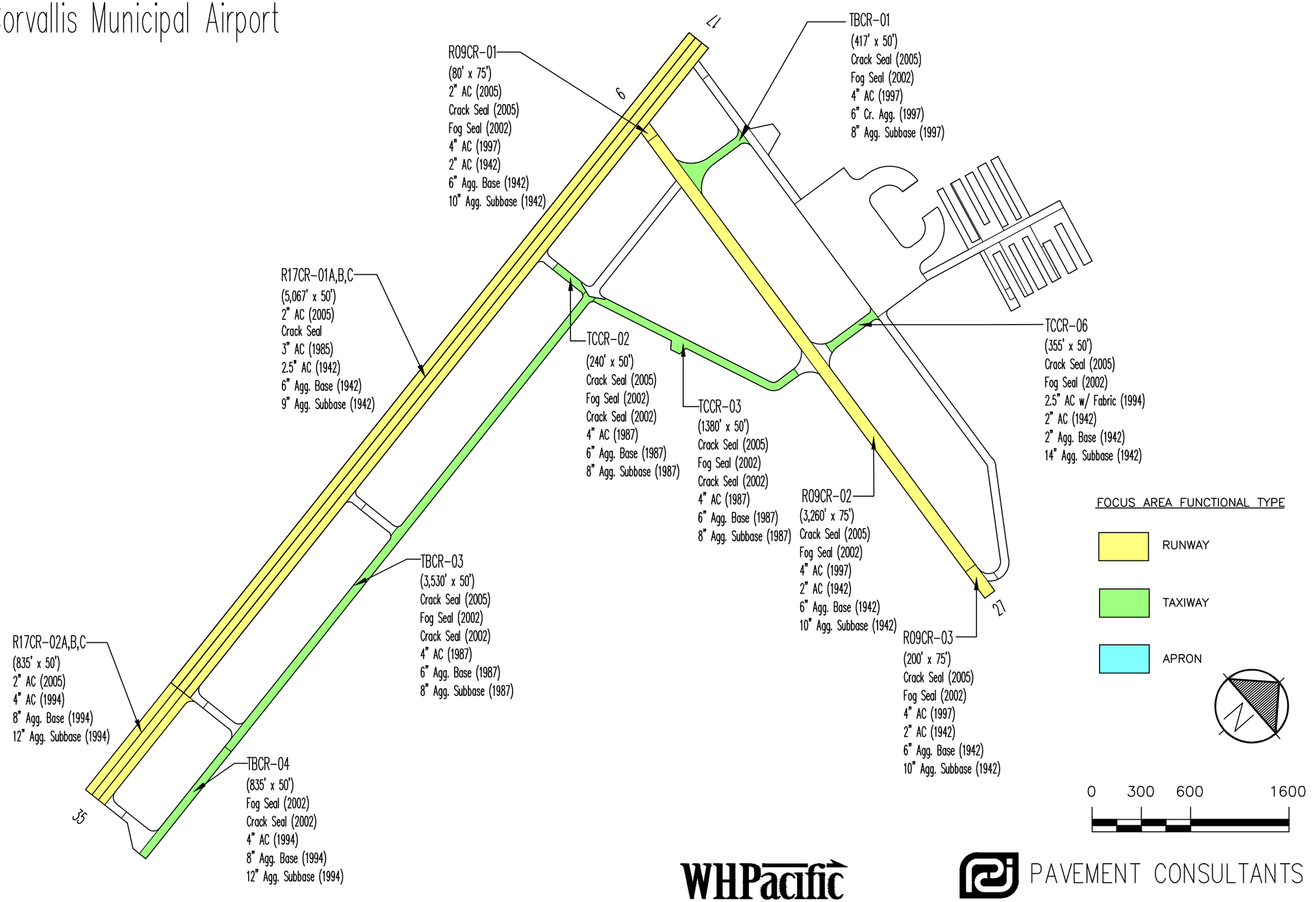
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE TI-1 – TILLAMOOK STUDY FOCUS AREAS.DWG 03/28/12

Figure CR-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Corvallis Municipal Airport



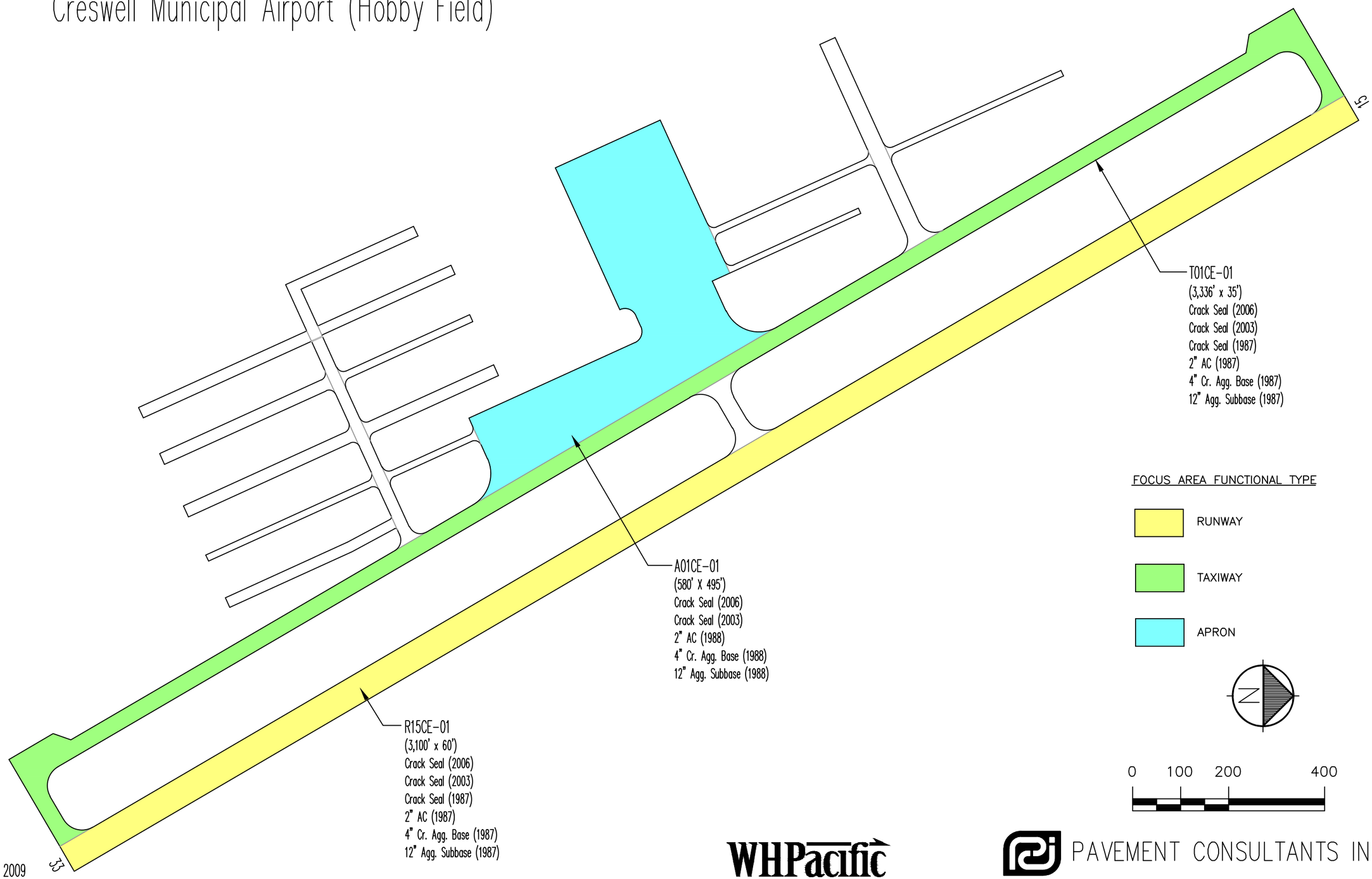
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE CR-1 - CORVALLIS STUDY FOCUS AREAS.DWG 03/28/12

Figure CE-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Creswell Municipal Airport (Hobby Field)



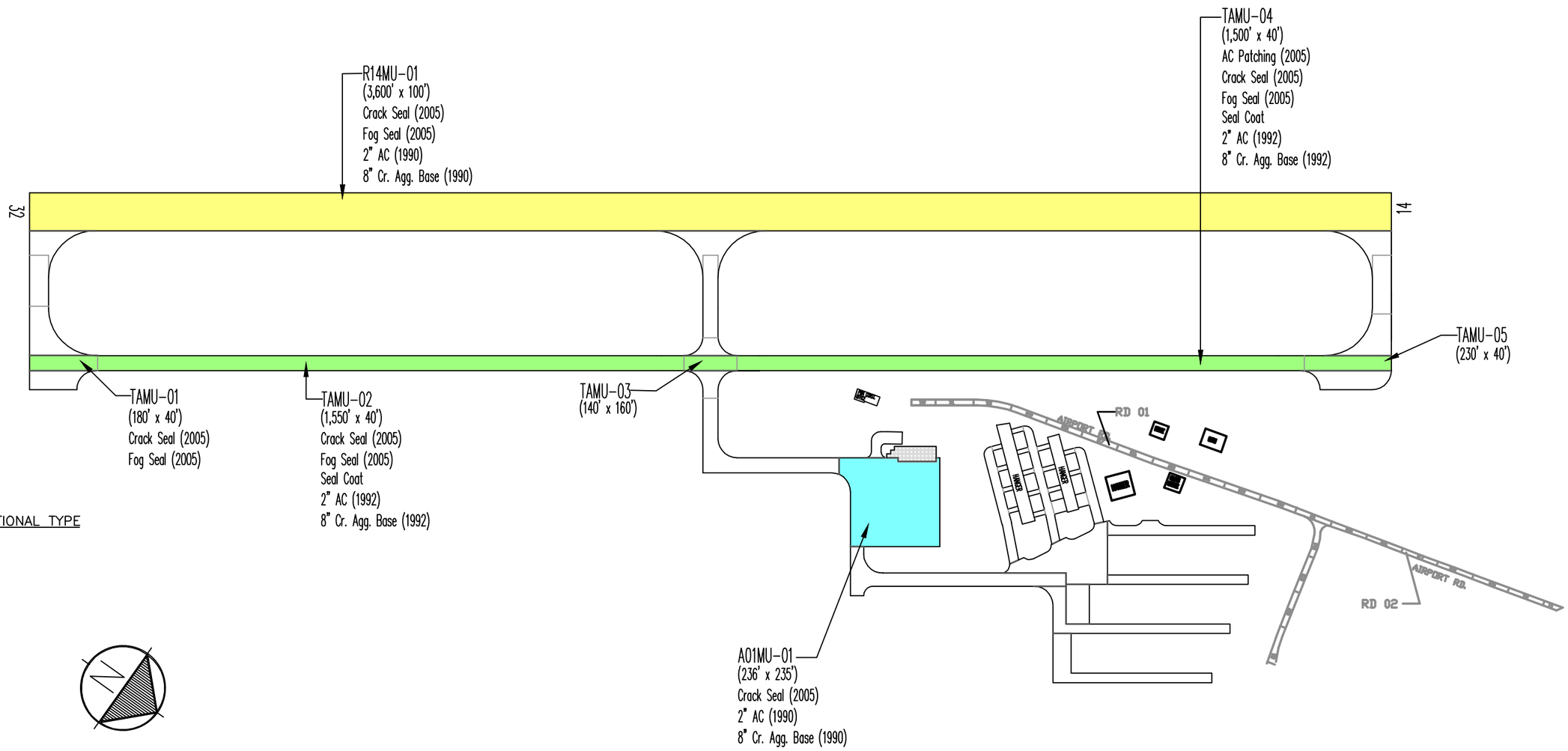
Source Drawing Date: April 2009

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE CE-1 - CRESWELL STUDY FOCUS AREAS.DWG 03/28/12

Figure MU-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Portland Mulino Airport



FOCUS AREA FUNCTIONAL TYPE

- RUNWAY
- TAXIWAY
- APRON

0 150 300 600

PAVEMENT CONSULTANTS INC.

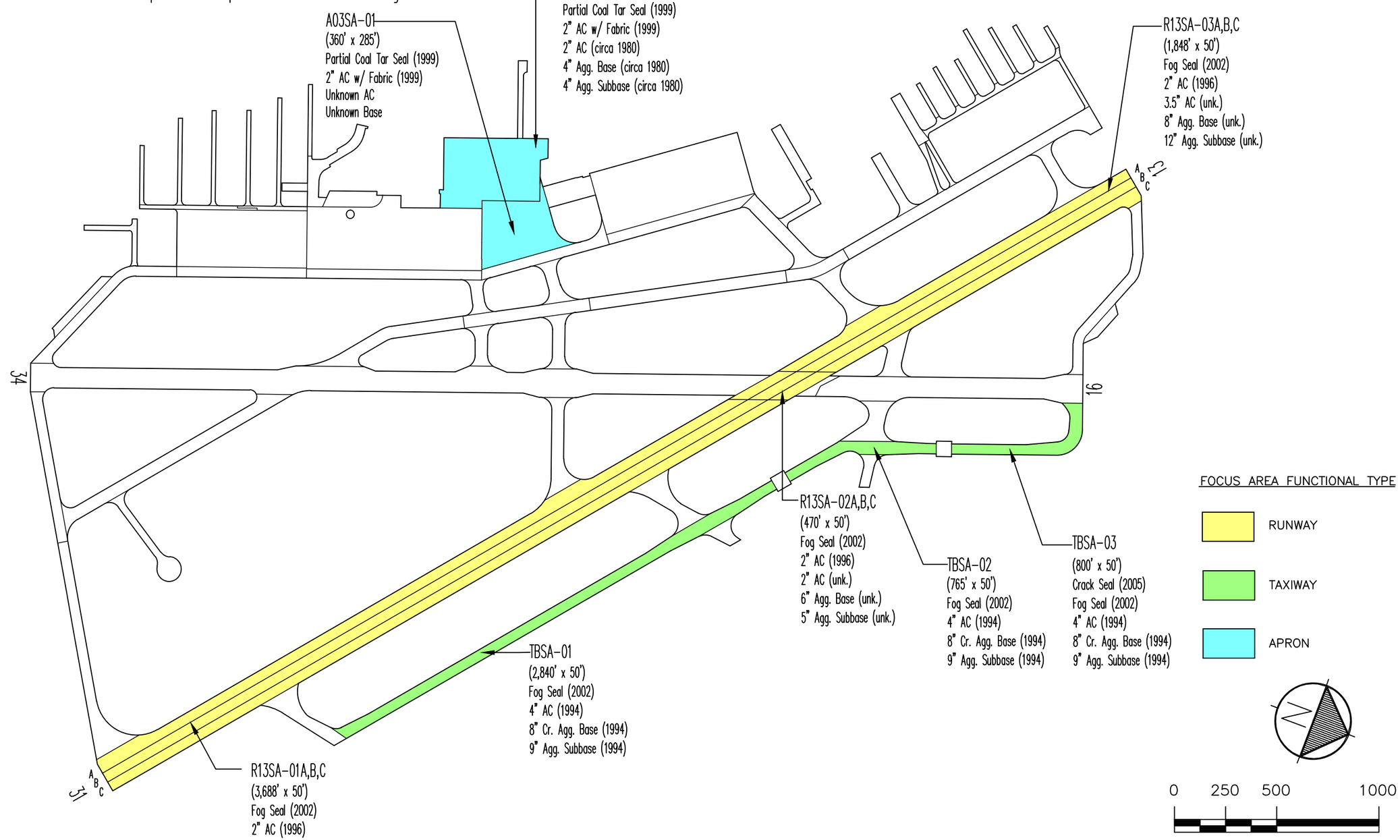
WHPacific

Source Drawing Date: April 2008

037601 FIGURE MU-1 - MULINO STUDY FOCUS AREAS.DWG 03/28/12

Figure SA-1. PAVEMENT CONDITION STUDY FOCUS AREAS

Salem Municipal Airport – McNary Field



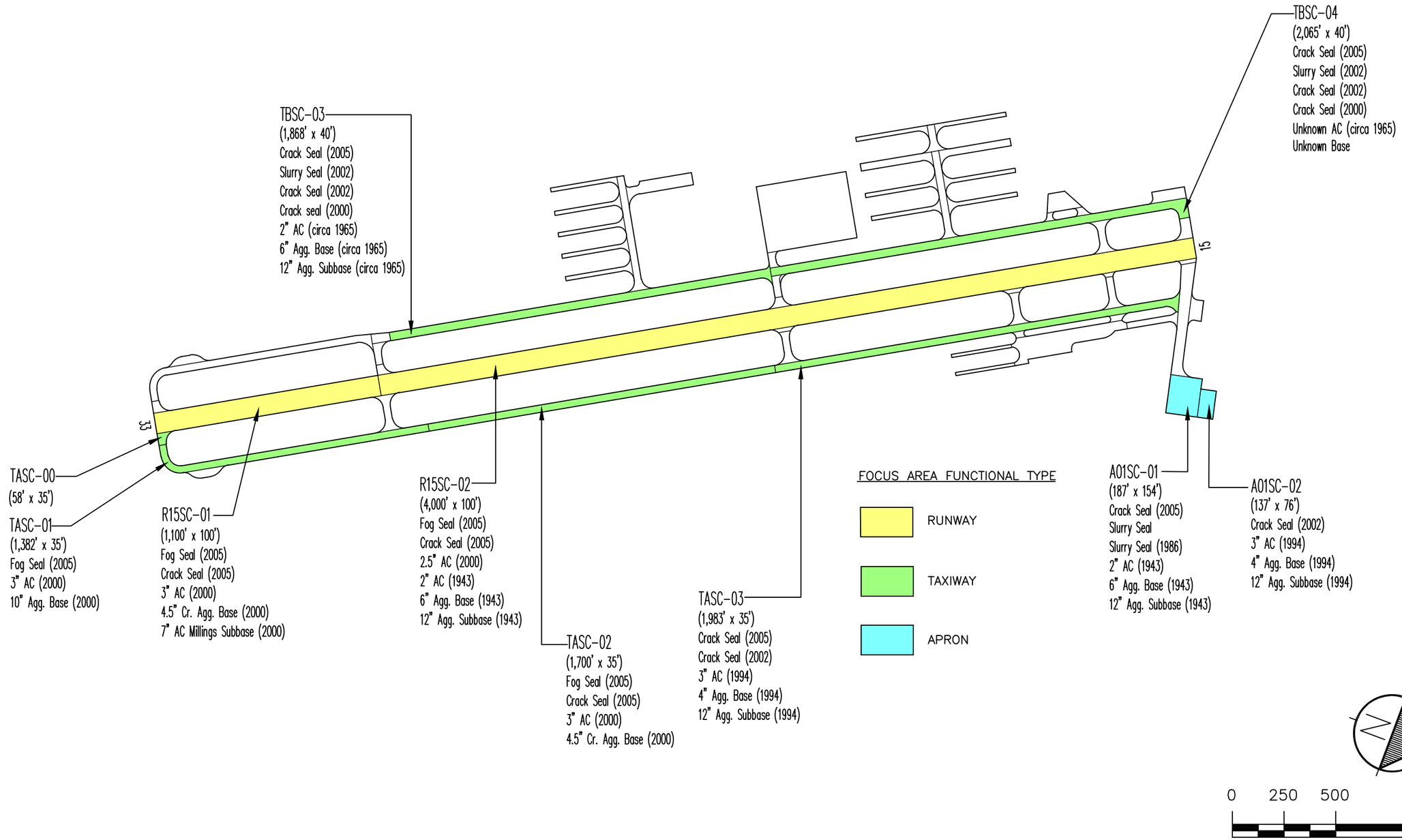
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE SA-1 – SALEM STUDY FOCUS AREAS.DWG 03/28/12

Figure SC-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Scappoose Industrial Airpark



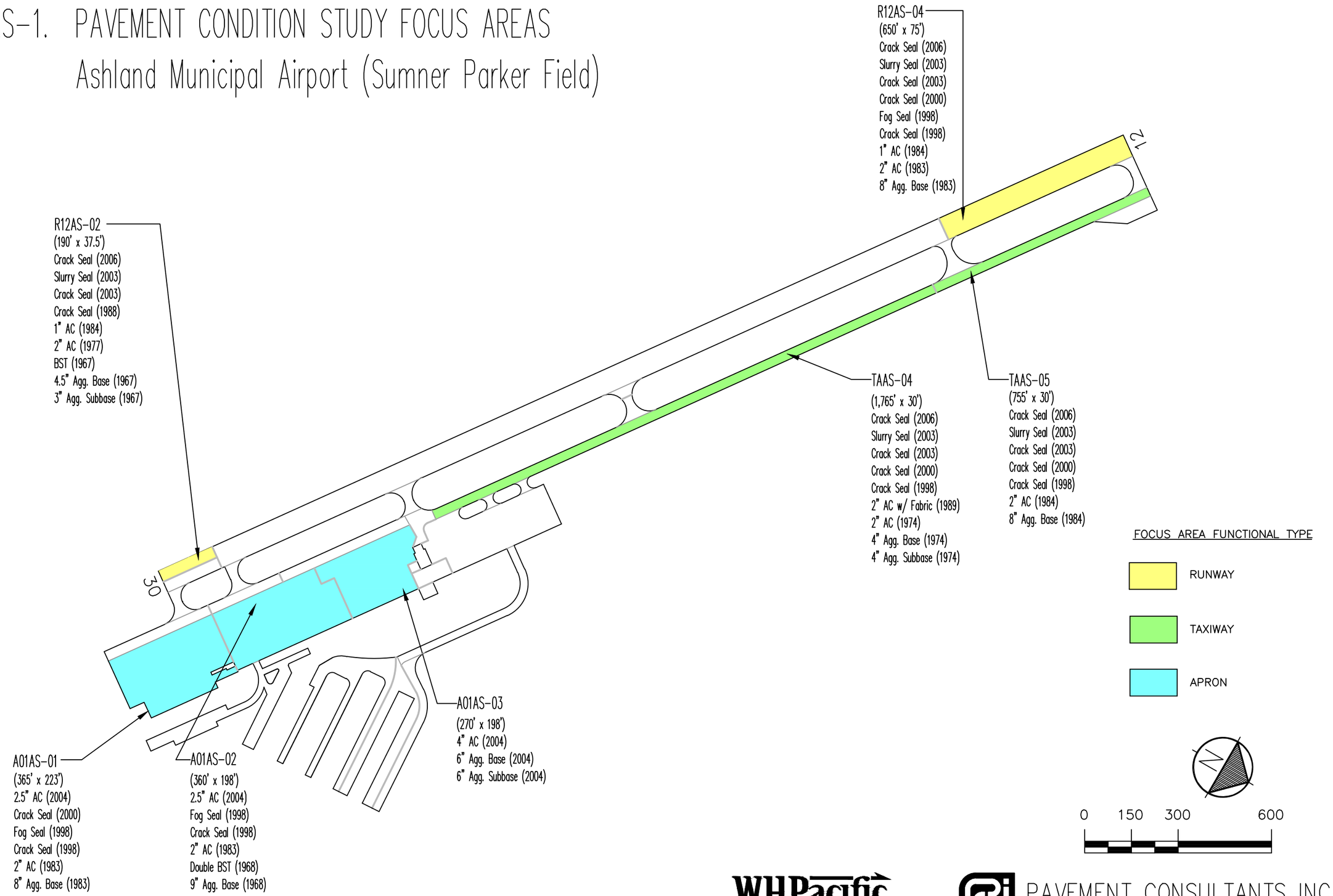
Source Drawing Date: April 2008

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE SC-1 - SCAPPOOSE STUDY FOCUS AREAS.DWG 03/28/12

Figure AS-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Ashland Municipal Airport (Sumner Parker Field)



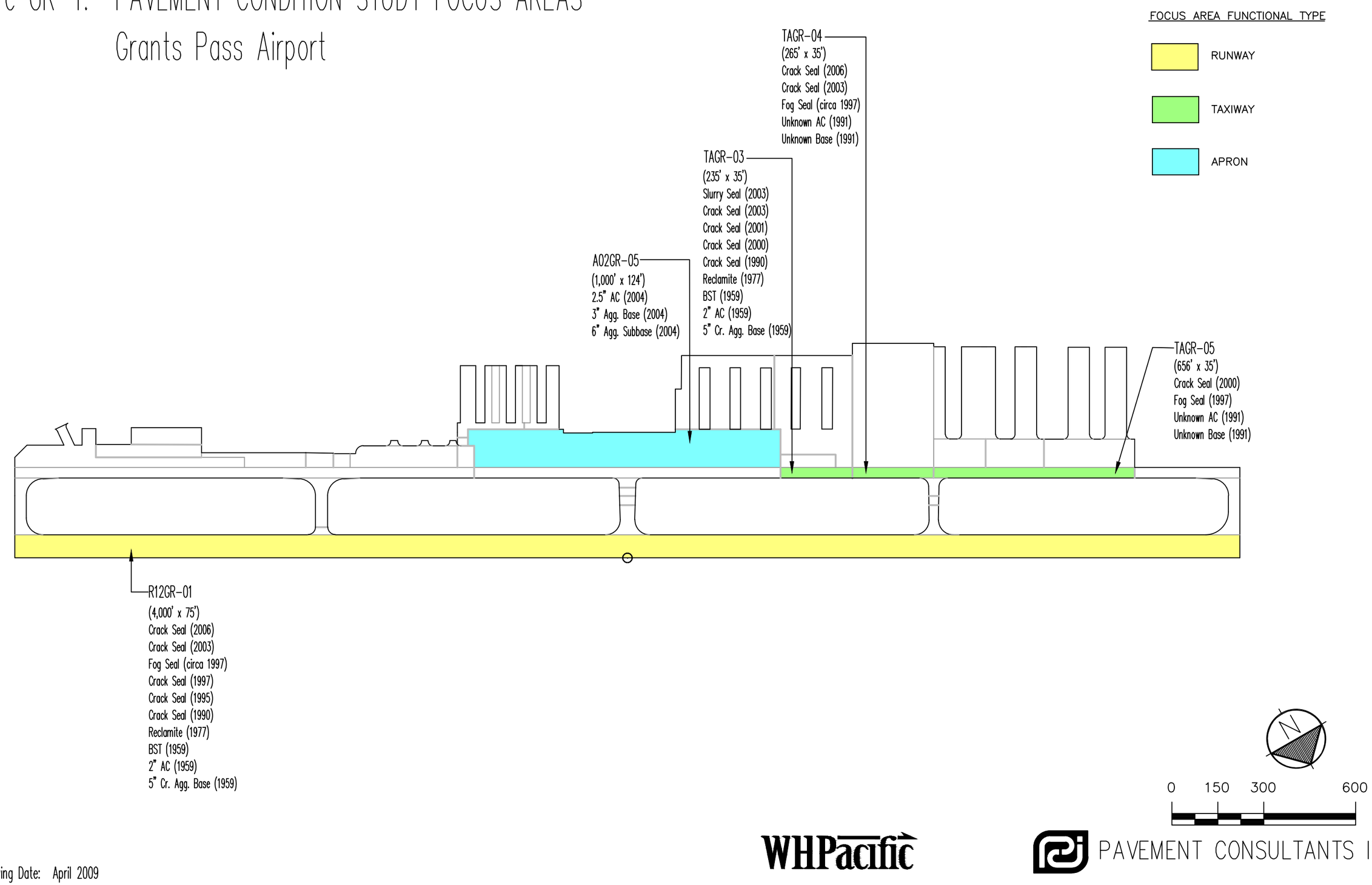
Source Drawing Date: April 2009

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE AS-1 - ASHLAND STUDY FOCUS AREAS.DWG 03/28/12

Figure GR-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Grants Pass Airport



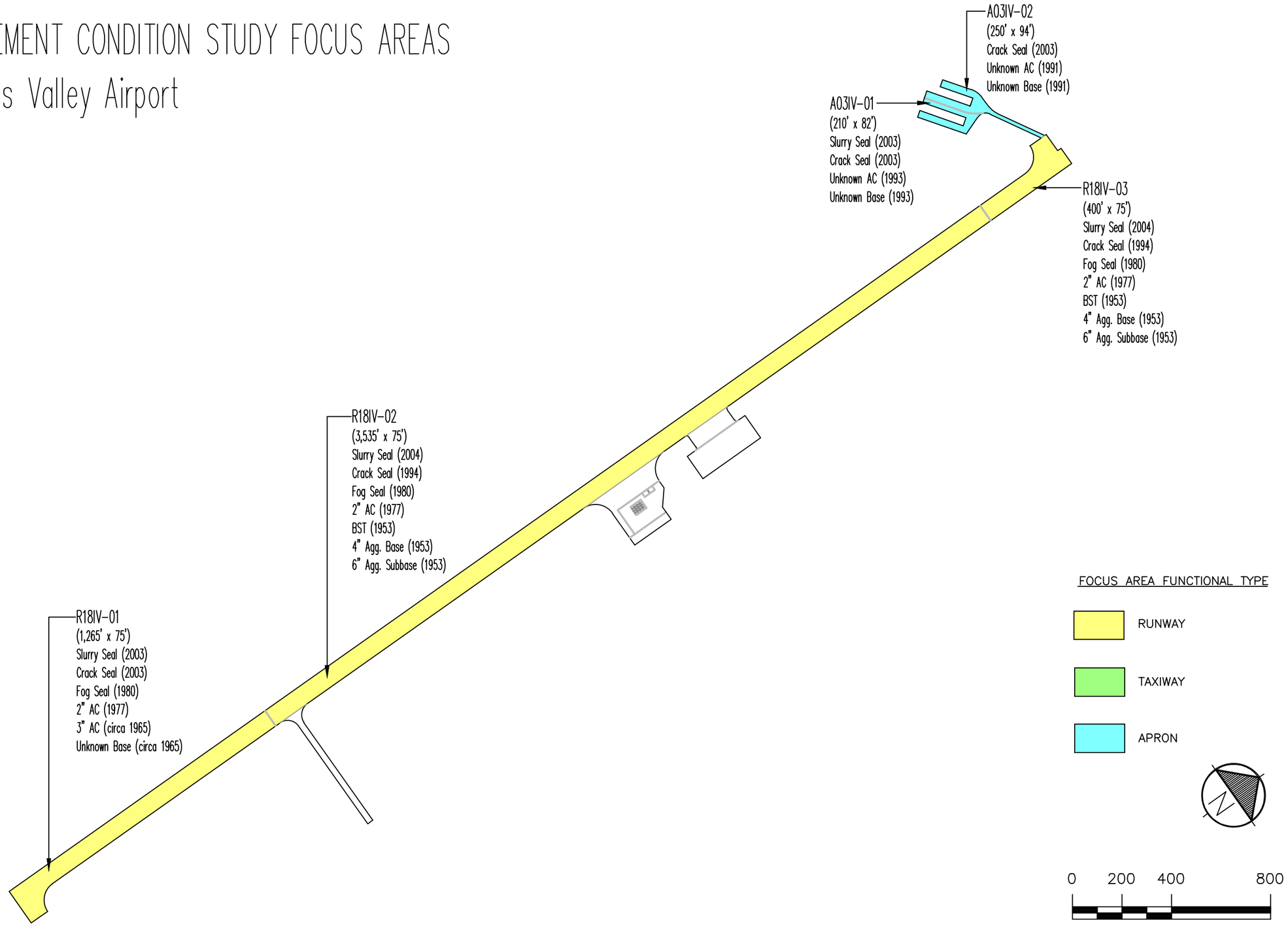
WHPacific

PAVEMENT CONSULTANTS INC.

Source Drawing Date: April 2009

037601 FIGURE GR-1 - GRANTS PASS STUDY FOCUS AREAS.DWG 03/27/12

Figure IV-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Illinois Valley Airport



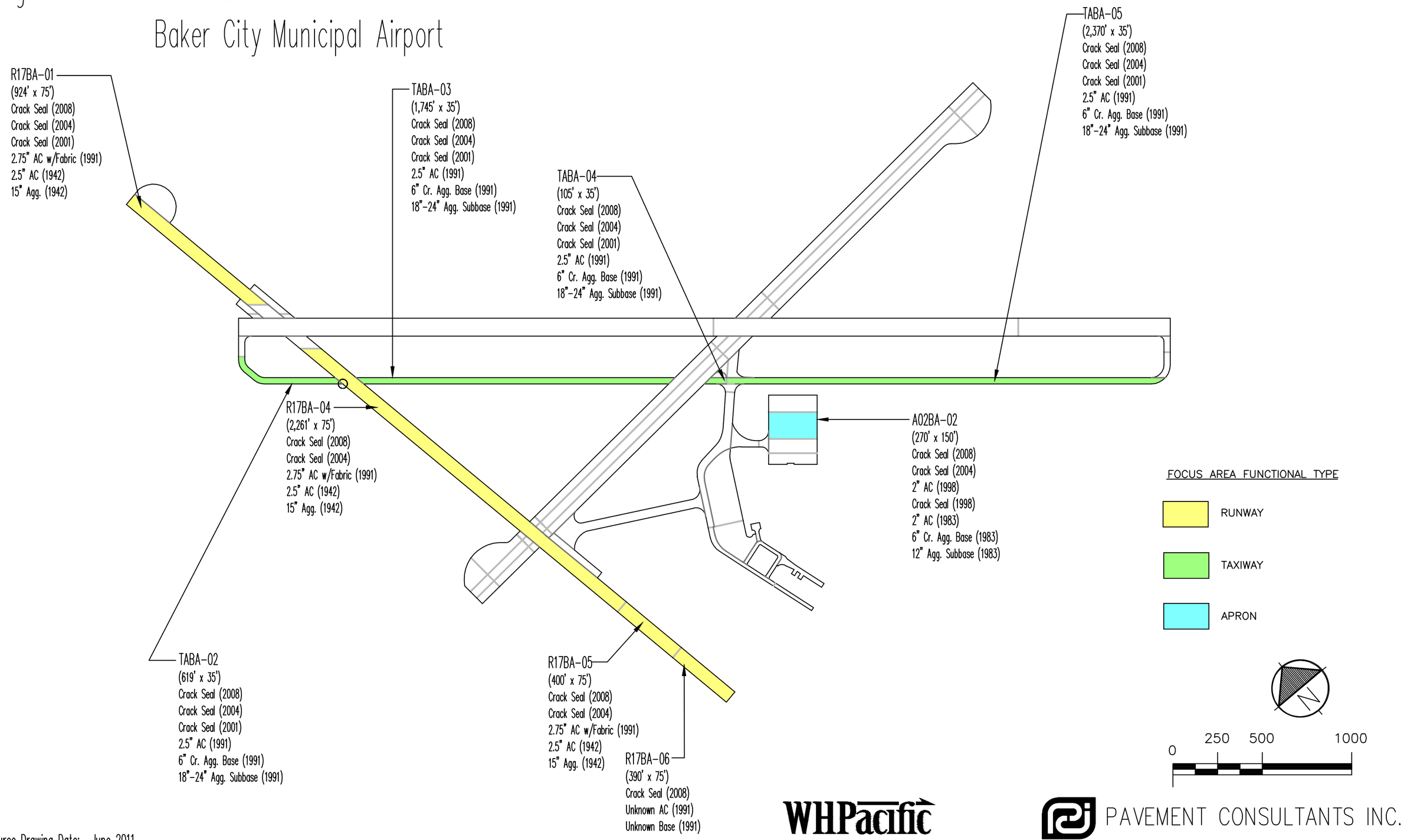
Source Drawing Date: April 2009

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE IV-1 - ILLINOIS VALLEY STUDY FOCUS AREAS.DWG 03/27/12

Figure BA-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Baker City Municipal Airport



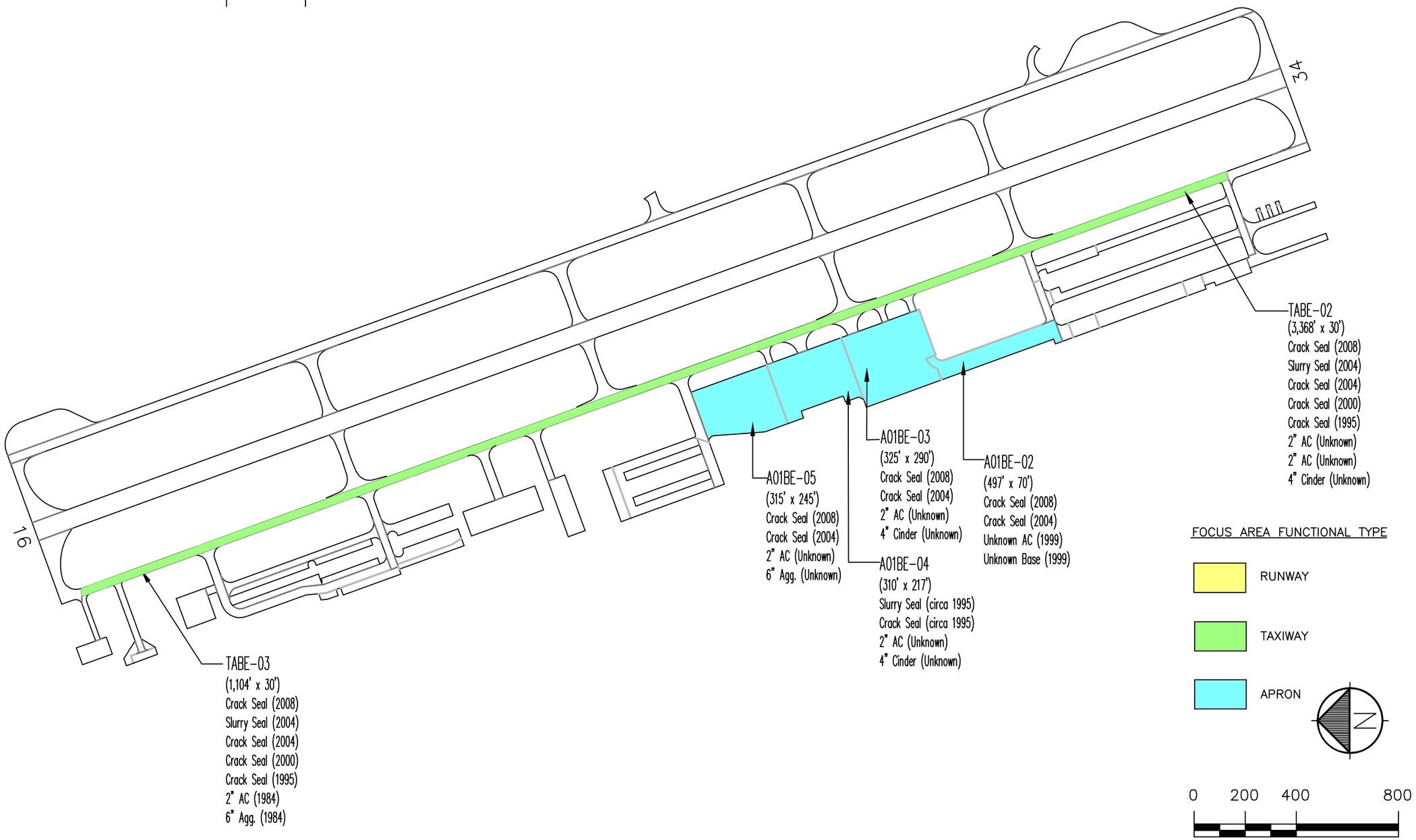
Source Drawing Date: June 2011

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE BA-1 - BAKER CITY STUDY FOCUS AREAS.DWG 03/27/12

Figure BE-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Bend Municipal Airport



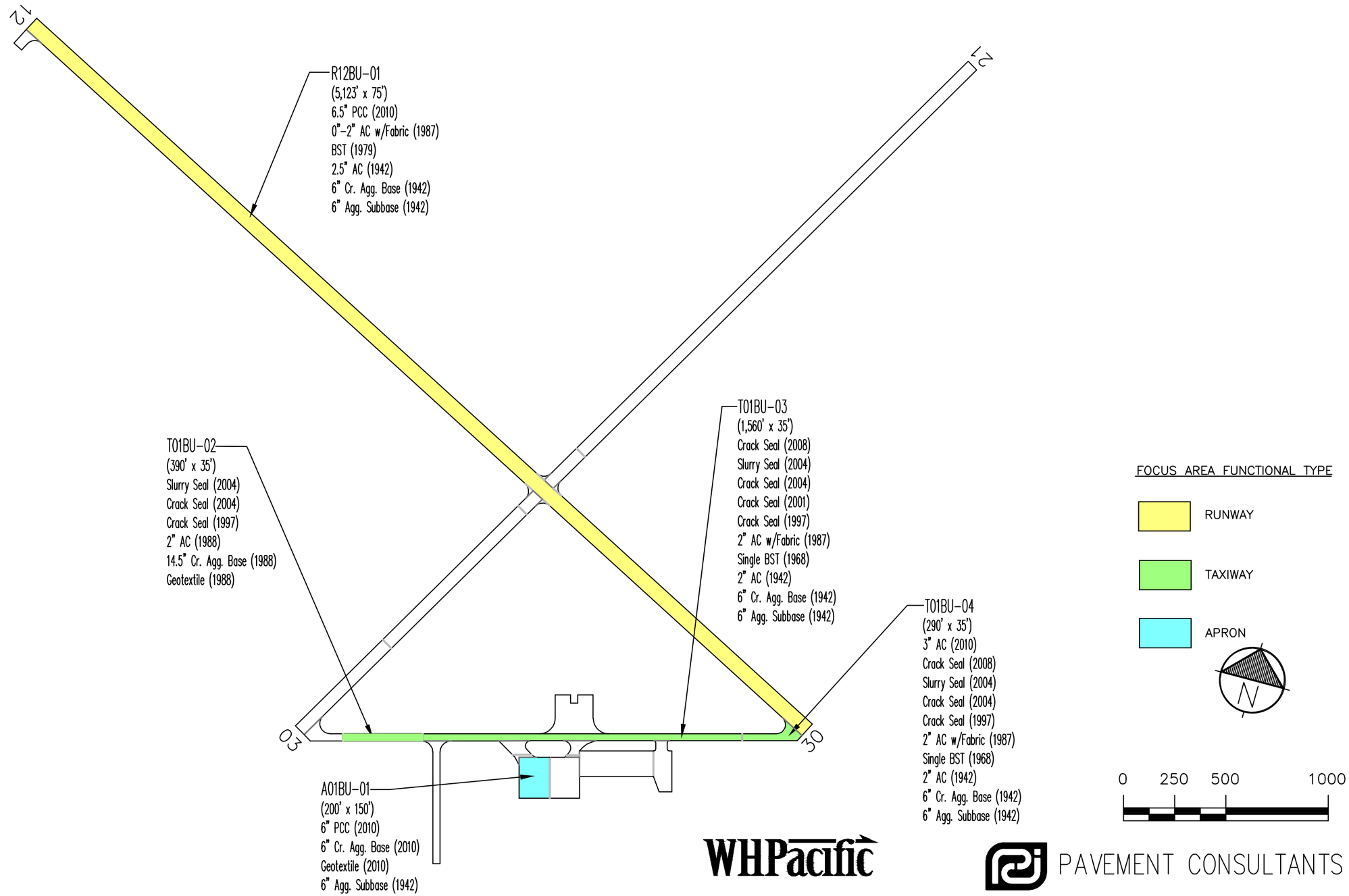
Source Drawing Date: June 2011

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE BE-1 - BEND STUDY FOCUS AREAS.DWG 03/27/12

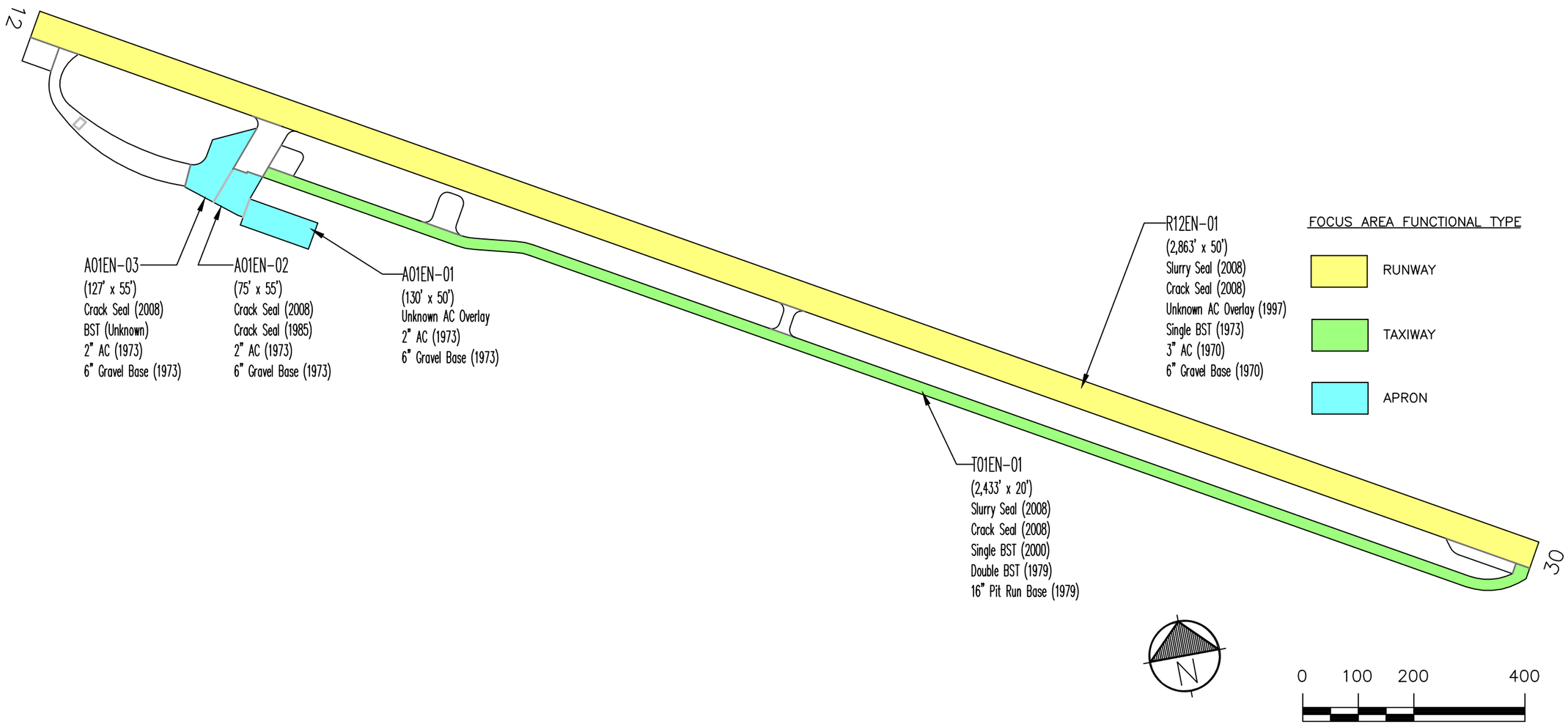
Figure BU-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Burns Municipal Airport



Source Drawing Date: June 2011

037601 FIGURE BU-1 - BURNS STUDY FOCUS AREAS.DWG 03/27/12

Figure EN-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Enterprise Municipal Airport



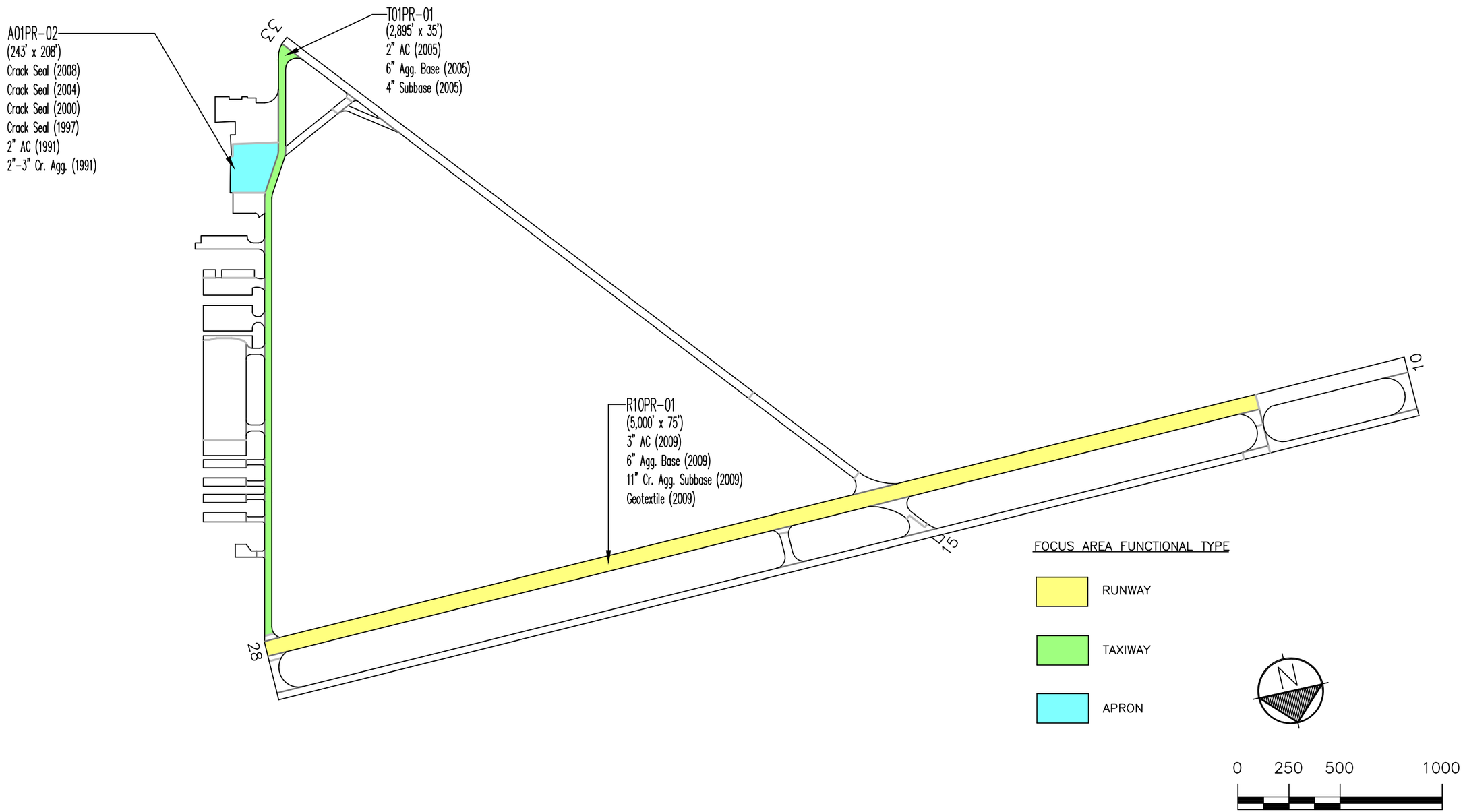
Source Drawing Date: June 2011

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE EN-1 - ENTERPRISE STUDY FOCUS AREAS.DWG 03/27/12

Figure PR-1. PAVEMENT CONDITION STUDY FOCUS AREAS
Prineville Airport



Source Drawing Date: June 2011

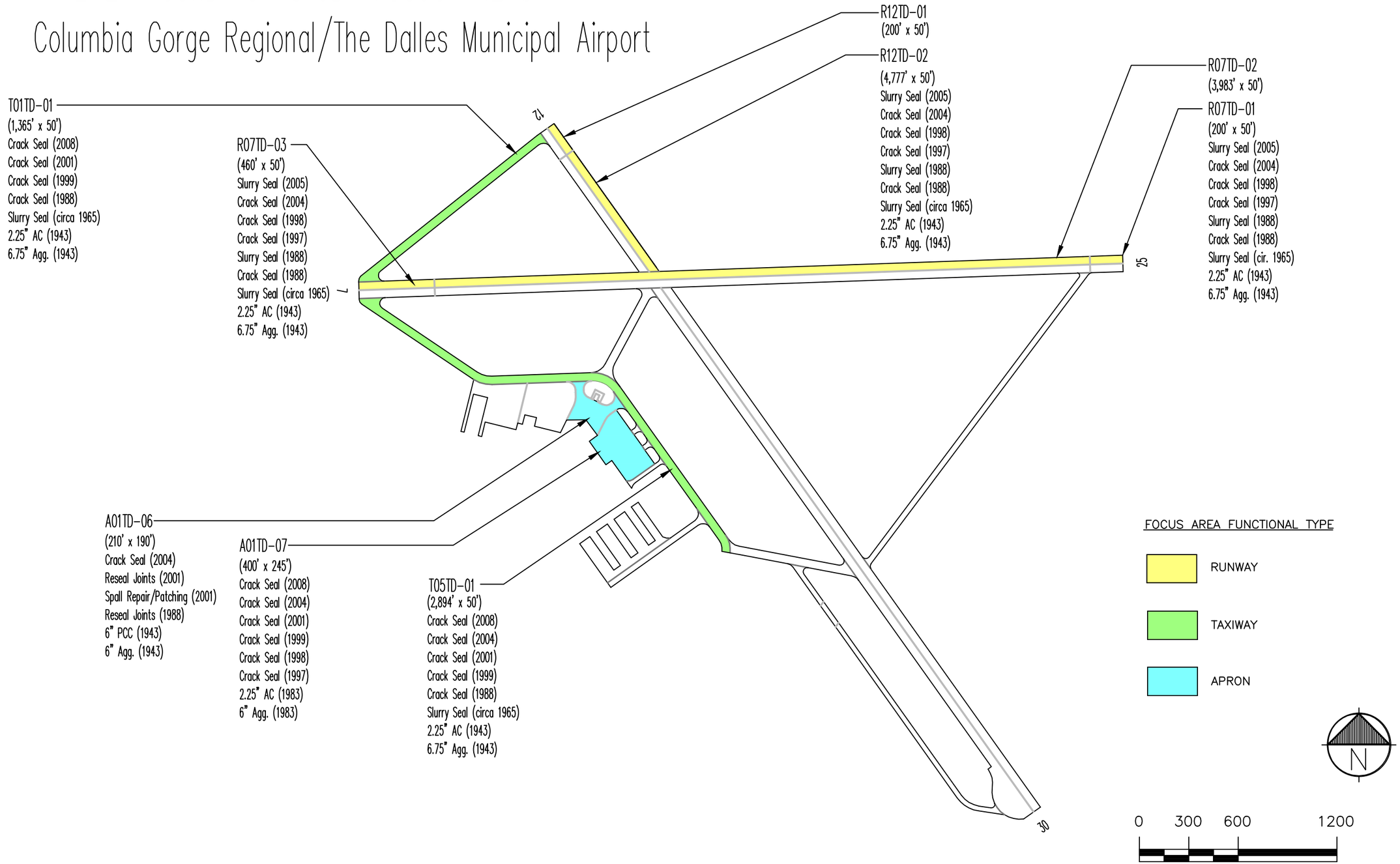
WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE PR-1 - PRINEVILLE STUDY FOCUS AREAS.DWG 03/27/12

Figure TD-1. PAVEMENT CONDITION STUDY FOCUS AREAS

Columbia Gorge Regional/The Dalles Municipal Airport



Source Drawing Date: June 2011

WHPacific

PAVEMENT CONSULTANTS INC.

037601 FIGURE TD-1 - THE DALLES STUDY FOCUS AREAS.DWG 03/28/12

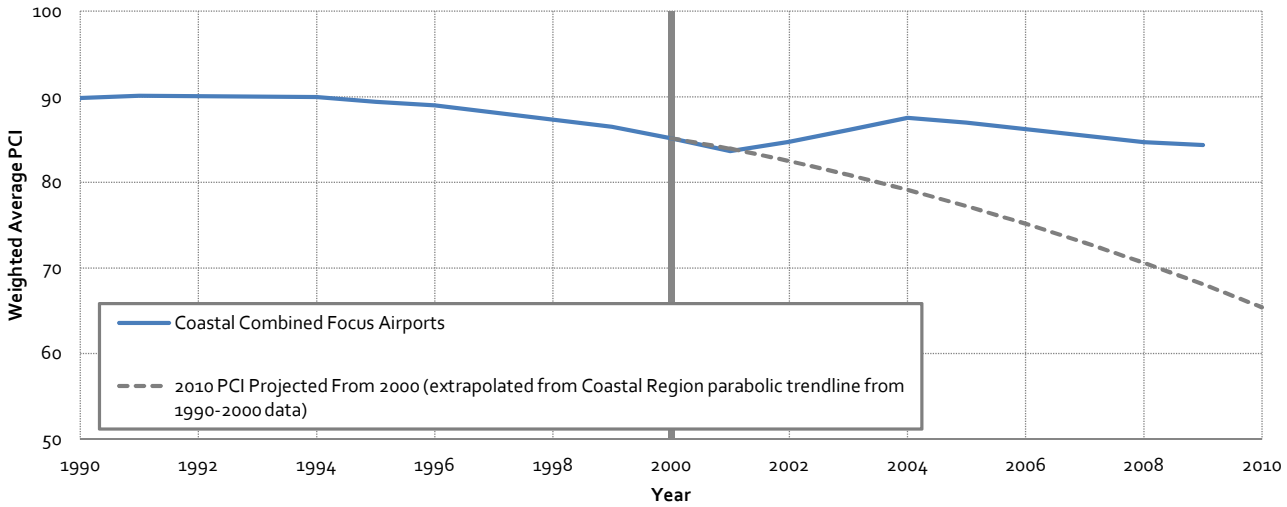
Table of Contents	Sheet	Page
Coastal Combined Focus Areas PCI Report Summary	COAST	1
Valley Combined Focus Areas PCI Report Summary	VALLEY	2
Mountain Combined Focus Areas PCI Report Summary	MOUNTAIN	3
Central/East Region Focus Areas PCI Report Summary	CENTRAL/EAST	4
Bandon Airport Combined Focus Areas PCI Report Summary	BN-01	5
Bandon Runway 16-34 PCI Report Summary	BN-02	6
Bandon Taxiway-01 PCI Report Summary	BN-03	7
Bandon Apron-01 PCI Report Summary	BN-04	8
Newport Airport Combined Focus Areas PCI Report Summary	NE-01	9
Newport Combined Runways Focus Areas PCI Report Summary	NE-02	10
Newport Runway 16-34 PCI Report Summary	NE-03	11
Newport Runway 2-20 PCI Report Summary	NE-04	12
Newport Taxiway A PCI Report Summary	NE-05	13
Newport Apron Focus Areas PCI Report Summary	NE-06	14
Seaside Airport Combined Focus Areas PCI Report Summary	SS-01	15
Seaside Runway 16-34 Focus Areas PCI Report Summary	SS-02	16
Seaside Taxiway Focus Areas PCI Report Summary	SS-03	17
Seaside Apron Focus Areas PCI Report Summary	SS-04	18
Tillamook Airport Combined Focus Areas PCI Report Summary	TI-01	19
Tillamook Combined Runways PCI Report Summary	TI-02	20
Tillamook Runway 1-19 Focus Areas PCI Report Summary	TI-03	21
Tillamook Runway 13-31 Focus Areas PCI Report Summary	TI-04	22
Tillamook Taxiway Focus Areas PCI Report Summary	TI-05	23
Tillamook Apron Focus Areas PCI Report Summary	TI-06	24
Corvallis Airport Combined Focus Areas PCI Report Summary	CR-01	25
Corvallis Combined Runways PCI Report Summary	CR-02	26
Corvallis Airport Runway 17-35 PCI Report Summary	CR-03	27
Corvallis Airport Runway 9-27 PCI Report Summary	CR-04	28
Corvallis Combined Focus Taxiways PCI Report Summary	CR-05	29
Corvallis Airport Taxiway B Focus Areas PCI Report Summary	CR-06	30
Corvallis Airport Taxiway C Focus Areas PCI Report Summary	CR-07	31
Creswell Combined Focus Areas PCI Report Summary	CE-01	32
Creswell Runway 15-33 PCI Report Summary	CE-02	33
Creswell Taxiway 01 PCI Report Summary	CE-03	34
Creswell Apron Focus Area PCI Report Summary	CE-04	35
Mulino Combined Focus Areas PCI Report Summary	MU-01	36
Mulino Runway 14-32 PCI Report Summary	MU-02	37
Mulino Taxiway 01 Focus Areas PCI Report Summary	MU-03	38
Mulino Apron Focus Area PCI Report Summary	MU-04	39
Salem Combined Focus Areas PCI Report Summary	SA-01	40
Salem Runway 13-31 PCI Report Summary	SA-03	41
Salem Taxiway Focus Areas PCI Report Summary	SA-07	42
Salem Apron Focus Areas PCI Report Summary	SA-08	43
Scappoose Combined Focus Areas PCI Report Summary	SC-01	44
Scappoose Runway 15-33 PCI Report Summary	SC-02	45
Scappoose Combined Taxiways Focus Areas PCI Report Summary	SC-03	46
Scappoose Taxiway A Focus Areas PCI Report Summary	SC-04	47
Scappoose Taxiway B Focus Areas PCI Report Summary	SC-05	48
Scappoose Apron Focus Areas PCI Report Summary	SC-06	49
Ashland Airport Combined Focus Areas PCI Report Summary	AS-01	50
Ashland Runway 12-30 Focus Areas PCI Report Summary	AS-02	51
Ashland Taxiway A Focus Areas PCI Report Summary	AS-03	52
Ashland Apron Focus Areas PCI Report Summary	AS-04	53
Grants Pass Airport Combined Focus Areas PCI Report Summary	GR-01	54
Grants Pass Runway 12-30 PCI Report Summary	GR-02	55
Grants Pass Taxiway A Focus Areas PCI Report Summary	GR-03	56
Grants Pass Apron Focus Areas PCI Report Summary	GR-04	57
Illinois Valley Combined Focus Areas PCI Report Summary	IV-01	58
Illinois Valley Runway 18-36 PCI Report Summary	IV-02	59
Illinois Valley Apron Focus Areas PCI Report Summary	IV-03	60

Table of Contents	Sheet	Page
Baker City Airport Focus Areas PCI Report Summary	BA-01	61
Baker City Runway 17-34 PCI Report Summary	BA-02	62
Baker City Taxiway A Focus Areas PCI Report Summary	BA-03	63
Baker City Apron Focus Area PCI Report Summary	BA-04	64
Bend Airport Focus Areas PCI Report Summary	BE-01	65
Bend Taxiway A Focus Areas PCI Report Summary	BE-02	66
Bend Apron 01 Focus Areas PCI Report Summary	BE-03	67
Burns Airport Focus Areas PCI Report Summary	BU-01	68
Burns Runway 12-30 PCI Report Summary	BU-02	69
Burns Taxiway Focus Areas PCI Report Summary	BU-03	70
Burns Apron 01 Focus Area PCI Report Summary	BU-04	71
The Dalles Airport Combined Focus Areas PCI Report Summary	TD-01	72
The Dalles Combined Runway Focus Areas PCI Report Summary	TD-02	73
The Dalles Runway 17-25 PCI Report Summary	TD-03	74
The Dalles Airport Runway 12-30 PCI Report Summary	TD-04	75
The Dalles Taxiway Focus Areas PCI Report Summary	TD-05	76
The Dalles Apron Focus Areas PCI Report Summary	TD-06	77
Enterprise Airport Focus Areas PCI Report Summary	EN-01	78
Enterprise Runway 12-30 PCI Report Summary	EN-02	79
Enterprise Taxiway 01 PCI Report Summary	EN-03	80
Enterprise Apron Focus Areas PCI Report Summary	EN-04	81
Prineville Airport Focus Areas PCI Report Summary	PR-01	82
Prineville Runway 10-28 PCI Report Summary	PR-02	83
Prineville Taxiway Focus Areas PCI Report Summary	PR-03	84
Prineville Apron Focus Areas PCI Report Summary	PR-04	85

Pavement Condition Index Report Summary

Region:	Oregon Coastal
Airports:	Bandon, Newport, Seaside, Tillamook
Pavement Type:	Runways, Taxiways, Aprons

Coastal Combined Focus Areas



Coastal Combined Focus Areas									
Coastal Combined Focus Airports		Bandon Airport		Newport Airport		Seaside Airport		Tillamook Airport	
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1943	100							1943	100
1944	100			1944	100			*1944**	*100*
1961	97			*1961**	*97*	1961	100	*1961**	*97*
1966	97	1966	100	*1966**	*97*	*1966**	*97*	*1966**	*96*
1970	96	1970	96	*1970**	*96*	*1970**	*94*	*1970**	*95*
1983	89	*1983**	*72*	*1983**	*94*	*1983**	*86*	1983	92
1984	89	*1984**	*71*	1984	94	*1984**	*86*	*1984**	*91*
1986	86	1986	67	*1986**	*91*	*1986**	*84*	*1986**	*88*
1987	84	*1987**	*65*	1987	89	1987	84	1987	87
1988	83	*1988**	*63*	1988	87	*1988**	*82*	*1988**	*88*
1989	83	1989	60	*1989**	*88*	*1989**	*80*	*1989**	*89*
1990	90	1990	100	*1990**	*88*	*1990**	*79*	*1990**	*90*
1991	90	*1991**	*100*	*1991**	*88*	1991	77	1991	91
1994	90	1994	99	1994	89	*1994**	*75*	*1994**	*90*
1995	89	1995	99	1995	88	*1995**	*75*	*1995**	*90*
1996	89	1996	100	*1996**	*87*	1996	74	1996	89
1999	87	*1999**	*98*	1999	85	*1999**	*73*	*1999**	*86*
2000	85	2000	97	*2000**	*83*	*2000**	*73*	*2000**	*84*
2001	84	*2001**	*96*	2001	81	2001	72	2001	83
2002	85	2002	95	*2002**	*84*	*2002**	*73*	*2002**	*84*
2003	86	*2003**	*96*	*2003**	*86*	2003	74	*2003**	*84*
2004	88	*2004**	*97*	2004	89	2004	75	2004	84
2005	87	2005	97	*2005**	*88*	*2005**	*75*	*2005**	*83*
2008	85	*2008**	*96*	2008	85	2008	76	2008	80
2009	84	2009	96	*2009***	*84*	*2009***	*76*	*2009***	*81*

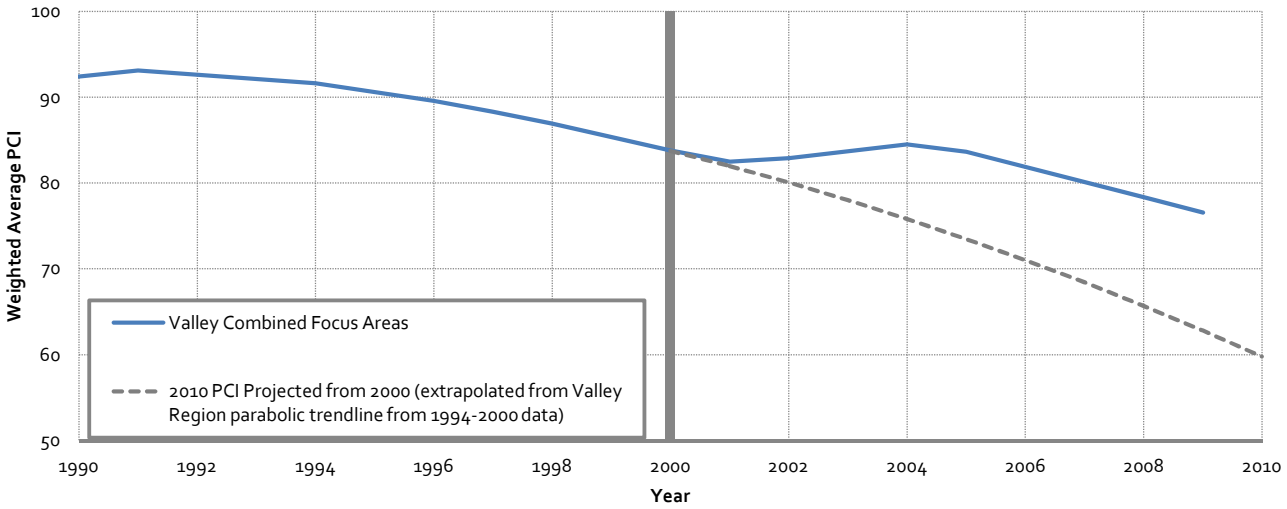
* PCI was interpolated to perform combined weighted average PCI.

** PCI was extrapolated 1 year to complete data and perform combined weighted average PCI.

Pavement Condition Index Report Summary

Region:	Oregon Valley
Airports:	Corvallis, Creswell, Mulino, Salem, and Scappoose
Pavement Type:	Runways, Taxiways, Aprons

Valley Combined Focus Areas



Valley Combined Focus Areas											
Valley Combined Focus Airports		Corvallis Airport		Creswell Airport		Mulino Airport		Salem Airport		Scappoose Airport	
Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI**
1942	100	1942	100					1942	100	1943	100
1965	100	1965*	100					1965*	100	1965	100
1981	99	1981*	100					1981	100	1981*	95
1985	98	1985	100					1985*	95	1985*	92
1987	96	1987	96	1987	100			1987*	92	1987	93
1988	94	1988	95	1988	95			1988*	91	1988*	91
1990	92	1990*	93	1990*	94			1990	88	1990*	91
1991	93	1991*	92	1991*	93	1991	100	1991*	87	1991	90
1994	92	1994	90	1994	92	1994*	99	1994*	82	1994	94
1996	90	1996*	87	1996*	88	1996*	98	1996	79	1996	94
1997	88	1997	86	1997*	86	1997*	98	1997*	76	1997*	93
1998	87	1998	85	1998*	84	1998*	98	1998*	73	1998*	92
2000	84	2000*	81	2000	81	2000*	97	2000*	67	2000	89
2001	82	2001	79	2001*	81	2001*	96	2001	64	2001	87
2002	83	2002*	79	2002	81	2002*	96	2002*	70	2002*	89
2004	85	2004	78	2004*	86	2004	95	2004	82	2004	93
2005	84	2005	77	2005	88	2005*	93	2005*	80	2005*	91
2008	78	2008	75	2008*	79	2008	84	2008	71	2008	86
2009	77	2009**	75	2009	76	2009**	81	2009**	68	2009**	84

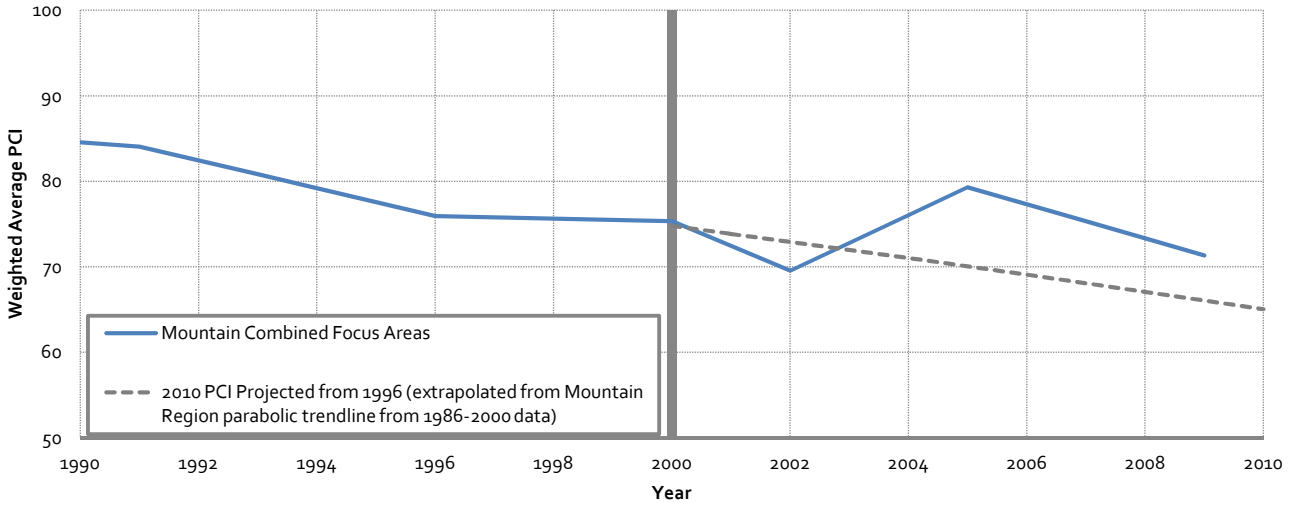
* PCI was interpolated to perform combined Weighted Average.

**PCI values extrapolated 1 year using rate of decline from years 2005-2008 values.

Pavement Condition Index Report Summary

Region:	Oregon Mountain
Airports:	Ashland, Grants Pass
Pavement Type:	Runways, Taxiways

Mountain Combined Focus Areas



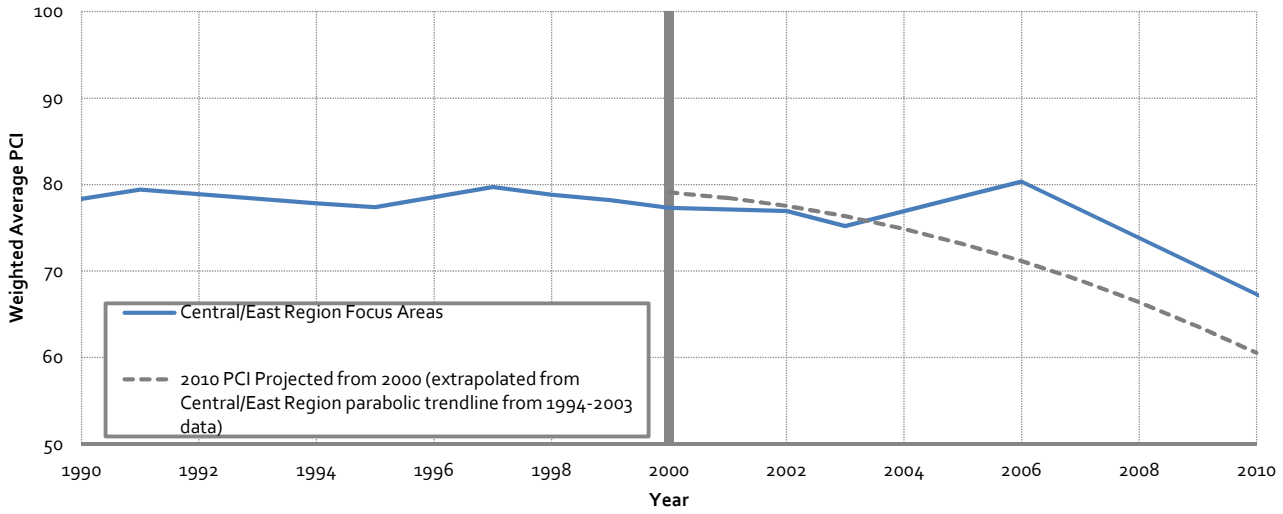
Mountain Combined Focus Areas							
Mountain Combined Focus Airports		Ashland Airport		Grants Pass Airport		Illinois Valley Airport	
Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1953	100					1953	100
1959	100			1959	100	*1959**	*100*
1965	100			*1965**	*100*	1965	100
1967	100	1967	100	*1967**	*100*	*1967**	*100*
1968	100	1968	100	*1968**	*100*	*1968**	*100*
1974	100	1674	100	*1974**	*100*	*1974**	*100*
1977	98	1977	90	1977	100	1977	100
1980	95	1980	90	*1980**	*94*	1980	99
1983	91	1983	89	*1983**	*88*	*1983**	94
1984	90	1984	92	*1984**	*86*	*1984**	92
1985	88	1985	91	*1985**	*84*	*1985**	90
1986	87	1986	89	*1986**	*82*	*1986**	88
1987	84	1987	83	1987	80	1987	87
1989	85	1989	89	*1989**	*79*	*1989**	*88*
1991	84	1991	85	1991	77	1991	89
1993	81	*1993**	*83*	*1993**	*77*	1993	83
1994	79	*1994**	*82*	1994	77	*1994**	*79*
1996	76	1996	80	1996	78	1996	72
2000	75	2000	83	2000	83	2000	65
2002	70	2002	68	2002	77	2002	64
2004	76	2004	77	2004	73	*2004**	*78*
2005	79	2005	82	2005	71	2005	85
2007	75	*2007**	*77*	2007	68	*2007**	*80*
2009	71	2009	73	2009	66	2009	75

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Region:	Oregon Central/East
Airports:	Ashland, Grants Pass
Pavement Type:	Runways, Taxiways

Central/East Region Focus Areas



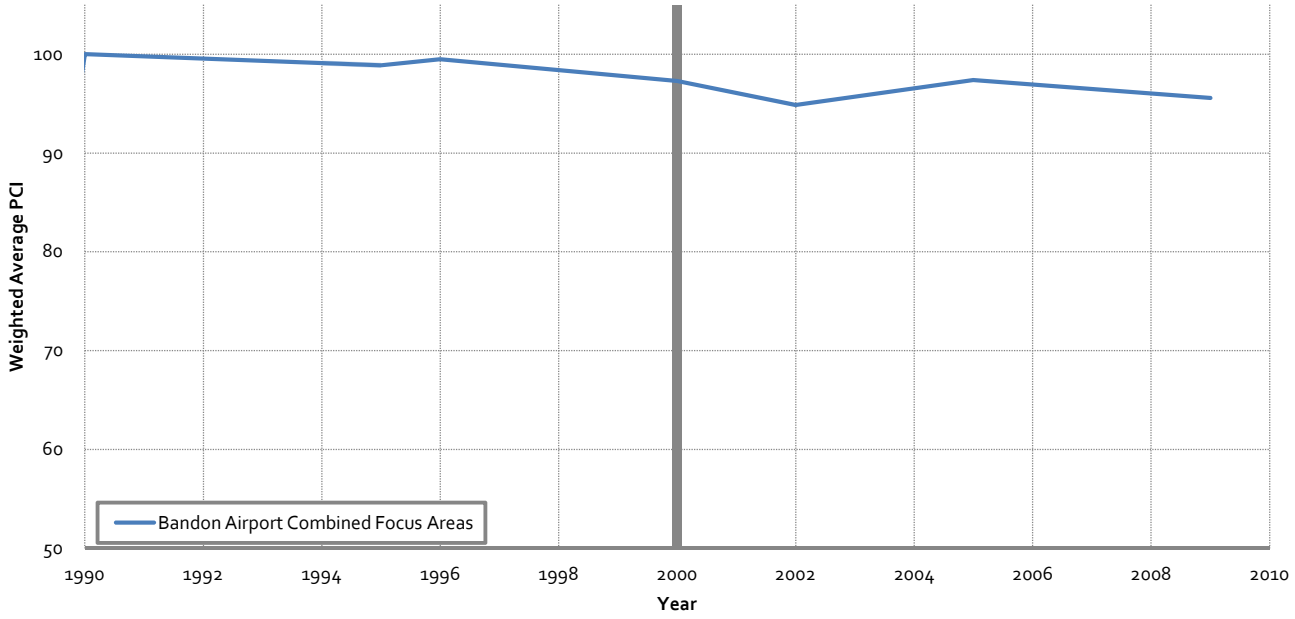
Central/East Region Focus Areas													
Central/East Combined Focus Airports		Baker City Airport		Bend Airport		Burns Airport		The Dalles Airport		Enterprise Airport		Prineville Airport	
Year	Weighted Average PCI	Year	Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1980	82			1980*	97	1980*	64	1980*	79	1980*	85	1980	100
1983	81	1983	100	1983*	93	1983*	56	1983	77	1983*	78	1983*	86
1984	78	1984*	92	1984	92	1984*	53	1984*	76	1984*	76	1984*	82
1986	73	1986	77	1986	89	1986	48	1986*	75	1986	71	1986	72
1987	79	1987*	81	1987*	85	1987	95	1987*	75	1987*	66	1987*	70
1988	78	1988*	85	1988*	80	1988	93	1988	74	1988*	61	1988	69
1989	77	1989	89	1989	76	1989	91	1989*	74	1989	56	1989	67
1990	78	1990*	94	1990*	77	1990*	88	1990*	75	1990*	52	1990	72
1991	79	1991	98	1991*	79	1991*	85	1991*	75	1991*	47	1991	77
1994	78	1994	95	1994*	84	1994	76	1994	76	1994*	35	1994	76
1995	77	1995*	95	1995	85	1995*	76	1995*	76	1995	31	1995*	74
1997	80	1997*	95	1997*	87	1997*	74	1997	75	1997	94	1997*	70
1998	79	1998	95	1998*	87	1998	74	1998*	74	1998*	91	1998	67
1999	78	1999*	94	1999	88	1999*	71	1999*	73	1999*	89	1999*	71
2000	77	2000	93	2000	87	2000	68	2000	72	2000	87	2000	74
2002	77	2002	90	2002*	78	2002*	73	2002*	73	2002*	81	2002*	66
2003	75	2003	89	2003	73	2003	75	2003	74	2003	78	2003	62
2005	79	2005*	87	2005*	75	2005*	75	2005*	83	2005*	70	2005	66
2006	80	2006	86	2006	76	2006	75	2006	88	2006	67	2006	68
2009	71	2009*	78	2009*	64	2009*	67	2009*	74	2009*	66	2009	65
2010	67	2010*	75	2010*	60	2010	64	2010*	69	2010*	66	2010*	65
2011	64	2011	73	2011	56	2011	58	2011	64	2011	66	2011	64

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region	Southern
Airports:	Bandon
Pavement Type:	Runways, Taxiways, Aprons

Bandon Airport Combined Focus Areas



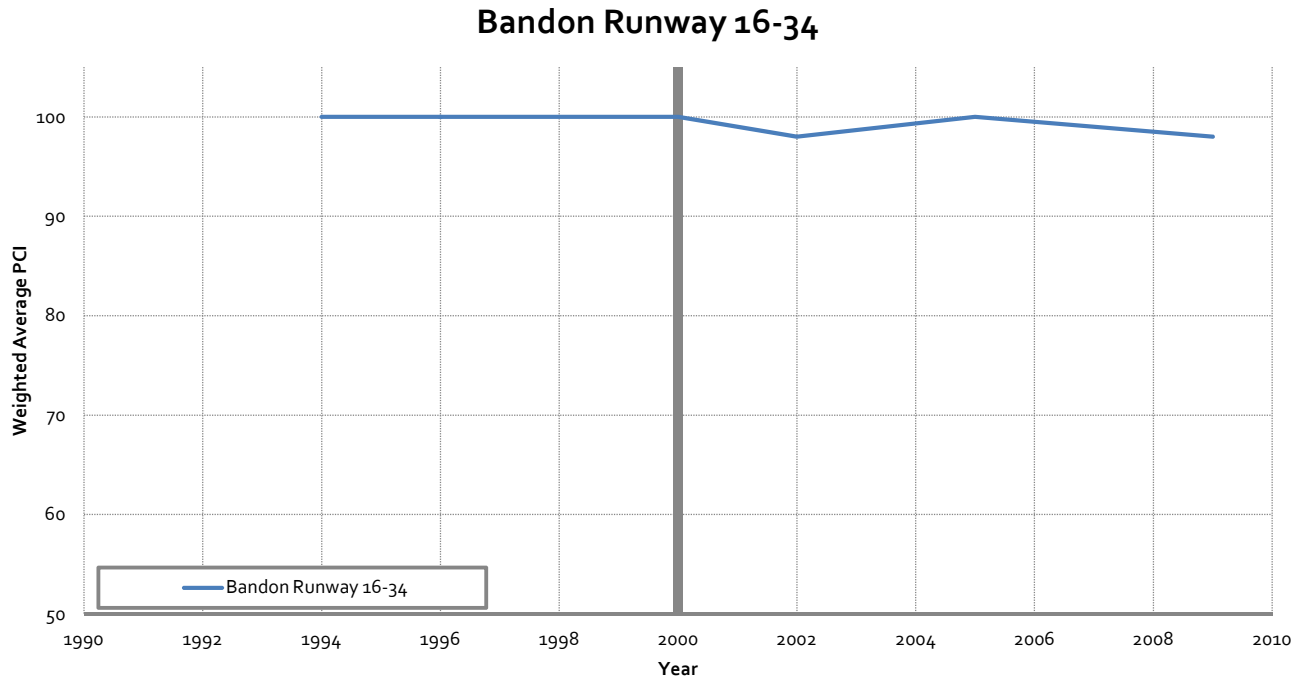
Bandon Airport Combined Focus Areas							
Bandon Airport		Runway 16-34		Taxiway-01		Apron 01	
Total Focus Area (sf)	**463,806**	Focus Area (sf)	216,000	Focus Area (sf)	127,522	Focus Area (sf)	120,284
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1966	**100**			1966	100		
1970	**96**			*1970**	*93*	1970	100
1986	**67**			1986	64	1986	70
1989	**60**			1989	54	1989	67
1990	**100**			1990	100	1990	100
1994	**99**	1994	100	1994	98	*1994**	*99*
1995	**99**	*1995**	*100*	1995	97	*1995**	*98*
1996	**100**	1996	100	1996	100	1996	98
2000	**97**	2000	100	2000	94	2000	95
2002	**95**	2002	98	2002	93	2002	91
2005	**97**	2005	100	2005	95	2005	95
2009	**96**	2009	98	2009	96	2009	90

* PCI was interpolated to perform combined Weighted Average.

** PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

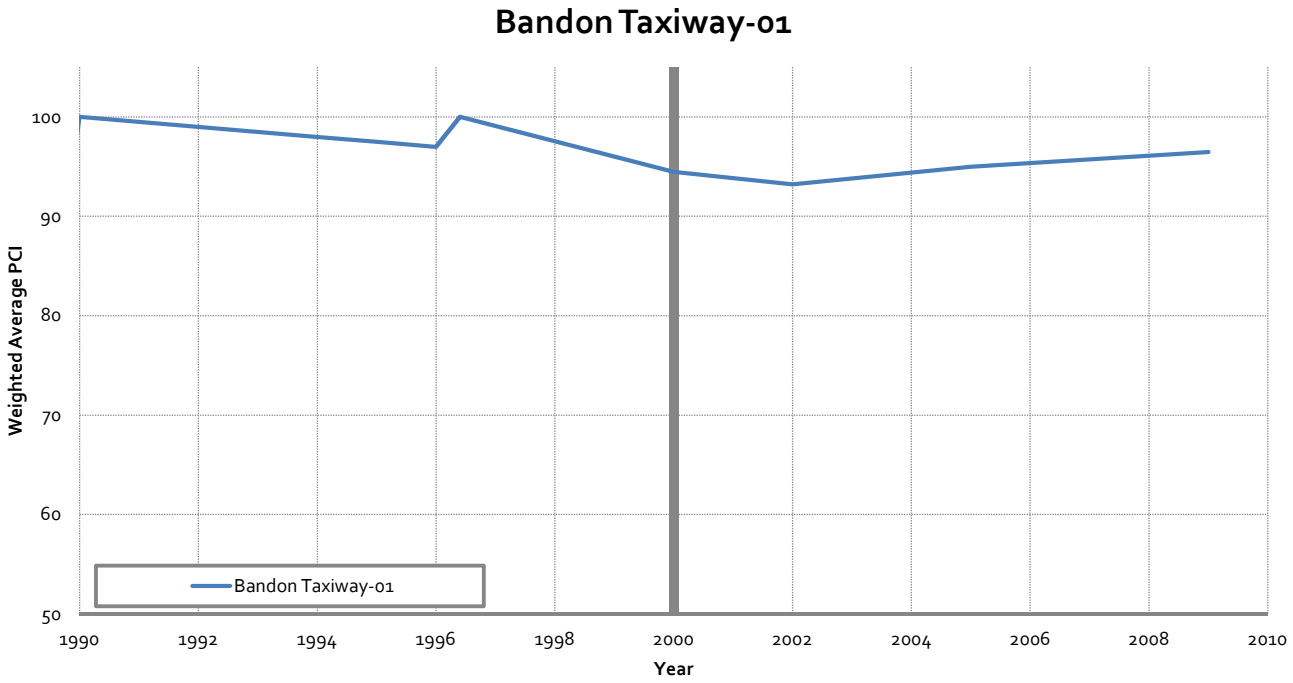
Climate Region:	Oregon Coastal
PMP Region	Southern
Airports:	Bandon
Pavement Type:	Runway



Bandon Runway 16-34			
Runway 16-34		R16BN-01	
Focus Area (sf)	**216,000**	Area (sf)	216,000
Year	**Weighted Average PCI**	Date	PCI
1994	**100**	9/3/94	100
1996	**100**	6/27/96	100
2000	**100**	4/8/00	100
2002	**98**	11/5/02	98
2005	**100**	9/23/05	100
2009	**98**	3/22/09	98

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region	Southern
Airports:	Bandon
Pavement Type:	Taxiway

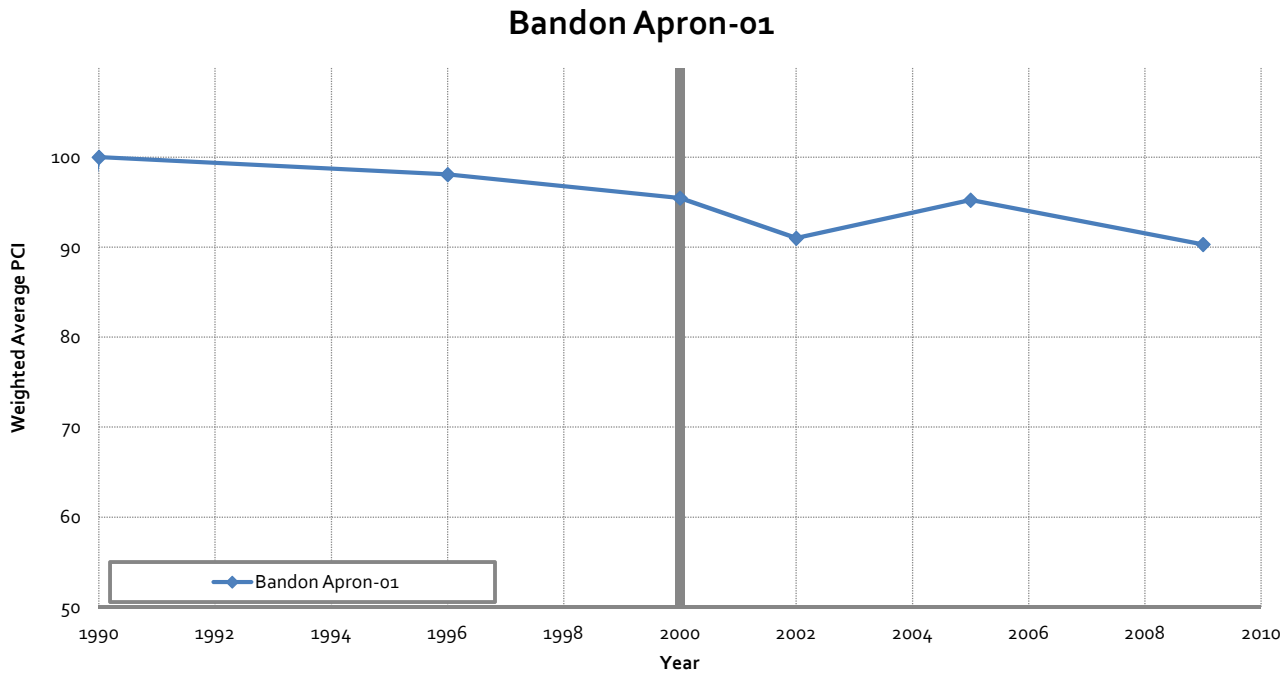


Bandon Taxiway-01							
Taxiway-01		T01BN-01		T01BN-02		T01BN-03	
Focus Area (sf)	**127,522**	Area (sf)	34,092	Area (sf)	64,000	Area (sf)	29,430
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1966	100			9/2/66	100		
1986	64			4/1/86	64		
1989	54			4/2/89	54		
1990	100			9/1/90	100		
1994	98	9/3/94	100	*1994**	*96*	9/3/94	100
1995	97	*1995**	*100*	*1995**	*95*	*1995**	*100*
1996	97	*1996**	*100*	9/1/96	94	*1996**	*100*
1996	100	6/27/96	100	9/1/96	100	6/27/96	100
2000	94	4/8/00	99	4/8/00	90	4/8/00	99
2002	93	11/5/02	98	11/5/02	88	11/5/02	99
2005	95	9/23/05	100	9/30/05	90	9/23/05	100
2009	96	3/22/09	98	3/22/09	94	3/22/09	100

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region	Southern
Airports:	Bandon
Pavement Type:	Apron

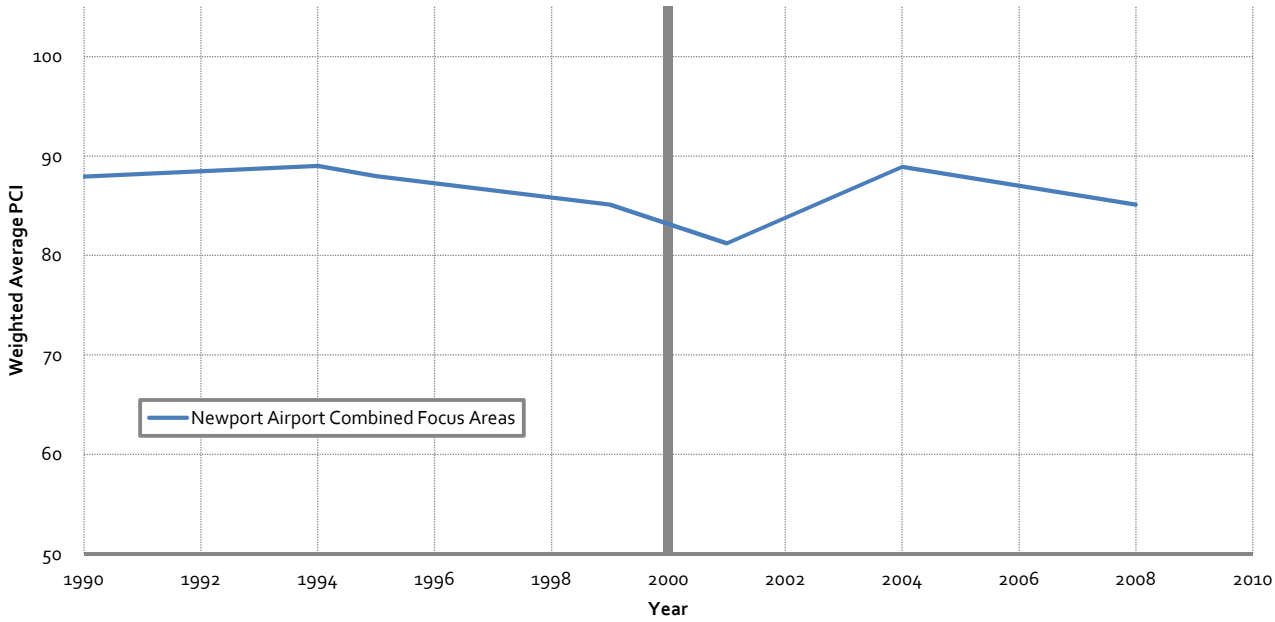


Bandon Apron-01					
Apron 01		A01BN-01		A01BN-02	
Focus Area (sf)	**120,284**	Area (sf)	74,016	Area (sf)	46,268
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1970	100	9/2/70	100		
1986	70	4/1/86	70		
1989	67	4/12/89	67		
1990	100	9/1/90	100	9/2/90	100
1996	98	6/27/96	100	6/27/96	95
2000	95	4/8/00	97	4/8/00	93
2002	91	11/5/02	91	11/2/02	91
2005	95	9/23/05	96	9/23/05	94
2009	90	3/22/09	93	3/22/09	86

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Runways, Taxiways, Aprons

Newport Airport Combined Focus Areas



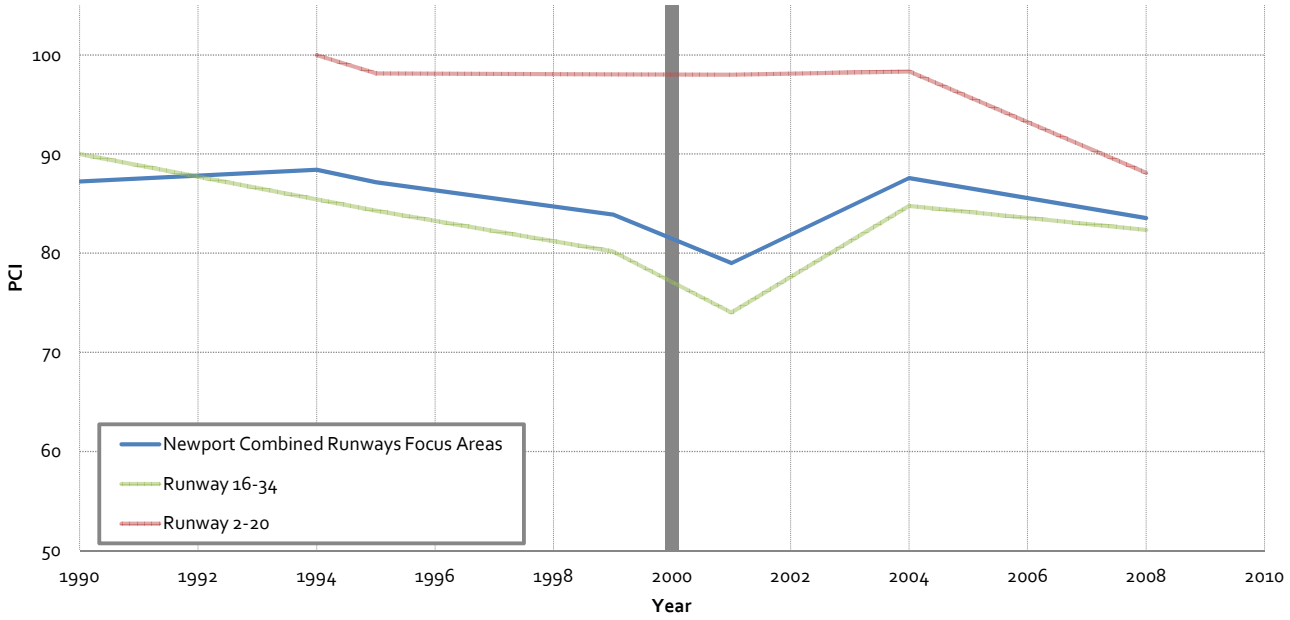
Newport Airport Combined Focus Areas							
Newport Airport		Combined Runways		Taxiway A		Apron -01	
Total Focus Area (sf)	**1,235,533**	Focus Area (sf)	1,021,618	Focus Area (sf)	126,725	Focus Area (sf)	87,190
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1944	**100**	1944	100			1944	100
1984	**94**	1984	93			1984	100
1987	**89**	*1987**	*88*	1987	100	*1987**	*86*
1988	**87**	1988	87	1988	98	1988	82
1994	**89**	1994	88	*1994**	*99*	*1994**	*82*
1995	**88**	1995	87	1995	99	1995	82
1999	**85**	1999	84	1999	98	1999	81
2001	**81**	2001	79	2001	100	2001	80
2004	**89**	2004	88	2004	100	2004	89
2008	**85**	2008	84	2008	97	2008	86

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Runways

Newport Combined Runways

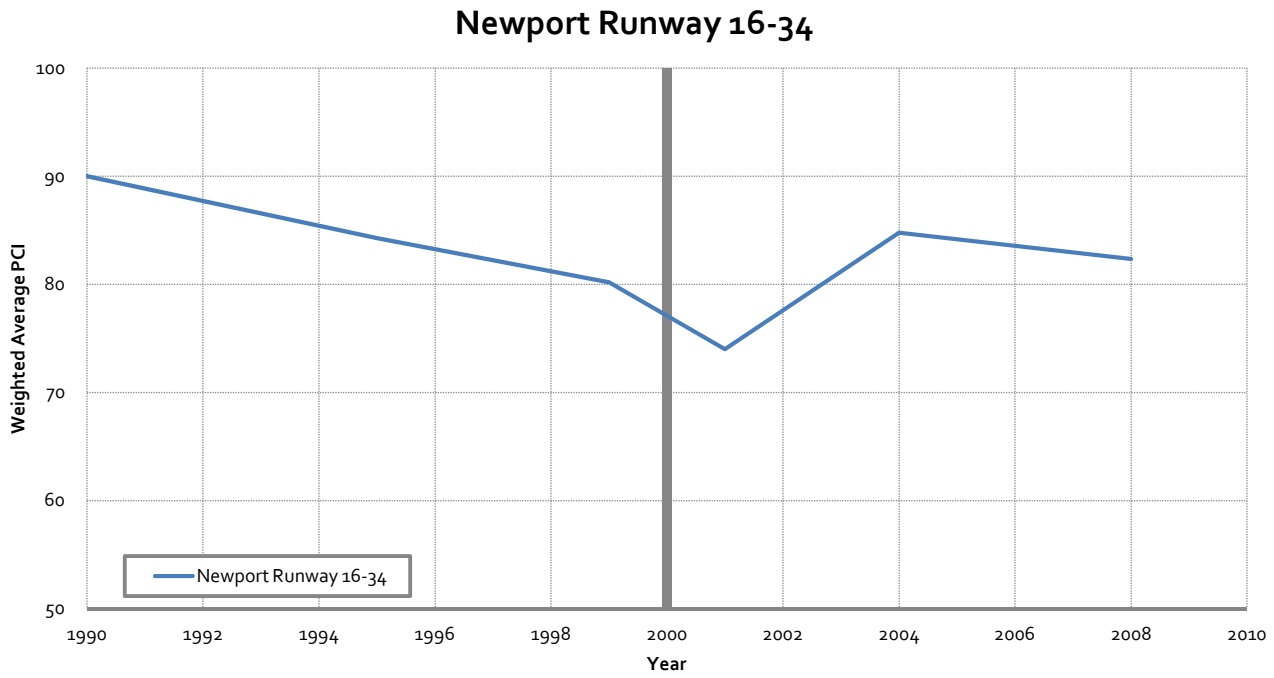


Newport Combined Runways Focus Areas					
Combined Runways		Runway 16-34		Runway 2-20	
Focus Area (sf)	1,021,618	Area (sf)	810,000	Area (sf)	211,618
Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1944	100	1944	100	1944	100
1984	93	1984	100	*1984**	*68*
1988	87	1988	92	1988	65
1994	88	*1994**	*85*	1994	100
1995	87	1995	84	1995	98
1999	84	1999	80	1999	98
2001	79	2001	74	2001	98
2004	88	2004	85	2004	98
2008	84	2008	82	2008	88

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Runway



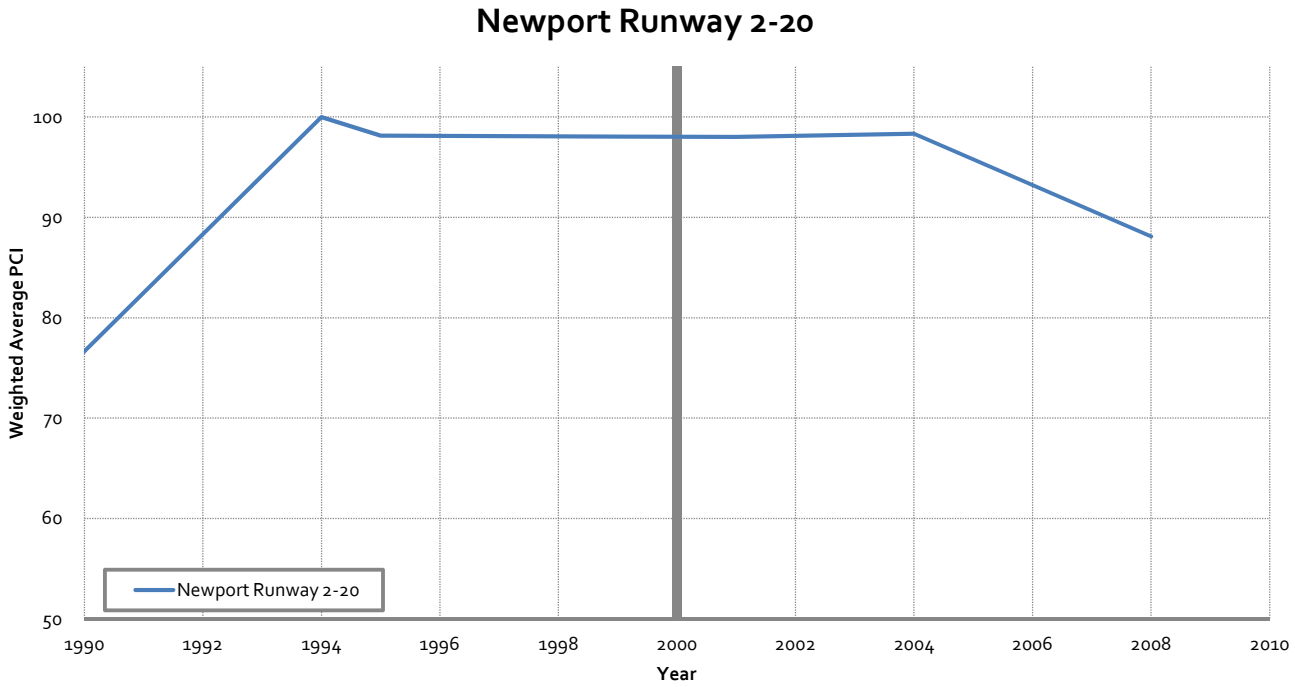
Newport Runway 16-34												
Runway 16-34		R16NE-01A		R16NE-01B		R16NE-01C		R16NE-02A		R16NE-02B		Continued below
Focus Area (sf)	810,000	Area (sf)	15,000	Area (sf)	15,000	Area (sf)	15,000	Area (sf)	238,250	Area (sf)	238,250	
Year	Weighted Average PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI	
1944	100.0	8/1/44	100	8/1/44	100	8/1/44	100	8/1/44	100	8/1/44	100	
1984	100.0	8/1/84	100	8/1/84	100	8/1/84	100	8/1/84	100	8/1/84	100	
1988	92.3	*1988**	*92*	*1988**	*91*	*1988**	*92*	*1988**	*95*	2/4/88	89	
1995	84.3	*1995**	*77*	5/8/95	74	*1995**	*77*	*1995**	*86*	5/8/95	85	
1999	80.2	*1999**	*68*	4/7/99	73	*1999**	*68*	*1999**	*82*	4/7/99	84	
2001	74.0	9/2/01	64	9/2/01	59	9/2/01	64	9/2/01	79	9/2/01	71	
2004	84.8	9/30/04	83	9/30/04	84	9/30/04	87	9/30/04	85	9/30/04	85	
2008	82.4	2/4/08	77	2/4/08	78	2/4/08	81	2/4/08	86	2/4/08	83	

R16NE-02C		R16NE-03A		R16NE-03B		R16NE-03C	
Area (sf)	238,250	Area (sf)	16,750	Area (sf)	16,750	Area (sf)	16,750
Date	PCI	Date	PCI	Date	PCI	Date	PCI
8/1/44	100						
8/1/84	100	8/1/84	100	8/1/84	100	8/1/84	100
*1988**	*94*	*1988**	*92*	2/4/88	72	*1988**	*93*
*1995**	*85*	*1995**	*79*	5/8/95	74	*1995**	*79*
*1999**	*79*	*1999**	*71*	4/7/99	73	*1999**	*72*
9/2/01	76	9/2/01	67	9/2/01	62	9/2/01	68
9/30/04	84	9/30/04	90	9/3/04	88	9/3/04	81
2/4/08	79	2/4/08	79	2/4/08	82	2/4/08	83

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Runway

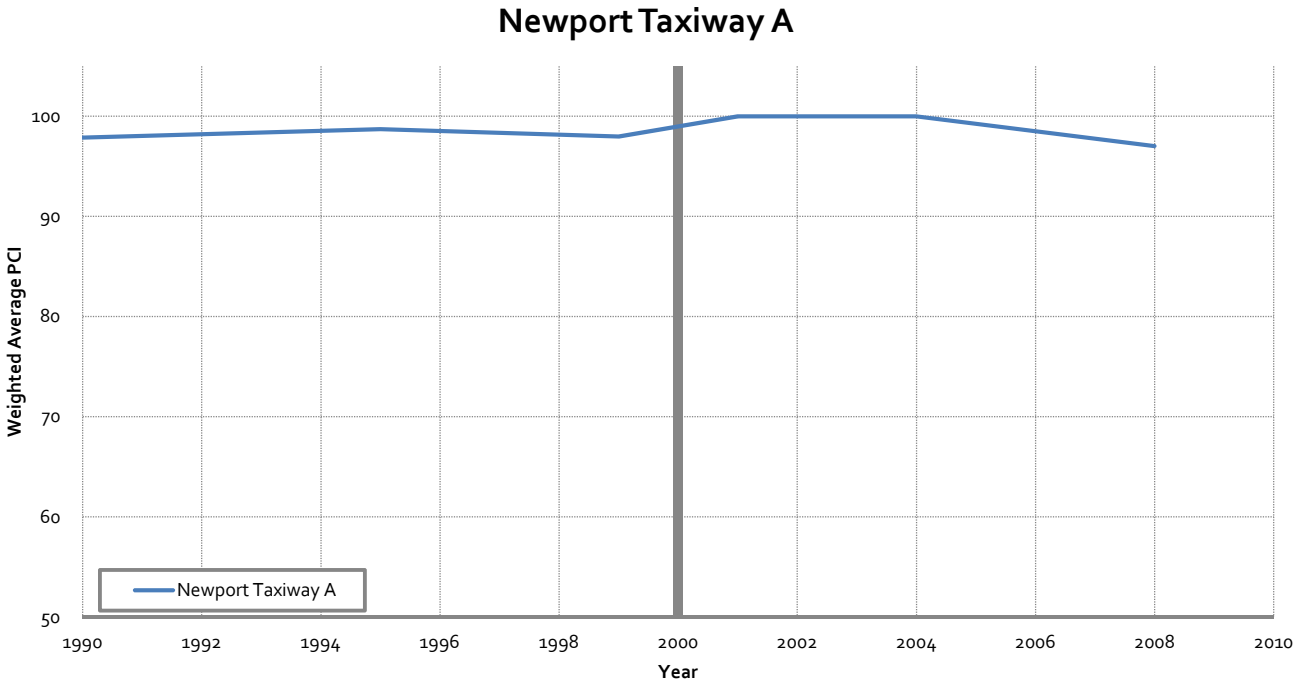


Newport Runway 2-20					
Newport Runway 2-20		R02NE-01		R02NE-02	
Focus Area (sf)	**211,618**	Area (sf)	16,093	Area (sf)	195,525
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1944	**100**	8/1/44	100	8/1/44	100
1988	**65**	2/5/88	65	2/5/88	65
1994	**100**	8/1/94	100	8/1/94	100
1995	**98**	*1995**	*100*	5/8/95	98
1999	**98**	*1999**	*99*	4/7/99	98
2001	**98**	9/2/01	98	9/2/01	98
2004	**98**	9/3/04	78	9/30/04	100
2008	**88**	2/4/08	65	2/4/08	90

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Taxiway

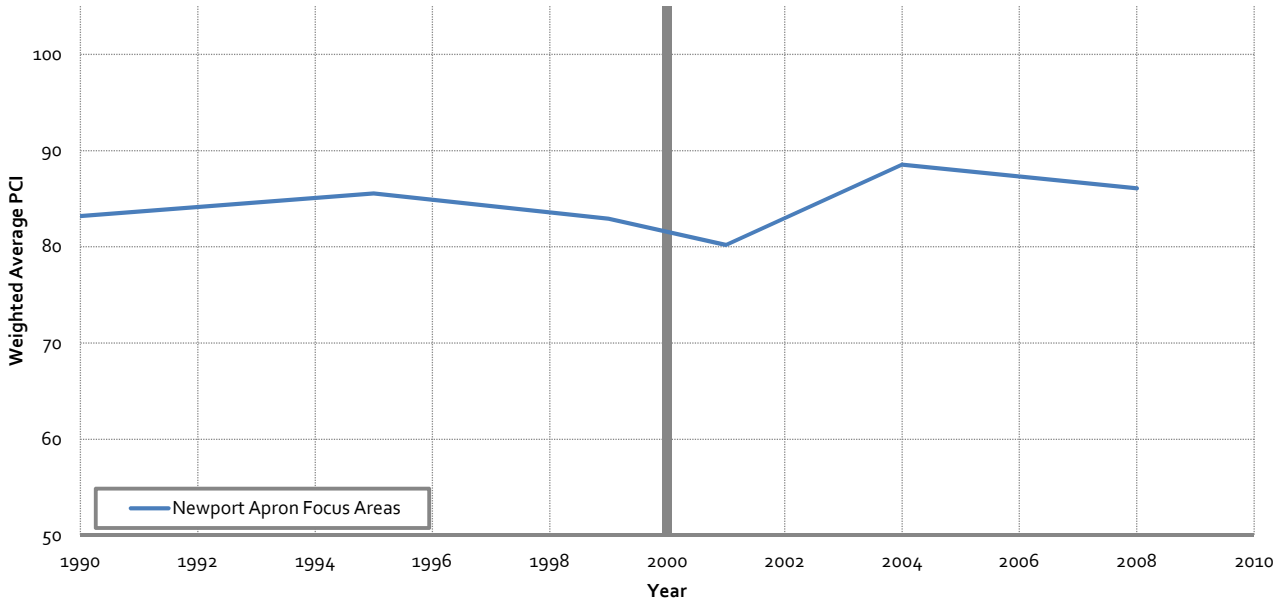


Newport Taxiway A					
Newport Taxiway A		TANE-01		TANE-02	
Focus Area (sf)	**126,725**	Area (sf)	94,127	Area (sf)	32,598
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1987	**100**	8/1/87	100	8/1/87	100
1988	**98**	2/4/88	97	2/4/88	99
1995	**99**	5/8/95	100	5/8/95	95
1999	**98**	4/7/99	99	4/7/99	95
2001	**100**	9/2/01	100	9/2/01	100
2004	**100**	9/3/04	100	9/30/04	100
2008	**97**	2/4/08	97	2/4/08	97

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Newport
Pavement Type:	Apron

Newport Apron Focus Areas



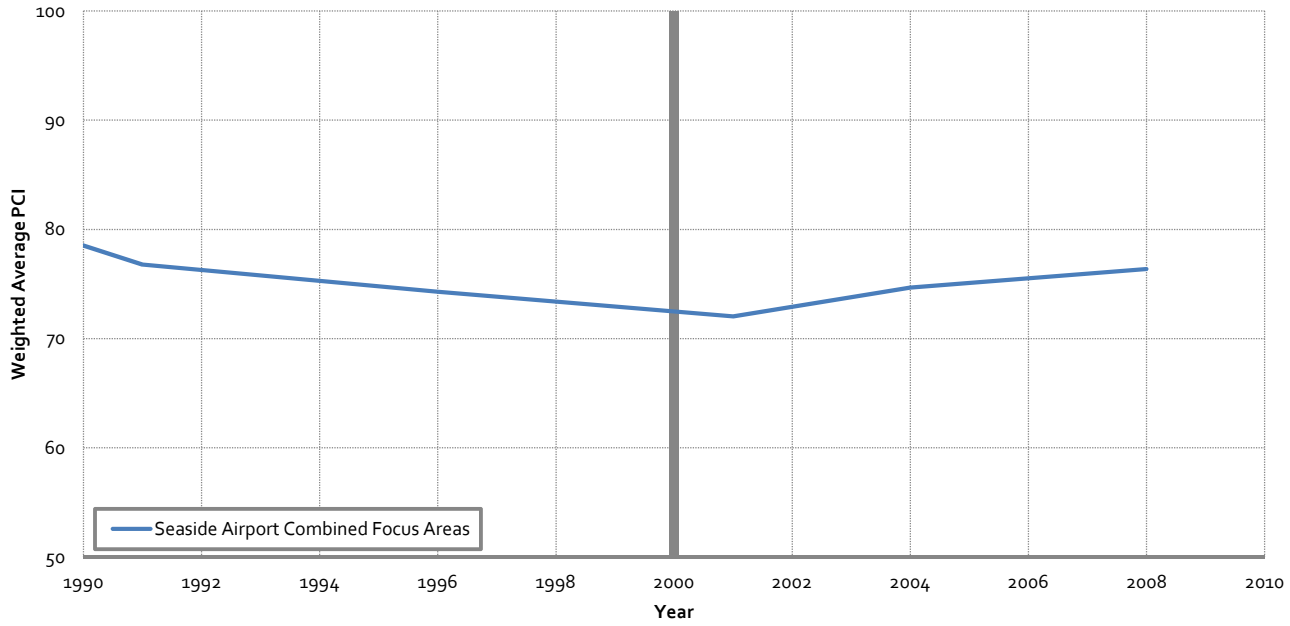
Newport Apron Focus Areas					
Apron-01		A01NE-02		A01NE-03	
Focus Area (sf)	**87,190**	Area (sf)	15,880	Area (sf)	71,310
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1944	**100**	8/1/44	100		
1984	**100**	8/1/84	100	8/1/84	100
1988	**82**	*1988**	*92.4*	2/5/88	80
1995	**86**	5/8/95	79	5/8/95	87
1999	**83**	4/7/99	78	4/7/99	84
2001	**80**	9/2/01	72	9/2/01	82
2004	**89**	9/30/04	82	9/30/04	90
2008	**86**	2/4/08	73	2/4/08	89

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Seaside
Pavement Type:	Runways, Taxiways, Aprons

Seaside Airport Combined Focus Areas



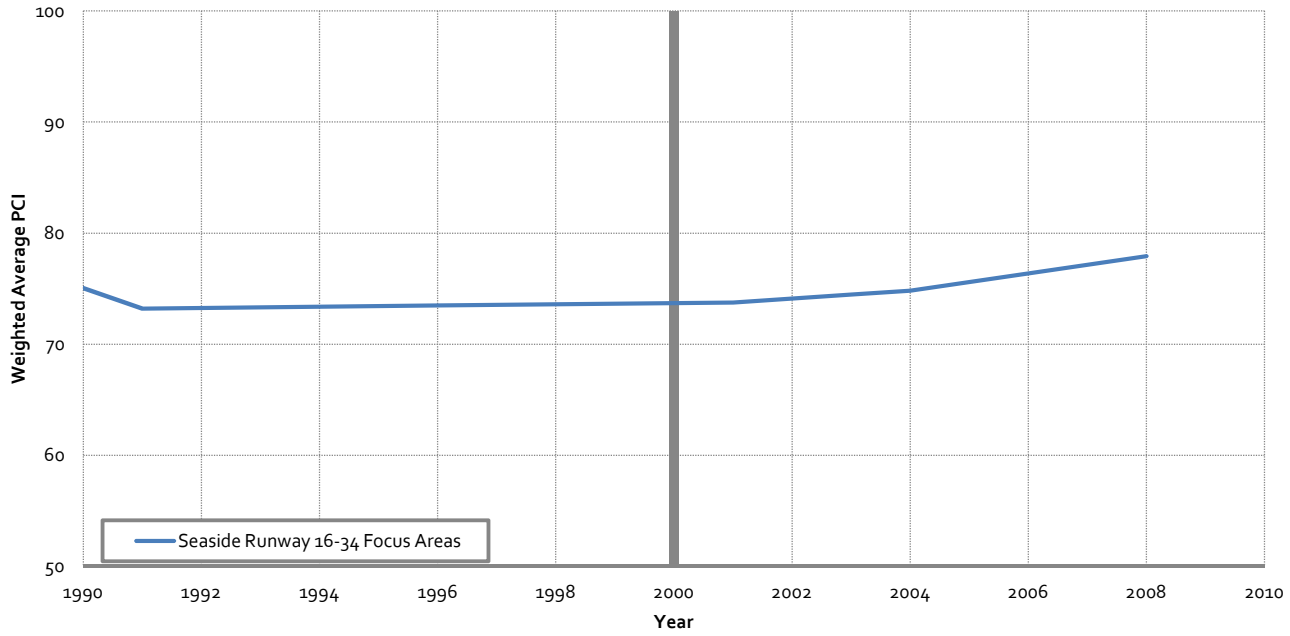
Seaside Airport Combined Focus Areas							
Seaside Airport		Runway 16-34		Taxiway 01		Apron 01	
Total Focus Area (sf)	**205,770**	Focus Area (sf)	111,850	Focus Area (sf)	70,830	Focus Area (sf)	23,090
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1961	**100**	1961	100	1961	100	1961	100
1987	**84**	1987	81	1987	89	1987	83
1991	**77**	1991	73	1991	83	1991	75
1996	**74**	1996	73	1996	75	1996	76
2001	**72**	2001	74	2001	69	2001	73
2003	**74**	2003	74	*2003**	*73*	*2003**	*73*
2004	**75**	2004	75	2004	75	2004	73
2008	**76**	2008	78	2008	76	2008	70

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Seaside
Pavement Type:	Runway

Seaside Runway 16-34 Focus Areas

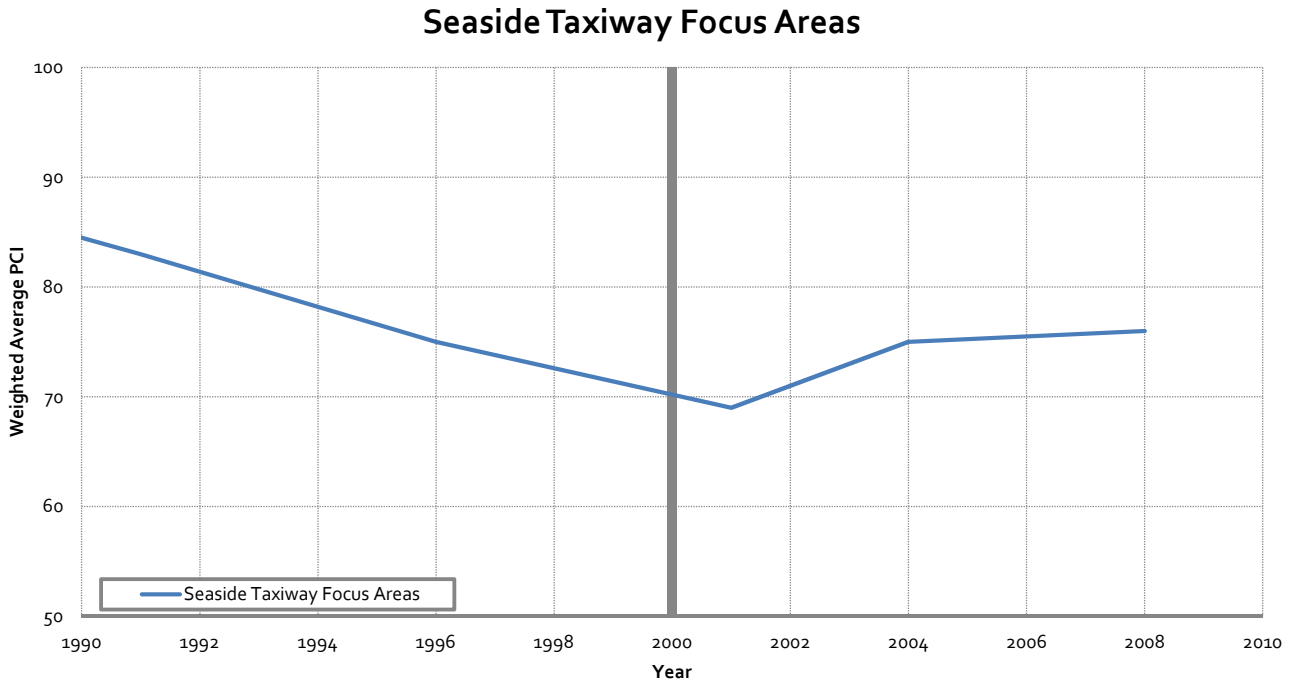


Seaside Runway 16-34 Focus Areas							
Runway 16-34		R16SS-01		R16SS-03		R16SS-04	
Focus Area (sf)	**111,850**	Area (sf)	8,000	Area (sf)	96,350	Area (sf)	7,500
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1961	**100**	1/1/61	100	8/1/61	100	1/1/61	100
1987	**81**	*1987**	*79*	6/24/87	81	*1987**	*77*
1991	**73**	*1991**	*75*	9/7/91	73	*1991**	*74*
1996	**73**	*1996**	*71*	6/23/96	74	*1996**	*69*
2001	**74**	9/4/01	67	9/4/01	75	9/4/01	65
2003	**74**	*2003**	*68*	*2003**	*76*	*2003**	*66*
2004	**75**	10/1/04	68	10/1/04	76	10/1/04	67
2008	**78**	2/11/08	80	2/1/08	78	2/1/08	75

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

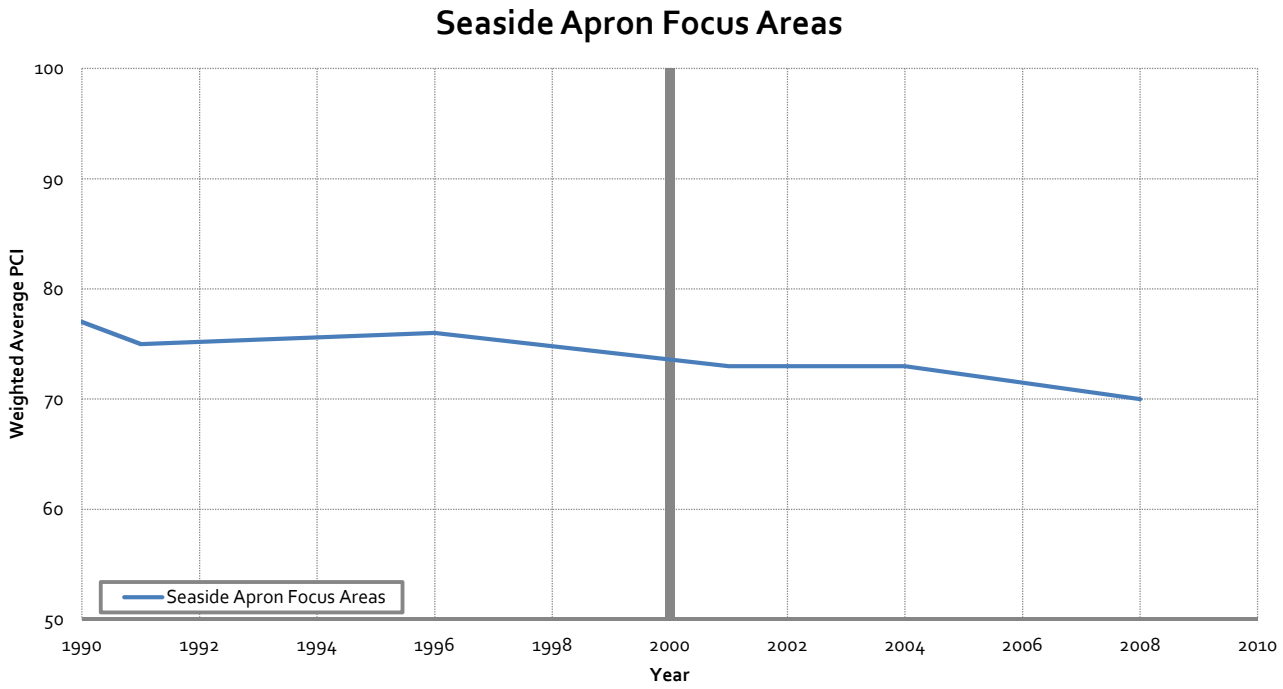
Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Seaside
Pavement Type:	Taxiway



Seaside Taxiway Focus Areas			
Taxiway 01		T01SS-01	
Focus Area (sf)	**70,830**	Area (sf)	70,830
Year	**Weighted Average PCI**	Date	PCI
1961	100	8/1/61	100
1987	89	6/24/87	89
1991	83	9/7/91	83
1996	75	6/23/96	75
2001	69	9/4/01	69
2004	75	10/1/04	75
2008	76	2/1/08	76

Pavement Condition Index Report Summary

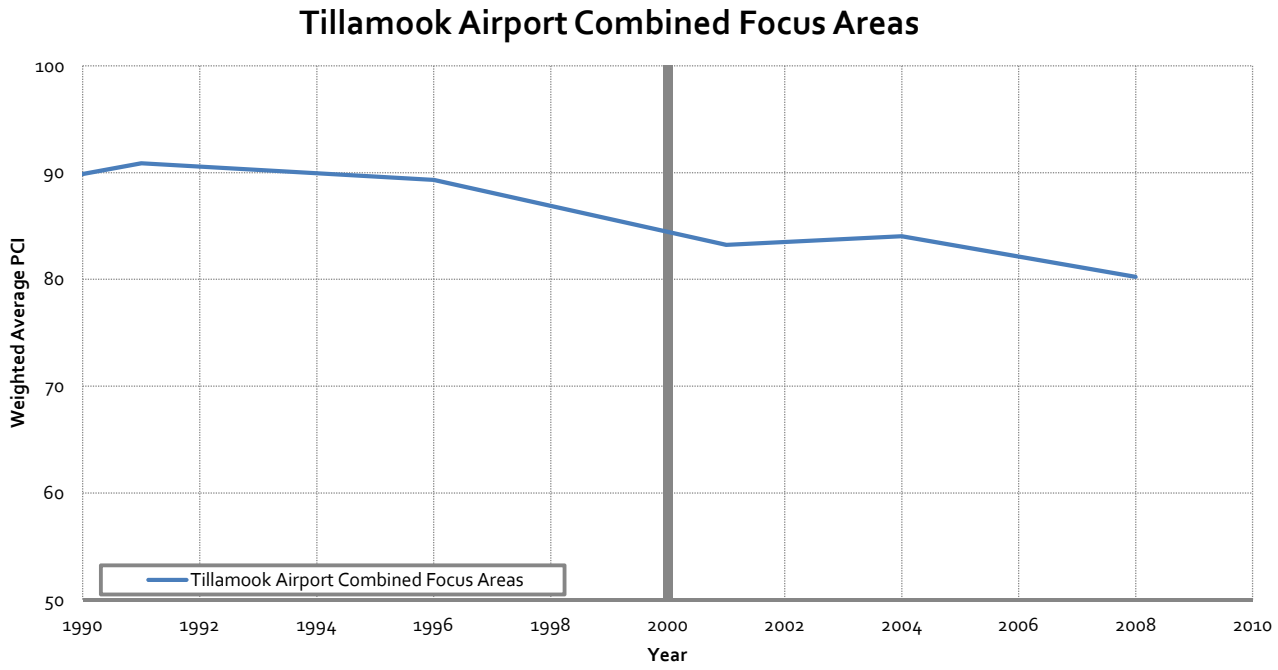
Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Seaside
Pavement Type:	Aprons



Seaside Apron Focus Areas			
Apron 01		A01SS-03	
Focus Area (sf)	**23,090**	Area (sf)	23,090
Year	**Weighted Average PCI**	Date	PCI
1961	**100**	1/1/61	100
1987	**83**	6/24/87	83
1991	**75**	9/17/91	75
1996	**76**	6/23/96	76
2001	**73**	9/4/01	73
2004	**73**	10/1/04	73
2008	**70**	2/1/08	70

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron



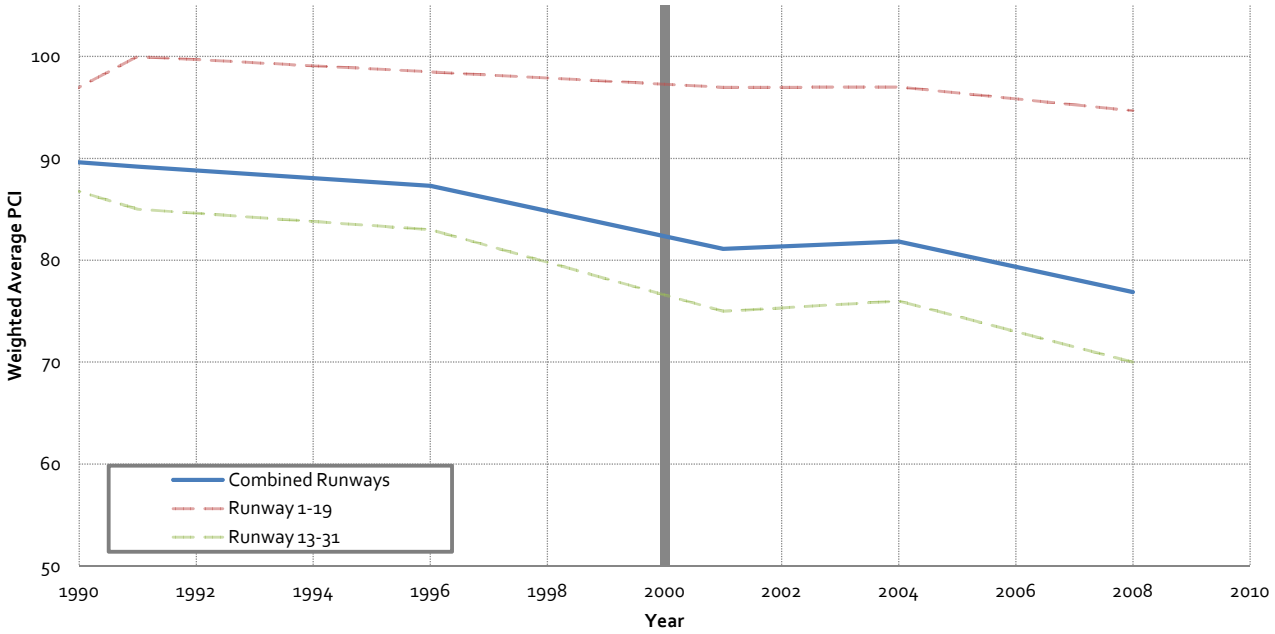
Tillamook Airport Combined Focus Areas							
Tillamook Airport		Combined Runways		Taxiway A		Apron 01	
Total Focus Area (sf)	**909,638**	Focus Area (sf)	651,252	Focus Area (sf)	201,386	Focus Area (sf)	57,000
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1943	**100**	1943	100	1943	100	1943	100
1983	**92**	1983	100	1983	70	*1983**	*85*
1987	**87**	1987	91	1987	75	1987	83
1991	**91**	1991	89	1991	100	1991	78
1996	**89**	1996	87	1996	99	1996	77
2001	**83**	2001	81	2001	98	2001	54
2004	**84**	2004	82	2004	96	2004	68
2008	**80**	2008	77	2008	90	2008	84

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron

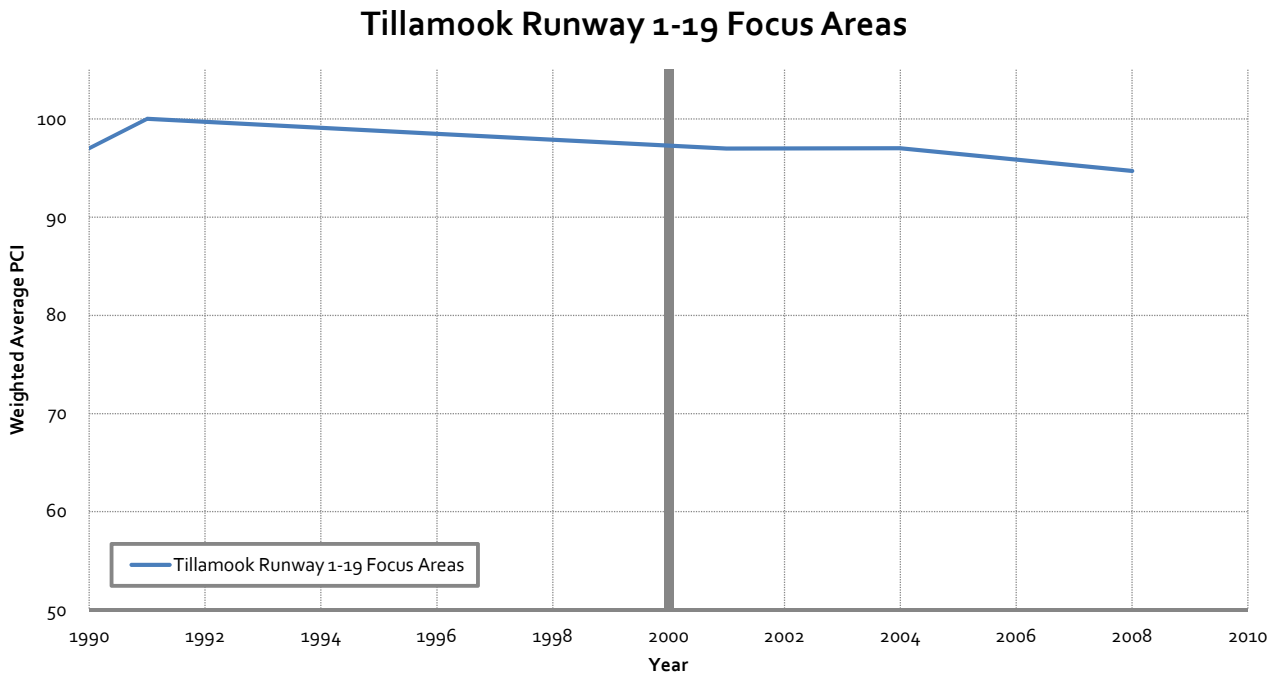
Tillamook Combined Runways



Tillamook Combined Runways					
Combined Runways		Runway 1-19		Runway 13-31	
Focus Area (sf)	**651,252**	Area (sf)	181,252	Area (sf)	470,000
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI
1943	100	1943	100	1943	100
1983	100	1983	100	1983	100
1987	91	1987	88	1987	92
1991	89	1991	100	1991	85
1996	87	1996	98	1996	83
2001	81	2001	97	2001	75
2004	82	2004	97	2004	76
2008	77	2008	95	2008	70

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron

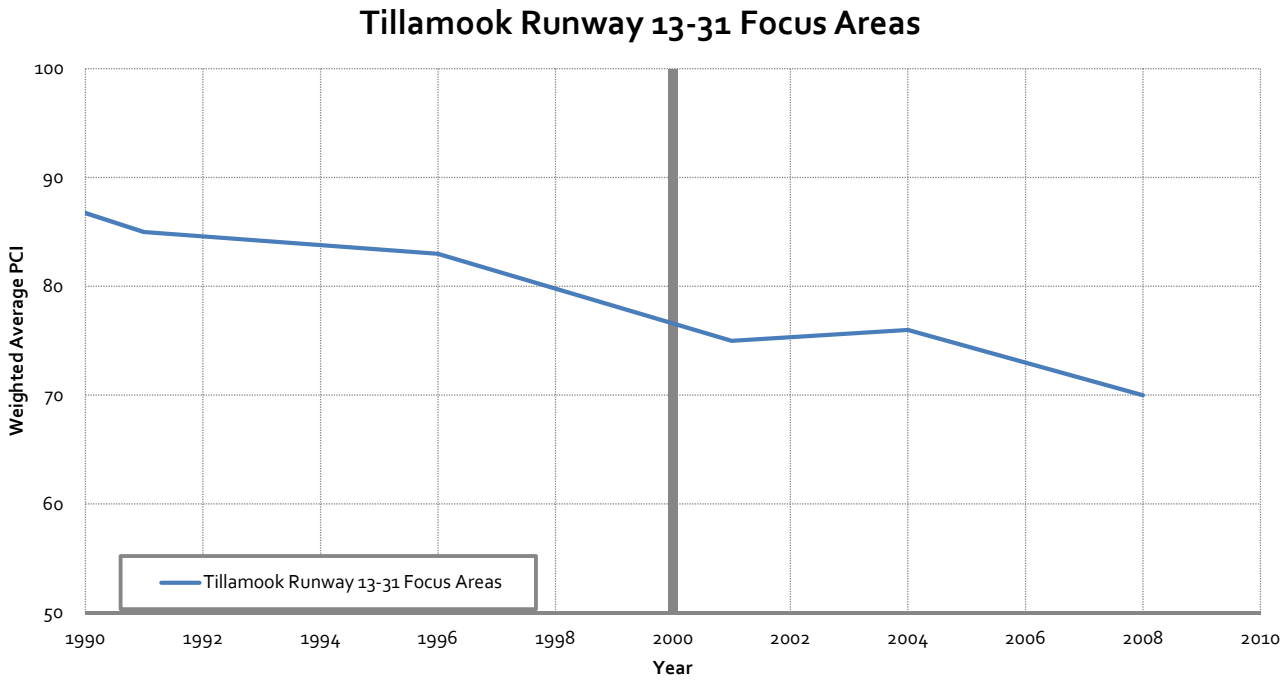


Tillamook Runway 1-19 Focus Areas							
Runway 1-19		R01TI-00		R01TI-01		R01TI-02	
Focus Area (sf)	**181,252**	Area (sf)	6,225	Area (sf)	60,442	Area (sf)	114,585
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1943	**100**	9/3/43	100	6/1/43	100	8/1/43	100
1983	**100**	*1983**	*100*	6/1/83	100	8/1/83	100
1987	**88**	*1987**	*100*	*1987**	*100*	6/25/87	64
1991	**100**	9/1/91	100	6/1/91	100	8/1/91	100
1996	**98**	*1996**	*98*	*1996**	*98*	6/28/96	99
2001	**97**	*2001**	*97*	9/6/01	96	9/6/01	98
2004	**97**	10/2/04	96	10/2/04	98	10/2/04	97
2008	**95**	2/1/08	91	2/1/08	97	2/1/08	96

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron

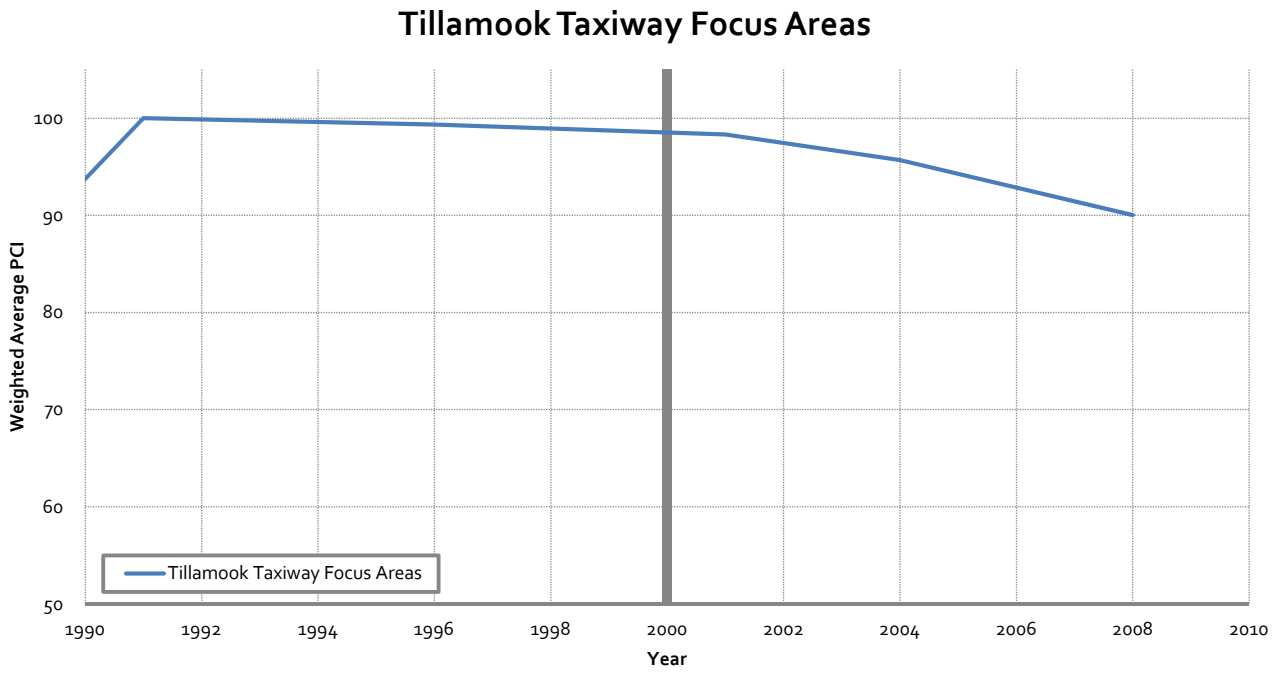


Tillamook Runway 13-31 Focus Areas			
Runway 13-31		R13TI-01	
Focus Area (sf)	**470,000**	Area (sf)	470,000
Year	**Weighted Average PCI**	Date	PCI
1943	**100**	8/1/43	100
1983	**100**	8/1/83	100
1987	**92**	6/25/87	92
1991	**85**	9/9/91	85
1996	**83**	6/28/96	83
2001	**75**	9/6/01	75
2004	**76**	10/2/04	76
2008	**70**	2/1/08	70

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron

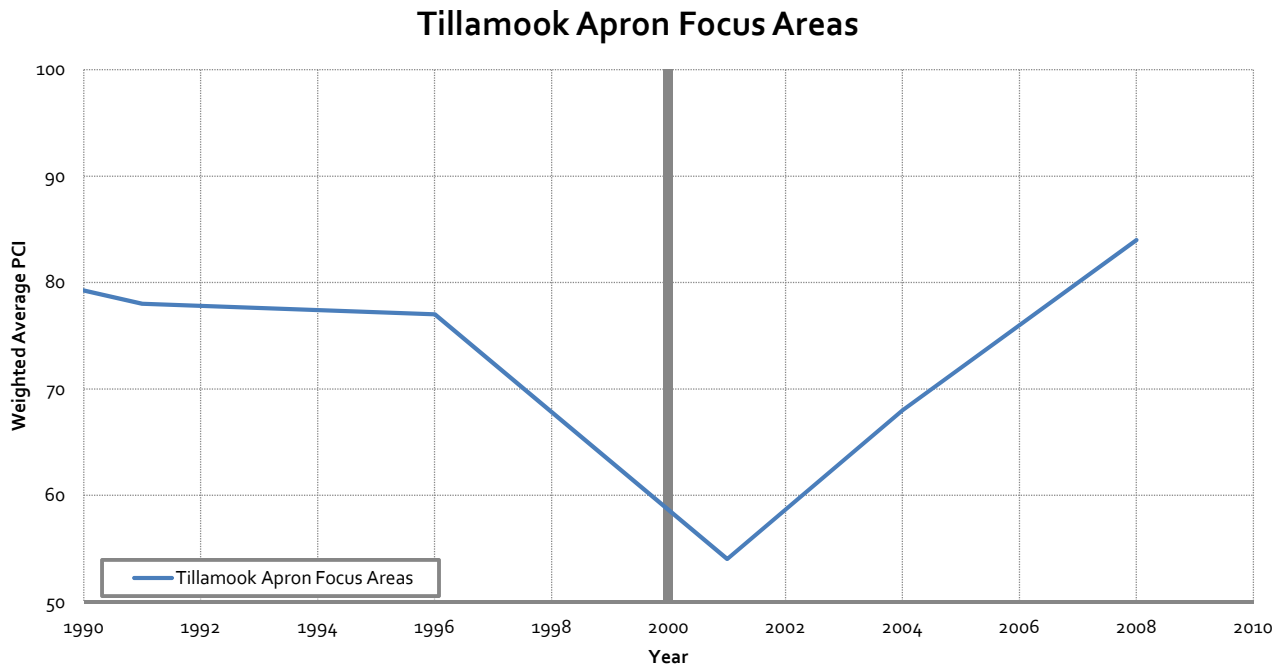


Tillamook Taxiway Focus Areas					
Taxiway A		TATI-01		TATI-02	
Focus Area (sf)	**201,386**	Area (sf)	68,297	Area (sf)	133,089
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1943	**100**	8/1/43	100	8/1/43	100
1983	**70**	8/1/83	100	6/26/87	55
1987	**75**	6/26/87	70	*1987**	*78*
1991	**100**	9/1/91	100	8/1/91	100
1996	**99**	6/28/96	100	6/28/96	99
2001	**98**	9/6/01	99	9/6/01	98
2004	**96**	10/2/04	99	10/2/04	94
2008	**90**	2/1/08	92	2/1/08	89

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Coastal
PMP Region:	Northwestern
Airports:	Tillamook
Pavement Type:	Runway, Taxiway, and Apron

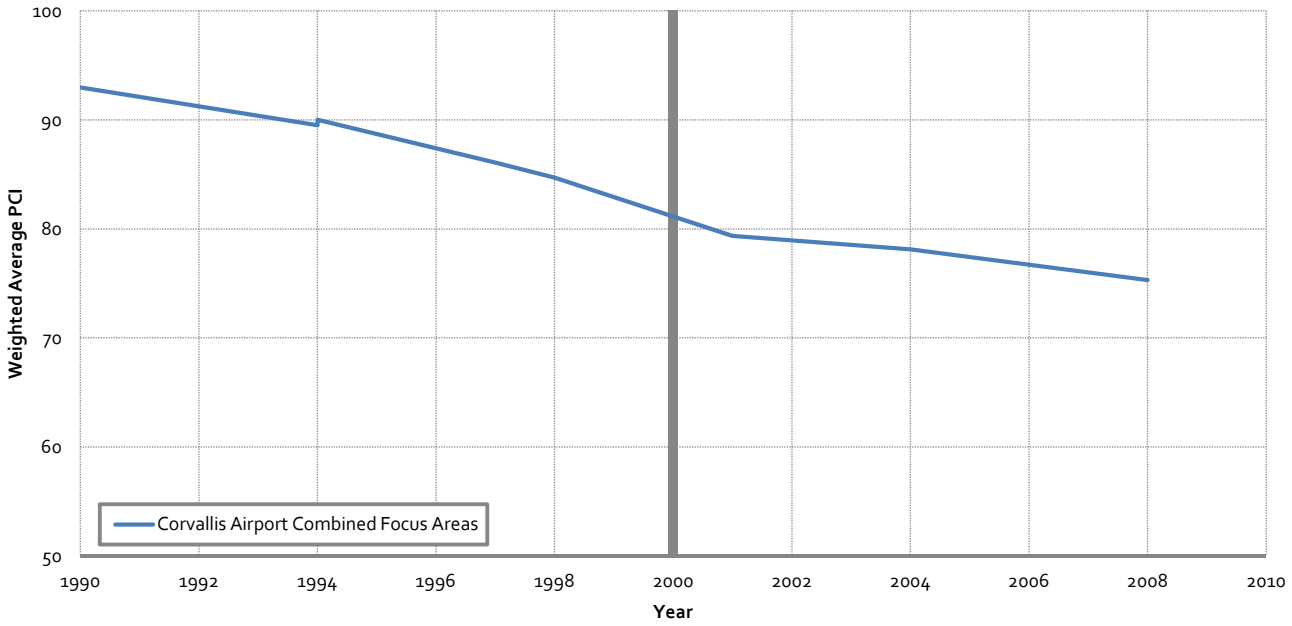


Tillamook Apron Focus Areas			
Apron 01		A01TI-01	
Focus Area (sf)	**57,000**	Area (sf)	57,000
Year	**Weighted Average PCI**	Date	PCI
1943	100	8/1/43	100
1987	83	6/26/87	83
1991	78	9/1/91	78
1996	77	6/28/96	77
2001	54	9/6/01	54
2004	68	10/2/04	68
2008	84	2/1/08	84

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Runways, Taxiways

Corvallis Airport Combined Focus Areas



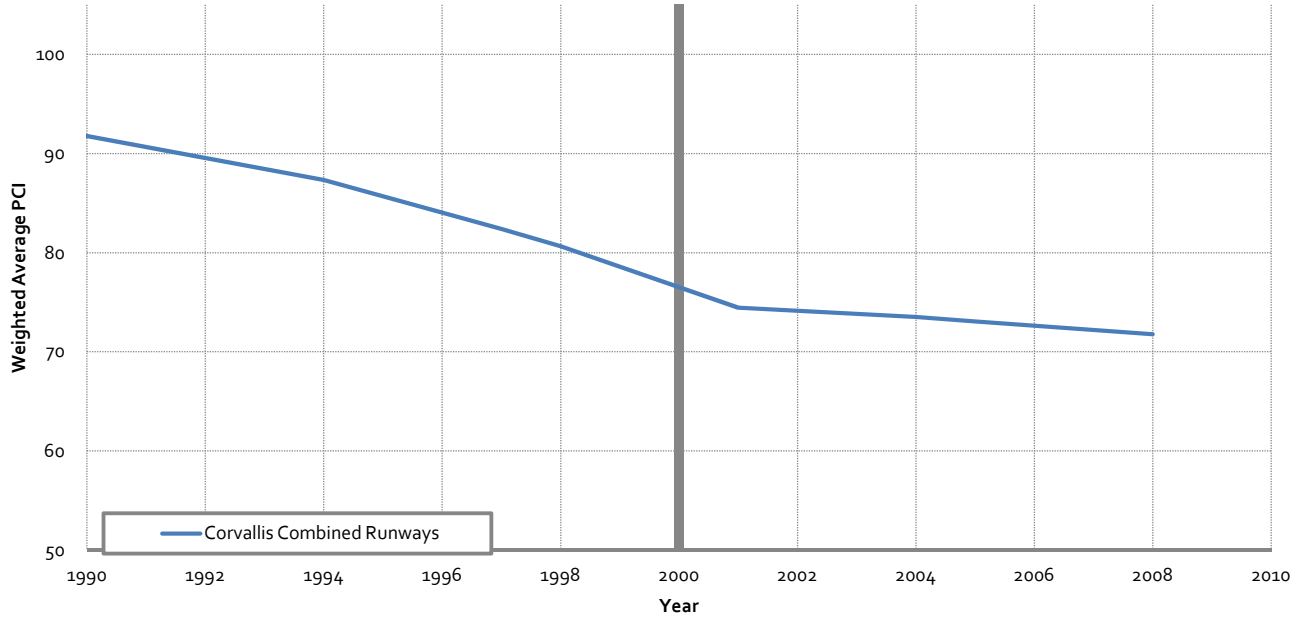
Corvallis Airport Combined Focus Areas					
Corvallis Airport		Combined Runway		Taxiways	
Total Focus Area (sf)	**1,504,897**	Focus Area (sf)	######	Focus Area (sf)	354,393
Year	**Weighted Average PCI**	Year	Weighted Average	Year	Weighted Average
1942	**100**	1942	100	1942	100
1985	**100**	1985	100	*1985**	*97*
1987	**96**	*1987**	*96*	1987	97
1988	**95**	1988	94	1988	97
1994	**90**	1994	87	1994	97
1994	**90**	*1994**	*87*	1994	99
1997	**86**	1997	82	1997	98
1998	**85**	1998	81	1998	98
2001	**79**	2001	74	2001	95
2004	**78**	2004	74	2004	93
2005	**77**	2005	73	*2005**	*92*
2008	**75**	2008	72	2008	87

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Runways

Corvallis Combined Runways



Corvallis Combined Runways					
Combined Runway		Runway 17-35		Runway 1-19	
Focus Area (sf)	**1,150,504**	Total Areas (sf)	885,300	Total Area (sf)	265,204
Year	**Weighted Average PCI**	Year	Weighted Average	Year	Weighted Average
1942	**100**	1942	100	1942	100
1985	**100**	1985	100	*1985**	*100*
1988	**94**	1988	92	*1988**	*100*
1994	**87**	1994	84	*1994**	*100*
1997	**82**	*1997**	*77*	1997	100
1998	**81**	1998	75	1998	100
2001	**74**	2001	67	2001	100
2004	**74**	2004	66	2004	97
2005	**73**	*2005***	*100 (66)*	2005	95
2008	**72**	*2008***	*100 (66)*	2008	90

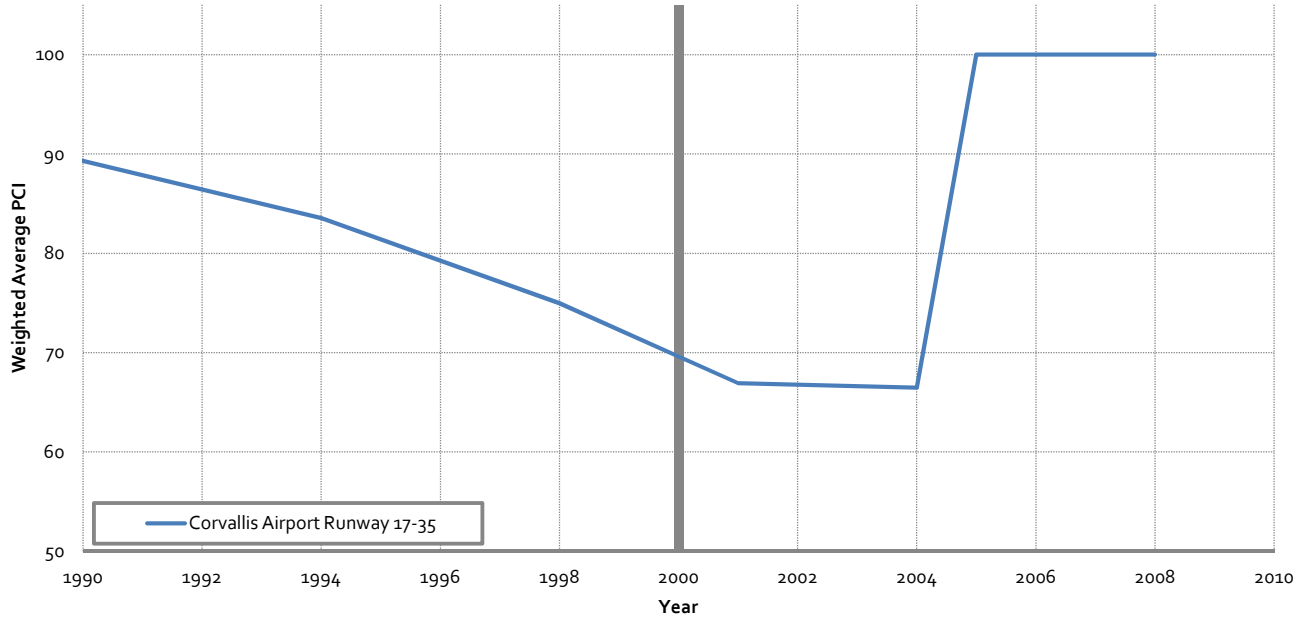
* PCI was interpolated to perform combined Weighted Average.

**Runway 17-35 was rehabilitated in 2005, so the PCI values for 2005-2008 have been extrapolated using the rate of decline from years 2001-2004 to get a more representative trend.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Runway

Corvallis Airport Runway 17-35



Corvallis Airport Runway 17-35							
Runway 17-35		R17CR-01A		R17CR-01B		R17CR-01C	
Total Areas (sf)	**885,300**	Area (sf)	253,350	Area (sf)	253,350	Area (sf)	253,350
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1942	**100**	8/1/42	100	8/1/42	100	8/1/42	100
1985	**100**	8/1/85	100	8/1/85	100	8/1/85	100
1988	**92**	*1988**	*94*	1/14/88	90	*1988**	*93*
1994	**84**	*1994**	*81*	6/29/94	83	*1994**	*78*
1998	**75**	*1998**	*73*	10/10/98	71	*1998**	*68*
2001	**67**	8/31/01	67	8/31/01	59	8/31/01	61
2004	**66**	9/29/04	63	9/29/04	58	9/29/04	62
2005	**100**	9/1/05	100	9/1/05	100	9/1/05	100
2008	**100**	2/5/08	100	2/5/08	100	2/5/08	100
		R17CR-02A		R17CR-02B		R17CR-02C	
		Area (sf)	41,750	Area (sf)	41,750	Area (sf)	41,750
		Date	PCI	Date	PCI	Date	PCI
		8/1/94	100	8/1/94	100	8/1/94	100
		*1998**	*100*	10/10/98	100	*1998**	*100*
		8/31/01	100	8/31/01	84	8/31/01	100
		9/29/04	100	9/29/04	99	9/29/04	99
		9/1/05	100	9/1/05	100	9/1/05	100
		2/15/08	100	2/5/08	100	2/15/08	100

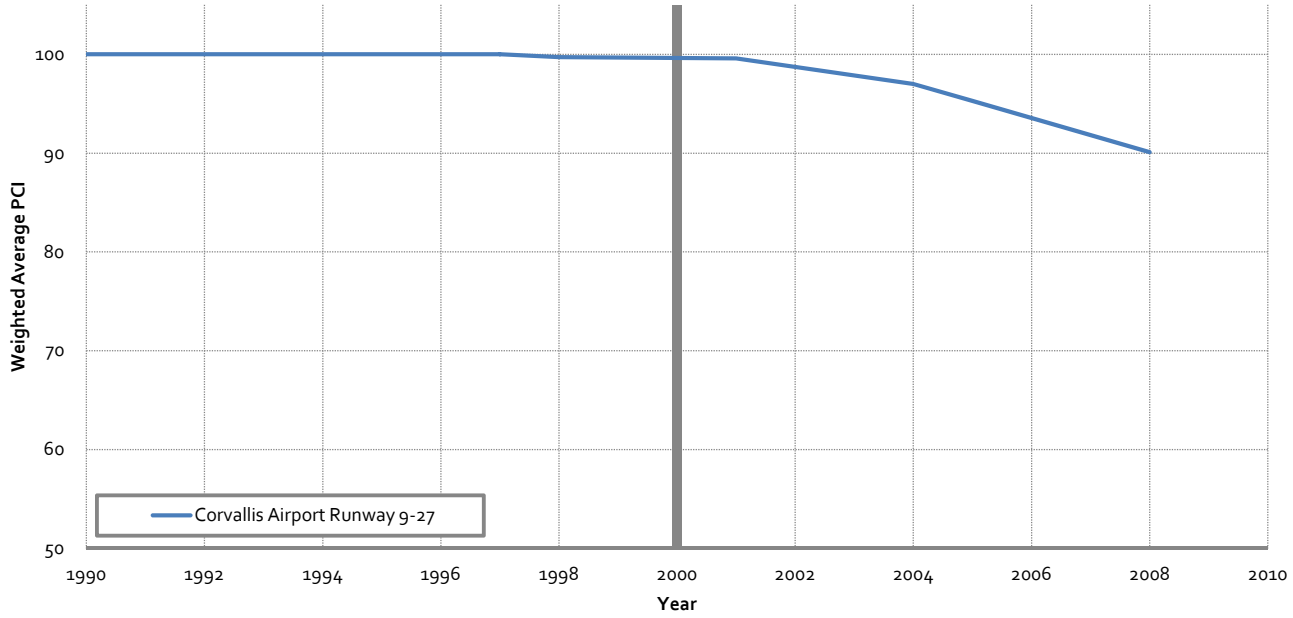
Continued below

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Runway

Corvallis Airport Runway 9-27



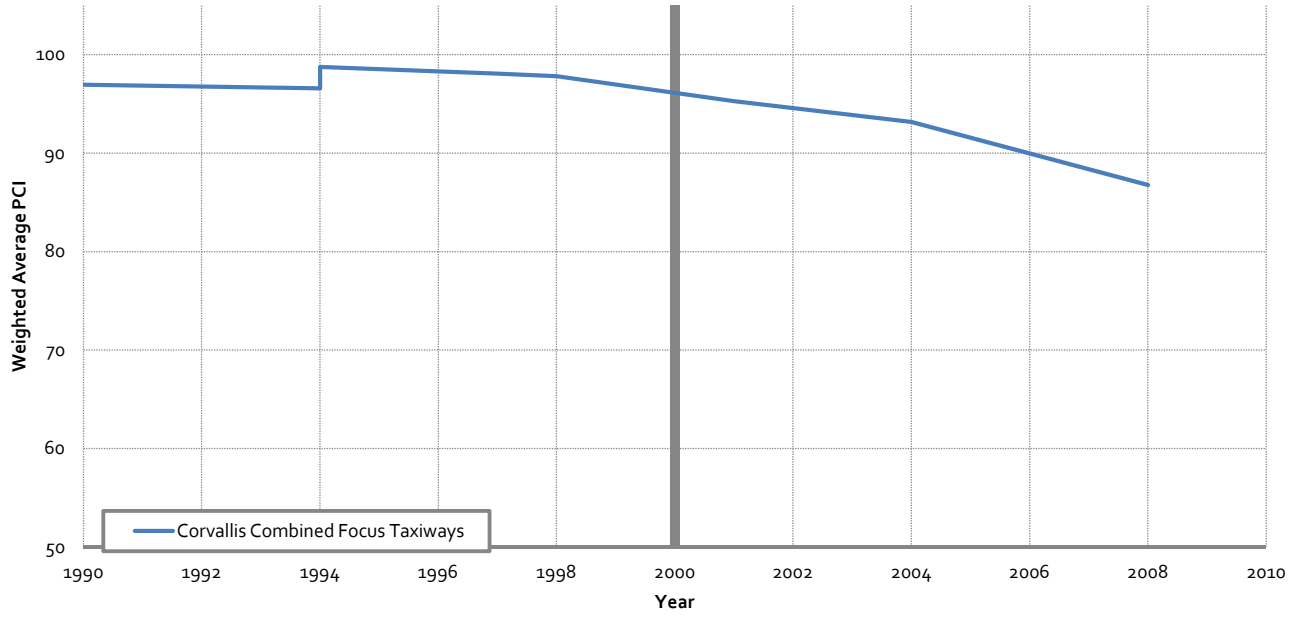
Corvallis Airport Runway 9-27							
Runway 9-27		R09CR-01		R09CR-02		R09CR-03	
Total Area (sf)	**265,204**	Area (sf)	5,659	Area (sf)	244,500	Area (sf)	15,045
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1942	**100**	8/1/42	100	8/1/42	100	8/1/42	100
1997	**100**	8/1/97	100	8/1/97	100	8/1/97	100
1998	**100**	*1998**	*100*	10/10/98	100	10/10/98	95
2001	**100**	*2001**	*100*	8/31/01	100	8/31/01	93
2004	**97**	*2004**	*100*	9/29/04	97	9/29/04	96
2005	**95**	5/3/05	100	*2005**	*95*	*2005**	*94*
2008	**90**	2/5/08	100	2/5/08	90	2/5/08	88

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Taxiways

Corvallis Combined Focus Taxiways



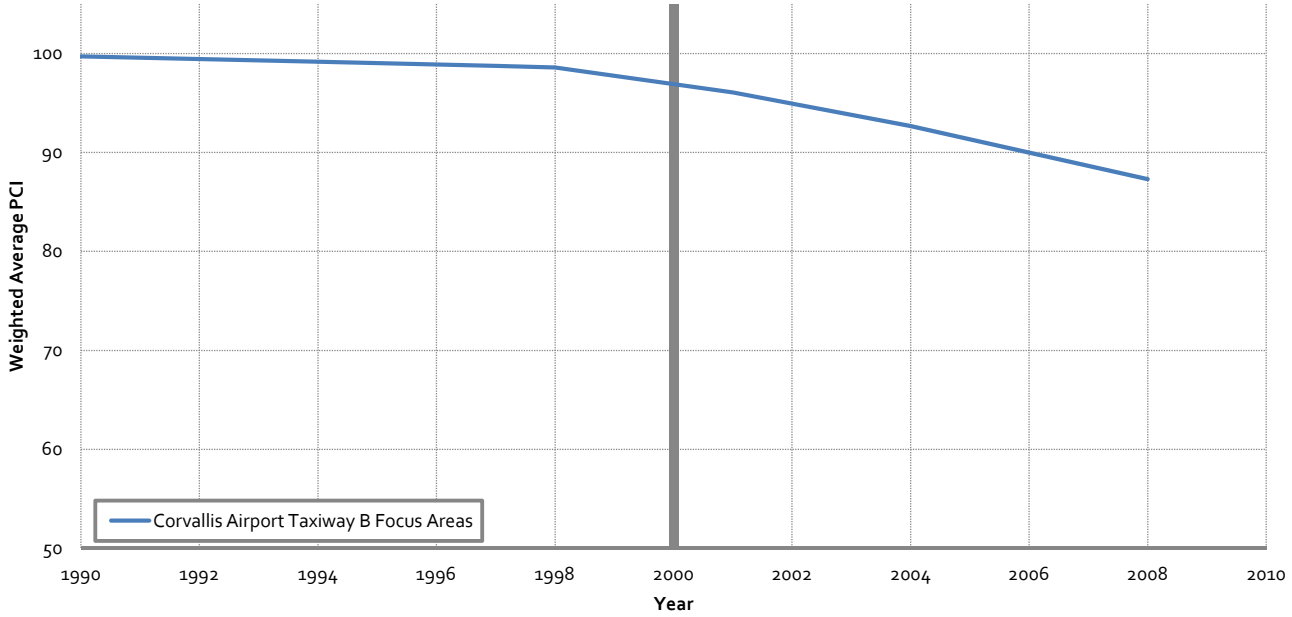
Corvallis Combined Focus Taxiways					
Taxiways		Taxiway B		Taxiway C	
Focus Area (sf)	**354,393**	Focus Area (sf)	252,301	Total Area (sf)	102,092
Year	**Weighted Average PCI**	Year	Weighted Average	Year	Weighted Average
1942	**100**			1942	100
1987	**97**	1987	100	1987	91
1988	**97**	1988	100	1988	90
1994	**97**	1994	99	1994	91
1994	**99**	1994	99	1994	98
1997	**98**	1997	99	*1997**	*96*
1998	**98**	1998	99	1998	96
2001	**95**	2001	96	2001	93
2004	**93**	2004	93	2004	94
2008	**87**	2008	87	2008	85

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Taxiway

Corvallis Airport Taxiway B Focus Areas

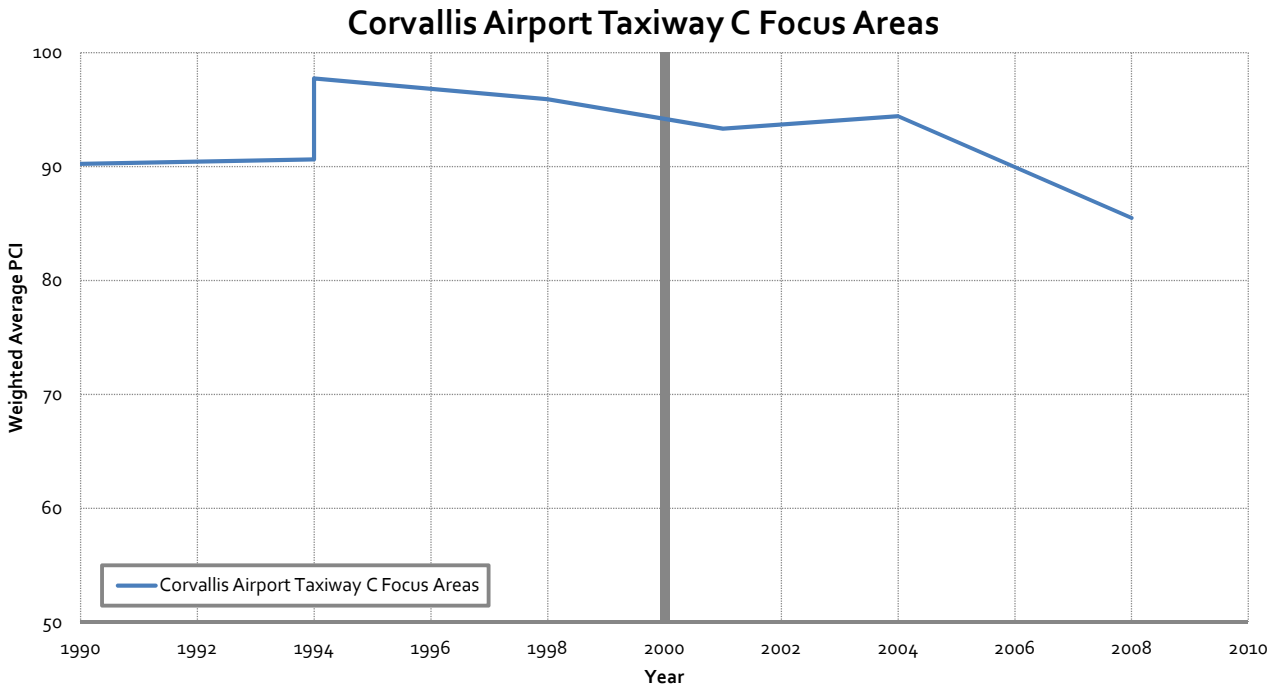


Corvallis Airport Taxiway B Focus Areas							
Taxiway B		TBCR-01		TBCR-03		TBCR-04	
Focus Area (sf)	**252,301**	Area (sf)	32,103	Area (sf)	178,448	Area (sf)	41,750
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1987	**100**			8/1/87	100		
1988	**100**			11/13/88	100		
1994	**99**			6/29/94	99	8/1/94	100
1997	**99**	8/1/97	100	*1997**	*98*	*1997**	*100*
1998	**99**	10/10/98	100	10/10/98	98	10/10/98	100
2001	**96**	8/31/01	97	8/31/01	95	8/31/01	100
2004	**93**	9/29/04	98	9/29/04	90	9/29/04	100
2008	**87**	2/5/08	94	2/5/08	85	2/5/08	92

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Corvallis
Pavement Type:	Taxiway



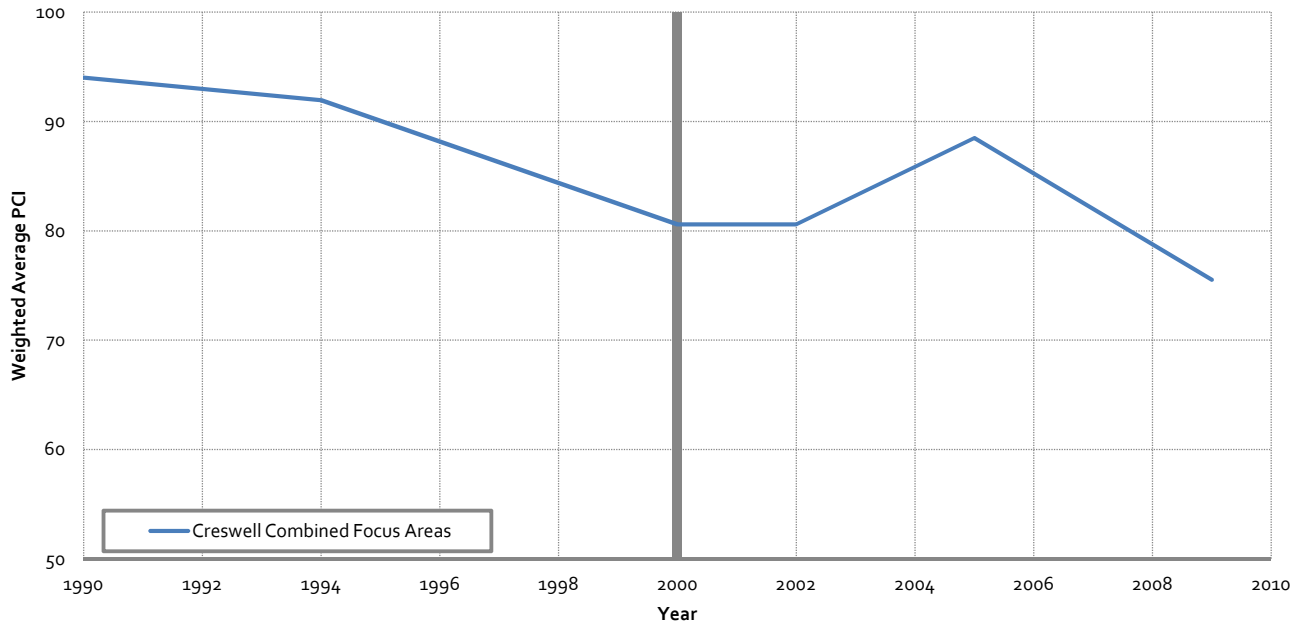
Corvallis Airport Taxiway C Focus Areas							
Taxiway C		TCCR-02		TCCR-03		TCCR-06	
Total Area (sf)	**102,092**	Area (sf)	11,181	Area (sf)	72,329	Area (sf)	18,582
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1942	**100**					8/1/42	100
1987	**91**	8/1/87	100	8/1/87	100	*1987**	*48*
1988	**90**	*1988**	*100*	*1988**	*100*	1/13/88	47
1994	**91**	*1994**	*98*	*1994**	*97*	6/29/94	61
1994	**98**	6/29/94	98	*1994**	*97*	8/2/94	100
1998	**96**	10/10/98	92	*1998**	*95*	10/10/98	100
2001	**93**	8/31/01	88	*2001**	*94*	8/31/01	93
2004	**94**	9/24/04	96	9/29/04	93	9/29/04	99
2008	**85**	2/5/08	89	2/5/08	83	2/5/08	93

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Southern
Airports:	Creswell
Pavement Type:	Runways, Taxiways, Aprons

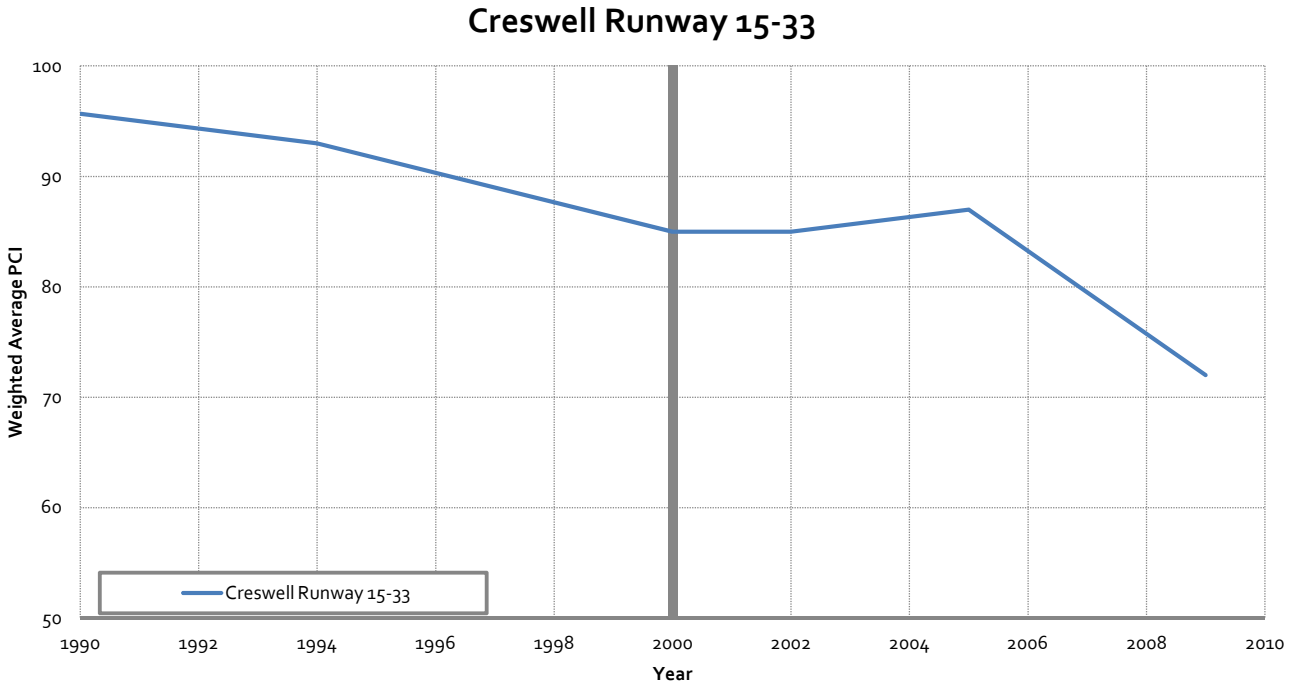
Creswell Combined Focus Areas



Creswell Combined Focus Areas							
Creswell Airport		R15CE-01		T01CE-01		A01CE-01	
Total Area (sf)	**484,628**	Focus Area (sf)	186,000	Focus Area (sf)	127,558	Focus Area (sf)	171,070
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1987	**100**	1987	100	1987	100		
1988	**95**	1988	97	1988	99	1988	100
1994	**92**	1994	93	1994	93	1994	90
2000	**81**	2000	85	2000	87	2000	71
2002	**81**	2002	85	2002	87	2002	71
2005	**88**	2005	87	2005	90	2005	89
2009	**76**	2009	72	2009	80	2009	76

Pavement Condition Index Report Summary

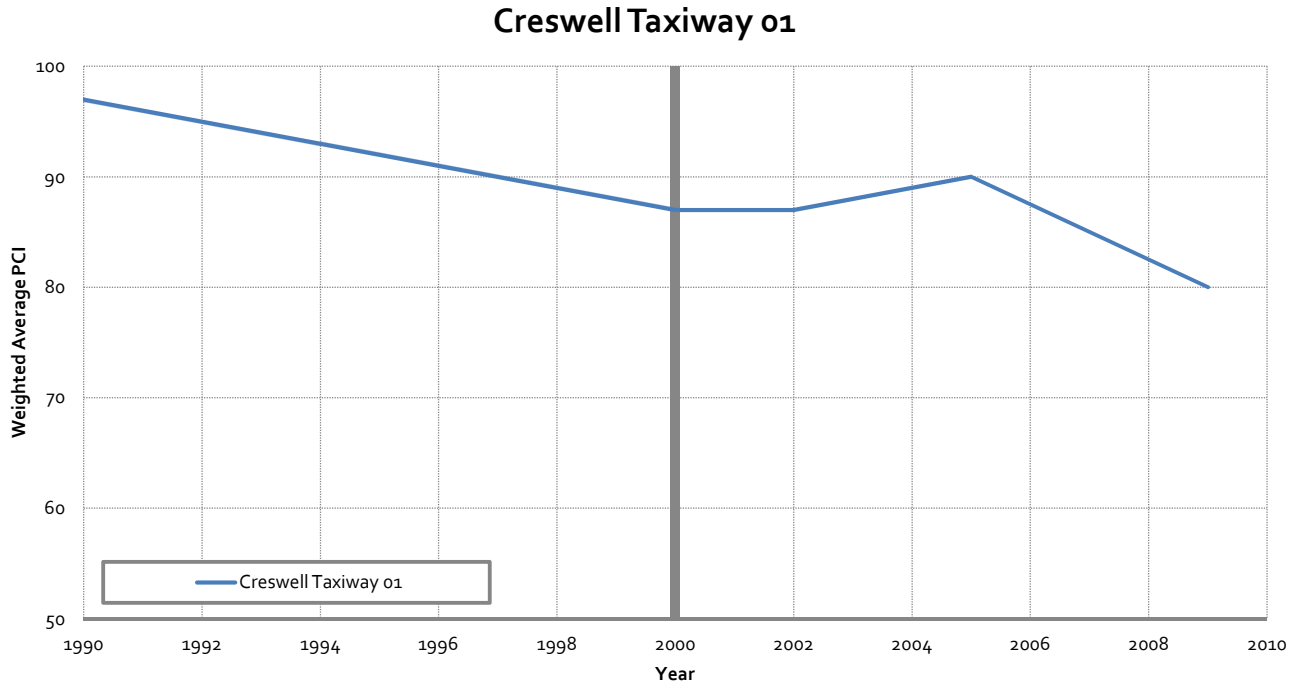
Climate Region:	Oregon Valley
PMP Region:	Southern
Airports:	Creswell
Pavement Type:	Runway



Creswell Runway 15-33			
Creswell Runway 15-33		R15CE-01	
Focus Area (sf)	**186,000**	Area (sf)	186,000
Year	**Weighted Average PCI**	Date	PCI
1987	**100**	9/1/87	100
1988	**97**	1/15/88	97
1994	**93**	7/1/94	93
2000	**85**	3/28/00	85
2002	**85**	10/23/02	85
2005	**87**	9/21/05	87
2009	**72**	3/24/09	72

Pavement Condition Index Report Summary

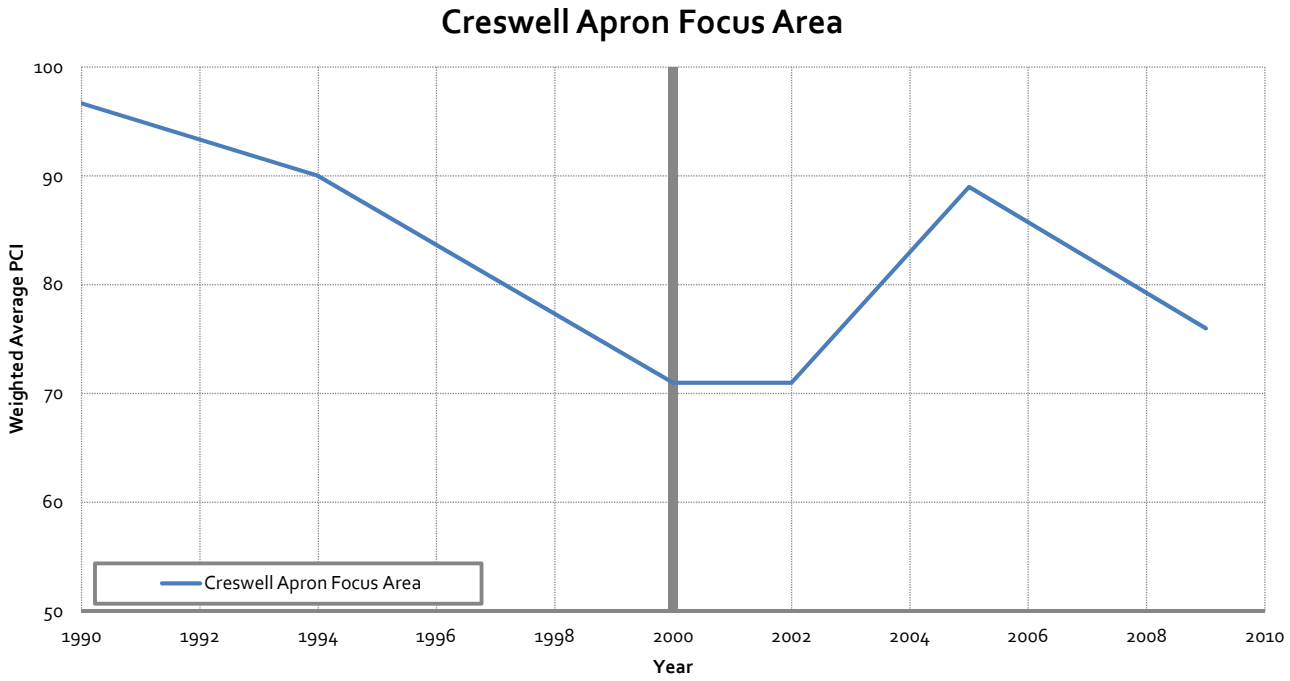
Climate Region:	Oregon Valley
PMP Region:	Southern
Airports:	Creswell
Pavement Type:	Taxiway



Creswell Taxiway 01			
Creswell Taxiway 01		T01CE-01	
Focus Area (sf)	**127,558**	Area (sf)	127,558
Year	**Weighted Average PCI**	Date	PCI
1987	**100**	9/1/87	100
1988	**99**	1/15/88	99
1994	**93**	7/1/94	93
2000	**87**	3/28/00	87
2002	**87**	10/23/02	87
2005	**90**	9/21/05	90
2009	**80**	3/24/09	80

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Southern
Airports:	Creswell
Pavement Type:	Apron

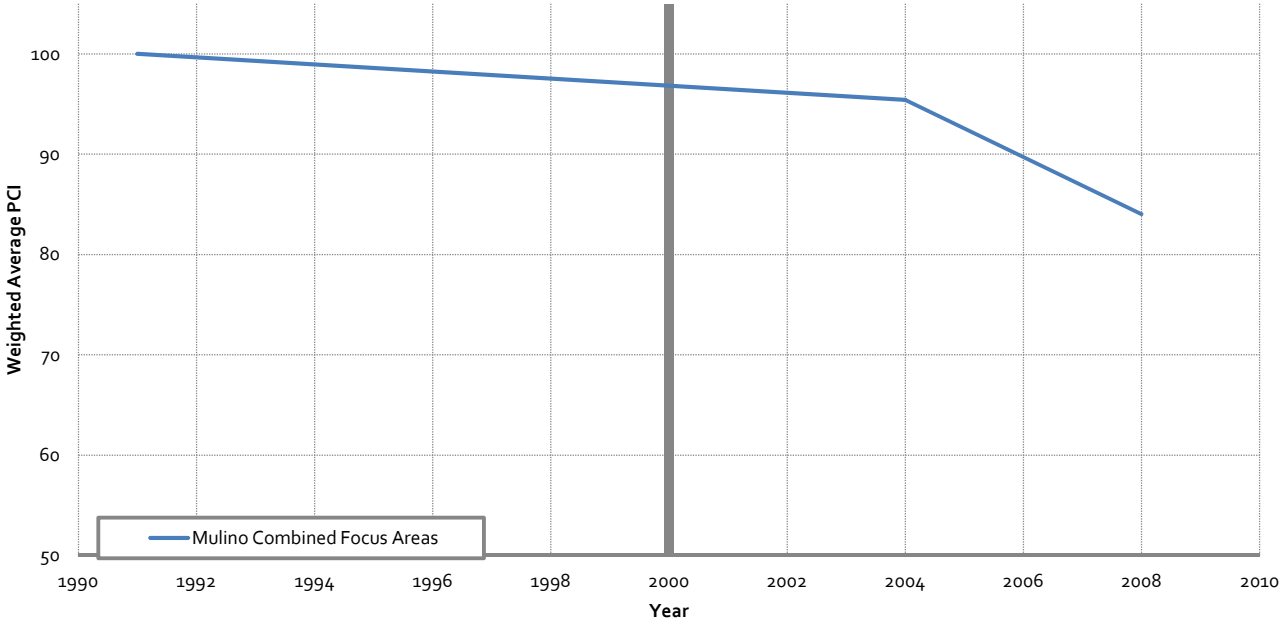


Creswell Apron Focus Area			
Creswell Apron 01		A01CE-01	
Focus Area (sf)	**171,070**	Area (sf)	171,070
Year	**Weighted Average PCI**	Date	PCI
1988	**100**	9/1/88	100
1994	**90**	7/1/94	90
2000	**71**	3/28/00	71
2002	**71**	10/23/02	71
2005	**89**	9/21/05	89
2009	**76**	3/24/09	76

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Mulino
Pavement Type:	Runways, Taxiways, Aprons

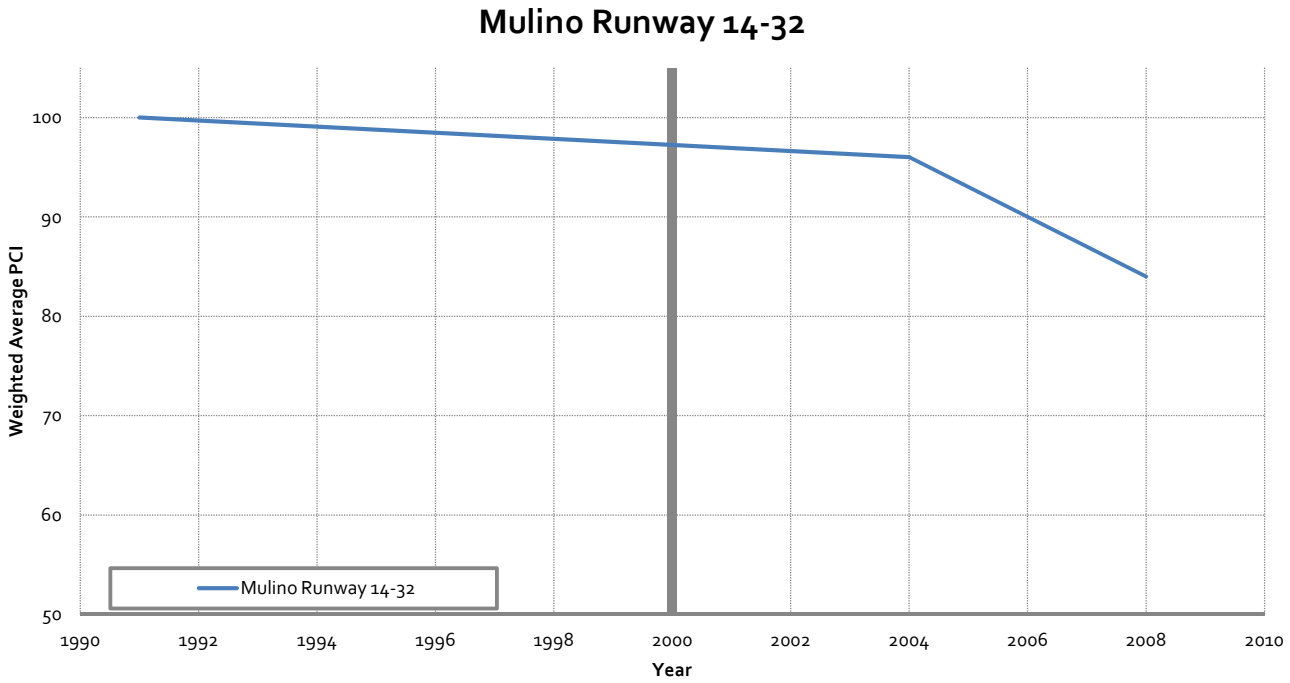
Mulino Combined Focus Areas



Mulino Combined Focus Areas							
Mulino Airport		Runway 14-32		Taxiway 01		Arpon 01	
Focus Area (sf)	**561,169**	Focus Area (sf)	360,000	Focus Area (sf)	144,000	Focus Area (sf)	57,169
Year	**Weighted Average PCI**	Date	Weighted	Date	Weighted	Date	Weighted
1991	**100**	1991	100	1991	100	1991	100
2004	**95**	2004	96	2004	95	2004	94
2008	**84**	2008	84	2008	85	2008	81

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Mulino
Pavement Type:	Runway

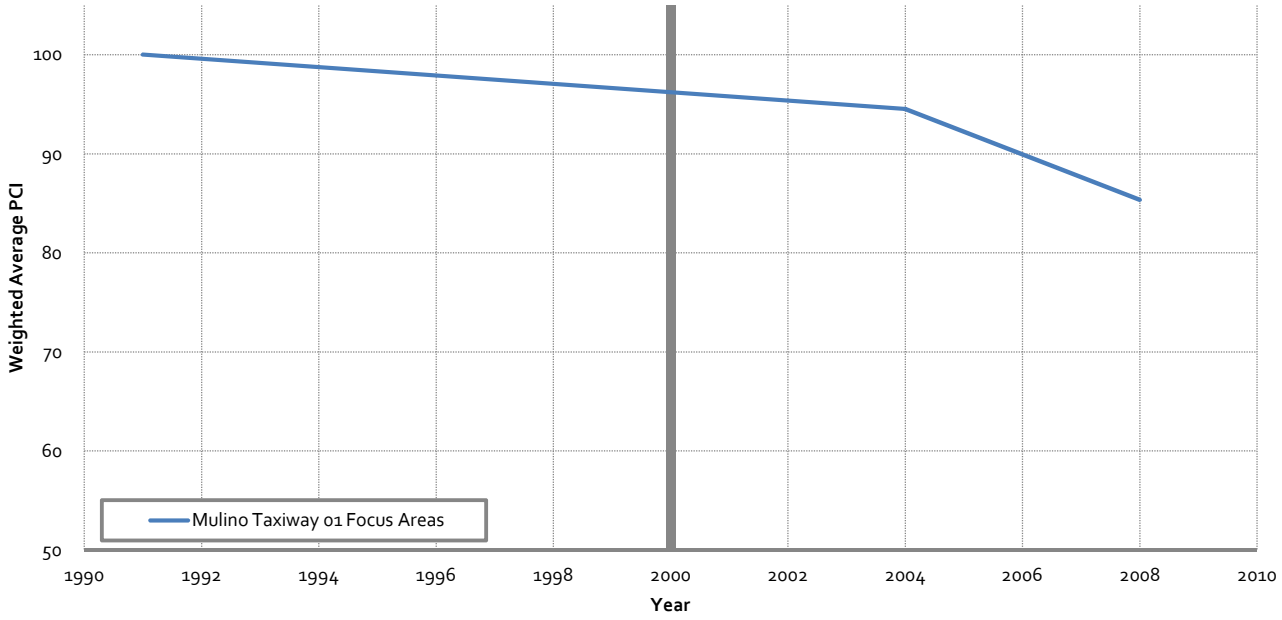


Mulino Runway 14-32			
Runway 14-32		R14MU-01	
Focus Area (sf)	**360,000**	Area (sf)	360,000
Year	**Weighted Average PCI**	Date	PCI
1991	**100**	8/2/91	100
2004	**96**	10/27/04	96
2008	**84**	4/23/08	84

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Mulino
Pavement Type:	Taxiway

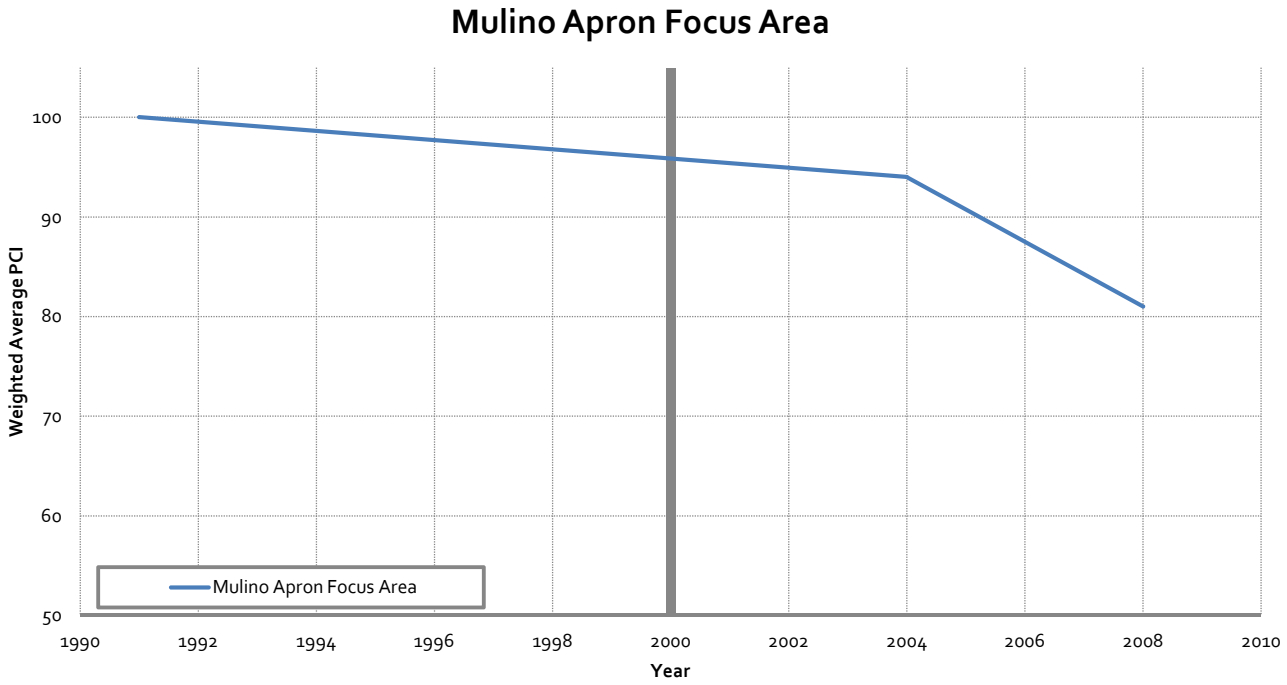
Mulino Taxiway 01 Focus Areas



Mulino Taxiway 01 Focus Areas											
Taxiway 01		TAMU-01		TAMU-02		TAMU-03		TAMU-04		TAMU-05	
Focus Area (sf)	**144,000**	Area (sf)	7,200	Area (sf)	62,000	Area (sf)	5,600	Area (sf)	60,000	Area (sf)	9,200
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1991	**100**	8/2/91	100	8/2/91	100	8/2/91	100	8/2/91	100	8/2/91	100
2004	**95**	10/27/04	97	10/27/04	99	10/27/04	92	10/27/04	89	10/27/04	100
2008	**85**	4/23/08	85	4/23/08	93	4/23/08	87	4/23/08	76	4/23/08	94

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Mulino
Pavement Type:	Apron

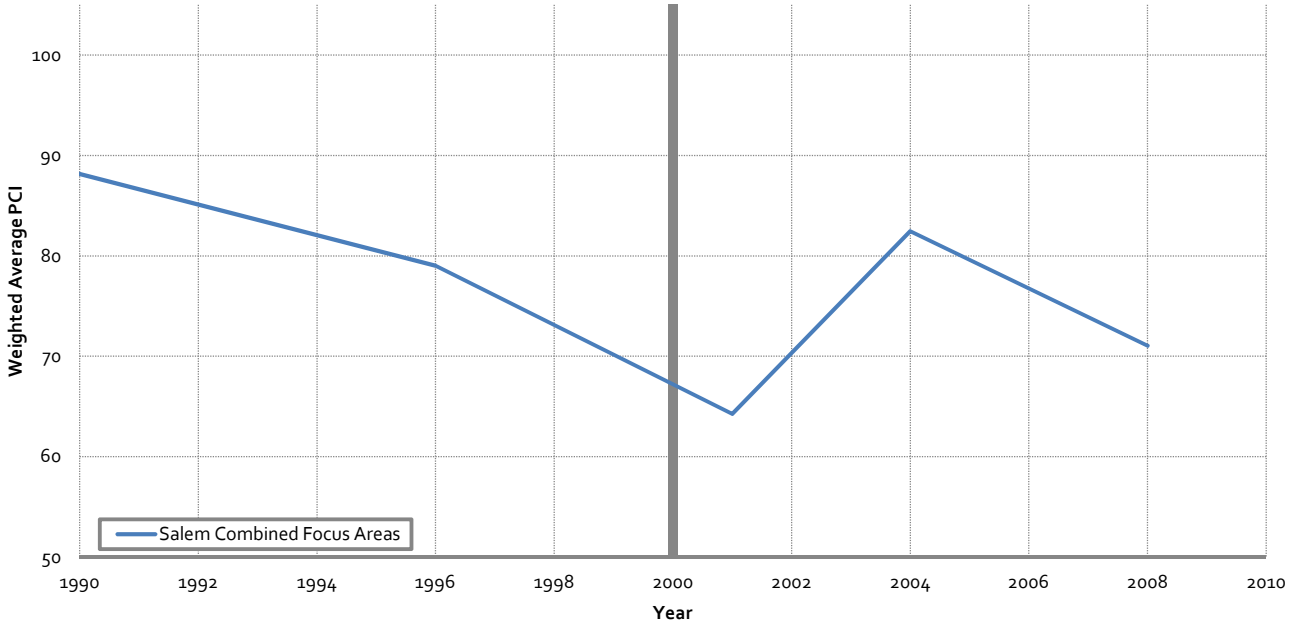


Mulino Apron Focus Area			
Arpon 01		A01MU-01	
Focus Area (sf)	**57,169**	Area (sf)	57,169
Year	**Weighted Average PCI**	Date	PCI
1991	**100**	8/2/91	100
2004	**94**	10/27/04	94
2008	**81**	4/23/08	81

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Salem
Pavement Type:	Runway, Taxiways, Aprons

Salem Combined Focus Areas



Salem Combined Focus Areas							
Salem Airport		Runway 13-31**		Taxiway M		Apron Focus Areas	
Total Area (sf)	**225,395**	Focus Area (sf)		Focus Area (sf)	47,509	Focus Area (sf)	177,886
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Average Weighted PCI	Year	Weighted Average PCI
1942	**100**	1942	100				
1981	**100**	*1981**	*100*			1981	100
1990	**88**	*1990**	*100*	1991	100	*1990**	*85*
1996	**79**	1996	100	1996	94	1996	75
2001	**64**	2001	100	2001	69	2001	63
2004	**82**	2004	98	2004	88	2004	81
2008	**71**	2008	96	2008	75	2008	70

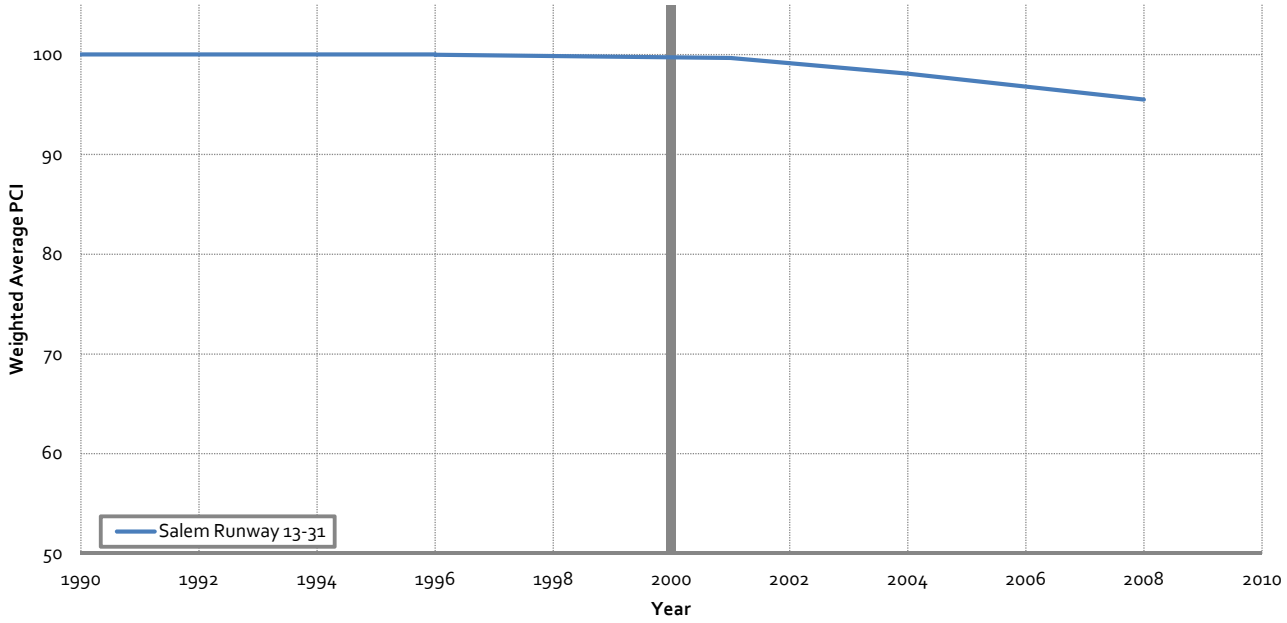
* PCI was interpolated to perform combined Weighted Average.

** Salem Runway 13-31 Excluded from Weighted Average since it was reconstructed in 2001.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Salem
Pavement Type:	Runway

Salem Runway 13-31

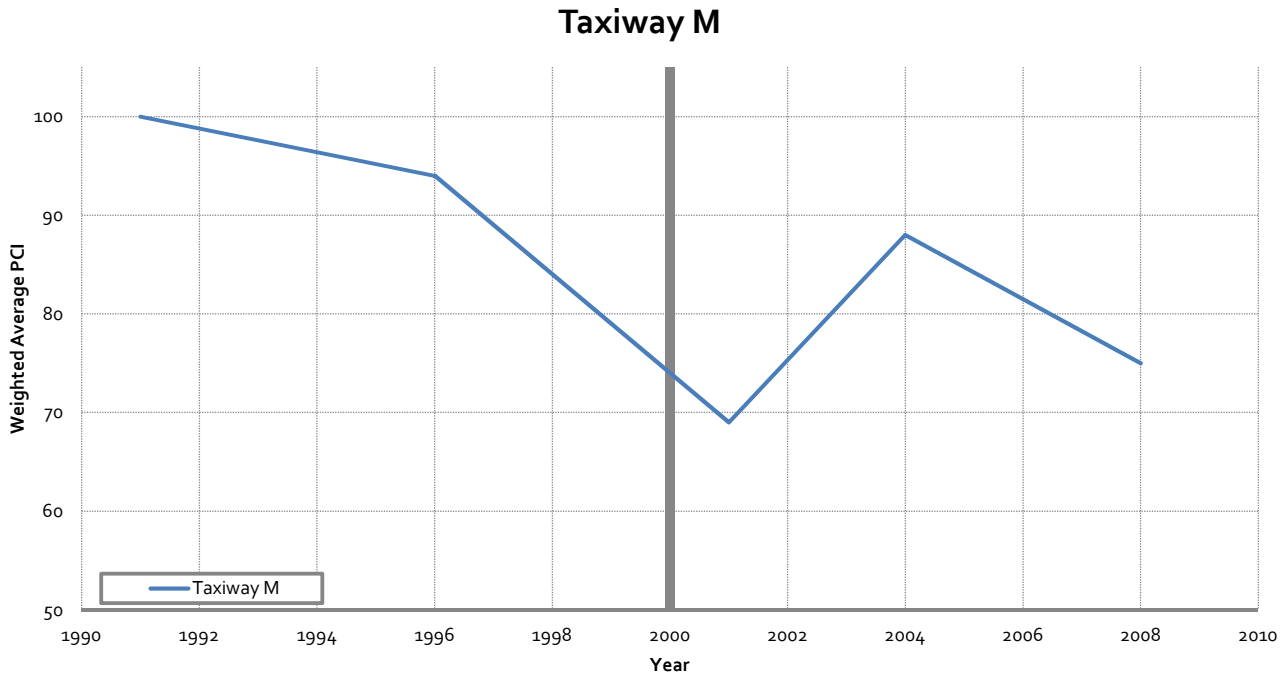


Salem Runway 13-31										
Runway 13-31		R13SA-01A		R13SA-01B		R13SA-01C		R13SA-02A		Continued below
Focus Area (sf)	**889,805**	Area (sf)	191,383	Area (sf)	184,395	Area (sf)	188,605	Area (sf)	13,711	
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI	
1942	100	8/3/42	100	8/3/42	100	8/3/42	100	8/3/42	100	
1996	100	8/1/96	100	8/1/96	100	8/1/96	100	8/1/96	100	
2001	100	8/26/01	100	8/26/01	99	8/26/01	100	8/26/01	100	
2004	98	9/20/04	100	9/20/04	96	9/20/04	99	9/20/04	100	
2008	96	2/7/08	96	2/7/08	96	2/7/08	97	2/7/08	83	

R13SA-02B		R13SA-02C		R13SA-03A		R13SA-03B		R13SA-03C	
Area (sf)	13,711	Area (sf)	13,711	Area (sf)	101,604	Area (sf)	92,395	Area (sf)	90,290
Date	PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI
8/3/42	100	8/3/42	100	8/3/42	100	8/3/42	100	8/3/42	100
8/1/96	100	8/1/96	100	8/1/96	100	8/1/96	100	8/1/96	100
8/26/01	100	8/26/01	100	8/26/01	100	8/26/01	99	8/26/01	100
9/20/04	100	9/20/04	100	9/20/04	97	9/20/04	97	9/20/04	98
2/7/08	76	2/7/08	84	2/7/08	95	2/7/08	97	2/7/08	96

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Salem
Pavement Type:	Taxiway

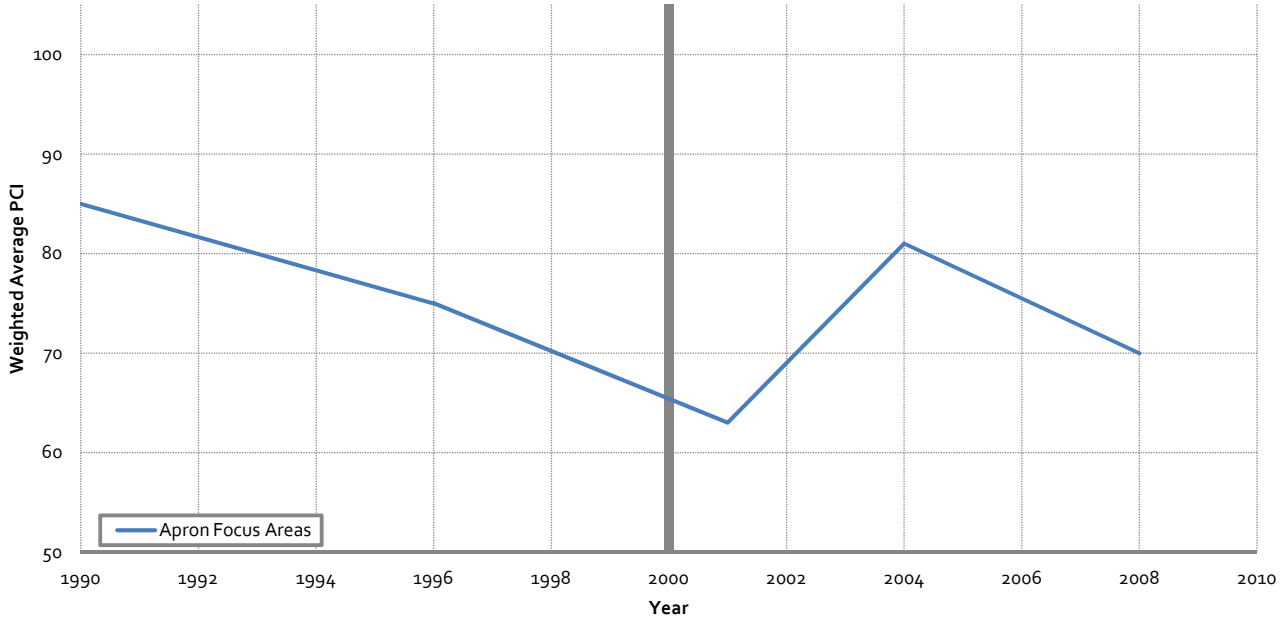


Salem Taxiway Focus Areas			
Taxiway M		TMSA-01	
Focus Area (sf)	**47,509**	Area (sf)	47509
Year	**Average Weighted PCI**	Date	PCI
1991	**100**	8/2/91	100
1996	**94**	6/30/96	94
2001	**69**	8/26/01	69
2004	**88**	9/20/04	88
2008	**75**	2/9/08	75

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Salem
Pavement Type:	Aprons

Apron Focus Areas



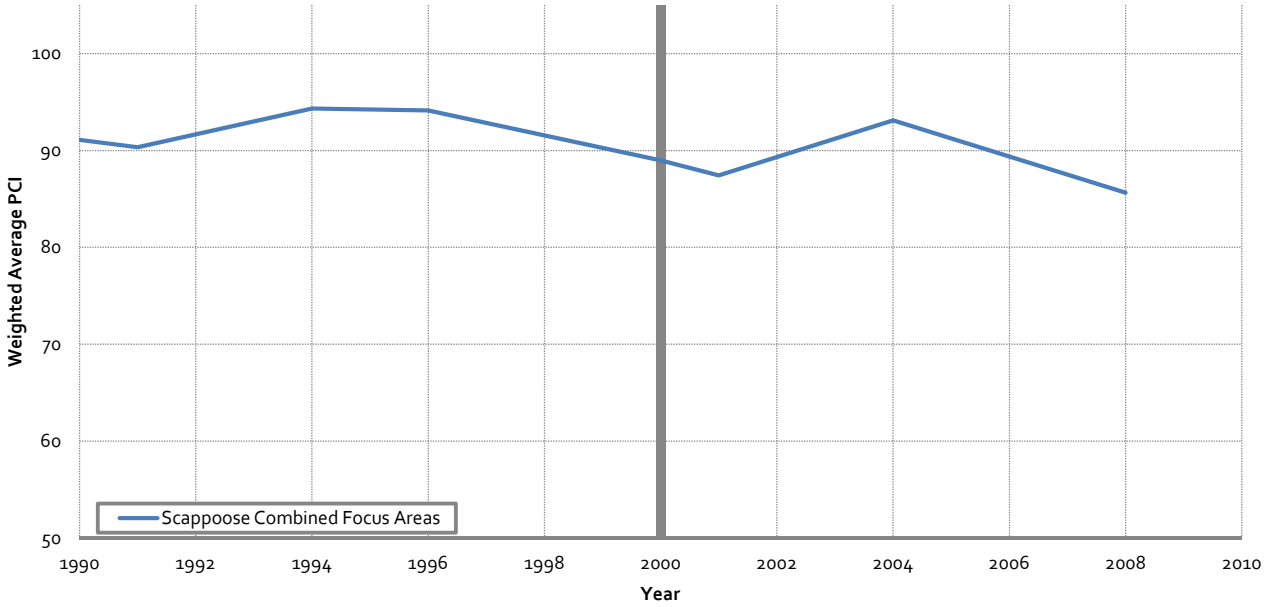
Salem Apron Focus Areas			
Apron Focus Areas		A01SA-01	
Focus Area (sf)	**177,886**	Area (sf)	177886
Year	**Weighted Average PCI**	Date	PCI
1981	**100**	8/2/81	100
1996	**75**	6/30/96	75
2001	**63**	8/26/01	63
2004	**81**	9/20/04	81
2008	**70**	2/9/08	70

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Runway, Taxiways, Aprons

Scappoose Combined Focus Areas



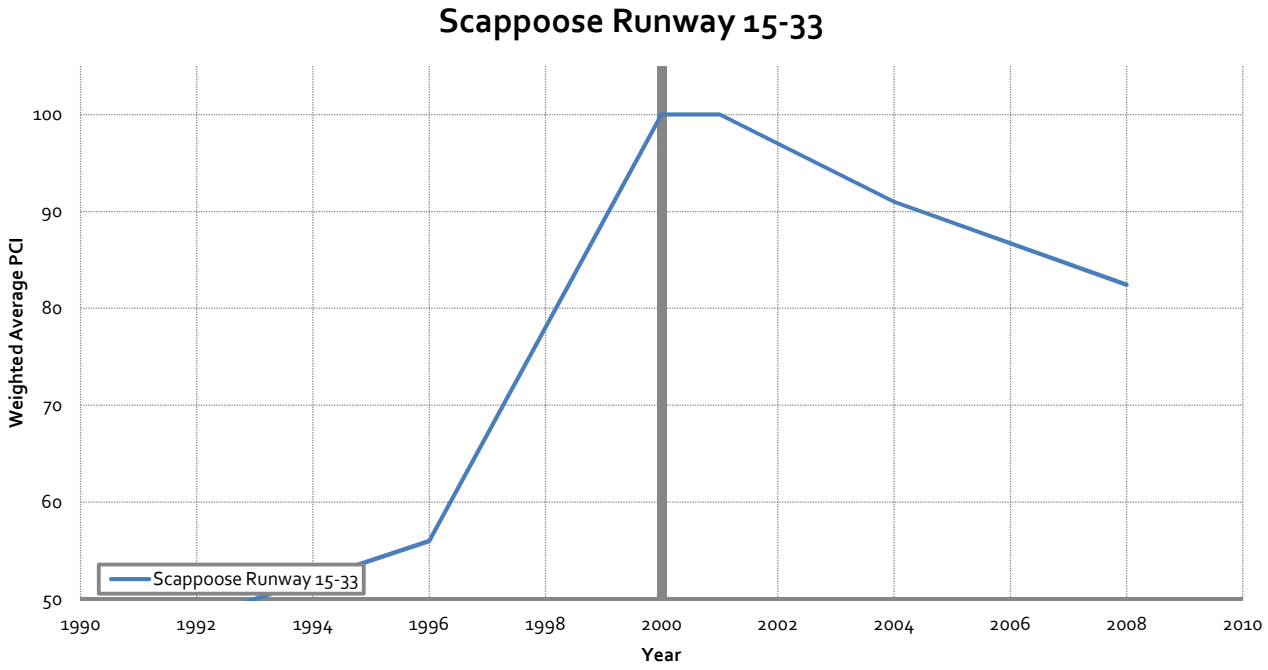
Scappoose Combined Focus Areas							
Scappoose Airport		Runway 15-33**		Combined Taxiways		Apron 01	
Total Area (sf)**	**380,677**	Focus Area (sf)		Focus Area (sf)	341,597	Focus Area (sf)	39,080
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Weight Average PCI	Year	Weighted Average PCI
1943	**100**	1943	100				
1965	**100**	*1965**	*80*	1,965	100	1965	100
1987	**93**	1987	59	1,987	96	1987	72
1991	**90**	1991	46	1,991	93	1991	68
1994	**94**	*1994**	*52*	1,994	97	1994	75
1996	**94**	1996	56	1,996	96	1996	74
2000	**89**	2000	100	2,000	93	*2000**	*53*
2001	**87**	2001	100	2,001	92	2001	47
2004	**93**	2004	91	2,004	96	2004	69
2008	**86**	2008	82	2,008	86	2008	83

* PCI was interpolated to perform combined Weighted Average.

**Runway 15-33 was excluded from Weighted Average PCI since it was rehabilitated in 2000

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Runway

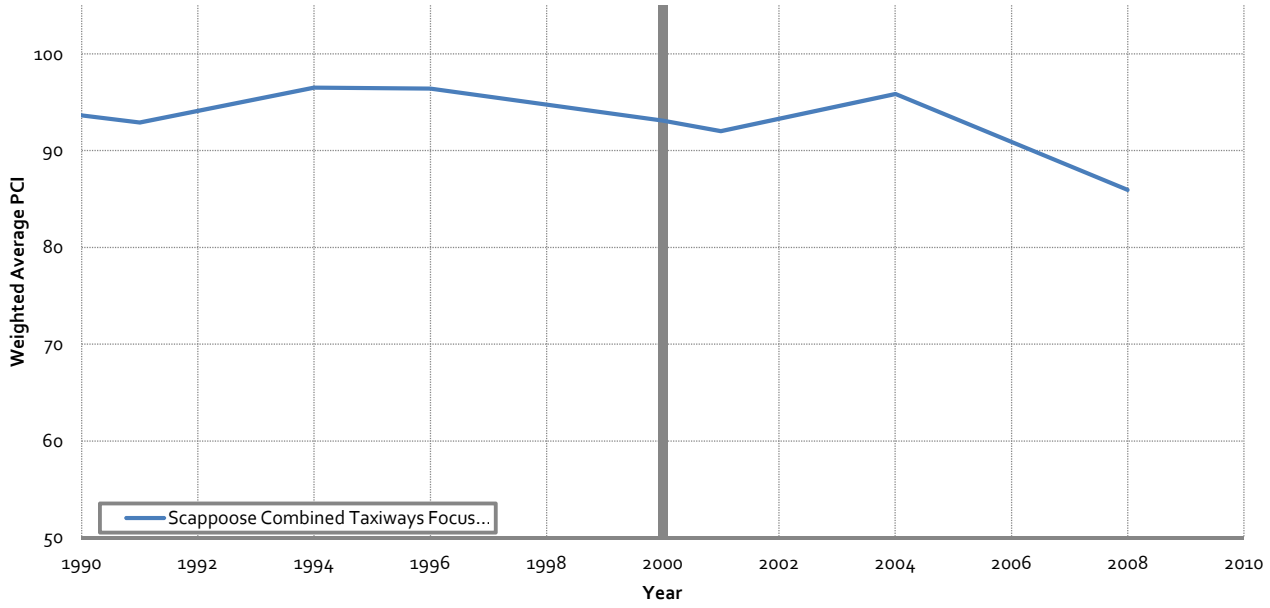


Scappoose Runway 15-33					
Runway 15-33		R15SC-01		R15SC-02	
Focus Area (sf)	**510,000**	Area (sf)	110,000	Area (sf)	400,000
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1943	100			8/3/43	100
1987	59			6/29/87	59
1991	46			9/4/91	46
1996	56			6/17/96	56
2000	100	8/3/00	100	8/1/00	100
2001	100	8/20/01	100	8/20/01	100
2004	91	9/13/04	91	9/13/04	91
2008	82	2/15/08	84	2/15/08	82

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Taxiways

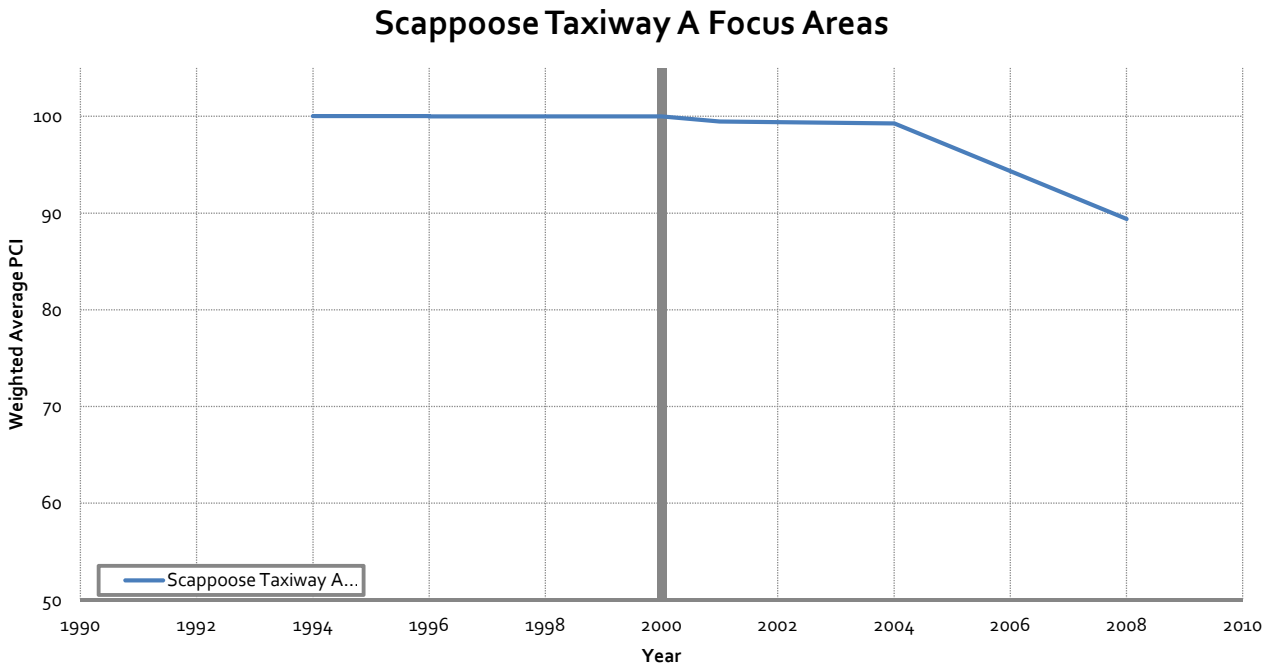
Scappoose Combined Taxiways Focus Areas



Scappoose Combined Taxiways Focus Areas					
Combined Taxiways		Taxiway A		Taxiway B	
Focus Area (sf)	**341,597**	Focus Area (sf)	181,300	Focus Area (sf)	160,297
Year	**Weight Average PCI**	Year	Weighted Average	Year	Weighted Average PCI
1965	**100**			1965	100
1987	**96**			1987	96
1991	**93**			1991	93
1994	**97**	1994	100	*1994**	*93*
1996	**96**	1996	100	1996	92
2000	**93**	2000	100	*2000**	*85*
2001	**92**	2001	99	2001	84
2004	**96**	2004	99	2004	92
2008	**86**	2008	89	2008	82

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Taxiway

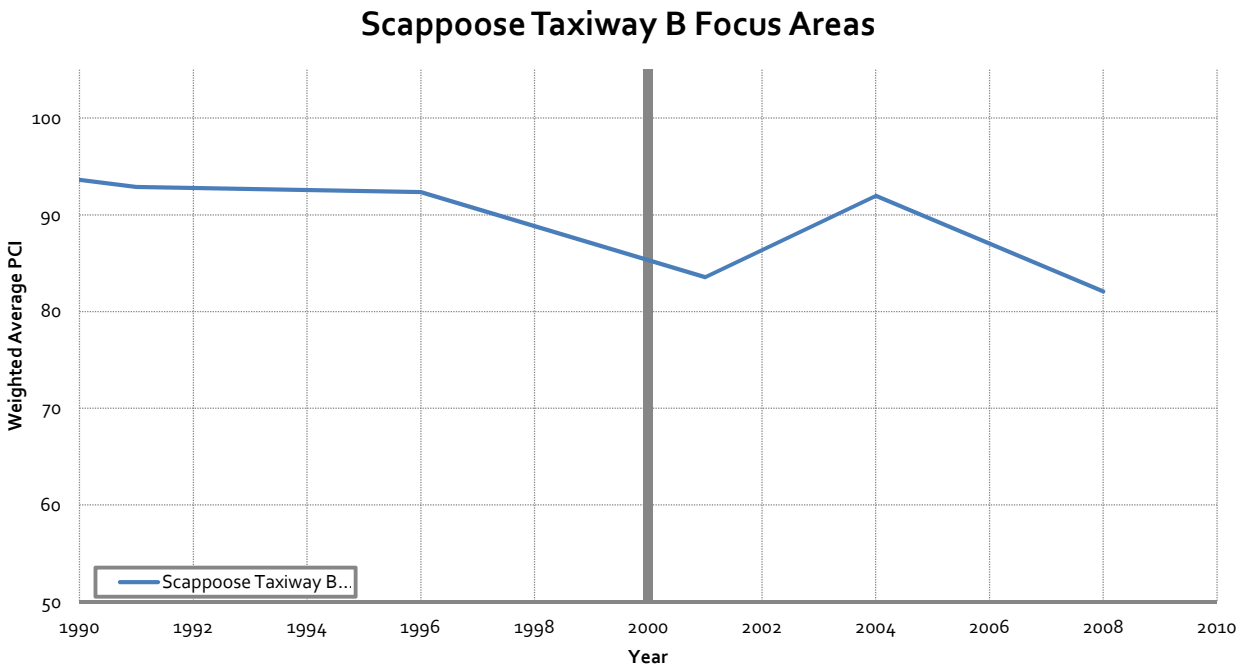


Scappoose Taxiway A Focus Areas									
Taxiway A		TASC-000		TASC-01		TASC-02		TASC-03	
Focus Area (sf)	**181,300**	Area (sf)	2,679	Area (sf)	48,381	Area (sf)	59,522	Area (sf)	70,718
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1994	**100**							8/3/94	100
1996	**100**							6/7/96	100
2000	**100**	8/3/00	100	8/2/00	100	8/2/00	100	*2000**	*100*
2001	**99**	*2001**	*100*	8/20/01	98	8/20/01	100	8/20/01	100
2004	**99**	9/13/04	100	9/13/04	100	9/13/04	99	9/13/04	99
2008	**89**	2/14/08	87	2/14/08	81	2/14/08	86	2/14/08	98

* PCI was interpolated to perform coml

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Taxiway



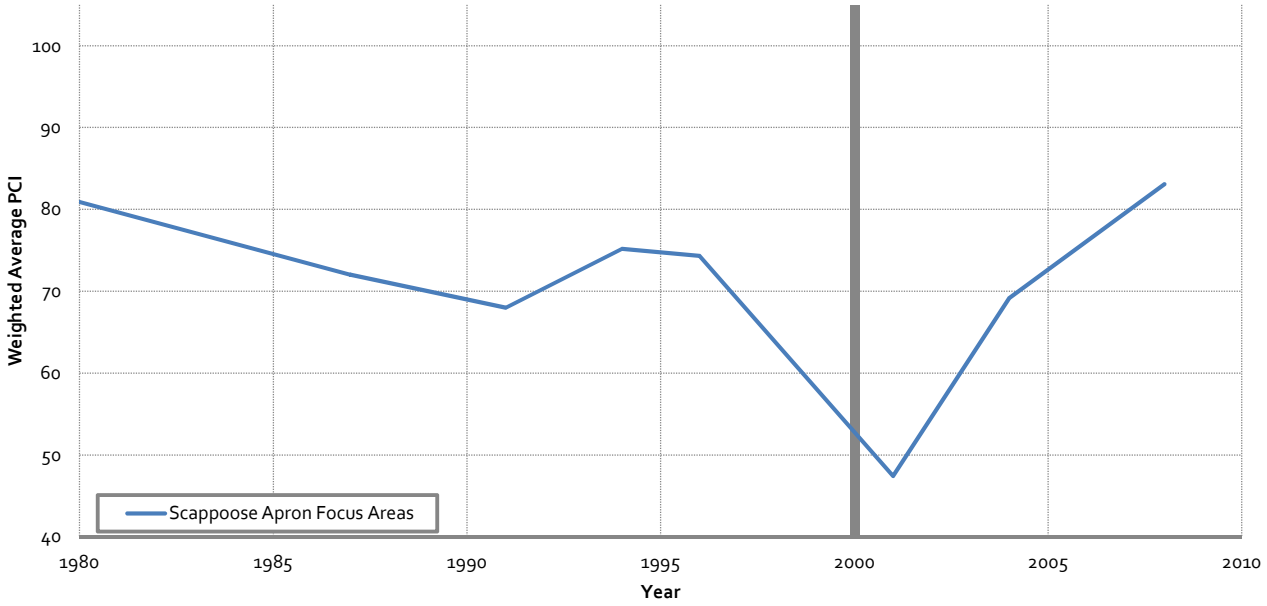
Scappoose Taxiway B Focus Areas					
Taxiway B		TBSC-03		TBSC-04	
Focus Area (sf)	**160,297**	Area (sf)	75,510	Area (sf)	84,787
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1965	**100**	8/3/65	100	8/3/65	100
1987	**96**	6/28/87	99	6/28/87	93
1991	**93**	9/4/91	95	9/4/91	91
1996	**92**	6/17/96	95	6/17/96	90
2001	**84**	8/20/01	92	8/20/01	76
2004	**92**	9/13/04	93	9/13/04	91
2008	**82**	2/14/08	81	2/14/08	83

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Valley
PMP Region:	Northwestern
Airports:	Scappoose
Pavement Type:	Aprons

Scappoose Apron Focus Areas



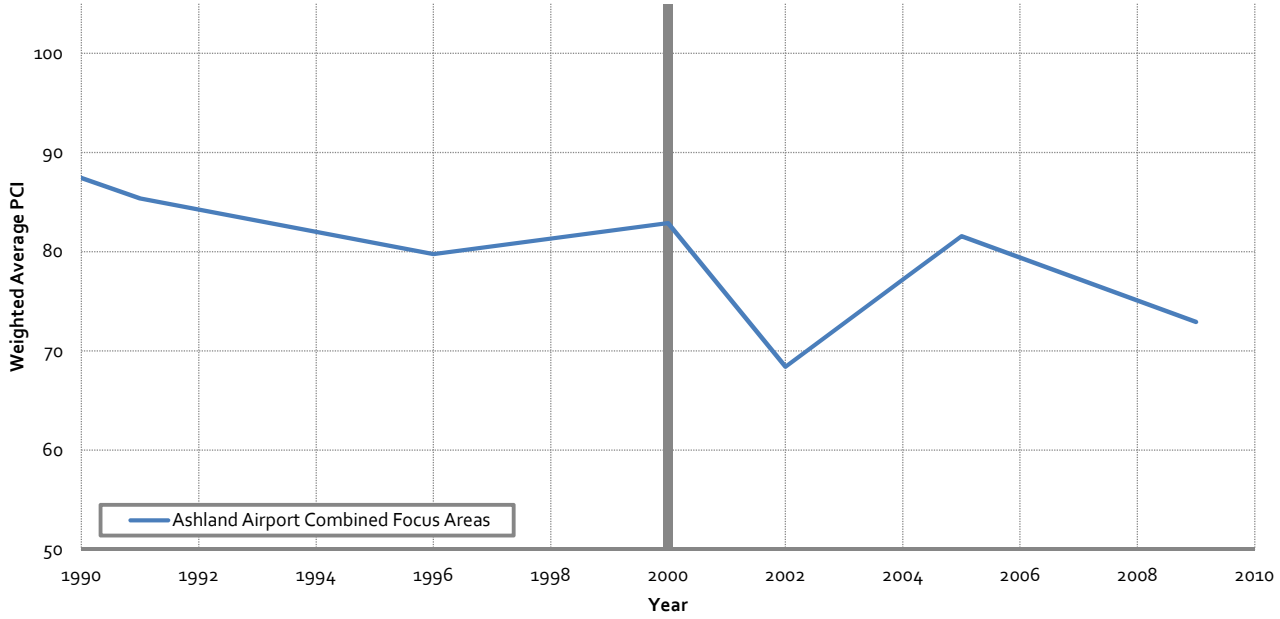
Scappoose Apron Focus Areas					
Apron 01		A01SC-01		A01SC-02	
Focus Area (sf)	**39,080**	Area (sf)	28,688	Area (sf)	10,392
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1965	**100**	8/3/65	100		
1987	**72**	6/28/87	72		
1991	**68**	9/4/91	68		
1994	**75**	1994*	66	8/3/94	100
1996	**74**	6/17/96	65	6/17/96	100
2001	**47**	8/20/01	32	8/20/01	90
2004	**69**	9/13/04	58	9/13/04	100
2008	**83**	2/14/08	90	2/15/08	64

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Ashland
Pavement Type:	Runway, Taxiway

Ashland Airport Combined Focus Areas



Ashland Airport Combined Focus Areas							
Ashland Airport		Runway 12-30		Taxiway A		Apron-01**	
Total Area (sf)**	**228,069**	Focus Area (sf)	152,475	Total Area (sf)	75,594	Focus Area (sf)	
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Weighted Average PCI**	Year	Weighted Average PCI
1967	**100**	1967	100				
1968	**100**	*1968**	*100*			1968	100
1674	**100**	*1674**	*100*	1974	100	*1974**	*100*
1977	**90**	1977	100	*1977**	*69*	*1977**	*100*
1980	**90**	*1980**	*100*	*1980**	*68*	1980	100
1983	**89**	*1983**	*100*	1983	68	1983	98
1984	**92**	1984	100	1984	75	*1984**	*96*
1985	**91**	1985	100	*1985**	*72*	1985	94
1986	**89**	1986	99	*1986**	*69*	*1986**	*92*
1987	**83**	1987	91	1987	66	1987	89
1989	**89**	*1989**	*86*	1989	97	*1989**	*84*
1991	**85**	1991	81	1991	95	1991	80
1996	**80**	1996	75	1996	89	1996	75
2000	**83**	2000	81	2000	86	2000	48
2002	**68**	2002	63	2002	79	2002	43
2004	**77**	*2004**	*74*	*2004**	*83*	2004	100
2005	**82**	2005	80	2005	84	2005	92
2009	**73**	2009	70	2009	79	2009	78

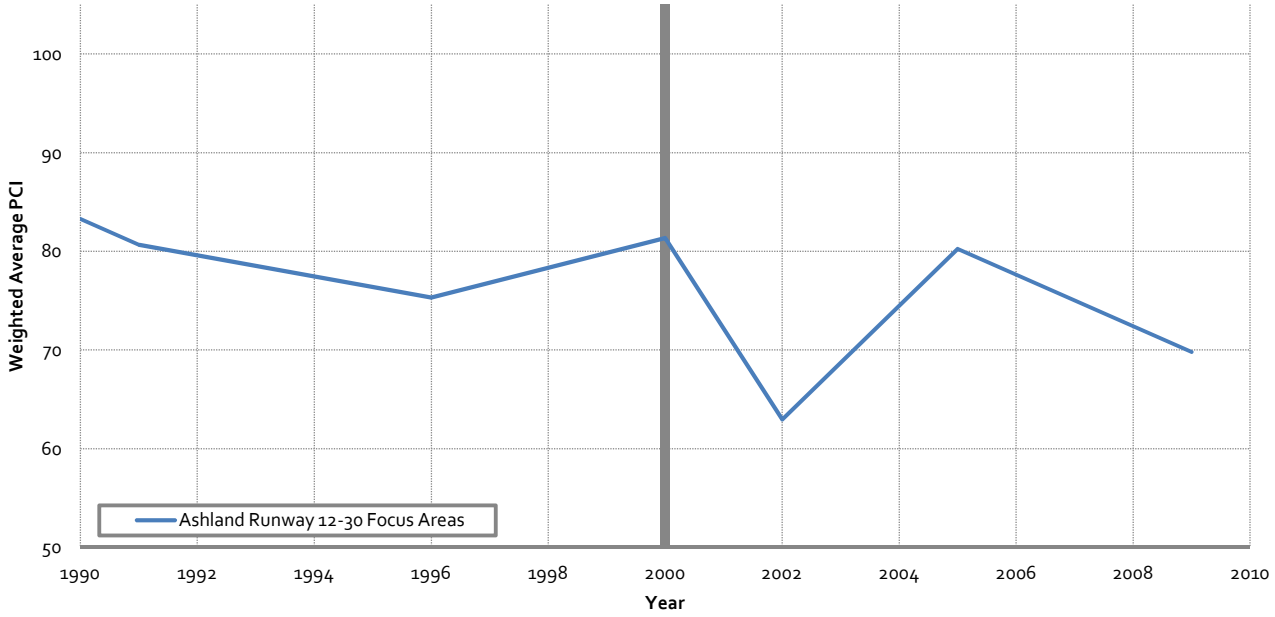
* PCI was interpolated to perform combined Weighted Average.

**Apron-01 excluded from weighted average PCI since it was rehabilitated after 2000.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Ashland
Pavement Type:	Runway

Ashland Runway 12-30 Focus Areas



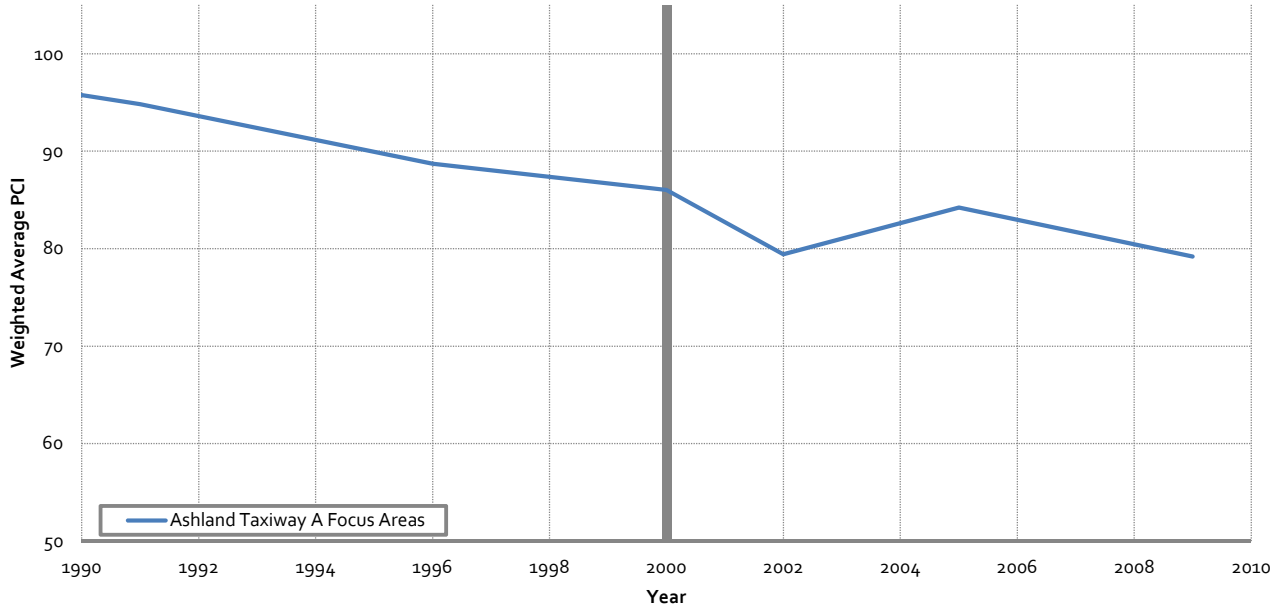
Ashland Runway 12-30 Focus Areas							
Runway 12-30		R12AS-02		R12AS-04		R12AS-05	
Focus Area (sf)	**152,475**	Area (sf)	1,995	Area (sf)	132,672	Area (sf)	17,808
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1967	**100**	9/3/67	100	9/3/67	100		
1977	**100**	9/1/77	100	9/1/77	100		
1984	**100**	9/1/84	100	9/1/84	100	9/1/84	100
1985	**100**	*1985**	*97*	*1985**	*100*	8/1/85	100
1986	**99**	*1986**	*95*	8/1/86	100	*1986**	*96*
1987	**91**	*1987**	*92*	2/6/87	91	2/6/87	92
1991	**81**	*1991**	*82*	6/29/91	81	6/29/91	78
1996	**75**	*1996**	*69*	6/23/96	76	6/23/96	71
2000	**81**	4/5/00	59	4/5/00	82	4/5/00	79
2002	**63**	11/1/02	41	11/1/02	63	11/1/02	65
2005	**80**	9/20/05	77	9/20/05	81	9/20/05	75
2009	**70**	3/12/09	100	3/19/09	70	3/19/09	65

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Ashland
Pavement Type:	Taxiway

Ashland Taxiway A Focus Areas

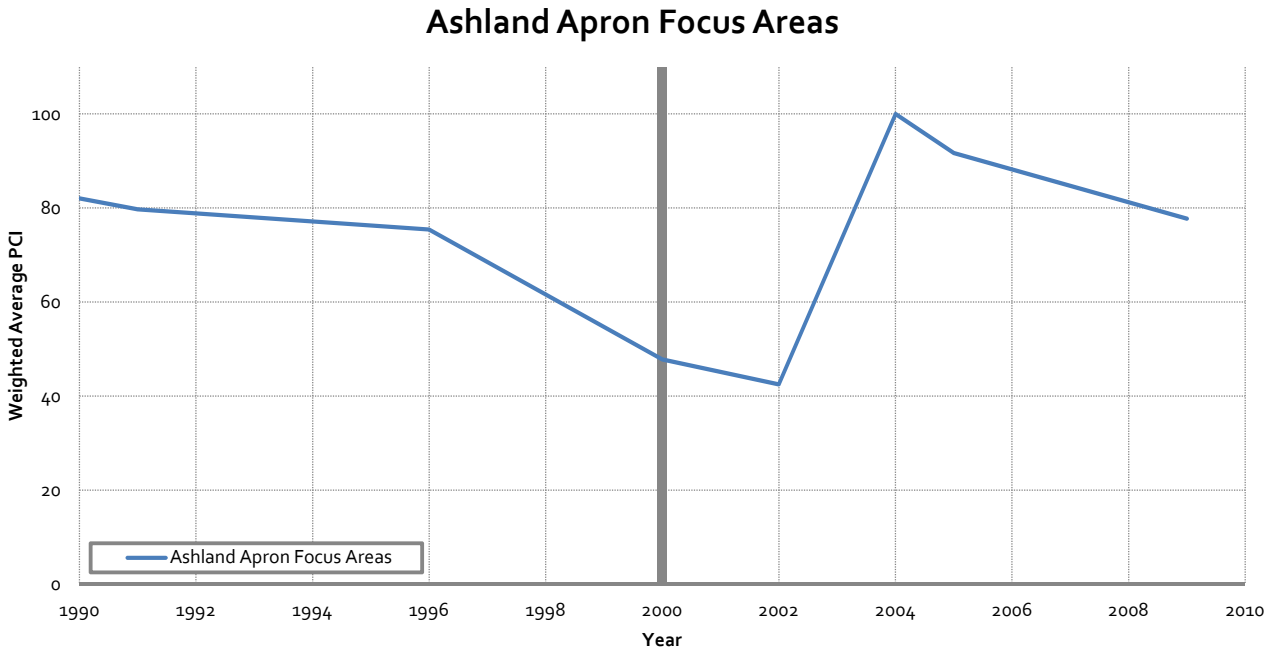


Ashland Taxiway A Focus Areas					
Taxiway A		TAAS-04		TAAS-05	
Total Area (sf)	**75,594**	Area (sf)	52,944	Area (sf)	22,650
Year	**Weighted Average PCI****	Date	PCI	Date	PCI
1974	**100**	9/3/74	100		
1983	**68**	*1983**	*68*		
1984	**75**	*1984**	*65*	9/2/84	100
1987	**66**	2/6/87	54	2/6/87	94
1989	**97**	1/1/89	100	6/28/89	89
1991	**95**	6/28/91	100	*1991**	*83*
1996	**89**	6/23/96	98	6/23/96	67
2000	**86**	4/5/00	92	4/5/00	72
2002	**79**	11/2/02	86	11/1/02	64
2005	**84**	9/20/05	89	9/20/05	73
2009	**79**	3/19/09	84	3/19/09	68

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Ashland
Pavement Type:	Apron



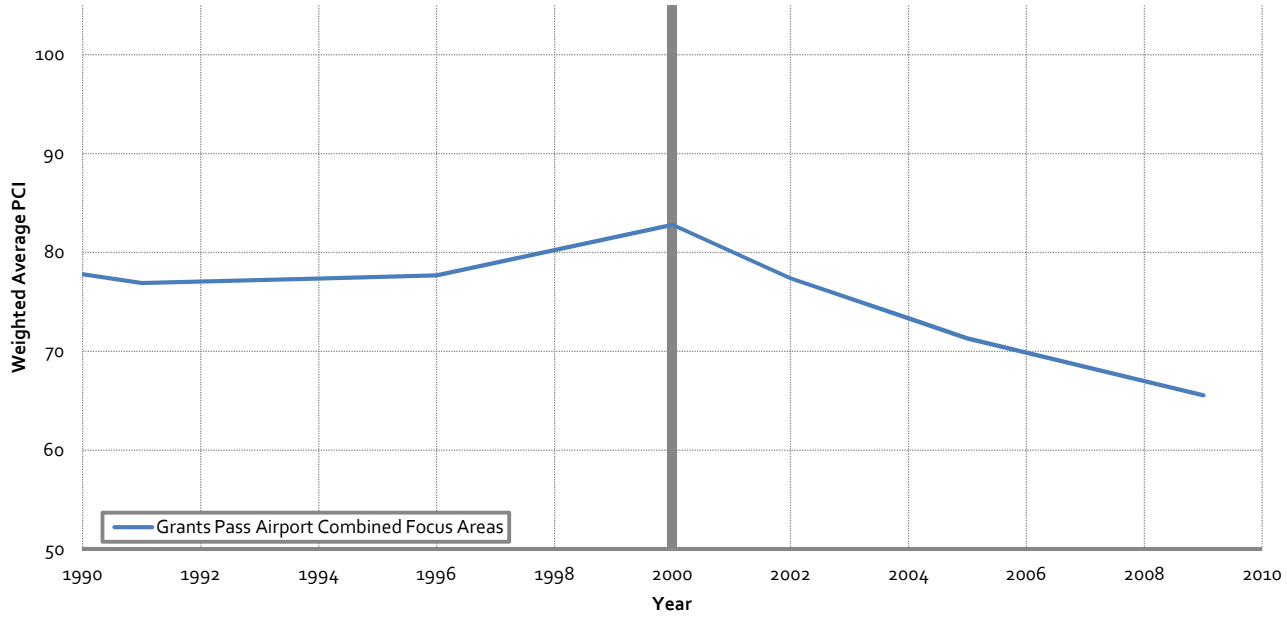
Ashland Apron Focus Areas							
Apron-01		A01AS-01		A01AS-02		A01AS-03	
Focus Area (sf)	**207,923**	Area (sf)	76,095	Area (sf)	77,707	Area (sf)	54,121
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1968	**100**			9/2/68	100		
1980	**100**			*1980**	*100*	8/1/80	100
1983	**98**	9/2/83	100	9/1/83	100	*1983**	*91*
1985	**94**	8/1/85	100	*1985**	*95*	*1985**	*84*
1987	**89**	2/6/87	95	*1987**	*91*	2/6/87	78
1991	**80**	6/29/91	86	*1991**	*82*	6/28/91	68
1996	**75**	6/23/96	79	*1996**	*70*	6/23/96	78
2000	**48**	4/5/00	59	4/5/00	61	4/5/00	13
2002	**43**	11/1/02	59	11/1/02	49	11/1/02	10
2004	**100**	8/1/04	100	8/1/04	100	9/3/04	100
2005	**92**	9/20/05	100	9/20/05	100	9/22/05	68
2009	**78**	3/19/09	87	3/19/09	79	3/19/09	63

* PCI was interpolated to perform coml

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Grants Pass
Pavement Type:	Runway, Taxiway

Grants Pass Airport Combined Focus Areas



Grants Pass Airport Combined Focus Areas							
Grants Pass Airport		Runway 12-30		Taxiway A Focus Areas		Apron 02 Focus Area**	
Total Focus Area (sf)**	**340,477**	Focus Area (sf)	300,000	Focus Area (sf)	40,477	Focus Area (sf)	
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1959	**100**	1959	100	1959	100		
1977	**100**	1977	100	*1977**	*99*	1977	100
1987	**80**	1987	78	*1987**	*99*	1987	72
1991	**77**	1991	74	1991	98	1991	69
1994	**77**	*1994**	*75*	1994	98	*1994**	*66*
1996	**78**	1996	75	1996	97	1996	64
2000	**83**	2000	81	2000	96	2000	43
2002	**77**	2002	75	2002	95	2002	41
2004	**73**	*2004**	*70*	2004	96	2004	100
2005	**71**	2005	68	2005	96	2005	100
2007	**68**	*2007**	*66*	2007	90	*2007**	*100*
2009	**66**	2009	63	2009	84	2009	100

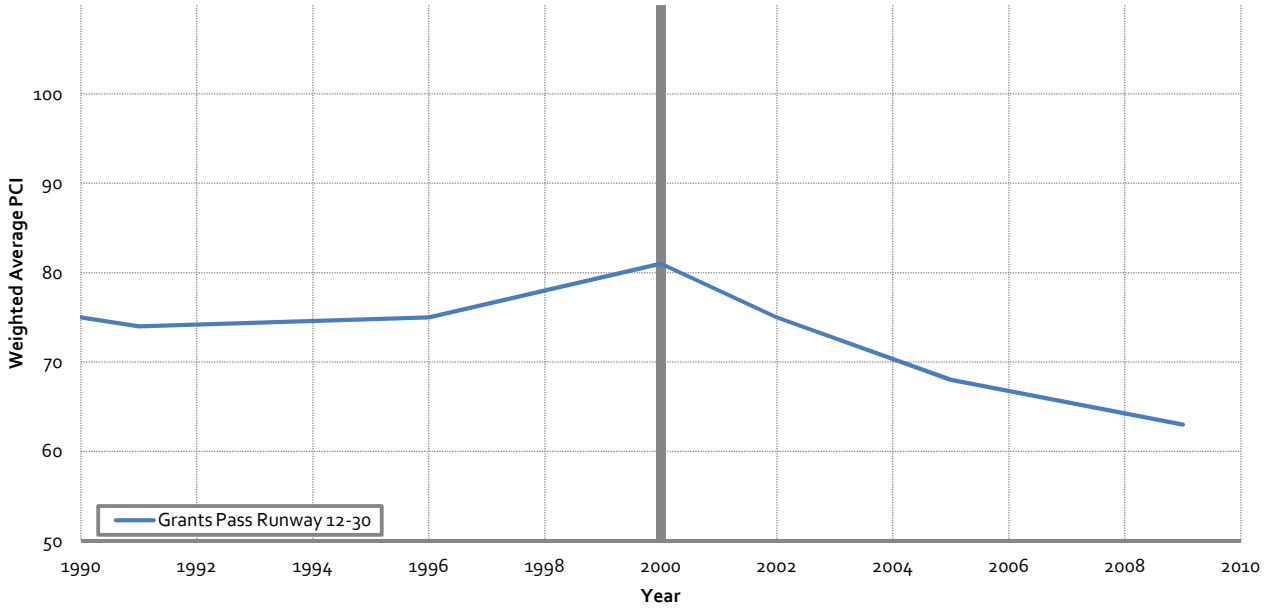
* PCI was interpolated to perform combined Weighted Average.

**Apron-02 excluded from weighted average PCI since it was rehabilitated after 2000.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Grants Pass
Pavement Type:	Runway

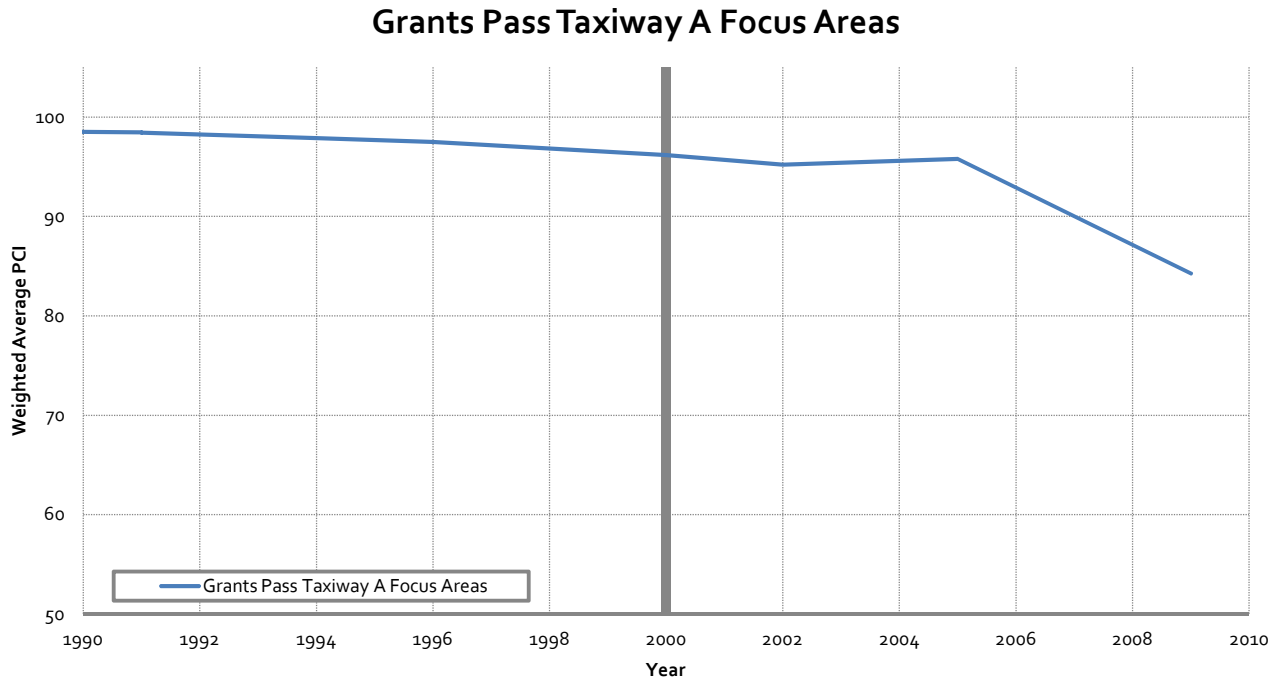
Grants Pass Runway 12-30



Grants Pass Runway 12-30			
Runway 12-30		R12GR-01	
Focus Area (sf)	**300,000**	Area (sf)	300,000
Year	**Weighted Average PCI**	Date	PCI
1959	**100**	9/1/59	100
1977	**100**	1/1/77	100
1987	**78**	2/4/87	78
1991	**74**	7/8/91	74
1996	**75**	6/25/96	75
2000	**81**	3/31/00	81
2002	**75**	10/31/02	75
2005	**68**	9/22/05	68
2009	**63**	3/20/09	63

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Grants Pass
Pavement Type:	Taxiway

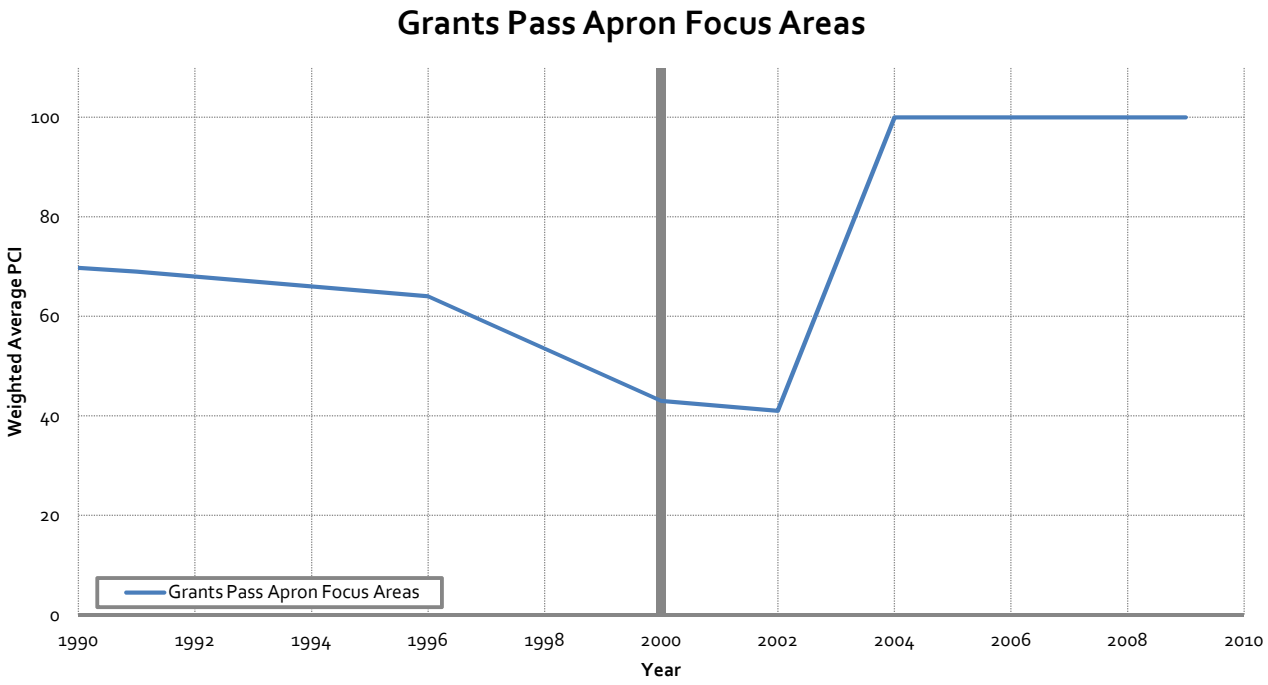


Grants Pass Taxiway A Focus Areas							
Taxiway A		TAGR-03		TAGR-04		TAGR-05	
Focus Area (sf)	**40,477**	Area (sf)	8,225	Area (sf)	9,275	Area (sf)	22,977
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1959	**100**	9/1/59	100				
1991	**98**	*1991**	*92*	9/2/91	100	9/2/91	100
1994	**98**	*1994**	*92*	*1994**	*98*	1/1/94	100
1996	**97**	*1996**	*91*	*1996**	*97*	6/25/96	100
2000	**96**	*2000**	*90*	*2000**	*95*	3/31/00	99
2002	**95**	*2002**	*90*	*2002**	*93*	10/31/02	98
2004	**96**	*2004**	*89*	*2004**	*92*	*2004**	*99*
2005	**96**	*2005**	*89*	*2005**	*91*	9/22/05	100
2007	**90**	*2007**	*88*	*2007**	*90*	*2007**	*91*
2009	**84**	3/20/09	88	3/20/09	89	3/20/09	81

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

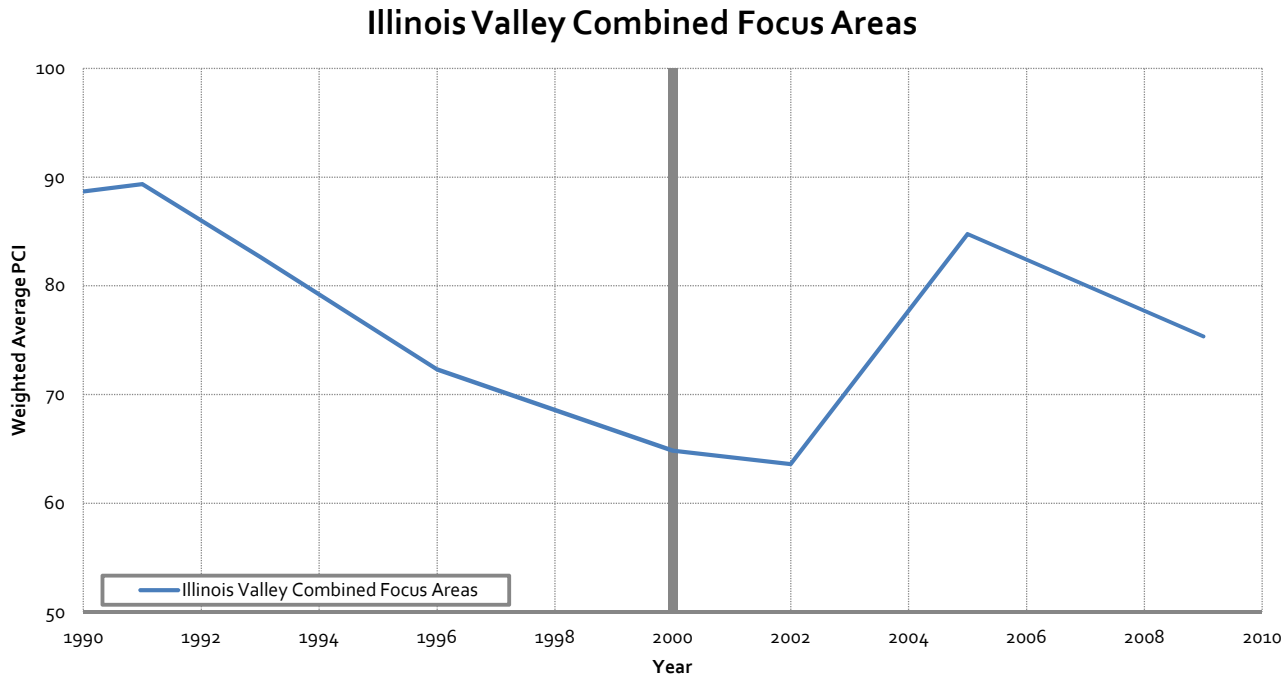
Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Grants Pass
Pavement Type:	Apron



Grants Pass Apron Focus Areas			
Apron 02 Focus Area		A02GR-05	
Focus Area (sf)	**121,555**	Area (sf)	121,555
Year	**Weighted Average PCI**	Date	PCI
1977	**100**	1/1/77	100
1987	**72**	2/4/87	72
1991	**69**	7/8/91	69
1996	**64**	6/25/96	64
2000	**43**	3/31/00	43
2002	**41**	10/31/02	41
2004	**100**	8/1/04	100
2005	**100**	9/22/05	100
2009	**100**	3/20/09	100

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Illinois Valley
Pavement Type:	Runway, Apron

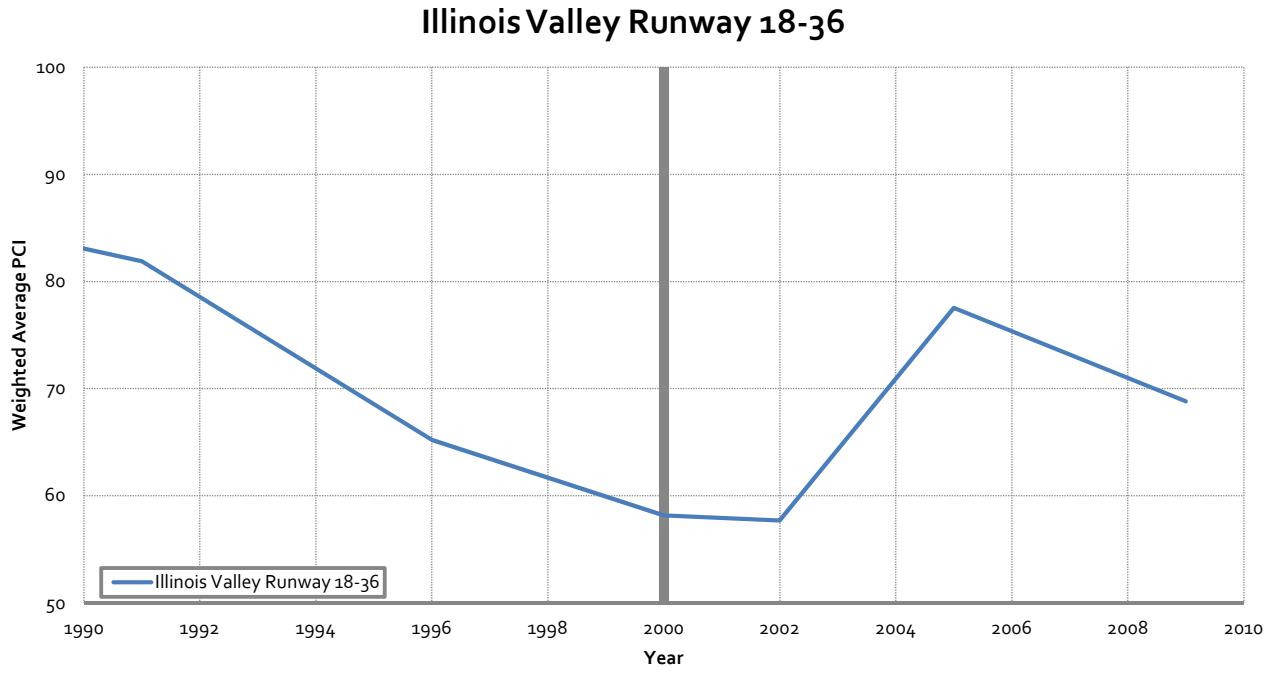


Illinois Valley Combined Focus Areas							
Illinois Valley Airport		Runway 18-36		Taxiways		Apron Focus Areas	
Total Focus Area (sf)	**405,546**	Focus Area (sf)	405,546	Focus Area (sf)		Focus Area (sf)	30,194
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1953	**100**	1953	100				
1965	**100**	1965	100				
1977	**100**	1977	100				
1980	**99**	1980	99				
1987	**87**	1987	87				
1991	**89**	1991	82			1991	100
1993	**83**	*1993**	*75*			1993	99
1996	**72**	1996	65			*1996**	*95*
2000	**65**	2000	58			2000	90
2002	**64**	2002	58			2002	80
2005	**85**	2005	78			2005	97
2009	**75**	2009	69			2009	88

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Illinois Valley
Pavement Type:	Runway



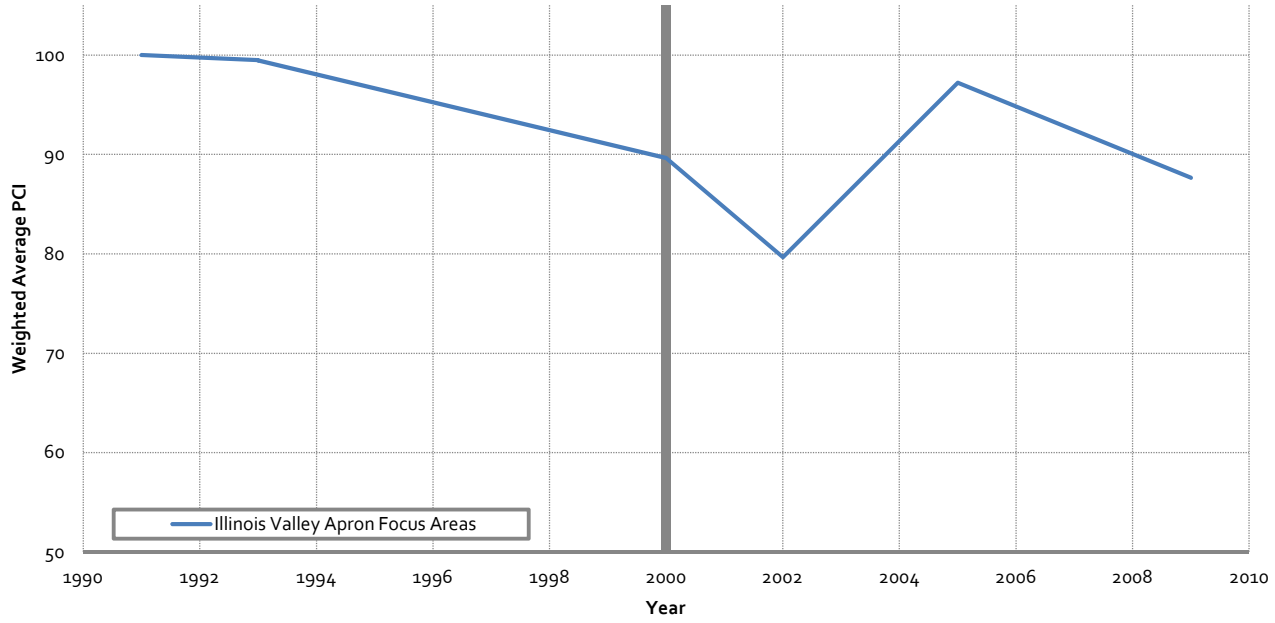
Illinois Valley Runway 18-36							
Runway 18-36		R18IV-01		R18IV-02		R18IV-03	
Focus Area (sf)	**405,546**	Area (sf)	102,648	Area (sf)	265,125	Area (sf)	37,773
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1953	**100**			9/3/53	100	9/3/53	100
1965	**100**	9/2/65	100	*1965**	*100*	*1965**	*100*
1977	**100**	9/1/77	100	9/1/77	100	9/1/77	100
1980	**99**	*1980**	*98*	9/1/80	100	*1980**	*94*
1987	**87**	2/5/87	93	2/5/87	85	*1987**	*81*
1991	**82**	7/7/91	90	7/7/91	80	*1991**	*73*
1996	**65**	6/23/96	87	6/23/96	57	*1996**	*64*
2000	**58**	4/6/00	80	4/6/00	50	4/6/00	56
2002	**58**	11/2/02	77	11/2/02	50	11/2/02	59
2005	**78**	9/22/05	92	9/22/05	72	9/22/05	77
2009	**69**	3/20/09	83	3/20/09	64	3/20/09	64

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Mountain
PMP Region:	Southern
Airports:	Illinois Valley
Pavement Type:	Apron

Illinois Valley Apron Focus Areas



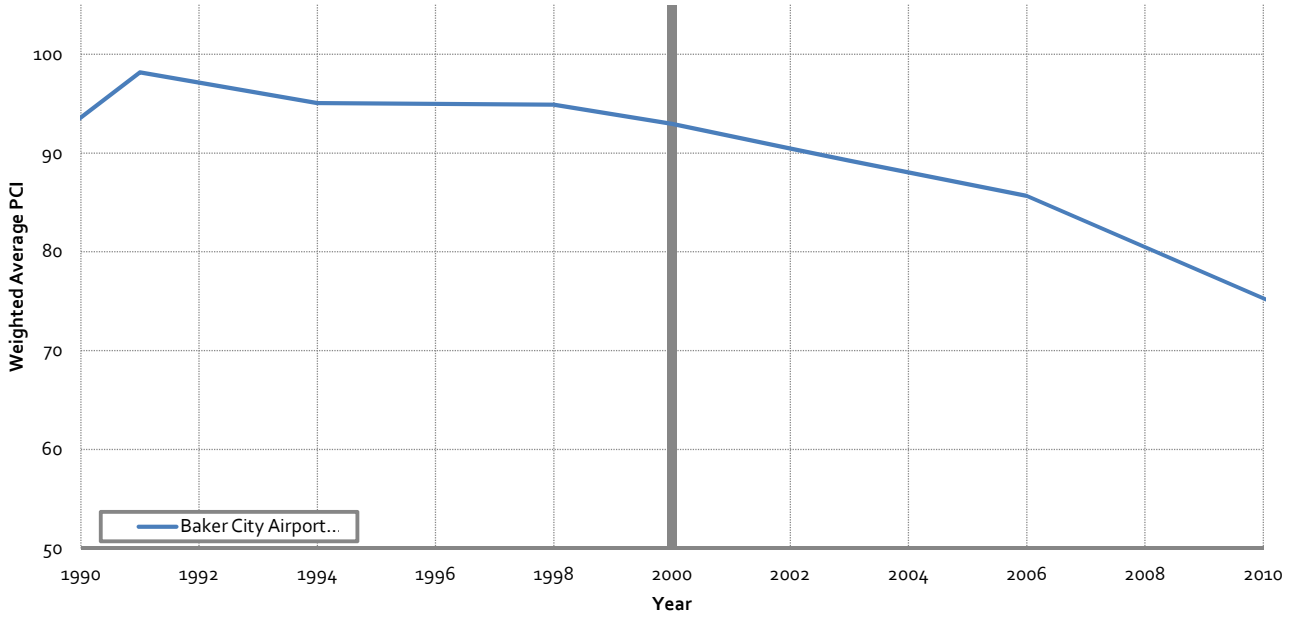
Illinois Valley Apron Focus Areas					
Apron Focus Areas		A03IV-01		A03IV-02	
Focus Area (sf)	**30,194**	Area (sf)	11,996	Area (sf)	18,198
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1991	**100**			9/2/91	100
1993	**99**	9/2/93	100	*1993**	*99*
2000	**90**	4/6/00	80	4/6/00	96
2002	**80**	11/2/02	67	11/2/02	88
2005	**97**	9/22/05	93	9/22/05	100
2009	**88**	3/20/09	75	3/20/09	96

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Runway, Taxiway, Apron

Baker City Airport Focus Areas

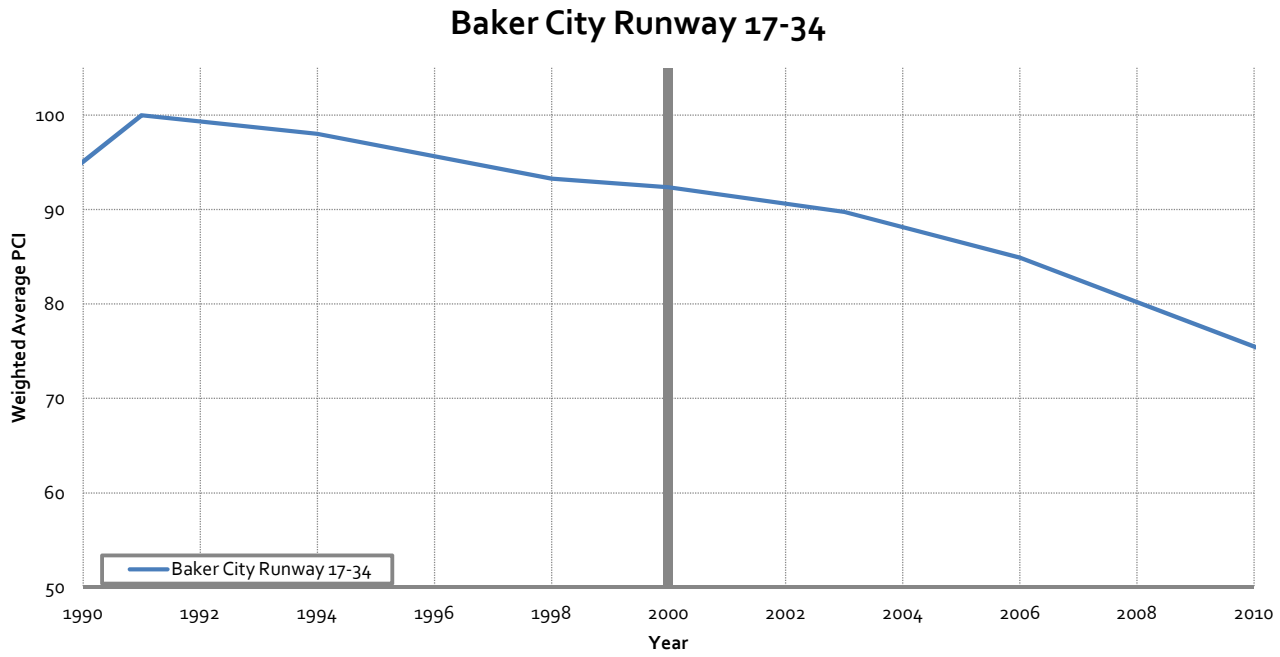


Baker City Airport Focus Areas							
Baker City Airport		Runway 17-34		Taxiway A		Apron 02	
Total Focus Area (sf)	**508,366**	Focus Area (sf)	298,092	Focus Area (sf)	169,774	Focus Area (sf)	40,500
Year	**Weighted Average PCI****	Year	Weighted Average PCI	Year	Weighted Average PCI**	Year	Weighted Average PCI
1983	**100**	1942	100			1983	100
1986	**77**	1986	75			1986	86
1989	**89**	*1989**	*90*			*1989**	*81*
1991	**98**	1991	100	1991	100	1989	77
1994	**95**	1994	98	1994	99	1994	58
1998	**95**	1998	93	1998	97	1998	100
2000	**93**	2000	92	2000	93	2000	95
2002	**90**	*2002**	*91*	2002	90	*2002**	*90*
2003	**89**	2003	90	2003	89	2003	87
2006	**86**	2006	85	2006	87	2006	85
2011	**73**	2011	73	2011	74	2011	62

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Runway



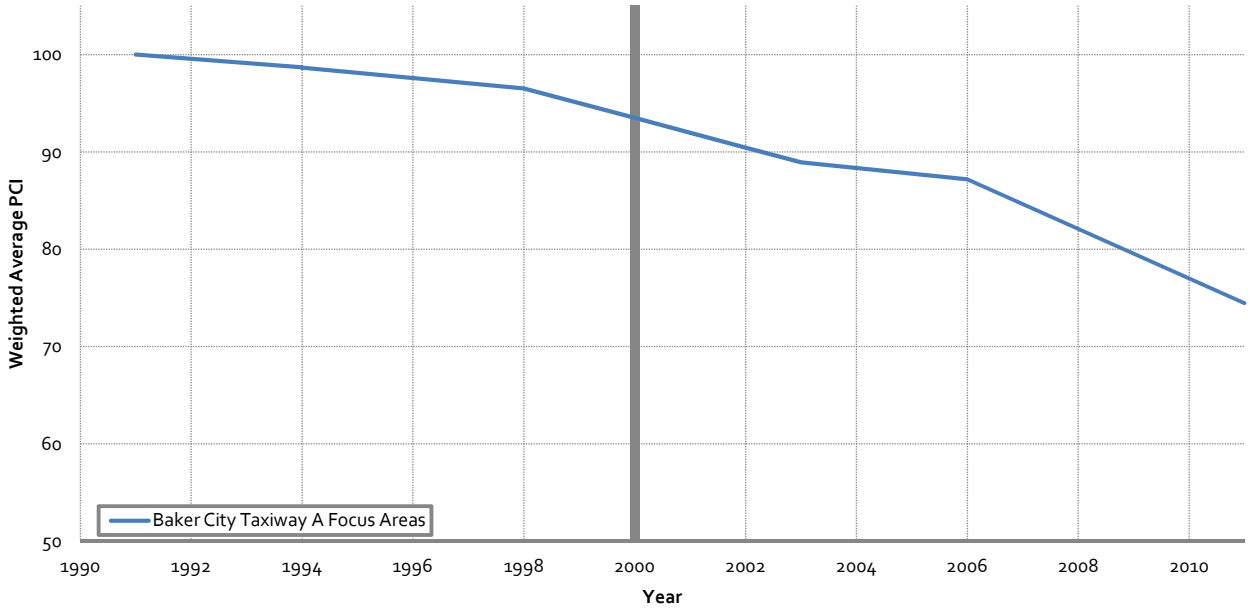
Baker City Runway 17-34									
Runway 17-34		R17BA-01		R17BA-04		R17BA-05		R17BA-06	
Focus Area (sf)	**298,092**	Area (sf)	69,352	Area (sf)	169,490	Area (sf)	30,000	Area (sf)	29,250
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1942	**100**	9/2/42	100	9/2/42	100	9/2/42	100		
1986	**75**	*1986**	*100*	6/18/86	61	*1986**	*100*		
1991	**100**	9/1/91	100	9/1/91	100	9/1/91	100	9/1/91	100
1994	**98**	*1994**	*97*	6/29/94	99	*1994**	*96*	*1994**	*98*
1998	**93**	*1998**	*92*	3/25/98	94	*1998**	*91*	*1998**	*94*
2000	**92**	8/18/00	90	8/18/00	94	8/18/00	88	*2000**	*93*
2003	**90**	9/14/03	90	9/14/03	90	9/14/03	87	*2003**	*90*
2006	**85**	10/11/06	80	10/11/06	86	10/11/06	87	10/11/06	88
2011	**73**	6/1/11	80	6/1/11	70	6/1/11	87	6/1/11	61
			72				71		

* PCI was interpolated to perform coml

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Taxiway

Baker City Taxiway A Focus Areas

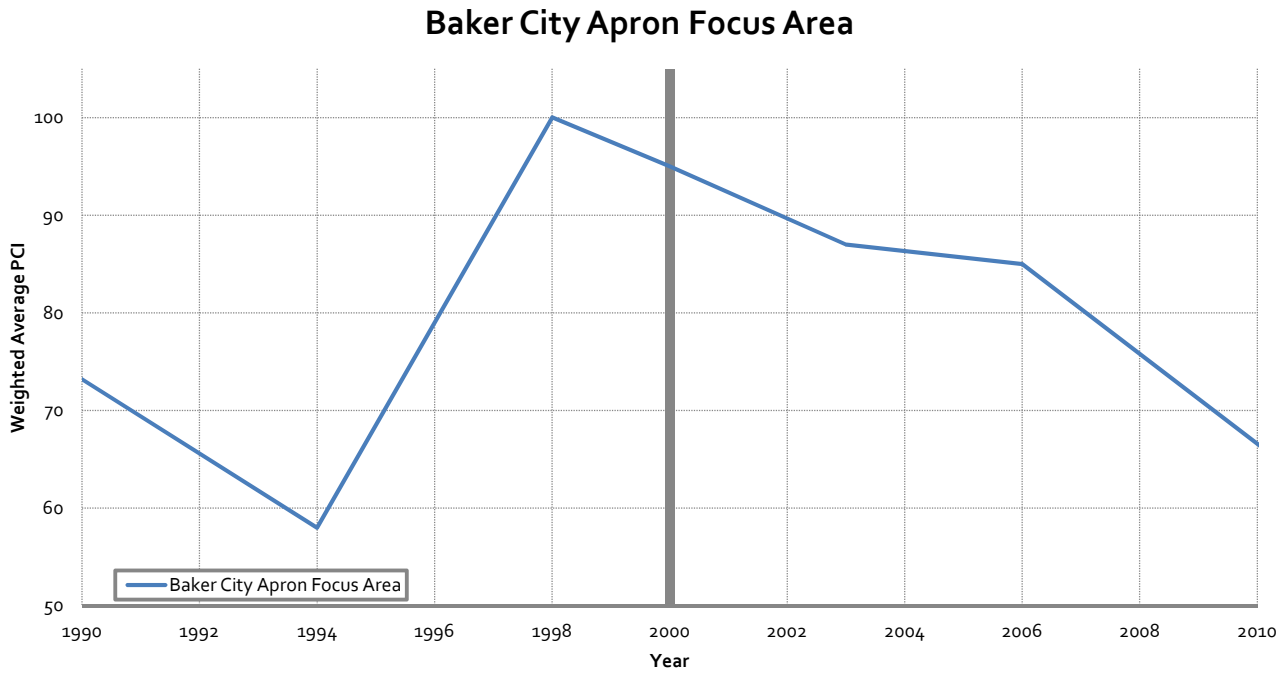


Baker City Taxiway A Focus Areas									
Taxiway A		TABA-02		TABA-03		TABA-04		TABA-05	
Focus Area (sf)	**169,774**	Area (sf)	21,679	Area (sf)	61,059	Area (sf)	3,735	Area (sf)	83,301
Year	**Weighted Average PCI****	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1991	**100**	9/3/91	100	9/3/91	100	9/3/91	100	9/3/91	100
1994	**99**	*1994**	*98*	6/29/94	*100*	*1994**	*94*	*1994**	*98*
1998	**97**	*1998**	*96*	3/25/98	*99*	*1998**	*85*	*1998**	*95*
2000	**93**	8/18/00	95	8/18/00	93	8/18/00	81	8/18/00	94
2002	**90**	*2002**	*93*	*2002**	*92*	*2002**	*80*	*2002**	*89*
2003	**89**	9/14/03	92	9/14/03	91	9/14/03	79	9/14/03	87
2006	**87**	10/11/06	93	10/11/06	86	10/11/06	77	10/11/06	87
2011	**74**	6/1/11	79	6/1/11	75	6/1/11	71	6/1/11	73

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

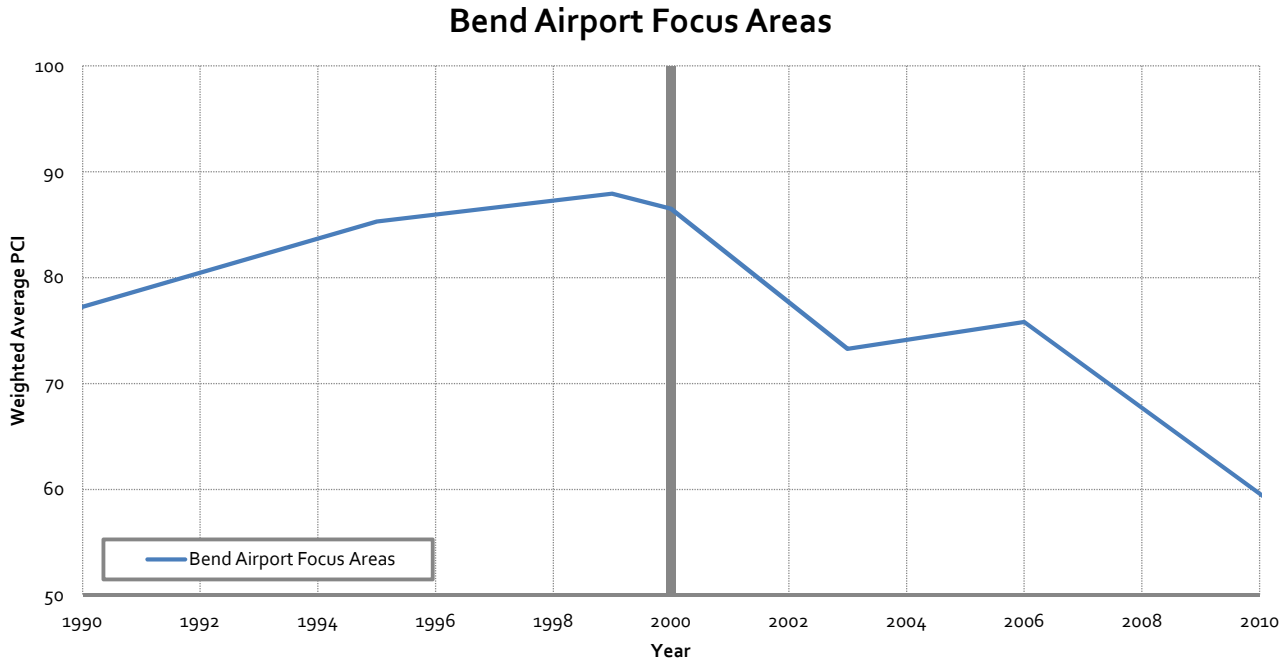
Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Apron



Baker City Apron Focus Area			
Apron 02		A02BA-02	
Focus Area (sf)	**40,500**	Area (sf)	40,500
Year	**Weighted Average PCI**	Date	PCI
1983	**100**	9/3/83	100
1986	**86**	6/18/86	86
1989	**77**	3/29/89	77
1994	**58**	6/29/94	58
1998	**100**	9/2/98	100
2000	**95**	8/18/00	95
2003	**87**	9/14/03	87
2006	**85**	10/11/06	85
2011	**62**	6/1/11	62

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Bend Airport
Pavement Type:	Taxiway, Apron



Bend Airport Focus Areas							
Bend Airport		Bend Runway**		Bend Taxiway A Focus Areas		Bend Apron 01 Focus Areas	
Total Focus Area (sf)	**413,528**	Focus Area (sf)	0	Focus Area (sf)	143,160	Focus Area (sf)	270,368
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average
1977	**100**					1977	100
1984	**92**			1984	*100*	*1984**	*88*
1986	**89**			1986	99	1986	84
1989	**76**			1989	86	1989	70
1995	**85**			1995	92	1995	82
1999	**88**			*1999**	*82*	1999	91
2000	**87**			2000	80	2000	90
2003	**73**			2003	63	2003	79
2006	**76**			2006	71	2006	78
2011	**56**			2011	58	2011	54

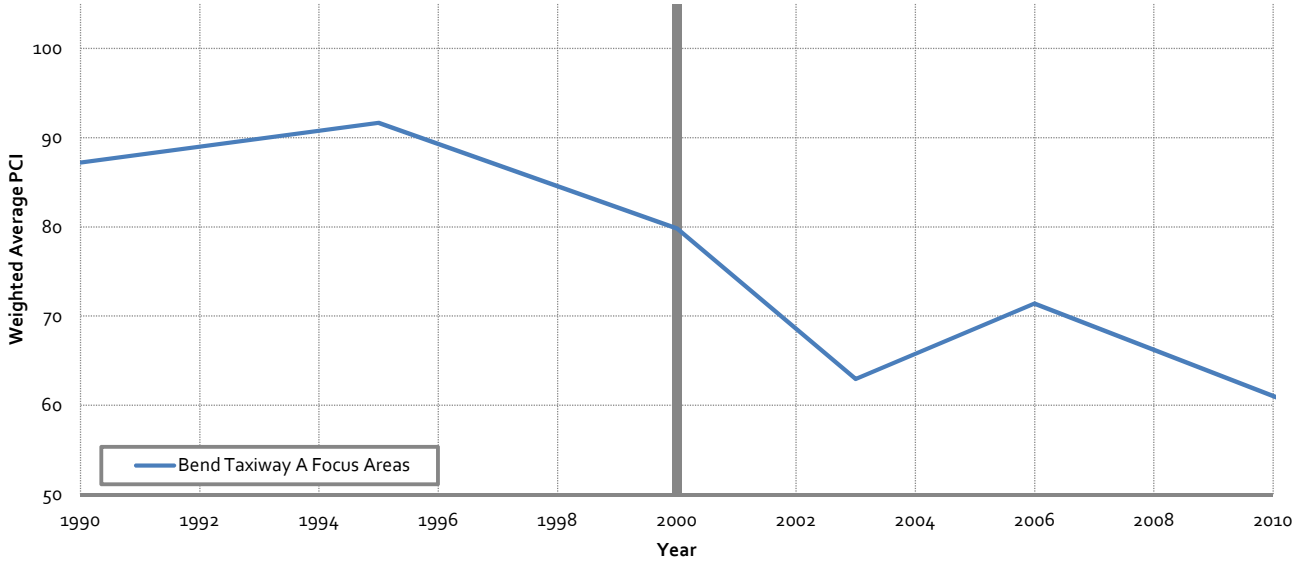
* PCI was interpolated to perform combined Weighted Average.

** Bend Runway was rehabilitated in 2009 and has been excluded from analysis.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Bend Airport
Pavement Type:	Taxiway

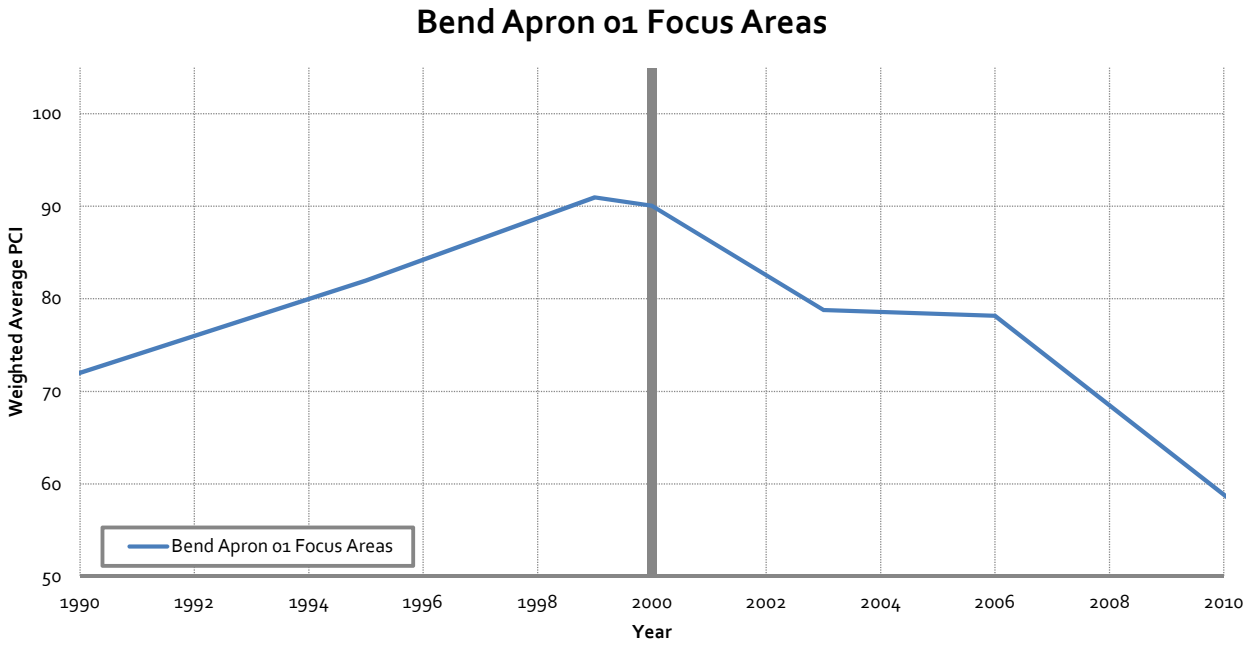
Bend Taxiway A Focus Areas



Bend Taxiway A Focus Areas					
Bend Taxiway A Focus Areas		TABE-02		TABE-03	
Focus Area (sf)	**143,160**	Area (sf)	110,047	Area (sf)	33,113
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1984	**100**			9/2/84	100
1986	**99**	5/27/86	100	5/27/86	95
1989	**86**	4/5/89	87	4/5/89	84
1995	**92**	9/3/95	100	5/20/95	64
2000	**80**	8/23/00	84	8/23/00	66
2003	**63**	9/24/03	65	9/24/03	56
2006	**71**	10/7/06	73	10/7/06	66
2011	**58**	5/21/11	64	5/21/11	40

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Bend Airport
Pavement Type:	Apron

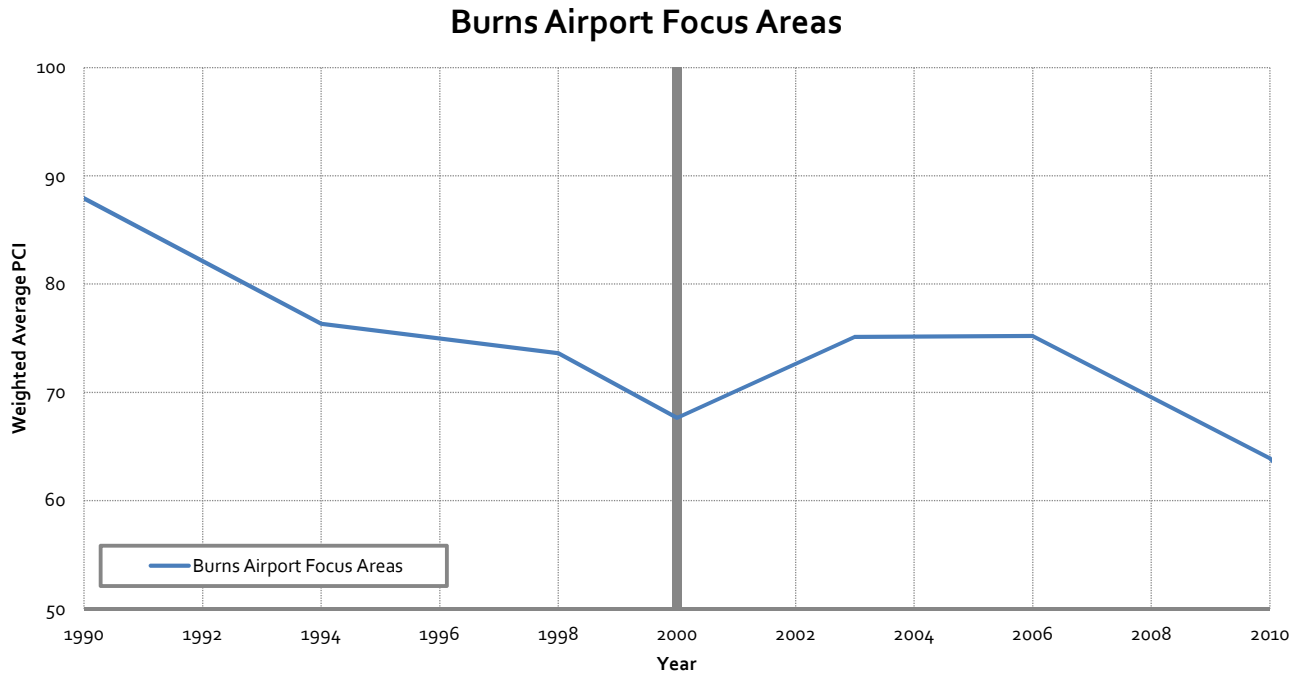


Bend Apron 01 Focus Areas									
Bend Apron 01 Focus Areas		A01BE-02		A01BE-03		A01BE-04		A01BE-05	
Focus Area (sf)	**270,368**	Area (sf)	36,867	Area (sf)	91,976	Area (sf)	70,952	Area (sf)	70,573
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1977	**100**					9/2/77	100		
1986	**84**					5/27/86	84		
1989	**70**					4/5/89	70		
1995	**82**					5/20/95	64	9/1/95	100
1999	**91**	9/2/99	100	9/2/99	100	*1999**	68	*1999**	98
2000	**90**	8/23/00	100	8/23/00	97	8/23/00	69	10/30/00	97
2003	**79**	9/25/03	95	9/25/03	92	9/24/03	49	9/24/03	83
2006	**78**	10/7/06	94	10/7/06	96	10/7/06	43	10/7/06	82
2011	**54**	5/21/11	72	5/21/11	70	5/21/11	28	5/21/11	50

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Burns Airport
Pavement Type:	Runway, Taxiway, Apron



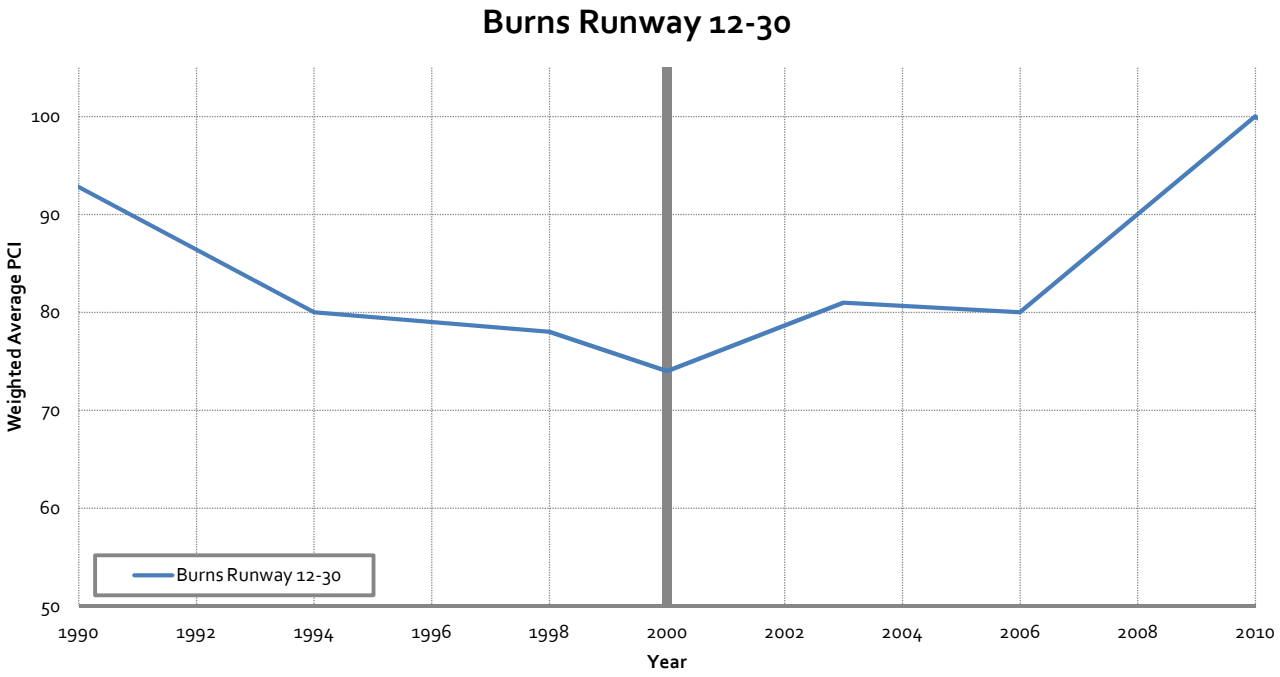
Burns Airport Focus Areas							
Burns Airport		Runway 12-30		Taxiway 01		Apron 01	
Total Area (sf)	**494,212**	Focus Area (sf)	384,225	Focus Area (sf)	79,987	Focus Area (sf)	30,000
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average	Year	Weighted Average
1942	**100**	1942	100			1942	100
1968	**97**	1968	100			*1968**	*53*
1986	**48**	1986	50			1986	21
1987	**95**	1987	100	1987	100	*1987**	*19*
1988	**93**	*1988**	*98*	1988	97	*1988**	*18*
1989	**91**	1989	96	1989	94	1989	16
1994	**76**	1994	80	1994	82	1994	14
1998	**74**	1998	78	1998	79	1998	3
2000	**68**	2000	74	2000	62	2000	0
2003	**75**	2003	81	2003	73	2003	5
2006	**75**	2006	80	2006	80	2006	2
2010	**64**	*2010***	*100*	2010	64	*2010***	*100*
2011	**58**	*2011***	*96*	2011	58	*2011***	*92*

* PCI was interpolated to perform combined Weighted Average.

**Runway 12-30 and Apron 01 PCI data was excluded from weighted average for 2010-2011 since they were rehabilitated in 2010.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Burns
Pavement Type:	Runway

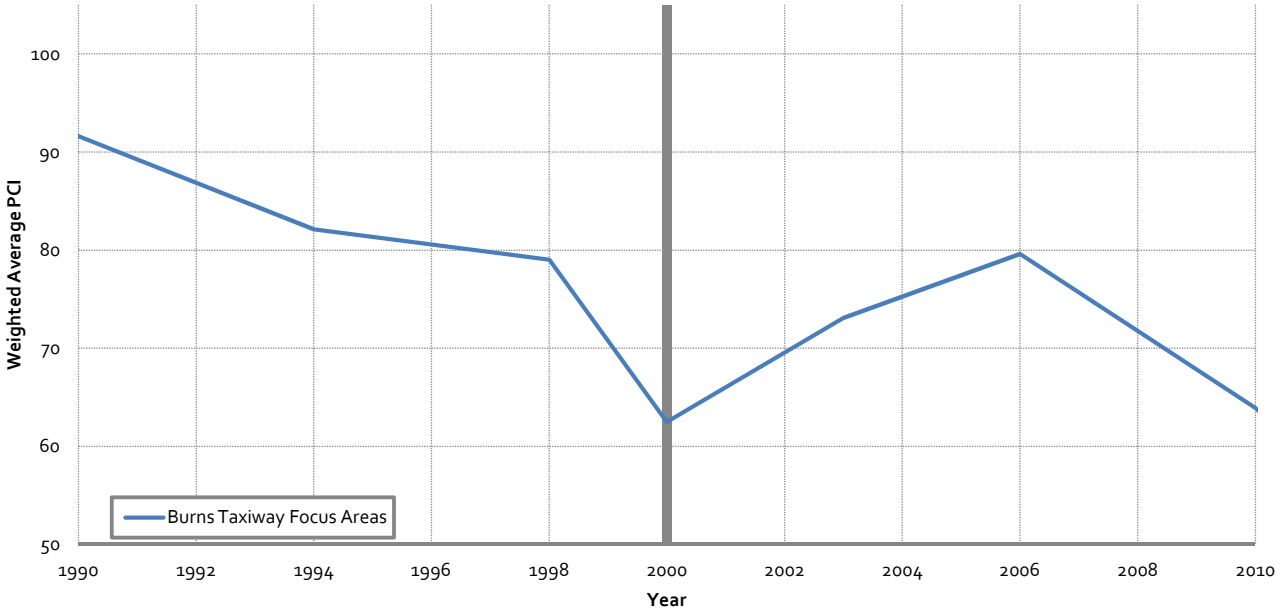


Burns Runway 12-30			
Runway 12-30		R12BU-01	
Focus Area (sf)	**384,225**	Area (sf)	384,225
Year	**Weighted Average PCI**	Date	PCI
1942	100	9/3/42	100
1968	100	9/1/68	100
1986	50	6/23/86	50
1987	100	9/1/87	100
1989	96	4/3/89	96
1994	80	6/27/94	80
1998	78	3/26/98	78
2000	74	8/20/00	74
2003	81	9/11/03	81
2006	80	10/8/06	80
2010	100	9/1/10	100
2011	96	5/27/11	96

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Burns
Pavement Type:	Taxiway

Burns Taxiway Focus Areas



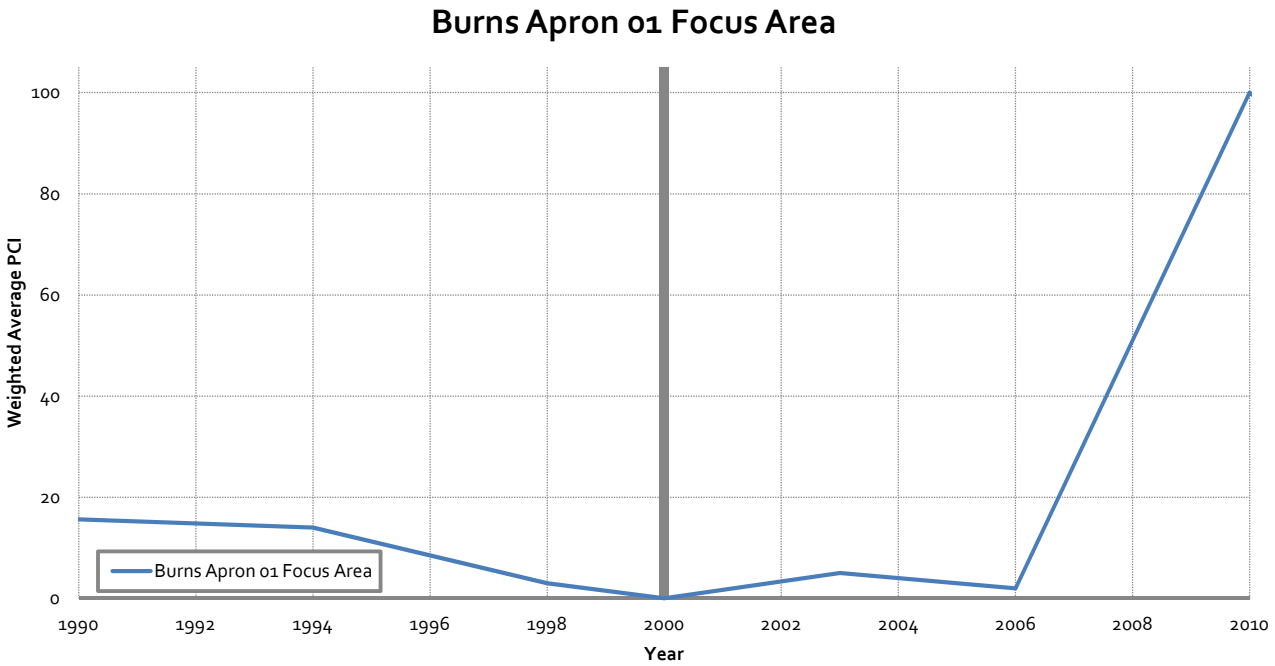
Burns Taxiway Focus Areas							
Taxiway 01		T01BU-02		T01BU-03		T01BU-04	
Focus Area (sf)	**79,987**	Area (sf)	13,650	Area (sf)	53,854	Area (sf)	12,483
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1987	**100**			9/1/87	100	9/1/87	100
1988	**97**	9/3/88	100	*1988**	*97*	*1988**	*95*
1989	**94**	4/3/89	98	4/3/89	94	*1989**	*90*
1994	**82**	6/27/94	80	6/27/94	87	*1994**	*63*
1998	**79**	3/26/98	77	3/26/98	88	*1998**	*42*
2000	**62**	8/20/00	45	8/20/00	74	8/20/00	32
2003	**73**	9/11/03	69	9/1/03	79	9/11/03	52
2006	**80**	10/8/06	76	10/8/06	86	10/8/06	56
2010	**64**	*2010**	*42*	*2010**	*61*	*9/1/10***	*100*
2011	**58**	5/27/11	33	5/27/11	55	*5/27/11***	*100*

* PCI was interpolated to perform combined Weighted Avera

**T01BU-04 PCI data was excluded from weighted average for 2010-2011 since it was rehabilitated in

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Burns Airport
Pavement Type:	Apron

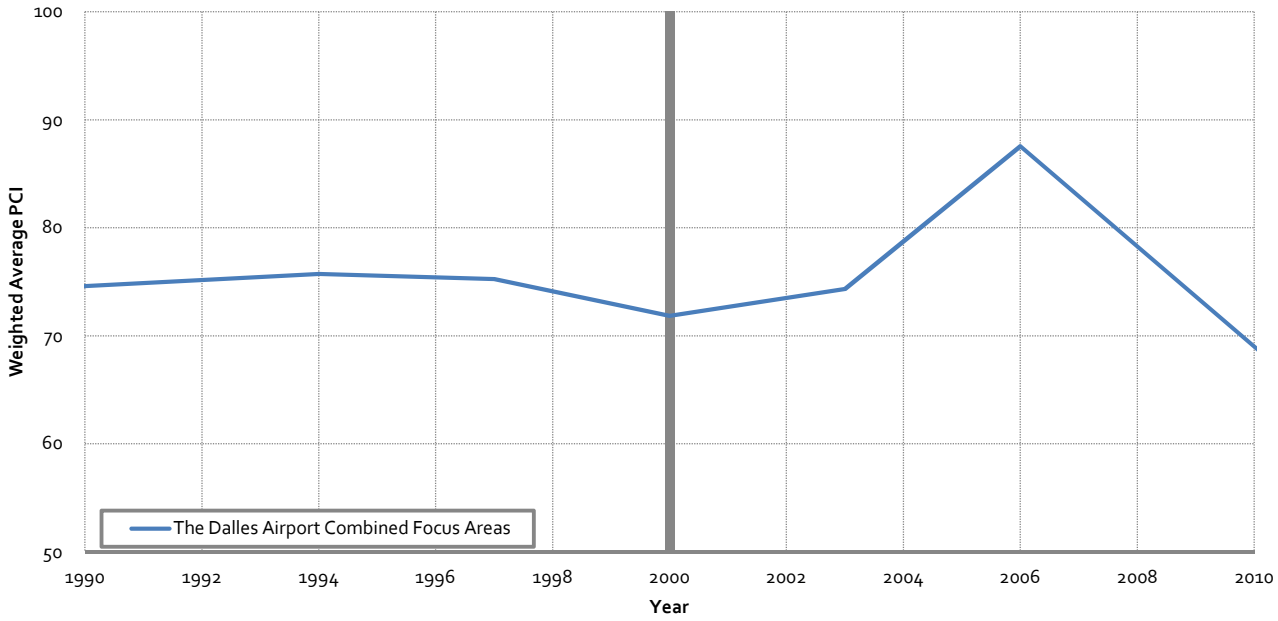


Burns Apron 01 Focus Area			
Apron 01		A01BU-01	
Focus Area (sf)	**30,000**	Area (sf)	30,000
Year	**Weighted Average PCI**	Date	PCI
1942	**100**	9/3/42	100
1986	**21**	6/23/86	21
1989	**16**	4/3/89	16
1994	**14**	6/27/94	14
1998	**3**	3/26/98	3
2000	**0**	8/20/00	0
2003	**5**	9/11/03	5
2006	**2**	10/8/06	2
2010	**100**	9/3/10	100
2011	**92**	5/27/11	92

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway, Taxiway, Apron

The Dalles Airport Combined Focus Areas

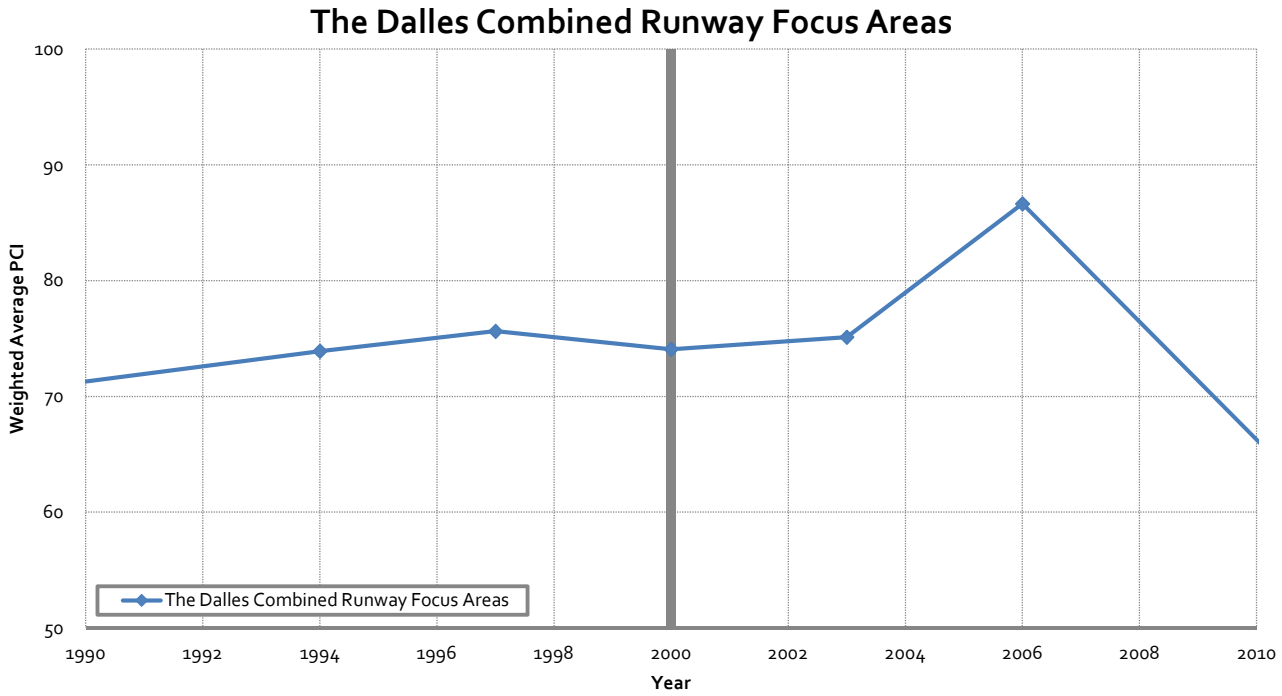


The Dalles Airport Combined Focus Areas							
The Dalles Airport		Combined Runways		Taxiways		Apron 01	
Total Focus Area (sf)	**1,309,914**	Focus Area (sf)	962,020	Focus Area (sf)	220,113	Focus Area (sf)	127,781
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1943	**100**	1943	100	1943	100	1943	100
1983	**77**	*1983**	*73*	*1983**	*85*	1983	92
1988	**74**	1988	70	1988	83	1988	89
1994	**76**	1994	74	1994	78	1994	85
1997	**75**	1997	76	1997	66	1997	88
2000	**72**	2000	74	2000	67	2000	64
2003	**74**	2003	75	2003	74	2003	69
2006	**88**	2006	87	2006	93	2006	85
2011	**64**	2011	61	2011	77	2011	66

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway, Taxiway, Apron

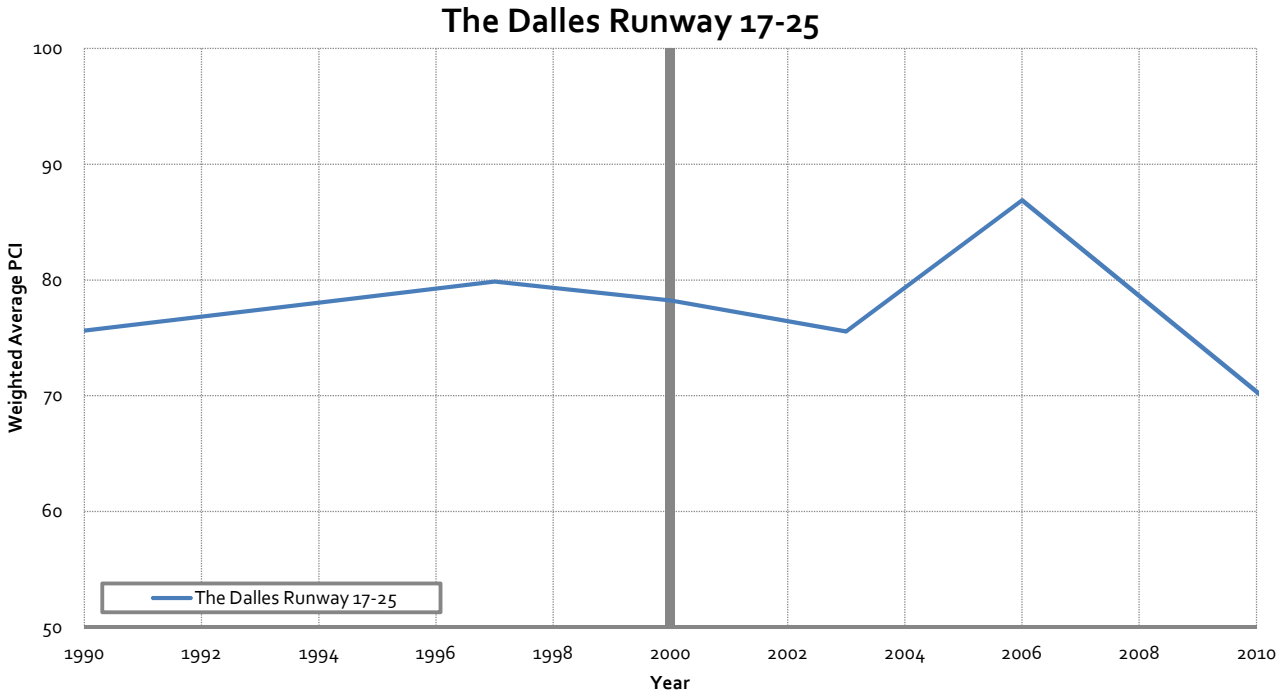


The Dalles Combined Runway Focus Areas					
Combined Runways		Runway 17-25		Runway 12-30	
Focus Area (sf)	**962,020**	Focus Area (sf)	464,300	Focus Area (sf)	497,720
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI
1943	**100**	1943	100	1943	100
1988	**70**	1988	74	1988	66
1994	**74**	1994	78	1994	70
1997	**76**	1997	80	1997	72
2000	**74**	2000	78	2000	70
2003	**75**	2003	76	2003	75
2006	**87**	2006	87	2006	86
2011	**61**	2011	66	2011	56

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway

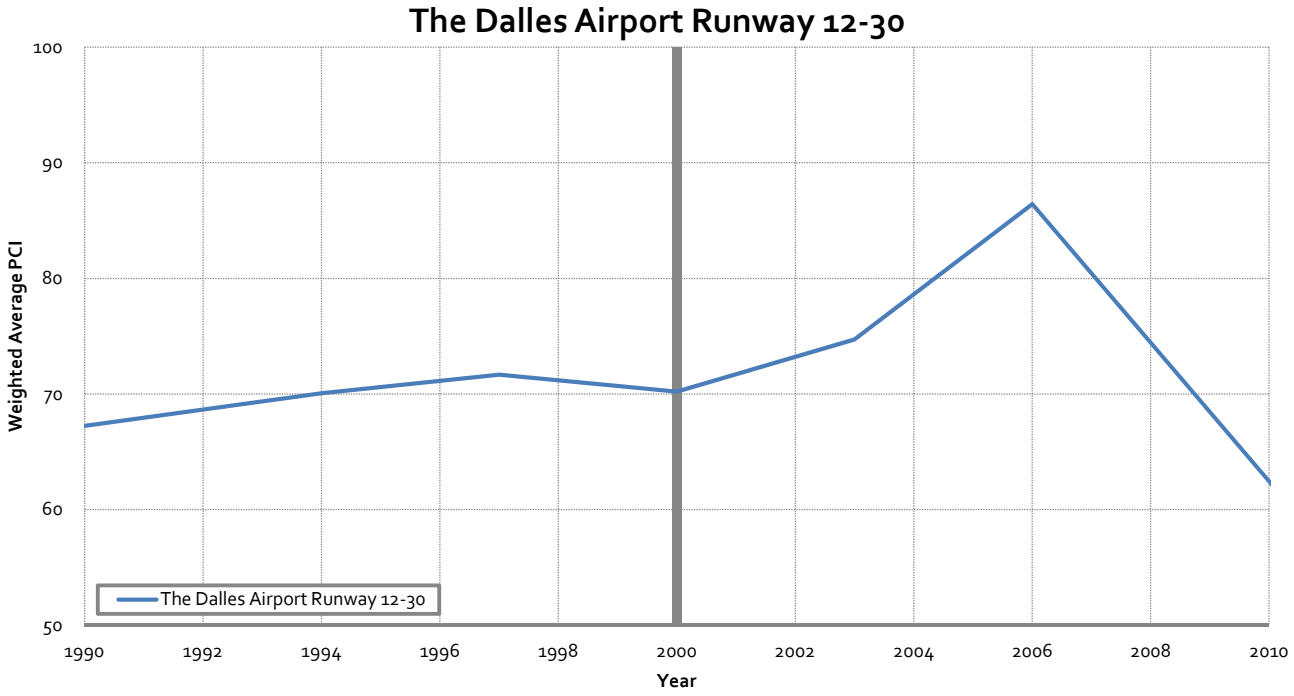


The Dalles Runway 17-25													
Runway 17-25		R07TD-01A		R07TD-01B		R07TD-02A		R07TD-02B		R07TD-03A		R07TD-03B	
Focus Area (sf)	464,300	Area (sf)	10,000	Area (sf)	10,000	Area (sf)	#####	Area (sf)	#####	Area (sf)	23,000	Area (sf)	23,000
Year	Weighted Average PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1943	100	9/2/43	100	9/2/43	100	9/2/43	100	9/2/43	100	9/2/43	100	9/2/43	100
1988	74	*1988**	*83*	*1988**	*87*	*1988**	*78*	2/16/88	67	*1988**	*87*	*1988**	*84*
1994	78	*1994**	*80*	*1994**	*86*	*1994**	*75*	6/24/94	79	*1994**	*85*	*1994**	*82*
1997	80	*1997**	*79*	*1997**	*85*	*1997**	*74*	10/10/97	85	*1997**	*84*	*1997**	*81*
2000	78	*2000**	*78*	8/10/00	84	*2000**	*72*	8/10/00	83	*2000**	*83*	8/10/00	80
2003	76	9/28/03	77	9/28/03	78	9/28/03	71	9/28/03	79	9/28/03	82	9/28/03	77
2006	87	10/3/06	90	10/3/06	92	10/3/06	86	10/3/06	87	10/3/06	90	10/3/06	87
2011	66	5/18/11	75	5/18/11	82	5/18/11	64	5/18/11	66	5/18/11	73	5/18/11	70

* PCI was interpolated to perform coml

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway, Taxiway, Apron



The Dalles Airport Runway 12-30									
Runway 12-30		R12TD-01A		R12TD-01B		R12TD-02A		R12TD-02B	
Focus Area (sf)	**497,720**	Area (sf)	10,000	Area (sf)	10,000	Area (sf)	238,860	Area (sf)	238,860
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI	Date	PCI
1943	**100**	9/2/43	100	9/2/43	100	9/2/43	100	9/2/43	100
1988	**66**	*1988**	*84*	*1988**	*76*	2/16/88	68	*1988**	*63*
1994	**70**	*1994**	*82*	*1994**	*73*	6/24/94	82	*1994**	*58*
1997	**72**	*1997**	*81*	*1997**	*71*	10/10/97	88	5/18/97	55
2000	**70**	8/10/00	80	*2000**	*70*	8/10/00	76	*2000**	*64*
2003	**75**	9/28/03	68	9/28/03	68	9/28/03	77	9/28/03	73
2006	**86**	10/3/06	81	10/3/06	88	10/3/06	86	10/3/06	87
2011	**56**	5/18/11	58	5/18/11	52	5/18/11	56	*2011***	*57*

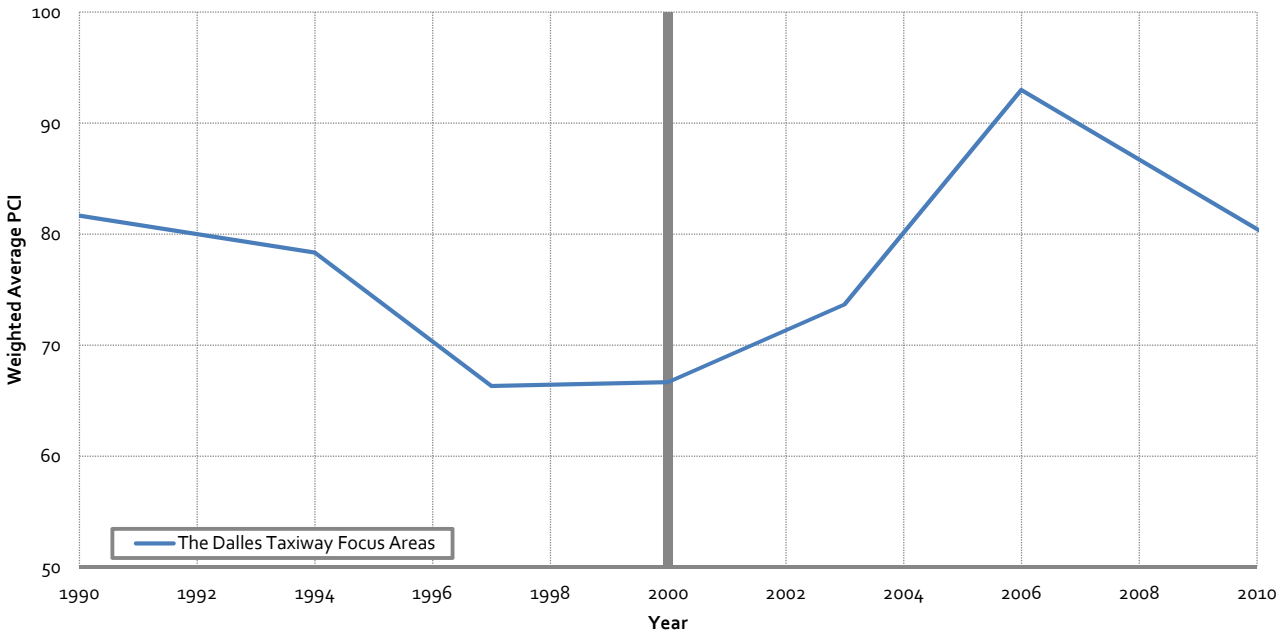
* PCI was interpolated to perform combined Weighted Average.

**R12TD-02B PCI for 2011 was extrapolated using decline rate for R12TD02A for years 2006 to 2011.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway, Taxiway, Apron

The Dalles Taxiway Focus Areas

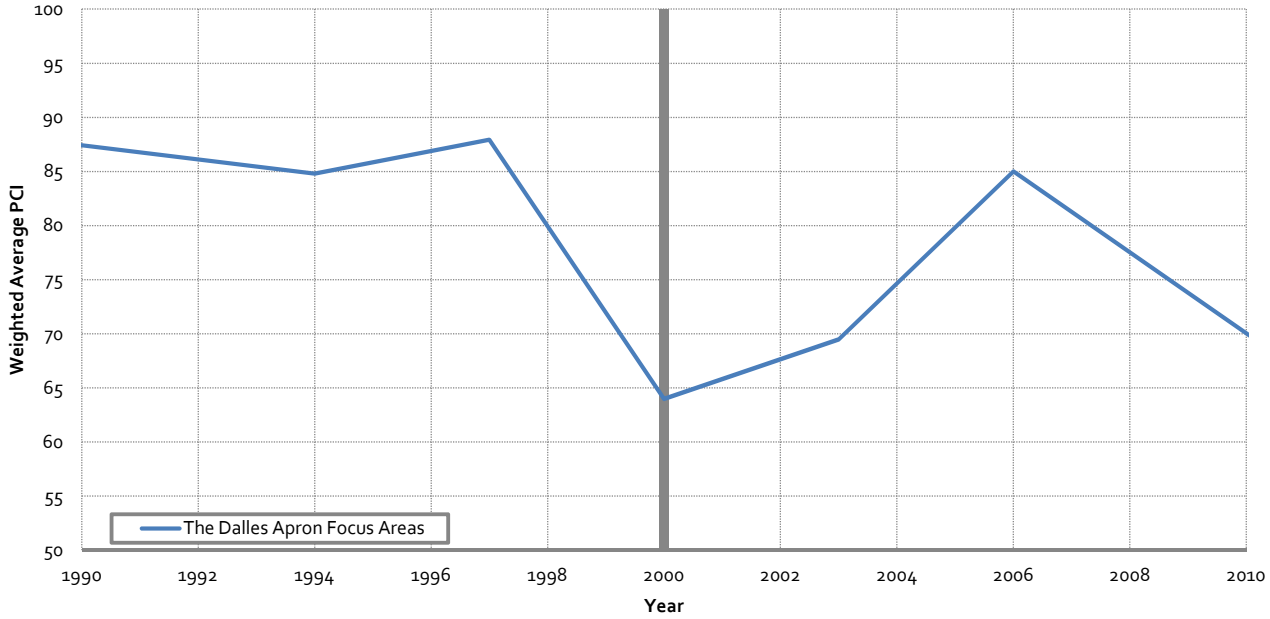


The Dalles Taxiway Focus Areas					
Taxiways		T05TD-01		T01TD-01	
Focus Area (sf)	**220,113**	Area (sf)	146,789	Area (sf)	73,324
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1943	**100**	9/2/43	100	9/2/43	100
1988	**83**	2/16/88	82	2/16/88	86
1994	**78**	6/24/94	83	6/24/94	69
1997	**66**	10/10/97	67	10/10/97	65
2000	**67**	8/10/00	68	8/10/00	64
2003	**74**	9/28/03	74	9/28/03	73
2006	**93**	10/3/06	95	10/3/06	89
2011	**77**	5/18/11	85	5/18/11	62

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	The Dalles Airport
Pavement Type:	Runway, Taxiway, Apron

The Dalles Apron Focus Areas

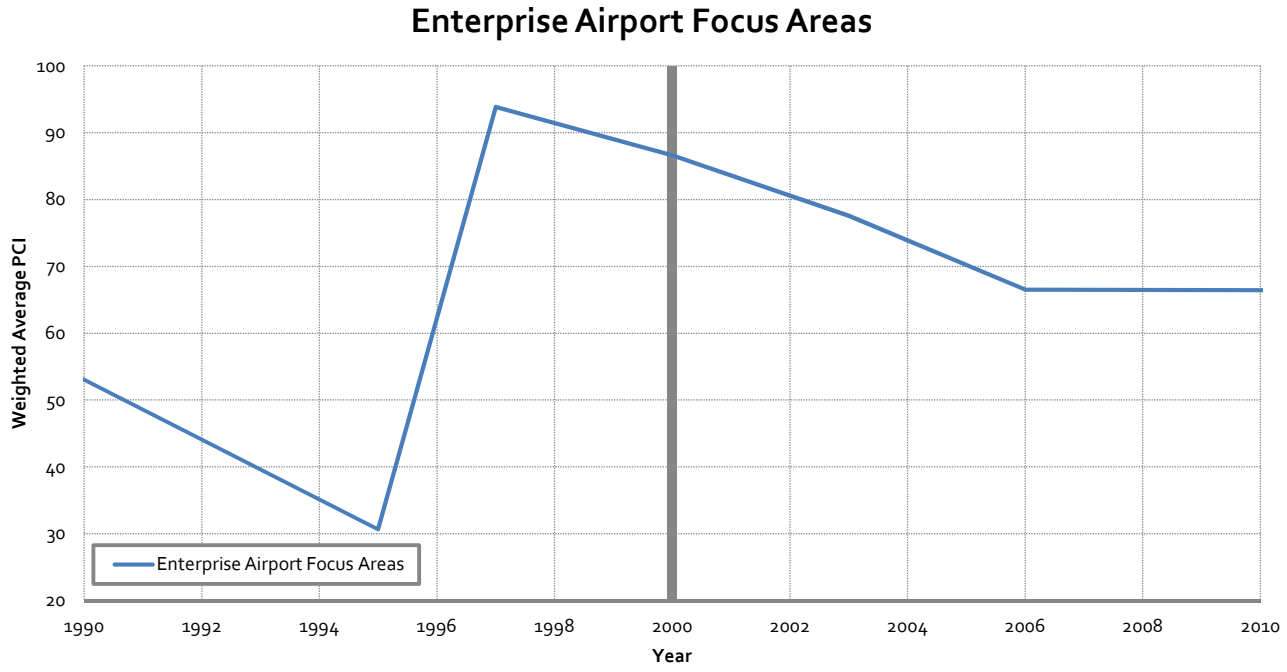


The Dalles Apron Focus Areas					
Apron 01		A01TD-06		A01TD-07	
Focus Area (sf)	**127,781**	Area (sf)	44,046	Area (sf)	83,735
Year	**Weighted Average PCI**	Date	PCI	Date	PCI
1943	**100**	9/2/43	100		
1983	**92**	*1983**	*76*	9/2/83	100
1988	**89**	2/16/88	73	2/16/88	97
1994	**85**	6/24/94	92	6/24/94	81
1997	**88**	10/10/97	84	10/10/97	90
2000	**64**	8/10/00	62	8/10/00	65
2003	**69**	9/28/03	78	9/28/03	65
2006	**85**	10/3/06	85	10/3/06	85
2011	**66**	5/18/11	84	5/18/11	57

* PCI was interpolated to perform coml

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Runway, Taxiway, Apron



Enterprise Airport Focus Areas							
Enterprise Airport		Runway 12-30		Taxiway 01**		Apron 01	
Total Focus Area (sf)	**161,339**	Focus Area (sf)	143,150	Focus Area (sf)		Focus Area (sf)	18,189
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1970	**100**	1970	100				
1973	**100**	1973	100			1973	100
1979	**87**	*1979**	*87*	1979	100	*1979**	*84*
1986	**71**	1986	72	1986	54	1986	65
1989	**56**	1989	56	1989	33	1989	56
1989	**56**	*1989**	*54*	*1989**	*32*	1989.4	68
1995	**31**	1995	28	1995	14	*1995**	*52*
1997	**94**	1997	100	*1997**	*48*	*1997**	*46*
2000	**87**	2000	93	2000	100	2000	37
2003	**78**	2003	77	2003	66	2003	82
2006	**67**	2006	65	2006	65	2006	79
2011	**66**	2011	64	2011	77	2011	86

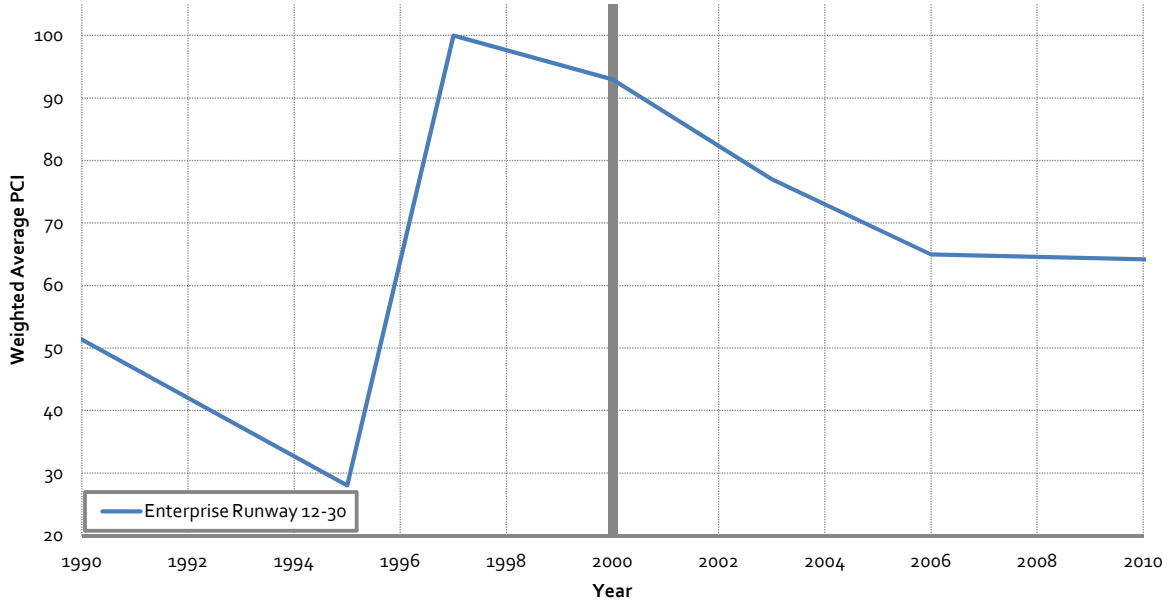
* PCI was interpolated to perform combined Weighted Average.

**Taxiway 01 was excluded from Weighted Average PCI since it was rehabilitated in 2000.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Runway

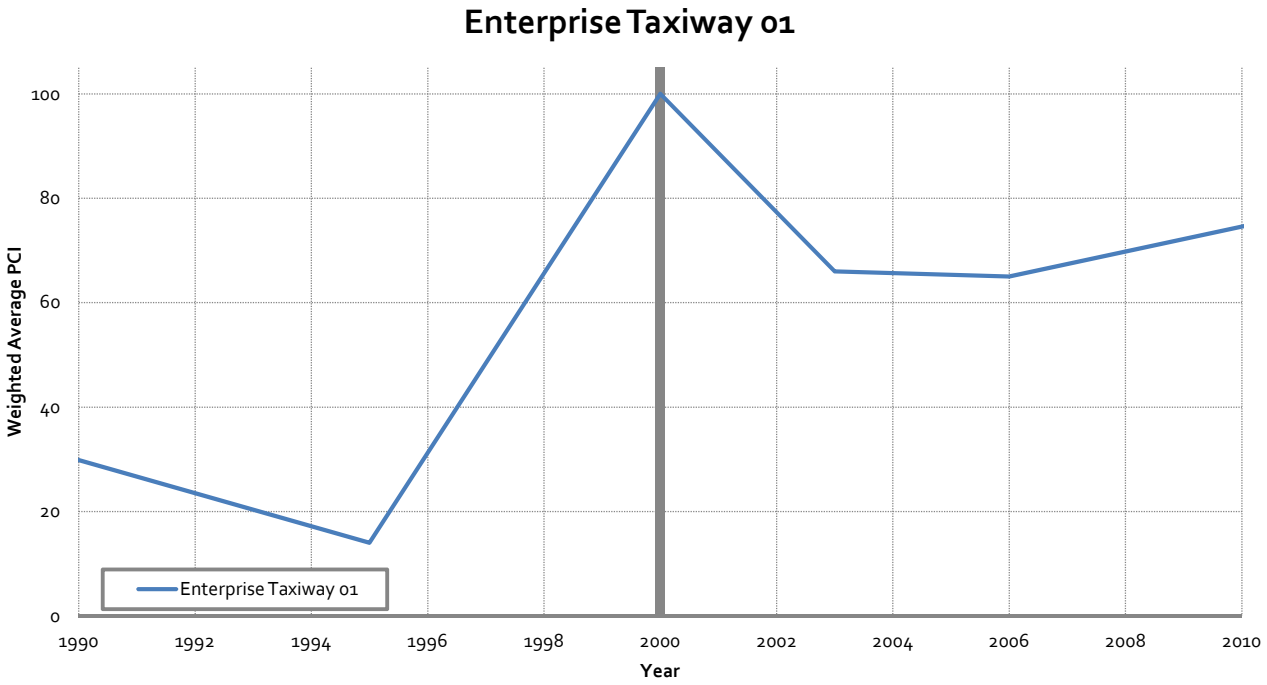
Enterprise Runway 12-30



Enterprise Runway 12-30			
Runway 12-30		R12EN-01	
Focus Area (sf)	**143,150**	Area (sf)	143,150
Year	**Weighted Average PCI**	Date	PCI
1970	100	9/2/70	100
1973	100	9/1/73	100
1986	72	6/26/86	72
1989	56	3/27/89	56
1995	28	5/17/95	28
1997	100	9/1/97	100
2000	93	8/15/00	93
2003	77	9/15/03	77
2006	65	10/11/06	65
2011	64	6/3/11	64

Pavement Condition Index Report Summary

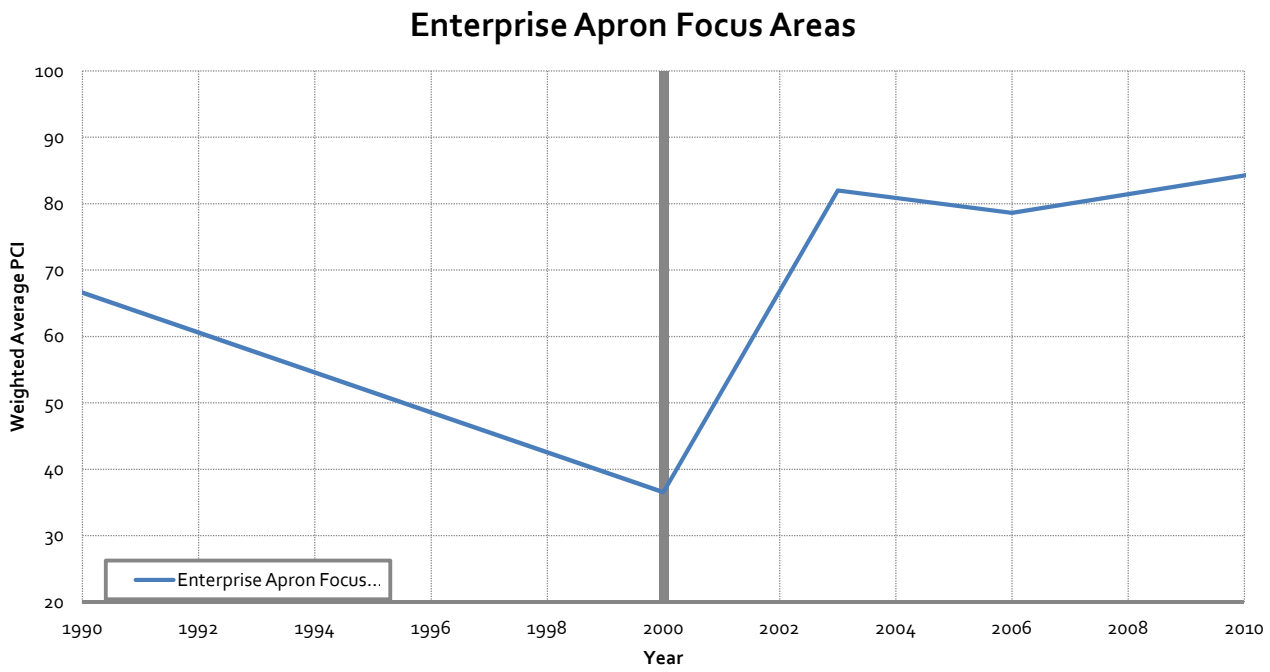
Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Taxiway



Enterprise Taxiway 01			
Taxiway 01		T01EN-01	
Focus Area (sf)	**48,242**	Area (sf)	48,242
Year	**Weighted Average PCI**	Date	PCI
1979	100	9/2/79	100
1986	54	6/26/86	54
1989	33	3/27/89	33
1995	14	5/17/95	14
2000	100	8/15/00	100
2003	66	9/15/03	66
2006	65	10/11/06	65
2011	77	6/3/11	77

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Baker City Airport
Pavement Type:	Apron

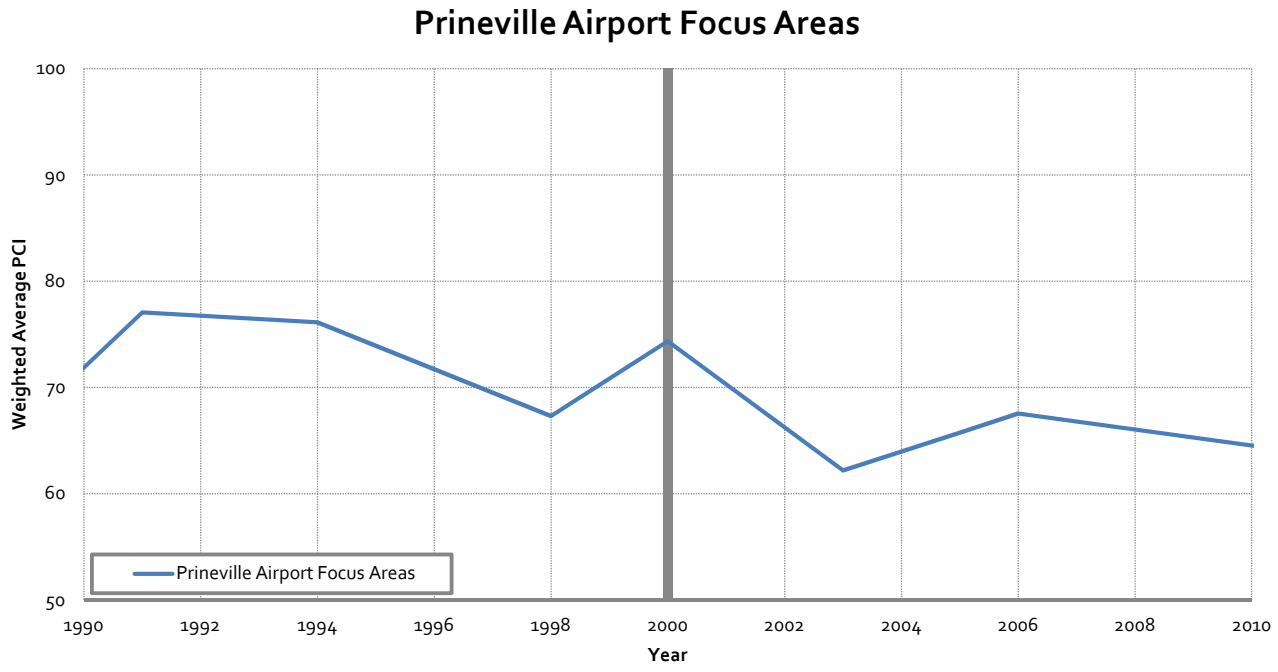


Enterprise Apron Focus Areas							
Apron 01		A01EN-01		A01EN-02		A01EN-03	
Focus Area (sf)	**18,189**	Area (sf)	6,500	Area (sf)	4,182	Area (sf)	7,507
Year	**Weighted Average PCI**	Date	PCI	Date	PCI	Date	PCI
1973	**100**	9/2/73	100	9/2/73	100	9/3/73	100
1986	**65**	6/26/86	73	*1986**	*70*	*1986**	*56*
1989	**56**	3/27/89	64	*1989**	*63*	*1989**	*46*
1989	**68**	9/1/89	100	*1989.4**	*62*	*1989.4**	*45*
2000	**37**	8/15/00	68	8/15/00	37	8/15/00	9
2003	**82**	9/15/03	68	9/15/03	100	9/15/03	84
2006	**79**	10/11/06	65	10/11/06	90	10/11/06	84
2011	**86**	6/3/11	81	6/3/11	85	6/3/11	90

* PCI was interpolated to perform combined Weighted Average.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Prineville Airport
Pavement Type:	Runway, Taxiway, Apron

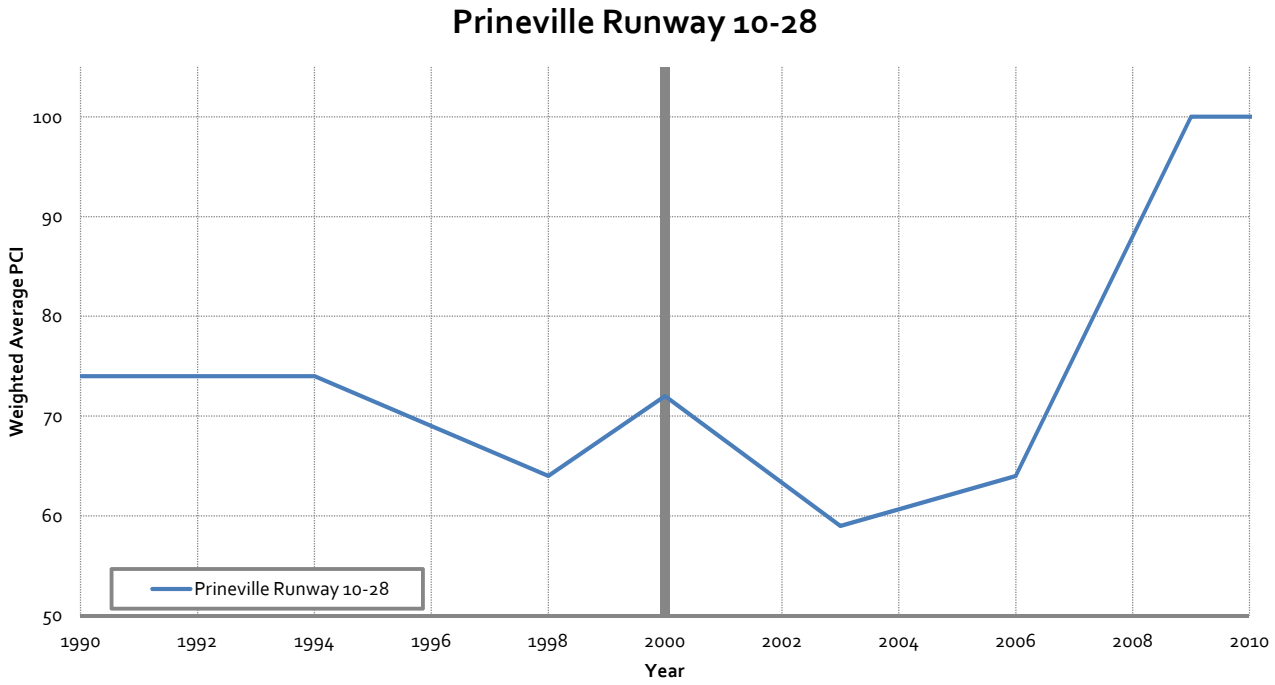


Prineville Airport Focus Areas							
Prineville Airport		Runway 10-28		Taxiway 01**		Apron 01	
Total Area	**425,089**	Focus Area(sf)	374,993	Focus Area (sf)		Focus Area (sf)	50,096
Year	**Weighted Average PCI**	Year	Weighted Average PCI	Year	Weighted Average PCI	Year	Weighted Average PCI
1980	**100**	1980	100				
1986	**72**	1986	77			1986	37
1988	**69**	*1988**	*75*	1988	100	*1988**	*20*
1989	**67**	1989	74	1989	94	1989	12
1990	**72**	*1990**	*74*	*1990**	*94*	*1990**	*56*
1991	**77**	*1991**	*74*	*1991**	*94*	1991	100
1994	**76**	1994	74	1994	93	1994	92
1998	**67**	1998	64	1998	68	1998	92
2000	**74**	2000	72	2000	54	2000	92
2003	**62**	2003	59	2003	38	2003	86
2005	**66**	*2005**	*62*	2005	100	*2005**	*91*
2006	**68**	2006	64	2006	100	2006	94
2009	**65**	*2009***	*64*	*2009**	*98*	*2009**	*75*
2011	**64**	*2011***	*64*	2011	97	2011	62

* PCI was interpolated to perform combined Weighted Average.
**Taxiway 01 was excluded from the Weighted Average PCI since it was rehabilitated in 2005.
***Runway 10-28 was rehabilitated in 2009, but to complete the data set for the Weighted Average, PCI values for 2009-2011 were assumed to stay at 64.

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Prineville Airport
Pavement Type:	Runway

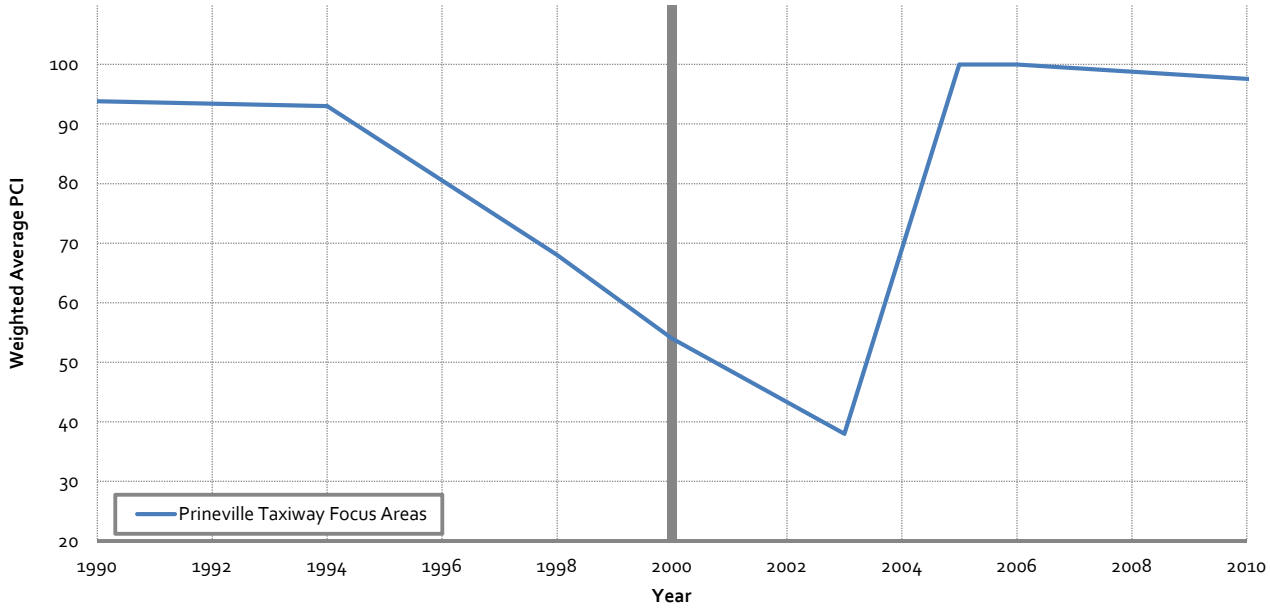


Prineville Runway 10-28			
Runway 10-28		R10PR-01	
Focus Area(sf)	**374,993**	Area (sf)	374,993
Year	**Weighted Average PCI**	Date	PCI
1980	100	9/2/80	100
1986	77	5/28/86	77
1989	74	4/7/89	74
1994	74	6/27/94	74
1998	64	3/27/98	64
2000	72	8/21/00	72
2003	59	9/25/03	59
2006	64	10/5/06	64
2009	100	9/4/09	100
2011	100	5/24/11	100

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Prineville Airport
Pavement Type:	Taxiway

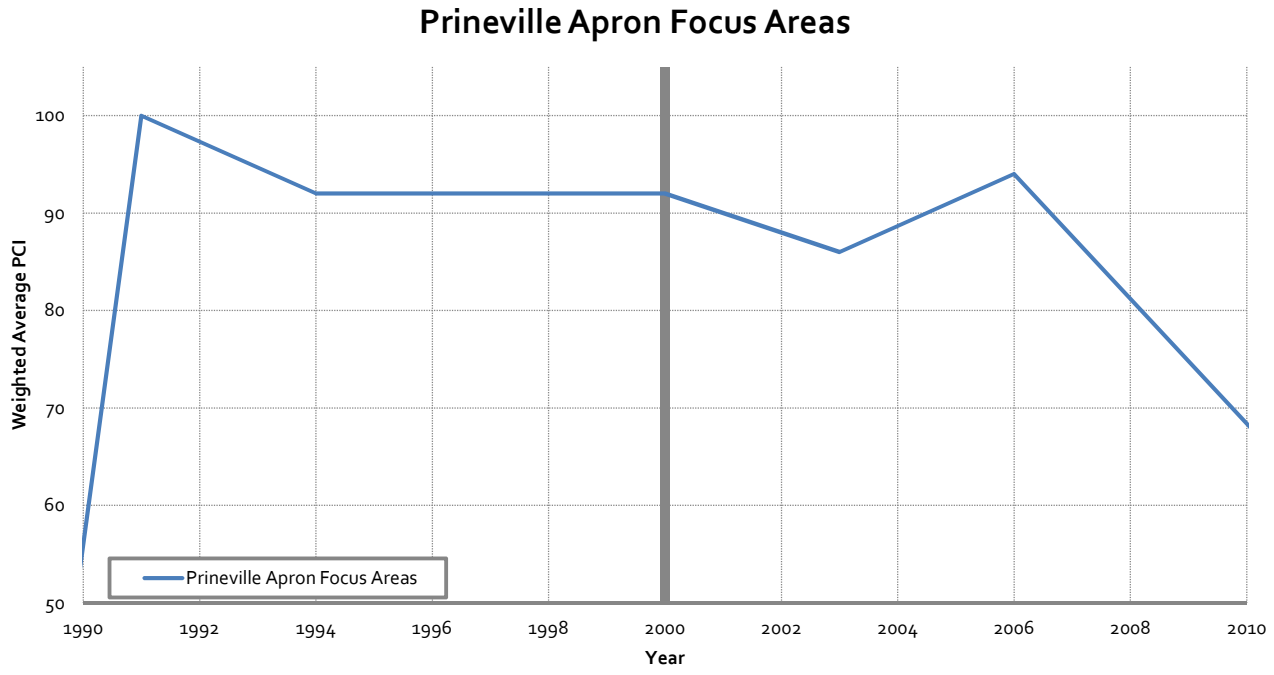
Prineville Taxiway Focus Areas



Prineville Taxiway Focus Areas			
Taxiway 01		T01PR-01	
Focus Area (sf)	**104,112**	Area (sf)	104,112
Year	**Weighted Average PCI**	Date	PCI
1988	**100**	9/2/88	100
1989	**94**	4/7/89	94
1994	**93**	6/27/94	93
1998	**68**	3/27/98	68
2000	**54**	8/21/00	54
2003	**38**	9/25/03	38
2005	**100**	6/3/05	100
2006	**100**	10/5/06	100
2011	**97**	5/24/11	97

Pavement Condition Index Report Summary

Climate Region:	Oregon Central/East
PMP Region:	Eastern
Airports:	Prineville Airport
Pavement Type:	Apron



Prineville Apron Focus Areas			
Apron 01		A01PR-02	
Focus Area (sf)	**50,096**	Area (sf)	50,096
Year	**Weighted Average PCI**	Date	PCI
1986	37	5/28/86	37
1989	12	4/7/89	12
1991	100	9/2/91	100
1994	92	6/27/94	92
1998	92	3/27/98	92
2000	92	8/21/00	92
2003	86	9/26/03	86
2006	94	10/5/06	94
2011	62	5/24/11	62

Pavement Maintenance Cost Inventory

Table of Contents	Page
Bandon Airport Pavement and Maintenance Inventory (2000-2009)	3
Bandon Airport 2006 PMP Cost Summary	4
Bandon Airport 2003 PMP Cost Summary	5
Bandon Airport 2000 PMP Cost Summary	6
Newport Airport Pavement and Maintenance Inventory (2000-2009)	7
Newport Airport 2006 PMP Cost Summary	8
Newport Airport 2003 PMP Cost Summary	9
Newport Airport 2000 PMP Cost Summary	10
Newport Airport 2006 PMP Cost Summary	11
Seaside Newport Combined Runways Focus Areas PCI Report Summary	12
Seaside Airport 2009 PMP Cost Summary	13
Seaside Airport 2005 PMP Cost Summary	14
Tillamook Airport Pavement and Maintenance Inventory (2000-2009)	15
Tillamook Airport 2009 PMP Cost Summary	16
Tillamook Airport 2005 PMP Cost Summary	17
Corvallis Airport Pavement and Maintenance Inventory (2000-2009)	18
Corvallis Airport 2009 PMP Cost Summary	19
Corvallis Airport 2005 PMP Cost Summary	20
Corvallis Airport 2002 PMP Cost Summary	21
Creswell Airport Pavement and Maintenance Inventory (2000-2009)	22
Creswell Airport 2006 PMP Cost Summary	23
Creswell Airport 2003 PMP Cost Summary	24
Creswell Airport 2000 PMP Cost Summary	25
Mulino Airport Pavement and Maintenance Inventory (2000-2009)	26
Mulino Airport 2009 PMP Cost Summary	27
Mulino Airport 2005 PMP Cost Summary	28
Salem Airport Pavement and Maintenance Inventory (2000-2009)	29
Salem Airport Pavement and Maintenance Inventory (2000-2009)	30
Salem Airport 2009 PMP Cost Summary	31
Salem Airport 2009 PMP Cost Summary	32
Salem Airport 2005 PMP Cost Summary	33
Salem Airport 2005 PMP Cost Summary	34
Salem Airport 2002 PMP Cost Summary	35
Salem Airport 2002 PMP Cost Summary	36
Scappoose Airport Pavement and Maintenance Inventory (2000-2009)	37
Scappoose Airport Pavement and Maintenance Inventory (2000-2009)	38
Scappoose Airport 2009 PMP Cost Summary	39
Scappoose Airport 2009 PMP Cost Summary	40
Scappoose Airport 2005 PMP Cost Summary	41
Scappoose Airport 2005 PMP Cost Summary	42
Scappoose Airport 2002 PMP Cost Summary	43
Scappoose Airport 2002 PMP Cost Summary	44
Scappoose Airport 2000 PMP Cost Summary	45
Scappoose Airport 2000 PMP Cost Summary	46
Ashland Airport Pavement and Maintenance Inventory (2000-2009)	47
Ashland Airport 2006 PMP Cost Summary	48
Ashland Airport 2003 PMP Cost Summary	49
Ashland Airport 2000 PMP Cost Summary	50
Grants Pass Airport Pavement and Maintenance Inventory (2000-2009)	51
Grants Pass Airport 2006 PMP Cost Summary	52
Grants Pass Airport 2006 PMP Cost Summary	53
Grants Pass Airport 2003 PMP Cost Summary	54
Grants Pass Airport 2003 PMP Cost Summary	55
Grants Pass Airport 2000 PMP Cost Summary	56
Grants Pass Airport 2000 PMP Cost Summary	57
Illinois Valley Airport Pavement and Maintenance Inventory (2000-2009)	58
Illinois Valley Airport 2003 PMP Cost Summary	59
Baker City Pavement and Maintenance Inventory (2000-2009)	60
Baker City Pavement and Maintenance Inventory (2000-2009)	61
Baker City Airport 2008 PMP Cost Summary	62
Baker City Airport 2008 PMP Cost Summary	63
Baker City Airport 2004 PMP Cost Summary	64
Baker City Airport 2004 PMP Cost Summary	65
Baker City Airport 2001 PMP Cost Summary	66
Baker City Airport 2001 PMP Cost Summary	67

Pavement Maintenance Cost Inventory

Table of Contents	Page
Bend Airport Pavement and Maintenance Inventory (2000-2009)	68
Bend Airport Pavement and Maintenance Inventory (2000-2009)	69
Bend Airport 2008 PMP Cost Summary	70
Bend Airport 2008 PMP Cost Summary	71
Bend Airport 2004 PMP Cost Summary	72
Bend Airport 2004 PMP Cost Summary	73
Bend Airport 2000 PMP Cost Summary	74
Bend Airport 2000 PMP Cost Summary	75
Burns Airport Pavement and Maintenance Inventory (2000-2009)	76
Burns Airport 2008 PMP Cost Summary	77
Burns Airport 2004 PMP Cost Summary	78
Burns Airport 2001 PMP Cost Summary	79
The Dalles Airport Pavement and Maintenance Inventory (2000-2009)	80
The Dalles Airport 2008 PMP Cost Summary	81
The Dalles Airport 2005 PMP Cost Summary	82
The Dalles Airport 2004 PMP Cost Summary	83
The Dalles Airport 2001 PMP Cost Summary	84
Enterprise Airport Pavement and Maintenance Inventory (2000-2009)	85
Enterprise Airport 2008 PMP Cost Summary	86
Prineville Airport Pavement and Maintenance Inventory (2000-2009)	87
Prineville Airport Pavement and Maintenance Inventory (2000-2009)	88
Prineville Airport 2008 PMP Cost Summary	89
Prineville Airport 2008 PMP Cost Summary	90
Prineville Airport 2004 PMP Cost Summary	91
Prineville Airport 2004 PMP Cost Summary	92
Prineville Airport 2001 PMP Cost Summary	93
Prineville Airport 2001 PMP Cost Summary	94
Prineville Airport 2000 PMP Cost Summary	95
Prineville Airport 2000 PMP Cost Summary	96

Bandon Airport

Pavement Maintenance Cost Inventory

Bandon Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Maintained Pavement Area (sf)	Total Maint Cost (2000-2009)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R16BN-01	216,000	216,000	$51,434	x	216,000	$51,434
T01BN-01	34,092	34,092	$8,118	x	34,092	$8,118
T01BN-02	64,000	64,000	$27,581	x	64,000	$27,582
T01BN-03	29,431	29,431	$7,304	x	29,431	$7,304
T02BN-01	5,818	5,818	$541		0	$0
T03BN-01	35,643	35,643	$20,334		0	$0
T03BN-02	8,565	8,565	$2,835		0	$0
T04BN-01	5,336	0	$0		0	$0
A01BN-01	74,016	74,016	$48,483	x	74,016	$48,483
A01BN-02	46,268	46,268	$31,155	x	46,268	$31,155
A02BN-01	644	644	$391		0	$0
A03BN-01	15,991	0	$0		0	$0
TOTAL	**535,804**	**514,477**	**$198,176**		**463,807**	**$174,074**

Bandon Airport

Pavement Maintenance Cost Inventory

2006 PMP								
Bandon Airport		TOTAL COST		$71,981				
		CS Cost		$2,849				
		Surface Sealant Cost		$36,659				
		Other Cost		$35,708				
Section	Area (sf)	Area Maintained This Year (sf)	CS	CS Cost	Surface Sealant	Sealant Cost	Other Cost	FOCUS AREA Maintenance Cost
R16BN-01	216000		0	$0		$0	$0	$0
T01BN-01	34092		0	$0		$0	$0	$0
T01BN-02	64000	64000	1200	$912		$0	$10,361	$11,272
T01BN-03	29431			$0		$0	$0	$0
T02BN-01	5818			$0		$0	$0	$0
T03BN-01	35643	35643	1500	$1,140	35643	$8,345	$5,770	$0
T03BN-02	8565			$0		$0	$0	$0
T04BN-01	5336			$0		$0	$0	$0
A01BN-01	74016	74016	500	$380	74016	$17,330	$11,982	$29,692
A01BN-02	46268	46268	450	$342	46268	$10,833	$7,490	$18,665
A02BN-01	644	644	100	$76	644	$151	$104	$0
A03BN-01	15991			$0		$0	$0	$0
TOTAL	**535804**	220571	3750	$2,849	156571	$36,659	$35,708	$59,630

Bandon Airport

Pavement Maintenance Cost Inventory

2003 PMP								
Bandon Airport		TOTAL COST		$104,441				
		CS Cost		$6,331				
		Surface Sealant Cost		$29,942				
		Other Cost		$68,168				
Section	Area (sf)	Area Maintained This Year (sf)	CS <3/8"	CS Cost	Surface Sealant	Sealant Cost	Other Cost	FOCUS AREA Maintenance Cost
R16BN-01	216000	216000	0	$0	216000	$22,450	$28,984	$51,434
T01BN-01	34092	34092	0	$0	34092	$3,543	$4,575	$8,118
T01BN-02	64000	64000	600	$1,775		$0	$8,588	$10,363
T01BN-03	29431	29431	100	$296	29431	$3,059	$3,949	$7,304
T02BN-01	5818			$0		$0	$0	$0
T03BN-01	35643	35643	100	$296		$0	$4,783	$0
T03BN-02	8565	8565		$0	8565	$890	$1,149	$0
T04BN-01	5336			$0		$0	$0	$0
A01BN-01	74016	74016	670	$1,982		$0	$9,932	$11,914
A01BN-02	46268	46268	670	$1,982		$0	$6,208	$8,191
A02BN-01	644			$0		$0	$0	$0
A03BN-01	15991			$0		$0	$0	$0
TOTAL	**535804**	**508015**	**2140**	**$6,331**	**288088**	**$29,942**	**$68,168**	**$97,323**

Bandon Airport

Pavement Maintenance Cost Inventory

2000 PMP								
Bandon Airport		TOTAL COST		$18,518				
Section	Area (sf)	Maintained This Year	Area Maintained (sf)	Maintenance Cost				FOCUS AREA Maintenance Cost
R16BN-01	216000		0	$0				$0
T01BN-01	34092		0	$0				$0
T01BN-02	64000	x	64000	$5,946				$5,946
T01BN-03	29431		0	$0				$0
T02BN-01	5818	x	5818	$541				$0
T03BN-01	35643		0	$0				$0
T03BN-02	8565	x	8565	$796				$0
T04BN-01	5336		0	$0				$0
A01BN-01	74016	x	74016	$6,877				$6,877
A01BN-02	46268	x	46268	$4,299				$4,299
A02BN-01	644	x	644	$60				$0
A03BN-01	15991		0	$0				$0
TOTAL	**535804**		**199311**	**$18,519**				**$17,122**

Newport Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Taken From 2009)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R16NE-01	45,000	45,000	$11,259	x	45,000	$11,259
R16NE-02	714,750	714,750	$216,882	x	714,750	$216,882
R16NE-03	50,250	50,250	$13,611	x	50,250	$13,611
R02NE-01	16,093	16,093	$2,652	x	16,093	$2,652
R02NE-02	195,525	195,525	$32,226	x	195,525	$32,226
TANE-01	94,127	94,127	$8,076	x	94,127	$8,076
TANE-02	32,598	32,598	$906	x	32,598	$906
TBNE-01	17,754	17,754	$450		0	$0
TCNE-01	7,789	7,789	$705		0	$0
TCNE-02	46,504	46,504	$4,230		0	$0
AH16NE-01	10,784	10,784	$966		0	$0
TDNE-01	14,543	14,543	$2,988		0	$0
AH34NE-01	6,210	6,210	$1,024		0	$0
TENE-01	77,483	77,483	$15,009		0	$0
TENE-02	41,779	41,779	$7,976		0	$0
TENE-03	40,625	40,625	$12,326		0	$0
T01NE-01	11,522	0	$0		0	$0
T02NE-01	19,110	19,110	$764		0	$0
T02NE-02	2,262	2,262	$534		0	$0
A01NE-01	72,253	72,253	$16,130		0	$0
A01NE-02	15,880	15,880	$4,670	x	15,880	$4,670
A01NE-03	71,310	71,310	$16,755	x	71,310	$16,755
A01NE-04	6,161	6,161	$373		0	$0
A01NE-05	14,408	14,408	$2,670		0	$0
A01NE-06	5,288	5,288	$872		0	$0
A02NE-01	70,232	70,232	$13,014		0	$0
T03NE-01	45,016	0	$0		0	$0
TOTAL	**1,745,256**	**1,688,718**	**$387,067**		**1,235,533**	**$307,037**

Newport Airport

Pavement Maintenance Cost Inventory

2009 PMP										
Newport Airport		TOTAL COST		$61,839						
		CS Cost		$38,682						
		ACP Cost								
		Surface Sealant Cost		$0						
		Other Cost		$23,157						
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	Other Cost				Focus Area Maint Cost
R16NE-01	45000	x	45000	2784	$1,569	$754.59				$2,324.09
R16NE-02	714750	x	714750	51831	$29,220	$11,985.43				$41,205.42
R16NE-03	50250	x	50250	741	$418	$842.63				$1,260.37
R02NE-01	16093				$0	$0.00				$0.00
R02NE-02	195525				$0	$0.00				$0.00
TANE-01	94127	x	94127	242	$136	$1,578.39				$1,714.82
TANE-02	32598	x	32598	224	$126	$546.63				$672.91
TBNE-01	17754	x	17754	45	$25	$297.71				$0.00
TCNE-01	7789	x	7789	86	$48	$130.61				$0.00
TCNE-02	46504	x	46504	201	$113	$779.81				$0.00
AH16NE-0	10784	x	10784	100	$56	$180.83				$0.00
TDNE-01	14543	x	14543	406	$229	$243.87				$0.00
AH34NE-0	6210				$0	$0.00				$0.00
TENE-01	77483	x	77483	683	$385	$1,299.29				$0.00
TENE-02	41779	x	41779	161	$91	$700.58				$0.00
TENE-03	40625	x	40625	4034	$2,274	$681.23				$0.00
T01NE-01	11522				$0	$0.00				$0.00
T02NE-01	19110	x	19110	334	$188	$320.45				$0.00
T02NE-02	2262	x	2262	50	$28	$37.93				$0.00
A01NE-01	72253	x	72253	1502	$847	$1,211.59				$0.00
A01NE-02	15880	x	15880	2331	$1,314	$266.29				$1,580.40
A01NE-03	71310	x	71310	2599	$1,465	$1,195.78				$2,660.98
A01NE-04	6161	x	6161	261	$147	$103.31				$0.00
A01NE-05	14408				$0	$0.00				$0.00
A01NE-06	5288				$0	$0.00				$0.00
A02NE-01	70232				$0	$0.00				$0.00
T03NE-01	45016					$0.00				$0.00
TOTAL	**1745256**		**1380962**	**68615**	**$38,682**	**$23,157**				**$51,419**

Newport Airport

Pavement Maintenance Cost Inventory

2005 PMP										
Newport Airport		TOTAL COST		$34,065						
		CS Cost		$24,191						
		ACP Cost								
		Surface Sealant Cost		$0						
		Other Cost		$9,874						
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	Other Cost				Focus Area Maint Cost
R16NE-01	45000	x	45000	1766	$1,196.04	$321.75				$1,517.79
R16NE-02	714750	x	714750	28046	$18,994.39	$5,110.53				$24,104.92
R16NE-03	50250	x	50250	1972	$1,335.55	$359.29				$1,694.85
R02NE-01	16093				$0.00	$0.00				$0.00
R02NE-02	195525				$0.00	$0.00				$0.00
TANE-01	94127	x	94127		$0.00	$673.02				$673.02
TANE-02	32598	x	32598		$0.00	$233.08				$233.08
TBNE-01	17754	x	17754		$0.00	$126.94				$0.00
TCNE-01	7789	x	7789		$0.00	$55.69				$0.00
TCNE-02	46504	x	46504	286	$193.70	$332.51				$0.00
AH16NE-0	10784	x	10784		$0.00	$77.11				$0.00
TDNE-01	14543	x	14543	106	$71.79	$103.98				$0.00
AH34NE-0	6210				$0.00	$0.00				$0.00
TENE-01	77483	x	77483		$0.00	$554.01				$0.00
TENE-02	41779	x	41779		$0.00	$298.72				$0.00
TENE-03	40625	x	40625	2292	$1,552.28	$290.47				$0.00
T01NE-01	11522				$0.00	$0.00				$0.00
T02NE-01	19110	x	19110	175	$118.52	$136.64				$0.00
T02NE-02	2262	x	2262	117	$79.24	$16.17				$0.00
A01NE-01	72253	x	72253	246	$166.61	$516.62				$0.00
A01NE-02	15880	x	15880	50	$33.86	$113.54				$147.41
A01NE-03	71310	x	71310	547	$370.46	$509.87				$880.33
A01NE-04	6161	x	6161	116	$78.56	$44.05				$0.00
A01NE-05	14408				$0.00	$0.00				$0.00
A01NE-06	5288				$0.00	$0.00				$0.00
A02NE-01	70232				$0.00	$0.00				$0.00
T03NE-01	45016				$0.00	$0.00				$0.00
TOTAL	**1745256**		**1380962**	**35719**	**$24,191**	**$9,874**				**$29,251**

Newport Airport

Pavement Maintenance Cost Inventory

2002 PMP										
Newport Airport		TOTAL COST		$260,189						
		CS Cost		$21,799						
		ACP Cost								
		Surface Sealant Cost		$122,104						
		Other Cost		$116,286						
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Area	CS Cost	Slurry	Slurry Cost	Other Cost	Focus Area Maint Cost
R16NE-01	45000	x	45000			$0.00	45,000	$3,817.48	$3,599.22	$7,416.70
R16NE-02	714750	x	714750	x	714750	$14,640.19	714,750	$60,634.28	$57,167.57	$132,442.04
R16NE-03	50250	x	50250	x	50250	$1,029.27	50,250	$4,262.85	$4,019.13	$9,311.25
R02NE-01	16093	x	16093			$0.00	16,093	$1,365.22	$1,287.16	$2,652.38
R02NE-02	195525	x	195525			$0.00	195,525	$16,586.94	$15,638.60	$32,225.54
TANE-01	94127					$0.00		$0.00	$0.00	$0.00
TANE-02	32598					$0.00		$0.00	$0.00	$0.00
TBNE-01	17754					$0.00		$0.00	$0.00	$0.00
TCNE-01	7789					$0.00		$0.00	$0.00	$0.00
TCNE-02	46504					$0.00		$0.00	$0.00	$0.00
AH16NE-0	10784					$0.00		$0.00	$0.00	$0.00
TDNE-01	14543	x	14543	x	14543	$297.88		$0.00	$1,163.19	$0.00
AH34NE-0	6210	x	6210			$0.00	6,210	$526.81	$496.69	$0.00
TENE-01	77483	x	77483			$0.00	77,483	$6,573.10	$6,197.29	$0.00
TENE-02	41779	x	41779			$0.00	41,779	$3,544.23	$3,341.59	$0.00
TENE-03	40625	x	40625	x	40625	$832.12	40,625	$3,446.33	$3,249.29	$0.00
T01NE-01	11522					$0.00		$0.00	$0.00	$0.00
T02NE-01	19110					$0.00		$0.00	$0.00	$0.00
T02NE-02	2262	x	2262			$0.00	2,262	$191.89	$180.92	$0.00
A01NE-01	72253	x	72253	x	72253	$1,479.95	72,253	$6,129.43	$5,778.98	$0.00
A01NE-02	15880	x	15880	x	15880	$325.27	15,880	$1,347.15	$1,270.12	$2,942.54
A01NE-03	71310	x	71310	x	71310	$1,460.64	71,310	$6,049.43	$5,703.56	$13,213.63
A01NE-04	6161					$0.00		$0.00	$0.00	$0.00
A01NE-05	14408	x	14408	x	14408	$295.12	14,408	$1,222.27	$1,152.39	$0.00
A01NE-06	5288	x	5288			$0.00	5,288	$448.60	$422.95	$0.00
A02NE-01	70232	x	70232	x	70232	$1,438.56	70,232	$5,957.98	$5,617.34	$0.00
T03NE-01	45016					$0.00		$0.00	$0.00	$0.00
TOTAL	**1745256**		**1453891**	**0**	**1064251**	**$21,799**	**1,439,348**	**$122,104**	**$116,286**	**$200,204**

Newport Airport

Pavement Maintenance Cost Inventory

2000 PMP										
Newport Airport		TOTAL COST		$30,974						
		CS Cost		$2,566						
		ACP Cost								
		Surface Sealant Cost		$6,432						
		Other Cost		$21,976						
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Area	CS Cost	Fog	Fog Cost	Other Cost	Focus Area Maint Cost
R16NE-01	45000					$0.00		$0.00	$0.00	$0.00
R16NE-02	714750	x	714750	x	714750	$2,397.45		$0.00	$16,732.25	$19,129.70
R16NE-03	50250	x	50250	x	50250	$168.55		$0.00	$1,176.35	$1,344.90
R02NE-01	16093					$0.00		0	$0.00	$0.00
R02NE-02	195525					$0.00		$0.00	$0.00	$0.00
TANE-01	94127	x	94127			$0.00	94,127	$3,484.52	$2,203.51	$5,688.03
TANE-02	32598					$0.00		$0.00	$0.00	$0.00
TBNE-01	17754					$0.00		$0.00	$0.00	$0.00
TCNE-01	7789	x	7789			$0.00	7,789	$288.34	$182.34	$0.00
TCNE-02	46504	x	46504			$0.00	46,504	$1,721.55	$1,088.66	$0.00
AH16NE-0	10784	x	10784			$0.00	10,784	$399.22	$252.45	$0.00
TDNE-01	14543	x	14543			$0.00	14,543	$538.37	$340.45	$0.00
AH34NE-0	6210					$0.00		$0.00	$0.00	$0.00
TENE-01	77483					$0.00		$0.00	$0.00	$0.00
TENE-02	41779					$0.00		$0.00	$0.00	$0.00
TENE-03	40625					$0.00		$0.00	$0.00	$0.00
T01NE-01	11522					$0.00		$0.00	$0.00	$0.00
T02NE-01	19110					$0.00		$0.00	$0.00	$0.00
T02NE-02	2262					$0.00		$0.00	$0.00	$0.00
A01NE-01	72253					$0.00		$0.00	$0.00	$0.00
A01NE-02	15880					$0.00		$0.00	$0.00	$0.00
A01NE-03	71310					$0.00		$0.00	$0.00	$0.00
A01NE-04	6161					$0.00		$0.00	$0.00	$0.00
A01NE-05	14408					$0.00		$0.00	$0.00	$0.00
A01NE-06	5288					$0.00		$0.00	$0.00	$0.00
A02NE-01	70232					$0.00		$0.00	$0.00	$0.00
T03NE-01	45016					$0.00		$0.00	$0.00	$0.00
TOTAL	**1745256**		**938747**	**0**	**765000**	**$2,566**	**173,747**	**$6,432**	**$21,976**	**$26,163**

Seaside Airport

Pavement Maintenance Cost Inventory

Seaside Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Taken From 2009)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R16SS-01	8000	8000	$3,992	x	8000	$3,992
R16SS-01A	6000	6000	$2,788		0	$0
R16SS-02	96350	96350	$50,522	x	96350	$50,522
R16SS-03	7500	7500	$4,215	x	7500	$4,215
T01SS-01	70830	70830	$39,846	x	70830	$39,846
T02SS-01	4030	4030	$1,268		0	$0
T03SS-01	3466	3466	$1,852		0	$0
T04SS-01	3538	3538	$2,432		0	$0
A01SS-01	8465	0	$0		0	$0
A01SS-02	94793	94793	$11,241		0	$0
A01SS-03	23090	23090	$2,126	x	23090	$2,126
TOTAL	**326062**	**317597**	**$120,282**		**205770**	**$100,701**

Seaside Airport

Pavement Maintenance Cost Inventory

2009 PMP											
Seaside Airport		TOTAL COST		$26,979							
		CS Cost		$10,668							
		ACP Cost		$6,342							
		Surface Sealant Cost		$0							
		Other Cost		$9,969							
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	ACP (Includes 622 LF Joint ACP)	ACP Cost (includes different costs for Joint ACP)	Other Cost			Focus Area Maint Cost
R16SS-01	8000	x	8000	438	$301		$0	$256.77			$557.88
R16SS-01A	6000	x	6000	329	$226		$0	$192.58			$0.00
R16SS-02	96350	x	96350	5277	$3,628		$0	$3,092.51			$6,720.24
R16SS-03	7500	x	7500	411	$283		$0	$240.73			$523.27
T01SS-01	70830	x	70830	4153	$2,855		$0	$2,273.41			$5,128.43
T02SS-01	4030	x	4030	195	$134		$0	$129.35			$0.00
T03SS-01	3466				$0		$0	$0.00			$0.00
T04SS-01	3538				$0		$0	$0.00			$0.00
A01SS-01	8465				$0		$0	$0.00			$0.00
A01SS-02	94793	x	94793	3791	$2,606	684	$5,592	$3,042.54			$0.00
A01SS-03	23090	x	23090	924	$635	25	$750	$741.11			$2,126.32
TOTAL	**326062**		**310593**	**15518**	**$10,668**	**709**	**$6,342**	**$9,969**			**$15,056**

Seaside Airport

Pavement Maintenance Cost Inventory

2005 PMP											
Seaside Airport		TOTAL COST		$93,303							
		CS Cost		$6,691							
		ACP Cost		$9,660							
		Surface Sealant Cost		$32,767							
		Other Cost		$44,185							
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	ACP	ACP Cost	Slurry	Slurry Cost	Other Cost	Focus Area Maint Cost
R16SS-01	8000	x	8000	398	$275.23		$0.00	8000	$1,389.32	$1,769.95	$3,434.49
R16SS-01A	6000	x	6000	0	$0.00		$0.00	6000	$1,041.99	$1,327.46	$0.00
R16SS-02	96350	x	96350	4575	$3,163.77	272	$2,588.69	96350	$16,732.57	$21,316.80	$43,801.83
R16SS-03	7500	x	7500	408	$282.15	47	$447.31	7500	$1,302.48	$1,659.33	$3,691.26
T01SS-01	70830	x	70830	3548	$2,453.57	451	$4,292.28	70830	$12,300.65	$15,670.67	$34,717.16
T02SS-01	4030	x	4030	164	$113.41		$0.00		$0.00	$891.61	$0.00
T03SS-01	3466	x	3466	330	$228.21	90	$856.55		$0.00	$766.83	$0.00
T04SS-01	3538	x	3538	252	$174.27	155	$1,475.17		$0.00	$782.76	$0.00
A01SS-01	8465				$0.00		$0.00		$0.00	$0.00	$0.00
A01SS-02	94793				$0.00		$0.00		$0.00	$0.00	$0.00
A01SS-03	23090				$0.00		$0.00		$0.00	$0.00	$0.00
TOTAL	**326062**		**199714**	**9675**	**$6,691**	**1015**	**$9,660**	**188680**	**$32,767**	**$44,185**	**$85,645**

Tillamook Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Taken From 2009)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R13TI-01	470,000	470000	$93,523	x	470,000	$93,523
R13TI-02	30,000	30000	$3,358		0	$0
R01TI-00	6,225	6225	$360	x	6,225	$360
R01TI-01	60,442	60442	$3,497	x	60,442	$3,497
R01TI-02	114,585	114585	$6,489	x	114,585	$6,489
TATI-01	68,297	68297	$4,117	x	68,297	$4,117
TATI-02	133,089	133089	$11,825	x	133,089	$11,825
TA2TI-01	5,560	0	$0		0	$0
TA2TI-02	16,169	16169	$4,999		0	$0
TB1TI-01`	55,078	0	$0		0	$0
TB2TI-01	28,501	0	$0		0	$0
TB2TI-02	5,923	0	$0		0	$0
TCTI-01	17,439	0	$0		0	$0
A01TI-01	60,000	60000	$26,826	x	60,000	$26,826
A02TI-01	13,861	13861	$901		0	$0
A02TI-02	9,566	0	$0		0	$0
ACRTI-01	4,395	4395	$885		0	$0
AFBOTI-01	4,215	0	$0		0	$0
AFBOTI-02	4,364	0	$0		0	$0
AFBOTI-03	8,171	8171	$252		0	$0
AFBOTI-04	2,534	2534	$67		0	$0
AHGRTI-01-04	139,294	0	$0		0	$0
TOTAL	**1,257,708**	**987,768**	**$157,100**		**912,638**	**$146,638**

Tillamook Airport

Pavement Maintenance Cost Inventory

2009 PMP													
Tillamook Airport		TOTAL COST		$62,978									
		CS Cost		$41,704									
		PCC Joint Seal		$1,718									
		PCC Crack Seal											
		PCC Spall Repair											
		ACP Cost											
		Surface Sealant Cost											
		Other Cost		$19,556									
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	PCC Joint Seal	PCC Joint Seal Cost	Other Cost					Focus Area Maint Cost
R13TI-01	470000	x	470000	61231	$31,172.36		$0.00	$9,750.33					$40,922.69
R13TI-02	30000				$0.00		$0.00	$0.00					$0.00
R01TI-00	6225	x	6225	147	$74.84		$0.00	$129.14					$203.98
R01TI-01	60442	x	60442	1425	$725.46		$0.00	$1,253.89					$1,979.35
R01TI-02	114585	x	114585	2701	$1,375.06		$0.00	$2,377.11					$3,752.17
TATI-01	68297	x	68297	2111	$1,074.70		$0.00	$1,416.85					$2,491.55
TATI-02	133089	x	133089	9877	$5,028.33		$0.00	$2,760.98					$7,789.31
TA2TI-01	5560				$0.00		$0.00	$0.00					$0.00
TA2TI-02	16169	x	16169	3222	$1,640.30		$0.00	$335.43					$0.00
TB1TI-01`	55078				$0.00		$0.00	$0.00					$0.00
TB2TI-01	28501				$0.00		$0.00	$0.00					$0.00
TB2TI-02	5923				$0.00		$0.00	$0.00					$0.00
TCTI-01	17439				$0.00		$0.00	$0.00					$0.00
A01TI-01	60000	x	60000		$0.00	518	$1,718.00	$1,244.72					$2,962.72
A02TI-01	13861	x	13861	1204	$612.95		$0.00	$287.55					$0.00
A02TI-02	9566				$0.00		$0.00	$0.00					$0.00
ACRTI-01	4395				$0.00		$0.00	$0.00					$0.00
AFBOTI-01	4215				$0.00		$0.00	$0.00					$0.00
AFBOTI-02	4364				$0.00		$0.00	$0.00					$0.00
AFBOTI-03	8171				$0.00		$0.00	$0.00					$0.00
AFBOTI-04	2534				$0.00		$0.00	$0.00					$0.00
AHGRTI-01-04	139294				$0.00		$0.00	$0.00					$0.00
TOTAL	**1257708**		**942668**	**81918**	**$41,704**	**518**	**$1,718**	**$19,556**					**$60,102**

Tillamook Airport

Pavement Maintenance Cost Inventory

2005 PMP													
Tillamook Airport		TOTAL COST		$93,422									
		CS Cost		$49,791									
		PCC Joint Seal		$15,470									
		PCC Crack Seal		$2,281									
		PCC Spall Repair		$4,769									
		ACP Cost											
		Surface Sealant Cost											
		Other Cost		$21,111									
Section (Taken From 2009)	Area (sf)	Maintained	Maintained Area (sf)	CS	CS Cost	PCC Joint Seal	PCC Joint Seal Cost	PCC CS	PCC CS Cost	PCC Spall Repair	PCC Spall Repair Cost	Other Cost	Focus Area Maint Cost
R13TI-01	470000	x	470000	47874	$42,074.60		$0.00		$0.00		$0.00	$10,525.63	$52,600.22
R13TI-02	30000	x	30000	3056	$2,685.80		$0.00		$0.00		$0.00	$671.85	$0.00
R01TI-00	6225	x	6225	19	$16.70		$0.00		$0.00		$0.00	$139.41	$156.11
R01TI-01	60442	x	60442	187	$164.35		$0.00		$0.00		$0.00	$1,353.60	$1,517.94
R01TI-02	114585	x	114585	194	$170.50		$0.00		$0.00		$0.00	$2,566.13	$2,736.62
TATI-01	68297	x	68297	109	$95.80		$0.00		$0.00		$0.00	$1,529.51	$1,625.30
TATI-02	133089	x	133089	1201	$1,055.51		$0.00		$0.00		$0.00	$2,980.52	$4,036.03
TA2TI-01	5560				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
TA2TI-02	16169	x	16169	3028	$2,661.19		$0.00		$0.00		$0.00	$362.10	$0.00
TB1TI-01`	55078				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
TB2TI-01	28501				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
TB2TI-02	5923				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
TCTI-01	17439				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
A01TI-01	60000	x	60000		$0.00	9027	$15,470.00	232	$2,281.00	88	$4,769.00	$1,343.70	$23,863.70
A02TI-01	13861				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
A02TI-02	9566				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
ACRTI-01	4395	x	4395	895	$786.58		$0.00		$0.00		$0.00	$98.43	$0.00
AFBOTI-01	4215				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
AFBOTI-02	4364				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
AFBOTI-03	8171	x	8171	79	$69.43		$0.00		$0.00		$0.00	$182.99	$0.00
AFBOTI-04	2534	x	2534	12	$10.55		$0.00		$0.00		$0.00	$56.75	$0.00
AHGRTI-01-04	139294				$0.00		$0.00		$0.00		$0.00	$0.00	$0.00
TOTAL	**1257708**		**973907**	**56654**	**$49,791**	**9027**	**$15,470**	**232**	**$2,281**	**88**	**$4,769**	**$21,811**	**$86,536**

Corvallis Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R17CR-01	760,050	$0	0	x	760,050	$0
R17CR-02	125,250	$0	0	x	125,250	$0
R09CR-01	5,969	$2,034	5,969	x	5,969	$2,034
R09CR-02	244,500	$83,325	244,500	x	244,500	$83,325
R09CR-03	15,045	$3,473	15,045	x	15,045	$3,473
A01CR-01	402677	$77,221	402,677		0	$0
AHACR-01	18,340	$954	18,340		0	$0
A02CR-01	20,740	$0	0		0	$0
A02CR-02	46,603	$0	0		0	$0
A02CR-03	46,327	$0	0		0	$0
T01CR-01	45,382	$1,498	45,382		0	$0
A03CR-01	19,895	$1,262	19,895		0	$0
A03CR-02	56,040	$3,554	56,040		0	$0
A03CR-03	56,234	$0	0		0	$0
A03CR-04	3,740	$237	3,740		0	$0
A03CR-05	2,415	$0	0		0	$0
A03CR-06	13,944	$0	0		0	$0
TBCR-01	32,103	$1,342	32,103	x	46,540	$1,342
TBCR-02	46,540	$0	0		0	$0
TBCR-03	178,448	$10,635	178,448	x	41,750	$10,635
TBCR-04	41,750	$1,066	41,750	x	5,033	$1,066
TACR-01	5,033	$956	5,033		0	$0
TACR-02	47,322	$11,305	47,322		0	$0
TACR-03	92,144	$19,052	92,144		0	$0
TACR-04	3,455	$697	3,455		0	$0
TCCR-01	5,526	$1,114	5,526		0	$0
TCCR-02	11,181	$2,680	11,181	x	72,329	$2,680
TCCR-03	72,329	$17,645	72,329	x	9,747	$17,645
TCCR-04	9,747	$1,769	9,747		0	$0
TCCR-05	7,317	$1,633	7,317		0	$0
TCCR-06	18,582	$3,933	18,582	x	5,526	$3,933
TB2CR-01	5,526	$1,036	5,526		0	$0
TB2CR-02	12,145	$2,706	12,145		0	$0
TB3CR-01	5,537	$1,169	5,537		0	$0
TB3CR-02	13,573	$3,564	13,573		0	$0
TB4CR-01	7,037	$1,173	7,037		0	$0
TB4CR-02	22,787	$4,387	22,787		0	$0
TOTAL	**2,521,233**	**$261,423**	**1,403,130**		**1,331,739**	**$126,134**

Corvallis Airport

Pavement Maintenance Cost Inventory

2009 PMP														
Corvallis Airport		TOTAL COST		$73,814										
		CS Cost		$17,077										
		PCC Spall Repair Cost		$1,425										
				$0										
		Surface Sealant Cost		$24,976										
		Other Cost		$30,336										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	PCC Spall Repair	PCC Spall Repair Cost		0	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17CR-01	760050	0		$0		$0		$0		$0	$0	$0	x	$0
R17CR-02	125250	0		$0		$0		$0		$0	$0	$0	x	$0
R09CR-01	5969	5,969	339	$198		$0		$0	5969	$595	$141	$934	x	$934
R09CR-02	244500	244,500	13894	$8,108		$0		$0	244500	$24,381	$5,772	$38,261	x	$38,261
R09CR-03	15045	15,045	485	$283		$0		$0		$0	$355	$638	x	$638
A01CR-01	402677	402,677		$0	19	$1,425		$0		$0	$9,506	$10,931		$0
AHACR-01	18340	18,340	893	$521		$0		$0		$0	$433	$954		$0
A02CR-01	20740	0		$0		$0		$0		$0	$0	$0		$0
A02CR-02	46603	0		$0		$0		$0		$0	$0	$0		$0
A02CR-03	46327	0		$0		$0		$0		$0	$0	$0		$0
T01CR-01	45382	45,382	731	$427		$0		$0		$0	$1,071	$1,498		$0
A03CR-01	19895	0		$0		$0		$0		$0	$0	$0		$0
A03CR-02	56040	0		$0		$0		$0		$0	$0	$0		$0
A03CR-03	56234	0		$0		$0		$0		$0	$0	$0		$0
A03CR-04	3740	0		$0		$0		$0		$0	$0	$0		$0
A03CR-05	2415	0		$0		$0		$0		$0	$0	$0		$0
A03CR-06	13944	0		$0		$0		$0		$0	$0	$0		$0
TBCR-01	32103	32,103	436	$254		$0		$0		$0	$758	$1,012	x	$1,012
TBCR-02	46540	0		$0		$0		$0		$0	$0	$0		$0
TBCR-03	178448	178,448	4307	$2,513		$0		$0		$0	$4,213	$6,726	x	$6,726
TBCR-04	41750	41,750	138	$81		$0		$0		$0	$986	$1,066	x	$1,066
TACR-01	5033	0		$0		$0		$0		$0	$0	$0		$0
TACR-02	47322	47,322	2064	$1,204		$0		$0		$0	$1,117	$2,322		$0
TACR-03	92144	92,144	2590	$1,511		$0		$0		$0	$2,175	$3,687		$0
TACR-04	3455	3,455	68	$40		$0		$0		$0	$82	$121		$0
TCCR-01	5526	0		$0		$0		$0		$0	$0	$0		$0
TCCR-02	11181	11,181	277	$162		$0		$0		$0	$264	$426	x	$426
TCCR-03	72329	72,329	1308	$763		$0		$0		$0	$1,707	$2,471	x	$2,471
TCCR-04	9747	0		$0		$0		$0		$0	$0	$0		$0
TCCR-05	7317	7,317	412	$240		$0		$0		$0	$173	$413		$0
TCCR-06	18582	18,582	344	$201		$0		$0		$0	$439	$639	x	$639
TB2CR-01	5526	0		$0		$0		$0		$0	$0	$0		$0
TB2CR-02	12145	12,145	243	$142		$0		$0		$0	$287	$429		$0
TB3CR-01	5537	0		$0		$0		$0		$0	$0	$0		$0
TB3CR-02	13573	13,573	650	$379		$0		$0		$0	$320	$700		$0
TB4CR-01	7037	0		$0		$0		$0		$0	$0	$0		$0
TB4CR-02	22787	22,787	84	$49		$0		$0		$0	$538	$587		$0
TOTAL	**2521233**	1,285,049	29,263	$17,077	19	$1,425	0	$0	250,469	$24,976	$30,336	$73,814		$52,173

Corvallis Airport

Pavement Maintenance Cost Inventory

2005 PMP														
Corvallis Airport		TOTAL COST		$28,646										
		CS Cost		$11,214										
		ACP Cost		$0										
		PCC Repair (CS and Spall) Cost		$5,892										
		Fog Seal Cost		$0										
		Other Cost		$11,540										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost		ACP Cost	PCC Repair	PCC Repair (CS and Spall) Cost		Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17CR-01	760050	0		$0		$0		$0		$0	$0	$0	x	$0
R17CR-02	125250	0		$0		$0		$0		$0	$0	$0	x	$0
R09CR-01	5969	5,969	48	$45		$0		$0		$0	$60	$104	x	$104
R09CR-02	244500	244,500	1979	$1,849		$0		$0		$0	$2,443	$4,292	x	$4,292
R09CR-03	15045	15,045	188	$176		$0		$0		$0	$150	$326	x	$326
A01CR-01	402677	402,677		$0		$0	402677	$5,892		$0	$4,023	$9,915		$0
AHACR-01	18340	0		$0		$0		$0		$0	$0	$0		$0
A02CR-01	20740	0		$0		$0		$0		$0	$0	$0		$0
A02CR-02	46603	0		$0		$0		$0		$0	$0	$0		$0
A02CR-03	46327	0		$0		$0		$0		$0	$0	$0		$0
T01CR-01	45382	0		$0		$0		$0		$0	$0	$0		$0
A03CR-01	19895	19,895	1138	$1,063		$0		$0		$0	$199	$1,262		$0
A03CR-02	56040	56,040	3204	$2,994		$0		$0		$0	$560	$3,554		$0
A03CR-03	56234	0		$0		$0		$0		$0	$0	$0		$0
A03CR-04	3740	3,740	214	$200		$0		$0		$0	$37	$237		$0
A03CR-05	2415	0		$0		$0		$0		$0	$0	$0		$0
A03CR-06	13944	0		$0		$0		$0		$0	$0	$0		$0
TBCR-01	32103	32,103	10	$9		$0		$0		$0	$321	$330	x	$330
TBCR-02	46540	0		$0		$0		$0		$0	$0	$0		$0
TBCR-03	178448	178,448	2276	$2,127		$0		$0		$0	$1,783	$3,909	x	$3,909
TBCR-04	41750	0		$0		$0		$0		$0	$0	$0	x	$0
TACR-01	5033	5,033	71	$66		$0		$0		$0	$50	$117		$0
TACR-02	47322	47,322	663	$620		$0		$0		$0	$473	$1,092		$0
TACR-03	92144	0		$0		$0		$0		$0	$0	$0		$0
TACR-04	3455	0		$0		$0		$0		$0	$0	$0		$0
TCCR-01	5526	5,526	60	$56		$0		$0		$0	$55	$111		$0
TCCR-02	11181	11,181	121	$113		$0		$0		$0	$112	$225	x	$225
TCCR-03	72329	72,329	1416	$1,323		$0		$0		$0	$723	$2,046	x	$2,046
TCCR-04	9747	0		$0		$0		$0		$0	$0	$0		$0
TCCR-05	7317	0		$0		$0		$0		$0	$0	$0		$0
TCCR-06	18582	18,582	10	$9		$0		$0		$0	$186	$195	x	$195
TB2CR-01	5526	5,526	63	$59		$0		$0		$0	$55	$114		$0
TB2CR-02	12145	12,145	140	$131		$0		$0		$0	$121	$252		$0
TB3CR-01	5537	5,537	116	$108		$0		$0		$0	$55	$164		$0
TB3CR-02	13573	13,573	284	$265		$0		$0		$0	$136	$401		$0
TB4CR-01	7037	0		$0		$0		$0		$0	$0	$0		$0
TB4CR-02	22787	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**2521233**	1,155,171	12,001	$11,214	0	$0	402,677	$5,892	0	$0	$11,540	$28,646		$11,427.10

Corvallis Airport

Pavement Maintenance Cost Inventory

2002 PMP														
Corvallis Airport		TOTAL COST		$158,963										
		CS Cost		$1,740										
		ACP Cost		$4,275										
		PCC Repair (CS and Spall) Cost		$35,045										
		Fog Seal Cost		$75,233										
		Other Cost		$42,670										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost	PCC Repair	PCC Repair (CS and Spall) Cost	Fog Seal (sf)	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17CR-01	760050	0		$0		$0		$0		$0	$0	$0	x	$0
R17CR-02	125250	0		$0		$0		$0		$0	$0	$0	x	$0
R09CR-01	5969	5,969		$0		$0		$0	5,969	$743	$253	$995	x	$995
R09CR-02	244500	244,500		$0		$0		$0	244,500	$30,416	$10,356	$40,772	x	$40,772
R09CR-03	15045	15,045		$0		$0		$0	15,045	$1,872	$637	$2,509	x	$2,509
A01CR-01	402677	402,677		$0	402677	$4,275	402677	$35,045		$0	$17,055	$56,375		$0
AHACR-01	18340	0		$0		$0		$0		$0	$0	$0		$0
A02CR-01	20740	0		$0		$0		$0		$0	$0	$0		$0
A02CR-02	46603	0		$0		$0		$0		$0	$0	$0		$0
A02CR-03	46327	0		$0		$0		$0		$0	$0	$0		$0
T01CR-01	45382	0		$0		$0		$0		$0	$0	$0		$0
A03CR-01	19895	0		$0		$0		$0		$0	$0	$0		$0
A03CR-02	56040	0		$0		$0		$0		$0	$0	$0		$0
A03CR-03	56234	0		$0		$0		$0		$0	$0	$0		$0
A03CR-04	3740	0		$0		$0		$0		$0	$0	$0		$0
A03CR-05	2415	0		$0		$0		$0		$0	$0	$0		$0
A03CR-06	13944	0		$0		$0		$0		$0	$0	$0		$0
TBCR-01	32103	0		$0		$0		$0		$0	$0	$0	x	$0
TBCR-02	46540	0		$0		$0		$0		$0	$0	$0		$0
TBCR-03	178448	0		$0		$0		$0		$0	$0	$0	x	$0
TBCR-04	41750	0		$0		$0		$0		$0	$0	$0	x	$0
TACR-01	5033	5,033		$0		$0		$0	5,033	$626	$213	$839		$0
TACR-02	47322	47,322		$0		$0		$0	47,322	$5,887	$2,004	$7,891		$0
TACR-03	92144	92,144		$0		$0		$0	92,144	$11,463	$3,903	$15,366		$0
TACR-04	3455	3,455		$0		$0		$0	3,455	$430	$146	$576		$0
TCCR-01	5526	5,526	5,526	$82		$0		$0	5,526	$687	$234	$1,003		$0
TCCR-02	11181	11,181	11,181	$165		$0		$0	11,181	$1,391	$474	$2,030	x	$2,030
TCCR-03	72329	72,329	72,329	$1,068		$0		$0	72,329	$8,998	$3,064	$13,129	x	$13,129
TCCR-04	9747	9,747	9,747	$144		$0		$0	9,747	$1,213	$413	$1,769		$0
TCCR-05	7317	7,317		$0		$0		$0	7,317	$910	$310	$1,220		$0
TCCR-06	18582	18,582		$0		$0		$0	18,582	$2,312	$787	$3,099	x	$3,099
TB2CR-01	5526	5,526		$0		$0		$0	5,526	$687	$234	$921		$0
TB2CR-02	12145	12,145		$0		$0		$0	12,145	$1,511	$514	$2,025		$0
TB3CR-01	5537	5,537	5,537	$82		$0		$0	5,537	$689	$235	$1,005		$0
TB3CR-02	13573	13,573	13,573	$200		$0		$0	13,573	$1,689	$575	$2,464		$0
TB4CR-01	7037	7,037		$0		$0		$0	7,037	$875	$298	$1,173		$0
TB4CR-02	22787	22,787		$0		$0		$0	22,787	$2,835	$965	$3,800		$0
TOTAL	**2521233**	1,007,432	117,893	$1,740	402,677	$4,275	402,677	$35,045	604,755	$75,233	$42,670	$158,963		$62,534

Creswell Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-
R15CE-01	186000	$57,960	186,000	x	186,000	$57,960
T01CE-01	127558	$31,532	127,558	x	127,558	$31,532
A01CE-01	171071	$24,053	171,071	x	171,071	$24,053
T02CE-01	6,813	$1,705	6,813		0	$0
T08CE-01	8,481	$0	0		0	$0
T07CE-01	5487	$531	5,487		0	$0
T07CE-02	3,091	$406	3,091		0	$0
T06CE-01	9,722	$1,970	9,722		0	$0
T06CE-02	7,597	$242	7,597		0	$0
T05CE-01	9,722	$2,103	9,722		0	$0
T05CE-02	4,865	$258	4,865		0	$0
T04CE-01	9,240	$479	9,240		0	$0
T04CE-02	6,405	$0	0		0	$0
T03CE-01	9,146	$25,802	9,146		0	$0
T03CE-02	11,900	$2,484	11,900		0	$0
T10CE-01	3,648	$808	3,648		0	$0
T09CE-01	5,345	$1,253	5,345		0	$0
T09CE-02	5,297	$742	5,297		0	$0
T11CE-01	16,778	$3,365	16,778		0	$0
TOTAL	**608,166**	**$155,695**	**593,280**		**484,629**	**$113,546**

2006 PMP														
Creswell Airport		TOTAL COST		$91,041										
		CS Cost		$12,272										
		ACP Cost		$25,893										
		WC Cost		$25,492										
		Surface Sealant Cost												
		Other Cost		$27,384										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP	ACP Cost	WC	WC Cost	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15CE-01	186000	186,000	4340	$3,582		$0	1540	$19,150		$0	$8,816	$31,548	x	$31,548
T01CE-01	127558	127,558	2300	$1,898		$0	500	$6,218		$0	$6,046	$14,162	x	$14,162
A01CE-01	171071	171,071	5900	$4,869		$0		$0		$0	$8,109	$12,978	x	$12,978
T02CE-01	6813	6,813	260	$215		$0		$0		$0	$323	$538		$0
T08CE-01	8481	0		$0		$0		$0		$0	$0	$0		$0
T07CE-01	5487	5,487	120	$99		$0		$0		$0	$260	$359		$0
T07CE-02	3091	0		$0		$0		$0		$0	$0	$0		$0
T06CE-01	9722	9,722	430	$355		$0		$0		$0	$461	$816		$0
T06CE-02	7597	0		$0		$0		$0		$0	$0	$0		$0
T05CE-01	9722	9,722	380	$314		$0		$0		$0	$461	$774		$0
T05CE-02	4865	0		$0		$0		$0		$0	$0	$0		$0
T04CE-01	9240	9,240	50	$41		$0		$0		$0	$438	$479		$0
T04CE-02	6405	0		$0		$0		$0		$0	$0	$0		$0
T03CE-01	9146	9,146	20	$17	1500	$25,352		$0		$0	$434	$25,802		$0
T03CE-02	11900	11,900	450	$371	32	$541		$0		$0	$564	$1,476		$0
T10CE-01	3648	3,648	100	$83		$0	10	$124		$0	$173	$380		$0
T09CE-01	5345	5,345	160	$132		$0		$0		$0	$253	$385		$0
T09CE-02	5297	5,297	180	$149		$0		$0		$0	$251	$400		$0
T11CE-01	16778	16,778	180	$149		$0		$0		$0	$795	$944		$0
TOTAL	**608166**	577,727	14,870	$12,272	1,532	$25,893	2,050	$25,492	0	$0	$27,384	$91,041		$58,688

Creswell Airport

Pavement Maintenance Cost Inventory

2003 PMP														
Creswell Airport		TOTAL COST		$33,365										
		CS Cost		$16,445										
		ACP Cost		$2,274										
		Fog Seal Cost												
		Other Cost		$14,646										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (SY)	ACP Cost		0	Fog Seal	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15CE-01	186000	186,000	3435	$6,095.01	5	$1,421.25		$0.00		$0.00	$4,795	$12,311	x	$12,311
T01CE-01	127558	127,558	1463	$2,595.93		$0.00		$0.00		$0.00	$3,288	$5,884	x	$5,884
A01CE-01	171071	171,071	3276	$5,812.89	3	$852.75		$0.00		$0.00	$4,410	$11,076	x	$11,076
T02CE-01	6813	6,813	109	$193.41		$0.00		$0.00		$0.00	$176	$369		$0
T08CE-01	8481	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T07CE-01	5487	5,487	17	$30.16		$0.00		$0.00		$0.00	$141	$172		$0
T07CE-02	3091	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T06CE-01	9722	9,722	94	$166.79		$0.00		$0.00		$0.00	$251	$417		$0
T06CE-02	7597	7,597	26	$46.13		$0.00		$0.00		$0.00	$196	$242		$0
T05CE-01	9722	9,722	192	$340.68		$0.00		$0.00		$0.00	$251	$591		$0
T05CE-02	4865	4,865	75	$133.08		$0.00		$0.00		$0.00	$125	$258		$0
T04CE-01	9240	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T04CE-02	6405	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T03CE-01	9146	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T03CE-02	11900	11,900	395	$700.88		$0.00		$0.00		$0.00	$307	$1,008		$0
T10CE-01	3648	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T09CE-01	5345	5,345	58	$102.91		$0.00		$0.00		$0.00	$138	$241		$0
T09CE-02	5297	5,297	116	$205.83		$0.00		$0.00		$0.00	$137	$342		$0
T11CE-01	16778	16,778	12	$21.29		$0.00		$0.00		$0.00	$433	$454		$0
TOTAL	**608166**	568,155	9,268	$16,445.00	8	$2,274.00	0	$0.00	0	$0.00	$14,646.01	$33,365.01		$29,270.67

Creswell Airport

Pavement Maintenance Cost Inventory

2000 PMP														
Creswell Airport		TOTAL COST		$31,289										
		CS Cost		$1,479										
		ACP Cost		$1,860										
		Fog Seal Cost		$18,432										
		Other Cost		$9,518										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost		0	Fog Seal	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15CE-01	186000	186,000		$0.00		$0.00		$0.00	186,000	$9,299.07	$4,802	$14,101	x	$14,101
T01CE-01	127558	127,558		$0.00	127558	$1,815.99		$0.00	127,558	$6,377.26	$3,293	$11,486	x	$11,486
A01CE-01	171071	0		$0.00		$0.00		$0.00		$0.00	$0	$0	x	$0
T02CE-01	6813	6,813	6,813	$282.45		$0.00		$0.00	6,813	$340.62	$176	$799		$0
T08CE-01	8481	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T07CE-01	5487	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T07CE-02	3091	3,091	3,091	$128.15	3091	$44.01		$0.00	3,091	$154.53	$80	$406		$0
T06CE-01	9722	9,722		$0.00		$0.00		$0.00	9,722	$486.05	$251	$737		$0
T06CE-02	7597	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T05CE-01	9722	9,722		$0.00		$0.00		$0.00	9,722	$486.05	$251	$737		$0
T05CE-02	4865	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T04CE-01	9240	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T04CE-02	6405	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T03CE-01	9146	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T03CE-02	11900	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T10CE-01	3648	3,648	3,648	$151.24		$0.00		$0.00	3,648	$182.38	$94	$428		$0
T09CE-01	5345	5,345	5,345	$221.59		$0.00		$0.00	5,345	$267.22	$138	$627		$0
T09CE-02	5297	0		$0.00		$0.00		$0.00		$0.00	$0	$0		$0
T11CE-01	16778	16,778	16,778	$695.58		$0.00		$0.00	16,778	$838.82	$433	$1,968		$0
TOTAL	**608166**	368,677	35,675	$1,479.00	130,649	$1,860.00	0	$0.00	368,677	$18,432.00	$9,518.00	$31,289.00		$25,587.33

Mulino Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R14MU-01	360000	$70,068	360,000	x	360,000	$70,068
TA3MU-01	6517	$1,207	6,517		0	$0
TA3MU-02	6750	$1,159	6,750		0	$0
TA3MU-03	9,868	$1,828	9,868		0	$0
AH32MU-01	6,787	$1,125	6,787		0	$0
TAMU-01	7217	$1,410	7,217	x	7,217	$1,410
TAMU-02	62,000	$11,822	62,000	x	62,000	$11,822
TAMU-03	5,601	$1,061	5,601	x	5,601	$1,061
TAMU-04	60,000	$20,233	60,000	x	60,000	$20,233
TAMU-05	9,200	$1,744	9,200	x	9,200	$1,744
AH14MU-01	9,405	$1,560	9,405		0	$0
TA1MU-01	6,603	$1,183	6,603		0	$0
TA1MU-02	7,755	$1,286	7,755		0	$0
TA1MU-03	8,849	$1,467	8,849		0	$0
TA2MU-01	9,306	$1,680	9,306		0	$0
TA2MU-02	8,720	$1,446	8,720		0	$0
TA2MU-03	2,947	$489	2,947		0	$0
TA2MU-04	3,993	$0	0		0	$0
TA2MU-05	21,224	$0	0		0	$0
AFUELMU-01	4,600	$0	0		0	$0
T05MU-01	3,554	$8,039	3,554		0	$0
A01MU-01	56,169	$8,233	56,169	x	56,169	$8,233
T06MU-01	23,936	$3,630	23,936		0	$0
AHELIMU-01	6,405	$990	6,405		0	$0
THANGMU-01	10,638	$1,950	10,638		0	$0
THANGMU-02	9,300	$1,785	9,300		0	$0
THANGMU-03	15,735	$507	15,735		0	$0
THANGMU-04	15,540	$0	0		0	$0
AHANGMU-01	23,229	$347	23,229		0	$0
TLANEMU-01	5,117	$167	5,117		0	$0
TLANEMU-02	1,770	$0	0		0	$0
TLANEMU-03	7,100	$188	7,100		0	$0
TLANEMU-04	4,241	$112	4,241		0	$0
TLANEMU-05	7,683	$224	7,683		0	$0
TLANEMU-06	1,280	$37	1,280		0	$0
TOTAL	**809,039**	**$146,979**	**761,912**		**560,187**	**$114,571**

2009 PMP														
Mulino Airport		TOTAL COST		$15,789										
		CS Cost		$10,651										
		ACP Cost												
		WC Cost												
		Surface Sealant Cost												
		Other Cost		$5,138										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP	ACP Cost	WC	WC Cost	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R14MU-01	360000	360,000	8257	$5,143		$0		$0		$0	$2,603	$7,746	x	$7,746
TA3MU-01	6517	6,517	66	$41		$0		$0		$0	$47	$88		$0
TA3MU-02	6750	0		$0		$0		$0		$0	$0	$0		$0
TA3MU-03	9868	9,868	100	$62		$0		$0		$0	$71	$134		$0
AH32MU-01	6787	0		$0		$0		$0		$0	$0	$0		$0
TAMU-01	7217	7,217	191	$119		$0		$0		$0	$52	$171	x	$171
TAMU-02	62000	62,000	1642	$1,023		$0		$0		$0	$448	$1,471	x	$1,471
TAMU-03	5601	5,601	148	$92		$0		$0		$0	$40	$133	x	$133
TAMU-04	60000	60,000	1589	$990		$0		$0		$0	$434	$1,424	x	$1,424
TAMU-05	9200	9,200	244	$152		$0		$0		$0	$67	$218	x	$218
AH14MU-01	9405	0		$0		$0		$0		$0	$0	$0		$0
TA1MU-01	6603	6,603	65	$40		$0		$0		$0	$48	$88		$0
TA1MU-02	7755	0		$0		$0		$0		$0	$0	$0		$0
TA1MU-03	8849	0		$0		$0		$0		$0	$0	$0		$0
TA2MU-01	9306	9,306	111	$69		$0		$0		$0	$67	$136		$0
TA2MU-02	8720	0		$0		$0		$0		$0	$0	$0		$0
TA2MU-03	2947	0		$0		$0		$0		$0	$0	$0		$0
TA2MU-04	3993	0		$0		$0		$0		$0	$0	$0		$0
TA2MU-05	21224	0		$0		$0		$0		$0	$0	$0		$0
AFUELMU-01	4600	0		$0		$0		$0		$0	$0	$0		$0
T05MU-01	3554	3,554	66	$41		$0		$0		$0	$26	$67		$0
A01MU-01	56169	56,169	1048	$653		$0		$0		$0	$406	$1,059	x	$1,059
T06MU-01	23936	23,936	946	$589		$0		$0		$0	$173	$762		$0
AHELIMU-01	6405	6,405	257	$160		$0		$0		$0	$46	$206		$0
THANGMU-01	10638	10,638	238	$148		$0		$0		$0	$77	$225		$0
THANGMU-02	9300	9,300	336	$209		$0		$0		$0	$67	$277		$0
THANGMU-03	15735	15,735	632	$394		$0		$0		$0	$114	$507		$0
THANGMU-04	15540	0		$0		$0		$0		$0	$0	$0		$0
AHANGMU-01	23229	23,229	288	$179		$0		$0		$0	$168	$347		$0
TLANEMU-01	5117	5,117	209	$130		$0		$0		$0	$37	$167		$0
TLANEMU-02	1770	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-03	7100	7,100	220	$137		$0		$0		$0	$51	$188		$0
TLANEMU-04	4241	4,241	131	$82		$0		$0		$0	$31	$112		$0
TLANEMU-05	7683	7,683	270	$168		$0		$0		$0	$56	$224		$0
TLANEMU-06	1280	1,280	45	$28		$0		$0		$0	$9	$37		$0
TOTAL	**809039**	**710,699**	**17,099**	**$10,651**	**0**	**$0**	**0**	**$0**	**0**	**$0.00**	**$5,138**	**$15,789**		**$12,222**

Mulino Airport

Pavement Maintenance Cost Inventory

2005 PMP														
Mulino Airport		TOTAL COST		$131,190										
		CS Cost		$5,467										
		ACP Cost		$15,436										
		Fog Seal Cost		$28,742										
		Other Cost		$81,545										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (SY)	ACP Cost	Fog Seal (sf)	Fog Seal Cost		0	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R14MU-01	360000	360,000	1806	$2,625		$0	360000	$17,611		$0	$42,086	$62,322	x	$62,322
TA3MU-01	6517	6,517	26	$38		$0	6517	$319		$0	$762	$1,118		$0
TA3MU-02	6750	6,750	27	$39		$0	6750	$330		$0	$789	$1,159		$0
TA3MU-03	9868	9,868	40	$58		$0	9868	$483		$0	$1,154	$1,695		$0
AH32MU-01	6787	6,787		$0		$0	6787	$332		$0	$793	$1,125		$0
TAMU-01	7217	7,217	29	$42		$0	7217	$353		$0	$844	$1,239	x	$1,239
TAMU-02	62000	62,000	48	$70		$0	62000	$3,033		$0	$7,248	$10,351	x	$10,351
TAMU-03	5601	5,601		$0		$0	5601	$274		$0	$655	$929	x	$929
TAMU-04	60000	60,000	675	$981	49	$7,879	60000	$2,935		$0	$7,014	$18,809	x	$18,809
TAMU-05	9200	9,200		$0		$0	9200	$450		$0	$1,076	$1,526	x	$1,526
AH14MU-01	9405	9,405		$0		$0	9405	$460		$0	$1,100	$1,560		$0
TA1MU-01	6603	6,603		$0		$0	6603	$323		$0	$772	$1,095		$0
TA1MU-02	7755	7,755		$0		$0	7755	$379		$0	$907	$1,286		$0
TA1MU-03	8849	8,849		$0		$0	8849	$433		$0	$1,035	$1,467		$0
TA2MU-01	9306	9,306		$0		$0	9306	$455		$0	$1,088	$1,543		$0
TA2MU-02	8720	8,720		$0		$0	8720	$427		$0	$1,019	$1,446		$0
TA2MU-03	2947	2,947		$0		$0	2947	$144		$0	$345	$489		$0
TA2MU-04	3993	0		$0		$0		$0		$0	$0	$0		$0
TA2MU-05	21224	0		$0		$0		$0		$0	$0	$0		$0
AFUELMU-01	4600	0		$0		$0		$0		$0	$0	$0		$0
T05MU-01	3554	3,554		$0	47	$7,557		$0		$0	$415	$7,973		$0
A01MU-01	56169	56,169	418	$607		$0		$0		$0	$6,566	$7,174	x	$7,174
T06MU-01	23936	23,936	48	$70		$0		$0		$0	$2,798	$2,868		$0
AHELIMU-01	6405	6,405	24	$35		$0		$0		$0	$749	$784		$0
THANGMU-01	10638	10,638	331	$481		$0		$0		$0	$1,244	$1,725		$0
THANGMU-02	9300	9,300	290	$421		$0		$0		$0	$1,087	$1,509		$0
THANGMU-03	15735	0		$0		$0		$0		$0	$0	$0		$0
THANGMU-04	15540	0		$0		$0		$0		$0	$0	$0		$0
AHANGMU-01	23229	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-01	5117	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-02	1770	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-03	7100	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-04	4241	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-05	7683	0		$0		$0		$0		$0	$0	$0		$0
TLANEMU-06	1280	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**809039**	**697,527**	**3,762**	**$5,467**	**96**	**$15,436**	**587,525**	**$28,742**	**0**	**$0**	**$81,545**	**$131,190**		**$102,350**

Salem Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Maintained Pavement Area (sf)	Total Maint Cost (2000-2009)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R13SA-01	564373	564,373	$161,771		0	$0
R13SA-02	40490	40,490	$4,823		0	$0
R13SA-03	284289	284,289	$81,488		0	$0
R16SA-01	385,886	385,886	$45,620		0	$0
R16SA-02	5,750	5,750	$680		0	$0
R16SA-03	136838	136,838	$16,177		0	$0
T09SA-01	5,889	0	$0		0	$0
T10SA-01	8,672	0	$0		0	$0
T11SA-01	9,472	0	$0		0	$0
T12SA-01	9,532	0	$0		0	$0
T13SA-01	10,772	0	$0		0	$0
T14SA-01	7,000	7,000	$1,102		0	$0
T15SA-01	28,623	28,623	$1,101		0	$0
T16SA-01	11,821	0	$0		0	$0
TA1SA-01	25,705	0	$0		0	$0
TASA-01	76,728	76,728	$2,855		0	$0
TASA-02	45,210	45,210	$2,222		0	$0
TASA-03	37,331	37,331	$1,727		0	$0
TASA-04	58,207	58,207	$2,165		0	$0
TASA-05	18,993	18,993	$896		0	$0
TASA-06	89,412	89,412	$3,473		0	$0
TBSA-01	130,289	130,289	$27,232		0	$0
TBSA-02	42,757	42,757	$9,134		0	$0
TBSA-03	45,385	45,385	$9,244		0	$0
TCRSA-01	26,149	0	$0		0	$0
TCSA-01	44,129	44,129	$10,486		0	$0
TCSA-02	31,750	0	$0		0	$0
TCSA-03	39,422	39,422	$781		0	$0
TCSA-04	34,397	0	$0		0	$0
TCSA-05	35,400	0	$0		0	$0
TFSA-01	37,702	0	$0		0	$0
TFSA-02	67,170	67,170	$15,547		0	$0
TGSA-01	31,225	31,225	$7,295		0	$0
THSA-01	11,797	11,797	$612		0	$0
THSA-02	14,192	14,192	$777		0	$0
TJSA-01	16,562	16,562	$793		0	$0
TJSA-02	19,037	19,037	$1,169		0	$0
TJSA-03	34,614	34,614	$2,057		0	$0
TKSA-01	34,704	34,704	$1,543		0	$0
TKSA-02	27,745	27,745	$1,267		0	$0
TL0SA-01	20,820	20,820	$2,371		0	$0
TL10SA-01	25,375	0	$0		0	$0
TL1SA-01	2,388	2,388	$252		0	$0
TL1SA-02	5,782	5,782	$662		0	$0

Salem Airport Pavement and Maintenance Inventory						
Section	Area (sf)	Maintained Pavement Area (sf)	Total Maint Cost (2000-2009)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
TL2SA-01	3,980	3,980	$562		0	$0
TL3SA-01	4,960	4,960	$742		0	$0
TL4SA-01	6,060	6,060	$845		0	$0
TL5SA-01	3,960	3,960	$466		0	$0
TL6SA-01	4,380	4,380	$523		0	$0
TL7SA-01	3,800	3,800	$610		0	$0
TL8SA-01	13,900	13,900	$2,209		0	$0
TL8SA-02	5,854	5,854	$468		0	$0
TL8SA-03	5,172	5,172	$600		0	$0
TL9SA-01	17,098	0	$0		0	$0
TMSA-01	47,506	47,506	$29,046	x	47,506	$29,046
TNSA-01	18,775	0	$0		0	$0
TNSA-02	25,894	25,894	$5,924		0	$0
TNSA-03	9,579	9,579	$2,065		0	$0
TQSA-01	31,665	31,665	$6,857		0	$0
TQSA-02	10,901	10,901	$2,444		0	$0
TS0SA-01	10,540	0	$0		0	$0
TS0SA-02	5,860	0	$0		0	$0
TWCWSA-01	10,560	0	$0		0	$0
A01SA-01	177,886	177,886	$58,241	x	177,886	$58,241
A02SA-01	266,162	0	$0		0	$0
A03SA-01	105,040	0	$0		0	$0
A04SA-01	157,081	157,081	$5,207		0	$0
A05SA-01	24,717	24,717	$880		0	$0
A06SA-01	234,056	0	$0		0	$0
AH16SA-01	9,337	9,337	$2,577		0	$0
AH34SA-01	15,075	15,075	$4,468		0	$0
ASACSA-01	20,255	0	$0		0	$0
ATS2SA-01	5,000	5,000	$495		0	$0
HANGSA-01	5,625	0	$0		0	$0
HANGSA-02	5,625	0	$0		0	$0
TOTAL	**3,906,087**	**2,933,855**	**$542,551**		**225,392**	**$87,287**

Salem Airport

Pavement Maintenance Cost Inventory

2009 PMP														
Salem Airport		TOTAL COST		$241,184										
		CS Cost		$45,134										
		ACP Cost		$0										
		WC Cost		$0										
		Surface Sealant Cost		$104,559										
		Other Cost		$91,491										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost		ACP Cost		WC Cost	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R13SA-01	564,373	564,373	11,244	$7,688		$0		$0	564,373	$41,626	$17,907	$67,220		$0
R13SA-02	40,490	40,490	807	$552		$0		$0	40,490	$2,986	$1,285	$4,823		$0
R13SA-03	284,289	284,289	5,664	$3,873		$0		$0	284,289	$20,968	$9,020	$33,861		$0
R16SA-01	385,886	385,886	7,189	$4,915		$0		$0	385886	$28,462	$12,244	$45,620		$0
R16SA-02	5,750	5,750	107	$73		$0		$0	5750	$424	$182	$680		$0
R16SA-03	136,838	136,838	2,549	$1,743		$0		$0	136838	$10,093	$4,342	$16,177		$0
T09SA-01	5,889	0		$0		$0		$0		$0	$0	$0		$0
T10SA-01	8,672	0		$0		$0		$0		$0	$0	$0		$0
T11SA-01	9,472	0		$0		$0		$0		$0	$0	$0		$0
T12SA-01	9,532	0		$0		$0		$0		$0	$0	$0		$0
T13SA-01	10,772	0		$0		$0		$0		$0	$0	$0		$0
T14SA-01	7,000	7,000	549	$375		$0		$0		$0	$222	$597		$0
T15SA-01	28,623	28,623	282	$193		$0		$0		$0	$908	$1,101		$0
T16SA-01	11,821	0		$0		$0		$0		$0	$0	$0		$0
TA1SA-01	25,705	0		$0		$0		$0		$0	$0	$0		$0
TASA-01	76,728	76,728	615	$420		$0		$0		$0	$2,434	$2,855		$0
TASA-02	45,210	45,210	1,152	$788		$0		$0		$0	$1,434	$2,222		$0
TASA-03	37,331	37,331	793	$542		$0		$0		$0	$1,184	$1,727		$0
TASA-04	58,207	58,207	465	$318		$0		$0		$0	$1,847	$2,165		$0
TASA-05	18,993	18,993	429	$293		$0		$0		$0	$603	$896		$0
TASA-06	89,412	89,412	930	$636		$0		$0		$0	$2,837	$3,473		$0
TBSA-01	130,289	130,289	1,859	$1,271		$0		$0		$0	$4,134	$5,405		$0
TBSA-02	42,757	42,757	899	$615		$0		$0		$0	$1,357	$1,971		$0
TBSA-03	45,385	45,385	293	$200		$0		$0		$0	$1,440	$1,640		$0
TCRSA-01	26,149	0		$0		$0		$0		$0	$0	$0		$0
TCSA-01	44,129	44,129	1,325	$906		$0		$0		$0	$1,400	$2,306		$0
TCSA-02	31,750	0		$0		$0		$0		$0	$0	$0		$0
TCSA-03	39,422	0		$0		$0		$0		$0	$0	$0		$0
TCSA-04	34,397	0		$0		$0		$0		$0	$0	$0		$0
TCSA-05	35,400	0		$0		$0		$0		$0	$0	$0		$0
TFSA-01	37,702	0		$0		$0		$0		$0	$0	$0		$0
TFSA-02	67,170	67,170	1,785	$1,220		$0		$0		$0	$2,131	$3,352		$0
TGSA-01	31,225	31,225	1,570	$1,073		$0		$0		$0	$991	$2,064		$0
THSA-01	11,797	11,797	348	$238		$0		$0		$0	$374	$612		$0
THSA-02	14,192	14,192	478	$327		$0		$0		$0	$450	$777		$0
TJSA-01	16,562	16,562	391	$267		$0		$0		$0	$525	$793		$0

2009 PMP														
TJSA-02	19,037	19,037	827	$565		$0		$0		$0	$604	$1,169		$0
TJSA-03	34,614	34,614	1,402	$959		$0		$0		$0	$1,098	$2,057		$0
TKSA-01	34,704	34,704	646	$442		$0		$0		$0	$1,101	$1,543		$0
TKSA-02	27,745	27,745	565	$386		$0		$0		$0	$880	$1,267		$0
TL0SA-01	20,820	20,820	729	$498		$0		$0		$0	$661	$1,159		$0
TL10SA-01	25,375	0		$0		$0		$0		$0	$0	$0		$0
TL1SA-01	2,388	2,388	84	$57		$0		$0		$0	$76	$133		$0
TL1SA-02	5,782	5,782	202	$138		$0		$0		$0	$183	$322		$0
TL2SA-01	3,980	3,980	139	$95		$0		$0		$0	$126	$221		$0
TL3SA-01	4,960	4,960	174	$119		$0		$0		$0	$157	$276		$0
TL4SA-01	6,060	6,060	212	$145		$0		$0		$0	$192	$337		$0
TL5SA-01	3,960	3,960	139	$95		$0		$0		$0	$126	$221		$0
TL6SA-01	4,380	4,380	153	$105		$0		$0		$0	$139	$244		$0
TL7SA-01	3,800	3,800	133	$91		$0		$0		$0	$121	$212		$0
TL8SA-01	13,900	13,900	1,192	$815		$0		$0		$0	$441	$1,256		$0
TL8SA-02	5,854	0		$0		$0		$0		$0	$0	$0		$0
TL8SA-03	5,172	5,172	173	$118		$0		$0		$0	$164	$282		$0
TL9SA-01	17,098	0		$0		$0		$0		$0	$0	$0		$0
TMSA-01	47,506	47,506	2,394	$1,637		$0		$0		$0	$1,507	$3,144	x	$3,144
TNSA-01	18,775	0		$0		$0		$0		$0	$0	$0		$0
TNSA-02	25,894	25,894	1,118	$764		$0		$0		$0	$822	$1,586		$0
TNSA-03	9,579	9,579	228	$156		$0		$0		$0	$304	$460		$0
TQSA-01	31,665	31,665	800	$547		$0		$0		$0	$1,005	$1,552		$0
TQSA-02	10,901	10,901	398	$272		$0		$0		$0	$346	$618		$0
TS0SA-01	10,540	0		$0		$0		$0		$0	$0	$0		$0
TS0SA-02	5,860	0		$0		$0		$0		$0	$0	$0		$0
TWCWSA-01	10,560	0		$0		$0		$0		$0	$0	$0		$0
A01SA-01	177,886	177,886	11,193	$7,653		$0		$0		$0	$5,644	$13,297	x	$13,297
A02SA-01	266,162	0		$0		$0		$0		$0	$0	$0		$0
A03SA-01	105,040	0		$0		$0		$0		$0	$0	$0		$0
A04SA-01	157,081	157,081	327	$224		$0		$0		$0	$4,984	$5,207		$0
A05SA-01	24,717	24,717	140	$96		$0		$0		$0	$784	$880		$0
A06SA-01	234,056	0		$0		$0		$0		$0	$0	$0		$0
AH16SA-01	9,337	9,337	470	$321		$0		$0		$0	$296	$618		$0
AH34SA-01	15,075	15,075	452	$309		$0		$0		$0	$478	$787		$0
ASACSA-01	20,255	0		$0		$0		$0		$0	$0	$0		$0
ATS2SA-01	5,000	0		$0		$0		$0		$0	$0	$0		$0
HANGSA-01	5,625	0		$0		$0		$0		$0	$0	$0		$0
HANGSA-02	5,625	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**3,906,087**	**2,883,579**	**66,013**	**$45,134**	**0**	**$0**	**0**	**$0**	**1,417,626**	**$104,559**	**$91,491**	**$241,184**		**$16,441**

Salem Airport

Pavement Maintenance Cost Inventory

2005 PMP														
Salem Airport		TOTAL COST		$15,512										
		CS Cost		$9,837										
		Other Cost		$5,675										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost		0		0		0	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R13SA-01	564,373	0		$0		$0		$0		$0	$0	$0		$0
R13SA-02	40,490	0		$0		$0		$0		$0	$0	$0		$0
R13SA-03	284,289	0		$0		$0		$0		$0	$0	$0		$0
R16SA-01	385,886	0		$0		$0		$0		$0	$0	$0		$0
R16SA-02	5,750	0		$0		$0		$0		$0	$0	$0		$0
R16SA-03	136,838	0		$0		$0		$0		$0	$0	$0		$0
T09SA-01	5,889	0		$0		$0		$0		$0	$0	$0		$0
T10SA-01	8,672	0		$0		$0		$0		$0	$0	$0		$0
T11SA-01	9,472	0		$0		$0		$0		$0	$0	$0		$0
T12SA-01	9,532	0		$0		$0		$0		$0	$0	$0		$0
T13SA-01	10,772	0		$0		$0		$0		$0	$0	$0		$0
T14SA-01	7,000	7,000	509	$425		$0		$0		$0	$80	$505		$0
T15SA-01	28,623	0		$0		$0		$0		$0	$0	$0		$0
T16SA-01	11,821	0		$0		$0		$0		$0	$0	$0		$0
TA1SA-01	25,705	0		$0		$0		$0		$0	$0	$0		$0
TASA-01	76,728	0		$0		$0		$0		$0	$0	$0		$0
TASA-02	45,210	0		$0		$0		$0		$0	$0	$0		$0
TASA-03	37,331	0		$0		$0		$0		$0	$0	$0		$0
TASA-04	58,207	0		$0		$0		$0		$0	$0	$0		$0
TASA-05	18,993	0		$0		$0		$0		$0	$0	$0		$0
TASA-06	89,412	0		$0		$0		$0		$0	$0	$0		$0
TBSA-01	130,289	0		$0		$0		$0		$0	$0	$0		$0
TBSA-02	42,757	0		$0		$0		$0		$0	$0	$0		$0
TBSA-03	45,385	0		$0		$0		$0		$0	$0	$0		$0
TCRSA-01	26,149	0		$0		$0		$0		$0	$0	$0		$0
TCSA-01	44,129	44,129	335	$279		$0		$0		$0	$507	$787		$0
TCSA-02	31,750	0		$0		$0		$0		$0	$0	$0		$0
TCSA-03	39,422	39,422	393	$328		$0		$0		$0	$453	$781		$0
TCSA-04	34,397	0		$0		$0		$0		$0	$0	$0		$0
TCSA-05	35,400	0		$0		$0		$0		$0	$0	$0		$0
TFSA-01	37,702	0		$0		$0		$0		$0	$0	$0		$0
TFSA-02	67,170	67,170	204	$170		$0		$0		$0	$772	$942		$0
TGSA-01	31,225	0		$0		$0		$0		$0	$0	$0		$0
THSA-01	11,797	0		$0		$0		$0		$0	$0	$0		$0
THSA-02	14,192	0		$0		$0		$0		$0	$0	$0		$0
TJSA-01	16,562	0		$0		$0		$0		$0	$0	$0		$0

2005 PMP														
TJSA-02	19,037	0		$0		$0		$0		$0	$0	$0		$0
TJSA-03	34,614	0		$0		$0		$0		$0	$0	$0		$0
TKSA-01	34,704	0		$0		$0		$0		$0	$0	$0		$0
TKSA-02	27,745	0		$0		$0		$0		$0	$0	$0		$0
TL0SA-01	20,820	20,820	1,166	$973		$0		$0		$0	$239	$1,212		$0
TL10SA-01	25,375	0		$0		$0		$0		$0	$0	$0		$0
TL1SA-01	2,388	2,388	110	$92		$0		$0		$0	$27	$119		$0
TL1SA-02	5,782	5,782	328	$274		$0		$0		$0	$66	$340		$0
TL2SA-01	3,980	3,980	354	$295		$0		$0		$0	$46	$341		$0
TL3SA-01	4,960	4,960	490	$409		$0		$0		$0	$57	$466		$0
TL4SA-01	6,060	6,060	525	$438		$0		$0		$0	$70	$508		$0
TL5SA-01	3,960	3,960	240	$200		$0		$0		$0	$46	$246		$0
TL6SA-01	4,380	4,380	275	$229		$0		$0		$0	$50	$280		$0
TL7SA-01	3,800	3,800	425	$354		$0		$0		$0	$44	$398		$0
TL8SA-01	13,900	13,900	951	$793		$0		$0		$0	$160	$953		$0
TL8SA-02	5,854	5,854	480	$400		$0		$0		$0	$67	$468		$0
TL8SA-03	5,172	5,172	310	$259		$0		$0		$0	$59	$318		$0
TL9SA-01	17,098	0		$0		$0		$0		$0	$0	$0		$0
TMSA-01	47,506	47,506	1,101	$918		$0		$0		$0	$546	$1,465	x	$1,465
TNSA-01	18,775	0		$0		$0		$0		$0	$0	$0		$0
TNSA-02	25,894	0		$0		$0		$0		$0	$0	$0		$0
TNSA-03	9,579	0		$0		$0		$0		$0	$0	$0		$0
TQSA-01	31,665	0		$0		$0		$0		$0	$0	$0		$0
TQSA-02	10,901	0		$0		$0		$0		$0	$0	$0		$0
TS0SA-01	10,540	0		$0		$0		$0		$0	$0	$0		$0
TS0SA-02	5,860	0		$0		$0		$0		$0	$0	$0		$0
TWCWSA-01	10,560	0		$0		$0		$0		$0	$0	$0		$0
A01SA-01	177,886	177,886	3,240	$2,702		$0		$0		$0	$2,045	$4,748	x	$4,748
A02SA-01	266,162	0		$0		$0		$0		$0	$0	$0		$0
A03SA-01	105,040	0		$0		$0		$0		$0	$0	$0		$0
A04SA-01	157,081	0		$0		$0		$0		$0	$0	$0		$0
A05SA-01	24,717	0		$0		$0		$0		$0	$0	$0		$0
A06SA-01	234,056	0		$0		$0		$0		$0	$0	$0		$0
AH16SA-01	9,337	9,337	184	$153		$0		$0		$0	$107	$261		$0
AH34SA-01	15,075	15,075	126	$105		$0		$0		$0	$173	$278		$0
ASACSA-01	20,255	0		$0		$0		$0		$0	$0	$0		$0
ATS2SA-01	5,000	5,000	48	$40		$0		$0		$0	$57	$98		$0
HANGSA-01	5,625	0		$0		$0		$0		$0	$0	$0		$0
HANGSA-02	5,625	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**3,906,087**	**493,581**	**11,794**	**$9,837**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**$5,675**	**$15,512**		**$6,212**

Salem Airport

Pavement Maintenance Cost Inventory

2002 PMP														
Salem Airport		TOTAL COST		$285,855										
		CS Cost		$12,721										
		ACP Cost		$15,298										
		Fog Seal Cost		$176,757										
		Other Cost		$81,079										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost		0	Fog Seal (sf)	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R13SA-01	564,373	564,373		$0		$0		$0	564,373	$64,884	$29,666	$94,550		$0
R13SA-02	40,490	0		$0		$0		$0		$0	$0	$0		$0
R13SA-03	284,289	284,289		$0		$0		$0	284,289	$32,684	$14,944	$47,627		$0
R16SA-01	385,886	0		$0		$0		$0		$0	$0	$0		$0
R16SA-02	5,750	0		$0		$0		$0		$0	$0	$0		$0
R16SA-03	136,838	0		$0		$0		$0		$0	$0	$0		$0
T09SA-01	5,889	0		$0		$0		$0		$0	$0	$0		$0
T10SA-01	8,672	0		$0		$0		$0		$0	$0	$0		$0
T11SA-01	9,472	0		$0		$0		$0		$0	$0	$0		$0
T12SA-01	9,532	0		$0		$0		$0		$0	$0	$0		$0
T13SA-01	10,772	0		$0		$0		$0		$0	$0	$0		$0
T14SA-01	7,000	0		$0		$0		$0		$0	$0	$0		$0
T15SA-01	28,623	0		$0		$0		$0		$0	$0	$0		$0
T16SA-01	11,821	0		$0		$0		$0		$0	$0	$0		$0
TA1SA-01	25,705	0		$0		$0		$0		$0	$0	$0		$0
TASA-01	76,728	0		$0		$0		$0		$0	$0	$0		$0
TASA-02	45,210	0		$0		$0		$0		$0	$0	$0		$0
TASA-03	37,331	0		$0		$0		$0		$0	$0	$0		$0
TASA-04	58,207	0		$0		$0		$0		$0	$0	$0		$0
TASA-05	18,993	0		$0		$0		$0		$0	$0	$0		$0
TASA-06	89,412	0		$0		$0		$0		$0	$0	$0		$0
TBSA-01	130,289	130,289		$0		$0		$0	130,289	$14,979	$6,849	$21,828		$0
TBSA-02	42,757	42,757		$0		$0		$0	42,757	$4,916	$2,248	$7,163		$0
TBSA-03	45,385	45,385		$0		$0		$0	45,385	$5,218	$2,386	$7,603		$0
TCRSA-01	26,149	0		$0		$0		$0		$0	$0	$0		$0
TCSA-01	44,129	44,129		$0		$0		$0	44,129	$5,073	$2,320	$7,393		$0
TCSA-02	31,750	0		$0		$0		$0		$0	$0	$0		$0
TCSA-03	39,422	0		$0		$0		$0		$0	$0	$0		$0
TCSA-04	34,397	0		$0		$0		$0		$0	$0	$0		$0
TCSA-05	35,400	0		$0		$0		$0		$0	$0	$0		$0
TFSA-01	37,702	0		$0		$0		$0		$0	$0	$0		$0
TFSA-02	67,170	67,170		$0		$0		$0	67,170	$7,722	$3,531	$11,253		$0
TGSA-01	31,225	31,225		$0		$0		$0	31,225	$3,590	$1,641	$5,231		$0
THSA-01	11,797	0		$0		$0		$0		$0	$0	$0		$0
THSA-02	14,192	0		$0		$0		$0		$0	$0	$0		$0
TJSA-01	16,562	0		$0		$0		$0		$0	$0	$0		$0

							2002 PMP							
TJSA-02	19,037	0		$0		$0		$0		$0	$0	$0		$0
TJSA-03	34,614	0		$0		$0		$0		$0	$0	$0		$0
TKSA-01	34,704	0		$0		$0		$0		$0	$0	$0		$0
TKSA-02	27,745	0		$0		$0		$0		$0	$0	$0		$0
TL0SA-01	20,820	0		$0		$0		$0		$0	$0	$0		$0
TL10SA-01	25,375	0		$0		$0		$0		$0	$0	$0		$0
TL1SA-01	2,388	0		$0		$0		$0		$0	$0	$0		$0
TL1SA-02	5,782	0		$0		$0		$0		$0	$0	$0		$0
TL2SA-01	3,980	0		$0		$0		$0		$0	$0	$0		$0
TL3SA-01	4,960	0		$0		$0		$0		$0	$0	$0		$0
TL4SA-01	6,060	0		$0		$0		$0		$0	$0	$0		$0
TL5SA-01	3,960	0		$0		$0		$0		$0	$0	$0		$0
TL6SA-01	4,380	0		$0		$0		$0		$0	$0	$0		$0
TL7SA-01	3,800	0		$0		$0		$0		$0	$0	$0		$0
TL8SA-01	13,900	0		$0		$0		$0		$0	$0	$0		$0
TL8SA-02	5,854	0		$0		$0		$0		$0	$0	$0		$0
TL8SA-03	5,172	0		$0		$0		$0		$0	$0	$0		$0
TL9SA-01	17,098	0		$0		$0		$0		$0	$0	$0		$0
TMSA-01	47,506	47,506	660	$1,181	8	$15,298		$0	47,506	$5,462	$2,497	$24,438	x	$24,438
TNSA-01	18,775	0		$0		$0		$0		$0	$0	$0		$0
TNSA-02	25,894	25,894		$0		$0		$0	25,894	$2,977	$1,361	$4,338		$0
TNSA-03	9,579	9,579		$0		$0		$0	9,579	$1,101	$504	$1,605		$0
TQSA-01	31,665	31,665		$0		$0		$0	31,665	$3,640	$1,664	$5,305		$0
TQSA-02	10,901	10,901		$0		$0		$0	10,901	$1,253	$573	$1,826		$0
TS0SA-01	10,540	0		$0		$0		$0		$0	$0	$0		$0
TS0SA-02	5,860	0		$0		$0		$0		$0	$0	$0		$0
TWCWSA-01	10,560	0		$0		$0		$0		$0	$0	$0		$0
A01SA-01	177,886	177,886	5,810	$10,395		$0		$0	177886	$20,451	$9,351	$40,197	x	$40,197
A02SA-01	266,162	0		$0		$0		$0		$0	$0	$0		$0
A03SA-01	105,040	0		$0		$0		$0		$0	$0	$0		$0
A04SA-01	157,081	0		$0		$0		$0		$0	$0	$0		$0
A05SA-01	24,717	0		$0		$0		$0		$0	$0	$0		$0
A06SA-01	234,056	0		$0		$0		$0		$0	$0	$0		$0
AH16SA-01	9,337	9,337	75	$134		$0		$0	9337	$1,073	$491	$1,698		$0
AH34SA-01	15,075	15,075	490	$877		$0		$0	15075	$1,733	$792	$3,402		$0
ASACSA-01	20,255	0		$0		$0		$0		$0	$0	$0		$0
ATS2SA-01	5,000	5,000	75	$134		$0		$0		$0	$263	$397		$0
HANGSA-01	5,625	0		$0		$0		$0		$0	$0	$0		$0
HANGSA-02	5,625	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**3,906,087**	**1,542,460**	**7,110**	**$12,721**	**8**	**$15,298**	**0**	**$0**	**1,537,460**	**$176,757**	**$81,079**	**$285,855**		**$64,634**

Scappoose Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Maintained Pavement Area (sf)	Total Maint Cost (2000-2009)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R15SC-01	110000	110,000	$24,827		0	$0
R15SC-02	400000	400,000	$90,280		0	$0
TASC-00	2679	2,679	$475	x	2,679	$475
TASC-01	48,381	48,381	$8,576	x	48,381	$8,576
TASC-02	59,522	59,522	$10,602	x	59,522	$10,602
TASC-03	70718	70,718	$9,722	x	70,718	$9,722
TBSC-00	2,644	2,644	$446		0	$0
TBSC-01	42,420	42,420	$7,176		0	$0
TBSC-02	3,888	3,888	$539		0	$0
TBSC-03	75,511	75,511	$31,457	x	75,511	$31,457
TBSC-04	84,787	84,787	$34,855	x	84,787	$34,855
TB5SC-01	4,330	4,330	$751		0	$0
TB5SC-02	2,399	2,399	$416		0	$0
TA5SC-01	8,634	8,634	$1,472		0	$0
TA4SC-01	1,720	1,720	$107		0	$0
TA4SC-02	6,914	6,914	$723		0	$0
TB4SC-01	2,893	2,893	$754		0	$0
TB4SC-02	515	515	$164		0	$0
TB4SC-03	3,810	3,810	$1,216		0	$0
TB4SC-04	3,048	3,048	$867		0	$0
TA3SC-01	1,720	1,720	$290		0	$0
TA3SC-02	6,914	6,914	$1,565		0	$0
TA3SC-03	1,459	1,459	$91		0	$0
TA2SC-01	967	967	$91		0	$0
TA2SC-02	6,638	6,638	$926		0	$0
TA2SC-03	2,067	2,067	$129		0	$0
TB2SC-01	8,022	8,022	$500		0	$0
TA1SC-01	1,654	1,654	$85		0	$0
TA1SC-02	30,760	30,760	$1,586		0	$0
TB1SC-01	5,649	5,649	$763		0	$0
AH33BSC-01	5,533	5,533	$768		0	$0
AH33ASC-01	5,533	5,533	$768		0	$0
T01SC-01	20,673	20,673	$4,257		0	$0
T01SC-02	6,984	6,984	$882		0	$0
T01SC-03	19,044	0	$0		0	$0
T01SC-04	7,372	7,372	$1,054		0	$0
T01SC-05	7,275	7,275	$832		0	$0
T01SC-06	7,322	7,322	$1,047		0	$0
T01SC-07	7,471	7,471	$389		0	$0
A02SC-01	143,000	143,000	$16,415		0	$0
T02SC-01	5,848	5,848	$2,663		0	$0
T02SC-02	15,742	15,742	$3,223		0	$0
T02SC-03	7,649	7,649	$3,205		0	$0

Scappoose Airport

Pavement Maintenance Cost Inventory

Scappoose Airport Pavement and Maintenance Inventory						
Section	Area (sf)	Maintained Pavement Area (sf)	Total Maint Cost (2000-2009)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
T02SC-04	7,649	7,649	$3,261		0	$0
T02SC-05	12,899	12,899	$2,734		0	$0
T02SC-06	12,899	12,899	$2,534		0	$0
T02SC-07	8,084	8,084	$1,664		0	$0
T02SC-08	8,084	8,084	$1,735		0	$0
T02SC-09	7,669	7,669	$1,525		0	$0
T02SC-10	7,669	7,669	$698		0	$0
A04SC-01	11,406	11,406	$9,219		0	$0
T03SC-01	1,330	1,330	$563		0	$0
T03SC-02	1,971	1,971	$953		0	$0
AH15BSC-01	8,993	8,993	$2,797		0	$0
AH15ASC-01	6,525	6,525	$1,506		0	$0
T05SC-01	4,425	0	$0		0	$0
T04SC-01	8,186	0	$0		0	$0
T06SC-01	4,350	0	$0		0	$0
A01SC-01	28,688	28,688	$1,066	x	28,688	$1,066
A01SC-02	10,392	10,392	$647	x	10,392	$647
A03SC-01	48,096	48,096	$1,810		0	$0
TOTAL	**1,459,424**	**1,423,419**	**$299,663**		**380,678**	**$97,400**

Scappoose Airport

Pavement Maintenance Cost Inventory

2009 PMP														
Scappoose Airport		TOTAL COST		$61,464										
		CS Cost		$29,258										
		ACP Cost												
		WC Cost		$12,420										
		Surface Sealant Cost												
		Other Cost		$19,786										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost		ACP Cost		WC Cost	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15SC-01	110000	110,000	7341	$4,001		$0		$0		$0	$1,737	$5,738		$0
R15SC-02	400000	400,000	26693	$14,550		$0		$0		$0	$6,315	$20,865		$0
TASC-00	2679	2,679	112	$61		$0		$0		$0	$42	$103	x	$103
TASC-01	48381	48,381	2016	$1,099		$0		$0		$0	$764	$1,863	x	$1,863
TASC-02	59522	59,522	2480	$1,352		$0		$0		$0	$940	$2,292	x	$2,292
TASC-03	70718	70,718	2947	$1,606		$0		$0		$0	$1,117	$2,723	x	$2,723
TBSC-00	2644	2,644	69	$38		$0	0	$0		$0	$42	$79		$0
TBSC-01	42420	42,420	1102	$601		$0	1	$19		$0	$670	$1,289		$0
TBSC-02	3888	0		$0		$0		$0		$0	$0	$0		$0
TBSC-03	75511	75,511	1961	$1,069		$0	3	$57		$0	$1,192	$2,318	x	$2,318
TBSC-04	84787	84,787	2202	$1,200		$0	3	$57		$0	$1,339	$2,596	x	$2,596
TB5SC-01	4330	0		$0		$0		$0		$0	$0	$0		$0
TB5SC-02	2399	0		$0		$0		$0		$0	$0	$0		$0
TA5SC-01	8634	8,634	252	$137		$0		$0		$0	$136	$274		$0
TA4SC-01	1720	0		$0		$0		$0		$0	$0	$0		$0
TA4SC-02	6914	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-01	2893	2,893	48	$26		$0		$0		$0	$46	$72		$0
TB4SC-02	515	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-03	3810	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-04	3048	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-01	1720	1,720	42	$23		$0	7	$133		$0	$27	$183		$0
TA3SC-02	6914	6,914	171	$93		$0	28	$530		$0	$109	$732		$0
TA3SC-03	1459	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-01	967	967	28	$15		$0		$0		$0	$15	$31		$0
TA2SC-02	6638	6,638	196	$107		$0		$0		$0	$105	$212		$0
TA2SC-03	2067	0		$0		$0		$0		$0	$0	$0		$0
TB2SC-01	8022	0		$0		$0		$0		$0	$0	$0		$0
TA1SC-01	1654	1,654	3	$2		$0		$0		$0	$26	$28		$0
TA1SC-02	30760	30,760	59	$32		$0		$0		$0	$486	$518		$0
TB1SC-01	5649	5,649	231	$126		$0		$0		$0	$89	$215		$0
AH33BSC-01	5533	0		$0		$0		$0		$0	$0	$0		$0
AH33ASC-01	5533	0		$0		$0		$0		$0	$0	$0		$0
T01SC-01	20673	20,673	488	$266		$0		$0		$0	$326	$592		$0
T01SC-02	6984	6,984	165	$90		$0		$0		$0	$110	$200		$0
T01SC-03	19044	0		$0		$0		$0		$0	$0	$0		$0
T01SC-04	7372	7,372	174	$95		$0		$0		$0	$116	$211		$0
T01SC-05	7275	0		$0		$0		$0		$0	$0	$0		$0
T01SC-06	7322	7,322	173	$94		$0		$0		$0	$116	$210		$0
T01SC-07	7471	0		$0		$0		$0		$0	$0	$0		$0

Scappoose Airport

Pavement Maintenance Cost Inventory

2009 PMP														
A02SC-01	143000	143,000	2356	$1,284		$0		$0		$0	$2,258	$3,542		$0
T02SC-01	5848	5,848	84	$46		$0	87	$1,647		$0	$92	$1,785		$0
T02SC-02	15742	15,742	324	$177		$0	65	$1,231		$0	$249	$1,656		$0
T02SC-03	7649	7,649	110	$60		$0	113	$2,139		$0	$121	$2,320		$0
T02SC-04	7649	7,649	110	$60		$0	113	$2,139		$0	$121	$2,320		$0
T02SC-05	12899	12,899	265	$144		$0	54	$1,022		$0	$204	$1,370		$0
T02SC-06	12899	12,899	265	$144		$0	54	$1,022		$0	$204	$1,370		$0
T02SC-07	8084	8,084	166	$90		$0	34	$644		$0	$128	$862		$0
T02SC-08	8084	8,084	166	$90		$0	34	$644		$0	$128	$862		$0
T02SC-09	7669	7,669	158	$86		$0	32	$606		$0	$121	$813		$0
T02SC-10	7669	0		$0		$0		$0		$0	$0	$0		$0
A04SC-01	11406	0		$0		$0		$0		$0	$0	$0		$0
T03SC-01	1330	1,330	155	$84		$0		$0		$0	$21	$105		$0
T03SC-02	1971	1,971	229	$125		$0		$0		$0	$31	$156		$0
AH15BSC-01	8993	8,993	178	$97		$0		$0		$0	$142	$239		$0
AH15ASC-01	6525	6,525	157	$86		$0	28	$530		$0	$103	$719		$0
T05SC-01	4425	0		$0		$0		$0		$0	$0	$0		$0
T04SC-01	8186	0		$0		$0		$0		$0	$0	$0		$0
T06SC-01	4350	0		$0		$0		$0		$0	$0	$0		$0
A01SC-01	28688	0		$0		$0		$0		$0	$0	$0	x	$0
A01SC-02	10392	0		$0		$0		$0		$0	$0	$0	x	$0
A03SC-01	48096	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1459424**	1,253,184	53,676	$29,258	0	$0	656	$12,420	0	$0	$19,786	$61,464		$11,894

Scappoose Airport

Pavement Maintenance Cost Inventory

2005 PMP														
Scappoose Airport		TOTAL COST		$144,658										
		CS Cost		$29,204										
		Fog Seal Cost		$75,949										
		Other Cost		$39,505										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost		0		0	Fog Seal	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15SC-01	110,000	110,000	2,641	$3,825		$0		$0	110,000	$11,954	$3,309	$19,089		$0
R15SC-02	400,000	400,000	9,604	$13,911		$0		$0	400,000	$43,470	$12,033	$69,415		$0
TASC-00	2,679	2,679		$0		$0		$0	2,679	$291	$81	$372	x	$372
TASC-01	48,381	48,381		$0		$0		$0	48,381	$5,258	$1,455	$6,713	x	$6,713
TASC-02	59,522	59,522	35	$51		$0		$0	59,522	$6,469	$1,791	$8,310	x	$8,310
TASC-03	70,718	70,718	322	$466		$0		$0		$0	$2,127	$2,594	x	$2,594
TBSC-00	2,644	2,644		$0		$0		$0	2,644	$287	$80	$367		$0
TBSC-01	42,420	42,420		$0		$0		$0	42,420	$4,610	$1,276	$5,886		$0
TBSC-02	3,888	3,888		$0		$0		$0	3,888	$423	$117	$539		$0
TBSC-03	75,511	75,511	1,908	$2,764		$0		$0		$0	$2,272	$5,035	x	$5,035
TBSC-04	84,787	84,787	1,825	$2,643		$0		$0		$0	$2,551	$5,194	x	$5,194
TB5SC-01	4,330	4,330		$0		$0		$0	4,330	$471	$130	$601		$0
TB5SC-02	2,399	2,399		$0		$0		$0	2,399	$261	$72	$333		$0
TA5SC-01	8,634	8,634		$0		$0		$0	8,634	$938	$260	$1,198		$0
TA4SC-01	1,720	0		$0		$0		$0		$0	$0	$0		$0
TA4SC-02	6,914	6,914	58	$84		$0		$0		$0	$208	$292		$0
TB4SC-01	2,893	2,893		$0		$0		$0	2,893	$314	$87	$401		$0
TB4SC-02	515	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-03	3,810	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-04	3,048	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-01	1,720	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-02	6,914	6,914	134	$194		$0		$0		$0	$208	$402		$0
TA3SC-03	1,459	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-01	967	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-02	6,638	6,638	70	$101		$0		$0		$0	$200	$301		$0
TA2SC-03	2,067	0		$0		$0		$0		$0	$0	$0		$0
TB2SC-01	8,022	0		$0		$0		$0		$0	$0	$0		$0
TA1SC-01	1,654	0		$0		$0		$0		$0	$0	$0		$0
TA1SC-02	30,760	0		$0		$0		$0		$0	$0	$0		$0
TB1SC-01	5,649	0		$0		$0		$0		$0	$0	$0		$0
AH33BSC-01	5,533	5,533		$0		$0		$0	5,533	$601	$166	$768		$0
AH33ASC-01	5,533	5,533		$0		$0		$0	5,533	$601	$166	$768		$0
T01SC-01	20,673	20,673	469	$679		$0		$0		$0	$622	$1,301		$0
T01SC-02	6,984	6,984	25	$36		$0		$0		$0	$210	$246		$0
T01SC-03	19,044	0		$0		$0		$0		$0	$0	$0		$0
T01SC-04	7,372	0		$0		$0		$0		$0	$0	$0		$0
T01SC-05	7,275	0		$0		$0		$0		$0	$0	$0		$0
T01SC-06	7,322	0		$0		$0		$0		$0	$0	$0		$0
T01SC-07	7,471	0		$0		$0		$0		$0	$0	$0		$0

Scappoose Airport

Pavement Maintenance Cost Inventory

2005 PMP														
A02SC-01	143,000	143,000	782	$1,133		$0		$0		$0	$4,302	$5,435		$0
T02SC-01	5,848	5,848	231	$335		$0		$0		$0	$176	$511		$0
T02SC-02	15,742	15,742	72	$104		$0		$0		$0	$474	$578		$0
T02SC-03	7,649	7,649	120	$174		$0		$0		$0	$230	$404		$0
T02SC-04	7,649	7,649	159	$230		$0		$0		$0	$230	$460		$0
T02SC-05	12,899	12,899	114	$165		$0		$0		$0	$388	$553		$0
T02SC-06	12,899	12,899	72	$104		$0		$0		$0	$388	$492		$0
T02SC-07	8,084	8,084	35	$51		$0		$0		$0	$243	$294		$0
T02SC-08	8,084	8,084	84	$122		$0		$0		$0	$243	$365		$0
T02SC-09	7,669	7,669	57	$83		$0		$0		$0	$231	$313		$0
T02SC-10	7,669	7,669	47	$68		$0		$0		$0	$231	$299		$0
A04SC-01	11,406	11,406	680	$985		$0		$0		$0	$343	$1,328		$0
T03SC-01	1,330	1,330	27	$39		$0		$0		$0	$40	$79		$0
T03SC-02	1,971	1,971	75	$109		$0		$0		$0	$59	$168		$0
AH15BSC-01	8,993	0		$0		$0		$0		$0	$0	$0		$0
AH15ASC-01	6,525	6,525	125	$181		$0		$0		$0	$196	$377		$0
T05SC-01	4,425	0		$0		$0		$0		$0	$0	$0		$0
T04SC-01	8,186	0		$0		$0		$0		$0	$0	$0		$0
T06SC-01	4,350	0		$0		$0		$0		$0	$0	$0		$0
A01SC-01	28,688	28,688	140	$203		$0		$0		$0	$863	$1,066	x	$1,066
A01SC-02	10,392	0		$0		$0		$0		$0	$0	$0	x	$0
A03SC-01	48,096	48,096	251	$364		$0		$0		$0	$1,447	$1,810		$0
TOTAL	**1459424**	1,313,203	20,162	$29,204	0	$0	0	$0	698,856	$75,949	$39,505	$144,658		$29,284

Scappoose Airport

Pavement Maintenance Cost Inventory

2002 PMP														
Scappoose Airport		TOTAL COST		$65,387										
		CS Cost		$4,803										
		ACP Cost												
		Slurry Seal Cost		$42,521										
		Other Cost		$18,063										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost		0	Slurry Seal	Slurry Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15SC-01	110,000	0		$0		$0		$0		$0	$0	$0		$0
R15SC-02	400,000	0		$0		$0		$0		$0	$0	$0		$0
TASC-00	2,679	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-01	48,381	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-02	59,522	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-03	70,718	70,718	70,718	$925		$0		$0		$0	$3,480	$4,405	x	$4,405
TBSC-00	2,644	0		$0		$0		$0		$0	$0	$0		$0
TBSC-01	42,420	0		$0		$0		$0		$0	$0	$0		$0
TBSC-02	3,888	0		$0		$0		$0		$0	$0	$0		$0
TBSC-03	75,511	75,511	75,511	$988		$0		$0	75,511	$16,778	$3,716	$21,482	x	$21,482
TBSC-04	84,787	84,787	84,787	$1,109		$0		$0	84,787	$18,839	$4,172	$24,121	x	$24,121
TB5SC-01	4,330	0		$0		$0		$0		$0	$0	$0		$0
TB5SC-02	2,399	0		$0		$0		$0		$0	$0	$0		$0
TA5SC-01	8,634	0		$0		$0		$0		$0	$0	$0		$0
TA4SC-01	1,720	1,720	1,720	$23		$0		$0		$0	$85	$107		$0
TA4SC-02	6,914	6,914	6,914	$90		$0		$0		$0	$340	$431		$0
TB4SC-01	2,893	2,893	2,893	$38		$0		$0		$0	$142	$180		$0
TB4SC-02	515	515	515	$7		$0		$0	515	$114	$25	$147		$0
TB4SC-03	3,810	3,810	3,810	$50		$0		$0	3,810	$847	$187	$1,084		$0
TB4SC-04	3,048	3,048	3,048	$40		$0		$0	3,048	$677	$150	$867		$0
TA3SC-01	1,720	1,720	1,720	$23		$0		$0		$0	$85	$107		$0
TA3SC-02	6,914	6,914	6,914	$90		$0		$0		$0	$340	$431		$0
TA3SC-03	1,459	1,459	1,459	$19		$0		$0		$0	$72	$91		$0
TA2SC-01	967	967	967	$13		$0		$0		$0	$48	$60		$0
TA2SC-02	6,638	6,638	6,638	$87		$0		$0		$0	$327	$414		$0
TA2SC-03	2,067	2,067	2,067	$27		$0		$0		$0	$102	$129		$0
TB2SC-01	8,022	8,022	8,022	$105		$0		$0		$0	$395	$500		$0
TA1SC-01	1,654	0		$0		$0		$0		$0	$0	$0		$0
TA1SC-02	30,760	0		$0		$0		$0		$0	$0	$0		$0
TB1SC-01	5,649	5,649	5,649	$74		$0		$0		$0	$278	$352		$0
AH33BSC-01	5,533	0		$0		$0		$0		$0	$0	$0		$0
AH33ASC-01	5,533	0		$0		$0		$0		$0	$0	$0		$0
T01SC-01	20,673	20,673	20,673	$270		$0		$0		$0	$1,017	$1,288		$0
T01SC-02	6,984	6,984	6,984	$91		$0		$0		$0	$344	$435		$0
T01SC-03	19,044	0		$0		$0		$0		$0	$0	$0		$0
T01SC-04	7,372	7,372	7,372	$96		$0		$0		$0	$363	$459		$0
T01SC-05	7,275	7,275	7,275	$95		$0		$0		$0	$358	$453		$0
T01SC-06	7,322	7,322	7,322	$96		$0		$0		$0	$360	$456		$0
T01SC-07	7,471	0		$0		$0		$0		$0	$0	$0		$0

Scappoose Airport

Pavement Maintenance Cost Inventory

2002 PMP														
A02SC-01	143,000	0		$0		$0		$0		$0	$0	$0		$0
T02SC-01	5,848	0		$0		$0		$0		$0	$0	$0		$0
T02SC-02	15,742	0		$0		$0		$0		$0	$0	$0		$0
T02SC-03	7,649	0		$0		$0		$0		$0	$0	$0		$0
T02SC-04	7,649	0		$0		$0		$0		$0	$0	$0		$0
T02SC-05	12,899	0		$0		$0		$0		$0	$0	$0		$0
T02SC-06	12,899	0		$0		$0		$0		$0	$0	$0		$0
T02SC-07	8,084	0		$0		$0		$0		$0	$0	$0		$0
T02SC-08	8,084	0		$0		$0		$0		$0	$0	$0		$0
T02SC-09	7,669	0		$0		$0		$0		$0	$0	$0		$0
T02SC-10	7,669	0		$0		$0		$0		$0	$0	$0		$0
A04SC-01	11,406	11,406	11,406	$149		$0		$0	11,406	$2,534	$561	$3,245		$0
T03SC-01	1,330	1,330	1,330	$17		$0		$0	1,330	$296	$65	$378		$0
T03SC-02	1,971	1,971	1,971	$26		$0		$0	1,971	$438	$97	$561		$0
AH15BSC-01	8,993	8,993	8,993	$118		$0		$0	8,993	$1,998	$443	$2,558		$0
AH15ASC-01	6,525	0		$0		$0		$0		$0	$0	$0		$0
T05SC-01	4,425	0		$0		$0		$0		$0	$0	$0		$0
T04SC-01	8,186	0		$0		$0		$0		$0	$0	$0		$0
T06SC-01	4,350	0		$0		$0		$0		$0	$0	$0		$0
A01SC-01	28,688	0		$0		$0		$0		$0	$0	$0	x	$0
A01SC-02	10,392	10,392	10,392	$136		$0		$0		$0	$511	$647	x	$647
A03SC-01	48,096	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1459424**	367,070	367,070	$4,803	0	$0	0	$0	191,371	$42,521	$18,063	$65,387		$50,655

Scappoose Airport

Pavement Maintenance Cost Inventory

2000 PMP														
Scappoose Airport		TOTAL COST		$28,154										
		CS Cost		$3,223										
		ACP Cost		$4,250										
		WC Cost												
		Fog Seal Cost		$8,256										
		Other Cost		$12,425										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost		ACP Cost		WC Cost	Fog Seal	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R15SC-01	110,000	0		$0		$0		$0		$0	$0	$0		$0
R15SC-02	400,000	0		$0		$0		$0		$0	$0	$0		$0
TASC-00	2,679	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-01	48,381	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-02	59,522	0		$0		$0		$0		$0	$0	$0	x	$0
TASC-03	70,718	0		$0		$0		$0		$0	$0	$0	x	$0
TBSC-00	2,644	0		$0		$0		$0		$0	$0	$0		$0
TBSC-01	42,420	0		$0		$0		$0		$0	$0	$0		$0
TBSC-02	3,888	0		$0		$0		$0		$0	$0	$0		$0
TBSC-03	75,511	75,511	75,511	$816		$0		$0		$0	$1,806	$2,622	x	$2,622
TBSC-04	84,787	84,787	84,787	$917		$0		$0		$0	$2,028	$2,944	x	$2,944
TB5SC-01	4,330	4,330	4,330	$47		$0		$0		$0	$104	$150		$0
TB5SC-02	2,399	2,399	2,399	$26		$0		$0		$0	$57	$83		$0
TA5SC-01	8,634	0		$0		$0		$0		$0	$0	$0		$0
TA4SC-01	1,720	0		$0		$0		$0		$0	$0	$0		$0
TA4SC-02	6,914	0		$0		$0		$0		$0	$0	$0		$0
TB4SC-01	2,893	2,893	2,893	$31		$0		$0		$0	$69	$100		$0
TB4SC-02	515	515	515	$6		$0		$0		$0	$12	$18		$0
TB4SC-03	3,810	3,810	3,810	$41		$0		$0		$0	$91	$132		$0
TB4SC-04	3,048	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-01	1,720	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-02	6,914	0		$0		$0		$0		$0	$0	$0		$0
TA3SC-03	1,459	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-01	967	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-02	6,638	0		$0		$0		$0		$0	$0	$0		$0
TA2SC-03	2,067	0		$0		$0		$0		$0	$0	$0		$0
TB2SC-01	8,022	0		$0		$0		$0		$0	$0	$0		$0
TA1SC-01	1,654	1,654	1,654	$18		$0		$0		$0	$40	$57		$0
TA1SC-02	30,760	30,760	30,760	$332		$0		$0		$0	$736	$1,068		$0
TB1SC-01	5,649	5,649	5,649	$61		$0		$0		$0	$135	$196		$0
AH33BSC-01	5,533	0		$0		$0		$0		$0	$0	$0		$0
AH33ASC-01	5,533	0		$0		$0		$0		$0	$0	$0		$0
T01SC-01	20,673	20,673		$0		$0		$0	20,673	$581	$494	$1,075		$0
T01SC-02	6,984	0		$0		$0		$0		$0	$0	$0		$0
T01SC-03	19,044	0		$0		$0		$0		$0	$0	$0		$0
T01SC-04	7,372	7,372		$0		$0		$0	7,372	$207	$176	$383		$0
T01SC-05	7,275	7,275		$0		$0		$0	7,275	$204	$174	$378		$0
T01SC-06	7,322	7,322		$0		$0		$0	7,322	$206	$175	$381		$0
T01SC-07	7,471	7,471		$0		$0		$0	7,471	$210	$179	$389		$0

Scappoose Airport

Pavement Maintenance Cost Inventory

2000 PMP														
A02SC-01	143,000	143,000		$0		$0		$0	143,000	$4,018	$3,420	$7,438		$0
T02SC-01	5,848	5,848	5,848	$63		$0		$0	5,848	$164	$140	$367		$0
T02SC-02	15,742	15,742	15,742	$170		$0		$0	15,742	$442	$376	$989		$0
T02SC-03	7,649	7,649	7,649	$83		$0		$0	7,649	$215	$183	$481		$0
T02SC-04	7,649	7,649	7,649	$83		$0		$0	7,649	$215	$183	$481		$0
T02SC-05	12,899	12,899	12,899	$139		$0		$0	12,899	$362	$309	$810		$0
T02SC-06	12,899	12,899		$0		$0		$0	12,899	$362	$309	$671		$0
T02SC-07	8,084	8,084	8,084	$87		$0		$0	8,084	$227	$193	$508		$0
T02SC-08	8,084	8,084	8,084	$87		$0		$0	8,084	$227	$193	$508		$0
T02SC-09	7,669	7,669		$0		$0		$0	7,669	$215	$183	$399		$0
T02SC-10	7,669	7,669		$0		$0		$0	7,669	$215	$183	$399		$0
A04SC-01	11,406	11,406	11,406	$123	11406	$4,250		$0		$0	$273	$4,646		$0
T03SC-01	1,330	0		$0		$0		$0		$0	$0	$0		$0
T03SC-02	1,971	1,971	1,971	$21		$0		$0		$0	$47	$68		$0
AH15BSC-01	8,993	0		$0		$0		$0		$0	$0	$0		$0
AH15ASC-01	6,525	6,525	6,525	$71		$0		$0	6,525	$183	$156	$410		$0
T05SC-01	4,425	0		$0		$0		$0		$0	$0	$0		$0
T04SC-01	8,186	0		$0		$0		$0		$0	$0	$0		$0
T06SC-01	4,350	0		$0		$0		$0		$0	$0	$0		$0
A01SC-01	28,688	0		$0		$0		$0		$0	$0	$0	x	$0
A01SC-02	10,392	0		$0		$0		$0		$0	$0	$0	x	$0
A03SC-01	48,096	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1459424**	519,515	298,165	$3,223	11,406	$4,250	0	$0	293,830	$8,256	$12,425	$28,154		$5,567

Ashland Airport Pavement and Maintenance Inventory (2000-2009)

Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R12AS-01	7,125	$2,868	7,125		0	$0
R12AS-02	1,995	$873	1,995	x	1,995	$873
R12AS-03	110,703	$52,348	110,703		0	$0
R12AS-04	132,672	$62,738	132,672	x	132,672	$62,738
R12AS-05	17,808	$6,924	17,808	x	17,808	$6,924
TAAS-01	11863	$0	0		0	$0
TAAS-02	8,000	$0	0		0	$0
TAAS-03	14,231	$0	0		0	$0
TAAS-04	52,944	$19,799	52,944	x	52,944	$19,799
TAAS-05	22,650	$9,216	22,650	x	22,650	$9,216
TA1AS-01	4,093	$1,307	4,093		0	$0
TA2AS-01	4,004	$1,151	4,004		0	$0
TA3AS-01	4,358	$1,751	4,358		0	$0
TA4AS-01	2,299	$872	2,299		0	$0
TA4AS-02	3,598	$1,365	3,598		0	$0
TA5AS-01	5,789	$2,304	5,789		0	$0
TA6AS-01	4,373	$1,778	4,373		0	$0
AH12AS-01	7,625	$3,101	7,625		0	$0
T07AS-01	1,343	$140	1,343		0	$0
T08AS-01	1,343	$140	1,343		0	$0
T09AS-01	15,453	$15,441	15,453		0	$0
A01AS-01	76,095	$2,834	76,095		0	$0
A01AS-02	77,707	$0	0		0	$0
A01AS-03	54,121	$0	0		0	$0
A01AS-04	63,798	$3,635	63,798		0	$0
A01AS-05	5,930	$2,549	5,930		0	$0
A01AS-06	2,000	$0	0		0	$0
A01AS-07	6,360	$0	0		0	$0
A02AS-01	33,552	$14,970	33,552		0	$0
A03AS-01	35,966	$3,754	35,966		0	$0
A03AS-02	29,105	$3,040	29,105		0	$0
A03AS-03	14,041	$1,465	14,041		0	$0
TOTAL	**832,944**	**$216,362**	**658,662**		**228,069**	**$99,550**

2006 PMP														
		TOTAL COST		$73,965										
		CS Cost		$14,151										
		ACP Cost		$34,893										
		WC Cost												
		Surface Sealant Cost												
		Other Cost		$24,921										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost		ACP Cost		WC Cost	Fog Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12AS-01	7125	7,125	257	$192	57	$431		$0		$0	$309	$933		$0
R12AS-02	1995	1,995	72	$54	16	$121		$0		$0	$87	$261	x	$261
R12AS-03	110703	110,703	3997	$2,990	881	$6,667		$0		$0	$4,802	$14,459		$0
R12AS-04	132672	132,672	4790	$3,583	1056	$7,991		$0		$0	$5,755	$17,330	x	$17,330
R12AS-05	17808	17,808	643	$481	142	$1,075		$0		$0	$773	$2,328	x	$2,328
TAAS-01	11863	0		$0		$0		$0		$0	$0	$0		$0
TAAS-02	8000	0		$0		$0		$0		$0	$0	$0		$0
TAAS-03	14231	0		$0		$0		$0		$0	$0	$0		$0
TAAS-04	52944	52,944	689	$515	363	$2,747		$0		$0	$2,297	$5,559	x	$5,559
TAAS-05	22650	22,650	295	$221	155	$1,173		$0		$0	$983	$2,376	x	$2,376
TA1AS-01	4093	0		$0		$0		$0		$0	$0	$0		$0
TA2AS-01	4004	0		$0		$0		$0		$0	$0	$0		$0
TA3AS-01	4358	4,358	500	$374		$0		$0		$0	$189	$563		$0
TA4AS-01	2299	2,299	140	$105		$0		$0		$0	$100	$204		$0
TA4AS-02	3598	3,598	220	$165		$0		$0		$0	$156	$321		$0
TA5AS-01	5789	5,789	330	$247	30	$227		$0		$0	$251	$725		$0
TA6AS-01	4373	4,373	57	$43	30	$227		$0		$0	$190	$459		$0
AH12AS-01	7625	7,625	99	$74	52	$394		$0		$0	$331	$798		$0
T07AS-01	1343	1,343	60	$45		$0		$0		$0	$58	$103		$0
T08AS-01	1343	1,343	60	$45		$0		$0		$0	$58	$103		$0
T09AS-01	15453	15,453	1570	$1,175		$0		$0		$0	$670	$1,845		$0
A01AS-01	76095	0		$0		$0		$0		$0	$0	$0		$0
A01AS-02	77707	0		$0		$0		$0		$0	$0	$0		$0
A01AS-03	54121	0		$0		$0		$0		$0	$0	$0		$0
A01AS-04	63798	63,798	1160	$868		$0		$0		$0	$2,768	$3,635		$0
A01AS-05	5930	5,930	800	$598	10	$76		$0		$0	$257	$931		$0
A01AS-06	2000	0		$0		$0		$0		$0	$0	$0		$0
A01AS-07	6360	0		$0		$0		$0		$0	$0	$0		$0
A02AS-01	33552	33,552	1557	$1,165	1632	$12,350		$0		$0	$1,456	$14,970		$0
A03AS-01	35966	35,966	736	$551	85	$643		$0		$0	$1,560	$2,754		$0
A03AS-02	29105	29,105	596	$446	69	$522		$0		$0	$1,263	$2,231		$0
A03AS-03	14041	14,041	288	$215	33	$250		$0		$0	$609	$1,074		$0
TOTAL	**832944**	574,470	18,916	$14,151	4,611	$34,893	0	$0	0	$0	$24,921	$73,965		$27,854.86

Ashland Airport

Pavement Maintenance Cost Inventory

2003 PMP														
		TOTAL COST		$114,365										
		CS Cost		$6,912										
		ACP Cost		$10,345										
		Slurry Seal Cost		$36,841										
		Other Cost		$60,267										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost		ACP Cost		0		Slurry Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12AS-01	7125	7,125	136	$124	6	$97		$0	7125	$651	$1,064	$1,936		$0
R12AS-02	1995	1,995	38	$35	6	$97		$0	1995	$182	$298	$612	x	$612
R12AS-03	110703	110,703	2115	$1,921		$0		$0	110703	$10,110	$16,538	$28,569		$0
R12AS-04	132672	132,672	2535	$2,303		$0		$0	132672	$12,116	$19,820	$34,239	x	$34,239
R12AS-05	17808	17,808	340	$309		$0		$0	17808	$1,626	$2,660	$4,595	x	$4,595
TAAS-01	11863	0		$0		$0		$0		$0	$0	$0		$0
TAAS-02	8000	0		$0		$0		$0		$0	$0	$0		$0
TAAS-03	14231	0		$0		$0		$0		$0	$0	$0		$0
TAAS-04	52944	52,944	26	$24		$0		$0	52944	$4,835	$7,909	$12,768	x	$12,768
TAAS-05	22650	22,650	728	$661	6	$97		$0	22650	$2,068	$3,384	$6,210	x	$6,210
TA1AS-01	4093	4,093	265	$241	5	$81		$0	4093	$374	$611	$1,307		$0
TA2AS-01	4004	4,004	170	$154	2	$32		$0	4004	$366	$598	$1,151		$0
TA3AS-01	4358	4,358	153	$139		$0		$0	4358	$398	$651	$1,188		$0
TA4AS-01	2299	2,299	126	$114		$0		$0	2299	$210	$343	$668		$0
TA4AS-02	3598	3,598	196	$178		$0		$0	3598	$329	$538	$1,044		$0
TA5AS-01	5789	5,789	186	$169	1	$16		$0	5789	$529	$865	$1,579		$0
TA6AS-01	4373	4,373	141	$128	1	$16		$0	4373	$399	$653	$1,197		$0
AH12AS-01	7625	7,625	245	$223	2	$32		$0	7625	$696	$1,139	$2,090		$0
T07AS-01	1343	0		$0		$0		$0		$0	$0	$0		$0
T08AS-01	1343	0		$0		$0		$0		$0	$0	$0		$0
T09AS-01	15453	15,453		$0	611	$9,876		$0	15453	$1,411	$2,309	$13,596		$0
A01AS-01	76095	0		$0		$0		$0		$0	$0	$0		$0
A01AS-02	77707	0		$0		$0		$0		$0	$0	$0		$0
A01AS-03	54121	0		$0		$0		$0		$0	$0	$0		$0
A01AS-04	63798	0		$0		$0		$0		$0	$0	$0		$0
A01AS-05	5930	5,930	209	$190		$0		$0	5930	$542	$886	$1,617		$0
A01AS-06	2000	0		$0		$0		$0		$0	$0	$0		$0
A01AS-07	6360	0		$0		$0		$0		$0	$0	$0		$0
A02AS-01	33552	0		$0		$0		$0		$0	$0	$0		$0
A03AS-01	35966	0		$0		$0		$0		$0	$0	$0		$0
A03AS-02	29105	0		$0		$0		$0		$0	$0	$0		$0
A03AS-03	14041	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**832944**	403,419	7,609	$6,912	640	$10,345	0	$0	403,419	$36,841	$60,267	$114,365		$58,424.13

Ashland Airport

Pavement Maintenance Cost Inventory

2000 PMP														
		TOTAL COST		$28,032										
		CS Cost		$2,252										
		ACP Cost		$3,020										
		Fog Seal Cost		$11,424										
		Other Cost		$11,336										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost		0	Fog Seal (sf)	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12AS-01	7125	0		$0		$0		$0		$0	$0	$0		$0
R12AS-02	1995	0		$0		$0		$0		$0	$0	$0	x	$0
R12AS-03	110703	110,703	110703	$510	110703	$1,046		$0	110703	$5,196	$2,567	$9,320		$0
R12AS-04	132672	132,672	132672	$611	132672	$1,254		$0	132672	$6,228	$3,076	$11,169	x	$11,169
R12AS-05	17808	0		$0		$0		$0		$0	$0	$0	x	$0
TAAS-01	11863	0		$0		$0		$0		$0	$0	$0		$0
TAAS-02	8000	0		$0		$0		$0		$0	$0	$0		$0
TAAS-03	14231	0		$0		$0		$0		$0	$0	$0		$0
TAAS-04	52944	52,944	52944	$244		$0		$0		$0	$1,228	$1,472	x	$1,472
TAAS-05	22650	22,650	22650	$104		$0		$0		$0	$525	$630	x	$630
TA1AS-01	4093	0		$0		$0		$0		$0	$0	$0		$0
TA2AS-01	4004	0		$0		$0		$0		$0	$0	$0		$0
TA3AS-01	4358	0		$0		$0		$0		$0	$0	$0		$0
TA4AS-01	2299	0		$0		$0		$0		$0	$0	$0		$0
TA4AS-02	3598	0		$0		$0		$0		$0	$0	$0		$0
TA5AS-01	5789	0		$0		$0		$0		$0	$0	$0		$0
TA6AS-01	4373	4,373	4373	$20		$0		$0		$0	$101	$122		$0
AH12AS-01	7625	7,625	7625	$35		$0		$0		$0	$177	$212		$0
T07AS-01	1343	1,343	1343	$6		$0		$0		$0	$31	$37		$0
T08AS-01	1343	1,343	1343	$6		$0		$0		$0	$31	$37		$0
T09AS-01	15453	0		$0		$0		$0		$0	$0	$0		$0
A01AS-01	76095	76,095	76095	$351	76095	$719		$0		$0	$1,765	$2,834		$0
A01AS-02	77707	0		$0		$0		$0		$0	$0	$0		$0
A01AS-03	54121	0		$0		$0		$0		$0	$0	$0		$0
A01AS-04	63798	0		$0		$0		$0		$0	$0	$0		$0
A01AS-05	5930	0		$0		$0		$0		$0	$0	$0		$0
A01AS-06	2000	0		$0		$0		$0		$0	$0	$0		$0
A01AS-07	6360	0		$0		$0		$0		$0	$0	$0		$0
A02AS-01	33552	0		$0		$0		$0		$0	$0	$0		$0
A03AS-01	35966	35,966	35966	$166		$0		$0		$0	$834	$1,000		$0
A03AS-02	29105	29,105	29105	$134		$0		$0		$0	$675	$809		$0
A03AS-03	14041	14,041	14041	$65		$0		$0		$0	$326	$390		$0
TOTAL	**832944**	488,860	488,860	$2,252	319,470	$3,020	0	$0	243,375	$11,424	$11,336	$28,032		$13,270.59

Grants Pass Airport Pavement and Maintenance Inventory (2000-2009)

Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-
R12GR-01	300,000	$34,626	300,000	x	300,000	$34,626
TA1GR-01	8,258	$1,676	8,258		0	$0
TA2GR-01	1,238	$570	1,238		0	$0
TA2GR-02	7,615	$3,512	7,615		0	$0
TA3GR-01	5,571	$2,224	5,571		0	$0
TA3GR-02	1,525	$610	1,525		0	$0
TA3GR-03	1,424	$570	1,424		0	$0
TA3GR-04	1,868	$746	1,868		0	$0
TA4GR-01	3,943	$1,800	3,943		0	$0
TA4GR-02	974	$446	974		0	$0
TA4GR-03	2,316	$1,057	2,316		0	$0
TA5GR-01	8,817	$1,538	8,817		0	$0
TAGR-01	52,498	$9,156	52,498		0	$0
TAGR-02	35,003	$0	0		0	$0
TAGR-03	8,225	$1,408	8,225	x	9,275	$1,408
TAGR-04	9,275	$1,588	9,275	x	22,977	$1,588
TAGR-05	22,977	$5,088	22,977	x	12,019	$5,088
TAGR-06	12,019	$2,097	12,019		0	$0
T05GR-01	7,483	$0	0		0	$0
T07GR-01	11,697	$3,448	11,697		0	$0
T07GR-02	4,226	$1,246	4,226		0	$0
T07GR-03	2,480	$732	2,480		0	$0
T09GR-01	21,174	$523	21,174		0	$0
T10GR-01	33,508	$1,319	33,508		0	$0
T11GR-01	11,486	$346	11,486		0	$0
TABGR-01	4,674	$0	0		0	$0
TBCGR-01	4,675	$0	0		0	$0
TLMGR-01	21,097	$0	0		0	$0
TMNGR-01	21,093	$0	0		0	$0
A01GR-01	38729	$11,417	38,729		0	$0
A01GR-02	14441	$4,257	14,441		0	$0
A01GR-03	12650	$3,729	12,650		0	$0
A02GR-01	24,105	$0	0		0	$0
A02GR-02	3,869	$0	0		0	$0
A02GR-03	912	$0	0		0	$0
A02GR-04	27416	$5,770	27,416		0	$0
A02GR-05	121,544	$0	0		0	$0
A02GR-06	14,400	$4,444	14,400		0	$0
A02GR-07	54,626	$22,632	54,626		0	$0
A02GR-08	69,118	$23,247	69,118		0	$0
A02GR-09	107,160	$18,344	107,160		0	$0
ALMNGR-01	15,706	$0	0		0	$0
ALMNGR-02	17,535	$993	17,535		0	$0
ALMNGR-03	27,346	$0	0		0	$0
TOTAL	**1,176,696**	**$171,157**	**889,189**		**344,271**	**$42,710**

Grants Pass Airport

Pavement Maintenance Cost Inventory

2006 PMP														
Grants Pass		TOTAL COST		$45,526										
		CS Cost		$17,362										
		ACP Cost												
		WC Cost												
		Surface Sealant Cost		$15,070										
		Other Cost		$13,094										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost		ACP Cost		WC Cost	Slurry Seal (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12GR-01	300000	300,000	11800	$11,375.44		$0.00		$0.00		$0	$5,766	$17,142	x	$17,142
TA1GR-01	8258	8,258	80	$77.12		$0.00		$0.00		$0	$159	$236		$0
TA2GR-01	1238	1,238	28	$26.99		$0.00		$0.00		$0	$24	$51		$0
TA2GR-02	7615	7,615	172	$165.81		$0.00		$0.00		$0	$146	$312		$0
TA3GR-01	5571	5,571	375	$361.51		$0.00		$0.00		$0	$107	$469		$0
TA3GR-02	1525	1,525	103	$99.29		$0.00		$0.00		$0	$29	$129		$0
TA3GR-03	1424	1,424	96	$92.55		$0.00		$0.00		$0	$27	$120		$0
TA3GR-04	1868	1,868	126	$121.47		$0.00		$0.00		$0	$36	$157		$0
TA4GR-01	3943	3,943	136	$131.11		$0.00		$0.00		$0	$76	$207		$0
TA4GR-02	974	974	34	$32.78		$0.00		$0.00		$0	$19	$51		$0
TA4GR-03	2316	2,316	80	$77.12		$0.00		$0.00		$0	$45	$122		$0
TA5GR-01	8817	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TAGR-01	52498	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TAGR-02	35003	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TAGR-03	8225	8,225	56	$53.99		$0.00		$0.00		$0	$158	$212	x	$212
TAGR-04	9275	9,275	63	$60.73		$0.00		$0.00		$0	$178	$239	x	$239
TAGR-05	22977	0		$0.00		$0.00		$0.00		$0	$0	$0	x	$0
TAGR-06	12019	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T05GR-01	7483	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T07GR-01	11697	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T07GR-02	4226	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T07GR-03	2480	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T09GR-01	21174	21,174	120	$115.68		$0.00		$0.00		$0	$407	$523		$0
T10GR-01	33508	33,508	700	$674.81		$0.00		$0.00		$0	$644	$1,319		$0
T11GR-01	11486	11,486	130	$125.32		$0.00		$0.00		$0	$221	$346		$0
TABGR-01	4674	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TBCGR-01	4675	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TLMGR-01	21097	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TMNGR-01	21093	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01GR-01	38729	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01GR-02	14441	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01GR-03	12650	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-01	24105	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-02	3869	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-03	912	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-04	27416	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-05	121544	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02GR-06	14400	14,400	1200	$1,156.82		$0.00		$0.00		$0	$277	$1,434		$0
A02GR-07	54626	54,626	550	$530.21		$0.00		$0.00	54626	$15,070	$1,050	$16,650		$0

Grants Pass Airport

Pavement Maintenance Cost Inventory

2006 PMP														
A02GR-08	69118	69,118	750	$723.01		$0.00		$0.00		$0	$1,329	$2,052		$0
A02GR-09	107160	107,160	731	$704.70		$0.00		$0.00		$0	$2,060	$2,764		$0
ALMNGR-01	15706	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
ALMNGR-02	17535	17,535	680	$655.53		$0.00		$0.00		$0	$337	$993		$0
ALMNGR-03	27346	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TOTAL	**1176696**	681,239	18,010	$17,362.00	0	$0.00	0	$0.00	54,626	$15,070.00	$13,094.01	$45,526.01		$17,592.77

Grants Pass Airport

Pavement Maintenance Cost Inventory

2003 PMP														
Grants Pass		TOTAL COST		$104,269										
		CS Cost		$38,090										
		Slurry Seal Cost		$30,448										
		Other Cost		$35,731										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost		0		0	Slurry Seal (sf)	Slurry Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12GR-01	300000	300,000	2380	$3,786		$0		$0		$0	$13,699	$17,485	x	$17,485
TA1GR-01	8258	8,258	668	$1,063		$0		$0		$0	$377	$1,440		$0
TA2GR-01	1238	1,238	46	$73		$0		$0	1238	$178	$57	$308		$0
TA2GR-02	7615	7,615	286	$455		$0		$0	7615	$1,098	$348	$1,900		$0
TA3GR-01	5571	5,571	346	$550		$0		$0		$0	$254	$805		$0
TA3GR-02	1525	1,525	95	$151		$0		$0		$0	$70	$221		$0
TA3GR-03	1424	1,424	89	$142		$0		$0		$0	$65	$207		$0
TA3GR-04	1868	1,868	116	$185		$0		$0		$0	$85	$270		$0
TA4GR-01	3943	3,943	108	$172		$0		$0	3943	$568	$180	$920		$0
TA4GR-02	974	974	27	$43		$0		$0	974	$140	$44	$228		$0
TA4GR-03	2316	2,316	63	$100		$0		$0	2316	$334	$106	$540		$0
TA5GR-01	8817	8,817	714	$1,136		$0		$0		$0	$403	$1,538		$0
TAGR-01	52498	52,498	4249	$6,759		$0		$0		$0	$2,397	$9,156		$0
TAGR-02	35003	0		$0		$0		$0		$0	$0	$0		$0
TAGR-03	8225	8,225	28	$45		$0		$0		$0	$376	$420	x	$420
TAGR-04	9275	9,275	32	$51		$0		$0		$0	$424	$474	x	$474
TAGR-05	22977	0		$0		$0		$0		$0	$0	$0	x	$0
TAGR-06	12019	12,019	973	$1,548		$0		$0		$0	$549	$2,097		$0
T05GR-01	7483	0		$0		$0		$0		$0	$0	$0		$0
T07GR-01	11697	11,697	772	$1,228		$0		$0	11697	$1,686	$534	$3,448		$0
T07GR-02	4226	4,226	279	$444		$0		$0	4226	$609	$193	$1,246		$0
T07GR-03	2480	2,480	164	$261		$0		$0	2480	$357	$113	$732		$0
T09GR-01	21174	0		$0		$0		$0		$0	$0	$0		$0
T10GR-01	33508	0		$0		$0		$0		$0	$0	$0		$0
T11GR-01	11486	0		$0		$0		$0		$0	$0	$0		$0
TABGR-01	4674	0		$0		$0		$0		$0	$0	$0		$0
TBCGR-01	4675	0		$0		$0		$0		$0	$0	$0		$0
TLMGR-01	21097	0		$0		$0		$0		$0	$0	$0		$0
TMNGR-01	21093	0		$0		$0		$0		$0	$0	$0		$0
A01GR-01	38729	38,729	2556	$4,066		$0		$0	38729	$5,582	$1,768	$11,417		$0
A01GR-02	14441	14,441	953	$1,516		$0		$0	14441	$2,081	$659	$4,257		$0
A01GR-03	12650	12,650	835	$1,328		$0		$0	12650	$1,823	$578	$3,729		$0
A02GR-01	24105	0		$0		$0		$0		$0	$0	$0		$0
A02GR-02	3869	0		$0		$0		$0		$0	$0	$0		$0
A02GR-03	912	0		$0		$0		$0		$0	$0	$0		$0
A02GR-04	27416	27,416	356	$566		$0		$0	27416	$3,952	$1,252	$5,770		$0
A02GR-05	121544	0		$0		$0		$0		$0	$0	$0		$0
A02GR-06	14400	14,400	174	$277		$0		$0	14400	$2,076	$658	$3,010		$0
A02GR-07	54626	54,626	2192	$3,487		$0		$0		$0	$2,494	$5,981		$0

Grants Pass Airport

Pavement Maintenance Cost Inventory

2003 PMP														
A02GR-08	69118	69,118	5077	$8,076		$0		$0	69118	$9,962	$3,156	$21,195		$0
A02GR-09	107160	107,160	366	$582		$0		$0		$0	$4,893	$5,475		$0
ALMNGR-01	15706	0		$0		$0		$0		$0	$0	$0		$0
ALMNGR-02	17535	0		$0		$0		$0		$0	$0	$0		$0
ALMNGR-03	27346	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1176696**	782,509	23,944	$38,090	0	$0	0	$0	211,243	$30,448	$35,731	$104,269		$18,379.26

Grants Pass Airport

Pavement Maintenance Cost Inventory

2000 PMP														
Grants Pass		TOTAL COST		$21,362										
		CS Cost		$6,287										
		ACP Cost												
		Fog Seal Cost		$7,488										
		Other Cost		$7,587										
Section	Area (sf)	Area Maintained This Year	CS (weighted by sf)	CS Cost	ACP (sf)	ACP Cost		0	Fog Seal (sf)	Fog Seal Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12GR-01	300000	0		$0		$0		$0		$0	$0	$0	x	$0
TA1GR-01	8258	0		$0		$0		$0		$0	$0	$0		$0
TA2GR-01	1238	1,238	1,238	$157		$0		$0		$0	$54	$211		$0
TA2GR-02	7615	7,615	7,615	$968		$0		$0		$0	$332	$1,300		$0
TA3GR-01	5571	5,571	5,571	$708		$0		$0		$0	$243	$951		$0
TA3GR-02	1525	1,525	1,525	$194		$0		$0		$0	$66	$260		$0
TA3GR-03	1424	1,424	1,424	$181		$0		$0		$0	$62	$243		$0
TA3GR-04	1868	1,868	1,868	$237		$0		$0		$0	$81	$319		$0
TA4GR-01	3943	3,943	3,943	$501		$0		$0		$0	$172	$673		$0
TA4GR-02	974	974	974	$124		$0		$0		$0	$42	$166		$0
TA4GR-03	2316	2,316	2,316	$294		$0		$0		$0	$101	$395		$0
TA5GR-01	8817	0		$0		$0		$0		$0	$0	$0		$0
TAGR-01	52498	0		$0		$0		$0		$0	$0	$0		$0
TAGR-02	35003	0		$0		$0		$0		$0	$0	$0		$0
TAGR-03	8225	8,225		$0		$0		$0	8225	$417	$358	$776	x	$776
TAGR-04	9275	9,275		$0		$0		$0	9275	$470	$404	$875	x	$875
TAGR-05	22977	22,977	22,977	$2,921		$0		$0	22977	$1,165	$1,001	$5,088	x	$5,088
TAGR-06	12019	0		$0		$0		$0		$0	$0	$0		$0
T05GR-01	7483	0		$0		$0		$0		$0	$0	$0		$0
T07GR-01	11697	0		$0		$0		$0		$0	$0	$0		$0
T07GR-02	4226	0		$0		$0		$0		$0	$0	$0		$0
T07GR-03	2480	0		$0		$0		$0		$0	$0	$0		$0
T09GR-01	21174	0		$0		$0		$0		$0	$0	$0		$0
T10GR-01	33508	0		$0		$0		$0		$0	$0	$0		$0
T11GR-01	11486	0		$0		$0		$0		$0	$0	$0		$0
TABGR-01	4674	0		$0		$0		$0		$0	$0	$0		$0
TBCGR-01	4675	0		$0		$0		$0		$0	$0	$0		$0
TLMGR-01	21097	0		$0		$0		$0		$0	$0	$0		$0
TMNGR-01	21093	0		$0		$0		$0		$0	$0	$0		$0
A01GR-01	38729	0		$0		$0		$0		$0	$0	$0		$0
A01GR-02	14441	0		$0		$0		$0		$0	$0	$0		$0
A01GR-03	12650	0		$0		$0		$0		$0	$0	$0		$0
A02GR-01	24105	0		$0		$0		$0		$0	$0	$0		$0
A02GR-02	3869	0		$0		$0		$0		$0	$0	$0		$0
A02GR-03	912	0		$0		$0		$0		$0	$0	$0		$0
A02GR-04	27416	0		$0		$0		$0		$0	$0	$0		$0
A02GR-05	121544	0		$0		$0		$0		$0	$0	$0		$0
A02GR-06	14400	0		$0		$0		$0		$0	$0	$0		$0
A02GR-07	54626	0		$0		$0		$0		$0	$0	$0		$0

Grants Pass Airport

Pavement Maintenance Cost Inventory

2000 PMP														
A02GR-08	69118	0		$0		$0		$0		$0	$0	$0		$0
A02GR-09	107160	107,160		$0		$0		$0	107160	$5,435	$4,670	$10,105		$0
ALMNGR-01	15706	0		$0		$0		$0		$0	$0	$0		$0
ALMNGR-02	17535	0		$0		$0		$0		$0	$0	$0		$0
ALMNGR-03	27346	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1176696**	174,111	49,451	$6,287	0	$0	0	$0	147,637	$7,488	$7,587	$21,362		$6,738

Illinois Valley Airport Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R18IV-01	102648	$50,215	102,648	x	102,648	$50,215
R18IV-02	265125	$0	0	x	265,125	$0
R18IV-03	37773	$0	0	x	37,773	$0
TE1IV-01	14,736	$0	0		0	$0
A01IV-01	25,651	$0	0		0	$0
A01IV-02	18850	$0	0		0	$0
A01IV-03	6,300	$0	0		0	$0
A01IV-04	2,000	$0	0		0	$0
A01IV-05	1,000	$0	0		0	$0
A02IV-01	13,386	$0	0		0	$0
A02IV-02	31,350	$0	0		0	$0
A03IV-01	11,996	$6,975	11,996	x	11,996	$6,975
A03IV-02	18,198	$7,851	18,198	x	18,198	$7,851
TOTAL	**549,013**	**$65,041**	**132,842**		**435,740**	**$65,041**

2003 PMP														
Illinois Valley		TOTAL COST		$65,041										
		CS Cost		$7,728										
		ACP Cost												
		WC Cost												
		Surface Sealant Cost		$23,764										
		Other Cost		$33,549										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP	ACP Cost	WC	WC Cost	Slurry Seal (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R18IV-01	102648	102,648	1305	$5,929		$0		$0	102648	$18,363	$25,924	$50,215	x	$50,215
R18IV-02	265125	0		$0		$0		$0		$0	$0	$0	x	$0
R18IV-03	37773	0		$0		$0		$0		$0	$0	$0	x	$0
TE1IV-01	14736	0		$0		$0		$0		$0	$0	$0		$0
A01IV-01	25651	0		$0		$0		$0		$0	$0	$0		$0
A01IV-02	18850	0		$0		$0		$0		$0	$0	$0		$0
A01IV-03	6300	0		$0		$0		$0		$0	$0	$0		$0
A01IV-04	2000	0		$0		$0		$0		$0	$0	$0		$0
A01IV-05	1000	0		$0		$0		$0		$0	$0	$0		$0
A02IV-01	13386	0		$0		$0		$0		$0	$0	$0		$0
A02IV-02	31350	0		$0		$0		$0		$0	$0	$0		$0
A03IV-01	11996	11,996	396	$1,799		$0		$0	11996	$2,146	$3,030	$6,975	x	$6,975
A03IV-02	18198	18,198		$0		$0		$0	18198	$3,255	$4,596	$7,851	x	$7,851
TOTAL	**549013**	132,842	1,701	$7,728	0	$0	0	$0	132,842	$23,764	$33,549	$65,041		$65,041

Baker City Pavement and Maintenance Inventory (2000-2009)						
Section	Area (sf)	Total Maint Cost (2000-2009)	Maintained Pavement Area (sf)	FOCUS Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-
R17BA-01	69,352	$15,918	69,352	x	69,352	$15,918
R17BA-02	8,778	$0	0		0	$0
R17BA-03	8271	$0	0		0	$0
R17BA-04	169118	$26,239	169,118	x	169,118	$26,239
R17BA-05	30000	$4,659	30,000	x	30,000	$4,659
R17BA-06	29250	$7,589	29,250	x	29,250	$7,589
AH17BA-01	28,099	$2,960	28,099		0	$0
AH13BA-01	8,831	$928	8,831		0	$0
AH13BA-02	4,058	$290	4,058		0	$0
AH13BA-03	1,406	$76	1,406		0	$0
AH13BA-04	1,406	$97	1,406		0	$0
R13BA-01	265,590	$0	0		0	$0
R13BA-02	170,436	$0	0		0	$0
R13BA-03	85,000	$0	0		0	$0
R08BA-01	26,536	$0	0		0	$0
R08BA-02	52,255	$0	0		0	$0
R08BA-03	4,760	$745	4,760		0	$0
R08BA-04	4,763	$854	4,763		0	$0
R08BA-05	194,364	$21,995	194,364		0	$0
R08BA-06	16,380	$0	0		0	$0
R08BA-07	19,180	$0	0		0	$0
R08BA-08	215,460	$0	0		0	$0
R08BA-09	39,144	$0	0		0	$0
AH08BA-01	13,476	$1,116	13,476		0	$0
AHABA-01	2,043	$847	2,043		0	$0
TABA-01	4,288	$576	4,288		0	$0
TABA-02	21,679	$3,600	21,679	x	21,679	$3,600
TABA-03	61,059	$16,629	61,059	x	61,059	$16,629
TABA-04	3,739	$1,765	3,739	x	3,739	$1,765
TABA-05	85,056	$23,599	85,056	x	85,056	$23,599
TA1BA-01	3,343	$217	3,343		0	$0
TA1BA-02	5,451	$1,235	5,451		0	$0
TA2BA-01	7,359	$0	0		0	$0
TA2BA-02	2,334	$0	0		0	$0
TA2BA-03	3,397	$232	3,397		0	$0
TA2BA-04	36818	$5,862	36,818		0	$0
TBBA-01	51,820	$7,091	51,820		0	$0
T03BA-01	11,071	$1,013	11,071		0	$0
T03BA-02	5,060	$467	5,060		0	$0
T02BA-01	8,442	$526	8,442		0	$0
T04BA-01	9,436	$0	0		0	$0
T01BA-01	9,497	$2,673	9,497		0	$0
T01BA-02	2,917	$806	2,917		0	$0
A03BA-01	3,255	$155	3,255		0	$0
A01BA-01	60,906	$0	0		0	$0

Baker City Airport

Pavement Maintenance Cost Inventory

A01BA-02	33,585	$0	0		0	$0
A02BA-01	25,650	$8,062	25,650		0	$0
A02BA-02	40,500	$12,714	40,500	x	40,500	$12,714
A02BA-03	21,600	$6,777	21,600		0	$0
A02BA-04	16,637	$3,865	16,637		0	$0
TOTAL	**2,002,855**	**$182,177**	**982,205**		**509,753**	**$112,712**

Baker City Airport

Pavement Maintenance Cost Inventory

2008 PMP														
Baker City Airport		TOTAL COST		$114,273										
		CS Cost		$29,426										
		ACP Cost		$20,415										
		WC Cost		$21,940										
		PCC Maint Cost		$3,195										
		Other Cost		$39,297										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost	PCC Maint	PCC Maint Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17BA-01	69,352	69,352	3528	$2,325.19		$0.00	244	$3,215.23		$0	$2,794	$8,334	x	$8,334
R17BA-02	8,778	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R17BA-03	8271	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R17BA-04	169118	169,118	13173	$8,681.88		$0.00	212	$2,793.56		$0	$6,813	$18,288	x	$18,288
R17BA-05	30000	30,000	2337	$1,540.24		$0.00	38	$500.73		$0	$1,209	$3,250	x	$3,250
R17BA-06	29250	29,250	2278	$1,501.35		$0.00	37	$487.56		$0	$1,178	$3,167	x	$3,167
AH17BA-01	28,099	28,099	1489	$981.35		$0.00		$0.00		$0	$1,132	$2,113		$0
AH13BA-01	8,831	8,831	309	$203.65		$0.00	28	$368.96		$0	$356	$928		$0
AH13BA-02	4,058	4,058	192	$126.54		$0.00		$0.00		$0	$163	$290		$0
AH13BA-03	1,406	1,406	29	$19.11		$0.00		$0.00		$0	$57	$76		$0
AH13BA-04	1,406	1,406	61	$40.20		$0.00		$0.00		$0	$57	$97		$0
R13BA-01	265,590	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R13BA-02	170,436	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R13BA-03	85,000	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-01	26,536	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-02	52,255	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-03	4,760	4,760	839	$552.96		$0.00		$0.00		$0	$192	$745		$0
R08BA-04	4,763	4,763	536	$353.26		$0.00		$0.00		$0	$192	$545		$0
R08BA-05	194,364	194,364		$0.00	14	$280.76		$0.00		$0	$7,830	$8,111		$0
R08BA-06	16,380	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-07	19,180	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-08	215,460	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-09	39,144	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH08BA-01	13,476	13,476	869	$572.73		$0.00		$0.00		$0	$543	$1,116		$0
AHABA-01	2,043	2,043	61	$40.20		$0.00	55	$724.74		$0	$82	$847		$0
TABA-01	4,288	4,288	110	$72.50		$0.00	4	$52.71		$0	$173	$298		$0
TABA-02	21,679	21,679	557	$367.10		$0.00	20	$263.54		$0	$873	$1,504	x	$1,504
TABA-03	61,059	61,059	1663	$1,096.03		$0.00	367	$4,836.02		$0	$2,460	$8,392	x	$8,392
TABA-04	3,739	3,739	255	$168.06	21	$421.13	43	$566.62		$0	$151	$1,306	x	$1,306
TABA-05	85,056	85,056	2102	$1,385.36	20	$401.08	422	$5,560.77		$0	$3,427	$10,774	x	$10,774
TA1BA-01	3,343	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA1BA-02	5,451	5,451	58	$38.23		$0.00	12	$158.13		$0	$220	$416		$0
TA2BA-01	7,359	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-02	2,334	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-03	3,397	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-04	36818	36,818	1669	$1,099.98		$0.00	58	$764.28		$0	$1,483	$3,347		$0
TBBA-01	51,820	51,820	3798	$2,503.13		$0.00		$0.00		$0	$2,088	$4,591		$0
T03BA-01	11,071	11,071	233	$153.56		$0.00	6	$79.06		$0	$446	$679		$0
T03BA-02	5,060	5,060	107	$70.52		$0.00	3	$39.53		$0	$204	$314		$0

Baker City Airport

Pavement Maintenance Cost Inventory

2008 PMP														
T02BA-01	8,442	8,442	282	$185.86		$0.00		$0.00		$0	$340	$526		$0
T04BA-01	9,436	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T01BA-01	9,497	9,497	1284	$846.24	31	$621.67	14	$184.48		$0	$383	$2,035		$0
T01BA-02	2,917	2,917	395	$260.33	9	$180.49	4	$52.71		$0	$118	$611		$0
A03BA-01	3,255	3,255	36	$23.73		$0.00		$0.00		$0	$131	$155		$0
A01BA-01	60,906	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01BA-02	33,585	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02BA-01	25,650	25,650	1870	$1,232.45	270	$5,414.59	29	$382.14		$0	$1,033	$8,062		$0
A02BA-02	40,500	40,500	2953	$1,946.22	426	$8,543.02	45	$592.97		$0	$1,632	$12,714	X	$12,714
A02BA-03	21,600	21,600	1575	$1,038.03	227	$4,552.26	24	$316.25		$0	$870	$6,777		$0
A02BA-04	16,637	16,637		$0.00		$0.00		$0.00	16,637	$3,195	$670	$3,865		$0
TOTAL	**198878**	975,465	44,648	$29,426.00	1,018	$20,415.00	1,665	$21,940.00	16,637	$3,195.00	$39,297.01	$114,273.01		$67,729.29

Baker City Airport

Pavement Maintenance Cost Inventory

2004 PMP														
Baker City Airport		TOTAL COST		$36,384										
		CS Cost		$17,149										
		Fill Sunken Cracks 12"x1"		$6,745										
		Other Cost		$12,490										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	Fill Sunken Cracks 12" x 1"	Fill Sunken Cracks Cost					Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17BA-01	69,352	69,352	1549	$1,695		$0		$0		$0	$1,390	$3,085	x	$3,085
R17BA-02	8,778	0		$0		$0		$0		$0	$0	$0		$0
R17BA-03	8271	0		$0		$0		$0		$0	$0	$0		$0
R17BA-04	169118	169,118	4169	$4,562		$0		$0		$0	$3,388	$7,950	x	$7,950
R17BA-05	30000	30,000	739	$809		$0		$0		$0	$601	$1,410	x	$1,410
R17BA-06	29250	29,250	3505	$3,835		$0		$0		$0	$586	$4,421	x	$4,421
AH17BA-01	28,099	28,099	259	$283		$0		$0		$0	$563	$846		$0
AH13BA-01	8,831	0		$0		$0		$0		$0	$0	$0		$0
AH13BA-02	4,058	0		$0		$0		$0		$0	$0	$0		$0
AH13BA-03	1,406	0		$0		$0		$0		$0	$0	$0		$0
AH13BA-04	1,406	0		$0		$0		$0		$0	$0	$0		$0
R13BA-01	265,590	0		$0		$0		$0		$0	$0	$0		$0
R13BA-02	170,436	0		$0		$0		$0		$0	$0	$0		$0
R13BA-03	85,000	0		$0		$0		$0		$0	$0	$0		$0
R08BA-01	26,536	0		$0		$0		$0		$0	$0	$0		$0
R08BA-02	52,255	0		$0		$0		$0		$0	$0	$0		$0
R08BA-03	4,760	0		$0		$0		$0		$0	$0	$0		$0
R08BA-04	4,763	0		$0		$0		$0		$0	$0	$0		$0
R08BA-05	194,364	0		$0		$0		$0		$0	$0	$0		$0
R08BA-06	16,380	0		$0		$0		$0		$0	$0	$0		$0
R08BA-07	19,180	0		$0		$0		$0		$0	$0	$0		$0
R08BA-08	215,460	0		$0		$0		$0		$0	$0	$0		$0
R08BA-09	39,144	0		$0		$0		$0		$0	$0	$0		$0
AH08BA-01	13,476	0		$0		$0		$0		$0	$0	$0		$0
AHABA-01	2,043	0		$0		$0		$0		$0	$0	$0		$0
TABA-01	4,288	0		$0		$0		$0		$0	$0	$0		$0
TABA-02	21,679	21,679	233	$255		$0		$0		$0	$434	$689	x	$689
TABA-03	61,059	61,059	572	$626	87	$1,577		$0		$0	$1,223	$3,427	x	$3,427
TABA-04	3,739	3,739	129	$141		$0		$0		$0	$75	$216	x	$216
TABA-05	85,056	85,056	679	$743	268	$4,859		$0		$0	$1,704	$7,306	x	$7,306
TA1BA-01	3,343	0		$0		$0		$0		$0	$0	$0		$0
TA1BA-02	5,451	5,451	44	$48	17	$308		$0		$0	$109	$466		$0
TA2BA-01	7,359	0		$0		$0		$0		$0	$0	$0		$0
TA2BA-02	2,334	0		$0		$0		$0		$0	$0	$0		$0
TA2BA-03	3,397	3,397	150	$164		$0		$0		$0	$68	$232		$0
TA2BA-04	36818	36,818	1624	$1,777		$0		$0		$0	$738	$2,515		$0
TBBA-01	51,820	51,820	1336	$1,462		$0		$0		$0	$1,038	$2,500		$0
T03BA-01	11,071	11,071	103	$113		$0		$0		$0	$222	$335		$0
T03BA-02	5,060	5,060	47	$51		$0		$0		$0	$101	$153		$0
T02BA-01	8,442	0		$0		$0		$0		$0	$0	$0		$0
T04BA-01	9,436	0		$0		$0		$0		$0	$0	$0		$0

Baker City Airport

Pavement Maintenance Cost Inventory

								2004 PMP						
T01BA-01	9,497	9,497	409	$448		$0		$0		$0	$190	$638		$0
T01BA-02	2,917	2,917	125	$137		$0		$0		$0	$58	$195		$0
A03BA-01	3,255	0		$0		$0		$0		$0	$0	$0		$0
A01BA-01	60,906	0		$0		$0		$0		$0	$0	$0		$0
A01BA-02	33,585	0		$0		$0		$0		$0	$0	$0		$0
A02BA-01	25,650	0		$0		$0		$0		$0	$0	$0		$0
A02BA-02	40,500	0		$0		$0		$0		$0	$0	$0	x	$0
A02BA-03	21,600	0		$0		$0		$0		$0	$0	$0		$0
A02BA-04	16,637	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**198878**	623,383	15,672	$17,149	372	$6,745	0	$0	0	$0	$12,490	$36,384		$28,505

Baker City Airport

Pavement Maintenance Cost Inventory

2001 PMP														
Baker City Airport		TOTAL COST		$31,520										
		CS Cost		$14,272										
		ACP Cost		$2,123										
		Other Cost		$15,126										
Section	Area (sf)	Area Maintained This Year	CS (lf)	CS Cost	ACP (sf)	ACP Cost					Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R17BA-01	69,352	69,352	69,352	$2,184.52		$0.00		$0.00		$0	$2,315	$4,500	x	$4,500
R17BA-02	8,778	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R17BA-03	8271	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R17BA-04	169118	0		$0.00		$0.00		$0.00		$0	$0	$0	x	$0
R17BA-05	30000	0		$0.00		$0.00		$0.00		$0	$0	$0	x	$0
R17BA-06	29250	0		$0.00		$0.00		$0.00		$0	$0	$0	x	$0
AH17BA-01	28,099	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH13BA-01	8,831	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH13BA-02	4,058	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH13BA-03	1,406	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH13BA-04	1,406	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R13BA-01	265,590	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R13BA-02	170,436	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R13BA-03	85,000	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-01	26,536	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-02	52,255	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-03	4,760	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-04	4,763	4,763	4,763	$150.03		$0.00		$0.00		$0	$159	$309		$0
R08BA-05	194,364	194,364	194,364	$6,122.27	15	$1,273.50		$0.00		$0	$6,488	$13,884		$0
R08BA-06	16,380	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-07	19,180	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-08	215,460	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
R08BA-09	39,144	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AH08BA-01	13,476	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
AHABA-01	2,043	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TABA-01	4,288	4,288	4,288	$135.07		$0.00		$0.00		$0	$143	$278		$0
TABA-02	21,679	21,679	21,679	$682.87		$0.00		$0.00		$0	$724	$1,407	x	$1,407
TABA-03	61,059	61,059	61,059	$1,923.30	10	$849.00		$0.00		$0	$2,038	$4,811	x	$4,811
TABA-04	3,739	3,739	3,739	$117.77		$0.00		$0.00		$0	$125	$243	x	$243
TABA-05	85,056	85,056	85,056	$2,679.18		$0.00		$0.00		$0	$2,839	$5,519	x	$5,519
TA1BA-01	3,343	3,343	3,343	$105.30		$0.00		$0.00		$0	$112	$217		$0
TA1BA-02	5,451	5,451	5,451	$171.70		$0.00		$0.00		$0	$182	$354		$0
TA2BA-01	7,359	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-02	2,334	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-03	3,397	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TA2BA-04	36818	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TBBA-01	51,820	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T03BA-01	11,071	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T03BA-02	5,060	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T02BA-01	8,442	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T04BA-01	9,436	0		$0.00		$0.00		$0.00		$0	$0	$0		$0

Baker City Airport

Pavement Maintenance Cost Inventory

2001 PMP														
T01BA-01	9,497	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
T01BA-02	2,917	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A03BA-01	3,255	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01BA-01	60,906	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A01BA-02	33,585	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02BA-01	25,650	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02BA-02	40,500	0		$0.00		$0.00		$0.00		$0	$0	$0	x	$0
A02BA-03	21,600	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
A02BA-04	16,637	0		$0.00		$0.00		$0.00		$0	$0	$0		$0
TOTAL	**198878**	453,094	453,094	$14,272.00	25	$2,122.50	0	$0.00	0	$0.00	$15,125.50	$31,520.00		$16,478.02

Bend Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Taken From 2009)	Area (sf)	Focus Pavement	FOCUS Pavement Area (sf)	Total Maint Costs (2000-2009)	Maintained Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R16BE	390000			$0		$0
TABE-01	12101			$5,313	12101	$0
TABE-02	110047	x	110047	$59,609	110047	$59,609
TABE-03	33113	x	33113	$4,941	33113	$4,941
TA1BE-01	13622			$5,982	13622	$0
TA2BE-01	12012			$3,684	12012	$0
TA3BE-01	12012			$3,684	12012	$0
TA4BE-01	12012			$3,684	12012	$0
TA5BE-01	12012			$563	12012	$0
TA6BE-01	17912			$840	17912	$0
TB-01	180485			$0		$0
TB1BE-01	14165			$0		$0
TB2BE-01	11418			$0		$0
TB3BE-01	11418			$0		$0
TB4BE-01	11418			$0		$0
TB5BE-01	11418			$0		$0
TB6BE-01	14165			$0		$0
SRUNUPBE-	32684			$0		$0
NRUNUPBE-	31189			$0		$0
T01BE-01	8411			$574	8411	$0
T02BE-01	9610			$0		$0
T03BE-01	9346			$8,019	9346	$0
T03BE-02	10800			$3,157	10800	$0
T03BE-03	4683			$220	4683	$0
T03BE-04	21900			$1,027	21900	$0
T03BE-05	6600			$3,186	6600	$0
T03BE-06	2834			$1,615	2834	$0
T04BE-01	16567			$9,395	16567	$0
T04BE-02	9357			$0		$0
T05BE-01	24437			$17,317	24437	$0
T05BE-02	1272			$487	1272	$0
T06BE-01	3772			$0		$0
T06BE-02	5036			$407	5036	$0
T07BE-01	2011			$427	2011	$0
T08BE-01	2011			$427	2011	$0
T09BE-01	4470			$314	4470	$0
T10BE-01	4145			$568	4145	$0
T11BE-01	2011			$142	2011	$0
T12BE-01	11097			$4,479	11097	$0
T12BE-02	7571			$5,191	7571	$0
T13BE-01	6687			$1,119	6687	$0

Bend Airport Pavement and Maintenance Inventory

T14BE-01	7687			$2,452	7687	$0
T15BE-01	10137			$2,699	10137	$0
T16BE-01	17025			$1,484	17025	$0
T17BE-01	32507			$11,424	32507	$0
T18BE-01	1211			$0		$0
T19BE-01	7275			$2,061	7275	$0
T20BE-01	3663			$0		$0
TLEBE-01	5343			$0		$0
TLCBE-01	5156			$0		$0
A01BE-01	130080			$0		$0
A01BE-02	36867	x	36867	$9,480	36867	$9,480
A01BE-03	91976	x	91976	$17,614	91976	$17,614
A01BE-04	70953	x	70953	$0		$0
A01BE-05	70573	x	70573	$26,784	70573	$26,784
A02BE-01	52460			$25,149	52460	$0
A02BE-02	8520			$684	8520	$0
A03BE-01	16240			$981	16240	$0
A04BE-01	13015			$0		$0
A04BE-02	12472			$0		$0
A04BE-03	5610			$0		$0
A05BE-01	5923			$1,149	5923	$0
A05BE-02	5908			$1,412	5908	$0
A05BE-03	7222			$0		$0
A05BE-04	1753			$0		$0
A05BE-05	8050			$0		$0
A05BE-06	9411			$0		$0
A06BE-01	3000			$268	3000	$0
A06BE-02	979			$0		$0
A06BE-03	2504			$0		$0
A07BE-01	15000			$0		$0
A08BE-01	8680			$0		$0
A09BE-01	30000			$18,865	30000	$0
TOTAL	**1815031**		**143160**	**$166,489**	**461363**	**$64,549**

Bend Airport

Pavement Maintenance Cost Inventory

2008 PMP														
		TOTAL COST		$74,002										
		CS Cost		$25,030										
		ACP Cost		$6,684										
		WC Cost		$17,769										
		Surface Sealant Cost		$0										
		Other Cost		$24,519										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost			Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R16BE	390000	0		$0		$0		$0			$0	$0		$0
TABE-01	12101	0		$0		$0		$0			$0	$0		$0
TABE-02	110047	110,047	8373	$5,112		$0	151	$1,817			$4,350	$11,279	x	$11,279
TABE-03	33113	33,113	2519	$1,538		$0	45	$541			$1,309	$3,388	x	$3,388
TA1BE-01	13622	0		$0		$0		$0			$0	$0		$0
TA2BE-01	12012	0		$0		$0		$0			$0	$0		$0
TA3BE-01	12012	0		$0		$0		$0			$0	$0		$0
TA4BE-01	12012	0		$0		$0		$0			$0	$0		$0
TA5BE-01	12012	0		$0		$0		$0			$0	$0		$0
TA6BE-01	17912	0		$0		$0		$0			$0	$0		$0
TB-01	180485	0		$0		$0		$0			$0	$0		$0
TB1BE-01	14165	0		$0		$0		$0			$0	$0		$0
TB2BE-01	11418	0		$0		$0		$0			$0	$0		$0
TB3BE-01	11418	0		$0		$0		$0			$0	$0		$0
TB4BE-01	11418	0		$0		$0		$0			$0	$0		$0
TB5BE-01	11418	0		$0		$0		$0			$0	$0		$0
TB6BE-01	14165	0		$0		$0		$0			$0	$0		$0
SRUNUPBE-	32684	0		$0		$0		$0			$0	$0		$0
NRUNUPBE-	31189	0		$0		$0		$0			$0	$0		$0
T01BE-01	8411	8,411	395	$241		$0		$0			$332	$574		$0
T02BE-01	9610	0		$0		$0		$0			$0	$0		$0
T03BE-01	9346	9,346	541	$330	169	$2,056	54	$650			$369	$3,405		$0
T03BE-02	10800	10,800	631	$385	63.5	$772	53	$638			$427	$2,222		$0
T03BE-03	4683	0		$0		$0		$0			$0	$0		$0
T03BE-04	21900	0		$0		$0		$0			$0	$0		$0
T03BE-05	6600	0		$0		$0		$0			$0	$0		$0
T03BE-06	2834	2,834	221	$135		$0		$0			$112	$247		$0
T04BE-01	16567	16,567	1169	$714		$0	173	$2,081			$655	$3,450		$0
T04BE-02	9357	0		$0		$0		$0			$0	$0		$0
T05BE-01	24437	24,437	1166	$712	105	$1,277	370	$4,451			$966	$7,406		$0
T05BE-02	1272	1,272	61	$37	5	$61	19	$229			$50	$377		$0
T06BE-01	3772	0		$0		$0		$0			$0	$0		$0
T06BE-02	5036	5,036	341	$208		$0		$0			$199	$407		$0
T07BE-01	2011	2,011	131	$80	22	$268		$0			$79	$427		$0
T08BE-01	2011	2,011	170	$104	20	$243		$0			$79	$427		$0
T09BE-01	4470	4,470	225	$137		$0		$0			$177	$314		$0
T10BE-01	4145	4,145	169	$103		$0	25	$301			$164	$568		$0
T11BE-01	2011	2,011	102	$62		$0		$0			$79	$142		$0
T12BE-01	11097	11,097	1373	$838		$0	14	$168			$439	$1,445		$0

2008 PMP														
T12BE-02	7571	7,571	936	$572		$0	9	$108			$299	$979		$0
T13BE-01	6687	6,687	767	$468	9	$109	23	$277			$264	$1,119		$0
T14BE-01	7687	0		$0		$0		$0			$0	$0		$0
T15BE-01	10137	10,137	533	$325		$0		$0			$401	$726		$0
T16BE-01	17025	17,025	1329	$811		$0		$0			$673	$1,484		$0
T17BE-01	32507	32,507	3447	$2,105		$0		$0			$1,285	$3,390		$0
T18BE-01	1211	0		$0		$0		$0			$0	$0		$0
T19BE-01	7275	7,275	661	$404		$0		$0			$288	$691		$0
T20BE-01	3663	0		$0		$0		$0			$0	$0		$0
TLEBE-01	5343	0		$0		$0		$0			$0	$0		$0
TLCBE-01	5156	0		$0		$0		$0			$0	$0		$0
A01BE-01	130080	0		$0		$0		$0			$0	$0		$0
A01BE-02	36867	36,867	1569	$958		$0		$0			$1,457	$2,415	x	$2,415
A01BE-03	91976	91,976	2038	$1,244		$0		$0			$3,636	$4,880	x	$4,880
A01BE-04	70953	0		$0		$0		$0			$0	$0	x	$0
A01BE-05	70573	70,573	8142	$4,971		$0		$0			$2,790	$7,761	x	$7,761
A02BE-01	52460	52,460	1298	$793	50	$608	541	$6,508			$2,074	$9,983		$0
A02BE-02	8520	8,520	569	$347		$0		$0			$337	$684		$0
A03BE-01	16240	16,240	556	$339		$0		$0			$642	$981		$0
A04BE-01	13015	0		$0		$0		$0			$0	$0		$0
A04BE-02	12472	0		$0		$0		$0			$0	$0		$0
A04BE-03	5610	0		$0		$0		$0			$0	$0		$0
A05BE-01	5923	5,923	741	$452	38	$462		$0			$234	$1,149		$0
A05BE-02	5908	5,908	576	$352	68	$827		$0			$234	$1,412		$0
A05BE-03	7222	0		$0		$0		$0			$0	$0		$0
A05BE-04	1753	0		$0		$0		$0			$0	$0		$0
A05BE-05	8050	0		$0		$0		$0			$0	$0		$0
A05BE-06	9411	0		$0		$0		$0			$0	$0		$0
A06BE-01	3000	3,000	245	$150		$0		$0			$119	$268		$0
A06BE-02	979	0		$0		$0		$0			$0	$0		$0
A06BE-03	2504	0		$0		$0		$0			$0	$0		$0
A07BE-01	15000	0		$0		$0		$0			$0	$0		$0
A08BE-01	8680	0		$0		$0		$0			$0	$0		$0
A09BE-01	30000	0		$0		$0		$0			$0	$0		$0
TOTAL	**1815031**	620,277	40,994	$25,030.00	550	$6,684.00	1,477	$17,769.00	0	$0.00	$24,519.00	$74,002.00		$29,723.77

Bend Airport

Pavement Maintenance Cost Inventory

2004 PMP														
		TOTAL COST		$168,620										
		CS Cost		$69,160										
		ACP Cost		$23,216										
		WC Cost												
		Surface Sealant Cost		$22,093										
		Other Cost		$54,151										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R16BE	390000	0		$0		$0		$0		$0	$0	$0		$0
TABE-01	12101	12,101	451	$1,603	12101	$476		$0	12101	$1,556	$1,111	$4,746		$0
TABE-02	110047	110,047	4104	$14,582	110047	$4,332		$0	110047	$14,151	$10,105	$43,171	x	$43,171
TABE-03	33113	0		$0		$0		$0		$0	$0	$0	x	$0
TA1BE-01	13622	13,622	508	$1,805	13622	$536		$0	13622	$1,752	$1,251	$5,344		$0
TA2BE-01	12012	12,012		$0	12012	$473		$0	12012	$1,545	$1,103	$3,120		$0
TA3BE-01	12012	12,012		$0	12012	$473		$0	12012	$1,545	$1,103	$3,120		$0
TA4BE-01	12012	12,012		$0	12012	$473		$0	12012	$1,545	$1,103	$3,120		$0
TA5BE-01	12012	0		$0		$0		$0		$0	$0	$0		$0
TA6BE-01	17912	0		$0		$0		$0		$0	$0	$0		$0
TB-01	180485	0		$0		$0		$0		$0	$0	$0		$0
TB1BE-01	14165	0		$0		$0		$0		$0	$0	$0		$0
TB2BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB3BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB4BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB5BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB6BE-01	14165	0		$0		$0		$0		$0	$0	$0		$0
SRUNUPBE-	32684	0		$0		$0		$0		$0	$0	$0		$0
NRUNUPBE	31189	0		$0		$0		$0		$0	$0	$0		$0
T01BE-01	8411	0		$0		$0		$0		$0	$0	$0		$0
T02BE-01	9610	0		$0		$0		$0		$0	$0	$0		$0
T03BE-01	9346	9,346	726	$2,580	9346	$368		$0		$0	$858	$3,806		$0
T03BE-02	10800	0		$0		$0		$0		$0	$0	$0		$0
T03BE-03	4683	0		$0		$0		$0		$0	$0	$0		$0
T03BE-04	21900	0		$0		$0		$0		$0	$0	$0		$0
T03BE-05	6600	6,600	566	$2,011	6600	$260		$0		$0	$606	$2,877		$0
T03BE-06	2834	2,834	243	$863	2834	$112		$0		$0	$260	$1,235		$0
T04BE-01	16567	16,567	658	$2,338	16567	$652		$0		$0	$1,521	$4,511		$0
T04BE-02	9357	0		$0		$0		$0		$0	$0	$0		$0
T05BE-01	24437	24,437	1292	$4,591	24437	$962		$0		$0	$2,244	$7,797		$0
T05BE-02	1272	0		$0		$0		$0		$0	$0	$0		$0
T06BE-01	3772	0		$0		$0		$0		$0	$0	$0		$0
T06BE-02	5036	0		$0		$0		$0		$0	$0	$0		$0
T07BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0
T08BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0
T09BE-01	4470	0		$0		$0		$0		$0	$0	$0		$0
T10BE-01	4145	0		$0		$0		$0		$0	$0	$0		$0
T11BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0

2004 PMP														
T12BE-01	11097	11,097	444	$1,578	11097	$437		$0		$0	$1,019	$3,033		$0
T12BE-02	7571	7,571	806	$2,864	7571	$298		$0		$0	$695	$3,857		$0
T13BE-01	6687	0		$0		$0		$0		$0	$0	$0		$0
T14BE-01	7687	7,687	219	$778	7687	$303		$0		$0	$706	$1,787		$0
T15BE-01	10137	10,137	181	$643	10137	$399		$0		$0	$931	$1,973		$0
T16BE-01	17025	0		$0		$0		$0		$0	$0	$0		$0
T17BE-01	32507	32,507	1061	$3,770	32507	$1,280		$0		$0	$2,985	$8,035		$0
T18BE-01	1211	0		$0		$0		$0		$0	$0	$0		$0
T19BE-01	7275	7,275	117	$416	7275	$286		$0		$0	$668	$1,370		$0
T20BE-01	3663	0		$0		$0		$0		$0	$0	$0		$0
TLEBE-01	5343	0		$0		$0		$0		$0	$0	$0		$0
TLCBE-01	5156	0		$0		$0		$0		$0	$0	$0		$0
A01BE-01	130080	0		$0		$0		$0		$0	$0	$0		$0
A01BE-02	36867	36,867	627	$2,228	36867	$1,451		$0		$0	$3,385	$7,064	x	$7,064
A01BE-03	91976	91,976	188	$668	91976	$3,621		$0		$0	$8,445	$12,734	x	$12,734
A01BE-04	70953	0		$0		$0		$0		$0	$0	$0	x	$0
A01BE-05	70573	70,573	2748	$9,764	70573	$2,778		$0		$0	$6,480	$19,023	x	$19,023
A02BE-01	52460	52,460	1054	$3,745	52460	$2,065		$0		$0	$4,817	$10,627		$0
A02BE-02	8520	0		$0		$0		$0		$0	$0	$0		$0
A03BE-01	16240	0		$0		$0		$0		$0	$0	$0		$0
A04BE-01	13015	0		$0		$0		$0		$0	$0	$0		$0
A04BE-02	12472	0		$0		$0		$0		$0	$0	$0		$0
A04BE-03	5610	0		$0		$0		$0		$0	$0	$0		$0
A05BE-01	5923	0		$0		$0		$0		$0	$0	$0		$0
A05BE-02	5908	0		$0		$0		$0		$0	$0	$0		$0
A05BE-03	7222	0		$0		$0		$0		$0	$0	$0		$0
A05BE-04	1753	0		$0		$0		$0		$0	$0	$0		$0
A05BE-05	8050	0		$0		$0		$0		$0	$0	$0		$0
A05BE-06	9411	0		$0		$0		$0		$0	$0	$0		$0
A06BE-01	3000	0		$0		$0		$0		$0	$0	$0		$0
A06BE-02	979	0		$0		$0		$0		$0	$0	$0		$0
A06BE-03	2504	0		$0		$0		$0		$0	$0	$0		$0
A07BE-01	15000	0		$0		$0		$0		$0	$0	$0		$0
A08BE-01	8680	0		$0		$0		$0		$0	$0	$0		$0
A09BE-01	30000	30,000	3471	$12,333	30000	$1,181		$0		$0	$2,755	$16,269		$0
TOTAL	**1815031**	589,740	19,464	$69,160.00	589,740	$23,216.00	0	$0.00	171,806	$22,093.00	$54,151.00	$168,620.00		$81,991.76

Bend Airport

Pavement Maintenance Cost Inventory

2000 PMP														
		TOTAL COST		$26,253										
		CS Cost		$12,813										
		Surface Sealant Cost		$6,048										
		Other Cost		$7,392										
Section	Area (sf)	Area Maintained This Year (sf)	CS (sf) Weighted Avg Area	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R16BE	390000	0		$0		$0		$0		$0	$0	$0		$0
TABE-01	12101	12,101	12101	$360		$0		$0		$0	$208	$567		$0
TABE-02	110047	110,047	110047	$3,272		$0		$0		$0	$1,887	$5,159	x	$5,159
TABE-03	33113	33,113	33113	$984		$0		$0		$0	$568	$1,552	x	$1,552
TA1BE-01	13622	13,622	13622	$405		$0		$0		$0	$234	$639		$0
TA2BE-01	12012	12,012	12012	$357		$0		$0		$0	$206	$563		$0
TA3BE-01	12012	12,012	12012	$357		$0		$0		$0	$206	$563		$0
TA4BE-01	12012	12,012	12012	$357		$0		$0		$0	$206	$563		$0
TA5BE-01	12012	12,012	12012	$357		$0		$0		$0	$206	$563		$0
TA6BE-01	17912	17,912	17912	$532		$0		$0		$0	$307	$840		$0
TB-01	180485	0		$0		$0		$0		$0	$0	$0		$0
TB1BE-01	14165	0		$0		$0		$0		$0	$0	$0		$0
TB2BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB3BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB4BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB5BE-01	11418	0		$0		$0		$0		$0	$0	$0		$0
TB6BE-01	14165	0		$0		$0		$0		$0	$0	$0		$0
SRUNUPBE-	32684	0		$0		$0		$0		$0	$0	$0		$0
NRUNUPBE-	31189	0		$0		$0		$0		$0	$0	$0		$0
T01BE-01	8411	0		$0		$0		$0		$0	$0	$0		$0
T02BE-01	9610	0		$0		$0		$0		$0	$0	$0		$0
T03BE-01	9346	9,346	9346	$278		$0		$0	9346	$370	$160	$809		$0
T03BE-02	10800	10,800	10800	$321		$0		$0	10800	$428	$185	$934		$0
T03BE-03	4683	4,683	4683	$139		$0		$0		$0	$80	$220		$0
T03BE-04	21900	21,900	21900	$651		$0		$0		$0	$376	$1,027		$0
T03BE-05	6600	6,600	6600	$196		$0		$0		$0	$113	$309		$0
T03BE-06	2834	2,834	2834	$84		$0		$0		$0	$49	$133		$0
T04BE-01	16567	16,567	16567	$493		$0		$0	16567	$657	$284	$1,433		$0
T04BE-02	9357	0		$0		$0		$0		$0	$0	$0		$0
T05BE-01	24437	24,437	24437	$726		$0		$0	24437	$969	$419	$2,114		$0
T05BE-02	1272	1,272	1272	$38		$0		$0	1272	$50	$22	$110		$0
T06BE-01	3772	0		$0		$0		$0		$0	$0	$0		$0
T06BE-02	5036	0		$0		$0		$0		$0	$0	$0		$0
T07BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0
T08BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0
T09BE-01	4470	0		$0		$0		$0		$0	$0	$0		$0
T10BE-01	4145	0		$0		$0		$0		$0	$0	$0		$0
T11BE-01	2011	0		$0		$0		$0		$0	$0	$0		$0
T12BE-01	11097	0		$0		$0		$0		$0	$0	$0		$0

Bend Airport

Pavement Maintenance Cost Inventory

2000 PMP														
T12BE-02	7571	7,571	7571	$225		$0		$0		$0	$130	$355		$0
T13BE-01	6687	0		$0		$0		$0		$0	$0	$0		$0
T14BE-01	7687	7,687	7687	$229		$0		$0	7687	$305	$132	$665		$0
T15BE-01	10137	0		$0		$0		$0		$0	$0	$0		$0
T16BE-01	17025	0		$0		$0		$0		$0	$0	$0		$0
T17BE-01	32507	0		$0		$0		$0		$0	$0	$0		$0
T18BE-01	1211	0		$0		$0		$0		$0	$0	$0		$0
T19BE-01	7275	0		$0		$0		$0		$0	$0	$0		$0
T20BE-01	3663	0		$0		$0		$0		$0	$0	$0		$0
TLEBE-01	5343	0		$0		$0		$0		$0	$0	$0		$0
TLCBE-01	5156	0		$0		$0		$0		$0	$0	$0		$0
A01BE-01	130080	0		$0		$0		$0		$0	$0	$0		$0
A01BE-02	36867	0		$0		$0		$0		$0	$0	$0	x	$0
A01BE-03	91976	0		$0		$0		$0		$0	$0	$0	x	$0
A01BE-04	70953	0		$0		$0		$0		$0	$0	$0	x	$0
A01BE-05	70573	0		$0		$0		$0		$0	$0	$0	x	$0
A02BE-01	52460	52,460	52460	$1,560		$0		$0	52460	$2,080	$900	$4,539		$0
A02BE-02	8520	0		$0		$0		$0		$0	$0	$0		$0
A03BE-01	16240	0		$0		$0		$0		$0	$0	$0		$0
A04BE-01	13015	0		$0		$0		$0		$0	$0	$0		$0
A04BE-02	12472	0		$0		$0		$0		$0	$0	$0		$0
A04BE-03	5610	0		$0		$0		$0		$0	$0	$0		$0
A05BE-01	5923	0		$0		$0		$0		$0	$0	$0		$0
A05BE-02	5908	0		$0		$0		$0		$0	$0	$0		$0
A05BE-03	7222	0		$0		$0		$0		$0	$0	$0		$0
A05BE-04	1753	0		$0		$0		$0		$0	$0	$0		$0
A05BE-05	8050	0		$0		$0		$0		$0	$0	$0		$0
A05BE-06	9411	0		$0		$0		$0		$0	$0	$0		$0
A06BE-01	3000	0		$0		$0		$0		$0	$0	$0		$0
A06BE-02	979	0		$0		$0		$0		$0	$0	$0		$0
A06BE-03	2504	0		$0		$0		$0		$0	$0	$0		$0
A07BE-01	15000	0		$0		$0		$0		$0	$0	$0		$0
A08BE-01	8680	0		$0		$0		$0		$0	$0	$0		$0
A09BE-01	30000	30,000	30000	$892		$0		$0	30000	$1,189	$515	$2,596		$0
TOTAL	**1815031**	431,000	431,000	$12,813.00	0	$0.00	0	$0.00	152,569	$6,048.00	$7,392.00	$26,253.00		$6,711.25

Burns Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Section Designations Taken From 2012)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R12BU-01	384258	384258	$293,225	x	384258	$293,225
R12BU-02	474	474	$54			$0
R12BU-03	606	606	$68			$0
R12BU-04	606	606	$68			$0
R12BU-05	474	474	$54			$0
AH12BU-01	5012	5012	$970			$0
R03BU-01	36000		$0			$0
R03BU-02	55800		$0			$0
R03BU-03	6294		$0			$0
R03BU-04	13200		$0			$0
R03BU-05	161393		$0			$0
T01BU-01	9366	9366	$2,821			$0
T01BU-02	13650	13650	$6,008	x	13650	$6,008
T01BU-03	53854	53854	$29,085	x	53854	$29,085
T01BU-04	12484	12484	$6,782	x	12484	$6,782
T02BU-01	7174	7174	$3,828			$0
T02BU-02	1599	1599	$853			$0
T03BU-01	4935	4935	$3,018			$0
T03BU-02	678	678	$363			$0
T04BU-01	22298		$0			$0
AFUELBU-0	36072		$0			$0
A01BU-01	30000		$0	x	30000	$0
A01BU-02	29000		$0			$0
A02BU-01	45125	45125	$19,610			$0
A02BU-02	19814		$0			$0
TOTAL	**950,166**	**540295**	**$366,806**		**494246**	**$335,100**

Burns Airport

Pavement Maintenance Cost Inventory

							2008 PMP							
Burns Airport		TOTAL COST		$99,317										
		CS Cost		$26,241										
		ACP Cost												
		WC Cost		$43,155										
		Surface Sealant Cost												
		Other Cost		$29,921										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost			Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12BU-01	384258	384,258	33817	$21,420		$0	3183.5	$40,967			$22,041.14	$84,429	x	$84,429
R12BU-02	474	474	42	$27		$0		$0			$27	$54		$0
R12BU-03	606	606	53	$34		$0		$0			$35	$68		$0
R12BU-04	606	606	53	$34		$0		$0			$35	$68		$0
R12BU-05	474	474	42	$27		$0		$0			$27	$54		$0
AH12BU-01	5012	0		$0		$0		$0			$0	$0		$0
R03BU-01	36000	0		$0		$0		$0			$0	$0		$0
R03BU-02	55800	0		$0		$0		$0			$0	$0		$0
R03BU-03	6294	0		$0		$0		$0			$0	$0		$0
R03BU-04	13200	0		$0		$0		$0			$0	$0		$0
R03BU-05	161393	0		$0		$0		$0			$0	$0		$0
T01BU-01	9366	9,366	163	$103		$0	44	$566			$537	$1,207		$0
T01BU-02	13650	0		$0		$0		$0			$0	$0	x	$0
T01BU-03	53854	53,854	2118	$1,342		$0	102	$1,313			$3,089	$5,743	x	$5,743
T01BU-04	12484	12,484	491	$311		$0	24	$309			$716	$1,336	x	$1,336
T02BU-01	7174	7,174	486	$308		$0		$0			$412	$719		$0
T02BU-02	1599	1,599	108	$68		$0		$0			$92	$160		$0
T03BU-01	4935	4,935	564	$357		$0		$0			$283	$640		$0
T03BU-02	678	678	77	$49		$0		$0			$39	$88		$0
T04BU-01	22298	0		$0		$0		$0			$0	$0		$0
AFUELBU-01	36072	0		$0		$0		$0			$0	$0		$0
A01BU-01	30000	0		$0		$0		$0			$0	$0	x	$0
A01BU-02	29000	0		$0		$0		$0			$0	$0		$0
A02BU-01	45125	45,125	3414	$2,162		$0		$0			$2,588	$4,751		$0
A02BU-02	19814	0		$0		$0		$0			$0	$0		$0
TOTAL	**950,166**	**521,633**	**41,428**	**$26,241**	**0**	**$0**	**3,354**	**$43,155**	**0**	**$0**	**$29,921**	**$99,317**		**$91,508**

Burns Airport

Pavement Maintenance Cost Inventory

2004 PMP														
Burns Airport		TOTAL COST		$119,313										
		CS Cost		$23,373										
		ACP Cost												
		WC Cost												
		Surface Sealant Cost		$10,743										
		Other Cost		$85,197										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12BU-01	384258	384,258	20370	$19,313		$0		$0		$0	$60,835	$80,149	x	$80,149
R12BU-02	474	0		$0		$0		$0		$0	$0	$0		$0
R12BU-03	606	0		$0		$0		$0		$0	$0	$0		$0
R12BU-04	606	0		$0		$0		$0		$0	$0	$0		$0
R12BU-05	474	0		$0		$0		$0		$0	$0	$0		$0
AH12BU-01	5012	5,012	186	$176		$0		$0		$0	$793.49	$970		$0
R03BU-01	36000	0		$0		$0		$0		$0	$0	$0		$0
R03BU-02	55800	0		$0		$0		$0		$0	$0	$0		$0
R03BU-03	6294	0		$0		$0		$0		$0	$0	$0		$0
R03BU-04	13200	0		$0		$0		$0		$0	$0	$0		$0
R03BU-05	161393	0		$0		$0		$0		$0	$0	$0		$0
T01BU-01	9366	9,366	139	$132		$0		$0		$0	$1,483	$1,615		$0
T01BU-02	13650	13,650	485	$460		$0		$0	13650	$1,554	$2,161	$4,175	x	$4,175
T01BU-03	53854	53,854	1533	$1,453		$0		$0	53854	$6,130	$8,526	$16,110	x	$16,110
T01BU-04	12484	12,484	393	$373		$0		$0	12484	$1,421	$1,976	$3,770	x	$3,770
T02BU-01	7174	7,174	203	$192		$0		$0	7174	$817	$1,136	$2,145		$0
T02BU-02	1599	1,599	45	$43		$0		$0	1599	$182	$253	$478		$0
T03BU-01	4935	4,935	392	$372		$0		$0	4935	$562	$781	$1,715		$0
T03BU-02	678	678		$0		$0		$0	678	$77	$107	$185		$0
T04BU-01	22298	0		$0		$0		$0		$0	$0	$0		$0
AFUELBU-01	36072	0		$0		$0		$0		$0	$0	$0		$0
A01BU-01	30000	0		$0		$0		$0		$0	$0	$0	x	$0
A01BU-02	29000	0		$0		$0		$0		$0	$0	$0		$0
A02BU-01	45125	45,125	906	$859		$0		$0		$0	$7,144	$8,003		$0
A02BU-02	19814	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**950,166**	**538,135**	**24,652**	**$23,373**	**0**	**$0**	**0**	**$0**	**94,374**	**$10,743**	**$85,197**	**$119,313**		**$104,203**

Burns Airport

Pavement Maintenance Cost Inventory

2001 PMP														
Burns Airport		TOTAL COST		$148,176										
		CS Cost		$14,540										
		ACP Cost		$18,580										
		WC Cost												
		Surface Sealant Cost		$59,267										
		Other Cost		$55,789										
Section	Area (sf)	Area Maintained This Year (sf)	CS (sf) Weighted Avg Area	CS Cost	ACP (SY)	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12BU-01	384258	384,258	384258	$10,667	335	$17,784		$0	384258	$59,267	$40,930	$128,648	x	$128,648
R12BU-02	474	0		$0		$0		$0		$0	$0	$0		$0
R12BU-03	606	0		$0		$0		$0		$0	$0	$0		$0
R12BU-04	606	0		$0		$0		$0		$0	$0	$0		$0
R12BU-05	474	0		$0		$0		$0		$0	$0	$0		$0
AH12BU-01	5012	0		$0		$0		$0		$0	$0	$0		$0
R03BU-01	36000	0		$0		$0		$0		$0	$0	$0		$0
R03BU-02	55800	0		$0		$0		$0		$0	$0	$0		$0
R03BU-03	6294	0		$0		$0		$0		$0	$0	$0		$0
R03BU-04	13200	0		$0		$0		$0		$0	$0	$0		$0
R03BU-05	161393	0		$0		$0		$0		$0	$0	$0		$0
T01BU-01	9366	0		$0		$0		$0		$0	$0	$0		$0
T01BU-02	13650	13,650	13650	$379		$0		$0		$0	$1,454	$1,833	x	$1,833
T01BU-03	53854	53,854	53854	$1,495		$0		$0		$0	$5,736	$7,231	x	$7,231
T01BU-04	12484	12,484	12484	$347		$0		$0		$0	$1,330	$1,676	x	$1,676
T02BU-01	7174	7,174	7174	$199		$0		$0		$0	$764	$963		$0
T02BU-02	1599	1,599	1599	$44		$0		$0		$0	$170	$215		$0
T03BU-01	4935	4,935	4935	$137		$0		$0		$0	$526	$663		$0
T03BU-02	678	678	678	$19		$0		$0		$0	$72	$91		$0
T04BU-01	22298	0		$0		$0		$0		$0	$0	$0		$0
AFUELBU-01	36072	0		$0		$0		$0		$0	$0	$0		$0
A01BU-01	30000	0		$0		$0		$0		$0	$0	$0	x	$0
A01BU-02	29000	0		$0		$0		$0		$0	$0	$0		$0
A02BU-01	45125	45,125	45125	$1,253	15	$796		$0		$0	$4,807	$6,856		$0
A02BU-02	19814	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**950,166**	**523,757**	**523,757**	**$14,540**	**350**	**$18,580**	**0**	**$0**	**384,258**	**$59,267**	**$55,789**	**$148,176**		**$139,389**

The Dalles Airport Pavement and Maintenance Inventory (2000-2009)

Section (Section Designations Taken From 2012)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R07TD-01	20000	20000	$5,283	x	20000	$5,283
R07TD-02	398300	398300	$105,035	x	398300	$105,035
R07TD-03	46000	46000	$12,114	x	46000	$12,114
R12TD-01	20000	20000	$5,145	x	20000	$5,145
R12TD-02	506917	506917	$130,976	x	506917	$130,976
TA3TD-01	77989		$0			$0
T01TD-01	73324	73324	$3,883	x	73324	$3,883
T02TD-01	33296	33296	$3,528			$0
T03TD-01	39343	39343	$2,555			$0
T04TD-01	9517	9517	$350			$0
T04TD-02	4723	4723	$174			$0
T04TD-03	47138	47138	$1,736			$0
T05TD-01	148101	148101	$7,239	x	148101	$7,239
T06TD-01	25640	25640	$1,140			$0
T07TD-01	6634	6634	$4,373			$0
T08TD-01	1768	1768	$1,435			$0
T09TD-01	1768	1768	$1,226			$0
A01TD-01	16161	16161	$823			$0
A01TD-02	2516		$0			$0
A01TD-03	1084		$0			$0
A01TD-04	70840	70840	$1,508			$0
A01TD-05	78753	78753	$1,908			$0
A01TD-06	43998	43998	$3,041	x	43998	$3,041
A01TD-07	83735	83735	$4,338	x	83735	$4,338
A02TD-01	89259	89259	$3,172			$0
TOTAL	**1846804**	**1765215**	**$300,983**		**1340375**	**$277,055**

The Dalles Airport

Pavement Maintenance Cost Inventory

							2008 PMP							
The Dalles Airport		TOTAL COST		$18,223										
		CS Cost		$9,914										
		ACP Cost		$0										
		WC Cost		$0										
		Surface Sealant Cost		$0										
		Other Cost		$8,309										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost			Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R07TD-01	20000	0		$0		$0		$0			$0	$0	x	$0
R07TD-02	398300	0		$0		$0		$0			$0	$0	x	$0
R07TD-03	46000	0		$0		$0		$0			$0	$0	x	$0
R12TD-01	20000	0		$0		$0		$0			$0	$0	x	$0
R12TD-02	506917	0		$0		$0		$0			$0	$0	x	$0
TA3TD-01	77989	0		$0		$0		$0			$0	$0		$0
T01TD-01	73324	73,324	2676	$2,615		$0		$0			$1,268	$3,883	x	$3,883
T02TD-01	33296	33,296	876	$856		$0		$0			$576	$1,432		$0
T03TD-01	39343	39,343	741	$724		$0		$0			$680	$1,404		$0
T04TD-01	9517	9,517	190	$186		$0		$0			$165	$350		$0
T04TD-02	4723	4,723	94	$92		$0		$0			$82	$174		$0
T04TD-03	47138	47,138	942	$920		$0		$0			$815	$1,736		$0
T05TD-01	148101	148,101	1647	$1,609		$0		$0			$2,561	$4,170	x	$4,170
T06TD-01	25640	25,640	713	$697		$0		$0			$443	$1,140		$0
T07TD-01	6634	6,634	294	$287		$0		$0			$115	$402		$0
T08TD-01	1768	1,768	150	$147		$0		$0			$31	$177		$0
T09TD-01	1768	1,768	156	$152		$0		$0			$31	$183		$0
A01TD-01	16161	0		$0		$0		$0			$0	$0		$0
A01TD-02	2516	0		$0		$0		$0			$0	$0		$0
A01TD-03	1084	0		$0		$0		$0			$0	$0		$0
A01TD-04	70840	0		$0		$0		$0			$0	$0		$0
A01TD-05	78753	0		$0		$0		$0			$0	$0		$0
A01TD-06	43998	0		$0		$0		$0			$0	$0	x	$0
A01TD-07	83735	0		$0		$0		$0			$0	$0	x	$0
A02TD-01	89259	89,259	1667	$1,629		$0		$0			$1,543	$3,172		$0
TOTAL	**1,846,804**	**480,511**	**10,146**	**$9,914**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**$8,309**	**$18,223**		**$8,053**

The Dalles Airport

Pavement Maintenance Cost Inventory

2005 PMP														
The Dalles Airport		TOTAL COST		$230,303										
		CS Cost		$0										
		ACP Cost		$0										
		WC Cost		$0										
		Surface Sealant Cost		$105,544										
		Other Cost		$124,759										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R07TD-01	20000	20,000		$0		$0		$0	20000	2129.58414	$2,517	$4,647	x	$4,647
R07TD-02	398300	398,300		$0		$0		$0	398300	42410.6681	$50,132	$92,542	x	$92,542
R07TD-03	46000	46,000		$0		$0		$0	46000	4898.04352	$5,790	$10,688	x	$10,688
R12TD-01	20000	20,000		$0		$0		$0	20000	2129.58414	$2,517	$4,647	x	$4,647
R12TD-02	506917	506,917		$0		$0		$0	506917	53976.1201	$63,803	$117,779	x	$117,779
TA3TD-01	77989	0		$0		$0		$0		0	$0	$0		$0
T01TD-01	73324	0		$0		$0		$0		0	$0	$0	x	$0
T02TD-01	33296	0		$0		$0		$0		0	$0	$0		$0
T03TD-01	39343	0		$0		$0		$0		0	$0	$0		$0
T04TD-01	9517	0		$0		$0		$0		0	$0	$0		$0
T04TD-02	4723	0		$0		$0		$0		0	$0	$0		$0
T04TD-03	47138	0		$0		$0		$0		0	$0	$0		$0
T05TD-01	148101	0		$0		$0		$0		0	$0	$0	x	$0
T06TD-01	25640	0		$0		$0		$0		0	$0	$0		$0
T07TD-01	6634	0		$0		$0		$0		0	$0	$0		$0
T08TD-01	1768	0		$0		$0		$0		0	$0	$0		$0
T09TD-01	1768	0		$0		$0		$0		0	$0	$0		$0
A01TD-01	16161	0		$0		$0		$0		0	$0	$0		$0
A01TD-02	2516	0		$0		$0		$0		0	$0	$0		$0
A01TD-03	1084	0		$0		$0		$0		0	$0	$0		$0
A01TD-04	70840	0		$0		$0		$0		0	$0	$0		$0
A01TD-05	78753	0		$0		$0		$0		0	$0	$0		$0
A01TD-06	43998	0		$0		$0		$0		0	$0	$0	x	$0
A01TD-07	83735	0		$0		$0		$0		0	$0	$0	x	$0
A02TD-01	89259	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1,846,804**	**991,217**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**991,217**	**$105,544**	**$124,759**	**$230,303**		**$230,303**

The Dalles Airport

Pavement Maintenance Cost Inventory

2004 PMP														
The Dalles Airport		TOTAL COST		$52,457										
		CS Cost		$18,646										
		ACP Cost		$12,142										
		PCC CS Cost		$825										
		Surface Sealant Cost		$0										
		Other Cost		$20,844										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	PCC CS (lf)	PCC CS Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R07TD-01	20000	20,000	226	$235	2	$126		$0	0	0	$275	$636	x	$636
R07TD-02	398300	398,300	4508	$4,687	37	$2,328		$0	0	0	$5,478	$12,493	x	$12,493
R07TD-03	46000	46,000	521	$542	4	$252		$0	0	0	$633	$1,426	x	$1,426
R12TD-01	20000	20,000	215	$224	0	$0		$0	0	0	$275	$499	x	$499
R12TD-02	506917	506,917	5443	$5,660	9	$566		$0	0	0	$6,972	$13,197	x	$13,197
TA3TD-01	77989	0		$0		$0		$0		0	$0	$0		$0
T01TD-01	73324	0		$0		$0		$0		0	$0	$0	x	$0
T02TD-01	33296	33,296	1334	$1,387	4	$252		$0		0	$458	$2,097		$0
T03TD-01	39343	39,343	344	$358	4	$252		$0		0	$541	$1,150		$0
T04TD-01	9517	0		$0		$0		$0		0	$0	$0		$0
T04TD-02	4723	0		$0		$0		$0		0	$0	$0		$0
T04TD-03	47138	0		$0		$0		$0		0	$0	$0		$0
T05TD-01	148101	148,101	811	$843	3	$189		$0		0	$2,037	$3,069	x	$3,069
T06TD-01	25640	0		$0		$0		$0		0	$0	$0		$0
T07TD-01	6634	6,634	101	$105	60	$3,775		$0		0	$91	$3,971		$0
T08TD-01	1768	1,768	97	$101	18	$1,132		$0		0	$24	$1,258		$0
T09TD-01	1768	1,768	12	$12	16	$1,007		$0		0	$24	$1,043		$0
A01TD-01	16161	16,161	578	$601		$0		$0		0	$222	$823		$0
A01TD-02	2516	0		$0		$0		$0		0	$0	$0		$0
A01TD-03	1084	0		$0		$0		$0		0	$0	$0		$0
A01TD-04	70840	70,840	513	$533		$0		$0		0	$974	$1,508		$0
A01TD-05	78753	78,753		$0		$0	2343	$825		0	$1,083	$1,908		$0
A01TD-06	43998	43,998	2343	$2,436		$0		$0		0	$605	$3,041	x	$3,041
A01TD-07	83735	83,735	886	$921	36	$2,265		$0		0	$1,152	$4,338	x	$4,338
A02TD-01	89259	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1,846,804**	**1,515,614**	**17,932**	**$18,646**	**193**	**$12,142**	**2,343**	**$825**	**0**	**$0**	**$20,844**	**$52,457**		**$38,699**

The Dalles Airport

Pavement Maintenance Cost Inventory

2001 PMP														
The Dalles Airport		TOTAL COST		$48,026										
		CS Cost		$3,446										
		PCC Spall Repair Cost		$1,725										
		PCC Joint Seal Cost		$17,847										
		Surface Sealant Cost		$7,245										
		Other Cost		$17,763										
Section	Area (sf)	Area Maintained This Year (sf)	CS (sf) Weighted Avg Area	CS Cost	Spall Repair (sf)	PCC Spall Repair Cost	PCC Joint Seal (lf)	PCC Joint Seal Cost	Fog Seal (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R07TD-01	20000	0		$0		$0		$0		0	$0	$0	x	$0
R07TD-02	398300	0		$0		$0		$0		0	$0	$0	x	$0
R07TD-03	46000	0		$0		$0		$0		0	$0	$0	x	$0
R12TD-01	20000	0		$0		$0		$0		0	$0	$0	x	$0
R12TD-02	506917	0		$0		$0		$0		0	$0	$0	x	$0
TA3TD-01	77989	0		$0		$0		$0		0	$0	$0		$0
T01TD-01	73324	73,324	73324	$650		$0		$0		0	$2,182	$2,832	x	$2,832
T02TD-01	33296	33,296	33296	$295		$0		$0		0	$991	$1,286		$0
T03TD-01	39343	39,343	39343	$349		$0		$0		0	$1,171	$1,520		$0
T04TD-01	9517	9,517	9517	$84		$0		$0		0	$283	$368		$0
T04TD-02	4723	0		$0		$0		$0		0	$0	$0		$0
T04TD-03	47138	47,138	47138	$418		$0		$0		0	$1,403	$1,821		$0
T05TD-01	148101	148,101	98734	$875		$0		$0		0	$4,407	$5,283	x	$5,283
T06TD-01	25640	25,640		$0		$0		$0	25640	1616.73992	$763	$2,380		$0
T07TD-01	6634	0		$0		$0		$0		0	$0	$0		$0
T08TD-01	1768	1,768	1768	$16		$0		$0		0	$53	$68		$0
T09TD-01	1768	1,768	1768	$16		$0		$0		0	$53	$68		$0
A01TD-01	16161	0		$0		$0		$0		0	$0	$0		$0
A01TD-02	2516	0		$0		$0		$0		0	$0	$0		$0
A01TD-03	1084	0		$0		$0		$0		0	$0	$0		$0
A01TD-04	70840	0		$0		$0		$0		0	$0	$0		$0
A01TD-05	78753	0		$0		$0		$0		0	$0	$0		$0
A01TD-06	43998	43,998		$0	8	$1,725	43998	$17,847		0	$1,309	$20,881	x	$20,881
A01TD-07	83735	83,735	83735	$742		$0		$0		0	$2,492	$3,234	x	$3,234
A02TD-01	89259	89,259		$0		$0		$0	89259	$5,628	$2,656	$8,285		$0
TOTAL	**1,846,804**	**596,887**	**388,623**	**$3,446**	**8**	**$1,725**	**43,998**	**$17,847**	**114,899**	**$7,245**	**$17,763**	**$48,026**		**$32,231**

Enterprise Airport Pavement and Maintenance Inventory (2000-2009)						
Section (Section Designations Taken From 2012)	Area (sf)	Maintained Pavement Area (sf)	Total Maint Costs (2000-2009)	Focus Pavement	FOCUS Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R12EN-01	143150	143150	$63,253	x	143150	$63,253
AH30EN-01	2465		$0			$0
AH12EN-01	2475	2475	$378			$0
T01EN-01	48242	48242	$17,752			$0
T02EN-01	1193		$0			$0
T03EN-01	5465	5465	$854			$0
T04EN-01	12154	12154	$1,852			$0
T04EN-02	235		$0			$0
A01EN-01	6500		$0	x	6500	$0
A01EN-02	4183	4183	$654	x	4183	$654
A01EN-03	7507	7507	$1,173	x	7507	$1,173
A02EN-01	2970		$0			$0
A03EN-01	2106		$0			$0
TOTAL	**238645**	**223176**	**$85,917**		**161340**	**$65,080**

Enterprise Airport

Pavement Maintenance Cost Inventory

2008 PMP														
Enterprise Airport		TOTAL COST		$85,917										
		CS Cost		$6,835										
		ACP Cost		$0										
		WC Cost		$4,575										
		Surface Sealant Cost		$40,707										
		Other Cost		$33,800										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost	Slurry Seal	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R12EN-01	143150	143,150	9461	$6,552		$0	275	$4,575	143150	$30,446	$21,680.06	$63,253	x	$63,253
AH30EN-01	2465	0		$0		$0		$0		$0	$0	$0		$0
AH12EN-01	2475	2,475	5	$3		$0		$0		$0	$375	$378		$0
T01EN-01	48242	48,242	268	$186		$0		$0	48242	$10,261	$7,306	$17,752		$0
T02EN-01	1193	0		$0		$0		$0		$0	$0	$0		$0
T03EN-01	5465	5,465	38	$26		$0		$0		$0	$828	$854		$0
T04EN-01	12154	12,154	17	$12		$0		$0		$0	$1,841	$1,852		$0
T04EN-02	235	0		$0		$0		$0		$0	$0	$0		$0
A01EN-01	6500	0		$0		$0		$0		$0	$0	$0	x	$0
A01EN-02	4183	4,183	29	$20		$0		$0		$0	$634	$654	x	$654
A01EN-03	7507	7,507	52	$36		$0		$0		$0	$1,137	$1,173	x	$1,173
A02EN-01	2970	0		$0		$0		$0		$0	$0	$0		$0
A03EN-01	2106	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**238645**	**223,176**	**9,870**	**$6,835**	**0**	**$0**	**275**	**$4,575**	**191,392**	**$40,707**	**$33,800**	**$85,917**		**$65,080**

Prineville Airport Pavement and Maintenance Inventory (2000-2009)

Section (Section Designations Taken From 2012)	Area (sf)	Focus Pavement	FOCUS Pavement Area (sf)	Total Maint Costs (2000-2009)	Maintained Pavement Area (sf)	Total Focus Area Maint Cost (2000-2009)
R10PR-01	374993	x	374993	$110,935	374993	$110,935
R10PR-02	57712			$22,606	57712	$0
R15PR-01	114782			$6,917	114782	$0
R15PR-02	25935			$1,567	25935	$0
R15PR-03	9047			$1,148	9047	$0
R15PR-04	10423			$12,772	10423	$0
R15PR-05	7375			$8,213	7375	$0
TAPR-01	170422			$0		$0
TAPR-02	4594			$0		$0
TAPR-03	28209			$0		$0
TBPR-01	7769			$0		$0
TBPR-02	1684			$0		$0
TCPR-01	8072			$0		$0
TCPR-02	1845			$0		$0
T01PR-01	104112			$2,623		$0
T01PR-02	1504			$0		$0
T02PR-01	873			$0		$0
T02PR-02	3241			$0		$0
T02PR-03	10912			$0		$0
T03PR-01	3294			$748	3294	$0
T04PR-01	3237			$605	3237	$0
T05PR-01	5745			$0		$0
T05PR-02	4294			$0		$0
T06PR-01	6337			$472	6337	$0
T07PR-01	2314			$0		$0
T08PR-01	2314			$0		$0
T09PR-01	2314			$0		$0
T10PR-01	2314			$0		$0
T11PR-01	1243			$0		$0
T12PR-01	11072			$0		$0
A01PR-01	58041			$0		$0
A01PR-02	50096	x	50096	$9,866	50096	$9,866
AFPR-01	15934			$603	15934	$0
A03PR-01	5052			$601	5052	$0
A03PR-02	104137			$18,779	104137	$0
A03PR-03	15750			$1,874	15750	$0
A04PR-01	32384			$2,080	32384	$0
A05PR-01	23268			$4,842	23268	$0
A05PR-02	6400			$0		$0
A05PR-03	2400			$0		$0
A06PR-01	8400			$0		$0
A07PR-01	8400			$0		$0
A08PR-01	8400			$0		$0

Prineville Airport Pavement and Maintenance Inventory (2000-2009)						
A09PR-01	9450			$0		$0
A10PR-01	5196			$0		$0
TOTAL	**1341290**		**425089**	**$207,249**	**859756**	**$120,801**

Prineville Airport

Pavement Maintenance Cost Inventory

2008 PMP														
		TOTAL COST		$23,161										
		CS Cost		$5,326										
		ACP Cost		$0										
		WC Cost		$5,634										
		Surface Sealant Cost		$0										
		Other Cost		$12,201										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf)	ACP Cost	Wide Crack (lf)	WC Cost			Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R10PR-01	374993	0		$0		$0		$0			$0	$0	x	$0
R10PR-02	57712	0		$0		$0		$0			$0	$0		$0
R15PR-01	114782	114,782	1502	$1,232		$0	43	$662			$5,023	$6,917		$0
R15PR-02	25935	25,935	339	$278		$0	10	$154			$1,135	$1,567		$0
R15PR-03	9047	9,047	542	$444		$0	20	$308			$396	$1,148		$0
R15PR-04	10423	10,423	776	$636		$0		$0			$456	$1,092		$0
R15PR-05	7375	0		$0		$0		$0			$0	$0		$0
TAPR-01	170422	0		$0		$0		$0			$0	$0		$0
TAPR-02	4594	0		$0		$0		$0			$0	$0		$0
TAPR-03	28209	0		$0		$0		$0			$0	$0		$0
TBPR-01	7769	0		$0		$0		$0			$0	$0		$0
TBPR-02	1684	0		$0		$0		$0			$0	$0		$0
TCPR-01	8072	0		$0		$0		$0			$0	$0		$0
TCPR-02	1845	0		$0		$0		$0			$0	$0		$0
T01PR-01	104112	0		$0		$0		$0			$0	$0		$0
T01PR-02	1504	0		$0		$0		$0			$0	$0		$0
T02PR-01	873	0		$0		$0		$0			$0	$0		$0
T02PR-02	3241	0		$0		$0		$0			$0	$0		$0
T02PR-03	10912	0		$0		$0		$0			$0	$0		$0
T03PR-01	3294	3,294	153	$125		$0		$0			$144	$270		$0
T04PR-01	3237	3,237	128	$105		$0		$0			$142	$247		$0
T05PR-01	5745	0		$0		$0		$0			$0	$0		$0
T05PR-02	4294	0		$0		$0		$0			$0	$0		$0
T06PR-01	6337	6,337	237	$194		$0		$0			$277	$472		$0
T07PR-01	2314	0		$0		$0		$0			$0	$0		$0
T08PR-01	2314	0		$0		$0		$0			$0	$0		$0
T09PR-01	2314	0		$0		$0		$0			$0	$0		$0
T10PR-01	2314	0		$0		$0		$0			$0	$0		$0
T11PR-01	1243	0		$0		$0		$0			$0	$0		$0
T12PR-01	11072	0		$0		$0		$0			$0	$0		$0
A01PR-01	58041	0		$0		$0		$0			$0	$0		$0
A01PR-02	50096	50,096	1078	$884		$0	236	$3,633			$2,192	$6,709	x	$6,709
AFPR-01	15934	0		$0		$0		$0			$0	$0		$0
A03PR-01	5052	0		$0		$0		$0			$0	$0		$0
A03PR-02	104137	0		$0		$0		$0			$0	$0		$0
A03PR-03	15750	0		$0		$0		$0			$0	$0		$0
A04PR-01	32384	32,384	808	$663		$0		$0			$1,417	$2,080		$0

Prineville Airport

Pavement Maintenance Cost Inventory

2008 PMP														
A05PR-01	23268	23,268	932	$764		$0	57	$877			$1,018	$2,660		$0
A05PR-02	6400	0		$0		$0		$0			$0	$0		$0
A05PR-03	2400	0		$0		$0		$0			$0	$0		$0
A06PR-01	8400	0		$0		$0		$0			$0	$0		$0
A07PR-01	8400	0		$0		$0		$0			$0	$0		$0
A08PR-01	8400	0		$0		$0		$0			$0	$0		$0
A09PR-01	9450	0		$0		$0		$0			$0	$0		$0
A10PR-01	5196	0		$0		$0		$0			$0	$0		$0
TOTAL	**1341290**	278,803	6,495	$5,326.00	0	$0.00	366	$5,634.00	0	$0.00	$12,201.00	$23,161.00		$6,709.13

Prineville Airport

Pavement Maintenance Cost Inventory

2004 PMP														
		TOTAL COST		$51,387										
		CS Cost		$31,966										
		ACP Cost		$0										
		WC Cost		$0										
		Surface Sealant Cost		$0										
		Other Cost		$19,421										
Section	Area (sf)	Area Maintained This Year (sf)	CS (lf)	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R10PR-01	374993	374,993	20662	$23,823		$0		$0		$0	$11,611.49	$35,435	x	$35,435
R10PR-02	57712	57,712	3180	$3,667		$0		$0		$0	$1,787	$5,454		$0
R15PR-01	114782	0		$0		$0		$0		$0	$0	$0		$0
R15PR-02	25935	0		$0		$0		$0		$0	$0	$0		$0
R15PR-03	9047	0		$0		$0		$0		$0	$0	$0		$0
R15PR-04	10423	10,423	336	$387		$0		$0		$0	$323	$710		$0
R15PR-05	7375	7,375	194	$224		$0		$0		$0	$228	$452		$0
TAPR-01	170422	0		$0		$0		$0		$0	$0	$0		$0
TAPR-02	4594	0		$0		$0		$0		$0	$0	$0		$0
TAPR-03	28209	0		$0		$0		$0		$0	$0	$0		$0
TBPR-01	7769	0		$0		$0		$0		$0	$0	$0		$0
TBPR-02	1684	0		$0		$0		$0		$0	$0	$0		$0
TCPR-01	8072	0		$0		$0		$0		$0	$0	$0		$0
TCPR-02	1845	0		$0		$0		$0		$0	$0	$0		$0
T01PR-01	104112	0		$0		$0		$0		$0	$0	$0		$0
T01PR-02	1504	0		$0		$0		$0		$0	$0	$0		$0
T02PR-01	873	0		$0		$0		$0		$0	$0	$0		$0
T02PR-02	3241	0		$0		$0		$0		$0	$0	$0		$0
T02PR-03	10912	0		$0		$0		$0		$0	$0	$0		$0
T03PR-01	3294	3,294	59	$68		$0		$0		$0	$102	$170		$0
T04PR-01	3237	3,237	153	$176		$0		$0		$0	$100	$277		$0
T05PR-01	5745	0		$0		$0		$0		$0	$0	$0		$0
T05PR-02	4294	0		$0		$0		$0		$0	$0	$0		$0
T06PR-01	6337	0		$0		$0		$0		$0	$0	$0		$0
T07PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T08PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T09PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T10PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T11PR-01	1243	0		$0		$0		$0		$0	$0	$0		$0
T12PR-01	11072	0		$0		$0		$0		$0	$0	$0		$0
A01PR-01	58041	0		$0		$0		$0		$0	$0	$0		$0
A01PR-02	50096	50,096	298	$344		$0		$0		$0	$1,551	$1,895	x	$1,895
AFPR-01	15934	15,934	95	$110		$0		$0		$0	$493	$603		$0
A03PR-01	5052	0		$0		$0		$0		$0	$0	$0		$0
A03PR-02	104137	104,137	2747	$3,167		$0		$0		$0	$3,225	$6,392		$0
A03PR-03	15750	0		$0		$0		$0		$0	$0	$0		$0
A04PR-01	32384	0		$0		$0		$0		$0	$0	$0		$0

Prineville Airport

Pavement Maintenance Cost Inventory

2004 PMP														
A05PR-01	23268	0		$0		$0		$0		$0	$0	$0		$0
A05PR-02	6400	0		$0		$0		$0		$0	$0	$0		$0
A05PR-03	2400	0		$0		$0		$0		$0	$0	$0		$0
A06PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A07PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A08PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A09PR-01	9450	0		$0		$0		$0		$0	$0	$0		$0
A10PR-01	5196	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1341290**	627,201	27,724	$31,966.00	0	$0.00	0	$0.00	0	$0.00	$19,421.00	$51,387.00		$37,329.74

Prineville Airport

Pavement Maintenance Cost Inventory

2001 PMP														
		TOTAL COST		$125,587										
		CS Cost		$17,169										
		ACP Cost		$5,068										
		WC Cost		$0										
		Surface Sealant Cost		$64,075										
		Other Cost		$39,275										
Section	Area (sf)	Area Maintained This Year (sf)	CS (sf) Weighted Avg Area	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R10PR-01	374993	374,993	374993	$10,695	374993	$4,392		$0	37499.3	$35,948	$24,465	$75,500	x	$75,500
R10PR-02	57712	57,712	57712	$1,646	57712	$676		$0	11542.4	$11,065	$3,765	$17,152		$0
R15PR-01	114782	0		$0		$0		$0		$0	$0	$0		$0
R15PR-02	25935	0		$0		$0		$0		$0	$0	$0		$0
R15PR-03	9047	0		$0		$0		$0		$0	$0	$0		$0
R15PR-04	10423	10,423	10423	$297		$0		$0	10423	$9,992	$680	$10,969		$0
R15PR-05	7375	7,375	7375	$210		$0		$0	7375	$7,070	$481	$7,761		$0
TAPR-01	170422	0		$0		$0		$0		$0	$0	$0		$0
TAPR-02	4594	0		$0		$0		$0		$0	$0	$0		$0
TAPR-03	28209	0		$0		$0		$0		$0	$0	$0		$0
TBPR-01	7769	0		$0		$0		$0		$0	$0	$0		$0
TBPR-02	1684	0		$0		$0		$0		$0	$0	$0		$0
TCPR-01	8072	0		$0		$0		$0		$0	$0	$0		$0
TCPR-02	1845	0		$0		$0		$0		$0	$0	$0		$0
T01PR-01	104112	0		$0		$0		$0		$0	$0	$0		$0
T01PR-02	1504	0		$0		$0		$0		$0	$0	$0		$0
T02PR-01	873	0		$0		$0		$0		$0	$0	$0		$0
T02PR-02	3241	0		$0		$0		$0		$0	$0	$0		$0
T02PR-03	10912	0		$0		$0		$0		$0	$0	$0		$0
T03PR-01	3294	3,294	3294	$94		$0		$0		$0	$215	$309		$0
T04PR-01	3237	0		$0		$0		$0		$0	$0	$0		$0
T05PR-01	5745	0		$0		$0		$0		$0	$0	$0		$0
T05PR-02	4294	0		$0		$0		$0		$0	$0	$0		$0
T06PR-01	6337	0		$0		$0		$0		$0	$0	$0		$0
T07PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T08PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T09PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T10PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T11PR-01	1243	0		$0		$0		$0		$0	$0	$0		$0
T12PR-01	11072	0		$0		$0		$0		$0	$0	$0		$0
A01PR-01	58041	0		$0		$0		$0		$0	$0	$0		$0
A01PR-02	50096	0		$0		$0		$0		$0	$0	$0	x	$0
AFPR-01	15934	0		$0		$0		$0		$0	$0	$0		$0
A03PR-01	5052	5,052	5052	$144		$0		$0		$0	$330	$474		$0
A03PR-02	104137	104,137	104137	$2,970		$0		$0		$0	$6,794	$9,764		$0
A03PR-03	15750	15,750	15750	$449		$0		$0		$0	$1,028	$1,477		$0
A04PR-01	32384	0		$0		$0		$0		$0	$0	$0		$0

Prineville Airport

Pavement Maintenance Cost Inventory

2001 PMP														
A05PR-01	23268	23,268	23268	$664		$0		$0		$0	$1,518	$2,182		$0
A05PR-02	6400	0		$0		$0		$0		$0	$0	$0		$0
A05PR-03	2400	0		$0		$0		$0		$0	$0	$0		$0
A06PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A07PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A08PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A09PR-01	9450	0		$0		$0		$0		$0	$0	$0		$0
A10PR-01	5196	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1341290**	602,004	602,004	$17,169.00	432,705	$5,068.00	0	$0.00	66,840	$64,075.00	$39,275.00	$125,587.00		$75,499.68

Prineville Airport

Pavement Maintenance Cost Inventory

2000 PMP														
		TOTAL COST		$7,114										
		CS Cost												
		ACP Cost												
		WC Cost												
		Surface Sealant Cost												
		Other Cost		$7,114										
Section	Area (sf)	Area Maintained This Year (sf)	CS (sf) Weighted Avg Area	CS Cost	ACP (sf) weighted avg	ACP Cost	Wide Crack (lf)	WC Cost	Surface Sealant (sf)	Surface Sealant Cost	Other Cost	Total Cost	Focus Area	FOCUS AREA Maintenance Cost
R10PR-01	374993	0		$0		$0		$0		$0	$0	$0	x	$0
R10PR-02	57712	0		$0		$0		$0		$0	$0	$0		$0
R15PR-01	114782	0		$0		$0		$0		$0	$0	$0		$0
R15PR-02	25935	0		$0		$0		$0		$0	$0	$0		$0
R15PR-03	9047	0		$0		$0		$0		$0	$0	$0		$0
R15PR-04	10423	0		$0		$0		$0		$0	$0	$0		$0
R15PR-05	7375	0		$0		$0		$0		$0	$0	$0		$0
TAPR-01	170422	0		$0		$0		$0		$0	$0	$0		$0
TAPR-02	4594	0		$0		$0		$0		$0	$0	$0		$0
TAPR-03	28209	0		$0		$0		$0		$0	$0	$0		$0
TBPR-01	7769	0		$0		$0		$0		$0	$0	$0		$0
TBPR-02	1684	0		$0		$0		$0		$0	$0	$0		$0
TCPR-01	8072	0		$0		$0		$0		$0	$0	$0		$0
TCPR-02	1845	0		$0		$0		$0		$0	$0	$0		$0
T01PR-01	104112	104,112	104112	$0		$0		$0		$0	$2,623	$2,623		$0
T01PR-02	1504	0		$0		$0		$0		$0	$0	$0		$0
T02PR-01	873	0		$0		$0		$0		$0	$0	$0		$0
T02PR-02	3241	0		$0		$0		$0		$0	$0	$0		$0
T02PR-03	10912	0		$0		$0		$0		$0	$0	$0		$0
T03PR-01	3294	0		$0		$0		$0		$0	$0	$0		$0
T04PR-01	3237	3,237	3237	$0		$0		$0		$0	$82	$82		$0
T05PR-01	5745	0		$0		$0		$0		$0	$0	$0		$0
T05PR-02	4294	0		$0		$0		$0		$0	$0	$0		$0
T06PR-01	6337	0		$0		$0		$0		$0	$0	$0		$0
T07PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T08PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T09PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T10PR-01	2314	0		$0		$0		$0		$0	$0	$0		$0
T11PR-01	1243	0		$0		$0		$0		$0	$0	$0		$0
T12PR-01	11072	0		$0		$0		$0		$0	$0	$0		$0
A01PR-01	58041	0		$0		$0		$0		$0	$0	$0		$0
A01PR-02	50096	50,096	50096	$0		$0		$0		$0	$1,262	$1,262	x	$1,262
AFPR-01	15934	0		$0		$0		$0		$0	$0	$0		$0
A03PR-01	5052	5,052	5052	$0		$0		$0		$0	$127	$127		$0
A03PR-02	104137	104,137	104137	$0		$0		$0		$0	$2,623	$2,623		$0
A03PR-03	15750	15,750	15750	$0		$0		$0		$0	$397	$397		$0
A04PR-01	32384	0		$0		$0		$0		$0	$0	$0		$0

Prineville Airport

Pavement Maintenance Cost Inventory

2000 PMP														
A05PR-01	23268	0		$0		$0		$0		$0	$0	$0		$0
A05PR-02	6400	0		$0		$0		$0		$0	$0	$0		$0
A05PR-03	2400	0		$0		$0		$0		$0	$0	$0		$0
A06PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A07PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A08PR-01	8400	0		$0		$0		$0		$0	$0	$0		$0
A09PR-01	9450	0		$0		$0		$0		$0	$0	$0		$0
A10PR-01	5196	0		$0		$0		$0		$0	$0	$0		$0
TOTAL	**1341290**	282,384	282,384	$0.00	0	$0.00	0	$0.00	0	$0.00	$7,114.00	$7,114.00		$1,262.05

WHPacific
9755 SW Barnes Road, Suite 300
Portland, OR 97225
www.whpacific.com