

Oregon

DEPARTMENT OF  
AVIATION

Pavement  
Evaluation/  
Maintenance  
Management Program  
2012



  
Pavement  
Consultants Inc.

Astoria Regional  
Airport

**Oregon Department of Aviation**

**2012 Pavement Evaluation / Maintenance  
Management Program**

**Final Report – Individual Airports  
Functional Category 2, Coastal Climatic Zone**

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# 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 completed 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 and rehabilitation projects 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 rehabilitation, 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 rehabilitation activities.

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

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

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 27 years 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, consultants and 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 ASTM International-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 individual 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 rehabilitation 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 (portland cement concrete) airport pavements, sample units typically include approximately 20 contiguous pavement slabs.

Beginning 27 years 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 rehabilitation 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, functional category, funding group, ownership and climatic region.

### ***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 is 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 is used as the zone designator.

### ***Functional Category***

Each airport is assigned a functional category based on its classification within the State System Plan. Each airport is 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, respectively. 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 are 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.

## ***Climatic Region***

Each airport in the statewide system is assigned to one of three climatic regions - eastern, central or coastal. Because climatic conditions can impact pavement performances, assigning airports to a climatic region allows pavement performance to be more accurately modeled resulting in more accurate pavement condition forecasts.

## **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 seven (7) 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), and surface treatment (ST). The surface type assigned to each pavement section 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, Federal Aviation Administration, or consultants. 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, FAA personnel and consultant staff was field-verified to ensure that each facility is 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 methodology is used to inspect Oregon's airports. Each airport is inspected on a three-year cycle thus complying with the FAA detailed inspection requirement.***

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 below.

## Detailed Inspection

### ***Methodology***

Pavement Condition Index (PCI) surveys were performed in late summer / early fall 2012 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 surface operational 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) as assigned by the Micro PAVER software. 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	Durability ("D") Crack	Climate/Durability
Depression	Other	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
Oil Spillage	Other	Pumping	Other
Patching and Utility Cut Patching	Climate/Durability	Scaling, Map Cracking, Crazeing	Other
Polished Aggregate	Other	Settlement or Faulting	Other
Raveling	Climate/Durability	Shattered Slab / Intersecting Cracks	Load
Rutting	Load	Shrinkage Cracks	Other
Shoving	Other	Spalling (Longitudinal and Transverse Joint)	Other
Slippage Cracking	Other	Spalling (Corner)	Other
Swell	Other	Alkali Silica Reaction (ASR)	Other
Weathering	Climate/Durability		

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.

**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

### ***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) in 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 summer/fall 2012.

### **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.



## 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 as its basis. The current version, Version 6.5.2, is a Windows-based program that can store pavement condition information, as well as construction and maintenance history information. Using the data stored in the Micro PAVER database the user has many capabilities, including: evaluating current condition, predicting future condition, determining maintenance and rehabilitation 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 into the State's Micro PAVER database for each inspected airport, 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 and area-weighted average PCI for 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 distress maintenance policy to the pavement network and identifies the type and cost of routine maintenance required across the entire network. Information in this report is listed by section.
Re-Inspection	Summarizes the distress data collected during the most recent inspection and provides the PCI for each sample unit inspected, as well as summary information about the section.

## 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, airport functional category and climatic region. These curves (models) are used to predict future pavement condition by assuming 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 9 show the "performance curves" used to model pavements in your airport's functional category and climatic region.

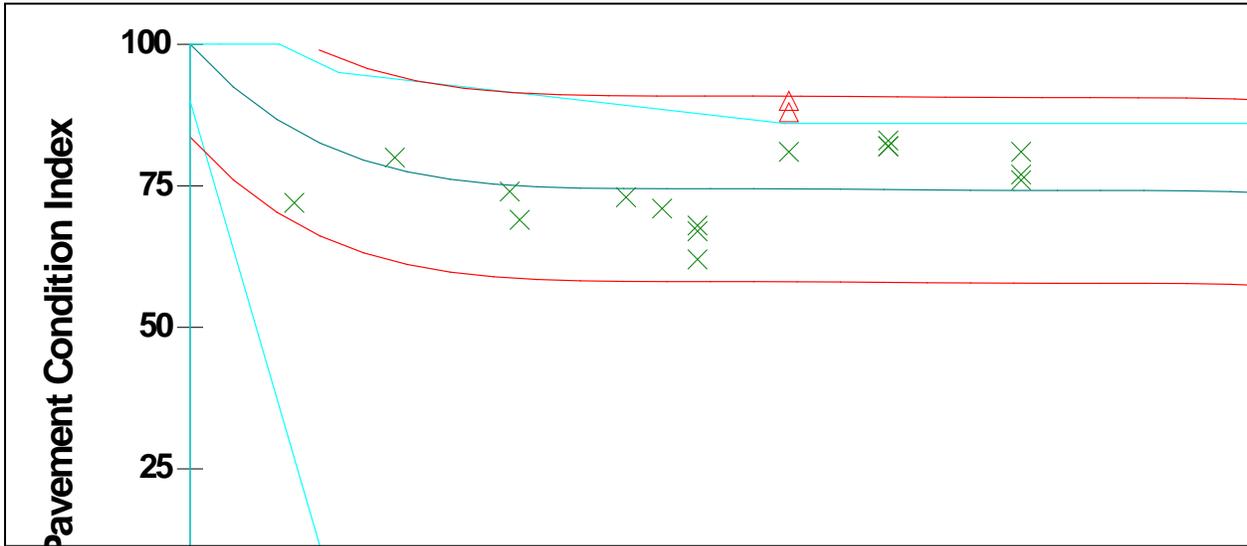
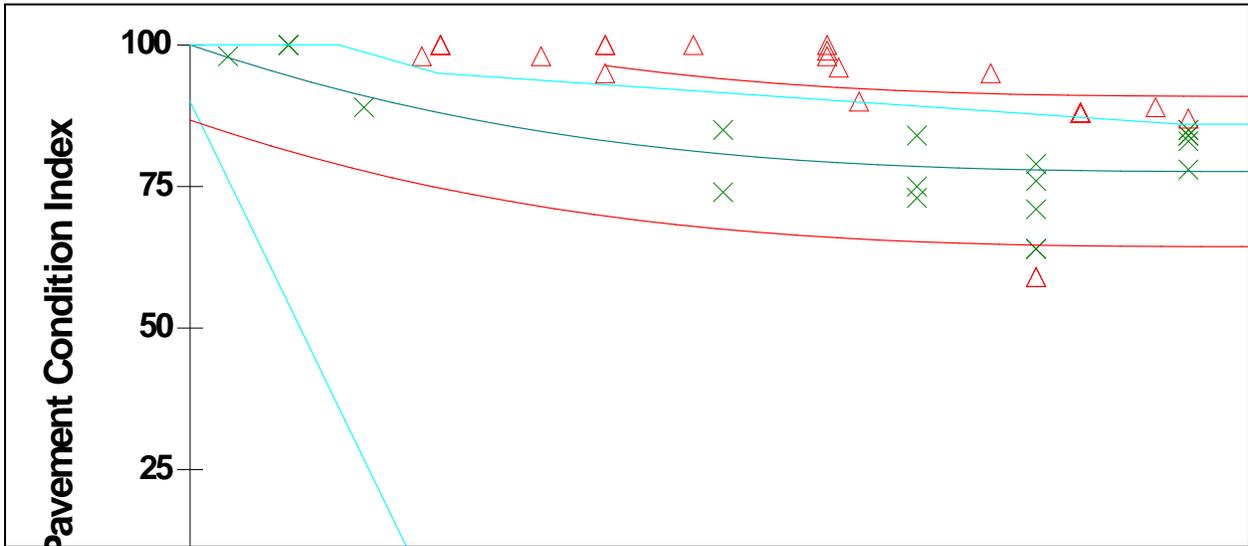
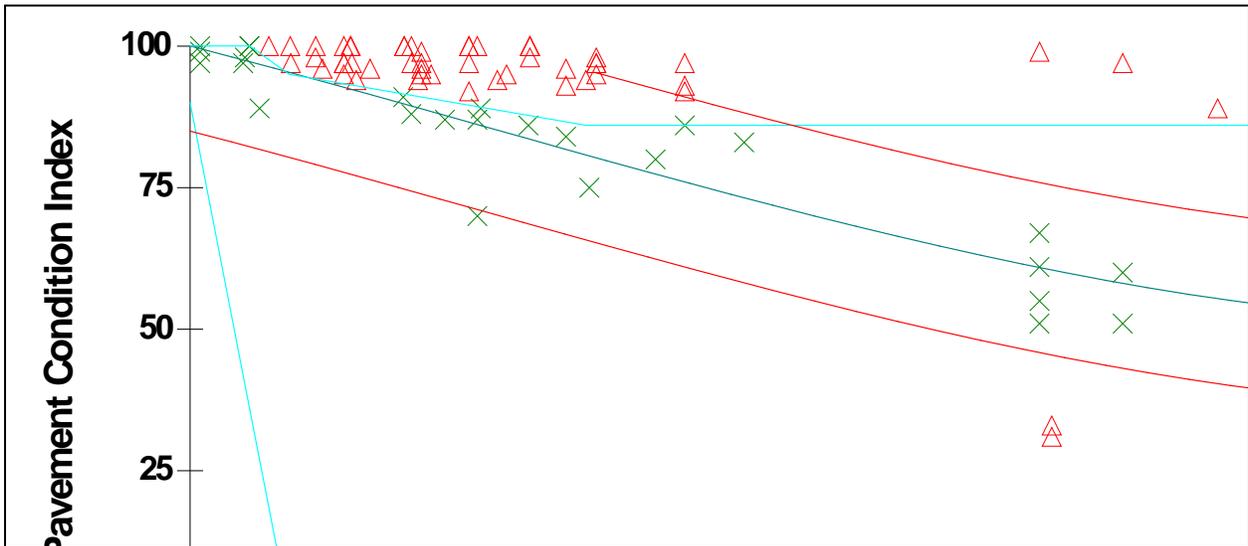


Figure 2. Performance Curve for Category 2 AC Runways – Coastal Oregon.



**Figure 3. Performance Curve for Category 2 AAC Runways – Coastal Oregon.**



**Figure 4. Performance Curve for Category 2 AC Taxiways – Coastal Oregon.**

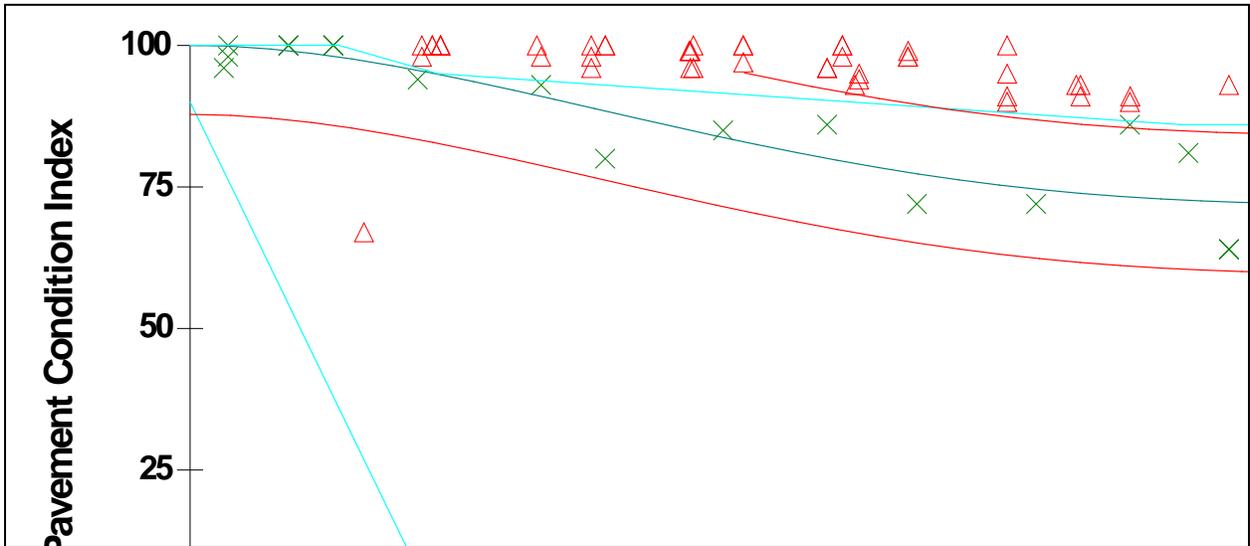


Figure 5. Performance Curve for Category 2 AAC Taxiways – Coastal Oregon.

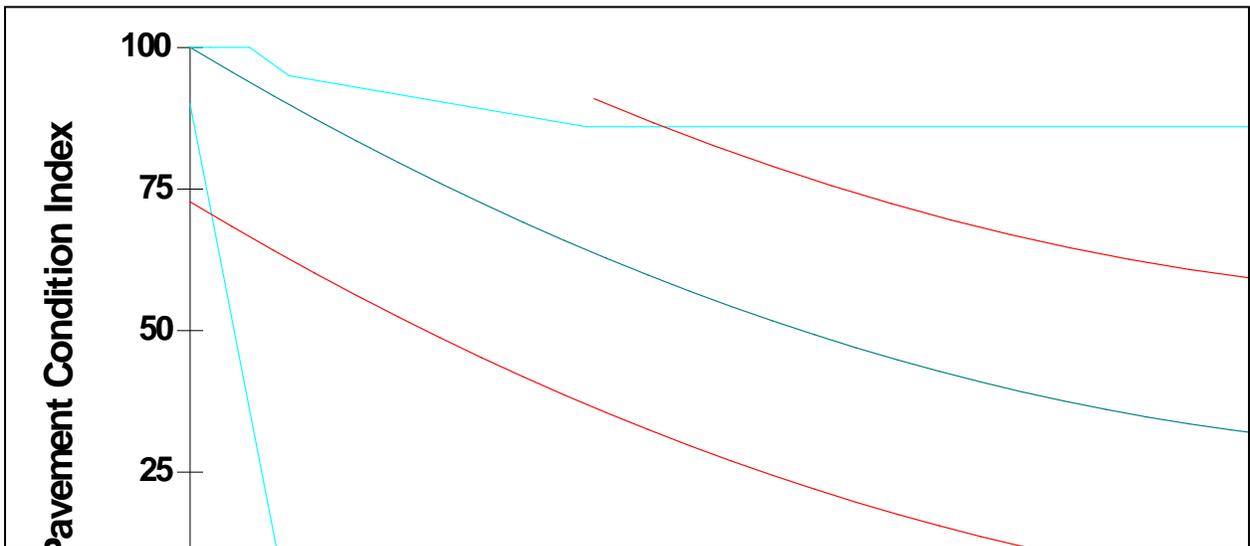
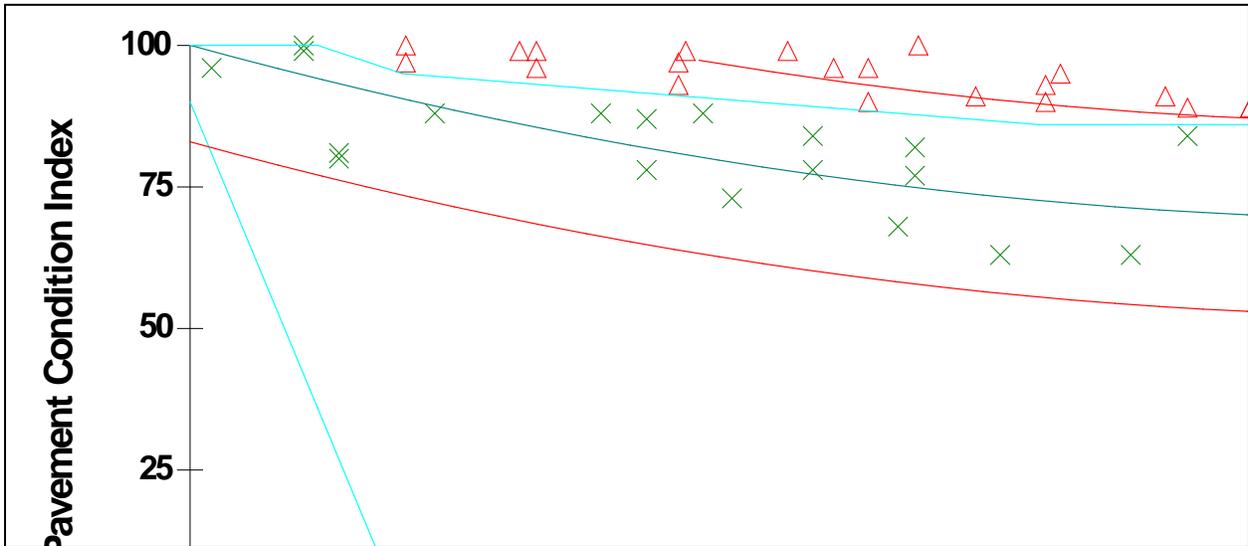
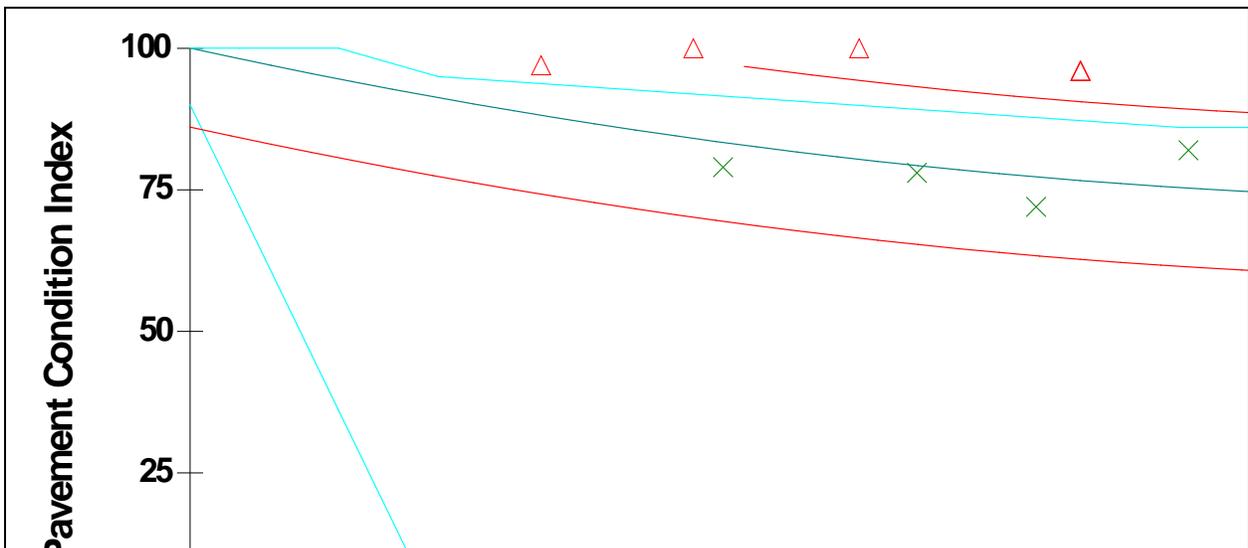


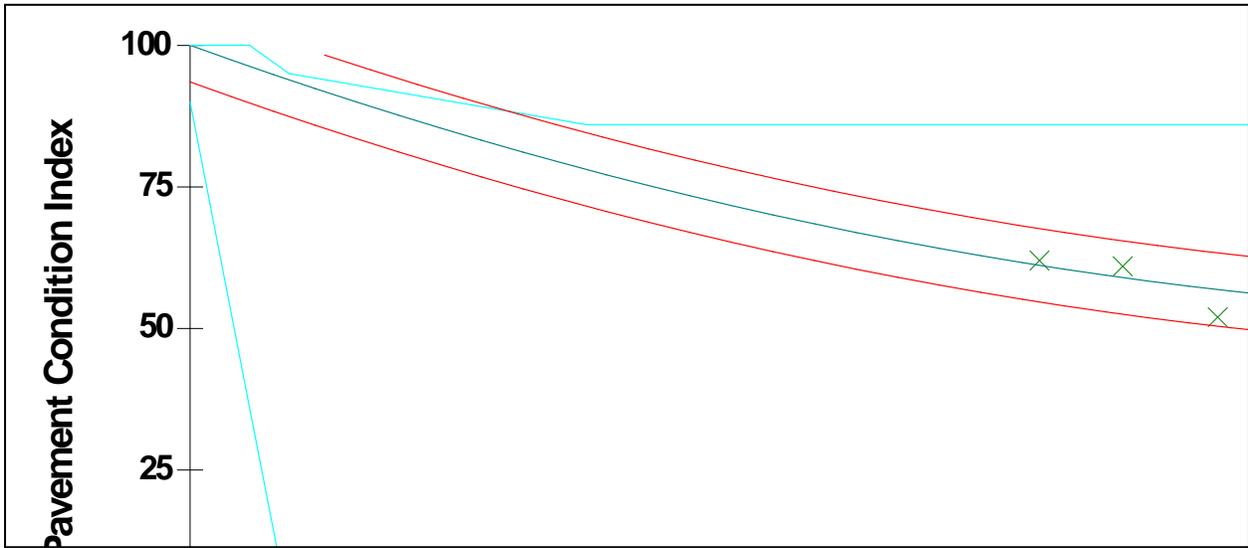
Figure 6. Performance Curve for Category 2 PCC Taxiways – Coastal Oregon.



**Figure 7. Performance Curve for Category 2 AC Aprons – Coastal Oregon.**



**Figure 8. Performance Curve for Category 2 AAC Aprons – Coastal Oregon.**



**Figure 9. Performance Curve for Category 2 PCC Aprons – Coastal Oregon.**

## 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 65, taxiways between 40 and 60, 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, such as crack sealing and patching.

The M&R Plan Report was generated for a 5-year period beginning in June 2013. 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 activity cost 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	\$2.50
Reconstruction	SF	\$7.64
Reseal PCC Joints w/ Hot Pour Sealant	LF	\$2.00

# Your Airport Report

# ASTORIA REGIONAL 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

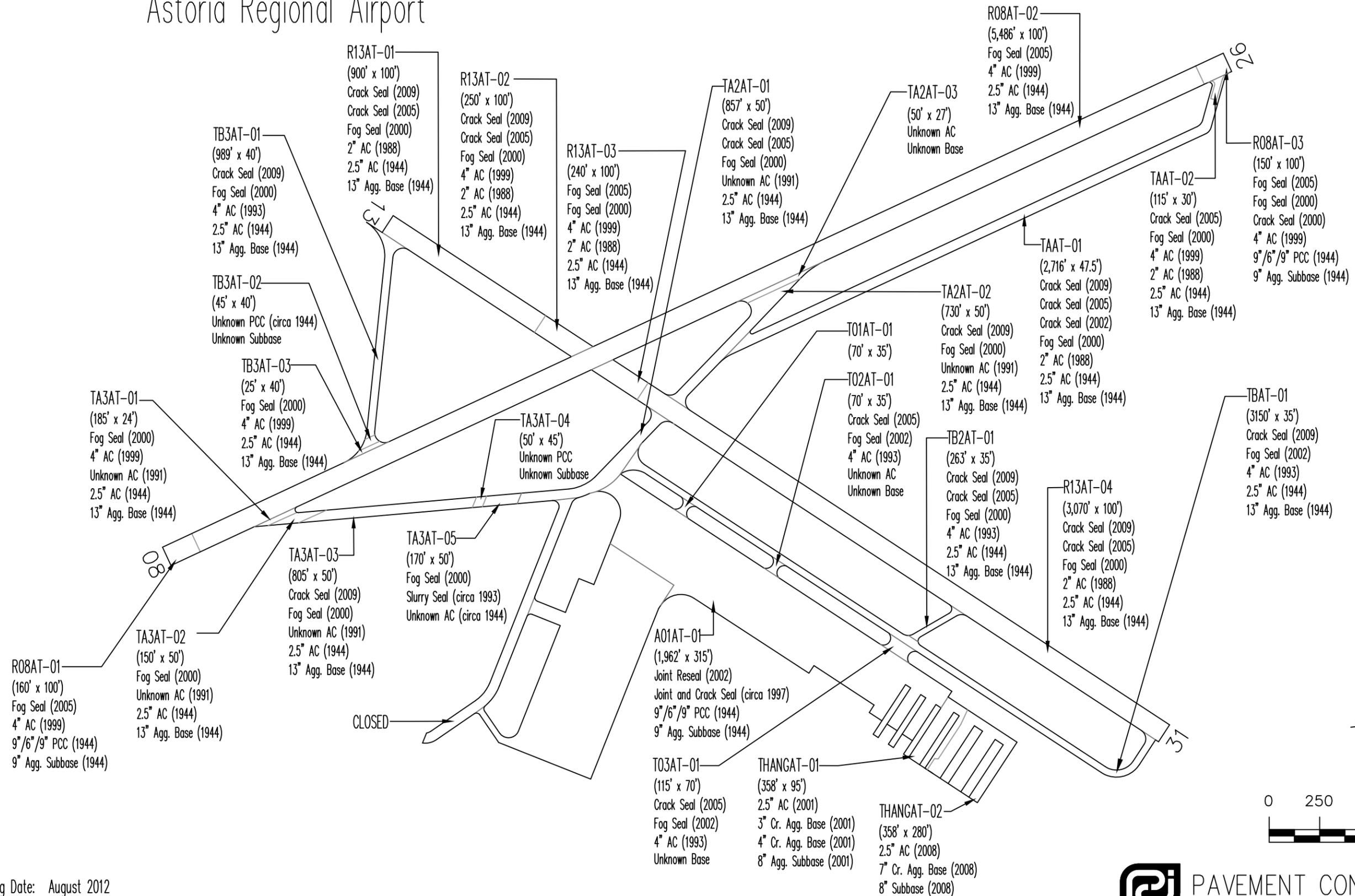
To determine how your pavements were constructed and their age, a records review was conducted. Figure AT-1 shows the records review results. This figure identifies pavement boundaries, dimensions, pavement layer types, thicknesses and dates of construction. The most recent construction date for each pavement can also be found in the Section Condition Report in Appendix 2. Figure AT-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 AT-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 Astoria Regional Airport in July 2012. 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.

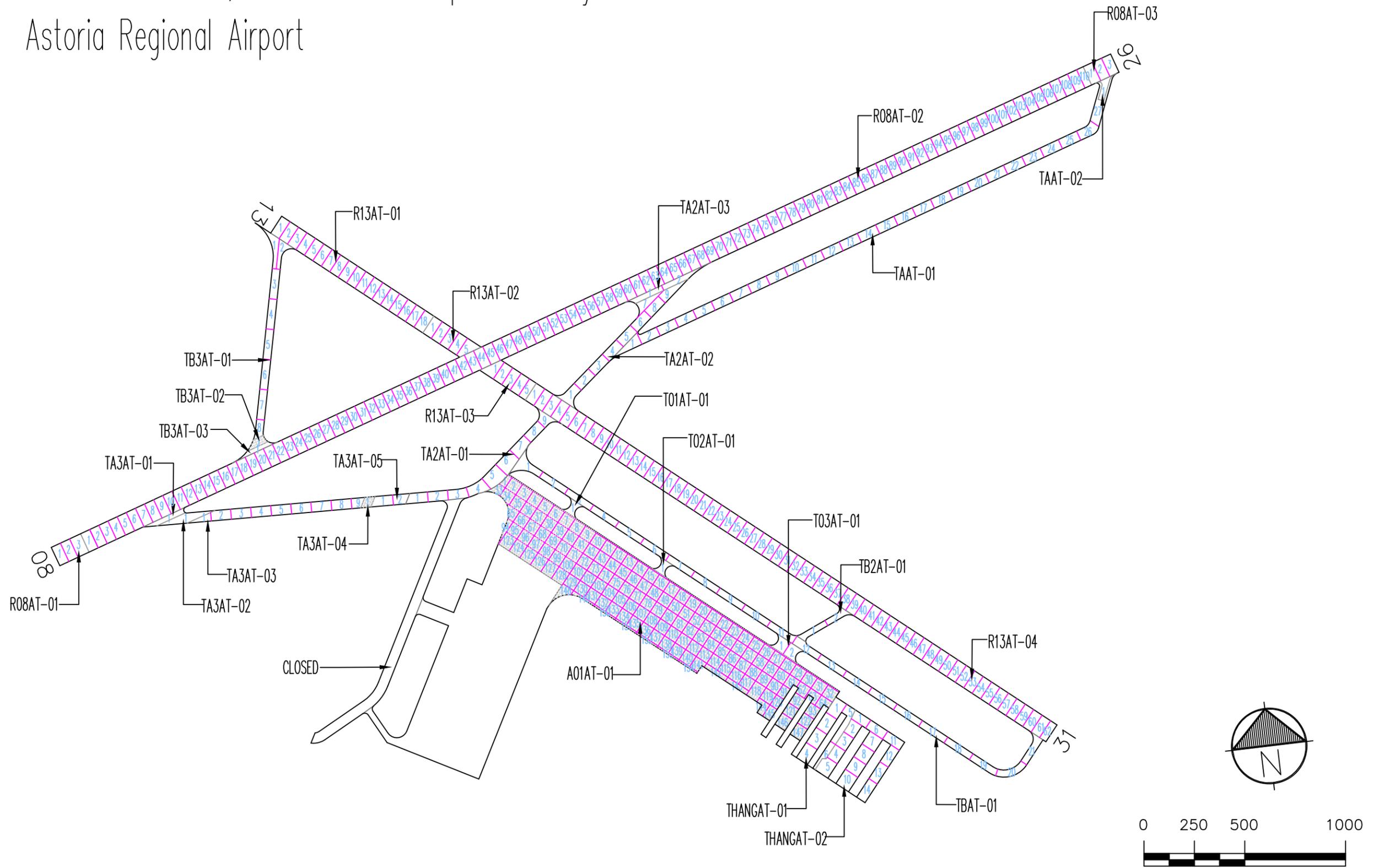
The Micro PAVER database updated during this project ensures your airport complies with the “record keeping and information retrieval” requirements of FAA’s PMMP guidelines.

Figure AT-1. Airport Layout, Dimensions and Pavement Cross-Sections.  
Astoria Regional Airport



Drawing Date: August 2012

Figure AT-2. Pavement Branch, Section and Sample Unit Layout.  
Astoria Regional Airport



## 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 2017 and 2022. 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, located in the same climatic region, and with the same surface type and use.

The ASTM Standard which governs the methodology for conducting the visual inspections was modified in 2010 and could result in changes to the Pavement Condition Index for the current inspection relative to that from the previous inspections. So a slight increase in the PCI value over the PCI values from previous inspections is possible, even if no work has been completed on the pavement.

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 AT-3.

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

Branch	Section	Inspections			Forecast	
		2004	2008	2012	2017	2022
A01AT	01	54	53	53	52	51
R08AT	01	98	100	99	95	92
R08AT	02	100	100	99	87	81
R08AT	03	100	100	100	96	93
R13AT	01	95	89	67	66	66
R13AT	02	100	95	98	87	81
R13AT	03	100	100	100	88	81
R13AT	04	94	92	66	57	48
T01AT	01	88	70	93	88	83
T02AT	01	100	87	96	91	86
T03AT	01	97	100	84	79	74
TA2AT	01	98	90	64	64	63
TA2AT	02	100	95	93	83	76
TA2AT	03	100	94	87	82	77
TA3AT	01	100	100	96	86	78
TA3AT	02	-	100	64	64	63
TA3AT	03	100	91	64	64	63
TA3AT	04	23	12	26	26	26
TA3AT	05	47	38	45	45	44

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

Branch	Section	Inspections			Forecast	
		2004	2008	2012	2017	2022
TAAT	01	82	70	64	60	57
TAAT	02	100	80	86	77	73
TB2AT	01	97	98	86	77	73
TB3AT	01	100	98	90	80	74
TB3AT	02	31	40	46	41	37
TB3AT	03	100	100	96	86	78
TBAT	01	100	99	91	81	75
THANGAT	01	100	98	100	95	91
THANGAT	02	-	100	100	95	91

Section PCIs at Astoria Regional Airport range from a low of 26 (a PCR of “Very Poor”) to a high of 100 (a PCR of “Good”). The area-weighted average PCI for all airport pavements is 76, corresponding to an overall PCR of “Satisfactory”. Figure AT-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 2004 and 2008.

The primary distresses observed during the inspection in the asphalt pavements were: longitudinal and transverse cracking, block cracking, and depressions, with isolated occurrences of raveling, rutting and patching. The primary distresses observed in the concrete pavements were: joint seal damage, shattered slabs and linear cracking.

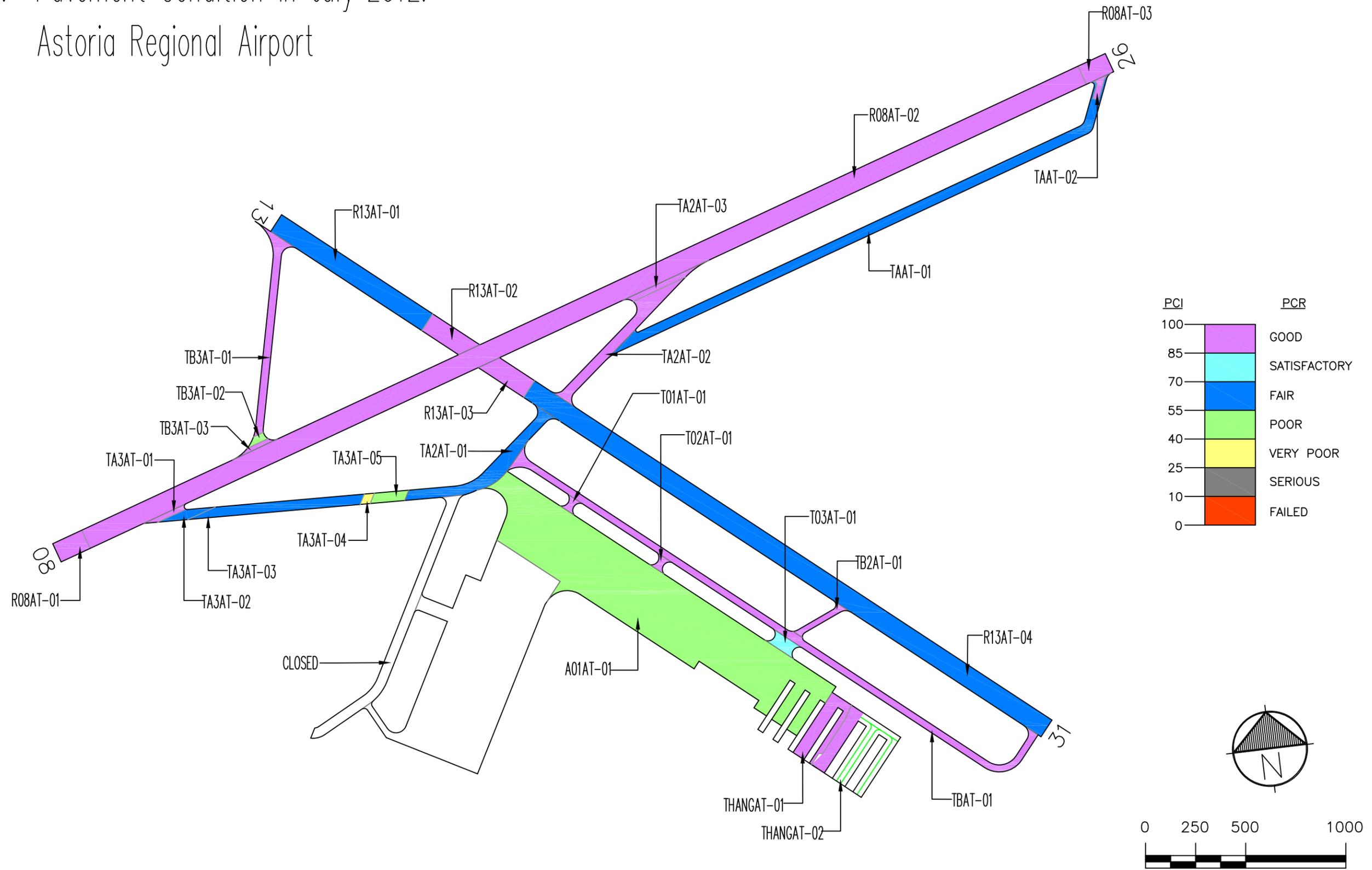
A graphical representation of the projected PCIs listed in Table 1 is shown in Figure AT-5.

## 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 distresses measured in the inspected sample units. If the repair activities identified are completed, the pavement deterioration rate will be slowed.

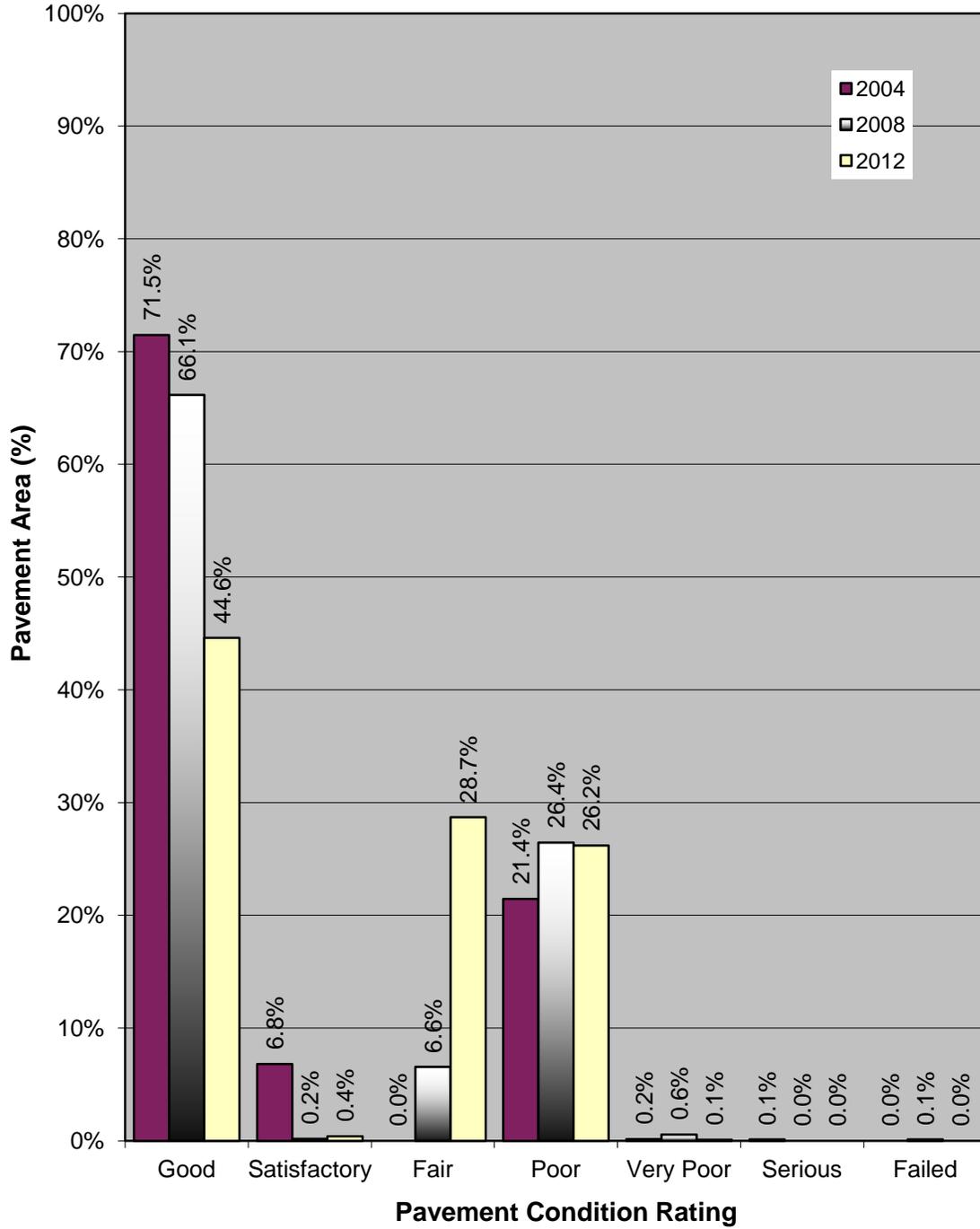
The recommended localized maintenance activities to be applied are selected by the Micro PAVER software based on a Distress Maintenance Policy established for the Oregon airport system. The report results indicate that, over your entire airport, the following quantities of localized maintenance are needed:

Figure AT-3. Pavement Condition in July 2012.  
Astoria Regional Airport

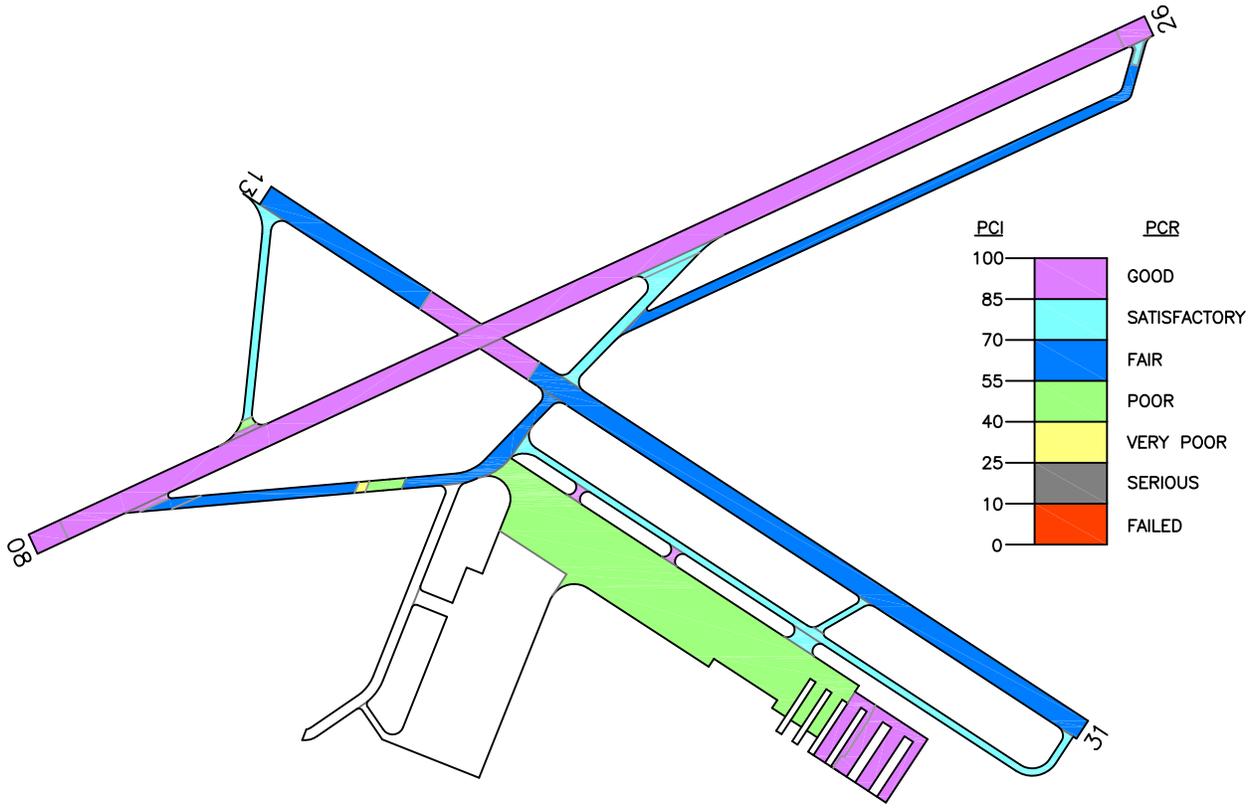


Drawing Date: August 2012

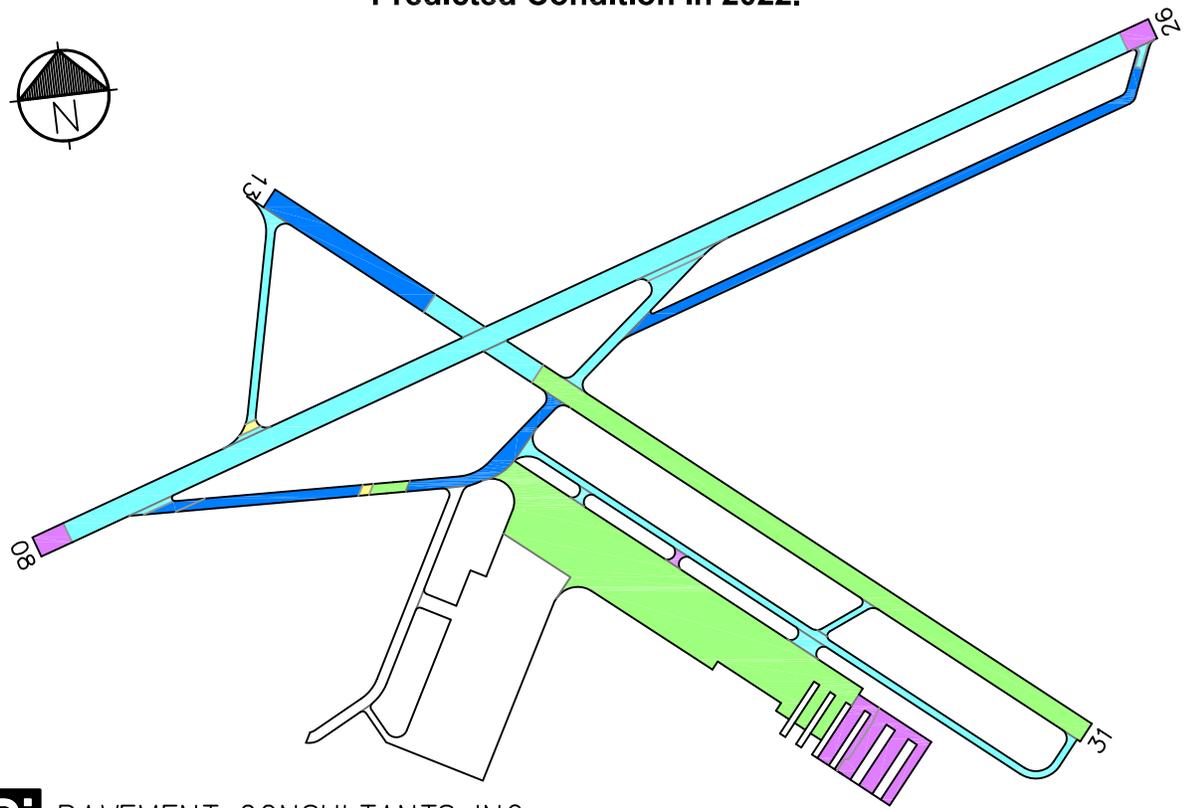
**Figure AT-4. Pavement Condition Distribution  
Astoria Regional Airport**



**Predicted Condition in 2017.**



**Predicted Condition in 2022.**



**Figure AT-5. Future Pavement Condition.**

- 212,481 linear feet of asphalt concrete crack sealing
- 71,215 square feet of portland cement concrete joint sealing/resealing

The Micro PAVER software can also identify and schedule recommended global (applied over an entire section) maintenance activities 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 2013 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 AT-6.

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

Year	Branch	Section	Action	Area (sf)	Unit Cost (\$/sf)	Total Cost (\$)
2013	R08AT	01	Slurry Seal	16,000	\$0.23	\$3,680
2013	R08AT	02	Slurry Seal	548,600	\$0.23	\$126,178
2013	R08AT	03	Slurry Seal	15,000	\$0.23	\$3,450
2013	R13AT	01	Slurry Seal	90,000	\$0.23	\$20,700
2013	R13AT	02	Slurry Seal	25,000	\$0.23	\$5,750
2013	R13AT	03	Slurry Seal	24,000	\$0.23	\$5,520
2013	R13AT	04	Slurry Seal	308,818	\$0.23	\$71,028
2013	T01AT	01	Slurry Seal	3,410	\$0.23	\$784
2013	T02AT	01	Slurry Seal	3,397	\$0.23	\$781
2013	T03AT	01	Slurry Seal	8,950	\$0.23	\$2,059
2013	TA2AT	01	Slurry Seal	44,166	\$0.23	\$10,158
2013	TA2AT	02	Slurry Seal	45,676	\$0.23	\$10,505
2013	TA2AT	03	Slurry Seal	9,413	\$0.23	\$2,165
2013	TA3AT	01	Slurry Seal	4,563	\$0.23	\$1,049
2013	TA3AT	02	Slurry Seal	7,572	\$0.23	\$1,742
2013	TA3AT	03	Slurry Seal	40,360	\$0.23	\$9,283
2013	TA3AT	04	Reconstruct with 2.5" AC, 7" Crushed Aggregate Base, 8" Aggregate Subbase	2,518	\$7.64	\$19,238
2013	TA3AT	05	Reconstruct with 2.5" AC, 7" Crushed Aggregate Base, 8" Aggregate Subbase	8,670	\$7.64	\$66,239
2013	TAAT	01	Slurry Seal	135,735	\$0.23	\$31,219

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

Year	Branch	Section	Action	Area (sf)	Unit Cost (\$/sf)	Total Cost (\$)
2013	TAAT	02	Slurry Seal	3,675	\$0.23	\$845
2013	TB2AT	01	Slurry Seal	8,603	\$0.23	\$1,979
2013	TB3AT	01	Slurry Seal	43,010	\$0.23	\$9,892
2013	TB3AT	02	Reconstruct with 2.5" AC, 7" Crushed Aggregate Base, 8" Aggregate Subbase	3,068	\$7.64	\$23,440
2013	TB3AT	03	Slurry Seal	3,373	\$0.23	\$776
2013	TBAT	01	Slurry Seal	115,815	\$0.23	\$26,637
2013	THANGAT	01	Slurry Seal	33,806	\$0.23	\$7,775
2013	THANGAT	02	Slurry Seal	72,352	\$0.23	\$16,641
<b>2013 Total</b>						<b>\$479,513</b>
<b>TOTAL</b>						<b>\$479,513</b>

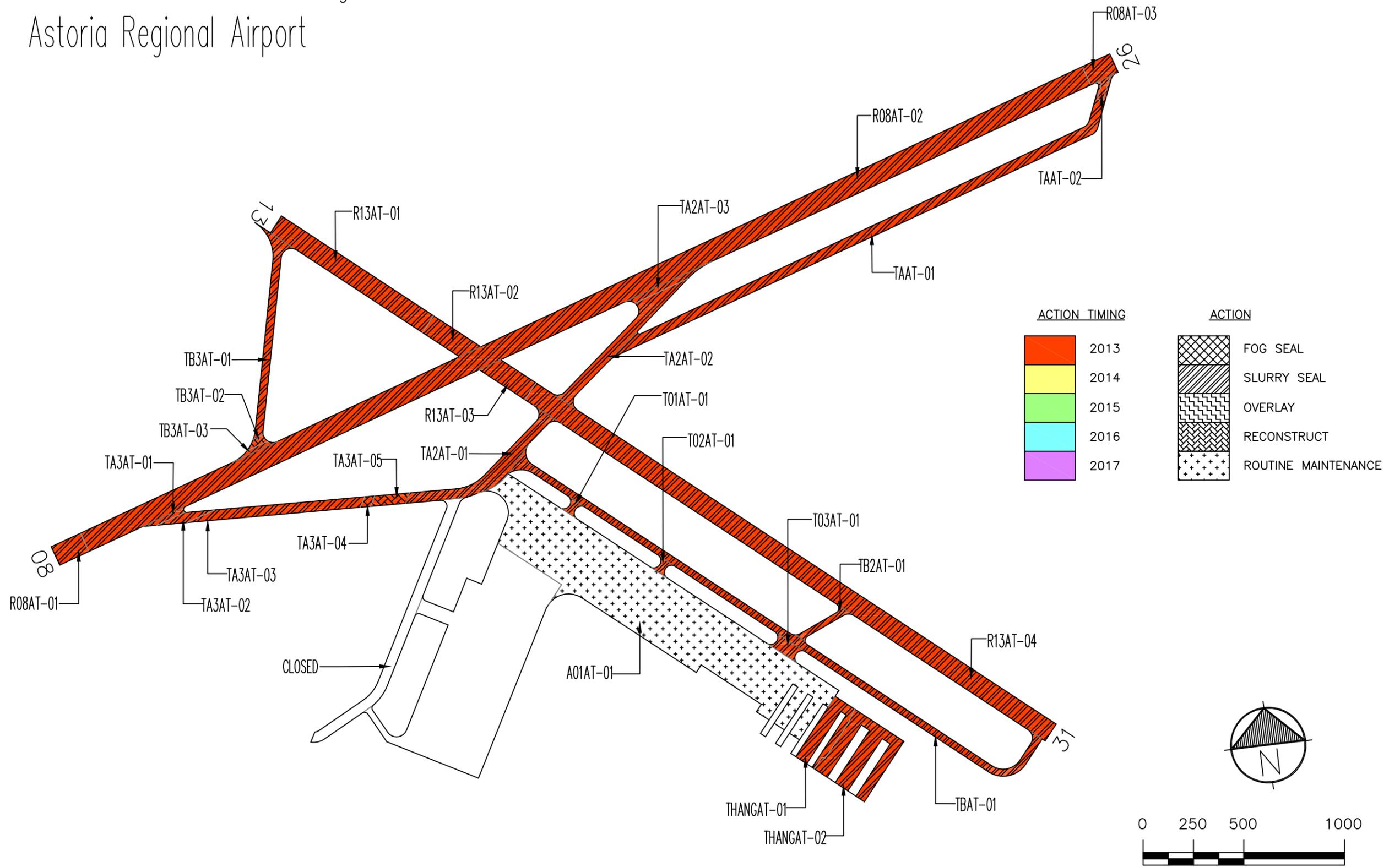
If the global maintenance and/or rehabilitation activities recommended in Table 2 are not completed, the localized maintenance activities identified in the Network Maintenance Report (Appendix 3) for that section should be done. Additionally, for those sections not listed in Table 2 as requiring global 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 in 2015.

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 AT-6. Five-Year Pavement Management Plan.  
Astoria Regional Airport



# **Appendix 1**

## **Branch Condition Report**

Date: 8 /20/2012

**Branch Condition Report**

1 of 2

Pavement Database: ODOT2012 NetworkID: Astoria

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
A01AT (Apron 01 Astoria)	1	1,962.00	315.00	561,392.00	APRON	53.00	0.00	53.00
R08AT (Runway 08/26 Astoria)	3	5,796.00	100.00	579,600.00	RUNWAY	99.33	0.47	99.03
R13AT (Runway 13/31 Astoria)	4	4,460.00	100.00	447,818.00	RUNWAY	82.75	16.27	69.81
T01AT (Taxiway 01 Astoria)	1	70.00	35.00	3,410.00	TAXIWAY	93.00	0.00	93.00
T02AT (Taxiway 02 Astoria)	1	70.00	35.00	3,397.00	TAXIWAY	96.00	0.00	96.00
T03AT (Taxiway 03 Astoria)	1	115.00	70.00	8,950.00	TAXIWAY	84.00	0.00	84.00
TA2AT (Taxiway A2 Astoria)	3	1,637.00	42.33	99,255.00	TAXIWAY	81.33	12.50	79.53
TA3AT (Taxiway A3 Astoria)	5	1,360.00	43.80	63,683.00	TAXIWAY	59.00	23.26	62.20
TAAT (Taxiway A Astoria)	2	2,831.00	40.00	139,410.00	TAXIWAY	75.00	11.00	64.58
TB2AT (Taxiway B2 Astoria)	1	263.00	35.00	8,603.00	TAXIWAY	86.00	0.00	86.00
TB3AT (Taxiway B3 Astoria)	3	1,059.00	40.00	49,451.00	TAXIWAY	77.33	22.29	87.68
TBAT (Taxiway B Astoria)	1	3,150.00	35.00	115,815.00	TAXIWAY	91.00	0.00	91.00
THANGAT (Hangar Taxiway Astoria)	2	713.00	197.50	106,158.00	TAXIWAY	100.00	0.00	100.00

<b>Use Category</b>	<b>Number of Sections</b>	<b>Total Area (SqFt)</b>	<b>Arithmetic Average PCI</b>	<b>Average PCI STD.</b>	<b>Weighted Average PCI</b>
APRON	1	561,392.00	53.00	0.00	53.00
RUNWAY	7	1,027,418.00	89.86	14.79	86.29
TAXIWAY	20	598,132.00	78.55	20.67	81.06
<b>All</b>	<b>28</b>	<b>2,186,942.00</b>	<b>80.46</b>	<b>20.28</b>	<b>76.31</b>

**Appendix 2**  
**Section Condition Report**

Date: 8 /20/2012

## Section Condition Report

1 of 3

Pavement Database: ODOT2012 NetworkID: Astoria

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
A01AT (Apron 01 Astoria)	01	08/02/1944	PCC	APRON	P	0	561,392.00	07/25/2012	68	53.00
R08AT (Runway 08/26 Astoria)	01	09/13/1999	APC	RUNWAY	P	0	16,000.00	07/25/2012	13	99.00
R08AT (Runway 08/26 Astoria)	02	09/13/1999	AAC	RUNWAY	P	0	548,600.00	07/25/2012	13	99.00
R08AT (Runway 08/26 Astoria)	03	09/13/1999	APC	RUNWAY	P	0	15,000.00	07/25/2012	13	100.00
R13AT (Runway 13/31 Astoria)	01	08/01/1988	AAC	RUNWAY	P	0	90,000.00	07/25/2012	24	67.00
R13AT (Runway 13/31 Astoria)	02	09/13/1999	AAC	RUNWAY	P	0	25,000.00	07/25/2012	13	98.00
R13AT (Runway 13/31 Astoria)	03	09/13/1999	AAC	RUNWAY	P	0	24,000.00	07/25/2012	13	100.00
R13AT (Runway 13/31 Astoria)	04	08/02/1944	AC	RUNWAY	P	0	308,818.00	07/25/2012	68	66.00
T01AT (Taxiway 01 Astoria)	01	08/01/1993	AC	TAXIWAY	P	0	3,410.00	07/25/2012	19	93.00
T02AT (Taxiway 02 Astoria)	01	08/01/1993	AC	TAXIWAY	P	0	3,397.00	07/25/2012	19	96.00
T03AT (Taxiway 03 Astoria)	01	08/01/1993	AC	TAXIWAY	P	0	8,950.00	07/25/2012	19	84.00
TA2AT (Taxiway A2 Astoria)	01	08/01/1991	AAC	TAXIWAY	P	0	44,166.00	07/25/2012	21	64.00
TA2AT (Taxiway A2 Astoria)	02	08/01/1991	AAC	TAXIWAY	P	0	45,676.00	07/25/2012	21	93.00
TA2AT (Taxiway A2 Astoria)	03	09/13/1999	AC	TAXIWAY	P	0	9,413.00	07/25/2012	13	87.00
TA3AT (Taxiway A3 Astoria)	01	09/13/1999	AAC	TAXIWAY	P	0	4,563.00	07/25/2012	13	96.00
TA3AT (Taxiway A3 Astoria)	02	08/01/1991	AAC	TAXIWAY	P	0	7,572.00	07/25/2012	21	64.00
TA3AT (Taxiway A3 Astoria)	03	08/01/1991	AAC	TAXIWAY	P	0	40,360.00	07/25/2012	21	64.00
TA3AT (Taxiway A3 Astoria)	04	08/01/1944	PCC	TAXIWAY	P	0	2,518.00	07/25/2012	68	26.00
TA3AT (Taxiway A3 Astoria)	05	08/01/1944	AC	TAXIWAY	P	0	8,670.00	07/25/2012	68	45.00
TAAT (Taxiway A Astoria)	01	08/02/1944	AC	TAXIWAY	P	0	135,735.00	07/25/2012	68	64.00
TAAT (Taxiway A Astoria)	02	09/13/1999	AAC	TAXIWAY	P	0	3,675.00	07/25/2012	13	86.00
TB2AT (Taxiway B2 Astoria)	01	08/01/1993	AAC	TAXIWAY	P	0	8,603.00	07/25/2012	19	86.00
TB3AT (Taxiway B3 Astoria)	01	08/01/1993	AAC	TAXIWAY	P	0	43,010.00	07/25/2012	19	90.00
TB3AT (Taxiway B3 Astoria)	02	08/01/1944	PCC	TAXIWAY	P	0	3,068.00	07/25/2012	68	46.00
TB3AT (Taxiway B3 Astoria)	03	09/13/1999	AAC	TAXIWAY	P	0	3,373.00	07/25/2012	13	96.00
TBAT (Taxiway B Astoria)	01	08/01/1993	AAC	TAXIWAY	P	0	115,815.00	07/28/2012	19	91.00

Date: 8 /20/2012

# Section Condition Report

2 of 3

Pavement Database: ODOT2012 NetworkID: Astoria

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
THANGAT (Hangar Taxiway Astoria)	01	10/04/2001	AC	TAXIWAY	S	0	33,806.00	07/25/2012	11	100.00
THANGAT (Hangar Taxiway Astoria)	02	08/03/2008	AC	TAXIWAY	S	0	72,352.00	07/25/2012	4	100.00

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
03-05	4.00	72,352.00	1	100.00	0.00	100.00
11-15	12.80	683,430.00	10	96.10	5.28	98.80
16-20	19.00	183,185.00	6	90.00	4.43	90.32
21-25	21.60	227,774.00	5	70.40	12.70	71.00
over 40	68.00	1,020,201.00	6	50.00	14.68	58.24
All	27.21	2,186,942.00	28	80.46	20.65	76.31

**Appendix 3**  
**Network Maintenance Report**

**Network Maintenance Report  
Astoria Regional Airport**

Network	Branch	Section	Distress	Severity	Action	Maint. Quantity	Unit	Unit Cost	Work Cost	Total Cost
Astoria	A01AT	1	LINEAR CR	M	Crack Sealing - PCC	20,401	Ft	\$6.00	\$122,407.14	\$354,873.40
Astoria	A01AT	1	SHAT. SLAB	M	Crack Sealing - PCC	13,820	Ft	\$6.00	\$82,920.97	
Astoria	A01AT	1	JT SEAL DMG	M	Joint Sealing - Bituminous	74,772	Ft	\$2.00	\$149,545.29	
Astoria	R08AT	1	L & T CR	L	Crack Sealing - AC	12	Ft	\$0.75	\$9.00	\$9.00
Astoria	R08AT	2	L & T CR	L	Crack Sealing - AC	345	Ft	\$0.75	\$258.62	\$258.62
Astoria	R13AT	1	BLOCK CR	L	Crack Sealing - AC	22,500	Ft	\$0.75	\$16,875.09	\$16,875.09
Astoria	R13AT	2	L & T CR	L	Crack Sealing - AC	18	Ft	\$0.75	\$13.75	\$13.75
Astoria	R13AT	4	BLOCK CR	L	Crack Sealing - AC	76,871	Ft	\$0.75	\$57,652.53	\$57,652.53
Astoria	T01AT	1	L & T CR	L	Crack Sealing - AC	63	Ft	\$0.75	\$47.25	\$47.25
Astoria	T02AT	1	L & T CR	L	Crack Sealing - AC	22	Ft	\$0.75	\$16.50	\$16.50
Astoria	T03AT	1	L & T CR	M	Crack Sealing - AC	103	Ft	\$0.75	\$77.25	\$116.25
Astoria	T03AT	1	L & T CR	L	Crack Sealing - AC	52	Ft	\$0.75	\$39.00	
Astoria	TA2AT	1	BLOCK CR	L	Crack Sealing - AC	13,462	Ft	\$0.75	\$10,096.23	\$10,096.23
Astoria	TA2AT	2	L & T CR	L	Crack Sealing - AC	429	Ft	\$0.75	\$322.01	\$322.01
Astoria	TA2AT	3	L & T CR	L	Crack Sealing - AC	291	Ft	\$0.75	\$218.10	\$218.10
Astoria	TA3AT	1	L & T CR	L	Crack Sealing - AC	24	Ft	\$0.75	\$18.00	\$18.00
Astoria	TA3AT	2	BLOCK CR	L	Crack Sealing - AC	2,308	Ft	\$0.75	\$1,730.94	\$1,730.94
Astoria	TA3AT	3	BLOCK CR	L	Crack Sealing - AC	12,302	Ft	\$0.75	\$9,226.18	\$9,226.18
Astoria	TA3AT	4	SHAT. SLAB	M	Crack Sealing - PCC	526	Ft	\$6.00	\$3,154.67	\$3,655.98
Astoria	TA3AT	4	JT SEAL DMG	M	Joint Sealing - Bituminous	251	Ft	\$2.00	\$501.31	
Astoria	TA3AT	5	BLOCK CR	M	Crack Sealing - AC	2,643	Ft	\$0.75	\$1,981.94	\$1,981.94
Astoria	TAAT	1	BLOCK CR	L	Crack Sealing - AC	41,372	Ft	\$0.75	\$31,028.64	\$31,028.64
Astoria	TAAT	2	L & T CR	L	Crack Sealing - AC	148	Ft	\$0.75	\$111.00	\$111.00
Astoria	TB2AT	1	L & T CR	L	Crack Sealing - AC	407	Ft	\$0.75	\$305.25	\$305.25
Astoria	TB3AT	1	L & T CR	L	Crack Sealing - AC	1,322	Ft	\$0.75	\$991.16	\$991.16
Astoria	TB3AT	2	LINEAR CR	M	Crack Sealing - PCC	105	Ft	\$6.00	\$630.93	\$1,644.90
Astoria	TB3AT	2	SHAT. SLAB	M	Crack Sealing - PCC	105	Ft	\$6.00	\$630.93	
Astoria	TB3AT	2	JT SEAL DMG	M	Joint Sealing - Bituminous	192	Ft	\$2.00	\$383.04	
Astoria	TB3AT	3	L & T CR	L	Crack Sealing - AC	15	Ft	\$0.75	\$11.25	\$11.25
Astoria	TBAT	1	L & T CR	L	Crack Sealing - AC	2,815	Ft	\$0.75	\$2,111.12	\$2,111.12
									<b>TOTAL</b>	<b>\$493,315.09</b>

**Appendix 4**  
**Re-Inspection Report**

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: A01AT Name: Apron 01 Astoria Use: APRON Area: 561,392.00SqFt

Section: 01 of 1 From: US Coast Guard Ramp To: Office, FBO, T-Hangars Last Const.: 08/02/1944  
Surface: PCC Family: OR-Cat2-PCC-Coast-AP-2012 Zone: KAST Category: A Rank: P  
Area: 561,392.00SqFt Length: 1,962.00Ft Width: 315.00Ft  
Slabs: 2,994 Slab Width: 12.50Ft Slab Length: 15.00Ft Joint Length: 88,367.40Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 147 Surveyed: 13

Conditions: PCI: 53

Sample Number: 002 Type: R Area: 20.00Slabs PCI = 41  
65 JOINT SEAL DAMAGE L 20.00 Slabs  
72 SHATTERED SLAB L 20.00 Slabs

Sample Number: 008 Type: R Area: 20.00Slabs PCI = 41  
65 JOINT SEAL DAMAGE L 20.00 Slabs  
72 SHATTERED SLAB L 20.00 Slabs

Sample Number: 014 Type: R Area: 20.00Slabs PCI = 67  
65 JOINT SEAL DAMAGE M 20.00 Slabs  
63 LINEAR CRACKING L 6.00 Slabs  
63 LINEAR CRACKING M 2.00 Slabs

Sample Number: 026 Type: R Area: 20.00Slabs PCI = 40  
65 JOINT SEAL DAMAGE M 20.00 Slabs  
63 LINEAR CRACKING M 5.00 Slabs  
72 SHATTERED SLAB M 3.00 Slabs

Sample Number: 029 Type: R Area: 20.00Slabs PCI = 23  
63 LINEAR CRACKING M 7.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs  
72 SHATTERED SLAB M 6.00 Slabs

Sample Number: 032 Type: R Area: 20.00Slabs PCI = 29  
72 SHATTERED SLAB M 12.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs

Sample Number: 056 Type: R Area: 20.00Slabs PCI = 43  
63 LINEAR CRACKING M 14.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs

Sample Number: 072 Type: R Area: 20.00Slabs PCI = 41  
63 LINEAR CRACKING M 16.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs

Sample Number: 096 Type: R Area: 20.00Slabs PCI = 52  
63 LINEAR CRACKING M 9.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs

Sample Number: 108 Type: R Area: 20.00Slabs PCI = 67  
63 LINEAR CRACKING M 4.00 Slabs  
65 JOINT SEAL DAMAGE M 20.00 Slabs

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

---

Sample Number: 112	Type: R	Area:	20.00Slabs	PCI = 71
63 LINEAR CRACKING		M	3.00 Slabs	
65 JOINT SEAL DAMAGE		M	20.00 Slabs	

---

Sample Number: 115	Type: R	Area:	20.00Slabs	PCI = 84
63 LINEAR CRACKING		M	1.00 Slabs	
65 JOINT SEAL DAMAGE		M	20.00 Slabs	

---

Sample Number: 138	Type: R	Area:	20.00Slabs	PCI = 84
63 LINEAR CRACKING		M	1.00 Slabs	
65 JOINT SEAL DAMAGE		M	20.00 Slabs	

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

---

Network: Astoria Name: Astoria Regional

---

Branch: R08AT Name: Runway 08/26 Astoria Use: RUNWAY Area: 579,600.00SqFt

---

Section: 01 of 3 From: Runway 08 End (West) To: Section 02 Last Const.: 09/13/1999  
Surface: APC Family: OR-Cat2-APC-Coast-RW-2012 Zone: KAST Category: A Rank: P  
Area: 16,000.00SqFt Length: 160.00Ft Width: 100.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 3 Surveyed: 3

Conditions: PCI : 99

---

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 97  
48 LONGITUDINAL/TRANSVERSE CRACKING L 12.00 Ft

---

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

---

Sample Number: 03 Type: R Area: 6,000.00SqFt PCI = 100  
<NO DISTRESSES>

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: R08AT Name: Runway 08/26 Astoria Use: RUNWAY Area: 579,600.00SqFt

Section: 02 of 3 From: Section 01 To: Section 03 Last Const.: 09/13/1999  
Surface: AAC Family: OR-Cat2-AAC-Coast-RW-2012 Zone: KAST Category: A Rank: P  
Area: 548,600.00SqFt Length: 5,486.00Ft Width: 100.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 110 Surveyed: 7

Conditions: PCI: 99

Sample Number: 04 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 15 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 26 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 37 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 48 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 62 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 106 Type: R Area: 5,000.00SqFt PCI = 93  
48 LONGITUDINAL/TRANSVERSE CRACKING L 22.00 Ft  
45 DEPRESSION L 22.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

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Branch: R08AT Name: Runway 08/26 Astoria Use: RUNWAY Area: 579,600.00SqFt

---

Section: 03 of 3 From: Section 02 To: Runway 26 End (East) Last Const.: 09/13/1999  
Surface: APC Family: OR-Cat2-APC-Coast-RW-2012 Zone: KAST Category: A Rank: P  
Area: 15,000.00SqFt Length: 150.00Ft Width: 100.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 3 Surveyed: 3

Conditions: PCI: 100

---

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

---

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

---

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: R13AT Name: Runway 13/31 Astoria Use: RUNWAY Area: 447,818.00SqFt

Section: 01 of 4 From: Runway 13 End To: Section 02 Last Const.: 08/01/1988

Surface: AAC Family: OR-Cat2-AAC-Coast-RW-2012 Zone: KAST Category: A Rank: P

Area: 90,000.00SqFt Length: 900.00Ft Width: 100.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 18 Surveyed: 5

Conditions: PCI: 67

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 67  
43 BLOCK CRACKING L 4,000.00 SqFt

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 68  
43 BLOCK CRACKING L 3,500.00 SqFt

Sample Number: 10 Type: R Area: 5,000.00SqFt PCI = 66  
43 BLOCK CRACKING L 4,200.00 SqFt

Sample Number: 14 Type: R Area: 5,000.00SqFt PCI = 66  
43 BLOCK CRACKING L 4,500.00 SqFt

Sample Number: 18 Type: R Area: 5,237.00SqFt PCI = 66  
43 BLOCK CRACKING L 4,500.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

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Branch: R13AT Name: Runway 13/31 Astoria Use: RUNWAY Area: 447,818.00SqFt

---

Section: 02 of 4 From: Section 01 To: Runway 08/26 Last Const.: 09/13/1999  
Surface: AAC Family: OR-Cat2-AAC-Coast-RW-2012 Zone: KAST Category: A Rank: P  
Area: 25,000.00SqFt Length: 250.00Ft Width: 100.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 5 Surveyed: 3

Conditions: PCI: 98

---

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 97  
48 LONGITUDINAL/TRANSVERSE CRACKING L 11.00 Ft

---

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>

---

Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 96  
45 DEPRESSION L 30.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: R13AT Name: Runway 13/31 Astoria Use: RUNWAY Area: 447,818.00SqFt

Section: 03 of 4 From: Runway 08/26 To: Section 04 Last Const.: 09/13/1999

Surface: AAC Family: OR-Cat2-AAC-Coast-RW-2012 Zone: KAST Category: A Rank: P

Area: 24,000.00SqFt Length: 240.00Ft Width: 100.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 5 Surveyed: 3

Conditions: PCI: 100

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 100  
45 DEPRESSION L 5.00 SqFt

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 100  
45 DEPRESSION L 5.00 SqFt

Sample Number: 05 Type: R Area: 4,000.00SqFt PCI = 100  
45 DEPRESSION L 5.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: R13AT Name: Runway 13/31 Astoria Use: RUNWAY Area: 447,818.00SqFt

Section: 04 of 4 From: Section 03 To: Section 05 Last Const.: 08/02/1944

Surface: AC Family: OR-Cat2-AC-Coast-RW-2012 Zone: KAST Category: A Rank: P

Area: 308,818.00SqFt Length: 3,070.00Ft Width: 100.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 58 Surveyed: 6

Conditions: PCI : 66

Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 62  
43 BLOCK CRACKING L 4,000.00 SqFt  
50 PATCHING L 300.00 SqFt

Sample Number: 18 Type: R Area: 5,000.00SqFt PCI = 66  
43 BLOCK CRACKING L 4,500.00 SqFt

Sample Number: 31 Type: R Area: 5,000.00SqFt PCI = 67  
43 BLOCK CRACKING L 4,000.00 SqFt

Sample Number: 39 Type: R Area: 5,000.00SqFt PCI = 67  
43 BLOCK CRACKING L 4,000.00 SqFt

Sample Number: 44 Type: R Area: 5,000.00SqFt PCI = 67  
43 BLOCK CRACKING L 4,000.00 SqFt

Sample Number: 57 Type: R Area: 5,000.00SqFt PCI = 67  
43 BLOCK CRACKING L 4,000.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

---

Branch: T01AT Name: Taxiway 01 Astoria Use: TAXIWAY Area: 3,410.00SqFt

---

Section: 01 of 1 From: Taxiway B To: US Coast Guard Ramp Last Const.: 08/01/1993

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 3,410.00SqFt Length: 70.00Ft Width: 35.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI : 93

---

Sample Number: 01 Type: R Area: 3,410.00SqFt PCI = 93

48 LONGITUDINAL/TRANSVERSE CRACKING L 63.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

---

Network: Astoria Name: Astoria Regional

---

Branch: T02AT Name: Taxiway 02 Astoria Use: TAXIWAY Area: 3,397.00SqFt

---

Section: 01 of 1 From: Taxiway B To: Apron 01 Last Const.: 08/01/1993

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 3,397.00SqFt Length: 70.00Ft Width: 35.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI : 96

---

Sample Number: 01 Type: R Area: 3,397.00SqFt PCI = 96

48 LONGITUDINAL/TRANSVERSE CRACKING L 22.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

---

Branch: T03AT Name: Taxiway 03 Astoria Use: TAXIWAY Area: 8,950.00SqFt

---

Section: 01 of 1 From: Taxiway B To: Apron 01 Last Const.: 08/01/1993

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 8,950.00SqFt Length: 115.00Ft Width: 70.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 84

---

Sample Number: 01 Type: R Area: 8,950.00SqFt PCI = 84

48 LONGITUDINAL/TRANSVERSE CRACKING L 52.00 Ft

48 LONGITUDINAL/TRANSVERSE CRACKING M 103.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TA2AT Name: Taxiway A2 Astoria Use: TAXIWAY Area: 99,255.00SqFt

Section: 01 of 3 From: Taxiway A3 To: Runway 13/31 Last Const.: 08/01/1991

Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 44,166.00SqFt Length: 857.00Ft Width: 50.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 9 Surveyed: 4

Conditions: PCI: 64

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TA2AT Name: Taxiway A2 Astoria Use: TAXIWAY Area: 99,255.00SqFt

Section: 02 of 3 From: Runway 13/31 To: Section 03 Last Const.: 08/01/1991  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 45,676.00SqFt Length: 730.00Ft Width: 50.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 9 Surveyed: 4

Conditions: PCI: 93

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 92  
45 DEPRESSION L 60.00 SqFt

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 93  
48 LONGITUDINAL/TRANSVERSE CRACKING L 67.00 Ft  
52 RAVELING L 7.00 SqFt

Sample Number: 04 Type: R Area: 5,000.00SqFt PCI = 92  
48 LONGITUDINAL/TRANSVERSE CRACKING L 75.00 Ft  
52 RAVELING L 20.00 SqFt

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 93  
48 LONGITUDINAL/TRANSVERSE CRACKING L 46.00 Ft  
52 RAVELING L 26.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TA2AT Name: Taxiway A2 Astoria Use: TAXIWAY Area: 99,255.00SqFt

Section: 03 of 3 From: Runway 8/26 To: Section 02 Last Const.: 09/13/1999

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 9,413.00SqFt Length: 50.00Ft Width: 27.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 2 Surveyed: 2

Conditions: PCI : 87

Sample Number: 01 Type: R Area: 4,520.00SqFt PCI = 85

48 LONGITUDINAL/TRANSVERSE CRACKING L 127.00 Ft

45 DEPRESSION M 6.00 SqFt

Sample Number: 02 Type: R Area: 4,867.00SqFt PCI = 88

48 LONGITUDINAL/TRANSVERSE CRACKING L 163.00 Ft

45 DEPRESSION L 12.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

---

Branch: TA3AT Name: Taxiway A3 Astoria Use: TAXIWAY Area: 63,683.00SqFt

---

Section: 01 of 5 From: Runway 08/26 To: Section 02 Last Const.: 09/13/1999  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 4,563.00SqFt Length: 185.00Ft Width: 24.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 96

---

Sample Number: 01 Type: R Area: 4,563.00SqFt PCI = 96  
48 LONGITUDINAL/TRANSVERSE CRACKING L 24.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

---

Network: Astoria Name: Astoria Regional

---

Branch: TA3AT Name: Taxiway A3 Astoria Use: TAXIWAY Area: 63,683.00SqFt

---

Section: 02 of 5 From: Section 01 To: Section 03 Last Const.: 08/01/1991

Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 7,572.00SqFt Length: 150.00Ft Width: 50.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 64

---

Sample Number: 01 Type: R Area: 7,572.00SqFt PCI = 64

43 BLOCK CRACKING L 7,572.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TA3AT Name: Taxiway A3 Astoria Use: TAXIWAY Area: 63,683.00SqFt

Section: 03 of 5 From: Section 02 To: Section 04 Last Const.: 08/01/1991  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 40,360.00SqFt Length: 805.00Ft Width: 50.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 9 Surveyed: 4

Conditions: PCI: 64

Sample Number: 02 Type: R Area: 4,928.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,928.00 SqFt

Sample Number: 04 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

Sample Number: 08 Type: R Area: 5,000.00SqFt PCI = 64  
43 BLOCK CRACKING L 5,000.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

---

Branch: TA3AT Name: Taxiway A3 Astoria Use: TAXIWAY Area: 63,683.00SqFt

---

Section: 04 of 5 From: Section 03 To: Section 05 Last Const.: 08/01/1944  
Surface: PCC Family: OR-Cat2-PCC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 2,518.00SqFt Length: 50.00Ft Width: 45.00Ft  
Slabs: 15 Slab Width: 15.00Ft Slab Length: 11.50Ft Joint Length: 250.65Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 26

---

Sample Number: 01	Type: R	Area:	18.00Slabs	PCI = 26
72 SHATTERED SLAB		M	12.00 Slabs	
65 JOINT SEAL DAMAGE		M	18.00 Slabs	

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TA3AT Name: Taxiway A3 Astoria Use: TAXIWAY Area: 63,683.00SqFt

Section: 05 of 5 From: Section 04 To: Taxiway A2 Last Const.: 08/01/1944

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 8,670.00SqFt Length: 170.00Ft Width: 50.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 2 Surveyed: 2

Conditions: PCI: 45

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 47  
43 BLOCK CRACKING M 5,000.00 SqFt

Sample Number: 02 Type: R Area: 3,669.00SqFt PCI = 42  
43 BLOCK CRACKING M 3,669.00 SqFt  
53 RUTTING L 30.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TAAT Name: Taxiway A Astoria Use: TAXIWAY Area: 139,410.00SqFt

Section: 01 of 2 From: Taxiway A2 To: Runway 26 End (East) Last Const.: 08/02/1944

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 135,735.00SqFt Length: 2,716.00Ft Width: 50.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 27 Surveyed: 5

Conditions: PCI: 64

Sample Number: 02 Type: R Area: 4,750.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,750.00 SqFt

Sample Number: 05 Type: R Area: 4,750.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,750.00 SqFt

Sample Number: 12 Type: R Area: 4,750.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,750.00 SqFt

Sample Number: 19 Type: R Area: 4,750.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,750.00 SqFt

Sample Number: 26 Type: R Area: 4,750.00SqFt PCI = 64  
43 BLOCK CRACKING L 4,750.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

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Branch: TAAT Name: Taxiway A Astoria Use: TAXIWAY Area: 139,410.00SqFt

---

Section: 02 of 2 From: Section 01 To: Runway 26 End (East) Last Const.: 09/13/1999

Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P

Area: 3,675.00SqFt Length: 115.00Ft Width: 30.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 86

---

Sample Number: 01 Type: R Area: 3,675.00SqFt PCI = 86

48 LONGITUDINAL/TRANSVERSE CRACKING L 148.00 Ft

45 DEPRESSION L 12.00 SqFt

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

---

Network: Astoria Name: Astoria Regional

---

Branch: TB2AT Name: Taxiway B2 Astoria Use: TAXIWAY Area: 8,603.00SqFt

---

Section: 01 of 1 From: Runway 13/31 To: Taxiway B Last Const.: 08/01/1993  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 8,603.00SqFt Length: 263.00Ft Width: 35.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 2 Surveyed: 2

Conditions: PCI: 86

---

Sample Number: 01 Type: R Area: 4,617.00SqFt PCI = 87  
48 LONGITUDINAL/TRANSVERSE CRACKING L 197.00 Ft

---

Sample Number: 02 Type: R Area: 3,986.00SqFt PCI = 85  
48 LONGITUDINAL/TRANSVERSE CRACKING L 210.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TB3AT Name: Taxiway B3 Astoria Use: TAXIWAY Area: 49,451.00SqFt

Section: 01 of 3 From: Runway 13 End To: Section 02 Last Const.: 08/01/1993  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 43,010.00SqFt Length: 989.00Ft Width: 40.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 7 Surveyed: 4

Conditions: PCI: 90

Sample Number: 02 Type: R Area: 4,424.00SqFt PCI = 88  
48 LONGITUDINAL/TRANSVERSE CRACKING L 162.00 Ft

Sample Number: 04 Type: R Area: 6,000.00SqFt PCI = 94  
48 LONGITUDINAL/TRANSVERSE CRACKING L 98.00 Ft

Sample Number: 06 Type: R Area: 6,000.00SqFt PCI = 89  
48 LONGITUDINAL/TRANSVERSE CRACKING L 210.00 Ft

Sample Number: 08 Type: R Area: 3,526.00SqFt PCI = 87  
48 LONGITUDINAL/TRANSVERSE CRACKING L 143.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TB3AT Name: Taxiway B3 Astoria Use: TAXIWAY Area: 49,451.00SqFt

Section: 02 of 3 From: Section 01 To: Section 03 Last Const.: 08/01/1944  
Surface: PCC Family: OR-Cat2-PCC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 3,068.00SqFt Length: 45.00Ft Width: 40.00Ft  
Slabs: 18 Slab Width: 15.00Ft Slab Length: 11.50Ft Joint Length: 191.52Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 46

Sample Number: 01 Type: R Area: 18.00Slabs PCI = 46  
63 LINEAR CRACKING M 4.00 Slabs  
72 SHATTERED SLAB M 2.00 Slabs  
65 JOINT SEAL DAMAGE M 18.00 Slabs

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

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Network: Astoria Name: Astoria Regional

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Branch: TB3AT Name: Taxiway B3 Astoria Use: TAXIWAY Area: 49,451.00SqFt

---

Section: 03 of 3 From: Section 02 To: Runway 08/26 Last Const.: 09/13/1999  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 3,373.00SqFt Length: 25.00Ft Width: 40.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

---

Last Insp. Date: 07/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI : 96

---

Sample Number: 01 Type: R Area: 3,373.00SqFt PCI = 96  
48 LONGITUDINAL/TRANSVERSE CRACKING L 15.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: TBAT Name: Taxiway B Astoria Use: TAXIWAY Area: 115,815.00SqFt

Section: 01 of 1 From: Taxiway A2 To: Runway 31 End (South) Last Const.: 08/01/1993  
Surface: AAC Family: OR-Cat2-AAC-Coast-TW-2012 Zone: KAST Category: A Rank: P  
Area: 115,815.00SqFt Length: 3,150.00Ft Width: 35.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/28/2012 Total Samples: 21 Surveyed: 5

Conditions: PCI: 91

Sample Number: 03 Type: R Area: 5,250.00SqFt PCI = 95  
48 LONGITUDINAL/TRANSVERSE CRACKING L 53.00 Ft

Sample Number: 06 Type: R Area: 5,250.00SqFt PCI = 92  
48 LONGITUDINAL/TRANSVERSE CRACKING L 126.00 Ft

Sample Number: 11 Type: R Area: 5,250.00SqFt PCI = 90  
48 LONGITUDINAL/TRANSVERSE CRACKING L 147.00 Ft

Sample Number: 15 Type: R Area: 5,250.00SqFt PCI = 93  
48 LONGITUDINAL/TRANSVERSE CRACKING L 92.00 Ft

Sample Number: 17 Type: R Area: 5,250.00SqFt PCI = 87  
48 LONGITUDINAL/TRANSVERSE CRACKING L 220.00 Ft

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: THANGAT Name: Hangar Taxiway Astoria Use: TAXIWAY Area: 106,158.00SqFt

Section: 01 of 2 From: Apron 01 To: T-Hangars Last Const.: 10/04/2001  
Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: S  
Area: 33,806.00SqFt Length: 355.00Ft Width: 115.00Ft  
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 8 Surveyed: 8

Conditions: PCI: 100

Sample Number: 01 Type: R Area: 5,805.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 02 Type: R Area: 5,805.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 5,805.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 04 Type: R Area: 5,805.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 05 Type: R Area: 3,776.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 06 Type: R Area: 4,908.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 07 Type: R Area: 4,908.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 08 Type: R Area: 4,908.00SqFt PCI = 100  
<NO DISTRESSES>

# Re-inspection Report

ODOT2012

Report Generated Date: August 20, 2012

Network: Astoria Name: Astoria Regional

Branch: THANGAT Name: Hangar Taxiway Astoria Use: TAXIWAY Area: 106,158.00SqFt

Section: 02 of 2 From: THANGAT-01 To: T-Hangars Last Const.: 08/03/2008

Surface: AC Family: OR-Cat2-AC-Coast-TW-2012 Zone: KAST Category: A Rank: S

Area: 72,352.00SqFt Length: 358.00Ft Width: 280.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Last Insp. Date: 07/25/2012 Total Samples: 14 Surveyed: 5

Conditions: PCI: 100

Sample Number: 01 Type: R Area: 4,243.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 03 Type: R Area: 4,500.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 06 Type: R Area: 4,772.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 09 Type: R Area: 5,625.00SqFt PCI = 100  
<NO DISTRESSES>

Sample Number: 12 Type: R Area: 5,000.00SqFt PCI = 100  
<NO DISTRESSES>