Idaho Division of Aeronautics
NETWORK PAVEMENT MANAGEMENT SYSTEM - PHASE VI

2016 Pavement Condition Index Report for

Payette Municipal Airport (S75)

Kimley»Horn

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EXECUTIVE SUMMARY

The Division of Aeronautics (AERO), City, and Airport Consultant staff make frequent decisions regarding the timing and type of maintenance and rehabilitation (M&R) activities that should be completed at Payette Municipal Airport (S75) to maintain an acceptable operational condition of the pavement network. In order to maintain a reasonable M&R schedule and 5-year Capital Improvement Plan (CIP), decision makers must know the relative condition of its pavements to make informed decision.

ES.1 Current Pavement Condition

The Pavement Condition Index (PCI) is a number ranging from 0 to 100 which indicates the apparent structural integrity and surface operational condition of the pavement, with “100” indicating a pavement in new condition and “0” indicating a failed pavement section as graphically depicted in **Figure ES.1-1**.

Figure ES.1-1
PCI Rating

PCI Range	Pavement Condition
86 –100	Good
71 – 85	Satisfactory
56 – 70	Fair
41 – 55	Poor
26 – 40	Very Poor
11 – 25	Serious
0 – 10	Failed

In April 2016, approximately 334 thousand square feet of pavements were identified for the airside pavements at S75. Generally speaking, the airfield pavements at S75 are in *Fair* condition having an area-weighted PCI of 69. The area-weighted PCIs of the aprons, runways, and taxiways are 36, 94, and 51, respectively. **Figure ES.1-2** summarizes the current PCIs for S75.

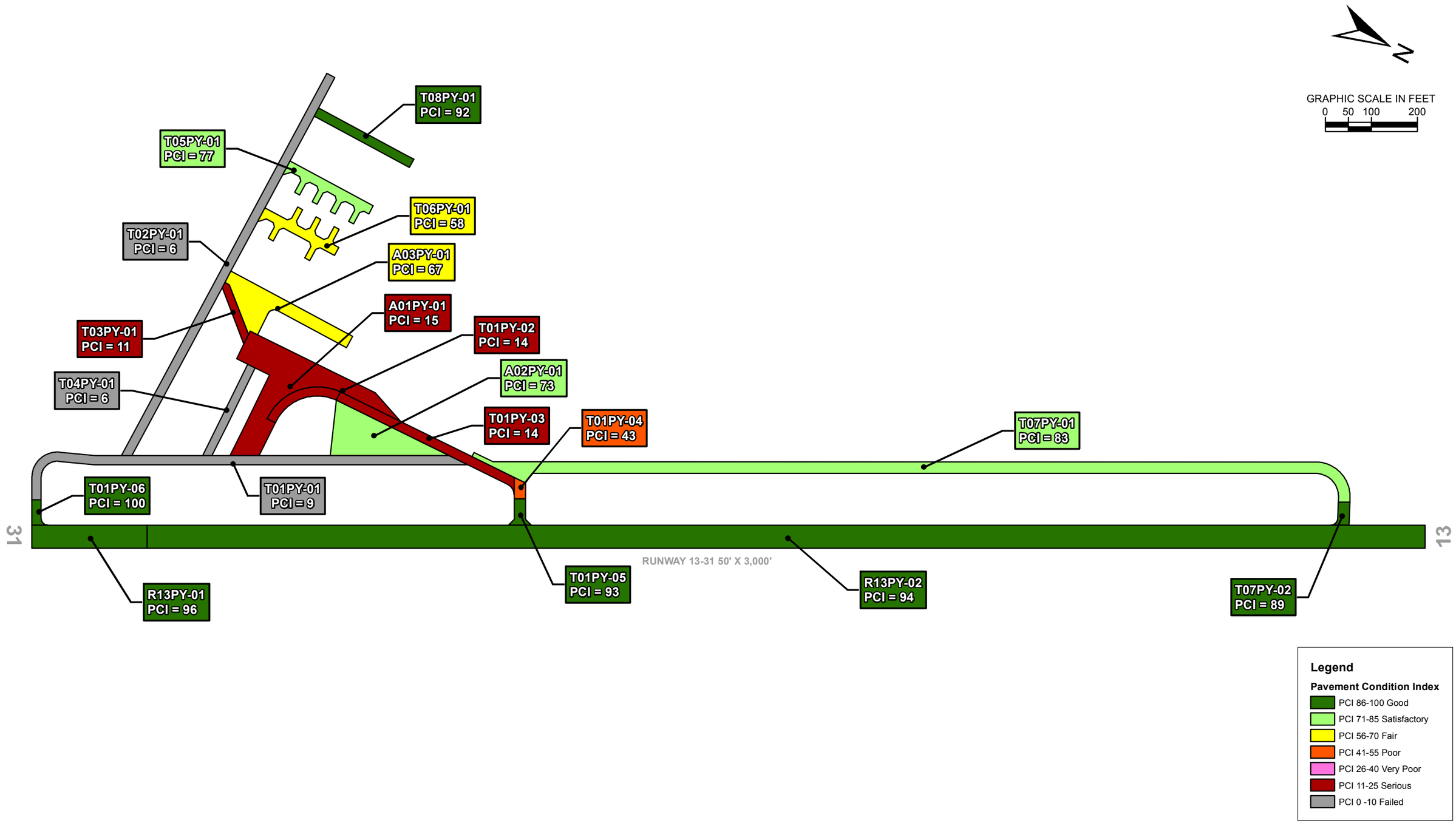

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Figure ES.1-2	*Airport ID*
2016 Airfield PCI Exhibit	**S75**
Payette Municipal Airport	
Idaho Transportation Department Division of Aeronautics	

ES.2 Recommended 5-Year Capital Improvement Plan

The 5-year recommended Capital Improvement Plan (CIP) presented for S75 is for the 2018 – 2022 planning period given that AERO has already established the CIPs for 2016 and 2017.

Decisions related to the timing for M&R, thus the development of the CIP is based on the Critical PCI methodology. A pavement is considered to have reached the end of its functional life when its surface condition, i.e. PCI, has deteriorated to the point where applying preventative maintenance activities are no longer cost effective and major rehabilitation is required to return the pavement safe operational condition. **Table ES.2-1** summarizes the critical PCI values by branch use and airport classification established for the Idaho NPMS.

Table ES.2-1
Critical PCI Values by Branch Use and Airport Classification

Airport Classification	Branch Use		
	Runway	Taxiway	Apron
NPIAS	65	60	50
Non-NPIAS	50	45	40

The PAVER pavement management software program was used to analyze the data for S75 and to provide a baseline for the development of a 5-year CIP; however, such a program has limitations. In an effort to provide the most logical CIP recommendations and costs it was necessary to consider other factors such as construction phasing, operational impacts, and currently planned rehabilitation projects when developing the recommended CIP. In order to develop realistic project specific cost estimates that AERO and S75 can trust for future planning purposes realistic cost estimates were developed outside of the PAVER program to include additional construction items and soft costs including items such as airfield electrical improvements / upgrades, costs for unknown utilities, future planned underground drainage improvements, construction costs (including quality control and construction administration), general administration costs, and professional services for design and construction.

The 5-year CIP for S75 is summarized in **Table ES.2-2** and graphically in **Figures ES.2-1** and **ES.2-2** for major rehabilitation and surface treatments, respectively.

Table ES.2-2
S75 Recommended 5-year CIP Summary Table

Year	Branch ID	Section ID	Area (SF)	PCI at Treatment	Recommended Treatment	PAVER Output		Soft Costs					Total Cost
						Unit Cost	Total Cost	Drainage/ Elec./Misc.	QA/QC Testing	Construction Administration	Admin Costs	Design Fee	
2018	A01PY	1	26,703	10	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$105,744	$8,460	$3,426	$11,763	$1,294	$12,939	$143,626
2018	T01PY	1	19,835	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$78,547	$6,284	$2,545	$8,738	$961	$9,611	$106,685
2018	T01PY	2	3,447	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$13,650	$1,092	$442	$1,518	$167	$1,670	$18,540
2018	T01PY	3	8,553	2	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$33,870	$2,710	$1,097	$3,768	$414	$4,144	$46,003
2018	T01PY	4	1,019	36	Complete Reconstruction - 6" PCC / 6" Agg Base	$15.00	$15,285	$1,223	$495	$1,700	$187	$1,870	$20,761
2018	T02PY	1	18,759	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$74,286	$5,943	$2,407	$8,264	$909	$9,090	$100,898
2018	T03PY	1	2,174	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$8,609	$689	$279	$958	$105	$1,053	$11,693
2018	T04PY	1	3,904	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$15,460	$1,237	$501	$1,720	$189	$1,892	$20,998
2018	T05PY	1	6,554	73	PCC Maintenance	$5.06	$33,189			$3,319	$365	$3,651	$40,524
2018	T06PY	1	6,083	53	PCC Maintenance	$6.00	$36,498			$3,650	$401	$4,015	$44,564
												Total for 2018:	*$554,293*
2021	A01PY	1	26,703	N/A	Surface Treatment	$0.35	$9,346			$935	$103	$1,028	$11,412
2021	A02PY	1	15,578	62	Surface Treatment	$0.35	$5,452			$545	$60	$600	$6,657
2021	A03PY	1	12,866	60	Surface Treatment	$0.35	$4,503			$450	$50	$495	$5,498
2021	R13PY	1	12,500	82	Surface Treatment	$0.35	$4,375			$438	$48	$481	$5,342
2021	R13PY	2	138,850	81	Surface Treatment	$0.35	$48,598			$4,860	$535	$5,346	$59,338

Table ES.2-2 (cont.)
S75 Recommended 5-year CIP Summary Table

						PAVER Output		Soft Costs					
Year	Branch ID	Section ID	Area (SF)	PCI at Treatment	Recommended Treatment	Unit Cost	Total Cost	Drainage/ Elec./Misc.	QA/QC Testing	Construction Administration	Admin Costs	Design Fee	Total Cost
2021	T01PY	1	19,835	N/A	Surface Treatment	$0.35	$6,942			$694	$76	$764	$8,476
2021	T01PY	2	3,447	N/A	Surface Treatment	$0.35	$1,206			$121	$13	$133	$1,473
2021	T01PY	3	8,553	N/A	Surface Treatment	$0.35	$2,994			$299	$33	$329	$3,655
2021	T01PY	4	1,019	N/A	Surface Treatment	$0.35	$357			$36	$4	$39	$435
2021	T01PY	5	1,581	81	Surface Treatment	$0.35	$553			$55	$6	$61	$676
2021	T01PY	6	1,148	88	Surface Treatment	$0.35	$402			$40	$4	$44	$491
2021	T02PY	1	18,759	N/A	Surface Treatment	$0.35	$6,566			$657	$72	$722	$8,017
2021	T03PY	1	2,174	N/A	Surface Treatment	$0.35	$761			$76	$8	$84	$929
2021	T04PY	1	3,904	N/A	Surface Treatment	$0.35	$1,366			$137	$15	$150	$1,668
2021	T07PY	1	48,315	73	Surface Treatment	$0.35	$16,910			$1,691	$186	$1,860	$20,648
2021	T07PY	2	1,295	78	Surface Treatment	$0.35	$453			$45	$5	$50	$553
2021	T08PY	1	4,700	80	Surface Treatment	$0.35	$1,645			$165	$18	$181	$2,009
												Total for 2021:	*$137,277*

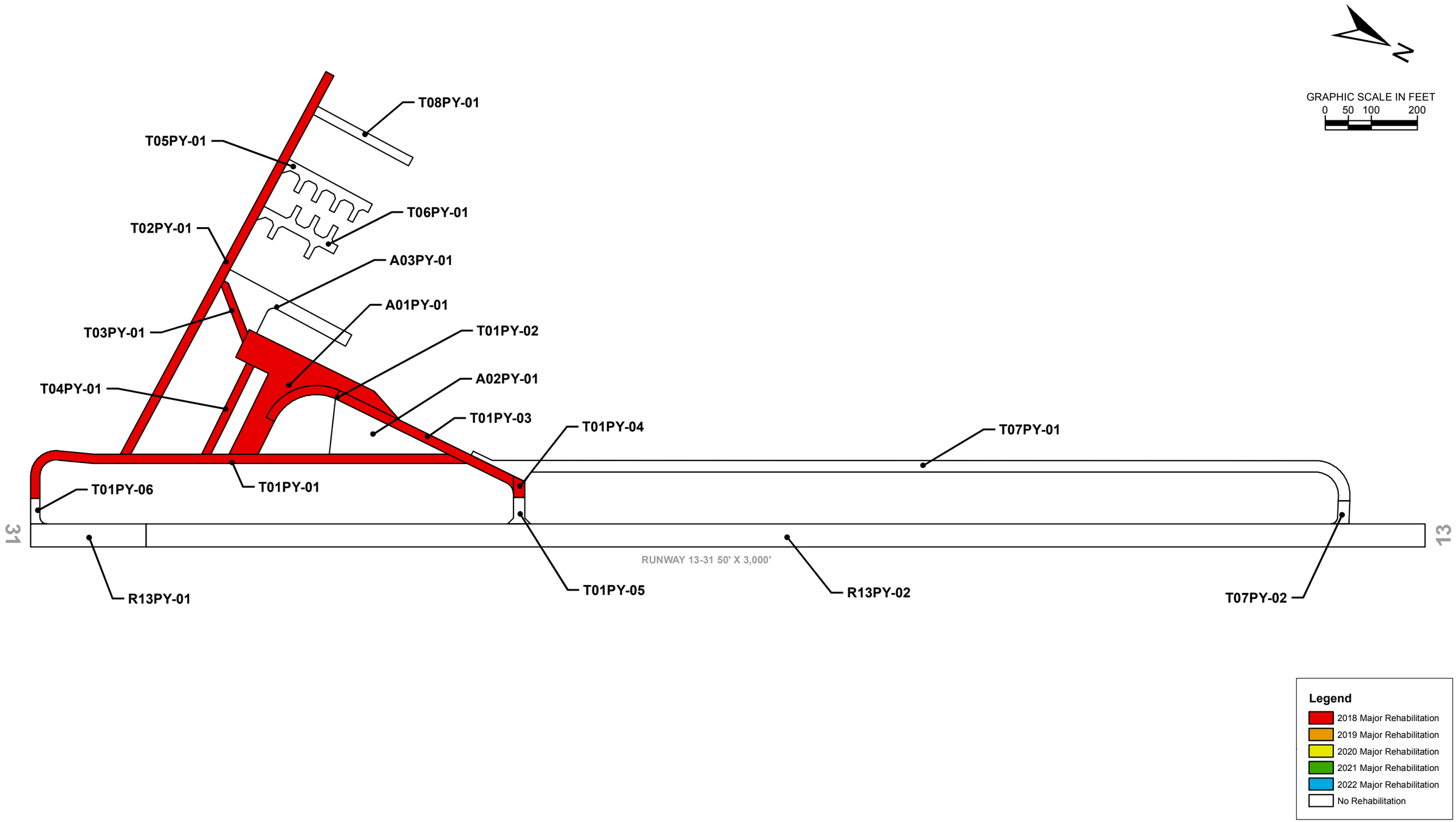

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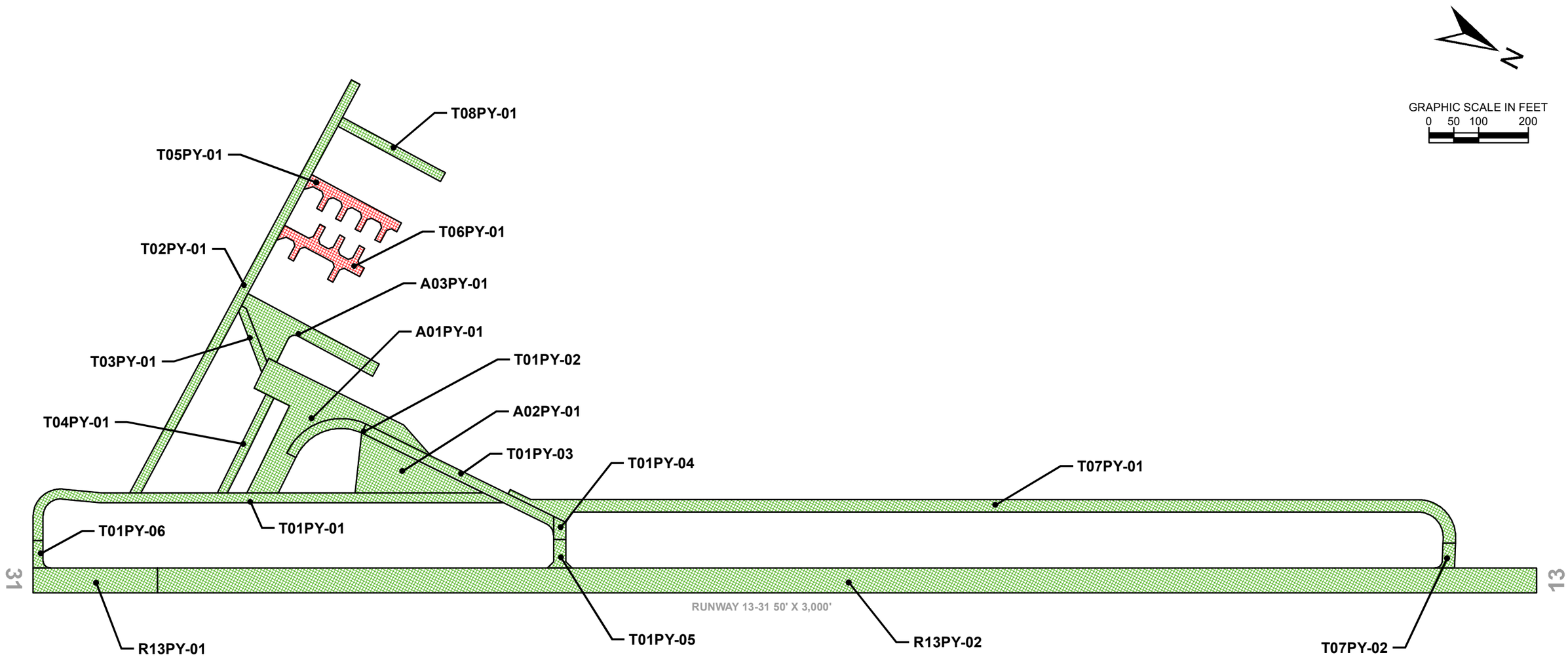
Figure ES.2-1	*Airport ID*
Recommended 5-Year Capital Improvement Program	**S75**
Payette Municipal Airport	
Idaho Transportation Department Division of Aeronautics	



Legend

- 2018 Surface Treatment
- 2019 Surface Treatment
- 2020 Surface Treatment
- 2021 Surface Treatment
- 2022 Surface Treatment
- No Rehabilitation

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Figure ES.2-2	*Airport ID*
Recommended 5-Year Capital Improvement Program	**S75**
Payette Municipal Airport	
Idaho Transportation Department Division of Aeronautics	

CHAPTER 1 – INTRODUCTION

1.1 Background

The Division of Aeronautics (AERO) is an entity within the Idaho Transportation Department. AERO is responsible for maintaining 30 National Plan of Integrated Airport System (NPIAS) classified airports and 18 Non-NPIAS airports through the use of a Network Pavement Management System (NPMS). The NPMS is intended to serve as a tool in identifying pavement maintenance and rehabilitation needs, aiding in the decision making process related to federal grant funding of capital projects, legislative decision making, and planning needs of local jurisdictions. Federal Aviation Administration (FAA) grant assurances require airports to have a pavement management system in place to address these objectives and AERO assists with achieving these objectives. For over 20 years AERO has actively managed their airfield pavement infrastructure at these 48 airports through the use of the NPMS.

1.2 Project Objectives

AERO, City, and Airport Consultant staff make frequent decisions regarding the timing and type of maintenance and rehabilitation activities that should be completed at Payette Municipal Airport (S75) to maintain an acceptable operational condition of the pavement network. In order to maintain a reasonable maintenance and rehabilitation schedule and 5-year Capital Improvement Plan (CIP), decision makers must know the relative condition of its pavements to be able to knowledgeably determine which pavements are in need of rehabilitation and at what point in time to apply these measures. To further strengthen their understanding of the airfield pavement condition at S75, AERO decided to update their existing NPMS to effectively manage Idaho's pavement network but more specifically, S75's pavement network based on current conditions. The data collected will be used for determining current (2016) as well as 5- and 10-year predicted Pavement Condition Index (PCI) values and to provide recommendations on the timing of future maintenance and rehabilitation activities. This report summarizes the data collection, analysis, program development and implementation of S75's NPMS.

This program can be used by decision makers to make logical and cost effective decisions regarding their pavement network for pavement rehabilitation projects in the future. It is recommended by Kimley-Horn and Associates, Inc. (Kimley-Horn) and the FAA that AERO update their NPMS for each airport on a 3-year basis.

This update was completed using the PAVER computer program for S75. With PAVER, a database will be established that will store pavement inventory and condition information, schedule maintenance activities, and prepare maintenance and rehabilitation budgets. A comprehensive NPMS provides information that assists with the project programming process.

The primary information resulting from a pavement management study includes:

- Functional Pavement Condition Index (PCI) determined from a visual condition survey;
- Remaining life determination (functional);
- PAVER pavement management system customization including unit costs, maintenance and rehabilitation policies, and prioritization;
- Development of a 5-Year CIP based on current and predicted PCIs;
- Functional pavement analysis and report of findings and recommendations; and
- Implementation of computerized NPMS

With maintenance and rehabilitation costs escalating, consequences of poor maintenance can be costly. If maintenance is conducted before significant decline in pavement condition occurs, substantial repair and/or rehabilitation costs may be avoided or delayed.

While a good NPMS does not replace sound engineering judgment, it does provide an excellent tool to assist AERO staff and the individual airports in their decision making processes. Furthermore, it provides information that can be used to support project funding requests and aid in developing work prioritization plans.

1.3 General Scope of Work

Kimley-Horn in association with AERO developed a scope of work to meet the project's objectives. The primary tasks undertaken to update the NPMS for S75 include but are not limited to:

- Research available airport construction records for construction projects that have taken place since the most recent update of the NPMS completed in 2011. This data is used to update the pavement inventory, network definition, and existing PAVER database. Additionally, a detailed review of all construction history documentation was conducted to verify the data contained in the existing PAVER database.
- Network definition maps were updated to reflect geometric changes and pavement sectioning since 2011 and the maps were spatially projected into a Geographic Information System (GIS) for use in tablet applications and for data sharing.
- Conducting visual PCI surveys in accordance with American Society of the International Associate for Testing and Material (ASTM) D5340-12.

- Information gathered from field surveys, records research, and network definition tasks were input into the updated PAVER database. PAVER uses this information to create a multi-functional database that can be used for a wide range of maintenance and management efforts, including pavement condition evaluation and data analysis. This powerful program can assist the pavement manager in many ways including serving as a centralized database from which to create reports and graphics.
- PAVER pavement management system customization was completed on the statewide level for the NPMS.
- PAVER data analysis was completed and the findings were used to develop a 5-Year CIP for S75.
- This report and documentation summarizes all evaluation methodologies used during the NPMS update at S75. It incorporates preliminary field reports including visual evaluation results and provides various PAVER analysis results and standard reports.
- Quality control was a key element in this study, and was included in the scope of work to assure that the technical objectives of the NPMS and all contractual obligations were met.

1.4 Report Organization

This report is divided into the following chapters:

- **Chapter 1 "Introduction"** - This chapter describes a general overview of the project objectives, general scope of work, study approach, technical references, and a list of project team participants.
- **Chapter 2 "Network Definition Update and Field Investigations"** - This chapter describes the methodology and procedures that were employed to update the pavement network and conduct field investigations, including historical research, and pavement condition surveys. Also included is a discussion of commonly found pavement distresses at the airport.
- **Chapter 3 "Pavement Condition Index"** - This chapter discusses the PAVER program and implementation, describes the procedures to calculate the pavement condition index, and discusses S75's current and future pavement conditions.
- **Chapter 4 "NPMS Customization"** - This chapter describes the development of the NPMS customization including the development of maintenance and rehabilitation policies, unit costs, and prioritization.
- **Chapter 5 "S75's Rehabilitation Recommendations"** - This chapter presents the findings of the PAVER analysis and the recommended 5-Year CIP for S75 based on the current and predicted PCIs.
- **Chapter 6 "Pavement Management Implementation"** - This chapter presents recommendations for implementing the NPMS at S75.

- **Appendix A "Re-Inspection Reports"** - provides a report summarizing all of the visual condition data compiled during the condition surveys at S75. Data is summarized on all levels including the branch, section, and sample unit levels.
- **Appendix B "PAVER Reports"** - lists the pavement management reports from PAVER including: Branch Condition Report, Section Condition Report, Work History Report, and PAVER Prediction Models.
- **Appendix C "Photo Appendix"** – presents general photos of current pavement conditions observed at S75.
- **Appendix D "Detailed 1st Year Maintenance Recommendations"** – Summarizes the recommended preventative maintenance activities (pavement sections with PCIs above critical) for the Year 1 based on pavement distresses observed in 2016.

1.5 References

The following FAA Advisory Circulars (ACs) and ASTM Standards are referenced as specific guidelines and procedures for maintaining airport pavements; establishing an effective maintenance program, and identifying specific types of pavement distresses, along with their probable cause, inspection guidelines, and recommended methods of repair.

- AC 150/5380-6C "Guidelines on Procedures for Maintenance of Airport Pavements"
- AC 150/5380-7B "Airport Pavement Management Program (PMP)"
- ASTM 5340-12 "Standard Test Method for Airport Pavement Condition Index Surveys"

1.6 Project Team Participants

In support of Kimley-Horn's contract with AERO to update the NPMS at S75, the following associated project team members supported in the field investigations, analysis, and the production of this report.

Kimley-Horn and Associates, Inc.	*Project Management, Network Definition Update, Visual Condition Surveys, Data Entry, PAVER Customization, PAVER Analysis, CIP Development, and Reporting*
J-U-B Engineers, Inc.	*Records Research, Assistance with Visual Condition Surveys, PAVER Customization, and CIP Development.*

CHAPTER 2 – NETWORK DEFINITION AND FIELD INVESTIGATIONS

To complete the pavement evaluations and to develop an updated NPMS for S75, it was necessary to collect information related to existing airport pavement inventory and conditions. Specialized analysis techniques were used to estimate pavement deterioration rates and determine predicted PCIs. This chapter describes the approaches taken to collect the required information.

2.1 Historical Records Research

AERO staff provided the consultant team all available information on existing airport pavement cross-sections and dates of construction contained in the existing NPMS and those sections that have been planned or completed construction since the last update. Historical records for S75 since the previous NPMS update were collected and reviewed. The information collected as part of this effort consisted of existing pavement history, pavement thickness and composition, and construction dates.

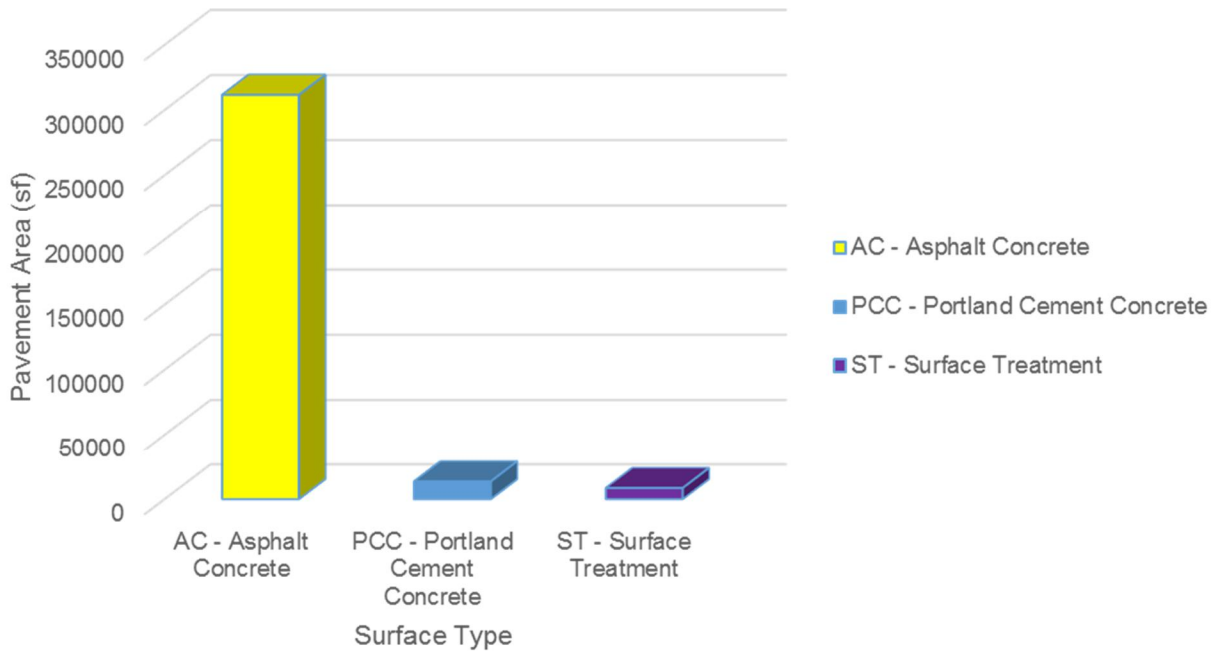
The updated historical data collected during this task was input into the PAVER database. This database includes (for each section): surface type, date of construction or last rehabilitation, section boundaries, areas.

Figure 2.1-1 illustrates the existing pavement types for the airside pavement network at S75.

2.2 Network Definition

To facilitate the update to an existing NPMS, the pavement network must be updated to reflect changes since the previous update was completed. While the Network Definition for S75 was previously setup, modifications were required to adjust for recent or planned construction. This section describes the methodology for defining, describing, and identifying the network for S75.

Figure 2.1-1
Pavement Area vs. Surface Type



Branch and Section Identification

Airport pavements are typically managed based on primary use an construction history. Airport pavements are divided into branches, sections, and sample units according to the guidelines contained in FAA Advisory Circular 150/5380-6C, "*Guidelines and Procedures for Maintenance of Airport Pavements*." The following are definitions for FAA's pavement division categories:

Network: A single pavement network is identified at S75; "PAYETTE" that contains all of the airfield pavements including runways, taxiways, and aprons.

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

Section: A section is a subdivision of a branch and has consistent characteristics throughout its length or area. These characteristics include: structural composition (pavement layer material type and thickness), construction history, traffic, and pavement condition. A section should also have the same traffic type. A section is the basic management unit of a pavement network, and is that portion of a branch on 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 to perform the visual (functional) pavement condition surveys. It is the smallest subdivision in a pavement network. For flexible pavements, sample units are typically 5,000 square feet ± 2,000 square feet in area and for rigid pavements, sample units typically include approximately 20 slabs ± 8 slabs.

Each pavement division is assigned a unique identification. Each branch number consists of up to five alphanumeric characters. The first character indicates the branch type: “R” for runway, “T” for taxiway, and “A” for apron. The next one to four alphanumeric characters following the branch type identifier specifies the individual runway, taxiway, or apron being referenced. Followed by a two-letter abbreviation of the associated City, for example; “PY” for Payette.

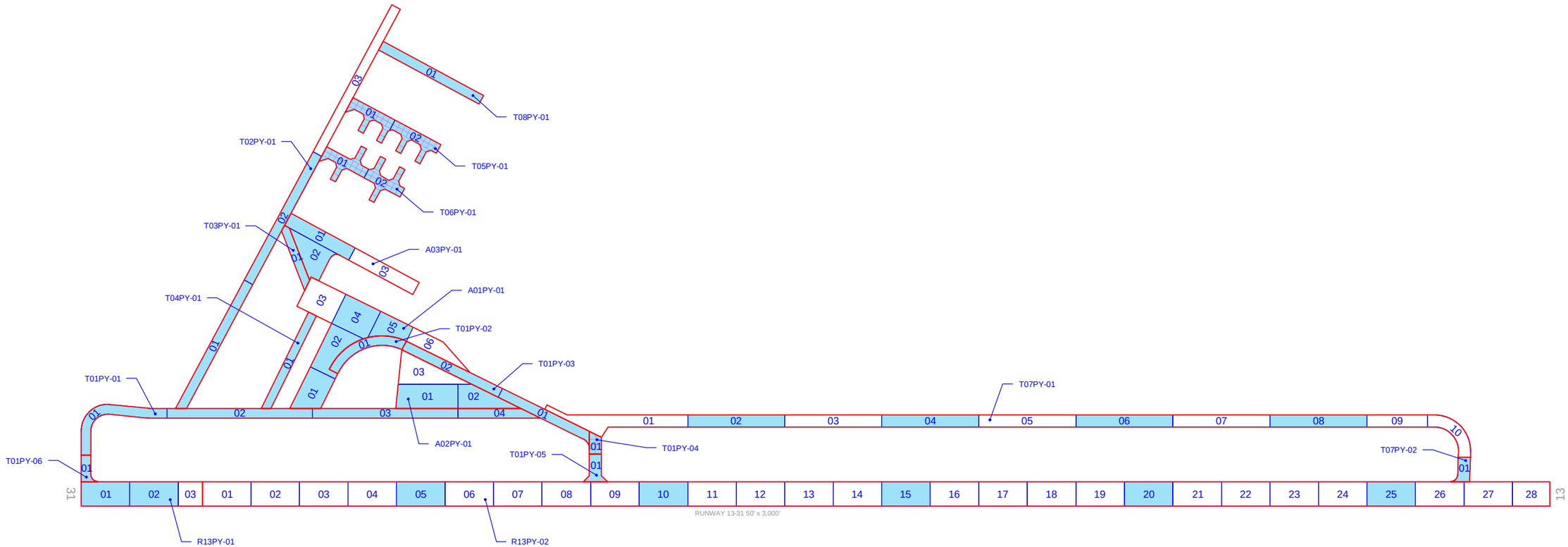
Each branch is assigned as many section numbers as necessary. Up to three alphanumeric characters are assigned and indicate the section number. For example, the identification number for the Branch Runway 13/31, Section 01, would read as follows:

BRANCH	SECTION
R13PY	01

A network definition map including the layout of the branches, sections, and sample units identified for the airside network at S75 is shown in **Figure 2.2-1**. The sections indicated were used as analysis units during the visual condition survey. Pavement analyses were completed for each individual section. The previously established airport network definition for S75 in 2012 was used as a basis and updated accordingly based on changes in construction history since that time.

Pavement Identifiers

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



LEGEND

R17L-01 — BRANCH IDENTIFIER; SECTION IDENTIFIER

01 — INSPECTED SAMPLE UNIT

SECTION BOUNDRY

SAMPLE UNIT BOUNDARY

No.	REVISIONS	DATE	BY

Kimley»Horn

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WWW.KIMLEY-HORN.COM

KHA PROJECT 168441001.1
DATE 08/01/2016
SCALE N.T.S
DESIGNED BY ___
DRAWN BY ___
CHECKED BY ___

IDAHO NETWORK PAVEMENT MANAGEMENT PHASE IV
PREPARED FOR
Idaho Transportation Department
Division of Aeronautics

LICENSED PROFESSIONAL
LIC PROF 1
STATE LICENSE NUMBER
LIC PROF 1 #
DATE: ____

Figure 2.2-1
Network Definition Map
S75 - Payette Municipal Airport

SHEET NUMBER

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Stone, Kevin Sheet Set:Kha Layout:NETWORK DEFINITION September 15, 2016 07:17:02pm K:\Civil-Aviation\168441001.1 - ITD AERO NPIAS PMMS\CAD\Airport\S75 - PAYETTE MUNICIPAL\PlanSheets\NTWK-S75-2016.dwg

Branch Use: Branch use identifies the primary use of each distinct pavement area. For each airside pavement included in this program, a branch use of "Runway", Taxiway", or "Apron" was assigned, as appropriate.

Table 2.2-1 summarizes the branch and section inventory for S75. This report lists the network ID, airport type, branch ID, branch name, branch use, branch area, section ID, pavement surface type, section area, last construction date, last inspection date, and current PCI.

Pavement Rank: Pavement rank refers to the relative importance assigned to pavement facilities based on their level or type of use.

Surface Type: Each pavement section is assigned a surface type designator based on the surface layer material present. The surface types contained in the Idaho NPMS database include asphalt concrete (AC), asphalt overlaid over existing asphalt concrete (AAC), Portland cement concrete (PCC), surface treatments (ST), and chip seals (X). Three surface types were encountered at S75: AC, PCC and ST.

2.3 Pavement Condition Index Survey

A pavement condition survey is the primary means of obtaining and recording pavement distress data. The condition survey for both rigid and flexible pavement facilities consists primarily of a visual inspection of the pavement surfaces for signs of distress resulting from traffic (aircraft and vehicular) and environmental influences. A visual pavement condition survey provides an indication of the rate of deterioration of a pavement from a functional (visual) point of view and can be an indicator of structural distress. A visual survey alone will not predict the remaining structural capacity of a pavement.

The condition survey is a visual statistical sampling of pavements which records primary distress types (i.e., cracking and deformation), the quantity of these distresses, and their severity. During a visual condition survey, random samples of a pavement network are taken to provide a statistical reliability as outlined in the FAA Advisory Circular 150/5380-7B "*Airport Pavement Management Program*". **Table 2.3-1** shows the recommended minimum number of sample units to be inspected based on the total number of sample units in a section. In total, a similar sampling rate that was used in 2011 was followed resulting in approximately 20% of the sample units were inspected at S75 on the airside pavement network in 2016.

Table 2.2-1
S75 Pavement Inventory Summary

Network ID	Airport Type	Branch ID	Branch Name	Branch Use	Section ID	Surface	True Area (sf)	Construction Date	Inspection Date	2016 PCI
PAYETTE	NON-NPIAS	A01PY	Apron 01 Payette	APRON	1	AC	26,703	8/1/1979	4/4/2016	15
PAYETTE	NON-NPIAS	A02PY	Apron 02 Payette	APRON	1	AC	15,578	8/1/1979	4/4/2016	73
PAYETTE	NON-NPIAS	A03PY	Apron 03 Payette	TAXIWAY	1	AC	12,866	8/1/1979	4/4/2016	67
PAYETTE	NON-NPIAS	R13PY	Runway 13/31 Payette	RUNWAY	1	AC	12,500	9/3/2011	4/4/2016	96
PAYETTE	NON-NPIAS	R13PY	Runway 13/31 Payette	RUNWAY	2	AC	138,850	9/3/2011	4/4/2016	94
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	1	AC	19,835	8/1/1979	4/4/2016	9
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	2	AC	3,447	8/1/1995	4/4/2016	14
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	3	ST	8,553	8/1/1995	4/4/2016	14
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	4	PCC	1,019	8/1/1983	4/4/2016	43
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	5	AC	1,581	9/1/2011	4/4/2016	93
PAYETTE	NON-NPIAS	T01PY	Taxiway 01 Payette	TAXIWAY	6	AC	1,148	9/3/2011	4/4/2016	100
PAYETTE	NON-NPIAS	T02PY	Taxiway 02 Payette	TAXIWAY	1	AC	18,759	8/1/1979	4/4/2016	6
PAYETTE	NON-NPIAS	T03PY	Taxiway 03 Payette	TAXIWAY	1	AC	2,174	8/1/1985	4/4/2016	11
PAYETTE	NON-NPIAS	T04PY	Taxiway 04 Payette	TAXIWAY	1	AC	3,904	9/1/1998	4/4/2016	6
PAYETTE	NON-NPIAS	T05PY	Taxiway 05 Payette	TAXIWAY	1	PCC	6,554	8/1/1995	4/4/2016	77
PAYETTE	NON-NPIAS	T06PY	Taxiway 06 Payette	TAXIWAY	1	PCC	6,083	8/1/1995	4/4/2016	58
PAYETTE	NON-NPIAS	T07PY	Taxiway 07 Payette	TAXIWAY	1	AC	48,315	11/2/2008	4/4/2016	83
PAYETTE	NON-NPIAS	T07PY	Taxiway 07 Payette	TAXIWAY	2	AC	1,295	9/3/2011	4/4/2016	89
PAYETTE	NON-NPIAS	T08PY	Taxiway 08 Payette	TAXIWAY	1	AC	4,700	1/1/2009	4/4/2016	92

Table 2.3-1
Network Level Sampling Criteria

PCC Pavement		Asphalt Pavement	
No. of Sample Units in Section (N)	No. of Sample Units to Be Inspected (n)	No. of Sample Units in Section (N)	No. of Sample Units to Be Inspected (n)
1-3	All	1-3	All
4	3	4	3
5-7	4	5-9	4
8-10	5	10-20	5
11-16	6	21-30	6
17-28	7	31-70	7
29-64	8	>70	10%, but < 17
65-90	9		
>90	10%, but < 32		

The condition survey at S75 was conducted using sample units of 5,000 square feet (±2,000 square feet) for asphalt pavement and 20 contiguous slabs (± 8 slabs) for concrete pavement. Some adjustments were made in the sample unit size in the field, necessitated by the geometry of the sample units.

Approximately 20% of the sample units were randomly selected for survey at S75 for all pavements. The 20% sampling frequency allows for a higher level of confidence evaluating network pavement conditions and is consistent with previous visual pavement inspections that have been completed. Subsequent network inspections should be completed with this same frequency and sample to better predict the future PCI of the pavements. The sampling rate utilized during the 2016 update is sufficient to achieve a 95% confidence level. For the most part sample units in the same representative area compared to previous inspections were inspected for data consistency. Subsequent network inspections should be completed with this same frequency and sample to better predict the future PCI of the pavements.

Methodology

A visual condition survey was performed at S75 in April 2016. The survey was performed using the PCI methodology developed by the U.S. Army Corps of Engineers, and described in FAA Advisory Circular AC 150/5380-6C, "*Guidance and Procedures for Maintenance of Airport Pavements"* and ASTM D5340-12, "*Standard Test Method for Airport Pavement Condition Index Surveys".* These documents define 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 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 distress types, or defects, observed within a sample unit. **Table 2.3-2** lists the AC pavement distress types considered in the PCI method, and also identifies the related cause (load, climate, other) as assigned by the PAVER software for airside pavements. **Table 2.3-3** lists the PCC pavement distress types considered in the PCI method, and also identifies the related causes of the distress for airside pavements. Load-related distresses exist where the pavement is likely insufficient to accommodate the applied aircraft loading. Climate-related distresses arise due to exposure to and extreme variation in climatic conditions. Other related distresses are caused by actions not related to load or climate, such as oil or fuel spills, construction-related issues, and material quality issues.

Table 2.3-2
Pavement Distresses - Asphalt Surfaced Airfields

Code	Distress	Mechanism
41	Alligator Cracking	Load
42	Bleeding	Other
43	Block Cracking	Climate
44	Corrugation	Other
45	Depression	Other
46	Jet Blast	Other
47	Joint Reflection – Cracking	Climate
48	Longitudinal / Transverse Cracking	Climate
49	Oil Spillage	Other
50	Patching	Other
51	Polished Aggregate	Other
52	Raveling	Climate
53	Rutting	Load
54	Shoving	Other
55	Slippage Cracking	Other
56	Swelling	Other
57	Weathering	Climate

Source: PAVER 6.5.3

Table 2.3-3
Pavement Distresses - Concrete Surfaced Airfields

Code	Distress	Mechanism
61	Blow-up	Climate
62	Corner Break	Load
63	Linear Cracking	Load
64	Durability Cracking	Climate
65	Joint Seal Damage	Climate
66	Small Patch	Other
67	Large Patch / Utility Cut	Other
68	Popout	Other
69	Pumping	Other
70	Scaling / Crazing	Other
71	Faulting	Other
72	Shattered Slab	Load
73	Shrinkage Cracking	Other
74	Joint Spalling	Other
75	Corner Spalling	Other
76	Akali Silica Reactivity	Other

Source: PAVER 6.5.3

Examination of specific distress types, severities, and quantities provides valuable information that is used to determine the cause of pavement deterioration, its condition, and eventually its M&R needs.

The condition of each pavement will dictate which of the distresses will be placed into each group. Classification by possible cause includes load, climate/durability, moisture/drainage, and other related causes. Classification by possible effect includes roughness, skid/hydroplaning potential, presence of or potential for foreign object debris (FOD), rate of deterioration, and maintenance requirements.

Although each distress is assigned only one cause by the PAVER pavement maintenance management software, the appearance and rate at which the distress occurs may be influenced by other causes. For example, alligator cracking is typically caused by aircraft loads or material deficiencies and is not likely to appear where traffic is minimal. However, its occurrence may be exacerbated by environmental factors such as moisture or drainage issues; when the base material is saturated and the asphalt concrete is placed under higher-induced strains under aircraft loading. As a result, the occurrence of alligator cracking may be accelerated due to the asphalt concrete being further fatigued under each aircraft load due to the base material being inefficient in carrying the design loads.

2.4 Airport Pavement Investigation

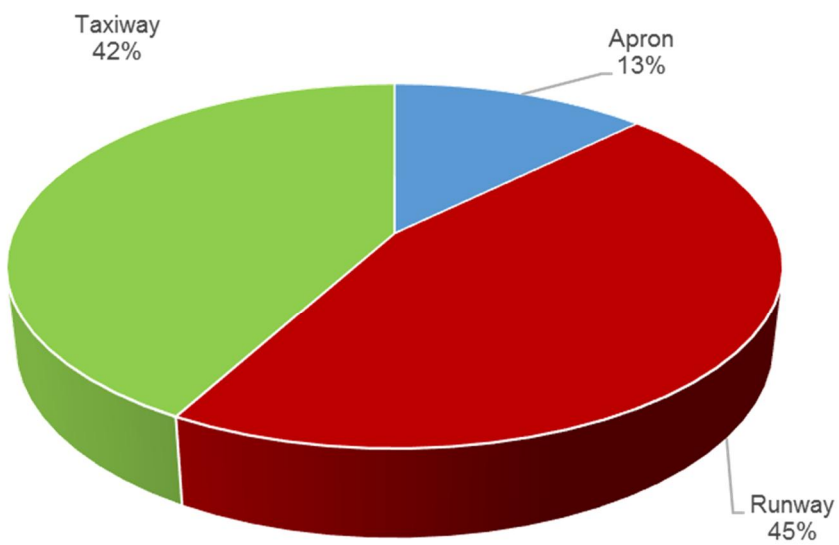
Distress data was collected for each sample unit surveyed and entered into the PAVER computer program, and stored in the database. The program used the data to calculate the PCI for each sample unit and section (refer to Chapter 3).

In April 2016, approximately 334 thousand square feet of pavements were identified for the airside pavements at S75. A total of 19 distinct pavement sections were identified. These areas are summarized in **Table 2.4-1** and are shown graphically in **Figure 2.4-1**.

Table 2.4-1
Pavement Areas and Percent of Areas

Airside Network		
Branch Use	Area (sf)	Percent of Area
Apron	42,281	13
Runway	151,350	45
Taxiway	140,233	42
Totals:	333,864	100

Figure 2.4-1
Pavement Percentage versus Pavement Use



CHAPTER 3 – PAVEMENT CONDITION INDEX

Visually identifying a specific pavement distress type (load- or climate-related), determining the severity of the distress, determining the quantity of the distress, and the computation of a PCI provides valuable information. This information can also be used to identify possible causes of the pavement deterioration, and eventually help in developing maintenance and rehabilitation recommendations. Load-related distress or pavements exhibiting visual indications of load-related distress can be further evaluated by conducting a structural evaluation consisting of non-destructive testing methods. Visual condition surveys were completed on the airside pavements at S75.

3.1 PAVER Computer Program

PAVER was developed by the U.S. Army Construction Engineering Research Laboratory (USA-CERL) and uses the guidelines contained in FAA Advisory Circular 150/5380-6C "*Guidelines and Procedures for Maintenance of Airport Pavements*". PAVER is a Windows-based program that can store information relating to pavements including but not limited to; pavement type (layer and material property data), dates of construction, pavement condition data, traffic data, construction and maintenance history information, and nondestructive testing data to name a few. Using the data stored in the PAVER database provides the user with many capabilities, including: evaluating current condition, predicting future condition, determining maintenance and rehabilitation needs, scheduling future inspections, and identifying budget needs based on various analysis scenarios. The existing PAVER database was updated to the current version, Version 6.5.6, as part of this update and was used to assist in updating the NPMS for S75.

3.2 PAVER Update

The following steps were completed to update the existing airside PAVER database and for S75:

- Update the existing PAVER database to Version 6.5.6
- Data collection and entry;
- Data integrity and error checking;
- Determination of current PCIs;
- Development of updated prediction models;
- Determination of 5- and 10-Year predicted PCIs**;** and
- PAVER report generation and interpretation.

Data Collection and Entry

To update the PAVER software, data must first be collected and entered into the program. Existing pavement branches and sections defined during the last update in 2011 were evaluated and updated accordingly using the inventory module. The inventory items updated included section naming, last construction date, section areas, and if appropriate, surface types. After these tasks were completed, the visual condition survey data was entered into the PAVER database.

Based on the visual condition data gathered and the likely causes associated with these distresses (load- and/or climate/environment-related), the engineer has some understanding of the cause of deterioration over the life of the pavement. Analyzing the potential causes of deterioration being exhibited helps the user identify proper maintenance and rehabilitation strategies.

Figure 3.2-1, "Section vs Age," is one of many graphs that can be obtained through the use of PAVER that demonstrates the age of the pavements within the network. It shows the number of sections versus the age at the time of inspection for the areas that were inspected as part of this update. As shown in this illustration, the airside pavements vary in age from less than 5-years to more than 35-years.

Figure 3.2-1
Summary of Sections vs. Age

Data Integrity and Error Checking

Because the usefulness of the PAVER database outputs are dependent on the accuracy of the data contained in it, it is essential that all data be carefully checked for errors. Once all of the information obtained was entered into the PAVER database, printouts were generated and checked for errors against the original field data sheets and corrections were made as needed.

PAVER Reports

PAVER Version 6.5.6 is capable of producing a variety of reports using the data contained in the database. The report generation capability is almost unlimited once data is exported to a spreadsheet for further formatting. The following PAVER reports were generated for S75 and are provided in Appendix B:

- PAVER Work History Report;
- PAVER Branch Condition Report;
- PAVER Section Condition Report;
- PAVER Prediction Models.

3.3 Calculating the Pavement Condition Index

Visual condition data collected during the PCI inspections was entered into the PAVER database. PAVER was then used to calculate the current PCI for each sample unit and section. The PCI is a number ranging from 0 to 100 which indicates the apparent structural integrity and surface operational condition of the pavement, with “100” indicating a pavement in new condition and “0” indicating a failed pavement section. Pavement Condition Ratings (PCRs) are associated with PCI ranges and these ratings vary from “failed” to “excellent.” PCRs are discussed in more detail in **Section 3.4**.

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) and severity within that sample area. All deducts are summed and subsequently adjusted (or corrected) for the number of different distresses found. This corrected deduct value is subtracted from 100, to arrive at the PCI for that particular sample unit. The PCI for a pavement section is the mean PCI value of all sample units evaluated within that section. PCRs are associated with ranges of PCI values. **Figure 3.3-1** shows the condition ratings and the range of PCI values to which each descriptive rating corresponds.

Figure 3.3-1
PCI Rating

PCI Range	Pavement Condition
86 –100	Good
71 – 85	Satisfactory
56 – 70	Fair
41 – 55	Poor
26 – 40	Very Poor
11 – 25	Serious
0 – 10	Failed

3.4 Pavement Condition Rating

Table 2.2-1 on page 2-6 provided an inventory summary for each pavement section as well as the 2016 individual section PCIs. Detailed individual distress' that were observed in the field can be found in **Appendix A**, "Pavement Re-Inspection Reports."

3.5 Current Pavement Condition

A variety of condition indices will be presented in the remaining chapters of the report including PCIs discussed in this chapter. **Table 3.5-1** summarizes the measured criteria, index ranges, and critical PCI thresholds based on airport type to provide the reader a basis for understanding the data being presented for the functional (visual) evaluation that is further discussed in this chapter. The critical PCI is the condition at which maintenance may no longer be cost effective and major rehabilitation should be considered.

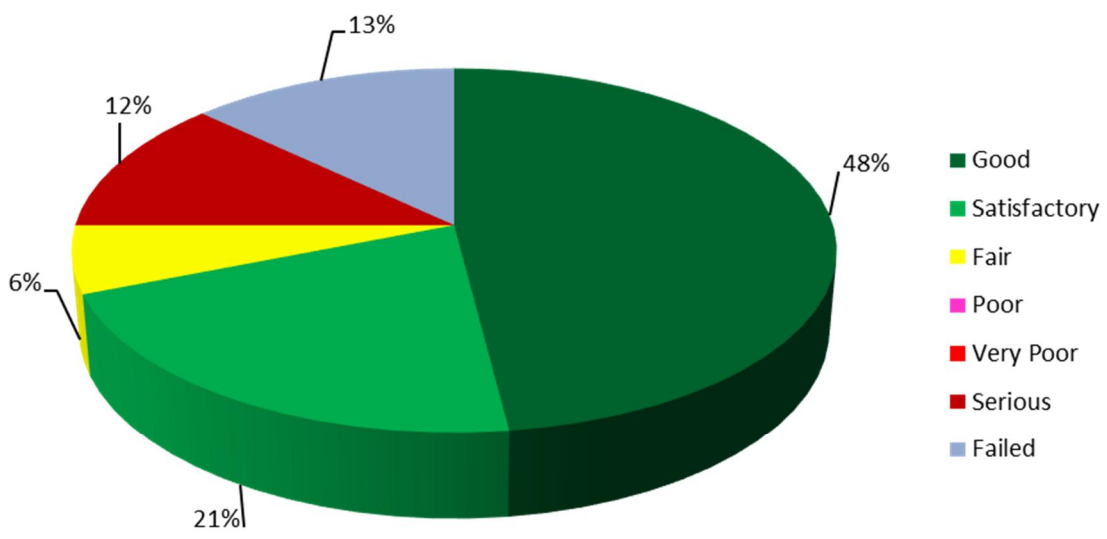
Figure 3.5-1 summarizes the current pavement condition inspected under the study limits at S75. As illustrated in this figure, approximately 69 percent of the airside pavement area is in *satisfactory* to *good* condition. Meanwhile, approximately 31 percent of the airside pavements at S75 are fair or below and will likely require rehabilitation within the near future.

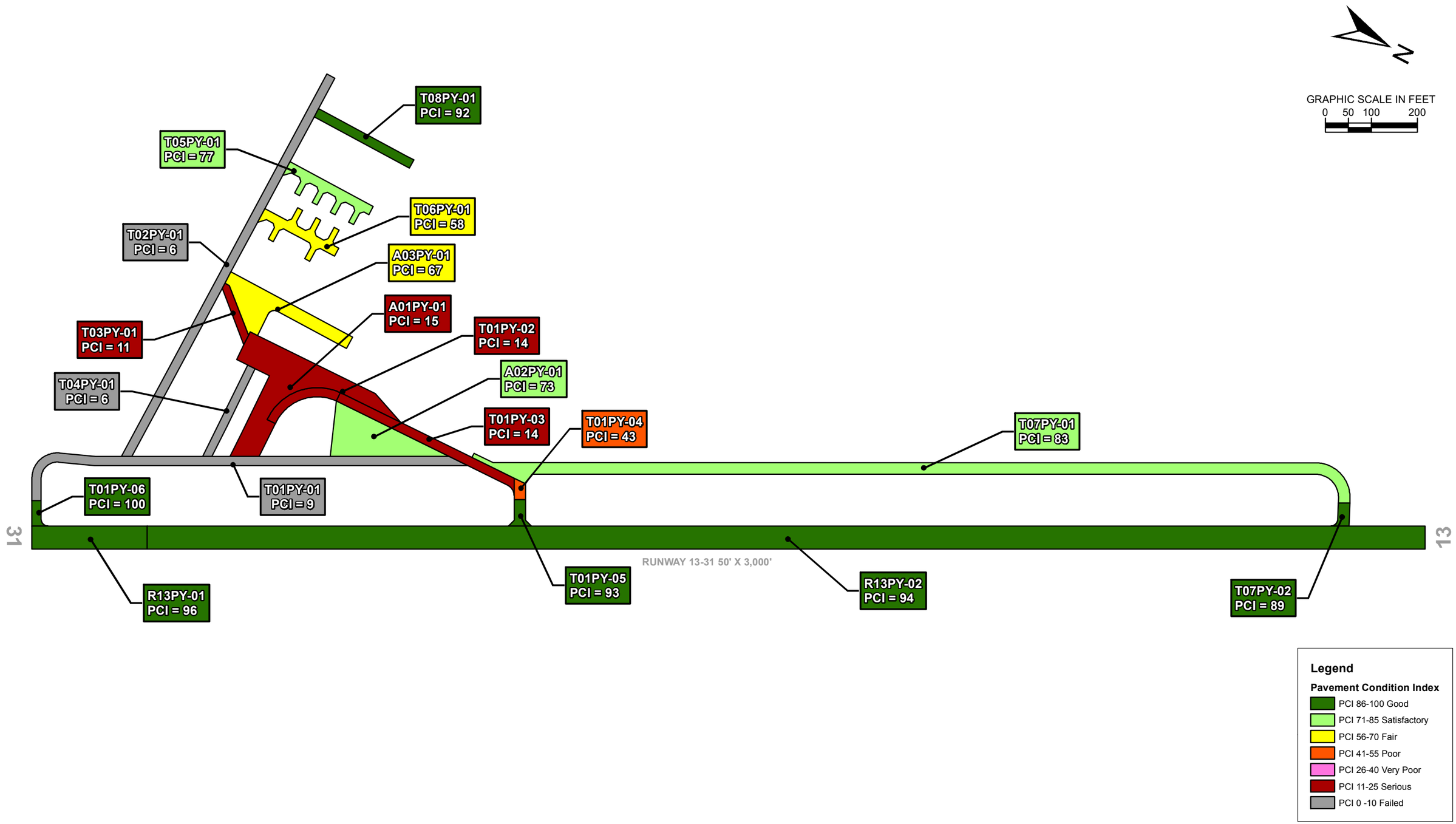
Figure 3.5-2 illustrates the existing PCIs (2016) for all of S75's pavement sections included in this NPMS update based on the visual condition survey results. This figure is color-coded to easily illustrate overall pavement condition. The pavement sections that are displayed in yellow (fair), magenta (poor), reds (very poor to serious), and grey (failed) should be considered for rehabilitation.

Table 3.5-1
Measured Condition Indices, Numerical Ranges, and Critical PCI

Index	Numerical Range		Critical PCI Based on Airport Type	
	Minimum	Maximum	NPIAS Airports	Non-NPIAS Airports
Pavement Condition Index (PCI)	0	100	65 for Runways 60 for Taxiways 50 for Aprons	50 for Runways 45 for Taxiways 40 for Aprons

Figure 3.5-1
Summary of Current (2016) Pavement Condition by Percent Pavement Area





Kimley»Horn

Figure 3.5-2

2016 Airfield PCI Exhibit

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

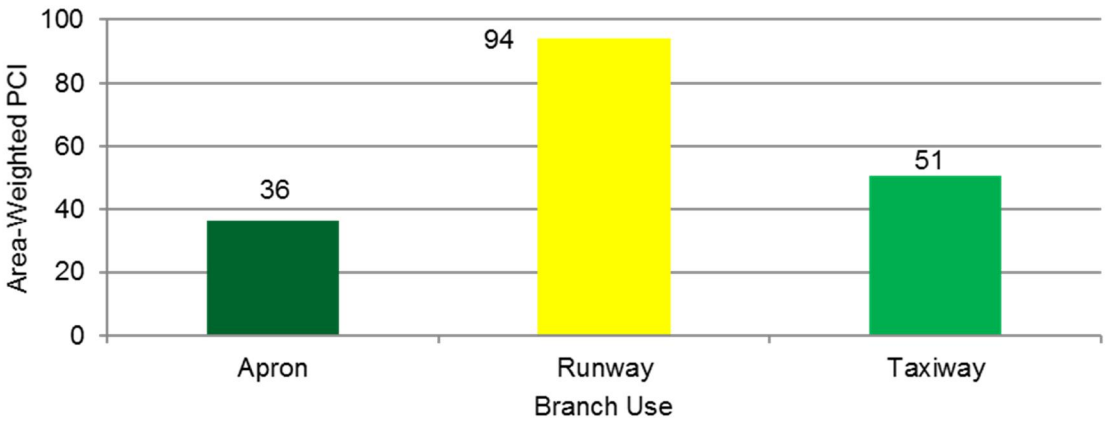
Airport ID

S75

Network Level Pavement Condition Index Discussion

A total of approximately 334 thousand square feet of airfield pavement including runways, taxiways, and `aprons were inspected at S75 in April 2016 using the procedure outlined in ASTM D5340-12 "*Standard Test Method for Airport Pavement Condition Index Surveys*." A total of 19 pavement sections were identified based on the previous NPMS update and recent construction records resulting in minor changes to the sections identified in 2011. The existing network has an area-weighted age at the time of inspection of approximately 16 years. Generally speaking, the airfield pavements at S75 are in *Fair* condition having an area-weighted PCI of 69. The area-weighted PCIs of the aprons, runways, and taxiways are 36, 94, and 51, respectively. **Figure 3.5-3** summarizes the area-weighted PCIs by branch use for S75.

Figure 3.5-3
Area-weighted PCI by Branch Use



Appendix C provides a variety of photographs taken during the visual condition surveys which document the overall condition of each branch and common distresses observed at the time of inspection.

3.6 Predicted Pavement Condition

The key of any NPMS is accurately estimating the future condition of each individual pavement section. Data collected during this study was used in the development of performance models and predicting future pavement condition. PAVER was used to develop prediction curves used to determine typical deterioration rates.

To develop these curves, all airside pavements for every airport included in this phase of the NPMS update were first divided into "groups or families" with similar pavement type, traffic, use,

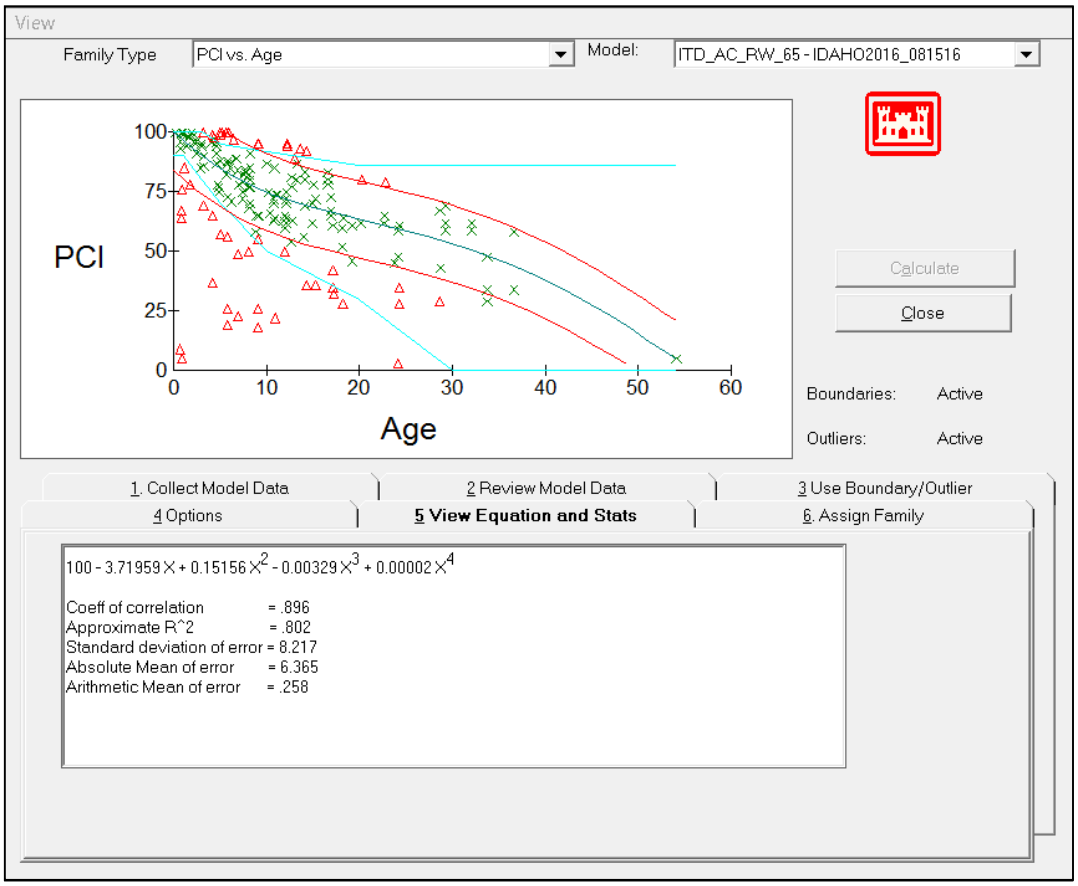
and rank. For example, all asphalt-surfaced runway, taxiway, and apron pavements were grouped together, etc. and constituted a family then PAVER establishes a best-fit curve through the visual condition data collected during the study to determine the PCI versus time for each family group. Research has demonstrated that pavement condition prediction is performed by assuming that there is a high probability that the behavior of one section will be similar to the behavior of other sections in the same family. These curves were used to determine when a pavement section would reach the critical PCI value determined acceptable for its surface type and usage, and to determine the proper timing of maintenance and rehabilitation activities.

The development of family curves for the NPMS is a very powerful and useful technique in predicting pavement condition even when historical condition data is limited. Multiple prediction curves were developed and evaluated for Idaho's NPMS; ultimately eight prediction curves were used for the functional analysis. The eight curves are listed below:

- ITD_AC_AP – Asphalt-surfaced Apron Pavements
- ITD_AC_RW – Asphalt-surfaced Runway Pavements
- ITD_AC_TW – Asphalt-surfaced Taxiway Pavements
- ITD_PCC – All PCC-surfaced Pavements
- ITD_ST_AP – All Surface-Treated Apron Pavements
- ITD_ST_RW – All Surface-Treated Runway Pavements
- ITD_ST_TW – All Surface-Treated Apron Pavements
- ITD_X – All Chip Sealed Pavements

An example of a family curve generated is shown in **Figure 3.7-1**, which shows the actual data points used to generate the prediction model. The remaining prediction curves are summarized in **Appendix B**. These curves will need to be further defined and developed as more inspection data is gathered during subsequent NPMS updates in future years.

Figure 3.7-1
ITD Prediction Curve (AC-surfaced Runway Pavements)

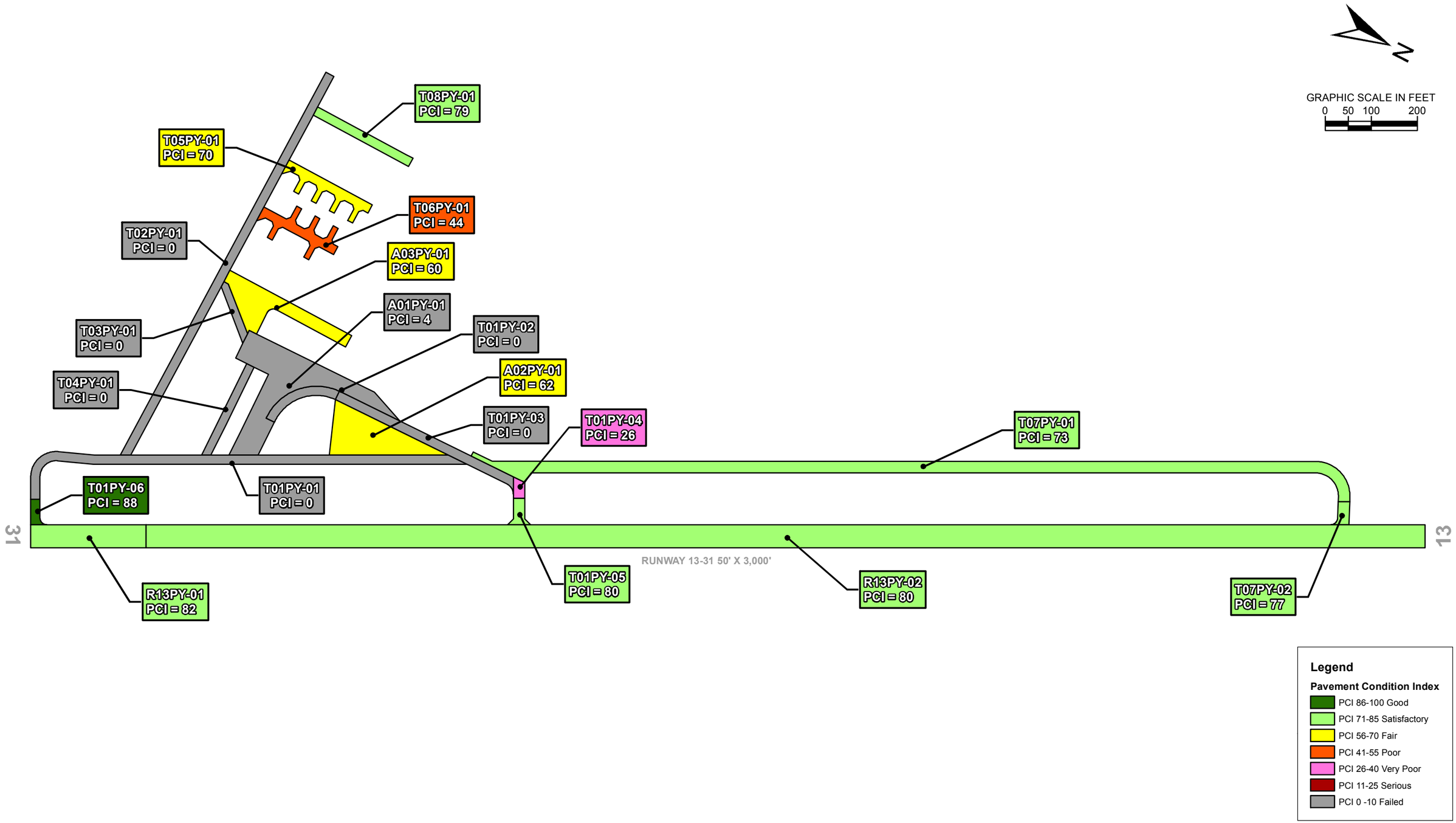


Predicted Pavement Condition in 5 and 10 Years with No Major Work

This section describes the pavement condition which is expected to result if only routine maintenance is applied. Routine maintenance consists of those activities normally performed on a regular basis, including crack sealing, joint seal repair, spall repair, minor patching, etc.

Figures 3.7-2 and 3.7-3 illustrate the predicted pavement condition in five years (2021) and ten years (2026) if no major rehabilitation (zero budget) is completed on the airfield pavements during a five-year and ten-year period, respectively, from the time of inspection.

As shown, a higher percentage of pavement area may fall into the “fair,” to “poor” categories in five years if no major rehabilitation is provided. For the second five years, the failure percentage increases substantially.



Kimley»Horn

Figure 3.7-2

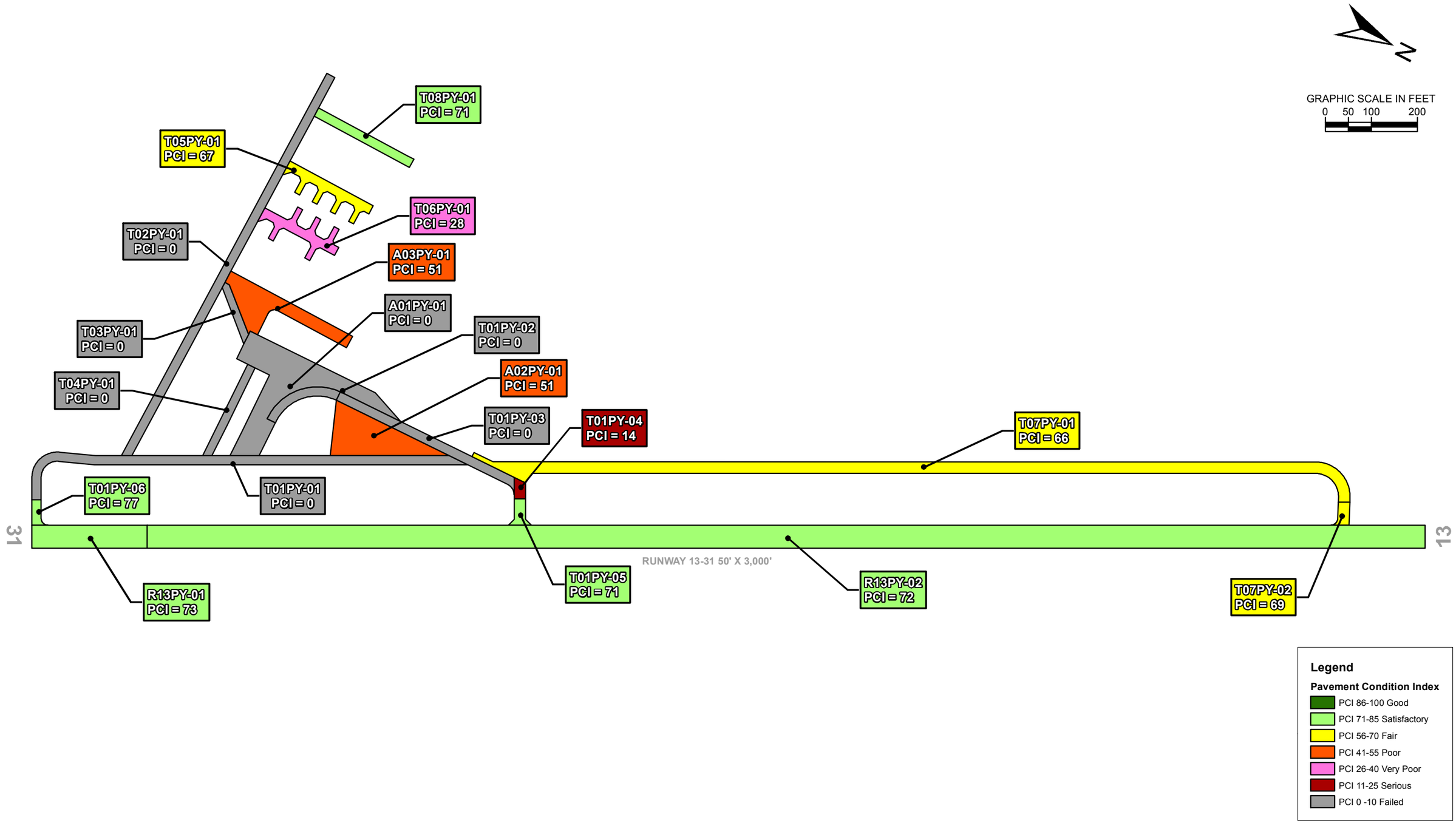
2021 Airfield Predicted PCI Exhibit

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

Airport ID

S75



Kimley»Horn

Figure 3.7-3

2026 Airfield Predicted PCI Exhibit

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

Airport ID

S75

CHAPTER 4 – NPMS CUSTOMIZATION

As part of the Phase VI update to the NPMS AERO requested a greater level of customization be completed to the PAVER software compared to previous updates in an effort to provide more realistic M&R recommendations to its airport sponsors. That being said, Kimley-Horn and J-U-B utilized the existing NPMS customization information, where available, as a starting point and further defined that information to consider actual conditions including airport type, geographic location, use, priority, and typical maintenance procedures to name a few.

4.1 Determination of Airport Type

In order to customize the NPMS to reflect items including typical pavement sections, traffic, geographic location, and typical approach to M&R activities that impact unit costing and ultimately CIP recommendations each individual airport was assigned a specific airport type. The airport types were first broken down by NPIAS or Non-NPIAS classification. The NPIAS airports were further subdivided into four additional airport types including NPIAS Large (NPIAS-L), NPIAS Medium (NPIAS-M), NPIAS Medium Cold Weather (NPIAS-M_C), and NPIAS Small (NPIAS-S) based on airport type, geographic location, and typical pavement section. A single airport type (NON-NPIAS) was assigned to all Non-NPIAS airports. **Table 4.1-1** summarizes the airport type identification for the 33 airports included in this phase of the NPMS update.

Table 4.1-1
Summary of Airports by Airport Type

Airport Name	Network ID	Airport Type
ABERDEEN MUNICIPAL AIRPORT	ABERDEEN	NPIAS-S
AMERICAN FALLS AIRPORT	AMER FALLS	NON-NPIAS
ARCO - BUTTE COUNTY AIRPORT	ARCO	NPIAS-M_C
BEAR LAKE COUNTY AIRPORT (PARIS)	BEAR LAKE	NPIAS-M_C
BLACKFOOT AIRPORT (MCCARLEY FIELD)	BLACKFOOT	NPIAS-M_C
BUHL MUNICIPAL AIRPORT	BUHL	NPIAS-M
BURLEY MUNICIPAL AIRPORT	BURLEY	NPIAS-M
CALDWELL INDUSTRIAL AIRPORT	CALDWELL	NPIAS-L
COTTONWOOD MUNICIPAL AIRPORT	COTTON	NON-NPIAS
DOWNEY AIRPORT (HYDE MEMORIAL)	DOWNEY	NON-NPIAS
DRIGGS MUNICIPAL AIRPORT (TETON PEAKS)	DRIGGS	NPIAS-L
EMMETT MUNICIPAL AIRPORT	EMMETT	NON-NPIAS
GLENNS FERRY MUNICIPAL AIRPORT	GLENNS	NON-NPIAS
GOODING MUNICIPAL AIRPORT	GOODING	NPIAS-M

Table 4.1-1 (cont.)
Summary of Airports by Airport Type

Airport Name	Network ID	Airport Type
HAZELTON MUNICIPAL AIRPORT	HAZELTON	NON-NPIAS
HOMEDALE MUNICIPAL AIRPORT	HOMEDALE	NPIAS-S
JEFFERSON COUNTY AIRPORT	RIGBY	NON-NPIAS
JEROME COUNTY AIRPORT	JEROME	NPIAS-M
LEE WILLIAMS MEMORIAL AIRPORT	MIDVALE	NON-NPIAS
MACKAY AIRPORT	MACKAY	NON-NPIAS
MALAD CITY AIRPORT	MALAD	NON-NPIAS
MOUNTAIN HOME MUNICIPAL AIRPORT	MTN HOME	NPIAS-M
MUD LAKE-JEFFERSON COUNTY AIRPORT	MUD LAKE	NON-NPIAS
MURPHY AIRSTRIP	MURPHY	NON-NPIAS
NAMPA MUNICIPAL AIRPORT	NAMPA	NPIAS-L
NEZ PERCE MUNICIPAL AIRPORT	NEZPERCE	NON-NPIAS
PARMA AIRPORT	PARMA	NON-NPIAS
PAYETTE MUNICIPAL AIRPORT	PAYETTE	NON-NPIAS
PRESTON AIRPORT	PRESTON	NPIAS-S
REXBURG AIRPORT	REXBURG	NPIAS-M_C
ROCKFORD MUNICIPAL AIRPORT	ROCKFORD	NON-NPIAS
SODA SPRINGS AIRPORT (ALLEN H. TIGERT FIELD)	SODA	NON-NPIAS
ST. ANTHONY MUNICIPAL AIRPORT	ST ANTHONY	NON-NPIAS

Typical Pavement Cross Sections

The following typical pavement cross sections were considered in the development of the per square foot unit costs for major rehabilitation activities based on various airport types identified.

- NPIAS Large – 4” Asphalt / 5” Aggregate Base / 12” Aggregate Subbase
- NPIAS Medium – 3” Asphalt / 4” Aggregate Base / 9” Aggregate Subbase
- NPIAS Medium (Cold) – 3” Asphalt / 4” Aggregate Base / 13” Aggregate Subbase
- NPIAS Small – 2” Asphalt / 4” Aggregate Base / 10” Aggregate Subbase
- Non-NPIAS – 2” Asphalt / 6” Aggregate Base

The standard sections are intended for planning purposes and are not intended to be a design level section and each “airport” is advised to develop a specific pavement section in accordance with the procedures set forth in AC 150/5320-6E during project level design.

4.2 Preventative Maintenance Policies

Preventative maintenance policies are applied in PAVER when a pavement section is above the critical PCI identified. The intention is to continually maintain a pavement section above the critical PCI through preventative maintenance activities to extend its pavement life. **Table 4.2-1** outlines the preventative maintenance policies developed for this update to the NPMS. It should be noted that the application of these treatments is most valid in year 1 of the analysis as it utilizes actual distresses observed at the time of inspection. For this update to the NPMS the analysis years considered were 2018 – 2022, therefore the maintenance recommendation presented in **Appendix D,** "Applied Policy Details – Detailed 1st Year Maintenance Recommendations", should only be considered for 2017.

Table 4.2-1
ITD Preventative Maintenance by Airport Classification

Distress	Distress Severity	Description	2016 Policies	
			NPIAS	Non-NPIAS
			Work Type	Work Type
41	Low	Alligator Cracking	Do Nothing	Do Nothing
41	Medium	Alligator Cracking	Patching - AC Deep	Patching - AC Deep
41	High	Alligator Cracking	Patching - AC Deep	Patching - AC Deep
42	N/A	Bleeding	Do Nothing	Do Nothing
43	Low	Block Cracking	Do Nothing	Do Nothing
43	Medium	Block Cracking	Crack Sealing - AC	Crack Sealing - AC
43	High	Block Cracking	Crack Sealing - AC	Crack Sealing - AC
44	Low	Corrugation	Do Nothing	Do Nothing
44	Medium	Corrugation	Do Nothing	Do Nothing
44	High	Corrugation	Patching - AC Shallow	Patching - AC Shallow
45	Low	Depression	Do Nothing	Do Nothing
45	Medium	Depression	Patching - AC Shallow	Do Nothing
45	High	Depression	Patching - AC Shallow	Patching - AC Shallow
47	Low	Joint Reflection Cracking	Do Nothing	Do Nothing
47	Medium	Joint Reflection Cracking	Crack Sealing - AC	Crack Sealing - AC
47	High	Joint Reflection Cracking	Crack Sealing - AC	Crack Sealing - AC
48	Low	L&T Cracking	Do Nothing	Do Nothing
48	Medium	L&T Cracking	Crack Sealing - AC	Crack Sealing - AC
48	High	L&T Cracking	Crack Sealing - AC	Crack Sealing - AC
49	N/A	Oil Spillage	Do Nothing	Do Nothing
50	Low	Patching	Do Nothing	Do Nothing
50	Medium	Patching	Do Nothing	Do Nothing

Table 4.2-1 (cont.)
ITD Preventative Maintenance by Airport Classification

Distress	Distress Severity	Description	2016 Policies	
			NPIAS	Non-NPIAS
			Work Type	Work Type
50	High	Patching	Patching - AC Deep	Patching - AC Deep
51	N/A	Polished Aggregate	Do Nothing	Do Nothing
52	Low	Raveling	Do Nothing	Do Nothing
52	Medium	Raveling	Patching - AC Shallow	Do Nothing
52	High	Raveling	Patching - AC Shallow	Patching - AC Shallow
53	Low	Rutting	Do Nothing	Do Nothing
53	Medium	Rutting	Patching - AC Shallow	Do Nothing
53	High	Rutting	Patching - AC Deep	Patching - AC Deep
54	Low	Shoving	Do Nothing	Do Nothing
54	Medium	Shoving	Do Nothing	Do Nothing
54	High	Shoving	Patching - AC Shallow	Patching - AC Shallow
55	N/A	Slippage Cracking	Patching - AC Deep	Patching - AC Deep
56	Low	Swelling	Do Nothing	Do Nothing
56	Medium	Swelling	Do Nothing	Do Nothing
56	High	Swelling	Patching - AC Shallow	Patching - AC Shallow
57	Low	Weathering	Do Nothing	Do Nothing
57	Medium	Weathering	Do Nothing	Do Nothing
57	High	Weathering	Patching - AC Shallow	Patching - AC Shallow
61	Low	Blow-Up	Do Nothing	Do Nothing
61	Medium	Blow-Up	Patching - PCC Full Depth	Patching - PCC Full Depth
61	High	Blow-Up	Patching - PCC Full Depth	Patching - PCC Full Depth
62	Low	Corner Break	Do Nothing	Do Nothing
62	Medium	Corner Break	Crack Sealing - PCC	Crack Sealing - PCC
62	High	Corner Break	Patching - PCC Full Depth	Patching - PCC Full Depth
63	Low	Linear Crack	Do Nothing	Do Nothing
63	Medium	Linear Crack	Crack Sealing - PCC	Crack Sealing - PCC
63	High	Linear Crack	Patching - PCC Full Depth	Patching - PCC Full Depth
64	Low	Durability Cracking	Do Nothing	Do Nothing
64	Medium	Durability Cracking	Patching - PCC Partial Depth	Patching - PCC Partial Depth
64	High	Durability Cracking	Patching - PCC Full Depth	Patching - PCC Full Depth
65	Low	Joint Seal Damage	Do Nothing	Do Nothing
65	Medium	Joint Seal Damage	Joint Seal (Localized)	Do Nothing
65	High	Joint Seal Damage	Joint Seal (Localized)	Joint Seal (Localized)
66	Low	Small Patch	Do Nothing	Do Nothing

Table 4.2-1 (cont.)
ITD Preventative Maintenance by Airport Classification

Distress	Distress Severity	Description	2016 Policies	
			NPIAS	Non-NPIAS
			Work Type	Work Type
66	Medium	Small Patch	Patching - PCC Partial Depth	Do Nothing
66	High	Small Patch	Patching - PCC Partial Depth	Patching - PCC Partial Depth
67	Low	Large Patch	Do Nothing	Do Nothing
67	Medium	Large Patch	Patching - PCC Partial Depth	Do Nothing
67	High	Large Patch	Patching - PCC Full Depth	Patching - PCC Full Depth
70	Low	Scaling	Do Nothing	Do Nothing
70	Medium	Scaling	Do Nothing	Do Nothing
70	High	Scaling	Grinding (Localized)	Grinding (Localized)
71	Low	Faulting	Do Nothing	Do Nothing
71	Medium	Faulting	Do Nothing	Do Nothing
71	High	Faulting	Grinding (Localized)	Grinding (Localized)
72	Low	Shattered Slab	Do Nothing	Do Nothing
72	Medium	Shattered Slab	Crack Sealing - PCC	Crack Sealing - PCC
72	High	Shattered Slab	Slab Replacement - PCC	Slab Replacement - PCC
73	N/A	Shrinkage Cracking	Do Nothing	Do Nothing
74	Low	Joint Spall	Do Nothing	Do Nothing
74	Medium	Joint Spall	Patching - PCC Partial Depth	Do Nothing
74	High	Joint Spall	Patching - PCC Partial Depth	Patching - PCC Partial Depth
75	Low	Corner Spall	Do Nothing	Do Nothing
75	Medium	Corner Spall	Patching - PCC Partial Depth	Do Nothing
75	High	Corner Spall	Patching - PCC Partial Depth	Patching - PCC Partial Depth
76	Low	ASR	Do Nothing	Do Nothing
76	Medium	ASR	Patching - PCC Partial Depth	Do Nothing
76	High	ASR	Slab Replacement - PCC	Slab Replacement - PCC

4.3 Global Maintenance

Global maintenance activities include treatments that are applied over the entire pavement section and are intended to extend the life of the pavement section. Global maintenance treatments such as slurry seals, fog seals, and chip seals are used frequently on airports throughout Idaho. In order to be effective it is important to apply these various global maintenance treatments at the right time and to pavements that are in good condition (i.e. above the critical PCI and exhibiting only age- or climate-related distresses). However, given funding constraints these types of treatments are often applied as a band-aid to address deteriorated pavement sections.

For the purpose of this analysis a generalized global maintenance treatment referred to as "Surface Treatment" is considered. It is recommended that a crack seal is completed prior to applying the recommended global treatment. Additionally, it is the responsibility of the airport engineer(s) to determine the appropriate surface treatment to be applied based on an evaluation during project level design in addition to the functional condition identified in this report.

Based on discussions with AERO staff the following parameters were applied in the analysis:

- Surface treatments to be applied on pavements with PCIs above critical and exhibiting climate- and age-related distress (i.e. L&T cracking, weathering, and raveling)
- 7-year application interval with a 2-year increase in life
- First surface treatment to be applied at Year 3 (or as close to given other project phasing constraints) following new surface construction

4.4 Critical PCI Values

A pavement is considered to have reached the end of its functional life when its rideability, skid characteristics, or surface condition have deteriorated to the point where action is required to correct the deficiency. Determination of when functional failure has occurred is usually based on the results of the visual condition survey.

To estimate functional remaining life, minimum allowable levels of PCI were set for all pavements within the airport (i.e. critical PCI values). These minimum values (threshold values) were established by evaluating current pavement conditions at S75 and estimating at what condition the pavements should be rehabilitated. The available condition data, combined with the team's pavement evaluation experience at other airports, were used to establish the threshold PCI values.

Table 4.4-1 summarizes the critical PCI values by branch use and airport classification established for the Idaho NPMS.

Table 4.4-1
Critical PCI Values by Branch Use and Airport Classification

Airport Classification	Branch Use		
	Runway	Taxiway	Apron
NPIAS	65	60	50
Non-NPIAS	50	45	40

4.5 Unit Costs

J-U-B conducted a detailed review of recent bid tabulations from across the State of Idaho that encompassed a variety of airport construction projects in an effort to develop representative planning level unit costs for M&R activities.

Preventative and Global Maintenance Costs

Table 4.5-1 summarizes the unit costs applied for the preventative and global maintenance activities based on airport type.

Table 4.5-1
Unit Costs for Preventative and Global Maintenance by Airport Type

Work Type	Units	Unit Cost				
		NPIAS				Non-NPIAS
		Large	Medium	Medium_Cold	Small	
Crak Sealing - AC	LF	$1.20	$1.20	$1.20	$1.20	$1.20
Patching - AC Shallow	SF	$1.78	$1.68	$1.78	$1.78	$1.59
Patching - AC Deep	SF	$3.37	$2.43	$2.57	$1.78	$1.59
Joint Seal (Localized)	LF	$2.25	$2.25	$2.25	$2.25	$2.25
Crack Sealing - PCC	LF	$2.25	$2.25	$2.25	$2.25	$2.25
Grinding (Localized)	SF	$0.75	$0.75	$0.75	$0.75	$0.75
Patching - PCC Partial Depth	SF	$8.00	$8.00	$8.00	$8.00	$8.00
Patching - PCC Full Depth	SF	$15.00	$15.00	$15.00	$15.00	$15.00
Slab Replacement - PCC	SF	$24.00	$24.00	$24.00	$24.00	$24.00
Crack Seal - Surface Treatment	SF	$0.35	$0.35	$0.35	$0.35	$0.35

Major Rehabilitation Costs

The PAVER software utilizes a cost by PCI relationship when determining the anticipated costs for major rehabilitation activities. The costs per square foot for major rehabilitation presented in **Table 4.5-2** were developed using the typical pavement sections outlined in **Section 4.1** and the notes presented at the bottom of the table.

Table 4.5-2
Unit Costs for Major Rehabilitation by Airport Type

	Unit Cost ($/SF)				
	NPIAS				
PCI	Large	Medium	Medium_Cold	Small	Non-NPIAS
100	$0.00	$0.00	$0.00	$0.00	$0.00
90	$0.00	$0.00	$0.00	$0.00	$0.00
80	$1.00	$0.75	$0.75	$0.50	$0.00
70	$1.40	$1.15	$1.15	$0.90	$0.25
60	$1.40	$1.15	$1.15	$0.90	$0.50
50	$1.40	$1.15	$1.15	$0.90	$0.90
40	$11.19	$7.46	$9.24	$7.44	$3.96
30	$11.19	$7.46	$9.24	$7.44	$3.96
20	$11.19	$7.46	$9.24	$7.44	$3.96
10	$11.19	$7.46	$9.24	$7.44	$3.96
0	$11.19	$7.46	$9.24	$7.44	$3.96

Notes:
NPIAS Large – Critical PCI to 40: 2" AC Mill and Replace
NPIAS Medium – Critical PCI to 40: 1.5" AC Mill and Replace
NPIAS Small/Non-NPIAS – Critical PCI to 40: 1" AC Mill and Replace
Less than 40 – Full-depth Reconstruction
PCC Reconstruction Assumed to be $15.00/SF

CHAPTER 5 – REHABILITATION RECOMMENDATIONS

This chapter will address typical maintenance and rehabilitation (M&R) questions: how much money is needed in the coming years to maintain the pavements, within an unlimited budget; which pavements will be maintained each year; and what type of M&R should be applied.

Decision makers need to understand the impact on budgetary needs based on current and predicted conditions. Annual budgetary needs can be established within PAVER to maintain the pavements in an acceptable condition. The needs are estimated on the section level by projecting the year at which each individual section will deteriorate below the critical PCIs and multiplying the section area by the unit M&R cost relationship (refer to **Table 4.5-2** shown in the previous Chapter).

The assumption that the PCI will return to 100 after an overlay or reconstruction activity is completed and that the PCI will only slightly increase after a preventive or global maintenance activity is applied.

PAVER utilizes the preventive maintenance policies presented in Chapter 4 to estimate budget requirements for maintenance activities in the first year of the work plan. The budget for subsequent years is based on the unit M&R cost relationship as described in Chapter 4.

This chapter presents the results of the PAVER analysis for S75 as well as the recommended 5-year CIP.

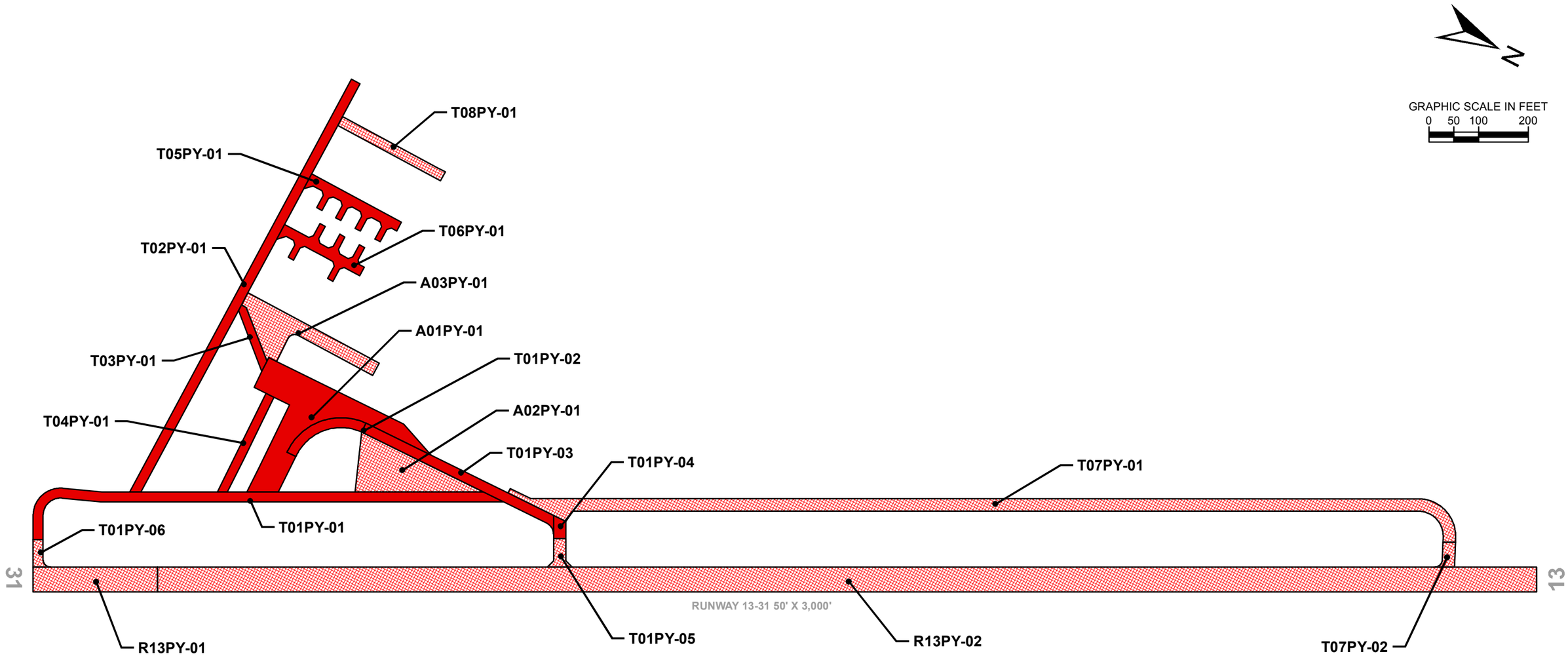
5.1 PAVER Unlimited Budget Analysis

Given the uncertainty in the availability of funding an unlimited budget analysis was completed to evaluate the worst case scenario and identify all pavement related needs. AERO did provide Kimley-Horn with their currently planned statewide CIP for 2016 and 2017 so that data was utilized when developing the recommended 5-year CIP. A 5-year planning period (2018-2022) was utilized for the analysis at S75.

Table 5.1-1 and **Figure 5.1-1** summarize the results of the unlimited budget analysis for S75. The fluctuation in the M&R costs is due to M&R being applied primarily in year one due to the unlimited funding nature of the analysis scenario. The results of the PAVER analysis will be used as the basis for developing the recommended 5-year CIP presented in Section 5.2.

Table 5.1-1
Summary of 5-year M&R Needs Identified by PAVER Unlimited Budget Analysis

Year	Branch ID	Section ID	Area (SF)	PCI at Treatment	Recommended Treatment	Unit Cost	Total Cost
2018	A01PY	1	26,703	10	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$105,744
2018	A02PY	1	15,578	68	Surface Treatment	$0.35	$5,452
2018	A03PY	1	12,866	64	Surface Treatment	$0.35	$4,503
2018	R13PY	1	12,500	89	Surface Treatment	$0.35	$4,375
2018	R13PY	2	138,850	87	Surface Treatment	$0.35	$48,598
2018	T01PY	1	19,835	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$78,547
2018	T01PY	2	3,447	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$13,650
2018	T01PY	3	8,553	2	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$33,870
2018	T01PY	4	1,019	36	Complete Reconstruction - 6" PCC / 6" Agg Base	$15.00	$15,285
2018	T01PY	5	1,581	87	Surface Treatment	$0.35	$553
2018	T01PY	6	1,148	96	Surface Treatment	$0.35	$402
2018	T02PY	1	18,759	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$74,286
2018	T03PY	1	2,174	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$8,609
2018	T04PY	1	3,904	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$15,460
2018	T05PY	1	6,554	73	Complete Reconstruction - 6" PCC / 6" Agg Base	$5.06	$33,189
2018	T06PY	1	6,083	53	Complete Reconstruction - 6" PCC / 6" Agg Base	$6.00	$36,498
2018	T07PY	1	48,315	78	Surface Treatment	$0.35	$16,910
2018	T07PY	2	1,295	83	Surface Treatment	$0.35	$453
2018	T08PY	1	4,700	86	Surface Treatment	$0.35	$1,645
						2018 Total:	*$498,030*
						5-Year Total:	*$498,030*



Legend

2018 Surface Treatment	2018 Major Rehabilitation
2019 Surface Treatment	2019 Major Rehabilitation
2020 Surface Treatment	2020 Major Rehabilitation
2021 Surface Treatment	2021 Major Rehabilitation
2022 Surface Treatment	2022 Major Rehabilitation

Kimley»Horn

Figure 5.1-1

PAVER 5-Year Capital Improvement Program

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

Airport ID

S75

5.2 Recommended 5-Year CIP

This section is a culmination of what has been evaluated and used in the development of the recommended CIP plan for S75. The results as presented in this section will vary from what is presented in the previous section based on other considerations including AERO's currently programmed CIP for 2016 and 2017, additional costs necessary to account for total project costs, as well as project packaging to optimize funding dollars, overall operations, and construction logistics throughout the airport. The recommended CIP, as outlined, should enable the airport to maintain the existing airport infrastructure at an acceptable condition, properly allocate funding, and apply M&R activities in a timely manner in the upcoming years.

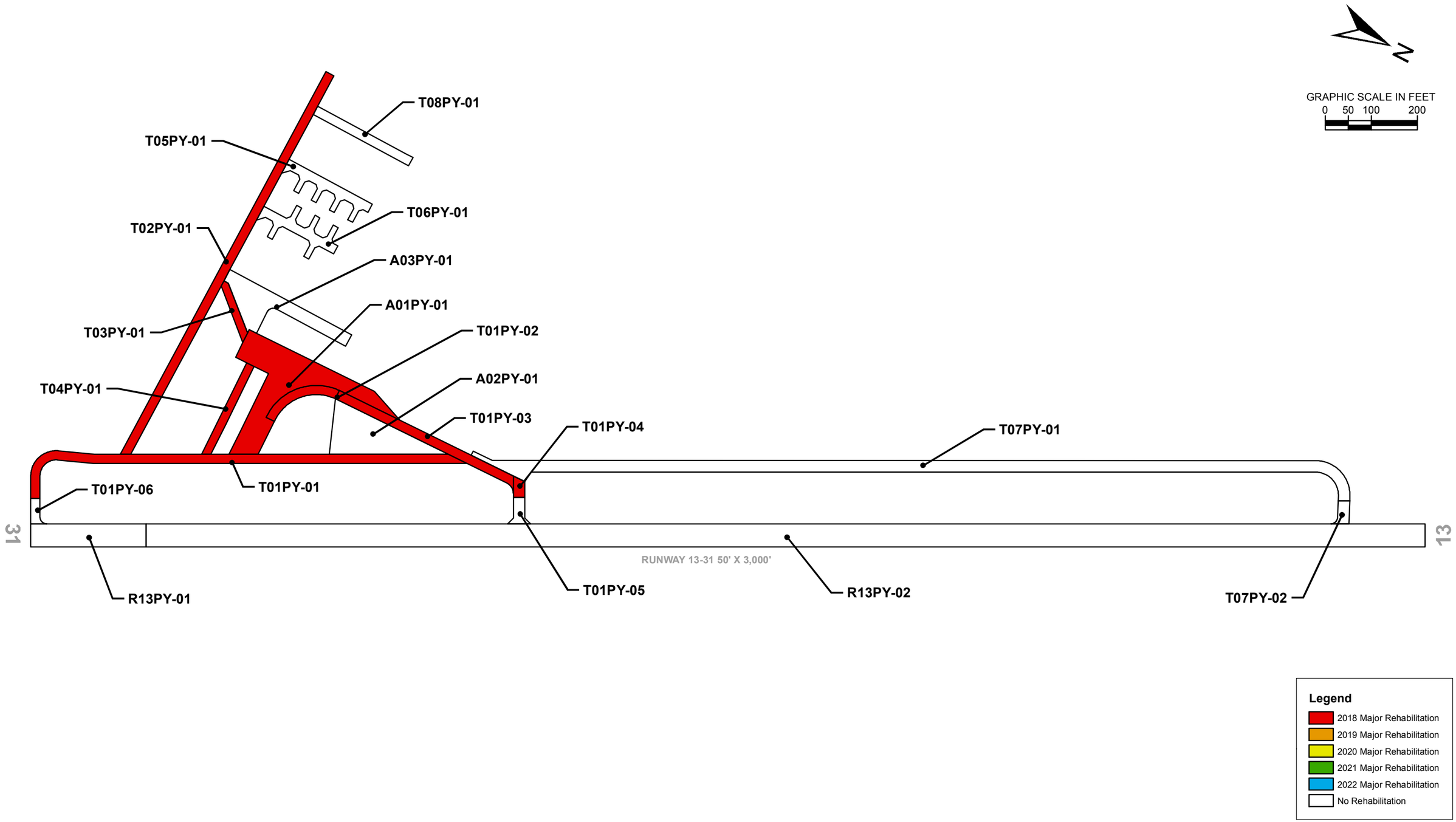
Project Packaging and CIP Development Considerations

The PAVER analysis results presented previously provide a good baseline for the development of a 5-year CIP; however, such a program has limitations. For example, rehabilitation projects are recommended based only on functional pavement condition under an unlimited budget scenario and oftentimes this results in adjacent pavement sections being recommended for rehabilitation in different years requiring multiple mobilizations to remote locations in Idaho and multiple operational disruptions. In addition, PAVER only takes into account the cost of the pavements and not the overall projects. In an effort to provide the most logical CIP recommendations and costs it is necessary to consider other factors such as construction phasing, operational impacts, and currently planned rehabilitation projects when developing the recommended CIP.

In order to develop a realistic 5-year CIP for S75 the following items were considered using the PAVER recommendations presented in Section 5.1 as the basis:

- Adjacent pavement sections recommended for M&R were grouped into logical construction projects.
- Prioritization was based on condition and distress types present.
- Pavement sections that were "granted" in the Idaho Statewide Capital Improvement Program (ISCIP) for 2016 or 2017 were manually removed from the recommended CIP.
- Recently rehabilitated pavement sections had a surface treatment manually applied as near to year three as possible assuming alignment with another recommended project.
- All sections recommended for complete reconstruction or an asphalt mill and replace in the 5-year CIP have a crack seal and surface treatment recommended at year three (or as near as possible), i.e. a pavement section recommended for a mill and replace in 2018 will have a planned surface treatment in 2021.

S75's recommended 5-year CIP is simplified and graphically presented in **Figures 5.2-1** and **5.2-2** for major rehabilitation and surface treatments, respectively.



Kimley»Horn

Figure 5.2-1

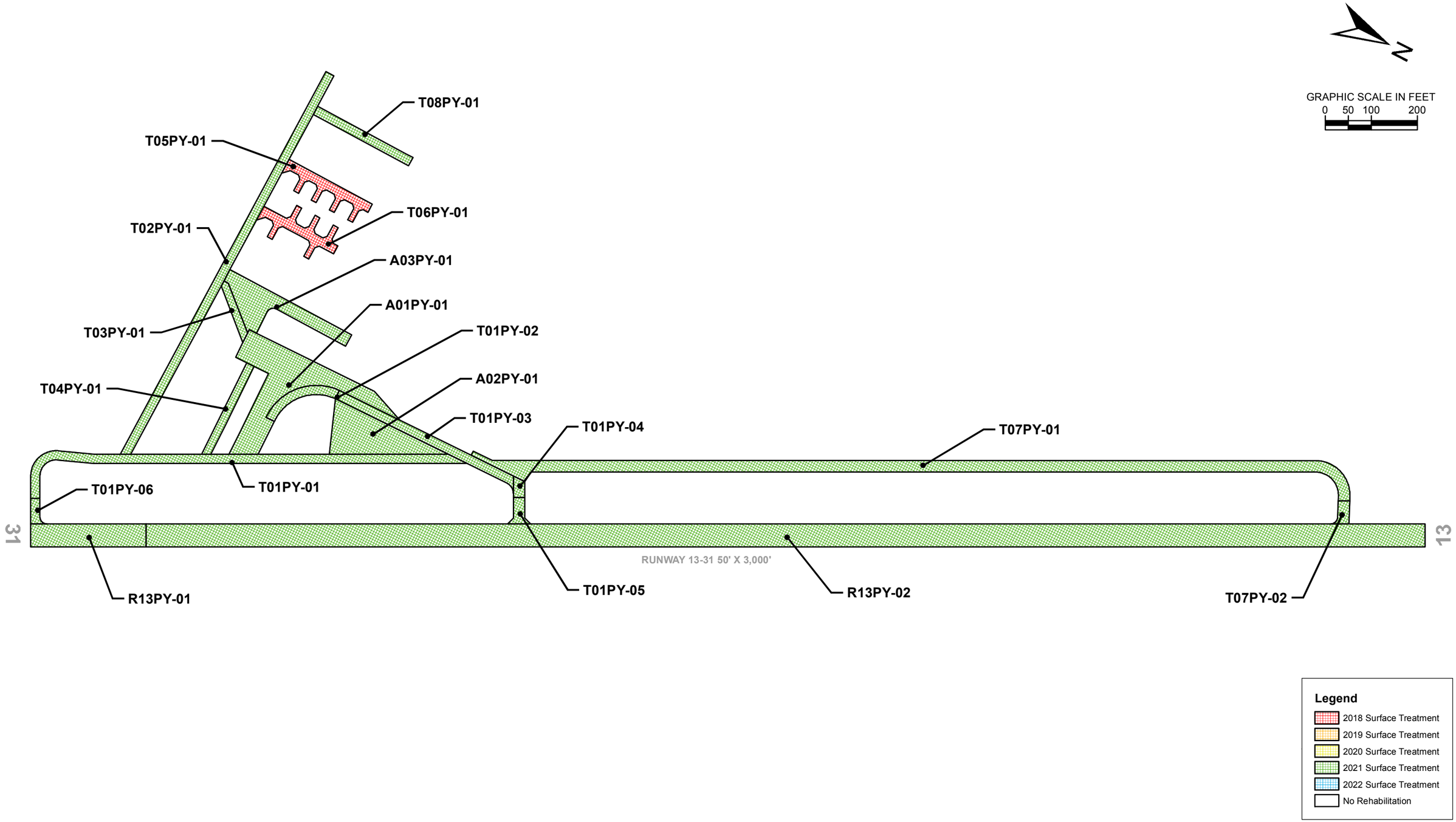
Recommended 5-Year Capital Improvement Program

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

Airport ID

S75



Kimley»Horn

Figure 5.2-2

Recommended 5-Year Capital Improvement Program

Payette Municipal Airport

Idaho Transportation Department Division of Aeronautics

Airport ID

S75

Development of Project Specific Cost Estimates

The PAVER software produces cost estimates based on a unit cost per square foot for pavement related (hard costs) costs only as presented in Chapter 4. In an effort to develop realistic project specific cost estimates that AERO can trust for future planning purposes our team developed realistic cost estimates outside of the PAVER program to include additional construction items and soft costs including items such as airfield electrical improvements / upgrades, costs for unknown utilities, future planned underground drainage improvements, construction costs (including quality control and construction administration), general administration costs, and professional services for design and construction. The raw costs for the pavement materials were the basis for developing the cost estimates and those costs were increased based on applied percentages related to these items. A discussion of each of these items is presented below.

- Drainage/Electrical/Misc. Improvements – 8% of raw pavement costs (only considered for complete reconstruction)
- QA/QC Testing – 3% of raw pavement costs plus drainage/electrical/misc. improvements (only considered for complete reconstruction and mill/replace)
- Construction Administration – 10% of raw pavement costs plus drainage/electrical/misc. improvements plus construction administration
- General Project Administration - 1% of total construction costs
- Professional Design Fee – 10% of total construction costs

Table 5.2-1 summarizes the project specific cost estimates based on the recommended 5-year CIP for S75.

Detailed 1st Year Maintenance Needs

This analysis was performed to estimate the amount of preventative maintenance activities that are recommended based on the preventative maintenance policies to maintain the pavements that have a PCI value above the critical PCI value at a high level. PAVER develops specific (type and quantity of repair) maintenance recommendations for year 1 of the analysis using the extrapolated distresses developed based on actual field data collected during the PCI surveys. The analytical process for year 1 of the analysis develops a more accurate plan for identifying maintenance needs as compared to future years. Given that specific distress types and severity present are unknown for future years, 2 through 5, of the analysis PAVER applies a unit cost ($/sf) based on PCI for each individual pavement section having a PCI greater than the critical.

In order to determine the budget needs for preventative maintenance activities in year 1 of the analysis a “Consequence of Localized Distress Maintenance” scenario was simulated. Applying the recommended preventative maintenance activities will increase the area-weighed PCI value of the network only slightly; however, it is expected that applying such maintenance on an annual

basis will extend the life of the pavements that have PCI values greater than the critical PCI values identified. It should be noted that applying preventative maintenance to pavements below the critical PCI value is not a cost-effective way to manage your pavement infrastructure. The detailed year 1 recommended preventative maintenance recommendations are presented in **Appendix D**.

Table 5.2-1
S75 Recommended 5-year CIP Summary Table

Year	Branch ID	Section ID	Area (SF)	PCI at Treatment	Recommended Treatment	PAVER Output		Soft Costs					Total Cost
						Unit Cost	Total Cost	Drainage/ Elec./Misc.	QA/QC Testing	Construction Administration	Admin Costs	Design Fee	
2018	A01PY	1	26,703	10	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$105,744	$8,460	$3,426	$11,763	$1,294	$12,939	$143,626
2018	T01PY	1	19,835	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$78,547	$6,284	$2,545	$8,738	$961	$9,611	$106,685
2018	T01PY	2	3,447	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$13,650	$1,092	$442	$1,518	$167	$1,670	$18,540
2018	T01PY	3	8,553	2	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$33,870	$2,710	$1,097	$3,768	$414	$4,144	$46,003
2018	T01PY	4	1,019	36	Complete Reconstruction - 6" PCC / 6" Agg Base	$15.00	$15,285	$1,223	$495	$1,700	$187	$1,870	$20,761
2018	T02PY	1	18,759	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$74,286	$5,943	$2,407	$8,264	$909	$9,090	$100,898
2018	T03PY	1	2,174	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$8,609	$689	$279	$958	$105	$1,053	$11,693
2018	T04PY	1	3,904	0	Complete Reconstruction - 2" AC / 6" Agg Base	$3.96	$15,460	$1,237	$501	$1,720	$189	$1,892	$20,998
2018	T05PY	1	6,554	73	PCC Maintenance	$5.06	$33,189			$3,319	$365	$3,651	$40,524
2018	T06PY	1	6,083	53	PCC Maintenance	$6.00	$36,498			$3,650	$401	$4,015	$44,564
												Total for 2018:	*$554,293*
2021	A01PY	1	26,703	N/A	Surface Treatment	$0.35	$9,346			$935	$103	$1,028	$11,412
2021	A02PY	1	15,578	62	Surface Treatment	$0.35	$5,452			$545	$60	$600	$6,657
2021	A03PY	1	12,866	60	Surface Treatment	$0.35	$4,503			$450	$50	$495	$5,498
2021	R13PY	1	12,500	82	Surface Treatment	$0.35	$4,375			$438	$48	$481	$5,342
2021	R13PY	2	138,850	81	Surface Treatment	$0.35	$48,598			$4,860	$535	$5,346	$59,338

Table 5.2-1 (cont.)
S75 Recommended 5-year CIP Summary Table

						PAVER Output		Soft Costs					
Year	Branch ID	Section ID	Area (SF)	PCI at Treatment	Recommended Treatment	Unit Cost	Total Cost	Drainage/ Elec./Misc.	QA/QC Testing	Construction Administration	Admin Costs	Design Fee	Total Cost
2021	T01PY	1	19,835	N/A	Surface Treatment	$0.35	$6,942			$694	$76	$764	$8,476
2021	T01PY	2	3,447	N/A	Surface Treatment	$0.35	$1,206			$121	$13	$133	$1,473
2021	T01PY	3	8,553	N/A	Surface Treatment	$0.35	$2,994			$299	$33	$329	$3,655
2021	T01PY	4	1,019	N/A	Surface Treatment	$0.35	$357			$36	$4	$39	$435
2021	T01PY	5	1,581	81	Surface Treatment	$0.35	$553			$55	$6	$61	$676
2021	T01PY	6	1,148	88	Surface Treatment	$0.35	$402			$40	$4	$44	$491
2021	T02PY	1	18,759	N/A	Surface Treatment	$0.35	$6,566			$657	$72	$722	$8,017
2021	T03PY	1	2,174	N/A	Surface Treatment	$0.35	$761			$76	$8	$84	$929
2021	T04PY	1	3,904	N/A	Surface Treatment	$0.35	$1,366			$137	$15	$150	$1,668
2021	T07PY	1	48,315	73	Surface Treatment	$0.35	$16,910			$1,691	$186	$1,860	$20,648
2021	T07PY	2	1,295	78	Surface Treatment	$0.35	$453			$45	$5	$50	$553
2021	T08PY	1	4,700	80	Surface Treatment	$0.35	$1,645			$165	$18	$181	$2,009
												Total for 2021:	*$137,277*

CHAPTER 6 – PAVEMENT MANAGEMENT IMPLEMENTATION

It is recommended that the NPMS be updated every 3-years in order to accurately plan for M&R needs.

6.1 Project Level Rehabilitation Projects (Design Level)

Prior to implementing major rehabilitation projects, it is recommended that S75 and their consultant perform a full project level evaluation of the specific section(s) of pavements during the design process. Specific pavement rehabilitation alternatives can then be developed based on specific conditions at the time of rehabilitation and a recommended alternative can then be selected after a life-cycle cost analysis is performed.

6.2 Re-Inspection of Pavements

A high priority should be given for continuous maintenance and re-inspection of all of S75's pavements to ensure continued safe aircraft operations. While deterioration of the pavements due to usage and exposure to the environment cannot be completely prevented, applying timely and effective maintenance strategies can slow the anticipated rate of deterioration. Lack of adequate and timely maintenance is the greatest single cause of pavement deterioration.

Re-Inspection Schedules

A series of scheduled periodic inspections must be carried out for an effective maintenance program. Re-inspection of pavements should be scheduled to ensure that all areas, particularly those that may not come under day-to-day observation, are thoroughly evaluated and reported. Thorough inspections of all paved areas should be scheduled accordingly.

It is recommended that a PCI survey be performed and the PAVER database be updated on a three-year basis for each pavement section of the network.

6.3 Recommendations

The following recommendations are made to fully implement a pavement management program for S75.

Recommendations

- Develop a detailed preventative maintenance program for S75.
- Further refine and implement the updated recommended rehabilitation program for S75.
- Maintain the PAVER program either through a consultant or trained in-house staff.
- Routinely update PAVER with new construction and maintenance cost data.
- Update the NPMS on a three-year cycle to see the greatest benefit.
- Develop a Statewide Pavement Design Criteria Report with design guidelines for each subsequent design project(s) that will take into consideration the recommendations of this report.

APPENDIX A
PAVER RE-INSPECTION REPORT

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: A01PY Name: Apron 01 Payette Use: APRON Area: 26,703.00SqFt

Section: 01 of 1 From: T03PY-01 To: T01PY-04 Last Const.: 08/01/1979
Surface: AC Family: ITD_AC_AP_40 Zone: S75 Category: 3 Rank: P
Area: 26,703.00SqFt Length: 221.00Ft Width: 225.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 6 Surveyed: 4
Conditions: PCI : 15
Inspection Comments:

Sample Number: 01 Type: R Area: 4,630.00SqFt PCI = 17
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	204.00	Ft	Comments:
45 DEPRESSION	M	52.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	264.00	SqFt	Comments:
53 RUTTING	L	1,050.00	SqFt	Comments:
52 RAVELING	M	4,593.00	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	100.00	Ft	Comments:
50 PATCHING	H	215.00	SqFt	Comments:
50 PATCHING	M	22.00	SqFt	Comments:

Sample Number: 02 Type: R Area: 4,885.00SqFt PCI = 11
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	214.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	161.00	Ft	Comments:
52 RAVELING	M	4,850.00	SqFt	Comments:
53 RUTTING	L	1,125.00	SqFt	Comments:
50 PATCHING	M	35.00	SqFt	Comments:
45 DEPRESSION	M	9.00	SqFt	Comments:
45 DEPRESSION	L	84.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	970.00	SqFt	Comments:
43 BLOCK CRACKING	L	970.00	SqFt	Comments:

Sample Number: 04 Type: R Area: 5,332.00SqFt PCI = 15
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	M	438.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	254.00	Ft	Comments:
52 RAVELING	M	5,312.00	SqFt	Comments:
45 DEPRESSION	L	394.00	SqFt	Comments:
53 RUTTING	L	120.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	533.00	SqFt	Comments:
52 RAVELING	H	20.00	SqFt	Comments:

Sample Number: 05 Type: R Area: 3,049.00SqFt PCI = 22
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	146.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	151.00	Ft	Comments:
52 RAVELING	M	2,929.00	SqFt	Comments:
45 DEPRESSION	L	141.00	SqFt	Comments:
50 PATCHING	M	110.00	SqFt	Comments:
53 RUTTING	M	84.00	SqFt	Comments:
52 RAVELING	H	10.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: A02PY Name: Apron 02 Payette Use: APRON Area: 15,578.00SqFt

Section: 01 of 1 From: T01PY-01 To: T01PY-02 Last Const.: 08/01/1979
Surface: AC Family: ITD_AC_AP_40 Zone: Category: Rank: P
Area: 15,578.00SqFt Length: 265.00Ft Width: 100.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 3 Surveyed: 2
Conditions: PCI : 73
Inspection Comments:

Sample Number: 01 Type: R Area: 6,301.00SqFt PCI = 76
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	72.00	Ft	Comments:
53	RUTTING	L	30.00	SqFt	Comments:
45	DEPRESSION	L	8.00	SqFt	Comments:
57	WEATHERING	L	6,291.00	SqFt	Comments:
52	RAVELING	L	10.00	SqFt	Comments:

Sample Number: 02 Type: R Area: 3,933.00SqFt PCI = 68
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	159.00	Ft	Comments:
53	RUTTING	L	60.00	SqFt	Comments:
52	RAVELING	L	100.00	SqFt	Comments:
57	WEATHERING	L	3,833.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: A03PY Name: Apron 03 Payette Use: TAXIWAY Area: 12,866.00SqFt

Section: 01 of 1 From: T02PY-01 To: A01PY-01 Last Const.: 08/01/1979
Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P
Area: 12,866.00SqFt Length: 188.00Ft Width: 93.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 3 Surveyed: 2
Conditions: PCI : 67
Inspection Comments:

Sample Number: 01 Type: R Area: 4,200.00SqFt PCI = 63
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	45.00	Ft	Comments:
52 RAVELING	L	835.00	SqFt	Comments:
57 WEATHERING	L	3,338.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	30.00	SqFt	Comments:
50 PATCHING	M	27.00	SqFt	Comments:

Sample Number: 02 Type: R Area: 4,466.00SqFt PCI = 71
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	47.00	Ft	Comments:
52 RAVELING	L	893.00	SqFt	Comments:
57 WEATHERING	L	3,573.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	12.00	SqFt	Comments:
45 DEPRESSION	L	6.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: R13PY Name: Runway 13/31 Payette Use: RUNWAY Area: 151,350.00SqFt

Section: 01 of 2 From: Runway 31 End To: R13PY-02 Last Const.: 09/03/2011
Surface: AC Family: ITD_AC_RW_50 Zone: S75 Category: 3 Rank: P
Area: 12,500.00SqFt Length: 250.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 3 Surveyed: 2
Conditions: PCI : 96
Inspection Comments:

Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 97
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	10.00 Ft	Comments:

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 95
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	44.00 Ft	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: R13PY Name: Runway 13/31 Payette Use: RUNWAY Area: 151,350.00SqFt

Section: 02 of 2 From: R13PY-01 To: Runway 13 End Last Const.: 09/03/2011
Surface: AC Family: ITD_AC_RW_50 Zone: S75 Category: 3 Rank: P
Area: 138,850.00SqFt Length: 2,750.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 28 Surveyed: 5
Conditions: PCI : 94
Inspection Comments:

Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 96
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 20.00 Ft Comments:

Sample Number: 10 Type: R Area: 5,000.00SqFt PCI = 94
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 75.00 Ft Comments:

Sample Number: 15 Type: R Area: 5,000.00SqFt PCI = 94
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 68.00 Ft Comments:

Sample Number: 20 Type: R Area: 5,000.00SqFt PCI = 93
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 98.00 Ft Comments:

Sample Number: 25 Type: R Area: 5,000.00SqFt PCI = 92
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 113.00 Ft Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 01 of 6 From: Runway 31 End To: T01PY-02 Last Const.: 08/01/1979
Surface: AC Family: ITD_AC_TW_45 Zone: S75 Category: 3 Rank: P
Area: 19,835.00SqFt Length: 1,075.00Ft Width: 20.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 4 Surveyed: 4
Conditions: PCI : 9
Inspection Comments:

Sample Number: 01 Type: R Area: 4,839.00SqFt PCI = 8
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	H	86.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	400.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	300.00 Ft	Comments:
52	RAVELING	M	4,229.00 SqFt	Comments:
52	RAVELING	H	300.00 SqFt	Comments:
45	DEPRESSION	L	25.00 SqFt	Comments:
53	RUTTING	L	180.00 SqFt	Comments:
41	ALLIGATOR CRACKING	L	338.00 SqFt	Comments:
50	PATCHING	M	310.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	181.00 SqFt	Comments:
41	ALLIGATOR CRACKING	H	24.00 SqFt	Comments:

Sample Number: 02 Type: R Area: 6,000.00SqFt PCI = 4
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	H	60.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	300.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	200.00 Ft	Comments:
52	RAVELING	M	5,864.00 SqFt	Comments:
53	RUTTING	H	202.00 SqFt	Comments:
53	RUTTING	L	70.00 SqFt	Comments:
53	RUTTING	M	248.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	620.00 SqFt	Comments:
52	RAVELING	H	128.00 SqFt	Comments:
41	ALLIGATOR CRACKING	L	149.00 SqFt	Comments:
45	DEPRESSION	M	16.00 SqFt	Comments:

Sample Number: 03 Type: R Area: 6,000.00SqFt PCI = 8
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	H	60.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	316.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	300.00 Ft	Comments:
52	RAVELING	M	5,929.00 SqFt	Comments:
53	RUTTING	L	223.00 SqFt	Comments:
45	DEPRESSION	L	31.00 SqFt	Comments:
45	DEPRESSION	M	12.00 SqFt	Comments:
53	RUTTING	M	127.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	60.00 SqFt	Comments:
53	RUTTING	H	136.00 SqFt	Comments:
41	ALLIGATOR CRACKING	L	68.00 SqFt	Comments:
50	PATCHING	M	71.00 SqFt	Comments:
41	ALLIGATOR CRACKING	H	174.00 SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Sample Number: 04 Type: R Area: 2,996.00SqFt PCI = 20

Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	M	162.00	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	317.00	Ft	Comments:
52	RAVELING	M	2,879.00	SqFt	Comments:
41	ALLIGATOR CRACKING	L	51.00	SqFt	Comments:
50	PATCHING	H	113.00	SqFt	Comments:
45	DEPRESSION	L	106.00	SqFt	Comments:
45	DEPRESSION	M	20.00	SqFt	Comments:
41	ALLIGATOR CRACKING	M	28.00	SqFt	Comments:
52	RAVELING	H	4.00	SqFt	Comments:
53	RUTTING	L	134.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 02 of 6 From: A01PY-01 To: T01PY-03 Last Const.: 08/01/1995

Surface: AC Family: ITD_AC_TW_45 Zone: S75 Category: 3 Rank: P

Area: 3,447.00SqFt Length: 102.00Ft Width: 20.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1

Conditions: PCI : 13

Inspection Comments:

Sample Number: 01 Type: R Area: 3,447.00SqFt PCI = 13

Sample Comments:

53	RUTTING	L	69.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	244.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	H	10.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	195.00 Ft	Comments:
52	RAVELING	M	3,343.00 SqFt	Comments:
41	ALLIGATOR CRACKING	L	200.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	108.00 SqFt	Comments:
50	PATCHING	H	4.00 SqFt	Comments:
45	DEPRESSION	M	15.00 SqFt	Comments:
52	RAVELING	H	100.00 SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 03 of 6 From: T01PY-02 To: T01PY-04 Last Const.: 08/01/1995
Surface: ST Family: ITD_ST_TW_45 Zone: S75 Category: 3 Rank: P
Area: 8,553.00SqFt Length: 343.00Ft Width: 20.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 2 Surveyed: 2
Conditions: PCI : 17
Inspection Comments:

Sample Number: 01 Type: R Area: 4,139.00SqFt PCI = 15
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	400.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	235.00	Ft	Comments:
41 ALLIGATOR CRACKING	L	468.00	SqFt	Comments:
50 PATCHING	M	154.00	SqFt	Comments:
45 DEPRESSION	L	6.00	SqFt	Comments:
53 RUTTING	M	108.00	SqFt	Comments:
52 RAVELING	H	4.00	SqFt	Comments:
41 ALLIGATOR CRACKING	H	4.00	SqFt	Comments:
52 RAVELING	M	3,981.00	SqFt	Comments:

Sample Number: 02 Type: R Area: 4,414.00SqFt PCI = 19
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	28.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	100.00	Ft	Comments:
52 RAVELING	M	4,414.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	506.00	SqFt	Comments:
53 RUTTING	M	45.00	SqFt	Comments:
45 DEPRESSION	L	54.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 04 of 6 From: T01PY-03 To: T01PY-05 Last Const.: 08/01/1983
Surface: PCC Family: ITD_PCC_45 Zone: S75 Category: 3 Rank: P
Area: 1,019.00SqFt Length: 88.00Ft Width: 25.00Ft
Slabs: 8 Slab Width: 12.50Ft Slab Length: 10.00Ft Joint Length: 250.11Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1
Conditions: PCI : 43
Inspection Comments:

Sample Number: 01 Type: R Area: 8.00Slabs PCI = 43
Sample Comments:

62 CORNER BREAK	L	2.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
64 DURABILITY CRACKING	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	8.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	2.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:
62 CORNER BREAK	M	1.00 Slabs	Comments:
63 LINEAR CRACKING	L	2.00 Slabs	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 05 of 6 From: T01PY-04 To: R13PY-02 Last Const.: 09/01/2011
Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P
Area: 1,581.00SqFt Length: 20.00Ft Width: 25.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1
Conditions: PCI : 93
Inspection Comments:

Sample Number: 01 Type: R Area: 1,581.00SqFt PCI = 93
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	30.00 Ft	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T01PY Name: Taxiway 01 Payette Use: TAXIWAY Area: 35,583.00SqFt

Section: 06 of 6 From: Runway 13-31 To: T01PY-01 Last Const.: 09/03/2011

Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P

Area: 1,148.00SqFt Length: 55.00Ft Width: 20.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1

Conditions: PCI : 100

Inspection Comments:

Sample Number: 01 Type: R Area: 1,148.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T02PY Name: Taxiway 02 Payette Use: TAXIWAY Area: 18,759.00SqFt

Section: 01 of 1 From: T01PY-01 To: T05PY-01 Last Const.: 08/01/1979
Surface: AC Family: ITD_AC_TW_45 Zone: S75 Category: 3 Rank: P
Area: 18,759.00SqFt Length: 714.00Ft Width: 20.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 3 Surveyed: 2
Conditions: PCI : 9
Inspection Comments:

Sample Number: 01 Type: R Area: 5,893.00SqFt PCI = 10
Sample Comments:

50 PATCHING	M	1,012.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	1,337.00	SqFt	Comments:
50 PATCHING	H	207.00	SqFt	Comments:
53 RUTTING	L	920.00	SqFt	Comments:
43 BLOCK CRACKING	M	1,335.00	SqFt	Comments:
43 BLOCK CRACKING	L	2,002.00	SqFt	Comments:
52 RAVELING	M	4,634.00	SqFt	Comments:
52 RAVELING	H	40.00	SqFt	Comments:
53 RUTTING	M	296.00	SqFt	Comments:

Sample Number: 02 Type: R Area: 6,000.00SqFt PCI = 9
Sample Comments:

43 BLOCK CRACKING	L	2,123.00	SqFt	Comments:
43 BLOCK CRACKING	M	1,416.00	SqFt	Comments:
52 RAVELING	M	4,437.00	SqFt	Comments:
41 ALLIGATOR CRACKING	M	98.00	SqFt	Comments:
41 ALLIGATOR CRACKING	L	1,000.00	SqFt	Comments:
50 PATCHING	M	818.00	SqFt	Comments:
50 PATCHING	L	545.00	SqFt	Comments:
53 RUTTING	M	600.00	SqFt	Comments:
52 RAVELING	H	200.00	SqFt	Comments:
53 RUTTING	L	800.00	SqFt	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T03PY Name: Taxiway 03 Payette Use: TAXIWAY Area: 2,174.00SqFt

Section: 01 of 1 From: T02PY-01 To: A01PY-01 Last Const.: 08/01/1985

Surface: AC Family: ITD_AC_TW_45 Zone: S75 Category: 3 Rank: P

Area: 2,174.00SqFt Length: 189.00Ft Width: 17.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1

Conditions: PCI : 11

Inspection Comments:

Sample Number: 01 Type: R Area: 2,174.00SqFt PCI = 11

Sample Comments:

50	PATCHING	M	36.00 SqFt	Comments:
50	PATCHING	H	76.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	848.00 SqFt	Comments:
43	BLOCK CRACKING	L	1,204.00 SqFt	Comments:
52	RAVELING	L	2,062.00 SqFt	Comments:
53	RUTTING	L	240.00 SqFt	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T04PY Name: Taxiway 04 Payette Use: TAXIWAY Area: 3,904.00SqFt

Section: 01 of 1 From: T01PY-01 To: A01PY-01 Last Const.: 09/01/1998

Surface: AC Family: ITD_AC_TW_45 Zone: S75 Category: 3 Rank: P

Area: 3,904.00SqFt Length: 210.00Ft Width: 18.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1

Conditions: PCI : 6

Inspection Comments:

Sample Number: 01 Type: R Area: 3,904.00SqFt PCI = 6

Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	H	50.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	156.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	243.00 Ft	Comments:
41	ALLIGATOR CRACKING	H	100.00 SqFt	Comments:
41	ALLIGATOR CRACKING	M	266.00 SqFt	Comments:
52	RAVELING	M	3,889.00 SqFt	Comments:
45	DEPRESSION	L	4.00 SqFt	Comments:
52	RAVELING	H	15.00 SqFt	Comments:
53	RUTTING	L	99.00 SqFt	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T05PY Name: Taxiway 05 Payette Use: TAXIWAY Area: 6,554.00SqFt

Section: 01 of 1 From: T02PY-01 To: T05PY-02 Last Const.: 08/01/1995

Surface: PCC Family: ITD_PCC_45 Zone: S75 Category: 3 Rank: P

Area: 6,554.00SqFt Length: 205.00Ft Width: 20.00Ft

Slabs: 50 Slab Width: 10.00Ft Slab Length: 12.00Ft Joint Length: 526.67Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 2 Surveyed: 2

Conditions: PCI : 77

Inspection Comments:

Sample Number: 01 Type: R Area: 26.00Slabs PCI = 69

Sample Comments:

65 JOINT SEAL DAMAGE	H	26.00 Slabs	Comments:
74 JOINT SPALLING	L	2.00 Slabs	Comments:
62 CORNER BREAK	L	4.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:
63 LINEAR CRACKING	L	2.00 Slabs	Comments:
62 CORNER BREAK	M	1.00 Slabs	Comments:

Sample Number: 02 Type: R Area: 24.00Slabs PCI = 85

Sample Comments:

65 JOINT SEAL DAMAGE	H	24.00 Slabs	Comments:
62 CORNER BREAK	L	1.00 Slabs	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T06PY Name: Taxiway 06 Payette Use: TAXIWAY Area: 6,083.00SqFt

Section: 01 of 1 From: T02PY-01 To: Hangar Last Const.: 08/01/1995
Surface: PCC Family: ITD_PCC_45 Zone: S75 Category: 3 Rank: P
Area: 6,083.00SqFt Length: 182.00Ft Width: 20.00Ft
Slabs: 48 Slab Width: 12.00Ft Slab Length: 10.00Ft Joint Length: 465.33Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 2 Surveyed: 2
Conditions: PCI : 58
Inspection Comments:

Sample Number: 01 Type: R Area: 25.00Slabs PCI = 52
Sample Comments:

65 JOINT SEAL DAMAGE	H	25.00 Slabs	Comments:
63 LINEAR CRACKING	L	4.00 Slabs	Comments:
63 LINEAR CRACKING	M	2.00 Slabs	Comments:
62 CORNER BREAK	L	8.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:
71 FAULTING	L	1.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:

Sample Number: 02 Type: R Area: 23.00Slabs PCI = 65
Sample Comments:

65 JOINT SEAL DAMAGE	H	23.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	3.00 Slabs	Comments:
62 CORNER BREAK	L	2.00 Slabs	Comments:
63 LINEAR CRACKING	L	4.00 Slabs	Comments:
62 CORNER BREAK	M	1.00 Slabs	Comments:
71 FAULTING	L	1.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T07PY Name: Taxiway 07 Payette Use: TAXIWAY Area: 49,610.00SqFt

Section: 01 of 2 From: T01PY-03 To: T07PY-02 Last Const.: 11/02/2008
Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P
Area: 48,315.00SqFt Length: 1,810.00Ft Width: 25.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 10 Surveyed: 4
Conditions: PCI : 83
Inspection Comments:

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 83
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	180.00 Ft	Comments:
57	WEATHERING	L	5,000.00 SqFt	Comments:

Sample Number: 04 Type: R Area: 5,000.00SqFt PCI = 83
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	198.00 Ft	Comments:
57	WEATHERING	L	5,000.00 SqFt	Comments:

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 82
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	200.00 Ft	Comments:
57	WEATHERING	L	5,000.00 SqFt	Comments:

Sample Number: 08 Type: R Area: 5,000.00SqFt PCI = 83
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	196.00 Ft	Comments:
57	WEATHERING	L	5,000.00 SqFt	Comments:

Re-inspection Report

IDAHO2016_081516

Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T07PY Name: Taxiway 07 Payette Use: TAXIWAY Area: 49,610.00SqFt

Section: 02 of 2 From: T07PY-01 To: Runway 13-31 Last Const.: 09/03/2011

Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P

Area: 1,295.00SqFt Length: 50.00Ft Width: 25.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1

Conditions: PCI : 89

Inspection Comments:

Sample Number: 01 Type: R Area: 1,295.00SqFt PCI = 89

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 43.00 Ft Comments:

Re-inspection Report

IDAHO2016_081516
Report Generated Date: October 06, 2016

Network: PAYETTE Name: PAYETTE MUNICIPAL AIRPORT

Branch: T08PY Name: Use: TAXIWAY Area: 4,700.00SqFt

Section: 01 of 1 From: T02PY-01 To: End Last Const.: 01/01/2009
Surface: AC Family: ITD_AC_TW_45 Zone: Category: Rank: P
Area: 4,700.00SqFt Length: 235.00Ft Width: 20.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 04/04/2016 Total Samples: 1 Surveyed: 1
Conditions: PCI : 92
Inspection Comments:

Sample Number: 01 Type: R Area: 4,700.00SqFt PCI = 92
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	3.00 Ft	Comments:
57	WEATHERING	L	4,700.00 SqFt	Comments:

APPENDIX B
PAVER REPORTS

Date: 8 /15/2016

Branch Condition Report

Pavement DatabaseIDAHO2016 NetworkID: PAYETT

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
A01PY (Apron 01 Payette)	1	221.00	225.00	26,703.00	APRON	15.00	0.00	15.00
A02PY (Apron 02 Payette)	1	265.00	100.00	15,578.00	APRON	73.00	0.00	73.00
A03PY (Apron 03 Payette)	1	188.00	93.00	12,866.00	TAXIWAY	67.00	0.00	67.00
R13PY (Runway 13/31 Payette)	2	3,000.00	50.00	151,350.00	RUNWAY	95.00	1.00	94.17
T01PY (Taxiway 01 Payette)	6	1,683.00	21.67	35,583.00	TAXIWAY	45.50	37.75	18.33
T02PY (Taxiway 02 Payette)	1	714.00	20.00	18,759.00	TAXIWAY	6.00	0.00	6.00
T03PY (Taxiway 03 Payette)	1	189.00	17.00	2,174.00	TAXIWAY	11.00	0.00	11.00
T04PY (Taxiway 04 Payette)	1	210.00	18.00	3,904.00	TAXIWAY	6.00	0.00	6.00
T05PY (Taxiway 05 Payette)	1	205.00	20.00	6,554.00	TAXIWAY	77.00	0.00	77.00
T06PY (Taxiway 06 Payette)	1	182.00	20.00	6,083.00	TAXIWAY	58.00	0.00	58.00
T07PY (Taxiway 07 Payette)	2	1,860.00	25.00	49,610.00	TAXIWAY	86.00	3.00	83.16
T08PY ()	1	235.00	20.00	4,700.00	APRON	92.00	0.00	92.00

Branch Condition Report

Pavement Database: IDAHO2016

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	3	46,981.00	60.00	32.75	41.93
RUNWAY	2	151,350.00	95.00	1.00	94.17
TAXIWAY	14	135,533.00	47.86	35.55	49.12
All	19	333,864.00	54.74	36.20	68.53

Date:8 /15/2016

Section Condition Report

Pavement Database: IDAHO2016 NetworkID: PAYETTE

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
A01PY (Apron 01 Payette)	01	08/01/1979	ST	APRON	P	0	26,703.00	04/04/2016	37	15.00
A02PY (Apron 02 Payette)	01	08/01/1979	ST	APRON	P	0	15,578.00	04/04/2016	37	73.00
A03PY (Apron 03 Payette)	01	08/01/1979	ST	TAXIWAY	P	0	12,866.00	04/04/2016	37	67.00
R13PY (Runway 13/31 Payette)	01	09/03/2011	AC	RUNWAY	P	0	12,500.00	04/04/2016	5	96.00
R13PY (Runway 13/31 Payette)	02	09/03/2011	AC	RUNWAY	P	0	138,850.00	04/04/2016	5	94.00
T01PY (Taxiway 01 Payette)	01	08/01/1979	ST	TAXIWAY	P	0	19,835.00	04/04/2016	37	9.00
T01PY (Taxiway 01 Payette)	02	08/01/1995	ST	TAXIWAY	P	0	3,447.00	04/04/2016	21	14.00
T01PY (Taxiway 01 Payette)	03	08/01/1995	ST	TAXIWAY	P	0	8,553.00	04/04/2016	21	14.00
T01PY (Taxiway 01 Payette)	04	08/01/1983	PCC	TAXIWAY	P	0	1,019.00	04/04/2016	33	43.00
T01PY (Taxiway 01 Payette)	05	09/01/2011	AC	TAXIWAY	P	0	1,581.00	04/04/2016	5	93.00
T01PY (Taxiway 01 Payette)	06	09/03/2011	AC	TAXIWAY	P	0	1,148.00	04/04/2016	5	100.00
T02PY (Taxiway 02 Payette)	01	08/01/1979	AC	TAXIWAY	P	0	18,759.00	04/04/2016	37	6.00
T03PY (Taxiway 03 Payette)	01	08/01/1985	AC	TAXIWAY	P	0	2,174.00	04/04/2016	31	11.00
T04PY (Taxiway 04 Payette)	01	09/01/1998	ST	TAXIWAY	P	0	3,904.00	04/04/2016	18	6.00
T05PY (Taxiway 05 Payette)	01	08/01/1995	PCC	TAXIWAY	P	0	6,554.00	04/04/2016	21	77.00
T06PY (Taxiway 06 Payette)	01	08/01/1995	PCC	TAXIWAY	P	0	6,083.00	04/04/2016	21	58.00
T07PY (Taxiway 07 Payette)	01	11/02/2008	ST	TAXIWAY	P	0	48,315.00	04/04/2016	8	83.00
T07PY (Taxiway 07 Payette)	02	09/03/2011	AC	TAXIWAY	P	0	1,295.00	04/04/2016	5	89.00
T08PY ()	01	01/01/2009	AC	APRON	P	0	4,700.00	04/04/2016	7	92.00

Section Condition Report

Pavement Database: IDAHO2016

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
03-05	5.00	155,374.00	5	94.40	4.04	94.15
06-10	7.50	53,015.00	2	87.50	6.36	83.80
16-20	18.00	3,904.00	1	6.00	0.00	6.00
21-25	21.00	24,637.00	4	40.75	31.85	41.62
31-35	32.00	3,193.00	2	27.00	22.63	21.21
36-40	37.00	93,741.00	5	34.00	33.09	28.70
All	20.58	333,864.00	19	54.74	37.19	68.53

Work History Report

Pavement Database IDAHO2016

Network: PAYETTE **Branch:** A01PY (Apron 01 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 08/01/1979 **Use:** APRON **Rank:** P **Length:** 221.00 Ft **Width:** 225.00 Ft **True Area:** 26,703.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	

Network: PAYETTE **Branch:** A02PY (Apron 02 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 08/01/1979 **Use:** APRON **Rank:** P **Length:** 265.00 Ft **Width:** 100.00 Ft **True Area:** 15,578.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
08/01/1979	INITIAL	Initial Construction	$0	0.00	True	

Network: PAYETTE **Branch:** A03PY (Apron 03 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 08/01/1979 **Use:** TAXIWAY **Rank:** P **Length:** 188.00 Ft **Width:** 93.00 Ft **True Area:** 12,866.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
08/01/1979	INITIAL	Initial Construction	$0	0.00	True	

Network: PAYETTE **Branch:** R13PY (Runway 13/31 Payette) **Section:** 01 **Surface:** AC
L.C.D.: 09/03/2011 **Use:** RUNWAY **Rank:** P **Length:** 250.00 Ft **Width:** 50.00 Ft **True Area:** 12,500.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/03/2011	CR-AC	Complete Reconstruction - AC	$0	2.00	True	
09/02/2011	BA-CA	Base Course - Crushed Aggreg	$0	3.00	False	
09/01/2011	SB-AG	Subbase - Aggregate	$0	8.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I	$0	0.00	False	
08/01/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown
08/03/1992	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/02/1992	CS-AC	Crack Sealing - AC	$0	1.00	False	
08/01/1992	PA-AD	Patching - AC Deep	$0	2.00	False	
08/01/1985	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/01/1962	BA-AG	Base Course - Aggregate	$0	2.00	False	

Network: PAYETTE **Branch:** R13PY (Runway 13/31 Payette) **Section:** 02 **Surface:** AC
L.C.D.: 09/03/2011 **Use:** RUNWAY **Rank:** P **Length:** 2,750.00 Ft **Width:** 50.00 Ft **True Area:** 138,850.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/03/2011	CR-AC	Complete Reconstruction - AC	$0	2.00	True	
09/02/2011	BA-CA	Base Course - Crushed Aggreg	$0	3.00	False	
09/01/2011	SB-AG	Subbase - Aggregate	$0	8.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/01/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown
08/03/1992	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/02/1992	CS-AC	Crack Sealing - AC	$0	1.00	False	
08/01/1992	UNKNOWN	UNKNOWN			True	
08/01/1992	PA-AD	Patching - AC Deep	$0	2.00	False	
08/01/1985	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	False	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	

08/01/1971	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	
08/01/1962	BA-AG	Base Course - Aggregate	$0	2.00	False	

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 08/01/1979 **Use:** TAXIWAY **Rank:** P **Length:** 1.075.00 Ft **Width:** 20.00 Ft **True Area:** 19.835.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/01/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown
08/01/1979	NC-AC	New Construction - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Course - Double Bitum	$0	1.00	True	

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 02 **Surface:** ST
L.C.D.: 08/01/1995 **Use:** TAXIWAY **Rank:** P **Length:** 102.00 Ft **Width:** 20.00 Ft **True Area:** 3.447.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/02/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown.
08/01/1995	SU-SB	Surface Course - BST	$0	0.00	True	Date of work unknown.
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Course - Double Bitum	$0	1.00	True	

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 03 **Surface:** ST
L.C.D.: 08/01/1995 **Use:** TAXIWAY **Rank:** P **Length:** 343.00 Ft **Width:** 20.00 Ft **True Area:** 8.553.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/02/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown
08/01/1995	UNKNOWN	UNKNOWN			True	
08/01/1995	ST-SB	Surface Treatment - Single Bitu	$0	0.75	False	Unknown const. date.
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	False	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 04 **Surface:** PCC
L.C.D.: 08/01/1983 **Use:** TAXIWAY **Rank:** P **Length:** 88.00 Ft **Width:** 25.00 Ft **True Area:** 1.019.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1983	SU-PC	Surface Course - PCC	$0	0.00	True	

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 05 **Surface:** AC
L.C.D.: 09/01/2011 **Use:** TAXIWAY **Rank:** P **Length:** 20.00 Ft **Width:** 25.00 Ft **True Area:** 1.581.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/01/2011	NC-AC	New Construction - AC	$0	0.00	True	Assumed construction date

Network: PAYETTE **Branch:** T01PY (Taxiway 01 Payette) **Section:** 06 **Surface:** AC
L.C.D.: 09/03/2011 **Use:** TAXIWAY **Rank:** P **Length:** 55.00 Ft **Width:** 20.00 Ft **True Area:** 1.148.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/03/2011	NU-IN	New Construction - Initial	$0	0.00	True	
09/03/2011	CR-AC	Complete Reconstruction - AC	$0	2.00	True	
09/02/2011	BA-CA	Base Course - Crushed Aggreg	$0	3.00	False	
09/01/2011	SB-AG	Subbase - Aggregate	$0	8.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I	$0	0.00	False	

08/01/1995	SS-FS	Surface Seal - Fog Seal	$0	0.00	False	Date of work unknown
08/01/1979	NC-AC	New Construction - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Course - Double Bitum	$0	1.00	True	

Network: PAYETTE **Branch:** T02PY (Taxiway 02 Payette) **Section:** 01 **Surface:** AC
L.C.D.: 08/01/1979 **Use:** TAXIWAY **Rank:** P **Length:** 714.00 Ft **Width:** 20.00 Ft **True Area:** 18.759.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1979	UNKNOWN	UNKNOWN			True	
08/01/1979	SU-AC	Surface Course - AC	$0	0.00	False	Unknown depth and date of const.

Network: PAYETTE **Branch:** T03PY (Taxiway 03 Payette) **Section:** 01 **Surface:** AC
L.C.D.: 08/01/1985 **Use:** TAXIWAY **Rank:** P **Length:** 189.00 Ft **Width:** 17.00 Ft **True Area:** 2.174.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
08/01/1985	UNKNOWN	UNKNOWN			True	
08/01/1979	SU-AC	Surface Course - AC	$0	0.00	False	Unknown depth and date of const.

Network: PAYETTE **Branch:** T04PY (Taxiway 04 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 09/01/1998 **Use:** TAXIWAY **Rank:** P **Length:** 210.00 Ft **Width:** 18.00 Ft **True Area:** 3.904.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
09/01/1999	ST-FS	Surface Treatment - Fog Seal (I			False	
09/01/1998	ST-CS	Surface Treatment - Chip (Majc			True	Unknown Date
08/01/1979	SU-AC	Surface Course - AC	$0	2.00	True	
08/01/1976	ST-SS	Surface Treatment - Slurry Seal	$0	0.10	False	
08/01/1971	SU-DB	Surface Treatment - Double Bitu	$0	1.00	False	

Network: PAYETTE **Branch:** T05PY (Taxiway 05 Payette) **Section:** 01 **Surface:** PCC
L.C.D.: 08/01/1995 **Use:** TAXIWAY **Rank:** P **Length:** 205.00 Ft **Width:** 20.00 Ft **True Area:** 6.554.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1995	UNKNOWN	UNKNOWN			True	
08/01/1995	SU-PC	Surface Course - PCC	$0	6.00	False	Unknown const. date.

Network: PAYETTE **Branch:** T06PY (Taxiway 06 Payette) **Section:** 01 **Surface:** PCC
L.C.D.: 08/01/1995 **Use:** TAXIWAY **Rank:** P **Length:** 182.00 Ft **Width:** 20.00 Ft **True Area:** 6.083.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1995	SU-PC	Surface Course - PCC	$0	6.00	False	Unknown const. date.
08/01/1995	UNKNOWN	UNKNOWN			True	

Network: PAYETTE **Branch:** T07PY (Taxiway 07 Payette) **Section:** 01 **Surface:** ST
L.C.D.: 11/02/2008 **Use:** TAXIWAY **Rank:** P **Length:** 1,810.00 Ft **Width:** 25.00 Ft **True Area:** 48.315.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
11/02/2008	NC-AC	New Construction - AC	$0	2.50	True	
11/01/2008	BA-CA	Base Course - Crushed Aggreg	$0	2.50	False	

Network: PAYETTE **Branch:** T07PY (Taxiway 07 Payette) **Section:** 02 **Surface:** AC
L.C.D.: 09/03/2011 **Use:** TAXIWAY **Rank:** P **Length:** 50.00 Ft **Width:** 25.00 Ft **True Area:** 1.295.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
09/03/2011	CR-AC	Complete Reconstruction - AC	$0	2.00	True	

09/03/2011	NU-IN	New Construction - Initial	$0	0.00	True	
09/02/2011	BA-CA	Base Course - Crushed Aggreg	$0	3.00	False	
09/01/2011	SB-AG	Subbase - Aggregate	$0	8.00	False	
01/01/2011	ST-SS	Surface Treatment - Slurry Seal	$0	0.00	False	
11/02/2008	NC-AC	New Construction - AC	$0	2.50	True	
11/02/2008	NC-AC	New Construction - AC	$0	2.50	True	
11/01/2008	BA-CA	Base Course - Crushed Aggreg	$0	2.50	False	
11/01/2008	BA-CA	Base Course - Crushed Aggreg	$0	2.50	False	

Network: PAYETTE **Branch:** T08PY () **Section:** 01 **Surface:** AC
L.C.D.: 01/01/2009 **Use:** APRON **Rank:** P **Length:** 235.00 Ft **Width:** 20.00 Ft **True Area:** 4,700.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2009	NU-IN	New Construction - Initial	$0	0.00	True	

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Base Course - Aggregate	2	151,350.00	2.00	.00
Base Course - Crushed Aggregate	7	204,698.00	2.79	.27
Complete Reconstruction - AC	4	153,793.00	2.00	.00
Crack Sealing - AC	2	151,350.00	1.00	.00
Initial Construction	2	28,444.00	.00	.00
New Construction - AC	6	73,469.00	1.92	.97
New Construction - Initial	3	7,143.00	.00	.00
Patching - AC Deep	2	151,350.00	2.00	.00
Subbase - Aggregate	4	153,793.00	8.00	.00
Surface Course - AC	8	214,890.00	1.50	.93
Surface Course - BST	1	3,447.00	.00	
Surface Course - Double Bitum.	3	24,430.00	1.00	.00
Surface Course - PCC	3	13,656.00	4.00	3.46
Surface Seal - Fog Seal	6	184,333.00	.00	.00
Surface Treatment - Chip (Major	1	3,904.00		
Surface Treatment - Double Bitum.	9	493,210.00	1.00	.00
Surface Treatment - Fog Seal	9	217,114.00	.00	.00
Surface Treatment - Single Bitum.	1	8,553.00	.75	
Surface Treatment - Slurry Seal	16	351,989.00	.05	.05
UNKNOWN	6	180,973.00		

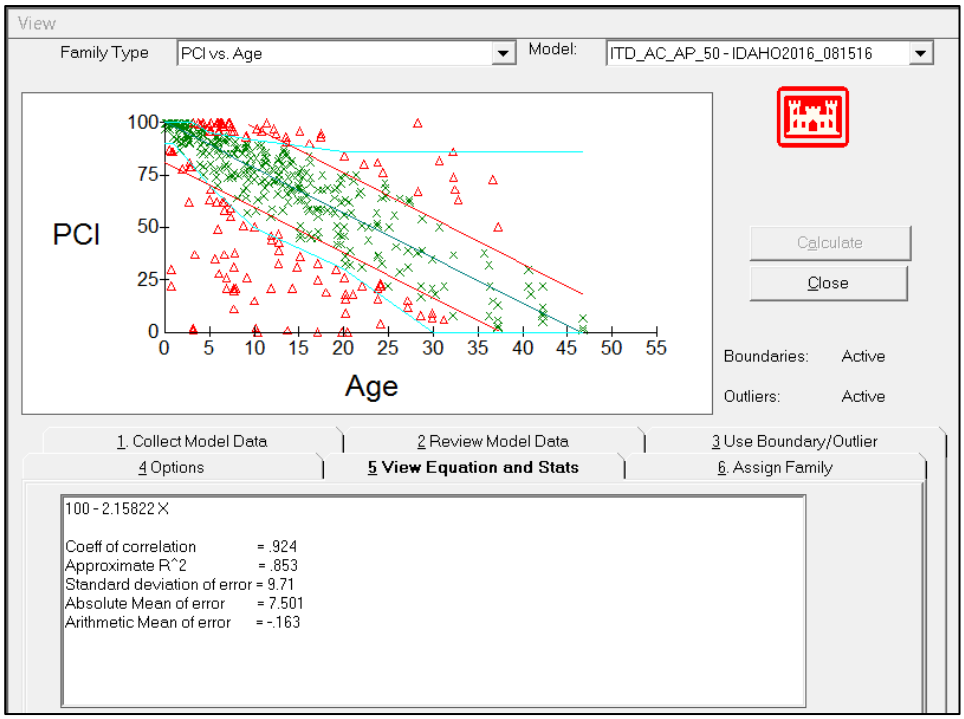


Figure B-1. Asphalt-surfaced Apron Pavements

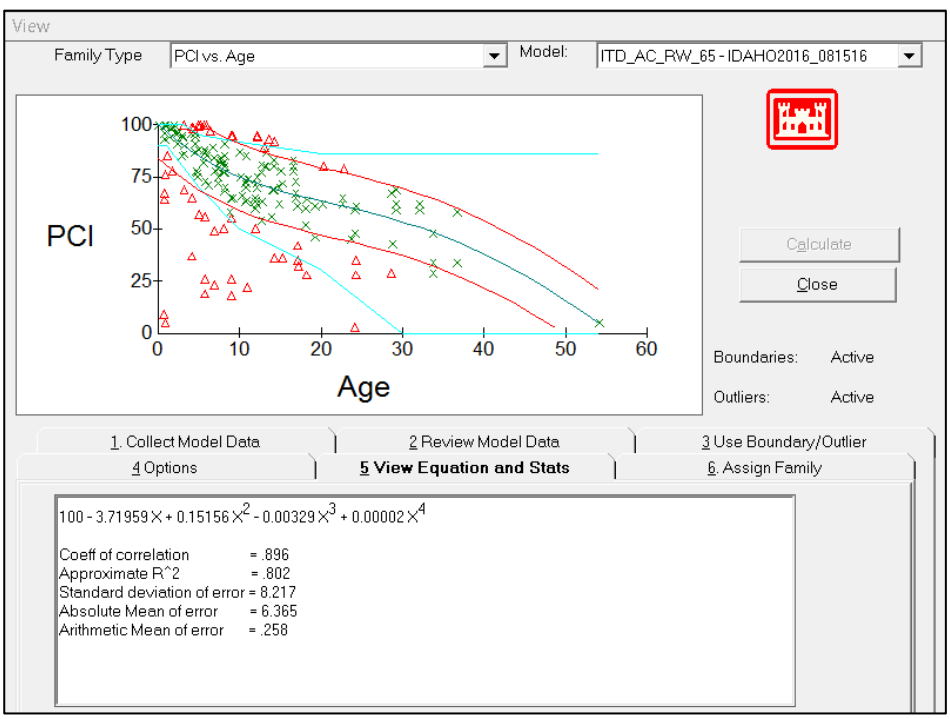


Figure B-2. Asphalt-surfaced Runway Pavements

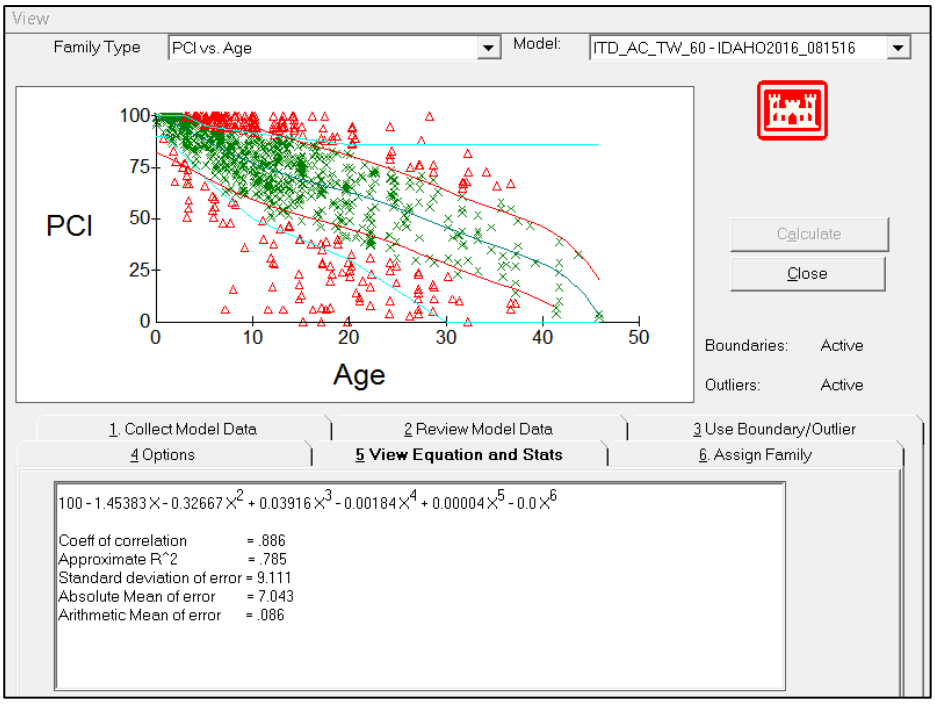


Figure B-3. Asphalt-surfaced Taxiway Pavements

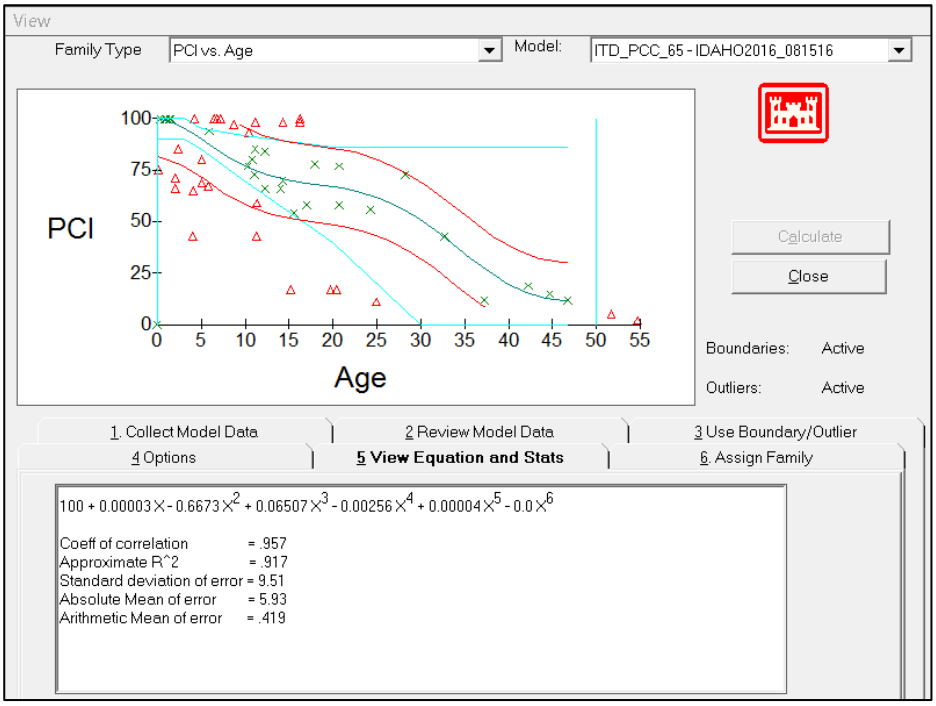


Figure B-4. PCC-surfaced Pavements

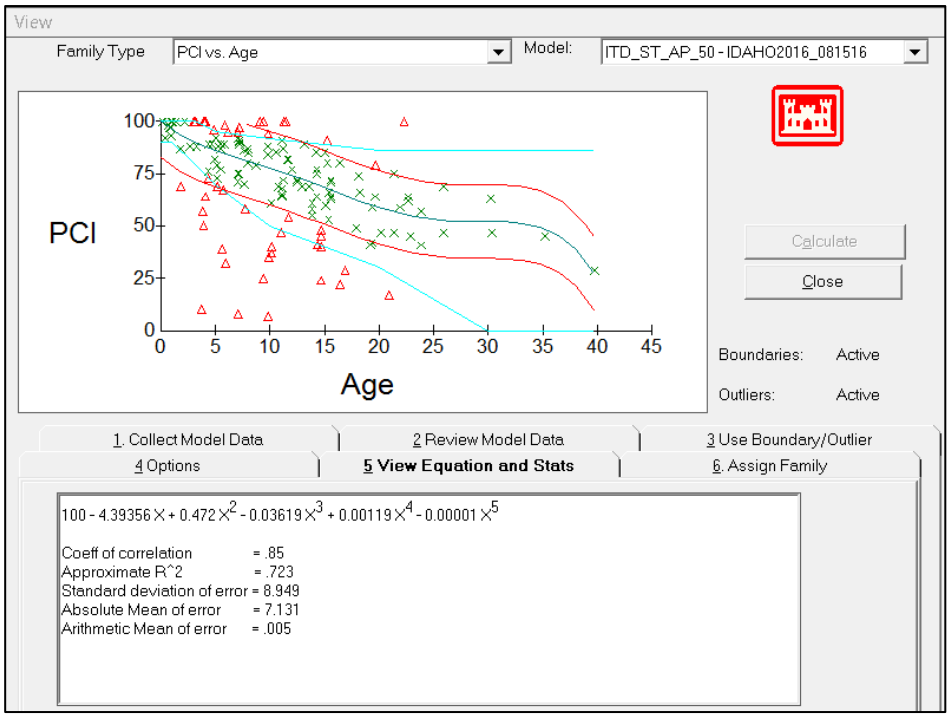


Figure B-5. Asphalt-surfaced (Surface Treated) Apron Pavements

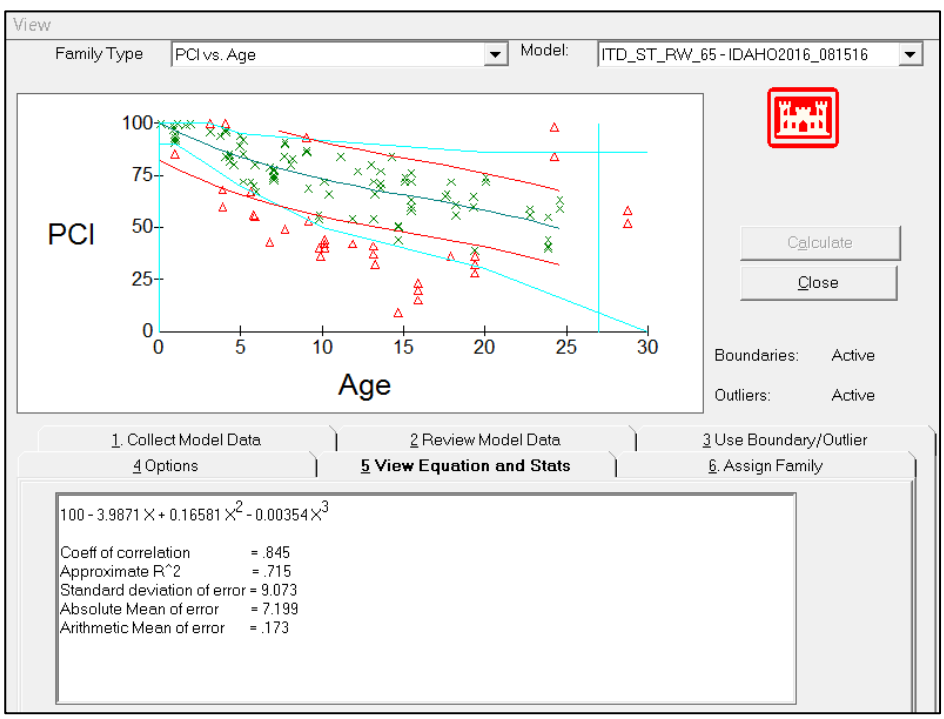


Figure B-6. Asphalt-surfaced (Surface Treated) Runway Pavements

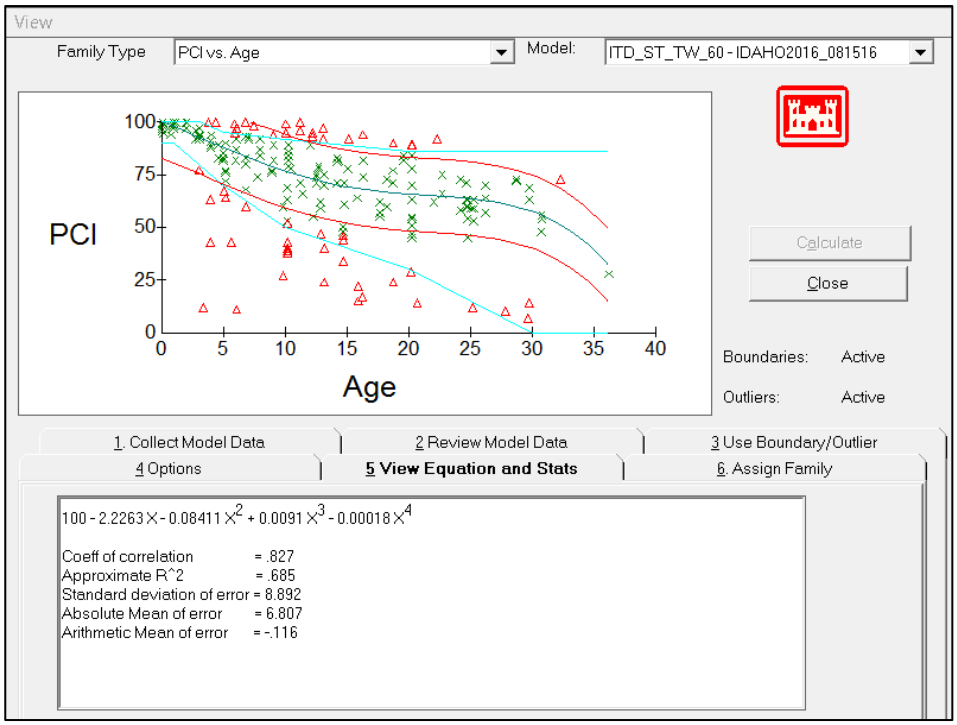


Figure B-7. Asphalt-surfaced (Surface Treated) Taxiway Pavements

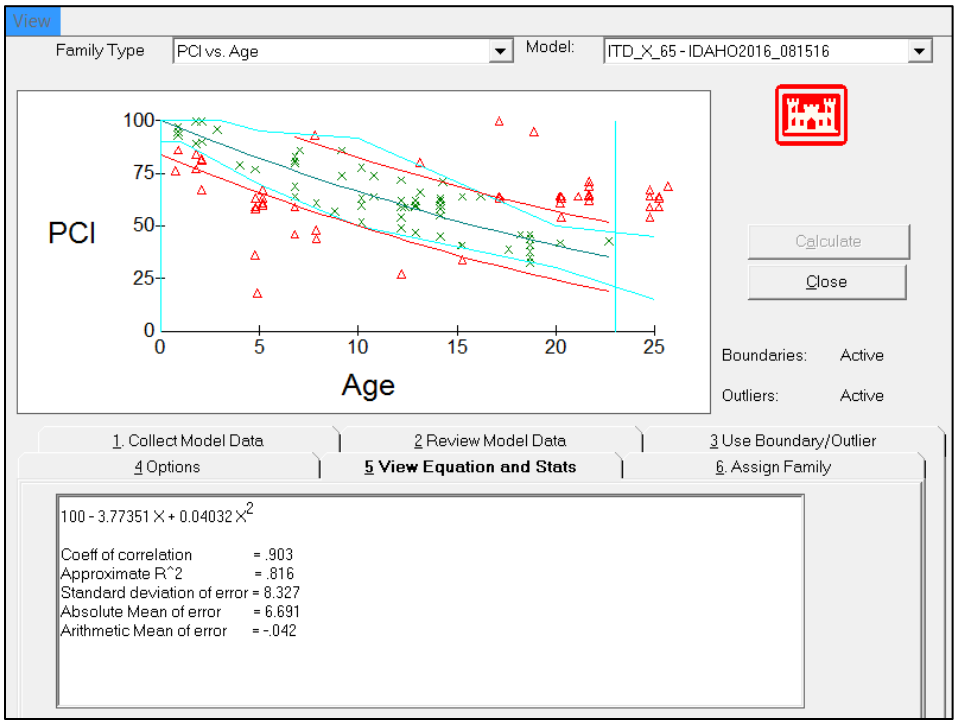
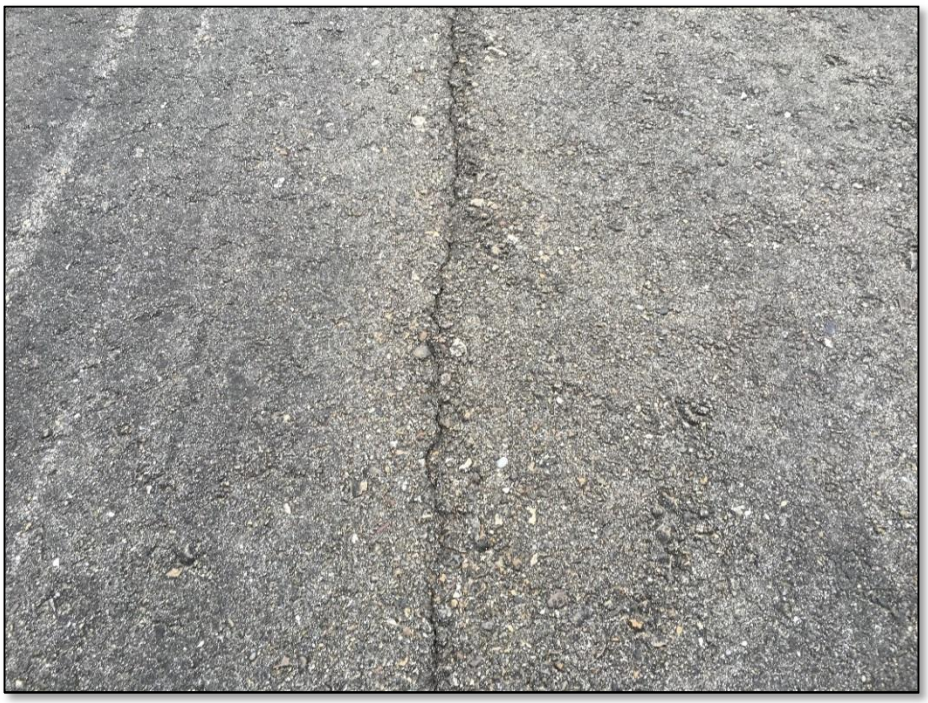


Figure B-8. Asphalt-surfaced (Chip Sealed) Pavements

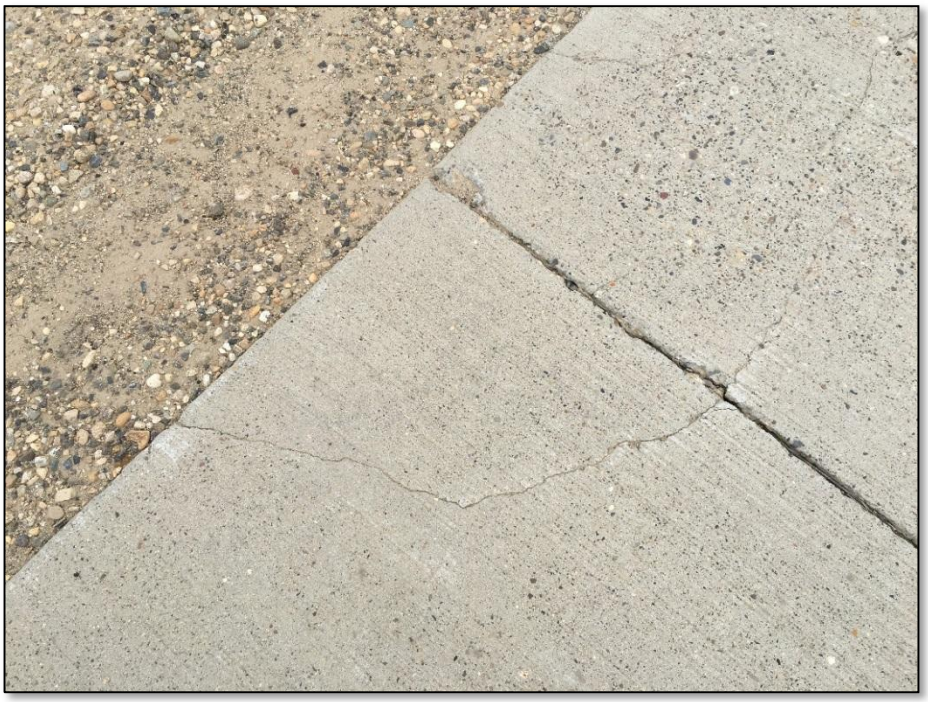
APPENDIX C
PHOTO APPENDIX



Runway 13-31, Section 01 – Longitudinal and Transverse Cracking

Runway 13-31, Section 01 – Longitudinal and Transverse Cracking

Taxiway 01, Section 01 – Alligator Cracking and Patching



Taxiway 01, Section 04 – Corner Break

Taxiway 02, Section 01 – Alligator Cracking and Raveling

a

Taxiway 04, Section 01 – Longitudinal and Transverse Cracking and Raveling

Taxiway 05, Section 01 – Joint Spalls

Apron 01, Section 01 – Alligator Cracking

Apron 01, Section 01 – Raveling

Apron 03, Section 01 – Alligator Cracking

APPENDIX D
1st YEAR MAINTENANCE RECOMMENDATIONS

Table D-1
S75 Detailed 1st Year Maintenance Recommendations

Branch ID	Section ID	Policy	Description	Severity	Distress Qty	Distress Unit	Work Description	Work Qty	Work Unit	Unit Cost	Work Cost
T05PY	1	ITD-NonNPIAS PREV.	CORNER BREAK	M	1	Slabs	Crack Sealing - PCC	8	Ft	$2.25	$18
T05PY	1	ITD-NonNPIAS PREV.	JT SEAL DMG	H	50	Slabs	Joint Seal (Localized)	527	Ft	$2.25	$1,185
T06PY	1	ITD-NonNPIAS PREV.	CORNER BREAK	M	1	Slabs	Crack Sealing - PCC	8	Ft	$2.25	$18
T06PY	1	ITD-NonNPIAS PREV.	LINEAR CR	M	2	Slabs	Crack Sealing - PCC	37	Ft	$2.25	$82
T06PY	1	ITD-NonNPIAS PREV.	JT SEAL DMG	H	48	Slabs	Joint Seal (Localized)	465	Ft	$2.25	$1,047

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