



SOUTH CAROLINA AERONAUTICS COMMISSION

STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

 35A – Union County Airport, Troy Shelton Field



Kimley»»Horn

2022



Contents

Overview	3
Introduction	3
System Inventory	4
Functional Evaluation	7
Pavement Condition Index.....	7
Critical PCI.....	8
PCI Results Summary	8
Pavement Condition Forecast	9
M&R Overview	13
Localized Maintenance and Repair.....	14
Major Rehabilitation Needs.....	14
Appendix A – Exhibits	A-1
Appendix B – Analysis Tables.....	B-1
Appendix C – Maintenance and Rehabilitation Tables	C-1
Appendix D – Detailed PCI Results.....	D-1
Appendix E – Re-Inspection Report	E-1

Overview

Introduction

For over 20 years, the South Carolina Aeronautics Commission (SCAC) has implemented an airfield pavement management program for publicly owned South Carolina airports. As part of their grant assurances federally obligated airports are required to perform detailed inspections as outlined in the FAA Advisory Circular 150/5380-7B – “Airport Pavement Management Program (PMP)”. All inspections performed within this program follow the guidance documented within the ASTM D5340-20 – “Standard Test Method for Airport Pavement Condition Surveys”. This is an objective process to assess the pavement condition in a consistent and repeatable manner.

Due to ever-changing pavement conditions, the FAA AC 150/5380-7B recommends the PMP be updated every 3 years. The overall pavement conditions are analyzed using the ASTM PCI methodology. It provides decision makers with a comparison of pavement facilities and a relative indication of their required maintenance or level of repair to aid in project prioritization. A detailed explanation of the SCAC airfield pavement management program process and pavement management terminology can be found in the [SCAC Statewide Report](#).

Project elements performed for the 2021-2024 program update included the development and update of pavement inventories, documentation of pavement conditions, performance modeling, and maintenance and rehabilitation (M&R) needs for all participating airports. This report summarizes the results of the SCAC pavement management program update at Union County Airport, Troy Shelton Field (35A).

Figure 1 – Airport Layout



System Inventory

The pavements at Union County Airport, Troy Shelton Field (35A) include approximately 354 thousand square feet of airfield pavements consisting of runways, taxiways, and aprons. Per the guidance in the ASTM D5340-20, all pavements were divided and subdivided into pavement management units (Network, Branch, Section, Sample). The divisions are documented in the **Network Definition Exhibit** providing the name and location of each branch, section, and sample.

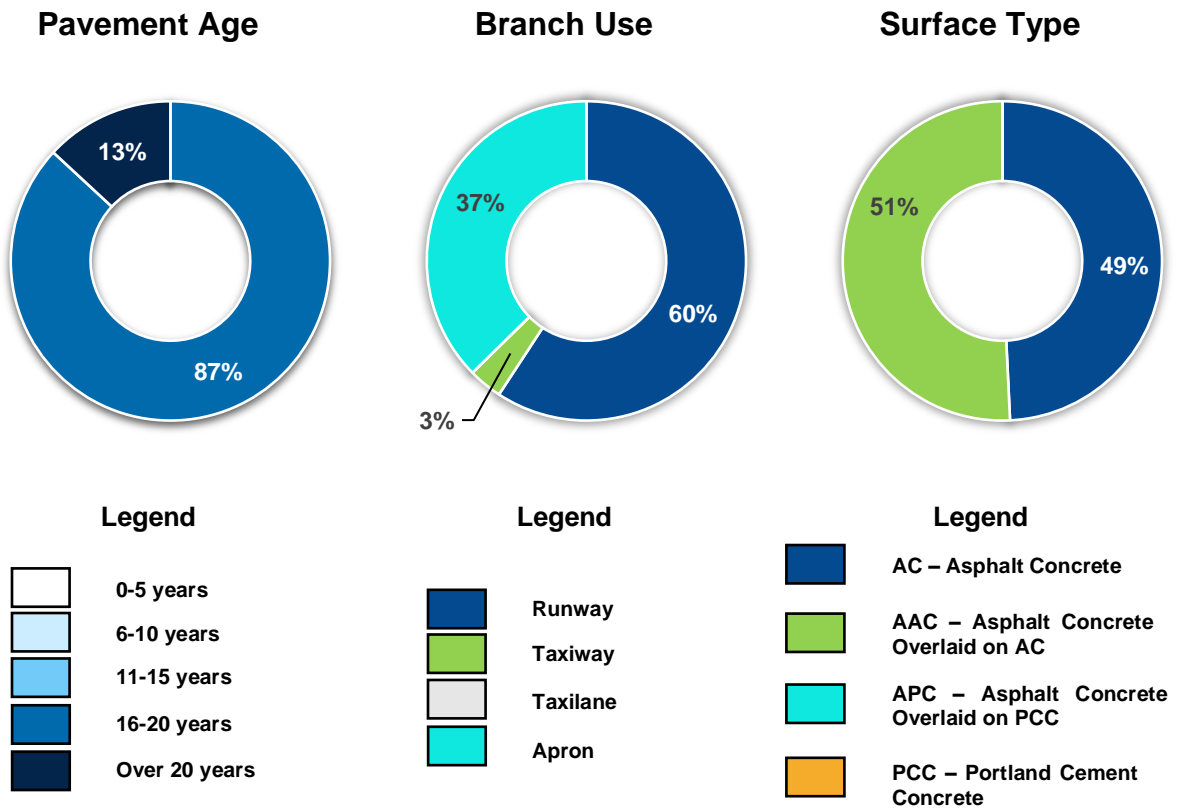
Each pavement update included a review of documentation of any maintenance and major rehabilitation related activities performed on the airfield pavements. The following table summarizes the projects that have occurred since the previous inspection.

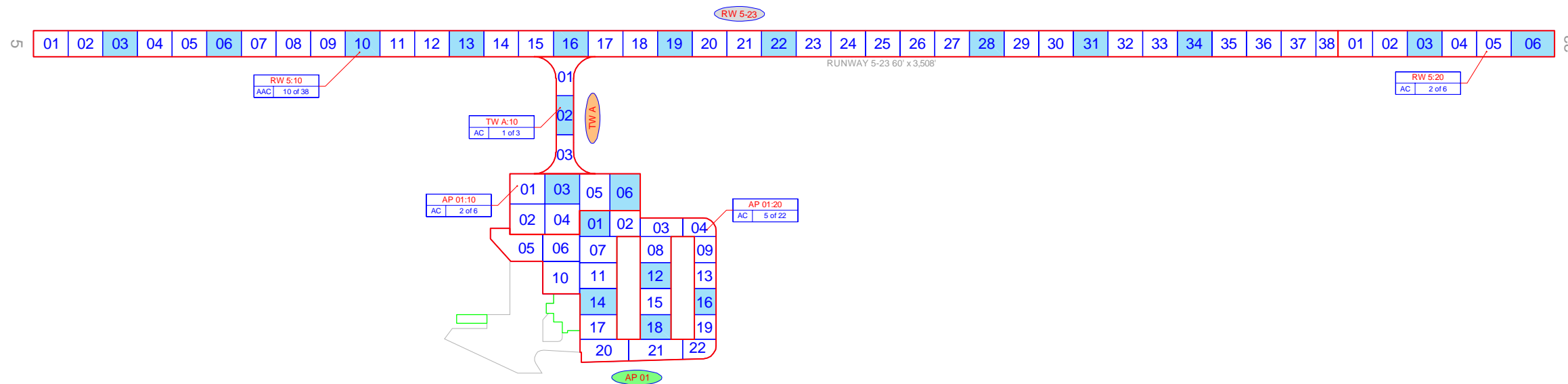
Table 1 - Recent Airfield Pavement Construction

Construction Year	Location	Work Type / Pavement Section
<i>*No documented or identified projects occurred since the previous inspection.</i>		

The following figure summarizes the inventory items at Union County Airport, Troy Shelton Field (35A). The **Estimated Age Exhibit** provides the last major work date for each pavement section based on the collected documentation.

Figure 2 – System Inventory Summary





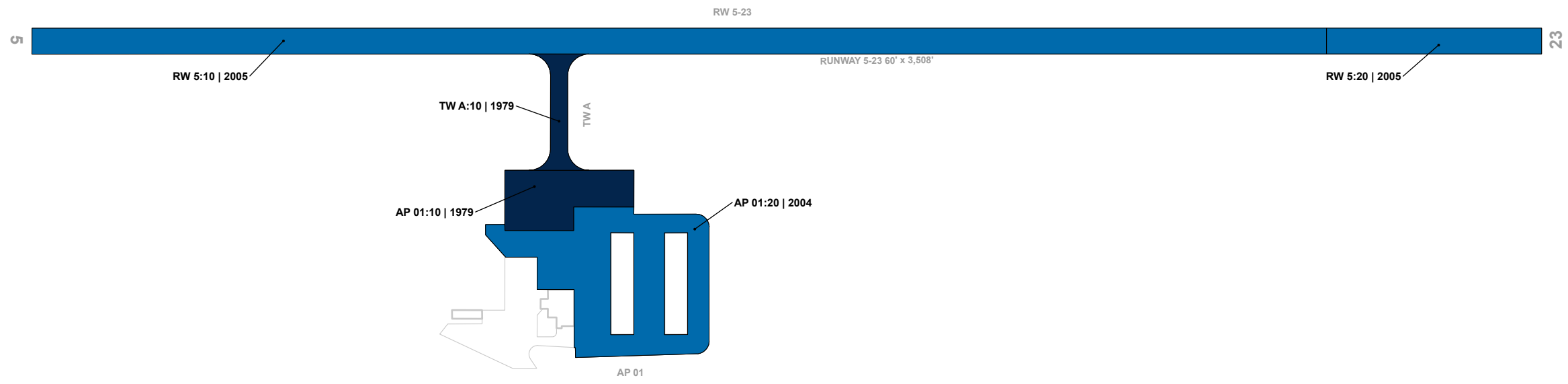
LEGEND

- RW 13-31 ← TYPICAL RUNWAY BRANCH ID
- TW A ← TYPICAL TAXIWAY BRANCH ID
- AP S ← TYPICAL APRON BRANCH ID
- RW 13-10 ← PAVEMENT BRANCH ID: SECTION ID
- AAC ← NUMBER OF SAMPLE UNITS IN SECTION
- 5 of 15 ← NUMBER OF SAMPLE UNITS TO BE INSPECTED
- PCC ← PAVEMENT SURFACE TYPE
- RW 13-20 ← SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE ESTIMATED AGE EXHIBIT FOR CONSTRUCTION DATES.
- AAC ←
- 0 of 5 ←
- 100 ← INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 20
AC: 20 PCC: 0

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.





Legend

- Estimated Age at Inspection**
- 0-5 Years
 - 6-10 Years
 - 11-15 Years
 - 16-20 Years
 - > 20 Years
- BRANCH IDENTIFIER
 SECTION IDENTIFIER
TWA:20 | 1985
 LAST MAJOR WORK DATE



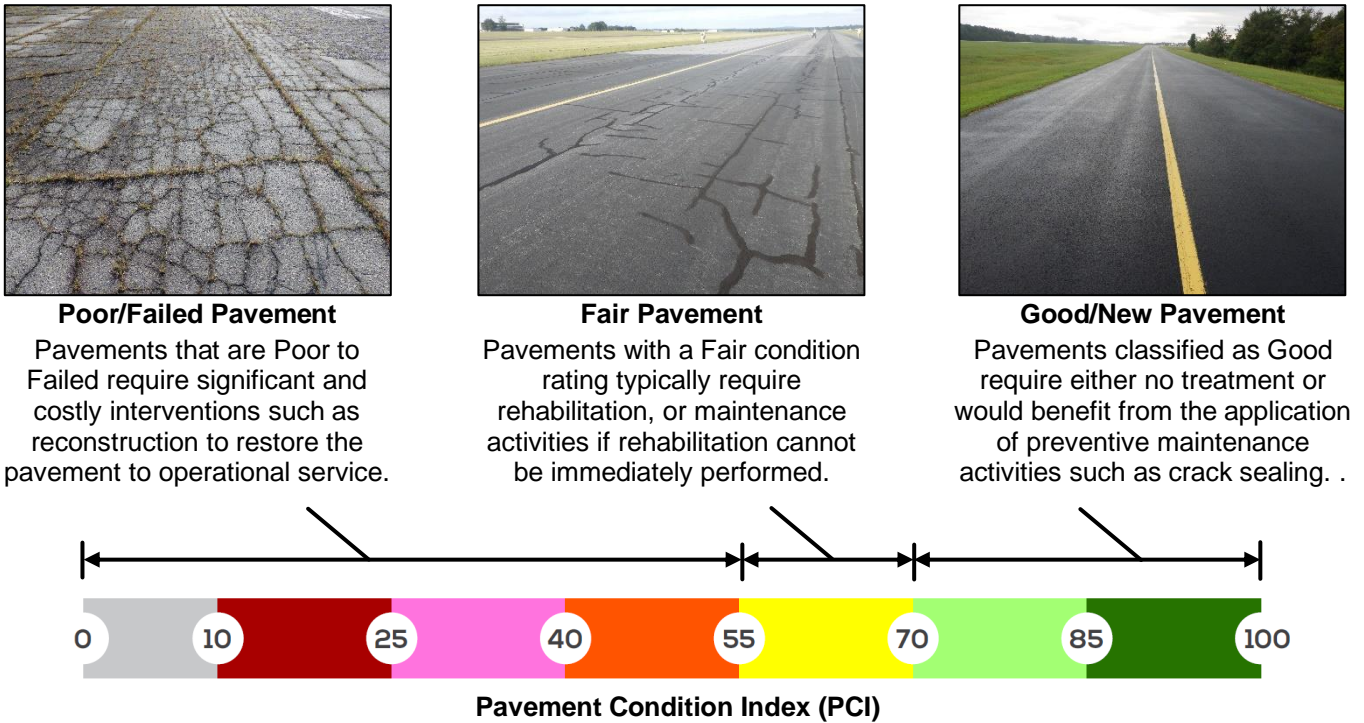
Functional Evaluation

Pavement Condition Index

A Pavement Condition Index (PCI) survey is the primary means of obtaining and recording pavement distress data. In adherence to FAA Advisory Circular 150/5380-7B, the SCAC Airfield Pavement Management System (APMS) Update utilizes the PCI survey methodology to collect pavement distress data and analyze the condition. This method uses a visual statistical sampling of pavements for recording primary distress types, associated severities, and quantities as defined by the ASTM D5340-20.

Visual condition data collected during the PCI survey is analyzed and used to calculate the current PCI for each inspected sample unit and section. The PCI is a value 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 are associated with PCI categories that range from Failed to Good. Representative photos of varying Pavement Condition Ratings are displayed in **Figure 3**.

Figure 3 – Representation of Pavement Condition Index Values



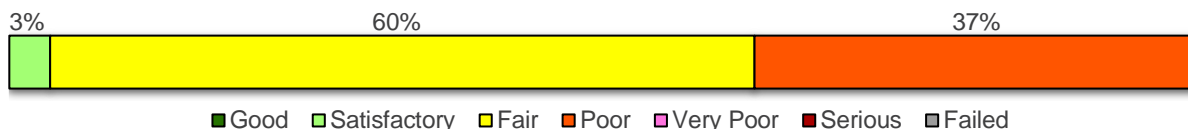
Critical PCI

From a pavement management perspective, one of the most valuable aspects of the PCI methodology is the ability to save money by effectively prioritizing the rehabilitation of pavement assets. Critical PCI refers to the condition beyond which the rate of pavement deterioration and the cost of applying a treatment increases significantly. In other words, it is the condition at which maintenance may no longer be cost effective and major rehabilitation should be considered. Based on the 2019 FAA Order 5100.38D Change 1 Airport Improvement Program Handbook, the FAA has established recommended PCI thresholds for pavement M&R. Accordingly, **the Critical PCI for all SCAC airfield pavements is defined at 70.**

PCI Results Summary

The PCI survey for Union County Airport, Troy Shelton Field (35A) was performed in September 2021. **The overall area-weighted average PCI value of the network was 61**, representing a condition rating of **Fair**. Approximately 3% of inspected pavements are in Good or Satisfactory condition, 60% of inspected pavements are in Fair condition, and the remaining 37% are in Poor or worse condition as summarized in **Figure 4**.

Figure 4 – Overall Network PCI Results



The area-weighted average PCIs by branch use are summarized in the figure below. The current PCIs at a section-level are displayed graphically on the **2021 Airfield Pavement Condition Index (PCI) Exhibit** and are summarized in **Table 2**.

Figure 5 – Area Weighted Average Pavement Condition

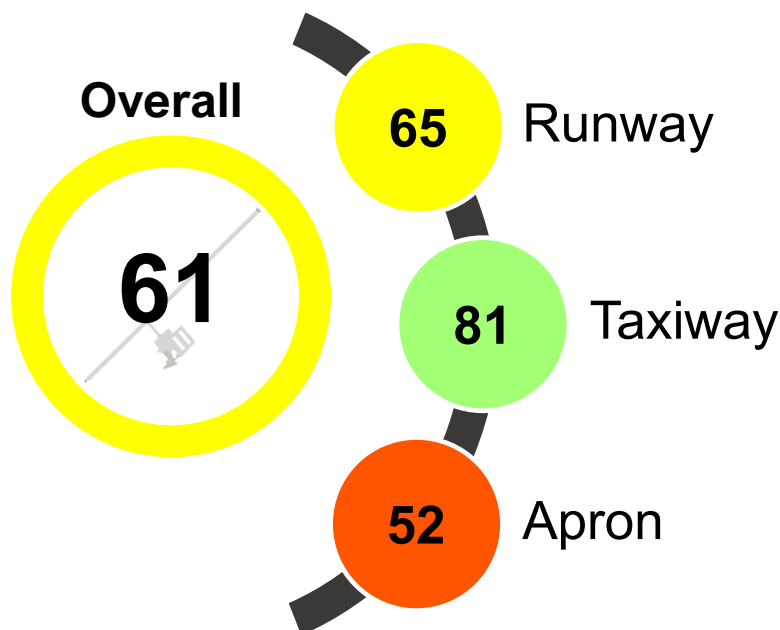


Table 2 – Current Pavement Condition Index Summary - Section

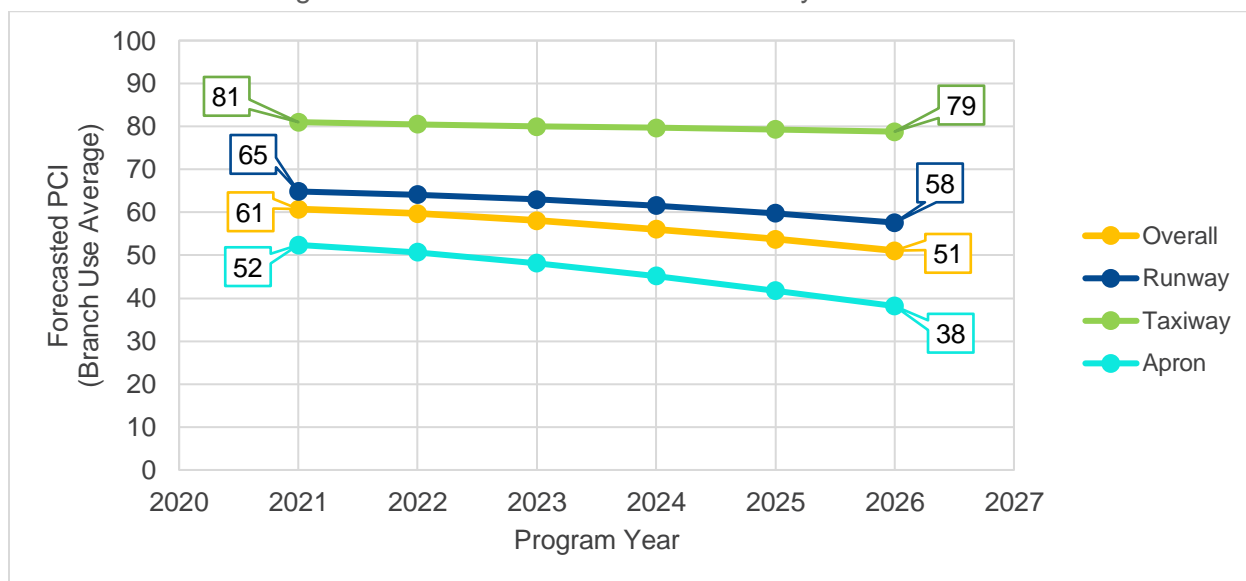
Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other
35A	AP 01	Apron	10	34,300	AC	45	Poor	54	46	0
35A	AP 01	Apron	20	98,113	AC	55	Poor	100	0	0
35A	RW 5	Runway	10	180,000	AAC	65	Fair	100	0	0
35A	RW 5	Runway	20	30,000	AC	64	Fair	100	0	0
35A	TW A	Taxiway	10	12,170	AC	81	Satisfactory	100	0	0

*For further PCI details and photos see Appendix D – Detailed PCI Results.

Pavement Condition Forecast

A primary objective of this APMS is to estimate the future condition of each individual pavement section. PAVER™ was utilized to develop prediction curves and determine typical deterioration rates that are then used to forecast a future PCI value. This value will assist decision makers in determining at what point in time certain pavement sections will require rehabilitation. The figure below shows the current and 5-year area-weighted forecasted pavement condition distribution of each functional use (Runway, Taxiway, Taxilane, Apron) found at the Airport. The forecasted 5-year PCIs at a section-level are displayed graphically on the **2026 Forecasted Airfield Pavement Condition Index Exhibit** and are summarized in **Table 3**. All forecasts presented assume that no maintenance or rehabilitation is performed within the 5-year analysis period. **Figure 6** displays the forecasted pavement conditions at the branch-level for 35A.

Figure 6 – Forecasted 5-Year PCI by Branch Use



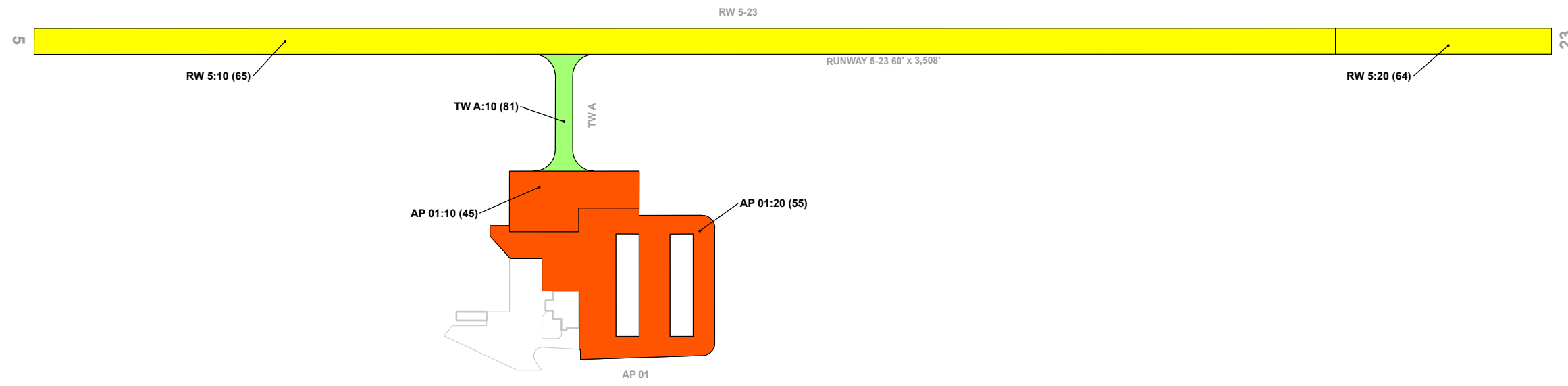
All condition forecasts are based on historical observations and analysis of South Carolina airfield pavements. The forecasts are not a guarantee of future PCI:- rather, they are a planning tool to aid in the timing of maintenance and rehabilitation activities.



35A – Union County Airport, Troy Shelton Field

Table 3 – Forecasted (2022-2026) Pavement Condition Index Summary - Section

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI				
				2022	2023	2024	2025	2026
35A	AP 01	10	45	42	38	34	29	25
35A	AP 01	20	55	54	52	49	46	43
35A	RW 5	10	65	64	63	62	60	58
35A	RW 5	20	64	63	62	60	58	55
35A	TW A	10	81	80	80	80	79	79



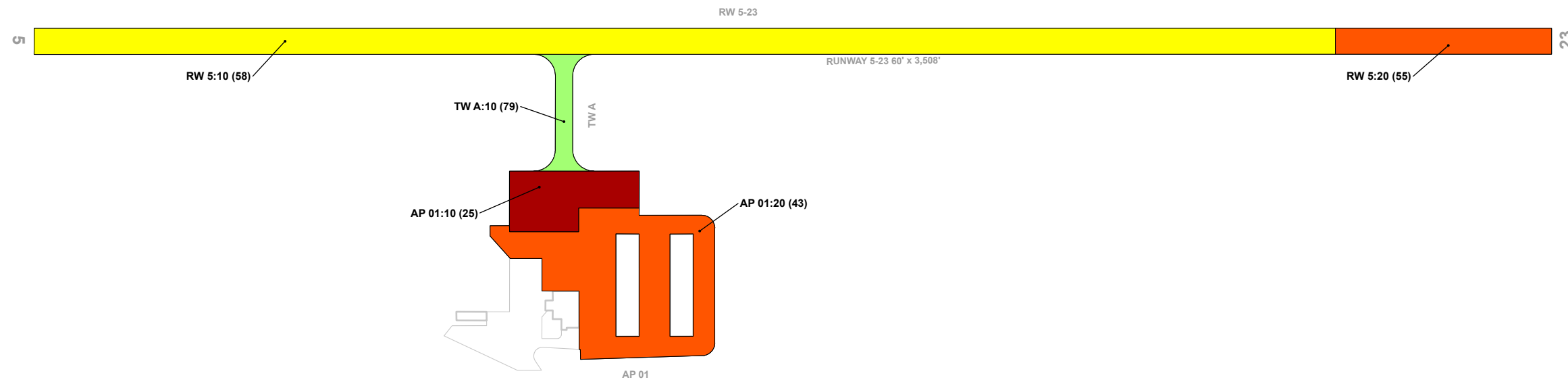
Legend

2021 Pavement Condition Index

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

— BRANCH IDENTIFIER
 — SECTION IDENTIFIER
TWA:20 (84)
 — PCI





Legend

2026 Forecasted Pavement Condition Index

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

— BRANCH IDENTIFIER
 — SECTION IDENTIFIER
TWA:20 (84)
 — FORECASTED PCI



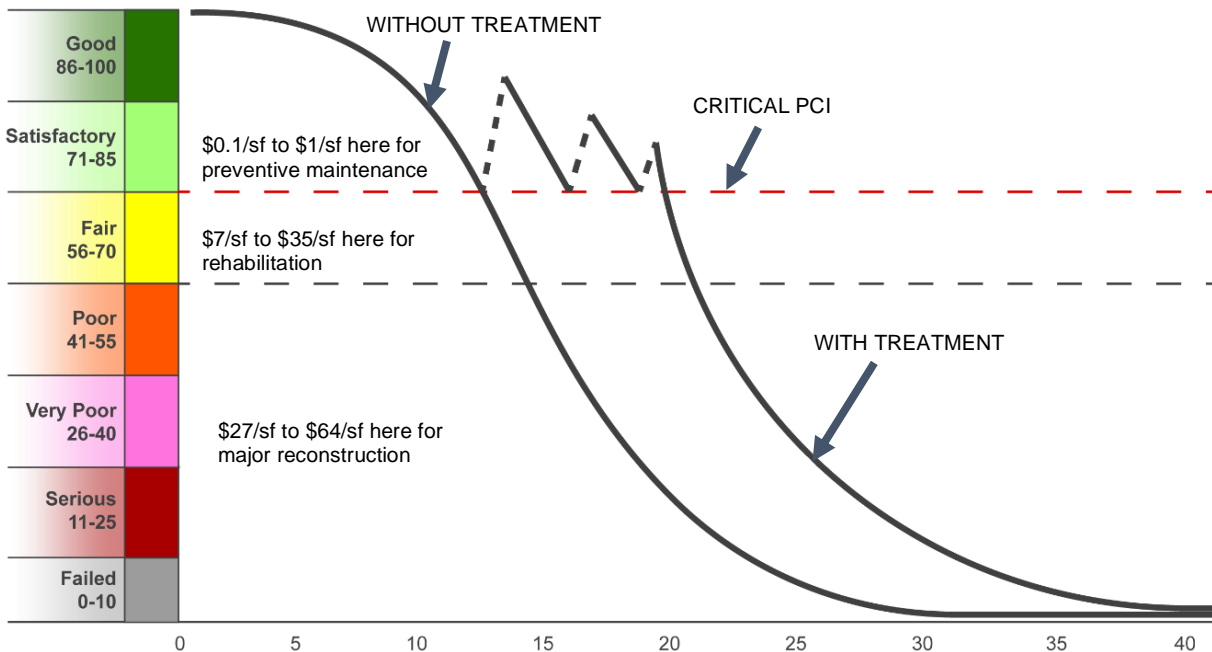
M&R Overview

An analysis was performed to assess the pavement maintenance and rehabilitation (M&R) needs at 35A over a 5-year period. The analysis compared the forecasted condition of each pavement section to Critical PCI threshold to develop a resultant recommendation and associated cost for each year of the 5-year plan. The M&R analysis should enable responsible parties to do the following:

- ➔ **Maintain** existing airport infrastructure at an acceptable condition
- ➔ Make timely and cost-effective **decisions** to appropriately allocate funding
- ➔ **Apply** global maintenance, localized maintenance, and major M&R activities in a timely manner to maintain an acceptable operational condition of a pavement network.

M&R planning considers various methods of repair to address the cause of the problem rather than just treating the symptom. As pavements deteriorate, repair costs can increase significantly. Once pavements have deteriorated below a certain condition threshold (the Critical PCI value), the pavement benefits more from substantial rehabilitation in lieu of maintenance activities. The figure below illustrates how the cost of pavement repairs can exponentially increase if M&R activities are delayed.

Figure 7 – Pavement Life and the Effect of Treatments



Localized Maintenance and Repair

Localized maintenance is best used as a preservation measure and is applied to slow the rate of deterioration. These activities typically include crack sealing and patching. Localized maintenance differs from major rehabilitation in that it is applied based on the distresses observed rather than based on a PCI value. Treatments are selected based on the appropriate corrective measure for a given distress type and severity level. Localized maintenance applied on pavements with PCIs above the Critical PCI of 70 is known as Preventive Localized Maintenance, while Stopgap Localized Maintenance is typically applied to pavement sections that are at or below the Critical PCI value as a temporary repair or due to safety concerns. The current localized maintenance needs are summarized in the table below.

Table 4 – Localized Maintenance Summary by Policy Type

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance	AC Crack Sealing Narrow	585	LF	\$ 2,340
<i>Localized Preventive Maintenance Total =</i>				\$ 2,340
Localized Stopgap Maintenance	AC Crack Sealing Narrow	5,442	LF	\$ 21,790
	AC Crack Sealing Wide	95	LF	\$ 1,190
	Surface Seal	24,485	SF	\$ 22,060
	AC Partial-Depth Patching	57	SF	\$ 580
	AC Full-Depth Patching	2,099	SF	\$ 45,650
<i>Localized Stopgap Maintenance Total =</i>				\$ 91,270
<i>Total Planning-Level Localized Maintenance Needs =</i>				\$ 93,610

Major Rehabilitation Needs

Major rehabilitation needs are identified by analyzing the Airport’s pavement condition in relationship to Critical PCI values, density of load-related distresses, and major rehabilitation policies, assuming there are no budget constraints. The needs analysis is performed over a 5-year analysis period. Major rehabilitation resets the PCI value to 100 and is divided into two policy categories:

- **Intermediate Major Rehabilitation (PCI 56 to 70)** –
 - **AC:** Milling of the upper surface course and replacing with new AC with isolated areas of full-depth reconstruction
 - **PCC:** Combination of crack sealing, joint seal replacement, limited patching, and slab replacement
- **Full-Depth Reconstruction (PCI 0 to 55)** – Removal and replacement of the existing pavement section down to the subgrade

The 5-year major rehabilitation needs analysis at 35A results in a total 5-year cost of \$4.50M. The **5-Year Major Rehabilitation Needs Exhibit** graphically depicts the major

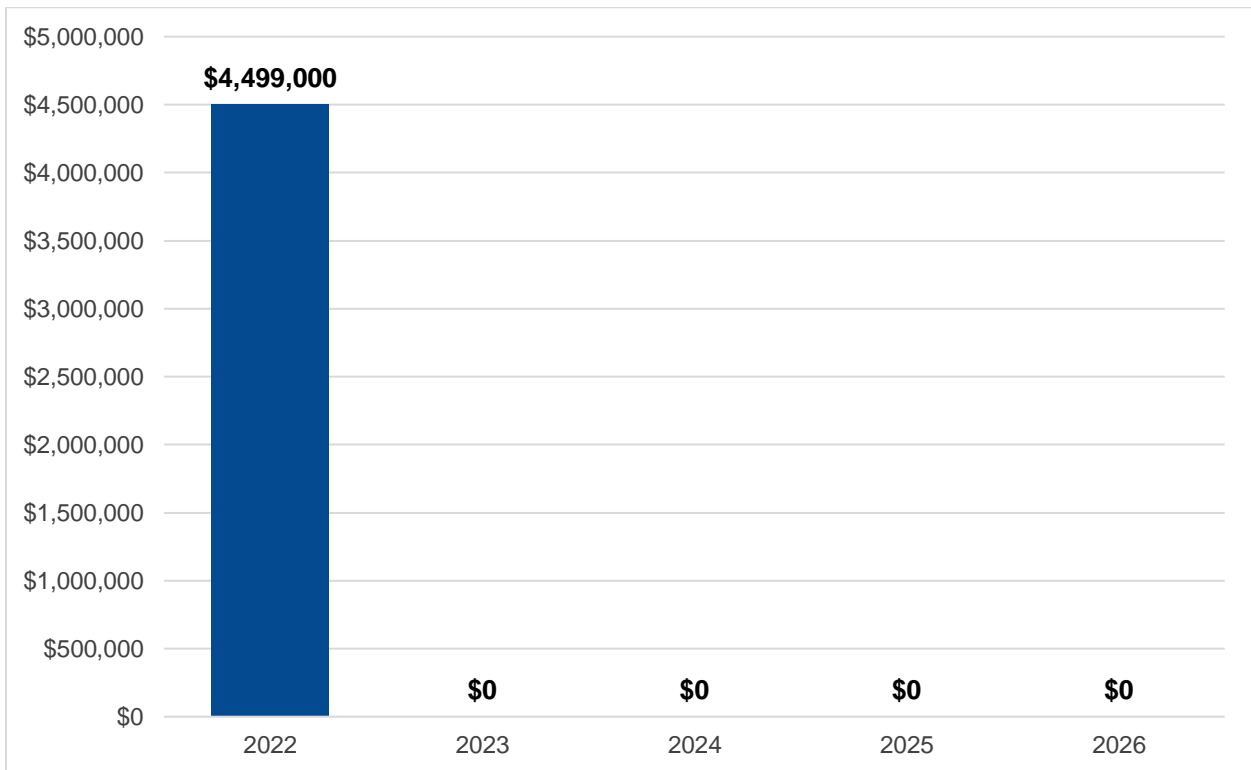
35A – Union County Airport, Troy Shelton Field

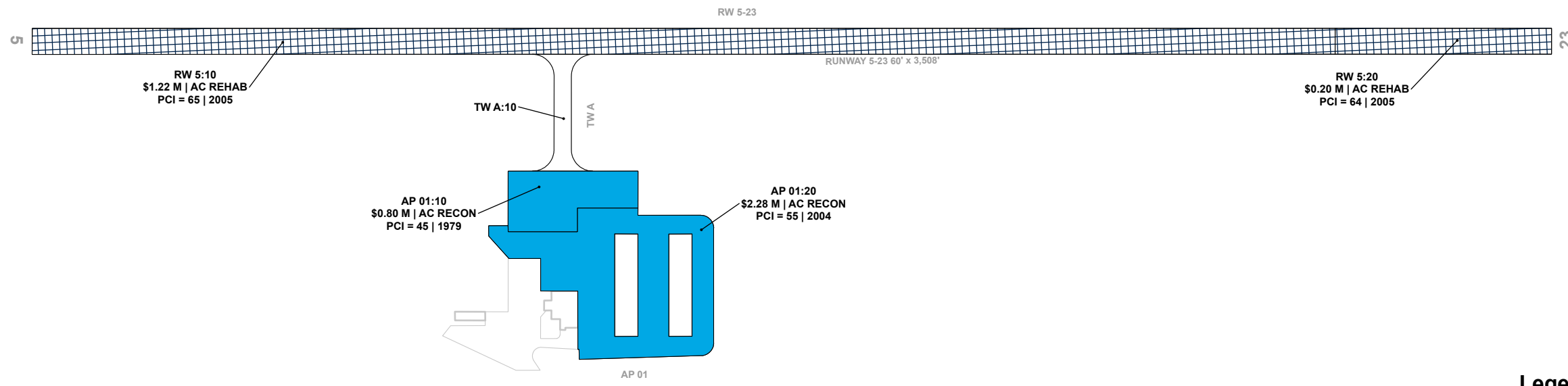
rehabilitation needs at a section-level which are also summarized in **Table 5** with rounded costs. Annual needs are displayed graphically in **Figure 8**.

Table 5 – 5-Year Major Rehabilitation Needs

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2022	35A	AP 01	10	AC	34,300	42	AC Reconstruction	\$ 798,000
2022	35A	AP 01	20	AC	98,113	54	AC Reconstruction	\$ 2,282,000
2022	35A	RW 5	10	AAC	180,000	64	AC Rehabilitation	\$ 1,216,000
2022	35A	RW 5	20	AC	30,000	63	AC Rehabilitation	\$ 203,000
Total 5-Year Major Rehabilitation Needs =								\$ 4,499,000

Figure 8 – 5-Year Major Rehabilitation Needs by Program Year

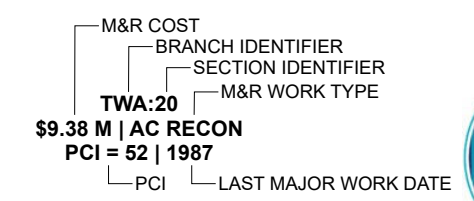




Legend

5-Year M&R Needs

- Year 1 Reconstruction Needs
- Year 1 Rehabilitation Needs
- Year 2 Rehabilitation Needs
- Year 3 Rehabilitation Needs
- Year 4 Rehabilitation Needs
- Year 5 Rehabilitation Needs



THIS EXHIBIT REPRESENTS NEEDS SOLEY BASED ON CURRENT AND FORECASTED CONDITIONS FURTHER PRIORITIZATION AND CONSIDERATIONS SHOULD BE MADE BEYOND THIS STUDY.



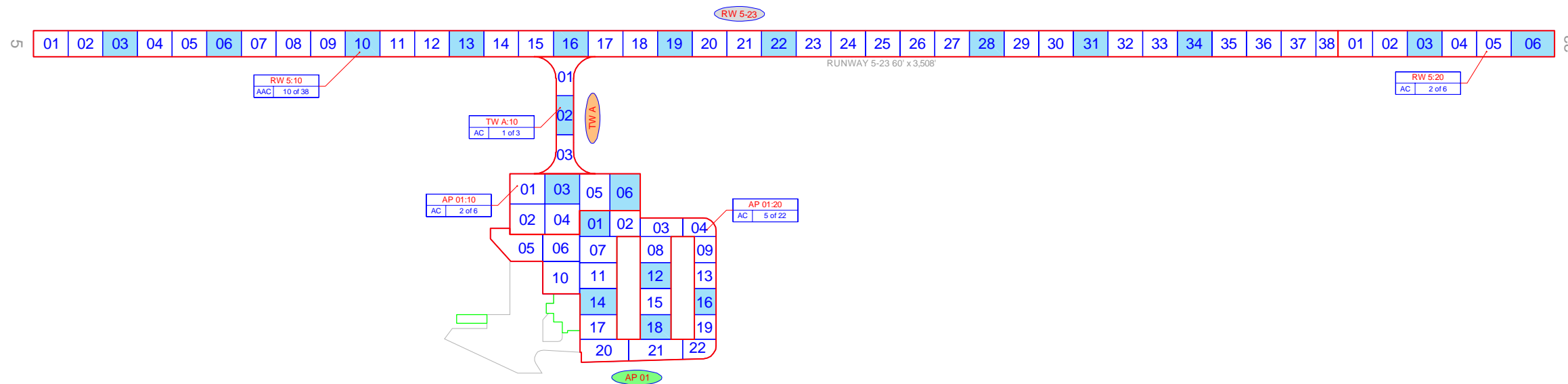
SECTION I

Appendices





Appendix A – Exhibits



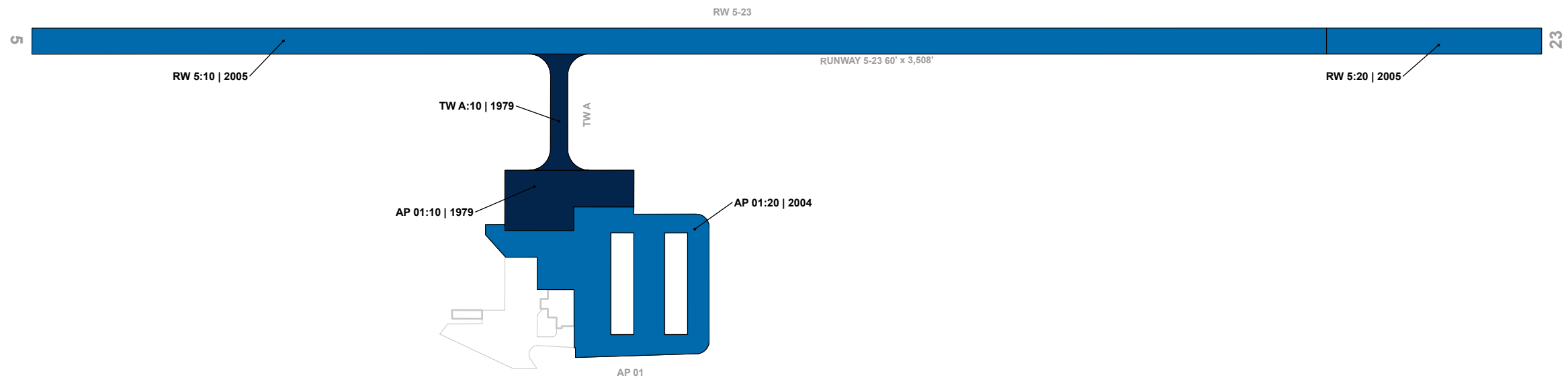
LEGEND

- RW 13-31 ← TYPICAL RUNWAY BRANCH ID
- TW A ← TYPICAL TAXIWAY BRANCH ID
- AP S ← TYPICAL APRON BRANCH ID
- RW 13:10 ← PAVEMENT BRANCH ID: SECTION ID
- AAC 5 of 15 ← NUMBER OF SAMPLE UNITS IN SECTION
- AC ← NUMBER OF SAMPLE UNITS TO BE INSPECTED
- PCC ← PAVEMENT SURFACE TYPE
- RW 13:20 ← SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE ESTIMATED AGE EXHIBIT FOR CONSTRUCTION DATES.
- AAC 0 of 5
- 100 ← INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 20
AC: 20 PCC: 0

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

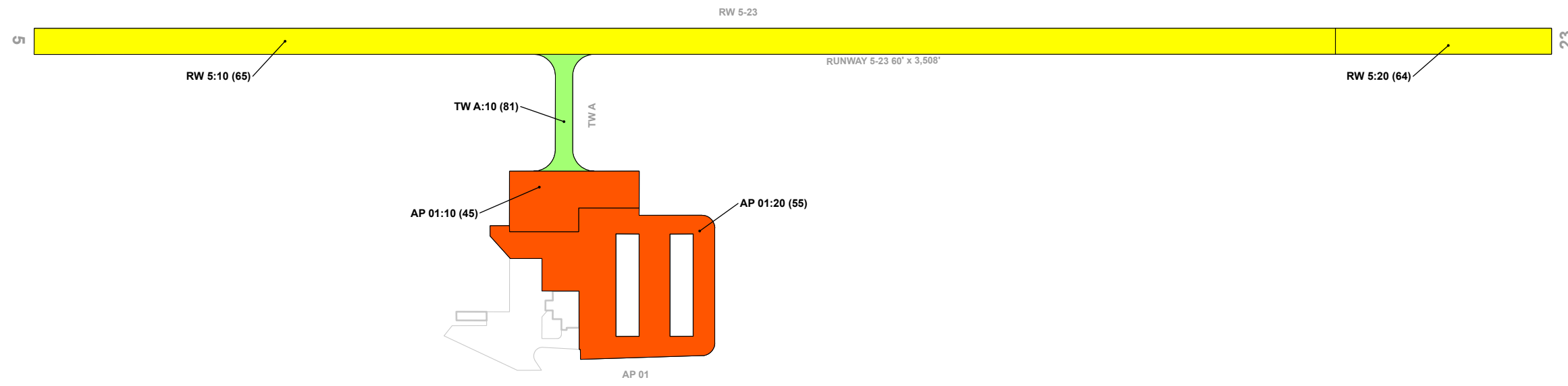




Legend

- Estimated Age at Inspection**
- 0-5 Years
 - 6-10 Years
 - 11-15 Years
 - 16-20 Years
 - > 20 Years
- BRANCH IDENTIFIER
 SECTION IDENTIFIER
TWA:20 | 1985
 LAST MAJOR WORK DATE





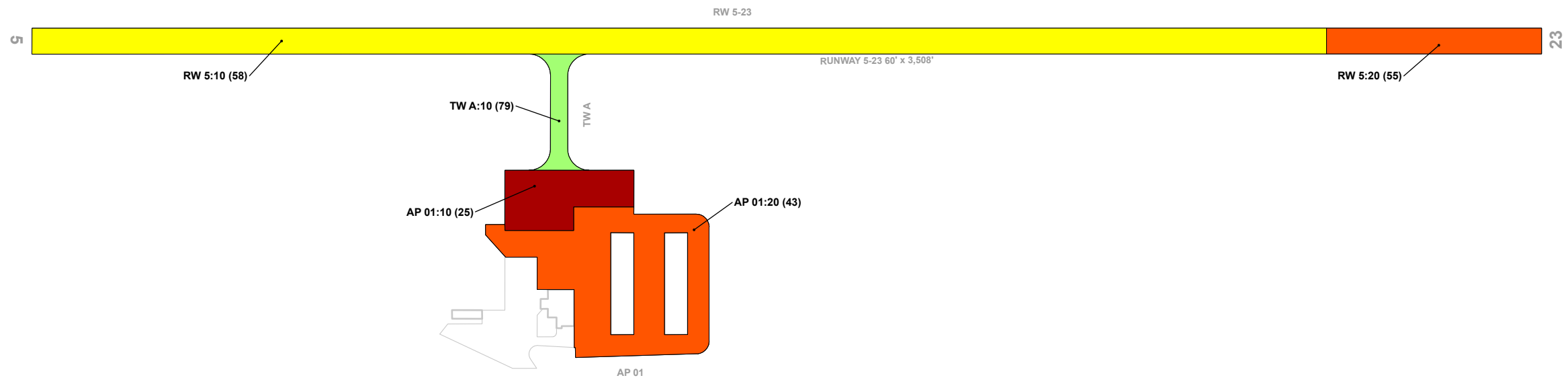
Legend

2021 Pavement Condition Index

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

— BRANCH IDENTIFIER
 — SECTION IDENTIFIER
TWA:20 (84)
 — PCI





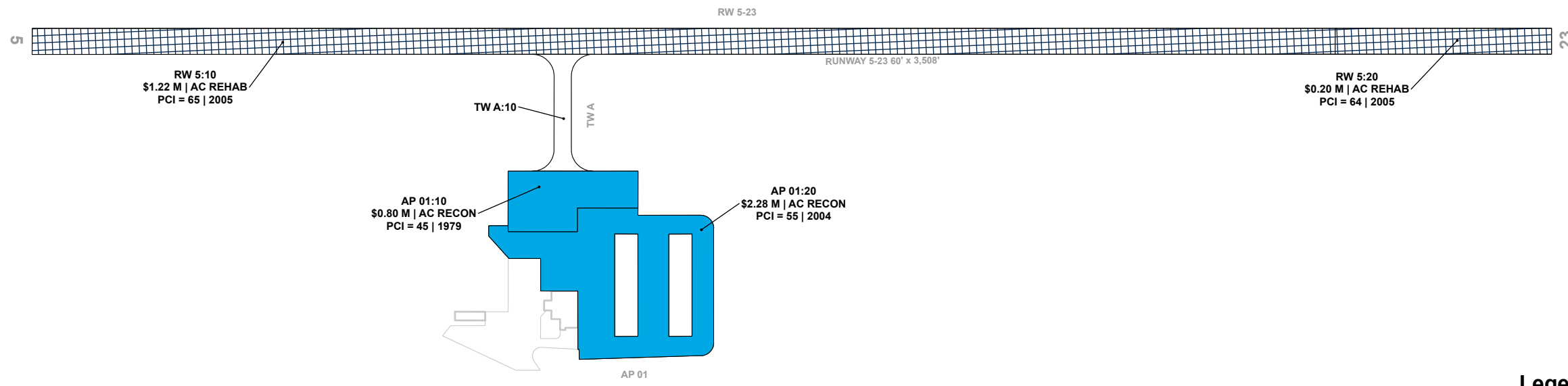
Legend

2026 Forecasted Pavement Condition Index

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

— BRANCH IDENTIFIER
 — SECTION IDENTIFIER
TWA:20 (84)
 — FORECASTED PCI

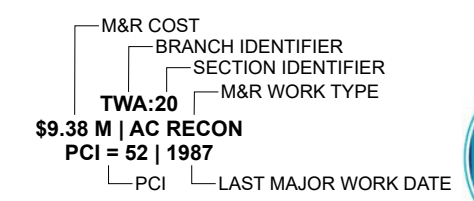




Legend

5-Year M&R Needs

- Year 1 Reconstruction Needs
- Year 1 Rehabilitation Needs
- Year 2 Rehabilitation Needs
- Year 3 Rehabilitation Needs
- Year 4 Rehabilitation Needs
- Year 5 Rehabilitation Needs



THIS EXHIBIT REPRESENTS NEEDS SOLEY BASED ON CURRENT AND FORECASTED CONDITIONS FURTHER PRIORITIZATION AND CONSIDERATIONS SHOULD BE MADE BEYOND THIS STUDY.





Appendix B – Analysis Tables



35A – Union County Airport, Troy Shelton Field

Table B1 – System Inventory Data - Section

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
35A	AP 01	Apron	10	34,300	AC	8/9/1979
35A	AP 01	Apron	20	98,113	AC	1/12/2004
35A	RW 5	Runway	10	180,000	AAC	6/1/2005
35A	RW 5	Runway	20	30,000	AC	6/1/2005
35A	TW A	Taxiway	10	12,170	AC	8/9/1979

Table B2 – Current Pavement Condition Index Summary - Branch

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Area-Weighted Avg PCI	Condition Rating
AP 01	Apron	2	132,413	52	Poor
RW 5	Runway	2	210,000	65	Fair
TW A	Taxiway	1	12,170	81	Satisfactory



 35A – Union County Airport, Troy Shelton Field

Table B3 – Current (2021) Pavement Condition Index Summary - Section

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other	Sample Units Inspected	Total Sample Units in Section
35A	AP 01	Apron	10	34,300	AC	45	Poor	54	46	0	2	6
35A	AP 01	Apron	20	98,113	AC	55	Poor	100	0	0	5	22
35A	RW 5	Runway	10	180,000	AAC	65	Fair	100	0	0	10	38
35A	RW 5	Runway	20	30,000	AC	64	Fair	100	0	0	2	6
35A	TW A	Taxiway	10	12,170	AC	81	Satisfactory	100	0	0	1	3



35A – Union County Airport, Troy Shelton Field

Table B4 –Forecasted (2022-2026) Pavement Condition Index Summary - Section

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI				
				2022	2023	2024	2025	2026
35A	AP 01	10	45	42	38	34	29	25
35A	AP 01	20	55	54	52	49	46	43
35A	RW 5	10	65	64	63	62	60	58
35A	RW 5	20	64	63	62	60	58	55
35A	TW A	10	81	80	80	80	79	79



Appendix C – Maintenance and Rehabilitation Tables



35A – Union County Airport, Troy Shelton Field

Table C1–Localized Maintenance Summary by Policy Type

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance	AC Crack Sealing Narrow	585	LF	\$ 2,340
Localized Preventive Maintenance Total =				\$ 2,340
Localized Stopgap Maintenance	AC Crack Sealing Narrow	5,442	LF	\$ 21,790
	AC Crack Sealing Wide	95	LF	\$ 1,190
	Surface Seal	24,485	SF	\$ 22,060
	AC Partial-Depth Patching	57	SF	\$ 580
	AC Full-Depth Patching	2,099	SF	\$ 45,650
Localized Stopgap Maintenance Total =				\$ 91,270
Planning-Level Localized M&R Needs =				\$ 93,610

Table C2 – Section – Level Year 1 Localized Maintenance Planning Cost Summary

Network ID	Branch ID	Section ID	Area (SF)	Start PCI	End PCI	Cost
35A	AP 01	10	34,300	45	60	\$ 45,850
35A	AP 01	20	98,113	55	56	\$ 26,370
35A	RW 5	10	180,000	65	67	\$ 13,850
35A	RW 5	20	30,000	64	70	\$ 5,160
35A	TW A	10	12,170	81	81	\$ 2,340



35A – Union County Airport, Troy Shelton Field

Table C3 – Localized Maintenance and Repair Needs Based on Current Distresses

Network ID	Branch ID	Section ID	Description	Severity	Distress Qty	Distress Unit	Distress Density	Policy Type	Localized Work Type	Work Qty	Work Unit	Unit Cost	Work Cost
35A	TW A	10	L & T CR	Low	585	LF	4.8%	Preventive	AC Crack Sealing Narrow	585	LF	\$ 4.00	\$ 2,340
35A	AP 01	10	ALLIGATOR CR	Medium	1,918	SF	5.6%	Stopgap	AC Full-Depth Patching	2,099	SF	\$ 21.75	\$ 45,650
35A	AP 01	10	RAVELING	Medium	223	SF	0.7%	Stopgap	Surface Seal	223	SF	\$ 0.90	\$ 210
35A	AP 01	20	L & T CR	Medium	1,071	LF	1.1%	Stopgap	AC Crack Sealing Narrow	1,071	LF	\$ 4.00	\$ 4,290
35A	AP 01	20	L & T CR	High	95	LF	0.1%	Stopgap	AC Crack Sealing Wide	95	LF	\$ 12.50	\$ 1,190
35A	AP 01	20	RAVELING	High	57	SF	0.1%	Stopgap	AC Partial-Depth Patching	57	SF	\$ 10.00	\$ 580
35A	AP 01	20	WEATHERING	Medium	22,583	SF	23.0%	Stopgap	Surface Seal	22,584	SF	\$ 0.90	\$ 20,330
35A	RW 5	10	L & T CR	Medium	3,094	LF	1.7%	Stopgap	AC Crack Sealing Narrow	3,094	LF	\$ 4.00	\$ 12,380
35A	RW 5	10	RAVELING	Medium	1,631	SF	0.9%	Stopgap	Surface Seal	1,631	SF	\$ 0.90	\$ 1,470
35A	RW 5	20	L & T CR	Medium	1,278	LF	4.3%	Stopgap	AC Crack Sealing Narrow	1,278	LF	\$ 4.00	\$ 5,120
35A	RW 5	20	RAVELING	Medium	47	SF	0.2%	Stopgap	Surface Seal	47	SF	\$ 0.90	\$ 50



35A – Union County Airport, Troy Shelton Field

Table C4 – 5-Year Major Rehabilitation Needs

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2022	35A	AP 01	10	AC	34,300	42	AC Reconstruction	\$ 798,000
2022	35A	AP 01	20	AC	98,113	54	AC Reconstruction	\$ 2,282,000
2022	35A	RW 5	10	AAC	180,000	64	AC Rehabilitation	\$ 1,216,000
2022	35A	RW 5	20	AC	30,000	63	AC Rehabilitation	\$ 203,000
Total 5-Year Major Rehabilitation Needs =								\$ 4,499,000



Appendix D – Detailed PCI Results

35A – Union County Airport, Troy Shelton Field

AP 01

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP 01	APRON	2	132,413	52	Poor

Section ID	Area (SF)	Surface	Est. Last Major Work Year	Est. Last Global Treatment Year	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other
10	34,300	AC	1979	2011	45	Poor	54	46	0
20	98,113	AC	2004	2011	55	Poor	100	0	0



AP 01-10



AP 01-10



AP 01-20

35A – Union County Airport, Troy Shelton Field

RW 5

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
RW 5	RUNWAY	2	210,000	65	Fair

Section ID	Area (SF)	Surface	Est. Last Major Work Year	Est. Last Global Treatment Year	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other
10	180,000	AAC	2005	2011	65	Fair	100	0	0
20	30,000	AC	2005	2011	64	Fair	100	0	0



RW 5-10



RW 5-10



RW 5-20



RW 5-20

35A – Union County Airport, Troy Shelton Field

TW A

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	1	12,170	81	Satisfactory

Section ID	Area (SF)	Surface	Est. Last Major Work Year	Est. Last Global Treatment Year	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other
10	12,170	AC	1979	2011	81	Satisfactory	100	0	0



TW A-10



TW A-10



Appendix E – Re-Inspection Report

Re-Inspection Report

SCAC_2021

Generated Date

5/29/2022

Page 1 of 6

Network: 35A **Name:** Union County Airport

Branch: AP 01 **Name:** MAIN APRON **Use:** APRON **Area:** 132,413 SqFt

Section: 10 of 2 **From:** - **To:** - **Last Const.:** 8/9/1979

Surface: AC **Family:** SC III & IV-AP-AC **Zone:** **Category:** G **Rank:** S

Area: 34,300 SqFt **Length:** 300 Ft **Width:** 140 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1979 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/1/1979 **Work Type:** Surface Course - AC (Layer Construct) **Code:** SU-AC **Is Major M&R:** False

Work Date: 8/9/1979 **Work Type:** New Construction - Initial **Code:** NU-IN **Is Major M&R:** True

Work Date: 6/1/2011 **Work Type:** Surface Seal - Rejuvenating **Code:** SS-RE **Is Major M&R:** False

Last Insp. Date: 9/21/2021 **Total Samples:** 6 **Surveyed:** 2

Conditions: PCI: 45

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 5600.00 SqFt **PCI:** 58

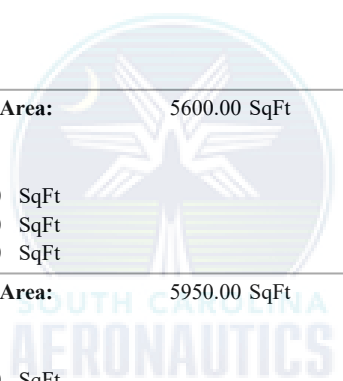
Sample Comments:

43	BLOCK CR	L	4070.00	SqFt
52	RAVELING	L	1455.00	SqFt
52	RAVELING	M	75.00	SqFt

Sample Number: 06 **Type:** R **Area:** 5950.00 SqFt **PCI:** 33

Sample Comments:

41	ALLIGATOR CR	M	646.00	SqFt
43	BLOCK CR	L	1326.00	SqFt
52	RAVELING	L	5950.00	SqFt



Network: 35A **Name:** Union County Airport

Branch: AP 01 **Name:** MAIN APRON **Use:** APRON **Area:** 132,413 SqFt

Section: 20 of 2 **From:** - **To:** - **Last Const.:** 1/12/2004

Surface: AC **Family:** SC III & IV-AP-AC **Zone:** **Category:** **Rank:** P

Area: 98,113 SqFt **Length:** 330 Ft **Width:** 314 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/12/2004 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 6/1/2011 **Work Type:** Surface Seal - Rejuvenating **Code:** SS-RE **Is Major M&R:** False

Last Insp. Date: 9/21/2021 **TotalSamples:** 22 **Surveyed:** 5

Conditions: PCI: 55

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4200.00 SqFt **PCI:** 35

Sample Comments:

43 BLOCK CR L 160.00 SqFt
48 L & T CR L 36.00 Ft
48 L & T CR M 225.00 Ft
48 L & T CR H 20.00 Ft
50 PATCHING L 136.00 SqFt
50 PATCHING M 584.00 SqFt
52 RAVELING H 12.00 SqFt
57 WEATHERING L 2774.00 SqFt
57 WEATHERING M 694.00 SqFt

Sample Number: 12 **Type:** R **Area:** 4260.00 SqFt **PCI:** 63

Sample Comments:

48 L & T CR L 577.00 Ft
57 WEATHERING L 3195.00 SqFt
57 WEATHERING M 1065.00 SqFt

Sample Number: 14 **Type:** R **Area:** 5112.00 SqFt **PCI:** 63

Sample Comments:

48 L & T CR L 650.00 Ft
57 WEATHERING L 3834.00 SqFt
57 WEATHERING M 1278.00 SqFt

Sample Number: 16 **Type:** R **Area:** 3000.00 SqFt **PCI:** 61

Sample Comments:

43 BLOCK CR L 180.00 SqFt
48 L & T CR L 320.00 Ft
57 WEATHERING L 2250.00 SqFt
57 WEATHERING M 750.00 SqFt

Sample Number: 18 **Type:** R **Area:** 4047.00 SqFt **PCI:** 54

Sample Comments:

43 BLOCK CR L 21.00 SqFt
48 L & T CR L 512.00 Ft
50 PATCHING M 210.00 SqFt
57 WEATHERING L 2878.00 SqFt
57 WEATHERING M 959.00 SqFt

Network: 35A **Name:** Union County Airport

Branch: RW 5 **Name:** RUNWAY 5/23 **Use:** RUNWAY **Area:** 210,000 SqFt

Section: 10 of 2 **From:** - **To:** - **Last Const.:** 6/1/2005

Surface: AAC **Family:** SC III & IV-RW-AC **Zone:** **Category:** G **Rank:** S

Area: 180,000 SqFt **Length:** 3,000 Ft **Width:** 60 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1979 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/1/1979 **Work Type:** Surface Course - AC (Layer Construct) **Code:** SU-AC **Is Major M&R:** False

Work Date: 8/9/1979 **Work Type:** New Construction - Initial **Code:** NU-IN **Is Major M&R:** True

Work Date: 6/1/2005 **Work Type:** Overlay - AC Structural **Code:** OL-AS **Is Major M&R:** True

Work Date: 6/1/2011 **Work Type:** Surface Seal - Rejuvenating **Code:** SS-RE **Is Major M&R:** False

Work Date: 6/1/2011 **Work Type:** Crack Sealing - AC **Code:** CS-AC **Is Major M&R:** False

Last Insp. Date: 9/21/2021 **Total Samples:** 38 **Surveyed:** 10

Conditions: PCI: 65

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 4800.00 SqFt **PCI:** 66

Sample Comments:

48 L & T CR L 354.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 70.00 SqFt
57 WEATHERING L 4730.00 SqFt

Sample Number: 06 **Type:** R **Area:** 4800.00 SqFt **PCI:** 64

Sample Comments:

48 L & T CR L 416.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 110.00 SqFt
57 WEATHERING L 4690.00 SqFt

Sample Number: 10 **Type:** R **Area:** 4800.00 SqFt **PCI:** 64

Sample Comments:

48 L & T CR L 413.00 Ft
48 L & T CR M 93.00 Ft
52 RAVELING M 38.00 SqFt
57 WEATHERING L 4762.00 SqFt

Sample Number: 13 **Type:** R **Area:** 4800.00 SqFt **PCI:** 66

Sample Comments:

48 L & T CR L 348.00 Ft
48 L & T CR M 112.00 Ft
52 RAVELING M 59.00 SqFt
57 WEATHERING L 4741.00 SqFt

Sample Number: 16 **Type:** R **Area:** 4800.00 SqFt **PCI:** 65

Sample Comments:

48 L & T CR L 372.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 16.00 SqFt
57 WEATHERING L 4784.00 SqFt

Sample Number: 19 **Type:** R **Area:** 4800.00 SqFt **PCI:** 63

Sample Comments:

48 L & T CR L 428.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 22.00 SqFt

57 WEATHERING L 4778.00 SqFt

Sample Number: 22 **Type:** R **Area:** 4800.00 SqFt **PCI:** 67

Sample Comments:

48 L & T CR L 336.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 8.00 SqFt
57 WEATHERING L 4792.00 SqFt

Sample Number: 28 **Type:** R **Area:** 4800.00 SqFt **PCI:** 63

Sample Comments:

48 L & T CR L 448.00 Ft
48 L & T CR M 60.00 Ft
52 RAVELING M 49.00 SqFt
57 WEATHERING L 4751.00 SqFt

Sample Number: 31 **Type:** R **Area:** 4800.00 SqFt **PCI:** 66

Sample Comments:

48 L & T CR L 332.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 28.00 SqFt
57 WEATHERING L 4772.00 SqFt

Sample Number: 34 **Type:** R **Area:** 4800.00 SqFt **PCI:** 65

Sample Comments:

48 L & T CR L 381.00 Ft
48 L & T CR M 80.00 Ft
52 RAVELING M 35.00 SqFt
57 WEATHERING L 4765.00 SqFt



Network: 35A **Name:** Union County Airport

Branch: RW 5 **Name:** RUNWAY 5/23 **Use:** RUNWAY **Area:** 210,000 SqFt

Section: 20 of 2 **From:** - **To:** - **Last Const.:** 6/1/2005

Surface: AC **Family:** SC III & IV-RW-AC **Zone:** **Category:** **Rank:** P

Area: 30,000 SqFt **Length:** 500 Ft **Width:** 60 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 6/1/2005 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 6/1/2011 **Work Type:** Crack Sealing - AC **Code:** CS-AC **Is Major M&R:** False

Work Date: 6/1/2011 **Work Type:** Surface Seal - Rejuvenating **Code:** SS-RE **Is Major M&R:** False

Last Insp. Date: 9/21/2021 **TotalSamples:** 6 **Surveyed:** 2

Conditions: PCI: 64

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 4800.00 SqFt **PCI:** 69

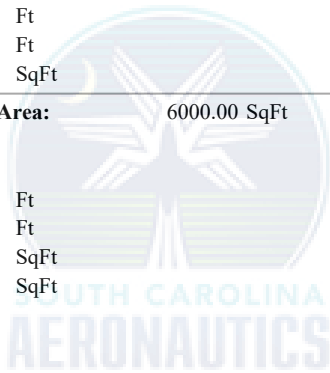
Sample Comments:

48 L & T CR L 262.00 Ft
48 L & T CR M 160.00 Ft
57 WEATHERING L 4800.00 SqFt

Sample Number: 06 **Type:** R **Area:** 6000.00 SqFt **PCI:** 59

Sample Comments:

48 L & T CR L 248.00 Ft
48 L & T CR M 300.00 Ft
52 RAVELING M 17.00 SqFt
57 WEATHERING L 5983.00 SqFt



Network: 35A **Name:** Union County Airport

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 12,170 SqFt

Section: 10 of 1 **From:** - **To:** - **Last Const.:** 8/9/1979

Surface: AC **Family:** SC III & IV-TW-TL-AC **Zone:** **Category:** G **Rank:** S

Area: 12,170 SqFt **Length:** 270 Ft **Width:** 40 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1979 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/1/1979 **Work Type:** Surface Course - AC (Layer Construct) **Code:** SU-AC **Is Major M&R:** False

Work Date: 8/9/1979 **Work Type:** New Construction - Initial **Code:** NU-IN **Is Major M&R:** True

Work Date: 6/1/2011 **Work Type:** Surface Seal - Rejuvenating **Code:** SS-RE **Is Major M&R:** False

Last Insp. Date: 9/21/2021 **TotalSamples:** 3 **Surveyed:** 1

Conditions: PCI: 81

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 3600.00 SqFt **PCI:** 81

Sample Comments:

48 L & T CR L 173.00 Ft
57 WEATHERING L 3600.00 SqFt





Kimley»»Horn