



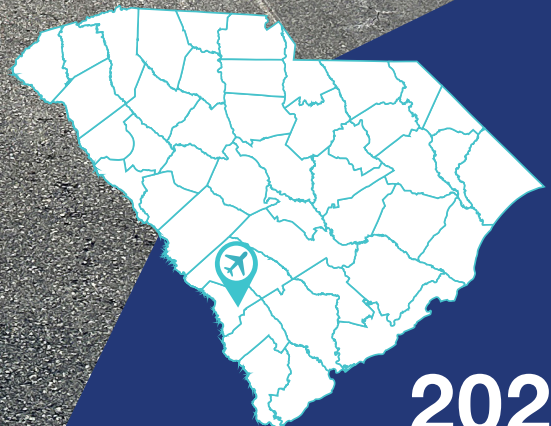
SOUTH CAROLINA AERONAUTICS COMMISSION

STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

 AQX - Allendale County Airport



Kimley»Horn



2024



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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 D5340-23 – “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 this 2021-2024 program update include the development and updates 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 program update at Allendale County Airport (AQX).

Figure 1 – Airport Layout



System Inventory

The pavements at Allendale County Airport (AQX) include approximately 0.7 million square feet of airfield pavements consisting of runways, taxiways, taxilane, and aprons. Per the guidance in the ASTM D5340-23, 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.

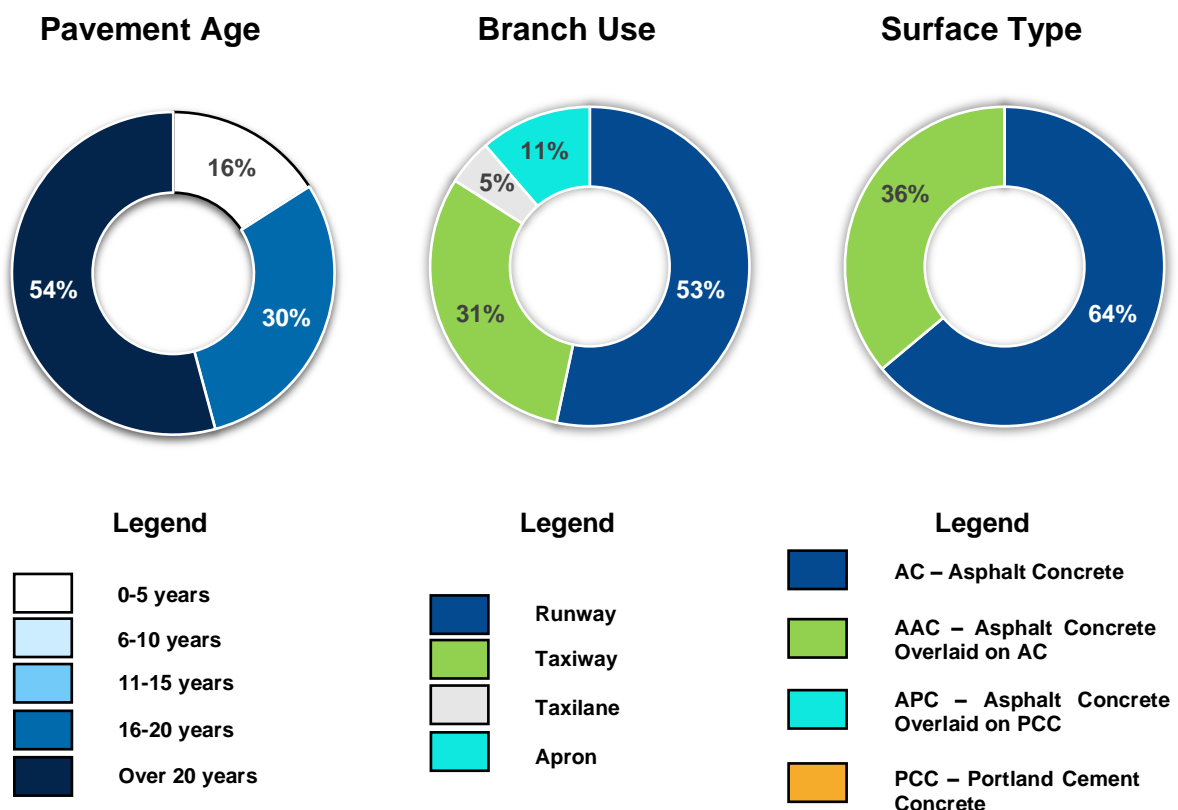
Each pavement update included a review of documentation of any maintenance and major rehabilitation related activities performed on the airfield pavements. The following table summarizes the projects that have occurred since the previous inspection.

Table 1 - Recent Airfield Pavement Construction

Construction Year	Location	Work Type / Pavement Section
2020	RW 17, TW A, TW A1, TW A2	Crack Sealing – AC, Surface Seal - Rejuvenating
2023	AP 01, TL 01	Reconstruction - AC 3" SC-403 SCDOT TYBE B, 6" SC-305 CRUSHED AGG BASE, P-152

The following figure summarizes the inventory items at Allendale County Airport (AQX). The **Estimated Age Exhibit** provides the last major work date for each pavement section based on the collected documentation.

Figure 2 – System Inventory Summary





STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

ALLENDALE COUNTY AIRPORT (AQX)

AIRFIELD PAVEMENT NETWORK DEFINITION EXHIBIT



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

100 — NUMBER OF SAMPLE UNITS TO BE INSPECTED

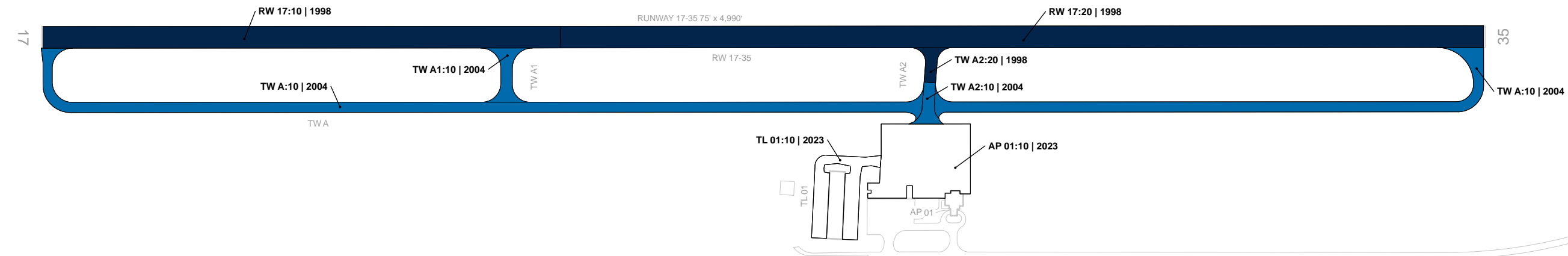
RW 13:20 — PAVEMENT SURFACE TYPE

AAC 0 of 5 — SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE ESTIMATED AGE EXHIBIT FOR CONSTRUCTION DATES.

100 — INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 26
AC: 26 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
LAST MAJOR WORK DATE

TWA:20 | 1985



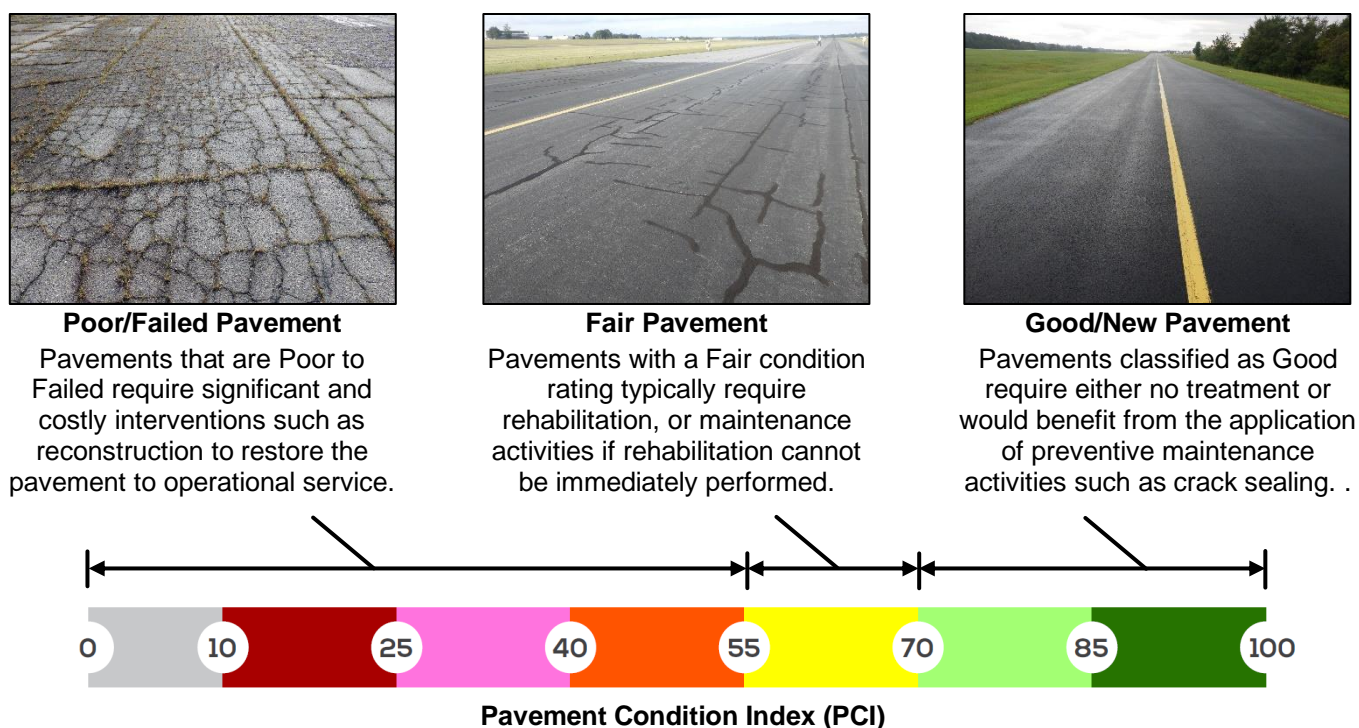
Functional Evaluation

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 D5340-23.

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



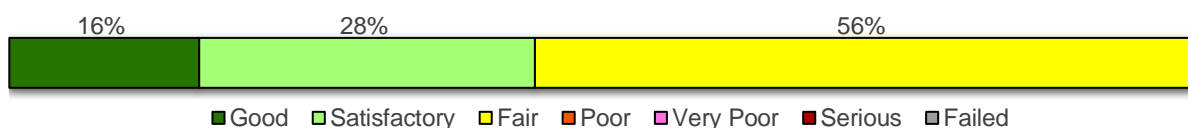
Critical PCI

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

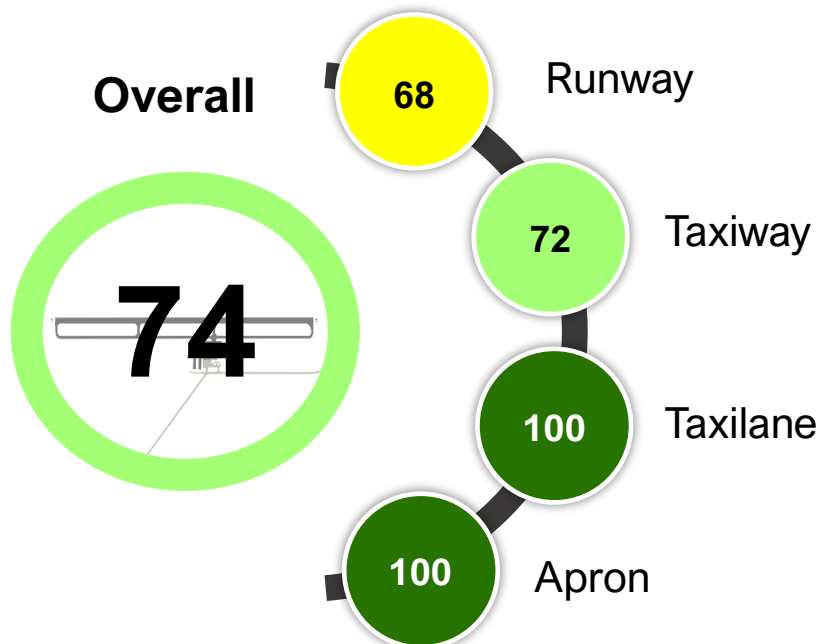
The PCI survey for Allendale County Airport (AQX) was performed in November 2023. **The overall area-weighted average PCI value of the network was 74**, representing a condition rating of **Satisfactory**. Approximately 44% of inspected pavements are in Good or Satisfactory condition, 56% of inspected pavements are in Fair condition, and no pavements 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 **2023 Airfield Pavement Condition Index Exhibit** and are summarized in **Table 2**.

Figure 5 – Area Weighted Average Pavement Condition





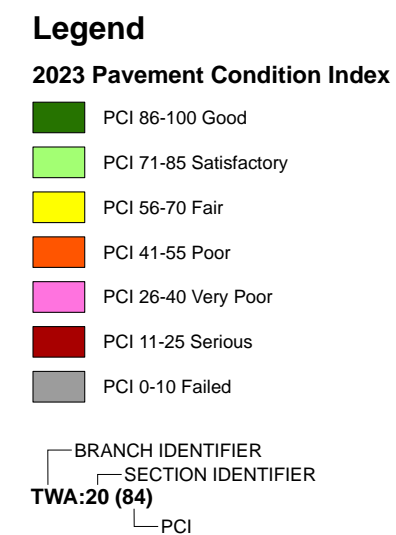
STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

AQX - Allendale County Airport

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
AQX	AP 01	Apron	10	79,394	AC	100	Good	0	0	0
AQX	RW 17	Runway	10	134,400	AC	69	Fair	97	0	3
AQX	RW 17	Runway	20	239,850	AAC	68	Fair	96	0	4
AQX	TL 01	Taxilane	10	32,582	AC	100	Good	0	0	0
AQX	TW A	Taxiway	10	190,698	AC	72	Satisfactory	65	34	1
AQX	TW A1	Taxiway	10	11,282	AC	70	Fair	100	0	0
AQX	TW A2	Taxiway	10	7,305	AAC	74	Satisfactory	94	0	6
AQX	TW A2	Taxiway	20	5,905	AAC	62	Fair	100	0	0

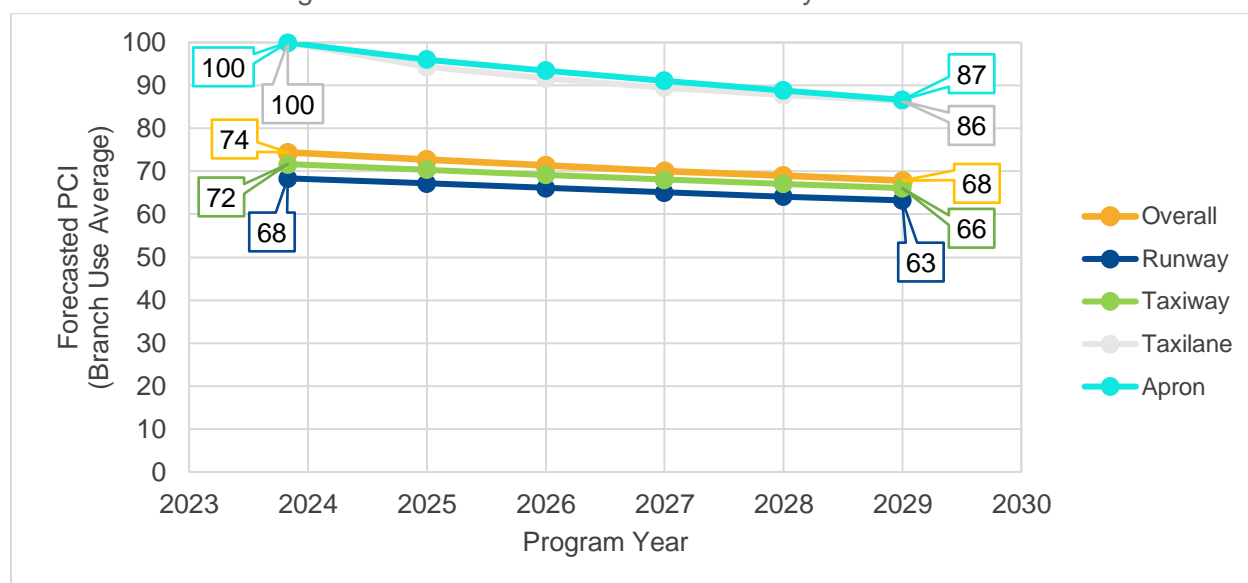
**For further PCI details and photos see Appendix D – Detailed PCI Results.*



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 **2029 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 AQX.

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.

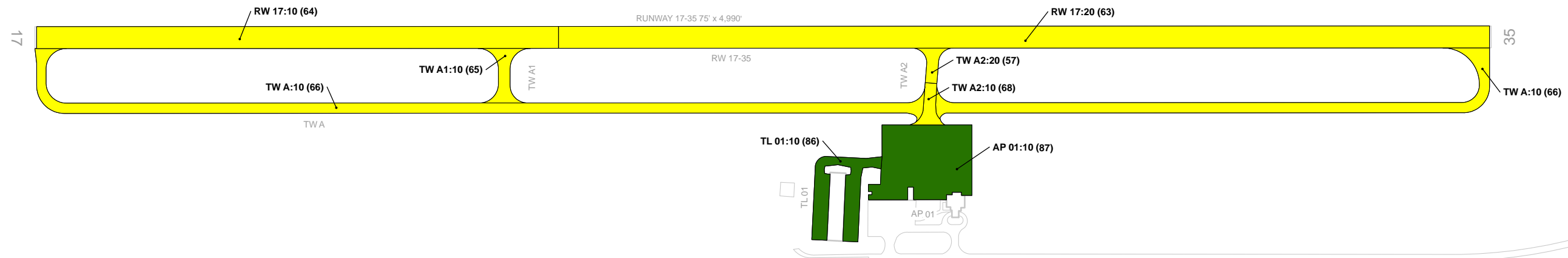


STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

AQX - Allendale County Airport

Table 3 – Forecast (2025-2029) Section Pavement Condition Index - Section

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI				
				2025	2026	2027	2028	2029
AQX	AP 01	10	100	96	94	91	89	87
AQX	RW 17	10	69	68	67	66	65	64
AQX	RW 17	20	68	67	66	65	64	63
AQX	TL 01	10	100	94	92	89	88	86
AQX	TW A	10	72	71	69	68	67	66
AQX	TW A1	10	70	69	68	67	66	65
AQX	TW A2	10	74	73	71	70	69	68
AQX	TW A2	20	62	62	61	61	60	60



Legend

2029 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



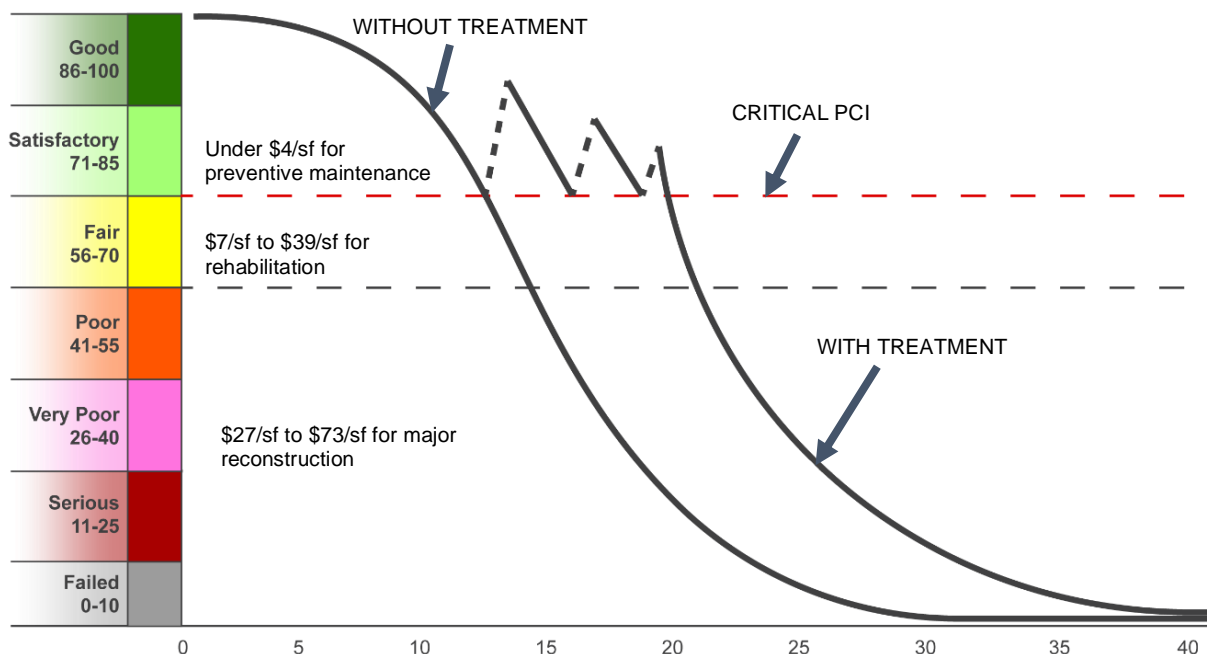
M&R Overview

An analysis was performed to assess the pavement maintenance and rehabilitation (M&R) needs at AQX over a 5-year period. The analysis compared the forecasted condition of each pavement section to the 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 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	14,919	LF	\$ 63,420
	Surface Seal	2,139	SF	\$ 3,530
	AC Full-Depth Patching	300	SF	\$ 9,930
<i>Localized Preventive Maintenance Total =</i>				\$ 76,880
<i>Planning-Level Localized M&R Needs =</i>				\$ 76,880

Major Rehabilitation Needs

Major rehabilitation needs are identified by analyzing the Airport's pavement condition in relationship to the Critical PCI value, 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 is divided into two policy categories:

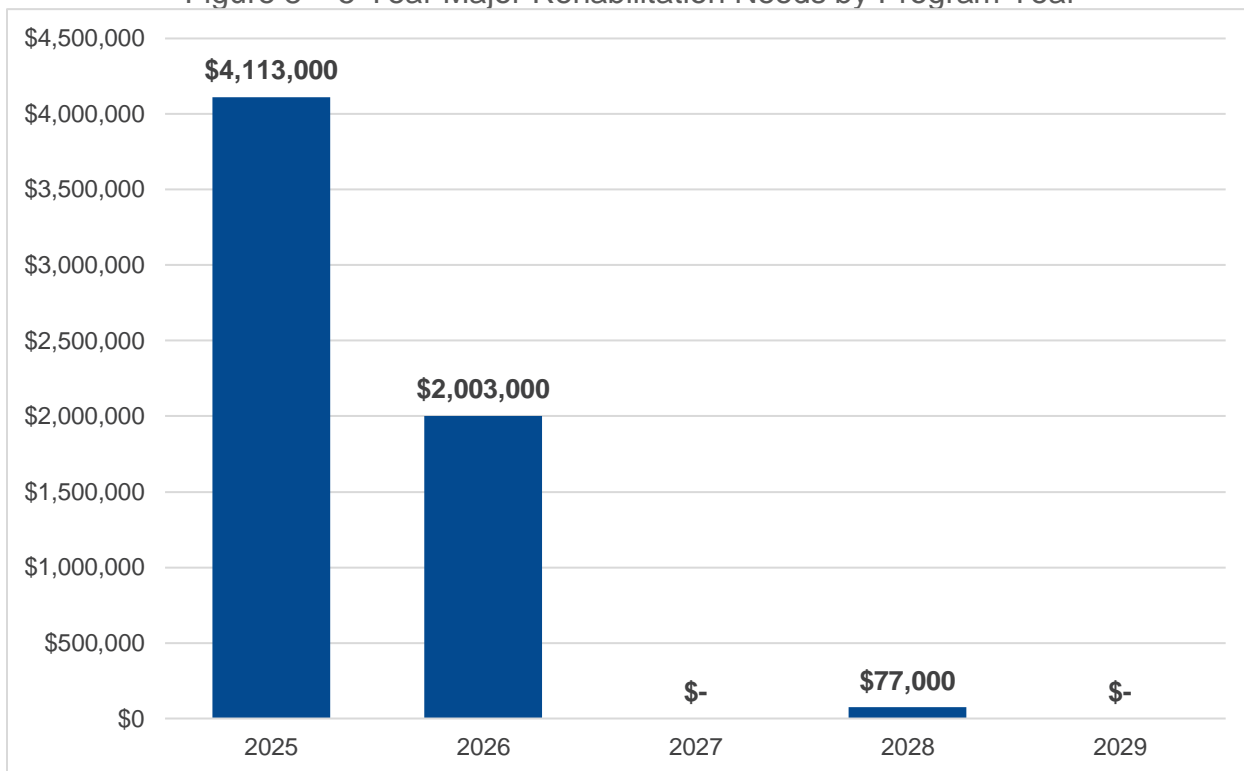
- ➔ **Intermediate Major Rehabilitation (PCI 56 to 70)** –
 - **AC:** Milling of the upper surface course and replacing with new AC with isolated areas of full-depth reconstruction
 - **PCC:** Combination of crack sealing, joint seal replacement, limited patching, and slab replacement
- ➔ **Full-Depth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

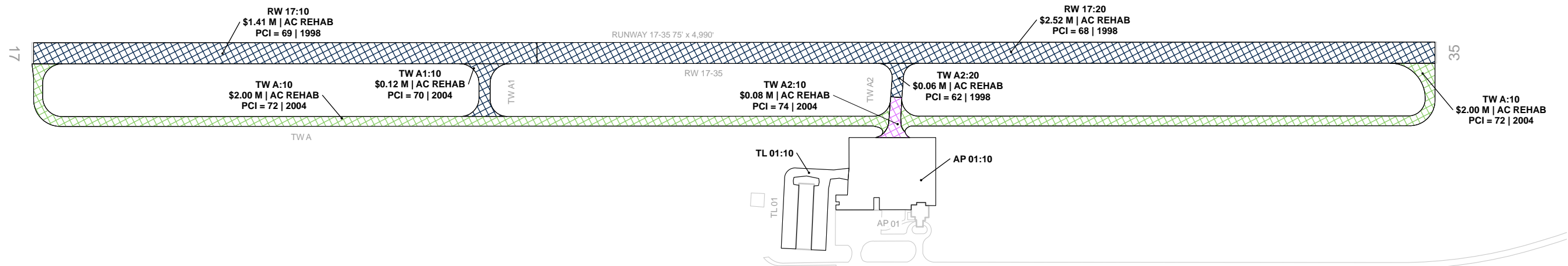
The 5-year major rehabilitation needs analysis at AQX results in a total 5-year cost of 6.19M. The **5-Year Major Rehabilitation Needs Exhibit** graphically depicts the major rehabilitation needs at a section-level which are also summarized in **Table 5** with rounded costs. Annual needs are displayed 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
2025	AQX	RW 17	10	AC	134,400	68	AC Rehabilitation	\$ 1,412,000
2025	AQX	RW 17	20	AAC	239,850	67	AC Rehabilitation	\$ 2,519,000
2025	AQX	TW A1	10	AC	11,282	69	AC Rehabilitation	\$ 119,000
2025	AQX	TW A2	20	AAC	5,905	62	AC Rehabilitation	\$ 63,000
2026	AQX	TW A	10	AC	190,698	69	AC Rehabilitation	\$ 2,003,000
2028	AQX	TW A2	10	AAC	7,305	69	AC Rehabilitation	\$ 77,000
Total 5-Year Major Rehabilitation Needs =								\$ 6,193,000

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





Legend

5-Year Major Rehabilitation 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

M&R COST
BRANCH IDENTIFIER
SECTION IDENTIFIER
M&R WORK TYPE
PCI
LAST MAJOR WORK DATE

TWA:20
\$9.38 M | AC RECON
PCI = 52 | 1987

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



STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

ATTENDALE COUNTY AIRPORT (AQA)

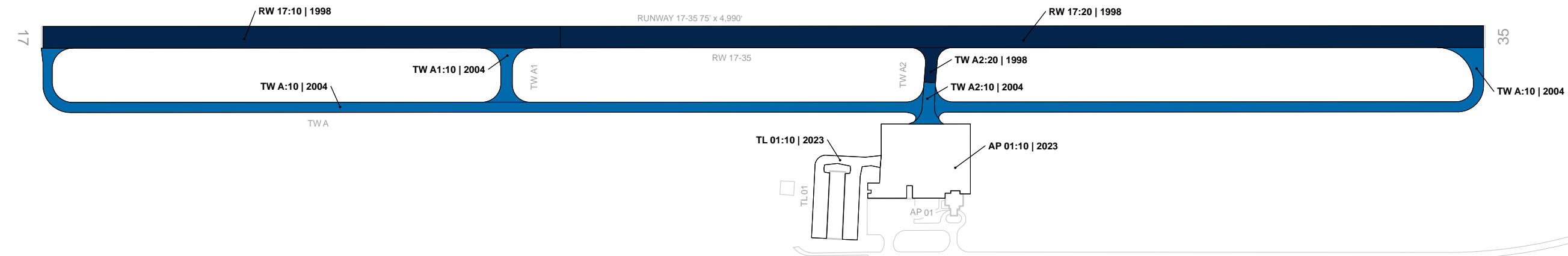
AIRFIELD PAVEMENT / NETWORK DEFINITION EXHIBIT



-
- Diagram illustrating the components of a pavement inspection record:
- Branch IDs:**
 - RW 13-31** (Blue oval): TYPICAL RUNWAY BRANCH ID
 - TW A** (Orange oval): TYPICAL TAXIWAY BRANCH ID
 - AP S** (Green oval): TYPICAL APRON BRANCH ID
 - Section ID and Sample Units:**
 - RW 13:10** (Blue box): PAVEMENT BRANCH ID: SECTION ID
 - AAC 5 of 15** (Blue box): NUMBER OF SAMPLE UNITS IN SECTION
 - AAC 5 of 15** (Blue box): NUMBER OF SAMPLE UNITS TO BE INSPECTED
 - Surface Type:**
 - 100** (Blue box): PAVEMENT SURFACE TYPE
 - Notes:**
 - SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE ESTIMATED AGE EXHIBIT FOR CONSTRUCTION DATES.
 - INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 26
AC: 26 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

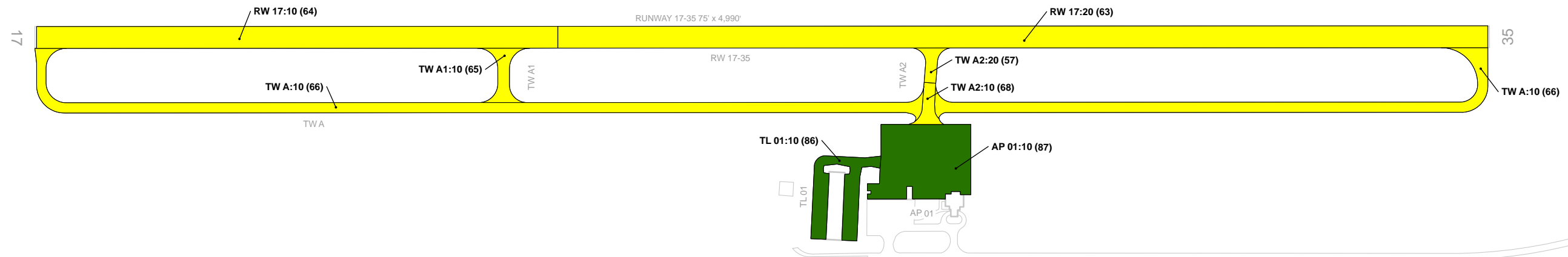
Estimated Age at Inspection

- 0-5 Years
- 6-10 Years
- 11-15 Years
- 16-20 Years
- > 20 Years

BRANCH IDENTIFIER
SECTION IDENTIFIER
LAST MAJOR WORK DATE

TWA:20 | 1985





Legend

2029 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

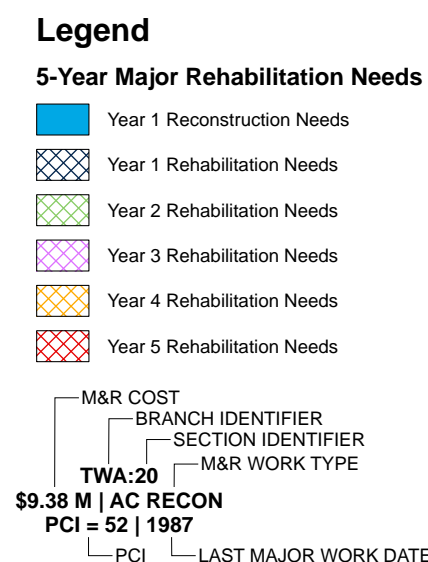




STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

ALLENDALE COUNTY AIRPORT (AQX)

5-YEAR MAJOR REHABILITATION EXHIBIT



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



STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

AQX - Allendale County Airport

Table B1 – System Inventory Data - Section

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
AQX	AP 01	Apron	10	79,394	AC	7/1/2023
AQX	RW 17	Runway	10	134,400	AC	8/1/1998
AQX	RW 17	Runway	20	239,850	AAC	8/1/1998
AQX	TL 01	Taxilane	10	32,582	AC	7/1/2023
AQX	TW A	Taxiway	10	190,698	AC	4/1/2004
AQX	TW A1	Taxiway	10	11,282	AC	4/1/2004
AQX	TW A2	Taxiway	10	7,305	AAC	4/1/2004
AQX	TW A2	Taxiway	20	5,905	AAC	8/1/1998

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	1	79,394	100	Good
RW 17	Runway	2	374,250	68	Fair
TL 01	Taxilane	1	32,582	100	Good
TW A	Taxiway	1	190,698	72	Satisfactory
TW A1	Taxiway	1	11,282	70	Fair
TW A2	Taxiway	2	13,210	69	Fair



Table B3 – Current (2023) 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
AQX	AP 01	Apron	10	79,394	AC	100	Good	0	0	0	0	0
AQX	RW 17	Runway	10	134,400	AC	69	Fair	97	0	3	5	24
AQX	RW 17	Runway	20	239,850	AAC	68	Fair	96	0	4	9	43
AQX	TL 01	Taxilane	10	32,582	AC	100	Good	0	0	0	0	0
AQX	TW A	Taxiway	10	190,698	AC	72	Satisfactory	65	34	1	9	37
AQX	TW A1	Taxiway	10	11,282	AC	70	Fair	100	0	0	1	3
AQX	TW A2	Taxiway	10	7,305	AAC	74	Satisfactory	94	0	6	1	2
AQX	TW A2	Taxiway	20	5,905	AAC	62	Fair	100	0	0	1	1



STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

AQX - Allendale County Airport

Table B4 –Forecasted (2025-2029) Pavement Condition Index Summary - Section

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI				
				2025	2026	2027	2028	2029
AQX	AP 01	10	100	96	94	91	89	87
AQX	RW 17	10	69	68	67	66	65	64
AQX	RW 17	20	68	67	66	65	64	63
AQX	TL 01	10	100	94	92	89	88	86
AQX	TW A	10	72	71	69	68	67	66
AQX	TW A1	10	70	69	68	67	66	65
AQX	TW A2	10	74	73	71	70	69	68
AQX	TW A2	20	62	62	61	61	60	60



Appendix C – Maintenance and Rehabilitation Tables

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	14,919	LF	\$ 63,420
	Surface Seal	2,139	SF	\$ 3,530
	AC Full-Depth Patching	300	SF	\$ 9,930
Localized Preventive Maintenance Total =				\$ 76,880
Planning-Level Localized M&R Needs =				\$ 76,880

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

Network ID	Branch ID	Section ID	Area (SF)	Start PCI	End PCI	Cost
AQX	AP 01	10	79,394	100	100	\$ -
AQX	RW 17	10	134,400	69	69	\$ -
AQX	RW 17	20	239,850	68	68	\$ -
AQX	TL 01	10	32,582	100	100	\$ -
AQX	TW A	10	190,698	72	75	\$ 74,840
AQX	TW A1	10	11,282	70	70	\$ -
AQX	TW A2	10	7,305	74	74	\$ 2,020
AQX	TW A2	20	5,905	62	62	\$ -

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
AQX	TW A	10	ALLIGATOR CR	Low	94	SF	0.1%	Preventive	AC Full-Depth Patching	137	SF	\$ 33.00	\$ 4,530
AQX	TW A	10	ALLIGATOR CR	Medium	116	SF	0.1%	Preventive	AC Full-Depth Patching	164	SF	\$ 33.00	\$ 5,400
AQX	TW A	10	L & T CR	Low	14,413	LF	7.6%	Preventive	AC Crack Sealing Narrow	14,413	LF	\$ 4.25	\$ 61,260
AQX	TW A	10	L & T CR	Medium	32	LF	0.0%	Preventive	AC Crack Sealing Narrow	32	LF	\$ 4.25	\$ 140
AQX	TW A	10	WEATHERING	Medium	2,139	SF	1.1%	Preventive	Surface Seal	2,139	SF	\$ 1.65	\$ 3,530
AQX	TW A2	10	L & T CR	Low	474	LF	6.5%	Preventive	AC Crack Sealing Narrow	474	LF	\$ 4.25	\$ 2,020

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
2025	AQX	RW 17	10	AC	134,400	68	AC Rehabilitation	\$ 1,412,000
2025	AQX	RW 17	20	AAC	239,850	67	AC Rehabilitation	\$ 2,519,000
2025	AQX	TW A1	10	AC	11,282	69	AC Rehabilitation	\$ 119,000
2025	AQX	TW A2	20	AAC	5,905	62	AC Rehabilitation	\$ 63,000
2026	AQX	TW A	10	AC	190,698	69	AC Rehabilitation	\$ 2,003,000
2028	AQX	TW A2	10	AAC	7,305	69	AC Rehabilitation	\$ 77,000
Total 5-Year Major Rehabilitation Needs =								\$ 6,193,000



Appendix D – PCI Results Summary

RW 17

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
RW 17	RUNWAY	2	374,250	68	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	134,400	AC	1998	2020	69	Fair	97	0	3
20	239,850	AAC	1998	2020	68	Fair	96	0	4



RW 17-10



RW 17-20

TW A

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	1	190,698	72	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	190,698	AC	2004	2020	72	Satisfactory	65	34	1



TW A-10



TW A-10



TW A-10

TW A1

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A1	TAXIWAY	1	11,282	70	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	11,282	AC	2004	2020	70	Fair	100	0	0



TW A1-10

TW A2

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A2	TAXIWAY	2	13,210	69	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	7,305	AAC	2004	2020	74	Satisfactory	94	0	6
20	5,905	AAC	1998	2020	62	Fair	100	0	0



TW A2-10



TW A2-20



STATEWIDE AIRFIELD PAVEMENT MANAGEMENT SYSTEM UPDATE

AQX - Allendale County Airport

TL 01

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL 01	TAXILANE	1	32,582	100	Good

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	32,582	AC	2023	-	100	Good	0	0	0

AP 01

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP 01	APRON	1	79,394	100	Good

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	79,394	AC	2023	-	100	Good	0	0	0



Appendix E – Re-Inspection Report

Re-Inspection Report

SCAC_2024

Generated Date

6/17/2024

Page 1 of 10

Network:	AQX		Name:	ALLENDALE COUNTY AIRPORT		
Branch:	AP 01	Name:	APRON 01	Use:	APRON	Area: 79,394 SqFt
Section:	10	of	1	From:	-	To: -
Surface:	AC	Family:	2024_SC III IV-AP-AC	Zone:		Category: G
Area:	79,394 SqFt	Length:	309 Ft	Width:	257 Ft	
Slabs:		Slab Length:	Ft	Slab Width:	Ft	Joint Length: Ft
Shoulder:		Street Type:		Grade:	0	Lanes: 0
Section Comments:						
Work Date:	6/1/1968	Work Type:	Surface Course - AC (Layer Construct)	Code:	SU-AC	Is Major M&R: False
Work Date:	6/1/1968	Work Type:	New Construction - AC	Code:	NC-AC	Is Major M&R: True
Work Date:	6/1/2000	Work Type:	Surface Treatment - Seal Coat	Code:	ST-SC	Is Major M&R: False
Work Date:	6/1/2000	Work Type:	Overlay - AC Structural	Code:	OL-AS	Is Major M&R: True
Work Date:	7/1/2023	Work Type:	Reconstruction - AC	Code:	RC-AC	Is Major M&R: True
Work Date:	7/2/2023	Work Type:	Base Course - Aggregate	Code:	BA-AG	Is Major M&R: False
Work Date:	7/3/2023	Work Type:	Surface Course - AC (Layer Construct)	Code:	LC-AC	Is Major M&R: False
Last Insp. Date:	5/25/2016	TotalSamples:	15	Surveyed:	4	
Conditions:	PCI: 68	NOTE: *** Pre-Construction PCI ***				
Inspection Comments:						
Sample Number:	03	Type:	R	Area:	4993.00 SqFt	PCI: 69
Sample Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	306.00	Ft		
52	RAVELING	L	4993.00	SqFt		
Sample Number:	05	Type:	R	Area:	5004.00 SqFt	PCI: 68
Sample Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	479.00	Ft		
52	RAVELING	L	5004.00	SqFt		
Sample Number:	07	Type:	R	Area:	5004.00 SqFt	PCI: 69
Sample Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	337.00	Ft		
52	RAVELING	L	5004.00	SqFt		
Sample Number:	09	Type:	R	Area:	4993.00 SqFt	PCI: 69
Sample Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	191.00	Ft		
52	RAVELING	L	4993.00	SqFt		

Network:	AQX		Name:	ALLENDALE COUNTY AIRPORT									
Branch:	RW 17		Name:	RUNWAY 17-35		Use:	RUNWAY	Area:	374,250 SqFt				
Section:	10	of 2	From:	-			To:	-			Last Const.:	8/1/1998	
Surface:	AC	Family:	2024_SC III IV-RW-AC		Zone:		Category:	G		Rank:	P		
Area:	134,400 SqFt		Length:	1,792 Ft		Width:	75 Ft						
Slabs:	Slab Length:		Ft		Slab Width:	Ft		Joint Length:	Ft				
Shoulder:	Street Type:				Grade:	0		Lanes:	0				
Section Comments:													
Work Date:	1/1/1985		Work Type:				New Construction - AC		Code:	NC-AC		Is Major M&R:	True
Work Date:	1/1/1985		Work Type:				Surface Course - AC (Layer Construct)		Code:	SU-AC		Is Major M&R:	False
Work Date:	1/1/1985		Work Type:				Base Course - Aggregate		Code:	BA-AG		Is Major M&R:	False
Work Date:	8/1/1998		Work Type:				New Construction - AC		Code:	NC-AC		Is Major M&R:	True
Work Date:	1/1/2010		Work Type:				Surface Treatment - Seal Coat		Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2020		Work Type:				Surface Treatment - Seal Coat		Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2020		Work Type:				Crack Sealing - AC		Code:	CS-AC		Is Major M&R:	False
Last Insp. Date:	11/30/2023		TotalSamples:	24		Surveyed:	5						
Conditions:	PCI: 69												
Inspection Comments:													
Sample Number:	03		Type:	R		Area:	5625.00 SqFt		PCI:	70			
Sample Comments:													
48	L & T CR		L	662.00 Ft									
57	WEATHERING		L	5625.00 SqFt									
Sample Number:	07		Type:	R		Area:	5625.00 SqFt		PCI:	73			
Sample Comments:													
48	L & T CR		L	521.00 Ft									
57	WEATHERING		L	5625.00 SqFt									
Sample Number:	11		Type:	R		Area:	5625.00 SqFt		PCI:	68			
Sample Comments:													
48	L & T CR		L	651.00 Ft									
56	SWELLING		L	11.00 SqFt									
57	WEATHERING		L	5625.00 SqFt									
Sample Number:	15		Type:	R		Area:	5625.00 SqFt		PCI:	70			
Sample Comments:													
48	L & T CR		L	647.00 Ft									
57	WEATHERING		L	5625.00 SqFt									
Sample Number:	19		Type:	R		Area:	5625.00 SqFt		PCI:	63			
Sample Comments:													
48	L & T CR		L	956.00 Ft									
56	SWELLING		L	18.00 SqFt									
57	WEATHERING		L	5625.00 SqFt									

Network:	AQX		Name:	ALLENDALE COUNTY AIRPORT								
Branch:	RW 17		Name:	RUNWAY 17-35		Use:	RUNWAY	Area:	374,250 SqFt			
Section:	20 of 2		From:	-		To:	-		Last Const.:	8/1/1998		
Surface:	AAC		Family:	2024_SC III IV-RW-AC		Zone:			Category:	G	Rank:	P
Area:	239,850 SqFt		Length:	3,198 Ft		Width:	75 Ft					
Slabs:			Slab Length:	Ft		Slab Width:	Ft		Joint Length:	Ft		
Shoulder:			Street Type:			Grade:	0		Lanes:	0		
Section Comments:												
Work Date:	6/1/1968		Work Type: Surface Course - AC (Layer Construct)				Code:	SU-AC		Is Major M&R:	False	
Work Date:	6/1/1968		Work Type: New Construction - AC				Code:	NC-AC		Is Major M&R:	True	
Work Date:	8/1/1998		Work Type: Overlay - AC Structural				Code:	OL-AS		Is Major M&R:	True	
Work Date:	1/1/2010		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False	
Work Date:	1/1/2020		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False	
Work Date:	1/1/2020		Work Type: Crack Sealing - AC				Code:	CS-AC		Is Major M&R:	False	
Last Insp. Date:	11/30/2023		TotalSamples:	43		Surveyed:	9					
Conditions:	PCI: 68											
Inspection Comments:												
Sample Number:	03		Type:	R		Area:	5625.00 SqFt		PCI:	68		
Sample Comments:												
48	L & T CR		L	728.00 Ft								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	10		Type:	R		Area:	5625.00 SqFt		PCI:	72		
Sample Comments:												
48	L & T CR		L	570.00 Ft								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	17		Type:	R		Area:	5625.00 SqFt		PCI:	67		
Sample Comments:												
48	L & T CR		L	705.00 Ft								
56	SWELLING		L	23.00 SqFt								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	24		Type:	R		Area:	5625.00 SqFt		PCI:	68		
Sample Comments:												
48	L & T CR		L	722.00 Ft								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	27		Type:	R		Area:	5625.00 SqFt		PCI:	66		
Sample Comments:												
48	L & T CR		L	698.00 Ft								
56	SWELLING		L	50.00 SqFt								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	31		Type:	R		Area:	5625.00 SqFt		PCI:	65		
Sample Comments:												
48	L & T CR		L	899.00 Ft								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	34		Type:	R		Area:	5625.00 SqFt		PCI:	77		
Sample Comments:												
48	L & T CR		L	380.00 Ft								
57	WEATHERING		L	5625.00 SqFt								
Sample Number:	38		Type:	R		Area:	5625.00 SqFt		PCI:	67		
Sample Comments:												

48	L & T CR	L	808.00	Ft
57	WEATHERING	L	5625.00	SqFt

Sample Number:

40

Type:

R

Area:

5625.00 SqFt

PCI:

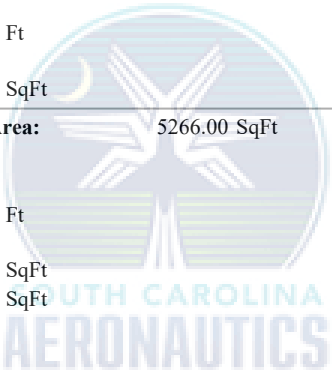
63

Sample Comments:

48	L & T CR	L	717.00	Ft
52	RAVELING	L	108.00	SqFt
56	SWELLING	L	24.00	SqFt
57	WEATHERING	L	5517.00	SqFt



Network:	AQX		Name:	ALLENDALE COUNTY AIRPORT							
Branch:	TL 01		Name:	TAXILANE 01		Use:	TAXILANE	Area:	32,582 SqFt		
Section:	10	of	1	From:	-	To:	-	Last Const.:	7/1/2023		
Surface:	AC	Family:	2024_SC III IV-TW TL-AC		Zone:		Category:	G	Rank:	T	
Area:	32,582 SqFt		Length:	746 Ft		Width:	52 Ft				
Slabs:		Slab Length:	Ft		Slab Width:	Ft		Joint Length:	Ft		
Shoulder:		Street Type:		Grade:	0		Lanes:	0			
Section Comments:											
Work Date:	6/1/1998		Work Type:	Surface Course - AC (Layer Construct)			Code:	SU-AC		Is Major M&R:	False
Work Date:	6/1/1998		Work Type:	New Construction - AC			Code:	NC-AC		Is Major M&R:	True
Work Date:	7/1/2023		Work Type:	Reconstruction - AC			Code:	RC-AC		Is Major M&R:	True
Work Date:	7/2/2023		Work Type:	Base Course - Aggregate			Code:	BA-AG		Is Major M&R:	False
Work Date:	7/3/2023		Work Type:	Surface Course - AC (Layer Construct)			Code:	LC-AC		Is Major M&R:	False
Last Insp. Date:	5/25/2016		TotalSamples:	3		Surveyed:	2				
Conditions:	PCI: 66		NOTE: *** Pre-Construction PCI ***								
Inspection Comments:											
Sample Number:	01		Type:	R		Area:	4281.00 SqFt		PCI:	69	
Sample Comments:											
48	LONGITUDINAL/TRANSVERSE CRACKING		L	202.00 Ft							
52	RAVELING		L	4281.00 SqFt							
Sample Number:	02		Type:	R		Area:	5266.00 SqFt		PCI:	64	
Sample Comments:											
48	LONGITUDINAL/TRANSVERSE CRACKING		L	319.00 Ft							
50	PATCHING		M	120.00 SqFt							
52	RAVELING		L	5146.00 SqFt							



Network:		AQX		Name:		ALLENDALE COUNTY AIRPORT			
Branch:	TW A		Name:	TAXIWAY A		Use:	TAXIWAY	Area:	190,698 SqFt
Section:	10	of	1	From:	-	To:	-	Last Const.:	4/1/2004
Surface:	AC	Family:	2024_SC III IV-TW TL-AC	Zone:		Category:		Rank:	P
Area:	190,698 SqFt	Length:	5,550 Ft	Width:	35 Ft				
Slabs:		Slab Length:	Ft	Slab Width:	Ft	Joint Length:	Ft		
Shoulder:		Street Type:		Grade:	0	Lanes:	0		
Section Comments:									
Work Date:	4/1/2004	Work Type:	New Construction - AC			Code:	NC-AC	Is Major M&R:	True
Work Date:	1/1/2010	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2020	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2020	Work Type:	Crack Sealing - AC			Code:	CS-AC	Is Major M&R:	False
Last Insp. Date:	11/30/2023	TotalSamples:	37	Surveyed:	9				
Conditions:	PCI:	72							
Inspection Comments:									
Sample Number:	01	Type:	R	Area:	4402.00 SqFt	PCI:	64		
Sample Comments:									
41	ALLIGATOR CR	M	24.00	SqFt					
48	L & T CR	L	352.00	Ft					
57	WEATHERING	L	4314.00	SqFt					
57	WEATHERING	M	88.00	SqFt					
Sample Number:	02	Type:	A	Area:	4503.00 SqFt	PCI:	60		
Sample Comments:									
41	ALLIGATOR CR	L	22.00	SqFt					
41	ALLIGATOR CR	M	8.00	SqFt					
45	DEPRESSION	L	42.00	SqFt					
48	L & T CR	L	284.00	Ft					
57	WEATHERING	L	4413.00	SqFt					
57	WEATHERING	M	90.00	SqFt					
Sample Number:	05	Type:	R	Area:	5250.00 SqFt	PCI:	67		
Sample Comments:									
48	L & T CR	L	738.00	Ft					
57	WEATHERING	L	5250.00	SqFt					
Sample Number:	11	Type:	R	Area:	5250.00 SqFt	PCI:	81		
Sample Comments:									
48	L & T CR	L	242.00	Ft					
57	WEATHERING	L	5250.00	SqFt					
Sample Number:	18	Type:	R	Area:	5250.00 SqFt	PCI:	85		
Sample Comments:									
48	L & T CR	L	163.00	Ft					
57	WEATHERING	L	5250.00	SqFt					
Sample Number:	25	Type:	R	Area:	5250.00 SqFt	PCI:	69		
Sample Comments:									
48	L & T CR	L	488.00	Ft					
57	WEATHERING	L	4988.00	SqFt					
57	WEATHERING	M	262.00	SqFt					
Sample Number:	30	Type:	R	Area:	5250.00 SqFt	PCI:	72		
Sample Comments:									
48	L & T CR	L	422.00	Ft					
57	WEATHERING	L	5145.00	SqFt					
57	WEATHERING	M	105.00	SqFt					

Sample Number:	34	Type:	R	Area:	5250.00 SqFt	PCI:	73
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Sample Comments:

48	L & T CR	L	469.00	Ft
57	WEATHERING	L	5250.00	SqFt

Sample Number:	36	Type:	R	Area:	5451.00 SqFt	PCI:	69
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Sample Comments:

41	ALLIGATOR CR	L	16.00	SqFt
48	L & T CR	L	264.00	Ft
48	L & T CR	M	7.00	Ft
50	PATCHING	L	24.00	SqFt
57	WEATHERING	L	5427.00	SqFt



Network:	AQX		Name:	ALLENDALE COUNTY AIRPORT					
Branch:	TW A1		Name:	TAXIWAY A1		Use:	TAXIWAY	Area:	11,282 SqFt
Section:	10	of	1	From:	-	To:	-	Last Const.:	4/1/2004
Surface:	AC	Family:	2024_SC III IV-TW TL-AC	Zone:		Category:		Rank:	P
Area:	11,282 SqFt	Length:	200 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:	4/1/2004	Work Type:	New Construction - AC			Code:	NC-AC	Is Major M&R:	True
Work Date:	1/1/2010	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2020	Work Type:	Crack Sealing - AC			Code:	CS-AC	Is Major M&R:	False
Work Date:	1/1/2020	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Last Insp. Date:	11/30/2023	TotalSamples:	3	Surveyed:	1				
Conditions:	PCI:	70							
Inspection Comments:									

Sample Number:	02	Type:	R	Area:	4126.00 SqFt	PCI:	70
Sample Comments:							
48	L & T CR	L	463.00	Ft			
57	WEATHERING	L	4126.00	SqFt			



Network: AQX		Name: ALLENDALE COUNTY AIRPORT		
Branch: TW A2	Name: TAXIWAY A2	Use: TAXIWAY	Area: 13,210 SqFt	
Section: 10	of 2	From: -	To: -	Last Const.: 4/1/2004
Surface: AAC	Family: 2024_SC III IV-TW TL-AC	Zone:	Category: G	Rank: S
Area: 7,305 SqFt	Length: 144 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: 6/1/1968		Work Type: Surface Course - AC (Layer Construct)	Code: SU-AC	Is Major M&R: False
Work Date: 6/1/1968		Work Type: New Construction - AC	Code: NC-AC	Is Major M&R: True
Work Date: 8/1/1998		Work Type: Overlay - AC Structural	Code: OL-AS	Is Major M&R: True
Work Date: 4/1/2004		Work Type: Overlay - AC Structural	Code: OL-AS	Is Major M&R: True
Work Date: 1/1/2010		Work Type: Surface Treatment - Seal Coat	Code: ST-SC	Is Major M&R: False
Work Date: 1/1/2020		Work Type: Crack Sealing - AC	Code: CS-AC	Is Major M&R: False
Work Date: 1/1/2020		Work Type: Surface Treatment - Seal Coat	Code: ST-SC	Is Major M&R: False
Last Insp. Date: 11/30/2023		TotalSamples: 2	Surveyed: 1	
Conditions: PCI: 74				
Inspection Comments:				
Sample Number: 01	Type: R	Area: 3189.00 SqFt	PCI: 74	
Sample Comments:				
48	L & T CR	L	207.00 Ft	
50	PATCHING	L	8.00 SqFt	
56	SWELLING	L	10.00 SqFt	
57	WEATHERING	L	3181.00 SqFt	



Network:	AQX			Name:	ALLENDALE COUNTY AIRPORT						
Branch:	TW A2		Name:	TAXIWAY A2		Use:	TAXIWAY		Area:	13,210 SqFt	
Section:	20 of 2		From:	-			To:	-		Last Const.:	8/1/1998
Surface:	AAC		Family:	2024_SC III IV-TW TL-AC		Zone:	Category: G		Rank:	S	
Area:	5,905 SqFt		Length:	120 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:	6/1/1968		Work Type: New Construction - AC				Code:	NC-AC		Is Major M&R:	True
Work Date:	6/1/1968		Work Type: Surface Course - AC (Layer Construct)				Code:	SU-AC		Is Major M&R:	False
Work Date:	8/1/1998		Work Type: Overlay - AC Structural				Code:	OL-AS		Is Major M&R:	True
Work Date:	1/1/2010		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2020		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2020		Work Type: Crack Sealing - AC				Code:	CS-AC		Is Major M&R:	False

48	L & T CR	L	817.00	Ft
50	PATCHING	L	1152.00	SqFt
57	WEATHERING	L	4753.00	SqFt





Kimley»»Horn