2024 *Statewide Airfield Pavement Management Program*

AIRFIELD PAVEMENT EVALUATION REPORT

CEW - Bob Sikes Airport | *District 3*

FDOT AVIATION

Florida Department of Transportation

AIRPORT PAVEMENT EVALUATION REPORT

Statewide Airfield Pavement Management Program

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FDOT AVIATION

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ACRONYMS AND ABREVIATIONS

AAC – Asphalt Concrete overlaid over existing Asphalt Concrete

AC – Asphalt Concrete

AIP – Airport Improvement Program

AP – Apron

APC – Asphalt over existing Portland Cement Concrete

ASTM – American Society for Testing and Materials

FAA – Federal Aviation Administration

FDOT – Florida Department of Transportation

FDR – Full-Depth Reclamation

FOD – Foreign Object Debris

GA – General Aviation

LF – Linear Feet

M&R – Maintenance and Rehabilitation

PAVER – Software Program for Pavement Management

PCC – Portland Cement Concrete

PCI – Pavement Condition Index

RW – Runway

SAPMP – Statewide Airfield Pavement Management Program

SF – Square Feet

TL – Taxilane

TW – Taxiway

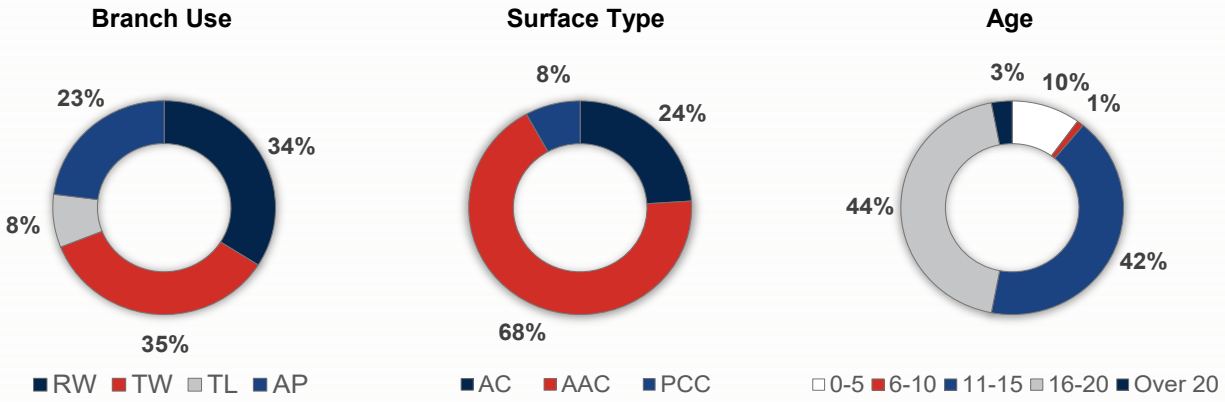
WT – Whitetopping

EXECUTIVE SUMMARY

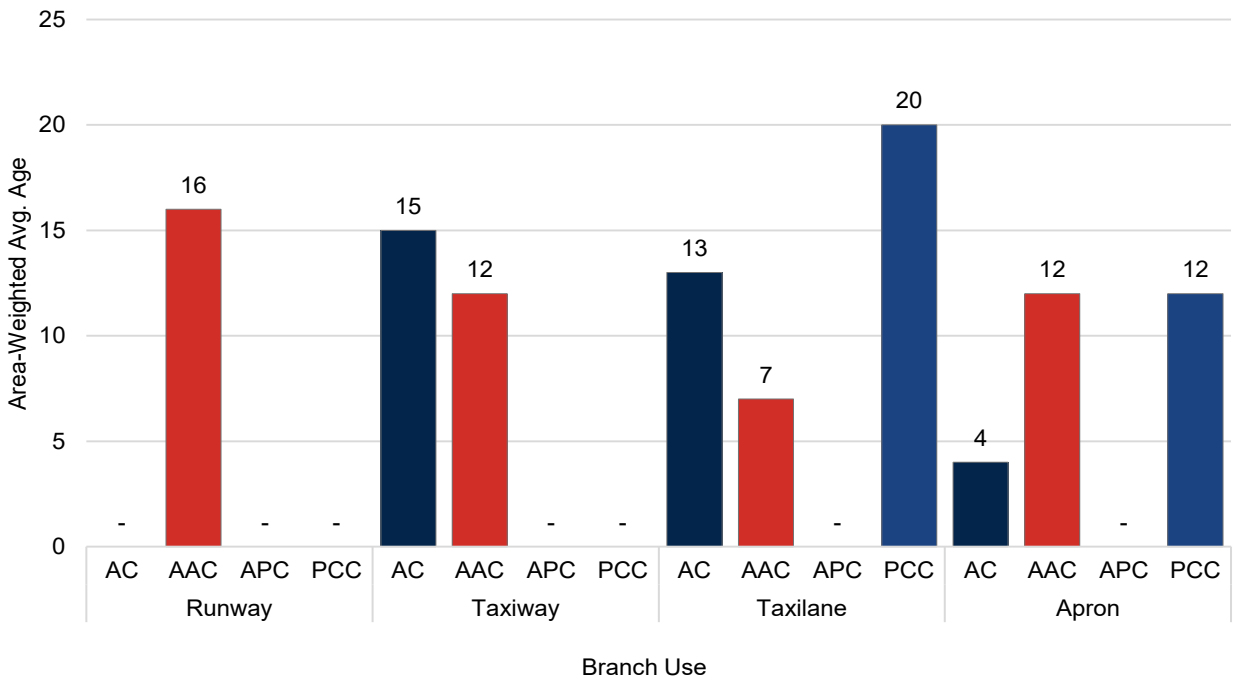
The airfield pavement condition survey was performed at Bob Sikes Airport (CEW) in April 2024 as part of the latest FDOT Statewide Airfield Pavement Management Program (SAPMP) update. The results of this update are summarized in the remainder of this report.

Pavement Inventory Summary

Bob Sikes Airport contains approximately 3.6 million square feet of airfield pavements consisting of runway, taxiway, taxilane, and apron assets. The following figures summarize the key inventory items at CEW including branch use, surface type, and estimated pavement age at inspection.



Estimated Branch Use Age at Inspection by Surface

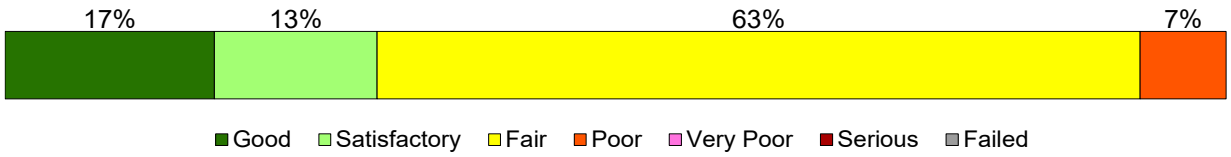


The section-level inventory details are presented in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table. The section delineations are graphically depicted in the **Network Definition Exhibit**.

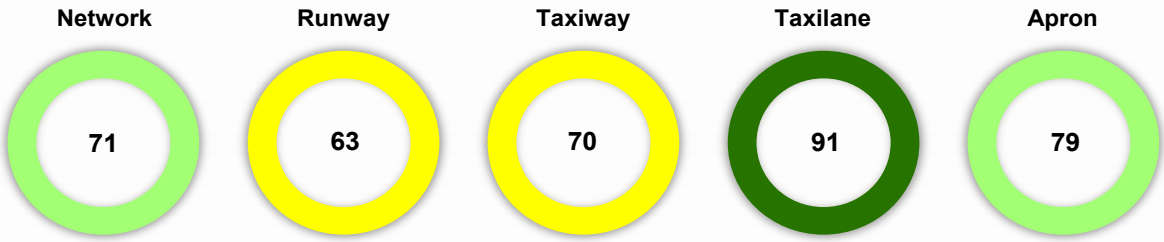
Pavement Condition Summary

CEW's overall area-weighted network PCI (average PCI adjusted to account for the relative size of the pavement sections) is a 71. Approximately 30% of the network's pavements are in Good or Satisfactory condition. Approximately 63% are in Fair condition, and 7% are in Poor condition or below and will likely require rehabilitation within the near future. The figure below summarizes the area-weighted average pavement condition distribution at CEW.

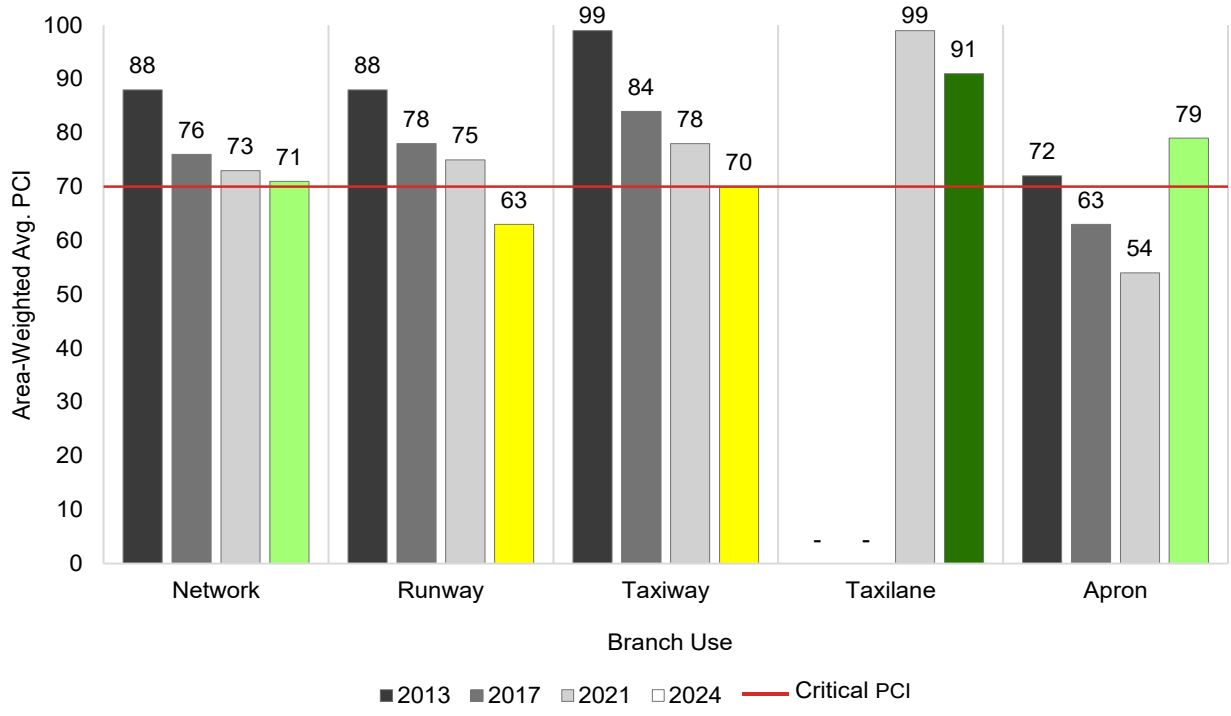
Current Condition - Overall Network



The area-weighted branch use PCIs are displayed graphically in the figures below. The current PCIs at a section-level are displayed graphically on the **Network PCI Results Exhibit** and in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table.



Pavement Conditions by Branch Use (Since 2013 Program)

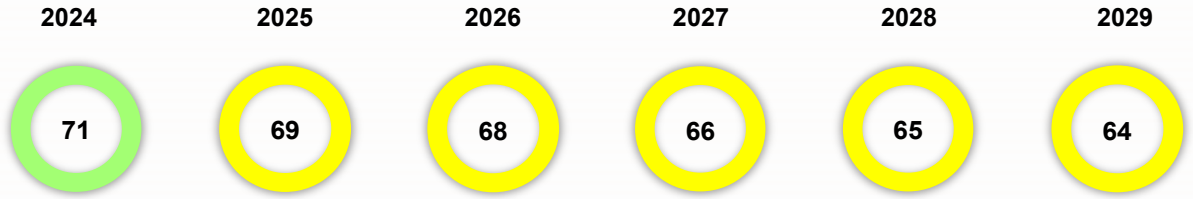


Forecasted Pavement Condition Summary

One of the main goals of the SAPMP is to forecast the future condition of each pavement section. Prediction curves were developed in PAVER to determine typical deterioration rates which are then used to forecast a future PCI value. The forecasts do not guarantee future PCI values; they are a planning tool to aid in the timing of maintenance and rehabilitation activities.

The CEW network PCI is forecasted to deteriorate from a PCI value of 71 (Satisfactory) to a 64 (Fair) in the next five years if no substantial maintenance and rehabilitation work is completed.

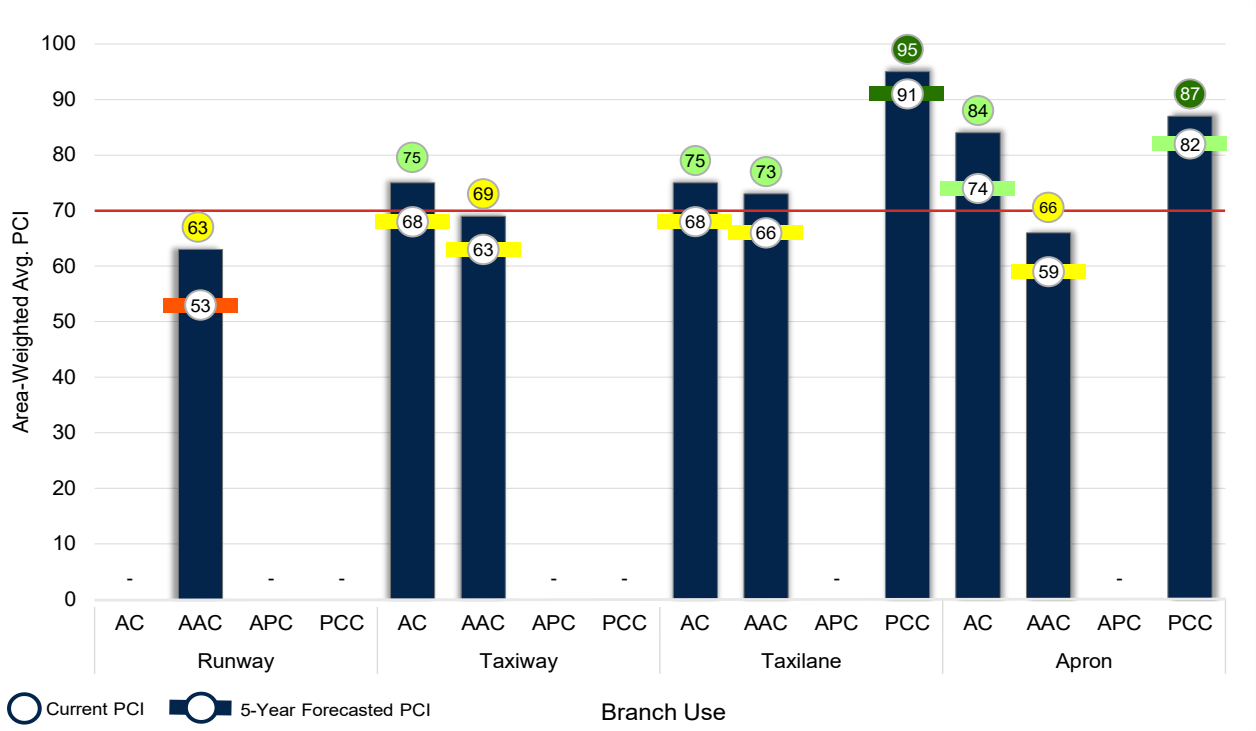
Forecasted Network-Level Pavement Performance



Forecasted Branch-Level Pavement Performance

Branch Use	2024 (Current)	2025	2026	2027	2028	2029
Network	71	69	68	66	65	64
Runway	63	60	59	57	55	53
Taxiway	70	68	67	66	65	64
Taxilane	91	90	89	88	87	86
Apron	79	77	75	73	72	71

Current and 5-Year Forecasted Conditions by Branch Use



Section-level details are available in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table.

Inventory and Pavement Condition Evaluation Results by Section

Inventory Data							Current (2024) PCI Data					Forecasted PCI Data				
Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other	2025	2026	2027	2028	2029
CEW	RW 17-35	RUNWAY	6105	80,200	AAC	1/1/2008	61	Fair	97	0	3	58	56	54	53	51
CEW	RW 17-35	RUNWAY	6110	40,100	AAC	1/1/2008	73	Satisfactory	100	0	0	70	68	66	65	63
CEW	RW 17-35	RUNWAY	6115	420,000	AAC	1/1/2008	64	Fair	98	0	2	61	59	57	56	54
CEW	RW 17-35	RUNWAY	6120	210,000	AAC	1/1/2008	70	Fair	100	0	0	67	65	63	62	60
CEW	RW 17-35	RUNWAY	6125	130,000	AAC	1/1/2008	61	Fair	100	0	0	58	56	54	53	51
CEW	RW 17-35	RUNWAY	6130	65,000	AAC	1/1/2008	66	Fair	100	0	0	63	61	59	58	56
CEW	RW 17-35	RUNWAY	6135	150,000	AAC	1/1/2008	49	Poor	96	0	4	46	44	42	41	39
CEW	RW 17-35	RUNWAY	6140	75,000	AAC	1/1/2008	56	Fair	100	0	0	53	51	49	48	46
CEW	RW 17-35	RUNWAY	6145	20,400	AAC	1/1/2008	69	Fair	100	0	0	66	64	62	61	59
CEW	RW 17-35	RUNWAY	6150	10,200	AAC	1/1/2008	83	Satisfactory	100	0	0	80	78	76	75	73
CEW	TW A	TAXIWAY	105	61,696	AAC	11/1/2012	67	Fair	100	0	0	65	64	63	62	61
CEW	TW A	TAXIWAY	110	303,843	AAC	11/1/2012	69	Fair	97	0	3	67	66	65	64	63
CEW	TW A	TAXIWAY	125	229,049	AAC	11/1/2012	73	Satisfactory	97	0	3	71	70	68	67	66
CEW	TW A	TAXIWAY	140	27,340	AC	11/1/2012	65	Fair	100	0	0	63	62	61	60	59
CEW	TW A	TAXIWAY	150	25,816	AC	11/1/2012	66	Fair	80	0	20	64	63	62	61	60
CEW	TW A	TAXIWAY	160	25,973	AC	11/1/2012	80	Satisfactory	100	0	0	78	76	75	73	72
CEW	TW A1	TAXIWAY	100	36,879	AAC	11/1/2012	65	Fair	100	0	0	63	62	61	60	59
CEW	TW A2	TAXIWAY	115	54,612	AAC	11/1/2012	68	Fair	96	0	4	66	65	64	63	62
CEW	TW A3	TAXIWAY	120	53,835	AAC	11/1/2012	68	Fair	97	0	3	66	65	64	63	62
CEW	TW A4	TAXIWAY	130	53,397	AAC	11/1/2012	62	Fair	100	0	0	60	59	58	57	56
CEW	TW A4	TAXIWAY	135	25,883	AC	11/1/2012	67	Fair	100	0	0	65	64	63	62	61
CEW	TW A5	TAXIWAY	170	38,108	AAC	11/1/2012	69	Fair	100	0	0	67	66	65	64	63
CEW	TW CONN	TAXIWAY	310	7,038	AAC	11/1/2012	66	Fair	100	0	0	64	63	62	61	60
CEW	TW CONN	TAXIWAY	330	5,089	AC	1/1/2024	100	Good	0	0	0	97	95	93	91	89
CEW	TW CONN	TAXIWAY	335	26,207	AAC	11/1/2012	60	Fair	100	0	0	58	57	56	55	54
CEW	TW CONN	TAXIWAY	340	26,273	AAC	11/1/2012	57	Fair	89	0	11	55	54	53	52	51
CEW	TW E	TAXIWAY	505	13,667	AAC	1/1/2008	67	Fair	93	0	7	65	64	63	62	61
CEW	TW E	TAXIWAY	510	56,489	AAC	1/1/1999	65	Fair	100	0	0	63	62	61	60	59
CEW	TW E	TAXIWAY	515	38,422	AAC	1/1/1999	77	Satisfactory	100	0	0	75	73	72	70	69
CEW	TW F	TAXIWAY	605	8,984	AAC	1/1/2008	81	Satisfactory	100	0	0	78	77	75	74	72
CEW	TW F	TAXIWAY	610	59,934	AC	1/1/2004	69	Fair	100	0	0	67	66	65	64	63
CEW	TW H	TAXIWAY	805	76,324	AC	1/1/2008	85	Satisfactory	100	0	0	82	81	79	78	76
CEW	TL F	TAXILANE	3505	226,420	PCC	7/1/2004	96	Good	91	0	9	95	94	93	92	92
CEW	TL J	TAXILANE	3205	10,832	AC	1/1/2024	100	Good	0	0	0	97	95	93	91	89
CEW	TL J	TAXILANE	3210	2,453	PCC	1/1/2003	42	Poor	13	45	42	41	40	39	38	38

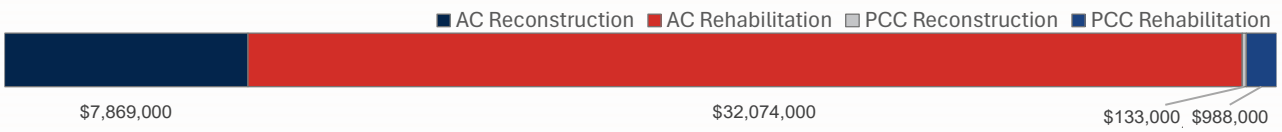
AIRFIELD PAVEMENT EVALUATION REPORT

Inventory Data							Current (2024) PCI Data					Forecasted PCI Data				
Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other	2025	2026	2027	2028	2029
CEW	TL K	TAXILANE	3405	25,450	AC	3/1/2008	66	Fair	100	0	0	64	63	62	61	60
CEW	TL L	TAXILANE	3305	4,434	AAC	1/1/2017	73	Satisfactory	100	0	0	71	70	68	67	66
CEW	TL L	TAXILANE	3310	2,200	AC	1/1/2024	100	Good	0	0	0	97	95	93	91	89
CEW	TL M	TAXILANE	3105	19,711	AC	6/1/2007	71	Satisfactory	100	0	0	69	68	67	65	64
CEW	AP N	APRON	4340	34,591	AAC	11/1/2012	59	Fair	71	0	29	57	56	55	54	53
CEW	AP N	APRON	4345	99,461	AC	11/1/2012	52	Poor	81	0	19	51	50	49	49	48
CEW	AP N	APRON	4350	23,262	PCC	11/1/2012	73	Satisfactory	35	0	65	71	70	69	68	68
CEW	AP N	APRON	4355	104,552	AC	11/1/2012	62	Fair	82	0	18	60	59	58	57	56
CEW	AP RU 17	APRON	5105	47,790	AAC	11/1/2012	61	Fair	100	0	0	59	58	57	56	55
CEW	AP S	APRON	4110	141,475	AC	1/1/2024	100	Good	0	0	0	96	94	91	89	87
CEW	AP S	APRON	4115	193,974	AC	1/1/2024	100	Good	0	0	0	96	94	91	89	87
CEW	AP S	APRON	4120	147,645	AAC	3/1/2012	69	Fair	97	0	3	67	65	64	62	61
CEW	AP S	APRON	4130	32,400	PCC	3/1/2012	97	Good	0	0	100	95	94	93	92	92

<70: Rehabilitation Eligible **<55:** Reconstruction Eligible

Major Rehabilitation Needs Summary

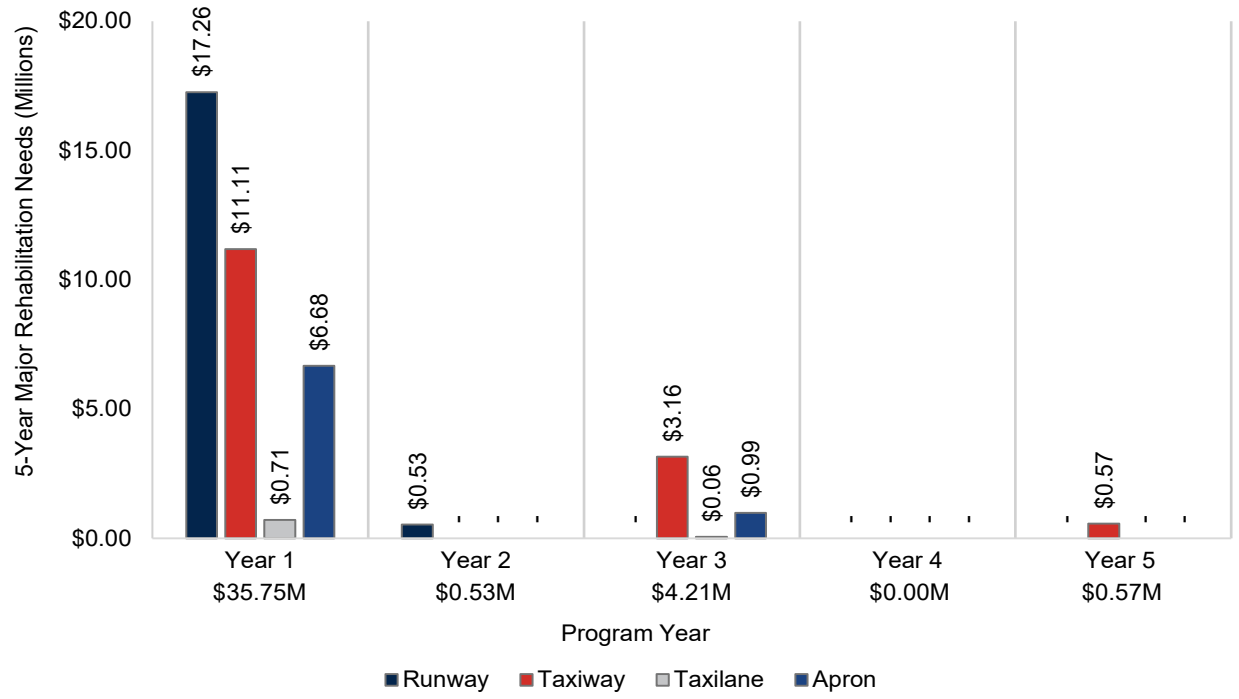
Total 5-Year Major Needs $41,064,000



5-Year Major Rehabilitation Needs by Branch Use

Branch Use	Annual Planning Estimate Cost (Millions)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Branch Use Total
Runway	$17.26	$0.53	-	-	-	$17.79
Taxiway	$11.11	-	$3.16	-	$0.57	$14.84
Taxilane	$0.71	-	$0.06	-	-	$0.77
Apron	$6.68	-	$0.99	-	-	$7.67
Annual Total	$35.75M	$0.53M	$4.21M	$0.00M	$0.57M	$41.06M

5-Year Major Rehabilitation Needs by Branch Use Summary



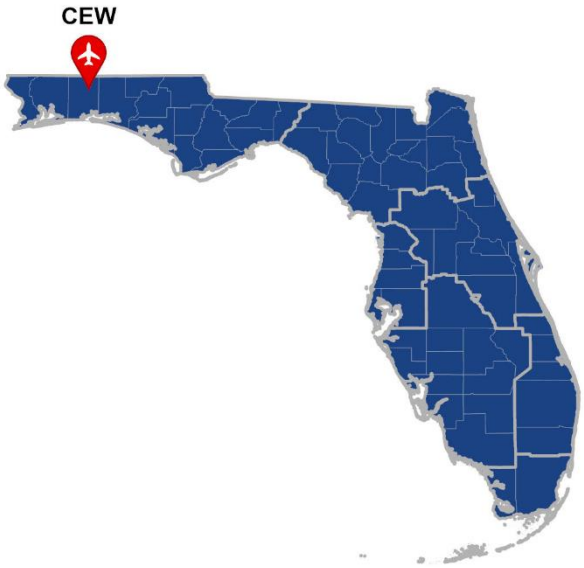
The **Major Rehabilitation Exhibit** depicts which sections will need major rehabilitation within the next 5 years. **Appendix B** provides a section-level detailed summary of these needs in addition to the cost of various rehabilitation options should a different pavement rehabilitation type be desired.

CHAPTER 1 – INTRODUCTION

Program Background

In 1992, the Florida Department of Transportation (FDOT) established the Statewide Airfield Pavement Management Program (SAPMP) to provide program managers, District Aviation Offices, and airport operators with a system to proactively manage airfield pavement infrastructure within the Florida airport system. The SAPMP includes Pavement Condition Index (PCI) surveys for airport facilities. Currently, the SAPMP includes 97 participating public-use airports with pavement facilities and provides its users with comprehensive data to better manage their pavement assets.

FAA grant assurances require airports to have a pavement management system in place for all projects that are to be funded through the Airport Improvement Program (AIP). To remain eligible for FAA funding through the AIP, FDOT performs the SAPMP update for each airport on a 3-year basis in adherence to the FAA Advisory Circular 150/5380-7B "Airport Pavement Management Program," and ASTM D5340-23 "Standard Test Method for Airport Pavement Condition Index Surveys."



The pavement condition results for CEW – Bob Sikes Airport are presented in this summary and can be utilized by the Airport to identify, prioritize, and schedule pavement maintenance, repair, reconstruction, and major rehabilitation projects.

Program Benefits

The SAPMP enables the Aviation Office, FDOT Districts, and airport staff to effectively monitor pavement conditions at Florida airports. The system provides critical data to support informed decision-making about airport infrastructure investments. By assessing the condition of pavement facilities, stakeholders can determine when rehabilitation is necessary, aiding in project planning over the next five years, with updates every three years.

The SAPMP meets the requirements of maintaining an effective pavement management program for participating airports by offering insights into both current and future pavement conditions and budgetary needs. It helps identify maintenance, repair, and major rehabilitation requirements, while also providing planning-level budget estimates for construction costs. This proactive approach to pavement management allows stakeholders to prioritize rehabilitation efforts, resulting in cost savings by addressing projects before pavement conditions reach a critical state and costs escalate.

SAPMP Process Overview

The SAPMP is limited to performing tasks in adherence to the key elements of an effective pavement management program on a statewide level. The primary tasks undertaken to update the SAPMP include, but are not limited to:

Pavement System Inventory	Pavement Condition Surveys	Data Analysis	Maintenance & Rehabilitation Recommendations
Pavement System Inventory Maintain historical airfield pavement data related to reconstruction, rehabilitation, maintenance, and resulting pavement conditions.	**Pavement Condition Surveys** Perform every three years according to the PCI survey methodology described in ASTM D5340-23 to maintain FDOT airports eligibility for AIP funding.	**Data Analysis** Analyze pavement conditions to help make informed maintenance and rehabilitation decision before projects become significantly more expensive to execute.	**Maintenance & Rehabilitation Recommendations** Provide guidance on maintenance, repair, and rehabilitation needs with associated opinions of probable construction cost.

Click below to view the information summarized within this report online in the interactive web application.

FDOT SAPMP Interactive Web Application

CHAPTER 2 – SYSTEM INVENTORY

System Inventory Information

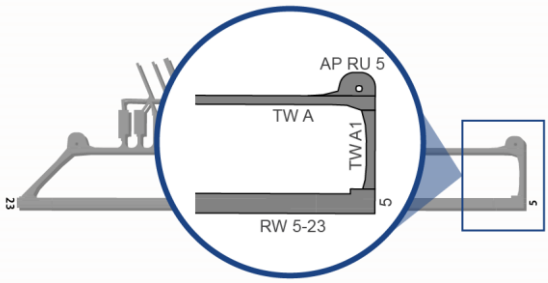
The pavement system inventory is developed during the Network Definition process in which large, homogenous pavement areas are subdivided into smaller pavement management units (Network, Branch, Section, Sample) for evaluation based on functional use, pavement surface type, construction history, traffic operations, importance, and other factors. The terms Network-, Branch-, and Section-level are defined below.

Network-Level

An individual airport's aircraft rated pavement facilities maintained by the airport.

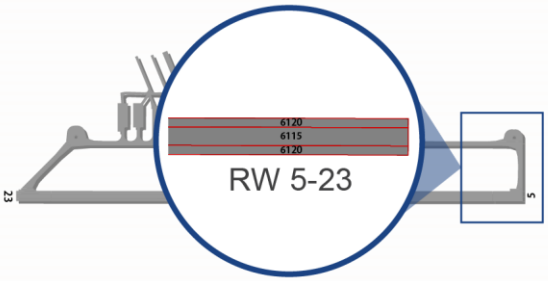
Branch-Level

A logical unit of generally identifiable pavement within a network that has a distinct function classification. This generally includes all runways, taxiways, taxilanes, and aprons. (Example, Taxiway A1).



Section-Level

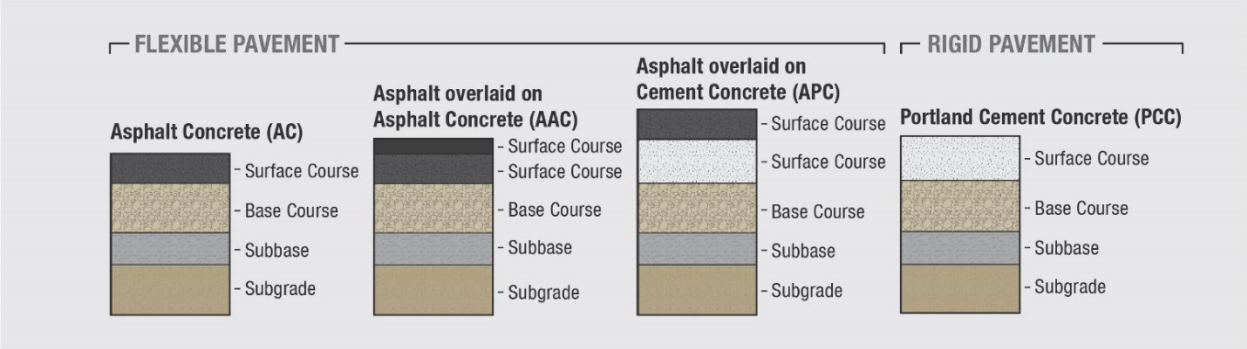
A subdivision of a branch that has consistent characteristics through its length or area. These characteristics include structural composition, construction history, age, traffic type, traffic frequency, and pavement condition.



The section-level pavement inventory data is based on record documentation provided by the airports and from previous SAPMP Updates. The information collected relies on the accuracy and the adequacy of data provided. In some cases, characteristics such as pavement area and last construction date may be estimated based on aerial interpretation. The extent of the pavement inventory considered in this SAPMP is memorialized in the **Network Definition Exhibit**.

Surface Type

FDOT airfield pavements consist of two predominant pavement types: flexible (AC-surfaced) and rigid (PCC-surfaced), which are further broken down into four categories defined below. The pavement sections shown are intended to be conceptual representations and may vary from actual construction. It should be noted that a select number of airports within the program contain a fifth surface type called Whitetopping Pavement (WT). Whitetopping pavement is a non-FAA standard composite pavement comprised of relatively thin PCC overlaid on an existing AC pavement structure.



Pavement surface types have been assigned to the various pavement sections based on the record documentation incorporated within the SAPMP database and as observed during airfield pavement field assessments.

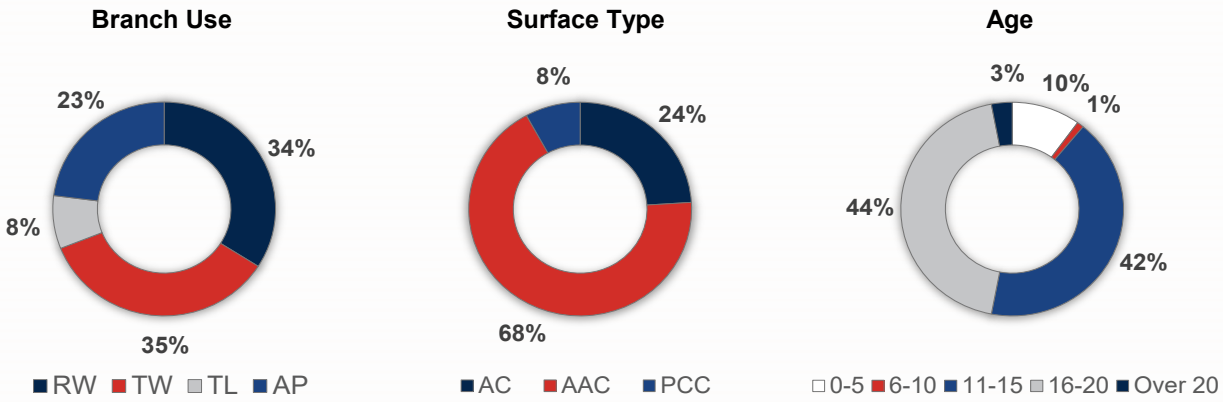
Estimated Pavement Age

Pavement age is determined by the date of the last major work project performed. The estimation of pavement age is based on the recent construction information provided by the airports at the start of the program. Major work such as reconstruction or rehabilitation resets a pavement's age to zero and the PCI to 100. It should be noted that surface treatments do not reset a pavement's age to zero as a reconstruction or rehabilitation project would; they are used as a measure to maintain and improve the current pavement surface and extend the useful life of the pavement without performing major work.

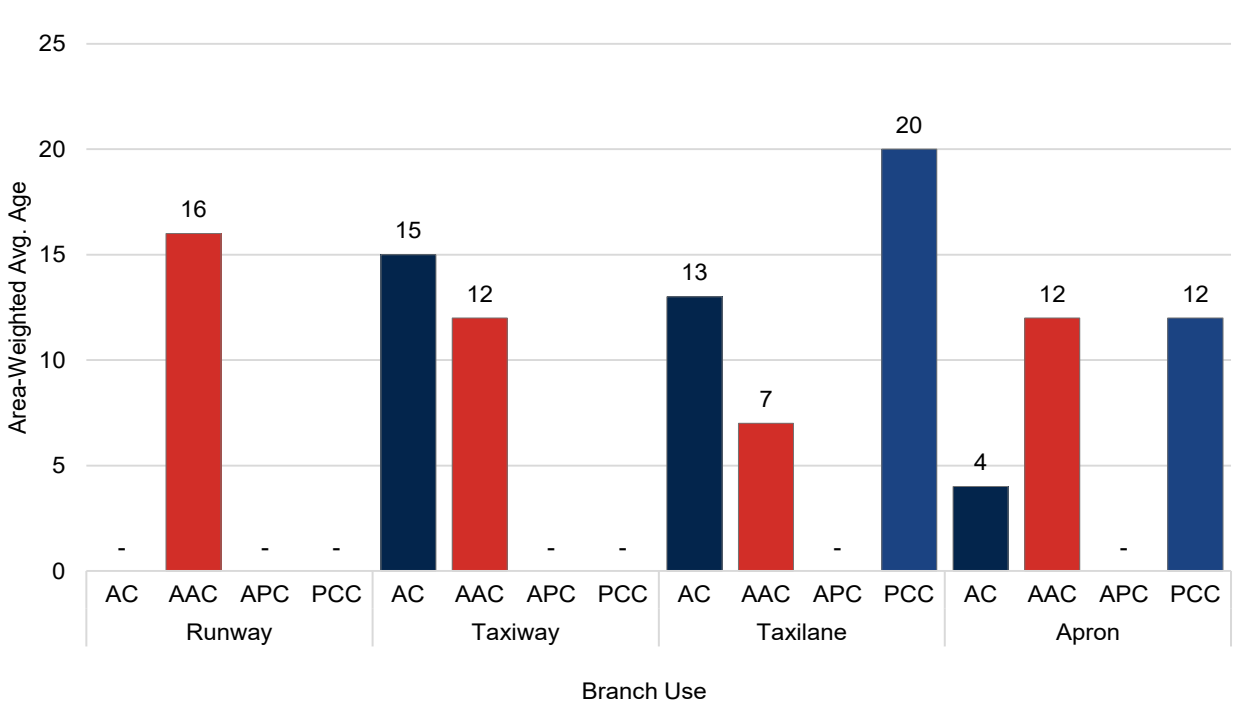
The **Estimated Age at Inspection Exhibit** summarizes the age of the pavement sections at the time of the 2024 PCI survey by providing the approximate limits and age ranges within the pavement network. Major pavement projects completed within the last 5 years are summarized in the **Construction History Exhibit**.

Pavement Inventory Summary

Bob Sikes Airport contains approximately 3.6 million square feet of airfield pavements consisting of runway, taxiway, taxilane, and apron assets. The following figures summarize the key inventory items at CEW including branch use, surface type, and estimated pavement age at inspection.



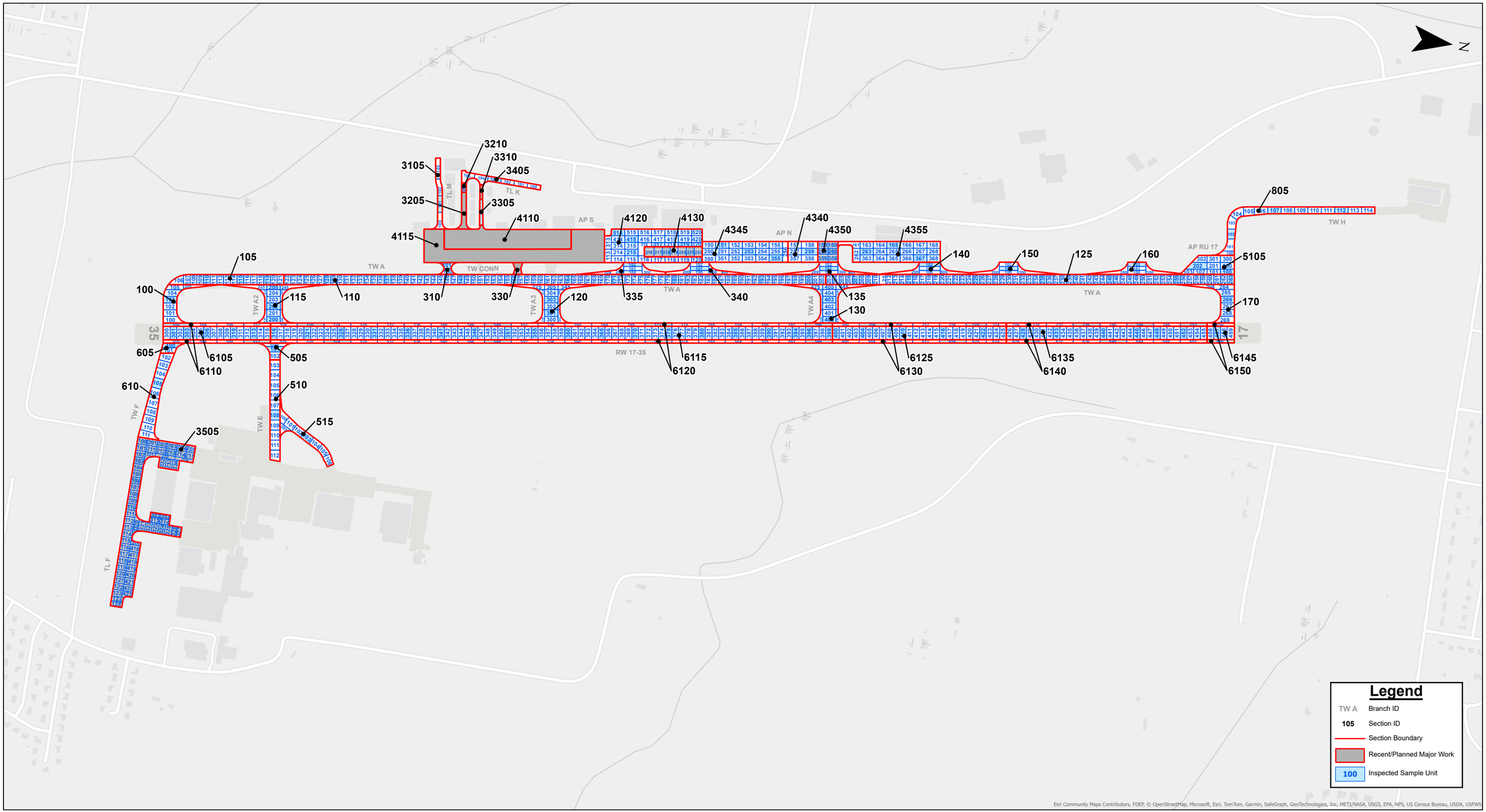
Estimated Branch Use Age at Inspection by Surface



The section-level inventory details are presented in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table. The section delineations are graphically depicted in the **Network Definition Exhibit**.

AIRFIELD PAVEMENT EVALUATION REPORT

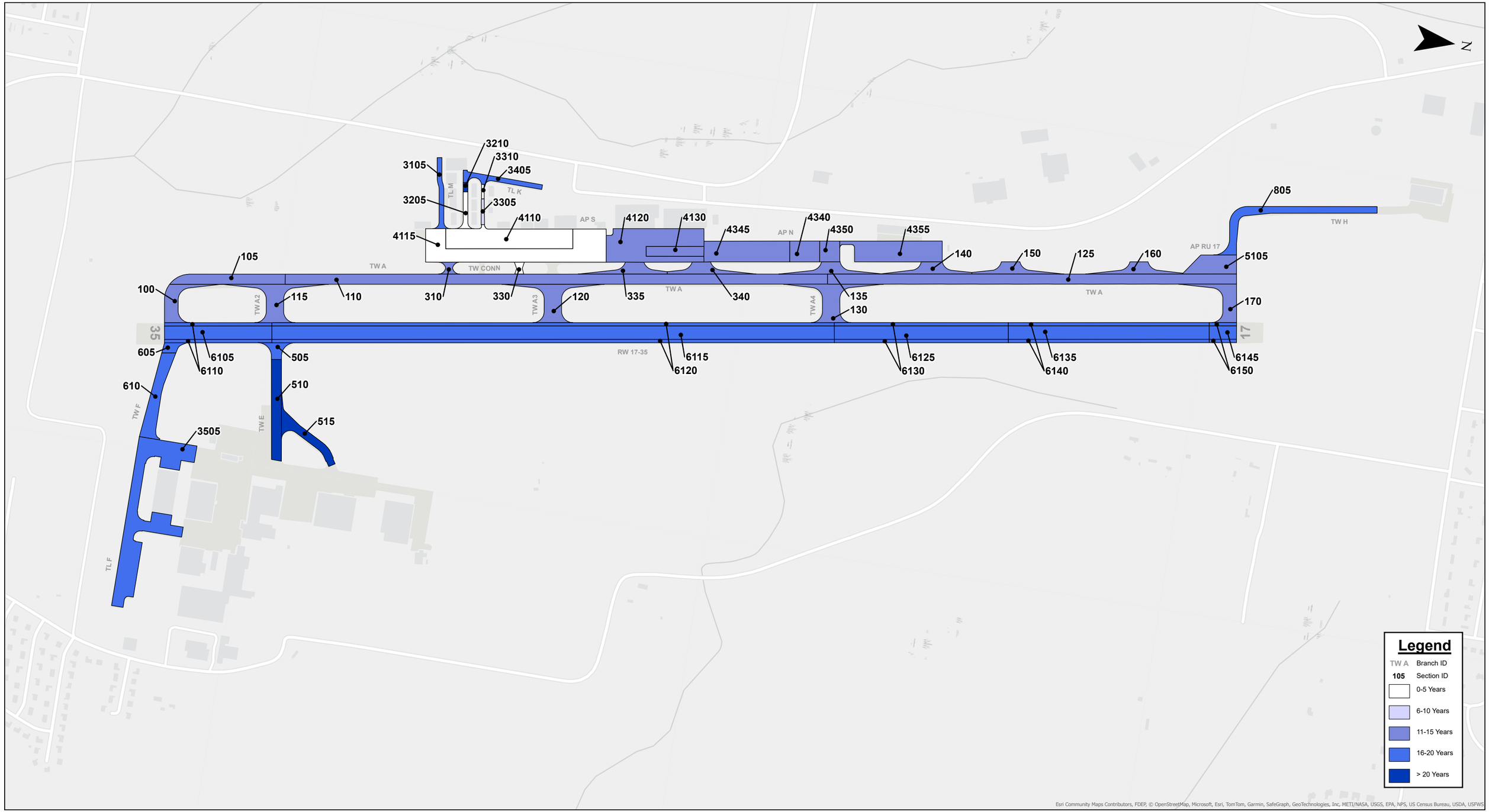
Network Definition



*This drawing is for pavement management purposes only. Drawing not to scale.

AIRFIELD PAVEMENT EVALUATION REPORT

Estimated Age at Inspection



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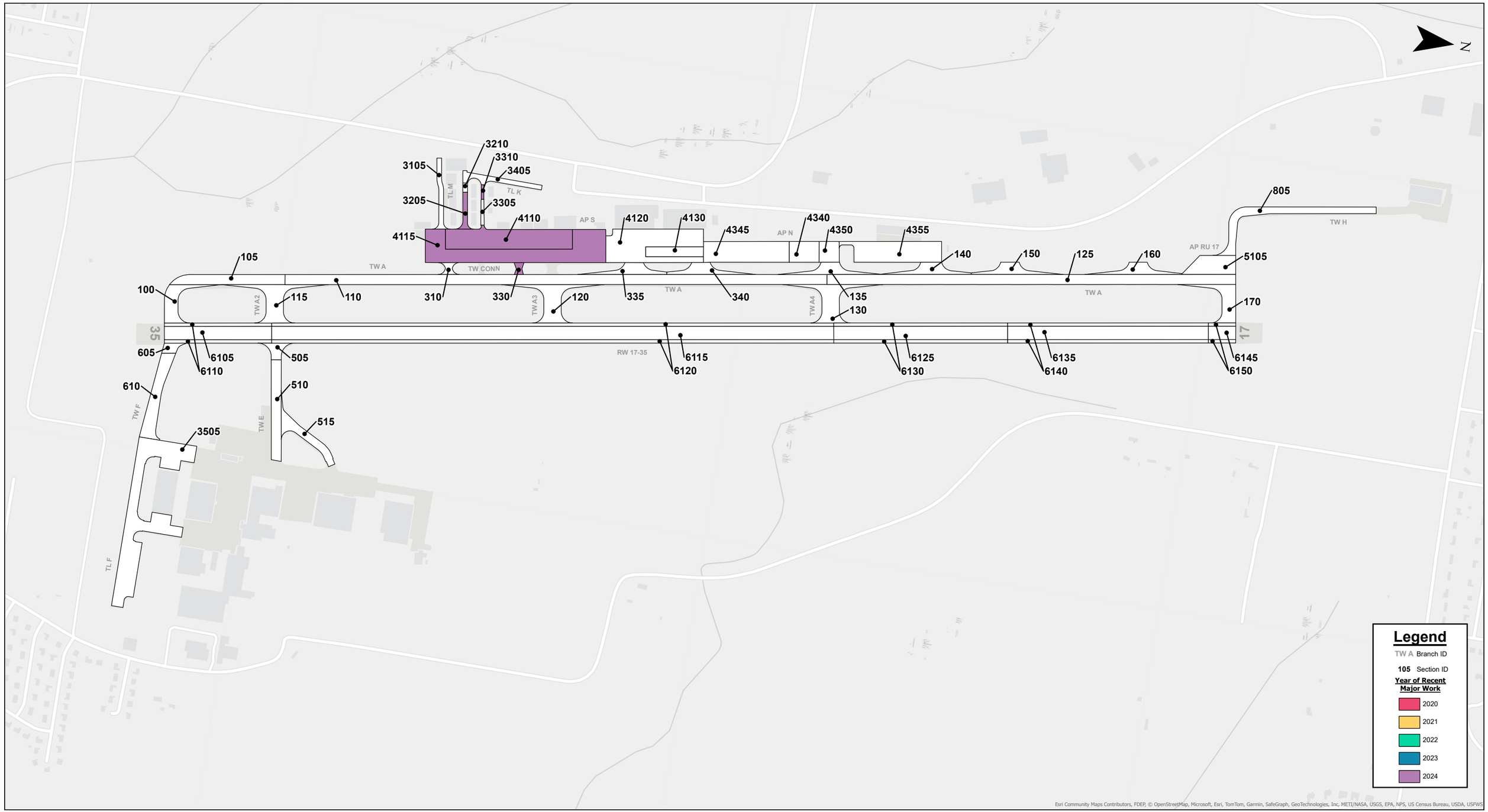
AIRFIELD PAVEMENT EVALUATION REPORT

Construction History



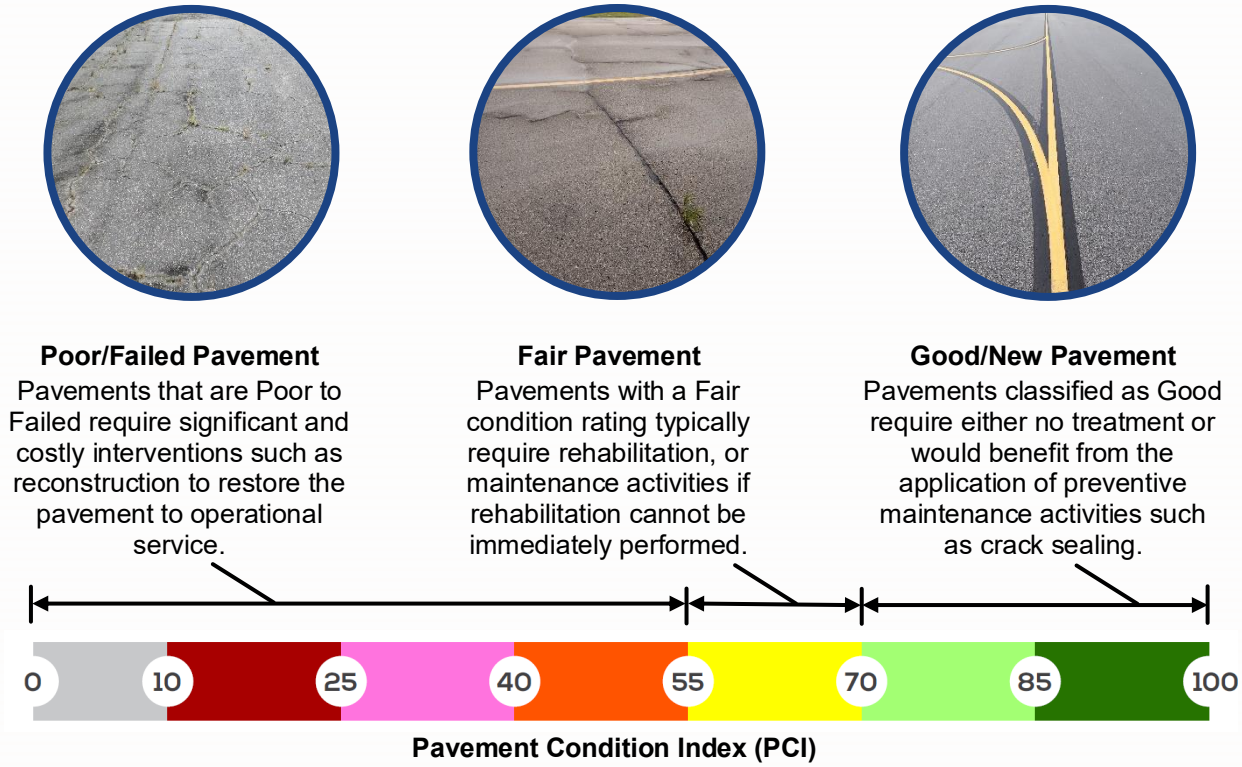
*This drawing is for pavement management purposes only. Drawing not to scale.

CHAPTER 3 – PAVEMENT CONDITION ANALYSIS

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 FDOT SAPMP 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.

The distress data collected during the survey is used to calculate a PCI score, which quantifies the functional condition of the pavement on a scale from 0 (failed pavement) to 100 (Good or new pavement). The figure below provides a visual representation of this scale. For this study, pavement facilities that have been rehabilitated within the past 24 months or have construction funding secured for a major rehabilitation project within the next 12 months, may have been omitted from this assessment.



Typical Pavement Distress Summary

Pavement conditions were documented at CEW by an experienced pavement evaluation team in 2024. Both pavement distresses and PCI values are used to determine a pavement's M&R needs. Below are descriptions of commonly observed distresses found at CEW during the visual PCI survey.

Block Cracking

Block cracking is typically a climate-induced distress caused by daily temperature cycles and shrinkage of the asphalt surface. A pattern of large blocks up to 10'x10' are formed as numerous cracks intersect.

L&T Cracking

Longitudinal & Transverse Cracking is typically a climate-induced distress caused by shrinkage of the asphalt surface from low temperatures or hardening of the material. L&T cracking may also be caused by paving lane joint deterioration or reflective cracking from underlying cracks.

Swelling

An upward bulge in a pavement's surface that may be accompanied by surface cracking. It can be caused by swelling soil and on AAC pavement when previous cracks weren't properly cleaned and sealed before overlay.

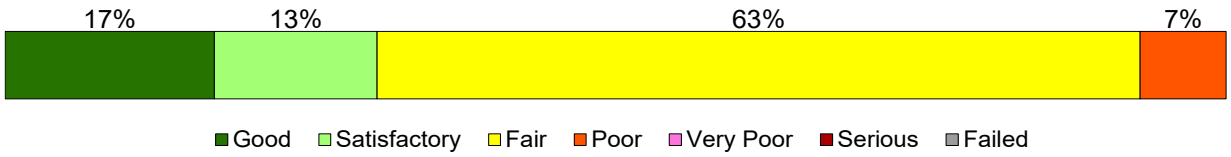
Weathering

Weathering is a climate-induced distress caused by oxidation and aging of the asphalt surface. The distress is evidenced by the wearing away of the asphalt binder and fine aggregate matrix from the pavement surface.

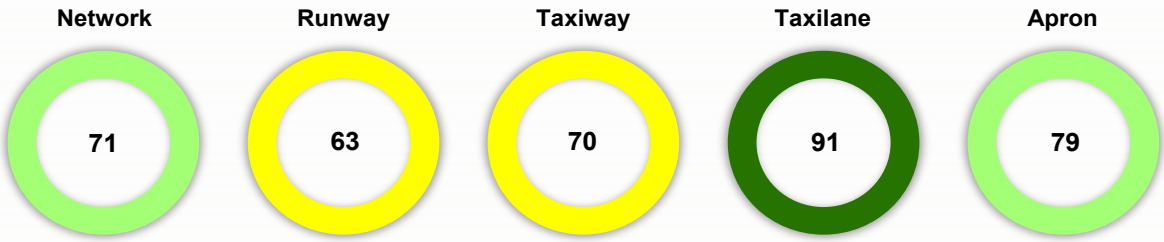
Pavement Condition Summary

CEW's overall area-weighted network PCI (average PCI adjusted to account for the relative size of the pavement sections) is a 71. Approximately 30% of the network's pavements are in Good or Satisfactory condition. Approximately 63% are in Fair condition, and 7% are in Poor condition or below and will likely require rehabilitation within the near future. The figure below summarizes the area-weighted average pavement condition distribution at CEW.

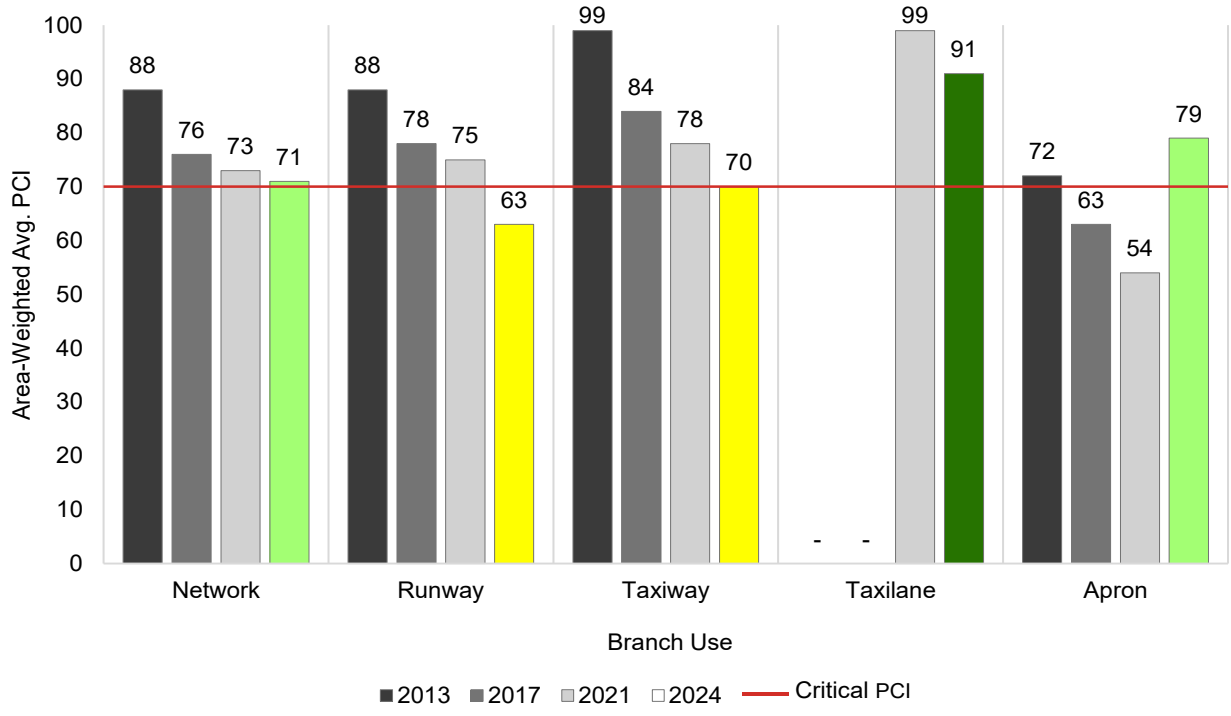
Current Condition - Overall Network



The area-weighted branch use PCIs are displayed graphically in the figures below. The current PCIs at a section-level are displayed graphically on the **Network PCI Results Exhibit** and in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table.

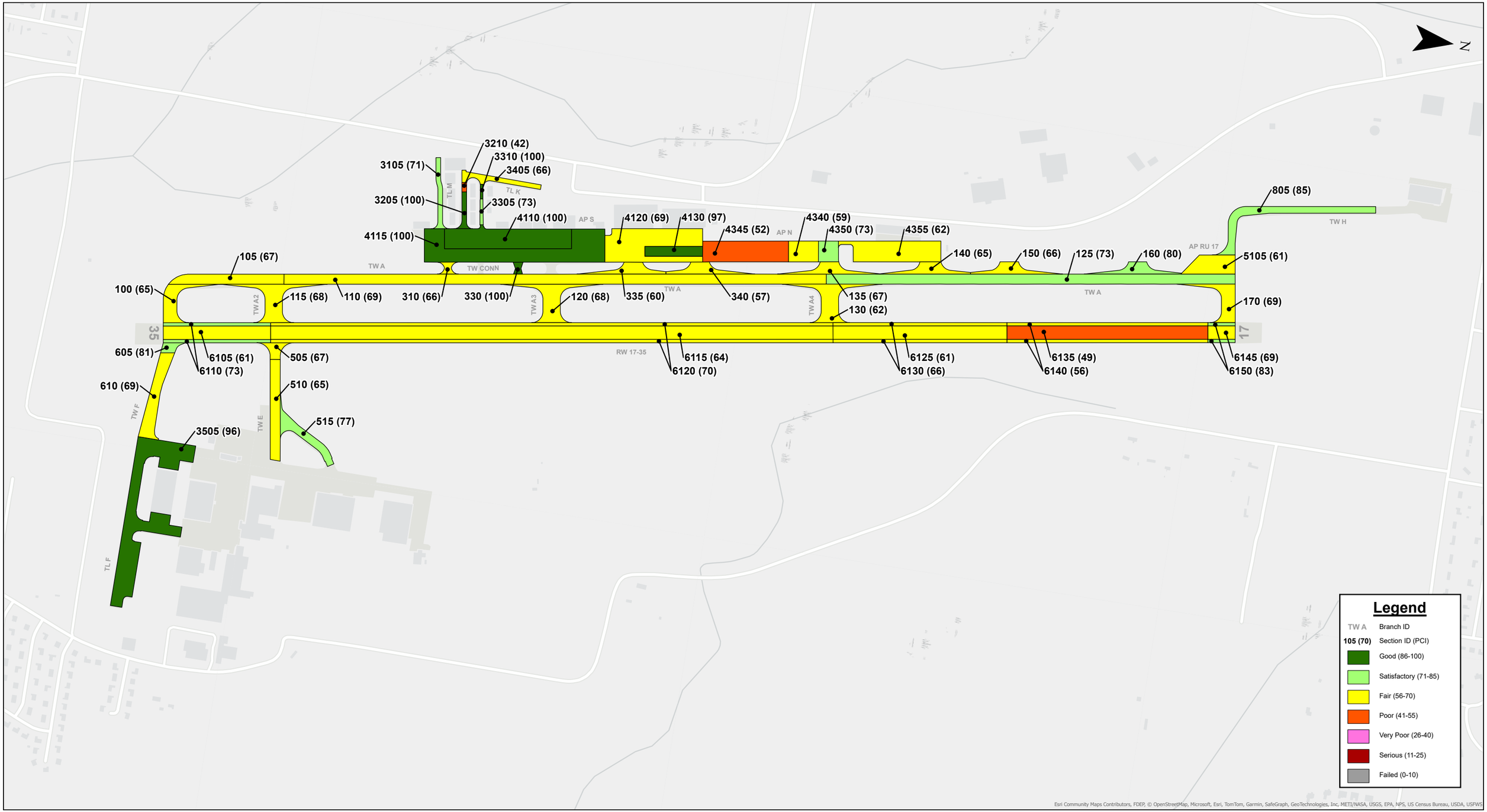


Pavement Conditions by Branch Use (Since 2015 Program)



AIRFIELD PAVEMENT EVALUATION REPORT

PCI Network Results



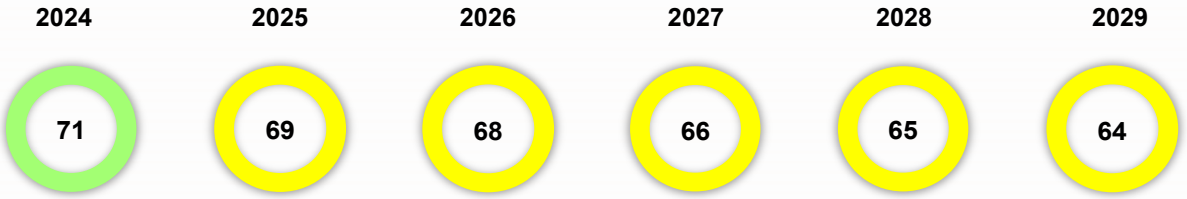
*This drawing is for pavement management purposes only. Drawing not to scale.

Forecasted Pavement Condition Summary

One of the main goals of the SAPMP is to forecast the future condition of each pavement section. Prediction curves were developed in PAVER to determine typical deterioration rates which are then used to forecast a future PCI value. The forecasts do not guarantee future PCI values; they are a planning tool to aid in the timing of maintenance and rehabilitation activities.

The CEW network PCI is forecasted to deteriorate from a PCI value of 71 (Satisfactory) to a 64 (Fair) in the next five years if no substantial maintenance and rehabilitation work is completed.

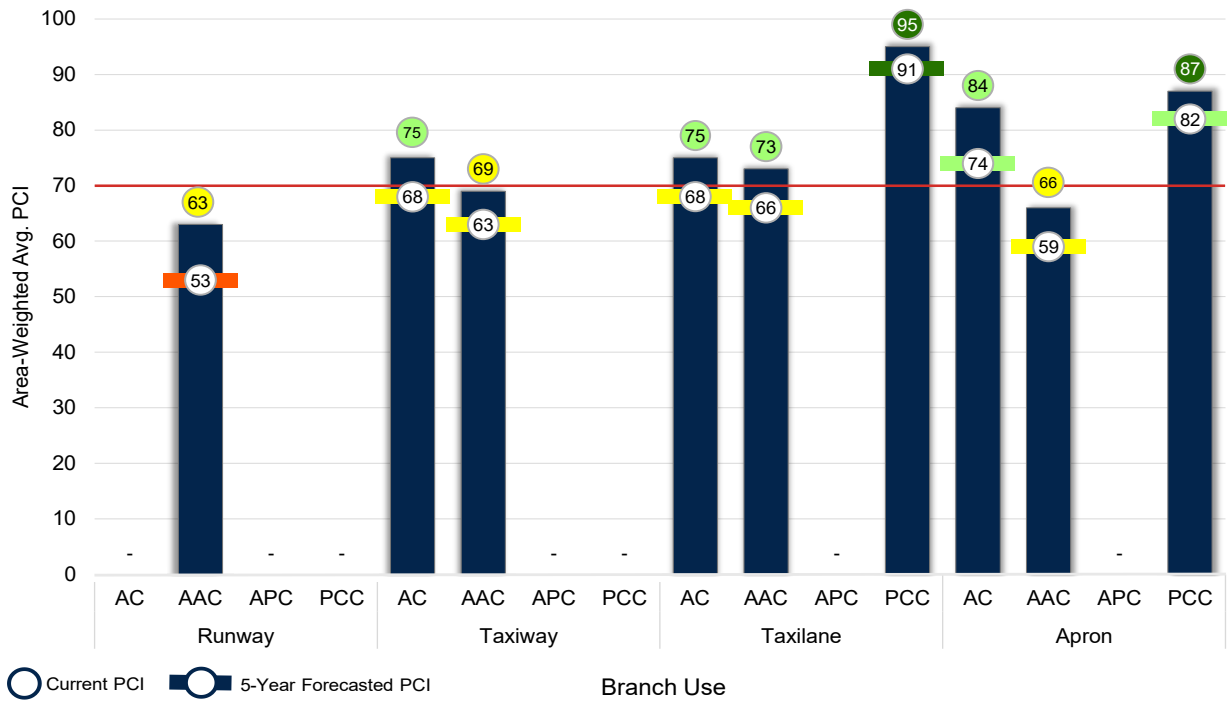
Forecasted Network-Level Pavement Performance



Forecasted Branch-Level Pavement Performance

Branch Use	2024 (Current)	2025	2026	2027	2028	2029
Network	71	69	68	66	65	64
Runway	63	60	59	57	55	53
Taxiway	70	68	67	66	65	64
Taxilane	91	90	89	88	87	86
Apron	79	77	75	73	72	71

Current and 5-Year Forecasted Conditions by Branch Use



Section-level details are available in tabular format in the **Inventory and Pavement Condition Evaluation Results by Section** table.

CHAPTER 4 – M&R PLANNING AND BUDGET NEEDS

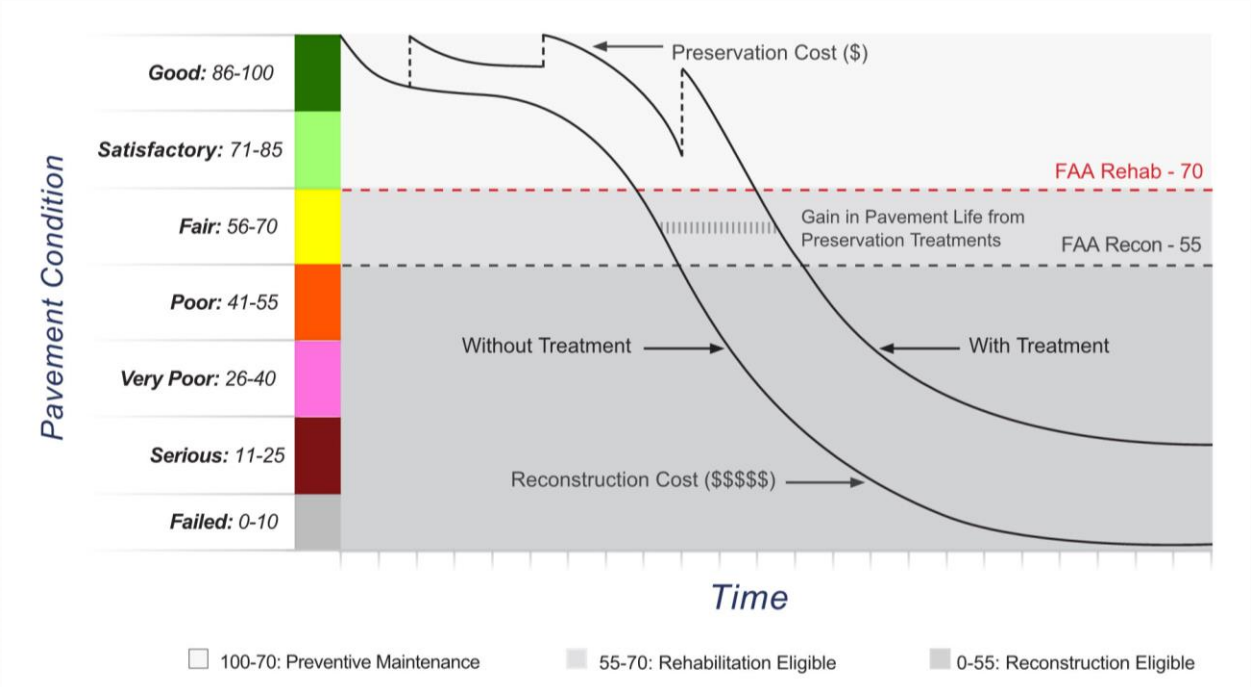
Maintenance and Rehabilitation Overview

An analysis was performed to assess the airfield pavement M&R needs 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 overall goal is to provide airports with fiscally conscious, timely and appropriate maintenance and rehabilitation recommendations. The projects recommended 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. The figure below illustrates how the cost of pavement repairs can exponentially increase if M&R activities are delayed.

Pavement Life and the Effect of Treatments



Critical PCI Value

One of the most valuable aspects of the PCI methodology is the ability for an agency to save money by prioritizing the rehabilitation of pavement assets effectively. 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. As defined in the FAA AIP handbook and shown in the table below, the FAA has established recommended PCI thresholds for pavement M&R. Accordingly, the Critical PCI value for all airfield pavements is defined at 70.

AIP Handbook PCI Requirements

Airfield Pavement Project Type	PCI Requirement
Reconstruction	PCI < 55 (Poor)
Rehabilitation	PCI < 70 (Fair)
Maintenance	N/A

**Source:* AIP Handbook, in reference to Runways, Taxiways, and Aprons as seen in table G-2, H-1, and I-1 respectively

Pavement Treatment Minimum Useful Life

Localized maintenance and major rehabilitation treatments have minimum useful life periods determined in the FAA AIP Handbook. Minimum useful life criteria can be used to help determine if a project is eligible for federal funding. The minimum useful life of the facility being rehabilitated or reconstructed must be met in order for the project to be funded. However, meeting minimum useful life may not always justify replacing the pavement facility if the PCI requirements have not been met.

AIP Handbook Minimum Useful Life

Airfield Pavement Project Type	Useful Life
Asphalt seal coat, Slurry Seal, and Joint Seal	3 years
Concrete Joint Replacement	7 years
Pavement Rehabilitation (not reconstruction)	10 years
Pavement Reconstruction	20 years

Localized Maintenance Needs

Localized maintenance is best used as a preservation measure and is applied to slow the rate of deterioration. These activities can be applied either as a preventive measure or a safety ("stopgap") measure. The two (2) types of localized maintenance are described below in further detail.

- **Localized Preventive Maintenance and Repair:** Distress maintenance activities performed with the primary objective of slowing the rate of deterioration on pavements above Critical PCI. These activities typically include crack sealing and patching.

- **Localized Stopgap/Safety Maintenance and Repair:** Is typically applied to pavement sections that are at or below the Critical PCI value as a temporary repair or due to safety concerns. These activities are typically applied to high-severity distresses or distresses impacting operations.

Localized maintenance differs from major rehabilitation in that it is applied based on the distresses observed rather than being based on a PCI value. Treatments are selected based on the appropriate corrective measure for a given distress type and severity level. These work quantities are limited to a near-term application since they are determined from the most recent PCI assessment. As pavements continue to deteriorate year-to-year, quantities and/or distress severities may increase, which will affect the amount and type of localized maintenance required. This analysis can be utilized as a planning tool to assist in determining an annual budget allocation for maintenance activities. The anticipated Year 1 Localized Maintenance recommendations by work type for each branch use are summarized below. The planning-level costs are rounded up to the nearest 10-dollar increment.

Year 1 Localized Maintenance by Work Type Summary

Maintenance Category	Work Type	Rough Estimate of Work Quantity				Work Units	Planning Material Cost	
		RW	TW	TL	AP			
Localized Preventive Maintenance	AC Crack Sealing	-	3,201	54	-	LF	$	16,280
	Surface Seal	-	14,742	1,209	-	SF	$	19,940
	PCC Partial-Depth Patching	-	-	-	18	SF	$	4,270
	PCC Joint Seal	-	-	26,468	2,795	LF	$	168,270
	Localized Preventive Maintenance Total						$	208,760
Localized Stopgap Maintenance	PCC Partial-Depth Patching	-	-	17	-	SF	$	3,850
	PCC Joint Seal	-	-	238	-	LF	$	1,370
	PCC Full-Depth Patching	-	-	29	-	SF	$	1,470
	Localized Stopgap Maintenance Total						$	6,690
Total Localized Maintenance Needs							$	215,450

A table providing a breakdown of the anticipated planning-level costs by section for those areas exhibiting distresses that would benefit from Year 1 Localized M&R is located in **Appendix B – M&R Planning Needs.**

Major Rehabilitation Project Types

Major rehabilitation project needs are identified by analyzing the Airport's pavement condition in relationship to Critical PCI and density of load-related distresses, assuming there are no budget constraints.

The needs analysis is performed over a 5-year planning period. Major rehabilitation is divided into two policy categories:

- ***Intermediate Major Rehabilitation (PCI 55 to 70)***
  - **AC:** Combination of asphalt pavement milling and overlay with 15% of the area estimated to need full-depth reconstruction OR alternatively, a PCC Overlay.
  - **PCC:** Combination of crack sealing, joint seal replacement, limited patching, and 15% slab replacement.
  - **Rehab Alternative – PCC Overlay of an Existing Flexible Pavement:** The application of a PCC pavement layer on top of an existing asphalt surface that exhibits surface distresses but does not require extensive structural improvements. PCC overlays effectively extend the life of structurally sound pavement, offering a longer lifespan than traditional mill and overlays.
- ***Full-Depth Reconstruction or Reclamation (PCI < 55)***
  - Removal and replacement of the existing pavement section down to the subgrade.
  - **Rehab Alternative – Full-Depth Reclamation (FDR):** The process of pulverizing the existing asphalt layer and part of the underlying base, mixing the materials with stabilizing agents, and compacting to form a durable new base. This method is ideal for addressing structural issues such as deep cracks, rutting, or base failures, providing a cost-effective and sustainable alternative to full-depth reconstruction.

The alternative work types offer different rehabilitation methods that can potentially reduce costs and extend the design life compared to traditional approaches. These methods depend heavily on the condition and composition of in-situ materials.

M&R Planning Cost Development

The project cost estimates are calculated using a unit cost per square foot for pavement-related expenses for each of the work types defined in **Major Rehabilitation Project Types**. Additional project cost factors applied to the unit cost of the defined pavement section are summarized below.

- Non-Pavement Costs (Drainage and Electrical Modification)
- General Project Contingency/Design Evolution
- Airport Classification Factor
- FDOT Location Factors

The conceptual pavement sections for the major rehabilitation project types and their associated unit costs are summarized on the following page. Given the diverse fleet mixes across Florida's GA Airports, the unit costs for each major rehabilitation type are presented as a range. This approach accommodates the cost differences between pavement sections designed for light and heavy GA traffic.

Conceptual pavement sections designated as Rehab Alternative on the following page, PCC Overlay and AC Full-Depth Reclamation, were not used as part of the major rehabilitation needs presented in the **Major Rehabilitation Needs Summary** of this report. These are meant as alternatives to the typical major rehabilitation activities recommended to airports. The cost of the recommended rehabilitation activities and the design alternative options are summarized in **Appendix B – M&R Planning Needs**.

The identification of rehabilitation needs and conceptual pavement sections have been determined at the planning level. No warranty or assurance is implied in this document for final design nor construction for any airfield pavements discussed within this report. Design-level investigation is recommended prior to developing construction-level design documents and budgets.

AIRFIELD PAVEMENT EVALUATION REPORT

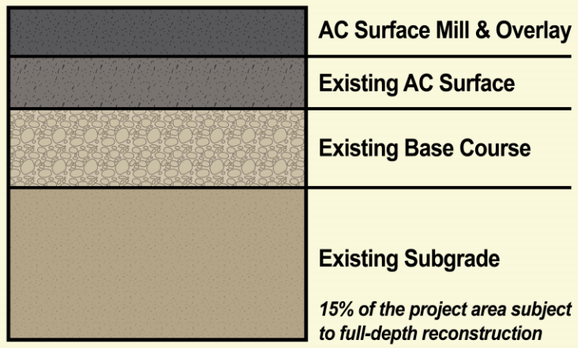
M&R Planning Cost Summary by Work Type

Localized Maintenance | PCI 70-100 (Satisfactory to Good)

- AC Crack Sealing - $5.00/LF
- AC Full-Depth Patching - $13.00 - $14.25/SF
- AC Partial-Depth Patching - $4.50 - $5.50/SF
- AC Surface Seal - $1.25/SF
- PCC Crack Sealing - $6.25/LF
- PCC Grinding - $12.00/LF
- PCC Full-Depth Patching - $46.25 - $50.00/SF
- PCC Joint Seal - $5.75/LF
- PCC Partial-Depth Patching - $231.00/SF
- PCC Slab Replacement - $38.50 - $40.00/SF

Intermediate Major Rehabilitation | PCI 55-70 (Fair)

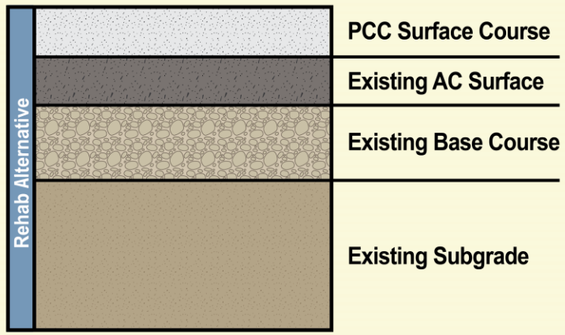
MILL & OVERLAY



15% of the project area subject to full-depth reconstruction

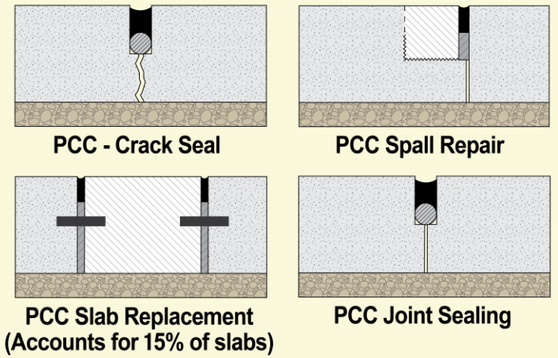
$8.75 - $12.75 per SF

PCC OVERLAY



$21.25 - $30.50 per SF

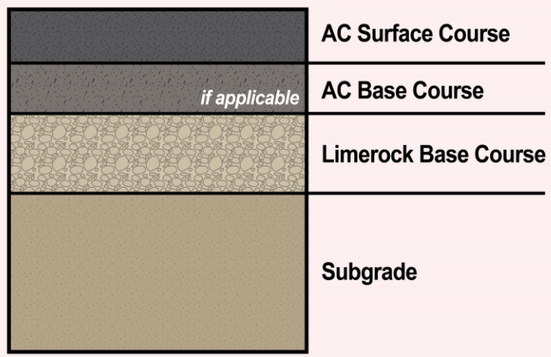
PCC REHABILITATION



$21.50 - $39.25 per SF

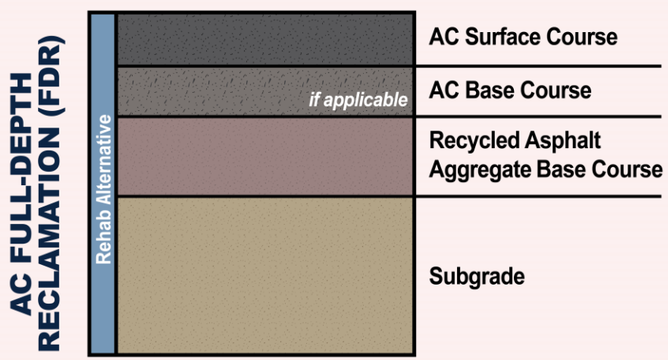
Full-Depth Reconstruction | PCI 0-55 (Failed to Poor)

AC RECONSTRUCTION



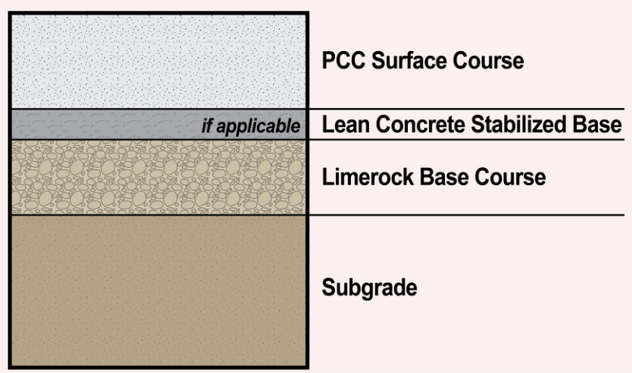
$17.50 - $24.25 per SF

AC FULL-DEPTH RECLAMATION (FDR)



$14.00 - $19.50 per SF

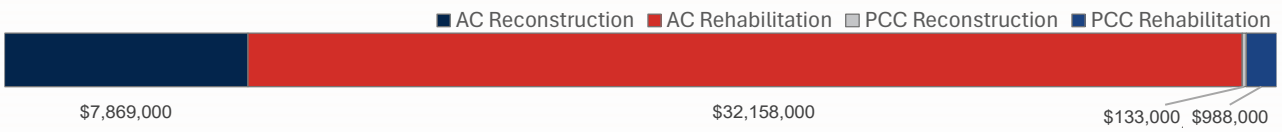
PCC RECONSTRUCITON



$41.75 - $54.00 per SF

Major Rehabilitation Needs Summary

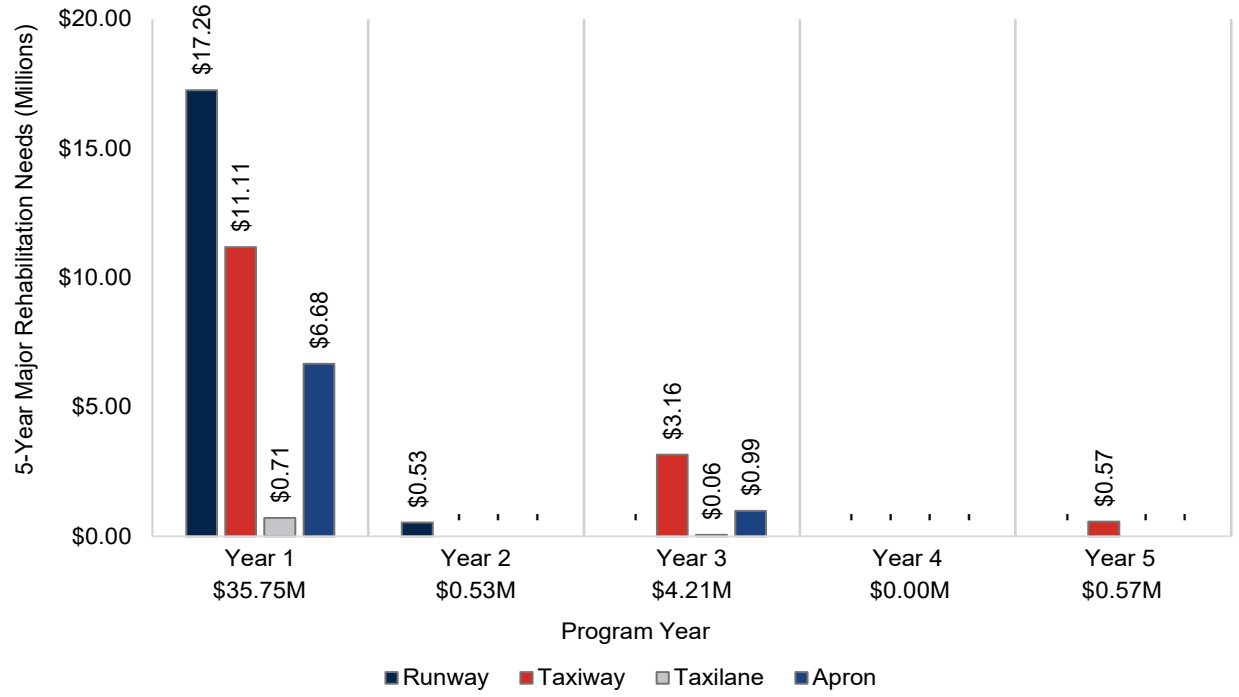
Total 5-Year Major Needs ~~$41,064,000~~



5-Year Major Rehabilitation Needs by Branch Use

Branch Use	Annual Planning Estimate Cost (Millions)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Branch Use Total
Runway	$17.26	$0.53	-	-	-	$17.79
Taxiway	$11.11	-	$3.16	-	$0.57	$14.84
Taxilane	$0.71	-	$0.06	-	-	$0.77
Apron	$6.68	-	$0.99	-	-	$7.67
Annual Total	$35.75M	$0.53M	$4.21M	$0.00M	$0.57M	$41.06M

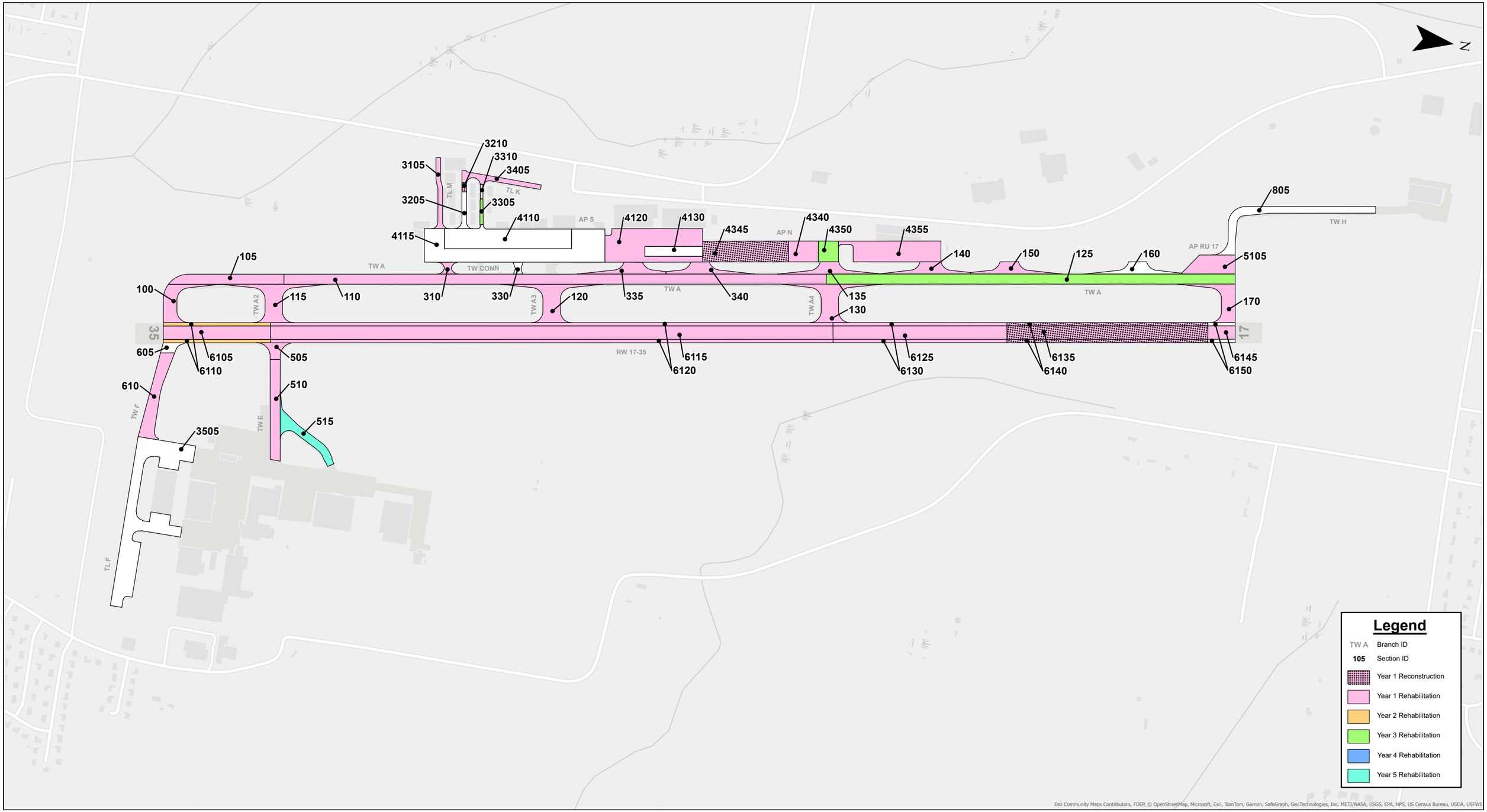
5-Year Major Rehabilitation Needs by Branch Use Summary



The **Major Rehabilitation Exhibit** depicts which sections will need major rehabilitation within the next 5 years. **Appendix B** provides a section-level detailed summary of these needs in addition to the cost of various rehabilitation options should a different pavement rehabilitation type be desired.

AIRFIELD PAVEMENT EVALUATION REPORT

5-Year Major Rehabilitation Needs



*This drawing is for pavement management purposes only. Drawing not to scale.

Major Rehabilitation Budget Analysis

Major Rehabilitation needs are identified by analyzing the airport's pavement condition in relationship to critical PCI, major rehabilitation policies, and unit costs, assuming there are no budget constraints. While this is financially impractical, it yields the unbiased pavement needs over a defined timeframe at each airport given current and forecasted pavement conditions.

Given the inherent uncertainty in available future funding, multiple budget scenarios were analyzed. These scenarios are based on the concept that each pavement section will be repaired at a unit cost specific to its condition. The budget scenarios help identify the impact that various funding levels have on the overall pavement needs. Budget scenarios analyzed were as follows:

- Unlimited Budget – Assumes unlimited funding available for M&R, with all present needs being addressed in the first planning year (best case scenario due to no inflation)
- Backlog Elimination – An iterative budget scenario to determine the dollars necessary per year to eliminate all major M&R backlog over the 5-year analysis period
- Maintain Current Condition – Iterative budget scenario to determine the dollars necessary per year to maintain the overall network condition.
- Unfunded (Do nothing) – Assumes no funding available to perform M&R (worst case scenario)

This theoretical analysis is used to identify the approximate budget needed to maintain and rehabilitate the current pavement network over the next 5-years. The major rehabilitation needs identified within the PAVER budget scenario analysis are not recommendations for timing of projects. They are utilized to determine the current and future needs of the airfield pavements, identify the effects of major rehabilitation delay, and determine the overall backlog of the existing pavement system.

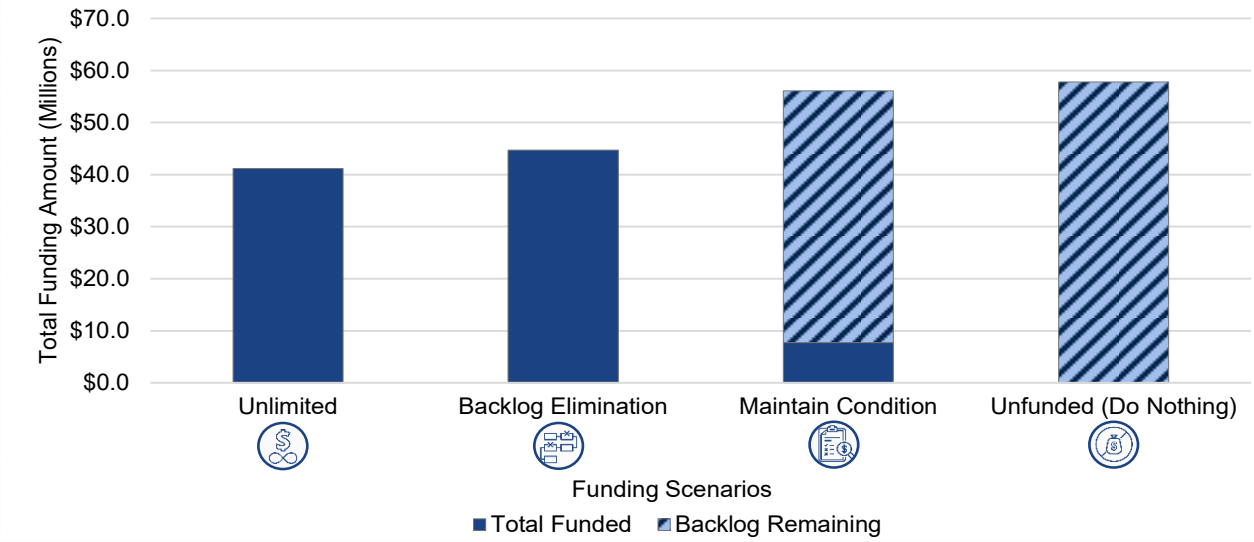
The budget analysis assumes the airport's current network-level PCI value as the starting point and applies specific performance models to each pavement section to forecast future PCI values. As lower funding levels are applied, resulting PCI values drop and unfunded backlog (remaining work left undone) increase.

The budget analyses for this airport are on the following page. Costs are assigned according to the PCI value of the section at the year rehabilitation is determined. Of note, backlog grows as major rehabilitation is delayed due to the declination of condition and inflation of the rehabilitation costs.

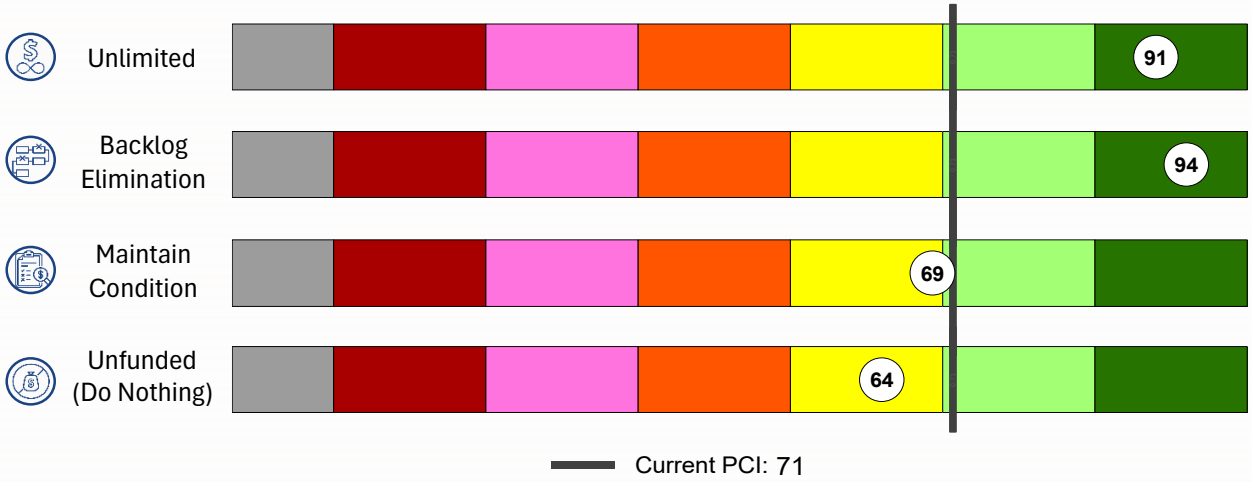
Budget Scenario Annual Needs Estimate

Funding Scenario	PCI by Year		Scenario Costs		
	2024 PCI	2029 PCI	Total Funded	Avg. Annual Funding	Unfunded Backlog at 2029
Unlimited	71	91	$41,062,000	$8,212,400	$0
Backlog Elimination	71	94	$44,691,000	$8,938,200	$0
Maintain Condition	71	69	$7,747,000	$1,549,400	$48,322,000
Unfunded (Do Nothing)	71	64	$0	$0	$57,804,000

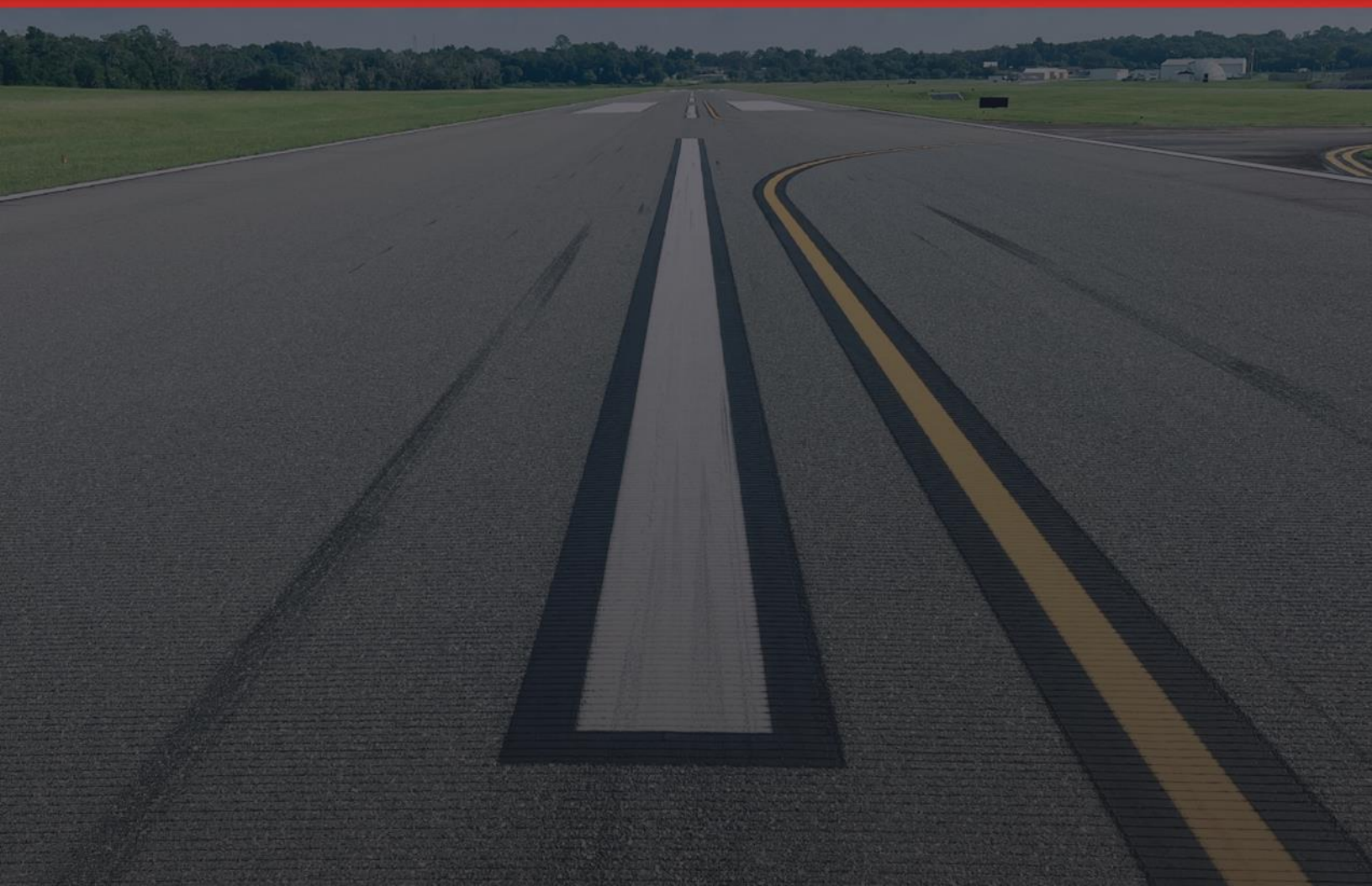
Budget Scenario Annual Cost Summary



Financial Impact on Pavement Condition



APPENDIX A – PAVEMENT CONDITION OBSERVATIONS

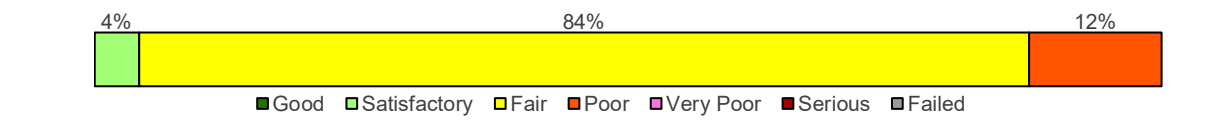


Runway Condition Observations

RW 17-35

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
RW 17-35	RUNWAY	10	1,200,900	63	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 4% Satisfactory (71-85 PCI), 84% Fair (56-70 PCI), 12% Poor (41-55 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
6105	AAC	80,200	61	Fair
6110	AAC	40,100	73	Satisfactory
6115	AAC	420,000	64	Fair
6120	AAC	210,000	70	Fair
6125	AAC	130,000	61	Fair
6130	AAC	65,000	66	Fair
6135	AAC	150,000	49	Poor
6140	AAC	75,000	56	Fair
6145	AAC	20,400	69	Fair
6150	AAC	10,200	83	Satisfactory

RW 17-35 consists of 10 flexible pavement sections, totaling 1,200,900 sf. The last major construction date for the branch was 2008, resulting in an area-weighted average age at inspection of 16 years old. Overall, RW 17-35 is in Fair condition with an area-weighted average PCI of 63.

RW 17-35:6105

RW 17-35:6115

RW 17-35:6120

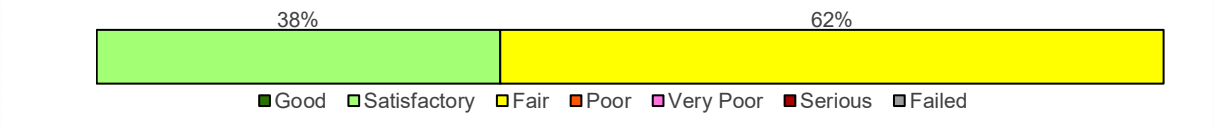
RW 17-35:6135

Taxiway Condition Observations

TW A

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	6	673,717	70	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 38% Satisfactory (71-85 PCI), 62% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
105	AAC	61,696	67	Fair
110	AAC	303,843	69	Fair
125	AAC	229,049	73	Satisfactory
140	AC	27,340	65	Fair
150	AC	25,816	66	Fair
160	AC	25,973	80	Satisfactory

TW A consists of 6 flexible pavement sections, totaling 673,717 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A is in Fair condition with an area-weighted average PCI of 70.

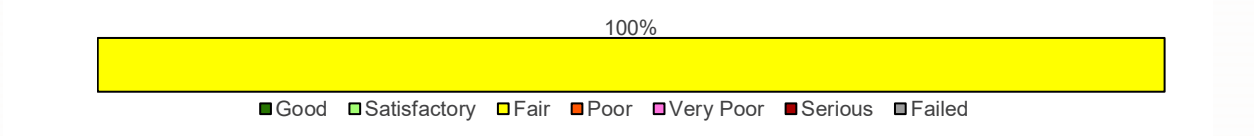
TW A:110

TW A:125

TW A1

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A1	TAXIWAY	1	36,879	65	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



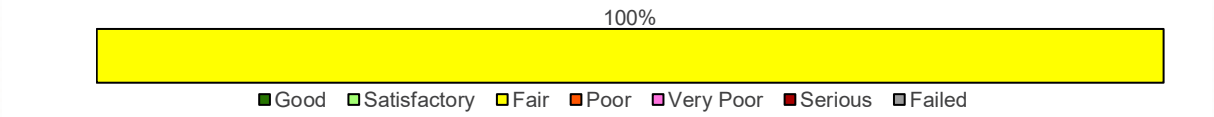
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
100	AAC	36,879	65	Fair

TW A1 consists of 1 flexible pavement section, totaling 36,879 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A1 is in Fair condition with an area-weighted average PCI of 65.

TW A2

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A2	TAXIWAY	1	54,612	68	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



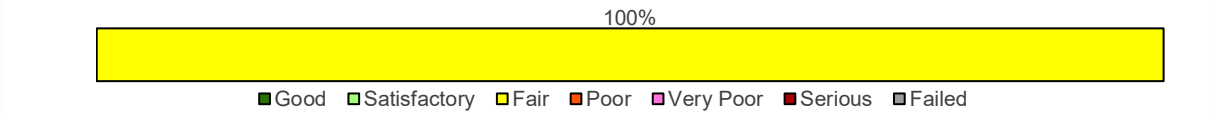
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
115	AAC	54,612	68	Fair

TW A2 consists of 1 flexible pavement section, totaling 54,612 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A2 is in Fair condition with an area-weighted average PCI of 68.

TW A3

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A3	TAXIWAY	1	53,835	68	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



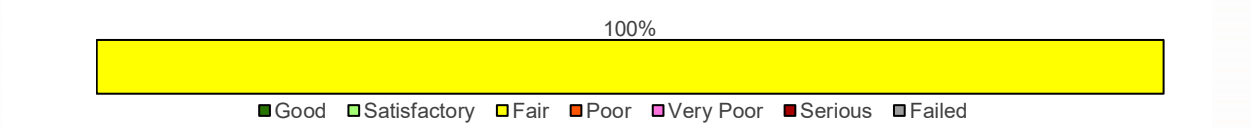
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
120	AAC	53,835	68	Fair

TW A3 consists of 1 flexible pavement section, totaling 53,835 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A3 is in Fair condition with an area-weighted average PCI of 68.

TW A4

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A4	TAXIWAY	2	79,280	64	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
130	AAC	53,397	62	Fair
135	AC	25,883	67	Fair

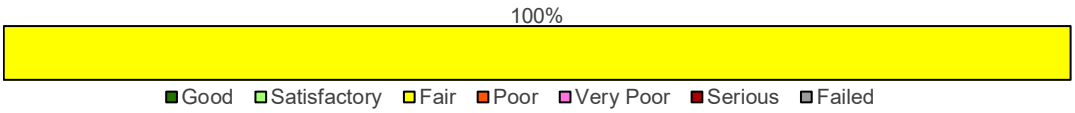
TW A4 consists of 2 flexible pavement sections, totaling 79,280 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A4 is in Fair condition with an area-weighted average PCI of 64.

TW A4:130

TW A5

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A5	TAXIWAY	1	38,108	69	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



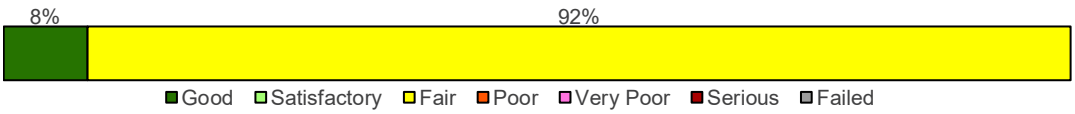
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
170	AAC	38,108	69	Fair

TW A5 consists of 1 flexible pavement section, totaling 38,108 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW A5 is in Fair condition with an area-weighted average PCI of 69.

TW CONN

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW CONN	TAXIWAY	4	64,607	63	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 8% Good (86-100 PCI), 92% Fair (56-70 PCI).



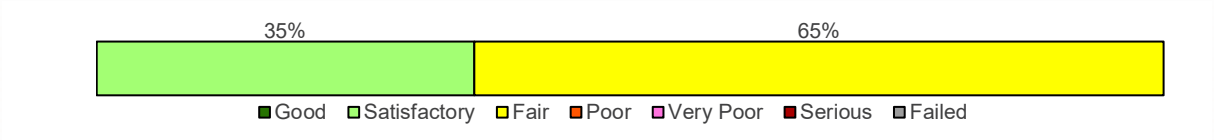
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
310	AAC	7,038	66	Fair
330	AC	5,089	100	Good
335	AAC	26,207	60	Fair
340	AAC	26,273	57	Fair

TW CONN consists of 4 flexible pavement sections, totaling 64,607 sf. The last major construction dates range from 2012 to 2024, resulting in an area-weighted average age at inspection of 11 years old. Overall, TW CONN is in Fair condition with an area-weighted average PCI of 63.

TW E

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW E	TAXIWAY	3	108,578	69	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 35% Satisfactory (71-85 PCI), 65% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
505	AAC	13,667	67	Fair
510	AAC	56,489	65	Fair
515	AAC	38,422	77	Satisfactory

TW E consists of 3 flexible pavement sections, totaling 108,578 sf. The last major construction dates range from 1999 to 2008, resulting in an area-weighted average age at inspection of 24 years old. Overall, TW E is in Fair condition with an area-weighted average PCI of 69.

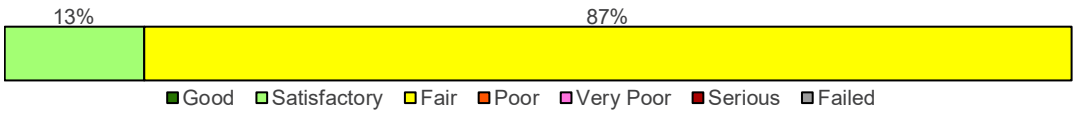
TW E:505

TW E:510

TW F

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW F	TAXIWAY	2	68,918	71	Satisfactory

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 13% Satisfactory (71-85 PCI), 87% Fair (56-70 PCI).



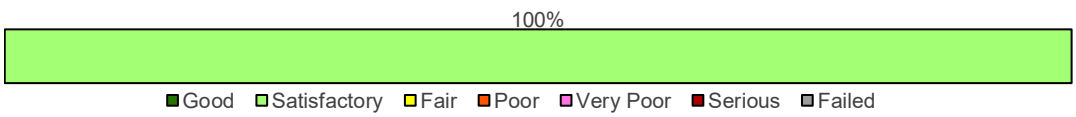
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
605	AAC	8,984	81	Satisfactory
610	AC	59,934	69	Fair

TW F consists of 2 flexible pavement sections, totaling 68,918 sf. The last major construction dates range from 2004 to 2008, resulting in an area-weighted average age at inspection of 20 years old. Overall, TW F is in Satisfactory condition with an area-weighted average PCI of 71.

TW H

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW H	TAXIWAY	1	76,324	85	Satisfactory

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Satisfactory (71-85 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
805	AC	76,324	85	Satisfactory

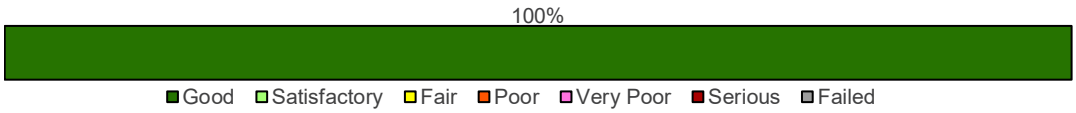
TW H consists of 1 flexible pavement section, totaling 76,324 sf. The last major construction date for the branch was 2008, resulting in an area-weighted average age at inspection of 16 years old. Overall, TW H is in Satisfactory condition with an area-weighted average PCI of 85.

Taxilane Condition Observations

TL F

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL F	TAXILANE	1	226,420	96	Good

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Good (86-100 PCI).



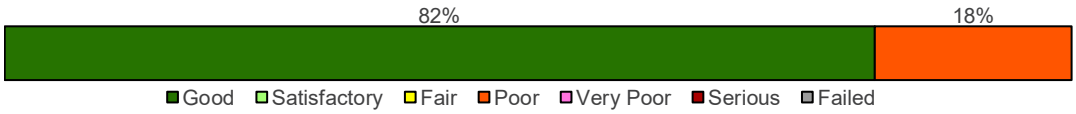
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3505	PCC	226,420	96	Good

TL F consists of 1 rigid pavement section, totaling 226,420 sf. The last major construction date for the branch was 2004, resulting in an area-weighted average age at inspection of 20 years old. Overall, TL F is in Good condition with an area-weighted average PCI of 96.

TL J

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL J	TAXILANE	2	13,285	89	Good

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 82% Good (86-100 PCI), 18% Poor (41-55 PCI).



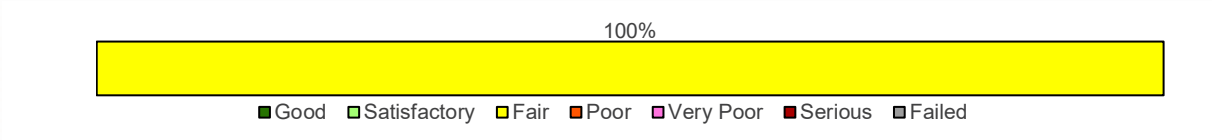
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3205	AC	10,832	100	Good
3210	PCC	2,453	42	Poor

TL J consists of 1 flexible and 1 rigid pavement sections, totaling 13,285 sf. The last major construction dates range from 2003 to 2024, resulting in an area-weighted average age at inspection of 4 years old. Overall, TL J is in Good condition with an area-weighted average PCI of 89.

TL K

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL K	TAXILANE	1	25,450	66	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3405	AC	25,450	66	Fair

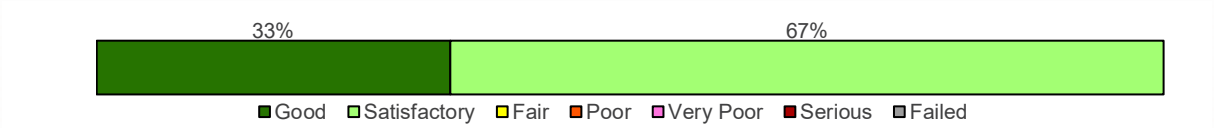
TL K consists of 1 flexible pavement section, totaling 25,450 sf. The last major construction date for the branch was 2008, resulting in an area-weighted average age at inspection of 16 years old. Overall, TL K is in Fair condition with an area-weighted average PCI of 66.

TL K: 3405

TL L

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL L	TAXILANE	2	6,634	82	Satisfactory

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 33% Good (86-100 PCI), 67% Satisfactory (71-85 PCI).



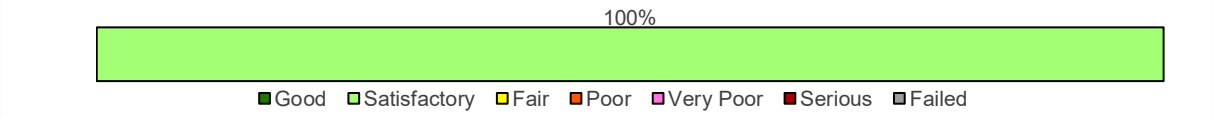
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3305	AAC	4,434	73	Satisfactory
3310	AC	2,200	100	Good

TL L consists of 2 flexible pavement sections, totaling 6,634 sf. The last major construction dates range from 2017 to 2024, resulting in an area-weighted average age at inspection of 5 years old. Overall, TL L is in Satisfactory condition with an area-weighted average PCI of 82.

TL M

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL M	TAXILANE	1	19,711	71	Satisfactory

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Satisfactory (71-85 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3105	AC	19,711	71	Satisfactory

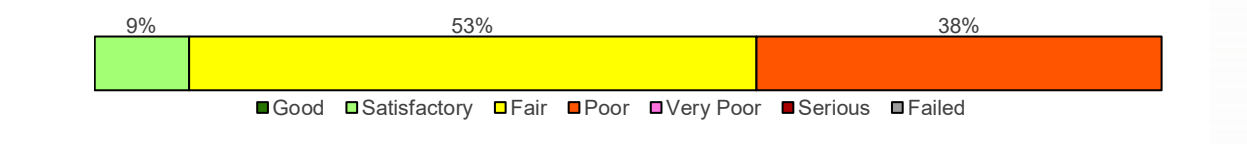
TL M consists of 1 flexible pavement section, totaling 19,711 sf. The last major construction date for the branch was 2007, resulting in an area-weighted average age at inspection of 17 years old. Overall, TL M is in Satisfactory condition with an area-weighted average PCI of 71.

Apron Condition Observations

AP N

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP N	APRON	4	261,866	59	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 9% Satisfactory (71-85 PCI), 53% Fair (56-70 PCI), 38% Poor (41-55 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4340	AAC	34,591	59	Fair
4345	AC	99,461	52	Poor
4350	PCC	23,262	73	Satisfactory
4355	AC	104,552	62	Fair

AP N consists of 3 flexible and 1 rigid pavement sections, totaling 261,866 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, AP N is in Fair condition with an area-weighted average PCI of 59.

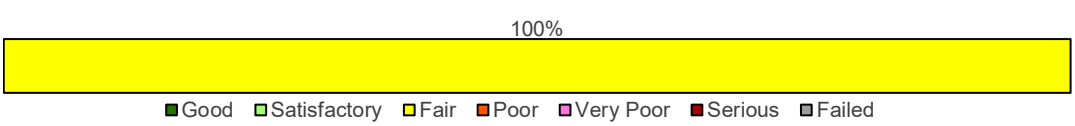
AP N:4345

AP N:4355

AP RU 17

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP RU 17	APRON	1	47,790	61	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



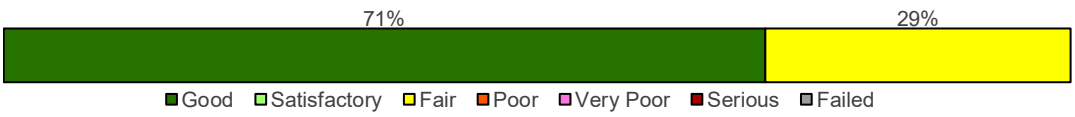
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
5105	AAC	47,790	61	Fair

AP RU 17 consists of 1 flexible pavement section, totaling 47,790 sf. The last major construction date for the branch was 2012, resulting in an area-weighted average age at inspection of 11 years old. Overall, AP RU 17 is in Fair condition with an area-weighted average PCI of 61.

AP S

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP S	APRON	4	515,494	91	Good

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 71% Good (86-100 PCI), 29% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4110	AC	141,475	100	Good
4115	AC	193,974	100	Good
4120	AAC	147,645	69	Fair
4130	PCC	32,400	97	Good

AP S consists of 3 flexible and 1 rigid pavement sections, totaling 515,494 sf. The last major construction dates range from 2012 to 2024, resulting in an area-weighted average age at inspection of 4 years old. Overall, AP S is in Good condition with an area-weighted average PCI of 91.

AP S:4120

AP S:4130

APPENDIX B – M&R PLANNING NEEDS BY SECTION

Localized Maintenance Recommendations by Section

Network ID	Branch ID	Section ID	Description	Severity	Distress Qty	Distress Unit	Distress Density	Policy Type	Localized Work Type	Work Qty	Work Unit	Work Cost
CEW	TW A	125	L & T CR	Medium	2,925	Ft	1.3%	Preventive	AC Crack Sealing	2,925	LF	$ 14,630
CEW	TW A	125	WEATHERING	Medium	3,244	SF	1.4%	Preventive	Surface Seal	3,244	SF	$ 4,060
CEW	TW E	515	WEATHERING	Medium	7,684	SF	20.0%	Preventive	Surface Seal	7,684	SF	$ 9,610
CEW	TW E	515	L & T CR	Medium	64	Ft	0.2%	Preventive	AC Crack Sealing	64	LF	$ 330
CEW	TW H	805	WEATHERING	Medium	3,813	SF	5.0%	Preventive	Surface Seal	3,814	SF	$ 4,770
CEW	TW H	805	L & T CR	Medium	213	Ft	0.3%	Preventive	AC Crack Sealing	213	LF	$ 1,070
CEW	TL F	3505	JT SEAL DMG	Low	1,159	Slabs	80.0%	Preventive	PCC Joint Seal	21,175	LF	$ 121,760
CEW	TL F	3505	JT SEAL DMG	Medium	290	Slabs	20.0%	Preventive	PCC Joint Seal	5,294	LF	$ 30,440
CEW	TL J	3210	CORNER SPALL	Medium	2	Slabs	18.2%	Stopgap	PCC Partial-Depth Patching	5	SF	$ 1,140
CEW	TL J	3210	JOINT SPALL	Medium	2	Slabs	18.2%	Stopgap	PCC Partial-Depth Patching	12	SF	$ 2,720
CEW	TL J	3210	JT SEAL DMG	High	10	Slabs	100.0%	Stopgap	PCC Joint Seal	238	LF	$ 1,370
CEW	TL J	3210	CORNER BREAK	Medium	1	Slabs	9.1%	Stopgap	PCC Full-Depth Patching	29	SF	$ 1,470
CEW	TL L	3305	WEATHERING	Medium	222	SF	5.0%	Preventive	Surface Seal	222	SF	$ 280
CEW	TL M	3105	WEATHERING	Medium	987	SF	5.0%	Preventive	Surface Seal	987	SF	$ 1,240
CEW	TL M	3105	L & T CR	Medium	54	Ft	0.3%	Preventive	AC Crack Sealing	54	LF	$ 280
CEW	AP N	4350	JT SEAL DMG	High	103	Slabs	100.0%	Preventive	PCC Joint Seal	2,795	LF	$ 16,080
CEW	AP N	4350	CORNER SPALL	Medium	7	Slabs	6.7%	Preventive	PCC Partial-Depth Patching	18	SF	$ 4,270

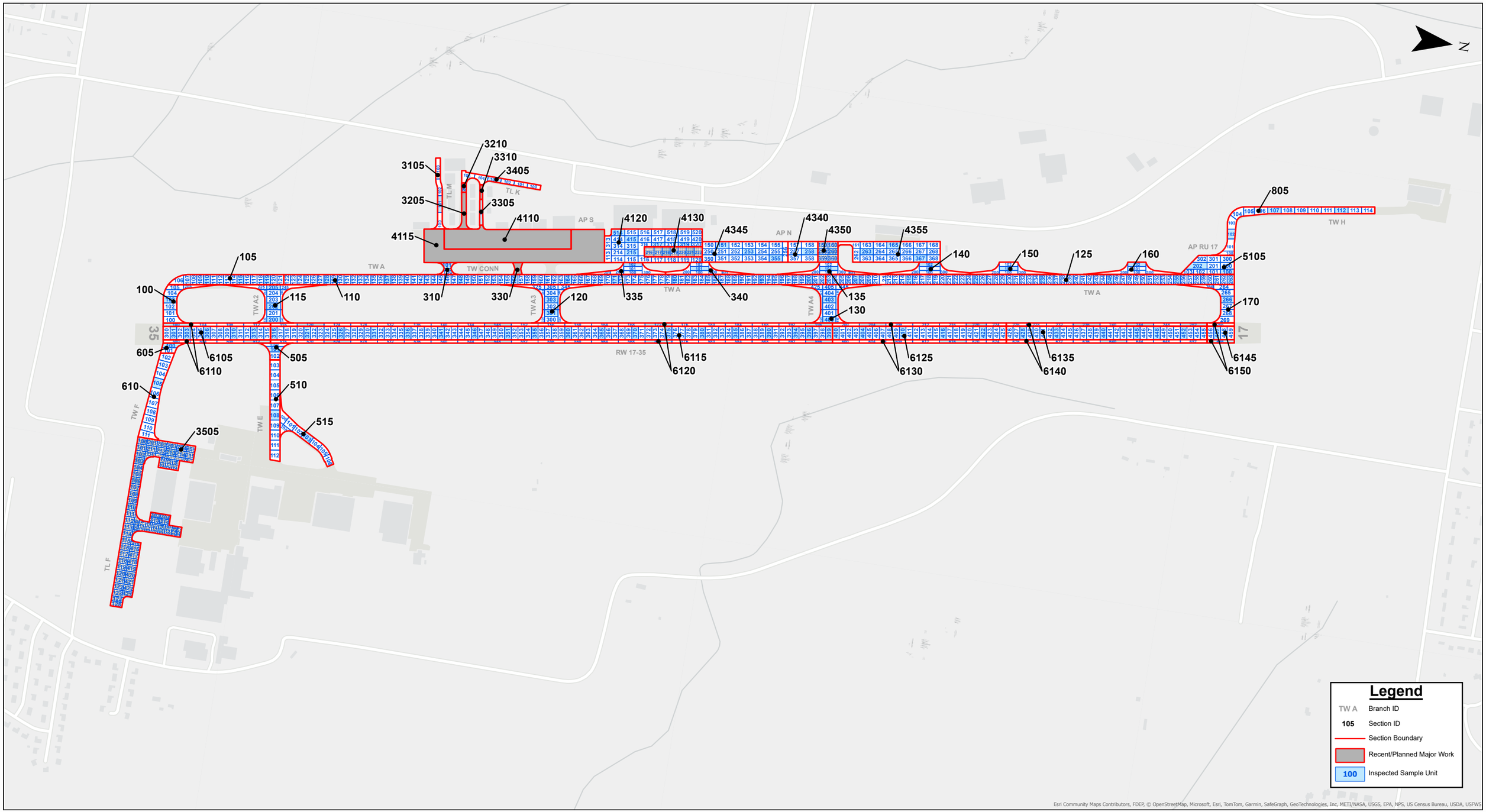
Major Rehabilitation Recommendations by Section

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate	Major Rehabilitation Design Alternatives					
									Mill & Overlay	PCC Overlay	AC Full-Depth Reconstruction	AC Full-Depth Reclamation (FDR)	PCC Rehabilitation	PCC Full-Depth Reconstruction
Year 1	CEW	RW 17-35	6105	AAC	80,200	58	AC Rehabilitation	$ 1,023,000	$ 1,023,000	$ 2,447,000	-	-	-	-
Year 1	CEW	RW 17-35	6115	AAC	420,000	61	AC Rehabilitation	$ 5,356,000	$ 5,356,000	$ 12,811,000	-	-	-	-
Year 1	CEW	RW 17-35	6120	AAC	210,000	67	AC Rehabilitation	$ 2,678,000	$ 2,678,000	$ 6,406,000	-	-	-	-
Year 1	CEW	RW 17-35	6125	AAC	130,000	58	AC Rehabilitation	$ 1,658,000	$ 1,658,000	$ 3,966,000	-	-	-	-
Year 1	CEW	RW 17-35	6130	AAC	65,000	63	AC Rehabilitation	$ 829,000	$ 829,000	$ 1,983,000	-	-	-	-
Year 1	CEW	RW 17-35	6135	AAC	150,000	46	AC Reconstruction	$ 3,638,000	-	-	$ 3,638,000	$ 2,926,000	-	-
Year 1	CEW	RW 17-35	6140	AAC	75,000	53	AC Reconstruction	$ 1,819,000	-	-	$ 1,819,000	$ 1,463,000	-	-
Year 1	CEW	RW 17-35	6145	AAC	20,400	66	AC Rehabilitation	$ 261,000	$ 261,000	$ 623,000	-	-	-	-
Year 1	CEW	TW A	105	AAC	61,696	65	AC Rehabilitation	$ 787,000	$ 787,000	$ 1,882,000	-	-	-	-
Year 1	CEW	TW A	110	AAC	303,843	67	AC Rehabilitation	$ 3,874,000	$ 3,874,000	$ 9,268,000	-	-	-	-
Year 1	CEW	TW A	140	AC	27,340	63	AC Rehabilitation	$ 349,000	$ 349,000	$ 834,000	-	-	-	-
Year 1	CEW	TW A	150	AC	25,816	64	AC Rehabilitation	$ 330,000	$ 330,000	$ 788,000	-	-	-	-
Year 1	CEW	TW A1	100	AAC	36,879	63	AC Rehabilitation	$ 471,000	$ 471,000	$ 1,125,000	-	-	-	-
Year 1	CEW	TW A2	115	AAC	54,612	66	AC Rehabilitation	$ 697,000	$ 697,000	$ 1,666,000	-	-	-	-
Year 1	CEW	TW A3	120	AAC	53,835	66	AC Rehabilitation	$ 687,000	$ 687,000	$ 1,642,000	-	-	-	-
Year 1	CEW	TW A4	130	AAC	53,397	60	AC Rehabilitation	$ 681,000	$ 681,000	$ 1,629,000	-	-	-	-
Year 1	CEW	TW A4	135	AC	25,883	65	AC Rehabilitation	$ 331,000	$ 331,000	$ 790,000	-	-	-	-
Year 1	CEW	TW A5	170	AAC	38,108	67	AC Rehabilitation	$ 486,000	$ 486,000	$ 1,163,000	-	-	-	-
Year 1	CEW	TW CONN	310	AAC	7,038	64	AC Rehabilitation	$ 90,000	$ 90,000	$ 215,000	-	-	-	-
Year 1	CEW	TW CONN	335	AAC	26,207	58	AC Rehabilitation	$ 335,000	$ 335,000	$ 800,000	-	-	-	-
Year 1	CEW	TW CONN	340	AAC	26,273	55	AC Rehabilitation	$ 335,000	$ 335,000	$ 802,000	-	-	-	-
Year 1	CEW	TW E	505	AAC	13,667	65	AC Rehabilitation	$ 175,000	$ 175,000	$ 417,000	-	-	-	-
Year 1	CEW	TW E	510	AAC	56,489	63	AC Rehabilitation	$ 721,000	$ 721,000	$ 1,723,000	-	-	-	-
Year 1	CEW	TW F	610	AC	59,934	67	AC Rehabilitation	$ 765,000	$ 765,000	$ 1,828,000	-	-	-	-
Year 1	CEW	TL J	3210	PCC	2,453	41	PCC Reconstruction	$ 133,000	-	-	-	-	-	$ 133,000
Year 1	CEW	TL K	3405	AC	25,450	64	AC Rehabilitation	$ 325,000	$ 325,000	$ 777,000	-	-	-	-
Year 1	CEW	TL M	3105	AC	19,711	69	AC Rehabilitation	$ 252,000	$ 252,000	$ 602,000	-	-	-	-
Year 1	CEW	AP N	4340	AAC	34,591	57	AC Rehabilitation	$ 442,000	$ 442,000	$ 1,056,000	-	-	-	-
Year 1	CEW	AP N	4345	AC	99,461	51	AC Reconstruction	$ 2,412,000	-	-	$ 2,412,000	$ 1,940,000	-	-
Year 1	CEW	AP N	4355	AC	104,552	60	AC Rehabilitation	$ 1,334,000	$ 1,334,000	$ 3,189,000	-	-	-	-
Year 1	CEW	AP RU 17	5105	AAC	47,790	59	AC Rehabilitation	$ 610,000	$ 610,000	$ 1,458,000	-	-	-	-
Year 1	CEW	AP S	4120	AAC	147,645	67	AC Rehabilitation	$ 1,883,000	$ 1,883,000	$ 4,504,000	-	-	-	-
Year 2	CEW	RW 17-35	6110	AAC	40,100	68	AC Rehabilitation	$ 532,000	$ 532,000	$ 1,272,000	-	-	-	-
Year 3	CEW	TW A	125	AAC	229,049	68	AC Rehabilitation	$ 3,159,000	$ 3,159,000	$ 7,557,000	-	-	-	-
Year 3	CEW	TL L	3305	AAC	4,434	68	AC Rehabilitation	$ 62,000	$ 62,000	$ 147,000	-	-	-	-
Year 3	CEW	AP N	4350	PCC	23,262	69	PCC Rehabilitation	$ 988,000	-	-	-	-	$ 988,000	-
Year 5	CEW	TW E	515	AAC	38,422	69	AC Rehabilitation	$ 574,000	$ 574,000	$ 1,371,000	-	-	-	-

APPENDIX C – TECHNICAL EXHIBITS

AIRFIELD PAVEMENT EVALUATION REPORT

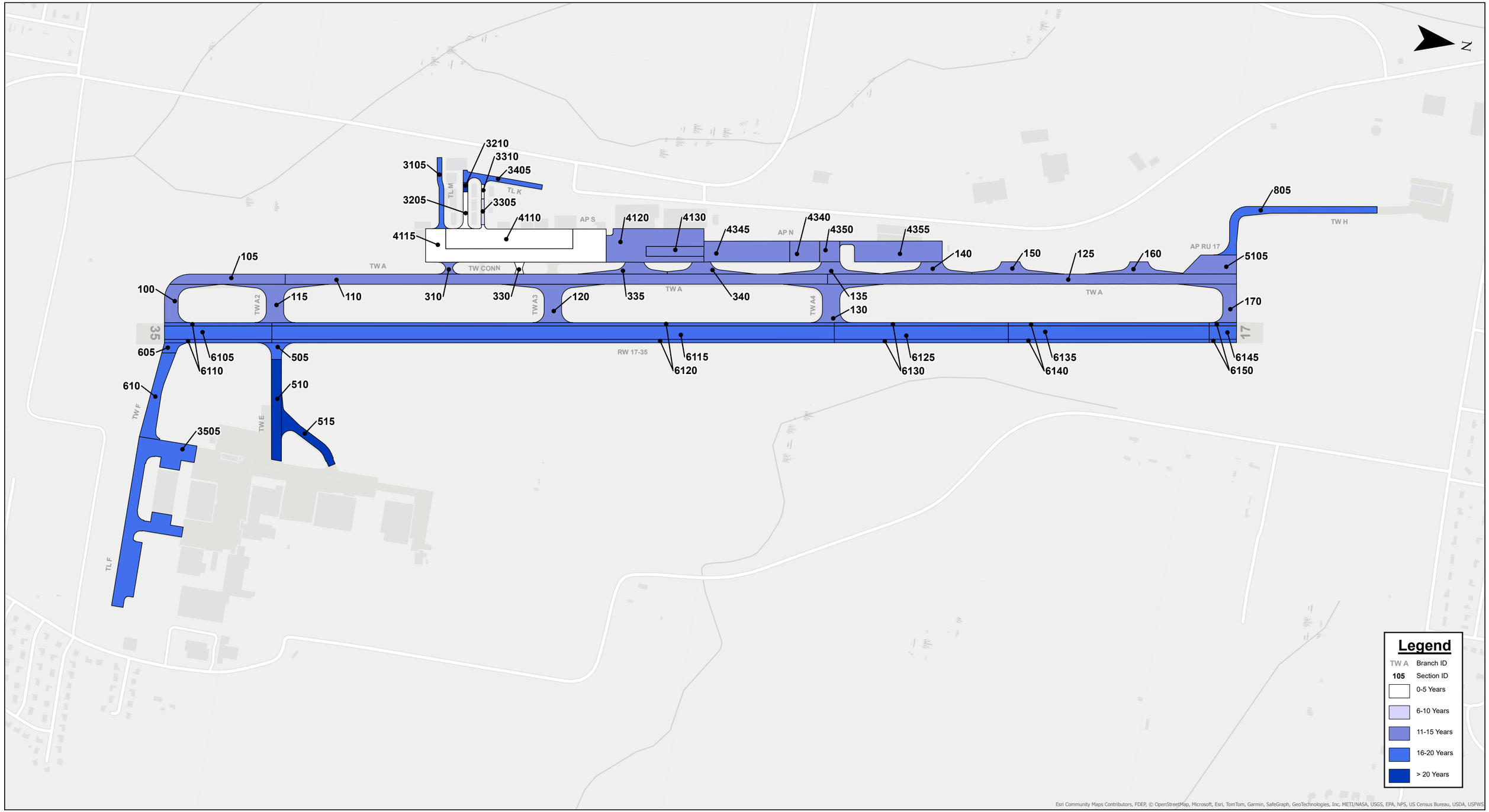
Network Definition



*This drawing is for pavement management purposes only. Drawing not to scale.

AIRFIELD PAVEMENT EVALUATION REPORT

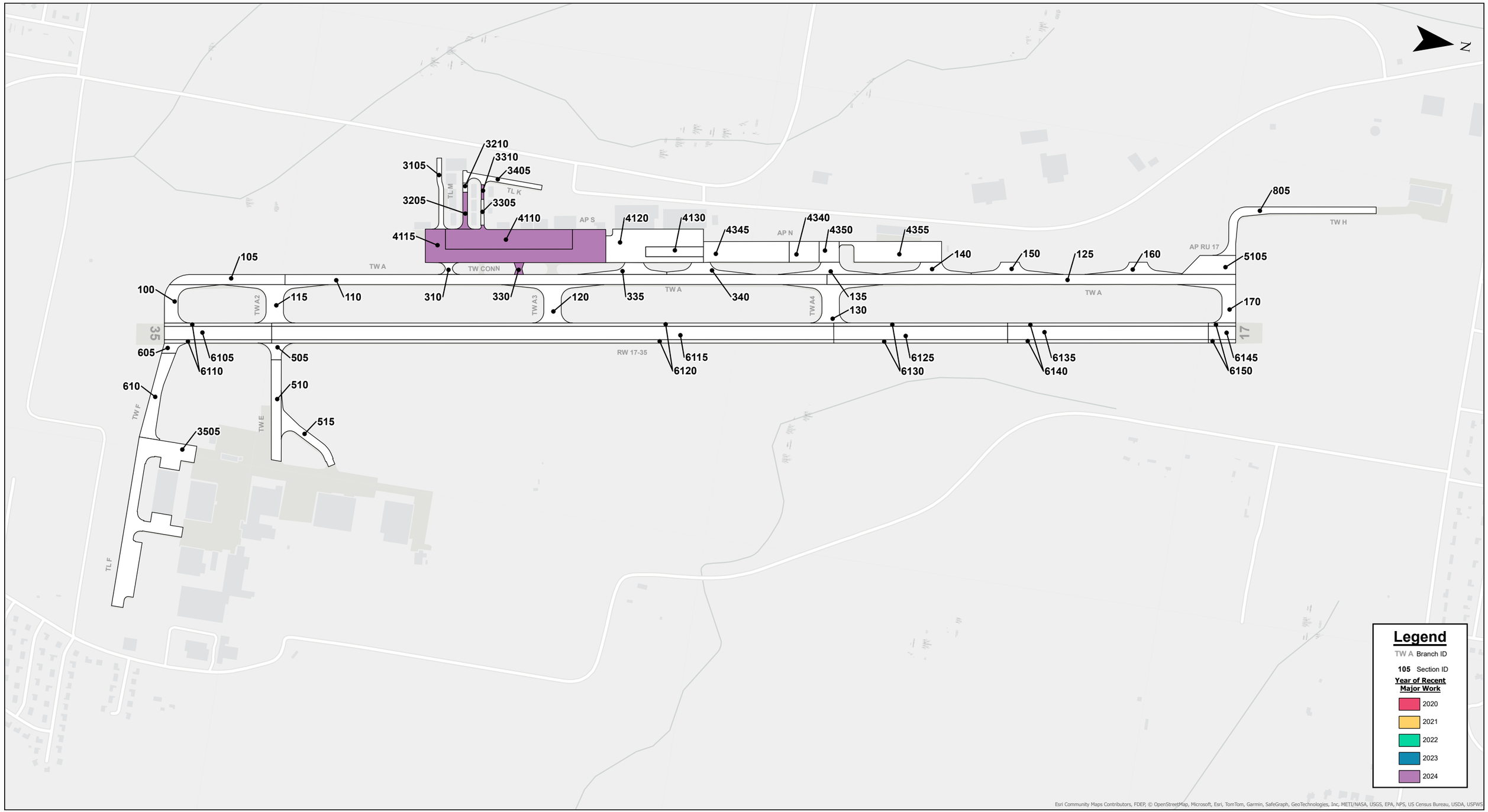
Estimated Age at Inspection



*This drawing is for pavement management purposes only. Drawing not to scale.

AIRFIELD PAVEMENT EVALUATION REPORT

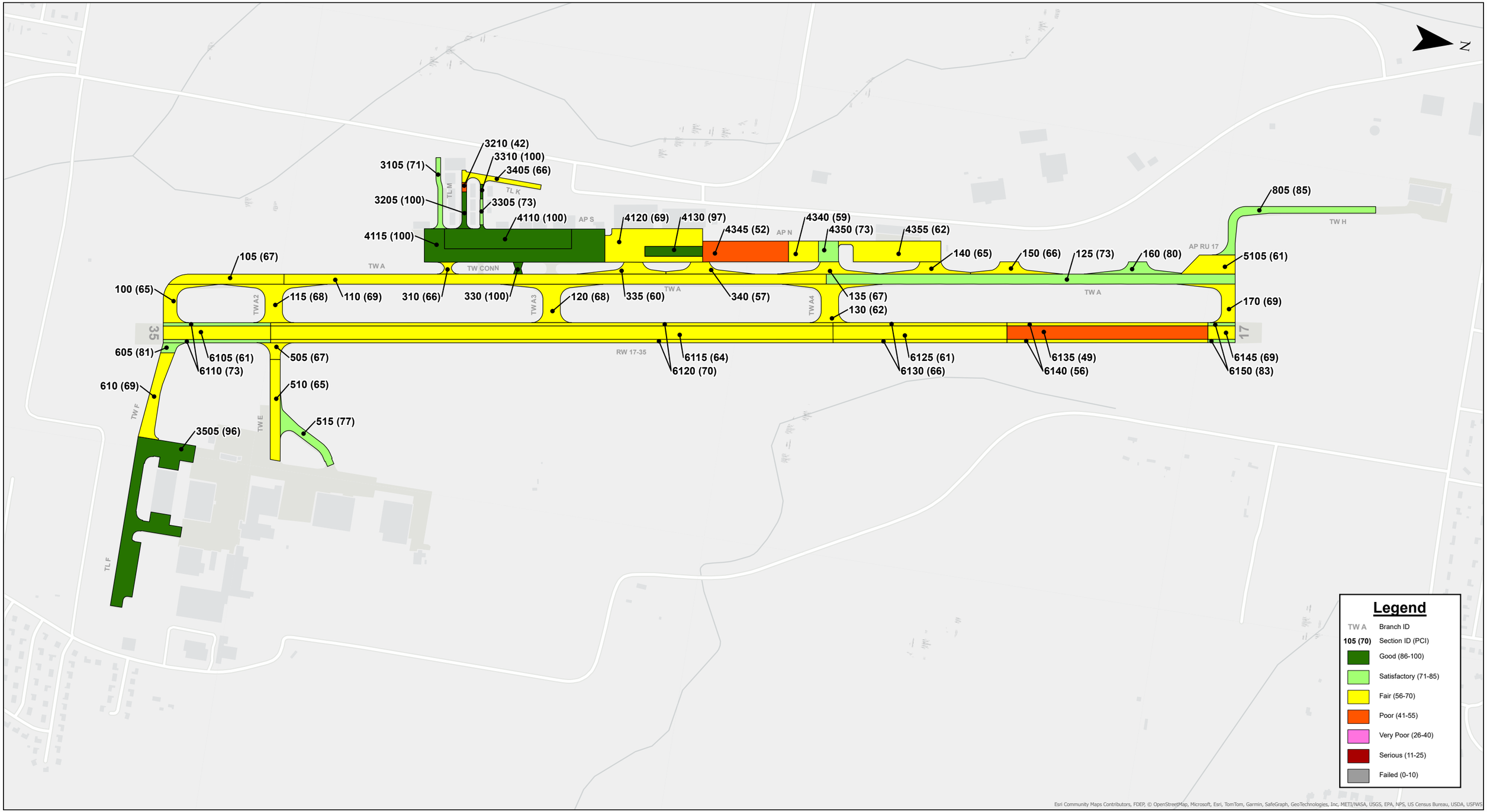
Construction History



*This drawing is for pavement management purposes only. Drawing not to scale.

AIRFIELD PAVEMENT EVALUATION REPORT

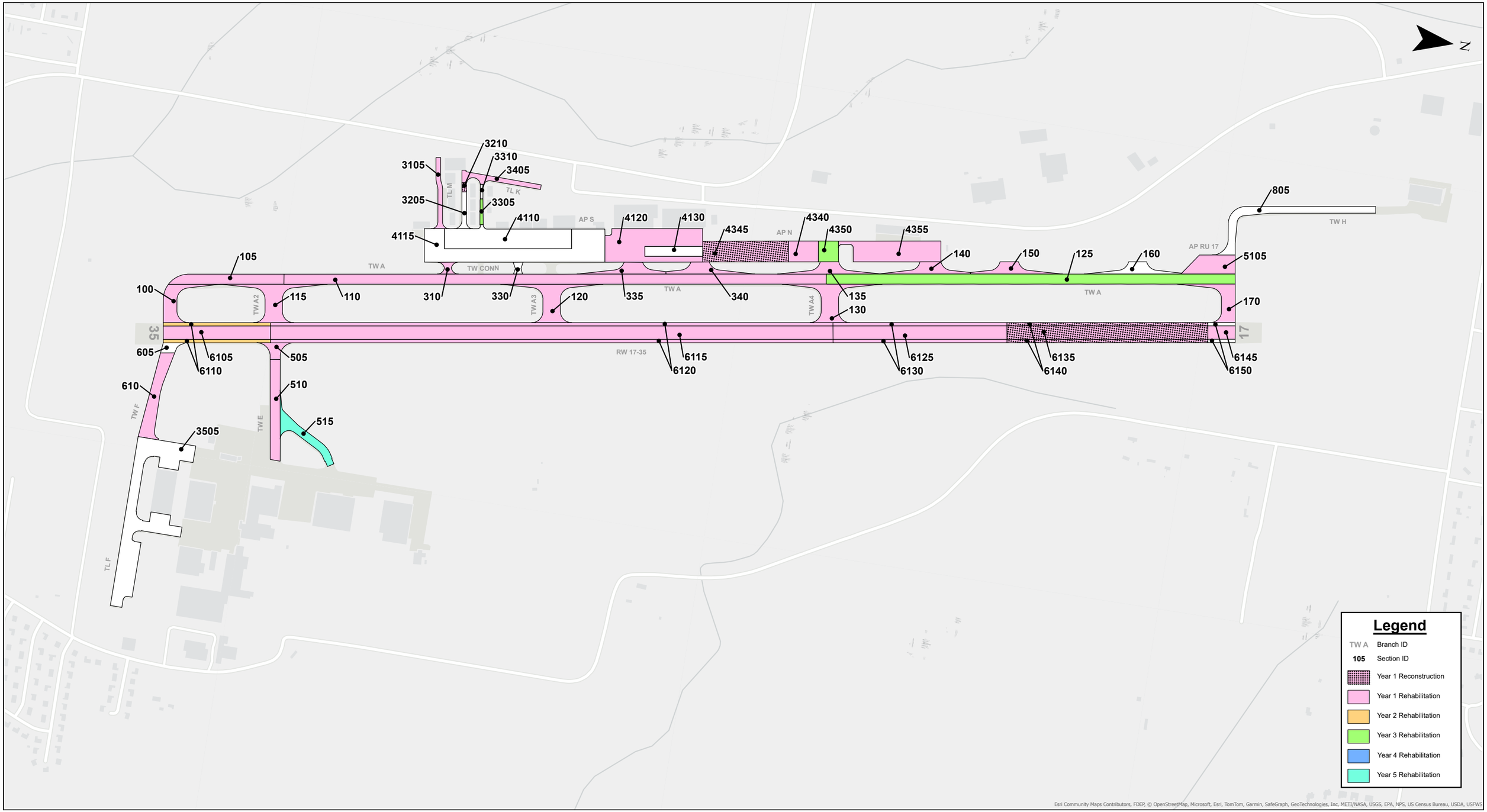
PCI Network Results



*This drawing is for pavement management purposes only. Drawing not to scale.

AIRFIELD PAVEMENT EVALUATION REPORT

5-Year Major Rehabilitation Needs



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CEW - Bob Sikes Airport | *District 3*

FDOT AVIATION