

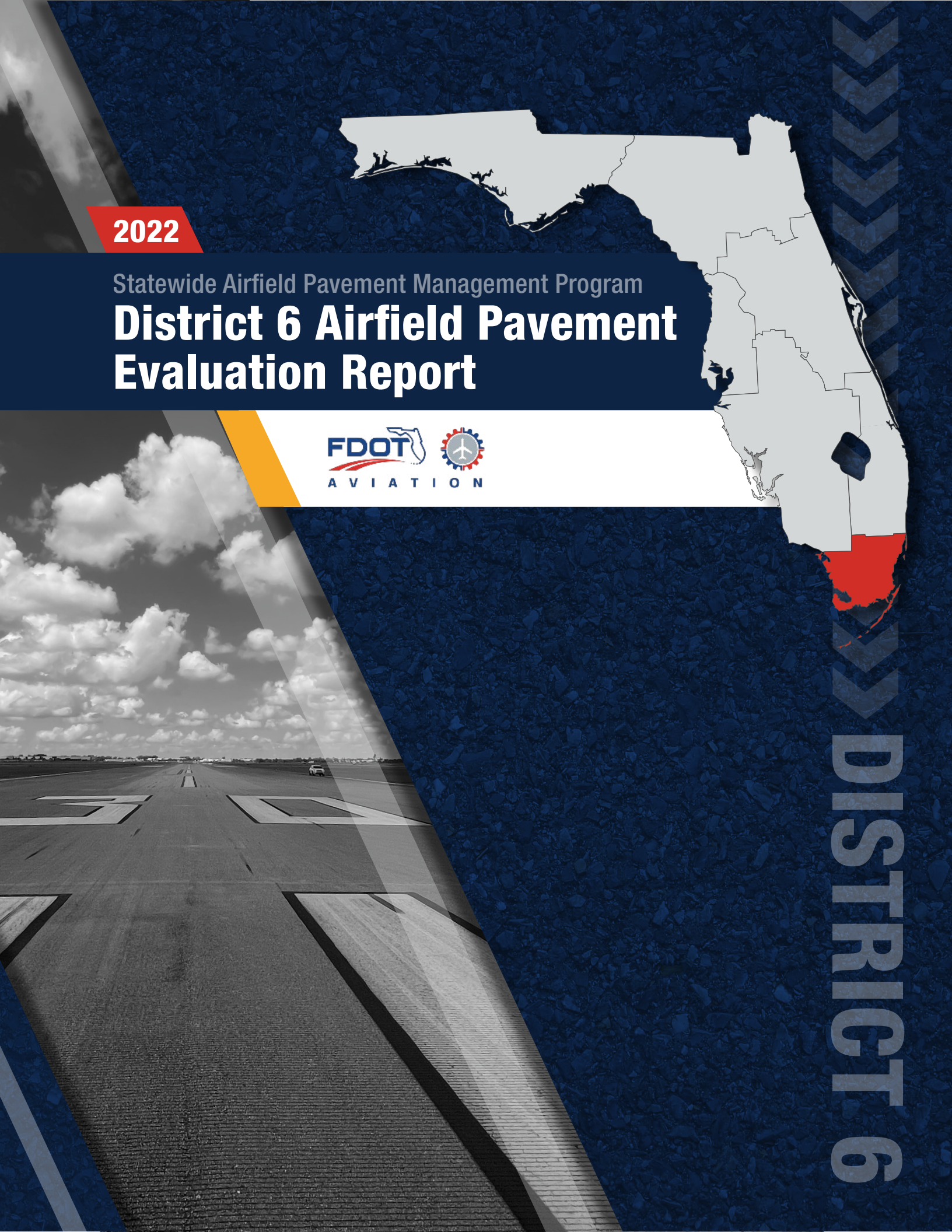
2022

Statewide Airfield Pavement Management Program

District 6 Airfield Pavement Evaluation Report



DISTRICT 6





PROGRAM OVERVIEW

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 95 participating public-use airports with pavement facilities and provides its users with comprehensive data to better manage their pavement assets.

Airports participating in the Airport Improvement Program (AIP) are required by the Federal Aviation Administration (FAA) to develop and implement a pavement maintenance program to be eligible for funding per FAA Advisory Circular 150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements” and 150/5380-7B “Airport Pavement Management Program (PMP)”. In general, adherence to the FAA Advisory Circulars is mandatory for projects funded with federal grant monies through the AIP and with revenue from the Passenger Facilities Charges (PFC) Program. The AIP requires detailed assessments of airfield pavements at least once a year for a pavement management program. The frequency of the detailed inspections may be extended to every three years if the pavement is assessed according to the PCI survey procedure described in ASTM D5340-20 “Standard Test Method for Airport Pavement Condition Index Surveys”. FDOT performs the SAPMP System Updates for the benefit of participating public-use and publicly owned airports through the FDOT’s Aviation Office.

The results of this program for the airports within District 6 are presented in this summary and can be utilized by the District to identify, prioritize, and schedule pavement maintenance, repair, reconstruction, and major rehabilitation projects. This summary was created specifically for the use of the District Aviation Offices and differs from the FDOT SAPMP individual airport reports regarding the summarization of data presented.



Program Benefits

The SAPMP enables the FDOT Aviation Office and the FDOT Districts to monitor pavement conditions at Florida airports. The SAPMP provides objective condition information needed to make informed decisions regarding the significant capital investment that the public-use airport pavement infrastructure represents. Utilizing the SAPMP will help stakeholders better understand the relative condition of their pavement facilities and when those facilities should be rehabilitated. The data collected from the SAPMP can be used for project planning for the next 10 years and will be revisited every three years as pavement conditions are updated.

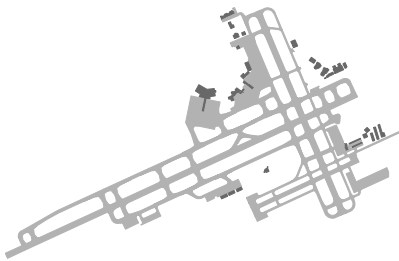
From a pavement management perspective, one of the most valuable aspects of the SAPMP is the ability to determine the optimum time for treatment resulting in cost savings by effectively prioritizing the rehabilitation of pavement assets that have, or will soon reach, a critical condition or PCI. The SAPMP supports a proactive major rehabilitation strategy that can effectively address pavement projects before the cost of these projects begin to exponentially increase.

The SAPMP addresses the requirements of maintaining an effective pavement management program for participating airports. Management of pavement assets provides insight for short- and long-term budget needs, understanding of the overall pavement condition (current and future), and knowledge of the pavement facilities that are under consideration for projects. A pavement evaluation can support the identification of maintenance, repair, and major rehabilitation needs and budgetary planning-level opinions of probable construction costs.

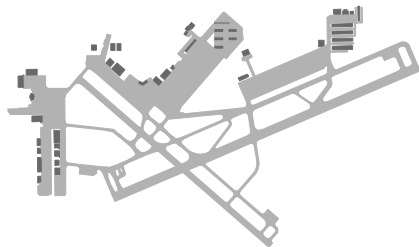
PAVEMENT INVENTORY OVERVIEW

Airport Category

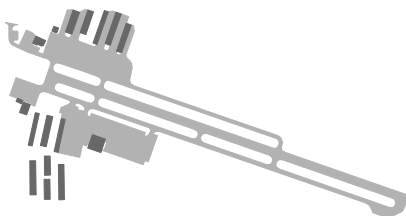
The airports within the FDOT SAPMP are classified into three categories as identified by the NPIAS: Primary/Commercial (PR), Reliever (RL), and General Aviation (GA). The summaries found within the remainder of this document are identified and summarized by these three categories, which are defined below.



Primary/Commercial: Primary and/or commercial service airports are publicly owned airports with scheduled air carrier service. Example, DAB – Daytona Beach International Airport.



Reliever: A non-primary airport designated to relieve congestion at commercial service airports and to provide more general aviation access to the overall community. Example, ORL – Orlando Executive Airport.



General Aviation: A public-use airport that does not have scheduled service or has scheduled service with less than 2,500 passenger boardings per year. Example, COI – Merritt Island Airport.

Airport Pavement Network Definition Terminology

The following section defines the common terms used in the SAPMP System Update.

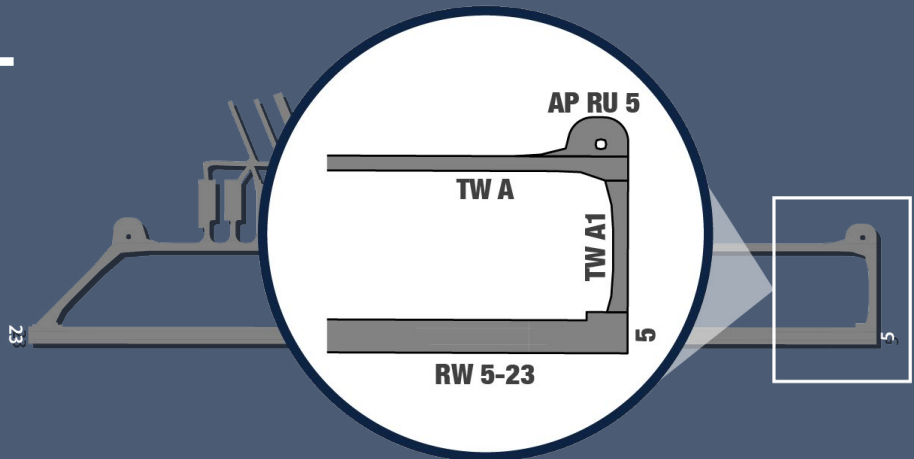
NETWORK LEVEL

An individual Airport's airfield pavement facilities maintained by the Airport.



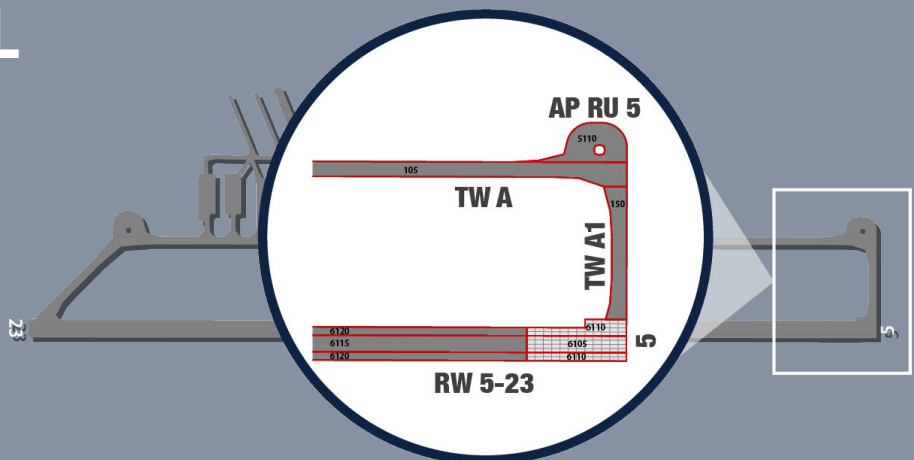
BRANCH LEVEL

A logical unit of generally identifiable pavement within a network that has a distinct functional classification.



SECTION LEVEL

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

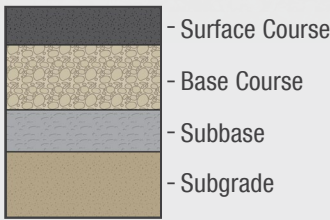


FDOT SAPMP Surface Types

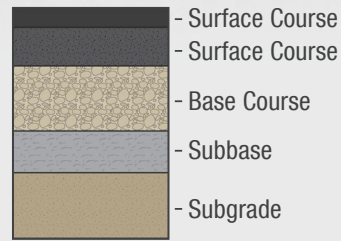
FDOT airfield pavements consist of two predominant pavement types: flexible (AC-surfaced) and rigid (PCC-surfaced), which are further broken down into four categories defined below. The pavement sections shown are intended to be conceptual representations and may vary from actual construction. It should 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.

FLEXIBLE PAVEMENT

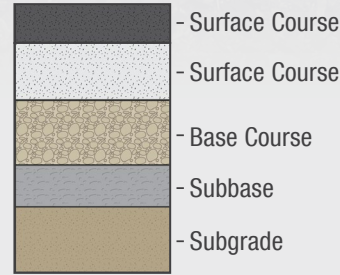
Asphalt Concrete (AC)



Asphalt overlaid on Asphalt Concrete (AAC)

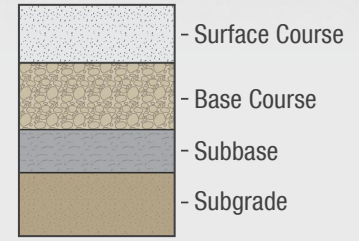


Asphalt overlaid on Cement Concrete (APC)



RIGID PAVEMENT

Portland Cement Concrete (PCC)



Pavement Age

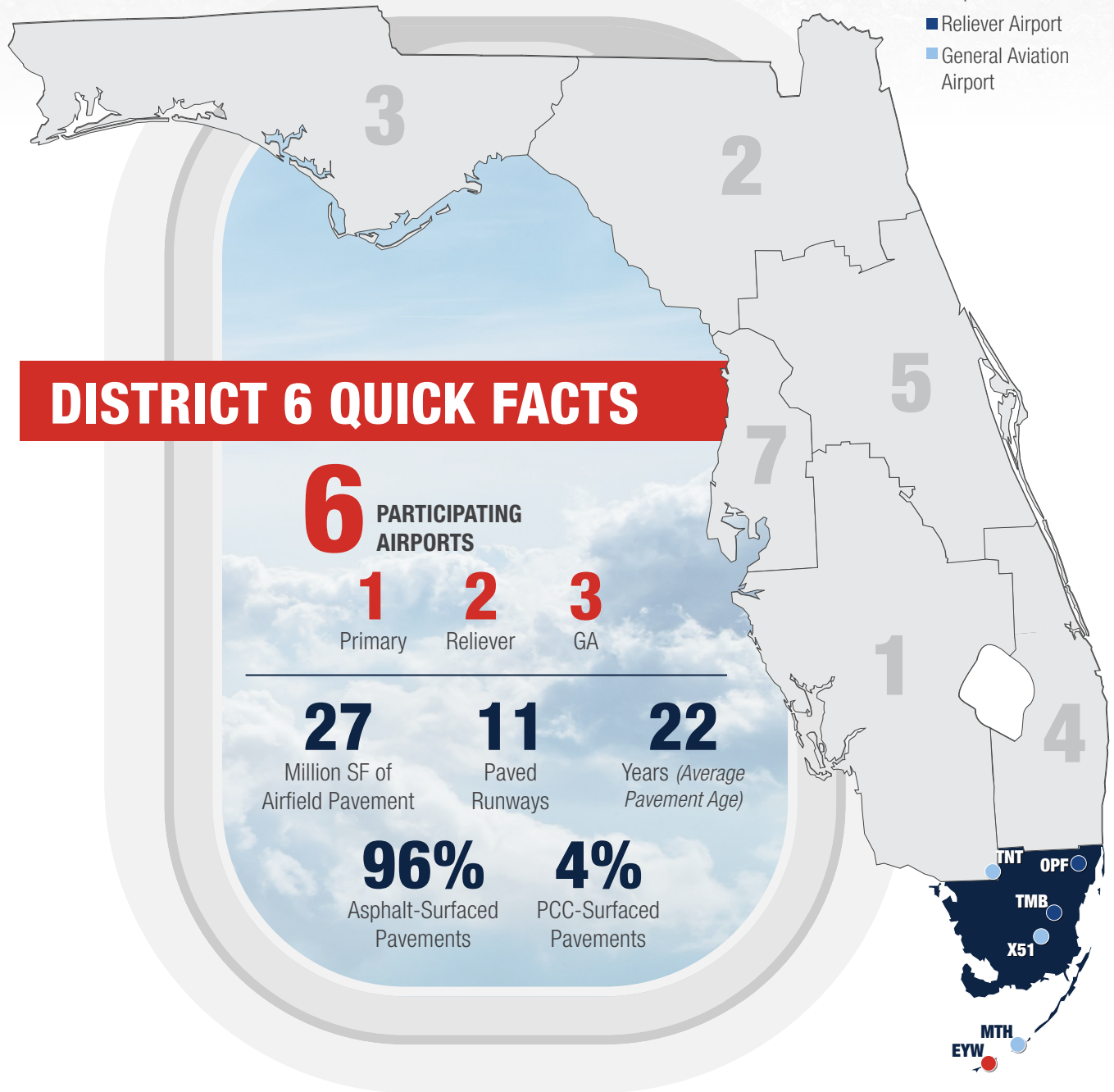
Pavement age is determined by the date of the last major work project performed. The estimation of pavement age is based on recent construction information requested from the airports at the start of the program. Major work such as reconstruction or rehabilitation resets a pavement's age to zero and 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 life of the pavement without performing major work.

Major work such as **reconstruction** or **rehabilitation** resets a pavement's age to **zero** and the **PCI** to **100**.

District 6 Inventory Summary

District 6 is responsible for 6 of the 95 participating Primary (PR), Reliever (RL), and General Aviation (GA) airports. As part of the FDOT SAPMP System Update, all these airports underwent a comprehensive pavement inventory update based on project record documentation provided by the airports at the start of this program. These updates included pavement facility limits, surface type, and section definitions resulting from provided project limits. It should be noted that although Miami International Airport (MIA) falls within District 6, the airport performs its own pavement evaluation separate from the FDOT SAPMP and its data is not summarized in this document.

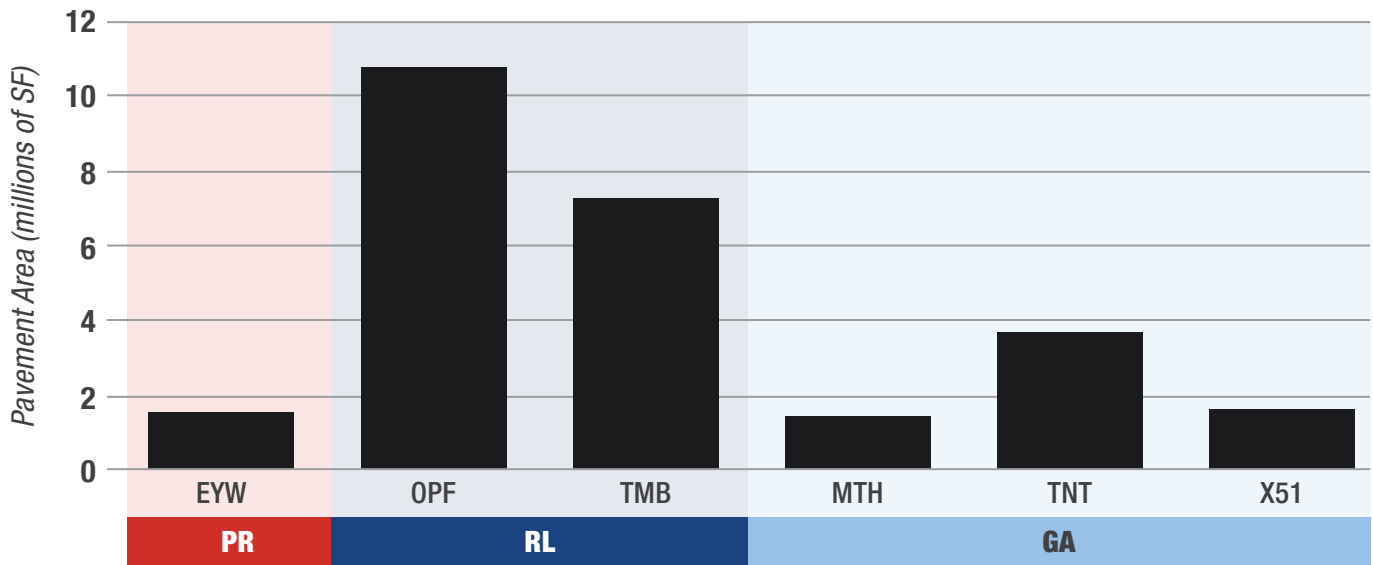
- Primary/Commercial Airport
- Reliever Airport
- General Aviation Airport



DISTRICT 6 AIRPORTS

Airport Identifier	Airport Name	SAPMP Phase	Airport Pavement Area (millions of SF)	Number of Runways
Primary/Commercial				
EYW	Key West International Airport	2	1.8	1
Reliever				
OPF	Miami-Opa Locka Executive Airport	2	10.8	3
TMB	Miami Executive Airport	2	7.3	3
General Aviation				
MTH	The Florida Keys Marathon International Airport	2	1.7	1
TNT	Dade-Collier Training and Transition Airport	1	3.8	1
X51	Miami Homestead General Aviation Airport	1	1.7	2

DISTRICT 6 PAVEMENT AREA BY AIRPORT



Airports by Airport Category

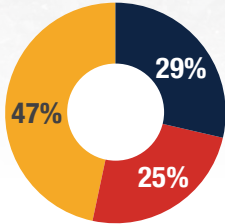
District 6 Inventory Summary by Airport Category

PRIMARY AIRPORT INVENTORY

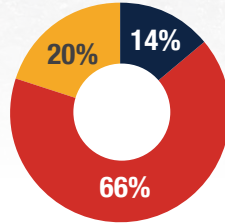
*EYW

1 airports **1.8M** SF of airfield pavement **1** paved runways **7** years (avg pavement age)

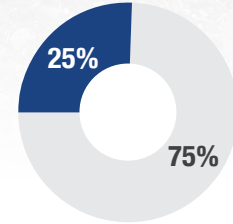
BRANCH USE



SURFACE TYPE



AGE

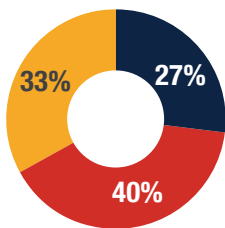


RELIEVER AIRPORT INVENTORY

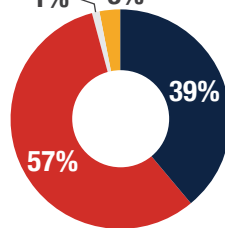
*OPF, TMB

2 airports **18.1M** SF of airfield pavement **6** paved runways **21** years (avg pavement age)

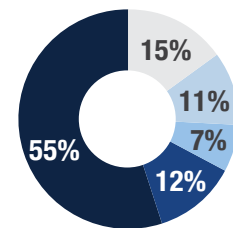
BRANCH USE



SURFACE TYPE



AGE

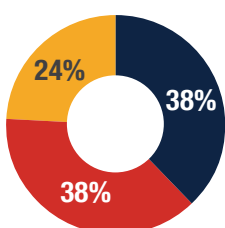


GENERAL AVIATION INVENTORY

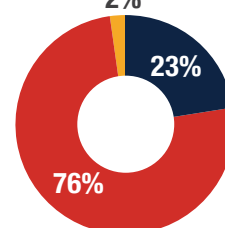
*MTH, TNT, X51

3 airports **7.1M** SF of airfield pavement **4** paved runways **28** years (avg pavement age)

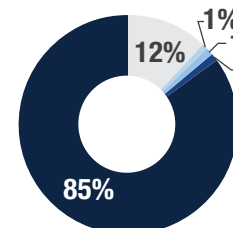
BRANCH USE



SURFACE TYPE



AGE



■ Runway ■ Taxiway/Taxilane ■ Apron

■ AC ■ AAC ■ APC ■ PCC

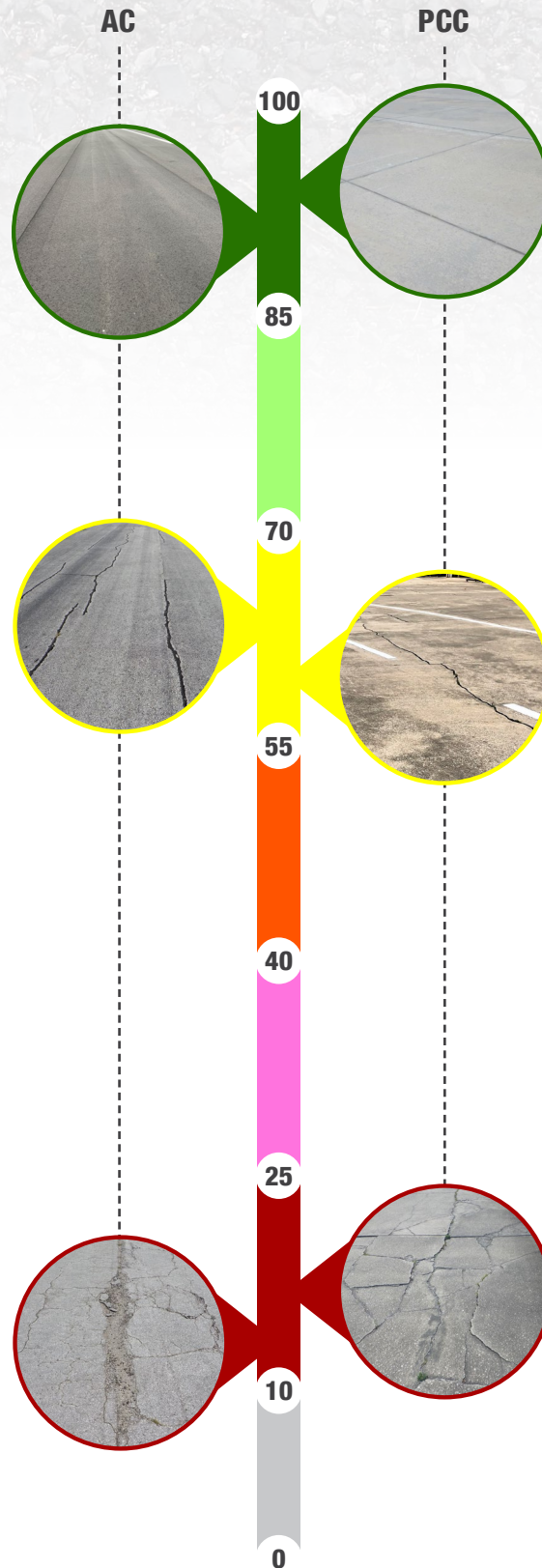
□ 0-5 years □ 6-10 years □ 11-15 years
■ 16-20 years ■ Over 20 years

PAVEMENT CONDITION INDEX (PCI)

In adherence to the FAA Advisory Circular 150/5380-7B “Airport Pavement Management Program” and ASTM D5340- 20 “Standard Test Method for Airport Pavement Condition Index Surveys,” the pavements were evaluated using the PCI Survey Method of inspection.

The PCI procedure is a visual statistical sampling of pavements for recording primary distress types (e.g. cracking and deformation), associated severities, and quantities as defined by ASTM D5340-20, and is the primary method of observing and recording distress data. It provides a consistent, objective, and repeatable method to evaluate the pavement condition.

The collected distress data is used to calculate an index that represents the functional pavement condition in numerical terms ranging from 0 (Failed pavement) to 100 (Good or new pavement). The adjacent figure provides a visual representation of the scale.



Good/New Pavement

Pavements classified as Good require either no treatment or would typically benefit from the application of preventive maintenance activities such as crack seals, joint seals, and surface treatment.

Fair Pavement

Pavements with a Fair condition rating typically require rehabilitation such as an overlay with or without milling for AC or select crack seal with significant patching for PCC.

Poor/Failed Pavement

Pavements that are Poor or Failed require significant and costly interventions such as reconstruction to restore the pavement to operational service.

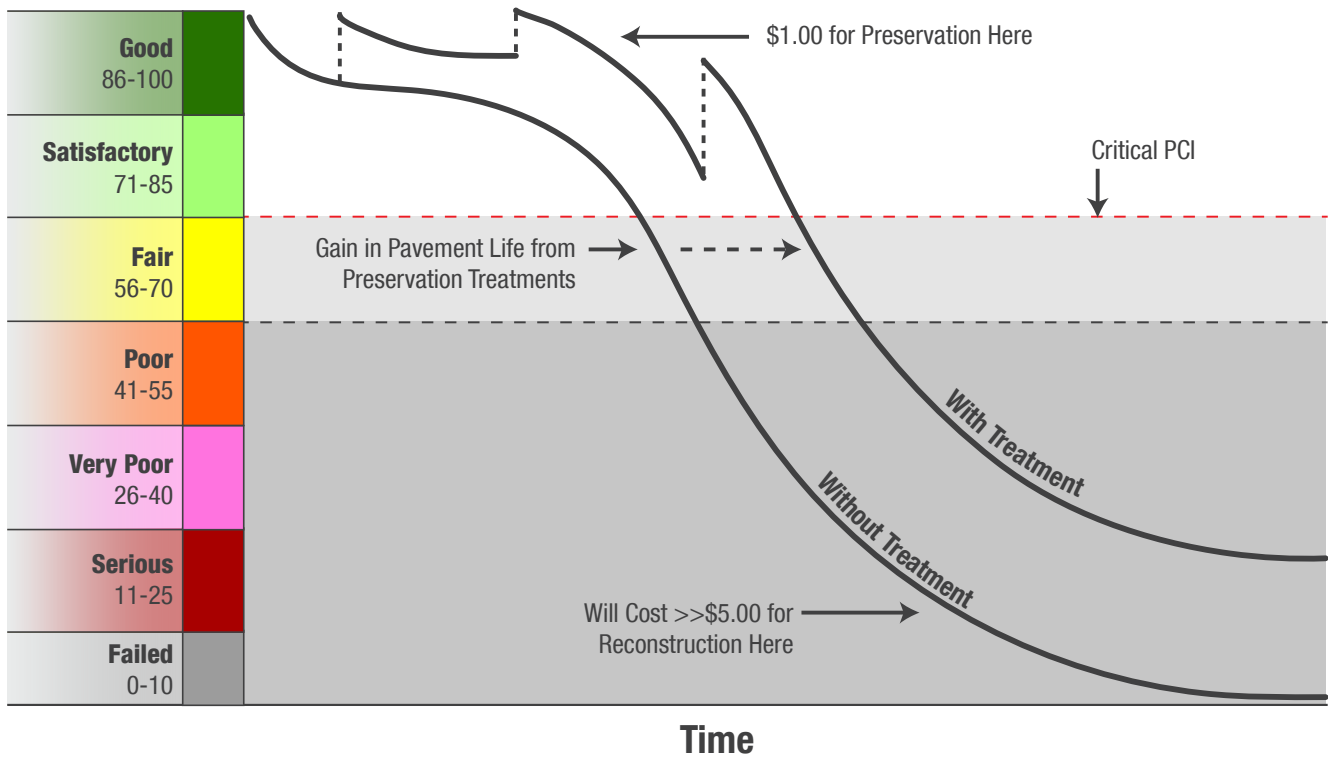
Critical PCI

Based on FAA Order 5100.38D Change 1 Airport Improvement Handbook, issued February 26, 2019, the FAA has established pavement construction based on thresholds that distinguish Rehabilitation and Reconstruction. Pavement sections between PCI values 55 and 70 will be considered for Rehabilitation and sections with PCI values less than 55 will be considered for Reconstruction at the planning-level. Accordingly, the **Critical PCI is defined at 70 for the FDOT SAPMP**. It should be noted that although a pavement reaches the threshold for rehabilitation, the pavement can still benefit from routine maintenance if no load-related distresses are present.

!!!
Critical PCI is defined at 70 for the FDOT SAPMP

An effective pavement maintenance management program is intended to identify and estimate future maintenance, repair, rehabilitation, and reconstruction needs. When timely preservation maintenance is performed on pavements with conditions above the “critical condition”, or prior to major decline in condition, significant rehabilitation and/or reconstruction may be delayed. The figure below depicts the concept of timely pavement treatments as described by the FAA AC 150/5380-7B.

TYPICAL PAVEMENT CONDITION LIFE CYCLE



FAA Eligibility Thresholds: **>70:** Routine Maintenance **55-70:** Rehabilitation Eligible **<55:** Reconstruction Eligible

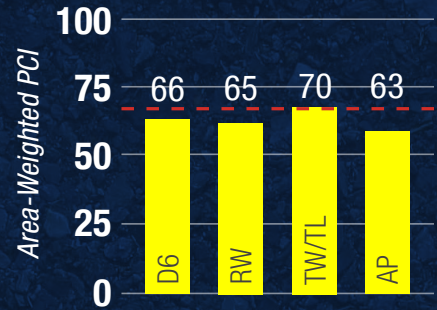
*Figure is for conceptual purposes only – unit costs are not specific to airfield pavements.

District 6 PCI Results

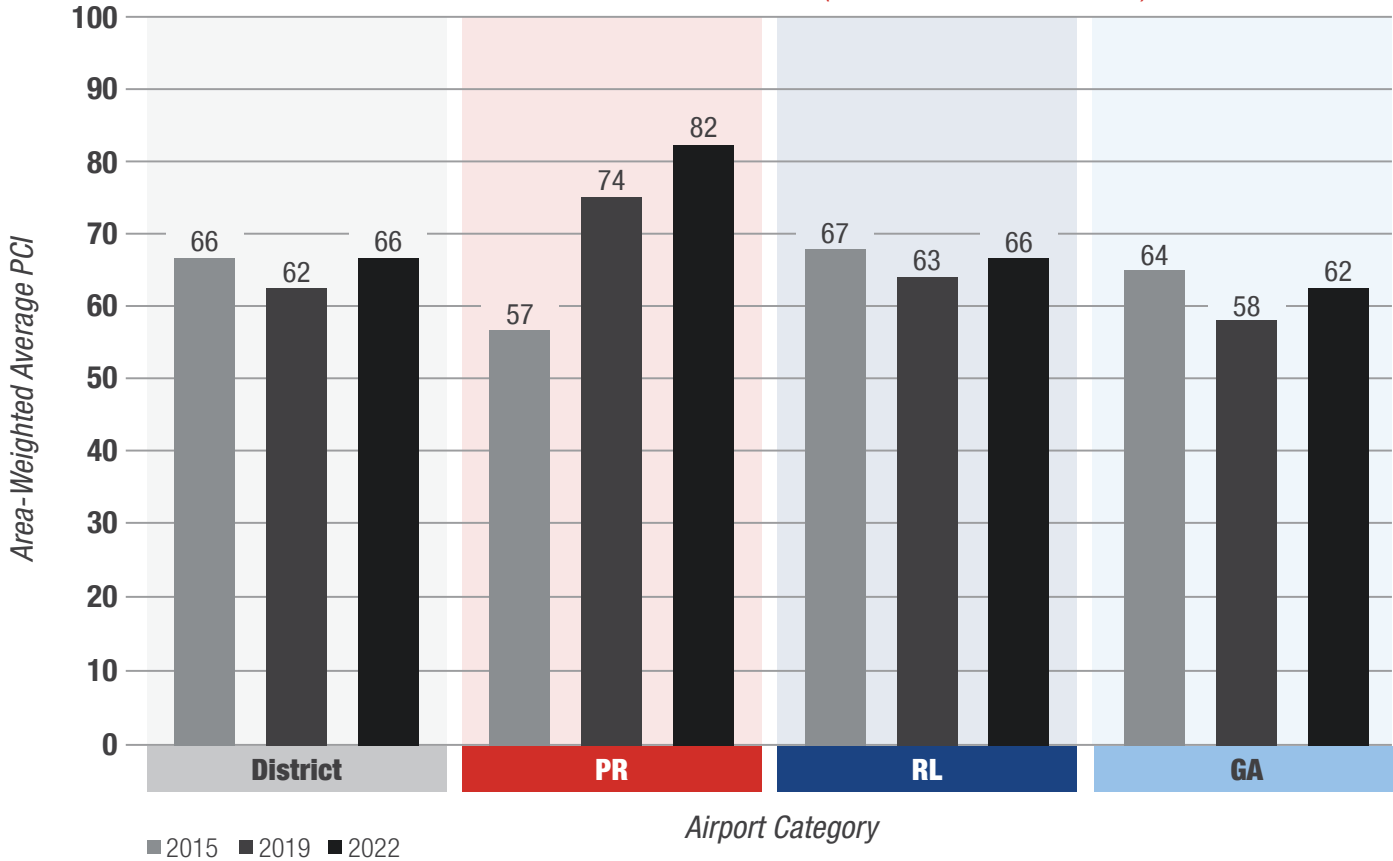
This section is an overall summary of the current and 5-year forecasted pavement conditions within District 6. A summary of each individual Airport's PCI findings can be found in the back of this report.



Current PCI: **66**
5-Year PCI: **58**



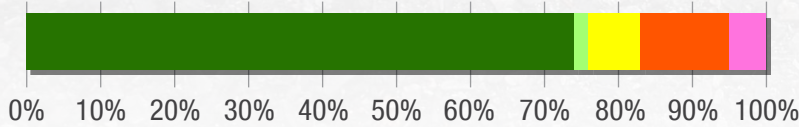
DISTRICT CONDITIONS BY CATEGORY (SINCE 2015 PROGRAM)



District 6 PCI Summary by Airport Category

PRIMARY AIRPORT CONDITIONS *EYW

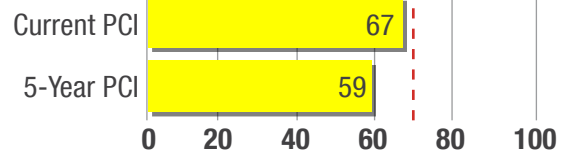
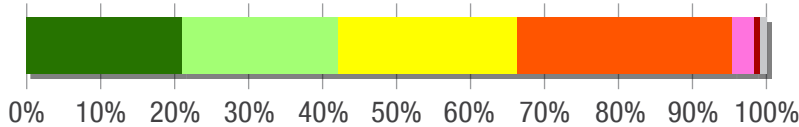
Area-Weighted PCI Summary



PCI Year	Runways	Taxiways/Taxilanes	Aprons
Current PCI	86	96	73
5-Year PCI	77	83	65

RELIEVER AIRPORT CONDITIONS *OPF, TMB

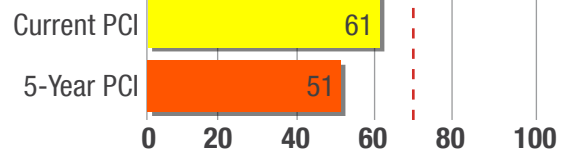
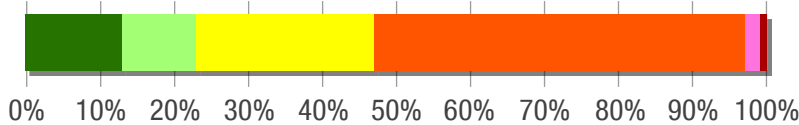
Area-Weighted PCI Summary



PCI Year	Runways	Taxiways/Taxilanes	Aprons
Current PCI	68	71	60
5-Year PCI	60	64	52

GENERAL AVIATION AIRPORT CONDITIONS *MTH, TNT, X51

Area-Weighted PCI Summary



PCI Year	Runways	Taxiways/Taxilanes	Aprons
Current PCI	56	62	69
5-Year PCI	44	52	62

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

6 District

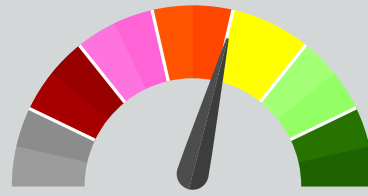
11 Runways

1 Primary **6** Reliever **4** General Aviation



Current Runway Conditions:
PCI = 65

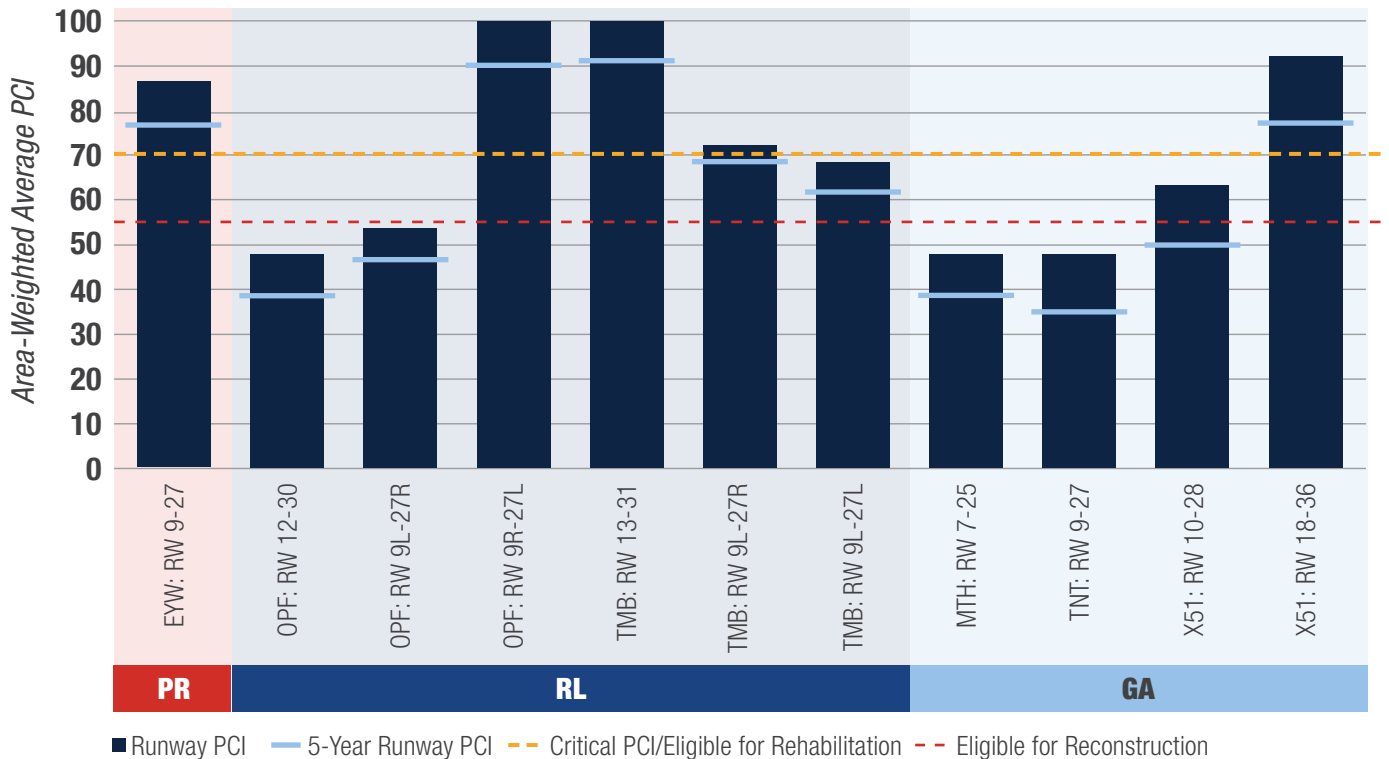
6 of **11**
are at or below
Critical PCI (**70**)



5-Year Runway Outlook:
PCI = 56

7 of **11**
will be at or below
Critical PCI (**70**)

CURRENT AND FORECASTED 5-YEAR RUNWAY PCI BY FACILITY





RUNWAY CONDITION SUMMARY

Category	Airport	Runway ID	Runway Length	Runway Width	Runway PCI	5 Year RW PCI
Primary						
PR	EYW	RW 9-27	5,076	100	86	77
Reliever						
RL	OPF	RW 12-30	6,800	150	49	39
RL	OPF	RW 9L-27R	8,002	150	54	46
RL	OPF	RW 9R-27L	4,309	100	100	90
RL	TMB	RW 13-31	4,001	150	100	91
RL	TMB	RW 9L-27R	5,003	150	72	68
RL	TMB	RW 9R-27L	6,000	150	69	62
General Aviation						
GA	MTH	RW 7-25	5,008	100	48	39
GA	TNT	RW 9-27	10,499	150	48	35
GA	X51	RW 10-28	3,000	75	63	50
GA	X51	RW 18-36	4,001	100	92	78

FAA Eligibility Thresholds: >70: Routine Maintenance 55-70: Rehabilitation Eligible <55: Reconstruction Eligible



SAPMP CUSTOMIZATION

FAA AIP Handbook PCI Requirements

The FDOT SAPMP will integrate the PCI thresholds for airfield pavement projects to maintain alignment with the FAA AIP and/or PFC eligibility for project planning. The critical PCI value will be defined at 70 for the FDOT SAPMP. Critical PCI values for this SAPMP System Update are shown below.

FAA AIP HANDBOOK PCI REQUIREMENTS FOR AIRFIELD PAVEMENT PROJECTS

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

FAA AIP Handbook Minimum Useful Life

Below is a table of typical localized maintenance and major work project types and their minimum useful life as identified in Table 3-7 of the FAA AIP Handbook. This minimum useful life criteria is used to help determine if a project is eligible for federal funding. The useful life of the facility being rehabilitated or reconstructed must have been met in order for the project to be funded.

FAA AIP HANDBOOK MINIMUM USEFUL LIFE

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





Planning-Level Localized Maintenance

Localized maintenance differs from major rehabilitation in that localized maintenance is applied based on the distresses observed and not an averaged or forecasted PCI value. Treatments are selected based on the appropriate corrective measure for a given distress type and severity level. Localized maintenance can be applied either as a preventive measure or a safety (“stopgap”) measure. The two 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. These activities typically include crack sealing and surface treatment.
- » Localized Stopgap/Safety Maintenance and Repair
 - Defined as the localized distress repair needed to keep a pavement in a safe and operational condition. These activities are typically applied to high-severity distresses or distresses impacting operations.

The work quantities used to develop costs are limited to a near-term application since they were determined directly from the PCI assessment efforts. 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 airport staff in determining an annual budget allocation for maintenance activities that will help maintain airport pavements above the critical PCI value and extend the life of the pavement.

Planning-Level Major Rehabilitation

Major rehabilitation is recommended to correct or improve structural deficiencies and/or functional deterioration. Often, when pavements are subject to significant changes in the aircraft fleet mix (frequency and type), major rehabilitation is required to provide a pavement section that can meet the structural demands of traffic loading. Major rehabilitation is generally described as a pavement construction that removes and replaces the pavement surface, thus resetting the PCI value to 100 and the pavement age to 0. Typical policies include full- and partial-depth reconstruction and mill and overlay.

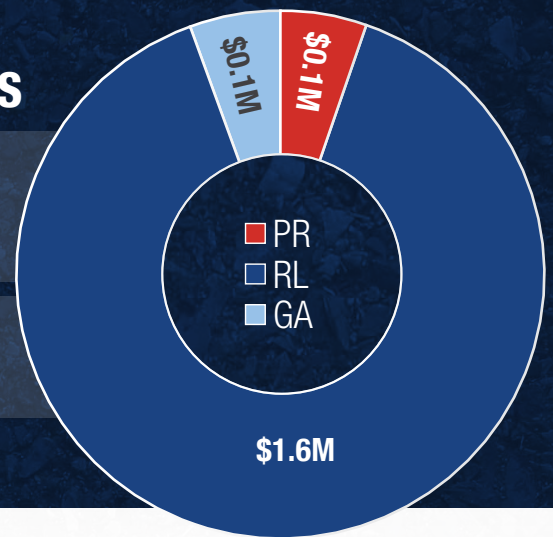
Major Rehabilitation needs are identified by analyzing the airport’s pavement condition in relationship to critical PCI values, major rehabilitation policies, and unit costs, assuming there are no budget constraints. While this is financially impractical, it does yield the unbiased pavement needs over a defined timeframe at each airport given current and forecasted pavement conditions. A review of cost trends and cost factors have been incorporated to assist airports in planning for project budgets.

Conceptual pavement sections were developed for this program based on the minimum requirements of the FAA AC 150/5320-6G and can be found in the Individual Airport Pavement Evaluation Report. No pavement design has been performed in accordance with AC 150/5320-6G for the determined conceptual sections.

DISTRICT 6 LOCALIZED MAINTENANCE NEEDS

\$1.0M + **\$0.8M**
 Preventive total Stopgap total

= \$1.8M In Total Localized Maintenance Needs



Localized Maintenance Needs

This FDOT SAPMP System Update provides a planning-level estimation of Localized Maintenance and Repair costs based on the results of the latest PCI assessment performed at the airports. The localized maintenance for Primary, Reliever, and General Aviation airports are shown below.

PLANNING-LEVEL LOCALIZED M&R NEEDS SUMMARY

Category	Network ID	Preventive Work Cost	Stopgap Work Cost	Total
PR	EYW	\$123,940	\$19,600	\$143,540
	PR Total	\$123,940	\$19,600	\$143,540
RL	OPF	\$316,140	\$694,580	\$1,010,720
	TMB	\$519,770	\$11,160	\$530,930
RL Total		\$835,910	\$705,740	\$1,541,650
GA	MTH	\$22,650	\$28,440	\$51,090
	TNT	\$19,890	\$17,830	\$37,720
	X51	\$12,390	\$0	\$12,390
GA Total		\$54,930	\$46,270	\$101,200
District 6 Total Localized Needs =		\$1,014,780	\$771,610	\$1,786,390

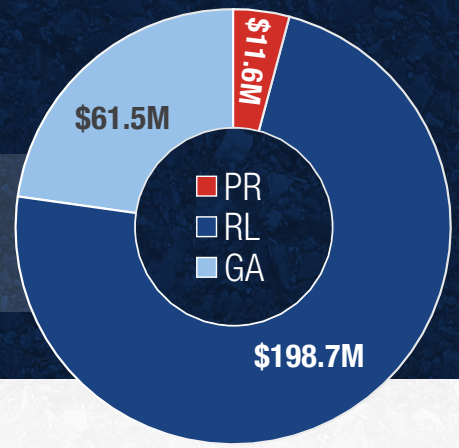
DISTRICT 6 MAJOR REHABILITATION NEEDS

\$80.8M + \$191.0M = \$271.8M

Total 5-Year RW
Major Needs

Total 5-Year TW
and AP Needs

In Total 5-Year Major
Rehabilitation Needs



Major Rehabilitation Needs

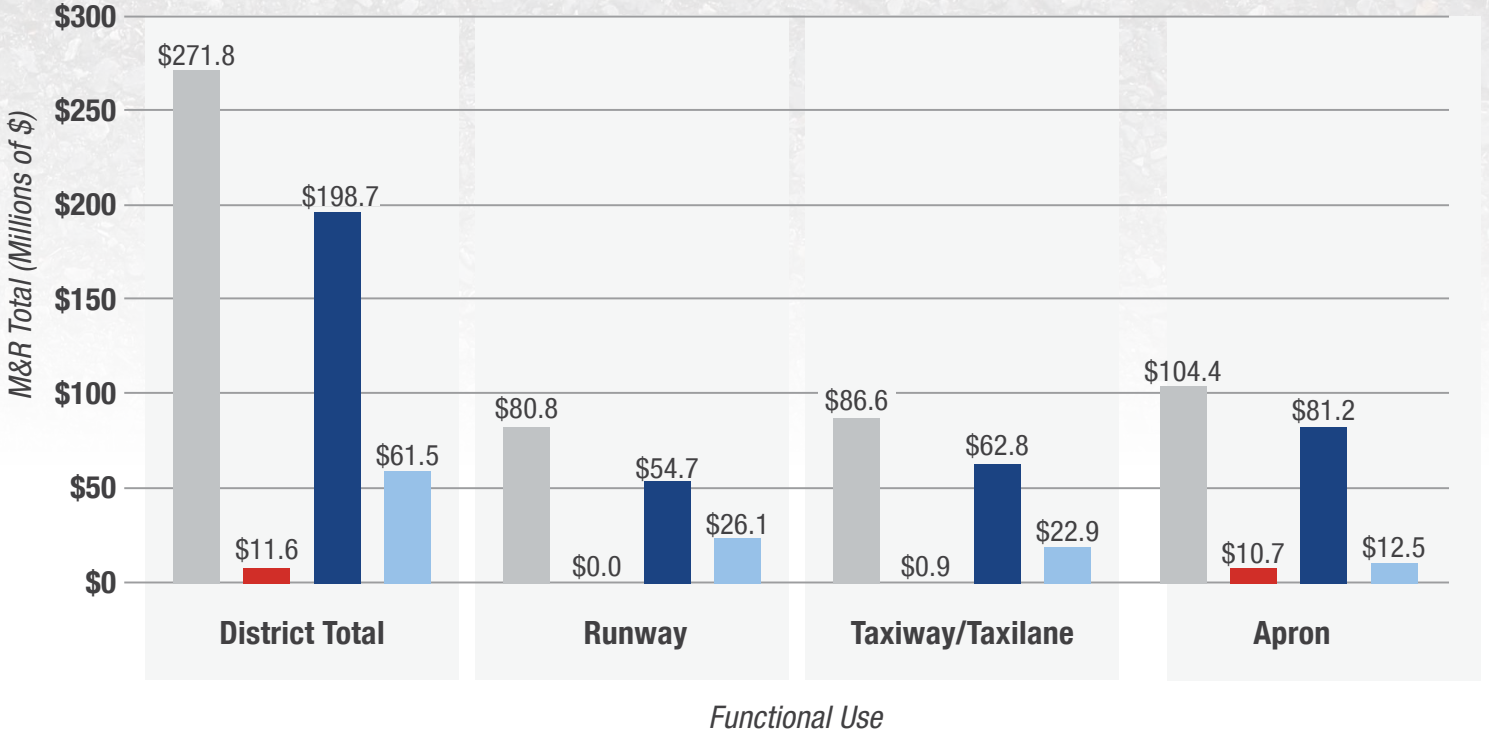
Due to the “unlimited” funding nature of the needs analysis, all present needs are addressed in the first planning year. The first planning year for each airport is the year following the airport’s most recent inspection year for this program. The table below summarizes the planning-level major rehabilitation needs forecasted for a 5-year period within District 6. A summary of each individual Airport’s needs at the section-level and the recommended work type can be found in the individual airport report.

M&R FUNDING NEEDS BY YEAR (IN MILLIONS)

Category	Network ID	Inspection Year	Year 1*	Year 2	Year 3	Year 4	Year 5	Planning Total
PR	EYW	2022	\$11.33	\$0.17	\$0.10	-	-	\$11.60
PR Planning Total			\$11.33	\$0.17	\$0.10	\$0.00	\$0.00	\$11.60
RL	OPF	2022	\$138.15	\$4.54	\$0.05	\$1.34	\$0.38	\$144.46
	TMB	2022	\$39.20	\$0.64	\$9.51	\$3.44	\$1.43	\$54.22
RL Planning Total			\$177.35	\$5.18	\$9.56	\$4.78	\$1.81	\$198.68
GA	MTH	2022	\$23.17	\$0.05	-	\$0.15	-	\$23.37
	TNT	2020	\$29.51	\$0.05	-	\$2.12	-	\$31.68
	X51	2020	\$6.34	\$0.08	-	-	\$0.04	\$6.46
GA Planning Total			\$59.02	\$0.18	\$0.00	\$2.27	\$0.04	\$61.51
District 6 Major Planning Needs =			\$247.70	\$5.53	\$9.66	\$7.05	\$1.85	\$271.79

*Year 1 equates to 2021 for airports inspected in 2020 and 2023 for airports inspected in 2022

M&R FUNDING NEEDS BY FUNCTIONAL USE

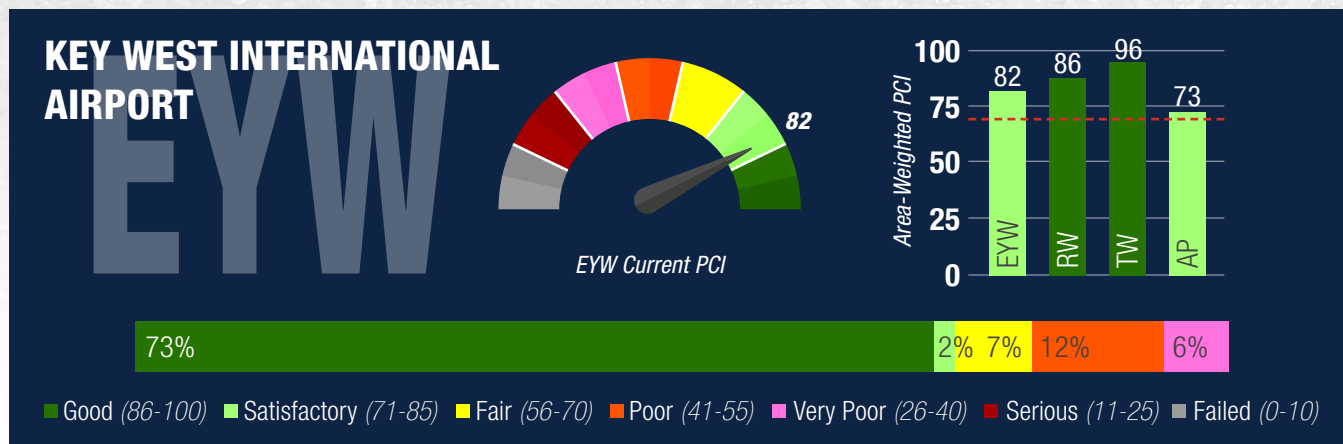


Airport Category ■ District 6 ■ Primary/Commercial ■ Reliever ■ General Aviation



INDIVIDUAL AIRPORT RESULTS SUMMARIES

PRIMARY/COMMERCIAL AIRPORTS



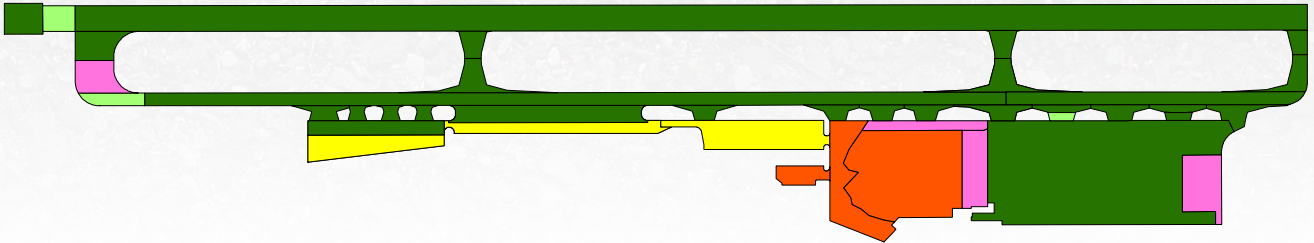
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$123,940)	Surface Seal	1,962	SF	\$1,490
	AC Full-Depth Patching	252	SF	\$4,730
	PCC Joint Seal	23,699	LF	\$100,730
	PCC Partial-Depth Patching	70	SF	\$11,820
	PCC Full-Depth Patching	69	SF	\$5,170
Localized Stopgap Maintenance (Total = \$19,600)	AC Full-Depth Patching	1,044	SF	\$19,600
Total Localized Maintenance Needs =				\$143,540

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

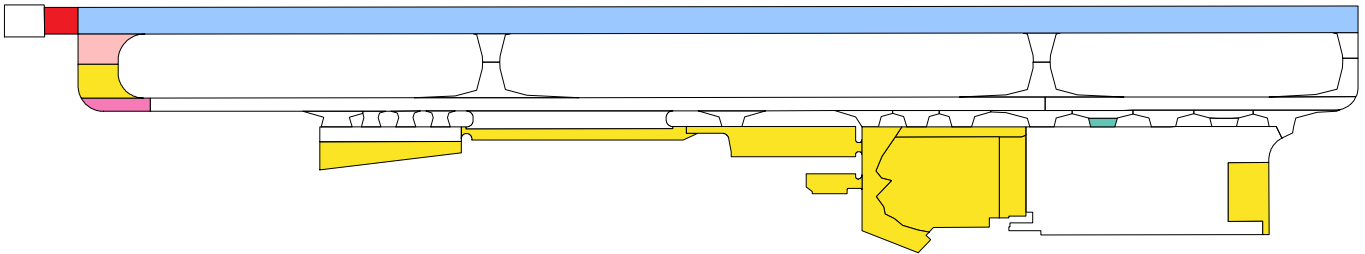
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2023	\$1.9	\$9.5	\$11.4
2024	\$0.2	-	\$0.2
2025	\$0.1	-	\$0.1
2030	\$0.2	-	\$0.2
2031	\$9.9	-	\$9.9
2032	\$0.40	-	\$0.40
Total Major Rehabilitation Needs =			\$21.8

PAVEMENT CONDITION INDEX EXHIBIT



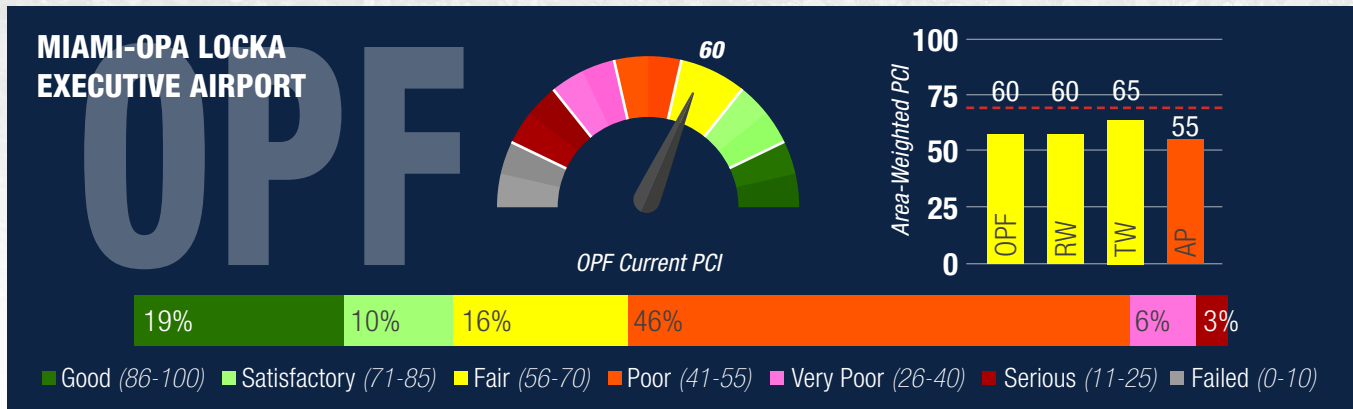
■ Good (86-100) ■ Satisfactory (71-85) ■ Fair (56-70) ■ Poor (41-55) ■ Very Poor (26-40) ■ Serious (11-25) ■ Failed (0-10)

MAJOR REHABILITATION EXHIBIT



■ 2021 ■ 2022 ■ 2023 ■ 2024 ■ 2025 ■ 2026 ■ 2027 ■ 2028 ■ 2029 ■ 2030 ■ 2031 ■ 2032

RELIEVER AIRPORTS



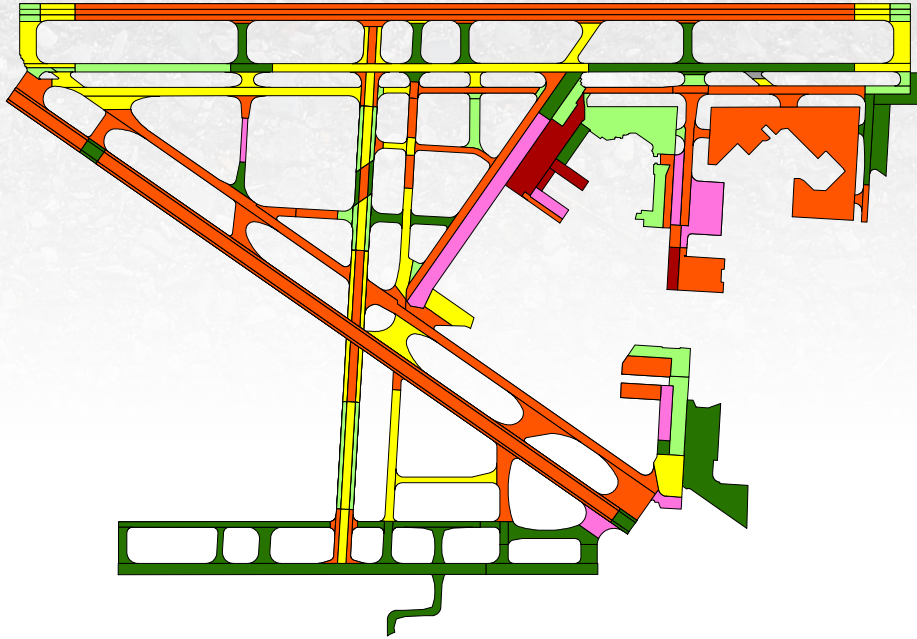
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$316,140)	AC Crack Sealing	262	LF	\$1,070
	Surface Seal	363,653	SF	\$272,920
	AC Full-Depth Patching	410	SF	\$4,730
	PCC Joint Seal	7,432	LF	\$31,600
	PCC Partial-Depth Patching	34	SF	\$5,820
Localized Stopgap Maintenance (Total = \$694,580)	AC Partial-Depth Patching	10	SF	\$50
	AC Full-Depth Patching	17,841	SF	\$205,220
	PCC Crack Sealing	3,241	LF	\$22,740
	PCC Joint Seal	38,694	LF	\$164,500
	PCC Partial-Depth Patching	1,111	SF	\$187,470
	PCC Full-Depth Patching	1,763	SF	\$114,600
Total Localized Maintenance Needs =				\$1,010,720

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

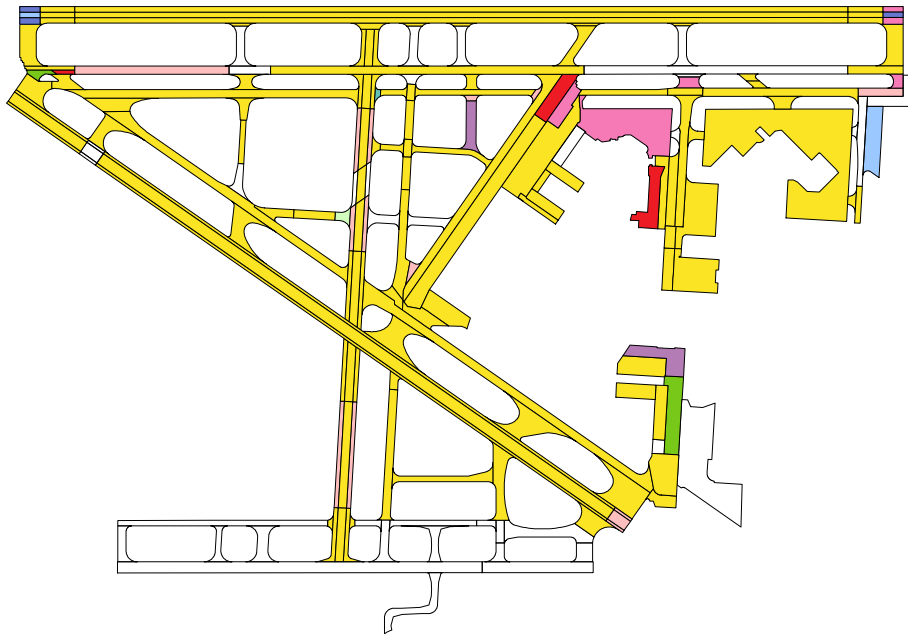
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2023	\$19.6	\$118.5	\$138.1
2024	\$4.5	-	\$4.5
2025	\$0.1	-	\$0.1
2026	\$1.3	-	\$1.3
2027	\$0.4	-	\$0.4
2028	\$0.2	-	\$0.2
2029	\$1.7	-	\$1.7
2030	\$2.1	-	\$2.1
2031	\$1.5	-	\$1.5
2032	\$5.4	-	\$5.4
Total Major Rehabilitation Needs =			\$155.3

PAVEMENT CONDITION INDEX EXHIBIT

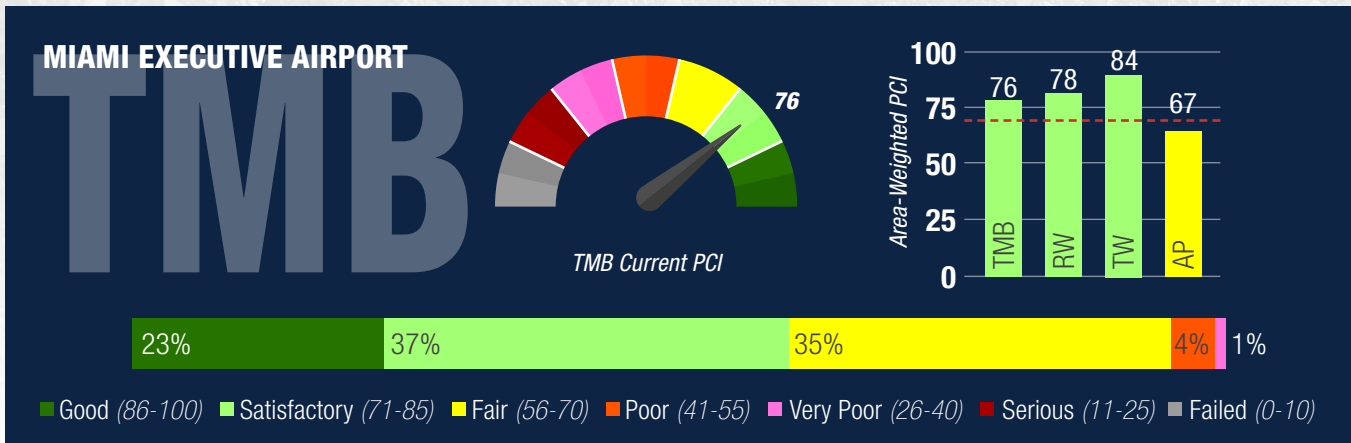


■ Good (86-100) ■ Satisfactory (71-85) ■ Fair (56-70) ■ Poor (41-55) ■ Very Poor (26-40) ■ Serious (11-25) ■ Failed (0-10)

MAJOR REHABILITATION EXHIBIT



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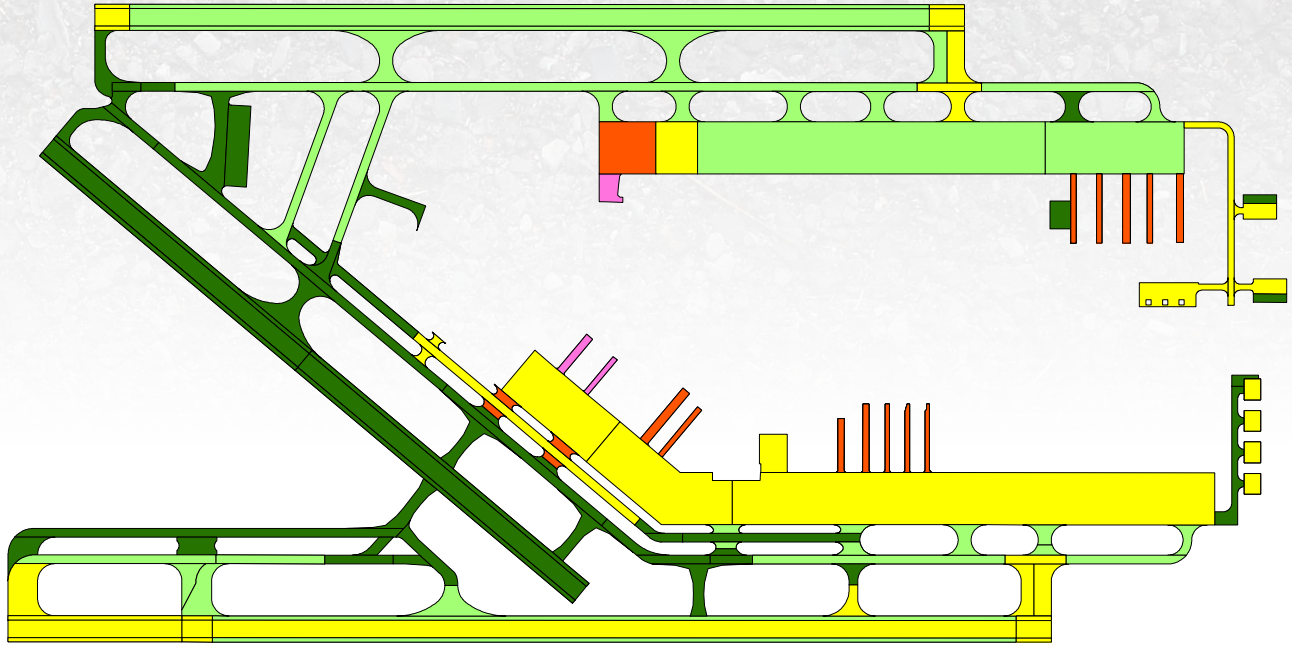
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$519,770)	AC Crack Sealing	1,800	LF	\$7,230
	Surface Seal	663,433	SF	\$497,770
	PCC Joint Seal	2,613	LF	\$11,110
	PCC Partial-Depth Patching	22	SF	\$3,660
Localized Stopgap Maintenance (Total = \$11,160)	AC Partial-Depth Patching	127	SF	\$620
	AC Full-Depth Patching	915	SF	\$10,540
Total Localized Maintenance Needs =				\$530,930

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

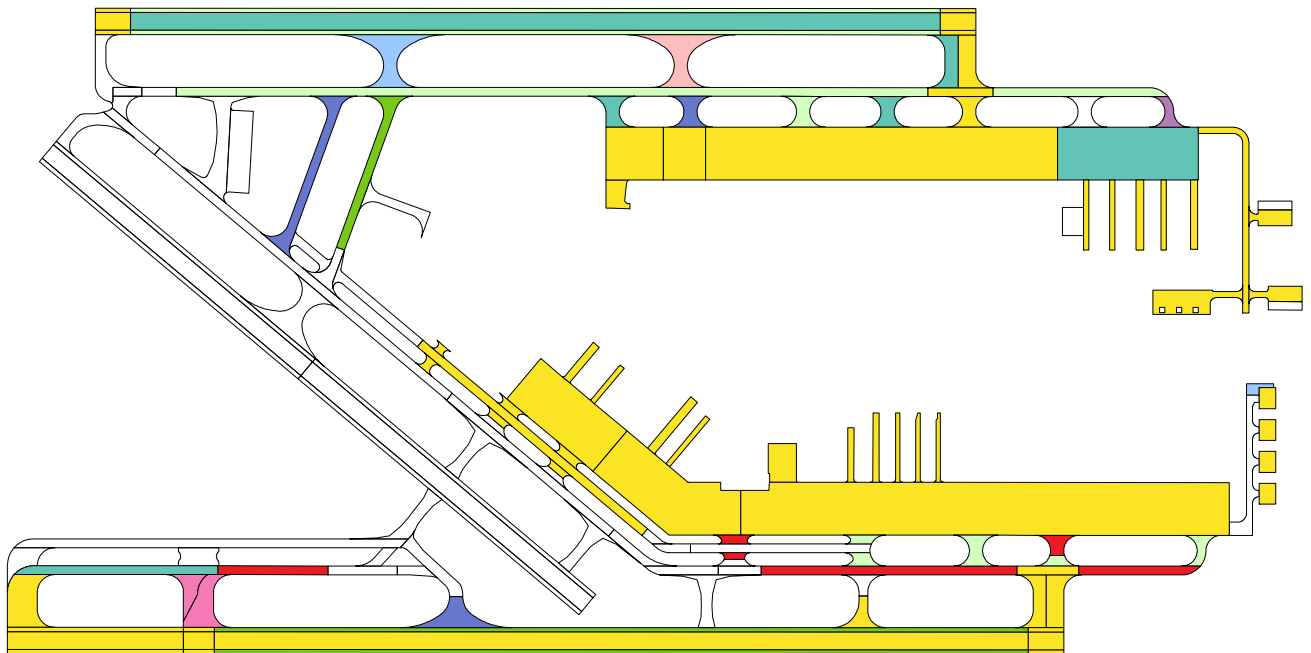
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2023	\$33.6	\$5.6	\$39.2
2024	\$0.6	-	\$0.6
2025	\$9.5	-	\$9.5
2026	\$3.4	-	\$3.4
2027	\$1.4	-	\$1.4
2028	\$7.6	-	\$7.6
2029	\$0.2	-	\$0.2
2030	\$2.4	-	\$2.4
2031	\$0.9	-	\$0.9
2032	\$0.8	-	\$0.8
Total Major Rehabilitation Needs =			\$66.0

PAVEMENT CONDITION INDEX EXHIBIT



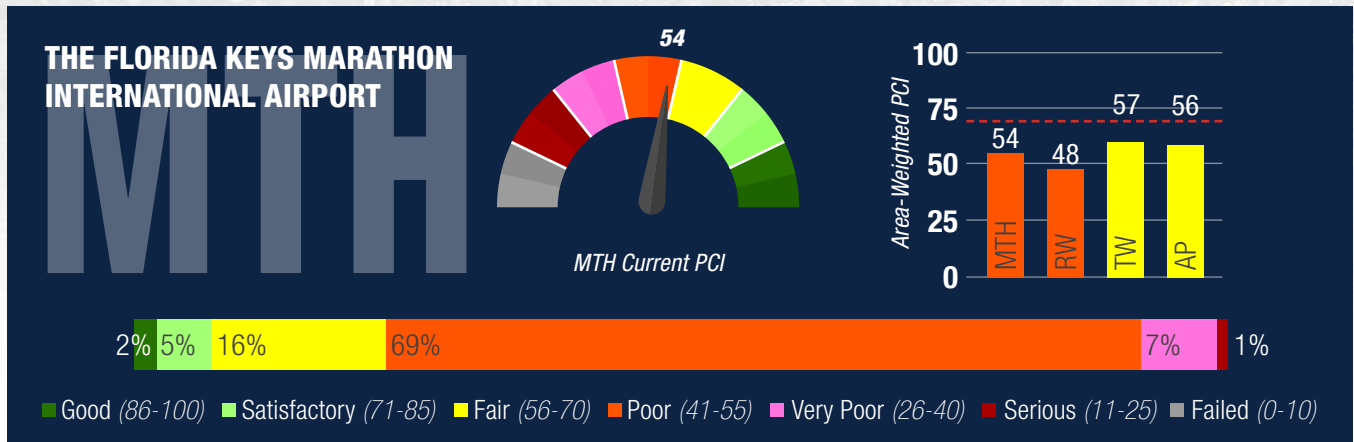
■ Good (86-100)
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MAJOR REHABILITATION EXHIBIT



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GENERAL AVIATION AIRPORTS



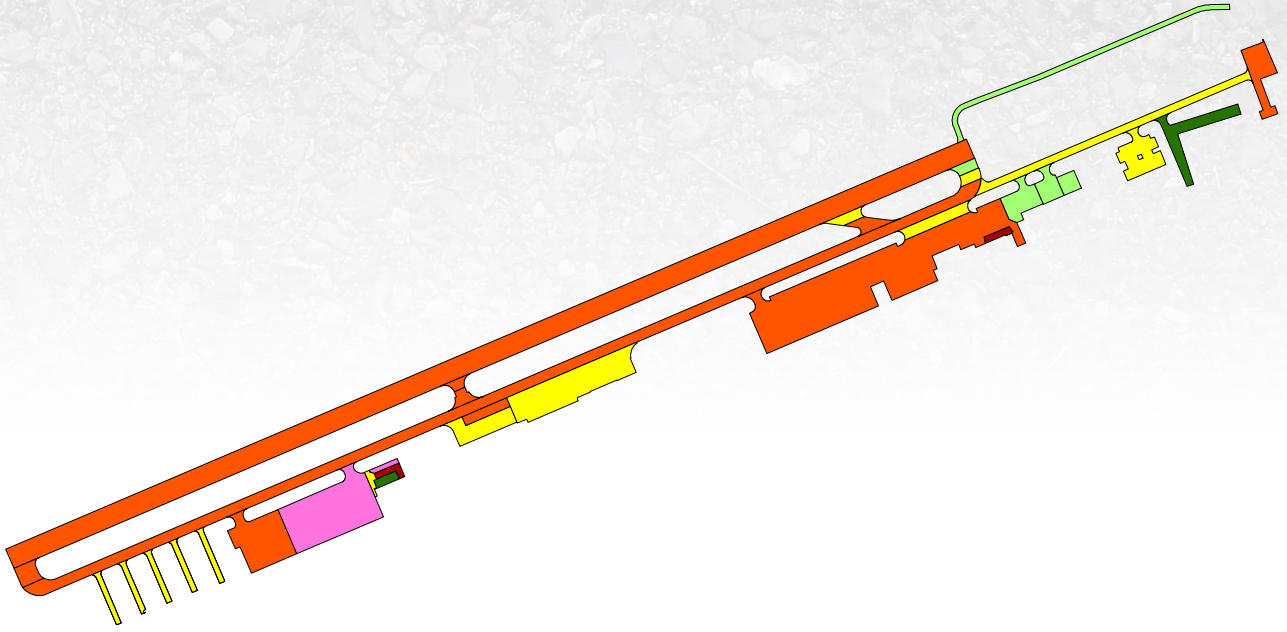
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$22,650)	Surface Seal	15,154	SF	\$11,390
	PCC Joint Seal	1,336	LF	\$5,680
	PCC Partial-Depth Patching	33	SF	\$5,580
Localized Stopgap Maintenance (Total = \$28,440)	AC Partial-Depth Patching	30	SF	\$150
	AC Full-Depth Patching	62	SF	\$630
	PCC Crack Sealing	247	LF	\$1,740
	PCC Joint Seal	295	LF	\$1,260
	PCC Partial-Depth Patching	80	SF	\$13,510
	PCC Full-Depth Patching	223	SF	\$11,150
Total Localized Maintenance Needs =				\$51,090

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

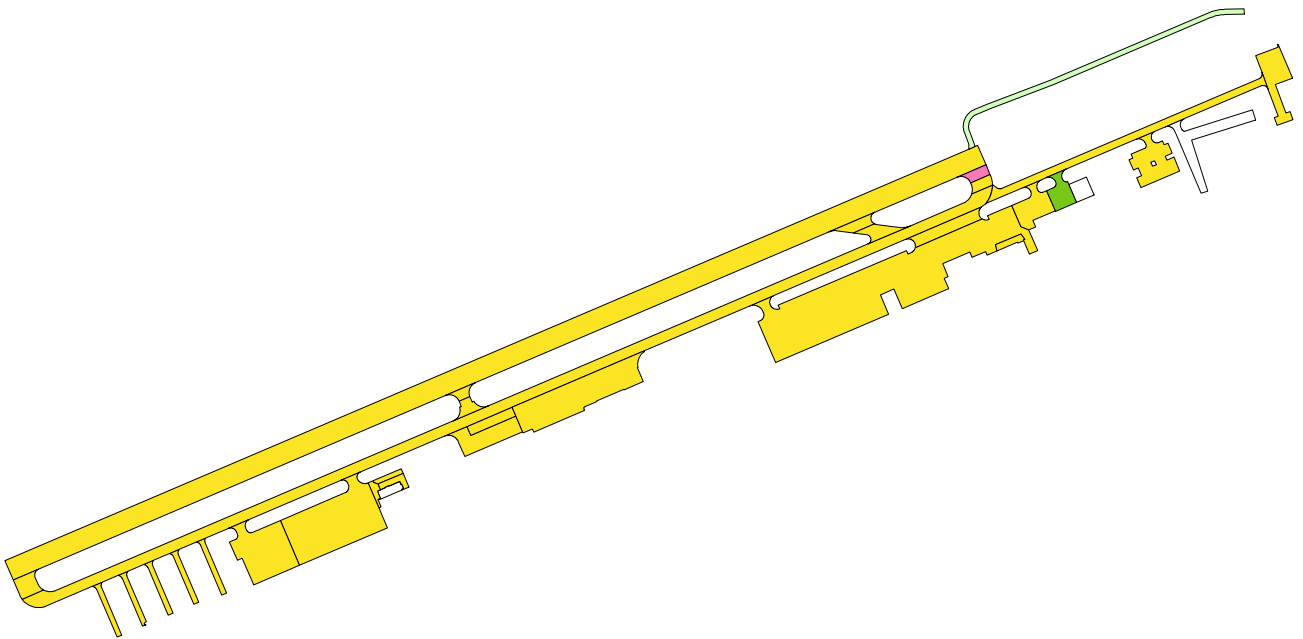
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2023	\$2.9	\$20.2	\$23.1
2024	\$0.1	-	\$0.1
2026	\$0.1	-	\$0.1
2028	\$0.4	-	\$0.4
Total Major Rehabilitation Needs =			\$23.7

PAVEMENT CONDITION INDEX EXHIBIT

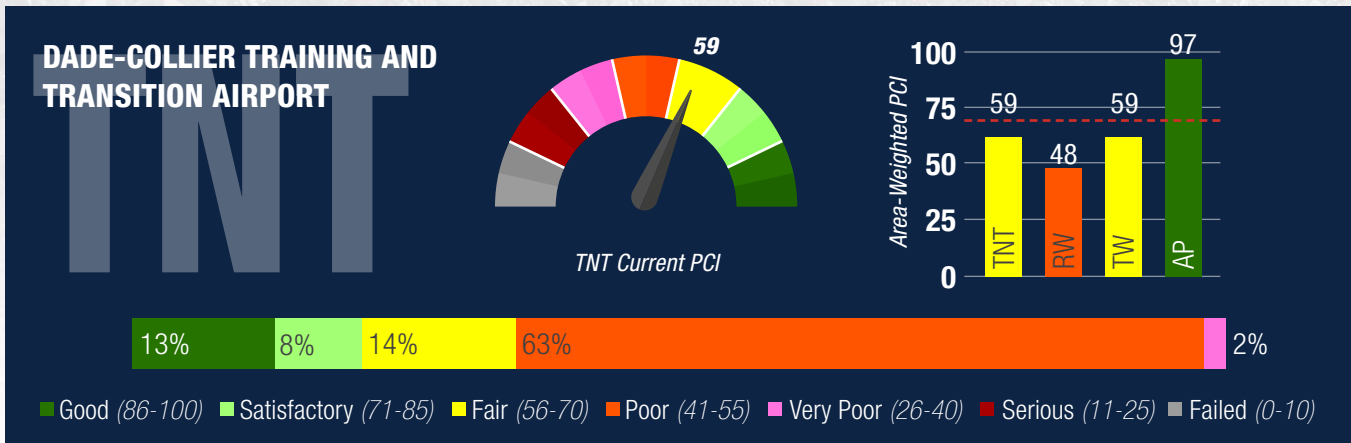


■ Good (86-100) ■ Satisfactory (71-85) ■ Fair (56-70) ■ Poor (41-55) ■ Very Poor (26-40) ■ Serious (11-25) ■ Failed (0-10)

MAJOR REHABILITATION EXHIBIT



■ 2021 ■ 2022 ■ 2023 ■ 2024 ■ 2025 ■ 2026 ■ 2027 ■ 2028 ■ 2029 ■ 2030 ■ 2031 ■ 2032



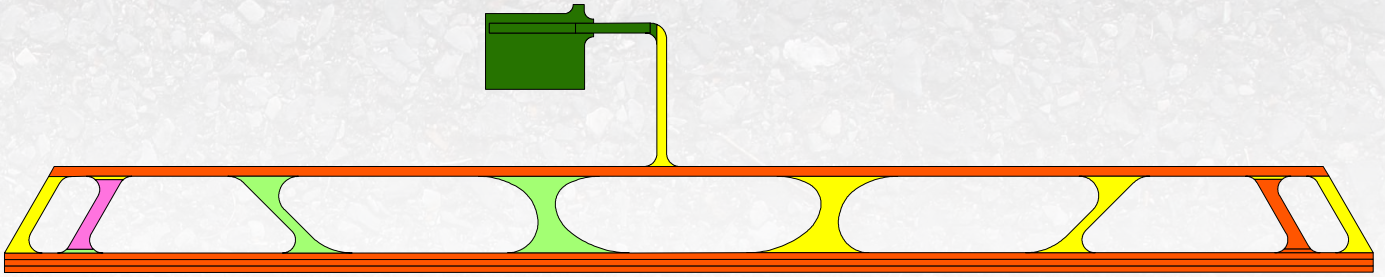
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$19,890)	Surface Seal	38,658	SF	\$19,340
	AC Full-Depth Patching	73	SF	\$550
Localized Stopgap Maintenance (Total = \$17,830)	AC Partial-Depth Patching	4,751	SF	\$17,830
Total Localized Maintenance Needs =				\$37,720

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

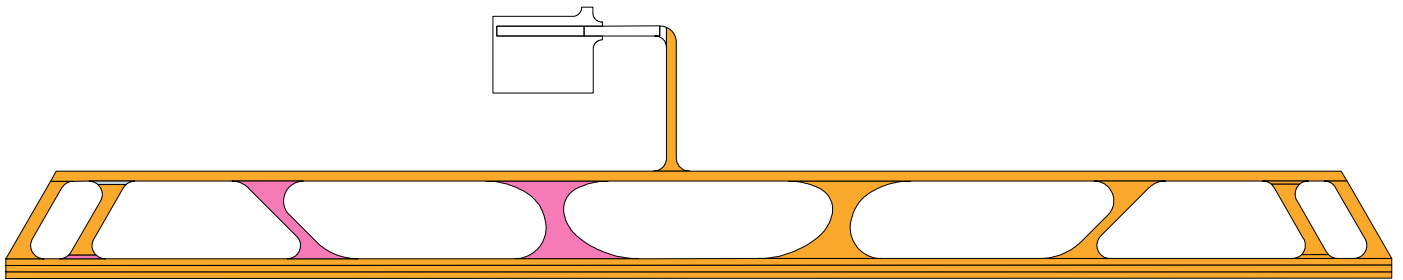
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2021	\$3.8	\$25.8	\$29.6
2024	\$2.1	-	\$2.1
Total Major Rehabilitation Needs =			\$31.7

PAVEMENT CONDITION INDEX EXHIBIT



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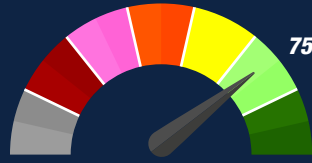
MAJOR REHABILITATION EXHIBIT



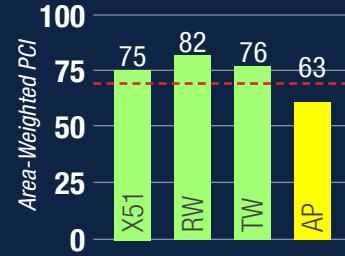
■ 2021 ■ 2022 ■ 2023 ■ 2024 ■ 2025 ■ 2026 ■ 2027 ■ 2028 ■ 2029 ■ 2030 ■ 2031 ■ 2032

MIAMI HOMESTEAD GENERAL AVIATION AIRPORT

X51



X51 Current PCI



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

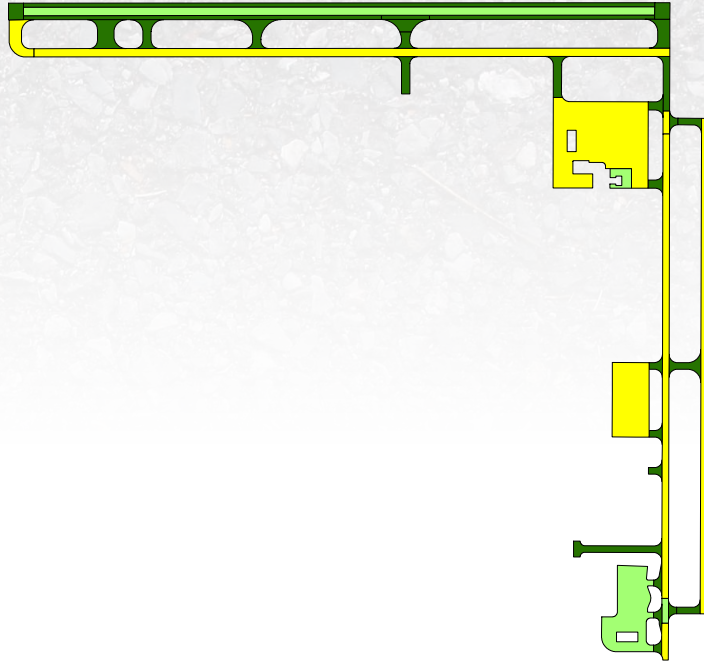
YEAR 1 LOCALIZED MAINTENANCE BY WORK TYPE SUMMARY

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance (Total = \$12,390)	Surface Seal	24,720	SF	\$12,390
Total Localized Maintenance Needs =				\$12,390

NETWORK-LEVEL MAJOR REHABILITATION NEEDS (IN MILLIONS)

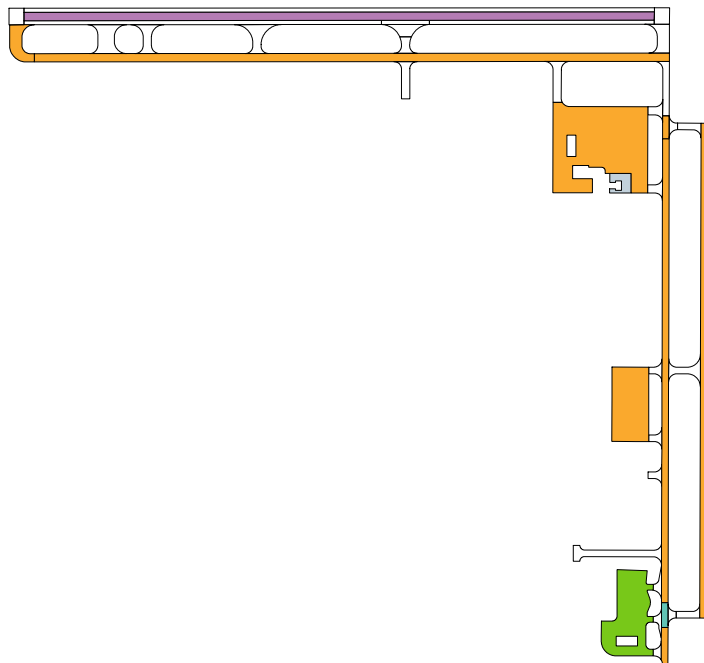
Program Year	Rehabilitation Cost	Reconstruction Cost	Total Cost (Millions)
2021	\$6.3	-	\$6.3
2022	\$0.1	-	\$0.1
2026	\$0.8	-	\$0.8
2029	\$1.3	-	\$1.3
Total Major Rehabilitation Needs =			\$8.5

PAVEMENT CONDITION INDEX EXHIBIT



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MAJOR REHABILITATION EXHIBIT



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