Alaska DOT&PF

Statewide Design and Engineering Services
Pavement Management and Preservation Office
5800 East Tudor Road, Anchorage AK 99507-1286

Pavement Inspection Report
Saint George Airport

Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Saint George Airport	PBV	PAPB	56° 34' 38.5" N	169° 39' 49.4" W	127.9

Please refer all questions or for further information about this report, please contact the AKDOT&PF Pavement Management and Preservation Office as follows:

Point of Contact	Phone	Email	Date Inspected	Date Published
Mr. Andrew Pavey, Pavement Management Engineer	(907) 269 6213	andrew.pavey@alaska.gov	May 2023	September 2023

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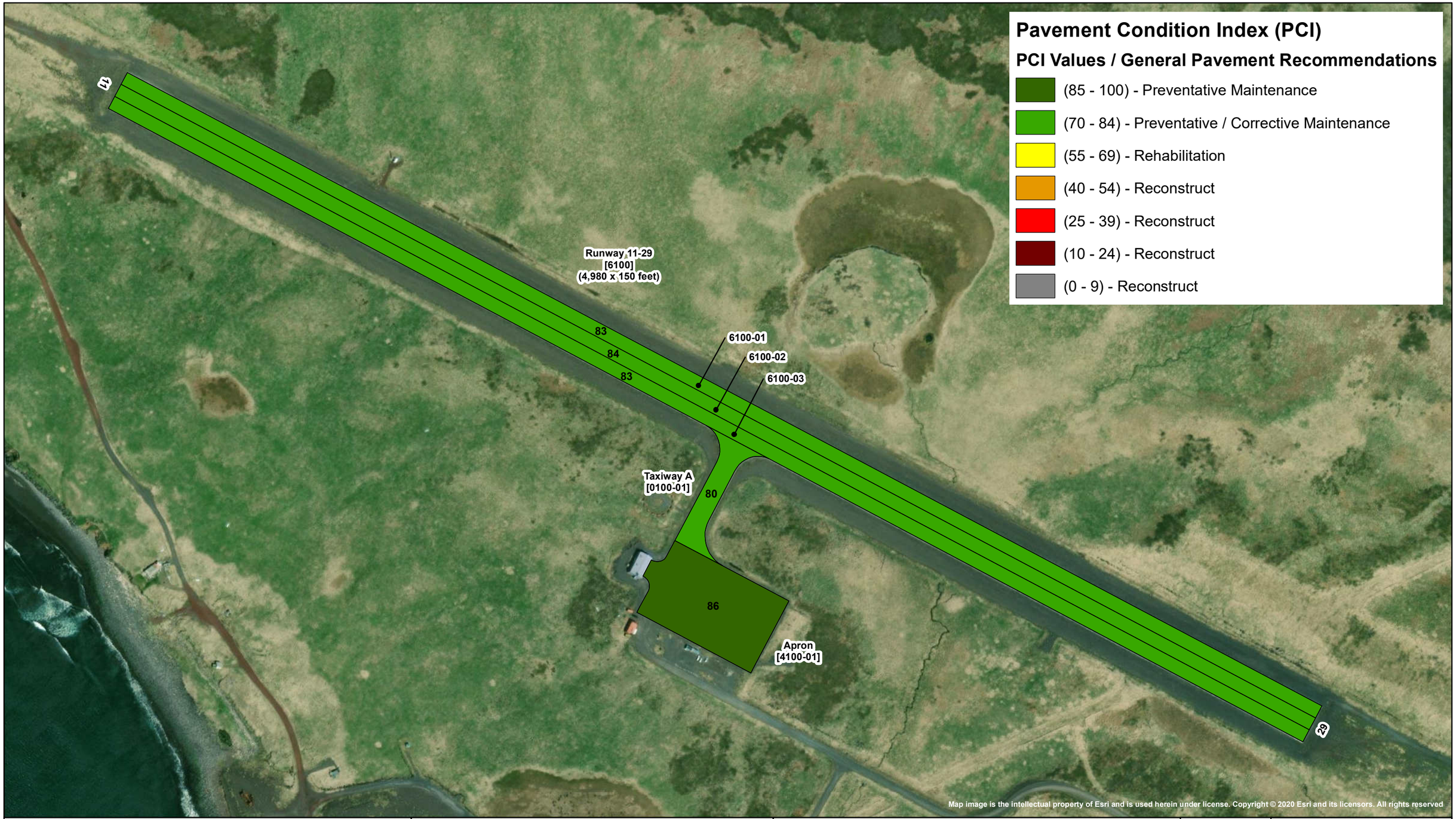


Saint George Airport

Airport Code: PBV
Site Number: 50680.*A

Pavement Condition Index (PCI)

Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

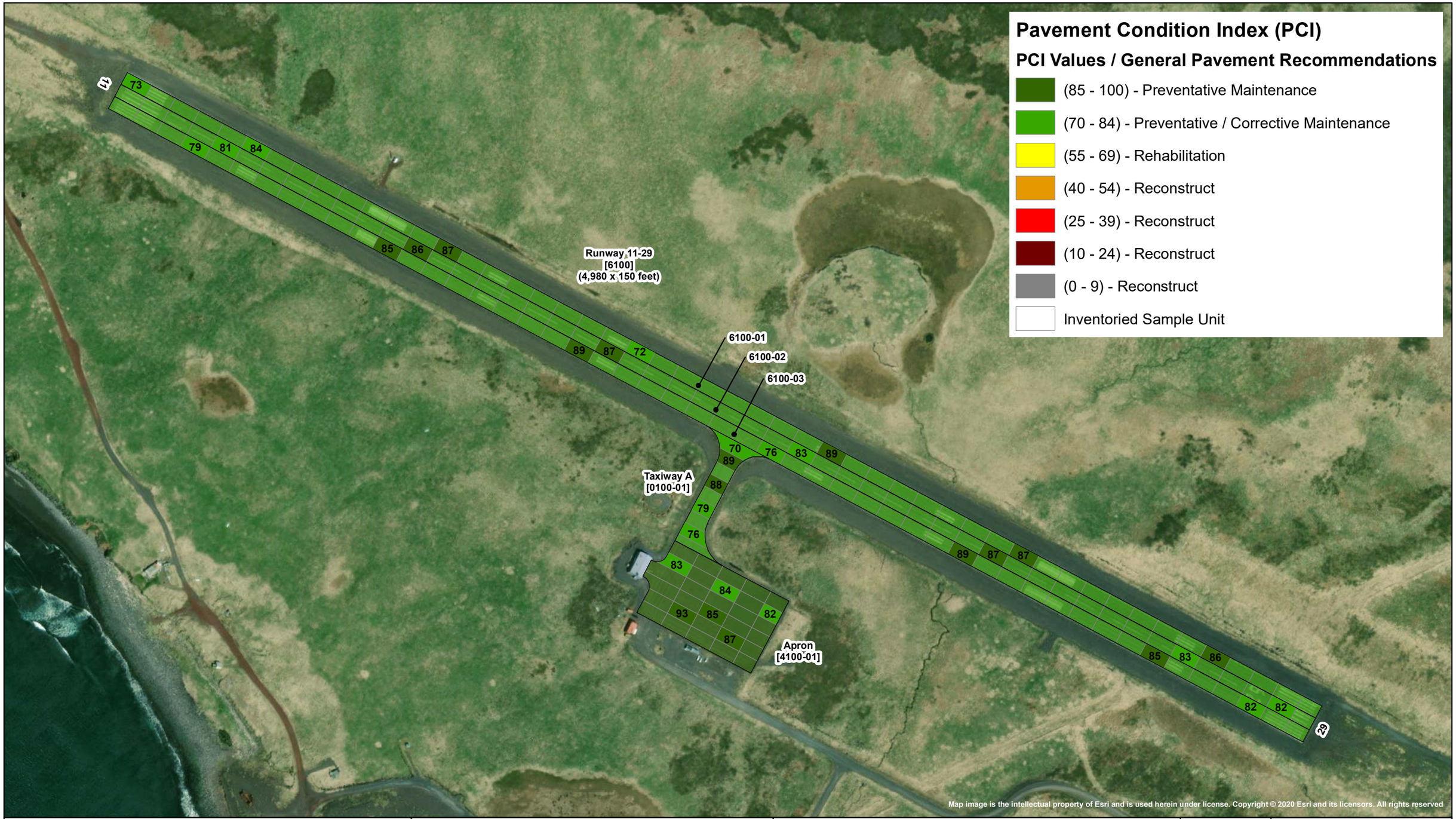
N
W E
S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 1 of 6



Saint George Airport

Airport Code: PBV
Site Number: 50680.*A

Sample Unit
Pavement Condition Index (PCI)

Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

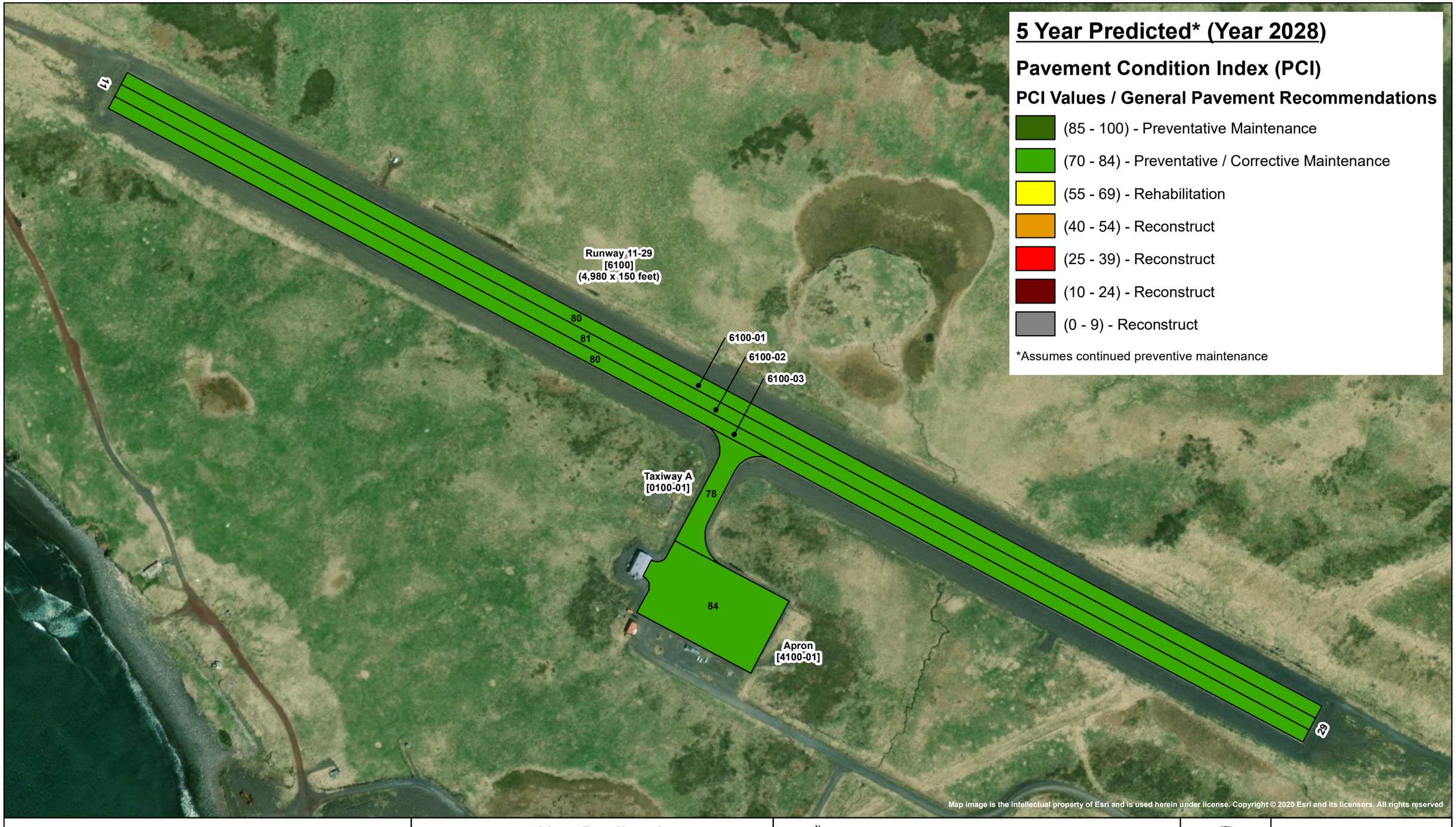
N
W E
S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 2 of 6



5 Year Predicted* (Year 2028)

Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

- (85 - 100) - Preventative Maintenance
- (70 - 84) - Preventative / Corrective Maintenance
- (55 - 69) - Rehabilitation
- (40 - 54) - Reconstruct
- (25 - 39) - Reconstruct
- (10 - 24) - Reconstruct
- (0 - 9) - Reconstruct

*Assumes continued preventive maintenance

Saint George Airport

Airport Code: PBV
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5 Year Predicted
Pavement Condition Index (PCI)

Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

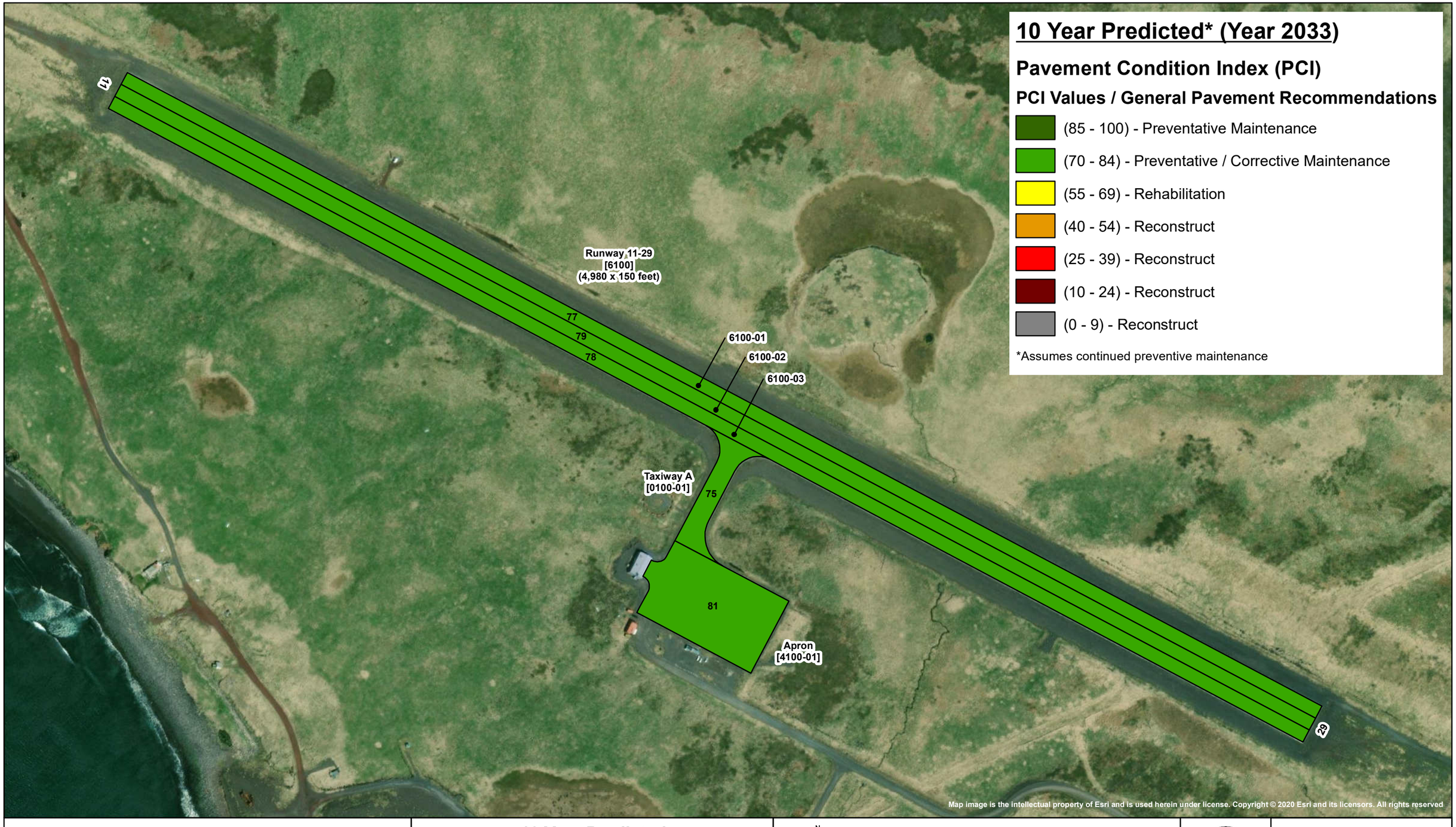
N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 3 of 6



10 Year Predicted* (Year 2033)

Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

- (85 - 100) - Preventative Maintenance
- (70 - 84) - Preventative / Corrective Maintenance
- (55 - 69) - Rehabilitation
- (40 - 54) - Reconstruct
- (25 - 39) - Reconstruct
- (10 - 24) - Reconstruct
- (0 - 9) - Reconstruct

*Assumes continued preventive maintenance

Saint George Airport

Airport Code: PBV
Site Number: 50680.*A

10 Year Predicted
Pavement Condition Index (PCI)

Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 4 of 6

Saint George Airport

Airport Code: PBV
Site Number: 50680.*A

Pavement Age at Inspection

N
W E
S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 5 of 6

Saint George Airport

Airport Code: PBV
Site Number: 50680.*A

Pavement Crack Seal Condition (CSC)

N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 6 of 6

AIRPORT PAVEMENT INSPECTION NOTES BY BRANCH

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0100	Taxiway A	Taxiway	1	39,500	80

Taxiway A was constructed in 2006 and has not received any major work since. Crack seal operations have not been performed on the branch. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field observations include wearing of the pavement surface due to climate, the development of new unfilled cracks, and localized areas of medium and high raveling near the paving joints.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	Apron	Apron	1	146,150	86

Like Taxiway A, the Apron was constructed in 2006 and has not received any major work since. Crack seal operations have not been performed on the branch. The most common distresses observed are low severity longitudinal and transverse cracking, low to medium severity raveling, and low severity weathering. Field observations include wearing of the pavements surface due to climate, the development of new unfilled cracks, and localized areas of medium and high raveling spread throughout the branch.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 11/29	Runway	3	747,000	83




Runway 11/29 was constructed in 2006 and has not received any major work since. Crack seal operations have not been performed on the section. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low to medium severity raveling, and low severity weathering. Field pavement observations include deterioration of the paving joints leading to higher severity longitudinal cracking as well as raveling, and vegetation growth inside the paving joints.

BRANCH CONDITION REPORT

Branch ID	No. of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (Sq Ft)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
0100	1	430	75	39,500	TAXIWAY	80.00	0.00	80.00
4100	1	300	475	146,150	APRON	86.00	0.00	86.00
6100	3	14,940	50	747,000	RUNWAY	83.17	0.62	83.17

Note: the dimensions in the Branch Condition Report are derived from area calculations and may not reflect actual dimensions of individual sections. Refer to the maps for actual section dimensions.

BRANCH USE CONDITION REPORT

Use Category	No. of Sections	Total Area (Sq Ft)	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
APRON	1	146,150	86.00	0.00	86.00
RUNWAY	3	747,000	83.17	0.62	83.17
TAXIWAY	1	39,500	80.00	0.00	80.00
ALL	5	932,650	83.10	1.96	83.48

SECTION CONDITION REPORT

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	True Area (Sq Ft)	Last Inspection Date	Age At Inspection	PCI
0100	0100-01	8/30/2006	AAC	TAXIWAY	P	39,500	6/1/2023	17	80
4100	4100-01	8/30/2006	AAC	APRON	P	146,150	6/1/2023	17	86
6100	6100-01	8/30/2006	AAC	RUNWAY	P	249,000	6/1/2023	17	83
6100	6100-02	8/30/2006	AAC	RUNWAY	P	249,000	6/1/2023	17	84
6100	6100-03	8/30/2006	AAC	RUNWAY	P	249,000	6/1/2023	17	83

SECTION CONDITION REPORT (SUMMARY BY AGE CATEGORY)

Age Category	Average Age at Inspection	Total Area (Sq Ft)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
16-20	17	932,650	5	83.10	1.96	83.48
ALL	17	932,650	5	83.10	1.96	83.48

Work History Report

Pavement Database: Alaska

Network: Saint George Airport **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:**AAC
L.C.D. 8/30/2006 **Use:** TAXIWAY **Rank:** P **Length:** 430.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 39500.00001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/30/2006	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Saint George Airport **Branch:** 4100 Apron **Section:** 4100-01 **Surface:**AAC
L.C.D. 8/30/2006 **Use:** APRON **Rank:** P **Length:** 300.00 (Ft) **Width:** 475.00 (Ft) **True Area:** 146150.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/30/2006	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Saint George Airport **Branch:** 6100 11/29 **Section:** 6100-01 **Surface:**AAC
L.C.D. 8/30/2006 **Use:** RUNWAY **Rank:** P **Length:** 4,980.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 249000.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/30/2006	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Saint George Airport **Branch:** 6100 11/29 **Section:** 6100-02 **Surface:**AAC
L.C.D. 8/30/2006 **Use:** RUNWAY **Rank:** P **Length:** 4,980.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 249000.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/30/2006	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Saint George Airport **Branch:** 6100 11/29 **Section:** 6100-03 **Surface:**AAC
L.C.D. 8/30/2006 **Use:** RUNWAY **Rank:** P **Length:** 4,980.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 249000.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/30/2006	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Work History Report

Pavement Database: Alaska

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
New Construction - Initial	5	932,650.00	0.00	0.00

PHYSICAL PROPERTY DATA

		Pavement		Base		Subbase		Subgrade	
Branch ID	Section ID	Thick (in)	Type	Thick (in)	Type	Thick (in)	Type	Type	CBR
Taxiway A 100	0100-01	4	P-401	10	FATB	6	P-154	GP-GM	7
Apron 4100	4100-01	4	P-401	10	FATB	6	P-154	GP-GM	7
Runway 11-29 6100	6100-01	4	P-401	10	FATB	6	P-154	GP-GM	7
	6100-02	4	P-401	10	FATB	6	P-154	GP-GM	7
	6100-03	4	P-401	10	FATB	6	P-154	GP-GM	7

Notes:
1. FATB = Foamed Asphalt Treated Base
2. For subgrade CBR 7, refer to 2003 Memo, Foamed Asphalt Stabilized Base Course

AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	D-15	17,120	95.0	63	178	1,123
2	Beechcraft King Air B200	12,590	95.0	98	252	1,264
3	Saab 340B	29,000	95.0	55	215	1,668
4	B737-100	111,000	92.0	157	2	15
5	B737-300	140,000	90.8	201	2	15
6	C-130	155,000	95.0	105	3	35

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Gross Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
11-29	B737-300	191,273	10,500	20.0	1.0	520/F/C/W/T

PCR CALCULATION NOTES

- 1% traffic growth assumed.
- Subgrade strength reduction for frost applied.
- D-15 refers to “generic” dual gear aircraft modeled in FAARFIELD.

REFERENCES

Year	Project No.	Document Title
2005	3-02-0416-06, 56947	Paving Construction, Bid Documents
2003		Memo, Foamed Asphalt Stabilized Base Course
2003	55769, 56947	Geotechnical Report
2003	55769, 56947	Geotechnical Recommendations
2003	55769	Geological Report
1990	56398	Geological Report