Alaska DOT&PF

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

Pavement Inspection Report
Atka Airport

Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Atka Airport	AKA	PAAK	52° 13' 14.1" N	174° 12' 22.3" W	55.2

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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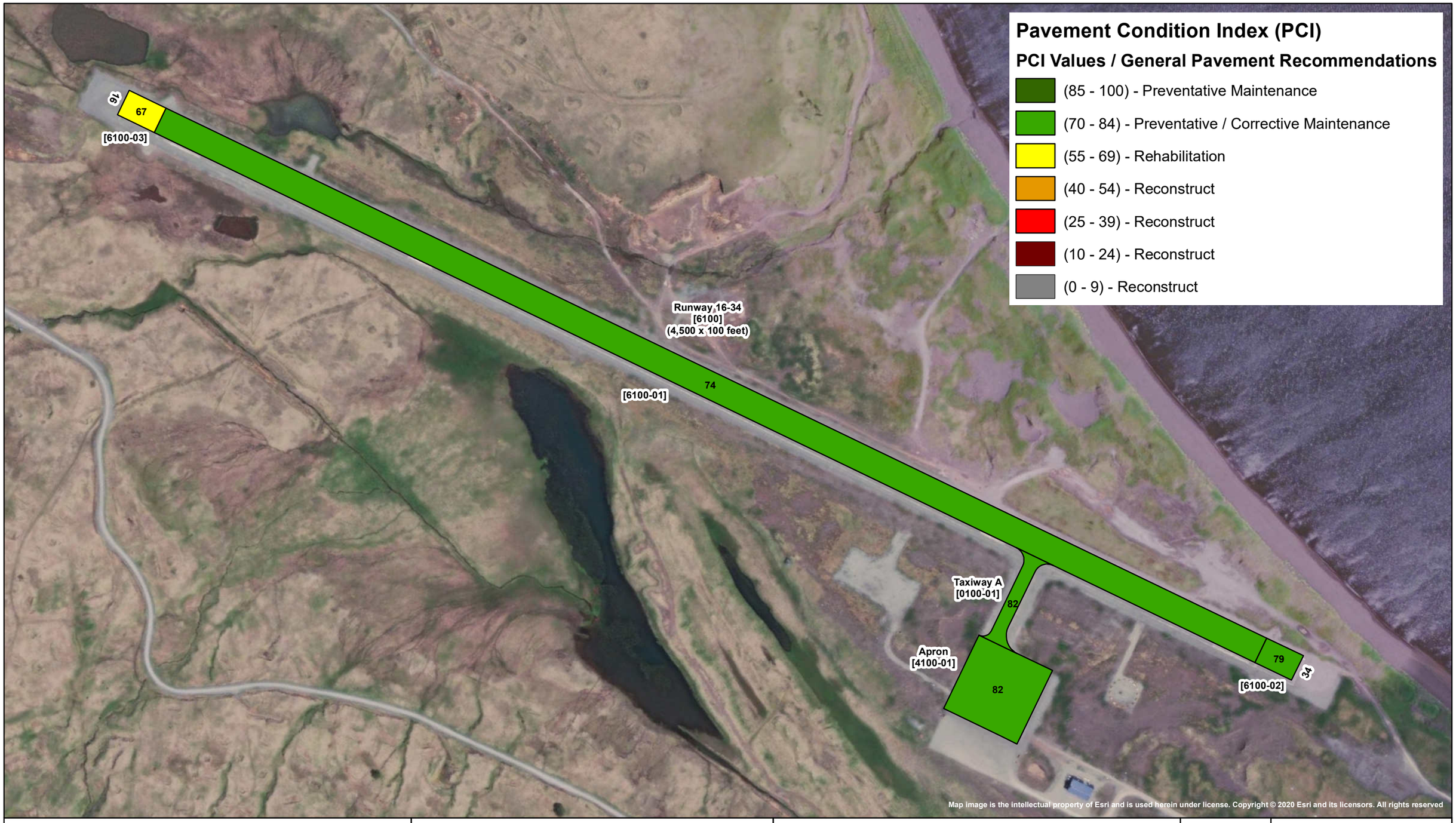


Atka Airport

Airport Code: AKA
Site Number: 50040.5*A

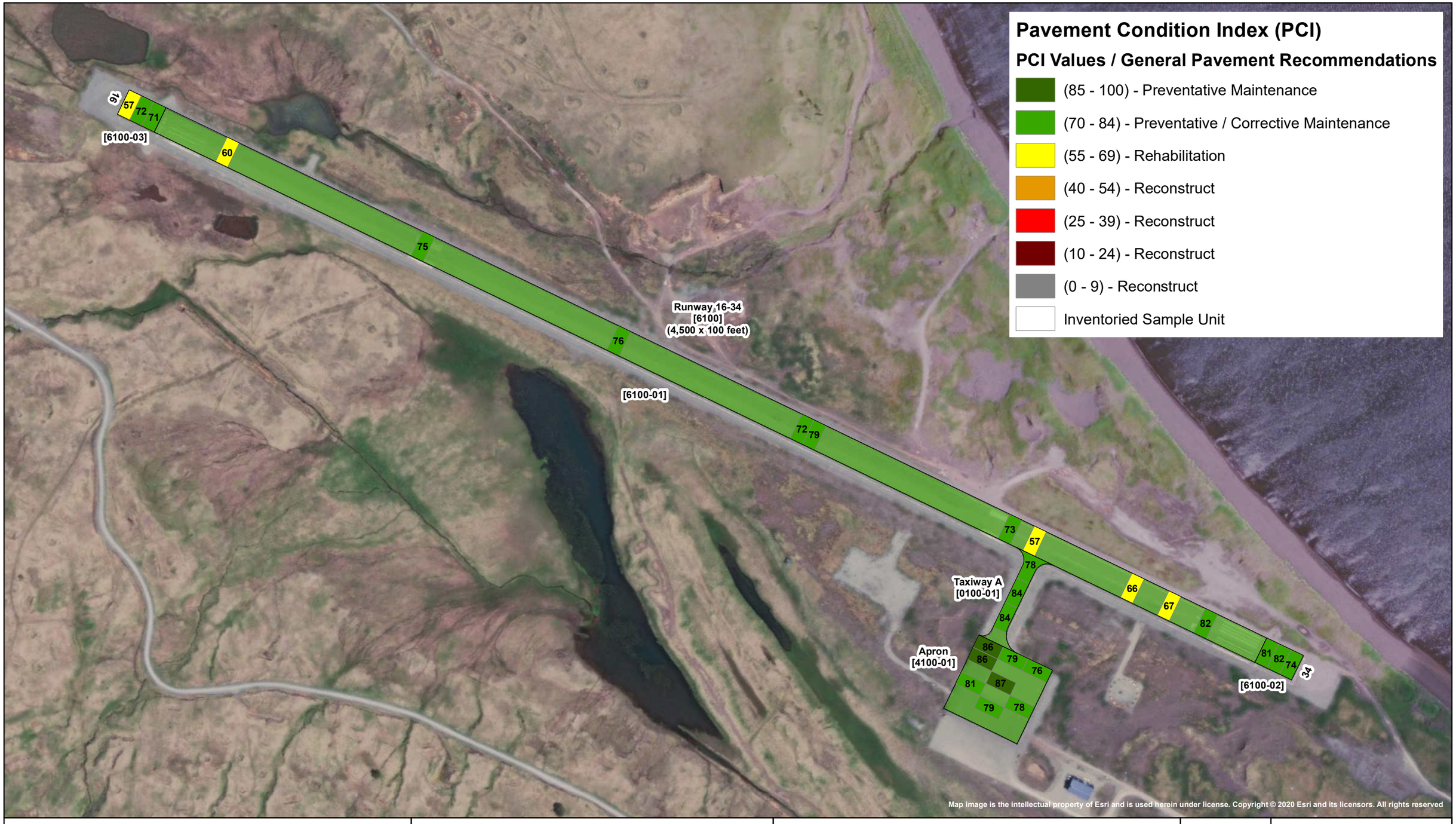
Pavement Condition Index (PCI)
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 1 of 6



Atka Airport

Airport Code: AKA
Site Number: 50040.5*A

Sample Unit
Pavement Condition Index (PCI)

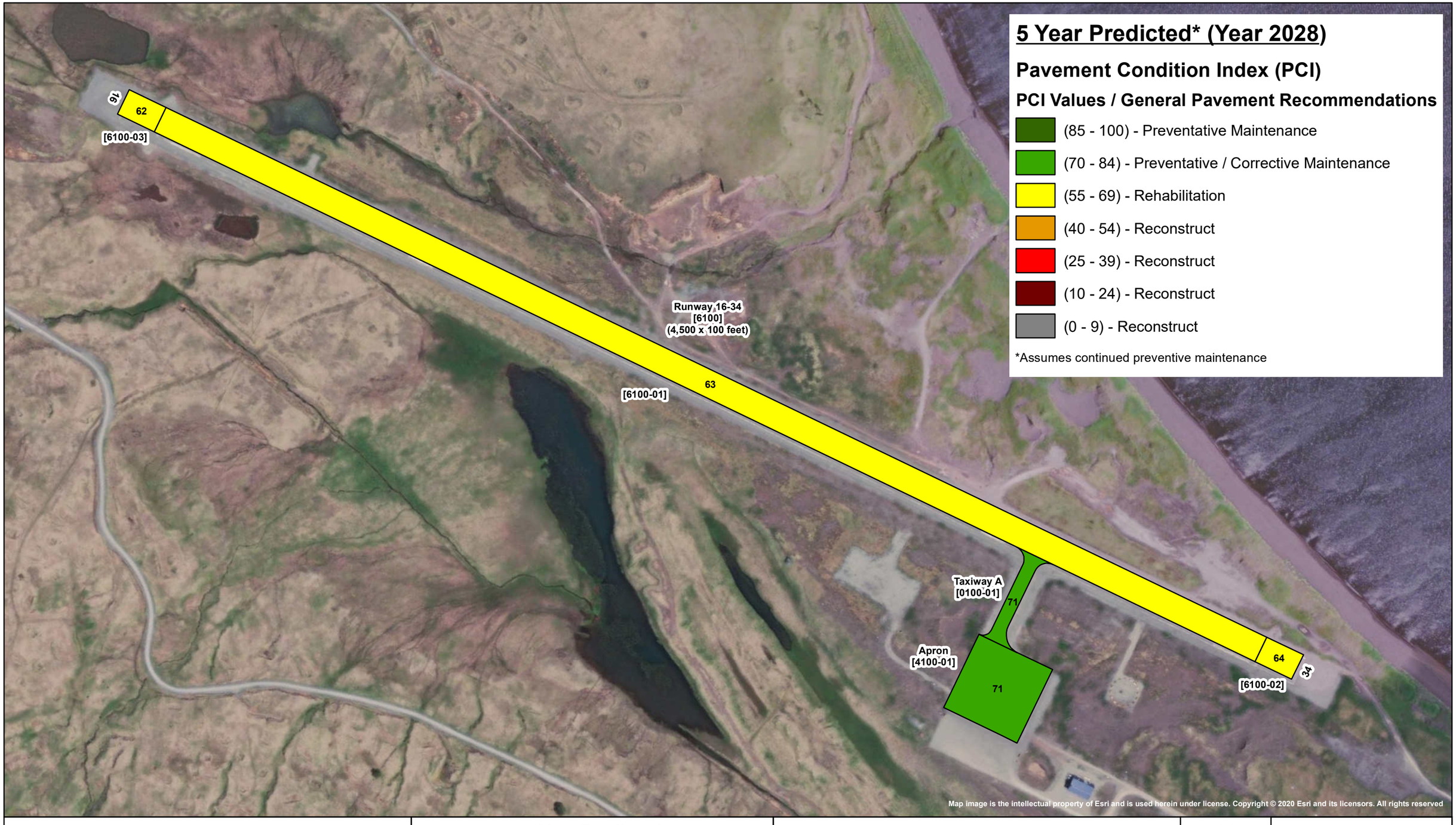
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 2 of 6



Atka Airport

Airport Code: AKA
Site Number: 50040.5*A

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

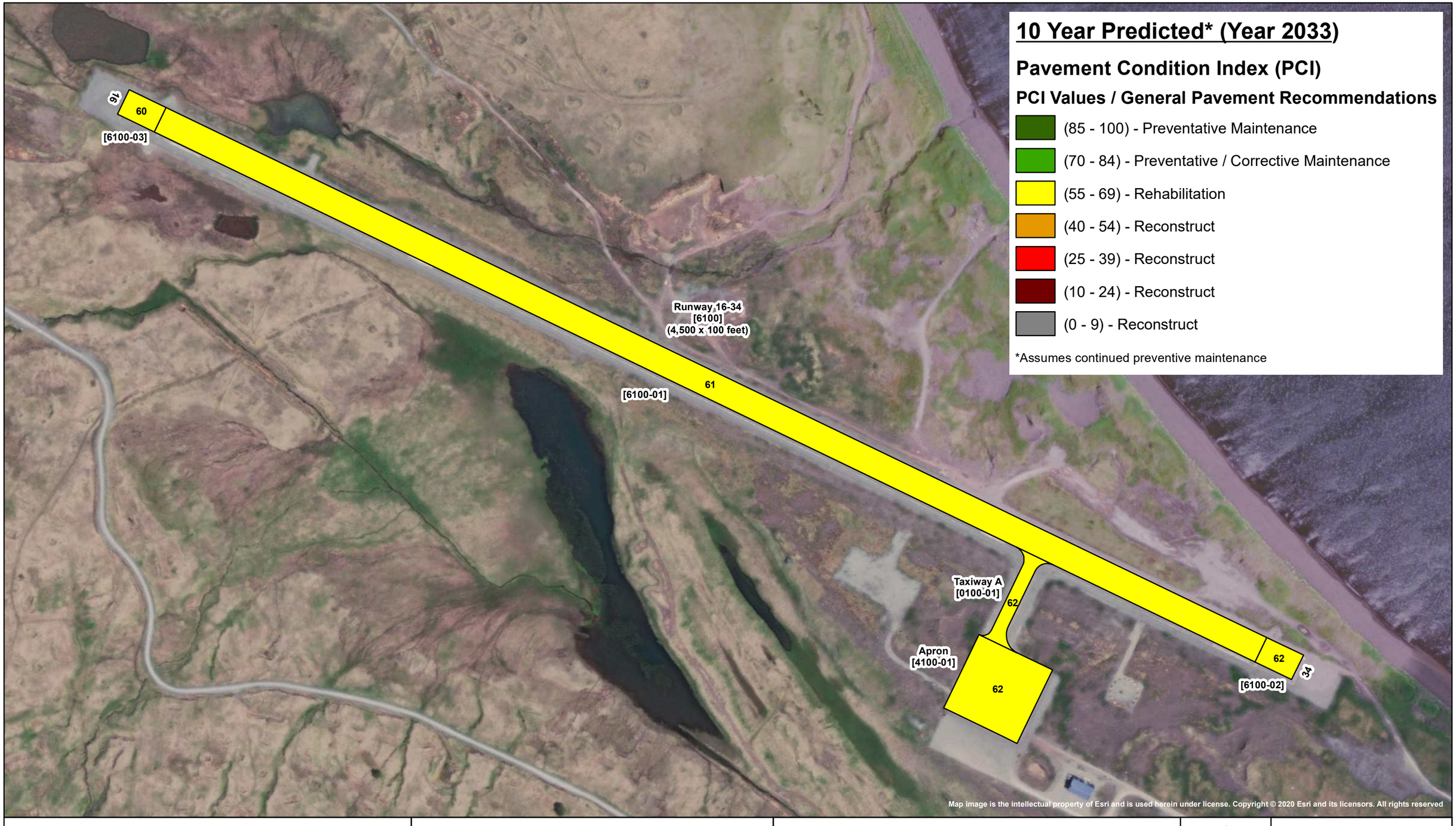
N E S W

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 3 of 6



Atka Airport

Airport Code: AKA
Site Number: 50040.5*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 E S W

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 4 of 6

Atka Airport

Airport Code: AKA
Site Number: 50040.5*A

Pavement Age at Inspection

N E S W

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 5 of 6

Atka Airport

Airport Code: AKA
Site Number: 50040.5*A

Pavement Crack Seal Condition (CSC)

N E S W

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	20,000	82

Taxiway A was initially constructed in 1982 and was reconstructed in 2009. No crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity raveling and low severity weathering. Field observations include isolated areas of low raveling and snowplow drags attributed to the higher severity raveling.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	Apron	Apron	1	90,000	82

Like Taxiway A, the Apron was initially constructed in 1982 and was reconstructed in 2009. No crack seal operations have 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 development of new unfilled cracks and the deterioration of the paving joints creating additional cracks and raveling throughout the apron.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 16/34	Runway	3	480,000	74




Runway 16/34 was initially constructed in 1982 and was reconstructed in 2009. No crack seal operations have been performed on the branch. The most common distresses observed are low severity longitudinal and transverse cracking, low to medium severity raveling, low to medium severity weathering, and isolated areas of low severity alligator cracking. Field observations include the edges of the overruns having damage from snowplow operations, the development of alligator cracking within 15’ of the runway’s edges, and areas of raveling that have been filled with cold patch material.

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	350	50	20,000	TAXIWAY	82.00	0.00	82.00
4100	1	300	300	90,000	APRON	82.00	0.00	82.00
6100	3	4,800	100	480,000	RUNWAY	73.20	4.91	73.56

BRANCH USE CONDITION REPORT

Use Category	No. of Sections	Total Area (Sq Ft)	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
APRON	1	90,000	82.00	0.00	82.00
RUNWAY	3	480,000	73.20	4.91	73.56
TAXIWAY	1	20,000	82.00	0.00	82.00
ALL	5	590,000	76.72	5.75	75.14

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	9/1/2009	AC	TAXIWAY	A	20,000	6/1/2023	14	82
4100	4100-01	9/1/2009	AC	APRON	A	90,000	6/1/2023	14	82
6100	6100-01	9/1/2009	AC	RUNWAY	P	450,000	6/1/2023	14	74
6100	6100-02	9/1/2009	AC	RUNWAY	P	15,000	6/1/2023	14	79
6100	6100-03	9/1/2009	AC	RUNWAY	P	15,000	6/1/2023	14	67

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.

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
11-15	14	590,000	5	76.72	5.75	75.14
ALL	14	590,000	5	76.72	5.75	75.14

Work History Report

Pavement Database: Alaska

Network: Atka Airport **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:**AC

L.C.D. 9/1/2009 **Use:** TAXIWAY **Rank:** A **Length:** 350.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 20000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	2.00	☑ X	(Funded via AIP)
9/1/1989	ST-SS	Surface Treatment - Slurry Seal	0.00	0.00	☐ X	(Funded via AIP)
8/1/1982	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Atka Airport **Branch:** 4100 Apron **Section:** 4100-01 **Surface:**AC

L.C.D. 9/1/2009 **Use:** APRON **Rank:** A **Length:** 300.00 (Ft) **Width:** 300.00 (Ft) **True Area:** 90000.00002 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	2.00	☑ X	(Funded via AIP)
9/1/1989	ST-SS	Surface Treatment - Slurry Seal	0.00	0.00	☐ X	(Funded via AIP)
8/1/1982	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Atka Airport **Branch:** 6100 16/34 **Section:** 6100-01 **Surface:**AC

L.C.D. 9/1/2009 **Use:** RUNWAY **Rank:** P **Length:** 4,500.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 450000.0001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	2.00	☑ X	(Funded via AIP)
9/1/1989	ST-SS	Surface Treatment - Slurry Seal	0.00	0.00	☐ X	(Funded via AIP)
8/1/1982	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Atka Airport **Branch:** 6100 16/34 **Section:** 6100-02 **Surface:**AC

L.C.D. 9/1/2009 **Use:** RUNWAY **Rank:** P **Length:** 150.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	2.00	☑ X	(Funded via AIP)
9/1/1989	ST-SS	Surface Treatment - Slurry Seal	0.00	0.00	☐ X	(Funded via AIP)
8/1/1982	NC-IN	New Construction - Initial	0.00	0.00	☑ X	(Funded via AIP)

Network: Atka Airport **Branch:** 6100 16/34 **Section:** 6100-03 **Surface:**AC

L.C.D. 9/1/2009 **Use:** RUNWAY **Rank:** P **Length:** 150.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	2.00	☑ X	(Funded via AIP)
9/1/1989	ST-SS	Surface Treatment - Slurry Seal	0.00	0.00	☐ X	(Funded via AIP)
8/1/1982	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)
Complete Reconstruction - AC	5	590,000.00	2.00	0.00
New Construction - Initial	5	590,000.00	0.00	0.00
Surface Treatment - Slurry Seal	5	590,000.00	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 0100	0100-01	2	P-401	6	P-209	12	P-154	SP	8
Apron 4100	4100-01	2	P-401	6	P-209	12	P-154	SP	8
Runway 16/34 6100	6100-01	2	P-401	6	P-209	12	P-154	SP	8
	6100-02	2	P-401	6	P-209	12	P-154	SP	8
	6100-03	2	P-401	6	P-209	12	P-154	SP	8

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	11	59
2	Beechcraft King Air B200	12,590	95.0	98	265	1,033
3	C-130-70	155,000	95.0	105	2	21

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
16-34	C-130	248,819	12,000	20.0	1.0	509/F/C/X/T

PCR CALCULATION NOTES

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

REFERENCES

Year	Project No.	Document Title
2010	59621, 3-02-0394-005	Memo on Quarry Rock and As-Advertised Plans, Sheets 1-6
2008	3-02-0394-005, 59621	Runway Extension, Resurfacing, As-Built Plans
2003	3-02-0394-004, 55291	Geologic Report
1988	3-02-0394-02, 57102	Runway Repair
1985	53185	Non-Directional Beacon, As-Built Plans
1983	83130203940183, D01522	Runway, Taxiway Lighting, As-Built Plans
1982	D01511	Runway, Taxiway Apron, As-Built Plans