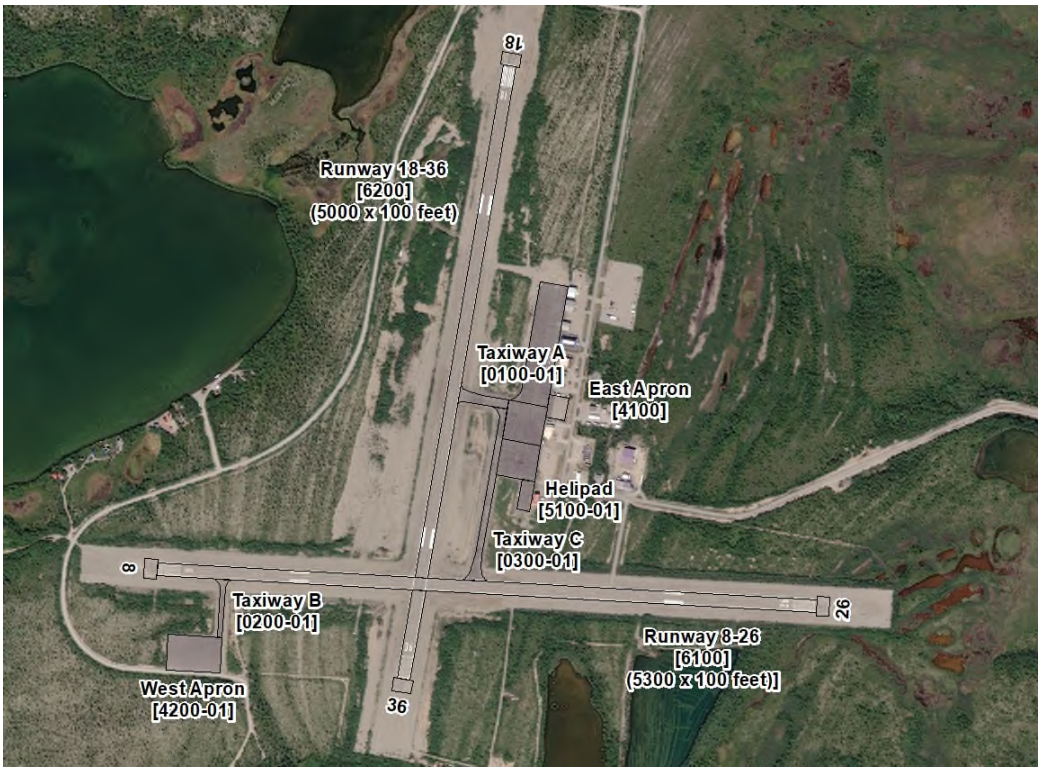
Alaska DOT&PF

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

Pavement Inspection Report
Iliamna Airport



Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Iliamna Airport	ILI	PAIL	59° 45' 05.79" N	154° 54' 47.12" W	192

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	October 2022	June 2023

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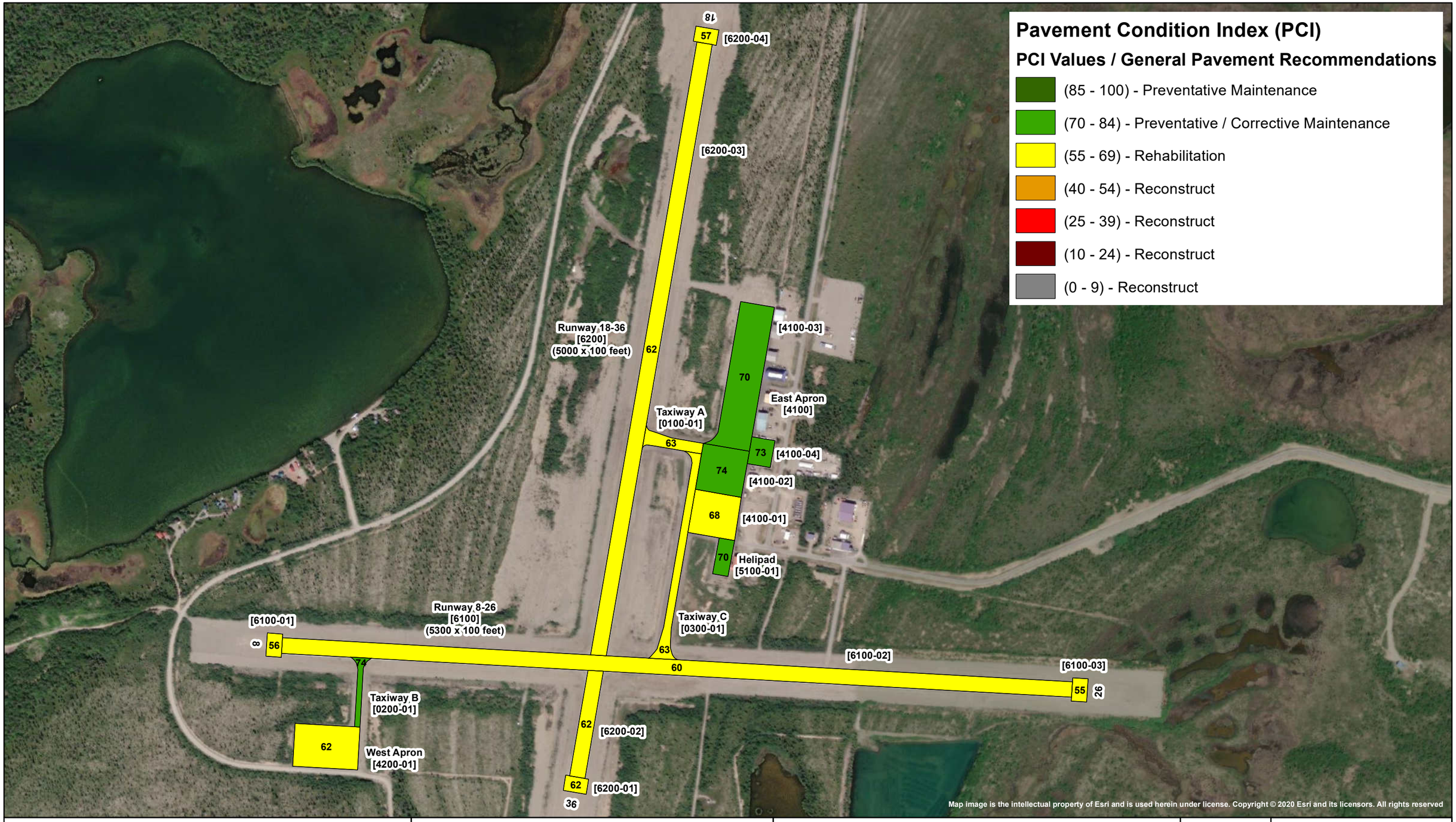


Iliamna Airport

Airport Code: ILI
Site Number: 50038.*A

Pavement Condition Index (PCI)

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

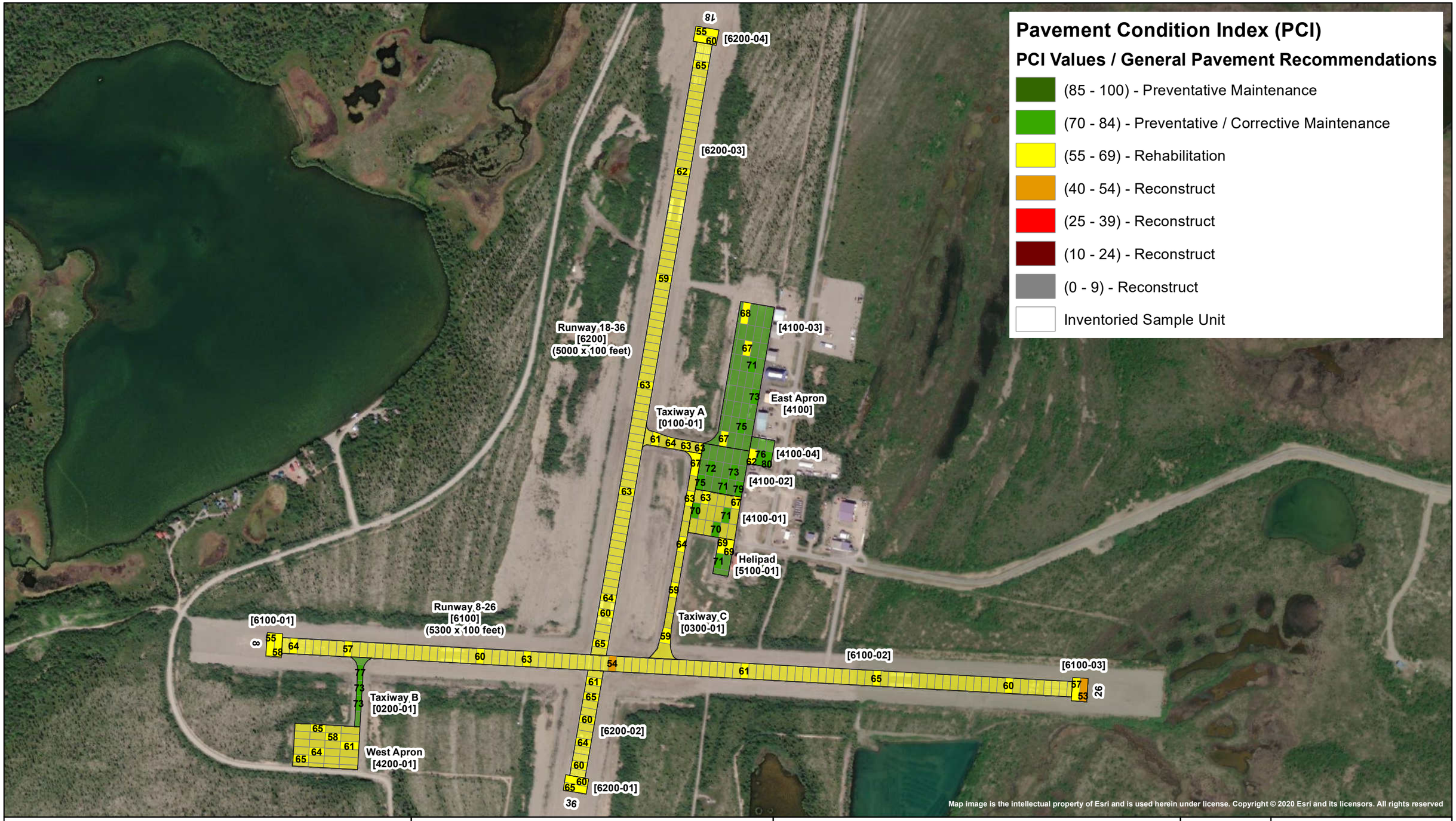
N
W E
S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 1 of 6



Iliamna Airport

Airport Code: ILI
Site Number: 50038.*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

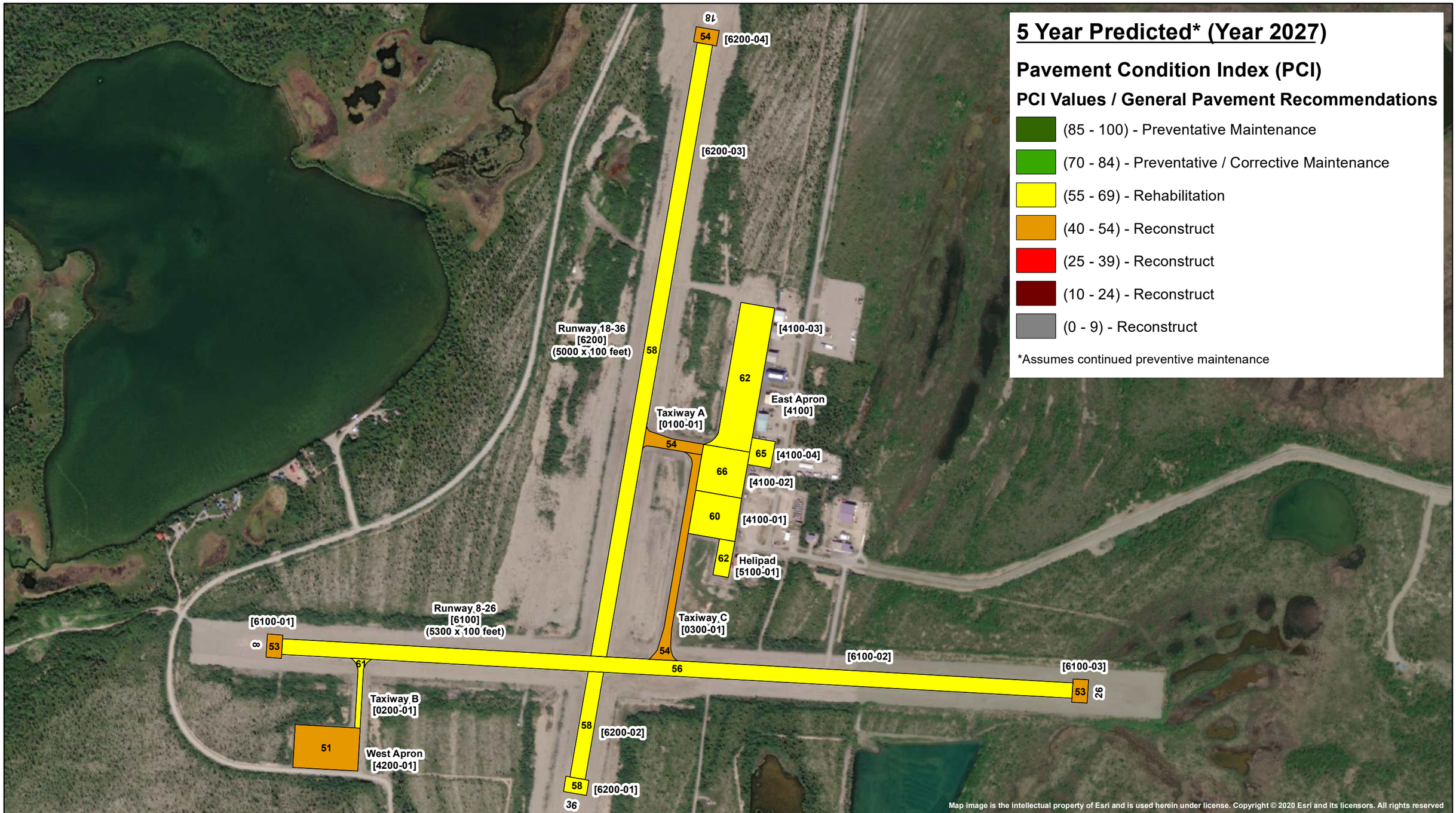
N
W E
S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 2 of 6



Iliamna Airport

Airport Code: ILI
Site Number: 50038.*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

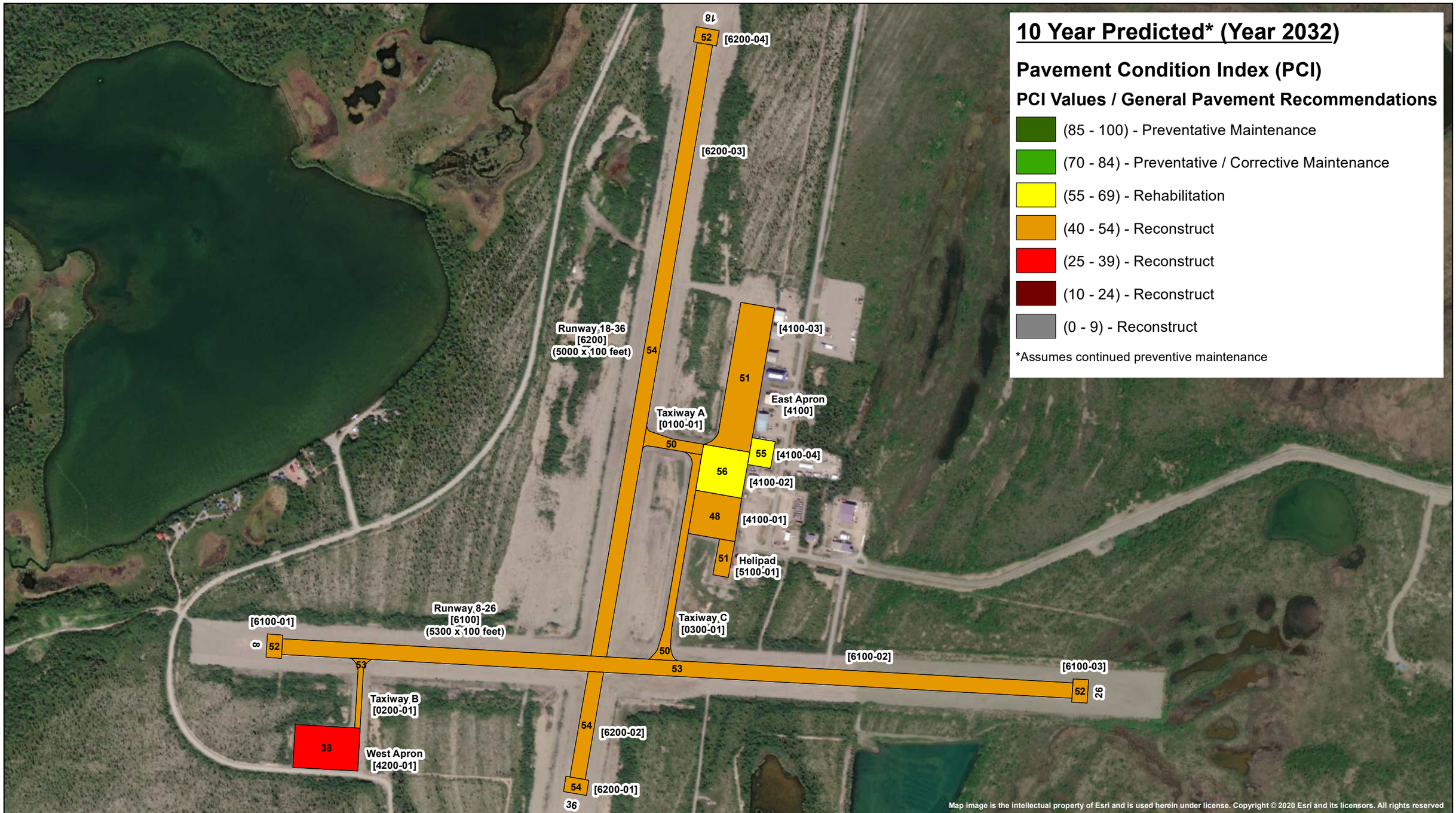
N
W E
S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 3 of 6



Iliamna Airport

Airport Code: ILI
Site Number: 50038.*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

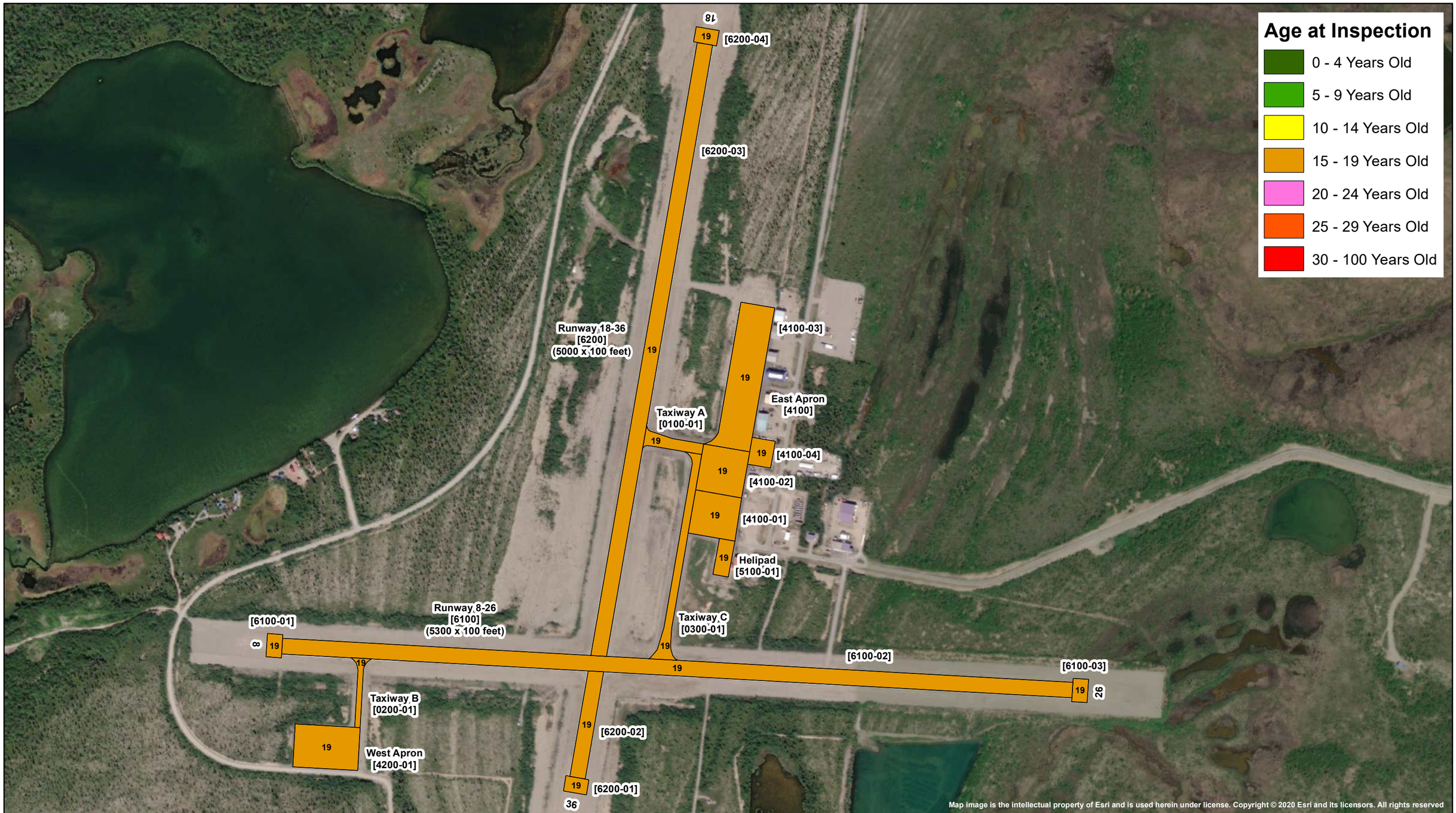
N
W E
S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 4 of 6



Iliamna Airport

Airport Code: ILI
Site Number: 50038.*A

Pavement Age at Inspection

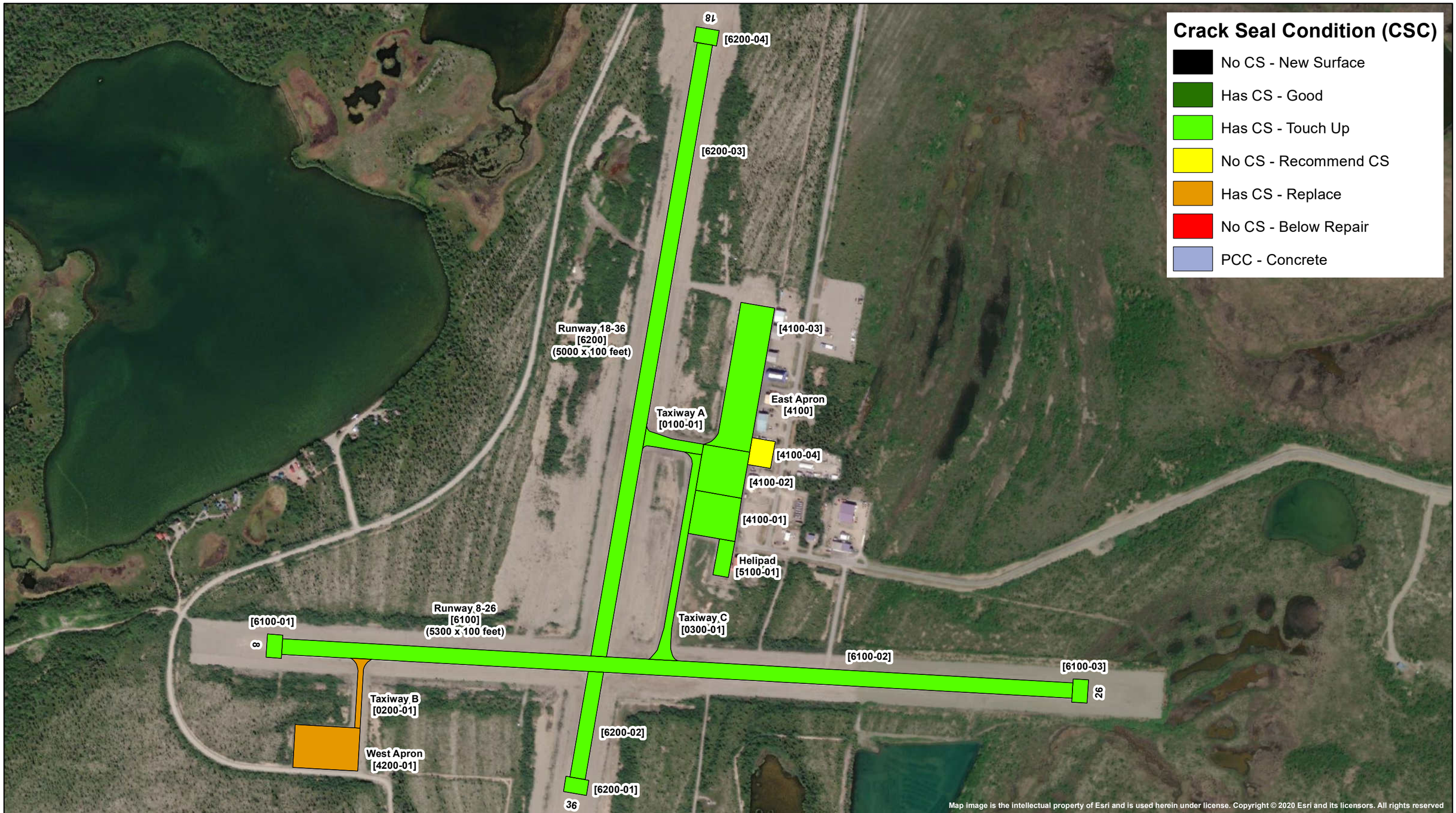
N W E S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 5 of 6



Iliamna Airport

Airport Code: ILI
Site Number: 50038.*A

Pavement Crack Seal Condition (CSC)

N W E S

2022 Pavement Inspection Results

0 250 500 1,000 1,500
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)	Weight Average PCI
0100	Taxiway A	Taxiway	1	29,932	63

Taxiway A was constructed in 2003 and received a sand tar surface treatment in 2015. Annual crack seal operations have 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 sand tar application due to climate and traffic, creation of new unfilled cracks, and widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0200	Taxiway B	Taxiway	1	18,000	74

Similar to Taxiway A, Taxiway B was constructed in 2003 and received a sand tar surface treatment in 2015. Annual crack seal operations are behind schedule on this branch. The most common distresses observed are low to medium to high severity longitudinal and transverse cracking. Field observations include the development of new unfilled cracks, widening of previously filled cracks, and vegetation growth in the cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0300	Taxiway C	Taxiway	1	79,958	63

Taxiway C was also constructed in 2003 and received a sand tar surface treatment in 2015. Annual crack seal operations have 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 sand tar application due to climate and traffic, the initiation of new unfilled cracks, and widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
4100	East Apron	Parking Apron	4	409,790	71

The East Apron was constructed in 2003 and received a sand tar surface treatment in 2015 except for section 4100-04. Annual crack seal operations have 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 sand tar application (not as much wear as the taxiways), development of new unfilled cracks, widening of previously filled cracks, and a transverse crack that is starting to widen, causing a localized depression, and creating a smoothness concern.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
4200	West Apron	Parking Apron	1	116,102	62

The West Apron was constructed in 2003 and received a sand tar surface treatment in 2015. Annual crack seal operations are behind schedule on this branch. The most common distresses observed are low to medium to high severity longitudinal and transverse cracking. Field observations include creation of new unfilled cracks, widening of previously filled cracks, and vegetation growth in the cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
5100	Helipad	Helipad	1	24,000	70

The Helipad was constructed in 2003 and received a sand tar surface treatment in 2015. Annual crack seal operations have been performed on the section. 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 sand tar application (not as much wear as the taxiways), initiation of new unfilled cracks, and widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
6100	Runway 08/26	Runway	3	540,000	60

RW 08/26 OVERRUNS

Runway 08/26 was constructed in 2003. Annual crack seal operations have been performed on the section. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low to medium to high severity raveling, and low severity weathering. Field observations include development of new unfilled cracks, widening of previously filled cracks, areas of increased severity and quantity of raveling, and overruns being damaged by snow plow operations (bottom right photograph).

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
6200	Runway 18/36	Runway	4	499,500	62

RW 18/36 OVERRUNS AND OTHER FEATURES

Runway 18/36 was constructed in 2003. Annual crack seal operations have been performed on the section. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low to medium to high severity raveling, and low severity weathering. Field pavement observations include development of new unfilled cracks, widening of previously filled cracks, and areas of increased severity and quantity of raveling.

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	385	70	29,932	TAXIWAY	63.00	0	63.00
0200	1	445	35	18,000	TAXIWAY	74.00	0	74.00
0300	1	1,345	50	75,958	TAXIWAY	63.00	0	63.00
4100	4	1,697	243	409,790	APRON	71.25	2.38	70.66
4200	1	420	276	116,102	APRON	62.00	0	62.00
5100	1	240	100	24,000	HELIPAD	70.00	0	70.00
6100	3	5,300	133	540,000	RUNWAY	57.00	2.16	59.75
6200	4	4,895	125	499,500	RUNWAY	60.75	2.17	61.85

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	5	525,892	69.40	4.27	68.75
HELIPAD	1	24,000	70.00	0	70.00
RUNWAY	7	1,039,500	59.14	2.85	60.76
TAXIWAY	3	123,890	66.67	5.19	64.60
ALL	16	1,713,282	64.44	6.09	63.62

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	8/1/2003	AC	TAXIWAY	P	29,932.00	10/17/2022	19	63
0200	0200-01	8/1/2003	AC	TAXIWAY	P	18,000.00	10/17/2022	19	74
0300	0300-01	8/1/2003	AC	TAXIWAY	P	75,958.00	10/17/2022	19	63
4100	4100-01	8/1/2003	AC	APRON	P	84,000.00	10/17/2022	19	68
4100	4100-02	8/1/2003	AC	APRON	P	90,000.00	10/17/2022	19	74
4100	4100-03	8/1/2003	AC	APRON	P	209,540.00	10/17/2022	19	70
4100	4100-04	8/1/2003	AC	APRON	P	26,250.00	10/17/2022	19	73
4200	4200-01	8/1/2003	AC	APRON	P	116,102.00	10/17/2022	19	62
5100	5100-01	8/1/2003	AC	HELIPAD	P	24,000.00	10/17/2022	19	70
6100	6100-01	8/1/2003	AC	RUNWAY	P	15,000.00	10/17/2022	19	56
6100	6100-02	8/1/2003	AC	RUNWAY	P	510,000.00	10/17/2022	19	60
6100	6100-03	8/1/2003	AC	RUNWAY	P	15,000.00	10/17/2022	19	55
6200	6200-01	8/1/2003	AC	RUNWAY	P	15,000.00	10/17/2022	19	62
6200	6200-02	8/1/2003	AC	RUNWAY	P	69,500.00	10/17/2022	19	62
6200	6200-03	8/1/2003	AC	RUNWAY	P	400,000.00	10/17/2022	19	62
6200	6200-04	8/1/2003	AC	RUNWAY	P	15,000.00	10/17/2022	19	57

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	19	1,713,282	16	64.44	6.09	63.62
ALL	19	1,713,282	16	64.44	6.09	63.62

Work History Report

Pavement Database: Alaska

Network: Iliamna Airport **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** TAXIWAY **Rank:** P **Length:** 385.00 (Ft) **Width:** 70.00 (Ft) **True Area:** 29932.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 0200 Taxiway B **Section:** 0200-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** TAXIWAY **Rank:** P **Length:** 445.00 (Ft) **Width:** 35.00 (Ft) **True Area:** 18000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 0300 Taxiway C **Section:** 0300-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** TAXIWAY **Rank:** P **Length:** 1,345.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 75958.00002 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 4100 East Apron **Section:** 4100-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** APRON **Rank:** P **Length:** 280.00 (Ft) **Width:** 300.00 (Ft) **True Area:** 84000.00002 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 4100 East Apron **Section:** 4100-02 **Surface:**AC
L.C.D. 8/1/2003 **Use:** APRON **Rank:** P **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
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 4100 East Apron **Section:** 4100-03 **Surface:**AC
L.C.D. 8/1/2003 **Use:** APRON **Rank:** P **Length:** 942.00 (Ft) **Width:** 220.00 (Ft) **True Area:** 209540.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 4100 East Apron **Section:** 4100-04 **Surface:**AC
L.C.D. 8/1/2003 **Use:** APRON **Rank:** P **Length:** 175.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 26250.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 4200 West Apron **Section:** 4200-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** APRON **Rank:** P **Length:** 420.00 (Ft) **Width:** 276.00 (Ft) **True Area:** 116102.0000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 5100 Helipad **Section:** 5100-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** HELIPAD **Rank:** P **Length:** 240.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 24000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/3/2015	ST-ST	Surface Treatment - Sand Tar	0.00	0.00	☐	(Funded via AIP)
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6100 08/26 **Section:** 6100-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6100 08/26 **Section:** 6100-02 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 5,100.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 510000.0001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6100 08/26 **Section:** 6100-03 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6200 18/36 **Section:** 6200-01 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6200 18/36 **Section:** 6200-02 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 695.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 69500.00002 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Iliamna Airport **Branch:** 6200 18/36 **Section:** 6200-03 **Surface:**AC
L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 4,000.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 400000.0001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Work History Report

Pavement Database: Alaska

Network: Iliamna Airport **Branch:** 6200 18/36 **Section:** 6200-04 **Surface:**AC

L.C.D. 8/1/2003 **Use:** RUNWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 15000.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2003	NU-IN	New Construction - Initial	0.00	0.00	☑	(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	16	1,713,282.00	0.00	0.00
Surface Treatment - Sand Tar	8	647,532.00	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	4.0	AC	8.0	P-209	6.0	P-154	SM	10
Taxiway B 0200	0200-01	2.0	AC	-	-	6.0	P-154	SM	10
Taxiway C 0300	0300-01	4.0	AC	8.0	P-209	30.0	P-154	SM	10
East Apron 4100	4100-01	4.0	AC	8.0	P-209	6.0	P-154	SM	10
	4100-02	4.0	AC	8.0	P-209	-	-	SM	10
	4100-03	3.0	AC	6.0	P-209	-	-	SM	10
	4100-04	2.0	AC	6.0	P-209	-	-	SM	10
West Apron 4200	4200-01	2.0	AC	6.0	P-209	-	-	SM	10
Helipad 5100	5100-01	3.0	AC	6.0	P-209	-	-	SM	10
Runway 8-26 6100	6100-01	2.0	AC	6.0	P-209	4.0	P-154	SM	10
	6100-02	4.0	AC	8.0	P-209	8.0	P-154	SM	10
	6100-03	2.0	AC	8.0	P-209	4.0	P-154	SM	10
Runway 18-36 6200	6200-01	2.0	AC	6.0	P-209	4.0	P-154	SM	10
	6200-02	4.0	AC	8.0	P-209	8.0	P-154	SM	10
	6200-03	4.0	AC	8.0	P-209	8.0	P-154	SM	10
	6200-04	2.0	AC	6.0	P-209	4.0	P-154	SM	10

AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	Beechcraft Baron	5424	95.0	56.0	53	153
2	Cessna 206 Stationair	3612	95.0	52.0	2124	5594
3	Beechcraft Bonanza	3412	95.0	40.0	267	740
4	S-5	5100	95.0	51.0	2	6
5	Cessna 208B	8750	95.0	75.0	3	9
6	S-10	10450	95.0	52.3	1885	6862
7	PA-31 Navajo	6536	95.0	66.0	6	17
8	D-15	17120	95.0	62.8	515	3249
9	S-25	25353	95.0	76.1	4	26
10	Saab 340B	29000	95.0	55.0	6	47
11	D-50	55357	95.0	88.6	98	816
12	B737-200	116000	92.76	158.0	2	16
13	DC9-51	122000	93.94	172.0	14	113
14	L-100-20	155801	96.4	104.4	4	47
15	C-130	155000	95.0	105.0	11	128

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
08-26	DC9-51	123538	10000	20.0	1.0	334/F/C/W/T
18-36	DC9-51	123538	10000	20.0	1.0	334/F/C/W/T

PCR CALCULATION NOTES

- 1% traffic growth assumed
- Total annual airport traffic assumed to apply for each runway
- Subgrade strength reduction for frost applied
- S-5, S-10 and S-25 refer to “generic” single gear aircraft as modeled in FAARFIELD
- D-5 and D-15 refer to “generic” dual gear aircraft as modeled in FAARFIELD

REFERENCES

Year	Project No.	Document Title
2012	14-25-1-010	Various Airports Seal Coat & Pavement Markings
2002	3-02-0132-06, 54739	Iliamna Paving and Fence as-built
1997	3-02-0132-04, 52260A	PAPI Runway 7-25
1997	3-02-0132-004, 52260	Crosswind Runway as-built
1997	52260	AKDOT&PF Geology Report
1989	56891	AKDOT&PF Geology Report
1984	3-02-0132-01, D18332	Apron and Access road
1984	D18332	AKDOT&PF Geology Report
1980	6-02-0132-02	Apron and Taxiway construction
1980		AKDOT&PF Geology Report
1976	8-02-0132-01	Runway Reconstruction
1972		AKDOT&PF Geology report