Alaska DOT&PF

Data Modernization and Innovation Office
Pavement Management and Preservation
5800 East Tudor Road, Anchorage AK 99507-1286

Pavement Inspection Report
Barrow Airport

Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Wiley Post-Will Rogers Airport	BRW	PABR	71° 17' 5.5" N	156° 46' 6.9" W	48.6

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	June 2024	August 2025

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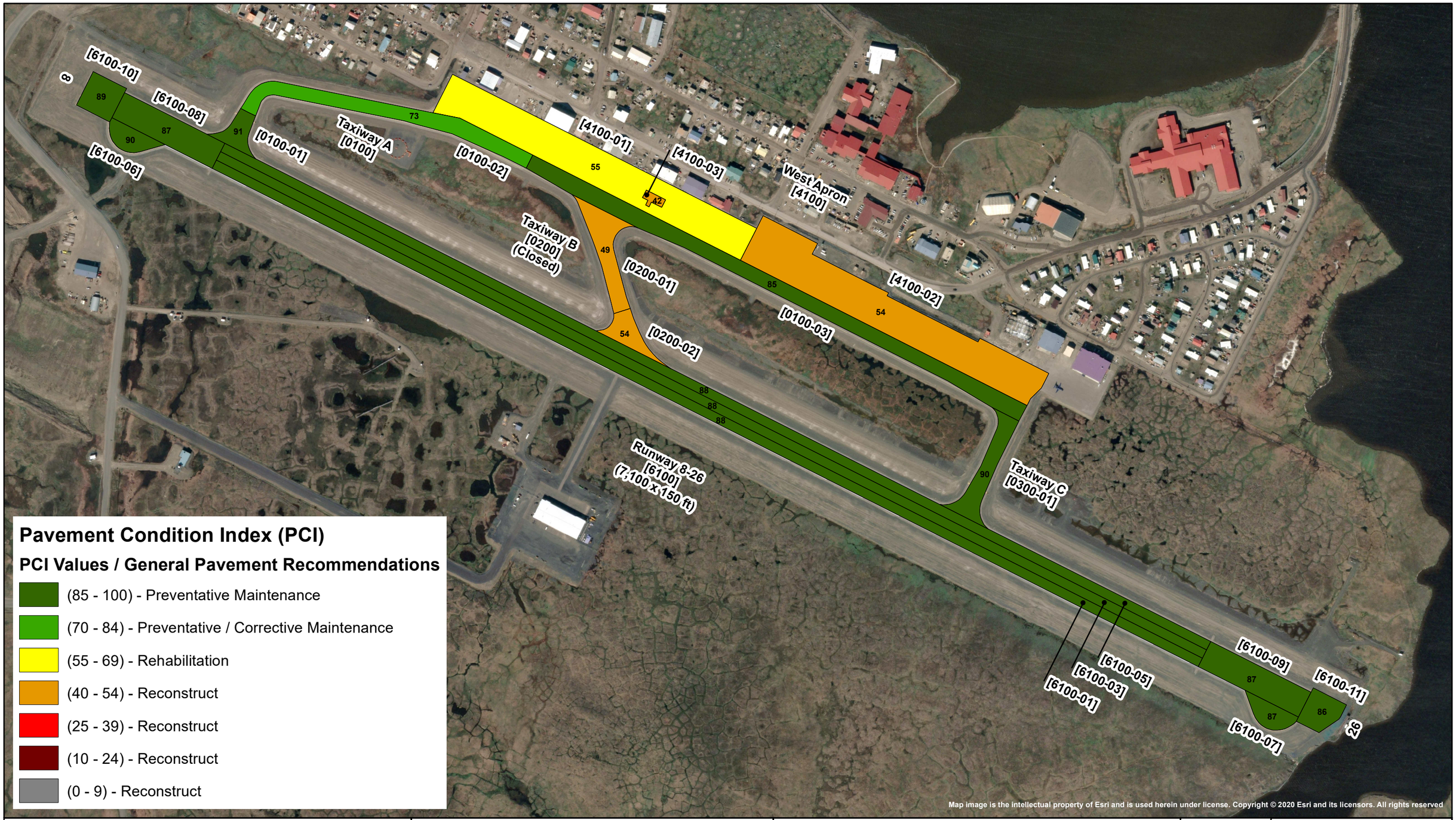


Barrow Airport

Airport Code: BRW
Site Number: 50054.3*A

Pavement Condition Index (PCI)

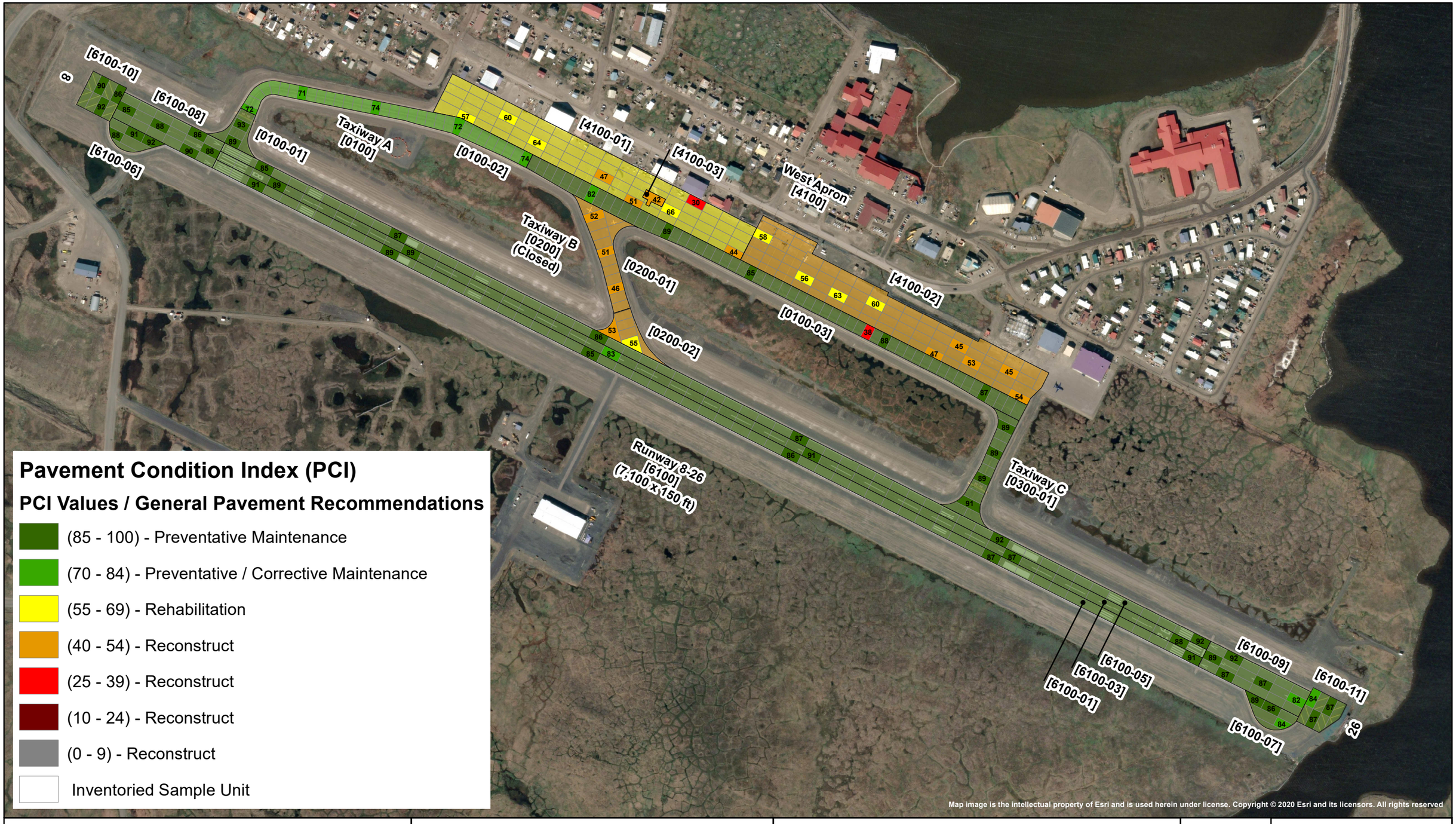
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2024 Pavement Inspection Results

0 350 700 1,400
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 1 of 6



Barrow Airport

Airport Code: BRW
Site Number: 50054.3*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

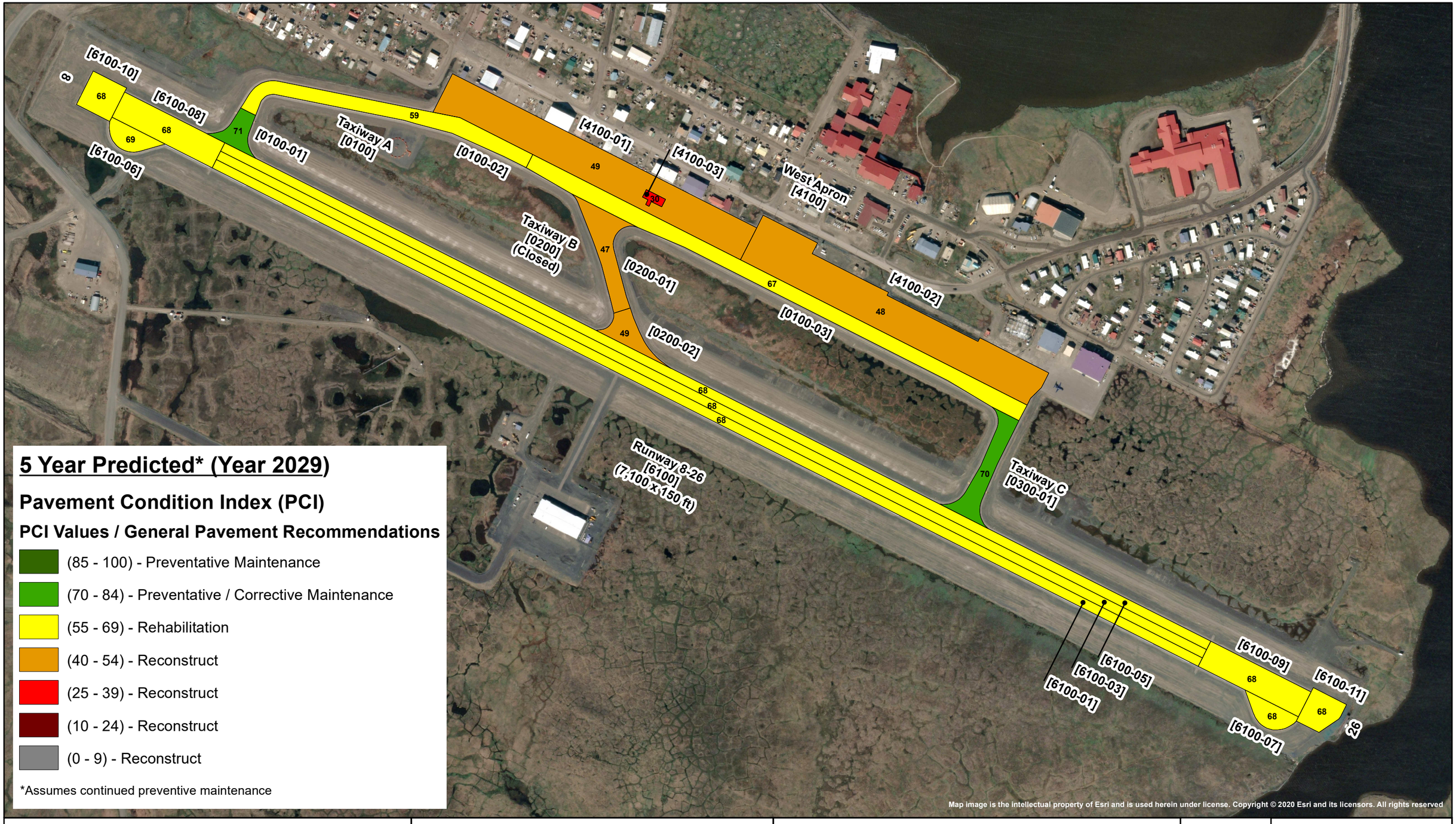
N W E S

2024 Pavement Inspection Results

0 350 700 1,400
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 2 of 6



Barrow Airport

Airport Code: BRW
Site Number: 50054.3*A

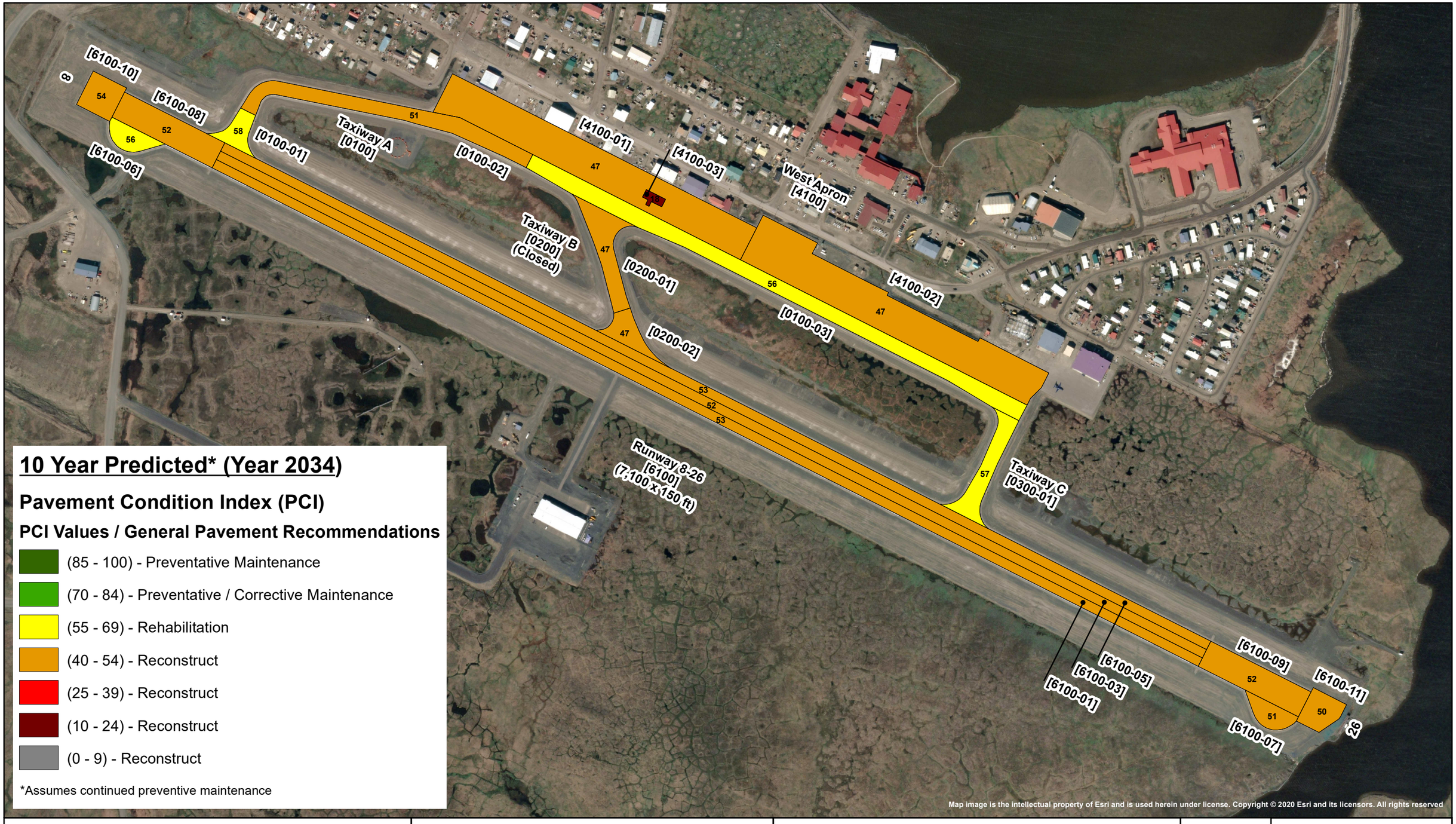
5 Year Predicted
Pavement Condition Index (PCI)
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2024 Pavement Inspection Results

0 350 700 1,400
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 3 of 6



Barrow Airport

Airport Code: BRW
Site Number: 50054.3*A

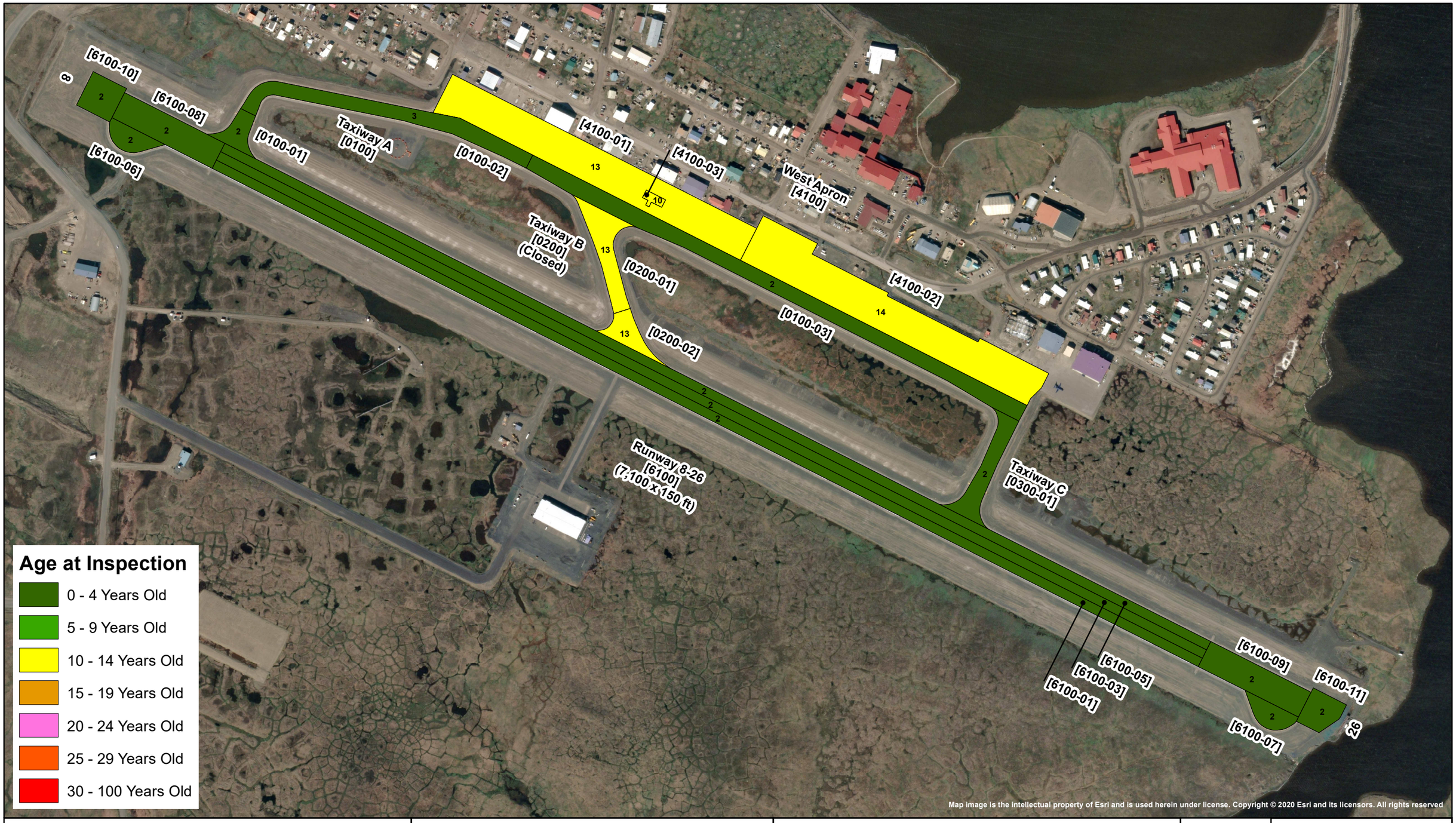
10 Year Predicted
Pavement Condition Index (PCI)
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2024 Pavement Inspection Results

0 350 700 1,400
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 4 of 6



Barrow Airport

Airport Code: BRW
Site Number: 50054.3*A

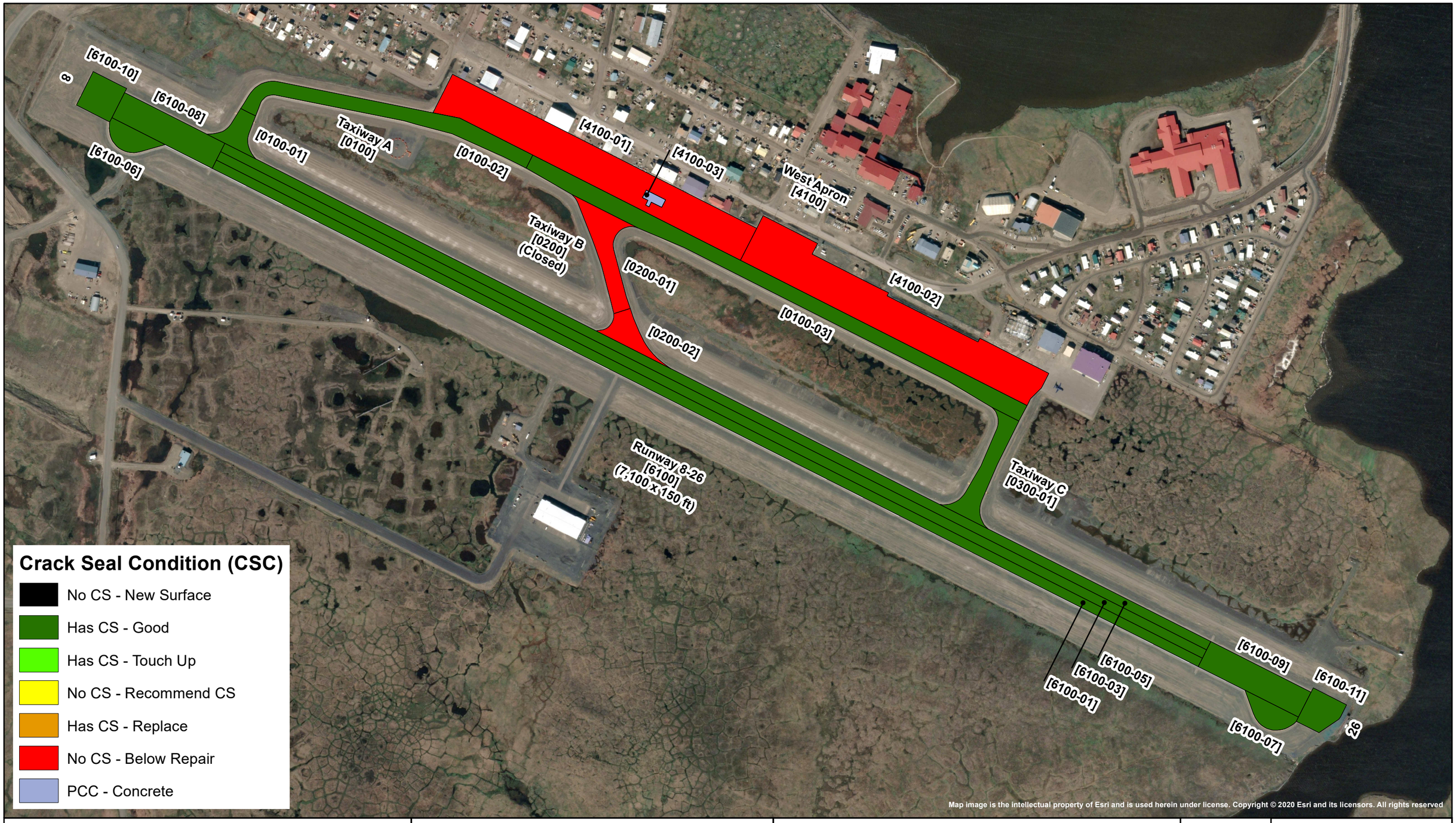
Pavement Age at Inspection

2024 Pavement Inspection Results

0 345 690 1,380
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 5 of 6



Barrow Airport

Airport Code: BRW
Site Number: 50054.3*A

Pavement Crack Seal Condition (CSC)

2024 Pavement Inspection Results

0 350 700 1,400
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	3	395,415	82

Taxiway A was initially constructed in 1975, and the most recent major work was a two-inch overlay from 2021 to 2022. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field observations indicate a significant depression near the edge of the Apron, between Taxiway B and Taxiway C. This depression, measuring approximately 500 square feet, has a depth ranging from 1 inch to over 2 inches, resulting in medium- to high-severity distresses for taxiways and aprons.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0200	Taxiway B	Taxiway	2	99,821	51

Taxiway B was constructed in 1977 and reconstructed in 2011 in correlation with the runway realignment. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low severity block cracking, low severity depressions, low severity longitudinal and transverse cracking, low severity raveling, and low weathering. Field observations note the taxiway being closed during the inspection but still received a recent crack seal application.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0300	Taxiway C	Taxiway	1	59,855	90

Taxiway C was constructed in 1977, and the most recent major work was a two-inch overlay in 2022. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low severity longitudinal and transverse cracking and low severity weathering. Field observations note the development of new cracks starting to reflect through the top asphalt layer.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	West Apron	Apron	3	713,367	54

AC Section 4100-01 (55 PCI), 4100-02 (54 PCI)

The West Apron consists of three sections, of which two are AC and the other is PCC. AC Section 4100-01 was initially constructed in 1977, in 2003 section 4100-02 was added doubling the size of the apron. Both sections had major work conducted from 2010 to 2011. Periodic crack sealing has been performed on the branch. The most common distresses are low severity block cracking, low to high severity depressions, low to high severity longitudinal and transverse cracking, low to high severity raveling, and low severity weathering. Pavement inspectors observed several large depressions holding water on the apron. In addition, high-severity cracks appear to be allowing water to infiltrate the AC pavement section, further compromising pavement integrity.

PCC Section 4100-03 (42 PCI)

PCC Section 4100-03 was constructed in 2014 and has not received any major work since. The most common distresses observed are low to medium linear cracking, high severity joint seal damage, and low to high severity joint spalling. Field observations note the high severity joint seal damage compromises the pavement's ability to prevent water infiltration. This infiltration can exacerbate existing distresses and lead to further deterioration of the pavement structure.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 08/26	Runway	9	1,197,870	88




Runway 08/26 underwent realignment and construction from 2009 to 2010. In 2022, the runway received a two-inch overlay. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity longitudinal and transverse cracking and low severity weathering. Field observations have highlighted the development of new cracks beginning to reflect through the top asphalt layer. This phenomenon, known as reflective cracking, occurs when cracks in the underlying pavement layers propagate upwards through the new overlay. It indicates the need for continued monitoring and maintenance to address these issues and ensure the runway's long-term performance.

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	3	4,795	88	395,415	TAXIWAY	82.97	7.59	81.68
0200	2	840	85	99,821	TAXIWAY	51.65	2.25	50.88
0300	1	590	75	59,855	TAXIWAY	89.50	0.00	89.50
4100	3	3,635	145	713,367	APRON	50.30	5.98	54.38
6100	9	19,940	123	1,197,870	RUNWAY	87.87	1.19	87.84

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	3	713,367	50.30	5.98	54.38
RUNWAY	9	1,197,870	87.87	1.19	87.84
TAXIWAY	6	555,091	73.62	16.65	76.99
ALL	18	2,466,328	76.86	16.75	75.72

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	7/1/2022	AAC	TAXIWAY	P	27,472	6/10/2024	2	91
0100	0100-02	7/1/2021	AAC	TAXIWAY	P	127,418	6/10/2024	3	73
0100	0100-03	7/1/2022	AAC	TAXIWAY	P	240,525	6/10/2024	2	85
0200	0200-01	9/1/2011	AC	TAXIWAY	P	67,000	6/10/2024	13	49
0200	0200-02	9/1/2011	AC	TAXIWAY	P	32,821	6/10/2024	13	54
0300	0300-01	7/1/2022	AAC	TAXIWAY	P	59,855	6/10/2024	2	90
4100	4100-01	9/1/2011	AC	APRON	P	344,718	6/10/2024	13	55
4100	4100-02	8/1/2010	AC	APRON	P	362,914	6/10/2024	14	54
4100	4100-03	9/1/2014	PCC	APRON	P	5,735	6/10/2024	10	42
6100	6100-01	7/1/2022	AAC	RUNWAY	P	295,000	6/10/2024	2	88
6100	6100-03	7/1/2022	AAC	RUNWAY	P	295,000	6/10/2024	2	88
6100	6100-05	7/1/2022	AAC	RUNWAY	P	295,000	6/10/2024	2	88
6100	6100-06	7/1/2022	AAC	RUNWAY	P	28,184	6/10/2024	2	90
6100	6100-07	7/1/2022	AAC	RUNWAY	P	28,490	6/10/2024	2	87
6100	6100-08	7/1/2022	AAC	RUNWAY	P	90,000	6/10/2024	2	87
6100	6100-09	7/1/2022	AAC	RUNWAY	P	90,000	6/10/2024	2	87
6100	6100-10	7/1/2022	AAC	RUNWAY	T	40,000	6/10/2024	2	89
6100	6100-11	7/1/2022	AAC	RUNWAY	T	36,196	6/10/2024	2	86

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
00-02	2	1,525,722	12	88.04	1.57	87.57
03-05	3	127,418	1	72.70	0.00	72.70
06-10	10	5,735	1	41.90	0.00	41.90
11-15	13	807,453	4	53.08	2.23	54.03
ALL	5	2,466,328	18	76.86	16.75	75.72

Work History Report

Pavement Database: Alaska

Network: Wiley Post-Will Roge **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:**AAC
L.C.D. 7/1/2022 **Use:** TAXIWAY **Rank:** P **Length:** 205.00 (Ft) **Width:** 115.00 (Ft) **True Area:** 27472 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2009	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-282" Bitumino

Network: Wiley Post-Will Roge **Branch:** 0100 Taxiway A **Section:** 0100-02 **Surface:**AAC
L.C.D. 7/1/2021 **Use:** TAXIWAY **Rank:** P **Length:** 1,632.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 127418 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2021	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2011	SR-AC	Surface Reconstruction - AC	0.00	0.00	☑	(Funded via AIP)
8/12/1985	OL-AT	Overlay - AC Thin (Global)	0.00	0.00	☐	(Funded via AIP)
8/1/1975	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 0100 Taxiway A **Section:** 0100-03 **Surface:**AAC
L.C.D. 7/1/2022 **Use:** TAXIWAY **Rank:** P **Length:** 2,958.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 240525 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2011	SR-AC	Surface Reconstruction - AC	0.00	0.00	☑	(Funded via AIP)
8/12/1985	OL-AT	Overlay - AC Thin (Global)	0.00	0.00	☐	(Funded via AIP)
8/1/1975	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 0200 Taxiway B **Section:** 0200-01 **Surface:**AC
L.C.D. 9/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 600.00 (Ft) **Width:** 85.00 (Ft) **True Area:** 67000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2011	CR-AC	Complete Reconstruction - AC	0.00	0.00	☑	2" Bituminous Mix 64-282" Bitumino
8/12/1977	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 0200 Taxiway B **Section:** 0200-02 **Surface:**AC
L.C.D. 9/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 240.00 (Ft) **Width:** 85.00 (Ft) **True Area:** 32821 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2011	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-282" Bitumino

Network: Wiley Post-Will Roge **Branch:** 0300 Taxiway C **Section:** 0300-01 **Surface:**AAC
L.C.D. 7/1/2022 **Use:** TAXIWAY **Rank:** P **Length:** 590.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 59855 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2009	CR-AC	Complete Reconstruction - AC	0.00	0.00	☑	2" Bituminous Mix 64-282" Bitumino
8/12/1977	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 4100 West Apron **Section:** 4100-01 **Surface:** AC

L.C.D. 9/1/2011 **Use:** APRON **Rank:** P **Length:** 1,820.00 (Ft) **Width:** 190.00 (Ft) **True Area:** 344718 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2011	SR-AC	Surface Reconstruction - AC	0.00	0.00	☑	(Funded via AIP)
8/12/1985	OL-AT	Overlay - AC Thin (Global)	0.00	0.00	☐	(Funded via AIP)
8/15/1977	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 4100 West Apron **Section:** 4100-02 **Surface:** AC

L.C.D. 8/1/2010 **Use:** APRON **Rank:** P **Length:** 1,700.00 (Ft) **Width:** 200.00 (Ft) **True Area:** 362914 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2010	CR-AC	Complete Reconstruction - AC	0.00	0.00	☑	3" Asphalt6" Crushed Aggregate Base
9/1/2003	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Wiley Post-Will Roge **Branch:** 4100 West Apron **Section:** 4100-03 **Surface:** PCC

L.C.D. 9/1/2014 **Use:** APRON **Rank:** P **Length:** 115.00 (Ft) **Width:** 45.00 (Ft) **True Area:** 5735 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2014	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-01 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 5,900.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 295000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2009	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-03 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 5,900.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 295000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2009	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-05 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 5,900.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 295000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2009	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-06 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 320.00 (Ft) **Width:** 130.00 (Ft) **True Area:** 28184 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
7/20/2015	SR-AC	Surface Reconstruction - AC	0.00	0.00	☑	(Funded via AIP)
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-07 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 320.00 (Ft) **Width:** 130.00 (Ft) **True Area:** 28490 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-08 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 600.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 90000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
7/20/2015	MOL	Cold Mill and Overlay	0.00	0.00	☑	HMA type II Class A, (Funded via AI
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-09 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** P **Length:** 600.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 90000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-10 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** T **Length:** 200.00 (Ft) **Width:** 200.00 (Ft) **True Area:** 40000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Network: Wiley Post-Will Roge **Branch:** 6100 08/26 **Section:** 6100-11 **Surface:** AAC

L.C.D. 7/1/2022 **Use:** RUNWAY **Rank:** T **Length:** 200.00 (Ft) **Width:** 200.00 (Ft) **True Area:** 36196 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2022	OL_2	2 in overlay	0.00	0.00	☑	(Funded via AIP)AIP No. 03-02-0026-
9/1/2010	NC-IN	New Construction - Initial	0.00	0.00	☑	2" Bituminous Mix 64-284" Bitumino

Work History Report

Pavement Database: Alaska

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
2 in overlay	13	1,653,140.00	0.00	0.00
Cold Mill and Overlay	1	90,000.00	0.00	0.00
Complete Reconstruction - AC	3	489,769.00	0.00	0.00
New Construction - Initial	18	2,466,328.00	0.00	0.00
Overlay - AC Thin (Global)	3	712,661.00	0.00	0.00
Surface Reconstruction - AC	4	740,845.00	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	7.5 [1]	P-401	5.5 [4]	Unk	-	-	P-154 (SP) F3 [3]	20 [5]
	0100-02	5 [1]	P-401	5.5 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
Taxiway B 0200	0200-01	7.5 [1]	P-401	-	-	-	-	P-154 (SP) F3	20 [5]
	0200-02	7.5 [1]	P-401	-	-	-	-	P-154 (SP) F3	20 [5]
Taxiway C 0300	0300-01	7.5 [1]	P-401	-	-	-	-	P-154 (SP) F3	20 [5]
West Apron 4100	4100-01	6 [1]	P-401	16 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	4100-02	3 [1]	P-401	16 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	4100-03	6 [1]	PCC	16 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
Runway 8/26 6100	6100-01 South 50'	7.5 [1]	P-401	19 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-03 Keel 50'	7.5 [1]	P-401	14 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-05 North 50'	7.5 [1]	P-401	19 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-06 West Turnaround	9 [1]	P-401	10 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-07 East Turnaround	9 [1]	P-401	6 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-08 West Displaced Threshold	9 [1]	P-401	-	-	-	-	P-154 (SP) F3	20 [5]
	6100-09 East Displaced Threshold	9 [1]	P-401	-	-	-	-	P-154 (SP) F3	20 [5]
	6100-10 West Overrun	5.5 [1]	P-401	5 [4]	Unk	-	-	P-154 (SP) F3	20 [5]
	6100-11 East Overrun	5.5 [1]	P-401	19 [4]	Unk	-	-	P-154 (SP) F3	20 [5]

Notes:

[1] Estimated thickness from construction and related documents provided for review

[2] PFS = Partially Frost Susceptible per UFC 3-260-02, Pavement Design for Airfields (2001)

[3] F3 = Frost Group per UFC 3-260-02, Pavement Design for Airfields (2001)

[4] Contingency Airfield Pavement Evaluation Report (2021), 621st CRSS, US Air Force

[5] Evaluation of Airport Pavement Designs for Seasonal Frost and Permafrost Conditions (2023)

AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	S-5	5,100	95.00	51	2	15
2	S-10	10,450	95.00	52	27	249
3	S-15	17,637	95.00	59	5	53
4	Cessna 208B	8,750	95.00	75	4,457	35,924
5	S-45	45,000	95.00	90	4	47
6	PA-31-325 Navajo C/R	6,536	95.00	66	778	6,036
7	D-15	17,120	95.00	63	753	10,882
8	Beechcraft King Air B200	12,590	95.00	98	10	134
9	D-25	25,353	95.00	76	6	100
10	B737-100	111,000	92.00	157	243	4,591
11	B737-300	140,000	90.80	201	260	4,874
12	B737-400	150,500	93.80	185	265	5,253
13	B737-7 MAX	177,500	93.60	204	1,099	21,601
14	EMB-175 STD	83,026	95.00	136	38	709
15	DC9-51	122,000	94.00	172	32	628

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
8-26	B737-7 MAX	326,138	30,000	21.5	1.0	786/F/A/X/T

PCR CALCULATION NOTES

- 1% traffic growth assumed
- S-5, S-10, S-15, S-45 refer to “generic” single gear aircraft as modeled in FAARFIELD
- D-15 and D-25 refer to “generic” dual gear aircraft as modeled in FAARFIELD
- Aircraft fleet mix and annual departures were provided by Alaska DOT&PF

REFERENCES

Year	Project No.	Document Title
2023	FAA-DOT-TC-23-11	Evaluation of Airport Pavement Designs for Seasonal Frost and Permafrost Conditions, FAA
2018	3-02-0026-016, NFAPT00247	Conformed Plans Addition 1, Pavement Overlay
2017		Geotechnical Report S&W, Airport Pavement Overlay
2016	3-02-0026-015, Z62378	Conformed Plans M&O Facility Stage 1
2014	3-02-0026-xxx, 63986	Runway 07 Repair, As-Built
2012	0612_ADOTPF_BRW_HWD	Dynatest FWD Evaluation of Runway, Final Report
2009	3-02-0026-10, 61002 REVISED	Runway and Apron Paving, As-Built
2008		Power Point - Jason Hill Barrow Construction
2001	3-02-0026-05, 64822	Apron Expansion, As-Built
1985	6-02-0026-03	Paving and Grading Improvement, As-Built
1972		Map 00184, As-Built