



Alaska DOT&PF

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

Pavement Inspection Report Cordova Airport



Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Merle K (Mudhole) Smith Airport	CDV	PACV	60° 29' 29.9" N	145° 28' 39.21" W	43

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
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Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

(85 - 100) - Preventative Maintenance

(70 - 84) - Preventative / Corrective Maintenance

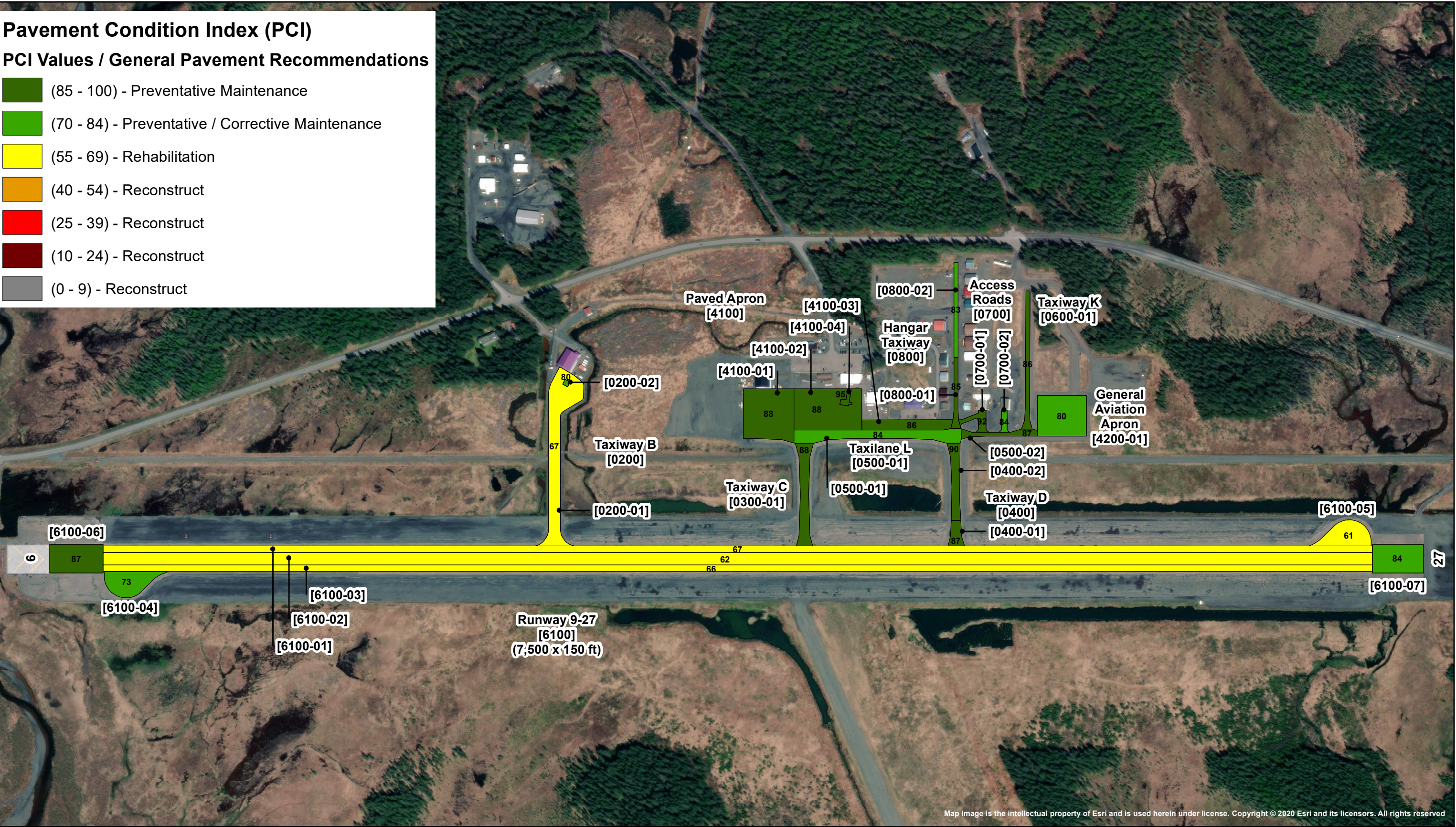
(55 - 69) - Rehabilitation

(40 - 54) - Reconstruct

(25 - 39) - Reconstruct

(10 - 24) - Reconstruct

(0 - 9) - Reconstruct

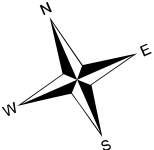


Cordova Airport

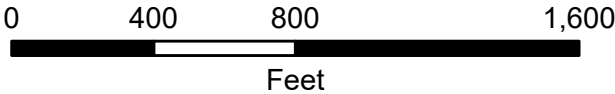
Airport Code: CDV
Site Number: 50124.*A

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



Map Created by Duval Engineering
for AK DOT&PF

Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

(85 - 100) - Preventative Maintenance

(70 - 84) - Preventative / Corrective Maintenance

(55 - 69) - Rehabilitation

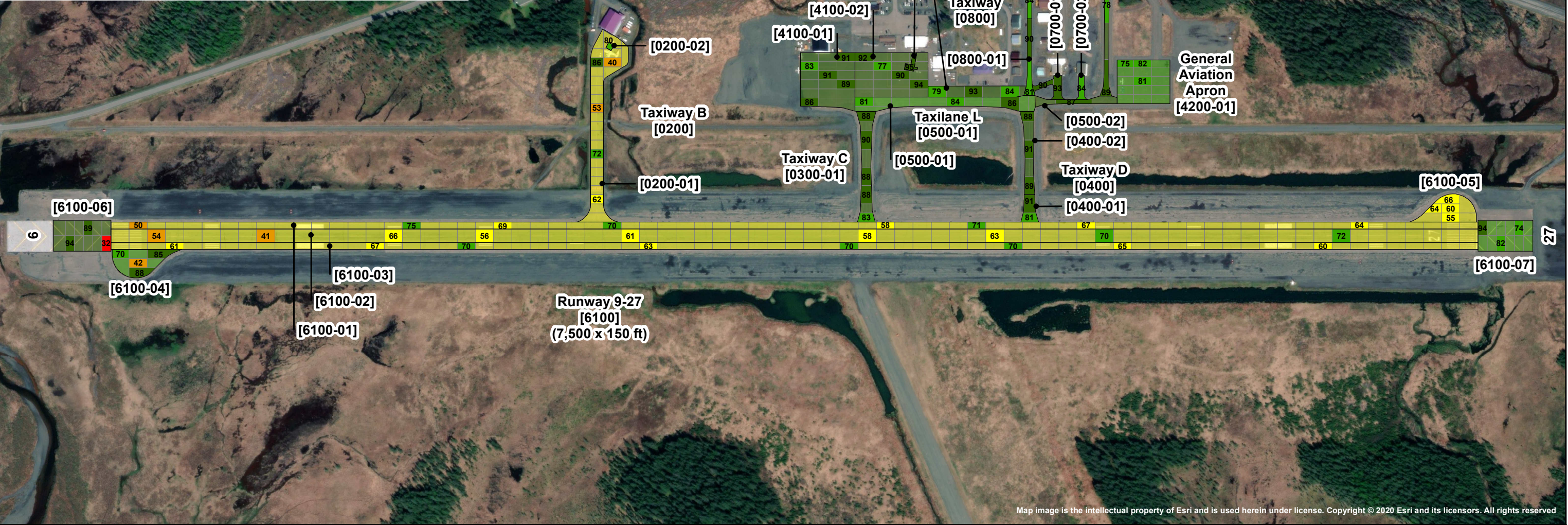
(40 - 54) - Reconstruct

(25 - 39) - Reconstruct

(10 - 24) - Reconstruct

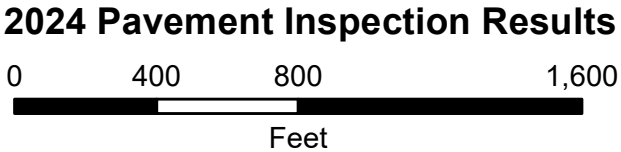
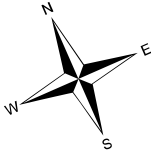
(0 - 9) - Reconstruct

Inventoried Sample Unit



Cordova Airport
Airport Code: CDV
Site Number: 50124.*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



Map Created by Duval Engineering
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Map 2 of 6

5 Year Predicted* (Year 2029)

Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

(85 - 100) - Preventative Maintenance

(70 - 84) - Preventative / Corrective Maintenance

(55 - 69) - Rehabilitation

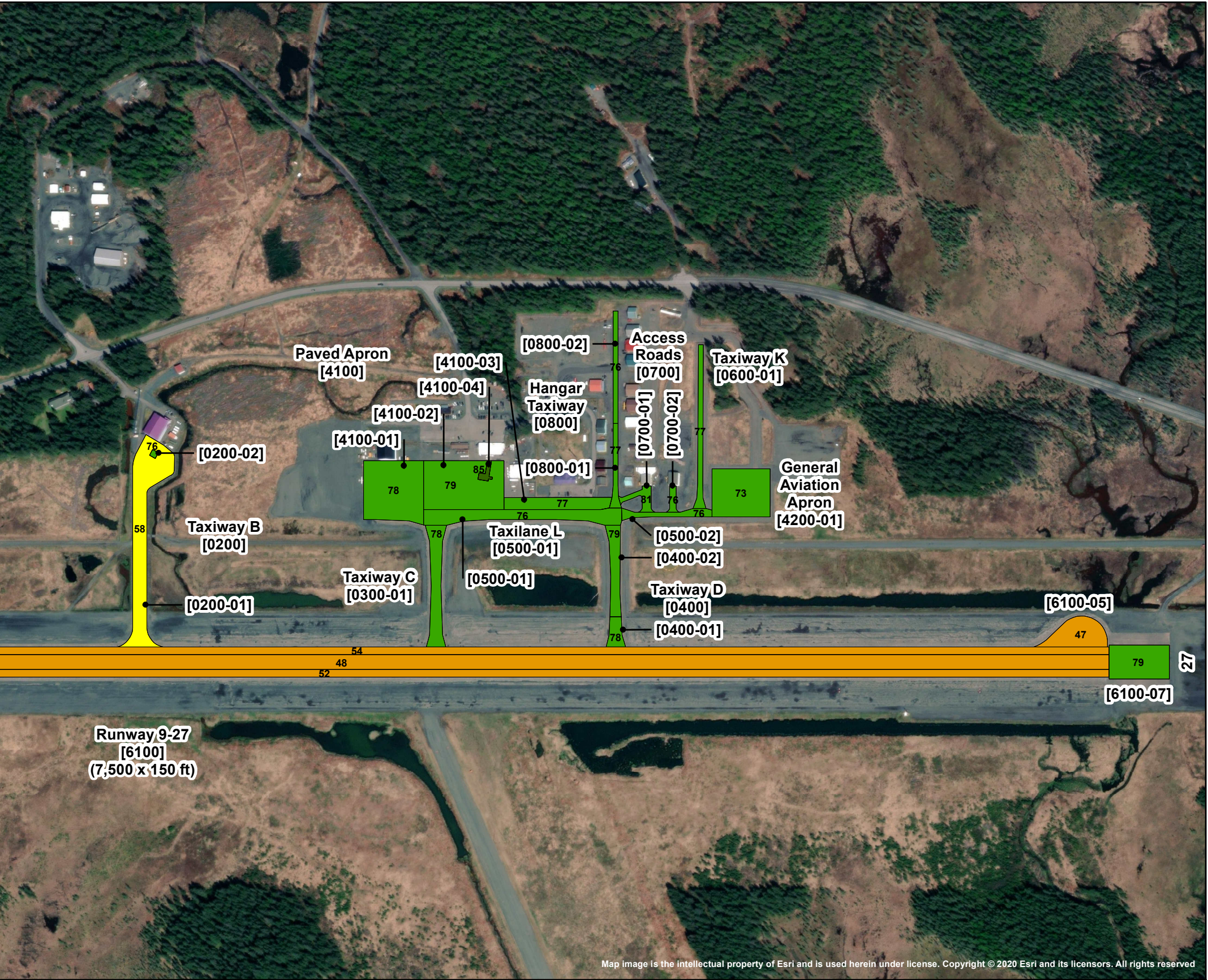
(40 - 54) - Reconstruct

(25 - 39) - Reconstruct

(10 - 24) - Reconstruct

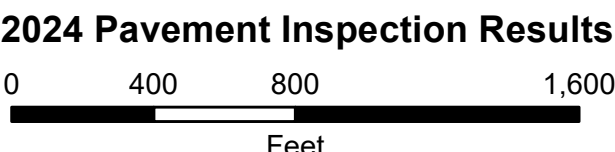
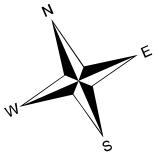
(0 - 9) - Reconstruct

*Assumes continued preventive maintenance



Cordova Airport
Airport Code: CDV
Site Number: 50124.*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



Map Created by Duval Engineering
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Map 3 of 6

10 Year Predicted* (Year 2034)

Pavement Condition Index (PCI)

PCI Values / General Pavement Recommendations

(85 - 100) - Preventative Maintenance

(70 - 84) - Preventative / Corrective Maintenance

(55 - 69) - Rehabilitation

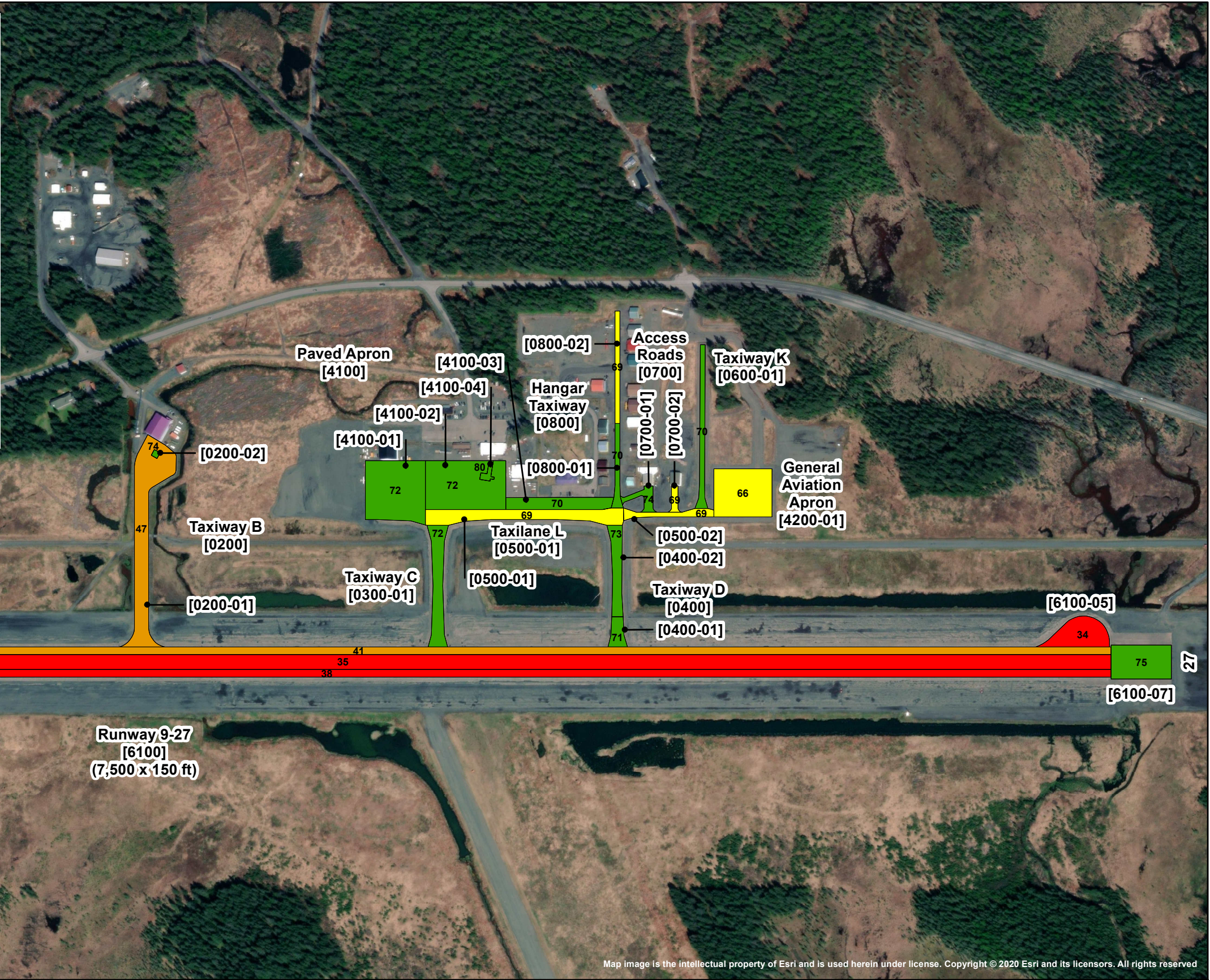
(40 - 54) - Reconstruct

(25 - 39) - Reconstruct

(10 - 24) - Reconstruct

(0 - 9) - Reconstruct

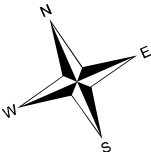
*Assumes continued preventive maintenance



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Cordova Airport
Airport Code: CDV
Site Number: 50124.*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



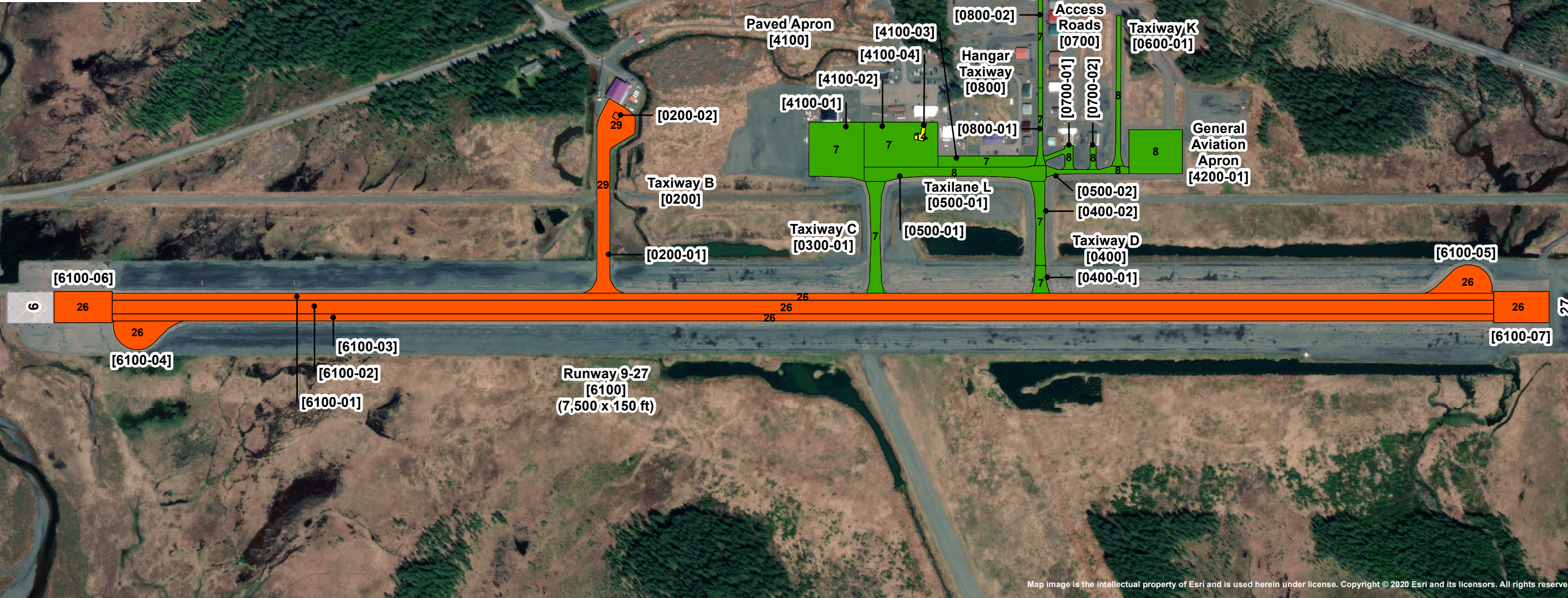
2024 Pavement Inspection Results
0 400 800 1,600
Feet



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for AK DOT&PF
Map 4 of 6

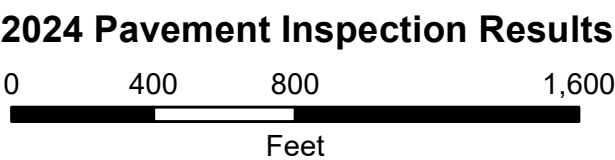
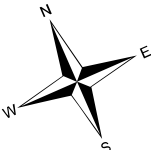
Age at Inspection

- 0 - 4 Years Old
- 5 - 9 Years Old
- 10 - 14 Years Old
- 15 - 19 Years Old
- 20 - 24 Years Old
- 25 - 29 Years Old
- 30 - 100 Years Old



Cordova Airport
Airport Code: CDV
Site Number: 50124.*A

Pavement Age at Inspection

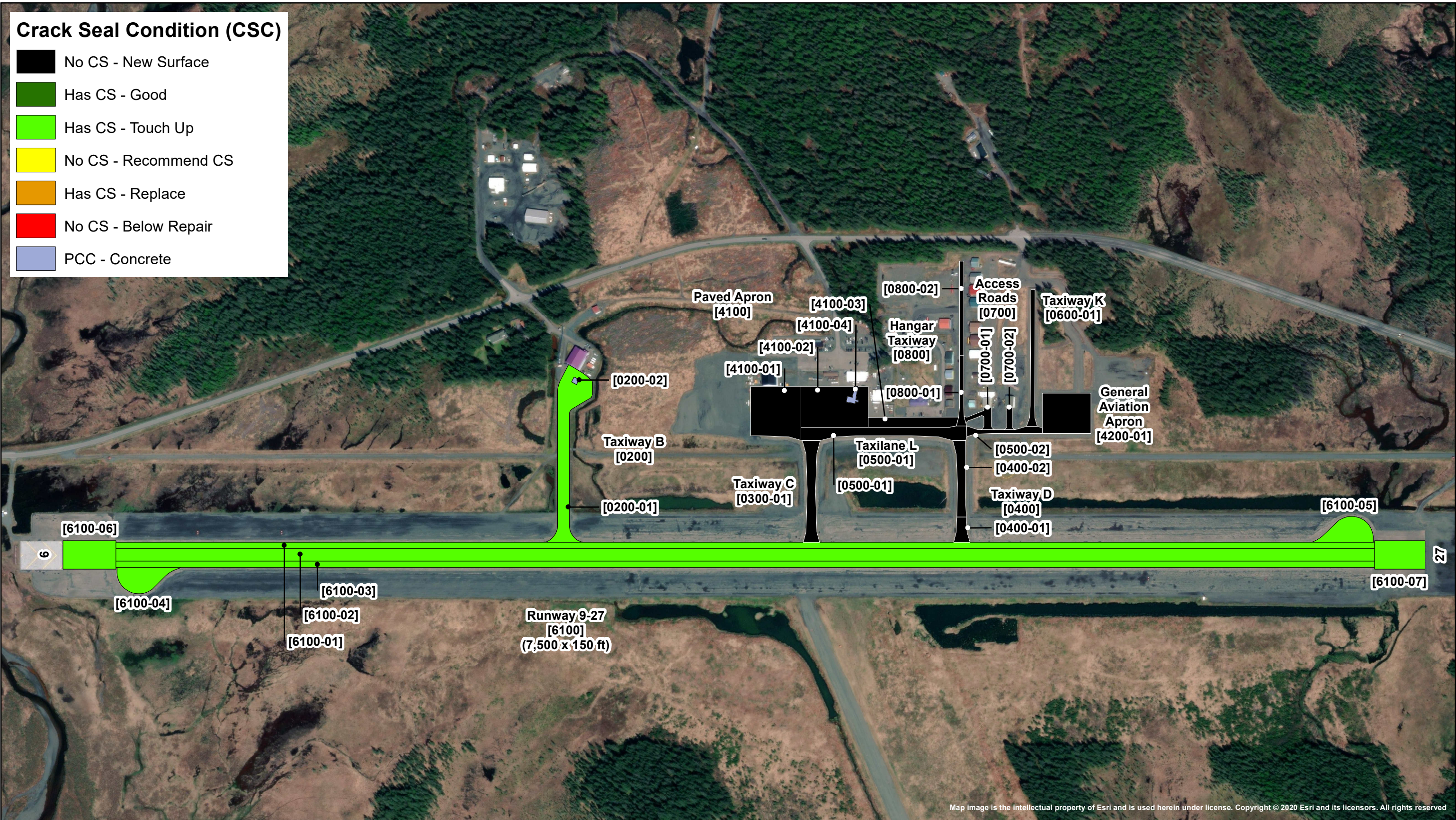


Map Created by Duval Engineering
for AK DOT&PF

Map 5 of 6

Crack Seal Condition (CSC)

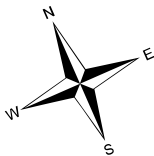
- No CS - New Surface
- Has CS - Good
- Has CS - Touch Up
- No CS - Recommend CS
- Has CS - Replace
- No CS - Below Repair
- PCC - Concrete



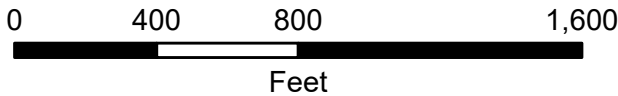
Cordova Airport

Airport Code: CDV
Site Number: 50124.*A

Pavement Crack Seal Condition (CSC)



2024 Pavement Inspection Results



Map Created by Duval Engineering
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AIRPORT PAVEMENT INSPECTION NOTES BY BRANCH

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0200	Taxiway B	Taxiway	2	99,651	67

AC Section 0200-01 (67 PCI)




Taxiway B consists of two sections, of which Section 0200-01 is asphalt concrete (AC) and Section 0200-02 is portland cement concrete (PCC). Section 0200-01 was constructed in 1995 and has not received any major work since. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity depressions, low to medium severity longitudinal and transverse cracking, low severity raveling, and low to medium severity weathering. Field observations include isolated areas of alligator cracking and slippage cracking located in the aircraft turning motions.


PCC Section 0200-02 (80 PCI)




Taxiway B Section 0200-02 was constructed in 1995 and has not received any major work since. The only distress observed was low severity linear cracking. No additional field observations were made during the inspection.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0300	Taxiway C	Taxiway	1	38,335	88
					


Taxiway C was initially constructed in 1967. The most recent major work, a complete reconstruction, was carried out in 2017. This included 16" of subbase, 6" of asphalt treated base, and 4" of asphalt top layer. Crack seal operations have not been performed on the branch. The most common distresses observed are low severity depressions, low severity raveling, and low severity weathering. Field observations indicate early signs of paving joint deterioration, resulting in isolated areas of raveling. Additionally, depressions along the joints are causing water to pool, further accelerating the deterioration.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0400	Taxiway D	Taxiway	2	34,724	89
					



Taxiway D was initially constructed in 1967. The most recent major work, a complete reconstruction, was carried out in 2017. This included 26" of subbase, 6" of asphalt treated base, and 4" of asphalt top layer. Crack seal operations have not been performed on the branch. The most common distresses observed are low severity depressions, low severity raveling, and low severity weathering. Field observations indicate early signs of paving joint deterioration, resulting in isolated areas of raveling. Additionally, depressions along the joints are causing water to pool, further accelerating the deterioration.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0500	Taxilane L	Taxiway	2	73,856	85
					



Taxilane L was initially constructed in 1967. The most recent major work, a complete reconstruction, was carried out in 2016. This included 18" of subbase, 6" of asphalt treated base, and 4" of asphalt top layer. Crack seal operations have not 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 initial development of cracking across the branch.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0600	Taxiway K	Taxiway	1	21,785	86
					

Taxiway K was initially constructed in 2016 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 raveling and low severity weathering. Field observations indicate initial deterioration of the paving joints, resulting in isolated areas of raveling.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0700	Access Roads	Taxiway	2	13,615	89
					

The access roads that break off from Taxilane K were constructed in 2016 and have 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 severity raveling, and low severity weathering. Field observations indicate initial development of cracking across the branch.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0800	Hangar TW	Taxiway	2	25,901	84
					

The Hangar Taxiway consists of two sections, of which section 0800-01 was initially constructed in 1975 while section 0800-02 was added on in 1995. Both sections underwent a 2" overlay in 2017. Crack seal operations have not been performed on the branch. The most common distresses observed are low severity longitudinal and transverse cracking, low severity raveling, and low to medium severity weathering. Field observations indicate initial deterioration of the paving joints, resulting in isolated areas of raveling.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	Paved Apron	Apron	4	219,419	88

AC Section 4100-01 (88 PCI), 4100-02 (88 PCI), 4100-03 (86 PCI)





The Paved Apron consists of four sections, of which Sections 4100-01, 4100-02, and 4100-03 are asphalt concrete (AC) while Section 4100-04 is portland cement concrete (PCC). Section 4100-01 was initially constructed in 1995 and received a 2" overlay in 2017. Sections 4100-02 and 4100-03 were initially constructed in 1967 and both received a 2" mill and overlay in 2017. Crack seal operations have not been performed on the branch. The most common distresses observed are low severity depressions, low severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field observations indicate early signs of paving joint deterioration, resulting in isolated areas of raveling. Additionally, depressions along the joints are causing water to pool, further accelerating the deterioration.





PCC Section 4100-04 (95 PCI)



The Paved Apron Section 4100-04 was initially constructed in 2010 and has not received any major work since. The most common distresses observed are low severity joint seal damage and low severity scaling. Field observations include wearing of the surface of the concrete leading to the low severity scaling, and initial deterioration of the joint sealant causing low severity joint seal damage.

ranch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4200	General Aviation Apron	Apron	1	69,600	80
					

The General Aviation Apron was initially constructed in 2016 and has not received any major work since. Crack seal operations have not been performed on the branch. The most common distresses observed are oil spillage, low severity raveling, and low to medium severity weathering. Field observations indicate initial deterioration of the paving joints, resulting in isolated areas of raveling as well as localized areas of oil spillage across the branch.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 09/27	Runway	7	1,303,827	66
					
					

Runway 09/27 was initially constructed in 1967 and received major work in 1998. Periodic crack seal operations have been performed on the branch. The most common distresses observed are low severity alligator cracking, low to medium severity longitudinal and transverse cracking, low severity depressions, low to high severity raveling, and low to medium severity weathering. Field observations include further deterioration of the top layer of asphalt, contributing to higher quantity and severity raveling and weathering throughout the branch.

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
0200	2	1,083	52	99,651	TAXIWAY	73.20	6.30	67.04
0300	1	607	65	38,335	TAXIWAY	87.60	0.00	87.60
0400	2	605	58	34,724	TAXIWAY	88.25	1.35	88.79
0500	2	1,437	37	73,856	TAXIWAY	85.65	1.75	84.57
0600	1	815	25	21,785	TAXIWAY	85.70	0.00	85.70
0700	2	380	39	13,615	TAXIWAY	87.80	4.00	89.20
0800	2	980	25	25,901	TAXIWAY	84.30	0.90	84.23
4100	4	1,330	164	219,419	APRON	89.25	3.54	87.89
4200	1	290	240	69,600	APRON	79.80	0.00	79.80
6100	7	23,869	114	1,303,827	RUNWAY	71.41	9.50	66.13

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	289,019	87.36	4.93	85.94
RUNWAY	7	1,303,827	71.41	9.50	66.13
TAXIWAY	12	307,867	84.31	6.06	80.01
ALL	23	1,900,713	80.94	9.63	71.39

SECTION CONDITION REPORT

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	True Area (Sq Ft)	Last Inspection Date	Age At Inspection	PCI
0200	0200-01	9/1/1995	AC	TAXIWAY	S	98,562	9/1/2024	29	67
0200	0200-02	9/1/1995	PCC	TAXIWAY	S	1,089	9/1/2024	29	80
0300	0300-01	10/22/2017	AC	TAXIWAY	P	38,335	9/1/2024	7	88
0400	0400-01	10/22/2017	AC	TAXIWAY	P	10,367	9/1/2024	7	87
0400	0400-02	10/22/2017	AC	TAXIWAY	P	24,357	9/1/2024	7	90
0500	0500-01	3/22/2016	AC	TAXIWAY	P	59,645	9/1/2024	8	84
0500	0500-02	3/22/2016	AC	TAXIWAY	T	14,211	9/1/2024	8	87
0600	0600-01	3/22/2016	AC	TAXIWAY	T	21,785	9/1/2024	8	86
0700	0700-01	3/22/2016	AC	TAXIWAY	T	9,184	9/1/2024	8	92
0700	0700-02	3/22/2016	AC	TAXIWAY	T	4,431	9/1/2024	8	84
0800	0800-01	10/22/2017	AAC	TAXIWAY	T	11,901	9/1/2024	7	85
0800	0800-02	10/22/2017	AAC	TAXIWAY	T	14,000	9/1/2024	7	83
4100	4100-01	10/22/2017	AAC	APRON	P	90,041	9/1/2024	7	88
4100	4100-02	10/22/2017	AC	APRON	P	94,355	9/1/2024	7	88
4100	4100-03	10/22/2017	AC	APRON	P	31,735	9/1/2024	7	86
4100	4100-04	8/1/2010	PCC	APRON	P	3,288	9/1/2024	14	95
4200	4200-01	3/22/2016	AC	APRON	T	69,600	9/1/2024	8	80
6100	6100-01	9/1/1998	AC	RUNWAY	P	281,250	9/1/2024	26	67
6100	6100-02	9/1/1998	AC	RUNWAY	P	562,500	9/1/2024	26	62
6100	6100-03	9/1/1998	AC	RUNWAY	P	281,250	9/1/2024	26	66
6100	6100-04	9/1/1998	AC	RUNWAY	P	37,535	9/1/2024	26	73
6100	6100-05	9/1/1998	AC	RUNWAY	P	36,742	9/1/2024	26	61
6100	6100-06	9/1/1998	AC	RUNWAY	T	53,550	9/1/2024	26	87
6100	6100-07	9/1/1998	AC	RUNWAY	T	51,000	9/1/2024	26	84

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
06-10	7	493,947	14	86.21	2.88	85.99
11-15	14	3,288	1	95.10	0.00	95.10
26-30	27	1,403,478	9	71.81	8.92	66.20
ALL	15	1,900,713	23	81.18	9.51	71.39

<h2 style="margin: 0;">Work History Report</h2> <p style="margin: 0;"><i>Pavement Database: Alaska</i></p>	<p>Page 1 of 5</p>
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Network: Merle K. (Mudhole) S Branch: 0200 Taxiway B Section: 0200-01 Surface: AC L.C.D. 9/1/1995 Use: TAXIWAY Rank: S Length: 1,050.00 (Ft) Width: 70.00 (Ft) True Area: 98562 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1995	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

Network: Merle K. (Mudhole) S Branch: 0200 Taxiway B Section: 0200-02 Surface: PCC L.C.D. 9/1/1995 Use: TAXIWAY Rank: S Length: 33.00 (Ft) Width: 33.00 (Ft) True Area: 1089 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1995	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	

Network: Merle K. (Mudhole) S Branch: 0300 Taxiway C Section: 0300-01 Surface: AC L.C.D. 10/22/201 Use: TAXIWAY Rank: P Length: 607.00 (Ft) Width: 65.00 (Ft) True Area: 38335 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	CR-AC	Complete Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC, 6" Asphalt Treated Base, 16" S
8/1/1975	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	1.5" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bitu

Network: Merle K. (Mudhole) S Branch: 0400 Taxiway D Section: 0400-01 Surface: AC L.C.D. 10/22/201 Use: TAXIWAY Rank: P Length: 150.00 (Ft) Width: 65.00 (Ft) True Area: 10367 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	CR-AC	Complete Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC, 6" Asphalt Treated Base, 26" S
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)
9/1/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

Network: Merle K. (Mudhole) S Branch: 0400 Taxiway D Section: 0400-02 Surface: AC L.C.D. 10/22/201 Use: TAXIWAY Rank: P Length: 455.00 (Ft) Width: 50.00 (Ft) True Area: 24357 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	CR-AC	Complete Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC, 6" Crushed Aggregate Base, 2
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)
9/1/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

Network: Merle K. (Mudhole) S Branch: 0500 Taxilane L Section: 0500-01 Surface: AC L.C.D. 3/22/2016 Use: TAXIWAY Rank: P Length: 987.00 (Ft) Width: 50.00 (Ft) True Area: 59645 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	CR-AC	Complete Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC, 6" Crushed Aggregate Base Co
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bitu

Network: Merle K. (Mudhole) S Branch: 0500 Taxilane L Section: 0500-02 Surface: AC L.C.D. 3/22/2016 Use: TAXIWAY Rank: T Length: 450.00 (Ft) Width: 24.00 (Ft) True Area: 14211 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	CR-AC	Complete Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC, 6" Crushed Aggregate Base Co
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bitu

Work History Report

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Pavement Database: Alaska

Network: Merle K. (Mudhole) S Branch: 0600 Taxiway K Section: 0600-01 Surface: AC L.C.D. 3/22/2016 Use: TAXIWAY Rank: T Length: 815.00 (Ft) Width: 25.00 (Ft) True Area: 21785 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" AC, 6" Crushed Aggregate Base Co

Network: Merle K. (Mudhole) S Branch: 0700 Access Roads Section: 0700-01 Surface: AC L.C.D. 3/22/2016 Use: TAXIWAY Rank: T Length: 250.00 (Ft) Width: 45.00 (Ft) True Area: 9184 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" AC, 6" Crushed Aggregate Base Co

Network: Merle K. (Mudhole) S Branch: 0700 Access Roads Section: 0700-02 Surface: AC L.C.D. 3/22/2016 Use: TAXIWAY Rank: T Length: 130.00 (Ft) Width: 32.00 (Ft) True Area: 4431 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" AC, 6" Crushed Aggregate Base Co

Network: Merle K. (Mudhole) S Branch: 0800 Hangar TW Section: 0800-01 Surface: AAC L.C.D. 10/22/201 Use: TAXIWAY Rank: T Length: 420.00 (Ft) Width: 25.00 (Ft) True Area: 11901 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	OL-AS	Overlay - AC Structural	0.00	0.00	<input checked="" type="checkbox"/>	2" AC (Funded via AIP)
9/1/1975	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

Network: Merle K. (Mudhole) S Branch: 0800 Hangar TW Section: 0800-02 Surface: AAC L.C.D. 10/22/201 Use: TAXIWAY Rank: T Length: 560.00 (Ft) Width: 25.00 (Ft) True Area: 14000 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	OL-AS	Overlay - AC Structural	0.00	0.00	<input checked="" type="checkbox"/>	2" AC (Funded via AIP)
9/1/1995	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

Network: Merle K. (Mudhole) S Branch: 4100 Paved Apron Section: 4100-01 Surface: AAC L.C.D. 10/22/201 Use: APRON Rank: P Length: 300.00 (Ft) Width: 300.00 (Ft) True Area: 90041 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	OL-AS	Overlay - AC Structural	0.00	0.00	<input checked="" type="checkbox"/>	2" AC (Funded via AIP)
9/1/1995	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	3" AC, 6" Crushed Aggregate Base Co

Network: Merle K. (Mudhole) S Branch: 4100 Paved Apron Section: 4100-02 Surface: AC L.C.D. 10/22/201 Use: APRON Rank: P Length: 400.00 (Ft) Width: 245.00 (Ft) True Area: 94355 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	MOL	Cold Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	2" AC (Funded via AIP)
9/1/1975	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bitu

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Pavement Database: Alaska

Network: Merle K. (Mudhole) S Branch: 4100 Paved Apron Section: 4100-03 Surface: AC L.C.D. 10/22/201 Use: APRON Rank: P Length: 530.00 (Ft) Width: 60.00 (Ft) True Area: 31735 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/22/2017	MOL	Cold Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	2" AC (Funded via AIP)
9/1/1975	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" AC, 6" Crushed Aggregate Base (F
Network: Merle K. (Mudhole) S Branch: 4100 Paved Apron Section: 4100-04 Surface: PCC L.C.D. 8/1/2010 Use: APRON Rank: P Length: 100.00 (Ft) Width: 50.00 (Ft) True Area: 3288 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2010	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)
Network: Merle K. (Mudhole) S Branch: 4200 General Aviation Section: 4200-01 Surface: AC L.C.D. 3/22/2016 Use: APRON Rank: T Length: 290.00 (Ft) Width: 240.00 (Ft) True Area: 69600 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/22/2016	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" AC, 6" Crushed Aggregate Base Co
Network: Merle K. (Mudhole) S Branch: 6100 09/27 Section: 6100-01 Surface: AC L.C.D. 9/1/1998 Use: RUNWAY Rank: P Length: 7,500.00 (Ft) Width: 37.50 (Ft) True Area: 281250 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1.5" Bituminous Surface Course, 1.5"
Network: Merle K. (Mudhole) S Branch: 6100 09/27 Section: 6100-02 Surface: AC L.C.D. 9/1/1998 Use: RUNWAY Rank: P Length: 7,500.00 (Ft) Width: 75.00 (Ft) True Area: 562500 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1.5" Bituminous Surface Course, 1.5"
Network: Merle K. (Mudhole) S Branch: 6100 09/27 Section: 6100-03 Surface: AC L.C.D. 9/1/1998 Use: RUNWAY Rank: P Length: 7,500.00 (Ft) Width: 37.50 (Ft) True Area: 281250 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1.5" Bituminous Surface Course, 1.5"
Network: Merle K. (Mudhole) S Branch: 6100 09/27 Section: 6100-04 Surface: AC L.C.D. 9/1/1998 Use: RUNWAY Rank: P Length: 377.00 (Ft) Width: 155.00 (Ft) True Area: 37535 (SqFt)						
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bin

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Network: Merle K. (Mudhole) S	Branch: 6100	09/27	Section: 6100-05	Surface: AC
L.C.D. 9/1/1998	Use: RUNWAY	Rank: P	Length: 377.00 (Ft)	Width: 155.00 (Ft) True Area: 36742 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
9/1/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1.5" Bituminous Surface Course, 1.5"

Network: Merle K. (Mudhole) S	Branch: 6100	09/27	Section: 6100-06	Surface: AC
L.C.D. 9/1/1998	Use: RUNWAY	Rank: T	Length: 315.00 (Ft)	Width: 170.00 (Ft) True Area: 53550 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bin

Network: Merle K. (Mudhole) S	Branch: 6100	09/27	Section: 6100-07	Surface: AC
L.C.D. 9/1/1998	Use: RUNWAY	Rank: T	Length: 300.00 (Ft)	Width: 170.00 (Ft) True Area: 51000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/1998	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/>	4" AC (Funded via AIP)
3/16/1967	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" Bituminous Surface Course, 2" Bin

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Cold Mill and Overlay	2	126,090.00	0.00	0.00
Complete Reconstruction - AC	5	146,915.00	0.00	0.00
New Construction - Initial	24	1,900,713.00	0.00	0.00
Overlay - AC Structural	3	115,942.00	0.00	0.00
Surface Reconstruction - AC	12	1,502,976.00	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 B 0200	0200-01	-	P-401	-	UNK	-	UNK	-	UNK
	0200-02	-	PCC	-	UNK	-	UNK	-	UNK
Taxiway C 0300	0300-01	4	P-401	6	ATB	16	P-154	ML	5
Taxiway D 0400	0400-01	4	P-401	6	ATB	26	P-154	ML	5
	0400-02	4	P-401	6	ATB	26	P-154	ML	5
Taxilane L 0500	0500-01	4	P-401	6	ATB	18	P-154	SP	15
	0500-02	2	P-401	6	P-209	18	P-154	SM	15
Taxiway K 0600	0600-01	2	P-401	6	P-209	18	P-154	SP-SM	15
Access Roads 0700	0700-01	2	P-401	6	P-209	-	UNK	SM	15
	0700-02	2	P-401	6	P-209	-	UNK	SM	15
Hangar TW 0800	0800-01	2	P-401	6	P-209	18	P-154	-	UNK
	0800-02	2	P-401	-	UNK	-	UNK	-	UNK
Paved Apron 4100	4100-01	3	P-401	6	P-209	-	UNK	SM	15
	4100-02	4	P-401	6	P-209	-	UNK	GW-GM	30
	4100-03	2	P-401	6	P-209	-	UNK	SM	15
	4100-04	-	PCC	6	P-209	-	UNK	GW-GM	30
General Aviation Apron 4200	4200-01	2	P-401	6	P-209	18	P-154	SM	15

PHYSICAL PROPERTY DATA (CONTINUED)

Branch ID	Section ID	Pavement		Base		Subbase		Subgrade	
		Thick (in)	Type	Thick (in)	Type	Thick (in)	Type	Type	CBR
Runway 09/27 6100	6100-01 North 37.5'	3	P-401	8	P-209	24 ²	P-154	SM	20 ¹
	6100-02 Keel 75'	4	P-401	8	P-209	24 ²	P-154	SM	20 ¹
	6100-02 Keel 75' Sta 72 to 103	3	P-401	8	P-209	24 ²	P-154	SM	20 ¹
	6100-03 South 37.5'	2	P-401	6	P-209	24 ²	P-154	SM	20 ¹
	6100-04 West Turnaround	3	P-401	6	P-209	24 ²	P-154	SM	20 ¹
	6100-05 East Turnaround	2	P-401	6	P-209	24 ²	P-154	SM	20 ¹
	6100-06 West Overrun	2	P-401	6	P-209	24 ²	P-154	SM	20 ¹
	6100-07 East Overrun	3	P-401	8	P-209	24 ²	P-154	SM	20 ¹

Notes:

¹ – Runway subgrade varies from NFS sand/gravel to frost susceptible silty sands. 15 CBR SM was used as a conservative value when calculating the PCR in FAARFIELD.

² – Fill material thickness varies. 24 inches of P-154 was used as a conservative value when calculating the PCR in FAARFIELD.

UNK – material type and/or thickness are unknown.

ATB – Asphalt-Treated Base

AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	Cessna 206 Stationair	3,612	95.00	52	2	18
2	S-10	10,450	95.00	52	4	44
3	D-15	17,120	95.00	63	697	11,329
4	Q100/Dash 8 Series 100	34,700	94.40	131	23	433
5	D-100	107,200	95.00	150	8	193
6	L-100-20	155,801	96.40	104	4	123
7	Learjet 35/36/35A/36A	18,000	95.00	171	2	31
8	B737-300	140,000	90.80	201	2	44
9	B737-400	150,500	93.80	185	8	186
10	B737-7 MAX	177,500	93.60	204	1,033	23,717
11	DC9-32	109,000	92.40	155	4	93
12	D-50	50,265	95.00	80	4	89

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
9-27	B737-7 MAX	382,591	42,000	22.0	1.0	977/F/A/X/T

PCR CALCULATION NOTES

- 1% traffic growth assumed
- S-10 refers to “generic” single gear aircraft as modeled in FAARFIELD
- D-15 and D-50 refer to “generic” dual gear aircraft as modeled in FAARFIELD
- Aircraft fleet mix and annual departures were provided by Alaska DOT&PF
- PCR computation based on Section 6100-02 Keel Sta 72 to 103

REFERENCES

Year	Project No.	Document Title
2016	3-02-0067, Z614030000	Airport Improvements, Stage II, As-Builts
2007	3-02-0067, 76878	Airport Improvements, Stage I, As-Builts
2006	3-02-0067, 61482	Construct EMAS, As-Builts
1998	3-02-0067-05, 67318	Runway Rehabilitation, As-Builts
1993	3-02-0067-04, 65529	Airport Improvements, As-Builts
1978	6-02-0067-03	Runway Modification
1967	9-50-111-01	Construct Runway, Taxiway, Apron, As-Builts
1952		Copper River Highway, As-Built Contracts