



Alaska DOT&PF

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

Pavement Inspection Report Sand Point Airport



Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Sand Point Airport	SDP	PASD	55° 18' 49.303" N	160° 31' 17.129" W	23.6

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	May 2023	August 2023

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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



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Sand Point Airport

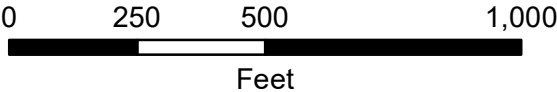
Airport Code: SDP
Site Number: 50684.4*A

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



Map Created by Duval Engineering
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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

Inventoried Sample Unit



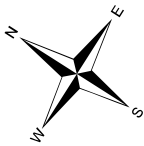
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Sand Point Airport

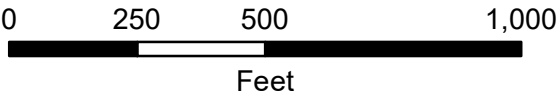
Airport Code: SDP
Site Number: 50684.4*A

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



Map Created by Duval Engineering
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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



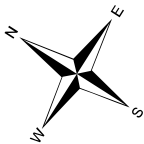
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Sand Point Airport

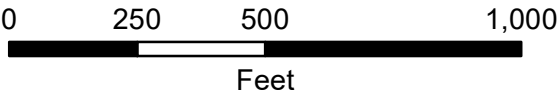
Airport Code: SDP
Site Number: 50684.4*A

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



2023 Pavement Inspection Results



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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

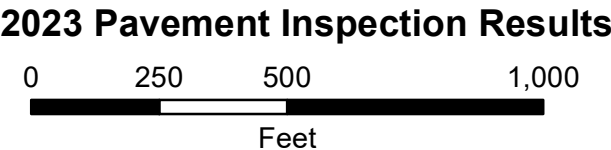


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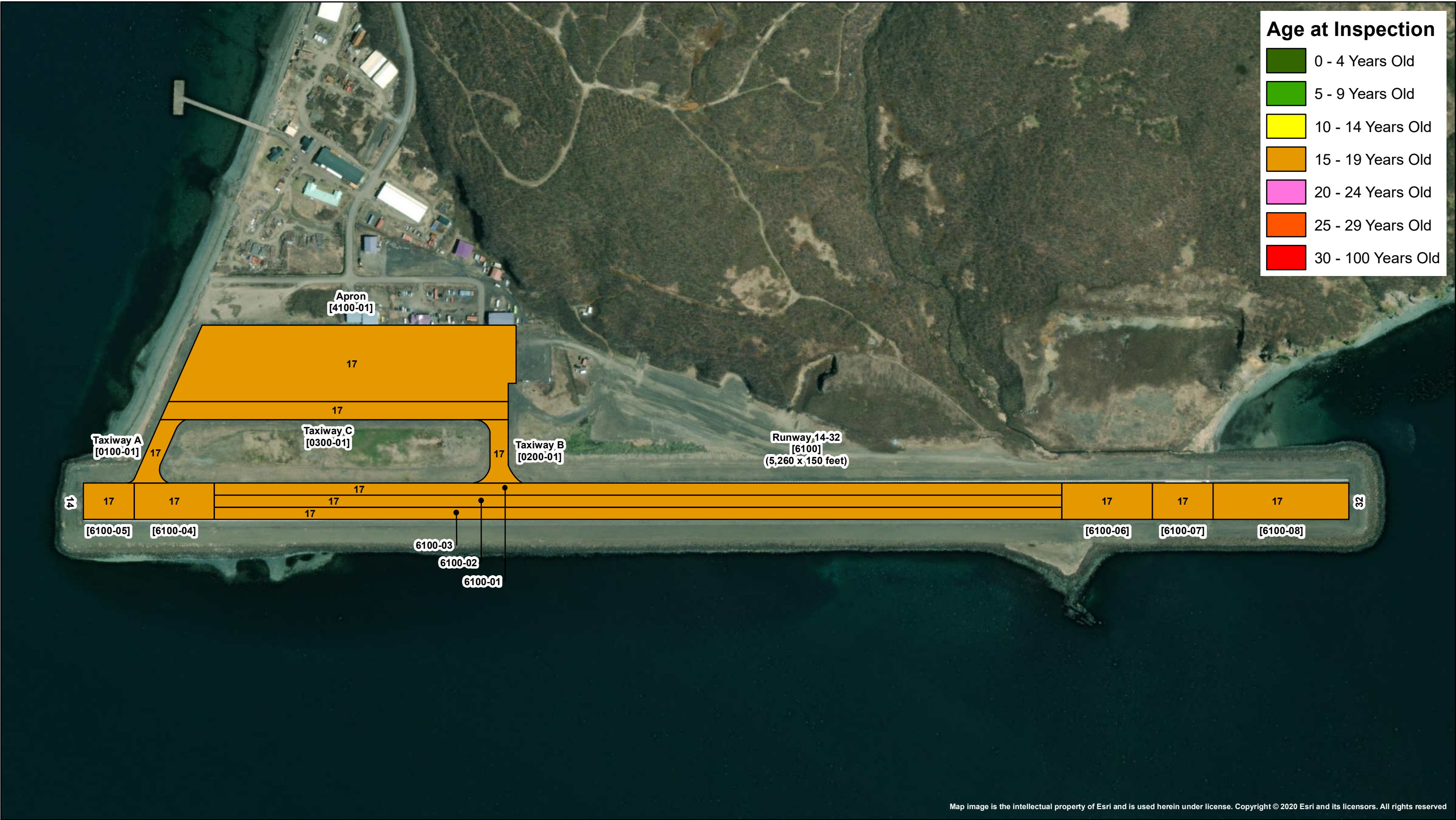
Sand Point Airport

Airport Code: SDP
Site Number: 50684.4*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



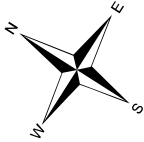
Map Created by Duval Engineering
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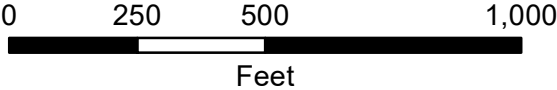
Sand Point Airport

Airport Code: SDP
Site Number: 50684.4*A

Pavement Age at Inspection



2023 Pavement Inspection Results



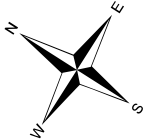
Map Created by Duval Engineering
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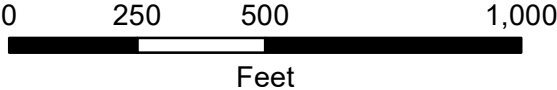
Sand Point Airport

Airport Code: SDP
Site Number: 50684.4*A

Pavement Crack Seal Condition (CSC)



2023 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
0100	Taxiway A	Taxiway	1	23,400	78




Taxiway A was reconstructed in 2006 and received a rejuvenating surface seal in 2014. Crack seal operations have not been performed on the branch. The most common distresses observed are bleeding, low to medium severity raveling, and low to medium severity weathering. Field observations include an increased loss of fine aggregate which caused higher severity weathering and localized areas of raveling.


Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0200	Taxiway B	Taxiway	1	23,450	83



Like Taxiway A, Taxiway B was reconstructed in 2006 and received a rejuvenating surface seal in 2014. Crack seal operations have not been performed on the branch. The most common distresses observed are low to medium to high severity raveling, and low to medium severity weathering. Field observations include wearing the rejuvenation application and an increased loss of fine aggregate which caused the increased severity in weathering and localized areas of raveling. Also, damage from snowplows was seen on multiple samples.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0300	Taxiway C	Taxiway	1	106,400	75
					

Like Taxiway A and B, Taxiway C was reconstructed in 2006 and received a rejuvenating surface seal in 2014. 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 to medium severity weathering. Field observations include a paving joint beginning to open creating space for water to infiltrate below the asphalt, wearing of the rejuvenation application, and an increased loss of fine aggregate which has caused the increased severity in weathering.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	Apron	Apron	1	427,400	85
					

Like the Taxiways, the Apron was also reconstructed in 2006 and received a rejuvenating surface seal in 2014. Crack seal operations have not been performed on the branch. The most common distresses observed are oil spillage, low to medium to high severity raveling, and low to medium severity weathering. Field observations include areas of oil spillage across the apron, wearing of the rejuvenation application, and an increased loss of fine aggregate which has caused the increased severity in weathering as well as localized areas of raveling. Also, damage from snowplows was seen on multiple samples.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 14/32	Runway	8	782,700	82



Runway 14/32 was reconstructed in 2006. 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 to medium to high severity raveling, and low to medium severity weathering. Field observations include the creation of a transverse cracking across the keel of the runway and a localized depression causing standing water on the edge of the runway. Also, damage from snowplows was seen on multiple samples across the runway.

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	280	75	23,400	TAXIWAY	78.00	0.00	78.00
0200	1	260	75	23,450	TAXIWAY	83.00	0.00	83.00
0300	1	1,415	75	106,400	TAXIWAY	75.00	0.00	75.00
4100	1	1,300	315	427,400	APRON	85.00	0.00	85.00
6100	8	12,208	113	782,700	RUNWAY	82.16	3.81	82.25

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	427,400	85.00	0.00	85.00
RUNWAY	8	782,700	82.16	3.81	82.25
TAXIWAY	3	153,250	78.67	3.30	76.68
ALL	12	1,363,350	81.53	3.96	82.49

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	6/1/2006	AC	TAXIWAY	P	23,400	6/1/2023	17	78
0200	0200-01	6/1/2006	AC	TAXIWAY	P	23,450	6/1/2023	17	83
0300	0300-01	6/1/2006	AC	TAXIWAY	P	106,400	6/1/2023	17	75
4100	4100-01	6/1/2006	AC	APRON	P	427,400	6/1/2023	17	85
6100	6100-01	6/1/2006	AC	RUNWAY	P	174,750	6/1/2023	17	85
6100	6100-02	6/1/2006	AC	RUNWAY	P	174,750	6/1/2023	17	81
6100	6100-03	6/1/2006	AC	RUNWAY	P	174,750	6/1/2023	17	80
6100	6100-04	6/2/2006	AC	RUNWAY	P	49,500	6/1/2023	17	78
6100	6100-05	6/1/2006	AC	RUNWAY	P	31,500	6/1/2023	17	76
6100	6100-06	6/1/2006	AC	RUNWAY	P	56,100	6/1/2023	17	85
6100	6100-07	6/2/2006	AC	RUNWAY	P	37,500	6/1/2023	17	88
6100	6100-08	6/2/2006	AC	RUNWAY	P	83,850	6/1/2023	17	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
16-20	17	1,363,350	12	81.53	3.96	82.49
ALL	17	1,363,350	12	81.53	3.96	82.49

Work History Report

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Pavement Database: Alaska

Network: Sand Point Airport **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:** AC
L.C.D. 6/1/2006 **Use:** TAXIWAY **Rank:** P **Length:** 280.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 23400.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2014	SS-RE	Surface Seal - Rejuvenating	0.00	0.00	<input type="checkbox"/> X	(Funded via AIP)
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport **Branch:** 0200 Taxiway B **Section:** 0200-01 **Surface:** AC
L.C.D. 6/1/2006 **Use:** TAXIWAY **Rank:** P **Length:** 260.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 23450.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2014	SS-RE	Surface Seal - Rejuvenating	0.00	0.00	<input type="checkbox"/> X	(Funded via AIP)
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport **Branch:** 0300 Taxiway C **Section:** 0300-01 **Surface:** AC
L.C.D. 6/1/2006 **Use:** TAXIWAY **Rank:** P **Length:** 1,415.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 106400.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2014	SS-RE	Surface Seal - Rejuvenating	0.00	0.00	<input type="checkbox"/> X	(Funded via AIP)
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport **Branch:** 4100 Apron **Section:** 4100-01 **Surface:** AC
L.C.D. 6/1/2006 **Use:** APRON **Rank:** P **Length:** 1,300.00 (Ft) **Width:** 315.00 (Ft) **True Area:** 427400.0001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2014	SS-RE	Surface Seal - Rejuvenating	0.00	0.00	<input type="checkbox"/> X	(Funded via AIP)
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport **Branch:** 6100 14/32 **Section:** 6100-01 **Surface:** AC
L.C.D. 6/1/2006 **Use:** RUNWAY **Rank:** P **Length:** 3,495.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 174750.0000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport **Branch:** 6100 14/32 **Section:** 6100-02 **Surface:** AC
L.C.D. 6/1/2006 **Use:** RUNWAY **Rank:** P **Length:** 3,495.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 174750.0000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Work History Report

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Pavement Database: Alaska

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-03	Surface: AC	
L.C.D. 6/1/2006	Use: RUNWAY	Rank: P	Length: 3,495.00 (Ft)	Width: 50.00 (Ft)	True Area: 174750.0000 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-04	Surface: AC	
L.C.D. 6/2/2006	Use: RUNWAY	Rank: P	Length: 330.00 (Ft)	Width: 150.00 (Ft)	True Area: 49500.00001 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/2/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
10/15/2003	SR-AC	Surface Reconstruction - AC	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
9/1/1993	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-05	Surface: AC	
L.C.D. 6/1/2006	Use: RUNWAY	Rank: P	Length: 210.00 (Ft)	Width: 150.00 (Ft)	True Area: 31500.00000 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
10/15/2003	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-06	Surface: AC	
L.C.D. 6/1/2006	Use: RUNWAY	Rank: P	Length: 374.00 (Ft)	Width: 150.00 (Ft)	True Area: 56100.00001 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)
10/15/2003	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-07	Surface: AC	
L.C.D. 6/2/2006	Use: RUNWAY	Rank: P	Length: 250.00 (Ft)	Width: 150.00 (Ft)	True Area: 37500.00001 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/2/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Network: Sand Point Airport		Branch: 6100	14/32	Section: 6100-08	Surface: AC	
L.C.D. 6/2/2006	Use: RUNWAY	Rank: P	Length: 559.00 (Ft)	Width: 150.00 (Ft)	True Area: 83850.00002 (SqFt)	
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/2/2006	CR-AC	Complete Reconstruction - AC	0.00	2.00	<input checked="" type="checkbox"/> X	(Funded via AIP)

Work History Report

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Pavement Database: Alaska

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Complete Reconstruction - AC	12	1,363,350.00	2.00	0.00
New Construction - Initial	10	1,242,000.00	0.00	0.00
Surface Reconstruction - AC	1	49,500.00	0.00	0.00
Surface Seal - Rejuvenating	4	580,650.00	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	4.75	P-401	6	P-209	6	P-154	GP	24
Taxiway B 200	0200-01	4.75	P-401	6	P-209	6	P-154	GP	24
Taxiway C 300	0300-01	4.75	P-401	6	P-209	6	P-154	GP	24
Apron 4100	4100-01	4.75	P-401	6	P-209	6	P-154	GP	24
Runway 13/31 6100	6100-01	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-02	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-03	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-04	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-05	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-06	4.75	P-401	6	P-209	6	P-154	GP	24
	6100-07	5	P-401	6	P-209	6	P-154	GP	24
	6100-08	5	P-401	6	P-209	6	P-154	GP	24

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	6
2	S-15	17,637	95.00	59	2	9
3	S-10	10,450	95.00	52	14	55
4	PA-31-325 Navajo C/R	6,536	95.00	66	8	25
5	D-15	17,120	95.00	63	1,238	8,137
6	Beechcraft King Air B200	12,590	95.00	98	11	61
7	Saab 340B	29,000	95.00	55	513	4,189
8	Q100/Dash 8 Series 100	34,700	94.40	131	106	702
9	D-50	50,265	95.00	80	114	977
10	B737-100	111,000	92.00	157	8	66
11	B737-300	140,000	90.80	201	22	179
12	L-100-20	155,801	96.40	104	13	159
13	C-130	155,000	95.00	105	2	24
14	C-17A	585,000	95.00	138	2	44

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
13-31	B737-300	379,794	36,000	17.0	1.0	1018/F/A/W/T

PCR CALCULATION NOTES

- 1% traffic growth assumed.
- Subgrade strength reduction for frost applied.
- S-5, S-10 and S-15 refer to “generic” single gear aircraft modeled in FAARFIELD.
- D-15 and D-50 refer to “generic” dual gear aircraft modeled in FAARFIELD.

REFERENCES

Year	Project No.	Document Title
2013	X-14-25-1-010	Various Airports Seal Coat and Pavement Markings
2005	3-020-0253-010, 57665	Runway Rehabilitation, RSA Extension 3, As-Built Plans
2005	54455	Memo Dome Quarry Rock
2004	3-02-0253-0904 57797	Runway Extension, As-Built Plans
2002	3-02-0253-08, 54455	Rehabilitation Phase I, As-Built Plans
2001	54455	Geologic Report (Dome Quarry)
1993	3-02-0253-004, 59699	Runway Realignment Phase 2b, As-Built Plans
1992	3-02-0253-03, 59027	Runway Realignment Phase 2a, As-Built Plans
1986		Geologic Report
1986		Geologic Report
1980		Geologic Report
1976		Geologic Report
1971	SA 363-1-71	Runway Repairs, Bid Documents
1964	FAAP 9-50-066-02	Erosion Control and Raise Grade, Bid Documents
1957	FAAP 9-50-066-5701	Excavation, Embankment, Surfacing, Seaplane Ramp Repair, As-Built Plans