



## Alaska DOT&PF

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

# Pavement Inspection Report Talkeetna Airport



Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Talkeetna Airport	TKA	PATK	62° 19' 14" N	150° 05' 37" W	3,500

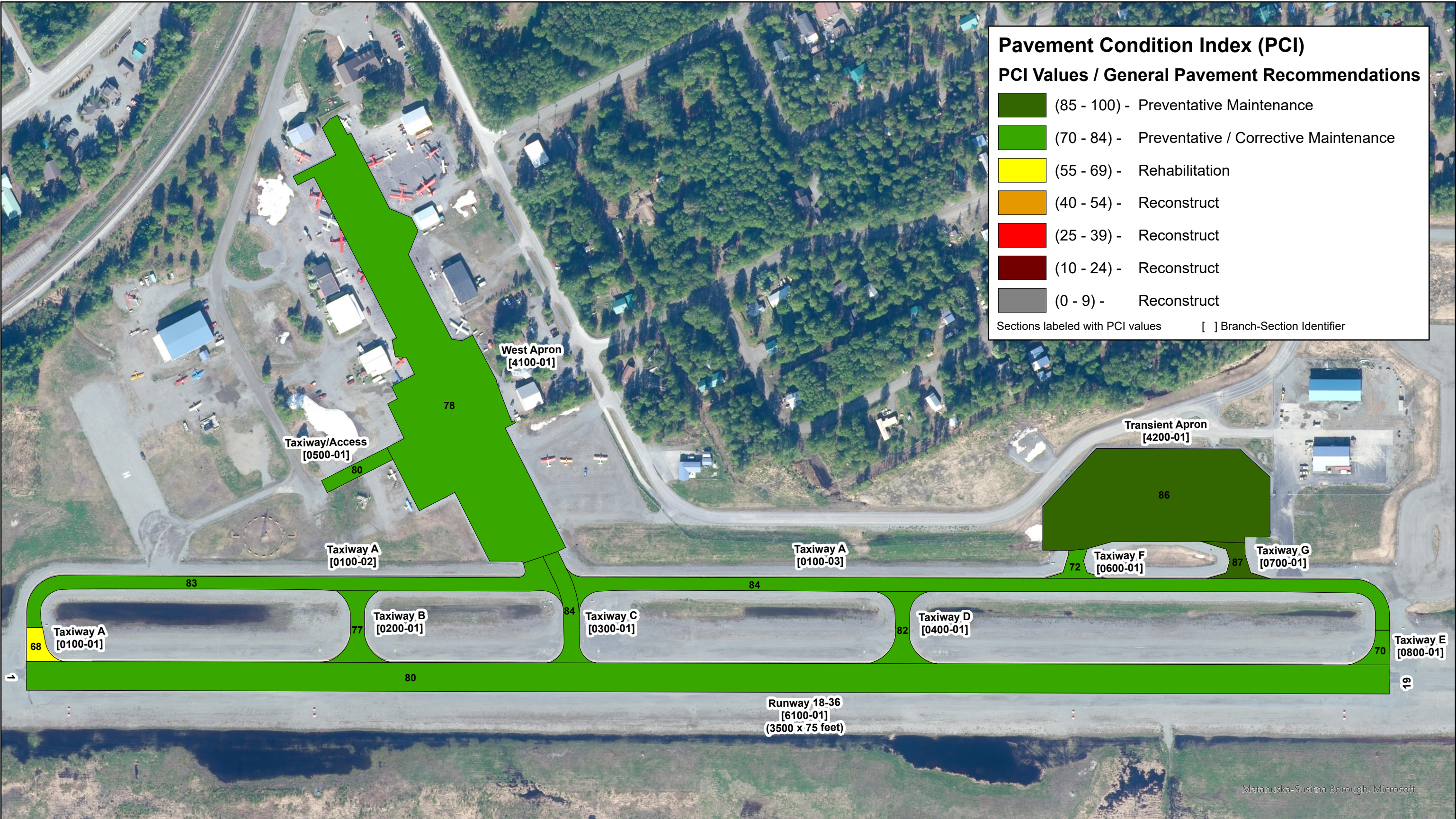
Please refer all questions or for further information about this report, please contact the AKDOT&PF Pavement Management and Preservation Office as follows:

Point of Contact	Phone	Email	Date Inspected	Date Published
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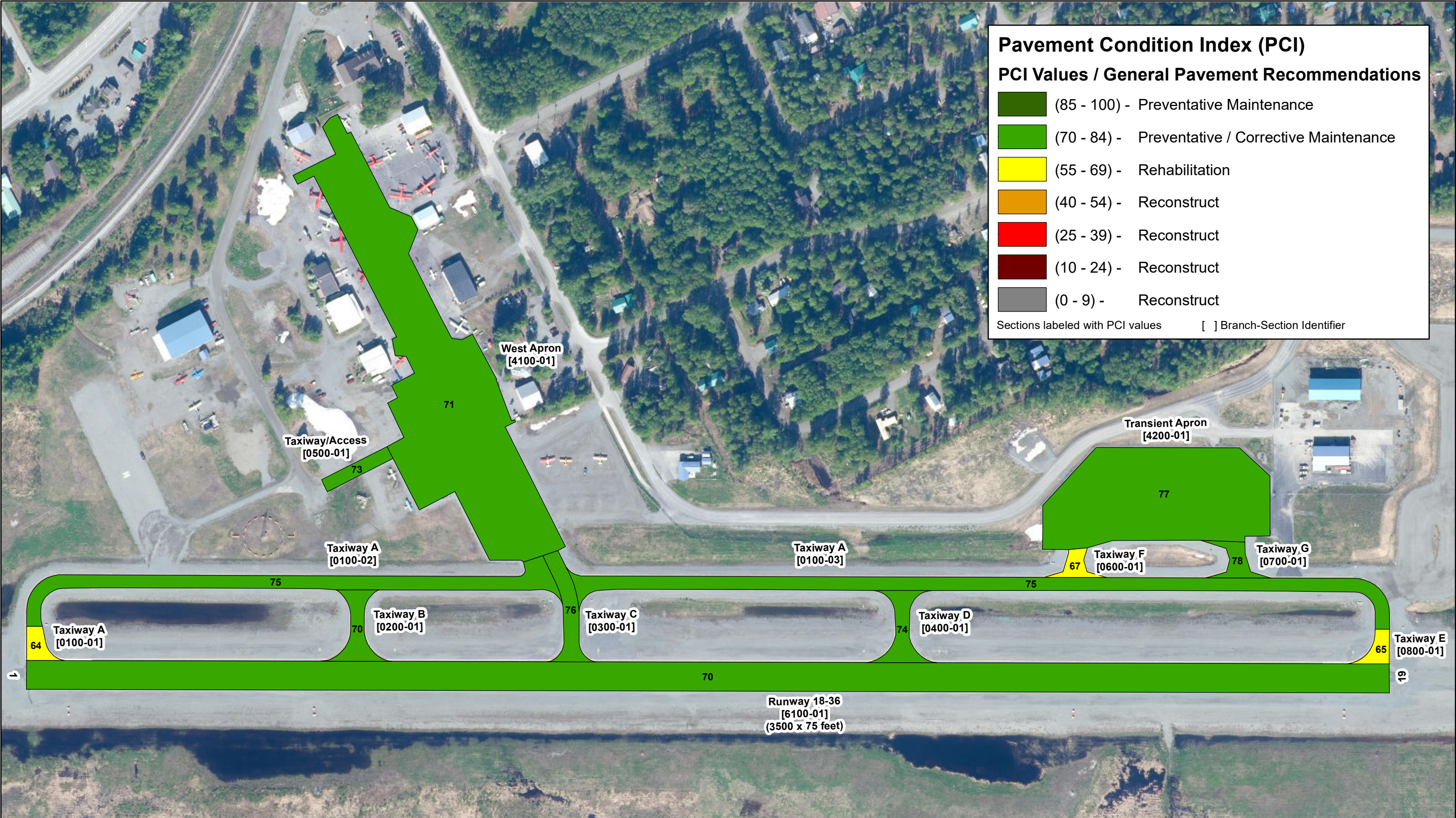










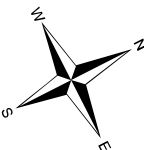


**Talkeetna Airport**

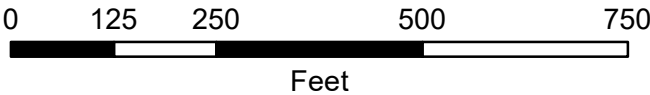
Airport Code: TKA  
Site Number: 50738.\*A

**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

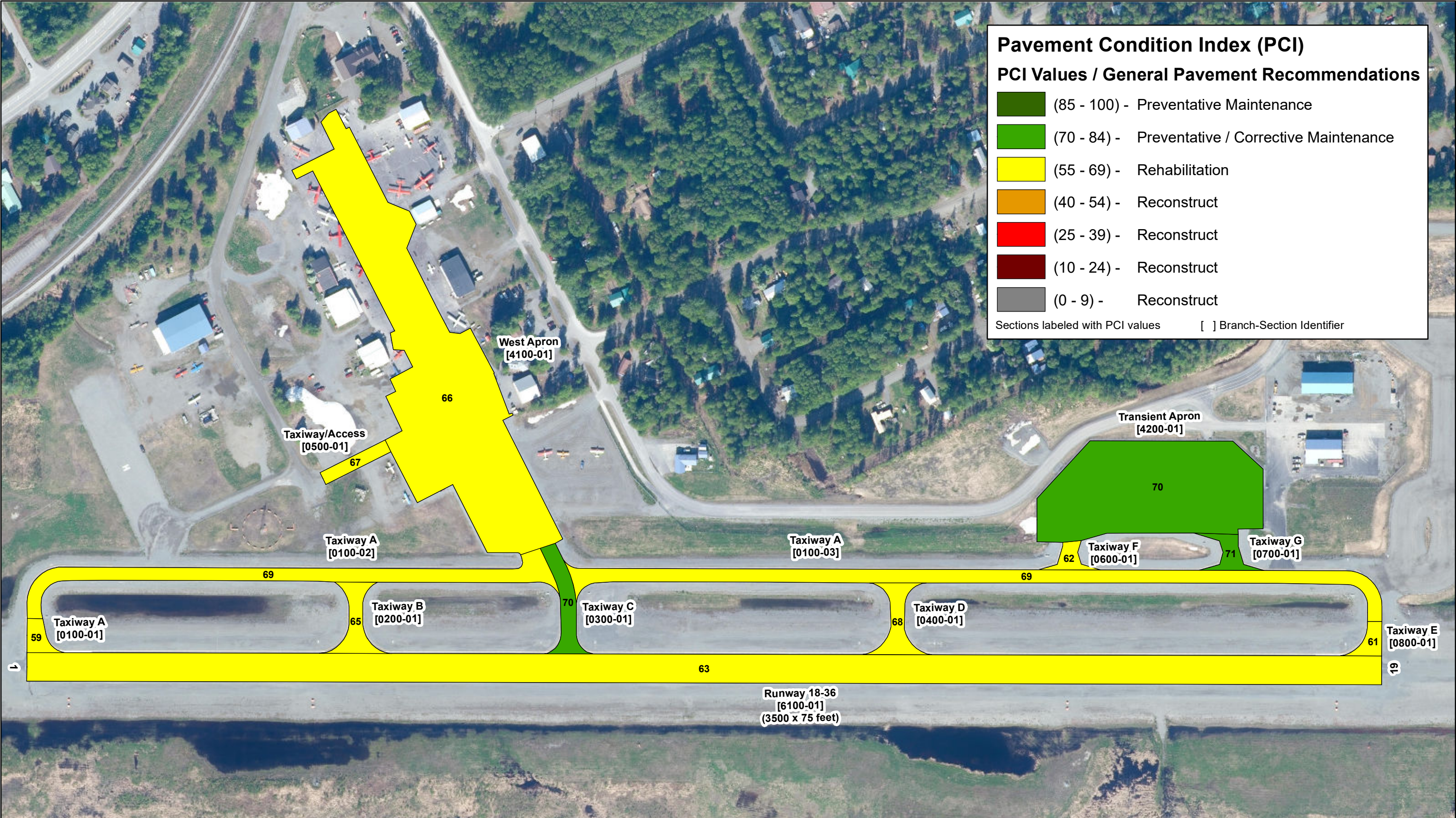


**2023 Pavement Inspection Results**



Map Created by  
State of Alaska DOT&PF



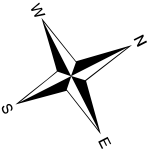


# Talkeetna Airport

Airport Code: TKA  
Site Number: 50738.\*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



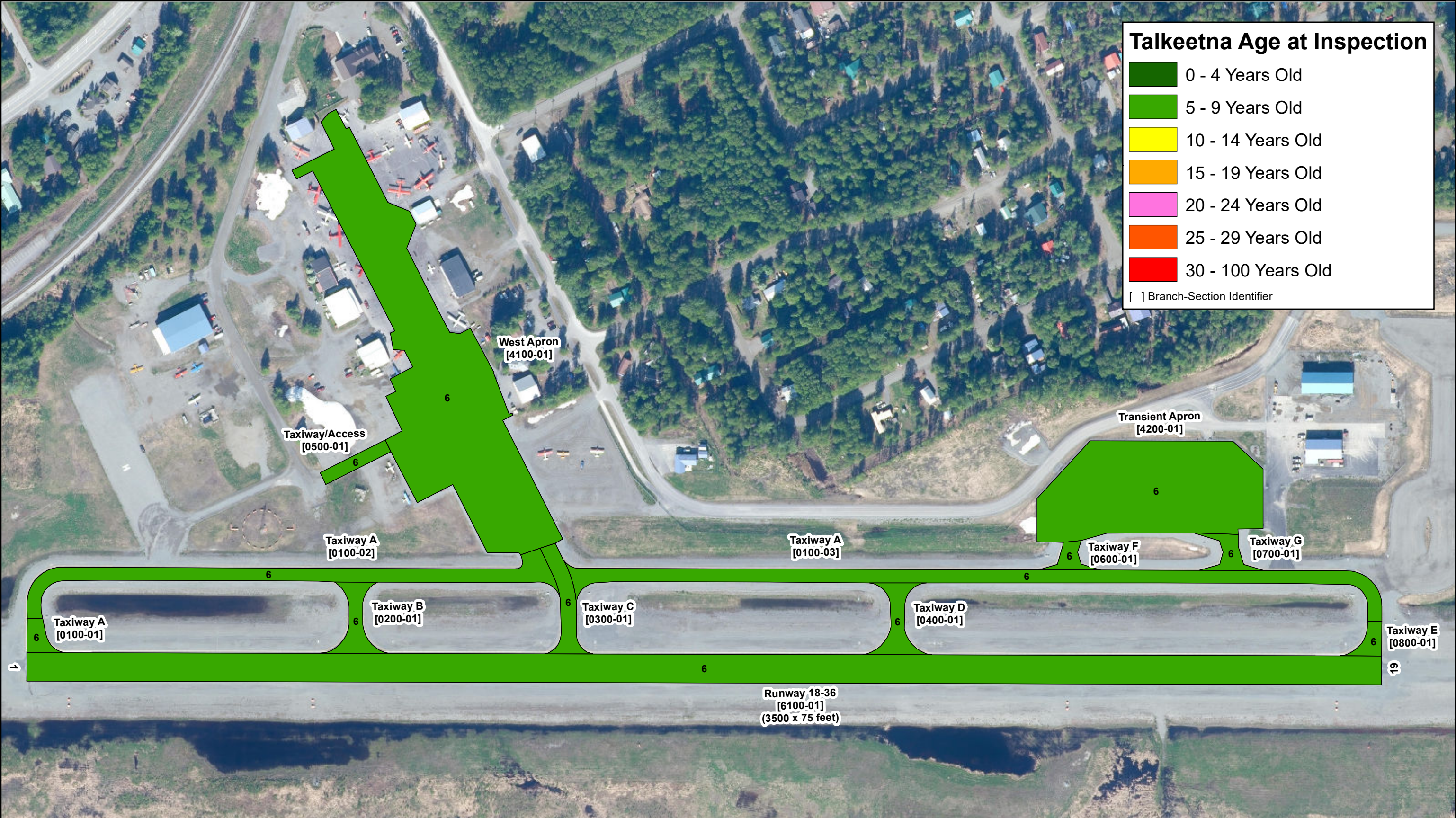
## 2023 Pavement Inspection Results



Map Created by  
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Map 4 of 6

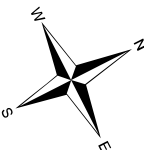




**Talkeetna Airport**

Airport Code: TKA  
Site Number: 50738.\*A

**Pavement Age at Inspection**

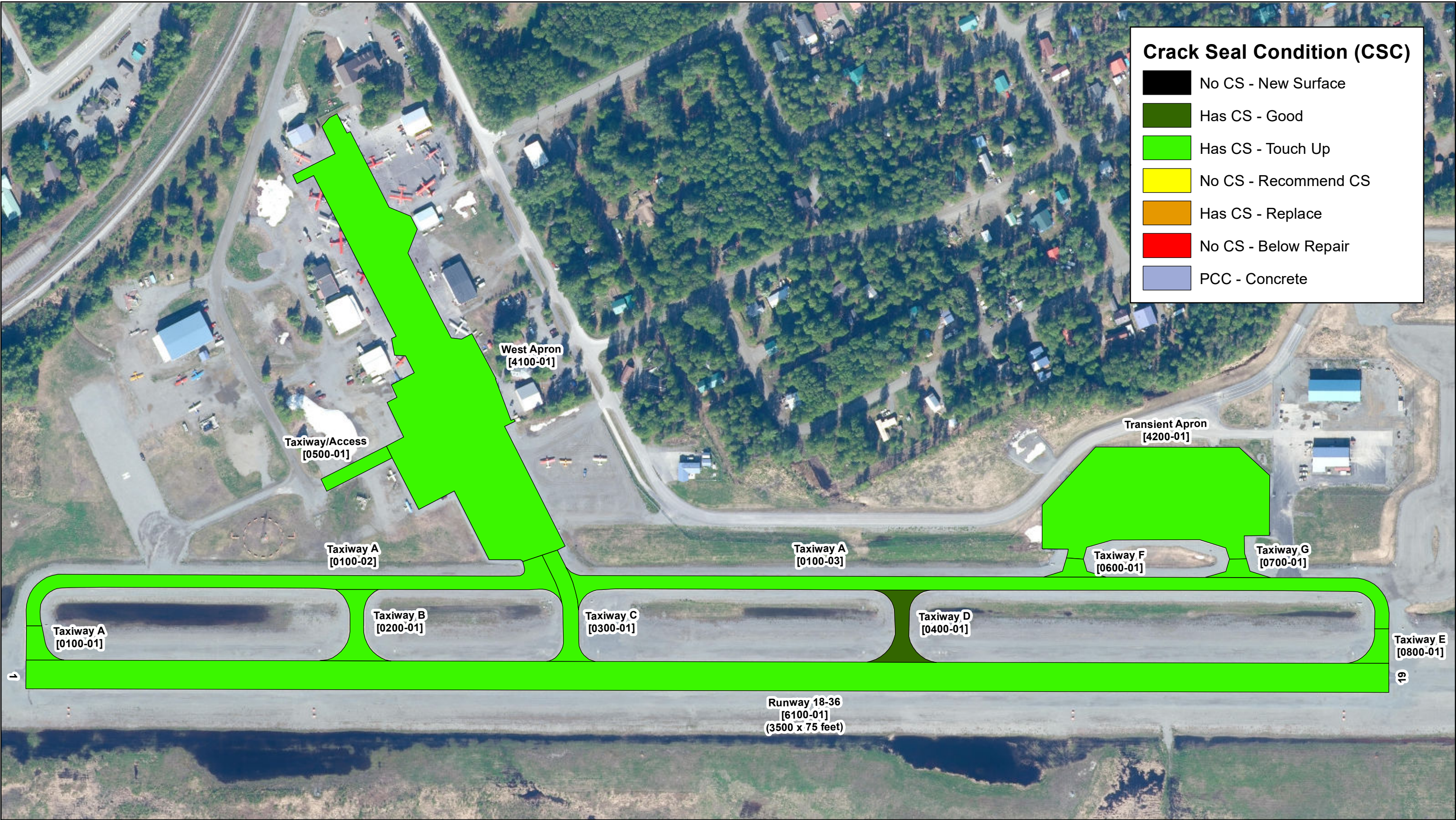


**2023 Pavement Inspection Results**



Map Created by  
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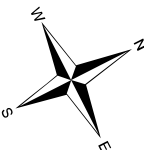




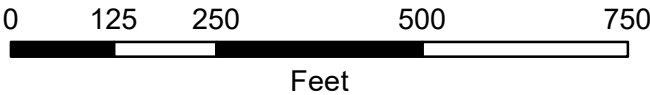
**Talkeetna Airport**

Airport Code: TKA  
Site Number: 50738.\*A

**Pavement Crack Seal Condition (CSC)**



**2023 Pavement Inspection Results**





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**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	3	131,802	83
					

Taxiway A was originally constructed in 1997 and was resurfaced 2017. Common distresses on the taxiway are low to medium severity longitudinal and transverse cracking with isolated areas of high severity cracking on section 0100-01. Other distresses observed are low to medium severity weathering and low to medium severity raveling.


Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0200	Taxiway B	Taxiway	1	10,936	77
					

Taxiway B was constructed in 1997 and was resurfaced 2017. Observed distresses are low severity longitudinal and transverse cracking, low to medium severity raveling and low to medium severity weathering.





Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0300	Taxiway C	Taxiway	1	12,777	84
					

Taxiway C was constructed in 1988 and was resurfaced in 2017. Distresses are low severity raveling, low severity weathering and low severity longitudinal and transverse cracking.



Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0400	Taxiway D	Taxiway	1	11,000	82
					

Taxiway D was constructed in 1997 and was resurfaced 2017. Common distresses are low to medium severity weathering, low to medium severity raveling and low severity longitudinal and transverse cracking. Medium severity raveling is from snowplow damage.




Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0500	Taxiway/Access	Taxiway	1	6,150	80
					

This taxiway connects the West Apron to an access road. It was constructed in 1986 and resurfaced in 2017. The distresses on the taxiway are low severity longitudinal and transverse cracking, low severity weathering and low severity raveling.


Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0600	Taxiway F	Taxiway	1	4,450	72
					

Taxiway F was constructed in 2017. The primary distresses are low to medium severity longitudinal and transverse cracking, low severity raveling, and low to medium severity weathering.





Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0700	Taxiway G	Taxiway	1	5,920	87
					

Taxiway G was constructed in 2017. Distresses are low severity longitudinal and transverse cracking, low severity weathering and low severity raveling.



Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
0800	Taxiway E	Taxiway	1	4,575	70
					

This taxiway was constructed in 2017. Distresses are low to medium severity longitudinal and transverse cracking, low to high severity weathering, and low to medium severity raveling. The high severity weathering is isolated to a small area near the runway and the medium severity raveling is from snowplow damage around longitudinal and transverse cracking.





Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
4100	West Apron	Parking Apron	1	174,600	78
					

The West Apron was originally constructed in 1980 and was resurfaced in 2017. Commonly observed distresses are low severity longitudinal and transverse cracking, low to medium severity weathering and low severity raveling. There are two areas on the apron experiencing severe swelling that are being patched.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
4200	Transient Apron	Parking Apron	1	132,538	86
					

The Transient Apron was constructed in 2017. Observed distresses are low severity longitudinal and transverse cracking, low severity weathering and low severity raveling. Observations include an increase in quantity of new longitudinal and transverse cracking.



Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weight Average PCI
6100	Runway 15-33	Runway	1	262,500	80
					

Runway 15-33 was constructed in 1980, paved in 1988 and resurfaced in 2017. Common distresses are low to medium severity longitudinal and transverse cracking, low severity weathering and low severity raveling. New, unsealed cracks are present on the runway and some sealed cracks have been damaged by snowplows. Most of the raveling and medium severity longitudinal and transverse cracking is from damage at cracks that heave during the winter and catch snowplows.



### 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	3,540	37	131,802	TAXIWAY	78.23	7.10	82.75
0200	1	185	35	10,936	TAXIWAY	77.00	0.00	77.00
0300	1	286	40	12,777	TAXIWAY	84.10	0.00	84.10
0400	1	185	35	11,000	TAXIWAY	81.90	0.00	81.90
0500	1	186	35	6,510	TAXIWAY	80.00	0.00	80.00
0600	1	75	50	4,450	TAXIWAY	72.40	0.00	72.40
0700	1	95	45	5,920	TAXIWAY	87.30	0.00	87.30
0800	1	90	35	4,575	TAXIWAY	70.10	0.00	70.10
4100	1	1,255	190	222,234	TAXIWAY	77.50	0.00	77.50
4200	1	585	240	132,538	TAXIWAY	85.50	0.00	85.50
6100	1	3,500	75	262,500	TAXIWAY	79.90	0.00	79.90

*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	2	357,772	81.50	4.00	80.46
RUNWAY	1	262,500	79.90	0.00	79.90
TAXIWAY	10	187,970	78.75	6.19	81.95
ALL	13	808,242	79.26	5.74	80.63



### SECTION CONDITION REPORT

Branch ID	Section ID	Last Const. Date	Surf.	Use	Rank	True Area (Sq Ft)	Last Inspection Date	Age At Inspection	PCI
0100	0100-01	8/1/2017	AC	TAXIWAY	P	4,766	7/31/2023	6	68.2
	0100-02	8/1/2017	AC	TAXIWAY	P	52,002	7/31/2023	6	83
	0100-03	8/1/2017	AC	TAXIWAY	P	75,034	7/31/2023	6	83.5
0200	0200-01	8/1/2017	AC	TAXIWAY	P	10,936	7/31/2023	6	77
0300	0300-01	8/1/2017	AC	TAXIWAY	P	12,777	7/31/2023	6	84.1
0400	0400-01	8/1/2017	AC	TAXIWAY	P	11,000	7/31/2023	6	81.9
0500	0500-01	8/1/2017	AAC	TAXIWAY	P	6,510	7/31/2023	6	80
0600	0600-01	8/1/2017	AC	TAXIWAY	P	4,450	7/31/2023	6	72.4
0700	0700-01	8/1/2017	AC	TAXIWAY	P	5,920	7/31/2023	6	87.3
0800	0800-01	8/1/2017	AC	TAXIWAY	P	4,575	7/31/2023	6	70.1
4100	4100-01	8/1/2017	AC	APRON	P	225,234	7/31/2023	6	77.5
4200	4200-01	8/1/2017	AC	APRON	P	132,538	7/31/2023	6	85.5
6100	6100-01	8/1/2017	AC	RUNWAY	P	262,500	7/31/2023	6	79.9

### 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	6	808,242	13	79.26	5.74	80.63
ALL	6	808,242	13	79.26	5.74	80.63



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## Work History Report

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Pavement Database: StatewidePaverData\_9-14-23

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0100		Taxiway A		<b>Section:</b> 0100-01	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 90.00 (Ft)	<b>Width:</b> 40.00 (Ft)	<b>True Area:</b> 4766.000001 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
7/1/1988	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0100		Taxiway A		<b>Section:</b> 0100-02	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 1,350.00 (Ft)	<b>Width:</b> 35.00 (Ft)	<b>True Area:</b> 52002.000001 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
8/15/1997	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0100		Taxiway A		<b>Section:</b> 0100-03	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 2,100.00 (Ft)	<b>Width:</b> 35.00 (Ft)	<b>True Area:</b> 75034.000002 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
8/15/1997	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0200		Taxiway B		<b>Section:</b> 0200-01	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 185.00 (Ft)	<b>Width:</b> 35.00 (Ft)	<b>True Area:</b> 10936.000000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
8/15/1997	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0300		Taxiway C		<b>Section:</b> 0300-01	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 286.00 (Ft)	<b>Width:</b> 40.00 (Ft)	<b>True Area:</b> 12777.000000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
7/1/1988	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0400		Taxiway D		<b>Section:</b> 0400-01	<b>Surface:</b> AC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 185.00 (Ft)	<b>Width:</b> 35.00 (Ft)	<b>True Area:</b> 11000.000000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
8/15/1997	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	

<b>Network:</b> Talkeetna Airport		<b>Branch:</b> 0500		Taxiway/Access		<b>Section:</b> 0500-01	<b>Surface:</b> AAC
<b>L.C.D.</b> 8/1/2017	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 186.00 (Ft)	<b>Width:</b> 35.00 (Ft)	<b>True Area:</b> 6510.000001 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)	
9/1/2006	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)	



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## Work History Report

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Pavement Database: StatewidePaverData\_9-14-23

**Network:** Talkeetna Airport **Branch:** 0600 **Taxiway F** **Section:** 0600-01 **Surface:** AC  
**L.C.D.** 9/10/2017 **Use:** TAXIWAY **Rank:** P **Length:** 75.00 (Ft) **Width:** 45.00 (Ft) **True Area:** 4480.000001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/10/2017	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

**Network:** Talkeetna Airport **Branch:** 0700 **Taxiway G** **Section:** 0700-01 **Surface:** AC  
**L.C.D.** 9/10/2017 **Use:** TAXIWAY **Rank:** P **Length:** 95.00 (Ft) **Width:** 45.00 (Ft) **True Area:** 6180.000001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/10/2017	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

**Network:** Talkeetna Airport **Branch:** 0800 **Taxiway E** **Section:** 0800-01 **Surface:** AC  
**L.C.D.** 9/18/2017 **Use:** TAXIWAY **Rank:** P **Length:** 90.00 (Ft) **Width:** 35.00 (Ft) **True Area:** 4575.000001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/18/2017	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

**Network:** Talkeetna Airport **Branch:** 4100 **West Apron** **Section:** 4100-01 **Surface:** AC  
**L.C.D.** 8/1/2017 **Use:** APRON **Rank:** P **Length:** 1,255.00 (Ft) **Width:** 190.00 (Ft) **True Area:** 225234.0000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)
7/1/1988	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

**Network:** Talkeetna Airport **Branch:** 4200 **Transient Apron** **Section:** 4200-01 **Surface:** AC  
**L.C.D.** 9/10/2017 **Use:** APRON **Rank:** P **Length:** 585.00 (Ft) **Width:** 240.00 (Ft) **True Area:** 128610.0000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/10/2017	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)

**Network:** Talkeetna Airport **Branch:** 6100 **18/36** **Section:** 6100-01 **Surface:** AC  
**L.C.D.** 8/1/2017 **Use:** RUNWAY **Rank:** P **Length:** 3,500.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 262500.0065 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2017	OL_2	2 in overlay	0.00	2.00	<input checked="" type="checkbox"/>	(Funded via AIP)
7/1/1988	NC-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	(Funded via AIP)



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## Work History Report

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*Pavement Database: StatewidePaverData\_9-14-23*

### Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
2 in overlay	9	660,759.01	2.00	0.00
New Construction - Initial	13	804,604.01	0.00	0.00



# **PHYSICAL PROPERTY DATA**

Branch ID	Section ID	Pavement		Base		Subbase		Subgrade	
		Thick (in)	Type	Thick (in)	Type	Thick (in)	Type	Type	CBR
Taxiway A 0100	0100-01	2	P-401	8	P-209	36"	P-154	GW-GM	15
	0100-02	2	P-401	8	P-209	36"	P-154	GW-GM	15
	0100-03	2	P-401	8	P-209	36"	P-154	GW-GM	15
Taxiway B 0200	0200-01	2	P-401	8	P-209	36"	P-154	GW-GM	15
Taxiway C 0300	0300-01	2	P-401	8	P-209			GW-GM	15
Taxiway D 0400	0400-01	2	P-401	8	P-209	36"	P-154	GW-GM	15
TW Access 0500	0500-01	2	P-401	6	P-209			GW-GM	15
Taxiway F 0600	0600-01	2	P-401	6	P-209	36"	P-154	GW-GM	15
Taxiway G 0700	0700-01	2	P-401	6	P-209	36"	P-154	GW-GM	15
Taxiway E 0800	0800-01	2	P-401	8	P-209	36"	P-154	GW-GM	15
West Apron 4100-01	4100-01	2	P-401	6	P-209	20"	P-154	GW-GM	15
	4100-02	2	P-401	6	P-209	20"	P-154	GW-GM	15
East Apron 4200	4200-01	2	P-401	6	P-209	36"	P-154	GW-GM	15
Runway 6- 24 6100	6100-01	2	P-401	8	P-209			GW-GM	15

Note – blanks in subbase thickness are from unknown thickness or quality of material.



### AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	Beechcraft Bonanza F33A	3,412	95	40	5,900	26,298
2	Cessna 206 Stationair	3,612	95	52	5,900	25,458
3	Cessna 208B Grand Caravan EX	8,750	95	75	8,800	41,624
4	S-10	10,000	95	50	2	10
5	Beechcraft King Air B200	12,590	95	98	5,900	43,517
6	Q100/Dash 8 Series 100	34,700	94.4	131	2	18

### PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
15-33	Cessna 208B Grand Caravan	37,715	22,500	10	1.0	87/F/A/X/T

### PCR CALCULATION NOTES

- 1% traffic growth assumed
- Subgrade strength reduction for frost applied
- S-10 refers to “generic” single gear aircraft as modeled in FAARFIELD
- Individual aircraft fleet mix departures are assumed based on total aircraft operations reported by Talkeetna flight surface station in 2022



## REFERENCES

Year	Reference No.	Document Title
2016	CFAPT00087 / 3-02-0287-004-2015	Talkeetna Airport & Pavement Rehabilitation As-Built
2005	54660	Supplemental Geology Data Report Talkeetna Airport Improvements
1996	60045 / 3-02-0287-03	Talkeetna Airport Improvements As-Built
1986	56229 / 3-02-0287-01	Talkeetna Airport Paving As-Builts
1986	54172	Talkeetna Airport Paving Soils Report
1980	5-02-0287-01	Talkeetna Airport Runway Taxiway & Apron Improvements