SUPERIOR -A-13 (#1-#2 53.5'x62.5') (#1-#10 25'x200') (#11 30'x115) (#12 35'x118') (#13 35'x127.5') (#14-#15 35'x97.5') -A-12 (#1-#2 62.5'x48.5') -A-11 (#1-#7 95'x55') (#1-#53 75'x65') (#54-#56 80'x48')

PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

		SUB SUB	.				PAVE	MENT ST	RENGTH	
PAVE. IDENT.	SOIL CLASS	GRADE	SUBBASE COURSE	BASE COURSE	SURFACE COURSE	MAX. G	REMARKS			
		CLASS			3333		SINGLE	DUAL	DUAL TAN.	
					RUNWAYS					
R-11			9" P-154	6" P-208	3" P-401	P-609	12,500			1,2,5
			-							
	ļ				TAXIWAYS					
T-11			9" P-154	6" P-208	3" P-401	P-609	12,500		1	1,2,5
			9 P-134	0 F-200	3 F-401	F-009	12,300			1,2,3
	1	l			APRONS					
A-11			9" P-154	6" P-208	3" P-401	P-609	12,500			1,2,5
A-12				8" P-208	3" P-401		12,500			3,5
A-13				8" P-208	3" P-401		12,500			4,5

- 1. AIP-005-2004, CONSTRUCT RUNWAY (R-11), TAXIWAYS (T-11), AND APRON (A-11).
 2. AIP-007-2010, CRACK SEAL, FOG SEAL, AND REMARK ALL PAVEMENTS.
- 3. AIP-008-2011, CONSTRUCT HANGAR APRON (A-12).

4. AIP-009-2013, CONSTRUCT HANGAR APRON (A-13).
5. AIP-010-2016, CRACK SEAL, SURFACE SEAL AND REMARK ALL PAVEMENTS.

LEGE	ND		DATE OF PAVEMENT		МО	NTANA AVIATIO	N SYSTEM	1 PLAN
	2006 SURVEY	AREA	STRENGTH SURVEY:		2018 (JPDATE - PAVEMENT	CONDITION	INDEXES
	2009 SURVEY AREA		EVALUATED BY:		М	ITY AIRP	PORT	
	2012 SURVEY	AREA				(954	-	
***	2015 SURVEY	AREA	DATE OF MOST			`	<u> </u>	
22 3	2018 SURVEY	AREA	RECENT PAVEMENT CONDITION SURVEY:	OCT. 23, 2018	Date:	Prepared For: MONTANA	^	Prepared By:
	MAINTAIN:	PCI > 60	EVALUATED BY:	S. BROWN	DECEMBER 2018	MD		
	TRANSITION: RECONSTRUCT:	PCI 45 TO 60 PCI < 45	LOCATION:	SUPERIOR MONTANA	2010	DEPARTMENT OF TRA	ANSPORTATION	

October 23, 2018



A-11, Overview



A-13, Overview



R-11, Overview



A-11, Depression



A-13, Depression



R-11, Sealed Crack







T-11, Depression and Sealed Crack

SUPE	RIOR Al	IRPORT	Branch:	04A	APRON		A-11
Length:	385 LF	Width: 95 LF Area: 37,284 S		st Const: 2004		Family:	ACAM
From:	APRON	To: OFF OF T-1				Surface:	AC
		Inspections					
Samples S	burveyed:	4 Total Samples: 7	Last Inspecti	on Date: 10/2	3/2018	PCI:	88
Sample #	1				Area:	5,225	SF
		Distress Description	Severity	Quantity			
		PATCHING	L	12 SF			
		LONGITUDINAL/TRANSVERSE CRACKING	L	168 LF			
ample #	3				Area:	5,225	SF
		Distress Description	Severity	Quantity		-,	
		PATCHING	L	12.2 SF			
		LONGITUDINAL/TRANSVERSE CRACKING	L	150 LF			
		DEPRESSION	L	1.6 SF			
Sample #	4				Area:	5,225	SF
		Distress Description	Severity	Quantity		-,	
		LONGITUDINAL/TRANSVERSE CRACKING	L	159 LF			
		PATCHING	L	16 SF			
		DEPRESSION	L	4 SF			
Sample #	7				Area:	5,225	SF
		Distress Description	Severity	Quantity		-,	
		PATCHING	L	12.1 SF			
		DEPRESSION	L	12 SF			
		LONGITUDINAL/TRANSVERSE CRACKING	L	85 LF			
		Extrapolated Distress	Quantities*				
		Distress Description	Severity	Quantity	Density		Deduct
		DEPRESSION	L	31 SF	0.08%		0.30
		LONGITUDINAL/TRANSVERSE CRACKING	L	1,003 LF	2.69%		9.24
• Multiple d	leduct values are	PATCHING scaled down from their algebraic sum to keep the model consi	L stent with experim	93 SF nental data	0.25%		2.06
	Jeduct various are	Percent of Deduct Values Based of	•				
			% Climate/Dura				% Other

SUPE	RIOR AII	RPORT	Branch:	04A	APRON	A-12
Length: From:	145 LF HANGARS	Width: 50 LF Area: 7,000 S To: APRON	SF Las	t Const: 2011		Family: ACAM Surface: AC
		Inspections				
Samples Su	urveyed:	2 Total Samples: 2	Last Inspection	on Date: 10/2	3/2018	PCI: 90
Sample #	1				Area:	3,031 SF
		Distress Description	Severity	Quantity		
		LONGITUDINAL/TRANSVERSE CRACKING	L	32 LF		
		DEPRESSION	L	35.1 SF		
Sample #	2				Area:	3,031 SF
		Distress Description	Severity	Quantity		
		PATCHING	L	0.2 SF		
		LONGITUDINAL/TRANSVERSE CRACKING	L	32 LF		
		Extrapolated Distress	Quantities*			
		Distress Description	Severity	Quantity	Density	Deduct
		DEPRESSION	L	41 SF	0.58%	3.90
		LONGITUDINAL/TRANSVERSE CRACKING	L	74 LF	1.06%	5.06
		PATCHING	L	0.2 SF	0.00%	2.00
* Multiple d	educt values are so	aled down from their algebraic sum to keep the model consis	stent with experim	ental data.		
		Percent of Deduct Values Based o	n Distress Mech	nanism		

64.0 % Climate/Durability

36.0 % Other

0.0 **% Load**

SUPE	RIOR AI	RPORT			Branch:	04A	APRON		A-13
Length:	135 LF	Width: 53.5 LF	Area:	7,223 SI	F Last	t Const: 2013		Family:	ACAM
From:	T-11		To:	HANGAR				Surface:	AC
				Inspections					
Samples S	urveyed:	2 Tota	al Samples:	2	Last Inspection	on Date: 10/2	23/2018	PCI:	95
Sample #	1						Area:	3,343	SF
		Distress Description			Severity	Quantity			
		LONGITUDINAL/TRANS	VERSE CR	ACKING	L	32 LF			
		DEPRESSION			L	0.8 SF			
Sample #	2						Area:	3,343	SF
		Distress Description			Severity	Quantity			
		LONGITUDINAL/TRANS	VERSE CR	ACKING	L	32 LF			
		DEPRESSION			L	0.8 SF			
			Extrapola	nted Distress Q	uantities*				
		Distress Description			Severity	Quantity	Densit	y	Deduct
		DEPRESSION			L	2 SF	0.02%	ó	0.30
		LONGITUDINAL/TRANS	VERSE CR	ACKING	L	69 LF	0.96%	ó	4.86
* Multiple d	leduct values are	scaled down from their algebraic	sum to keep t	he model consist	ent with experime	ental data.			
		Percent o	f Deduct V	alues Based on	Distress Mech	anism			

94.0 % Climate/Durability

6.0 **% Other**

0.0 **% Load**

SUPE Length:	RIOR AIR 3,450 LF	Width: 75 LF	Area:	270,979 SF	Branch:	04R t Const: 200	RUNWAY 04	Family:	R-11
From:	STA 0+00 RWY	7 12/30	To:	STA 34+50 RV			-	Surface:	A
				Inspections					
Samples S	urveyed:	7 To	tal Samples:	56	Last Inspection	on Date: 10/	/23/2018	PCI:	92
Sample #	8						Area:	4,875	SF
		Distress Description LONGITUDINAL/TRAN	ISVERSE CR	ACKING	Severity L	Quantity 54 LF			
Sample #	16						Area:	4,875	SF
•		Distress Description			Severity	Quantity		,	
		LONGITUDINAL/TRAN	ISVERSE CR	RACKING	L	126 LF			
Sample #	24						Area:	4,875	SF
•		Distress Description			Severity	Quantity			
		LONGITUDINAL/TRAN	ISVERSE CR	RACKING	L	58 LF			
Sample #	31						Area:	4,875	SF
-		Distress Description			Severity	Quantity			
		LONGITUDINAL/TRAN	ISVERSE CR	RACKING	L	102 LF			
		RAVELING			Н	0.5 SF			
Sample #	40						Area:	4,875	SF
		Distress Description	GVEDGE GD	ACKING	Severity	Quantity			
		LONGITUDINAL/TRAN	IS VERSE CR	ACKING	L	119 LF			
ample #	48						Area:	4,875	SF
		Distress Description	GVEDGE GD	ACKING	Severity	Quantity			
		LONGITUDINAL/TRAN PATCHING	IS VERSE CR	ACKING	L L	120 LF 0.09 SF			
		Tittelmid			L	0.07 51			
Sample #	56						Area:	4,875	SF
		Distress Description SWELL			Severity L	Quantity 0.4 SF			
		LONGITUDINAL/TRAN	SVERSE CR	ACKING	L L	0.4 SF 27 LF			
		Distress Description	Extrapola	ated Distress Q	uantities* Severity	Quantity	Densit	tv	Deduc
		LONGITUDINAL/TRAN	SVERSE CR	ACKING	L	2,208 LF	0.039	•	4.5
		RAVELING			L	5,479 SF	9.99		4.0
Multiple o	leduct values are sca	aled down from their algebraic	sum to keep t	he model consiste	ent with experime	ental data.			
			of Deduct V	<mark>alues Based on</mark>					
		0.0 % Load		94.0 %	Climate/Dura	bility		6.0	% Othe

SUPE	RIOR AI	RPORT	Branch:	04T	TAXIWAY		T-11
Length:	2,556 LF	Width: 25 LF Area: 72,414 S	F Las	t Const: 200	4		ACRML
From:	NORTHWEST	END RWY 12/30 To: A-11 Inspections				Surface:	AC
		Inspections					
Samples S	Surveyed:	5 Total Samples: 15	Last Inspection	on Date: 10/	23/2018	PCI:	95
Sample #	2	Distress Description LONGITUDINAL/TRANSVERSE CRACKING	Severity L	Quantity 135 LF	Area:	5,000	SF
Sample #	5	Distress Description LONGITUDINAL/TRANSVERSE CRACKING DEPRESSION	Severity L L	Quantity 14 LF 0.02 SF	Area:	5,000	SF
Sample #	8	Distress Description LONGITUDINAL/TRANSVERSE CRACKING	Severity L	Quantity 31 LF	Area:	5,000	SF
Sample #	11	Distress Description NO DISTRESSES	Severity	Quantity	Area:	3,450	SF
Sample #	14	Distress Description LONGITUDINAL/TRANSVERSE CRACKING DEPRESSION	Severity L L	Quantity 39 LF 20 SF	Area:	3,412	SF
		Extrapolated Distress (Quantities*				
* Multiple o	deduct values are so	Distress Description DEPRESSION LONGITUDINAL/TRANSVERSE CRACKING caled down from their algebraic sum to keep the model consis	Severity L L stent with experim	Quantity 66 LF 725 SF ental data.	Density 0.09% 1.00%		0.30 4.95
		Percent of Deduct Values Based of	n Distress Mech	nanism			

94.0 % Climate/Durability

6.0 **% Other**

0.0~%~Load

SUPERIOR AIRPORT (04)

	EAR PROJECTIONS			FCT	IMATED AVERAGE	ANNIIAI COST		\$28,932
Plan Year:				LST	Estimated Cost:	\$134,348	PCI	
	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13	Global MR	\$0	\$2,456	\$0	\$0	\$2,456	95	98
R-11 T-11	Global MR Global MR	\$0 \$0	\$92,132 \$24,620	\$0 \$0	\$0 \$0	\$92,132 \$24,620	92 95	94 96
A-12	Preventive + Global MR	\$0 \$2	\$2,380	\$0 \$0	\$0 \$0	\$2,382	90	94
A-11	Preventive + Global MR	\$81	\$12,676	\$0	\$0	\$12,758	88	90
Plan Year:	: 2020				Estimated Cost:	\$18	PCI	
	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-12	None	\$0	\$0	\$0	\$0 \$0	\$0	93	93
A-13 R-11	None None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	97 93	97 93
T-11	None	\$0	\$0	\$0	\$0	\$0	96	96
A-11	Preventive	\$18	\$0	\$0	\$0	\$18	90	90
Plan Year:	: 2021				Estimated Cost:	\$48	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-12 A-13	None None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	91 96	91 96
R-11	None	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0	92	92
T-11	None	\$0	\$0	\$0	\$0	\$0	95	95
A-11	Preventive	\$48	\$0	\$0	\$0	\$48	89	89
Plan Year:					Estimated Cost:	\$80_	PCI	
Section A-13	Maintenance None	Local \$0	Global \$0	Major <crit \$0</crit 	Major>Crit \$0	Total \$0	Before 95	After 95
R-13	None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	95 92	95 92
T-11	None	\$0	\$0	\$0	\$0	\$0	95	95
A-12 A-11	Preventive	\$2 \$79	\$0 \$0	\$0 \$0	\$0 \$0	\$2 \$79	90 88	90 88
A-11	Preventive	\$79	ŞU	\$0	\$ 0	\$79	00	00
Plan Year:					Estimated Cost:	\$120_	PCI	
Section A-13	Maintenance None	Local \$0	Global \$0	Major <crit \$0</crit 	Major>Crit \$0	Total \$0	Before 94	After 94
R-11	None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	91	91
T-11	None	\$0	\$0	\$0	\$0	\$0	95	95
A-12 A-11	Preventive Preventive	\$11 \$109	\$0 \$0	\$0 \$0	\$0 \$0	\$11 \$109	88 87	88 87
		\$109	JU	50	30	\$109		
Plan Year: Section	: 2024 Maintenance	Local	Global	Major <crit< td=""><td>Estimated Cost: Major>Crit</td><td>\$134,424_ Total</td><td>PCI Before</td><td>After</td></crit<>	Estimated Cost: Major>Crit	\$134,424_ Total	PCI Before	After
A-13	Global MR	\$0	\$2,456	\$0	\$0	\$2,456	93	96
R-11	Global MR	\$0	\$92,132	\$0	\$0	\$92,132	91	92
T-11 A-12	Global MR Preventive + Global MR	\$0 \$20	\$24,620 \$2,380	\$0 \$0	\$0 \$0	\$24,620	94 87	95 91
A-12 A-11	Preventive + Global MR	\$140	\$2,560 \$12,676	\$0 \$0	\$0 \$0	\$2,400 \$12,816	86	89
Diam Wasse	2025				Estimated Cost		DCI	
Plan Year: Section	Maintenance	Local	Global	Major <crit< td=""><td>Estimated Cost: Major>Crit</td><td>\$76_ Total</td><td>PCI Before</td><td>After</td></crit<>	Estimated Cost: Major>Crit	\$76_ Total	PCI Before	After
A-13	None	\$0	\$0	\$0	\$0	\$0	95	95
R-11 T-11	None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	92 95	92 95
A-12	None Preventive					,\$0 ,\$0	90	90
A-11	Preventive	\$0 \$76	\$0 \$0	\$0 \$0	\$0 \$0	\$76	88	88
Plan Year:	: 2026				Estimated Cost:	\$116	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13	None	\$0	\$0	\$0	\$0 \$0	\$0	94	94
R-11 T-11	None None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	91 95	91 95
A-12	Preventive	\$10	\$0	\$0	\$0	\$10	89	89
A-11	Preventive	\$107	\$0	\$0	\$0	\$107	87	87
Plan Year:	: 2027				Estimated Cost:	\$156_	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13 R-11	None None	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	93 91	93 91
T-11	None	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	94	94
A-12	Preventive	\$19	\$0	\$0	\$0	\$19	87	87
A-11	Preventive	\$137	\$0	\$0	\$0	\$137	86	86
Plan Year:					Estimated Cost:	\$196_	PCI	
Section A-13	Maintenance None	Local \$0	Global \$0	Major <crit \$0</crit 	Major>Crit	Total \$0	Before 92	After 92
R-13	None	\$0	\$0	\$0	\$0 \$0	\$0 \$0	92 90	92 90
T-11	None	\$0	\$0	\$0	\$0	\$0	94	94
A-12 A-11	Preventive Preventive	\$28 \$168	\$0 \$0	\$0 \$0	\$0 \$0	\$28 \$168	86 86	86 86
W-11	rievelitive	\$109	ŞU	\$0	\$ 0	\$108	00	00

SUPERIOR AIRPORT (04)

FIFTEEN Y	EAR PROJECTIONS			ESTI	MATED AVERAGE A	ANNUAL COST:		\$28,932
Plan Year:	: 2029				Estimated Cost:	\$134,602	PCI	
Section	Maintenance	Local	Global	Major <crit< th=""><th>Major>Crit</th><th>Total</th><th>Before</th><th>After</th></crit<>	Major>Crit	Total	Before	After
A-13	Global MR	\$0	\$2,456	\$0	\$0	\$2,456	91	94
T-11	Global MR	\$0	\$24,620	\$0	\$0	\$24,620	94	95
A-12	Preventive + Global MR	\$38	\$2,380	\$0	\$0	\$2,418	85	89
R-11	Preventive + Global MR	\$101	\$92,132	\$0	\$0	\$92,233	90	91
A-11	Preventive + Global MR	\$199	\$12,676	\$0	\$0	\$12,875	85	87
Plan Year:	: 2030				Estimated Cost:	\$152	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13	None	\$0	\$0	\$0	\$0	\$0	93	93
R-11	None	\$0	\$0	\$0	\$0	\$0	91	91
T-11	None	\$0	\$0	\$0	\$0	\$0	94	94
A-12	Preventive	\$18	\$0	\$0	\$0	\$18	87	88
A-11	Preventive	\$134	\$0	\$0	\$0	\$134	86	86
Plan Year:	: 2031				Estimated Cost:	\$192	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13	None	\$0	\$0	\$0	\$0	\$0	92	92
R-11	None	\$0	\$0	\$0	\$0	\$0	90	90
T-11	None	\$0	\$0	\$0	\$0	\$0	94	94
A-12	Preventive	\$27	\$0	\$0	\$0	\$27	86	86
A-11	Preventive	\$165	\$0	\$0	\$0	\$165	86	86
Plan Year:	: 2032				Estimated Cost:	\$330	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
A-13	None	\$0	\$0	\$0	\$0	\$0	91	91
T-11	None	\$0	\$0	\$0	\$0	\$0	94	94
A-12	Preventive	\$36	\$0	\$0	\$0	\$36	85	85
R-11	Preventive	\$98	\$0	\$0	\$0	\$98	90	90
A-11	Preventive	\$196	\$0	\$0	\$0	\$196	85	85
Plan Year:	: 2033				Estimated Cost:	\$523	PCI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	Total	Before	After
T-11	None	\$0	\$0	\$0	\$0	\$0	93	93
A-13	Preventive	\$2	\$0	\$0	\$0	\$2	90	90
A-12	Preventive	\$46	\$0	\$0	\$0	\$46	83	84
	Daniel and the same						0.4	
A-11	Preventive	\$226 \$249	\$0 \$0	\$0 \$0	\$0	\$226	84	84