

Federal Lands Highway Road Inventory Program

Road Inventory and Condition Assessment



Organ Pipe Cactus National Monument ORPI

Cycle 5 Report

Prepared By: Federal Highway Administration Road Inventory Program (RIP) Data Collected: 04/2012 Report Date: 12/2012

Organ Pipe Cactus National Monument in Arizona

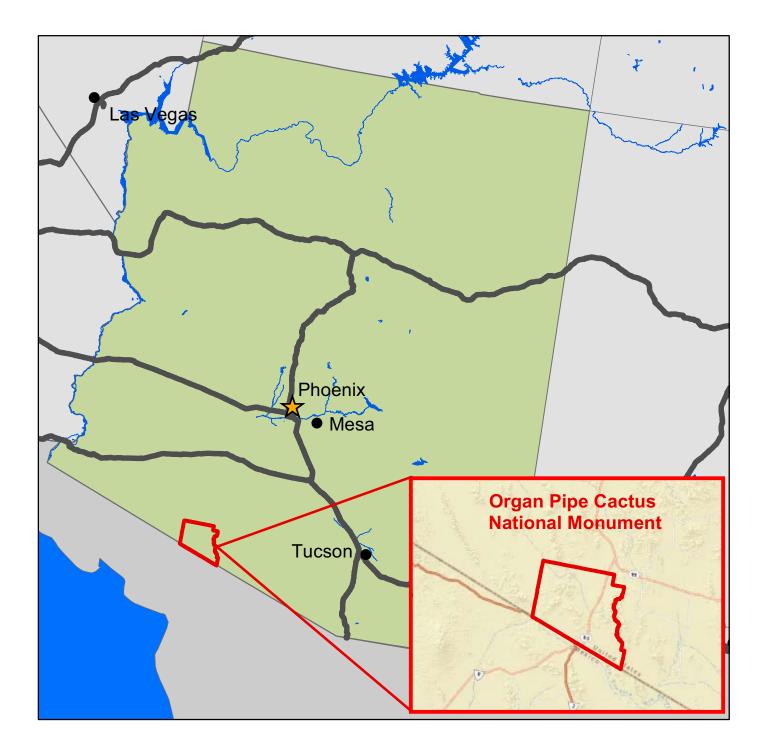




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Section 1 Introduction



Organ Pipe Cactus National Monument



INTRODUCTION

The Federal Highway Administration, (FHWA), in the mid 1970s, was charged with the task of identifying surface condition deficiencies and corrective priorities on National Park Service (NPS) roads and parkways. Additionally, FHWA was tasked with establishing an integrated maintenance features inventory, locating features such as culverts, guardrails, and signs, among others, along NPS roads and parkways. As a result, in 1976 the NPS and FHWA entered into an MOA (Memorandum Of Agreement) which established the RIP (Road Inventory Program). This MOA was terminated and revised in 1980 to establish a new MOA aiming to update RIP data and develop a long-range program to improve and maintain NPS roads to designated condition standards and establish a maintenance management program.

The FHWA completed this initial phase of the RIP in the early 1980s. As a result of this effort, each NPS site included in the study received a RIP Report known as the "Brown Book" which included the information collected during this first RIP phase.

In the 1990s, the effort was again renewed to update and maintain the RIP data. By this time the computer age was upon us and a process was employed that relied heavily on electronic data collection and computer technology. A cyclical program was developed and the RIP completed two cycles of data collection from 1994 to 2001. Cycle 1, starting in 1994, was conducted in 44 "large parks" (parks containing 10 or more paved route miles). Cycle 2 began in 1997 and comprised 79 large parks and 5 small parks totaling 4,874 paved route miles. Each of these parks received a RIP Report known as the "Blue Book". Cycle 3, from 2001 to 2004, was conducted in all parks, large and small, that contained any paved routes, including parking areas and, again, each park received a RIP Report and associated electronic files.

Cycle 4 was initiated in the spring of 2006 covering 86 large parks and several associated small parks consisting of 5,553 paved route miles and 6,232 paved parking areas. Data collection has been completed for Cycle 4 and all data has been delivered to the NPS.

In 2005, the FHWA began implementing the use of a Pavement Management System (PMS) to assist the NPS in prioritizing Pavement Maintenance and Rehabilitation activities. The PMS used by FHWA is the Highway Pavement Management Application (HPMA) and this software has the ability to store inventory and condition data from RIP and forecast future performance using prediction models. Outputs include performance and condition reports at the National, Regional, Park, or Route level. A regional prioritized list and optimization have been produced for most regions and the Federal Highway Deferred Maintenance is calculated via the HPMA.

In an effort to improve the accuracy of treatment recommendations and pavement condition descriptions, an extensive study was completed throughout 2010 that has resulted in changes to the RIP condition reporting method, specifically the distresses and indexes that comprise the Pavement Condition Rating (PCR). It was determined that a better representation of PCR could

be achieved by modifying the relative impact certain distresses would have on the overall rating. The changes that were implemented were endorsed by management at both the FHWA and NPS in October 2010. These changes will allow greater use of RIP and HPMA data for not simply condition data reporting, but also as a reliable tool for project identification and selection. Because of these changes, the PCR Condition ratings reported in Cycle 5 do not directly relate to the condition ratings reported in previous cycle RIP Reports. For more detailed information about the changes, see Section 3 and Section 10 in this RIP Report.

Cycle 5 has launched in the summer of 2010 and will again comprise all parks, large and small, that are served by paved roads and/or parking areas. For Cycle 5, the decision was made to collect condition data in large parks on Functional Class 1, 2, and 7 paved routes only, as well as any new routes that were previously not collected. In small parks, all paved routes and parking areas will be collected. As a result, this will include 81 large parks with 4,459 paved route miles and 168 small parks with 529 paved route miles and associated paved parking areas.

Since 1984, the Road Inventory Program has been funded through the Federal Lands Highway Park Roads and Parkways (PRP) Program. Currently, coordination of the RIP with FLH is under the NPS Washington Headquarters Park Facility Management Division. The FLH Washington office coordinates policy and prepares national reports and needs assessment studies for Congress.

In 1998, the Transportation Equity Act for the 21st Century (TEA-21) amended Title 23 U.S.C., and inserted Section 204(a)(6) requiring the FHWA and NPS, to develop by rule, a Pavement Management System (PMS) applied to park roads and parkways serving the National Park System.

FLH is responsible for the accuracy of all data presented in this report. Any questions or comments concerning the contents of this report should be directed to the national RIP Coordinator located in Sterling, Virginia.

Respectfully,

FHWA RIP Team

FHWA/Eastern Federal Lands 21400 Ridgetop Circle Sterling, VA 20166 (703) 404-6371 FHWA/Central Federal Lands 12300 West Dakota Ave Lakewood, CO 80228 (720) 963-3560

Section 2 Park Route Inventory



Organ Pipe Cactus National Monument



Red te	ng Colo ext denc c. milea	otes		aved Routes, DCV Driven		putes, DCV not Driven Blue Dr Private non-NPS Routes	e = All Paved Parki	C		reen = All	Unpaved	Parking Area	S	
арргол	. mica	*	•	route data was obtained f Data Collection Vehicle	rom NPS and was not invento NC - Not Collected	ried by the Road Inventory Pro								
O	RP:		ORGA	N PIPE CACTUS NA	TIONAL MONUMENT									
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route De From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0010	5	72387		VISITOR CENTER DRIVE	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 17.42 (ON RIGHT)	TO ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.02 (ON RIGHT)	N/A	0.34	0.00	0.34	1		AS	2,4
011ZZ	5	74168		AJO MOUNTAIN DRIVE	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 17.42 (ON LEFT)	TO END OF LOOP	N/A	3.10	14.97	18.07	1	287,305	AS	1,4
0012ZZ	5	74253		PUERTO BLANCO DRIVE	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.32 (ON RIGHT)	TO ROUTE 5000 (STATE HIGHWAY 85) AT MP 21.83 (ON RIGHT)	N/A	1.73	34.17	35.90	1	201,552	AS	2
0100	5	72452		RESIDENCE ACCESS ROAD	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.30 (ON LEFT)	TO END OF LOOP	N/A	1.14	0.00	1.14	5		AS	2
0101	5	72864		TWIN PEAKS ACCESS ROAD	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.17 (ON LEFT)	TO BEGIN OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) AND END OF ROUTE 0200 (CAMPGROUND LOOP ROAD)	N/A	1.32	0.00	1.32	2		AS	2
0200	5	72866		CAMPGROUND LOOP ROAD	FROM ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) (ON LEFT)	TO END OF ROUTE 0101 (TWIN PEAKS ACCESS ROAD) AND BEGIN OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)	N/A	0.82	0.00	0.82	3		AS	2
0201	NC	74164		CAMINO DE DOS REPUBLICAS	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 21.91 (ON LEFT)	TO DOS LOMITAS RANCH	N/A	0.00	4.90	4.90	2		NV	
0202	NC	74266		SENITA BASIN ROAD	FROM ROUTE 0012ZZ (PUERTO BLANCO DRIVE)	TO ROUTE 0901 (SENITA BASIN PARKING)	N/A	0.00	4.50	4.50	2		NV	
0203	NC	74269		QUITOBAQUITO ROAD	FROM ROUTE 0012ZZ (PUERTO BLANCO DRIVE)	TO ROUTE 0900	N/A	0.00	0.40	0.40	2		NV	
0204	NC	74171		ALAMO CANYON ROAD	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 7.63 (ON LEFT)	TO ALAMO CANYON TRAILHEAD	N/A	0.00	3.30	3.30	2		NV	
0205	5	72685		MAINTENANCE YARD ACCESS ROAD	FROM ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.07 (ON	TO ROUTE 0903 (MAINTENANCE YARD)	N/A	0.08	0.00	0.08	5		AS	2

	ng Colo	,	e = P	aved Routes, DCV Driven	Yellow = Unpaved R	outes, DCV not Driven Blue	e = All Paved Parki	ng Areas	G	ireen = All	Unpaved	Parking Area	IS	
appro	ext denc x. milea	ige Grey *Unr ** Do	aved	ved Routes, DCV not Driv route data was obtained f Data Collection Vehicle		or Private non-NPS Routes pried by the Road Inventory Pro		sion Route F	lag ON					
	RP]		GAI	N PIPE CACTUS NA	TIONAL MONUMENT									
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route De From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Are Map
0206	5	102406		CAMPGROUND SITES 1-6 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.76 (ON LEFT)	N/A	0.09	0.00	0.09	3		AS	2
0207	5	102418		CAMPGROUND SITES 7-15 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.03 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.74 (ON LEFT)	N/A	0.12	0.00	0.12	3		AS	2
0208	5	102419		CAMPGROUND SITES 16-23 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.05 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.73 (ON LEFT)	N/A	0.13	0.00	0.13	3		AS	2
0209	5	102421		CAMPGROUND SITES 24-34 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.06 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.71 (ON LEFT)	N/A	0.15	0.00	0.15	3		AS	2
0210	5	102422		CAMPGROUND SITES 35-45 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.08 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.70 (ON LEFT)	N/A	0.16	0.00	0.16	3		AS	2
0211	5	102424		CAMPGROUND SITES 46-57 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.09 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.68 (ON LEFT)	N/A	0.17	0.00	0.17	3		AS	2
0212	5	102425		CAMPGROUND SITES 58-70 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.11 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.67 (ON LEFT)	N/A	0.18	0.00	0.18	3		AS	2
0213	5	102426		CAMPGROUND SITES 71-85 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.12 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.66 (ON LEFT)	N/A	0.19	0.00	0.19	3		AS	2
214	5	102427		CAMPGROUND SITES 86-95 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.14 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.64 (ON LEFT)	N/A	0.20	0.00	0.20	3		AS	2
0215	5	102428		CAMPGROUND SITES 96-112 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.16 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.63 (ON LEFT)	N/A	0.21	0.00	0.21	3		AS	2

	na Colo		aito - D	aved Routes, DCV Driven	Vellow - Uppeved P	outes, DCV not Driven	e = All Paved Parki			$roon = \Lambda \parallel$	Innovad	Parking Area	0	
	ng Colo <mark>ext denc</mark>	otes		aved Routes, DCV Driven	·	or Private non-NPS Routes		Ŭ		sreen – All	Unpaved	Parking Area	S	
appro	x. milea	ge				pried by the Road Inventory Pro		sion Route F	lag ON					
			•	Data Collection Vehicle	NC - Not Collected		gram (ran).							
	יחח													
U	RP:	L 0	RGA	N PIPE CACTUS NA	TIONAL MONUMENT									
	ed		S		Route De	scription	Maint.		Un-	Total	1_ [Manual	Surf.	
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	From	То	District	Paved Miles	Paved Miles	Route Length	Func. Class	Rated SQ/FT	туре	Are Ma
0216	5	102429		CAMPGROUND SITES 113-128 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.17 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.61 (ON LEFT)	N/A	0.21	0.00	0.21	3		AS	2
)217	5	102430		CAMPGROUND SITES 129-145 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.19 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.60 (ON LEFT)	N/A	0.22	0.00	0.22	3		AS	2
218	5	102431		CAMPGROUND SITES 146-158 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.20 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.59 (ON LEFT)	N/A	0.23	0.00	0.23	3		AS	:
219	5	102432		CAMPGROUND SITES 159-174 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.22 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.57 (ON LEFT)	N/A	0.23	0.00	0.23	3		AS	
220	5	102435		CAMPGROUND SITES 175-191 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.23 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.56 (ON LEFT)	N/A	0.25	0.00	0.25	3		AS	
221	5	102434		CAMPGROUND SITES 192-208 ACCESS	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.24 (ON LEFT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.54 (ON LEFT)	N/A	0.25	0.00	0.25	3		AS	
222	NC	72867		50 K WATER TANK ROAD	FROM ROUTE 0906 (GROUP CAMPGROUND PARKING)	TO 50K WATER TANK	N/A	0.00	0.19	0.19	3		NV	
401	5	72473		SPUR RESIDENCE ROAD WEST	FROM ROUTE 0402 (SPUR RESIDENCE ROAD EAST) AT MP 0.02 (ON LEFT)	TO ROUTE 0912 (HOUSING AREA DUPLEX PARKING)	N/A	0.07	0.00	0.07	5		AS	
402	5	72455		SPUR RESIDENCE ROAD EAST	FROM ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.52 (ON RIGHT)	TO END OF LOOP	N/A	0.09	0.03	0.12	5		AS	
403	5	102994		CAMPGROUND HOUSING ROAD	FROM ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) AT MP 0.03 (ON RIGHT)	TO ROUTE 0909 (CAMPGROUND HOUSING PARKING)	N/A	0.05	0.00	0.05	6		AS	
404	NC	74274		POZO NUEVO ROAD	FROM ROUTE 0012ZZ	TO ROUTE 0405 (BATES WELL ROAD)	N/A	0.00	13.95	13.95	4		NV	

Cycle 5 NPS/RIP Route ID Report Road Inventory Program 12/06/2012 (Numerical By Route #) Page 4 of 7 White = Paved Routes. DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Shading Color Key: Green = All Unpaved Parking Areas Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage *Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP). ** DCV - Data Collection Vehicle NC - Not Collected ORPI **ORGAN PIPE CACTUS NATIONAL MONUMENT** Un-Total Cycle Collected Concess Route **Route Description** Manual Maint. Surf. Paved Func. Area Rte. FMSS Paved Route Rated **Route Name** District Miles Туре То Class Maps From No. No. Miles Length SQ/FT TO NORTH PARK 0405 NC 74277 BATES WELL ROAD FROM WEST PARK 0.00 13.25 13.25 2 NV N/A BOUNDARY BOUNDARY 0406 NC 74280 ARMENTA ROAD TO ROUTE 5000 (STATE FROM ROUTE 0405 (BATES 3 N/A 0.00 9.35 9.35 NV HIGHWAY 85) WELL ROAD) SEWAGE LAGOON TO SEWAGE LAGOON 0407 72874 NC FROM ROUTE 0908 (DUMP N/A 0.00 0.25 0.25 6 NV ROAD STATION LOOP) 0408 72482 **100 K WATER TANK** TO WATER TANK 5 **FROM ROUTE 0100** 6,353 AS 2 N/A 0.09 0.27 0.37 6 ROAD (RESIDENCE ACCESS ROAD)AT MP 0.83 (ON RIGHT) 0409 72870 GROUP **TO ROUTE 0906 (GROUP** 5 FROM END OF ROUTE N/A 0.14 0.00 0.14 3 AS 2 CAMPGROUND CAMPGROUND **0101 (TWIN PEAKS** ACCESS ROAD PARKING) ACCESS ROAD) 0410 NC 72862 DOMESTIC WATER TO WATER WELLS FROM ROUTE 0101 (TWIN N/A 0.00 0.23 0.23 6 NV WELLS ROAD PEAKS ACCESS ROAD) AT MP 0.22 (ON LEFT) 74286 TIGER CAGE ROAD 0412 NC TO BORROW PIT FROM ROUTE 5000 (STATE 0.50 6 N/A 0.00 0.50 NV HIGHWAY 85) 0413 102995 FIREARMS RANGE TO FIREARMS RANGE NC FROM STATE ROUTE 85 6 0.00 0.50 0.50 N/A NV ROAD 0416 NC 72485 VIP ROAD TO END FROM ROUTE 0100 5 N/A 0.00 0.10 0.10 GR (RESIDENCE ACCESS ROAD) AT MP 1.08 (ON LEFT) 0417 NC 92462 MAINTENANCE TO END FROM ROUTE 0205 N/A 0.00 0.10 0.10 6 NV BONEYARD ROAD (MAINTENANCE YARD ACCESS ROAD) 0418 230320 TOWER SITE 170 ROAD TO END NC FROM ROUTE 0406 0.00 6.00 6.00 6 N/A NV (ARMENTA ROAD) 0419 234263 NC TOWER SITE 310 ROAD FROM BORDER ROAD EAST TO 1.25 MI FROM STATE 0.00 1.25 1.25 6 NV N/A

PROPERTY

TO PARKING

TO PARKING

TO PARKING

TO PARKING

N/A

N/A

N/A

N/A

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

7,200

5,700

5,100

26,519

NV

NV

NV

AS

2

SIDE OF LOOPVILLE

FROM ROUTE 0203

(QUITOBAQUITO ROAD)

FROM ROUTE 0202

(SENITA BASIN ROAD)

FROM ROUTE 0012ZZ

(PUERTO BLANCO DRIVE)

FROM END OF ROUTE

0205 (MAINTENANCE YARD ACCESS ROAD)

0900

0901

0902

0903

NC

NC

NC

5

102998

103000

102992

72690

OUITOBAOUITO

SENITA BASIN

GOLDEN BELL MINE

MAINTENANCE YARD

PARKING

PARKING

PARKING

Shadi	ng Colo		ito = P	Paved Routes. DCV Driver	Vellow = Uppaved R	outes, DCV not Driven	Blue = All Paved Parki	ng Areas		Freen = All	Unnaved	Parking Area	c d	
Red te	ext deno	otes		aved Routes, DCV not Driv		or Private non-NPS Routes		Ŭ			onpuvou	T unking / i cu	<u> </u>	
appro	k. milea	ge			from NPS and was not invento				lay ON					
		** D	CV - [Data Collection Vehicle	NC - Not Collected									
Ο	RP]				TONAL MONUMENT									
				1	TIONAL MONUMENT				1		1 1		1	
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route De From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Are Maj
)904A	5	72424		VISITOR CENTER PARKING A	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.07 (ON RIGHT) AND AT MP 0.08 (ON RIGHT)	TO ROUTE 0905 (OFFIC PARKING)	E N/A	0.00	0.00	0.00		36,421	AS	2
904B	5	105672		VISITOR CENTER PARKING B	ADJACENT TO ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.09 (ON LEFT)		N/A	0.00	0.00	0.00		7,872	AS	2
0905	5	102991		OFFICE PARKING	FROM ROUTE 0904A (VISITOR CENTER PARKING A)	TO PARKING	N/A	0.00	0.00	0.00		7,592	AS	2
0906	5	102987		GROUP CAMPGROUND PARKING	FROM END OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)	TO PARKING	N/A	0.00	0.00	0.00		12,604	AS	2
0907	5	102774		CAMPGROUND PARKING	ADJACENT TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.21 (ON RIGHT)		N/A	0.00	0.00	0.00		1,024	AS	2
0908	5	102436		DUMP STATION LOOP	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.34 (ON RIGHT)	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.38 (OI RIGHT)		0.00	0.00	0.00		7,620	AS	2
0909	5	102773		CAMPGROUND HOUSING PARKING	FROM END OF ROUTE 0403 (CAMPGROUND HOUSING ROAD)	TO PARKING	N/A	0.00	0.00	0.00		2,637	AS	2
0910	5	109708		TILLOTSON PEAK WAYSIDE PARKING	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 14.67 (ON LEFT)	TO PARKING	N/A	0.00	0.00	0.00		28,558	AS	2
0911	5	109712		AJO MOUNTAINS WAYSIDE PARKING	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 4.89 (ON RIGHT)	TO PARKING	N/A	0.00	0.00	0.00		30,492	AS	1
0912	5	115987		HOUSING AREA DUPLEX HOUSING PARKING	FROM END OF ROUTE 0401 (SPUR RESIDENCE ROAD WEST)	TO PARKING	N/A	0.00	0.00	0.00		1,746	AS	2
0913	NC	237607		BATES WELL PARKING	FROM ROUTE 0405 (BATES WELL ROAD)	TO PARKING	N/A	0.00	0.00	0.00		15,000	NV	
0914	NC	235017		HORSE TRAILER PULLOUT	FROM ROUTE 5000 (STATE HIGHWAY 85) (AT	TO ROUTE 5000 (STATE HIGHWAY 85)	N/A	0.00	0.00	0.00		235,017	GR	

Road Inventory Pr	ogram 12	-	ycle	5 NPS	-	P Rout		ID Rej	port	1				Pag	e 6 of 7
Shading Color Key:	White = P	Paved Routes, DCV Driver		low = Unpaved	Routes, DC	V not Driven	Blue = /	All Paved Parking	n Areas		Green = All	Unpaved	Parking Ar	eas	
Red text denotes		aved Routes, DCV not Dri		•		non-NPS Routes		= Concessio	J			Chparoa	·		
approx. mileage	*Unpaved	I route data was obtained Data Collection Vehicle	from NPS a												
ORPI	ORGA	N PIPE CACTUS NA	TIONAL	MONUMEN	т										
Rte. Collected Collected No. Collected No.	10 3	Route Name		Route I From	Descriptio	n To		Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manua Rated SQ/FT	Type	Area Maps
5000 5		STATE HIGHWAY 85	FROM BC	NORTH PARK UNDARY		SOUTH PARK OUNDARY		N/A	22.56	0.00	22.56			AS	1,2,3,4
	<u></u>	YCLE 5 SUMM	IARY T	OTALS F	OR OR	GAN PIPE	E CA	CTUS NA	TION		ONUM	ENT	, ,		·
	<u>CYCI</u>	<u>LE 5 ROUTE TO</u>	DTALS					CYCLE	<u>5 CON</u>	ICESS	SION 1	ΓΟΤΑ	<u>LS</u>		
		DCV Driven R	oute Mile	5	7.03				C	oncessi	on Paved	l Route	Miles		0.00
		Manually Rated R	oute Mile	5	4.93				Con	cession	Unpaved	l Route	Miles		0.00
TOTAL PAI	RK ROUTE	MILES COLLECTED I	N CYCLE !	5	11.95				ΤΟΤΑ		SSION F		1ILES		0.00
		Manually Rated Rout	tes (SQFT		0.00				Concess	ion Pave	ed Parkir	ig Area	SQFT		0
	TOTAL	UNPAVED PARK RO	UTE MILE	5	59.07			Со	ncessior	Unpave	ed Parkin	ig Area	SQFT		0
								ΤΟΤΑ		ESSION	PARKING	G AREA	SQFT		0
								Co	ncessio	n Manua	lly Rated	Rotes	SQFT		0
* <u>C</u>	YCLE 5	PARKING AR	EA TO	<u>rals</u>		<u><u> </u></u>	YCLI	<u>E 5 WEIG</u>	HTED	AVE	RAGE	PARK	(VALL	JES	
	Paved Parking (SQFT)						5 DCV Driven P								85
	Unpaved Parking (SQFT)								*	*Manua	lly Rated	Routes	5 PCR		80
		TOTAL PARKI	431,102						**	Parking	PCR		88		
									**	*Total E	quivaler	nt Lane	Miles		21.93

* - The Parking Area Totals SQFT value represents **all** parking areas collected in Cycle 5, both park and concessionaire.

** - Parking and Manually Rated Routes are assigned the following PCR values based on their observed condition: Construction=-1, Excellent=97, Good=90, Fair=73, and Poor=45.

*** - Equivalent Lane Miles are calculated by route using the following equations : DCV and Manually Rated Lines Routes=(PAVE_WIDTHxPAVED_MI)/11 foot lane. Parking Areas=SQ_FEET/5280/11. Manually Rated Polygons=SQ_FEET/5280/11.

Ũ	Color Key:	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved P	arking Areas	Green = All Unpaved Parking Areas
Red text approx. r	denotes nileage	•	Black = State, Local or Private non-NPS Rou NPS and was not inventoried by the Road Invent C - Not Collected		ession Route Flag ON	
		<u>General Park R</u>	oad Functional Classification	<u> Table</u>		Surface Type Abbreviations
<u>Class 1</u>			n constitute the main access route, circulatory tour, or th Trace) are numbered 1 - 9. State Routes Inventoried for			AS - Asphaltic Concrete Pavement
<u>Class 2</u>		ark Road (Public Roads) - Roads which provide acc Is, etc. Route Numbers 100-199.	ess within a park to areas of scenic, scientific, recreatior	al or cultural interest, su	ch as overlooks,	CO - Portland Cement Concrete Pavement BR - Brick or Pavers Road Bed
<u>lass 3</u>			de circulation within public areas, such as campgrounds, speed traffic and are often designed for one-way circulat			CB - Cobble Stone Road Bed GR - Gravel Road Bed
<u>lass 4</u>	roads freque	ently have no minimum design standards and their	ulation through remote areas and/or access to primitive use may be limited to specially equipped vehicles. Rou s because, historically, they were numbered similarly.		eloped areas. These	SA - Sand Road Bed NV - Native or Dirt Material Road Bed
<u>Class 5</u>		ve Access Road (Administrative Roads) - All public utility areas. Route Numbers 400-499.	roads intended for access to administrative developmer	ts or structures such as	oark offices, employee	OT - Other Materials Road Bed
<u>Class 6</u>	Note: Func	ctional Classes 5 and 6 have the same route numb	osed to the public, including patrol roads, truck trails, an ers because historically they were numbered similarly ar housing are often closed to the public, this restriction v	d often there is little dist	inction between	
<u>Class 7</u>	an urban are		ities serve high volumes of park and non-park related tr he major parkways which serve as gateways to our nati nbers 1-9.			
<u>Class 8</u>			re usually extensions of the adjoining street system that rm with accepted local engineering practice and local co			

nationwid	e which are de	esignated by the 300 and 500 series. The numbers	ies for interpretive roads, and a 500 series for one-way for these roads will be maintained for reporting consiste) and 500 series will be discontinued for future use.			
		ers are assigned to Non-NPS Routes that are State, Video Log only.	County or City owned which border, traverse, or provid	e access to Park Facilities	or Locations. 5000 Routes	

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Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	s = Concession Route Flag ON		_
	*Unpaved route data was obtained from NF	S and was not inventoried by the Road Inventor	y Program (RIP).		
ORPI	ORGAN PIPE CACTUS NAT	IONAL MONUMENT			

ORGAN PIPE CACTUS NATIONAL MONUMENT

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0011ZZ	74168	5	AJO MOUNTAIN DRIVE	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 17.42 (ON LEFT)	TO END OF LOOP		1	3.10	14.97	18.07	287,305
0012ZZ	74253	5	PUERTO BLANCO DRIVE	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.32 (ON RIGHT)	TO ROUTE 5000 (STATE HIGHWAY 85) AT MP 21.83 (ON RIGHT)		1	1.73	34.17	35.90	201,552

ORPI-0011ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0011AZ	74168	5	AJO MOUNTAIN DRIVE SECTION 01	FROM UNPAVED SECTION OF ROUTE 00112Z (AJO MOUNTAIN DRIVE) AT MP 1.012	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 1.032		1	0.02	0.00	0.02	1,848
0011BZ	74168	5	AJO MOUNTAIN DRIVE SECTION 02	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.003	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.033		1	0.03	0.00	0.03	2,772
0011CZ	74168	5	AJO MOUNTAIN DRIVE SECTION 03	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.354	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.387		1	0.03	0.00	0.03	3,729
0011DZ	74168	5	AJO MOUNTAIN DRIVE SECTION 04	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 5.785	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.017		1	2.23	0.00	2.23	206,237
0011EZ	74168	5	AJO MOUNTAIN DRIVE SECTION 05	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.270	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.298		1	0.03	0.00	0.03	2,587
0011FZ	74168	5	AJO MOUNTAIN DRIVE SECTION 06	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.596	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.62		1	0.02	0.00	0.02	2,218
0011GZ	74168	5	AJO MOUNTAIN DRIVE SECTION 07	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.704	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.729		1	0.03	0.00	0.03	2,310
0011HZ	74168	5	AJO MOUNTAIN DRIVE SECTION 08	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.426	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.464		1	0.04	0.00	0.04	3,511
0011IZ	74168	5	AJO MOUNTAIN DRIVE SECTION 09	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.485	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.552		1	0.07	0.00	0.07	6,191

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ORGAN PIPE CACTUS NATIONAL MONUMENT

ORPI-0011ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0011JZ	74168	5	AJO MOUNTAIN DRIVE SECTION 10	FROM UNPAVED SECTION OF ROUTE 00112Z (AJO MOUNTAIN DRIVE) AT MP 10.323	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.659		1	0.34	0.00	0.34	31,046
0011KZ	74168	5	AJO MOUNTAIN DRIVE SECTION 11	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.807	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.829		1	0.02	0.00	0.02	2,033
0011MZ	74168	5	AJO MOUNTAIN DRIVE SECTION 13	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.205	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.238		1	0.03	0.00	0.03	3,049
0011NZ	74168	5	AJO MOUNTAIN DRIVE SECTION 14	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.751	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.933		1	0.18	0.00	0.18	16,817
0011OZ	74168	5	AJO MOUNTAIN DRIVE SECTION 15	FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 17.511	TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 17.543		1	0.03	0.00	0.03	2,957

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ORGAN PIPE CACTUS NATIONAL MONUMENT

ORPI-0012ZZ Subcomponent Breakdown

Rte.	FMSS No.	Cycle Collected	Deute Neura		escription	Concess Route	Func. Class	Paved	Un- Paved	Total Route	Manual Rated
No.	NO.	δŭ	Route Name	From	То	<u> </u>	ЪÜ	Miles	Miles	Length	SQ/FT
0012AZ	74253	5	PUERTO BLANCO DRIVE SECTION 01	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 0.514	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 0.67		1	0.16	0.00	0.16	18,945
0012BZ	74253	5	PUERTO BLANCO DRIVE SECTION 02	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.077	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.165		1	0.09	0.00	0.09	10,687
0012CZ	74253	5	PUERTO BLANCO DRIVE SECTION 03	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.278	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.465		1	0.19	0.00	0.19	22,709
0012DZ	74253	5	PUERTO BLANCO DRIVE SECTION 04	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.696	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.806		1	0.11	0.00	0.11	13,358
0012EZ	74253	5	PUERTO BLANCO DRIVE SECTION 05	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.966	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.064		1	0.10	0.00	0.10	11,901
0012FZ	74253	5	PUERTO BLANCO DRIVE SECTION 06	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.108	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.221		1	0.11	0.00	0.11	13,723
0012GZ	74253	5	PUERTO BLANCO DRIVE SECTION 07	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.317	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.389		1	0.07	0.00	0.07	7,603
0012HZ	74253	5	PUERTO BLANCO DRIVE SECTION 08	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.983	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.136		1	0.15	0.00	0.15	17,772
0012IZ	74253	5	PUERTO BLANCO DRIVE SECTION 09	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.197	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.223		1	0.03	0.00	0.03	2,608
0012JZ	74253	5	PUERTO BLANCO DRIVE SECTION 10	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.296	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.403		1	0.11	0.00	0.11	11,864
0012KZ	74253	5	PUERTO BLANCO DRIVE SECTION 11	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.574	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.669		1	0.10	0.00	0.10	10,032
0012LZ	74253	5	PUERTO BLANCO DRIVE SECTION 12	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.853	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.913		1	0.06	0.00	0.06	6,336
0012MZ	74253	5	PUERTO BLANCO DRIVE SECTION 13	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.021	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.217		1	0.20	0.00	0.20	22,767

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 *Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).
 Topological areas

ORGAN PIPE CACTUS NATIONAL MONUMENT

ORPI-0012ZZ Subcomponent Breakdown

ORPI

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From To				Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0012NZ	74253	5	PUERTO BLANCO DRIVE SECTION 14	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.284	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.345		1	0.06	0.00	0.06	7,086
0012OZ	74253	5	PUERTO BLANCO DRIVE SECTION 15	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.406	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.533		1	0.13	0.00	0.13	14,752
0012PZ	74253	5	PUERTO BLANCO DRIVE SECTION 16	FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.784	TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.865		1	0.08	0.00	0.08	9,409

ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - ORPI

	ROUTES MODIFIED FROM PREVIOUS INVENTORY:								
Route #	Route Name	Type of Modification	Comments						
0908	DUMP STATION LOOP	RECONSTRUCTED	ROUTE RECOLLECTED IN CYCLE 5 BECAUSE IT HAS BEEN RECONSTRUCTED SINCE CYCLE 4 DATA COLLECTION.						
	OTHER CHANGES FROM PREVIOUS INVENTORY:								
Route #	Route Name	Type of Change	Comments						
0011ZZ	AJO MOUNTAIN DRIVE	LENGTH CHANGE	ROUTE LENGTH HAS CHANGED IN CYCLE 5 DUE TO UPDATED GPS COLLECTED. WAS ROUTE 0011, SECTIONS 01 - 15 IN PREVIOUS CYCLES. SECTION 12 OF THIS ROUTE IS UNPAVED IN CYCLE 5.						
0012ZZ	PUERTO BLANCO DRIVE	SURFACE TYPE CHANGE	ROUTE WAS UNPAVED IN CYCLE 4, SOME INTERMITTENT SECTIONS HAVE BEEN PAVED. THE PAVED SECTIONS WERE MANUALLY RATED IN CYCLE 5.						
0101	TWIN PEAKS ACCESS ROAD	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASSIFICATION CHANGED FROM 1 TO 2 DURING THE CYCLE 5 ROUTE ID MEETING. THE PURPOSE OF THIS ROUTE IS TO PROVIDE ACCESS TO A CAMPGROUND.						
0401	SPUR RESIDENCE ROAD WEST	SURFACE TYPE CHANGE	ROUTE COLLECTED BY DATA COLLECTION VEHICLE IN CYCLE 5; WAS UNPAVED IN CYCLE 4.						
0402	SPUR RESIDENCE ROAD EAST	OTHER	PAVED ROUTE LENGTH DECREASED DUE TO SMALL SECTION AT END CHANGING FROM PAVED TO UNPAVED SINCE CYCLE 4 DATA COLLECTION.						
0403	CAMPGROUND HOUSING ROAD	SURFACE TYPE CHANGE	ROUTE COLLECTED BY DATA COLLECTION VEHICLE IN CYCLE 5; WAS UNPAVED IN CYCLE 4.						
0408	100 K WATER TANK ROAD	SURFACE TYPE CHANGE	ROUTE WAS UNPAVED IN CYCLE 4, PAVED IN CYCLE 5 .						
5000	STATE HIGHWAY 85	LENGTH CHANGE	ROUTE DRIVEN 0.28 MILES LONGER IN CYCLE 5 TO END AT SOUTH PARK BOUNDARY.						

<u>Section 3</u> Park Summary Information



Organ Pipe Cactus National Monument



ORPI: PAVED ROUTE MILES AND PERCENTAGES BY FUNCTIONAL CLASS AND PCR

	Pavement Condition Rating (PCR)								
	Poor ((0-60)	Fair (61-84)		Good (85-94)		Excellent	(95-100)	TOTAL
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1			0.02	0.28%	0.12	1.71%	0.20	2.85%	0.34
2			0.24	3.42%	0.72	10.26%	0.36	5.13%	1.32
3	0.22	3.13%	1.63	23.22%	2.02	28.77%	0.06	0.85%	3.93
4									
5	0.04	0.57%	0.41	5.84%	0.91	12.96%	0.02	0.28%	1.38
6	0.03	0.43%			0.02	0.28%			0.05
7									
8									
Totals	0.29	4.13%	2.30	32.76%	3.79	53.99%	0.64	9.12%	7.02

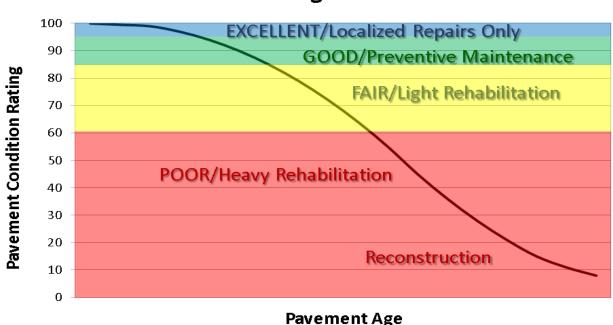
Note: The information in this table is derived from the PMS_20 table in the Park database, which only contains processed data from routes collected with the Data Collection Vehicle (DCV). Information for Manually Rated Routes (MRR) and Parking Areas is not reported in this table. Only Functional Class 1, 2, & 7 routes, and any new routes not previously collected by RIP, are collected in Large Parks.

Explanation of the Excellent, Good, Fair and Poor Condition Descriptions

In addition to the RIP Index changes that have been implemented in Cycle 5, we will also aim to provide greater assistance in translating excellent/good/fair/poor categories into pavement needs categories. The PCR can be used to indicate the place in the Pavement Life Cycle and the types of treatments that should be considered now and into the future.

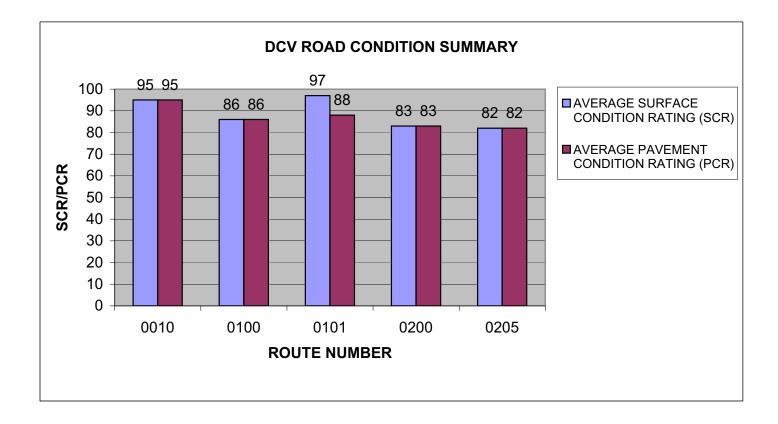
- Excellent/New: PCR of 95-100. Pavements in this range will require only spot repairs
- Good: PCR of 85-94. Pavements in this range will likely be candidates for Preventive Maintenance. Examples include Chip and Slurry Seals, Micro Surfacing and Thin Overlays.
- Fair: PCR of 61-84. Pavements in this range will likely be candidates of Light Rehabilitation (L3R). Examples include single-lift overlays up to 2.5 inches in total thickness, milling and overlays.
- Poor: PCR of 0-60. Pavements in this range will likely be candidates of Heavy Rehabilitation or Reconstruction (H3R or 4R). Examples include Pulverization, Multiple Lift Overlays, and Reconstruction.

At this time, specific Maintenance and Rehabilitation activities should be evaluated and recommended at the project level. Site-specific conditions that influence treatment type should be determined based on performing a subsurface investigation and/or pavement condition survey, and not be based solely on RIP data. Additionally, RIP produces a snapshot of conditions the year in which the data was collected. For further information or to obtain additional Pavement Management System's data from our Highway Pavement Management Application (HPMA) please contact the Eastern Federal Lands pavement team.

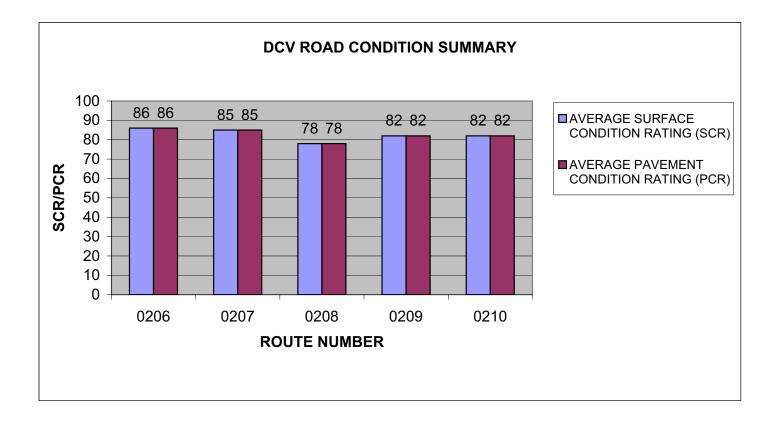


Condition Categories and Treatments

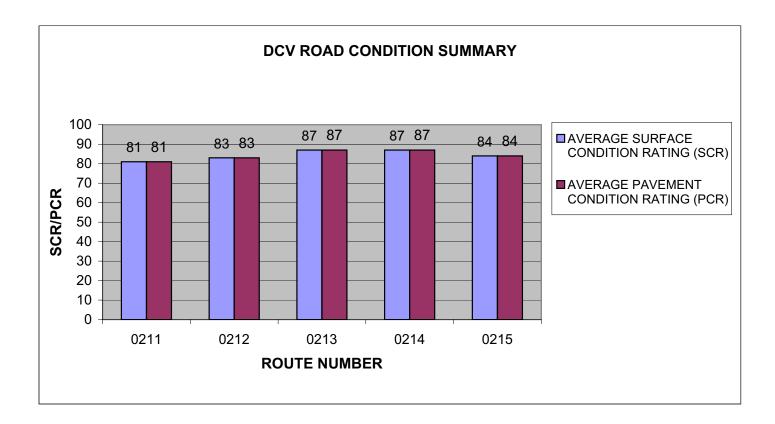
ROUTE NUMBER	ROUTE NAME		PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	VISITOR CENTER DRIVE	1	0.34	ASPHALT	95	95
0100	RESIDENCE ACCESS ROAD	5	1.14	ASPHALT	86	86
0101	TWIN PEAKS ACCESS ROAD	2	1.32	ASPHALT	97	88
0200	CAMPGROUND LOOP ROAD	3	0.82	ASPHALT	83	83
0205	MAINTENANCE YARD ACCESS ROAD	5	0.08	ASPHALT	82	82



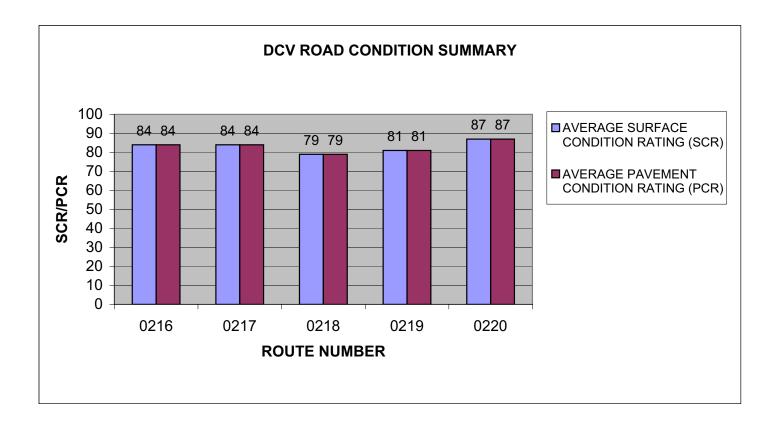
ROUTE NUMBER	ROUTE NAME	101101	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0206	CAMPGROUND SITES 1-6 ACCESS	3	0.09	ASPHALT	86	86
0207	CAMPGROUND SITES 7-15 ACCESS	3	0.12	ASPHALT	85	85
0208	CAMPGROUND SITES 16-23 ACCESS	3	0.13	ASPHALT	78	78
0209	CAMPGROUND SITES 24-34 ACCESS	3	0.15	ASPHALT	82	82
0210	CAMPGROUND SITES 35-45 ACCESS	3	0.16	ASPHALT	82	82



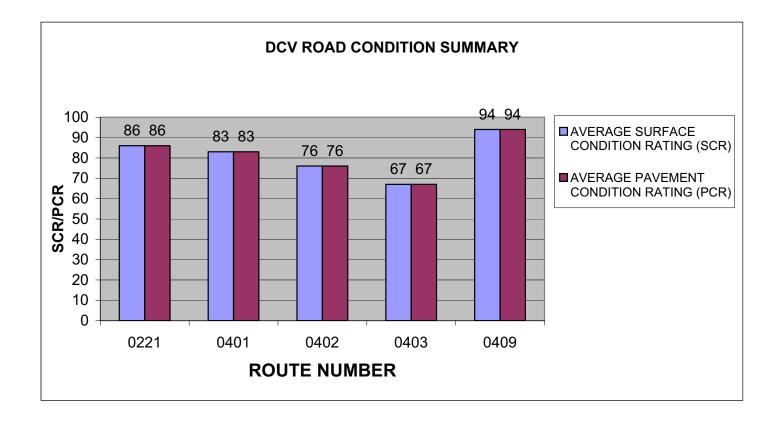
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0211	CAMPGROUND SITES 46-57 ACCESS	3	0.17	ASPHALT	81	81
0212	CAMPGROUND SITES 58-70 ACCESS	3	0.18	ASPHALT	83	83
0213	CAMPGROUND SITES 71-85 ACCESS	3	0.19	ASPHALT	87	87
0214	CAMPGROUND SITES 86-95 ACCESS	3	0.20	ASPHALT	87	87
0215	CAMPGROUND SITES 96-112 ACCESS	3	0.21	ASPHALT	84	84



ROUTE NUMBER	ROUTE NAME	101101	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0216	CAMPGROUND SITES 113-128 ACCESS	3	0.21	ASPHALT	84	84
0217	CAMPGROUND SITES 129-145 ACCESS	3	0.22	ASPHALT	84	84
0218	CAMPGROUND SITES 146-158 ACCESS	3	0.23	ASPHALT	79	79
0219	CAMPGROUND SITES 159-174 ACCESS	3	0.23	ASPHALT	81	81
0220	CAMPGROUND SITES 175-191 ACCESS	3	0.25	ASPHALT	87	87



ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0221	CAMPGROUND SITES 192-208 ACCESS	3	0.25	ASPHALT	86	86
0401	SPUR RESIDENCE ROAD WEST	5	0.07	ASPHALT	83	83
0402	SPUR RESIDENCE ROAD EAST	5	0.09	ASPHALT	76	76
0403	CAMPGROUND HOUSING ROAD	6	0.05	ASPHALT	67	67
0409	GROUP CAMPGROUND ACCESS ROAD	3	0.14	ASPHALT	94	94

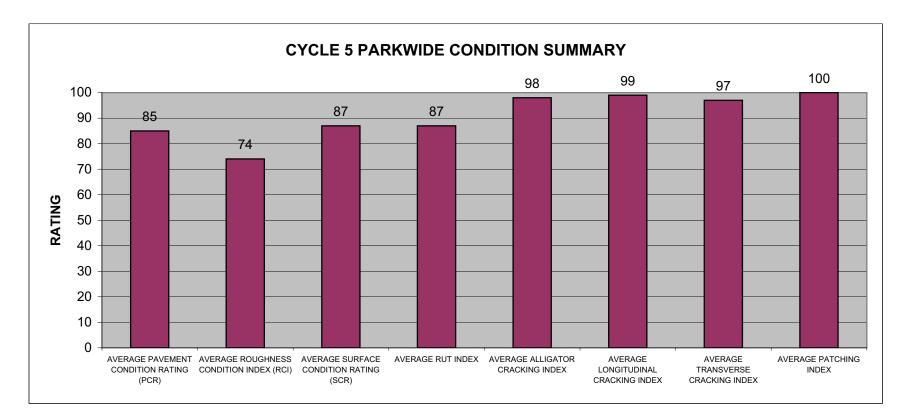


ORPI: PARKWIDE DCV CONDITION SUMMARY

AVERAGE	AVERAGE	AVERAGE		AVERAGE	AVERAGE	AVERAGE	
PAVEMENT	ROUGHNESS	SURFACE		ALLIGATOR	LONGITUDINAL	TRANSVERSE	AVERAGE
CONDITION	CONDITION	CONDITION	AVERAGE	CRACKING	CRACKING	CRACKING	PATCHING
RATING (PCR)	INDEX (RCI)	RATING (SCR)	RUT INDEX	INDEX	INDEX	INDEX	INDEX
85	74	87	87	98	99	97	100

All Index values are based on Data Collection Vehicle (DCV) driven roads that were collected in Cycle-5.

Roughness data is only collected on routes with lengths greater than 0.5 miles and a posted speed limit of 25 MPH or greater.

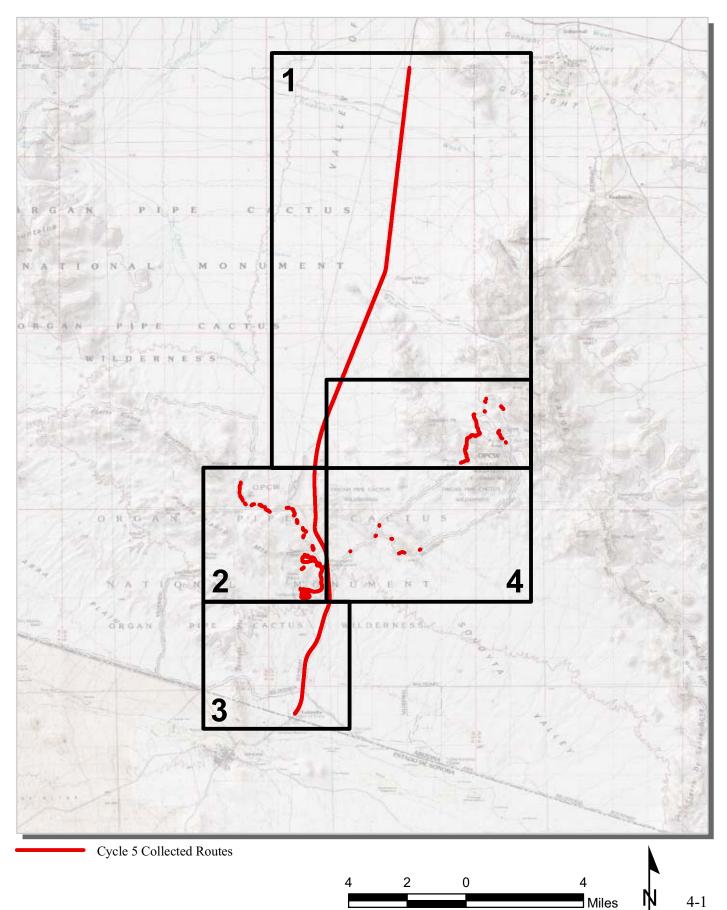


<u>Section 4</u> Park Route Location Maps

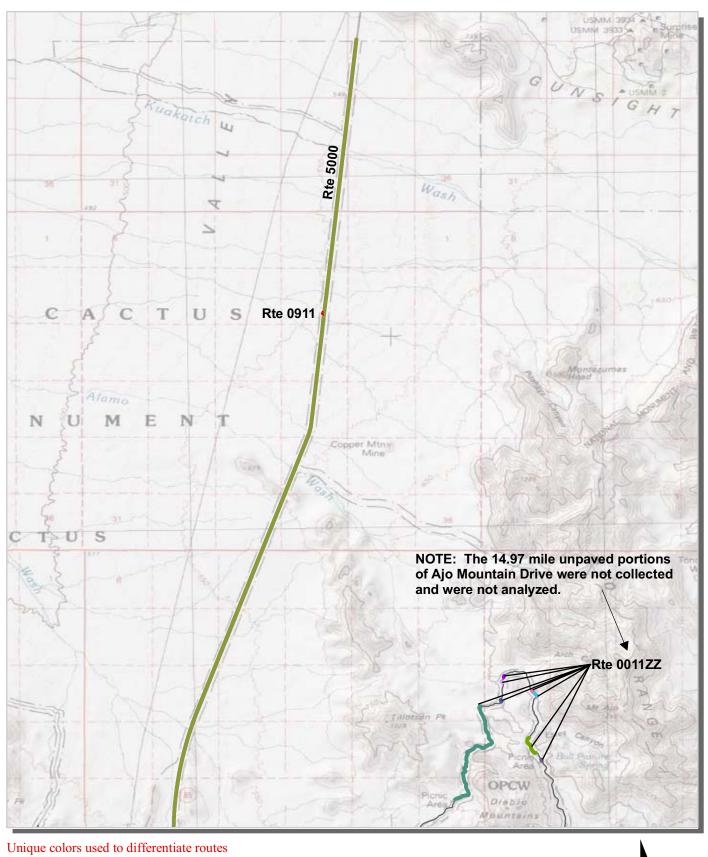


Organ Pipe Cactus National Monument



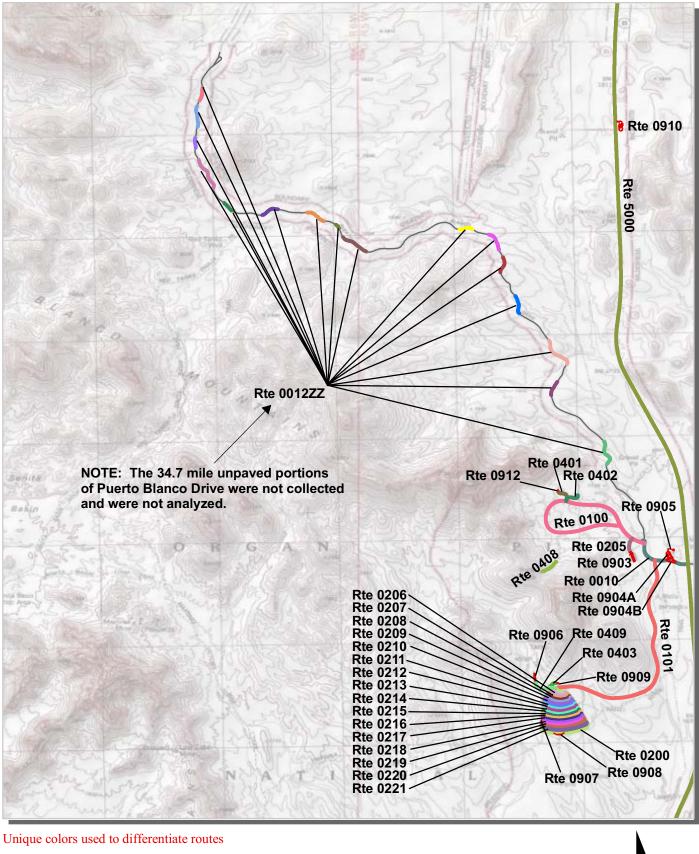


4-1

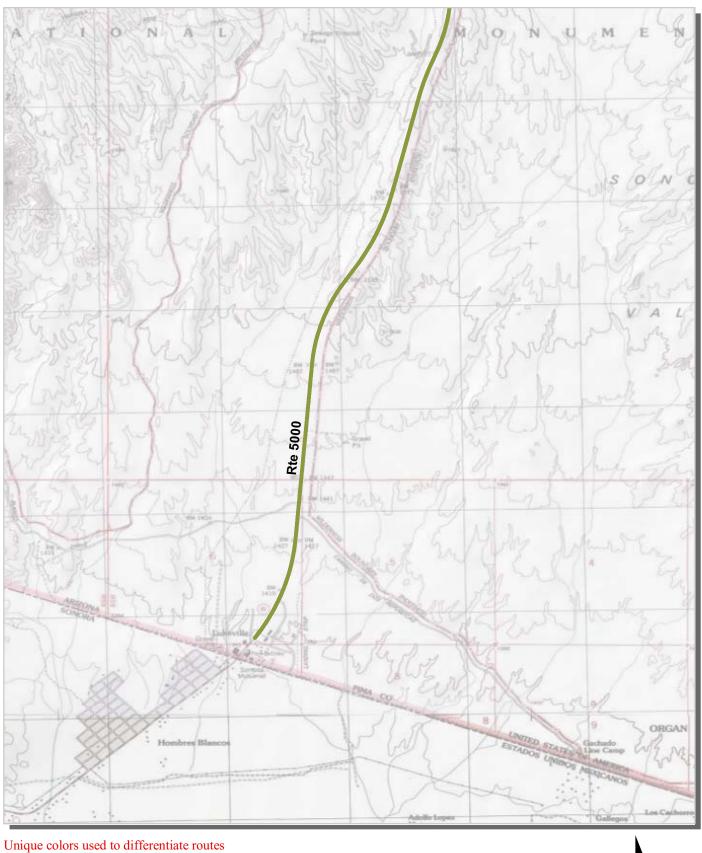


2 1 0 2 Miles

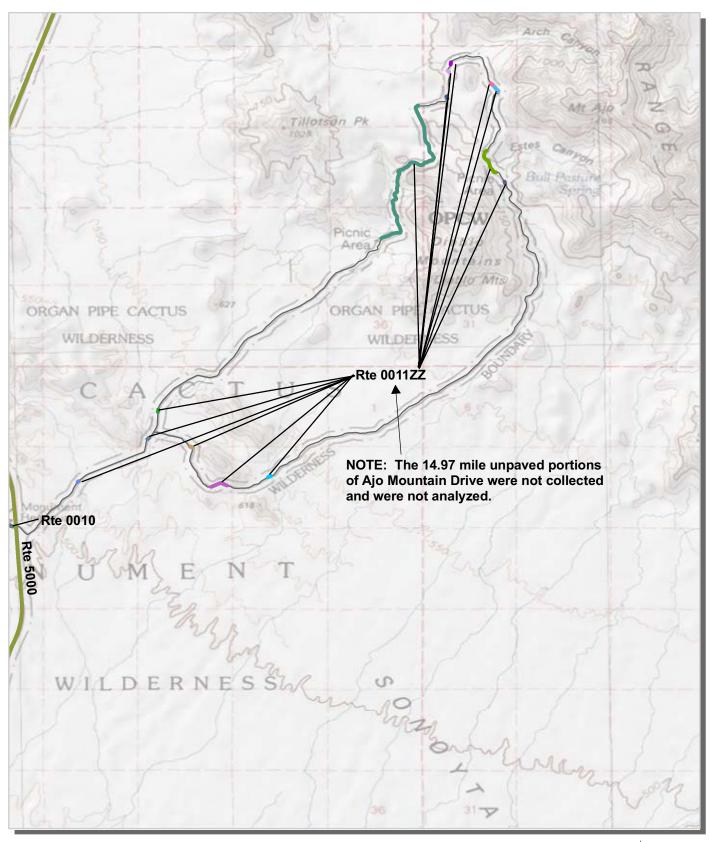
4-2







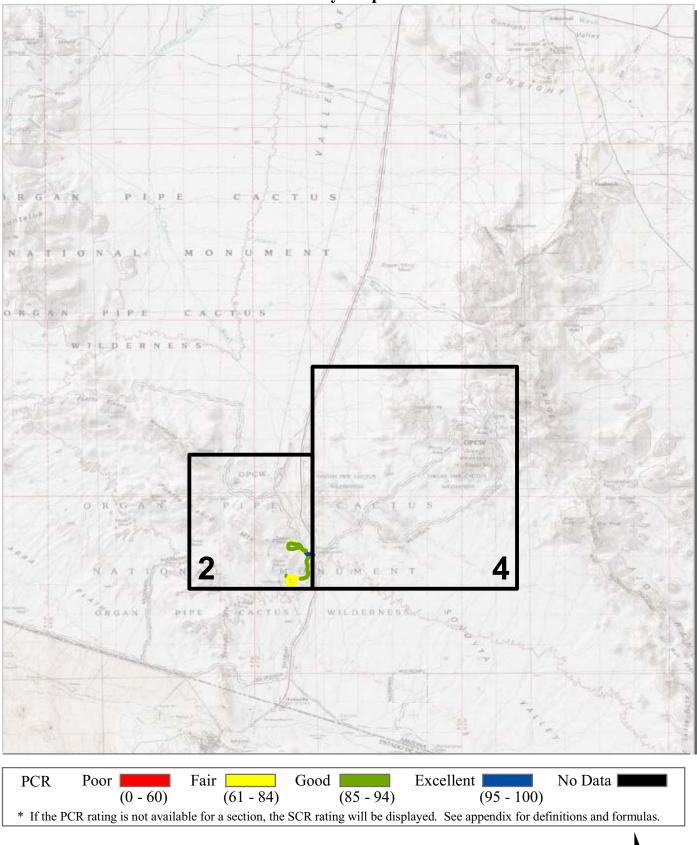




Unique colors used to differentiate routes



Organ Pipe Cactus National Monument Route Condition Map PCR - Mile by Mile Key Map



2

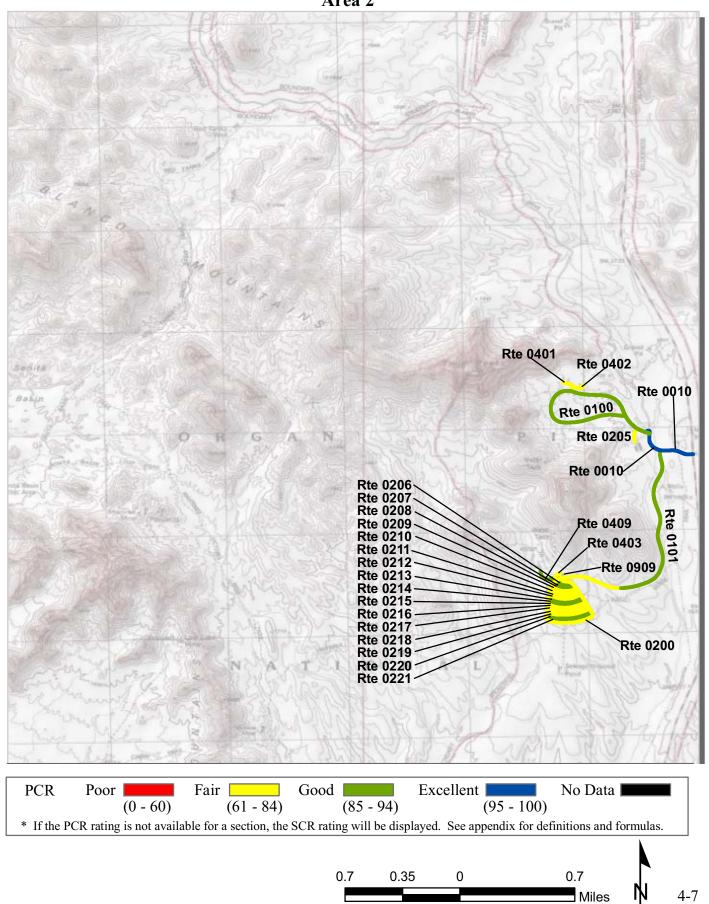
4

0

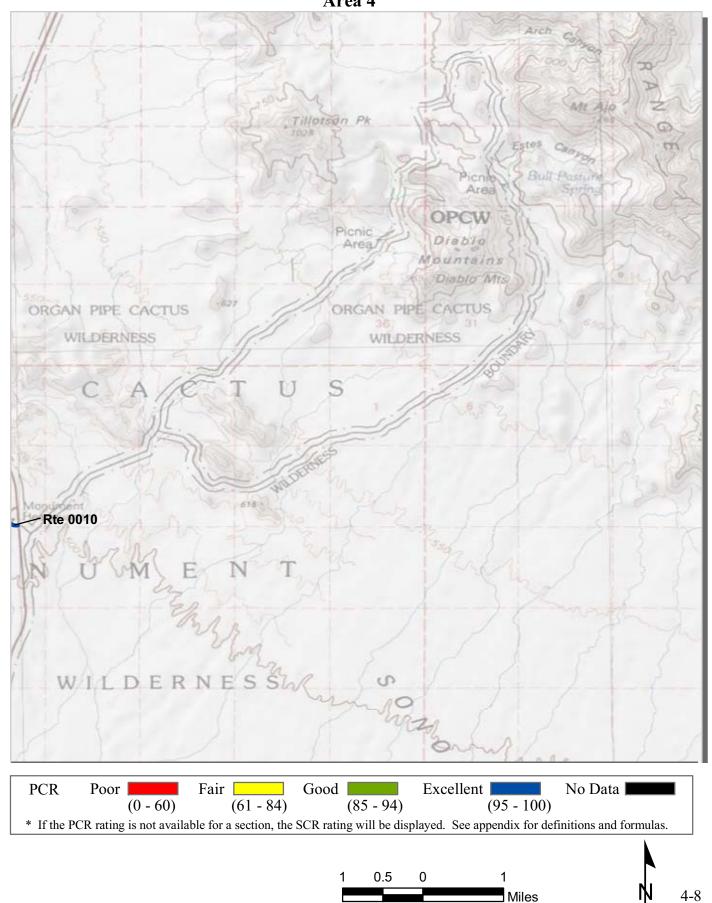
Note: Only routes collected by the DCV in Cycle-5 are displayed.

Miles

Organ Pipe Cactus National Monument Route Condition Map PCR - Mile by Mile Area 2



Organ Pipe Cactus National Monument Route Condition Map PCR - Mile by Mile Area 4

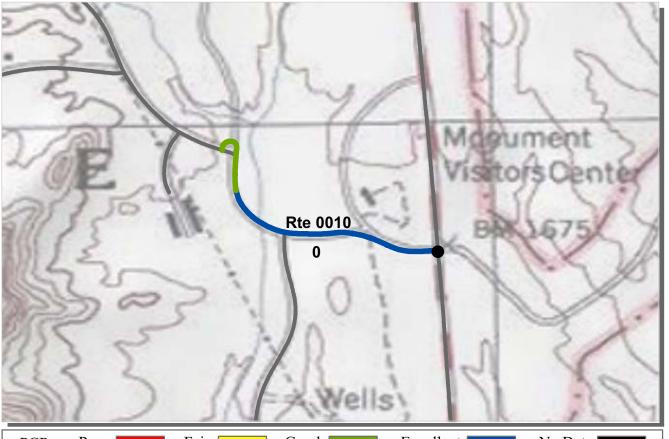


<u>Section 5</u> Paved Route Condition Rating Sheets



Organ Pipe Cactus National Monument





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PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	00)
* If the PCF	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix fo	or definitions and formulas.

ROUTE: 0010 VISITOR CENTER DRIVE ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

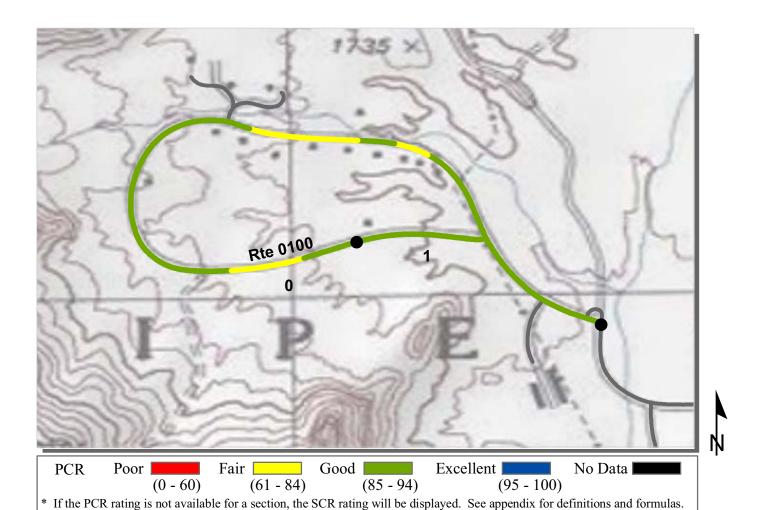
			COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LENGTH			
Section Number	0				
Section Length (mi)	0.34				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	26				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	95				
PCR (Pavement Condition Rating)	95				
Distress Index Values					
Structural Crack Index	99				
Transverse Cracking Index	95				
Patching Index	100				
Rutting Index	98				
Roughness Condition Index (RCI)	NC				

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

ROUTE: 0010 VISITOR CENTER DRIVE



ROUTE: 0100 RESIDENCE ACCESS ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

			COLLECTED:	4/19/2012
INTERMOUNTAIN REGION	TOTAL LENGTH:	1.14 Miles		
Section Number	0	1		
Section Length (mi)	1.00	0.14		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	21	19		
Lane Width (ft)	10	9		
Roadway Condition Information				
SCR (Surface Condition Rating)	86	88		
PCR (Pavement Condition Rating)	86	88		
Distress Index Values				
Structural Crack Index	99	100		
Transverse Cracking Index	97	99		
Patching Index	100	100		
Rutting Index	86	88		
Roughness Condition Index (RCI)	NC	NC		

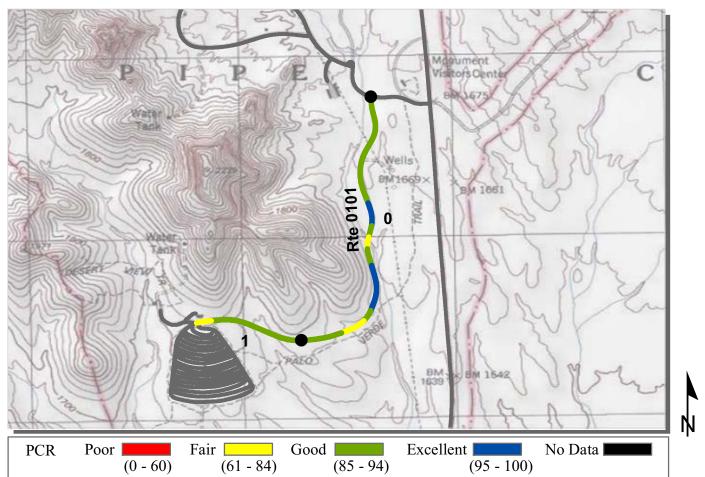
NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

ROUTE: 0100 RESIDENCE ACCESS ROAD

0/2012



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

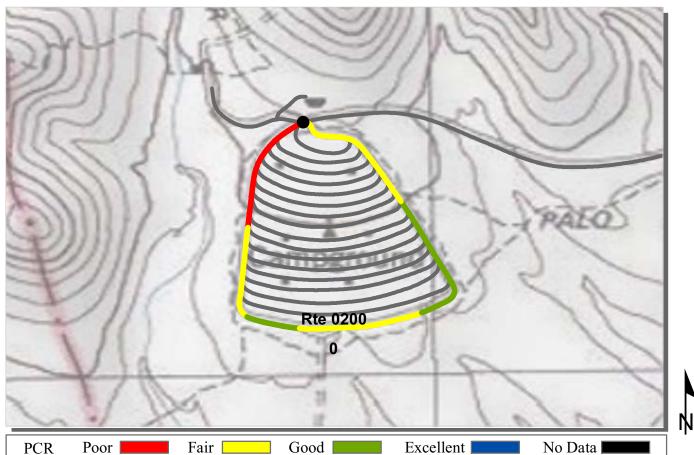
ROUTE: 0101 TWIN PEAKS ACCESS ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

INTERMOUNTAIN REGION			COLLECTED: TOTAL LENGTH:	4/19/2012 1.32 Miles
Section Number	0	1		
Section Length (mi)	1.00	0.32		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	24	25		
Lane Width (ft)	10	10		
Roadway Condition Information				
SCR (Surface Condition Rating)	97	95		
PCR (Pavement Condition Rating)	89	84		
Distress Index Values				
Structural Crack Index	100	100		
Transverse Cracking Index	98	99		
Patching Index	100	100		
Rutting Index	97	95		
Roughness Condition Index (RCI)	76	67		

ROUTE: 0101 TWIN PEAKS ACCESS ROAD

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



		(0 - 60)	(61 - 84)		(95 - 100)	
*	If the PCR rating	is not available	for a section, the So	CR rating will be displayed	d. See appendix for de	finitions and formulas.

ROUTE: 0200 CAMPGROUND LOOP ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

			COLLECTEI): 4/19/2012
INTERMOUNTAIN REGION		TOTAL LENGTH		
Section Number	0			
Section Length (mi)	0.82			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	14			
Lane Width (ft)	14			
Roadway Condition Information				
SCR (Surface Condition Rating)	83			
PCR (Pavement Condition Rating)	83			
Distress Index Values				
Structural Crack Index	83			
Transverse Cracking Index	92			
Patching Index	99			
Rutting Index	84			
Roughness Condition Index (RCI)	NC			

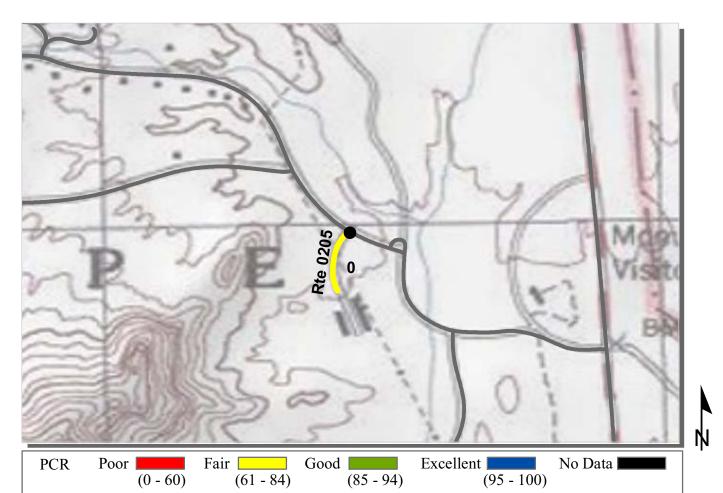
ROUTE: 0200 CAMPGROUND LOOP ROAD

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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0205 MAINTENANCE YARD ACCESS ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

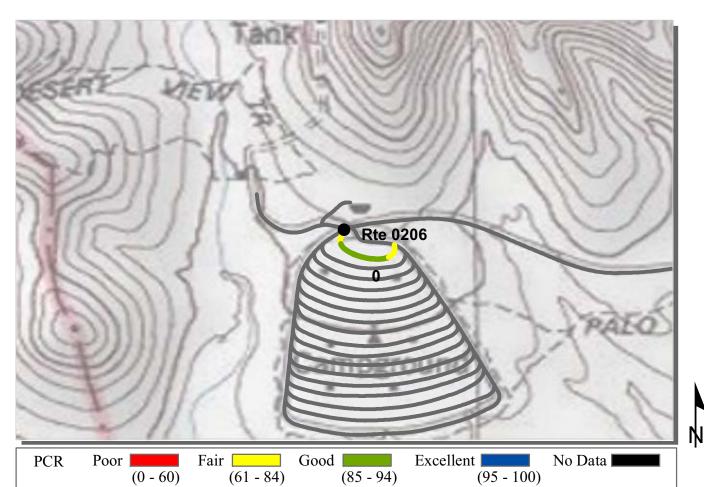
			COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LE		LENGTH:	0.08 Miles
Section Number	0				
Section Length (mi)	0.08				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	22				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	82				
PCR (Pavement Condition Rating)	82				
Distress Index Values					
Structural Crack Index	94				
Transverse Cracking Index	94				
Patching Index	100				
Rutting Index	82				
Roughness Condition Index (RCI)	NC				

ROUTE: 0205 MAINTENANCE YARD ACCESS ROAD

1/10/2012

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0206 CAMPGROUND SITES 1-6 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

			COL	LECTED:	4/19/2012	
INTERMOUNTAIN REGION		TOTAL LENGTH			0.09 Miles	
Section Number	0					
Section Length (mi)	0.09					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	13					
Lane Width (ft)	13					
Roadway Condition Information						
SCR (Surface Condition Rating)	86					
PCR (Pavement Condition Rating)	86					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	93					
Patching Index	100					
Rutting Index	86					
Roughness Condition Index (RCI)	NC					

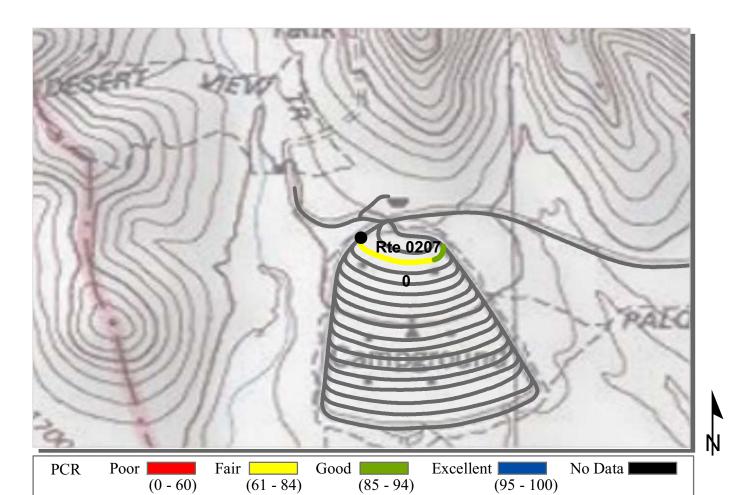
ROUTE: 0206 CAMPGROUND SITES 1-6 ACCESS

4/10/2012

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.
 ROUTE: 0207 CAMPGROUND SITES 7-15 ACCESS

ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

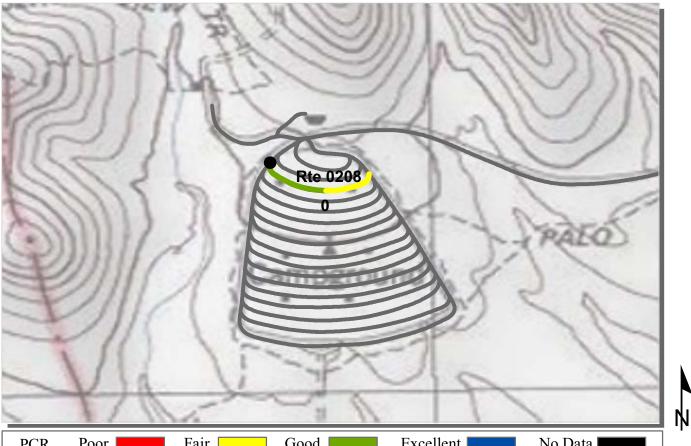
		COLLECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LENGTH:	0.12 Miles
Section Number	0		
Section Length (mi)	0.12		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	11		
Lane Width (ft)	11		
Roadway Condition Information			
SCR (Surface Condition Rating)	85		
PCR (Pavement Condition Rating)	85		
Distress Index Values			
Structural Crack Index	94		
Transverse Cracking Index	95		
Patching Index	100		
Rutting Index	85		
Roughness Condition Index (RCI)	NC		

ROUTE: 0207 CAMPGROUND SITES 7-15 ACCESS

4/10/2012

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor		Fair 📃	Good		Excellent	No Data
		(0 - 60)	(61 -	84)	(85 - 94)	(95 - 1	00)
* If the PC	R rating i	s not availab	ble for a section	n, the SCR ratir	ng will be disp	olayed. See appendix f	for definitions and formulas.

ROUTE: 0208 CAMPGROUND SITES 16-23 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

			COLLE	ECTED:	4/19/2012	
INTERMOUNTAIN REGION		TOTAL LENGTH			: 0.13 Miles	
Section Number	0					
Section Length (mi)	0.13					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	11					
Lane Width (ft)	11					
Roadway Condition Information						
SCR (Surface Condition Rating)	78					
PCR (Pavement Condition Rating)	78					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	94					
Patching Index	99					
Rutting Index	78					
Roughness Condition Index (RCI)	NC					

ROUTE: 0208 CAMPGROUND SITES 16-23 ACCESS

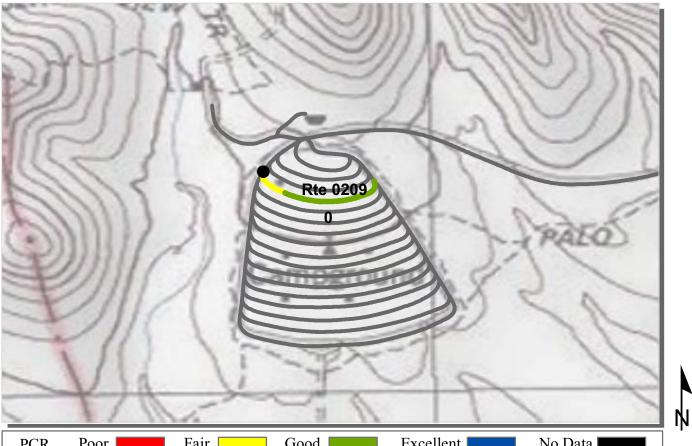
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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fair		Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)) (95 - 100))
* If the PC	R rating is a	not available for	a section, the	SCR rating will be d	isplayed. See appendix for	definitions and formulas.

ROUTE: 0209 CAMPGROUND SITES 24-34 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COLL	ECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LI	ENGTH:	0.15 Miles
Section Number	0			
Section Length (mi)	0.15			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	82			
PCR (Pavement Condition Rating)	82			
Distress Index Values				
Structural Crack Index	99			
Transverse Cracking Index	92			
Patching Index	100			
Rutting Index	82			
Roughness Condition Index (RCI)	NC			

ROUTE: 0209 CAMPGROUND SITES 24-34 ACCESS

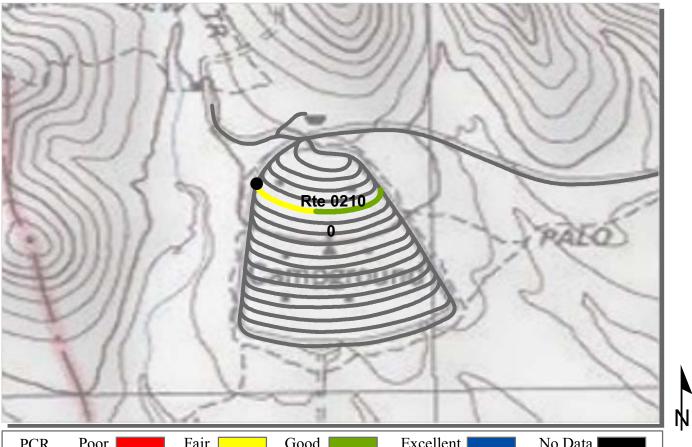
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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	0)
* If the PC	R rating is	s not available	e for a section, the	SCR rating will be dis	splayed. See appendix for	r definitions and formulas.

ROUTE: 0210 CAMPGROUND SITES 35-45 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL I	LENGTH:	0.16 Miles
Section Number	0			
Section Length (mi)	0.16			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	82			
PCR (Pavement Condition Rating)	82			
Distress Index Values				
Structural Crack Index	99			
Transverse Cracking Index	95			
Patching Index	100			
Rutting Index	82			
Roughness Condition Index (RCI)	NC			

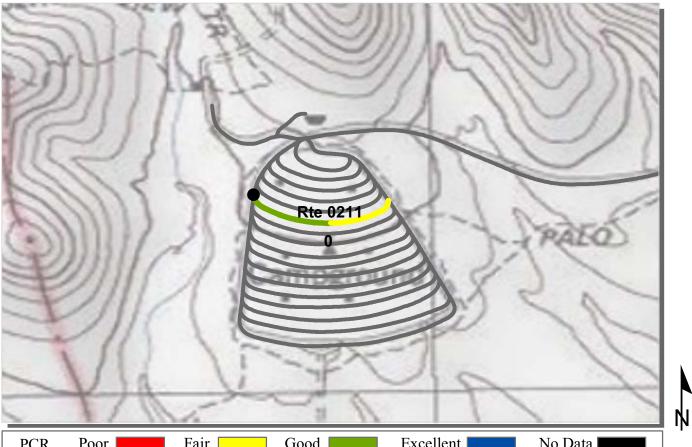
ROUTE: 0210 CAMPGROUND SITES 35-45 ACCESS

4/10/2012

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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor 📃	Fair	Goo	d	Excellent	No Data
	(0 - 0	60) ((61 - 84)	(85 - 94)	(95 - 100))
* If the PC	R rating is not a	vailable for a s	section, the SCR ra	ating will be disp	layed. See appendix for	definitions and formulas.

ROUTE: 0211 CAMPGROUND SITES 46-57 ACCESS ORPI: ORGAN PIPE CACTUS NATIONAL MONUMENT

		COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.17 Miles
Section Number	0			
Section Length (mi)	0.17			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	81			
PCR (Pavement Condition Rating)	81			
Distress Index Values				
Structural Crack Index	99			
Transverse Cracking Index	98			
Patching Index	100			
Rutting Index	81			
Roughness Condition Index (RCI)	NC			

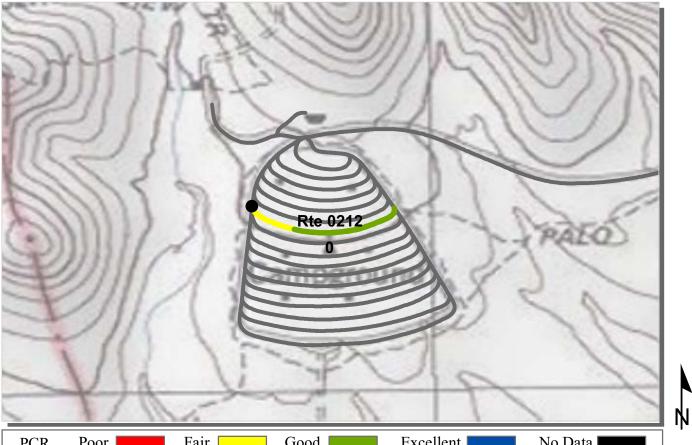
ROUTE: 0211 CAMPGROUND SITES 46-57 ACCESS

4/10/2012

DOTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	0)
* If the PC	R rating is	not availab	le for a section, the	SCR rating will be di	splayed. See appendix for	r definitions and formulas.

ROUTE: 0212 CAMPGROUND SITES 58-70 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.18 Miles
Section Number	0			
Section Length (mi)	0.18			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	83			
PCR (Pavement Condition Rating)	83			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	99			
Patching Index	100			
Rutting Index	83			
Roughness Condition Index (RCI)	NC			

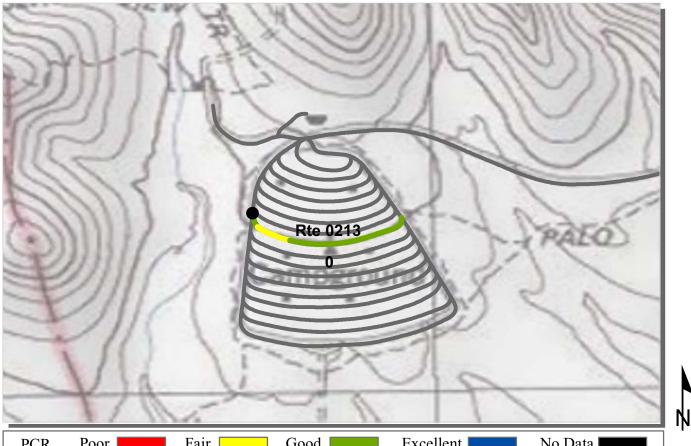
ROUTE: 0212 CAMPGROUND SITES 58-70 ACCESS

1/10/2012

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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



 PCR
 Poor
 Fair
 Good
 Excellent
 No Data

 * If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0213 CAMPGROUND SITES 71-85 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

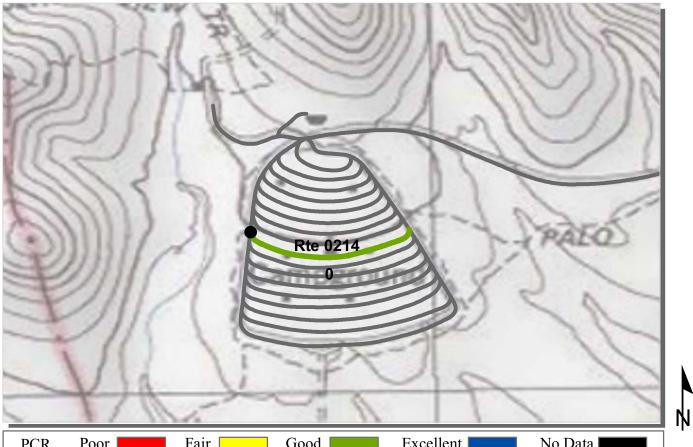
		COL	LECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.19 Miles
Section Number	0			
Section Length (mi)	0.19			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	87			
PCR (Pavement Condition Rating)	87			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	98			
Patching Index	100			
Rutting Index	87			
Roughness Condition Index (RCI)	NC			

ROUTE: 0213 CAMPGROUND SITES 71-85 ACCESS

4/10/2012

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100))
* If the PC	R rating is not availal	ble for a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

ROUTE: 0214 CAMPGROUND SITES 86-95 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COLLECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LENGTH:	0.20 Miles
Section Number	0		
Section Length (mi)	0.20		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	11		
Lane Width (ft)	11		
Roadway Condition Information			
SCR (Surface Condition Rating)	87		
PCR (Pavement Condition Rating)	87		
Distress Index Values			
Structural Crack Index	100		
Transverse Cracking Index	99		
Patching Index	99		
Rutting Index	87		
Roughness Condition Index (RCI)	NC		

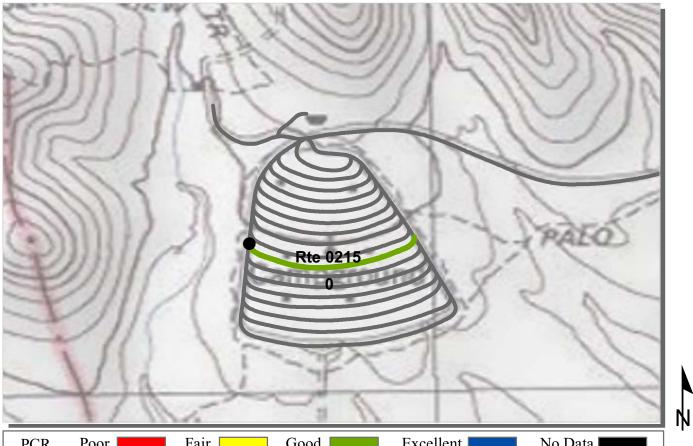
ROUTE: 0214 CAMPGROUND SITES 86-95 ACCESS

4/10/2012

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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100))
* If the PCF	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

ROUTE: 0215 CAMPGROUND SITES 96-112 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COLLECI	ED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LENG	TH:	0.21 Miles
Section Number	0			
Section Length (mi)	0.21			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	84			
PCR (Pavement Condition Rating)	84			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	98			
Patching Index	99			
Rutting Index	84			
Roughness Condition Index (RCI)	NC			

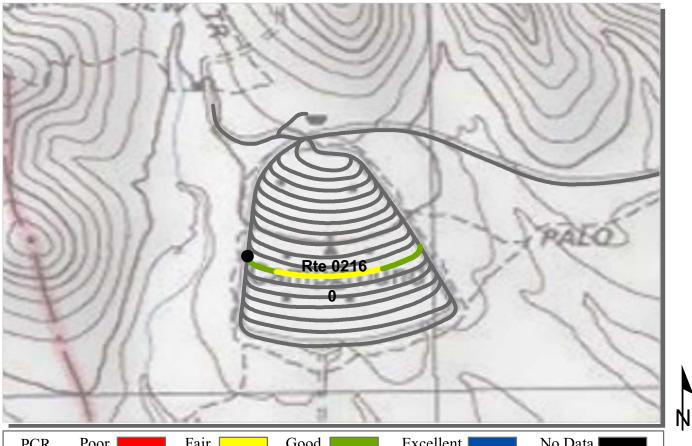
ROUTE: 0215 CAMPGROUND SITES 96-112 ACCESS

1/10/2012

IECTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fai	r 📃	Good	Excellent	No Data
	(0) - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PC	R rating is no	ot available for	a section, the	SCR rating will be di	splayed. See appendix fo	r definitions and formulas.

ROUTE: 0216 CAMPGROUND SITES 113-128 ACCESS ORPI: ORGAN PIPE CACTUS NATIONAL MONUMENT

			COLLECTED:	4/19/2012	
INTERMOUNTAIN REGION	TOTAL LENGTH			0.21 Miles	
Section Number	0				
Section Length (mi)	0.21				
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	11				
Lane Width (ft)	11				
Roadway Condition Information					
SCR (Surface Condition Rating)	84				
PCR (Pavement Condition Rating)	84				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	99				
Patching Index	98				
Rutting Index	84				
Roughness Condition Index (RCI)	NC				

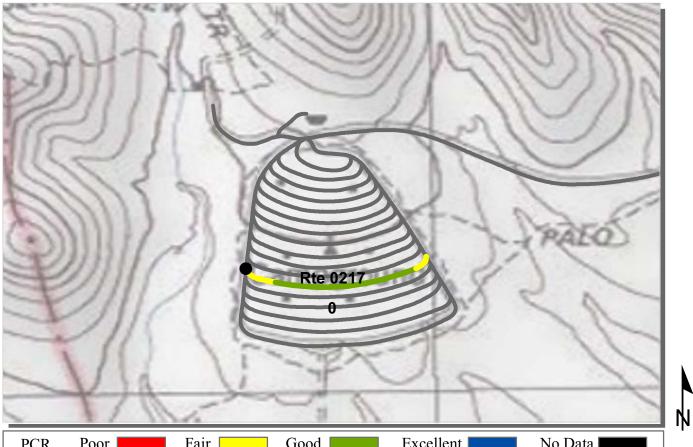
ROUTE: 0216 CAMPGROUND SITES 113-128 ACCESS

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NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



	PCR	Poor		Fair	Good	Excellent	No Data
			(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100))
*	If the PCI	R rating i	s not availab	ble for a section, the	SCR rating will be dis	splayed. See appendix for	definitions and formulas.

ROUTE: 0217 CAMPGROUND SITES 129-145 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

			COL	LECTED:	4/19/2012	
INTERMOUNTAIN REGION	TOTAL LENGTH			LENGTH:	: 0.22 Miles	
Section Number	0					
Section Length (mi)	0.22					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	11					
Lane Width (ft)	11					
Roadway Condition Information						
SCR (Surface Condition Rating)	84					
PCR (Pavement Condition Rating)	84					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	99					
Patching Index	99					
Rutting Index	84					
Roughness Condition Index (RCI)	NC					

ROUTE: 0217 CAMPGROUND SITES 129-145 ACCESS

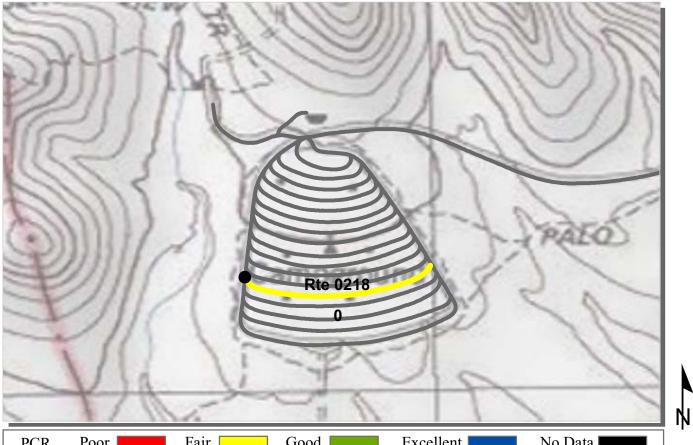
1/10/2012

т

FOTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix fo	or definitions and formulas.

ROUTE: 0218 CAMPGROUND SITES 146-158 ACCESS ORPI: ORGAN PIPE CACTUS NATIONAL MONUMENT

			COL	LECTED:	4/19/2012	
INTERMOUNTAIN REGION	TOTAL LENGTH			LENGTH:	: 0.23 Miles	
Section Number	0					
Section Length (mi)	0.23					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	11					
Lane Width (ft)	11					
Roadway Condition Information						
SCR (Surface Condition Rating)	79					
PCR (Pavement Condition Rating)	79					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	99					
Patching Index	100					
Rutting Index	79					
Roughness Condition Index (RCI)	NC					

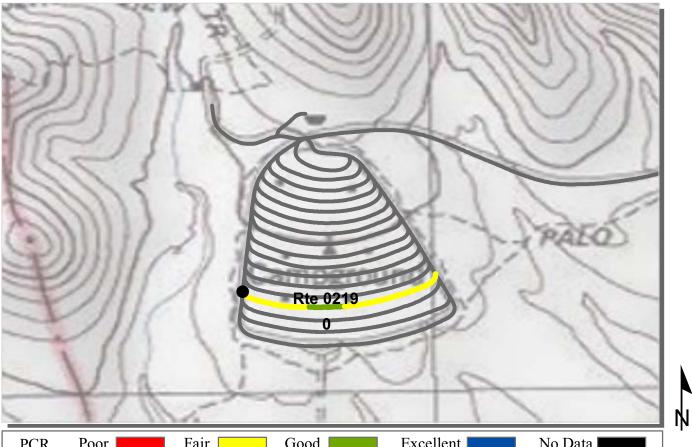
ROUTE: 0218 CAMPGROUND SITES 146-158 ACCESS

1/10/2012

IECTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor	Fa	ir 📃	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100))
* If the PC	R rating is	s not available fo	or a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

ROUTE: 0219 CAMPGROUND SITES 159-174 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		COLLECTED:				
INTERMOUNTAIN REGION	TOTAL LENGTH			LENGTH:	0.23 Miles	
Section Number	0					
Section Length (mi)	0.23					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	12					
Lane Width (ft)	12					
Roadway Condition Information						
SCR (Surface Condition Rating)	81					
PCR (Pavement Condition Rating)	81					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	100					
Patching Index	100					
Rutting Index	81					
Roughness Condition Index (RCI)	NC					

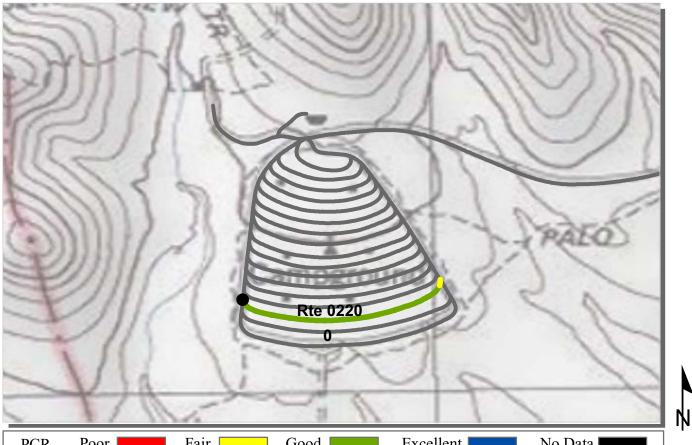
ROUTE: 0219 CAMPGROUND SITES 159-174 ACCESS

1/10/2012

FOTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



PCR	Poor 📃	Fair 📃	Good	Exce	ellent	No Data
	(0 -	60) (61	- 84)	(85 - 94)	(95 - 100)	
* If the PC	R rating is not a	vailable for a sect	ion, the SCR ratin	g will be displayed.	See appendix for der	finitions and formulas.

ROUTE: 0220 CAMPGROUND SITES 175-191 ACCESS ORPI: ORGAN PIPE CACTUS NATIONAL MONUMENT

			COLL	ECTED:	4/19/2012	
INTERMOUNTAIN REGION	TOTAL LENGTH			ENGTH:	0.25 Miles	
Section Number	0					
Section Length (mi)	0.25					
Cross Section Information						
Number of Lanes	1					
Paved Width (ft)	10					
Lane Width (ft)	10					
Roadway Condition Information						
SCR (Surface Condition Rating)	87					
PCR (Pavement Condition Rating)	87					
Distress Index Values						
Structural Crack Index	100					
Transverse Cracking Index	100					
Patching Index	100					
Rutting Index	87					
Roughness Condition Index (RCI)	NC					

ROUTE: 0220 CAMPGROUND SITES 175-191 ACCESS

1/10/2012

FOTED

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

1 HONG	A Contraction	- A	Rte 02		Strated
PCR	Poor	Fair	Good	Excellent	No Data

(0 - 60) $(\overline{61 - 84})$ $(\overline{95} - 100)$ (85 - 94) * If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

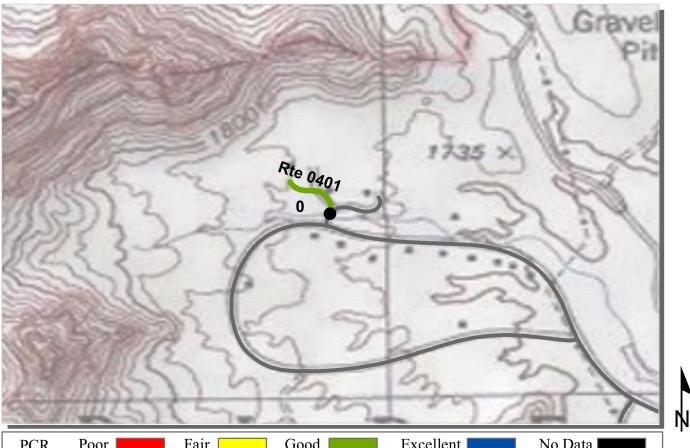
ROUTE: 0221 CAMPGROUND SITES 192-208 ACCESS ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

INTERMOUNTAIN REGION			LLECTED: LENGTH:	4/19/2012 0.25 Miles
Section Number	0			
Section Length (mi)	0.25			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	86			
PCR (Pavement Condition Rating)	86			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	86			
Roughness Condition Index (RCI)	NC			

ROUTE: 0221 CAMPGROUND SITES 192-208 ACCESS

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



 PCR
 Poor
 Fair
 Good
 Excellent
 No Data

 (0 - 60)
 (61 - 84)
 (85 - 94)
 (95 - 100)

 * If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0401 SPUR RESIDENCE ROAD WEST ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

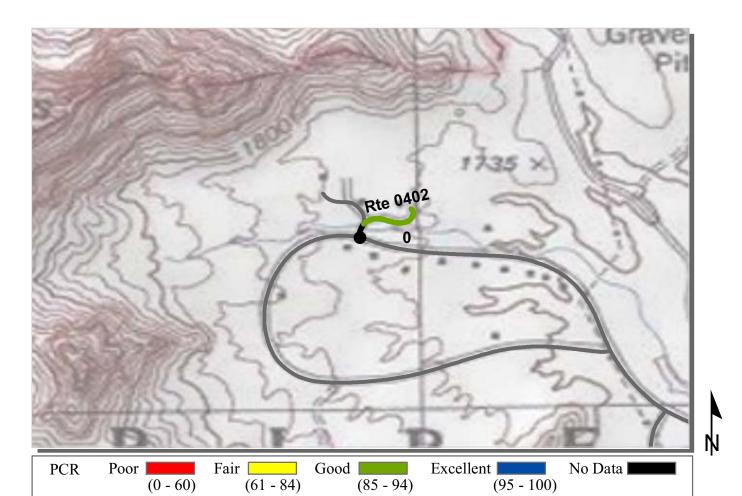
		COLLE	CIED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LE	NGTH:	0.07 Miles
Section Number	0			
Section Length (mi)	0.07			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	15			
Lane Width (ft)	7			
Roadway Condition Information				
SCR (Surface Condition Rating)	83			
PCR (Pavement Condition Rating)	83			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	83			
Roughness Condition Index (RCI)	NC			

ROUTE: 0401 SPUR RESIDENCE ROAD WEST

4/10/2012

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.
 ROUTE: 0402 SPUR RESIDENCE ROAD EAST

ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

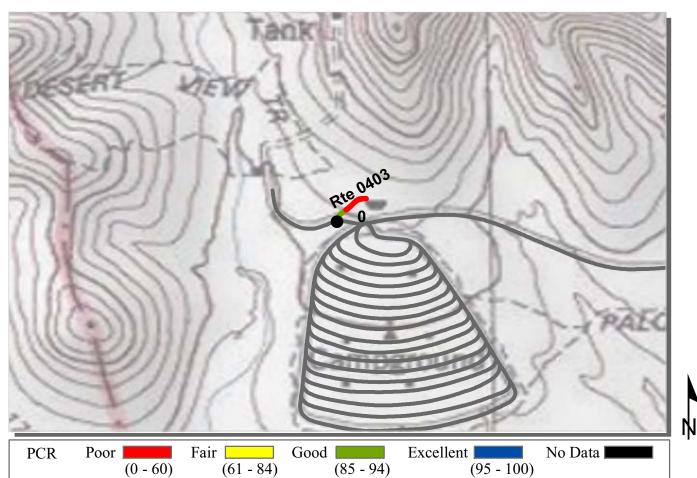
		COLLECT	ED:	4/19/2012
INTERMOUNTAIN REGION		TOTAL LENG	TH:	0.09 Miles
Section Number	0			
Section Length (mi)	0.09			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	23			
Lane Width (ft)	13			
Roadway Condition Information				
SCR (Surface Condition Rating)	76			
PCR (Pavement Condition Rating)	76			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	96			
Patching Index	100			
Rutting Index	76			
Roughness Condition Index (RCI)	NC			

ROUTE: 0402 SPUR RESIDENCE ROAD EAST

4/10/2012

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

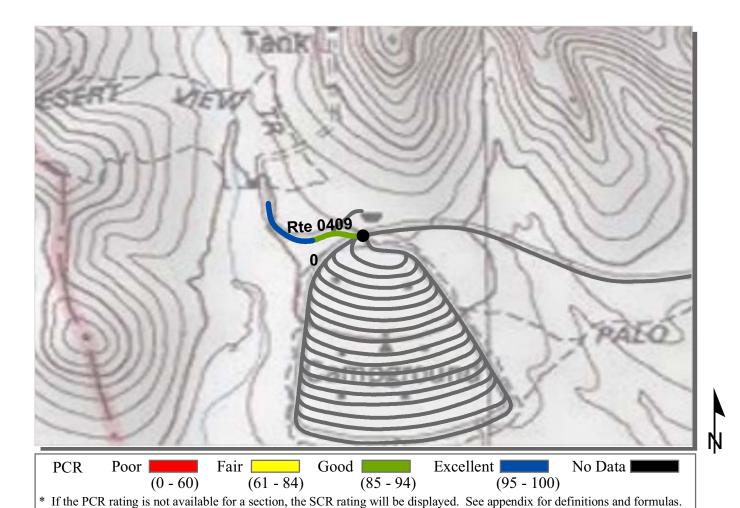
ROUTE: 0403 CAMPGROUND HOUSING ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

INTERMOUNTAIN REGION			LLECTED: L LENGTH:	4/19/2012 0.05 Miles
Section Number	0			
Section Length (mi)	0.05			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	16			
Lane Width (ft)	8			
Roadway Condition Information				
SCR (Surface Condition Rating)	67			
PCR (Pavement Condition Rating)	67			
Distress Index Values				
Structural Crack Index	99			
Transverse Cracking Index	100			
Patching Index	99			
Rutting Index	67			
Roughness Condition Index (RCI)	NC			

ROUTE: 0403 CAMPGROUND HOUSING ROAD

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.



ROUTE: 0409 GROUP CAMPGROUND ACCESS ROAD ORPI : ORGAN PIPE CACTUS NATIONAL MONUMENT

		CO	LLECTED:	4/19/2012
INTERMOUNTAIN REGION		TOTAI	LENGTH:	0.14 Miles
Section Number	0			
Section Length (mi)	0.14			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	21			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	94			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	94			
Roughness Condition Index (RCI)	NC			

ROUTE: 0409 GROUP CAMPGROUND ACCESS ROAD

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

<u>Section 6</u> Manually Rated Paved Route Condition Rating Sheets



Organ Pipe Cactus National Monument



ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011ZZ

AJO MOUNTAIN DRIVE

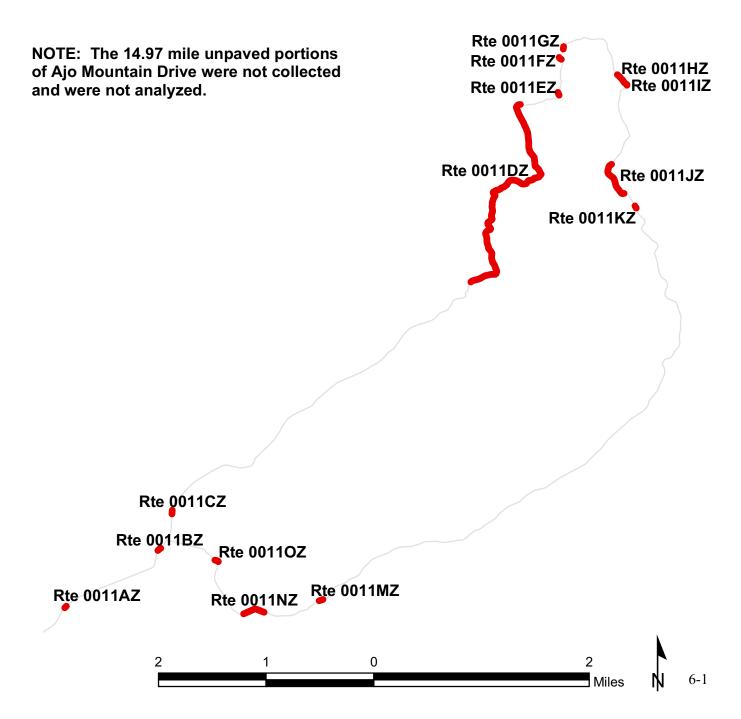
FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 17.42 (ON LEFT)

TO END OF LOOP

Summary Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011ZZ	PUBLIC	12/8/2010	287,305	4.95	3.10	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND	CONCRETE		
20	0	0	GUTTER	CURB	SUMMARY/76	AS

* Lane miles are based on 11' lane widths



ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011AZ

AJO MOUNTAIN DRIVE SECTION 01

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 1.012 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 1.032

Subcomponent Record

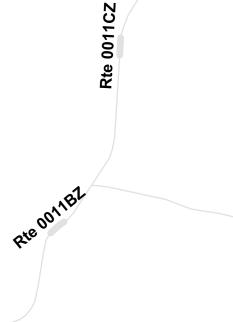
Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011AZ	PUBLIC	12/8/2010	1,848	0.03	0.02	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS

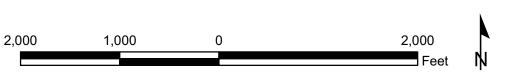
* Lane miles are based on 11' lane widths





Rte 0011AZ





ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011BZ

AJO MOUNTAIN DRIVE SECTION 02

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.003 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.033

Subcomponent Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011BZ	PUBLIC	12/8/2010	2,772	0.05	0.03	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS

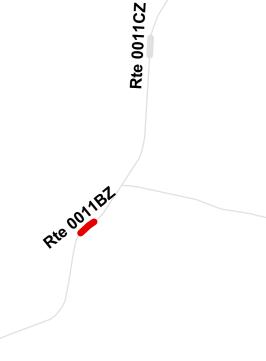
* Lane miles are based on 11' lane widths





2,000

Rie OOMAZ





ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011CZ

AJO MOUNTAIN DRIVE SECTION 03

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.354 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 2.387

Subcomponent Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011CZ	PUBLIC	12/8/2010	3,729	0.06	0.03	21.4
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	FAIR/73	AS

* Lane miles are based on 11' lane widths

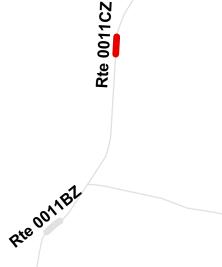




2,000

1,000

Rte OOMAZ





ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011DZ

AJO MOUNTAIN DRIVE SECTION 04

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 5.785 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.017

	Subcomponent Record											
Route	Public /			Lane	Paved Length	Paved Width						
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)						
0011DZ	PUBLIC	12/8/2010	206,237	3.55	2.23	17.5						
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type						
			NO CURB AND	CONCRETE								
18	0	0	GUTTER	CURB	FAIR/73	AS						

* Lane miles are based on 11' lane widths





ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011EZ

AJO MOUNTAIN DRIVE SECTION 05

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.270 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.298

			×		,					
Subcomponent Record										
Route	Public /			Lane	Paved Length	Paved Width				
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)				
0011EZ	PUBLIC	12/8/2010	2,587	0.05	0.03	17.5				
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type				
			NO CURB AND							
0	0	0	GUTTER	NO CURB	GOOD/90	AS				

* Lane miles are based on 11' lane widths



4,000

2,000



ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011FZ

AJO MOUNTAIN DRIVE SECTION 06

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.596 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.62

Subcomponent Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011FZ	PUBLIC	12/8/2010	2,218	0.04	0.02	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
1	0	0	GUTTER	NO CURB	GOOD/90	AS

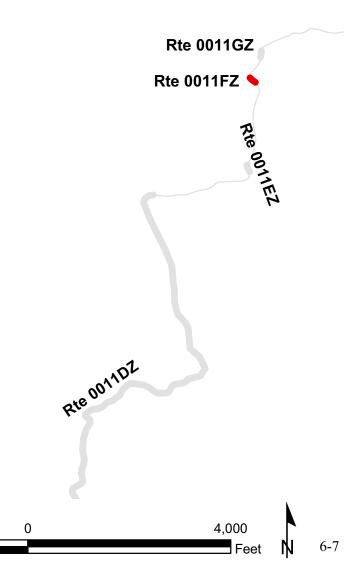
* Lane miles are based on 11' lane widths





4,000

2,000



ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0011GZ

AJO MOUNTAIN DRIVE SECTION 07

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.704 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 8.729

Subcomponent Record						
Route	Public /		1	Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011GZ	PUBLIC	12/8/2010	2,310	0.04	0.03	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS

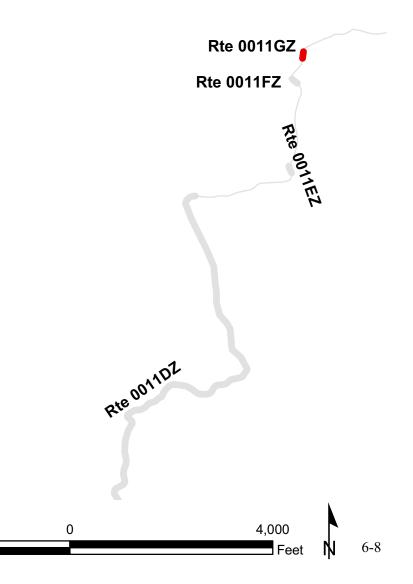
* Lane miles are based on 11' lane widths





4,000

2,000

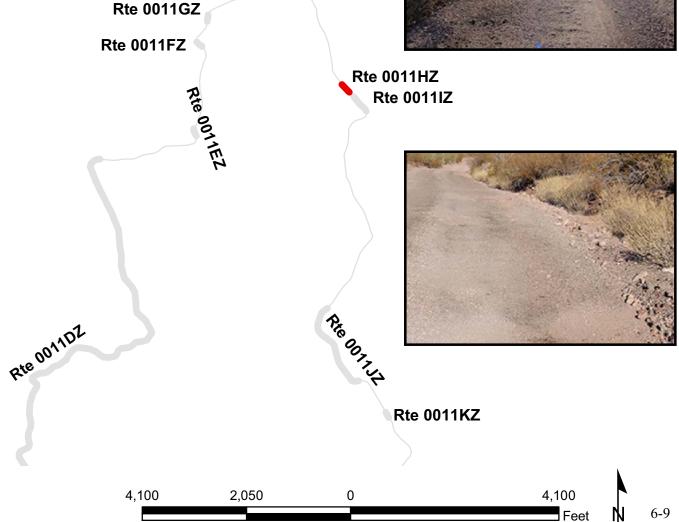


AJO MOUNTAIN DRIVE SECTION 08

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.426 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.464

Subcomponent Record								
Route	Public /			Lane	Paved Length	Paved Width		
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0011HZ	PUBLIC	12/8/2010	3,511	0.06	0.04	17.5		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	POOR/45	AS		



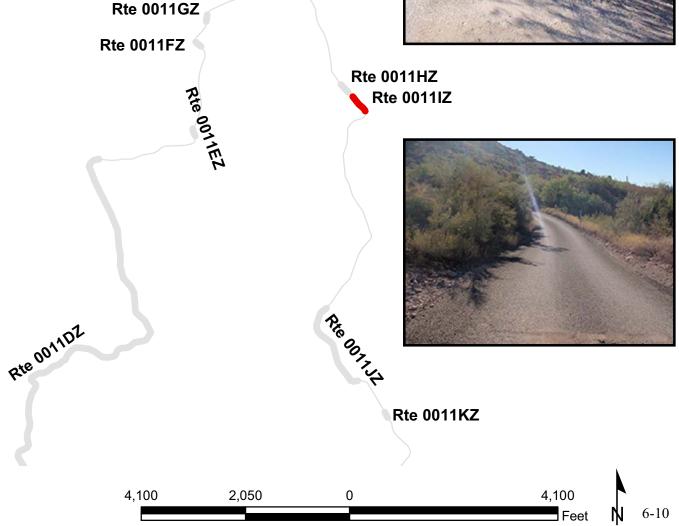


AJO MOUNTAIN DRIVE SECTION 09

FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.485 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 9.552

Subcomponent Record								
Route	Public /			Lane	Paved Length	Paved Width		
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0011IZ	PUBLIC	12/8/2010	6,191	0.11	0.07	17.5		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		





AJO MOUNTAIN DRIVE SECTION 10 FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.323 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.659

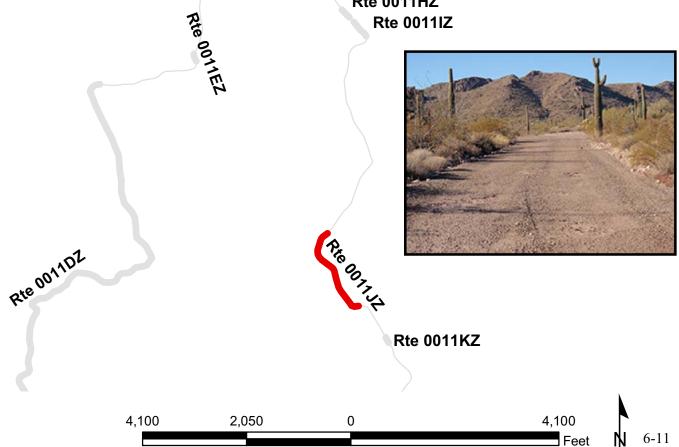
Subcomponent Record								
Route	Public /			Lane	Paved Length	Paved Width		
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0011JZ	PUBLIC	12/8/2010	31,046	0.54	0.34	17.5		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
1	0	0	GUTTER	NO CURB	GOOD/90	AS		

* Lane miles are based on 11' lane widths



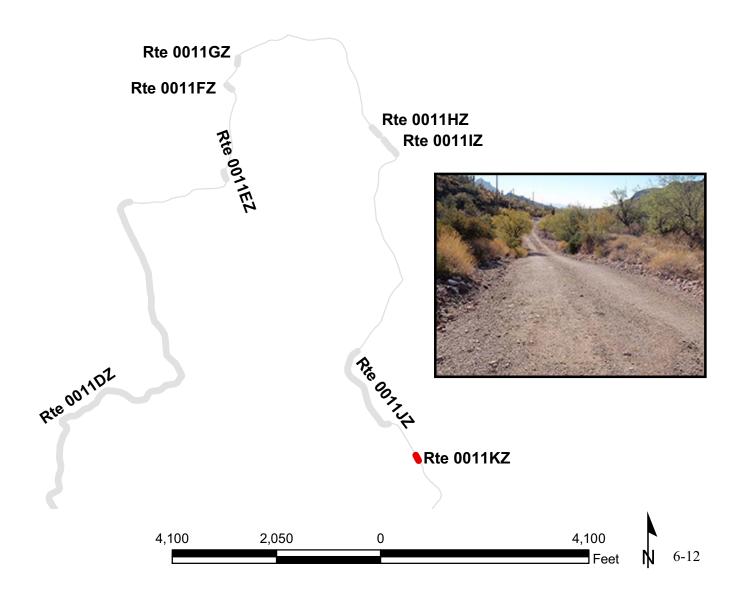


Rte 0011HZ **Rte 0011IZ**



AJO MOUNTAIN DRIVE SECTION 11 FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.807 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 10.829

Subcomponent Record								
Route	Public /			Lane	Paved Length	Paved Width		
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0011KZ	PUBLIC	12/8/2010	2,033	0.04	0.02	17.5		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	FAIR/73	AS		



AJO MOUNTAIN DRIVE SECTION 13 FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.205 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.238

Subcomponent Record Paved Length Public / Paved Width Route Lane Number NonPublic **Date Visited** Area (sq ft) Miles * (mi) (ft) 0011MZ PUBLIC 12/8/2010 3,049 0.03 0.05 17.5 Culverts **Drop Inlets** Gates **Curb & Gutter** Curb PCR **Surface Type** NO CURB AND

GUTTER

NO CURB

0 * Lane miles are based on 11' lane widths

0

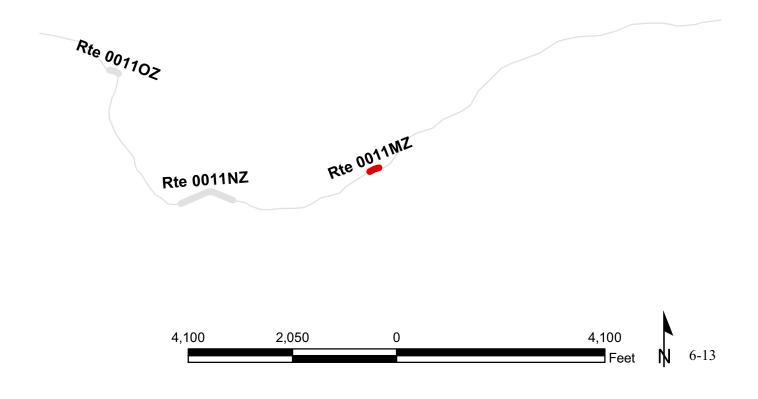
0





GOOD/90

AS



AJO MOUNTAIN DRIVE SECTION 14 FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.751 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 16.933

					/			
Subcomponent Record								
Route	Public /			Lane	Paved Length	Paved Width		
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0011NZ	PUBLIC	12/8/2010	16,817	0.29	0.18	17.5		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	FAIR/73	AS		

* Lane miles are based on 11' lane widths

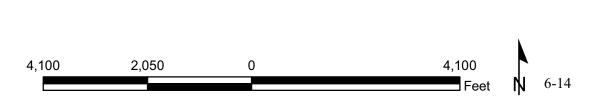


Rte 0011NZ

Rte 001102







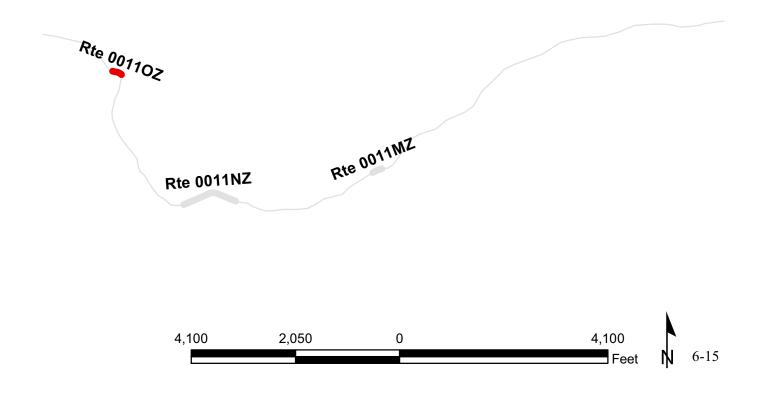
Rte 0011MZ

AJO MOUNTAIN DRIVE SECTION 15 FROM UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 17.511 TO UNPAVED SECTION OF ROUTE 0011ZZ (AJO MOUNTAIN DRIVE) AT MP 17.543 Subcomponent Record

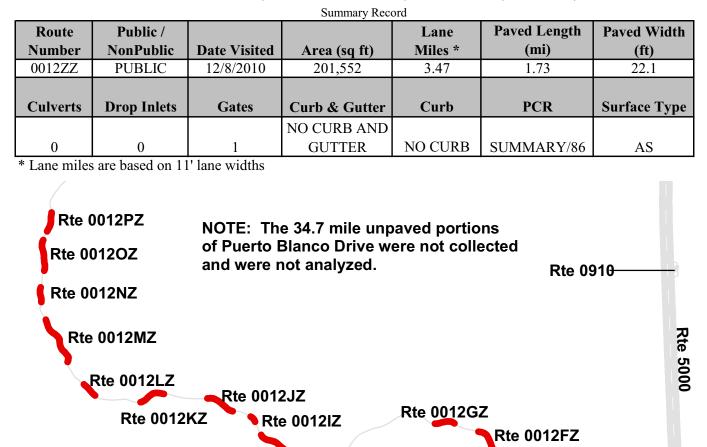
Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0011OZ	PUBLIC	12/8/2010	2,957	0.05	0.03	17.5
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
			NO CORD AND			

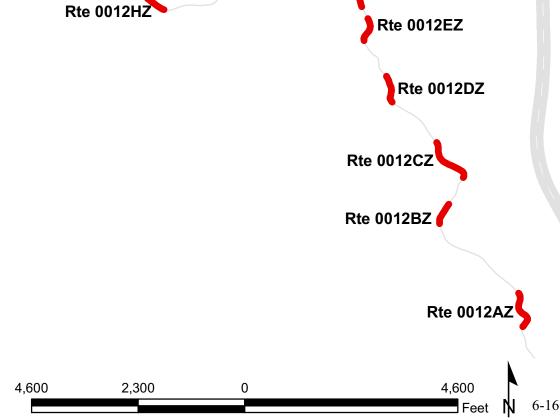






PUERTO BLANCO DRIVE FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.32 (ON RIGHT) TO ROUTE 5000 (STATE HIGHWAY 85) AT MP 21.83 (ON RIGHT)





PUERTO BLANCO DRIVE SECTION 01 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 0.514 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 0.67

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012AZ	PUBLIC	12/8/2010	18,945	0.33	0.16	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	1	GUTTER	NO CURB	POOR/45	AS	

* Lane miles are based on 11' lane widths



Rte 0012FZ

3,300

Rte 0012EZ

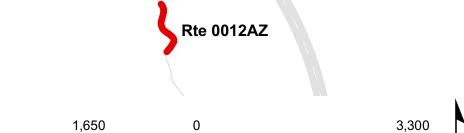
Rte 0012DZ

Rte 0012CZ

Rte 0012BZ







6-17

Feet

PUERTO BLANCO DRIVE SECTION 02 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.077 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.165

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012BZ	PUBLIC	12/8/2010	10,687	0.18	0.09	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	0	GUTTER	NO CURB	GOOD/90	AS	

* Lane miles are based on 11' lane widths

Rte 0012GZ

Rte 0012FZ

3,300

Rte 0012EZ

Rte 0012DZ

Rte 0012CZ

Rte 0012BZ





Rte 0012AZ

Rte 5000



PUERTO BLANCO DRIVE SECTION 03 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.278 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.465

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012CZ	PUBLIC	12/8/2010	22,709	0.39	0.19	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	0	GUTTER	NO CURB	GOOD/90	AS	

* Lane miles are based on 11' lane widths



Rte 0012FZ

3,300

Rte 0012EZ

Rte 0012DZ





Rte 0012BZ

Rte 0012CZ

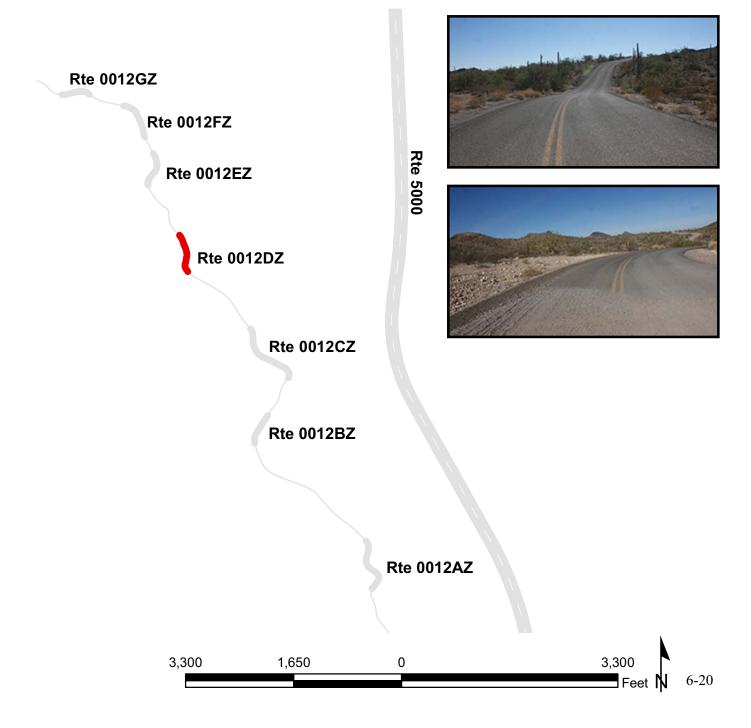
Rte 0012AZ

Rte 5000



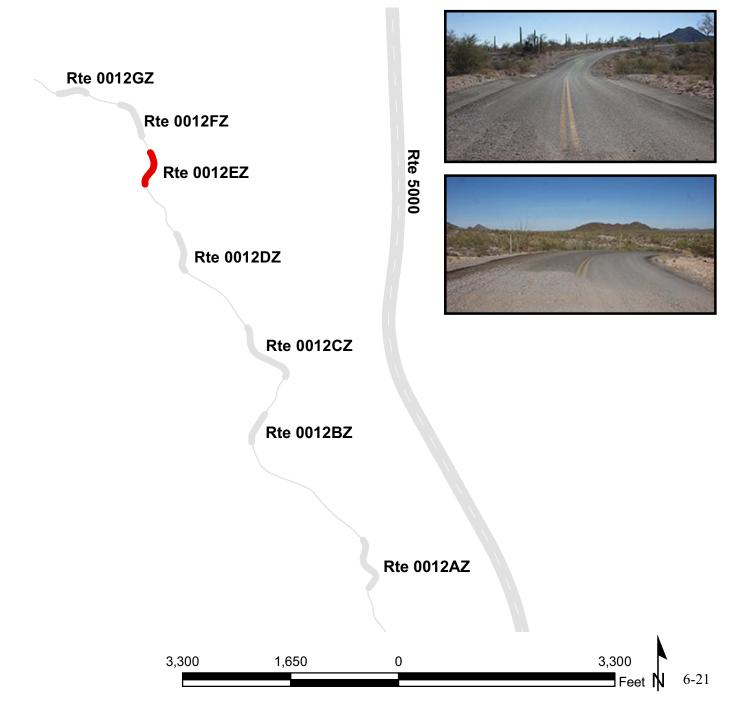
PUERTO BLANCO DRIVE SECTION 04 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.696 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.806

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012DZ	PUBLIC	12/8/2010	13,358	0.23	0.11	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	0	GUTTER	NO CURB	GOOD/90	AS	



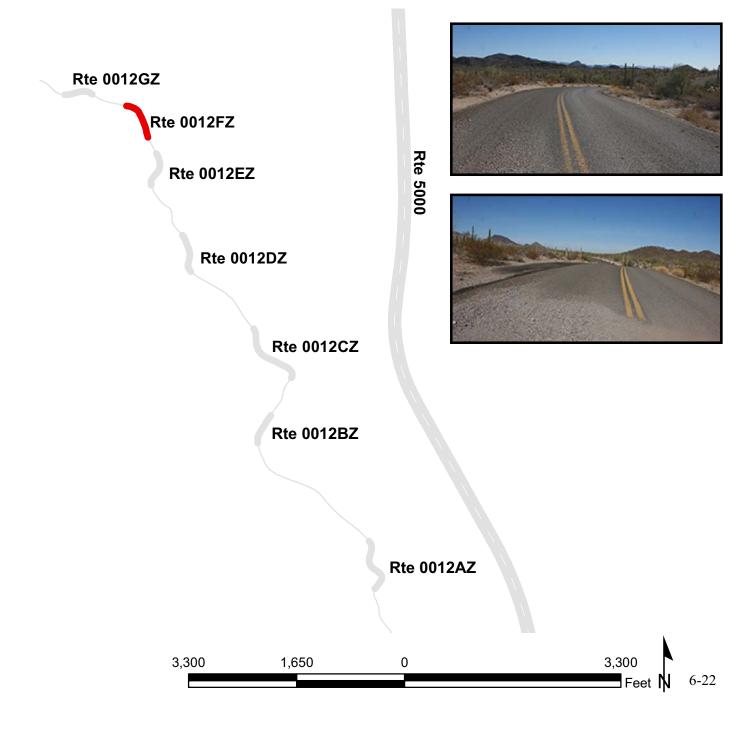
PUERTO BLANCO DRIVE SECTION 05 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 1.966 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.064

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012EZ	PUBLIC	12/8/2010	11,901	0.21	0.10	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	0	GUTTER	NO CURB	GOOD/90	AS	



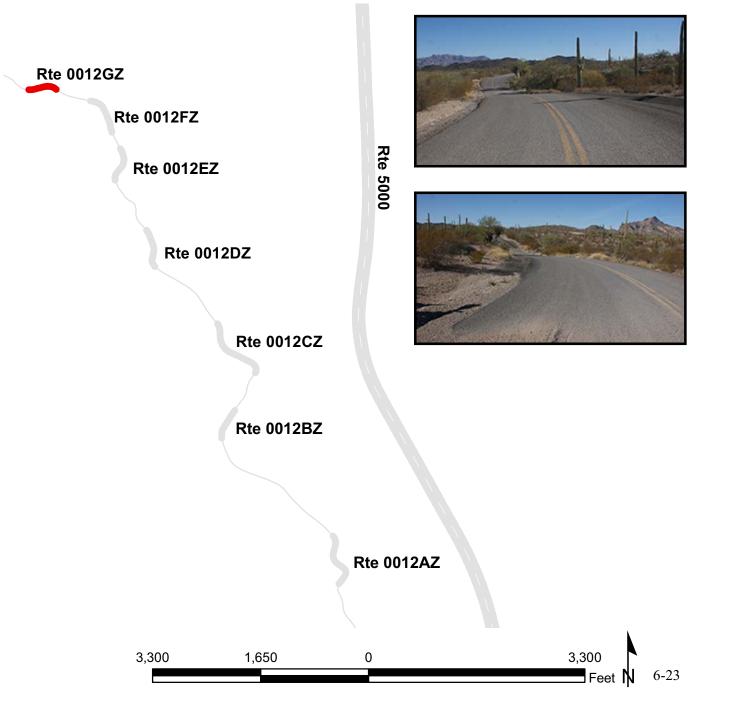
PUERTO BLANCO DRIVE SECTION 06 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.108 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.221

Subcomponent Record							
Route	Public /			Lane	Paved Length	Paved Width	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)	
0012FZ	PUBLIC	12/8/2010	13,723	0.24	0.11	23	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type	
			NO CURB AND				
0	0	0	GUTTER	NO CURB	GOOD/90	AS	



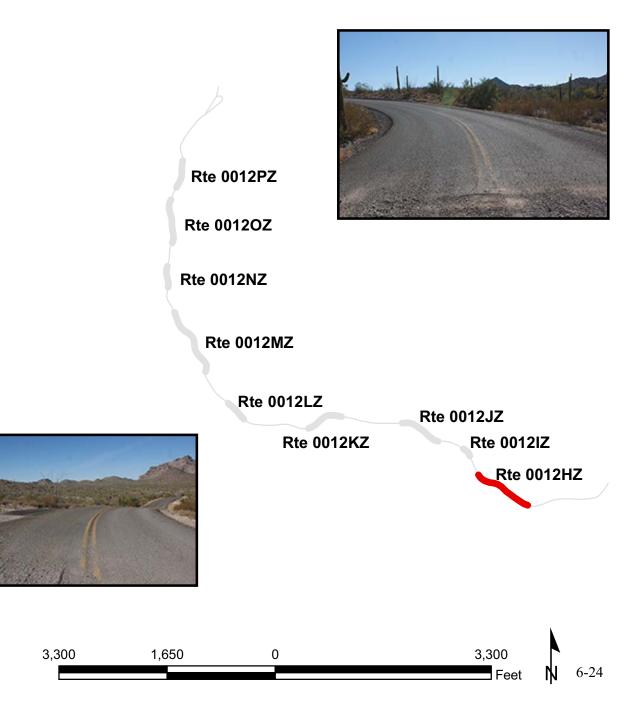
PUERTO BLANCO DRIVE SECTION 07 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.317 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.389

Subcomponent Record								
Route	Public /		Lane Paved Length					
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0012GZ	PUBLIC	12/8/2010	7,603	0.13	0.07	20		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		



PUERTO BLANCO DRIVE SECTION 08 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 2.983 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.136 Subcomponent Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Paved Length (mi)	Paved Width (ft)
0012HZ	PUBLIC	12/8/2010	17,772	0.31	0.15	22
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS



PUERTO BLANCO DRIVE SECTION 09 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.197 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.223

Subcomponent Record

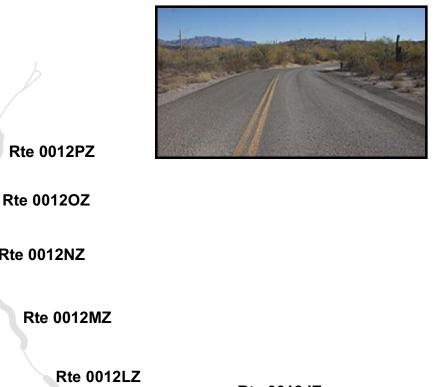
Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0012IZ	PUBLIC	12/8/2010	2,608	0.05	0.03	19
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS

Rte 0012NZ

1,650

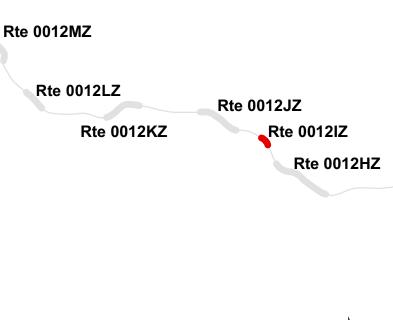
0

* Lane miles are based on 11' lane widths





3,300



3,300 6-25 Feet

PUERTO BLANCO DRIVE SECTION 10 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.296 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.403

	Subcomponent Record									
Rou	ıte	Public /		Lane Paved Length						
Num	ber	NonPublic	Date Visited	Area (sq ft) Miles *		(mi)	(ft)			
0012	2JZ	PUBLIC	12/8/2010	11,864	0.20	0.11	21			
Culv	erts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type			
				NO CURB AND						
0		0	0	GUTTER	NO CURB	GOOD/90	AS			

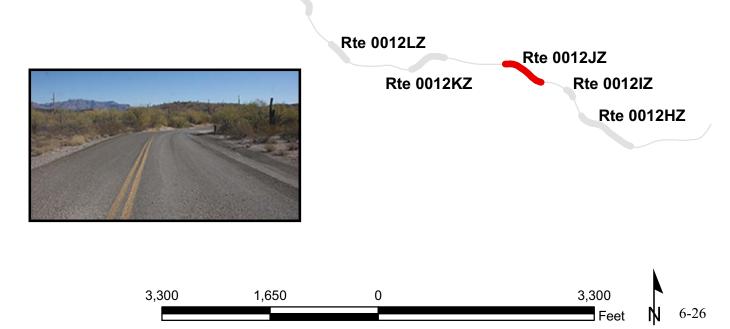
* Lane miles are based on 11' lane widths



Rte 0012PZ

Rte 0012OZ

Rte 0012NZ



PUERTO BLANCO DRIVE SECTION 11 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.574 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.669

Subcomponent Record								
Route	Public /		Lane Paved Length					
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0012KZ	PUBLIC	12/8/2010	10,032	0.17	0.10	20		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		

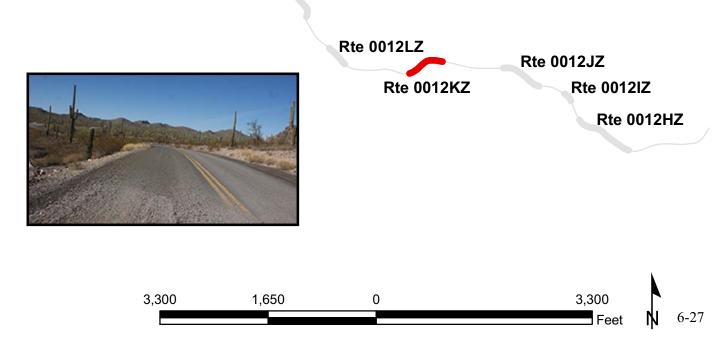
* Lane miles are based on 11' lane widths



Rte 0012PZ

Rte 0012OZ

Rte 0012NZ



PUERTO BLANCO DRIVE SECTION 12 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.853 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 3.913

Subcomponent Record								
Route	Public /		Paved Width					
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0012LZ	PUBLIC	12/8/2010	6,336	0.11	0.06	20		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		

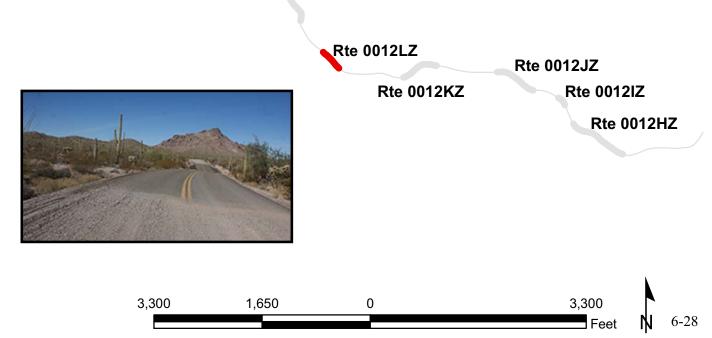
* Lane miles are based on 11' lane widths



Rte 0012PZ

Rte 0012OZ

Rte 0012NZ



PUERTO BLANCO DRIVE SECTION 13 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.021 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.217

Subcomponent Record								
Route	Public /		Paved Length	Paved Width				
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0012MZ	PUBLIC	12/8/2010	22,767	0.39	0.20	22		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		

* Lane miles are based on 11' lane widths



Rte 0012PZ

Rte 0012OZ

Rte 0012NZ

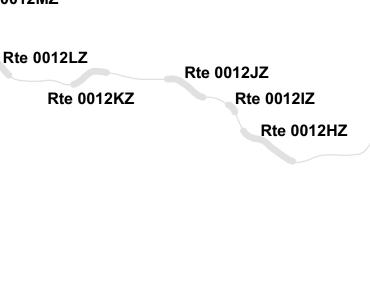
1,650



0



3,300



3,300

Feet

6-29

PUERTO BLANCO DRIVE SECTION 14 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.284 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.345

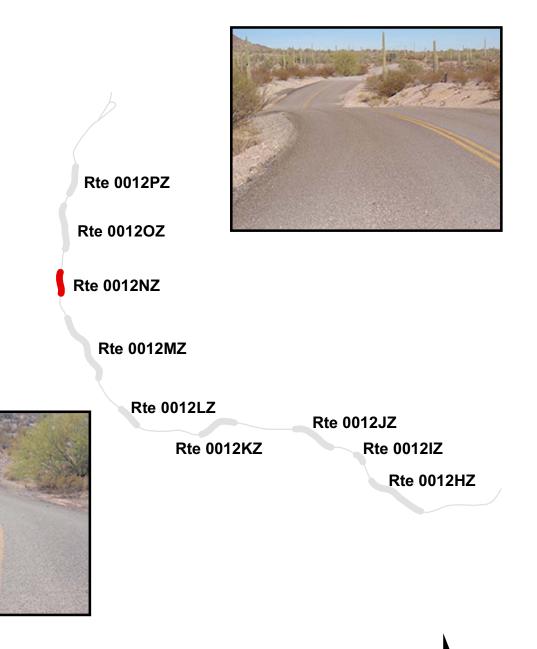
Subcomponent Record									
Route	Public /	Lane Paved Length Paved							
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)			
0012NZ	PUBLIC	12/8/2010	7,086	0.12	0.06	22			
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type			
			NO CURB AND						
0	0	0	GUTTER	NO CURB	GOOD/90	AS			

* Lane miles are based on 11' lane widths

3,300

1,650

0

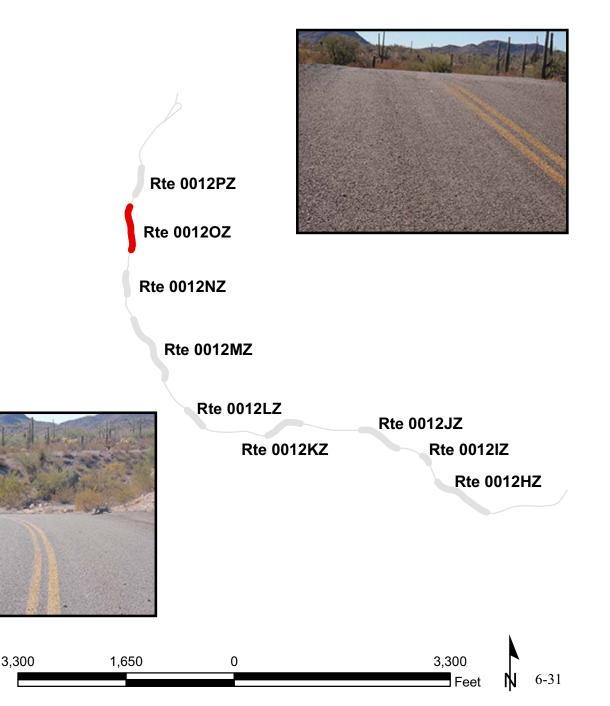




6-30

PUERTO BLANCO DRIVE SECTION 15 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.406 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.533

Subcomponent Record								
Route	Public /	lic / Lane Paved Length P						
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)		
0012OZ	PUBLIC	12/8/2010	14,752	0.25	0.13	22		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type		
			NO CURB AND					
0	0	0	GUTTER	NO CURB	GOOD/90	AS		



PUERTO BLANCO DRIVE SECTION 16 FROM UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.784 TO UNPAVED SECTION OF ROUTE 0012ZZ (PUERTO BLANCO DRIVE) AT MP 4.865

	Subcomponent Record								
Route	Public /		Lane Paved Length						
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)			
0012PZ	PUBLIC	12/8/2010	9,409	0.16	0.08	22			
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type			
			NO CURB AND						
0	0	0	GUTTER	NO CURB	GOOD/90	AS			

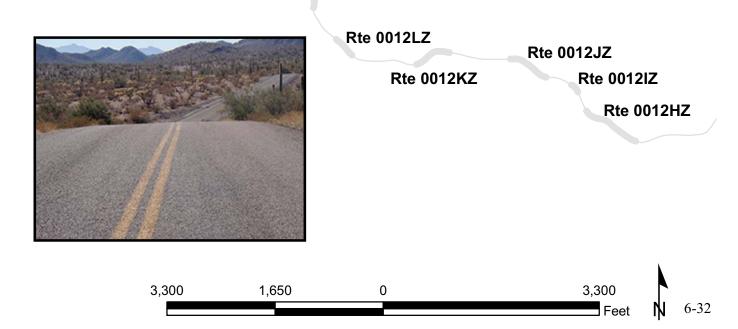
* Lane miles are based on 11' lane widths



Rte 0012OZ

Rte 0012PZ

Rte 0012NZ



100 K WATER TANK ROAD FROM ROUTE 0100 (RESIDENCE ACCESS ROAD)AT MP 0.83 (ON RIGHT) TO WATER TANK

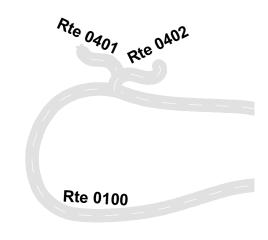
Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0408	NONPUBLIC	12/8/2010	6,353	0.11	0.09	12.8
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	POOR/45	AS

* Lane miles are based on 11' lane widths

NOTE: The 0.27 mile unpaved portion of 100 K Water Tank Road was not collected and was not analyzed.











<u>Section 7</u> Parking Area Condition Rating Sheets



Organ Pipe Cactus National Monument



MAINTENANCE YARD

FROM END OF ROUTE 0205 (MAINTENANCE YARD ACCESS ROAD)

TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0903	NONPUBLIC	12/8/2010	26,519	0.46	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

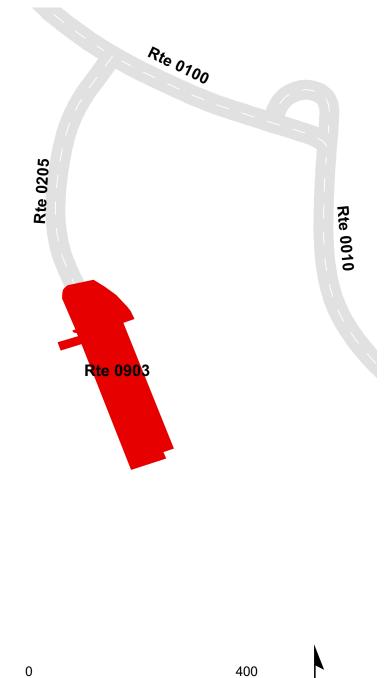






400

200



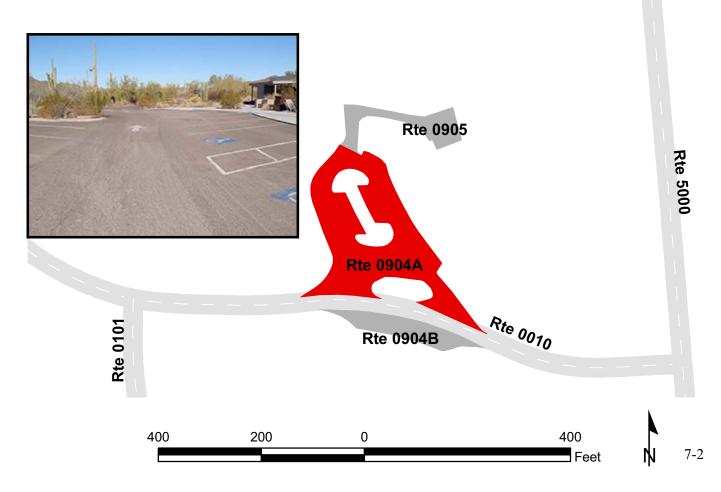
VISITOR CENTER PARKING A

FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.07 (ON RIGHT) AND AT MP 0.08 (ON RIGHT) TO ROUTE 0905 (OFFICE PARKING)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0904A	PUBLIC	12/8/2010	36,421	0.63	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	GOOD/90







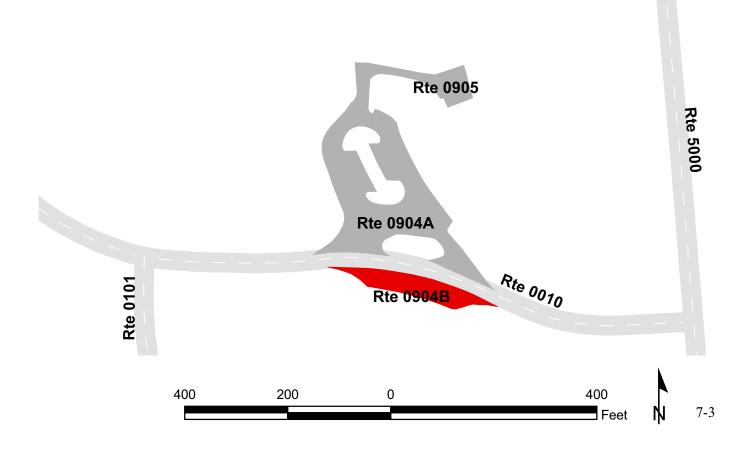
VISITOR CENTER PARKING B

ADJACENT TO ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.09 (ON LEFT)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0904B	PUBLIC	12/8/2010	7,872	0.14	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90





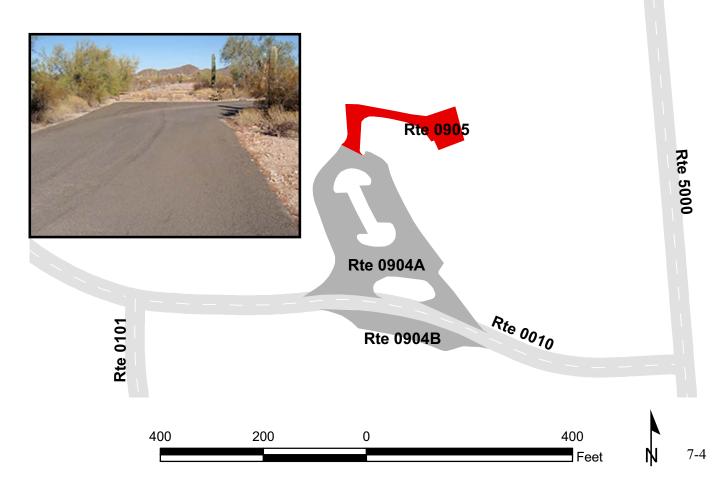


OFFICE PARKING FROM ROUTE 0904A (VISITOR CENTER PARKING A) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0905	NONPUBLIC	12/8/2010	7,592	0.13	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90







GROUP CAMPGROUND PARKING

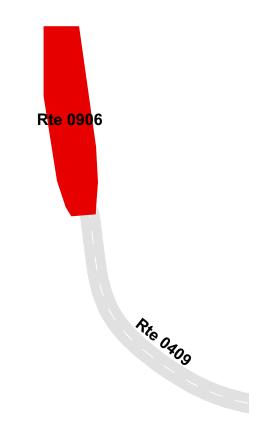
FROM END OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)

TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0906	PUBLIC	12/8/2010	12,604	0.22	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	FAIR/73





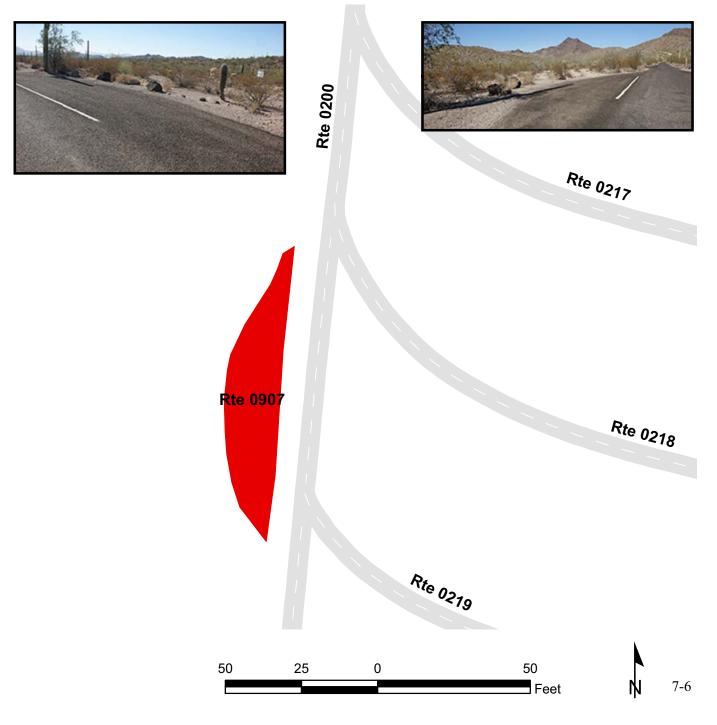




CAMPGROUND PARKING

ADJACENT TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.21 (ON RIGHT)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0907	PUBLIC	12/8/2010	1,024	0.02	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90



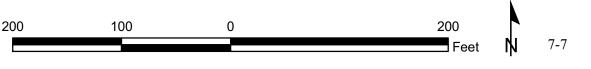
DUMP STATION LOOP FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.34 (ON RIGHT) TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.38 (ON RIGHT)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0908	PUBLIC	12/8/2010	7,620	0.13	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	GOOD/90







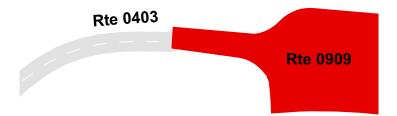


CAMPGROUND HOUSING PARKING FROM END OF ROUTE 0403 (CAMPGROUND HOUSING ROAD) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0909	NONPUBLIC	12/8/2010	2,637	0.05	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	FAIR/73









TILLOTSON PEAK WAYSIDE PARKING FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 14.67 (ON LEFT) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0910	PUBLIC	12/8/2010	28,558	0.49	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
1	0	0	GUTTER	CURB	GOOD/90

* Lane miles are based on 11' lane widths



Rte 5000







AJO MOUNTAINS WAYSIDE PARKING FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 4.89 (ON RIGHT)

TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0911	PUBLIC	12/8/2010	30,492	0.53	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	GOOD/90

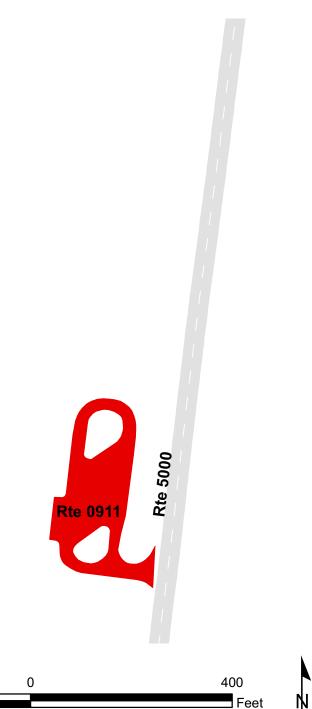
* Lane miles are based on 11' lane widths





400

200



7-10

ORGAN PIPE CACTUS NATIONAL MONUMENT Route 0912

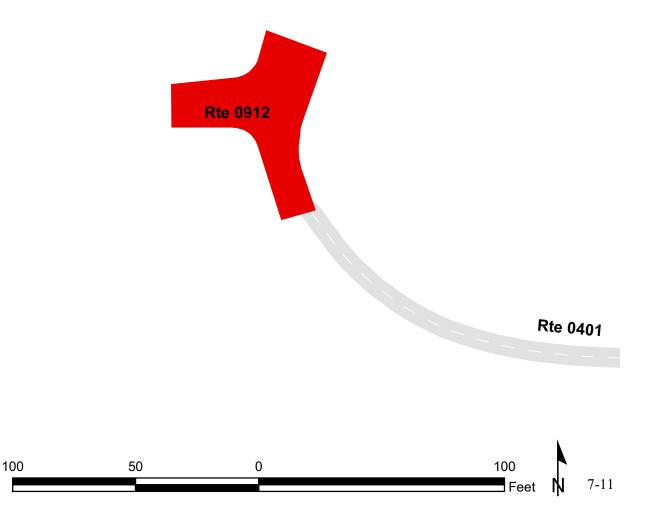
HOUSING AREA DUPLEX HOUSING PARKING FROM END OF ROUTE 0401 (SPUR RESIDENCE ROAD WEST) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0912	NONPUBLIC	12/8/2010	1,746	0.03	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths







<u>Section 8</u> Parkwide/Route Maintenance Features Summaries



Organ Pipe Cactus National Monument



ORPI: PARKWIDE MAINTENANCE FEATURES SUMMARY Includes DCV, MRL, MRP & PKG routes collected in Cycle-5

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all DCV driven routes. Culverts, drop inlets, and gates were also collected on all Manually Rated Routes and Paved Parking areas. Those totals are reflected below.

FEATURE	LINEAR FEET	COUNT
BRIDGE		0
CATTLE GUARD		0
CULVERT		24
CURB	3,795	
DROP INLET		2
GATE		17
GUARD/GUIDE RAIL	64	
CABLE	0	
NON-CABLE	64	
GUARD/GUIDE WALL	0	
BOLLARD	0	
TEMPORARY BARRIER	0	
NON TEMP/BOLLARD	0	
INTERSECTION		148
LOW WATER CROSSING	53	1
MILE MARKER		0
OVERPASS		0
PARK BOUNDARY		0
PAVED DITCH	0	
PULLOUT	216	2
RAILROAD CROSSING		0
RETAINING WALL	0	0
SIGN		103
STATE BOUNDARY		0
TRAFFIC LIGHT		0
TUNNEL	0	0

FEATURE	ROUTE 0010 VISITOR CENTER DRIVE	ROUTE 0100 RESIDENCE ACCESS ROAD	ROUTE 0101 TWIN PEAKS ACCESS ROAD	ROUTE 0200 CAMPGROUND LOOP ROAD	ROUTE 0205 MAINTENANCE YARD ACCESS ROAD	ROUTE 0206 CAMPGROUND SITES 1-6 ACCESS	UNIT
BRIDGE	0	0	0	0	0	0	EACH
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	0	2	0	0	0	0	EACH
CURB	0	42	3,537	216	0	0	LINEAR FEET
DROP INLET	0	0	2	0	0	0	EACH
GATE	0	1	0	0	0	0	EACH
GUARD/GUIDE RAIL	0	0	0	0	0	0	LINEAR FEET
CABLE	0	0	0	0	0	0	LINEAR FEET
NON-CABLE	0	0	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0	0	0	LINEAR FEET
BOLLARD	0	0	0	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0	0	0	0	0	LINEAR FEET
INTERSECTION	10	12	5	39	3	4	EACH
LOW WATER CROSSING	0	0	1	0	0	0	EACH
LOW WATER CROSSING	0	0	53	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	0	0	LINEAR FEET
PULLOUT	1	0	0	1	0	0	EACH
PULLOUT	100	0	0	116	0	0	LINEAR FEET
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	LINEAR FEET
SIGN	23	12	21	27	0	0	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	LINEAR FEET

FEATURE	ROUTE 0207	CAMPGROUND SITES 7-15 ACCESS	ROUTE 0208	CAMPGROUND SITES 16-23 ACCESS	ROUTE 0209 CAMPGROUND SITES 24-34 ACCESS	ROUTE 0210	CAMPGROUND SITES 35-45 ACCESS	ROUTE 0211 CAMPGROUND SITES 46-57 ACCESS	ROUTE 0212 CAMPGROUND SITES 58-70 ACCESS	UNIT
BRIDGE	0		0		0	0		0	0	EACH
CATTLE GUARD	0		0		0	0		0	0	EACH
CULVERT	0		0		0	0		0	0	EACH
CURB	0		0		0	0		0	0	LINEAR FEET
DROP INLET	0		0		0	0		0	0	EACH
GATE GUARD/GUIDE RAIL	0		$\frac{0}{0}$		0	0		0	0	EACH LINEAR FEET
	0		0		0	0		0	0	
CABLE NON-CABLE	0 0		0		0 0	0		0 0	0 0	LINEAR FEET LINEAR FEET
GUARD/GUIDE WALL	0		$\frac{0}{0}$		0	0		0	0	LINEAR FEET
BOLLARD	0		$\frac{0}{0}$		0	0		0	0	LINEAR FEET
TEMPORARY BARRIER	0		$\frac{0}{0}$		0	0		0	0	LINEAR FEET
NON TEMP/BOLLARD	0		0		0	0		0	0	LINEAR FEET
INTERSECTION	4		4		4	4		4	4	EACH
LOW WATER CROSSING	0		$\frac{1}{0}$		0	0		0	0	EACH
LOW WATER CROSSING	0		$\frac{0}{0}$		0	0		0	0	LINEAR FEET
MILE MARKER	0		0		0	0		0	0	EACH
OVERPASS	0		0		0	0		0	0	EACH
PARK BOUNDARY	0		0		0	0		0	0	EACH
PAVED DITCH	0		0		0	0		0	0	LINEAR FEET
PULLOUT	0		0		0	0		0	0	EACH
PULLOUT	0		0		0	0		0	0	LINEAR FEET
RAILROAD CROSSING	0		0		0	0		0	0	EACH
RETAINING WALL	0		0		0	0		0	0	EACH
RETAINING WALL	0		0		0	0		0	0	LINEAR FEET
SIGN	0		0		0	1		0	0	EACH
STATE BOUNDARY	0		0		0	0		0	0	EACH
TRAFFIC LIGHT	0		0		0	0		0	0	EACH
TUNNEL	0		0		0	0		0	0	EACH
TUNNEL	0		0		0	0		0	0	LINEAR FEET

FEATURE	ROUTE 0213	CAMPGROUND SITES 71-85 ACCESS	ROUTE 0214	CAMPGROUND SITES 86-95 ACCESS	ROUTE 0215 CAMPGROUND SITES 96-112 ACCESS	ROUTE 0216 CAMPGROUND SITES 113-128 ACCESS	ROUTE 0217 CAMPGROUND SITES 129-145 ACCESS	ROUTE 0218 CAMPGROUND SITES 146-158 ACCESS	UNIT
BRIDGE	0		0		0	0	0	0	EACH
CATTLE GUARD	0		0		0	0	0	0	EACH
CULVERT	0		0		0	0	0	0	EACH
CURB	0		0		0	0	0	0	LINEAR FEET
DROP INLET	0		0		0	0	0	0	EACH
GATE	1		2		2	2	2	2	EACH
GUARD/GUIDE RAIL	0		0		0	0	0	0	LINEAR FEET
CABLE	0		0		0	0	0	0	LINEAR FEET
NON-CABLE	0		0		0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0		0		0	0	0	0	LINEAR FEET
BOLLARD	0		0		0	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0		0		0	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0		0		0	0	0	0	LINEAR FEET
INTERSECTION	4		4		4	4	4	4	EACH
LOW WATER CROSSING	0		0		0	0	0	0	EACH
LOW WATER CROSSING	0		0		0	0	0	0	LINEAR FEET
MILE MARKER	0		0		0	0	0	0	EACH
OVERPASS	0		0		0	0	0	0	EACH
PARK BOUNDARY	0		0		0	0	0	0	EACH
PAVED DITCH	0		0		0	0	0	0	LINEAR FEET
PULLOUT	0		0		0	0	0	0	EACH
PULLOUT	0		0		0	0	0	0	LINEAR FEET
RAILROAD CROSSING	0		0		0	0	0	0	EACH
RETAINING WALL	0		0		0	0	0	0	EACH
RETAINING WALL	0		0		0	0	0	0	LINEAR FEET
SIGN	0		0		0	4	1	0	EACH
STATE BOUNDARY	0		0		0	0	0	0	EACH
TRAFFIC LIGHT	0		0		0	0	0	0	EACH
TUNNEL	0		0		0	0	0	0	EACH
TUNNEL	0		0		0	0	0	0	LINEAR FEET

FEATURE	ROUTE 0219	CAMPGROUND SITES 159-174 ACCESS ROUTE 0220	CAMPGROUND SITES 175-191 ACCESS	ROUTE 0221 CAMPGROUND SITES 192-208 ACCESS	ROUTE 0401 SPUR RESIDENCE ROAD WEST	ROUTE 0402 SPUR RESIDENCE ROAD EAST	ROUTE 0403 CAMPGROUND HOUSING ROAD	UNIT
BRIDGE	0	0		0	0	0	0	EACH
CATTLE GUARD	0	0		0	0	0	0	EACH
CULVERT	0	0		0	0	1	0	EACH
CURB	0	0		0	0	0	0	LINEAR FEET
DROP INLET	0	0		0	0	0	0	EACH
GATE	2	1		0	0	0	1	EACH
GUARD/GUIDE RAIL	0	0		0	0	64	0	LINEAR FEET
CABLE	0	0		0	0	0	0	LINEAR FEET
NON-CABLE	0	0		0	0	64	0	LINEAR FEET
GUARD/GUIDE WALL	0	0		0	0	0	0	LINEAR FEET
BOLLARD	0	0		0	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0		0	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0		0	0	0	0	LINEAR FEET
INTERSECTION	4	4		4	3	4	3	EACH
LOW WATER CROSSING	0	0		0	0	0	0	EACH
LOW WATER CROSSING	0	0		0	0	0	0	LINEAR FEET
MILE MARKER	0	0		0	0	0	0	EACH
OVERPASS	0	0		0	0	0	0	EACH
PARK BOUNDARY	0	0		0	0	0	0	EACH
PAVED DITCH	0	0		0	0	0	0	LINEAR FEET
PULLOUT	0	0		0	0	0	0	EACH
PULLOUT	0	0		0	0	0	0	LINEAR FEET
RAILROAD CROSSING	0	0		0	0	0	0	EACH
RETAINING WALL	0	0		0	0	0	0	EACH
RETAINING WALL	0	0		0	0	0	0	LINEAR FEET
SIGN	0	2		2	1	4	0	EACH
STATE BOUNDARY	0	0		0	0	0	0	EACH
TRAFFIC LIGHT	0	0		0	0	0	0	EACH
TUNNEL	0	0		0	0	0	0	EACH
TUNNEL	0	0		0	0	0	0	LINEAR FEET

FEATURE	ROUTE 0409 GROUP CAMPGROUND ACCESS ROAD	UNIT
BRIDGE	0	EACH
CATTLE GUARD	0	EACH
CULVERT	0	EACH
CURB	0	LINEAR FEET
DROP INLET	0	EACH
GATE	0	EACH
GUARD/GUIDE RAIL	0	LINEAR FEET
CABLE	0	LINEAR FEET
NON-CABLE	0	LINEAR FEET
GUARD/GUIDE WALL	0	LINEAR FEET
BOLLARD	0	LINEAR FEET
TEMPORARY BARRIER	0	LINEAR FEET
NON TEMP/BOLLARD	0	LINEAR FEET
INTERSECTION	5	EACH
LOW WATER CROSSING	0	EACH
LOW WATER CROSSING	0	LINEAR FEET
MILE MARKER	0	EACH
OVERPASS	0	EACH
PARK BOUNDARY	0	EACH
PAVED DITCH	0	LINEAR FEET
PULLOUT	0	EACH
PULLOUT	0	LINEAR FEET
RAILROAD CROSSING	0	EACH
RETAINING WALL	0	EACH
RETAINING WALL	0	LINEAR FEET
SIGN	5	EACH
STATE BOUNDARY	0	EACH
TRAFFIC LIGHT	0	EACH
TUNNEL	0	EACH
TUNNEL	0	LINEAR FEET

STRUCTURE LIST

No data available for this section.

<u>Section 9</u> Route Maintenance Features Road Logs



Organ Pipe Cactus National Monument



ROUTE 0010: VISITOR CENTER DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5000 (STATE HIGHWAY 85) AT MP 17.42 (ON RIGHT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5000 (STATE HIGHWAY 85)
0.000	0.000	SIGN	N/A	REGULATORY, SOUTH
0.000	0.000	SIGN	N/A	REGULATORY, 85
0.000	0.000	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	SIGN	N/A	REGULATORY, 85
0.000	0.000	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	SIGN	N/A	REGULATORY, NORTH
0.000	0.000	INTERSECTION	LEFT	ROUTE 5000 (STATE HIGHWAY 85)
0.008	0.008	SIGN	LEFT	REGULATORY, STOP
0.030	0.030	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN NO TEXT
0.038	0.038	SIGN	LEFT	GUIDE, LUKEVILLE USA 5 SONOYTA MEXICO 7 AJO 34
0.052	0.052	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.054	0.054	SIGN	RIGHT	GUIDE, VISITOR CENTER CAMPGROUND NORTH PUERTO BLANCO DR
0.070	0.070	INTERSECTION	RIGHT	ROUTE 0904A (VISITOR CENTER PARKING A)
0.100	0.100	INTERSECTION	LEFT	ROUTE 0904B (VISITOR CENTER PARKING B)
0.102	0.102	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.111	0.111	INTERSECTION	RIGHT	ROUTE 0904A (VISITOR CENTER PARKING A)
0.117	0.117	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.174	0.174	INTERSECTION	LEFT	ROUTE 0101 (TWIN PEAKS ACCESS ROAD)
0.174	0.174	SIGN	LEFT	GUIDE, CAMPGROUND 1 1/2 MI. NORTH PUERTO BLANCO DRIVE
0.175	0.175	SIGN	LEFT	GUIDE, U.S. FEE AREA
0.219	0.219	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.242	0.242	SIGN	RIGHT	GUIDE, STOP AHEAD FEE STATION 250 FEET
0.278	0.278	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.304	0.323	PULLOUT	RIGHT	N/A
0.310	0.310	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.317	0.317	SIGN	RIGHT	GUIDE, U.S. FEE AREA

ROUTE 0010: VISITOR CENTER DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.323	0.323	INTERSECTION	RIGHT	ROUTE 0012ZZ (PUERTO BLANCO DRIVE)
0.326	0.326	SIGN	RIGHT	REGULATORY, VEHICLE TURNAROUND
0.326	0.326	SIGN	RIGHT	REGULATORY, ONE WAY
0.337	0.337	SIGN	RIGHT	REGULATORY, STOP
0.341	0.341	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.341	0.341	SIGN	N/A	GUIDE, VISITOR CENTER HWY 85 AUTHORIZED VEHICLES ONLY
0.341	0.341	INTERSECTION	RIGHT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.341	0.341	ROUTE END	N/A	TO ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.02 (ON RIGHT)

ROUTE 0100: RESIDENCE ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.30 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (VISITOR CENTER DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (VISITOR CENTER DRIVE)
0.005	0.005	SIGN	LEFT	REGULATORY, YIELD
0.016	0.016	INTERSECTION	RIGHT	ROUTE 0010 (VISITOR CENTER DRIVE)
0.020	0.020	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.034	0.034	SIGN	RIGHT	REGULATORY, AUTHORIZED VEHICLES ONLY
0.069	0.069	INTERSECTION	LEFT	ROUTE 0205 (MAINTENANCE YARD ACCESS ROAD)
0.097	0.105	CURB	N/A	N/A
0.101	0.101	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.101	0.101	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.101	0.101	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.101	0.101	GATE	N/A	N/A
0.138	0.138	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.159	0.159	CULVERT	N/A	N/A
0.174	0.174	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.207	0.207	CULVERT	N/A	N/A
0.248	0.248	SIGN	RIGHT	WARNING, SLOW CHILDREN PLAYING
0.270	0.270	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.321	0.321	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.366	0.366	INTERSECTION	RIGHT	UNPAVED ROUTE
0.526	0.526	SIGN	RIGHT	GUIDE, RESOURCES BUILDING 2
0.526	0.526	INTERSECTION	RIGHT	ROUTE 0402 (SPUR RESIDENCE ROAD EAST)
0.826	0.826	INTERSECTION	RIGHT	UNPAVED ROUTE
0.837	0.837	INTERSECTION	RIGHT	UNPAVED ROUTE
1.084	1.084	INTERSECTION	LEFT	ROUTE 0416 (VIP ROAD)
1.135	1.135	SIGN	RIGHT	REGULATORY, STOP
1.139	1.139	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
1.139	1.139	INTERSECTION	RIGHT	ROUTE 0100 (RESIDENCE ACCESS ROAD)

ROUTE 0100: RESIDENCE ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.139	1.139	ROUTE END	N/A	TO END OF LOOP

ROUTE 0101: TWIN PEAKS ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (VISITOR CENTER DRIVE) AT MP 0.17 (ON LEFT)
0.000	0.000	SIGN	N/A	GUIDE, VISITOR CENTER HIGHWAY 85 PUERTO BLANCO DRIVE
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (VISITOR CENTER DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (VISITOR CENTER DRIVE)
0.005	0.005	SIGN	LEFT	REGULATORY, STOP
0.020	0.020	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.082	0.082	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.230	0.230	INTERSECTION	LEFT	ROUTE 0410 (DOMESTIC WATER WELLS ROAD)
0.498	0.498	SIGN	RIGHT	WARNING, DIP
0.512	0.522	LOW WATER CROSSING	N/A	N/A
0.534	0.534	SIGN	LEFT	WARNING, DIP
0.560	0.812	CURB	RIGHT	N/A
0.569	0.569	SIGN	LEFT	WARNING, ROAD NARROWS
0.628	0.628	DROP INLET	RIGHT	N/A
0.696	0.696	DROP INLET	RIGHT	N/A
0.773	0.773	SIGN	RIGHT	WARNING, ROAD NARROWS
0.822	0.822	SIGN	RIGHT	WARNING, DIP
0.823	0.835	CURB	RIGHT	N/A
0.841	1.112	CURB	RIGHT	N/A
0.859	0.859	SIGN	LEFT	WARNING, DIP
1.085	1.085	SIGN	RIGHT	WARNING, DIP
1.128	1.251	CURB	LEFT	N/A
1.133	1.133	SIGN	LEFT	WARNING, DIP
1.173	1.173	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
1.198	1.198	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
1.202	1.202	SIGN	LEFT	REGULATORY, SPEED LIMIT 25
1.270	1.270	SIGN	RIGHT	GUIDE, RE- ENTRY WITH RECEIPT RIGHT LANE
1.294	1.301	CURB	N/A	N/A
1.297	1.297	SIGN	N/A	GUIDE, U.S. FEE AREA

ROUTE 0101: TWIN PEAKS ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.302	1.307	CURB	N/A	N/A
1.304	1.304	SIGN	N/A	REGULATORY, STOP
1.306	1.306	SIGN	N/A	GUIDE, WELCOME TWIN PEAKS CAMPGROUND
1.308	1.308	SIGN	LEFT	REGULATORY, STOP
1.308	1.308	SIGN	RIGHT	REGULATORY, STOP
1.323	1.323	INTERSECTION	N/A	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
1.323	1.323	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
1.323	1.323	ROUTE END	N/A	TO BEGIN OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) AND END OF ROUTE 0200 (CAMPGROUND LOOP ROAD)

ROUTE 0200: CAMPGROUND LOOP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
0.000	0.816	ONE-WAY	N/A	N/A
0.009	0.009	INTERSECTION	LEFT	ROUTE 0206 (CAMPGROUND SITES 1-6 ACCESS)
0.010	0.010	SIGN	LEFT	GUIDE, SITES 1-6
0.013	0.013	SIGN	RIGHT	GUIDE, DUMP STATION
0.013	0.013	SIGN	RIGHT	GUIDE, GROUP CAMPSITES CAMPGROUND RIGS 28 - 35 MUST OCCUPY BLUE NUMBERED SITES
0.015	0.015	SIGN	RIGHT	REGULATORY, ONE WAY
0.020	0.020	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.027	0.027	SIGN	LEFT	GUIDE, CAMPGROUND PERIMETER TRAIL
0.034	0.034	SIGN	RIGHT	GUIDE, CAMPGROUND PERIMETER TRAIL
0.037	0.037	INTERSECTION	LEFT	ROUTE 0207 (CAMPGROUND SITES 7-15 ACCESS)
0.041	0.041	SIGN	LEFT	GUIDE, SITES 7-15
0.053	0.053	INTERSECTION	LEFT	ROUTE 0208 (CAMPGROUND SITES 16-23 ACCESS)
0.055	0.055	SIGN	LEFT	GUIDE, SITES 16-24
0.067	0.067	INTERSECTION	LEFT	ROUTE 0209 (CAMPGROUND SITES 24-34 ACCESS)
0.071	0.071	SIGN	LEFT	GUIDE, SITES 25-34
0.085	0.085	INTERSECTION	LEFT	ROUTE 0210 (CAMPGROUND SITES 35-45 ACCESS)
0.087	0.087	SIGN	LEFT	GUIDE, SITES 35-45
0.101	0.101	INTERSECTION	LEFT	ROUTE 0211 (CAMPGROUND SITES 46-57 ACCESS)
0.103	0.103	SIGN	LEFT	GUIDE, SITES 46-57
0.118	0.118	INTERSECTION	LEFT	ROUTE 0212 (CAMPGROUND SITES 58-70 ACCESS)
0.119	0.119	SIGN	LEFT	GUIDE, SITES 58-70
0.125	0.125	INTERSECTION	LEFT	ROUTE 0213 (CAMPGROUND SITES 71-85 ACCESS)
0.128	0.128	SIGN	LEFT	GUIDE, SITES 71-85
0.150	0.150	INTERSECTION	LEFT	ROUTE 0214 (CAMPGROUND SITES 86-95 ACCESS)
0.150	0.150	SIGN	LEFT	GUIDE, SITES 86-95
0.164	0.164	INTERSECTION	LEFT	ROUTE 0215 (CAMPGROUND SITES 96-112 ACCESS)

ROUTE 0200: CAMPGROUND LOOP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.166	0.166	SIGN	LEFT	GUIDE, SITES 96-112
0.172	0.194	PULLOUT	RIGHT	N/A
0.181	0.181	INTERSECTION	LEFT	ROUTE 0216 (CAMPGROUND SITES 113-128 ACCESS)
0.182	0.182	SIGN	LEFT	GUIDE, SITES 113-128
0.198	0.198	INTERSECTION	LEFT	ROUTE 0217 (CAMPGROUND SITES 129-145 ACCESS)
0.198	0.198	SIGN	LEFT	GUIDE, SITES 129-145
0.210	0.210	INTERSECTION	LEFT	ROUTE 0218 (CAMPGROUND SITES 146-158 ACCESS)
0.211	0.211	SIGN	LEFT	GUIDE, SITES 146-158
0.214	0.214	SIGN	LEFT	GUIDE, CAMPERS LESS THAN FEET IN LENGTH NO GENERATORS
0.214	0.214	SIGN	LEFT	GUIDE, SITES 146 - 174
0.219	0.219	INTERSECTION	RIGHT	ROUTE 0907 (CAMPGROUND PARKING)
0.225	0.225	SIGN	RIGHT	GUIDE, AMPHITHEATER
0.227	0.227	SIGN	LEFT	GUIDE, SITES 159-174
0.227	0.227	INTERSECTION	LEFT	ROUTE 0219 (CAMPGROUND SITES 159-174 ACCESS)
0.239	0.239	INTERSECTION	LEFT	ROUTE 0220 (CAMPGROUND SITES 175-191 ACCESS)
0.249	0.249	INTERSECTION	LEFT	ROUTE 0221 (CAMPGROUND SITES 192-208 ACCESS)
0.256	0.256	SIGN	LEFT	GUIDE, SITES 192-208
0.256	0.256	SIGN	LEFT	GUIDE, SITES 175-191
0.258	0.258	SIGN	LEFT	GUIDE, TENT SITES NO GENERATORS
0.337	0.337	INTERSECTION	RIGHT	ROUTE 0908 (DUMP STATION LOOP)
0.342	0.383	CURB	RIGHT	N/A
0.387	0.387	INTERSECTION	RIGHT	ROUTE 0908 (DUMP STATION LOOP)
0.541	0.541	INTERSECTION	LEFT	ROUTE 0221 (CAMPGROUND SITES 192-208 ACCESS)
0.567	0.567	INTERSECTION	LEFT	ROUTE 0220 (CAMPGROUND SITES 175-191 ACCESS)
0.576	0.576	INTERSECTION	LEFT	ROUTE 0219 (CAMPGROUND SITES 159-174 ACCESS)
0.592	0.592	INTERSECTION	LEFT	ROUTE 0218 (CAMPGROUND SITES 146-158 ACCESS)
0.602	0.602	INTERSECTION	LEFT	ROUTE 0217 (CAMPGROUND SITES 129-145 ACCESS)
0.617	0.617	INTERSECTION	LEFT	ROUTE 0216 (CAMPGROUND SITES 113-128 ACCESS)
0.633	0.633	INTERSECTION	LEFT	ROUTE 0215 (CAMPGROUND SITES 96-112 ACCESS)

ROUTE 0200: CAMPGROUND LOOP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.643	0.643	INTERSECTION	LEFT	ROUTE 0214 (CAMPGROUND SITES 86-95 ACCESS)
0.661	0.661	INTERSECTION	LEFT	ROUTE 0213 (CAMPGROUND SITES 71-85 ACCESS)
0.674	0.674	INTERSECTION	LEFT	ROUTE 0212 (CAMPGROUND SITES 58-70 ACCESS)
0.687	0.687	INTERSECTION	LEFT	ROUTE 0211 (CAMPGROUND SITES 46-57 ACCESS)
0.704	0.704	INTERSECTION	LEFT	ROUTE 0210 (CAMPGROUND SITES 35-45 ACCESS)
0.715	0.715	INTERSECTION	LEFT	ROUTE 0209 (CAMPGROUND SITES 24-34 ACCESS)
0.728	0.728	INTERSECTION	LEFT	ROUTE 0208 (CAMPGROUND SITES 16-23 ACCESS)
0.746	0.746	INTERSECTION	LEFT	ROUTE 0207 (CAMPGROUND SITES 7-15 ACCESS)
0.762	0.762	INTERSECTION	LEFT	ROUTE 0206 (CAMPGROUND SITES 1-6 ACCESS)
0.807	0.807	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.816	0.816	INTERSECTION	LEFT	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
0.816	0.816	INTERSECTION	RIGHT	ROUTE 0101 (TWIN PEAKS ACCESS ROAD)
0.816	0.816	ROUTE END	N/A	TO END OF ROUTE 0101 (TWIN PEAKS ACCESS ROAD) AND BEGIN OF ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)

ROUTE 0205: MAINTENANCE YARD ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.07 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.084	0.084	INTERSECTION	N/A	ROUTE 0903 (MAINTENANCE YARD)
0.084	0.084	ROUTE END	N/A	TO ROUTE 0903 (MAINTENANCE YARD)

ROUTE 0206: CAMPGROUND SITES 1-6 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.094	ONE-WAY	N/A	N/A
0.094	0.094	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.094	0.094	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.094	0.094	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.76 (ON LEFT)

ROUTE 0207: CAMPGROUND SITES 7-15 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.03 (ON LEFT)
0.000	0.115	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.115	0.115	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.115	0.115	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.115	0.115	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.74 (ON LEFT)

ROUTE 0208: CAMPGROUND SITES 16-23 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.05 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.132	ONE-WAY	N/A	N/A
0.132	0.132	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.132	0.132	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.132	0.132	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.73 (ON LEFT)

ROUTE 0209: CAMPGROUND SITES 24-34 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.06 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.150	ONE-WAY	N/A	N/A
0.150	0.150	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.150	0.150	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.150	0.150	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.71 (ON LEFT)

ROUTE 0210: CAMPGROUND SITES 35-45 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.08 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.160	ONE-WAY	N/A	N/A
0.083	0.083	SIGN	RIGHT	GUIDE, CAMP HOST IN
0.160	0.160	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.160	0.160	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.160	0.160	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.70 (ON LEFT)

ROUTE 0211: CAMPGROUND SITES 46-57 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.09 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.171	ONE-WAY	N/A	N/A
0.171	0.171	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.171	0.171	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.171	0.171	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.68 (ON LEFT)

ROUTE 0212: CAMPGROUND SITES 58-70 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.11 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.178	ONE-WAY	N/A	N/A
0.178	0.178	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.178	0.178	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.178	0.178	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.67 (ON LEFT)

ROUTE 0213: CAMPGROUND SITES 71-85 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.12 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.193	ONE-WAY	N/A	N/A
0.012	0.012	GATE	N/A	N/A
0.193	0.193	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.193	0.193	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.193	0.193	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.66 (ON LEFT)

ROUTE 0214: CAMPGROUND SITES 86-95 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.14 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.197	ONE-WAY	N/A	N/A
0.008	0.008	GATE	N/A	N/A
0.194	0.194	GATE	N/A	N/A
0.197	0.197	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.197	0.197	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.197	0.197	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.64 (ON LEFT)

ROUTE 0215: CAMPGROUND SITES 96-112 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.16 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.205	ONE-WAY	N/A	N/A
0.008	0.008	GATE	N/A	N/A
0.200	0.200	GATE	N/A	N/A
0.205	0.205	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.205	0.205	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.205	0.205	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.63 (ON LEFT)

ROUTE 0216: CAMPGROUND SITES 113-128 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.17 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.211	ONE-WAY	N/A	N/A
0.004	0.004	GATE	N/A	N/A
0.053	0.053	SIGN	RIGHT	GUIDE, RESTROOMS
0.093	0.093	SIGN	RIGHT	GUIDE, CAMP HOST
0.106	0.106	SIGN	RIGHT	GUIDE, RESTROOMS
0.146	0.146	SIGN	RIGHT	GUIDE, RESTROOMS
0.207	0.207	GATE	N/A	N/A
0.211	0.211	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.211	0.211	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.211	0.211	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.61 (ON LEFT)

ROUTE 0217: CAMPGROUND SITES 129-145 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.19 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.217	ONE-WAY	N/A	N/A
0.008	0.008	GATE	N/A	N/A
0.112	0.112	SIGN	RIGHT	GUIDE, RESTROOMS
0.211	0.211	GATE	N/A	N/A
0.217	0.217	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.217	0.217	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.217	0.217	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.60 (ON LEFT)

ROUTE 0218: CAMPGROUND SITES 146-158 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.20 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.225	ONE-WAY	N/A	N/A
0.007	0.007	GATE	N/A	N/A
0.223	0.223	GATE	N/A	N/A
0.225	0.225	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.225	0.225	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.225	0.225	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.59 (ON LEFT)

ROUTE 0219: CAMPGROUND SITES 159-174 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.22 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.231	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.007	0.007	GATE	N/A	N/A
0.228	0.228	GATE	N/A	N/A
0.231	0.231	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.231	0.231	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.231	0.231	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.57 (ON LEFT)

ROUTE 0220: CAMPGROUND SITES 175-191 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.23 (ON LEFT)
0.000	0.245	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.007	0.007	GATE	N/A	N/A
0.067	0.067	SIGN	RIGHT	GUIDE, RESTROOMS
0.129	0.129	SIGN	RIGHT	GUIDE, RESTROOMS
0.245	0.245	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.245	0.245	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.245	0.245	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.56 (ON LEFT)

ROUTE 0221: CAMPGROUND SITES 192-208 ACCESS

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.24 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.253	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.065	0.065	SIGN	RIGHT	GUIDE, RESTROOMS
0.135	0.135	SIGN	RIGHT	GUIDE, RESTROOMS
0.253	0.253	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.253	0.253	INTERSECTION	RIGHT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.253	0.253	ROUTE END	N/A	TO ROUTE 0200 (CAMPGROUND LOOP ROAD) AT MP 0.54 (ON LEFT)

ROUTE 0401: SPUR RESIDENCE ROAD WEST

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0402 (SPUR RESIDENCE ROAD EAST) AT MP 0.02 (ON LEFT)
0.000	0.000	INTERSECTION	N/A	ROUTE 0402 (SPUR RESIDENCE ROAD EAST)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0402 (SPUR RESIDENCE ROAD EAST)
0.026	0.026	SIGN	RIGHT	GUIDE, RESOURCES
0.070	0.070	INTERSECTION	N/A	ROUTE 0912 (HOUSING AREA DUPLEX HOUSING PARKING)
0.070	0.070	ROUTE END	N/A	TO ROUTE 0912 (HOUSING AREA DUPLEX PARKING)

ROUTE 0402: SPUR RESIDENCE ROAD EAST

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (RESIDENCE ACCESS ROAD) AT MP 0.52 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (RESIDENCE ACCESS ROAD)
0.000	0.000	SIGN	N/A	GUIDE, BUILDING 1
0.000	0.000	SIGN	N/A	GUIDE, 20
0.000	0.000	SIGN	N/A	GUIDE, RESOURCES
0.003	0.003	SIGN	LEFT	REGULATORY, YIELD
0.010	0.016	GUARD/GUIDE RAIL	RIGHT	N/A
0.011	0.017	GUARD/GUIDE RAIL	LEFT	N/A
0.017	0.017	CULVERT	N/A	N/A
0.024	0.024	INTERSECTION	LEFT	ROUTE 0401 (SPUR RESIDENCE ROAD WEST)
0.089	0.089	INTERSECTION	N/A	ROUTE 0402 (SPUR RESIDENCE ROAD EAST) UNPAVED SECTION
0.089	0.089	ROUTE END	N/A	TO END OF LOOP

ROUTE 0403: CAMPGROUND HOUSING ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD) AT MP 0.03 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0409 (GROUP CAMPGROUND ACCESS ROAD)
0.046	0.046	GATE	N/A	N/A
0.047	0.047	INTERSECTION	N/A	ROUTE 0909 (CAMPGROUND HOUSING PARKING)
0.047	0.047	ROUTE END	N/A	TO ROUTE 0909 (CAMPGROUND HOUSING PARKING)

ROUTE 0409: GROUP CAMPGROUND ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM END OF ROUTE 0101 (TWIN PEAKS ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.000	0.000	INTERSECTION	N/A	ROUTE 0101 (TWIN PEAKS ACCESS ROAD)
0.009	0.009	SIGN	RIGHT	GUIDE, DESERT VIEW NATURE TRAIL
0.009	0.009	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.010	0.010	INTERSECTION	LEFT	ROUTE 0200 (CAMPGROUND LOOP ROAD)
0.013	0.013	SIGN	RIGHT	GUIDE, GROUP CAMPGROUND RESERVATIONS REQUIRED
0.018	0.018	SIGN	LEFT	REGULATORY, YIELD
0.033	0.033	INTERSECTION	RIGHT	ROUTE 0403 (CAMPGROUND HOUSING ROAD)
0.033	0.033	SIGN	RIGHT	REGULATORY, AUTHORIZED VEHICLES ONLY
0.141	0.141	INTERSECTION	N/A	ROUTE 0906 (GROUP CAMPGROUND PARKING)
0.141	0.141	ROUTE END	N/A	TO ROUTE 0906 (GROUP CAMPGROUND PARKING)

Section 10 Appendix



Organ Pipe Cactus National Monument



Explanation of Changes to the RIP Index Equations and Determination of PCR

In 2005, the FHWA began implementing the use of a Pavement Management System to assist the National Park Service in prioritizing Pavement Maintenance and Rehabilitation activities. The PMS used by FHWA is the Highway Pavement Management Application (HPMA) and this software has the ability to store inventory and condition data from RIP and forecast future performance using prediction models. Outputs include performance and condition reports at the National, Region, Park, or Route level. A regional prioritized list and optimization have been produced for most regions and the Federal Highway Deferred Maintenance is calculated via the HPMA as well.

In an effort to improve the accuracy of treatment recommendations and pavement condition descriptions vis a vis the distresses and indexes that comprise the Pavement Condition Rating (PCR), an extensive study was completed throughout 2010 that has resulted in changes to the Road Inventory Program condition reporting method and specifically, the calculation of PCR. It was determined that a better representation of PCR could be achieved by modifying the relative impact certain distresses would have on the overall rating.

Through the use of HPMA data, it was noted that false failure indicators existed with the existing PCR model, and that it would be necessary to reduce their impact. The distresses affected in this way were Rutting and Roughness. Conversely, experience showed that roadways with extensive cracking present were often shown to have a high PCR. Therefore, the crack index models were adjusted to be more sensitive to changes in crack severity or quantity. It was also determined that these issues were not due to a problem with data acquisition (i.e. the RIP "van"), but with the way the collected data was processed. The final change was to provide guidance on when to use the Roughness Condition Index (RCI) in the PCR calculation. Roughness data is of little value to determining overall condition on routes that, due to their length or geometrics, have lower vehicle operating speeds. Therefore, in Cycle 5, only routes that have lengths of one half mile or greater and posted speed limits of 25 mph or greater will have RCI reported and included in the PCR calculations.

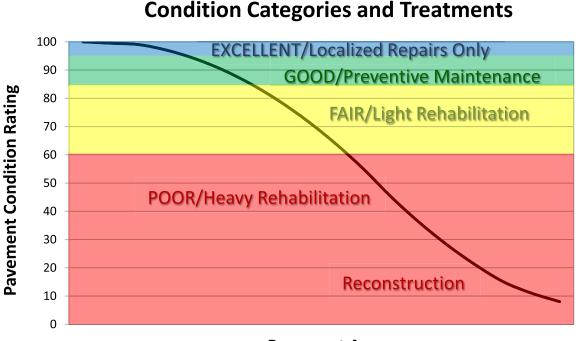
The changes that were implemented were endorsed by management at both the FHWA and NPS. In order to show the effectiveness of these changes, several sites were ground truth tested to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation needs that were represented. The changes will allow greater use of RIP and HPMA data for not simply condition data reporting, but also as a reliable tool for project identification and selection.

Explanation of the Excellent, Good, Fair and Poor Condition Descriptions

In addition to the RIP Index changes that will be implemented in Cycle 5, we will also aim to provide greater assistance in translating good/fair/poor categories into pavement needs categories. The PCR can be used to indicate the place in the Pavement Life Cycle and the types of treatments that should be considered now and into the future.

- Excellent/New: PCR of 95-100. Pavements in this range will require only spot repairs
- Good: PCR of 85-94. Pavements in this range will likely be candidates for Preventive Maintenance. Examples include Chip and Slurry Seals, Micro Surfacing and Thin Overlays.
- Fair: PCR of 61-84. Pavements in this range will likely be candidates of Light Rehabilitation (L3R). Examples include single-lift overlays up to 2.5 inches in total thickness, milling and overlays.
- Poor: PCR of 60 or below. Pavements in this range will likely be candidates of Heavy Rehabilitation or Reconstruction (H3R or 4R). Examples include Pulverization, Multiple Lift Overlays, and Reconstruction.

At this time, specific Maintenance and Rehabilitation activities should be evaluated and recommended at the project level. Site-specific conditions that influence treatment type should be determined based on performing a subsurface investigation and/or pavement condition survey, and not be based solely on RIP data. Additionally, RIP produces a snapshot of conditions the year in which the data was collected. For further information or to obtain additional Pavement Management System's data from our Highway Pavement Management Application (HPMA) please contact the Eastern Federal Lands pavement team.



Pavement Age

DESCRIPTION OF RATING SYSTEM

The Federal Highway Administration (FHWA), Road Inventory Program (RIP) for the National Park Service (NPS), collects roadway condition data on paved surfaces (asphalt, concrete, brick, and cobblestone) on roads, parkways, and parking areas in national parks nationwide. The road surface condition data is collected using an automated Data Collection Vehicle (DCV). Roads having brick or cobblestone surfacing are not normally surveyed with the DCV, but are manually rated for condition rating.

The FHWA RIP is implemented based on the premise that an accurate pavement surface condition assessment can be accomplished using automated crack detection technology as applied to digital images. Various methods of pavement condition assessment have been developed over the years with varying degrees of accuracy and acceptance. The use of digital photography to record pavement images and subsequent crack detection and classification has undergone continuous improvements over the past decade. Digital cameras with increasingly superior resolution and high definition have been more affordable, and the proprietary programming code and algorithms have been improved in crack detection software.

With the use of quality digital photography and automated crack detection software, FHWA RIP is tasked with executing a pavement condition assessment on about 5000 miles of National Park Service roads and parkways. Foremost in setting up the basis of pavement distress identification is employing the distress identification protocols used by FHWA. There is no single distress identification system that is universal among entities conducting a program of distress identification. For the purpose of the NPS RIP, FHWA employs distress identification protocols that are specific to this program.

FHWA has referenced the "Distress Identification Manual for the Long-Term Pavement Performance Program", Publication No. FHWA-RD 03-031, June 2003, as the point-ofreference for distress types on NPS pavement. In truth, the FHWA RIP distress types are similar to those described in the LTPP manual with some modifications. This document, "Distress Identification Manual for the NPS Road Inventory Program, Cycle 5, 2010-2013" was developed using the "Distress Identification Manual for the Long-Term Pavement Performance Program" as a guideline. Definitions of severity levels based on crack width contained in this document adhere to the LTPP Distress ID Manual. Modifications have been made to the definition of Alligator and Longitudinal Cracking and determination of Alligator Cracking severity. This manual also addresses Rutting and Roughness and its application to RIP.

In 2010, FHWA RIP began the fifth cycle of data collection in national parks. For Cycle 5, data will be collected in approximately 81 large parks (10 or more paved route miles) on Functional Class 1, 2, and 7 routes plus any new routes or parking areas previously not collected, totaling an estimated 4,459 paved route miles. Additionally, 168 small parks will be collected comprising approximately 529 paved route miles and associated paved parking areas. The data is used to support the National Park Service road maintenance program and Pavement Management System (PMS) developed and maintained by FHWA.

This "Distress Identification Manual for the NPS Road Inventory Program, Cycle 5, 2010-2013" will be used as a reference resource in crack detection and classification, determination of distress severity and extent, and in the calculation of distress index values for the FHWA RIP Cycle 5.

SURFACE DISTRESSES

Surface Condition Rating - SCR

Surface distresses are measured in the primary lane only. In the classification and measurement of all paved surface condition data, results will be reported in the database in record intervals of 0.02 miles (105.6 feet) (smallest granularity) along the route.

Surface distresses determined from digital images

- Transverse Cracks
- Longitudinal Cracks
- Alligator Cracks
- Patching/Potholes

Surface distress measured by DCV (Data Collection Vehicle) LRMS (Laser Rut Measuring System)

• Rutting

Each of the five surface distresses is assigned a computed surface distress index

- Transverse Crack Index
- Longitudinal Crack Index
- Alligator Crack Index
- Patching/Pothole Index
- Rutting Index

Surface distress data are classified as listed above, measured for severity, and quantified for extent. Classification, severity, and extent of these five surface distresses comprise the three main elements for calculation of SCR (Surface Condition Rating).

In addition to the five surface distresses, a **Structural Crack Index** is computed, which is a combination of the Longitudinal Crack Index and the Alligator Crack Index. The Structural Crack Index is then used in lieu of the LC and AC indices to compute SCR.

Roughness Condition Index - RCI

Additional condition data measured by DCV (lasers and accelerometers)

• Roughness (IRI)

Roughness is measured by FHWA's DCV and reported as International Roughness Index (IRI) in inches/mile. Using IRI, the Roughness Condition Index (RCI) is computed.

Pavement Condition Rating - PCR

Using the SCR (computed from the five surface distresses) and the RCI, an overall Pavement Condition Rating (PCR) is computed. The formula for PCR is:

Asphalt PCR = (0.60 * SCR) + (0.40 * RCI) **Concrete PCR** = RCI

A detailed description of each distress index formula, roughness index formula, SCR and PCR is provided in this document beginning on page 23.

Each classified surface distress will fall into one or more *severity*...LOW, MEDIUM, or HIGH based on criteria listed. For each severity, an *extent* is established based on the measured quantity of the distress within that severity. Within each *severity* individual distresses are assigned a *Maximum Allowable Extent* (MAE). For example, LOW severity transverse cracking may be allowed up to 21.1 cracks within a 0.02 interval before it reaches MAE and fails.

The index formulas are based on a scale of 0-100. A PCR index value of 100 would indicate a "new" road with no measurable distresses or rough ride. A PCR value of 60 is determined to be *terminable serviceability* and the road is considered failed. The range of index values with condition descriptors is:

POOR (<=60), FAIR (61 - 84), GOOD (85 - 94), EXCELLENT (95 - 100)

Index values are generally computed based on cumulative deducts of the measured severities. As shown in the index formulas below, as any single severity reaches or exceeds MAE, the index computes to a value of 60 or less, and the road fails for that 0.02 interval.

Note: As a result of a unique combination of measured surface distresses and IRI, index values occasionally compute to less than 0 or greater than 100. In this instance, an index value < 0 defaults to 0. Index values > 100 default to 100. For all indices, a higher value indicates a better road condition, and a lower value indicates a poorer road condition.

On the following page, Table 1 summarizes the different types of distresses measured.

Г

ASPHALT-SURFA	ASPHALT-SURFACED PAVEMENT DISTRESS TYPES with RUTTING and ROUGHNESS				
DISTRESS TYPE	UNIT OF MEASURE	CONVERTED TO	DEFINED SEVERITY LEVELS?	MEASURED BY	
Alligator Cracking	Square Feet	Percent of Lane Per 0.02 Mile	Yes	Digital Image Crack Detection Software	
Transverse Cracking	Linear Feet	Number of Cracks Per 0.02 Mile	Yes	Digital Image Crack Detection Software	
Longitudinal Cracking	Linear feet	Percent of Lane Length Per 0.02 Mile	Yes	Digital Image Crack Detection Software	
Patching/Potholes	Square Feet	Percent of Lane Per 0.02 Mile	No	Digital Image Crack Detection Software	
Rutting	Inches	Rut Depth Per 0.02 Mile	Yes	DCV – Laser Rut Measuring System (LRMS)	
Roughness	IRI	*RCI Per 0.02 Mile	No	DCV – Lasers /Accelerometers	

*Note: Roughness is measured on concrete roadways, but surface distresses and rutting are not measured. For concrete, PCR = RCI

ALLIGATOR CRACKING

Description

Alligator cracking is considered a combination of fatigue and block cracking. It is a series of interconnected cracks in various stages of development. Alligator cracking develops into a many-sided pattern that resembles chicken wire or alligator skin. It can occur anywhere in the road lane. Alligator cracking must have a quantifiable area.

Severity Levels

LOW

An area of cracks with no or very few interconnecting cracks and the cracks are not spalled. Cracks are ≤ 0.25 in (6mm) in mean width. Cracks in the pattern are no further apart than 1 foot (0.328 m). May be sealed cracks with sealant in good condition and a crack width that cannot be determined.

MEDIUM

An area of interconnected cracks that form a complete pattern. Cracks may be slightly spalled. Cracks are >0.25 in. (6 mm) and <= 0.75 in. (19 mm) or any crack with a mean width <= 19 mm and adjacent low severity cracking. Cracks in the pattern are no further apart than 6 in. (150 mm).

HIGH

An area of interconnected cracks forming a complete pattern. Cracks are moderately or severely spalled. Cracks are >0.75 in (19mm) or any crack with a mean width ≤ 0.75 in (19mm) and adjacent medium to high severity random cracking.

A combination of observed crack width and crack pattern is used to determine overall severity of alligator cracking. Based on above description of each severity, the highest level of crack width and crack pattern determines overall severity. Table 2 illustrates this.

	Crack Pattern			
ALLIGATOR CRACKING SE LEVELS	LOW	MED	HIGH	
	LOW	L	M	Н
rack /idth	MED	M	M	Н
Čr.	HI	Н	Н	Н

TABLE 2: Alligator Crack Severity Levels

LONGITUDINAL CRACKING

Description

Longitudinal cracking occurs predominantly parallel to the pavement centerline. It can occur anywhere within the lane. Longitudinal cracks occurring in the wheelpath may be noteworthy.

Severity Levels

LOW

Cracks with a mean width of < 0.25 in. (6 mm). Sealed cracks with sealant in good condition and a width that cannot be determined.

MED

Cracks with a mean width > 0.25 in. (6 mm) and ≤ 0.75 in. (19 mm). Also, any crack with a mean width < 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH

Cracks with a mean width > 0.75 in. (19 mm). Also, any crack with a mean width < 0.75 in. (19 mm) and adjacent random medium to high severity cracking.

TRANSVERSE CRACKING

Description

Transverse cracking occurs predominantly perpendicular to the pavement centerline. It can occur anywhere within the lane.

Severity Levels

LOW

Cracks with a mean width of < 0.25 in. (6 mm). Sealed cracks with sealant in good condition and a width that cannot be determined.

MED

Cracks with a mean width > 0.25 in. (6 mm) and <= 0.75 in. (19 mm). Also, any crack with a mean width < 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH

Cracks with a mean width > 0.75 in. (19 mm). Also, any crack with a mean width < 0.75 in. (19 mm) and adjacent random medium to high severity cracking.

PATCHING AND POTHOLES

Description

Patching is an area of pavement surface that has been removed and replaced with patching material or an area of pavement surface that has had additional patching material applied. Patching may encompass partial lane or full lane width On full lane width patching; the total, contiguous length of patch may not exceed 0.30 mi. (0.48 km). (Any full-lane patch exceeding 0.30 mi. in length is considered a pavement change). Patching must have a quantifiable area.

Potholes are bowl-shaped holes of various sizes occurring in the pavement surface.

Severity Levels

There are no stratified severities for Patching/Potholes. They either are present or they are not.

RUTTING

Description

Rutting is a longitudinal surface depression in the wheelpath.

Severity Levels

LOW Ruts with a measured depth ≥ 0.20 " and ≤ 0.49 "

MED Ruts with a measured depth ≥ 0.50 " and ≤ 0.99 "

HIGH

Ruts with a measured depth ≥ 1.00 "

Ruts < 0.20" are not included in the distress calculations.

ROUGHNESS

Description

Roughness is the measurement of the unevenness of the pavement in the direction of travel. It is measured in units of IRI (International Roughness Index), inches per mile, and is indicative of ride comfort.

Severity Levels

There are no stratified severity levels for roughness. The roughness (or smoothness) of a road surface can be defined by IRI in the following table.

TABLE 3: IRI			
IRI Descriptions			
Type of Road	Typical IRI (in/mile)		
New Road, no noticeable roughness	<90		
Small level of roughness	90 - 126		
Road of average roughness	126 – 190		
Road with above average roughness	190 – 253		
Road with severe roughness	253 - 380		
Nearly impassable	>380		

INDEX FORMULAS

Note: All index formulas listed below contain MAE applicable to 0.02 mile (105.6 feet) interval.

Alligator Crack Index

 $AC_INDEX = 100 - 40 * [(\%LOW / 35) + (\%MED / 15) + (\%HI / 5)]$

Where:

The values %LOW, %MED and %HI report the percentage of the observed pavement (0.02 mile, primary lane) that contains alligator cracking within the respective severities. These values range from 0 to 100.

%LOW = Percent of total area (primary lane, 0.02 in length), low severity %MED = Percent of total area (primary lane, 0.02 in length), medium severity %HI = Percent of total area (primary lane, 0.02 in length), high severity

Percent of total area is computed as:

square foot area of alligator crack severity 0.02 mile * lane width

In AC_INDEX, the denominators 35, 15, and 5 are the Maximum Allowable Extents (MAE) for each severity. In other words, we will allow up to 35% of low severity alligator cracking for a 0.02 interval before failure, 15% for medium severity, and so on. As you can see, if any single severity reaches MAE the resulting index value is 60, or failure.

Longitudinal Crack Index

 $LC_INDEX = 100 - 40 * [(\%LOW / 175) + (\%MED / 75) + (\%HI / 25)]$

Where:

The values %LOW, %MED, and %HI report the length of longitudinal cracking within each severity as a percent of the section length (0.02 mile, primary lane). These values are ≥ 0 and can exceed 100.

%LOW = Percent of interval length (primary lane, 0.02 in length), low severity %MED = Percent of interval length (primary lane, 0.02 in length), medium severity %HI = Percent of interval length (primary lane, 0.02 in length), high severity

Percent of interval length is computed as: <u>length of respective longitudinal cracking</u> 0.02 mile (105.6 feet) In LC_INDEX, the denominators 175, 75, and 25 are the Maximum Allowable Extents (MAE) for each severity. In other words, we will allow up to 175% of low severity alligator cracking for a 0.02 interval before failure, 75% for medium severity, and so on. As you can see, if any single severity reaches MAE the resulting index value is 60, or failure.

Structural Crack Index

 $SC_{INDEX} = [100 - ((100 - AC_{INDEX}) + (100 - LC_{INDEX}))]$

Structural Crack Index is a combination of Alligator Cracking and Longitudinal Cracking, and is used in the SCR formula in lieu of AC and LC separately.

Transverse Crack Index

 $TC_INDEX = 100 - 40 * [(LOW / 21.1) + (MED / 4.4) + (HI / 2.6)]$

Where:

The values *LOW*, *MED* and *HI* report a count of the total number of transverse cracks (reported to three decimals) within each severity level, where one transverse crack is equal to the lane width. These values are ≥ 0 .

LOW = Number of cracks in interval (primary lane, 0.02 in length), low severity MED = Number of cracks in interval (primary lane, 0.02 in length), medium severity HI = Number of cracks in interval (primary lane, 0.02 in length), high severity

Number of cracks is computed as: <u>Total length of transverse cracks</u> Lane width

In TC_INDEX, the denominators 21.1, 4.4, and 2.6 are the Maximum Allowable Extents (MAE) for each severity. In other words, we will allow up to 21.1 low severity transverse cracks for a 0.02 interval before failure, 4.4 cracks for medium severity, and so on. As you can see, if any single severity reaches MAE the resulting index value is 60, or failure.

Patching Index

PATCH_INDEX = 100 - 40 * (%PATCHING / 80)

Where:

The value *%PATCHING* reports the percentage of the observed pavement (0.02 mile, primary lane) that contains patching/potholes. This value ranges from 0 to 100.

%PATCHING = Percent of total area (primary lane, 0.02 in length)

Percent of total area is computed as:

square foot area of patching/potholes 0.02 mile * lane width

There are no severity levels for patching. It either exists or does not.

In PATCH_INDEX, the denominator 80 is the Maximum Allowable Extent (MAE) for each severity. In other words, we will allow up to 80% patching for a 0.02 interval before failure. As you can see, if patching/potholes reaches MAE the resulting index value is 60, or failure.

Rutting Index

RUT_INDEX = 100 - 40 * [(% LOW / 535) + (% MED / 205) + (% HI / 40)]

Where:

20 rut depth measurements are taken per 0.02 interval for each of 2 wheel paths (left and right), resulting in a total of 40 measurements taken for both wheel paths. *Each wheelpath is analyzed independently for rut severities*. The values %*LOW*, %*MED* and %*HI* are a *total percentage* of left wheelpath percentage and right wheelpath percentage added together for the respective severity. These values range from 0 to 200.

%LOW = Percent of LOW ruts in left wheelpath based on 20 ruts, plus percent of LOW ruts in right wheelpath based on 20 ruts.

%MED = Percent of MED ruts in left wheelpath based on 20 ruts, plus percent of MED ruts in right wheelpath based on 20 ruts.

%HI = Percent of HI ruts in left wheelpath based on 20 ruts, plus percent of HI ruts in right wheelpath based on 20 ruts.

Percent of rut measurements within each severity can also be computed as:

total number of ruts within each severity in both wheelpaths 20 * 100

In RUT_INDEX, the denominators 535, 205, and 40 are the Maximum Allowable Extents for each severity. In other words, the formula allows up to 535% low severity

ruts for a 0.02 interval before. However, since 200 is the highest measurable percentage allowed, 535% is unattainable and therefore, no amount of LOW severity rutting will cause the RUT_INDEX to fail a road. Similarly, since the MAE for MED severity rutting is 205, no amount of MED severity rutting will cause the RUT_INDEX to reach 60 and fail the road. As you can see, LOW severity rutting reaches MAE the resulting index value is 60, or failure. This formula was intentionally designed to minimize the impact of LOW and MED severity rutting on RUT_INDEX.

Roughness Condition Index (Asphalt)

$$\mathbf{RCI} = 32 * [5 * (2.718282 \land (-0.0041 * AVG IRI)))]$$

Where:

The value *AVG IRI* reports the average value of the Left IRI and Right IRI measurements for the interval (0.02 mile, primary lane). This value can range from approximately 40 to 999.0.

Average IRI is computed as:

Left wheelpath IRI + Right wheelpath IRI 2

There is no applicable threshold for failure for this index.

Roughness Condition Index (Concrete)

 $\mathbf{RCI} = -0.0012(\mathbf{IRI}^2) + 0.0499(\mathbf{IRI}) + 99.542$

For concrete, PCR = RCI

Surface Condition Rating Index

SCR = *Lowest* Index Value Of: [SC_INDEX, TC_INDEX, PATCH_INDEX, RUT_INDEX]

Note: The modified SCR equation above combines AC_INDEX and LC_INDEX, and considers that a single AC/LC index value of the Structural Crack Index (SC_INDEX). The lowest of the four computed index values (SC_INDEX, TC_INDEX, PATCH_INDEX, or RUT_INDEX) becomes the SCR.

Where:

See above for determinations of SC_INDEX, TC_INDEX, PATCH_INDEX and RUT_INDEX.

The threshold for failure for this index is SCR = 60.

Data Collection Vehicle Subsystems

Data on paved roads in Cycle 5 is collected by FHWA using a Pathway Services Inc. Data Collection Vehicle (DCV), called PathRunner. The DCV is driven in the primary-direction lane at posted speed limits and less.

CAMERAS

Forward-facing and rear-facing video is collected as .jpg digital imagery at a frequency of 26.4 feet.

Two forward-facing cameras are mounted above the vehicle cab, one pointed straight ahead and the other to the right shoulder providing seamless 120 degree viewing.

CAMERA SPECIFICATIONS			
Two Forward/ One Rear Facing			
Camera lens/type	FUJINON CCTV LENS H16x10B-Y41		
Focal length	10 mm – 160 mm		
Image size	8.8 mm x 6.6mm		
Image format	*.jpg		
Image resolution	HD 2000 X 1200		
Image pixel size	depends on distance		
Zoom ratio	16x		
Max Relative Aperture	1:2.5		
Iris range	F25-T800 (Equivalent to F800)		

Pavement images are created using a Laser Scan Imaging System. This system is composed of a single high resolution line-scan camera and two lasers configured to image an approximate 11-foot wide lane with 1 mm resolution.

CAMERA SPECIFICATIONS			
Pavement Line Scan			
Image size	4280 pixels/line		
Image width	4 meters (3950 mm nominal)		
Laser class	3B		
Power	250W		
Vehicle speed limitations	62 mph		
Environment	Dry pavement, day or night		
Sensor size (approx)	300 mm(H) x 375 mm(L) x 200 mm(D)		
Image frame length	26.4 feet		

DMI (Distance Measuring Instrument)

The DMI (Distance Measuring Instrument) obtains road length measurements that are accurate to 0.1% for speeds up to 60 mph. The DMI is connected to the hub of the rear wheel on the driver's side, and is calibrated to the revolutions of the rear vehicle axle on a regular basis.

ROUGHNESS (IRI)

The collection system includes a South Dakota type laser profiler manufactured based on active Class 1 ASTM E950 standards. The dynamic profile of the pavement surface is collected from which the IRI roughness data is computed. The sensors include one accelerometer on each wheelpath, one height sensor (laser) on each wheelpath, and a distance transducer.

IRI SPECIFICATIONS	
Reported IRI units	Inches/mile
Vehicle speed limitations	12-62 mph
IRI equipment certification	Texas Transportation Institute (TTI)
Wavelengths accommodated	6 in. – 300 feet
IRI computed & reported	World Bank Technical Paper Number 46
Environment	Dry pavement, day or night, above 32 degrees F
Adherence to specifications	ASTM E950-98 (2004), ASTM E 1926-08,
	AASHTO MP 11-08, AASHTO PP 49-08

RUTTING

Rutting depths are measured using an INO Laser Rut Measurement System (LRMS). This system is a transverse profiling device that detects and characterizes pavement rutting. The LRMS can acquire full 4 meter width profiles of a pavement lane at normal traffic speeds and uses two laser profilers that digitize transverse sections of the pavement.

RUTTING SPECIFICATIONS	
Reported rut depth units	Inches
Vehicle speed limitations	Up to 62 mph
Sampling rate	30-150 profiles/second
Transverse resolution	1280 points/profile
Transverse field-of-view	4 m
Depth accuracy (nominal)	+/- 1 mm
Environment	Dry pavement, day or night, above 32 degrees F
Adherence to specifications	ASTM E1703M-95 (reapproved 2005)

GPS & INERTIAL SYSTEMS

GPS is collected by an onboard system employing Omnistar real time correction and a gyroscope Inertial Measuring Unit (IMU) to provide accurate positioning data in instances of satellite obstruction. All GPS coordinates are tied to image and linear distance measurements.

GPS SPECIFICATIONS	
Static accuracy	Sub-meter
Dynamic accuracy	2-3 meters
Receiver	12 satellite tracking
Coordinate system	Lat Lon WGS 84
Environment	Day or night
Cross-slope	+- 0.1 degrees
Grade	+- 0.1 degrees

GPS on Manually Rated Roads (MRR)

Parking areas, some roads, and other paved areas that are not fully drivable with the DCV are collected manually by field technicians. GPS is collected for these routes using portable Trimble GPS backpack units.

Geodatabase - Background and Metadata

In addition to this park report, a *geodatabase* containing both tabular and spatial data specific to this park has been provided. All data disseminated in the preceding report has been obtained from the tables and fields within said geodatabase. The geodatabase can be referenced for tabular data via Microsoft Access or for both tabular and spatial data via ESRI's ArcGIS Suite of software which consists of; ArcMap, ArcCatalog and ArcExplorer. Consolidating the RIP data into one database creates a seamless relationship of tables and geographic data. It will allow RIP to facilitate easier updates and enhancements in the future.

A geodatabase can be thought of as simply a database containing spatial data. Many different tables are contained with the park's geodatabase. A complete and thorough description of the tables and fields contained within this geodatabase can be found in the *metadata*. The metadata is attached directly within the geodatabase and can be accessed via ESRI's ArcCatalog.

GLOSSARY OF TERMS AND ABBREVIATIONS

TERM ORABBREVIATIONDESCRIPTION OR DEFINITION

AC	Alligator Cracking
CRS	Condition Rating Sheets (Section 5)
DCV	Data Collection Vehicle
Excellent	Excellent rating with an index value of 95 to 100
Fair	Fair rating with an index value from 61 to 84
FUNCT_CLASS	Functional Classification (see Route ID, Section 2)
Good	Good rating with an index value from 85 to 94
IRI	International Roughness Index
Lane Width	Width from road centerline to fogline, or from centerline to edge- of-pavement when no fogline exists
LC	Longitudinal Cracking
MRR	Manually Rated Route
MRL	Manually Rated Line
MRP	Manually Rated Polygon
N/A	Not Applicable
NC	Not Collected
РАТСН	Patching and Potholes
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating
PKG	Parking Area
Poor	Poor rating with an index value of 0 to 60
RCI	Roughness Condition Index
SC	Structural Cracking
SCR	Surface Condition Rating
TC	Transverse Cracking