

Road Inventory and Condition Assessment



## **Chickasaw National Recreation Area CHIC - 7510**

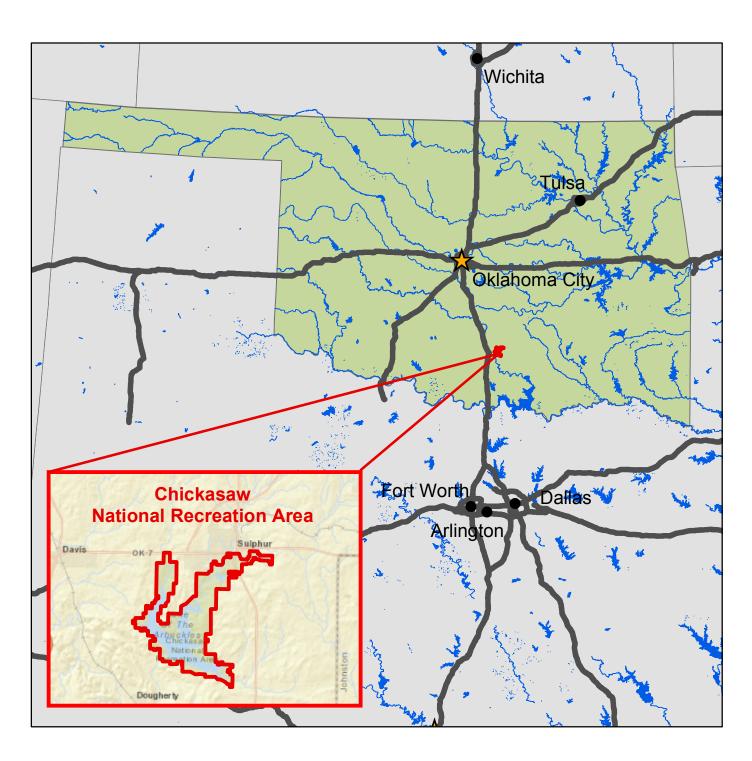
Cycle 5 Report

Prepared By: Federal Highway Administration

**Road Inventory Program (RIP)** 

Data Collected: 01/2012 Report Date: 10/2012

# Chickasaw National Recreation Area in Oklahoma

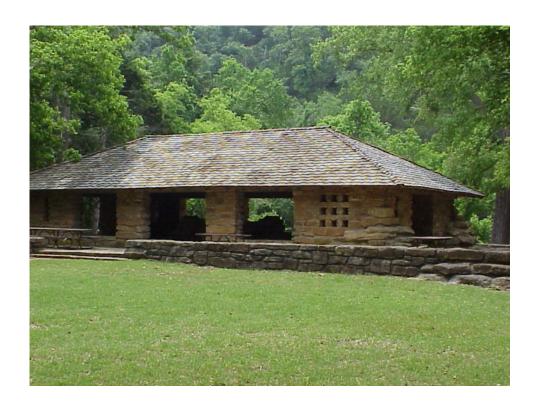




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## **Section 1 Introduction**



Chickasaw National Recreation Area



#### 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 21<sup>st</sup> 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



Chickasaw National Recreation Area



Road Inventory Program 10/05/2012

(Numerical By Route #)

Green = All Unpaved Parking Areas

Shading Color Key: Red text denotes approx. mileage

White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas

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Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

\*\* DCV - Data Collection Vehicle

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

## CHIC

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des 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	33400		PERIMETER DRIVE	FROM ROUTE 0016 (U.S. HIGHWAY 177) (ON WEST SIDE)	TO ROUTE 0016 (U.S. HIGHWAY 177) (ON EAST SIDE)	PLATT	6.23	0.00	6.23	1		AS	1
0011	5	33405		BUCKHORN ROAD	FROM END OF ROUTE 5001 (E1780 ROAD (BUCKHORN ROAD, NON NPS SECTION)) AT PARK BOUNDARY	TO BOAT RAMP	ARBUCKLE	1.62	0.00	1.62	1		AS	2,3
0012	5	33516		GUY SANDY ROAD	FROM ROUTE 5004 (CHICKASAW TRAIL) AT PARK BOUNDARY	TO ROUTE 0911 (GUY SANDY LAUNCH AREA PARKING)	ARBUCKLE	0.46	0.00	0.46	1		AS	6
0013ZZ	5	33517		POINT ROADS	FROM END OF ROUTE 5003 (CHARLES F. COOPER MEMORIAL ROAD) AT PARK BOUNDARY	TO ROUTE 0925 (POINT PARKING/END OF 110)	ARBUCKLE	1.09	0.00	1.09	1		AS	5
0014	5	33518		TWELFTH STREET ENTRANCE ROAD	FROM WEST LINDSAY AVENUE	TO ROUTE 0010 (PERIMETER DRIVE)	PLATT	0.05	0.00	0.05	1		AS	1
0015	NC	33522		BLACK SULPHUR PICNIC AREA ROAD	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END OF LOOP	PLATT	0.00	0.21	0.21	2		GR	
0016	NC	239928		U.S. HIGHWAY 177	FROM STATE ROUTE 7 (WEST BROADWAY AVENUE)	TO SOUTH PARK BOUNDARY	PLATT	1.14	0.00	1.14	1		AS	1
0100	5	33519		CEDAR BLUE ENTRANCE ROAD	FROM END OF ROUTE 5000 (CEDAR BLUE ROAD) AT PARK BOUNDARY	TO ROUTE 0011 (BUCKHORN ROAD)	ARBUCKLE	0.51	0.00	0.51	2		AS	3
0101A	4	33520		BROMIDE AREA ROAD A	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 0.91 (ON LEFT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 1.01 (ON LEFT)	PLATT	0.25	0.00	0.25	3		AS	1
0101B	4	33521		BROMIDE AREA ROAD B	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 1.02 (ON LEFT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 1.13 (ON LEFT)	PLATT	0.14	0.00	0.14	3		AS	1
0116	NC	33523		WARM UP AREA ROAD	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END OF LOOP	PLATT	0.00	0.12	0.12	2		GR	
0200A	4	33524		BUCKHORN CAMPGROUND LOOP A	FROM ROUTE 0200B (BUCKHORN CAMPGROUND LOOP B)	TO END OF LOOP	ARBUCKLE	0.53	0.00	0.53	3		AS	3
0200B	4	54889		BUCKHORN CAMPGROUND LOOP B	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 0.38 (ON LEFT)	TO END OF LOOP	ARBUCKLE	0.64	0.00	0.64	3		AS	3

Road Inventory Program 10/05/2012

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Blue = All Paved Parking Areas Green = All Unpaved Parking Areas

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Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0200C	4	54890		BUCKHORN CAMPGROUND LOOP C	FROM ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE) AT MP 0.12	TO ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE) AT MP 0.08	ARBUCKLE	0.62	0.00	0.62	3		AS	3
)200DZZ	4	54891		BUCKHORN CAMPGROUND ROUTE	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 0.56 (ON LEFT)	THROUGH CAMPGROUND	ARBUCKLE	0.79	0.00	0.79	3		AS	3
0201	4	33525		GUY SANDY CAMPGROUND ROAD	FROM ROUTE 0012 (GUY SANDY ROAD) AT MP 0.21 (ON LEFT)	TO END OF LOOP	ARBUCKLE	0.41	0.00	0.41	3		AS	6
0202	4	33528		BLACKJACK ROAD	FROM ROUTE 0013ZZ (POINT ROADS) AT MP 0.79 (ON LEFT)	TO END OF LOOP	ARBUCKLE	0.15	0.17	0.32	3		AS	5
0203	4	33531		POINT LAUNCHING RAMP ROAD	FROM ROUTE 0013ZZ (POINT ROADS) AT MP 0.67 (ON LEFT)	TO ROUTE 0914 (POINT LAUNCH AREA PARKING)	ARBUCKLE	0.20	0.00	0.20	3		AS	5
0204	4	54894		POINT CAMPGROUND ACCESS ROAD	FROM ROUTE 0013ZZ (POINT ROADS) AT MP 0.35 (ON LEFT)	TO END OF LOOP	ARBUCKLE	1.56	0.00	1.56	3		AS	5
0204A	5	238072		POINT CAMPGROUND CONNECTOR	FROM ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 0.82 (ON LEFT)	TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.31 (ON LEFT)	ARBUCKLE	0.03	0.00	0.03	3		AS	5
0205	4	33535		BUCKHORN TRAIL EAST	FROM ROUTE 0206 (BUCKHORN TRAIL WEST) AT MP 0.09 (ON LEFT)	TO ROUTE 0916 (BUCKHORN PICNIC F LOOP PARKING)	ARBUCKLE	0.20	0.00	0.20	3		AS	3
0206	4	33537		BUCKHORN TRAIL WEST	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 1.23 (ON LEFT)	TO ROUTE 0917 (BUCKHORN PICNIC TEARDROP PARKING)	ARBUCKLE	0.17	0.00	0.17	3		AS	3
0207ZZ	4	33539		COLD SPRINGS CAMPGROUND ROADS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND	PLATT	0.90	0.00	0.90	3	47,826	AS	1
0208ZZ	4	33541		CENTRAL CAMPGROUND LOOPS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND	PLATT	0.48	0.00	0.48	3		AS	1
0209ZZ	5	33543		ROCK CREEK CAMPGROUND ROADS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND	PLATT	1.59	0.00	1.59	3		AS	1
0210	NC	33545		BLUE STEM PRAIRIE ROAD	FROM WEST SIDE PUBLIC ACCESS ROAD	TO END	ARBUCKLE	0.00	0.54	0.54	2		GR	
0211	NC	33547		BREEZE POINT ROAD/POST OAK ROAD	FROM ROUTE 0013ZZ (POINT ROADS)	TO END	ARBUCKLE	0.00	1.67	1.67	2		GR	
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Road Inventory Program 10/05/2012

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## CHIC

Rte.	ed	FMSS	ess		Route Des	scription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0212	NC	33549		THEDFORD POND ROAD	FROM ROUTE 0013ZZ (POINT ROADS)	TO END	ARBUCKLE	0.00	0.25	0.25	3		GR	
0213	NC	33550		CATFISH BOTTOMS ROAD	FROM ROUTE 5002 (GODDARD YOUTH CAMP ROAD)	TO BOAT RAMP	ARBUCKLE	0.00	0.29	0.29	3		GR	
0214	4	48975		VETERANS LAKE ACCESS ROAD	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END OF DAM	ARBUCKLE	0.52	0.00	0.52	3		AS	1
0215	4	48976		VETERANS LAKE ROAD	FROM ROUTE 0214 (VETERANS LAKE ACCESS ROAD)	TO ROUTE 0968ZZ (VETERANS LAKE PARKING AREAS)	ARBUCKLE	0.67	0.00	0.67	3		AS	1
0216	4	48978		CATSEYE ROAD	FROM ROUTE 0214 (VETERANS LAKE ACCESS ROAD)	TO END OF PAVEMENT	ARBUCKLE	0.07	0.45	0.52	3		AS	1
0217	5	95049		EAGLE BAY BOAT LAUNCH ROAD	FROM INTERSECTION OF ROUTES 5005 (SHEPHERD ROAD) AND 5006 (PRIMROSE ROAD)	TO BOAT RAMP	ARBUCKLE	0.26	0.00	0.26	3		AS	7
0218	4	33827		SUNSET BEACH ROAD	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 1.42	TO END OF PAVEMENT	ARBUCKLE	0.00	0.00	0.00	3	2,884	AS	3
0220	4	33829		SYCAMORE CROSSING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 4.12	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 5.18	PLATT	0.00	0.00	0.00	3	8,668	со	1
0400	NC	33833		POINT MAINTENANCE STORAGE ROAD	FROM ROUTE 0203 (POINT LAUNCHING RAMP ROAD)	TO END	ARBUCKLE	0.00	0.05	0.05	6		GR	
0401	NC	33837		WATER PLANT SERVICE ROAD	FROM ROUTE 0100 (CEDAR BLUE ENTRANCE ROAD)	TO LIFT STATION W/SPURS	ARBUCKLE	0.00	3.48	3.48	6		GR	
0402	NC	33839		POINT SEWER LIFT STATION ROAD	FROM ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD)	TO END	ARBUCKLE	0.00	0.84	0.84	6		GR	
0403	NC	33840		SW PERIMETER DRIVE RESIDENCE ROAD	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END	PLATT	0.00	0.18	0.18	5		GR	
0405	4	33842		BUCKHORN MAINTENANCE ROAD	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 0.67 (ON RIGHT)	TO END OF LOOP	ARBUCKLE	0.17	0.00	0.17	5		AS	3
0406	4	33844		GUY SANDY MAINTENANCE AREA ROAD	FROM ROUTE 0012 (GUY SANDY ROAD)	TO END OF PAVEMENT	ARBUCKLE	0.10	0.00	0.10	6	7,688	AS	6
0407	NC	33845		E1740-CITY SEWAGE PLANT ROAD	FROM ROUTE 5003 (CHARLES F. COOPER MEMORIAL ROAD)	TO CITY SEWAGE PLANT	ARBUCKLE	0.00	0.83	0.83	6		GR	

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Road Inventory Program 10/05/2012

(Numerical By Route #)

Green = All Unpaved Parking Areas

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0408	4	33846		SUPERINTENDENT'S RESIDENCE #7 ROAD	FROM ROUTE 0016 (U.S. HIGHWAY 177)	TO END OF PAVEMENT	PLATT	0.04	0.04	0.07	6	2,344	AS	1
0409	4	33847		RESIDENCE #2 ROAD	FROM ROUTE 0906 (PAVILION SPRINGS)	TO END OF LOOP	PLATT	0.16	0.16	0.32	6	10,074	AS	1
0410	4	33848		MAINTENANCE AREA ROAD	FROM ROUTE 0016 (U.S. HIGHWAY 177)	TO ROUTE 0928 (MAINTENANCE PARKING)	PLATT	0.13	0.00	0.13	5		AS	1
0414	NC	33872		POINT RESIDENCE ROAD	FROM ROUTE 0203 (POINT LAUNCHING RAMP ROAD)	TO ROUTE 0013ZZ (POINT ROADS)	ARBUCKLE	0.00	0.10	0.10	6		GR	
0415	NC	238078		VETERANS LAKE HOUSE ROAD	FROM ROUTE 0216 (CATSEYE ROAD) UNPAVED SECTION	TO UNPAVED PARKING (NPS)	ARBUCKLE	0.00	0.07	0.07	5		GR	
0701	NC			ARBUCKLE ROAD OVERLOOK	FROM LAKE VIEW ROAD AT GATE	TO END OF LOOP	ARBUCKLE	0.00	0.50	0.50			GR	
0900	4	33972		NATURE CENTER PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 4.46 (ON RIGHT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 4.50 (ON RIGHT)	PLATT	0.00	0.00	0.00		43,537	AS	1
0901	4	33975		TRAVERTINE ISLAND PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 4.80 (ON LEFT)	TO PARKING	PLATT	0.00	0.00	0.00		11,294	AS	1
0902	4	55064		LEEPER HOUSE PARKING	ADJACENT TO ROUTE 0410 (MAINTENANCE AREA ROAD) AT MP 0.04 (ON RIGHT)		PLATT	0.00	0.00	0.00		2,782	AS	1
0903	4	33978		BROMIDE HILL PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 1.61 (ON LEFT)	TO PARKING	PLATT	0.00	0.00	0.00		13,589	AS	1
0904ZZ	4	55065		BROMIDE PARKING AREAS	FROM ROUTE 0101A (BROMIDE AREA ROAD A) (ON LEFT AND RIGHT)AND ROUTE 0010 (PERIMETER DRIVE)	TO PARKING AREAS	PLATT	0.00	0.00	0.00		15,893	AS	1
0905	4	33984		BISON VIEWPOINT PARKING	ADJACENT TO ROUTE 0016 (U.S. HIGHWAY 177)		PLATT	0.00	0.00	0.00		4,207	AS	1
0906	4	33985		PAVILION SPRINGS	FROM ROUTE 0016 (U.S. HIGHWAY 177)	TO PARKING	PLATT	0.00	0.00	0.00		13,542	AS	1
0908	4	33986		LITTLE NIAGARA PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 4.31 (ON LEFT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 4.50 (ON LEFT)	PLATT	0.00	0.00	0.00		52,670	AS	1
0909A	4	33987		BUCKHORN PAVILION PARKING AREA	ADJACENT TO ROUTE 0011 (BUCKHORN ROAD) (ON LEFT)		ARBUCKLE	0.00	0.00	0.00		140,509	AS	3

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## CHIC

Rte.	e ted	FMSS	ess		Route De	scription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0909В	4	105818		BUCKHORN LAUNCH PARKING AREA	FROM ROUTE 0011 (BUCKHORN ROAD) (ON RIGHT)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		58,542	AS	3
0911	4	33989		GUY SANDY LAUNCH AREA PARKING	FROM END OF ROUTE 0012 (GUY SANDY ROAD)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		105,255	AS	6
0912	4	33881		VENDOME PARKING	FROM HIGHWAY 7	TO PARKING	PLATT	0.00	0.00	0.00		43,665	AS	1
0913	4	33884		HILLSIDE SPRING PARKING	FROM ROUTE 0016 (U.S. HIGHWAY 177)	TO PARKING	PLATT	0.00	0.00	0.00		7,499	AS	1
0914	4	33992		POINT LAUNCH AREA PARKING	FROM END OF ROUTE 0203 (POINT LAUNCHING RAMP ROAD)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		142,586	AS	5
0915A	4	55071		BEAR FALLS PARKING A	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 5.27 (ON LEFT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 5.30 (ON LEFT)	PLATT	0.00	0.00	0.00		7,019	AS	1
0916	4	55073		BUCKHORN PICNIC F LOOP PARKING	FROM END OF ROUTE 0205 (BUCKHORN TRAIL EAST)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		18,182	AS	3
0917	4	55074		BUCKHORN PICNIC TEARDROP PARKING	FROM END OF ROUTE 0206 (BUCKHORN TRAIL WEST)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		16,290	AS	3
0918	NC	33923		BUCKHORN SUNSET BEACH PARKING	FROM END OF ROUTE 0218 (SUNSET BEACH ROAD)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		4,275	GR	
0920	4	55075		BUCKHORN CG LOOP D RESTROOM PARKING	ADJACENT TO ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE)		ARBUCKLE	0.00	0.00	0.00		1,683	AS	3
0921	4	33930		BUCKHORN RV WASTE STATION PARKING	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 1.23 (ON RIGHT)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		18,352	AS	3
0923	4	33931		GUY SANDY PICNIC AREA PARKING	FROM ROUTE 0201 (GUY SANDY CAMPGROUND ROAD) AT MP 0.06 (ON LEFT)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		6,975	AS	6
0924	4	55076		BLACKJACK PICNIC AREA PARKING	ADJACENT TO ROUTE 0202 (BLACKJACK ROAD) AT MP 0.15 (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		5,590	AS	5
0925	4	55077		POINT PARKING/END OF 110	FROM END OF ROUTE 0013ZZ (POINT ROADS)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		19,457	AS	5
0926 <b>ZZ</b>	4	55078		BROMIDE PARKING WEST	ADJACENT TO ROUTE 0101B (BROMIDE AREA ROAD B) AT MP 0.07 (ON LEFT)		PLATT	0.00	0.00	0.00		11,011	AS	1

<sup>\*</sup>Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

<sup>\*\*</sup> DCV - Data Collection Vehicle

Road Inventory Program 10/05/2012

(Numerical By Route #)

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Shading Color Key: Red text denotes approx. mileage White = Paved Routes, DCV Driven

Yellow = Unpaved Routes, DCV not Driven

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= Concession Route Flag ON

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\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

## CHIC

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0927	3	33938		PARKING AREA EAST OF LIMESTONE CREEK BRIDGE	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 4.75		PLATT	0.00	0.00	0.00		1,370	AS	1
0928	4	55081		MAINTENANCE PARKING	FROM END OF ROUTE 0410 (MAINTENANCE AREA ROAD)	TO PARKING	PLATT	0.00	0.00	0.00		15,803	AS	1
0929	4	33940		BLACK SULPHUR SPRINGS PICNIC PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 0.12 (ON RIGHT)	TO PARKING	PLATT	0.00	0.00	0.00		7,624	AS	1
0930	4	55082		BLACK SULPHUR SPRINGS RESTROOM PARKING	FROM ROUTE 0010 (PERIMETER DRIVE) AT MP 0.17 (ON RIGHT)	TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.18 (ON RIGHT)	PLATT	0.00	0.00	0.00		4,108	AS	1
0931ZZ	4	55083		WALNUT GROVE PICNIC PARKING AREAS	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) (ON LEFT AND RIGHT)		PLATT	0.00	0.00	0.00		18,662	AS	1
0934	4	55097		PANTHER FALLS PARKING	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 5.92 (ON LEFT)		PLATT	0.00	0.00	0.00		2,925	AS	1
0935	4	55098		LINCOLN BRIDGE PARKING	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.02 (ON RIGHT)		PLATT	0.00	0.00	0.00		3,063	AS	1
0940	4	55101		BUCKHORN WALK-IN CAMPGROUND PARKING	ADJACENT TO ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE) (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		4,304	AS	3
0941	4	55102		BUCKHORN AMPHITHEATER PARKING	ADJACENT TO ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE) (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		3,845	AS	3
0942	4	55103		GUY SANDY PARKING	ADJACENT TO ROUTE 0012 (GUY SANDY ROAD) AT MP 0.41 (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		1,741	AS	6
0943	4	104553		BUCKHORN CG LOOP D OVERFLOW PARKING	ADJACENT TO ROUTE 0200DZZ (BUCKHORN CAMPGROUND ROUTE) (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		3,397	AS	3
0944	4	104555		BUCKHORN CAMPGROUND LOOP C PICNIC PARKING	ADJACENT TO ROUTE 0200C (BUCKHORN CAMPGROUND LOOP C) AT MP 0.35 (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		1,130	AS	3

<sup>\*\*</sup> DCV - Data Collection Vehicle

Road Inventory Program 10/05/2012

(Numerical By Route #)

Green = All Unpaved Parking Areas

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Yellow = Unpaved Routes, DCV not Driven

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Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

## CHIC

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0945	4	104556		BUCKHORN CAMPGROUND LOOP C WALK-IN CAMPSITE PARKING	ADJACENT TO ROUTE 0200C (BUCKHORN CAMPGROUND LOOP C) AT MP 0.42 (ON LEFT)	ARBUCKLE	0.00	0.00	0.00		3,610	AS	3
0946	4	104557		BUCKHORN CAMPGROUND LOOP C RESTROOM PARKING	ADJACENT TO ROUTE 0200C (BUCKHORN CAMPGROUND LOOP C) AT MP 0.45 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		1,678	AS	3
0947	4	104558		BUCKHORN CAMPGROUND LOOP B RESTROOM PARKING	ADJACENT TO ROUTE 0200B (BUCKHORN CAMPGROUND LOOP B) AT MP 0.49 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		9,243	AS	3
0948	4	104560		BUCKHORN CAMPGROUND LOOP A PICNIC PARKING	ADJACENT TO ROUTE 0200A (BUCKHORN CAMPGROUND LOOP A) AT MP 0.48 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		1,360	AS	3
0949	4	104561		BUCKHORN CAMPGROUND LOOP A RESTROOM PARKING	ADJACENT TO ROUTE 0200A (BUCKHORN CAMPGROUND LOOP A) AT MP 0.30 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		621	AS	3
0950	4	104562		POINT CAMPGROUND LOOP B PARKING	ADJACENT TO ROUTE 0204  (POINT CAMPGROUND  ACCESS ROAD) AT MP 0.80  (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		2,141	AS	5
0951	4	104563		POINT CAMPGROUND LOOP B CAMPSITES 5-10 PARKING	ADJACENT TO ROUTE 0204  (POINT CAMPGROUND  ACCESS ROAD) AT MP 0.91  (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		2,712	AS	5
0952	4	104564		POINT CAMPGROUND LOOP B CAMPSITES 11-13 PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 0.97 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		2,219	AS	5
0953	4	104567		POINT CAMPGROUND LOOP B CAMPSITES 14-19 PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.00 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		4,000	AS	5
0954	4	104568		POINT CAMPGROUND LAKE OVERLOOK PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.04 (ON RIGHT)	ARBUCKLE	0.00	0.00	0.00		1,367	AS	5

<sup>\*\*</sup> DCV - Data Collection Vehicle

Road Inventory Program 10/05/2012

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= Concession Route Flag ON

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

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

## CHIC

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0955	4	104569		POINT CAMPGROUND LOOP B CAMPSITE 26 PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.11 (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		870	AS	5
0956	4	104570		POINT CAMPGROUND LOOP B CAMPSITES 28-30 PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.16 (ON LEFT)		ARBUCKLE	0.00	0.00	0.00		1,784	AS	5
0957	4	104585		POINT CAMPGROUND RESTROOM PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.19 (ON LEFT)		ARBUCKLE	0.00	0.00	0.00		1,053	AS	5
0958	4	104588		POINT CAMPGROUND LOOP B CAMPSITES 34-37 PARKING	ADJACENT TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.23 (ON LEFT)		ARBUCKLE	0.00	0.00	0.00		2,873	AS	5
0959	4	104591		POINT CAMPGROUND DUMPSTATION	FROM ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 0.51 (ON LEFT)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		12,359	AS	5
0960	4	238080		CENTRAL CAMPGROUND RESTROOM PARKING	ADJACENT TO ROUTE 0208ZZ (CENTRAL CAMPGROUND LOOPS) (ON LEFT)		ARBUCKLE	0.00	0.00	0.00		786	AS	1
0961	4	238070		VETERANS LAKE ACCESS PARKING	ADJACENT TO ROUTE 0214 (VETERANS LAKE ACCESS ROAD) AT MP 0.47 (ON RIGHT)		ARBUCKLE	0.00	0.00	0.00		2,711	AS	1
0968ZZ	5	238071		VETERANS LAKE PARKING AREAS	FROM ROUTE 0215 (VETERANS LAKE ROAD)	TO PARKING	ARBUCKLE	0.00	0.00	0.00		36,690	AS	1
0969ZZ	NC	238081		VETERANS LAKE WEST TRAILHEAD PARKING AREAS	ADJACENT TO ROUTE 0214 (VETERANS LAKE ACCESS ROAD) (ON LEFT AND RIGHT)		ARBUCKLE	0.00	0.00	0.00		4,361	AS	1
0971	NC	237455		CATSEYE PARKING	FROM END OF ROUTE 0216 (CATSEYE ROAD) UNPAVED SECTION	TO PARKING	ARBUCKLE	0.00	0.00	0.00		7,405	GR	
5000	4			CEDAR BLUE ROAD	FROM U.S. HIGHWAY 177	TO BEGIN ROUTE 0100 (CEDAR BLUE ENTRANCE ROAD) AT PARK BOUNDARY	N/A	3.91	0.00	3.91			AS	2,3

<sup>\*\*</sup> DCV - Data Collection Vehicle

Road Inventory Program 10/05/2012

(Numerical By Route #)

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Green = All Unpaved Parking Areas

From the paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

## CHIC

Rte. No.	Cycle ollected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
	ن		Ů											
5001	4			E1780 ROAD (BUCKHORN ROAD, NON NPS SECTION)	FROM U.S. HIGHWAY 177	TO BEGIN ROUTE 0011 (BUCKHORN ROAD) AT PARK BOUNDARY	N/A	1.98	0.00	1.98			AS	2
5002	4			GODDARD YOUTH CAMP ROAD	FROM U.S. HIGHWAY 177	TO HIGHWAY 110	N/A	5.58	0.00	5.58			AS	2,3,4
5003	4			CHARLES F. COOPER MEMORIAL ROAD	FROM STATE ROUTE 7 (WEST BROADWAY AVENUE)	TO BEGIN ROUTE 0013ZZ (POINT ROADS) AT PARK BOUNDARY	N/A	4.63	0.00	4.63			AS	5,8
5004	4			CHICKASAW TRAIL	FROM STATE ROUTE 7 (WEST BROADWAY AVENUE)	TO HIGHWAY 110	N/A	5.23	0.00	5.23			AS	6,7
5005	4			SHEPHERD ROAD	FROM STATE ROUTE 7 (WEST BROADWAY AVENUE)	TO INTERSECTION OF ROUTE 5006 (PRIMROSE ROAD) AND STATE RAMP ROAD	N/A	1.99	0.00	1.99			AS	7
5006	4			PRIMROSE ROAD	FROM ROUTE 5004 (CHICKASAW TRAIL) AT MP 1.99 (ON LEFT)	TO INTERSECTION OF ROUTE 5005 (SHEPHERD ROAD) AND STATE RAMP ROAD	N/A	1.00	0.00	1.00			AS	7

<sup>\*</sup>Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

<sup>\*\*</sup> DCV - Data Collection Vehicle

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Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	= Concession Route Flag ON	

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

#### CYCLE 5 COLLECTED SUMMARY TOTALS FOR CHICKASAW NATIONAL RECREATION AREA CYCLE 5 COLLECTED CONCESSION TOTALS **CYCLE 5 COLLECTED ROUTE TOTALS Concession Paved Route Miles** 0.00 **DCV Driven Route Miles** 11.83 Concession Paved Parking Area SQFT **Manually Rated Route Miles** 0.00 TOTAL PARK ROUTE MILES COLLECTED IN CYCLE 5 11.83 **Concession Manually Rated Rotes SQFT** Manually Rated Routes (SQFT) 0 CYCLE 5 COLLECTED WEIGHTED AVERAGE PARK VALUES CYCLE 5 COLLECTED PARKING AREA TOTALS DCV Driven PCR 81 Paved Parking (SQFT) 811 \*\*Manually Rated Routes PCR N/A \*\*Parking PCR 73 \*\*\*Total Equivalent Lane Miles 23.75

TOTAL PARK SUMMARY	TOTAL PARK SUMMARY FOR CHICKASAW NATIONAL RECREATION AREA									
ROUTE TOTALS										
TOTAL PAVED PARK ROUTE MILES	21.87									
TOTAL PAVED PARKING (SQFT)	920,539									

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

<sup>\*</sup>Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

<sup>\*\*</sup> DCV - Data Collection Vehicle

<sup>\*\* -</sup> 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.

<sup>\*\*\* -</sup> 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.

Road Inventory Program 10/05/2012

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\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

#### **General Park Road Functional Classification Table**

- Class 1 Principal Park Road/Rural Parkway (Public Roads) Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors.

  Route Numbers 1 99. Note: Rural parkways (e.g. Natchez Trace) are numbered 1 9. State Routes Inventoried for Park. Route Numbers 5000-5999
- Class 2 Connector Park Road (Public Roads) Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, camparounds, etc. Route Numbers 100-199.
- <u>Class 3</u> Special Purpose Park Road (Public Roads) Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.
- Class 4 Primitive Park Roads (Public Roads) Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Route Numbers 200-299.

  Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.
- <u>Class 5</u> Administrative Access Road (Administrative Roads) All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas. Route Numbers 400-499.
- Class 6
  Restricted Road (Administrative Roads) All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Route Numbers 400-499.
  Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.
- Class 7 Urban Parkway (Urban Parkways and City Streets) These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category. Route Numbers 1-9.
- Class 8 City Streets (Urban Parkways and City Streets) City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

A park road system contains those roads within or giving access to a park or other unit of the NPS which are administered by the NPS, or by the Service in cooperation with other agencies. The assignment of a functional classification (FC) to a park road is not based on traffic volumes or design speed, but on the intended use or function of that road or route.

The historic route numbering system also included a 300 number series for interpretive roads, and a 500 series for one-way roads. There are approximately 250 roads nationwide which are designated by the 300 and 500 series. The numbers for these roads will be maintained for reporting consistency. However, since these interpretive and one-way routes are not as clearly tied to a specific functional class, the 300 and 500 series will be discontinued for future use.

5000 route numbers are assigned to Non-NPS Routes that are State, County or City owned which border, traverse, or provide access to Park Facilities or Assets. 5000 Routes are driven for GPS and Video Log only.

#### **Surface Type Abbreviations:**

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- **AS Asphaltic Concrete Pavement**
- CO Portland Cement Concrete Pavement
- BR Brick or Pavers Road Bed CB - Cobble Stone Road Bed
- GR Gravel Road Bed
- SA Sand Road Bed
- NV Native or Dirt Material Road Bed
- OT Other Materials Road Bed

<sup>\*\*</sup> DCV - Data Collection Vehicle

Road Inventory Program 10/05/2012

(Numerical By Subcomponent #)

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## CHIC

Rte.	FMSS	cle llected		Route Des	cription	Concess Route	JC.	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	ည်ပို့ လ	Route Name	From	То	S S	Func. Class	Miles	Miles	Length	SQ/FT
0013ZZ	33517	5	POINT ROADS	FROM END OF ROUTE 5003 (CHARLES F. COOPER MEMORIAL ROAD) AT PARK BOUNDARY	TO ROUTE 0925 (POINT PARKING/END OF 110)		1	1.09	0.00	1.09	
0200DZZ	54891	4	BUCKHORN CAMPGROUND ROUTE	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 0.56 (ON LEFT)	THROUGH CAMPGROUND		3	0.79	0.00	0.79	
0207ZZ	33539	4	COLD SPRINGS CAMPGROUND ROADS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND		3	0.90	0.00	0.90	47,826
0208ZZ	33541	4	CENTRAL CAMPGROUND LOOPS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND		3	0.48	0.00	0.48	<u> </u>
0209ZZ	33543	5	ROCK CREEK CAMPGROUND ROADS	FROM ROUTE 0010 (PERIMETER DRIVE)	THROUGH CAMPGROUND		3	1.59	0.00	1.59	<u> </u>
0904ZZ	55065	4	BROMIDE PARKING AREAS	FROM ROUTE 0101A (BROMIDE AREA ROAD A) (ON LEFT AND RIGHT)AND ROUTE 0010 (PERIMETER DRIVE)	TO PARKING AREAS			0.00	0.00	0.00	15,893
0926ZZ	55078	4	BROMIDE PARKING WEST	ADJACENT TO ROUTE 0101B (BROMIDE AREA ROAD B) AT MP 0.07 (ON LEFT)				0.00	0.00	0.00	11,011
0931ZZ	55083	4	WALNUT GROVE PICNIC PARKING AREAS	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) (ON LEFT AND RIGHT)				0.00	0.00	0.00	18,662
0968ZZ	238071	5	VETERANS LAKE PARKING AREAS	FROM ROUTE 0215 (VETERANS LAKE ROAD)	TO PARKING			0.00	0.00	0.00	36,690
0969ZZ	238081	NC	VETERANS LAKE WEST TRAILHEAD PARKING AREAS	ADJACENT TO ROUTE 0214 (VETERANS LAKE ACCESS ROAD) (ON LEFT AND RIGHT)				0.00	0.00	0.00	4,361

Asset	CHIC-	00	13ZZ Subcomponent E	3reakdown							ļ
Rte.	FMSS	cle llected		Route Desc	cription	ncess ute	JC. SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	ػؖػٙ	Route Name	From	То	<u> </u>	Fur Cla	Miles	Miles	Length	SQ/FT
0013AZ	33517	5	POINT ROAD	FROM END OF ROUTE 5003 (CHARLES F. COOPER MEMORIAL ROAD) AT PARK BOUNDARY	TO ROUTE 0925 (POINT PARKING/END OF 110)		1	1.06	0.00	1.06	
0013BZ	33517	5	POINT ROAD SPUR	FROM ROUTE 0013AZ (POINT ROAD)	TO ROUTE 0203 (POINT LAUNCHING RAMP ROAD)		1	0.03	0.00	0.03	

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## CHIC

Asset	CHIC-	-02	00DZZ Subcomponent	Breakdown							
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De From	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0200DAZ	54891	4	BUCKHORN CAMPGROUND LOOP D CONNECTOR ROAD A	FROM ROUTE 0200DZ (BUCKHORN CAMPGROUND LOOP D) AT MP 0.34 (ON LEFT)	TO ROUTE 0200DZ (BUCKHORN CAMPGROUND LOOP D) AT MP 0.54 (ON LEFT)		3	0.05	0.00	0.05	
0200DBZ	54891	4	BUCKHORN CAMPGROUND LOOP D CONNECTOR ROAD B	FROM ROUTE 0200DZ (BUCKHORN CAMPGROUND LOOP D) AT MP 0.400 (ON LEFT)	TO ROUTE 0200DZ (BUCKHORN CAMPGROUND LOOP D) AT MP 0.47 (ON LEFT)		3	0.06	0.00	0.06	
0200DZ	54891	4	BUCKHORN CAMPGROUND LOOP D	FROM ROUTE 0011 (BUCKHORN ROAD) AT MP 0.56 (ON LEFT)	TO END OF LOOP		3	0.68	0.00	0.68	

CHIC-	02	07ZZ Subcomponent E	Breakdown							
FMSS No.	Cycle Collected	Route Name	Route D	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
33539	4	COLD SPRINGS CAMPGROUND ROAD A	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END OF LOOP		3	0.57	0.00	0.57	30,202
33539	4	COLD SPRINGS CAMPGROUND ROAD B	FROM ROUTE 0207AZ (COLD SPRINGS CAMPGROUND ROAD A)	TO ROUTE 0207AZ (COLD SPRINGS CAMPGROUND ROAD A)		3	0.26	0.00	0.26	13,675
33539	4	COLD SPRINGS CAMPGROUND ROAD C	FROM ROUTE 0207AZ (COLD SPRINGS CAMPGROUND ROAD A)	TO ROUTE 0207AZ (COLD SPRINGS CAMPGROUND ROAD A)		3	0.03	0.00	0.03	1,800
33539	4	COLD SPRINGS CAMPGROUND ROAD D	FROM ROUTE 0207AZ (COLD SPRINGS CAMPGROUND ROAD A)	TO ROUTE 0207BZ (COLD SPRINGS CAMPGROUND ROAD B)		3	0.04	0.00	0.04	2,149
	FMSS No. 33539 33539 33539	FMSS No. 33539 4 33539 4 33539 4	FMSS No. So To Route Name  33539 4 COLD SPRINGS CAMPGROUND ROAD A  33539 4 COLD SPRINGS CAMPGROUND ROAD B  33539 4 COLD SPRINGS CAMPGROUND ROAD C	Route Name  From  Route Name  From  Route Name  From  Route Name  From  Route Old Springs Campground Road A From Route 0010 (Perimeter Drive)  Route Name From Route 0010 (Perimeter Drive)  Route Name From Route 0010 (Perimeter Drive)  Route Name From Route 0010 (Perimeter Drive)  From Route 0010 (Perimeter Drive)  Route Name From Route 0010 (	Route Description  Route Name  From  To  Cold Springs Campground Road a From Route 0207AZ (Cold Springs Campground Road a)  To Route 0207AZ (Cold Springs Campground Road a)	Route Description  Route Name  From  To  Cold Springs Campground Road A  From Route 0207AZ (Cold Springs Campground Road A)  From Route 0207AZ (Cold Springs Campground Road A)  From Route 0207AZ (Cold Springs Campground Road A)  From Route 0207AZ (Cold To Route 0207AZ (Cold Springs Campground Road A)  To Route 0207AZ (Cold Springs Campground Road A)	Route Description  Route Name From To  SS et 25	Route Description  Route Name From To  Solve Local Paved Miles  Route Name From To  Cold Springs Campground Road A FROM ROUTE 0010 (PERIMETER DRIVE)  33539  4 COLD Springs Campground Road B FROM ROUTE 0207AZ (COLD CAMPGROUND ROAD A) FROM ROUTE 0207AZ (COLD Springs Campground Road A) FROM ROUTE 0207AZ (COLD Springs Campground Road A) FROM ROUTE 0207AZ (COLD Springs Campground Road A) To ROUTE 0207AZ (COLD Springs Campground Road A)  Campground Road A)	Route Description  Route Description  Route Description  Route Name  From  To  Route Description  Route Description  Route Description  Route Description  To  Paved Miles  All Cold Springs CAMPGROUND ROAD A FROM ROUTE 0010 (PERIMETER DRIVE)  To END OF LOOP  DRIVE)  To Route Description  To  Route	Route Description  To  Route Name  From  To  Route Name  From  To  Route Description  To  Route Desc

Asset	CHIC	-020	08ZZ Subcomponent I	Breakdown							
Rte.	FMSS	cle llected		Route Desc	ription	Concess Route	Func. Class	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cyc Col	Route Name	From	То	ပိ မိ	S.S.	Miles	Miles	Length	SQ/FT
0208AZ	33541	4	CENTRAL CAMPGROUND ROAD A	FROM ROUTE 0010 (PERIMETER DRIVE)	TO END OF LOOP		3	0.24	0.00	0.24	
0208BZ	33541	4	CENTRAL CAMPGROUND ROAD B	FROM ROUTE 0208AZ (CENTRAL CAMPGROUND ROAD A)	TO END OF LOOP		3	0.24	0.00	0.24	

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Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

## CHIC

Rte.	FMSS	sle llected		Route De	escription	ncess ute	SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	ςς 20	Route Name	From	То	Conce	Func. Class	Miles	Miles	Length	SQ/FT
0209AZ	33543	5	ROCK CREEK CAMPGROUND ROAD A	FROM ROUTE 0010 (PERIMETER DRIVE)	TO ROUTE 0010 (PERIMETER DRIVE)		3	0.75	0.00	0.75	
0209BZ	33543	5	ROCK CREEK CAMPGROUND ROAD B	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO END OF LOOP		3	0.35	0.00	0.35	
0209CZ	33543	5	ROCK CREEK CAMPGROUND ROAD C	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.05	0.00	0.05	
0209DZ	33543	5	ROCK CREEK CAMPGROUND ROAD D	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.06	0.00	0.06	
0209EZ	33543	5	ROCK CREEK CAMPGROUND ROAD E	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.07	0.00	0.07	
0209FZ	33543	5	ROCK CREEK CAMPGROUND ROAD F	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.07	0.00	0.07	
0209GZ	33543	5	ROCK CREEK CAMPGROUND ROAD G	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.08	0.00	80.0	· ·
0209HZ	33543	5	ROCK CREEK CAMPGROUND ROAD H	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.06	0.00	0.06	· ·
02091Z	33543	5	ROCK CREEK CAMPGROUND ROAD I	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)		3	0.09	0.00	0.09	· · · · · · · · · · · · · · · · · · ·

ASSEL	CHIC.	-091 R	04ZZ Subcomponent I	Sieakuowii		Ø					
Rte. No.	FMSS No.	Cycle Collecte	Route Name	Route De From	scription To	Conces: Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0904AZ	55065	4	B20 LAB PARKING	FROM ROUTE 0101A (BROMIDE AREA ROAD A) AT MP 0.05 (ON LEFT)	TO ROUTE 0101A (BROMIDE AREA ROAD A) AT MP 0.20 (ON LEFT)			0.00	0.00	0.00	10,188
0904BZ	55065	4	BROMIDE ROAD PARKING	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.94 (ON LEFT)				0.00	0.00	0.00	2,336
0904CZ	55065	4	EAST BROMIDE PAVILION PARKING	ADJACENT TO ROUTE 0101A (BROMIDE AREA ROAD A) AT MP 0.06 (ON RIGHT)				0.00	0.00	0.00	2,064
0904DZ	55065	4	JOB CORPS BRIDGE PARKING	ADJACENT TO ROUTE 0101A (BROMIDE AREA ROAD A) AT MP 0.24 (ON LEFT)				0.00	0.00	0.00	1,305

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CHIC

Rte.	FMSS	le lected		Route Descrip	tion	icess	S. S.	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Collec	Route Name	From	То	Conce Route	Func. Class	Miles	Miles	Length	SQ/FT
0926AZ	55078	4	BROMIDE HOUSE PARKING	ADJACENT TO ROUTE 0101B (BROMIDE AREA ROAD B) AT MP 0.04 (ON RIGHT)				0.00	0.00	0.00	1,178
0926BZ	55078	4	BROMIDE RV AREA PARKING	ADJACENT TO ROUTE 0101B (BROMIDE AREA ROAD B) AT MP 0.06 (ON RIGHT)				0.00	0.00	0.00	3,907
0926CZ	55078	4	BROMIDE PAVILION AREA PARKING	ADJACENT TO ROUTE 0101B (BROMIDE AREA ROAD B) AT MP 0.07 (ON LEFT)				0.00	0.00	0.00	5,926

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CHIC

Rte.	FMSS No.	Cycle Collected	Barda Nama	Route Descriptio		Concess Route	Func. Class	Paved	Un- Paved	Total Route	Manual Rated
No.	NO.	ပ်ပဲ	Route Name	From	То	<u>ن</u> ک	<u> </u>	Miles	Miles	Length	SQ/FT
0931AZ	55083	4	WALNUT GROVE PICNIC AREA PARKING A	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.34 (ON RIGHT)				0.00	0.00	0.00	2,386
0931BZ	55083	4	WALNUT GROVE PICNIC AREA PARKING B	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.36 (ON RIGHT)				0.00	0.00	0.00	870
0931CZ	55083	4	WALNUT GROVE PICNIC AREA PARKING C	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.39 (ON RIGHT)				0.00	0.00	0.00	3,328
0931DZ	55083	4	WALNUT GROVE PICNIC AREA PARKING D	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.42 (ON RIGHT)				0.00	0.00	0.00	4,725
0931EZ	55083	4	WALNUT GROVE PICNIC AREA PARKING E	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.48 (ON RIGHT)				0.00	0.00	0.00	1,059
0931FZ	55083	4	WALNUT GROVE PICNIC AREA PARKING F	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.50 (ON RIGHT)				0.00	0.00	0.00	1,489
0931GZ	55083	4	WALNUT GROVE PICNIC AREA PARKING G	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.52 (ON RIGHT)				0.00	0.00	0.00	1,142
0931HZ	55083	4	WALNUT GROVE PICNIC AREA PARKING H	ADJACENT TO ROUTE 0010 (PERIMETER DRIVE) AT MP 0.51 (ON LEFT)				0.00	0.00	0.00	3,663

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## CHIC

Asset	CHIC	-09	68ZZ Subcomponent E	Breakdown							
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Descripti From	on To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0962Z	238071	4	VETERANS LAKE BOAT LAUNCH PARKING	ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.25 (ON RIGHT)				0.00	0.00	0.00	5,848
0963Z	238071	4	VETERANS LAKE ROAD PARKING C	ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.38 (ON RIGHT)				0.00	0.00	0.00	1,431
0964Z	238071	4	VETERANS LAKE ROAD PARKING D	ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.48 (ON RIGHT)				0.00	0.00	0.00	1,504
0965Z	238071	4	VETERANS LAKE ROAD PARKING E	ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.50 (ON RIGHT)				0.00	0.00	0.00	917
0966Z	238071	5	VETERANS LAKE ROAD PARKING F	ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.52 (ON RIGHT)				0.00	0.00	0.00	811
0967Z	238071	4	EAST TRAILHEAD PARKING	FROM END OF ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.67	TO PARKING			0.00	0.00	0.00	8,610
0968Z	238071	4	VETERANS LAKE PAVILION PARKING AREA	FROM ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.31 (ON RIGHT)	TO PARKING			0.00	0.00	0.00	17,569

Asset	CHIC-	09	69ZZ Subcomponent E	Breakdown							
Rte.	FMSS	Cycle Collected		Route Descripti	on	ncess ute	unc. Slass	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	රිරි	Route Name	From	То	Conc	Fur	Miles	Miles	Length	SQ/FT
0969AZ	238081	NC	VETERANS LAKE WEST TRAILHEAD PARKING A	ADJACENT TO ROUTE 0214 (VETERANS LAKE ACCESS ROAD) (ON LEFT)				0.00	0.00	0.00	2,481
0969BZ	238081	NC	VETERANS LAKE WEST TRAILHEAD PARKING B	ADJACENT TO ROUTE 0214 (VETERANS LAKE ACCESS ROAD) (ON RIGHT)				0.00	0.00	0.00	1,880

	ROUTES	S ADDED FROM PREVIOUS IN	VENTORY:
Route #	Route Name	Reason for Addition	Comments
0016	U.S. HIGHWAY 177	OTHER	NEW PAVED ROUTE ADDED AFTER DATA COLLECTION VEHICLE VISIT PER THE PARK'S REQUEST. THE NPS SHARES MAINTENANCE RESPONSIBILITY WITH THE STATE.
0927	PARKING AREA EAST OF LIMESTONE CREEK BRIDGE	OTHER	ROUTE WAS COLLECTED IN CYCLE 3 AND REMOVED FROM THE RIP INVENTORY IN CYCLE 4. IT WAS ADDED BACK TO THE RIP INVENTORY AFTER THE DATA COLLECTION VEHICLE VISIT TO THE PARK PER THE PARK'S REQUEST.
0969ZZ	VETERANS LAKE WEST TRAILHEAD PARKING AREAS	OTHER	NEW PAVED ROUTE ADDED DURING CYCLE 5 ROUTE ID MEETING PER PARK'S REQUEST.
	ROUTES	MODIFIED FROM PREVIOUS II	NVENTORY:
Route #	Route Name	Type of Modification	Comments
0013ZZ	POINT ROADS	OTHER	SPUR ADDED AND COMBINED WITH ROUTE 0013 IN CYCLE 5 PER THE PARK'S REQUEST.
0202	BLACKJACK ROAD	OTHER	ROUTE IS NOW UNPAVED PAST ROUTE 0924. AS A RESULT, THE PAVED ROUTE LENGTH DECREASED FROM 0.310 MILES IN CYCLE 4 TO APPROXIMATELY 0.140 MILES IN CYCLE 5. THE TOTAL ROUTE LENGTH HAS NOT CHANGED. ROUTE NAME CHANGED FROM "POINT PICNIC SPUR" TO "BLACKJACK ROAD."
0207ZZ	COLD SPRINGS CAMPGROUND ROADS	ROUTES COMBINED	CYCLE 4 ROUTES 0207A-0207D WERE COMBINED DURING THE CYCLE 5 ROUTE ID MEETING PER THE PARK'S REQUEST.
0904ZZ	BROMIDE PARKING AREAS	ROUTES COMBINED	CYCLE 4 ROUTES 0904A-0904D WERE COMBINED DURING THE CYCLE 5 ROUTE ID MEETING PER THE PARK'S REQUEST.
0926ZZ	BROMIDE PARKING WEST	ROUTES COMBINED	CYCLE 4 ROUTES 0926A-0926C WERE COMBINED DURING THE CYCLE 5 ROUTE ID MEETING PER THE PARK'S REQUEST.

ROUTES MODIFIED FROM PREVIOUS INVENTORY:							
Route #	tte # Route Name Type of Modification Comments						
0931ZZ	WALNUT GROVE PICNIC PARKING AREAS	ROUTES COMBINED	CYCLE 4 ROUTES 0931A-0931H WERE COMBINED DURING THE CYCLE 5 ROUTE ID MEETING PER THE PARK'S REQUEST.				
0968ZZ	VETERANS LAKE PARKING AREAS	ROUTES COMBINED	CYCLE 4 ROUTES 0962-0968 WERE COMBINED DURING THE C5 ROUTE ID MEETING PER THE PARK'S REQUEST.				

OTHER CHANGES FROM PREVIOUS INVENTORY:							
Route #	Route Name	Type of Change	Comments				
0204A	POINT CAMPGROUND CONNECTOR	COLLECTION METHOD CHANGE	ROUTE COLLECTED WITH THE DATA COLLECTION VEHICLE PER THE PARK'S REQUEST.				
0209ZZ	ROCK CREEK CAMPGROUND ROADS	COLLECTION METHOD CHANGE	IN CYCLE 4 THIS CAMPGROUND WAS MANUALLY RATED, IN CYCLE 5 IT WAS DRIVEN WITH THE COLLECTION VEHICLE.				
0216	CATSEYE ROAD	OTHER	UNPAVED ROUTE LENGTH INCREASED FROM APPROXIMATELY 0.150 MILES TO APPROXIMATELY 0.448 MILES. ROUTE NAME CHANGED FROM "VETERANS LAKE - ROCK CREEK ROAD" TO "CATSEYE ROAD."				
0217	EAGLE BAY BOAT LAUNCH ROAD	OTHER	ROUTE NAME CHANGED FROM "STATE RAMP BOAT LAUNCH ROAD" TO "EAGLE BAY BOAT LAUNCH ROAD."				
0405	BUCKHORN MAINTENANCE ROAD	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS (FC) CHANGED FROM FC 6 TO FC 5. THIS IS AN ADMINISTRATIVE ROAD WITH PUBLIC ACCESS ALLOWED. ROUTE NAME CHANGED FROM "BUCKHORN UTILITY ROAD" TO "BUCKHORN MAINTENANCE ROAD."				
0406	GUY SANDY MAINTENANCE AREA ROAD	OTHER	ROUTE NAME CHANGED FROM "GUY SANDY WATER TREATMENT ROAD" TO "GUY SANDY MAINTENANCE AREA ROAD."				
0408	SUPERINTENDENT'S RESIDENCE #7 ROAD	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS (FC) CHANGED FROM FC 5 TO FC 6. THIS IS AN ADMINISTRATIVE ROAD WITH RESTRICTED ACCESS.				
0409	RESIDENCE #2 ROAD	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS (FC) CHANGED FROM FC 5 TO FC 6. THIS IS AN ADMINISTRATIVE ROAD WITH RESTRICTED ACCESS.				
0410	MAINTENANCE AREA ROAD	OTHER	ROUTE NAME CHANGED FROM "HEADQUARTERS UTILITIES AREA ROAD" TO "MAINTENANCE AREA ROAD."				
0902	LEEPER HOUSE PARKING	OTHER	ROUTE NAME CHANGED FROM "HEADQUARTERS PARKING" TO "LEEPER HOUSE PARKING."				

OTHER CHANGES FROM PREVIOUS INVENTORY:							
Route #	Route Name	Type of Change	Comments				
0909A	BUCKHORN PAVILION PARKING AREA	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN LAUNCH PARKING AREA A" TO "BUCKHORN PAVILION PARKING AREA."				
0909B	BUCKHORN LAUNCH PARKING AREA	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN LAUNCH PARKING AREA B" TO "BUCKHORN LAUNCH PARKING AREA."				
0916	BUCKHORN PICNIC F LOOP PARKING	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN PICNIC A PARKING" TO "BUCKHORN PICNIC F LOOP PARKING."				
0917	BUCKHORN PICNIC TEARDROP PARKING	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN PICNIC B PARKING" TO "BUCKHORN PICNIC TEARDROP PARKING."				
0921	BUCKHORN RV WASTE STATION PARKING	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN WASTE STATION PARKING" TO "BUCKHORN RV WASTE STATION PARKING."				
0924	BLACKJACK PICNIC AREA PARKING	OTHER	ROUTE NAME CHANGED FROM "POINT PICNIC AREA PARKING" TO "BLACKJACK PICNIC AREA PARKING."				
0925	POINT PARKING/END OF 110	OTHER	ROUTE NAME CHANGED FROM "POINT PARKING" TO "POINT PARKING/END OF 110."				
0943	BUCKHORN CG LOOP D OVERFLOW PARKING	OTHER	ROUTE NAME CHANGED FROM "BUCKHORN CAMPGROUND LOOP D RESTROOM PARKING" TO "BUCKHORN CG LOOP D OVERFLOW PARKING."				

## **Section 3 Park Summary Information**



Chickasaw National Recreation Area



## CHIC: PAVED ROUTE MILES AND PERCENTAGES BY FUNCTIONAL CLASS AND PCR

	Pavement Condition Rating (PCR)								
	Poor (	0-60)	Fair (6	1-84)	Good (85-94)		Excellent (95-100)		TOTAL
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1	0.15	1.27%	1.61	13.61%	3.41	28.83%	4.28	36.18%	9.45
2	0.08	0.68%	0.21	1.78%	0.18	1.52%	0.04	0.34%	0.51
3	1.45	12.26%	0.14	1.18%	0.07	0.59%	0.21	1.78%	1.87
4									
5									
6									
7									
8									
Totals	1.68	14.20%	1.96	16.57%	3.66	30.94%	4.53	38.29%	11.83

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.

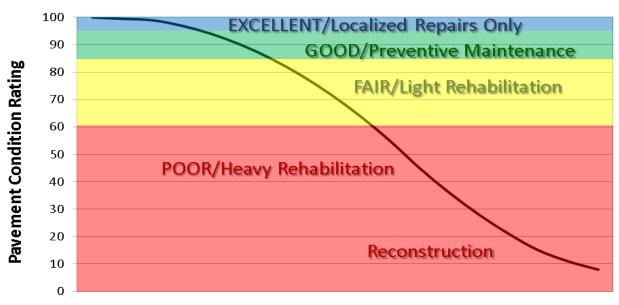
#### Explanation of the Excellent, Good, Fair and Poor Condition Descriptions

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**

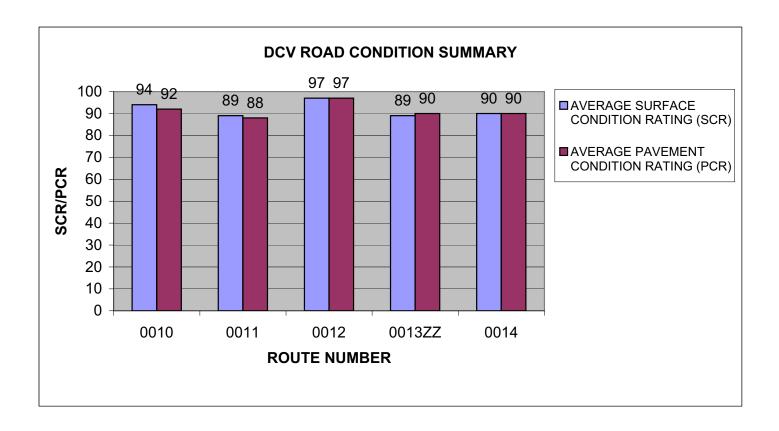


**Pavement Age** 

#### **CHIC: DCV ROAD CONDITION SUMMARY**

DCV - Data Collection Vehicle

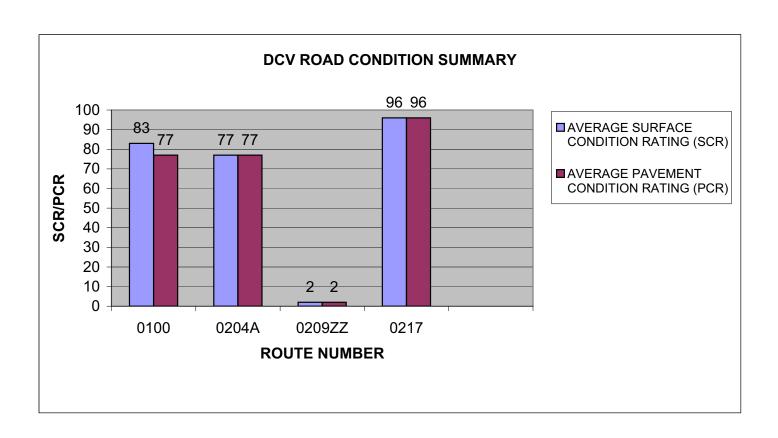
ROUTE NUMBER	ROUTE NAME	101.01	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	PERIMETER DRIVE	1	6.23	ASPHALT	94	92
0011	BUCKHORN ROAD	1	1.62	ASPHALT	89	88
0012	GUY SANDY ROAD	1	0.46	ASPHALT	97	97
0013ZZ	POINT ROADS	1	1.09	ASPHALT	89	90
0014	TWELFTH STREET ENTRANCE ROAD	1	0.05	ASPHALT	90	90



### **CHIC: DCV ROAD CONDITION SUMMARY**

DCV - Data Collection Vehicle

					AVERAGE SURFACE	AVERAGE PAVEMENT
ROUTE		FUNCT	PAVED	SURFACE	CONDITION	CONDITION
NUMBER	ROUTE NAME	CLASS	LENGTH	TYPE	RATING (SCR)	RATING (PCR)
0100	CEDAR BLUE ENTRANCE ROAD	2	0.51	ASPHALT	83	77
0204A	POINT CAMPGROUND CONNECTOR	3	0.03	ASPHALT	77	77
0209ZZ	ROCK CREEK CAMPGROUND ROADS	3	1.59	ASPHALT	2	2
0217	EAGLE BAY BOAT LAUNCH ROAD	3	0.26	ASPHALT	96	96



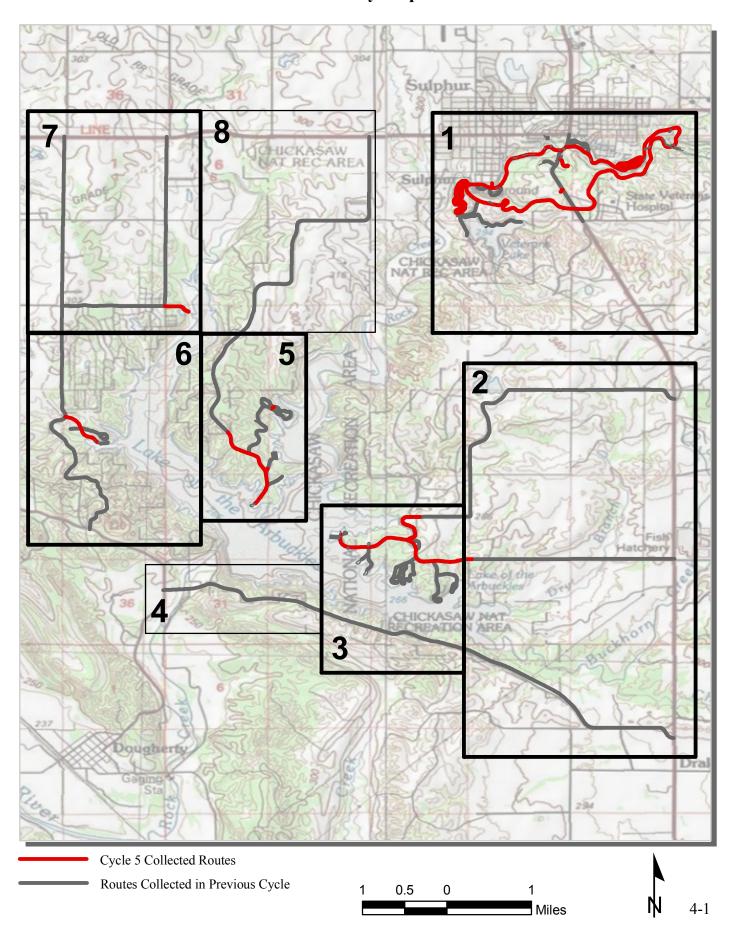
## Section 4 Park Route Location Maps



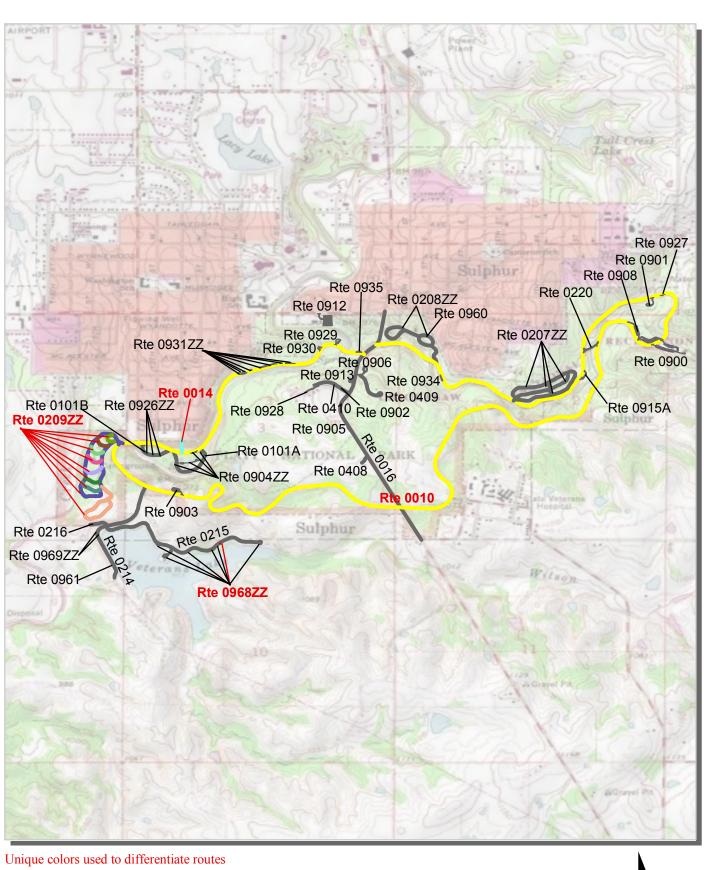
Chickasaw National Recreation Area



### Chickasaw National Recreation Area Route Location Map Key Map

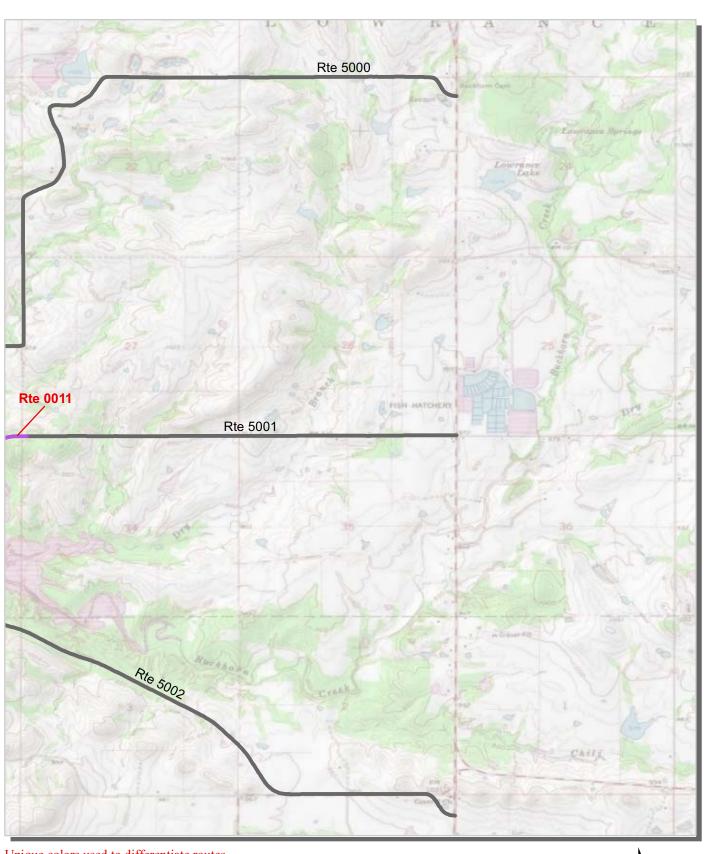


### Chickasaw National Recreation Area Route Location Map Area 1

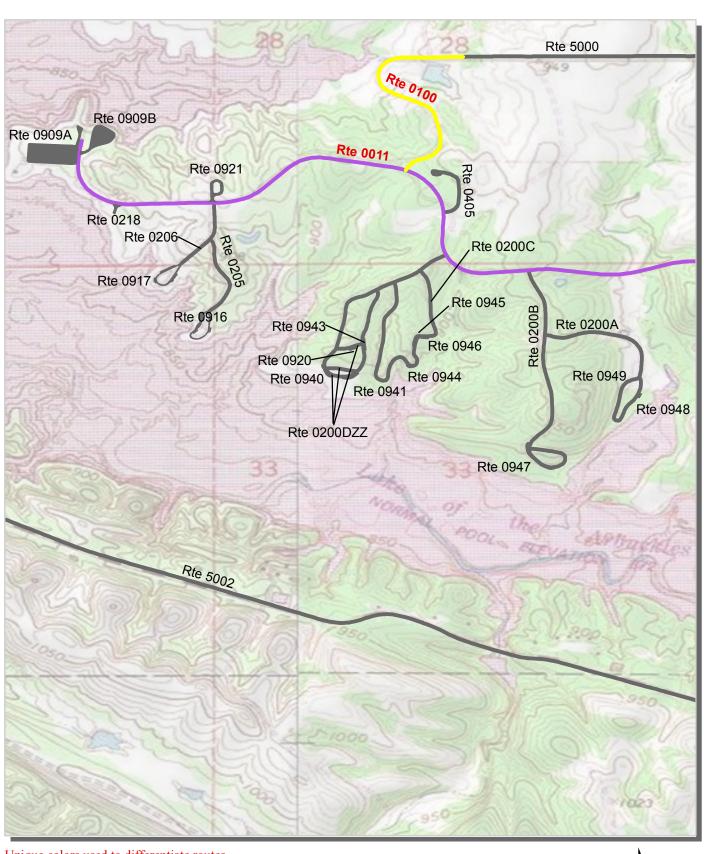


Routes Collected in Previous Cycle





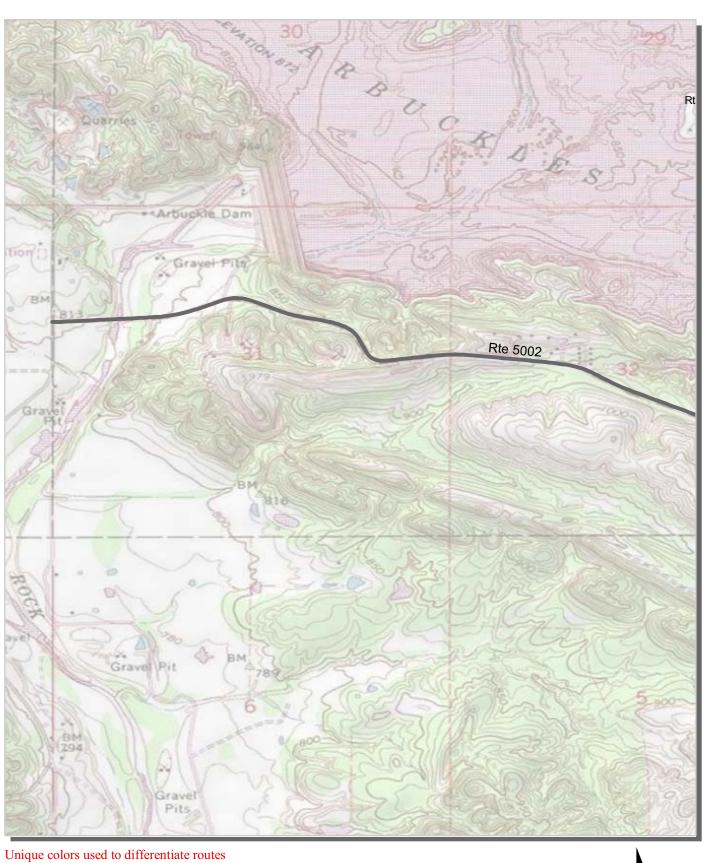
Unique colors used to differentiate routes



Unique colors used to differentiate routes

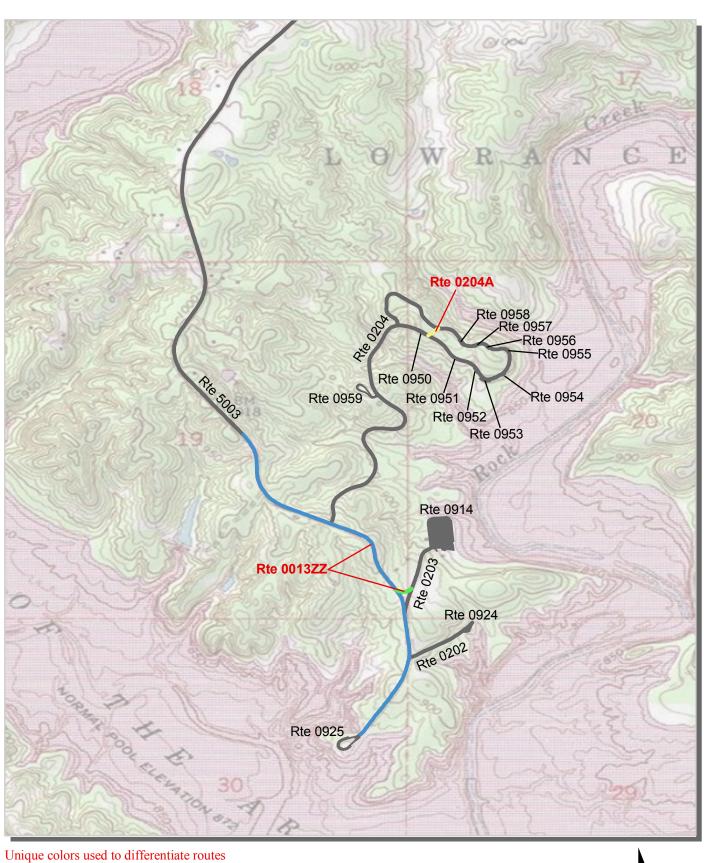
Routes Collected in Previous Cycle

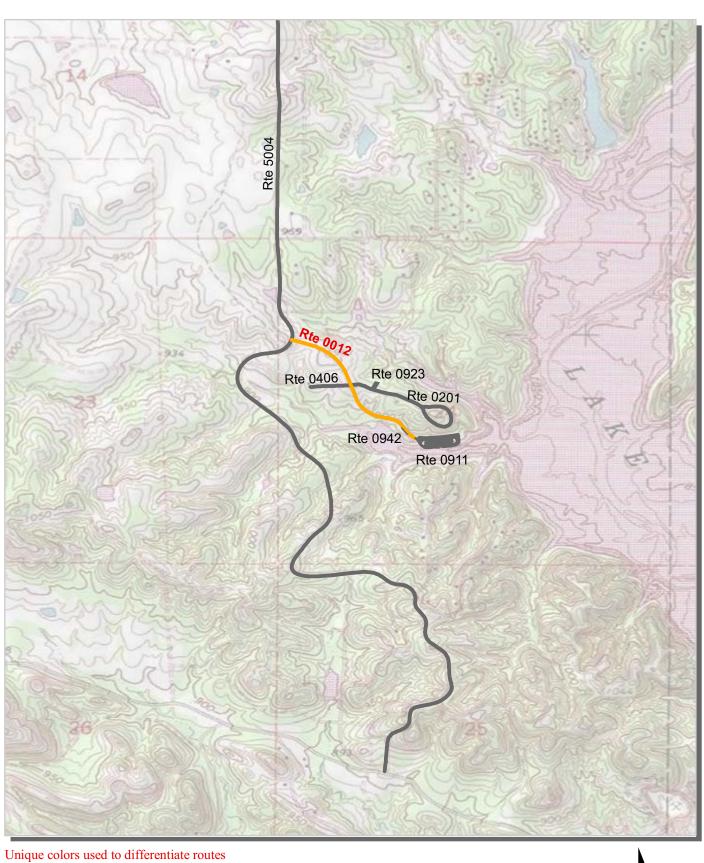
0.25 0.125 0 0.25 Miles



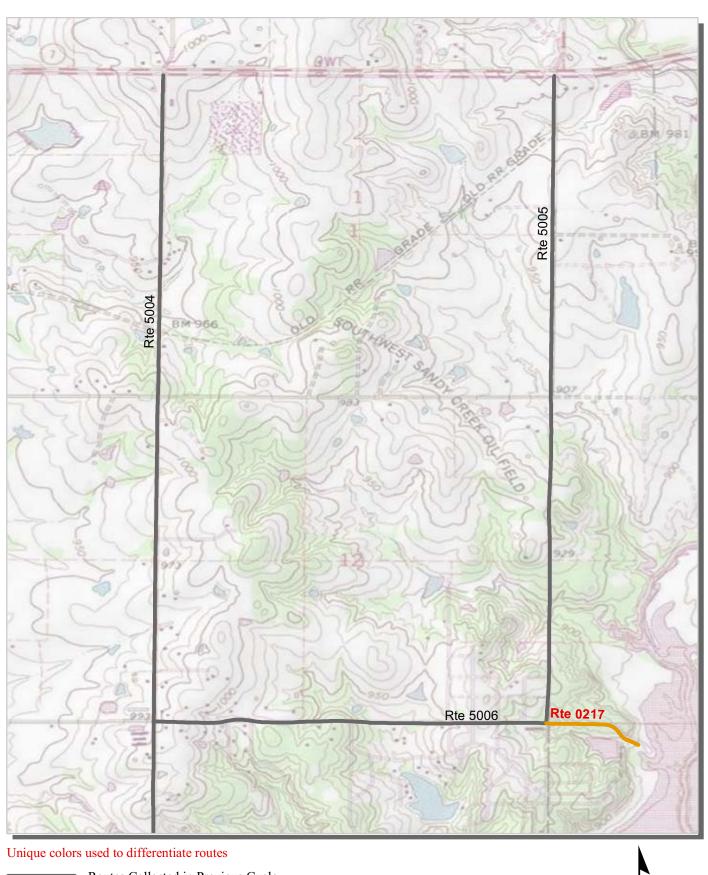
Routes Collected in Previous Cycle

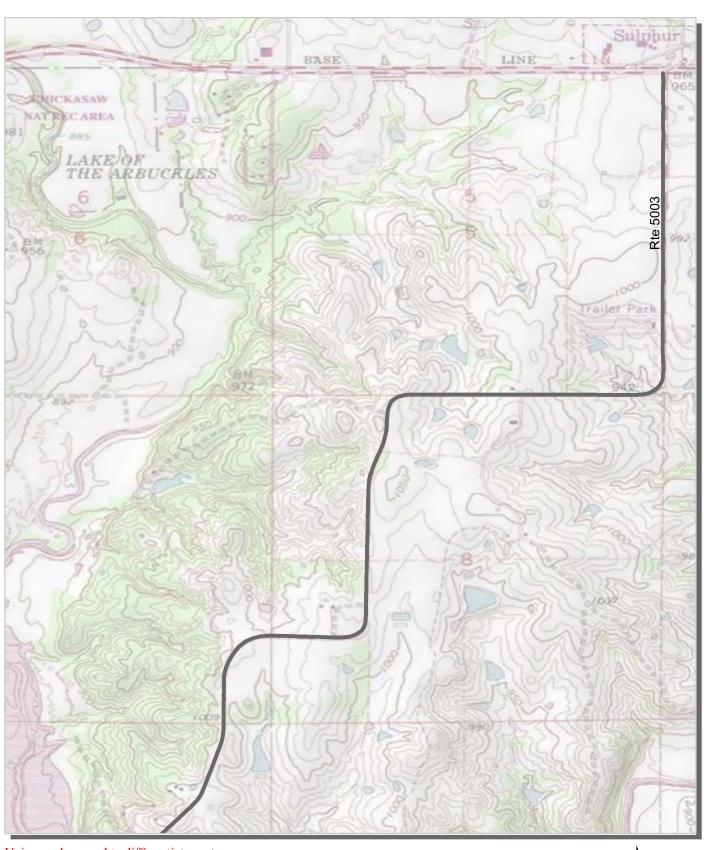
0.3 0.15 0 0.3 Miles





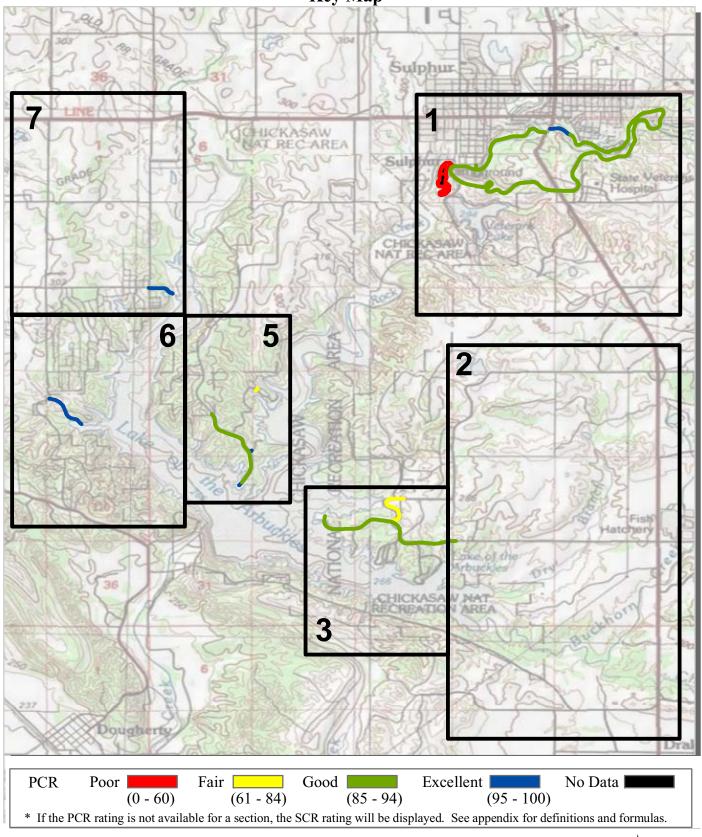




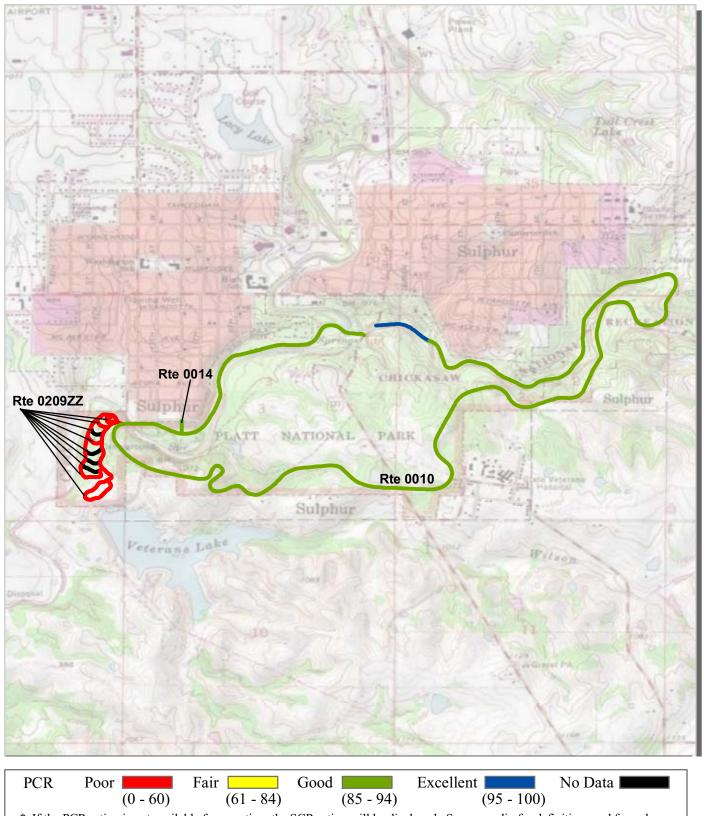


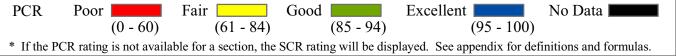
Unique colors used to differentiate routes

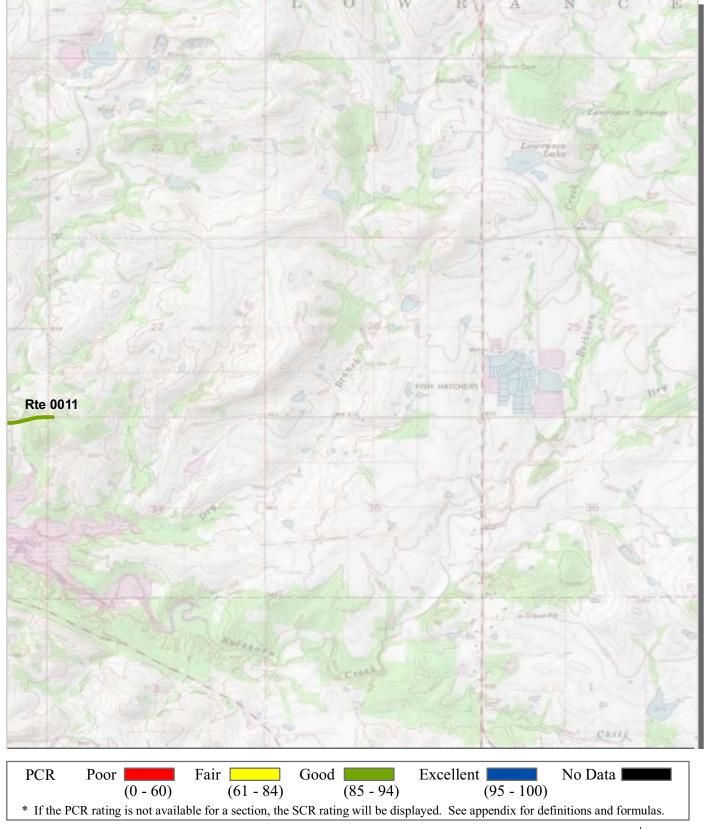
Routes Collected in Previous Cycle



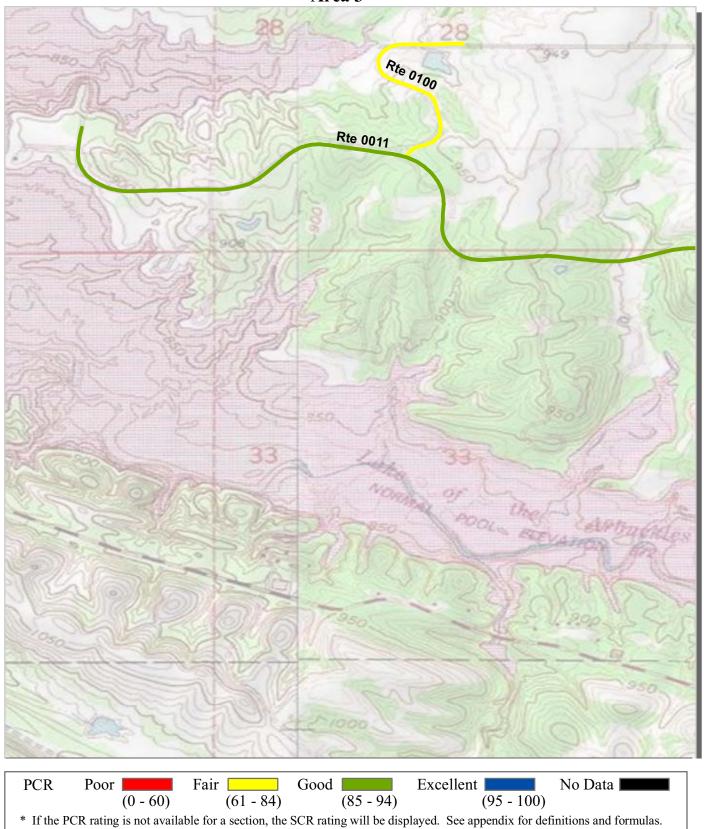
Note: Only routes collected by the DCV in Cycle-5 are displayed.

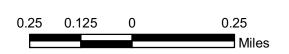


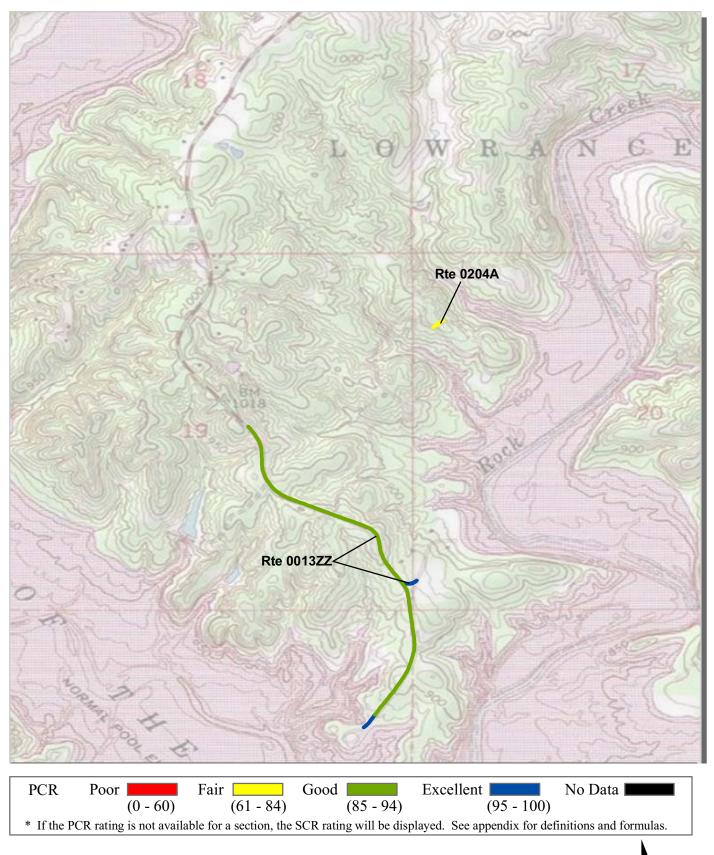


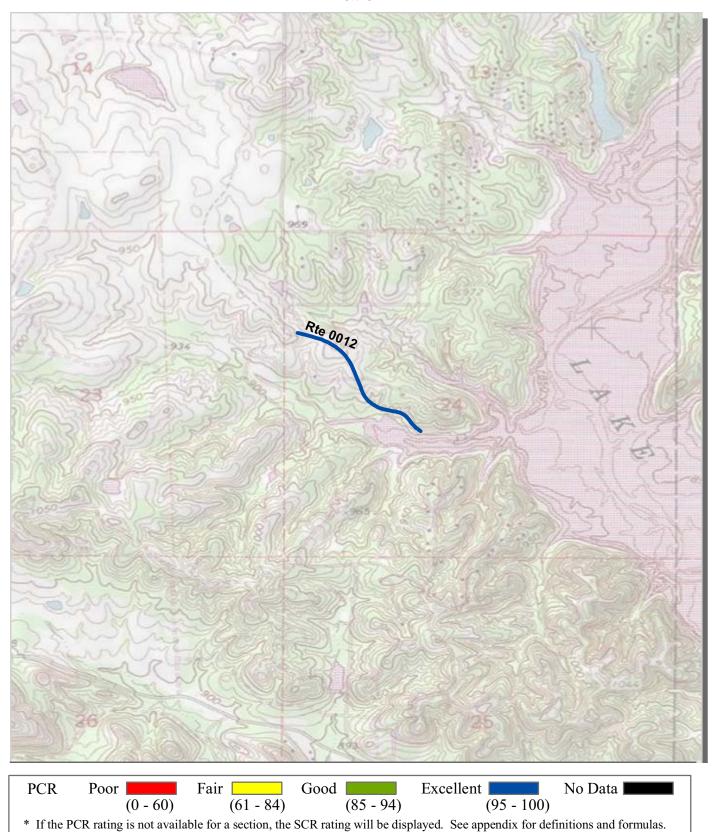


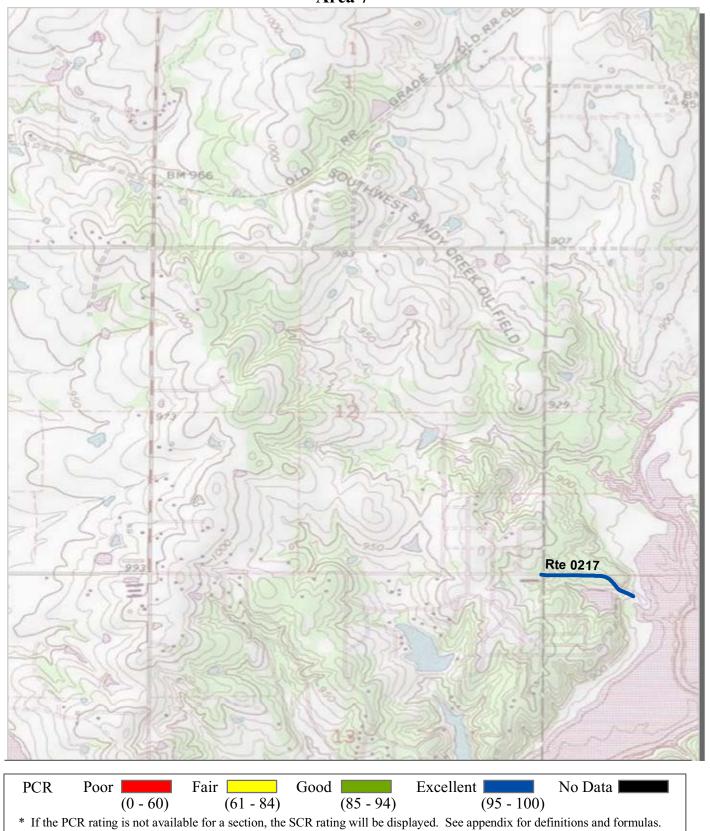


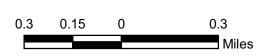










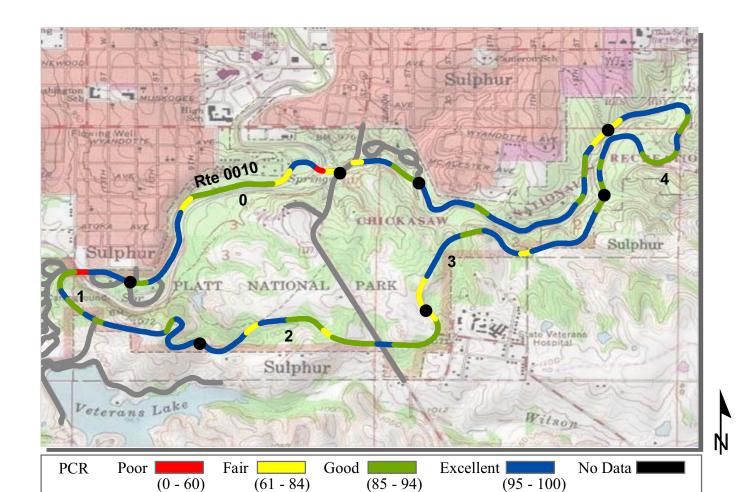


# Section 5 Paved Route Condition Rating Sheets



Chickasaw National Recreation Area





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

**COLLECTED:** 

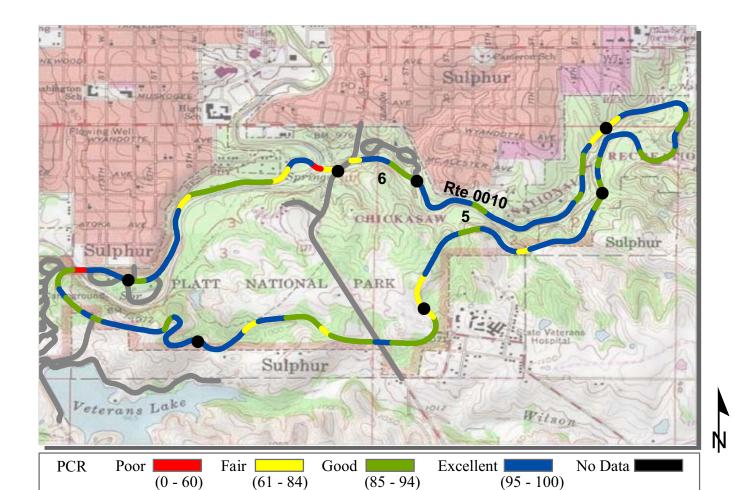
1/11/2012

**ROUTE: 0010 PERIMETER DRIVE** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

#### INTERMOUNTAIN REGION

INTERMOUNTAIN REGION			TOTAL	<b>6.23 Miles</b>	
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	1
Paved Width (ft)	22	24	22	21	19
Lane Width (ft)	10	12	11	10	15
Roadway Condition Information					
SCR (Surface Condition Rating)	94	96	89	93	96
PCR (Pavement Condition Rating)	89	93	89	92	94
Distress Index Values					
Structural Crack Index	94	96	89	93	96
Transverse Cracking Index	99	99	99	99	99
Patching Index	100	100	100	100	100
Rutting Index	99	100	99	100	99
Roughness Condition Index (RCI)	81	88	90	90	90



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

**COLLECTED:** 

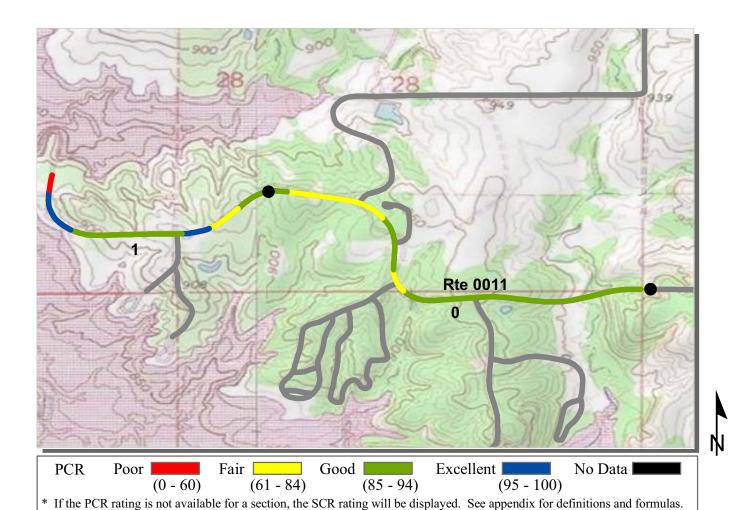
1/11/2012

**ROUTE: 0010 PERIMETER DRIVE** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

#### INTERMOUNTAIN REGION

INTERMOUNTAIN REGION			TOTAL LENGTH	<b>l:</b> 6.23 Miles
Section Number	5	6		
Section Length (mi)	1.00	0.23		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	21	21		
Lane Width (ft)	11	10		
Roadway Condition Information				
SCR (Surface Condition Rating)	98	98		
PCR (Pavement Condition Rating)	93	96		
Distress Index Values				
Structural Crack Index	98	99		
Transverse Cracking Index	99	99		
Patching Index	100	100		
Rutting Index	99	98		
Roughness Condition Index (RCI)	86	93		



**COLLECTED:** 

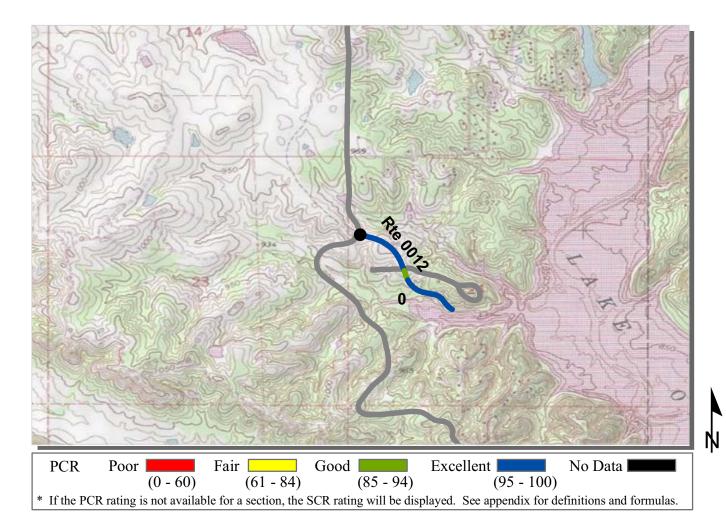
1/11/2012

**ROUTE: 0011 BUCKHORN ROAD** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

#### INTERMOUNTAIN RECION

INTERMOUNTAIN REGION	TOTAL LENGTH:	<b>1.62 Miles</b>		
Section Number	0	1		
Section Length (mi)	1.00	0.62		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	30	29		
Lane Width (ft)	11	11		
Roadway Condition Information				
SCR (Surface Condition Rating)	88	90		
PCR (Pavement Condition Rating)	86	90		
Distress Index Values				
Structural Crack Index	96	90		
Transverse Cracking Index	99	99		
Patching Index	100	100		
Rutting Index	88	90		
Roughness Condition Index (RCI)	84	91		



**COLLECTED:** 

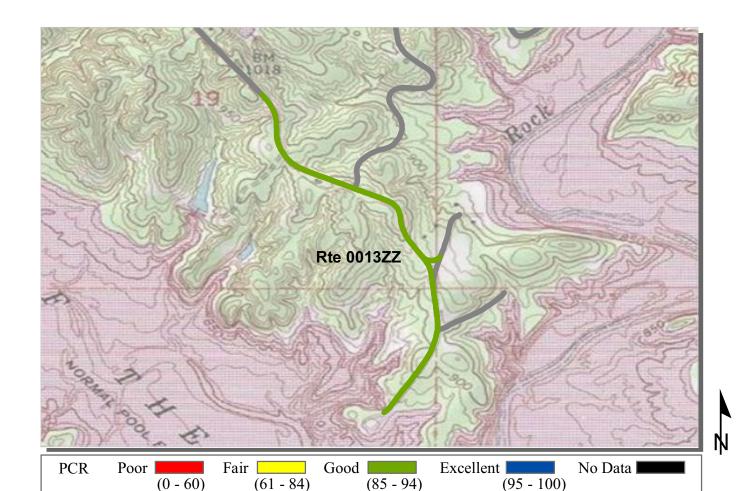
1/11/2012

**ROUTE: 0012 GUY SANDY ROAD** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

#### INTERMOUNTAIN REGION

INTERMOUNTAIN REGION		TOTAL	LENGTH:	<b>0.46 Miles</b>
Section Number	0			
Section Length (mi)	0.46			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	28			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	97			
PCR (Pavement Condition Rating)	97			
Distress Index Values				
Structural Crack Index	97			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	98			
Roughness Condition Index (RCI)	NC			



**ROUTE: 0013ZZ POINT ROADS** 

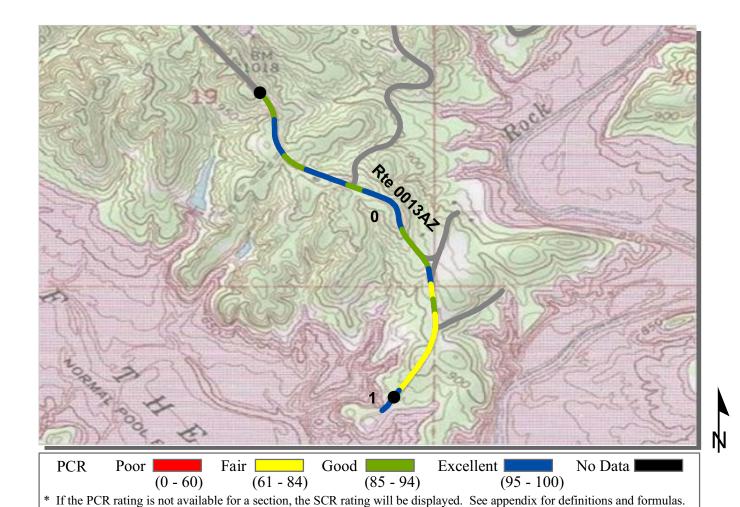
**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

Summary Record COLLECTED: 1/11/2012
INTERMOUNTAIN REGION TOTAL LENGTH: 1 00 Miles

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

INTERMOUNTAIN REGION		TOTAL	LENGTH:	1.09 Miles
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	89			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			

5-6

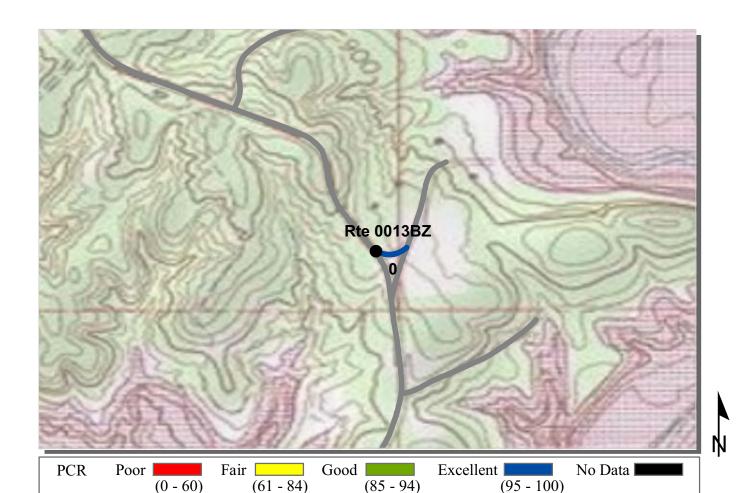


**ROUTE: 0013AZ POINT ROAD** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN REGION TOTAL LENGTH: 1.06 Miles

II (I EII) (I E GIGI)			101112	EE, GIII.	1100 1111105
Section Number	0	1			
Section Length (mi)	1.00	0.06			
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	25	29			
Lane Width (ft)	12	11			
Roadway Condition Information					
SCR (Surface Condition Rating)	89	97			
PCR (Pavement Condition Rating)	90	95			
Distress Index Values					
Structural Crack Index	89	97			
Transverse Cracking Index	98	100			
Patching Index	100	100			
Rutting Index	99	99			
Roughness Condition Index (RCI)	91	93			



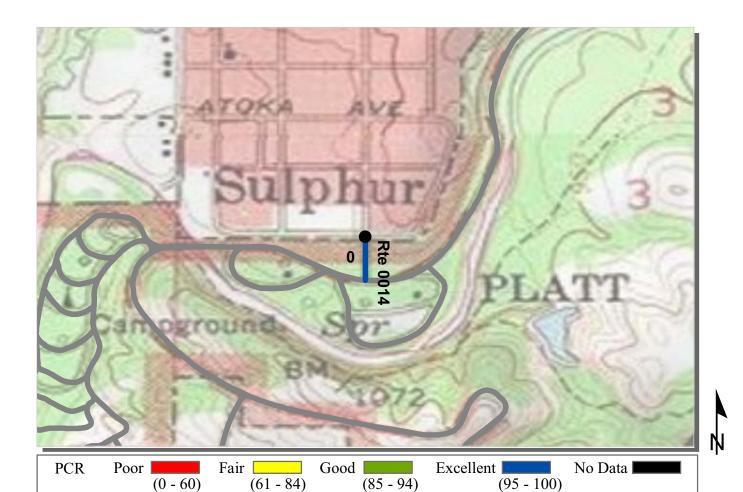
**ROUTE: 0013BZ POINT ROAD SPUR** 

**CHIC: CHICKASAW NATIONAL RECREATION AREA** 

Subcomponent Record COLLECTED: 1/11/2012

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

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.03 Miles
Section Number	0			
Section Length (mi)	0.03			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	26			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	95			
PCR (Pavement Condition Rating)	95			
Distress Index Values				
Structural Crack Index	95			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	98			
Roughness Condition Index (RCI)	NC			



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

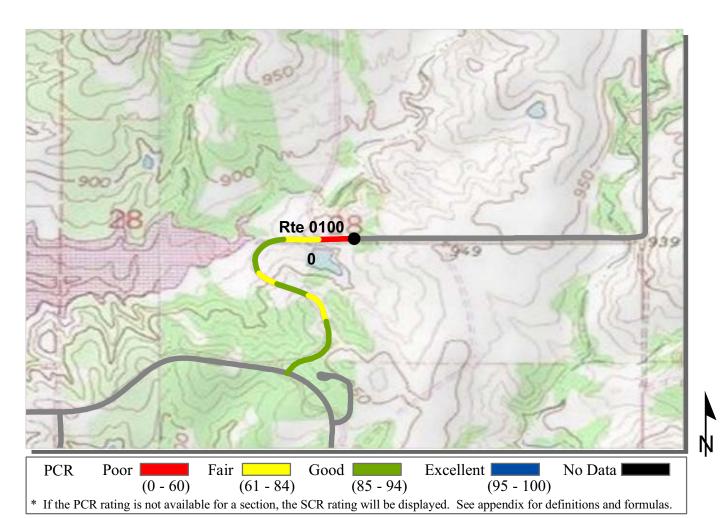
ROUTE: 0014 TWELFTH STREET ENTRANCE ROAD CHIC: CHICKASAW NATIONAL RECREATION AREA

# INTERMOUNTAIN REGION COLLECTED: 1/11/2012 TOTAL LENGTH: 0.05 Miles

INTERMOUNTAIN REGION		IOIAL	LENGIH:	0.05 Milles
Section Number	0			
Section Length (mi)	0.05			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	21			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	90			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	99			
Patching Index	100			
Rutting Index	90			
Roughness Condition Index (RCI)	NC			

## NOTES:

NC - Not Collected N/A - Not Applicable



**COLLECTED:** 

1/11/2012

ROUTE: 0100 CEDAR BLUE ENTRANCE ROAD

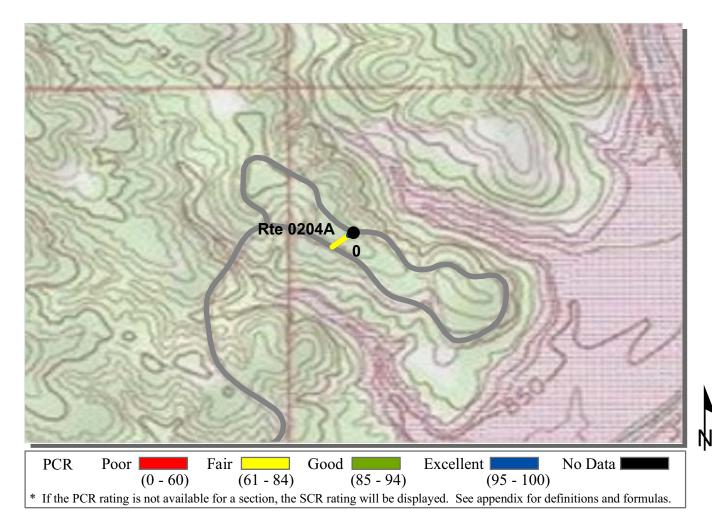
CHIC: CHICKASAW NATIONAL RECREATION AREA

#### INTERMOUNTAIN REGION **TOTAL LENGTH: 0.51 Miles** Section Number Section Length (mi) 0.51 **Cross Section Information** Number of Lanes 25 Paved Width (ft) Lane Width (ft) 10 Roadway Condition Information 83 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 77 Distress Index Values Structural Crack Index 83 97 Transverse Cracking Index 100 Patching Index 88 **Rutting Index**

## NOTES:

Roughness Condition Index (RCI)

68

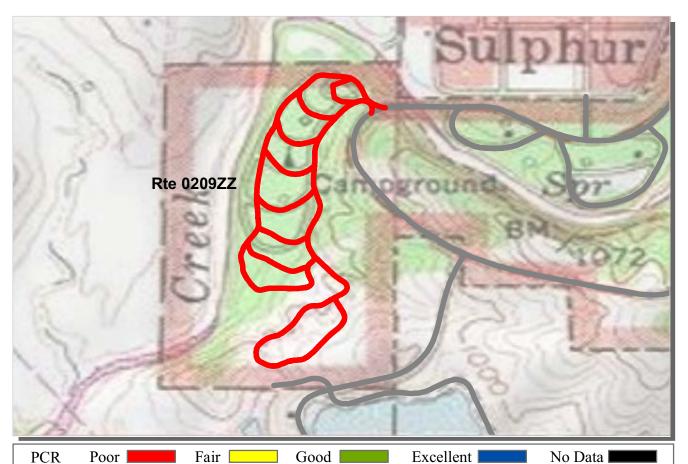


**COLLECTED:** 

1/11/2012

**ROUTE: 0204A POINT CAMPGROUND CONNECTOR CHIC: CHICKASAW NATIONAL RECREATION AREA** 

INTERMOUNTAIN REGION		TOTAL	TOTAL LENGTH:		
Section Number	0				
Section Length (mi)	0.03				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	19				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	77				
PCR (Pavement Condition Rating)	77				
Distress Index Values					
Structural Crack Index	77				
Transverse Cracking Index	88				
Patching Index	100				
Rutting Index	84				
Roughness Condition Index (RCI)	NC				



PCR Poor Fair Good Excellent No Data (0 - 60) (61 - 84) (85 - 94) (95 - 100)

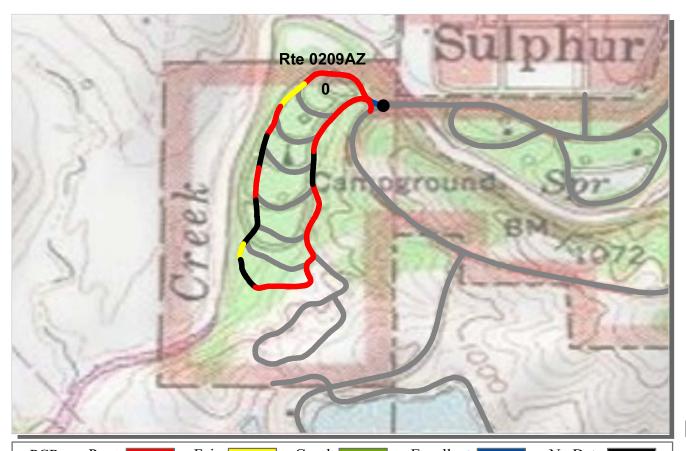
\* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

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

# ROUTE: 0209ZZ ROCK CREEK CAMPGROUND ROADS CHIC: CHICKASAW NATIONAL RECREATION AREA

Summary Record COLLECTED: 1/11/2012

INTERMOUNTAIN REGION		 TOTAL	LENGTH:	<b>1.59 Miles</b>
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	2			
PCR (Pavement Condition Rating)	2			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			



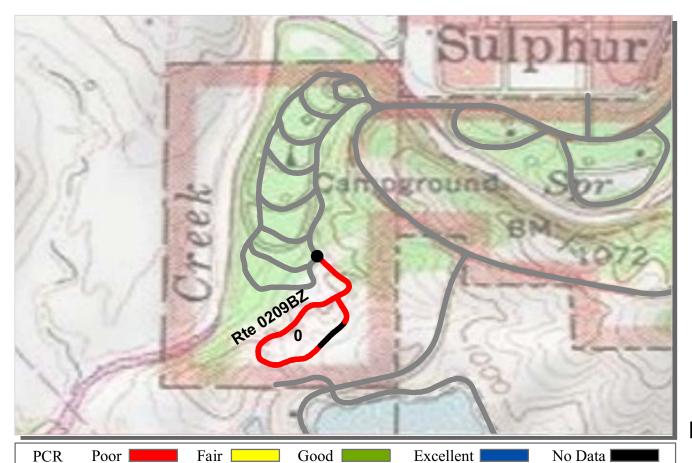
PCR Poor Fair Good Excellent No Data (0 - 60) (61 - 84) (85 - 94) (95 - 100)

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

ROUTE: 0209AZ ROCK CREEK CAMPGROUND ROAD A CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.75 Miles

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.75 Miles
Section Number	0			
Section Length (mi)	0.75			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	0			
PCR (Pavement Condition Rating)	0			
Distress Index Values				
Structural Crack Index	0			
Transverse Cracking Index	96			
Patching Index	99			
Rutting Index	72			
Roughness Condition Index (RCI)	NC			

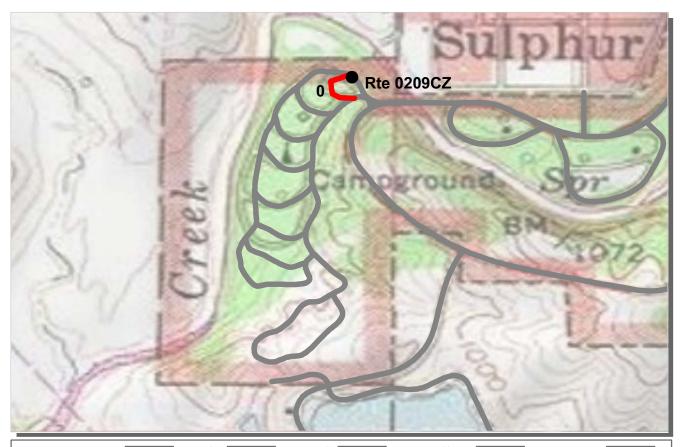


(0-60) (61-84) (85-94) (95-100)\* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0209BZ ROCK CREEK CAMPGROUND ROAD B CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.35 Miles

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.35 Miles
Section Number	0			
Section Length (mi)	0.35			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	15			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	0			
PCR (Pavement Condition Rating)	0			
Distress Index Values				
Structural Crack Index	0			
Transverse Cracking Index	90			
Patching Index	99			
Rutting Index	64			
Roughness Condition Index (RCI)	NC			

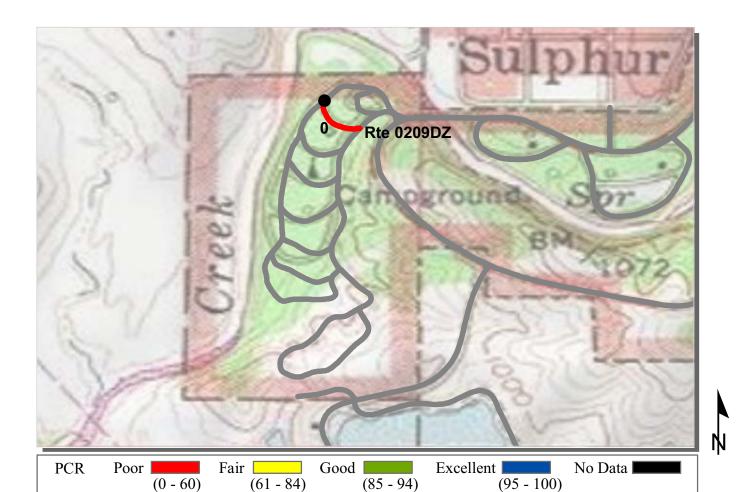




# ROUTE: 0209CZ ROCK CREEK CAMPGROUND ROAD C CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.05 Miles

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.05 Miles
Section Number	0			
Section Length (mi)	0.05			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	0			
PCR (Pavement Condition Rating)	0			
Distress Index Values				
Structural Crack Index	0			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	66			
Roughness Condition Index (RCI)	NC			

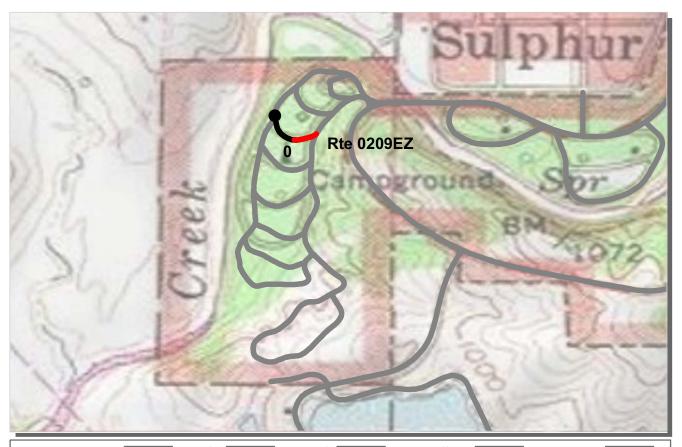


ROUTE: 0209DZ ROCK CREEK CAMPGROUND ROAD D CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.06 Miles

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

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.06 Miles
Section Number	0			
Section Length (mi)	0.06			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	15			
Lane Width (ft)	15			
Roadway Condition Information				
SCR (Surface Condition Rating)	31			
PCR (Pavement Condition Rating)	31			
Distress Index Values				
Structural Crack Index	31			
Transverse Cracking Index	93			
Patching Index	100			
Rutting Index	68			
Roughness Condition Index (RCI)	NC			

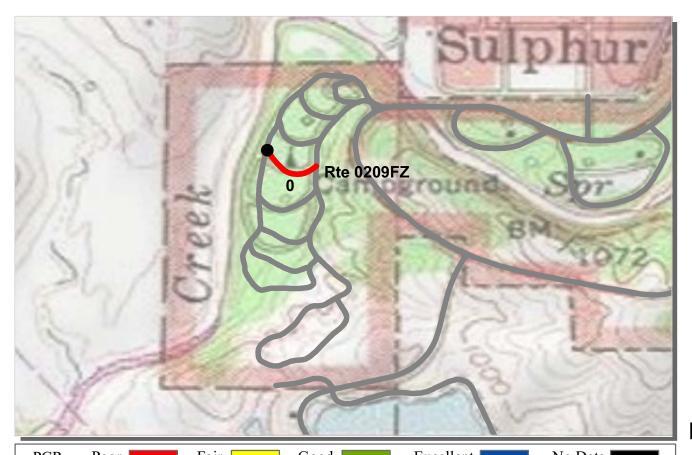




# ROUTE: 0209EZ ROCK CREEK CAMPGROUND ROAD E CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012

INTERMOUNTAIN REGION		TOTAL	LENGTH:	<b>0.07 Miles</b>
Section Number	0			
Section Length (mi)	0.07			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	NC			
PCR (Pavement Condition Rating)	NC			
Distress Index Values				
Structural Crack Index	NC			
Transverse Cracking Index	NC			
Patching Index	NC			
Rutting Index	NC			
Roughness Condition Index (RCI)	NC			



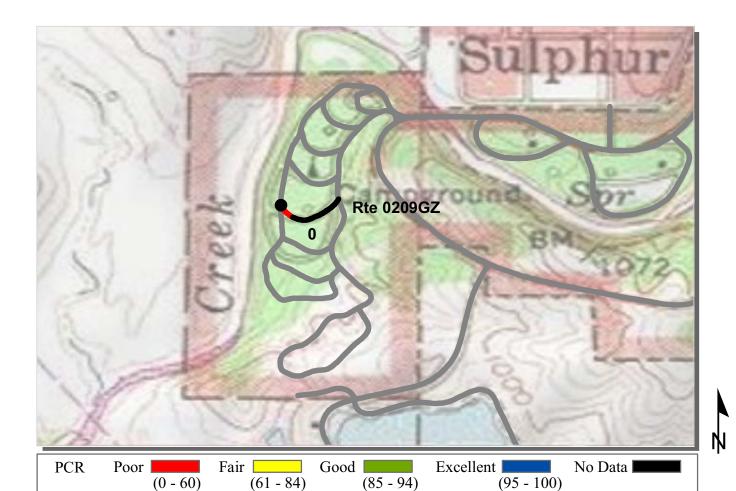
PCR Poor Fair Good Excellent No Data (0 - 60) (61 - 84) (85 - 94) (95 - 100)

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

ROUTE: 0209FZ ROCK CREEK CAMPGROUND ROAD F CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.07 Miles

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.07 Miles
Section Number	0			
Section Length (mi)	0.07			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	8			
Lane Width (ft)	8			
Roadway Condition Information				
SCR (Surface Condition Rating)	0			
PCR (Pavement Condition Rating)	0			
Distress Index Values				
Structural Crack Index	0			
Transverse Cracking Index	99			
Patching Index	100			
Rutting Index	50			
Roughness Condition Index (RCI)	NC			

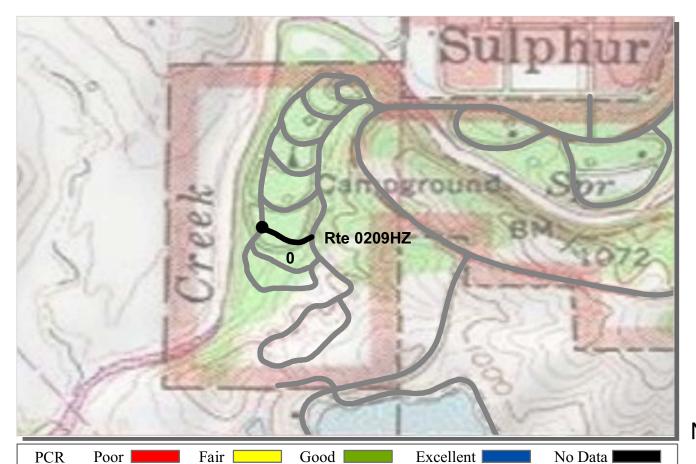


ROUTE: 0209GZ ROCK CREEK CAMPGROUND ROAD G CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN DECION TOTAL LENGTH: 0.08 Miles

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

INTERMOUNTAIN REGION		TOTAL	LENGTH:	0.08 Miles
Section Number	0			
Section Length (mi)	0.08			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	18			
Lane Width (ft)	18			
Roadway Condition Information				
SCR (Surface Condition Rating)	NC			
PCR (Pavement Condition Rating)	NC			
Distress Index Values				
Structural Crack Index	NC			
Transverse Cracking Index	NC			
Patching Index	NC			
Rutting Index	NC			
Roughness Condition Index (RCI)	NC			



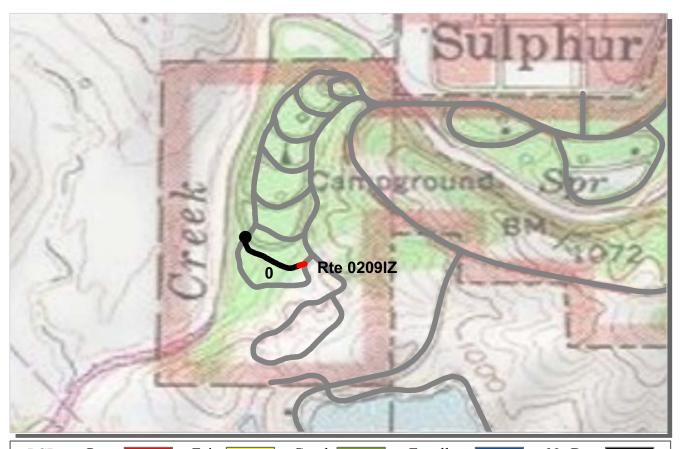
(0 - 60) (61 - 84) (85 - 94) (95 - 100)

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

# ROUTE: 0209HZ ROCK CREEK CAMPGROUND ROAD H CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN REGION TOTAL LENGTH: 0.06 Miles

INTERMOUNTAIN REGION		TOTAL LENGTH.	0.00 Miles
Section Number	0		
Section Length (mi)	0.06		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	11		
Lane Width (ft)	11		
Roadway Condition Information			
SCR (Surface Condition Rating)	NC		
PCR (Pavement Condition Rating)	NC		
Distress Index Values			
Structural Crack Index	NC		
Transverse Cracking Index	NC		
Patching Index	NC		
Rutting Index	NC		
Roughness Condition Index (RCI)	NC		

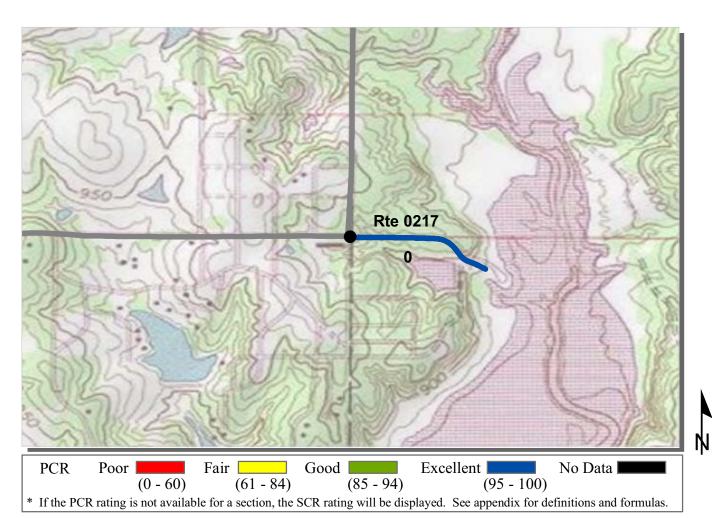




# ROUTE: 0209IZ ROCK CREEK CAMPGROUND ROAD I CHIC: CHICKASAW NATIONAL RECREATION AREA

Subcomponent Record COLLECTED: 1/11/2012
INTERMOUNTAIN REGION TOTAL LENGTH: 0.09 Miles

INTERMOUNTAIN REGION		IUIAL LENGIH:	0.09 Milles
Section Number	0		
Section Length (mi)	0.09		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	12		
Lane Width (ft)	12		
Roadway Condition Information			
SCR (Surface Condition Rating)	NC		
PCR (Pavement Condition Rating)	NC		
Distress Index Values			
Structural Crack Index	NC		
Transverse Cracking Index	NC		
Patching Index	NC		
Rutting Index	NC		
Roughness Condition Index (RCI)	NC		



ROUTE: 0217 EAGLE BAY BOAT LAUNCH ROAD CHIC: CHICKASAW NATIONAL RECREATION AREA

INTERMOUNTAIN REGION COLLECTED: 1/11/2012

TOTAL LENGTH: 0.26 Miles

Section Number	0		
Section Length (mi)	0.26		
Cross Section Information			
Number of Lanes	2		
Paved Width (ft)	22		
Lane Width (ft)	11		
Roadway Condition Information			
SCR (Surface Condition Rating)	96		
PCR (Pavement Condition Rating)	96		
Distress Index Values			
Structural Crack Index	96		
Transverse Cracking Index	100		
Patching Index	100		
Rutting Index	100		
Roughness Condition Index (RCI)	NC		

# Section 6 Manually Rated Paved Route Condition Rating Sheets



Chickasaw National Recreation Area



# MANUALLY RATED ROUTE CONDITION RATING SHEETS

This park is classified as a Large Park. Therefore, in Cycle 5, no manually rated routes were collected unless the route was modified or previously uncollected by RIP.

# Section 7 Parking Area Condition Rating Sheets



Chickasaw National Recreation Area



# CHICKASAW NATIONAL RECREATION AREA

# **Route 0968ZZ**

# VETERANS LAKE PARKING AREAS

FROM ROUTE 0215 (VETERANS LAKE ROAD)

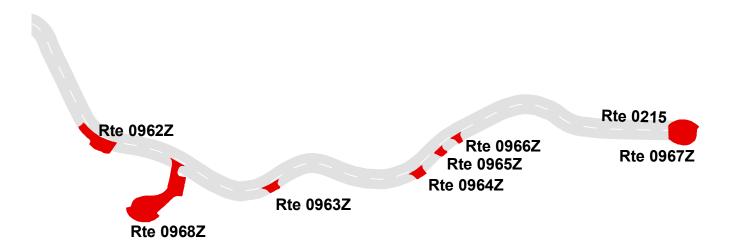
#### TO PARKING

Summary Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0968ZZ	PUBLIC	1/11/2012	36,690	0.63	AS
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR
-1	-1	-1	N/A	N/A	SUMMARY/73

<sup>\*</sup> Lane miles are based on 11' lane widths

Rte 0010



NOTE: Subcomponent Route 0966Z is the only section of Route 0968ZZ that was collected in Cycle 5. (It was re-collected because of poor GPS in Cycle 4.) Therefore no PCR or Features are shown on this page.

740

Feet

740

# CHICKASAW NATIONAL RECREATION AREA

# **Route 0966Z**

# VETERANS LAKE ROAD PARKING F

ADJACENT TO ROUTE 0215 (VETERANS LAKE ROAD) AT MP 0.52 (ON RIGHT)

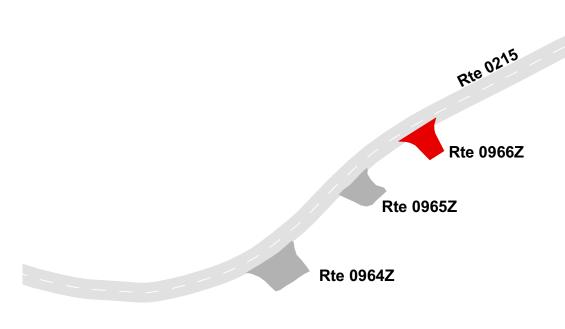
Subcomponent Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0966Z	PUBLIC	1/11/2012	811	0.01	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	FAIR/73

<sup>\*</sup> Lane miles are based on 11' lane widths







# Section 8 Route Maintenance Features Summaries



Chickasaw National Recreation Area



# CHIC: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5 along new or re-aligned DCV driven routes.

FEATURE	ROUTE 0013BZ POINT ROAD SPUR	ROUTE 0204A POINT CAMPGROUND CONNECTOR	ROUTE 0209ZZ ROCK CREEK CAMPGROUND ROADS	ROUTE 0217 EAGLE BAY BOAT LAUNCH ROAD	UNIT
BRIDGE	0	0	0	0	EACH
CATTLE GUARD	0	0	0	0	EACH
CULVERT	0	0	0	0	EACH
CURB	0	0	58	0	LINEAR FEET
DROP INLET	0	0	0	0	EACH
GATE CHARD (CHARDE DAM	0	0	5	1	EACH LINEAR FEET
GARLE	0	0	0	0	LINEAR FEET
CABLE	0	0	0	0	LINEAR FEET
NON-CABLE	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL BOLLARD	0	0	0	0	LINEAR FEET
		0		0	LINEAR FEET
TEMPORARY BARRIER NON TEMP/BOLLARD	0	0	0	0	LINEAR FEET
INTERSECTION	4	4	55	5	LINEAR FEET EACH
LOW WATER CROSSING	0	0	0	0	EACH
LOW WATER CROSSING  LOW WATER CROSSING	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	EACH
OVERPASS	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	LINEAR FEET
PULLOUT	0	0	1	0	EACH
PULLOUT	0	0	42	0	LINEAR FEET
RAILROAD CROSSING	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	LINEAR FEET
SIGN	2	4	39	7	EACH
STATE BOUNDARY	0	0	0	0	EACH
TRAFFIC LIGHT	0	0	0	0	EACH
TUNNEL	0	0	0	0	EACH
TUNNEL	0	0	0	0	LINEAR FEET

# **STRUCTURE LIST**

This park is classified as a large park. Therefore, in Cycle 5, BIP-Structures were inventoried only if they were located along routes that were modified or previously uncollected by RIP, so this report does not provide an all-inclusive listing of all BIP-Structures in the park.

Data Collected 01/2012

# Section 9 Route Maintenance Features Road Logs



Chickasaw National Recreation Area



**ROUTE 0013BZ: POINT ROAD SPUR** 

<u>Notice:</u> Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013AZ (POINT ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013AZ (POINT ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013AZ (POINT ROAD)
0.005	0.005	SIGN	LEFT	REGULATORY, YIELD
0.025	0.025	SIGN	RIGHT	REGULATORY, YIELD
0.034	0.034	INTERSECTION	LEFT	ROUTE 0203 (POINT LAUNCHING RAMP ROAD)
0.034	0.034	INTERSECTION	RIGHT	ROUTE 0203 (POINT LAUNCHING RAMP ROAD)
0.034	0.034	ROUTE END	N/A	TO ROUTE 0203 (POINT LAUNCHING RAMP ROAD)
		·		·

# **ROUTE 0204A: POINT CAMPGROUND CONNECTOR**

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 0.82 (ON LEFT)
0.000	0.000	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD)
0.000	0.000	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.012	0.012	SIGN	LEFT	GUIDE, CAMPGROUND HOST
0.027	0.027	INTERSECTION	LEFT	ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD)
0.027	0.027	INTERSECTION	RIGHT	ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD)
0.027	0.027	SIGN	RIGHT	REGULATORY, STOP
0.027	0.027	ROUTE END	N/A	TO ROUTE 0204 (POINT CAMPGROUND ACCESS ROAD) AT MP 1.31 (ON LEFT)

# ROUTE 0209AZ: ROCK CREEK CAMPGROUND ROAD A

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (PERIMETER DRIVE)
0.000	0.000	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (PERIMETER DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (PERIMETER DRIVE)
0.000	0.000	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.005	0.011	CURB	N/A	N/A
0.018	0.018	INTERSECTION	RIGHT	UNPAVED ROUTE
0.020	0.020	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.024	0.024	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.028	0.735	ONE-WAY	N/A	N/A
0.032	0.032	SIGN	RIGHT	REGULATORY, ONE WAY
0.038	0.038	SIGN	RIGHT	REGULATORY, SPEED LIMIT 10
0.050	0.050	INTERSECTION	LEFT	ROUTE 0209CZ (ROCK CREEK CAMPGROUND ROAD C)
0.058	0.058	SIGN	RIGHT	WARNING, SLOW CHILDREN
0.116	0.116	INTERSECTION	LEFT	ROUTE 0209DZ (ROCK CREEK CAMPGROUND ROAD D)
0.120	0.120	SIGN	LEFT	GUIDE, GRAPHIC SIGN NO TEXT
0.161	0.161	INTERSECTION	LEFT	ROUTE 0209EZ (ROCK CREEK CAMPGROUND ROAD E)
0.206	0.206	INTERSECTION	LEFT	ROUTE 0209FZ (ROCK CREEK CAMPGROUND ROAD F)
0.210	0.210	GATE	N/A	N/A
0.211	0.221	DEBRIS ON ROAD	N/A	N/A
0.212	0.212	SIGN	LEFT	REGULATORY, ROAD CLOSED
0.265	0.265	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.265	0.265	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.266	0.266	INTERSECTION	LEFT	ROUTE 0209GZ (ROCK CREEK CAMPGROUND ROAD G)
0.310	0.310	INTERSECTION	LEFT	ROUTE 0209HZ (ROCK CREEK CAMPGROUND ROAD H)
0.313	0.333	DEBRIS ON ROAD	N/A	N/A
0.315	0.315	SIGN	LEFT	GUIDE, SITES 61-78 EXIT
0.316	0.316	GATE	N/A	N/A

# ROUTE 0209AZ: ROCK CREEK CAMPGROUND ROAD A

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.330	0.330	INTERSECTION	LEFT	ROUTE 0209IZ (ROCK CREEK CAMPGROUND ROAD I)
0.345	0.345	SIGN	LEFT	GUIDE, GRAPHIC SIGN NO TEXT
0.373	0.382	DEBRIS ON ROAD	N/A	N/A
0.490	0.490	SIGN	RIGHT	REGULATORY, TWO WAY TRAFFIC AHEAD
0.491	0.491	INTERSECTION	LEFT	ROUTE 0209IZ (ROCK CREEK CAMPGROUND ROAD I)
0.502	0.502	INTERSECTION	RIGHT	ROUTE 0209BZ (ROCK CREEK CAMPGROUND ROAD B)
0.504	0.504	SIGN	N/A	GUIDE, SITES 79-106 EXIT
0.515	0.515	GATE	N/A	N/A
0.518	0.518	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN NO TEXT
0.519	0.519	SIGN	LEFT	REGULATORY, TWO WAY TRAFFIC AHEAD
0.530	0.530	INTERSECTION	LEFT	ROUTE 0209HZ (ROCK CREEK CAMPGROUND ROAD H)
0.596	0.596	INTERSECTION	LEFT	ROUTE 0209GZ (ROCK CREEK CAMPGROUND ROAD G)
0.618	0.628	DEBRIS ON ROAD	N/A	N/A
0.621	0.621	GATE	N/A	N/A
0.628	0.628	INTERSECTION	LEFT	ROUTE 0209FZ (ROCK CREEK CAMPGROUND ROAD F)
0.664	0.664	INTERSECTION	LEFT	ROUTE 0209EZ (ROCK CREEK CAMPGROUND ROAD E)
0.698	0.698	INTERSECTION	LEFT	ROUTE 0209DZ (ROCK CREEK CAMPGROUND ROAD D)
0.711	0.711	SIGN	LEFT	GUIDE, CAMPGROUND HOST
0.717	0.717	INTERSECTION	LEFT	ROUTE 0209CZ (ROCK CREEK CAMPGROUND ROAD C)
0.724	0.724	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.736	0.736	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.745	0.750	CURB	N/A	N/A
0.746	0.746	SIGN	N/A	REGULATORY, STOP
0.748	0.748	SIGN	N/A	GUIDE, ROCK CREEK CAMPGROUND ENTRANCE
0.752	0.752	SIGN	RIGHT	REGULATORY, YIELD
0.754	0.754	INTERSECTION	LEFT	ROUTE 0010 (PERIMETER DRIVE)
0.754	0.754	INTERSECTION	RIGHT	ROUTE 0010 (PERIMETER DRIVE)
0.754	0.754	ROUTE END	N/A	TO ROUTE 0010 (PERIMETER DRIVE)

# ROUTE 0209BZ: ROCK CREEK CAMPGROUND ROAD B

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	SIGN	LEFT	REGULATORY, KEEP RIGHT
0.000	0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.007	0.007	GATE	N/A	N/A
0.074	0.074	INTERSECTION	LEFT	ROUTE 0209BZ (ROCK CREEK CAMPGROUND ROAD B)
0.074	0.352	ONE-WAY	N/A	N/A
0.287	0.302	DEBRIS ON ROAD	N/A	N/A
0.347	0.347	SIGN	RIGHT	REGULATORY, TWO WAY TRAFFIC AHEAD
0.352	0.352	INTERSECTION	LEFT	ROUTE 0209BZ (ROCK CREEK CAMPGROUND ROAD B)
0.352	0.352	INTERSECTION	RIGHT	ROUTE 0209BZ (ROCK CREEK CAMPGROUND ROAD B)
0.352	0.352	ROUTE END	N/A	TO END OF LOOP

# ROUTE 0209CZ: ROCK CREEK CAMPGROUND ROAD C

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.000	0.000	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.000	0.020	DEBRIS ON ROAD	N/A	N/A
0.000	0.054	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.047	0.047	SIGN	RIGHT	REGULATORY, ONE WAY
0.054	0.054	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.054	0.054	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.054	0.054	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)

# ROUTE 0209DZ: ROCK CREEK CAMPGROUND ROAD D

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.063	ONE-WAY	N/A	N/A
0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.035	PULLOUT	RIGHT	N/A
0.053	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.056	SIGN	RIGHT	REGULATORY, ONE WAY
0.063	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.063	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.063	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
	0.000 0.063 0.000 0.035 0.053 0.056 0.063	MILEPOST         FEATURE           0.000         ROUTE BEGIN           0.063         ONE-WAY           0.000         INTERSECTION           0.000         INTERSECTION           0.035         PULLOUT           0.053         SIGN           0.063         INTERSECTION           0.063         INTERSECTION	MILEPOST         FEATURE         SIDE           0.000         ROUTE BEGIN         N/A           0.063         ONE-WAY         N/A           0.000         INTERSECTION         LEFT           0.000         INTERSECTION         RIGHT           0.035         PULLOUT         RIGHT           0.053         SIGN         RIGHT           0.056         SIGN         RIGHT           0.063         INTERSECTION         LEFT           0.063         INTERSECTION         RIGHT

# ROUTE 0209EZ: ROCK CREEK CAMPGROUND ROAD E

<u>Notice:</u> Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.065	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.020	0.029	DEBRIS ON ROAD	N/A	N/A
0.060	0.060	SIGN	RIGHT	REGULATORY, ONE WAY
0.065	0.065	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.065	0.065	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.065	0.065	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
	•			·

# ROUTE 0209FZ: ROCK CREEK CAMPGROUND ROAD F

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	SIGN	RIGHT	REGULATORY, ROAD CLOSED
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.071	ONE-WAY	N/A	N/A
0.066	0.066	SIGN	RIGHT	REGULATORY, ONE WAY
0.071	0.071	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.071	0.071	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.071	0.071	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)

# ROUTE 0209GZ: ROCK CREEK CAMPGROUND ROAD G

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FFATUDE	SIDE	COMMENT
WILET OST	WILLIOSI	TEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	0.079	ONE-WAY	N/A	N/A
0.032	0.037	DEBRIS ON ROAD	N/A	N/A
0.047	0.057	DEBRIS ON ROAD	N/A	N/A
0.067	0.077	DEBRIS ON ROAD	N/A	N/A
0.074	0.074	SIGN	RIGHT	REGULATORY, ONE WAY
0.079	0.079	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.079	0.079	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.079	0.079	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)

# ROUTE 0209HZ: ROCK CREEK CAMPGROUND ROAD H

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.060	ONE-WAY	N/A	N/A
0.000	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.027	DEBRIS ON ROAD	N/A	N/A
0.060	DEBRIS ON ROAD	N/A	N/A
0.054	SIGN	RIGHT	GUIDE, SITES 79-106 EXIT
0.060	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.060	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.060	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
	0.000 0.000 0.000 0.000 0.000 0.000 0.0027 0.060 0.054 0.060 0.060	MILEPOST         FEATURE           0.000         ROUTE BEGIN           0.000         SIGN           0.060         ONE-WAY           0.000         SIGN           0.000         INTERSECTION           0.000         INTERSECTION           0.027         DEBRIS ON ROAD           0.060         DEBRIS ON ROAD           0.054         SIGN           0.060         INTERSECTION           0.060         INTERSECTION	MILEPOST         FEATURE         SIDE           0.000         ROUTE BEGIN         N/A           0.000         SIGN         RIGHT           0.060         ONE-WAY         N/A           0.000         SIGN         RIGHT           0.000         INTERSECTION         RIGHT           0.000         INTERSECTION         LEFT           0.027         DEBRIS ON ROAD         N/A           0.060         DEBRIS ON ROAD         N/A           0.054         SIGN         RIGHT           0.060         INTERSECTION         LEFT           0.060         INTERSECTION         RIGHT

# ROUTE 0209IZ: ROCK CREEK CAMPGROUND ROAD I

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	ROUTE BEGIN	N/A	FROM ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.087	ONE-WAY	N/A	N/A
0.000	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.000	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.051	DEBRIS ON ROAD	N/A	N/A
0.066	DEBRIS ON ROAD	N/A	N/A
0.083	SIGN	RIGHT	REGULATORY, ONE WAY
0.087	INTERSECTION	LEFT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.087	INTERSECTION	RIGHT	ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
0.087	SIGN	LEFT	REGULATORY, UNABLE TO READ FROM VIDEO
0.087	ROUTE END	N/A	TO ROUTE 0209AZ (ROCK CREEK CAMPGROUND ROAD A)
	0.000 0.087 0.000 0.000 0.051 0.066 0.083 0.087 0.087	MILEPOST         FEATURE           0.000         ROUTE BEGIN           0.087         ONE-WAY           0.000         INTERSECTION           0.051         DEBRIS ON ROAD           0.066         DEBRIS ON ROAD           0.083         SIGN           0.087         INTERSECTION           0.087         INTERSECTION           0.087         SIGN	MILEPOST         FEATURE         SIDE           0.000         ROUTE BEGIN         N/A           0.087         ONE-WAY         N/A           0.000         INTERSECTION         LEFT           0.000         INTERSECTION         RIGHT           0.051         DEBRIS ON ROAD         N/A           0.066         DEBRIS ON ROAD         N/A           0.083         SIGN         RIGHT           0.087         INTERSECTION         LEFT           0.087         INTERSECTION         RIGHT           0.087         SIGN         LEFT

# **ROUTE 0217: EAGLE BAY BOAT LAUNCH ROAD**

Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on any new or re-aligned DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM INTERSECTION OF ROUTES 5005 (SHEPHERD ROAD) AND 5006 (PRIMROSE ROAD)
0.000	0.000	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (N 3350 ROAD / NON NPS)
0.000	0.000	INTERSECTION	N/A	ROUTE 5006 (PRIMROSE ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 5005 (SHEPHERD ROAD)
0.006	0.006	SIGN	LEFT	REGULATORY, STOP
0.015	0.015	GATE	N/A	N/A
0.015	0.015	SIGN	N/A	GUIDE, ROAD CLOSED
0.019	0.019	SIGN	RIGHT	REGULATORY, ROAD CLOSED
0.059	0.059	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.137	0.137	SIGN	RIGHT	GUIDE, DAILY BOAT PERMIT REQUIRED PAY AT GUY SANDY
0.246	0.246	SIGN	RIGHT	WARNING, BOAT RAMP 300 FT
0.255	0.255	INTERSECTION	LEFT	UNPAVED PARKING
0.255	0.255	INTERSECTION	N/A	NPS BOAR RAMP
0.255	0.255	ROUTE END	N/A	TO BOAT RAMP

# Section 10 Appendix



Chickasaw National Recreation Area



# 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.

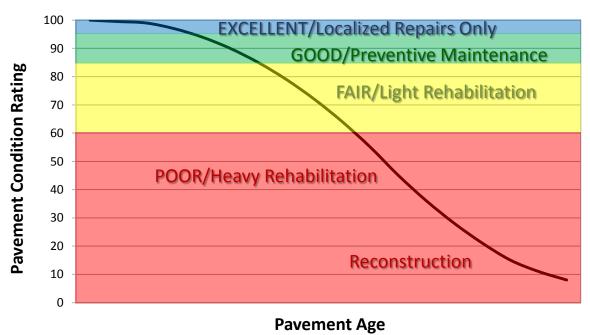
# **Explanation of the Excellent, Good, Fair and Poor Condition Descriptions**

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.

# **Condition Categories and Treatments**



#### 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 become 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-of-reference 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.

**TABLE 1: Distress Summary** 

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  $\leq 0.25$  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.

**TABLE 2: Alligator Crack Severity Levels** 

ALLICATION ON A CHANGE CHANDAINA		Crack Pattern		
ALLIGATOR CRACKING SE LEVELS	LOW	MED	HIGH	
	LOW	L	M	Н
ack	MED	M	M	Н
C. C.	HI	Н	Н	Н

# 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  $\geq 0.20$ " and  $\leq 0.49$ "

#### **MED**

Ruts with a measured depth  $\geq 0.50$ " and  $\leq 0.99$ "

#### HIGH

Ruts with a measured depth  $\geq 1.00$ "

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  $\geq 0$  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  $\geq 0$ .

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:

Total length of transverse cracks

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:

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 OR** 

<u>ABBREVIATION</u> <u>DESCRIPTION OR DEFINITION</u>

AC Alligator Cracking

CRS Condition Rating Sheets (Section 5)

DCV Data Collection Vehicle

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

PATCH 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