



**national park service**

**The Road Inventory  
of  
Redwood National Park  
REDW – 8480  
Cycle 4**



**Prepared By:  
Federal Highway Administration  
Road Inventory Program  
Cycle 4**



# Redwood National Park in California





## TABLE OF CONTENTS

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
<b>1. INTRODUCTION</b>	<b>1 - 1</b>
<b>2. PARK SUMMARY INFORMATION</b>	
Paved Route Miles and Percentages by Functional Class and PCR	<b>2 - 1</b>
Route Condition Summary	<b>2 - 2</b>
Parkwide Road Condition Summary	<b>2 - 4</b>
Cycle 2 vs Cycle 3 vs Cycle 4 Condition Comparisons	<b>2 - 5</b>
<b>3. PARK ROUTE LOCATION / CONDITION MAPS</b>	
Route Location Key Map	<b>3 - 1</b>
Route Location Area Map	<b>3 - 2</b>
Route Condition Key Map – PCR Mile by Mile	<b>3 - 4</b>
Route Condition Area Map – PCR Mile by Mile	<b>3 - 5</b>
<b>4. PARK ROUTE INVENTORY</b>	
Route Identification Report	<b>4 - 1</b>
<b>5. PAVED ROUTE CONDITION RATING SHEETS (CRS)</b>	
CRS Pages	<b>5 - 1</b>
<b>6. MANUALLY RATED PAVED ROUTE CONDITION RATING SHEETS (MRR)</b>	
MRR Pages	<b>6 - 1</b>
<b>7. PARKING AREA CONDITION RATING SHEETS</b>	
Paved Parking Area Pages	<b>7 - 1</b>
<b>8. PARKWIDE / ROUTE MAINTENANCE FEATURES SUMMARIES</b>	
Parkwide Maintenance Features Summary	<b>8 - 1</b>
Route Maintenance Features Summary	<b>8 - 2</b>
Structure List	<b>8 - 4</b>
<b>9. PARK ROUTE MAINTENANCE FEATURES ROAD LOGS</b>	
Route Maintenance Features Road Logs	<b>9 - 1</b>
<b>10. APPENDIX</b>	
A. Glossary of Terms and Abbreviations	<b>10 - 1</b>
B. Description of Rating System	<b>10 - 2</b>
C. General Information on RIP Systems	<b>10 - 8</b>
D. Metadata	<b>10 - 11</b>

# Redwood National Park



## **Section 1** **Introduction**

## INTRODUCTION

**Background:** In 1976, the National Park Service (NPS) and the Federal Highway Administration (FHWA) entered into a Memorandum of Agreement (MOA), establishing the Road Inventory Program (RIP). In 1980, the NPS and the FHWA terminated the 1976 MOA and entered into a new MOA that provided for the completion of the initial phase of the RIP. The purpose of the RIP, per the 1980 MOA was to maintain and update RIP data in order to develop long-range costs and programs to bring National Park Service (NPS) roads up to, or to maintain, designated standards, and establish a maintenance management program.

The FHWA's Federal Lands Highway (FLH) was assigned the task of identifying condition deficiencies and corrective priorities along with associated corrective costs, inventorying maintenance features (e.g., culverts, signs, guardrail, etc.), summarizing the data and findings in a report and providing a photographic record of the road system.

The FLH completed the initial phase of the RIP in the early 1980's. As a result of this effort, each park received a RIP book, also known as the "Brown Book," that included the information collected during this initial RIP phase.

In an effort to maintain and update the RIP data, a cyclical data collection and reporting process was reestablished in the 1990's. The FLH completed two cycles of RIP data collection between 1994 and 2001. Cycle 1 was collected in 44 large parks from 1994 to 1996. This data was found to be unusable for comparison to future cycles. Cycle 2 data was collected from March 1997 to January 2001 in 79 large parks and 5 small parks containing 4,874 route miles. Each park received a copy of a Cycle 2 RIP Report, also known as the "Blue Book". Cycle 3 was completed from 2001 through 2004, and included data collection in all parks that contain pavement.

Since 1984, the RIP Program has been funded through the Federal Lands Highway Program's Park Roads and Parkways (PRP) Program. Currently, the NPS Washington Headquarters' Park Facility Management Division is responsible for coordinating the RIP program with the FLH. 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) which requires the Federal Highway Administration and the National Park Service, to develop, by rule, a Pavement Management System (PMS) for the park roads and parkways serving the National Park System. As a result of the requirements in TEA-21, the NPS and FHWA are in the process of developing a PMS. The PMS will assist the decision-makers in effectively spending limited PRP Program funds. The PMS

will provide information for planning and programming road maintenance, rehabilitation, and reconstruction activities. RIP data will provide the basic information for this system.

Key information included in the RIP is the mileage inventory and condition assessments accomplished by the RIP Program. The mileage and condition data are used in the current allocation formula of PRP Program funds.

**RIP Cycle 4:** Cycle 4 data collection was initiated in spring 2006, where 86 large parks, consisting of 5,553 route miles and 6,232 paved parking areas, were selected as a representative sample of the entire NPS paved road network. Cycle 4 is scheduled for completion in spring 2009 and will serve the PMS in further development of its pavement preservation techniques.

In the Cycle 4 Reports, a general condition rating of excellent, good, fair and poor is ascribed to each one-mile section of paved roadway, and to each paved parking area. This condition rating system provides a realistic means of assessing the general funding needs for road improvements. Along with these descriptive condition ratings, a numerical rating between 0 and 100 is ascribed to each mile of road and to each parking area. This numerical rating is called a Pavement Condition Rating (PCR). The PCR rating system is described in Section 10 of this report.

All of the fieldwork required for obtaining inventory, condition, and maintenance feature information is coordinated with each park and the regional offices to ensure that the information in the RIP reports is accurate.

The FLH is responsible for all the data presented in this report. Anyone having questions or comments regarding the contents of this report is encouraged to contact the FHWA RIP Coordinator. It is our aim to provide exceptional customer satisfaction in our delivery of the RIP program.

The FHWA RIP Team

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# Redwood National Park



## **Section 2** **Park Summary Information**

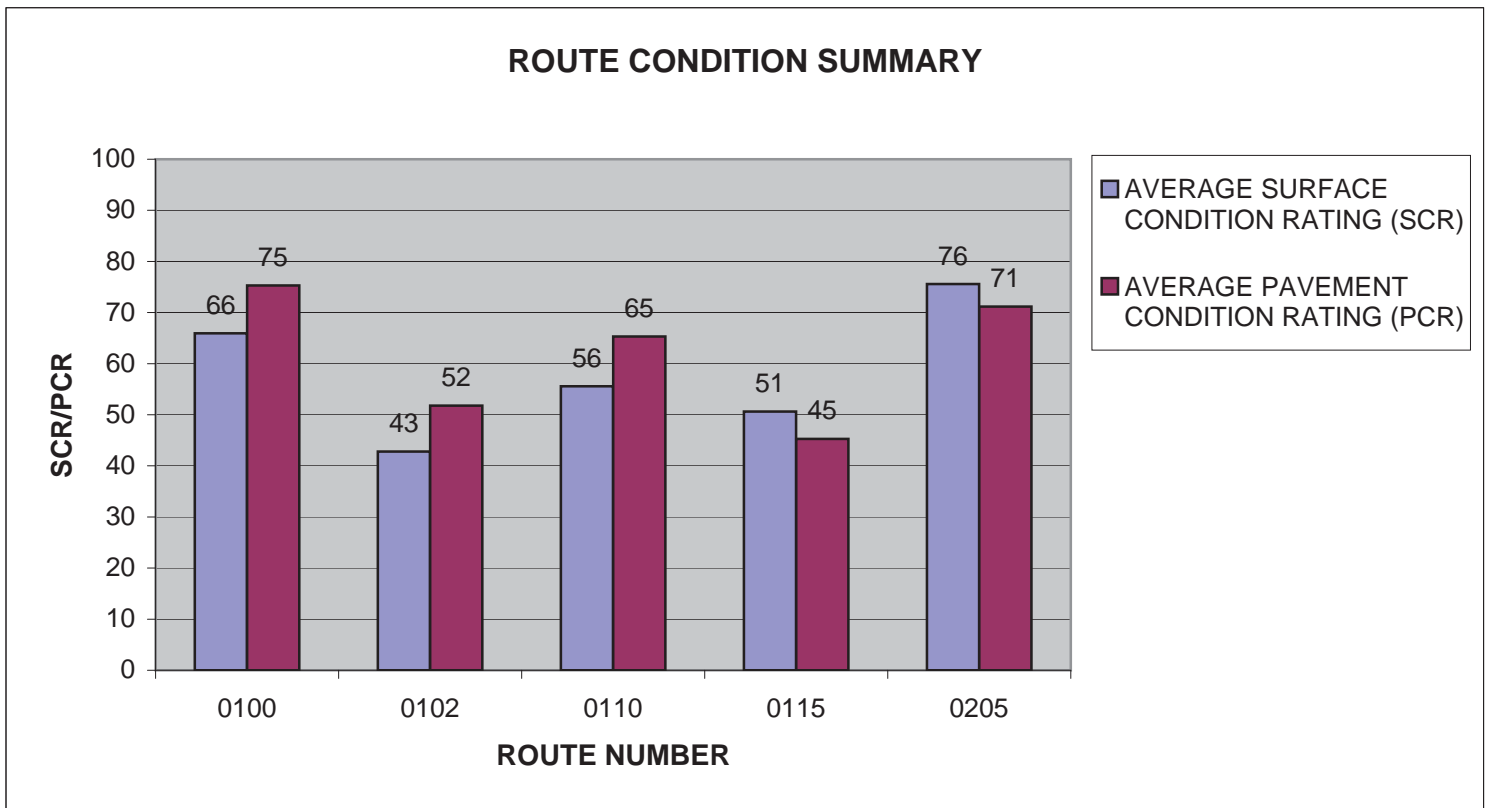
## REDW: PAVED ROUTE MILES AND PERCENTAGES BY FUNCTIONAL CLASS AND PCR

F.C.	Pavement Condition Rating (PCR)								TOTAL MILES
	Poor (<=60)		Fair (61-84)		Good (85-94)		Excellent (95-100)		
	MILES	%	MILES	%	MILES	%	MILES	%	
1									
2	1.98	23.13%	2.65	30.96%	0.81	9.46%	0.04	0.47%	5.48
3	0.89	10.40%	0.63	7.36%	0.07	0.82%			1.59
4									
5	0.42	4.91%	0.04	0.47%					0.46
6	0.20	2.34%	0.61	7.13%	0.10	1.17%	0.12	1.40%	1.03
7									
8									
<b>Totals</b>	<b>3.49</b>	<b>40.77%</b>	<b>3.93</b>	<b>45.91%</b>	<b>0.98</b>	<b>11.45%</b>	<b>0.16</b>	<b>1.87%</b>	<b>8.56</b>



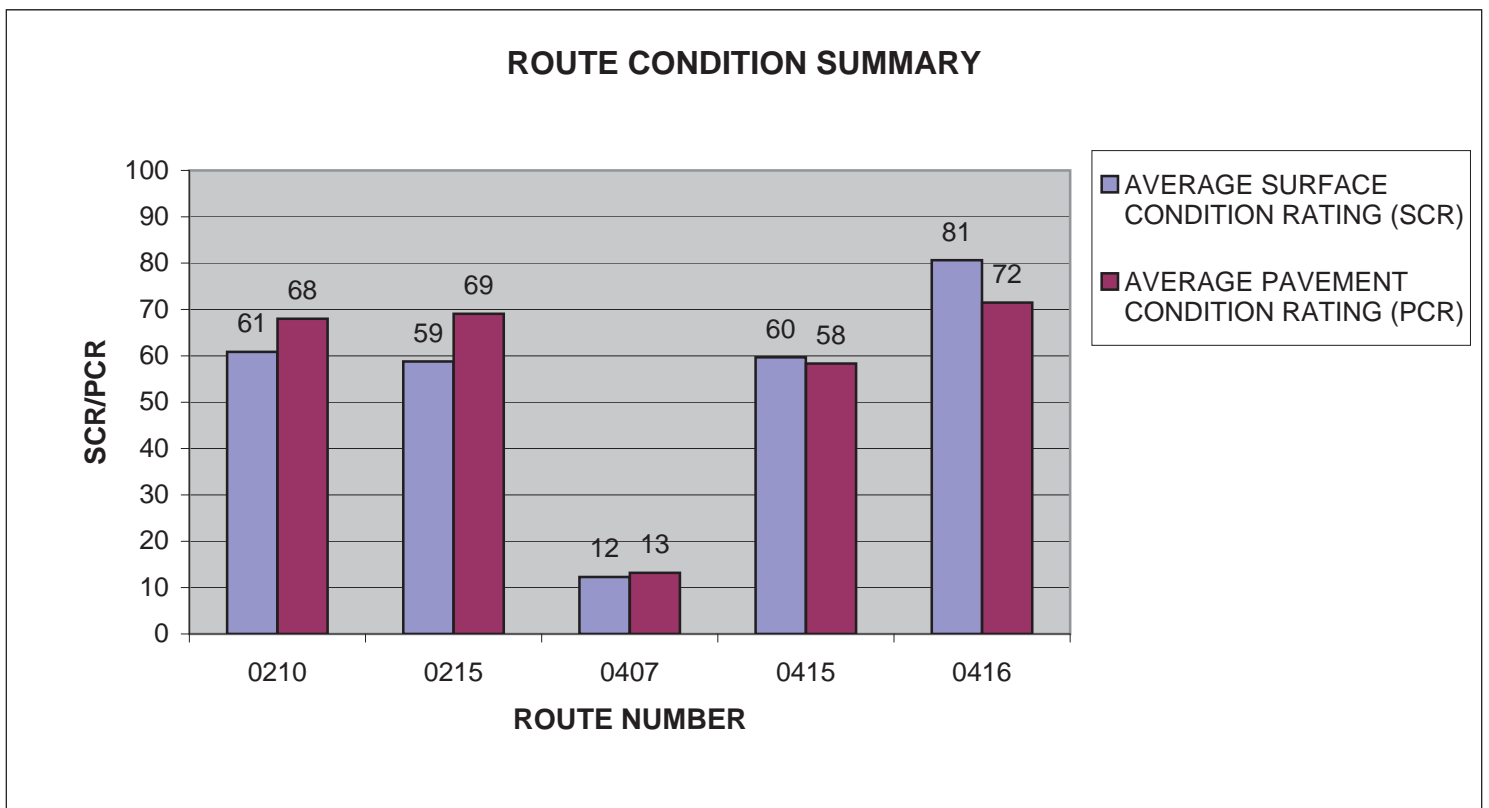
# REDW: ROUTE CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0100	ENDERTS BEACH ROAD	2	1.77	ASPHALT	66	75
0102	ALDER CAMP ROAD	2	2.09	ASPHALT	43	52
0110	RED ALDER ROAD	2	1.26	ASPHALT	56	65
0115	DAVISON ROAD	2	0.36	ASPHALT	51	45
0205	LOST MAN CREEK ROAD	3	0.90	ASPHALT	76	71



# REDW: ROUTE CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0210	REDWOOD CREEK TRAILHEAD ROAD	3	0.43	ASPHALT	61	68
0215	KUCHEL VISITOR CENTER ACCESS ROAD	3	0.26	ASPHALT	59	69
0407	RESIDENCE ROAD	5	0.4	ASPHALT	12	13
0415	KUCHEL VISITOR CENTER SERVICE ROAD	5	0.06	ASPHALT	60	58
0416	OFF HIGHWAY ROAD	6	1.03	ASPHALT	81	72

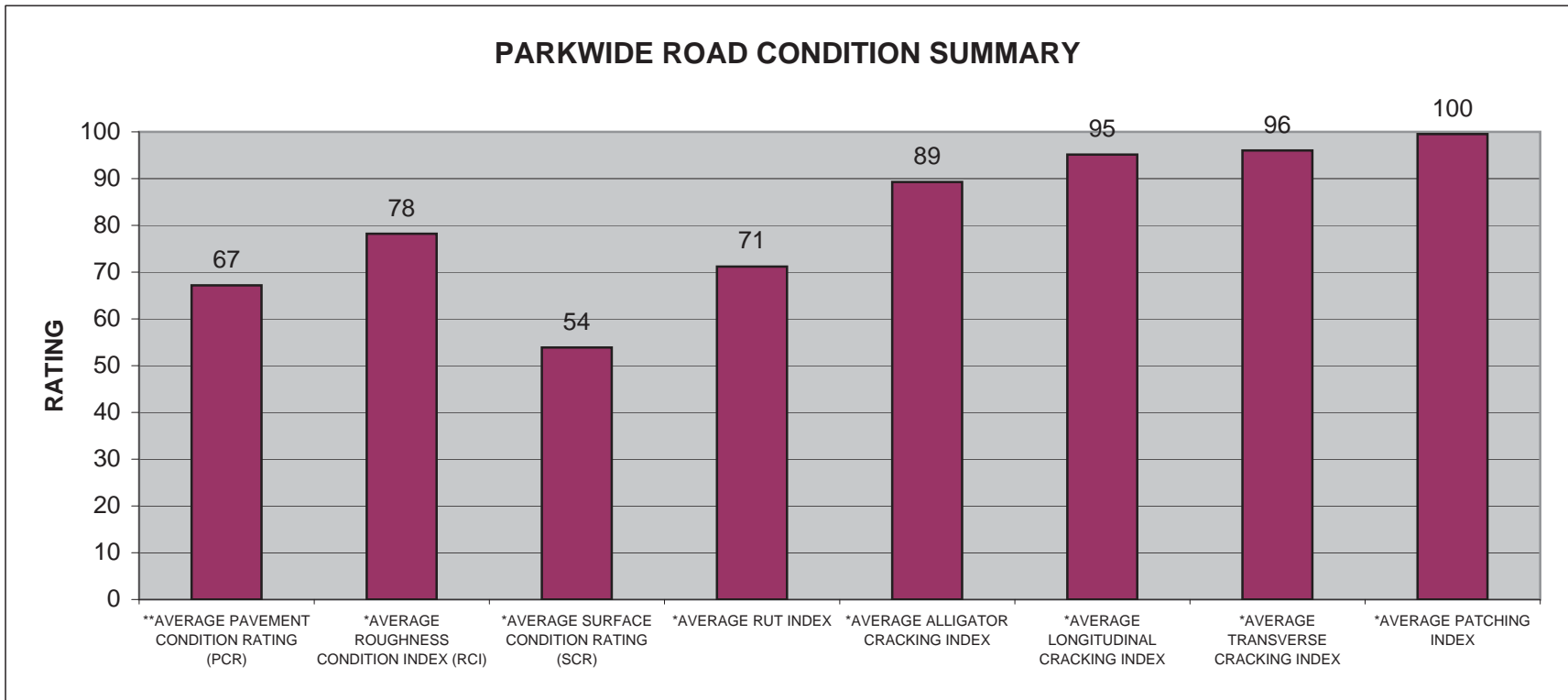


# REDW: PARKWIDE ROAD CONDITION SUMMARY

**AVERAGE PAVEMENT CONDITION RATING (PCR)	*AVERAGE ROUGHNESS CONDITION INDEX (RCI)	*AVERAGE SURFACE CONDITION RATING (SCR)	*AVERAGE RUT INDEX	*AVERAGE ALLIGATOR CRACKING INDEX	*AVERAGE LONGITUDINAL CRACKING INDEX	*AVERAGE TRANSVERSE CRACKING INDEX	*AVERAGE PATCHING INDEX
67	78	54	71	89	95	96	100

\*\* PCR Index is based on all ARAN-driven roads, parking areas, and manually rated routes.

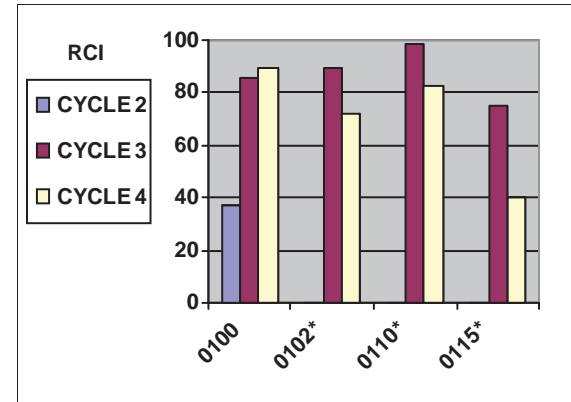
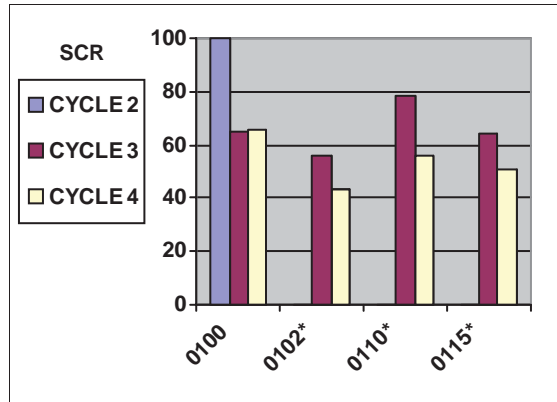
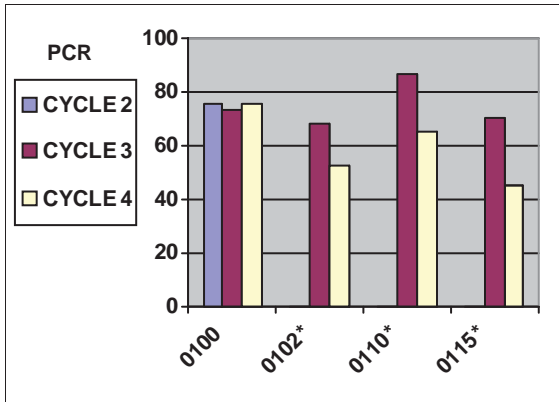
\* Index values are based on ARAN-driven roads only.



## REDW : CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	ROUTE LENGTH	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0100	2.24	0.00	2.24	75	73	75	+3%	100	65	66	+2%	37	85	89	+5%	
0102*	2.09	0.00	2.09	0	68	52	-24%	0	56	43	-23%	0	89	72	-19%	Route not collected in Cycle 2.
0110*	1.26	0.00	1.26	0	86	65	-24%	0	78	56	-28%	0	98	82	-16%	Route not collected in Cycle 2.
0115*	0.36	0.00	0.36	0	70	45	-36%	0	64	51	-20%	0	75	40	-47%	Route not collected in Cycle 2.

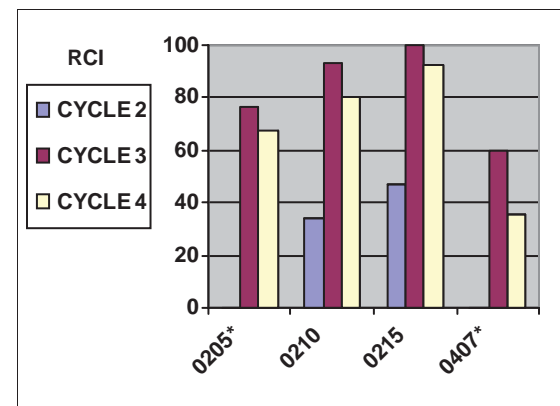
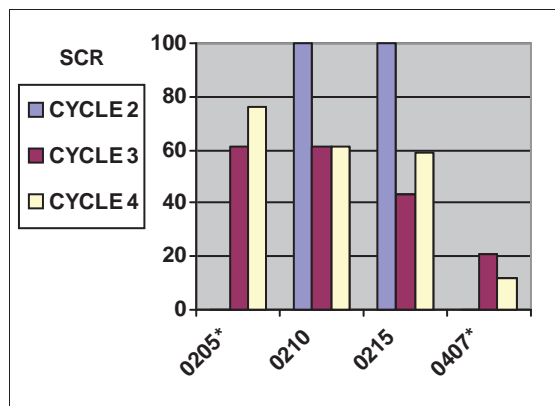
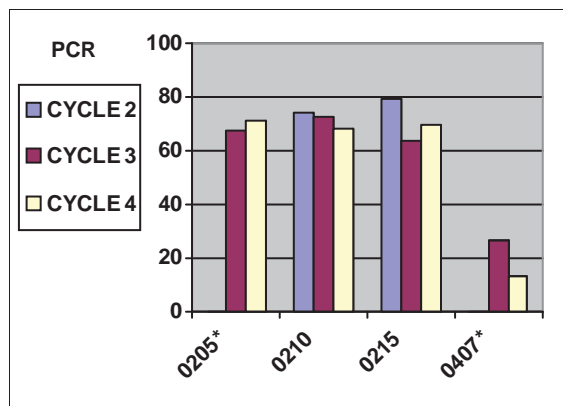
\* - denotes a comment



## REDW : CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	ROUTE LENGTH	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0205*	0.90	0.00	0.90	0	67	71	+6%	0	61	76	+25%	0	76	67	-12%	Route not collected in Cycle 2.
0210	0.43	0.00	0.43	74	72	68	-6%	100	61	61	0%	34	93	80	-14%	
0215	0.26	0.00	0.26	79	63	69	+10%	100	43	59	+37%	47	100	92	-8%	
0407*	0.41	0.00	0.41	0	26	13	-50%	0	21	12	-43%	0	60	36	-40%	Route not collected in Cycle 2.

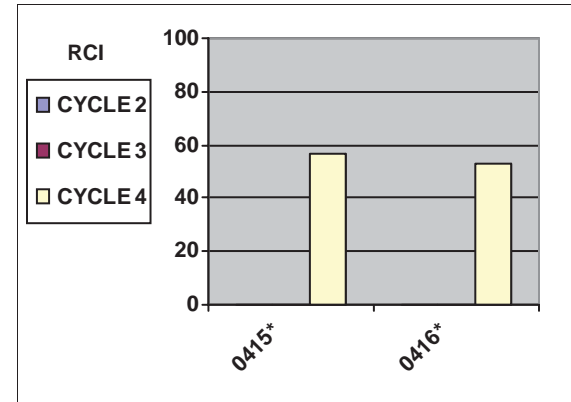
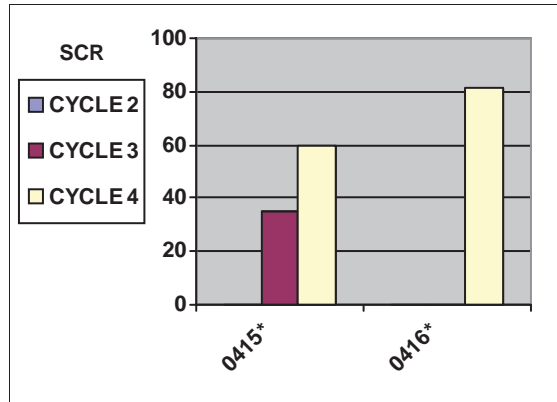
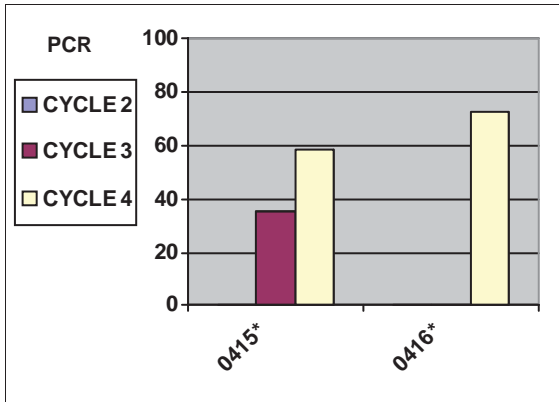
\* - denotes a comment



## REDW : CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	ROUTE LENGTH	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0415*	0.07	0.00	0.07	0	34	58	+71%	0	34	60	+76%	0	0	57	N/A	Route not collected in Cycle 2. No RCI recorded for Cycle 3.
0416*	1.03	0.00	1.03	0	0	72	N/A	0	0	81	N/A	0	0	53	N/A	New route added in Cycle 4.

\* - denotes a comment

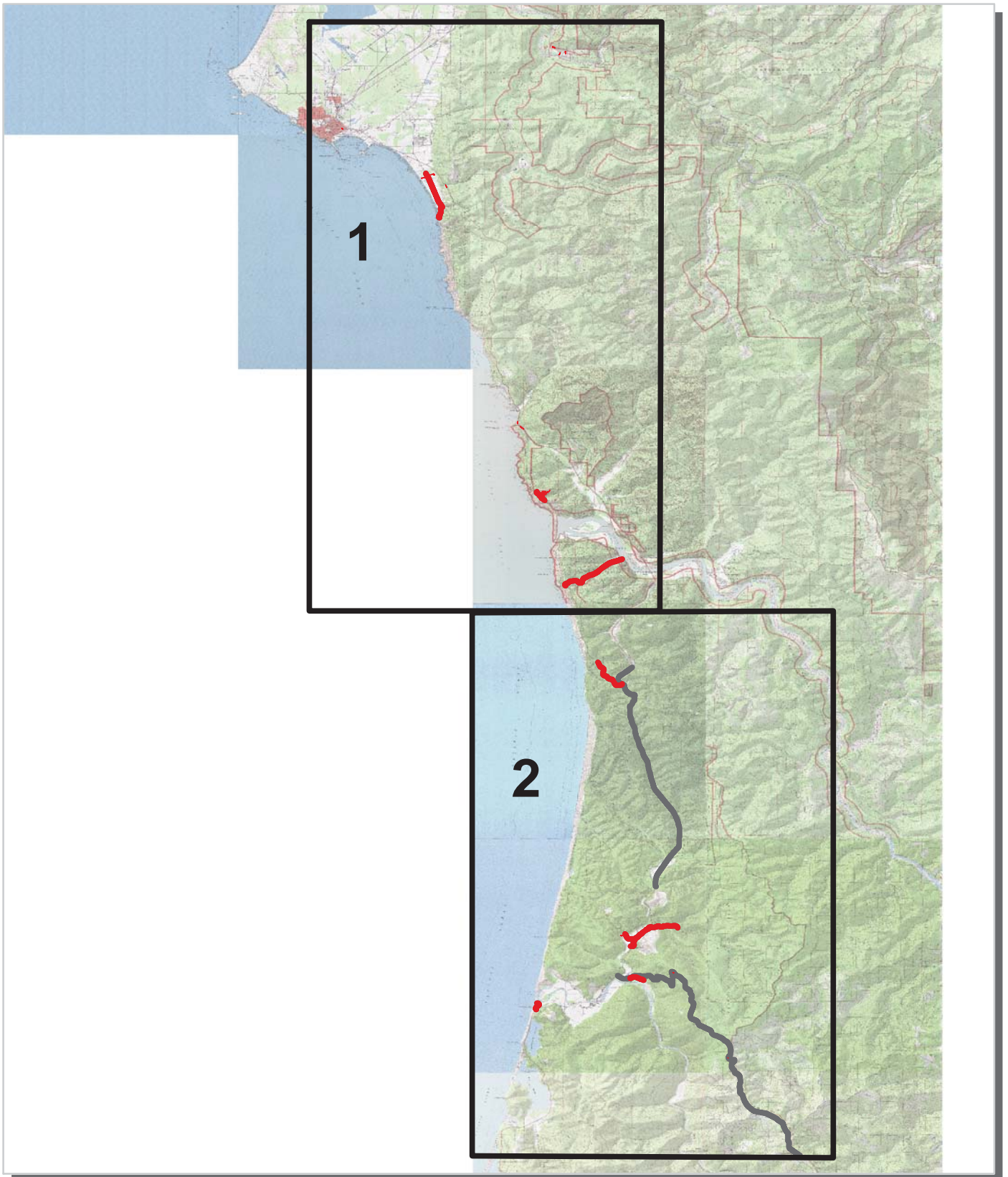


# Redwood National Park

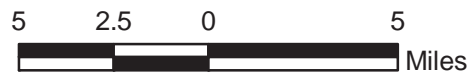


## **Section 3** **Park Route Location / Condition** **Maps**

# Redwood National Park Route Location Map Key Map

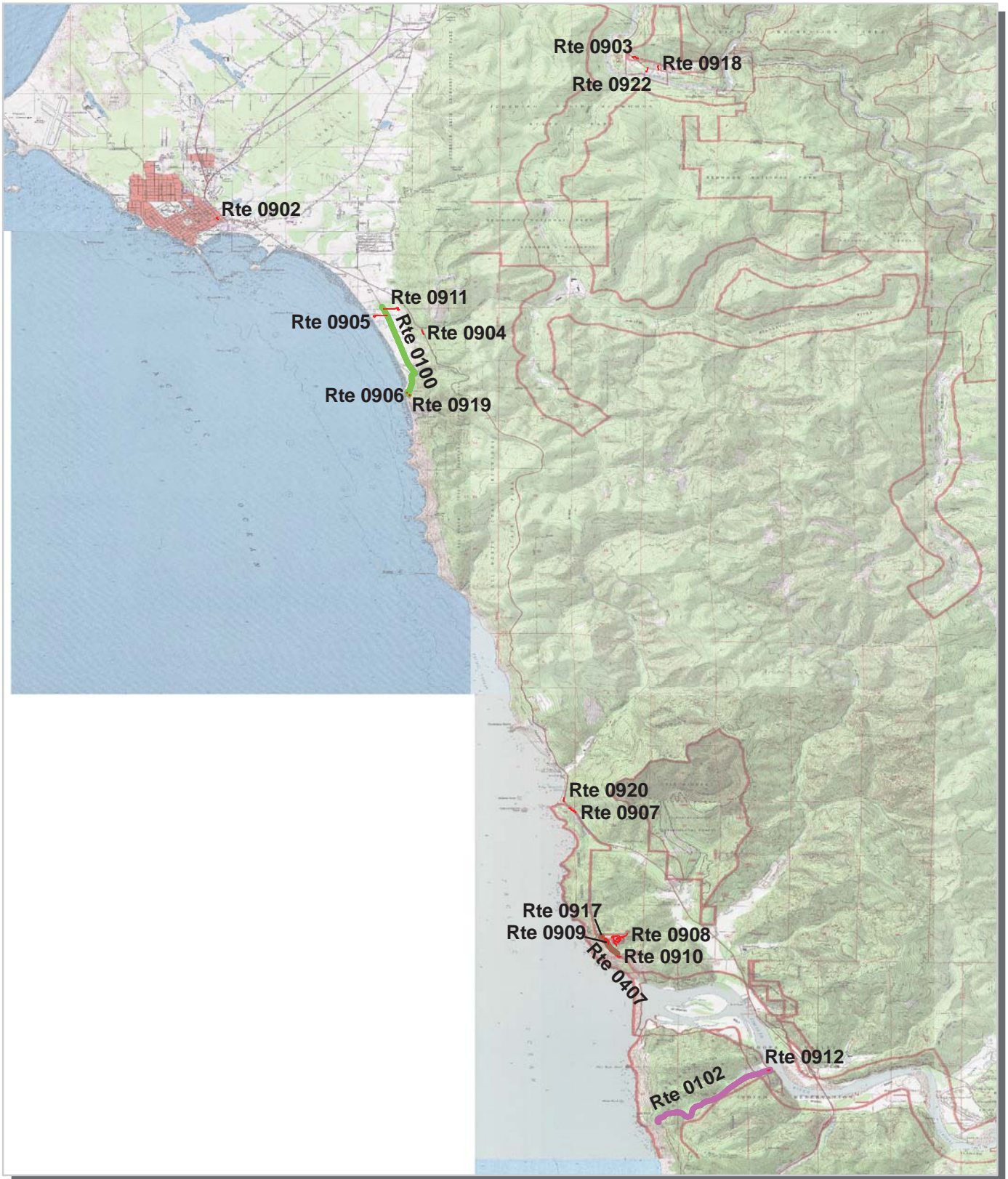


 Park Owned Routes





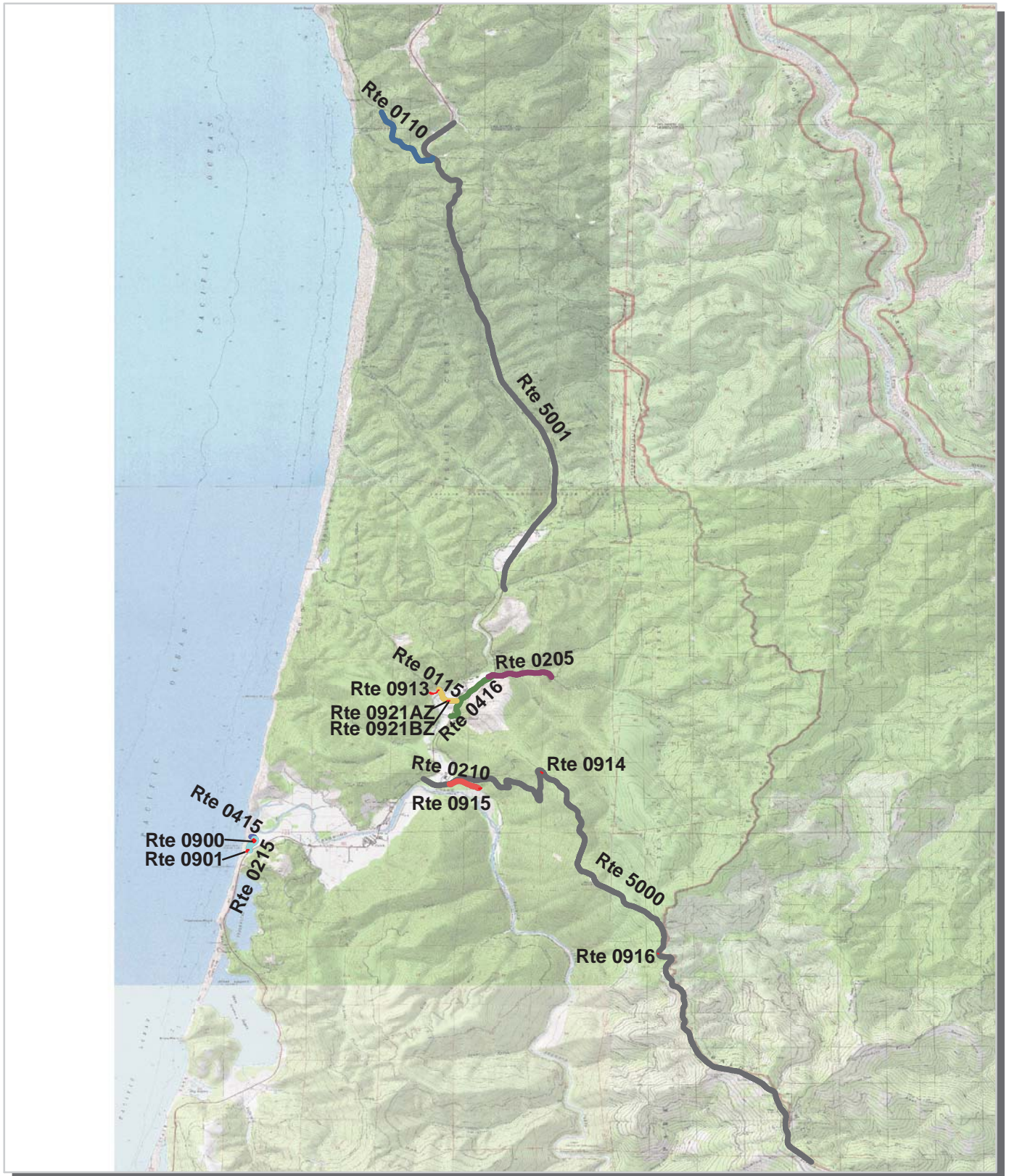
# Redwood National Park Route Location Map Area 1



Unique colors used to differentiate routes



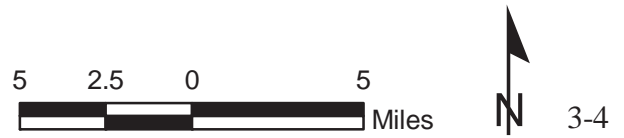
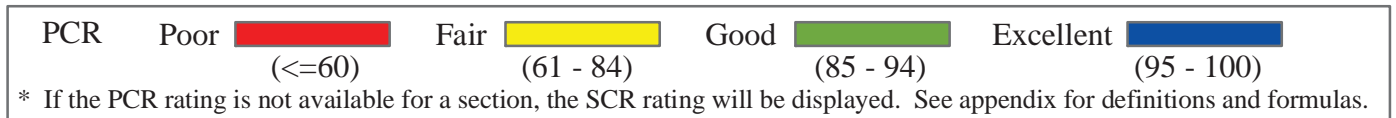
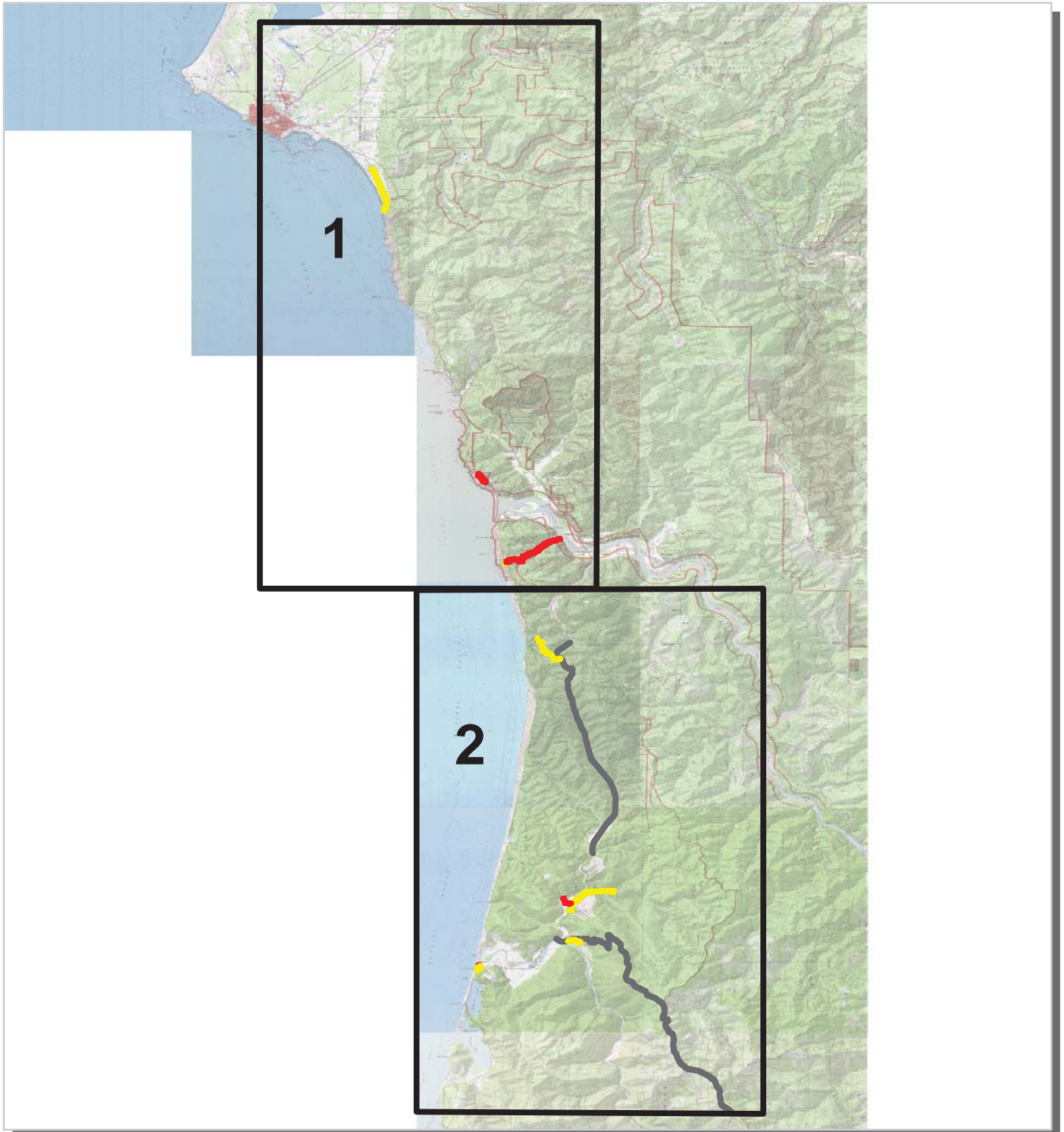
# Redwood National Park Route Location Map Area 2



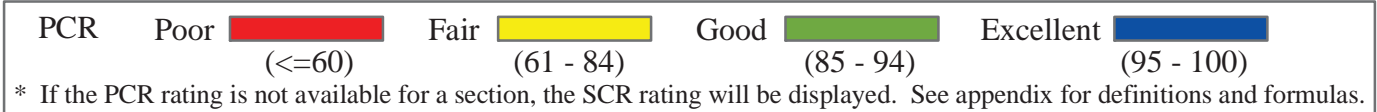
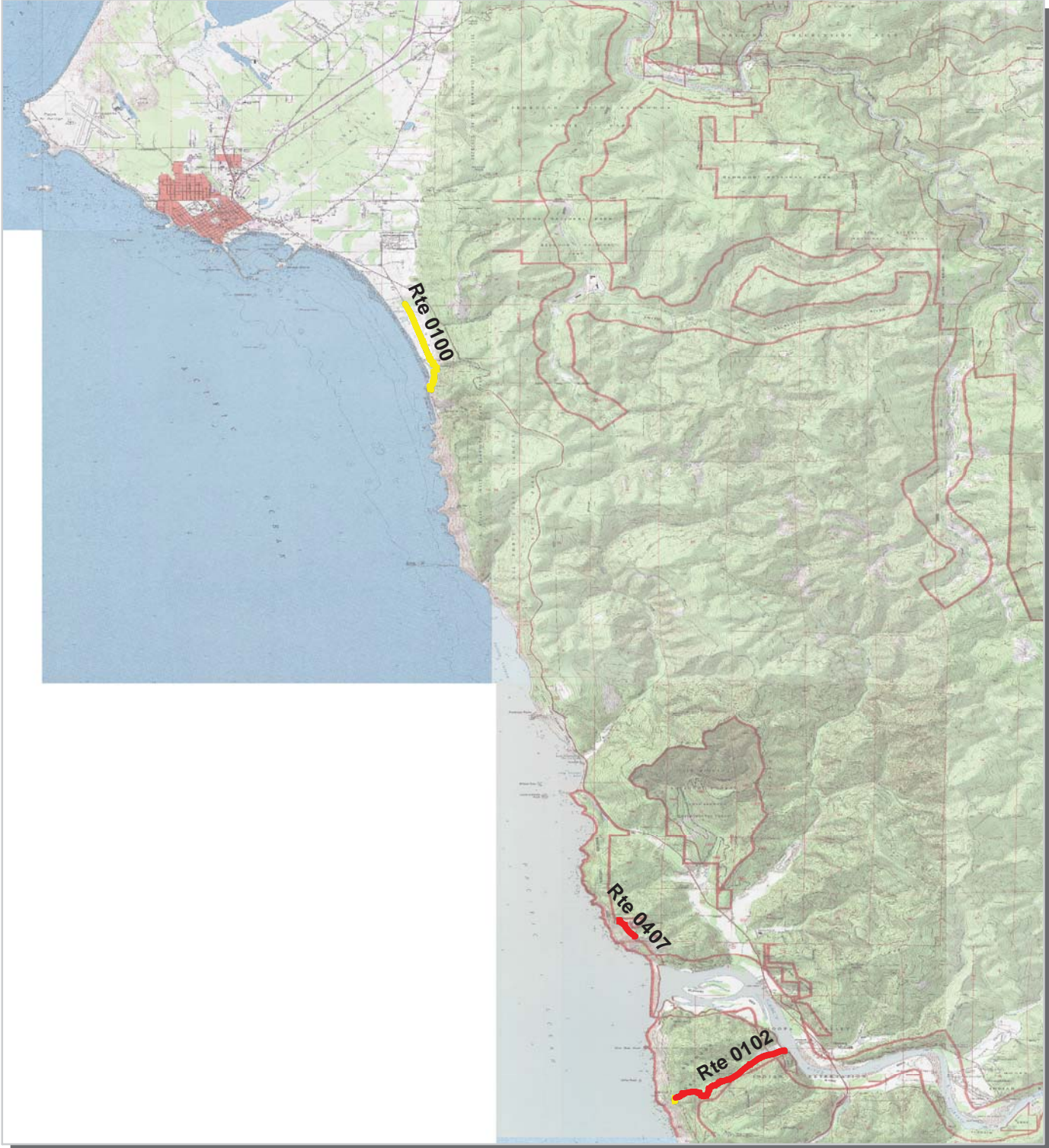
Unique colors used to differentiate routes



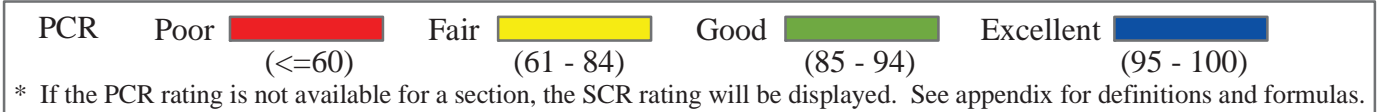
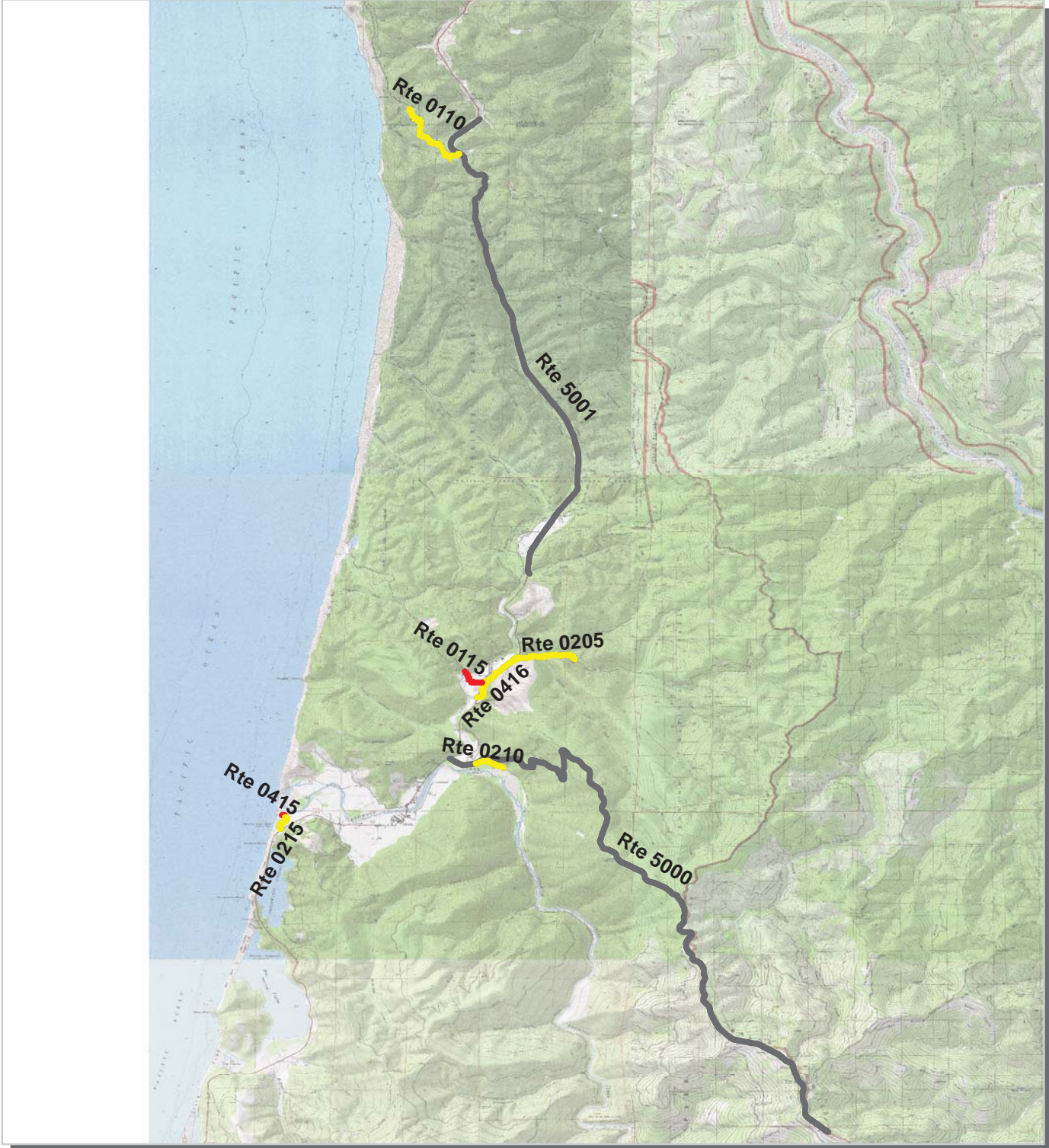
# Redwood National Park Route Condition Map PCR - Mile by Mile Key Map



**Redwood National Park  
Route Condition Map  
PCR - Mile by Mile  
Area 1**



**Redwood National Park  
Route Condition Map  
PCR - Mile by Mile  
Area 2**



# Redwood National Park



## **Section 4** **Park Route Inventory**

# NPS/RIP Route ID Report

Road Inventory Program 07/19/2007

(Numerical By Route #)

Page 1 of 7

Shading Color Key:

White = Paved Routes, ARAN Driven

Yellow = Unpaved Routes, ARAN not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Red text denotes  
approx. mileage

Grey = Paved Routes, ARAN not Driven

Black = Paved State, Local or Private non-NPS Routes, ARAN Driven

■ = Concession Route Flag ON

\*\* Unpaved Routes displayed on report were obtained from FMSS database and not inventoried by Road Inventory Program (RIP)

## REDW

### REDWOOD NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0100	3456		ENDERTS BEACH ROAD	FROM PARK BOUNDARY AT PAVEMENT CHANGE TO ROUTE 0919		1.770	0.000	1.770	2	2	0	AS	1
0102	3443		ALDER CAMP ROAD	FROM KLAMATH BEACH ROAD TO ROUTE 0202 AND START OF STATE-MAINTAINED ROAD		2.090	0.000	2.090	2	2	0	AS	1
0110	3447		RED ALDER ROAD	FROM ROUTE 5001 TO ROUTE 0202		1.260	0.000	1.260	2	2	0	AS	2
0115	3454		DAVISON ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0913		0.360	0.000	0.360	2	2	0	AS	2
0116	11034		HIGH BLUFF ROAD	FROM ROUTE 0202 TO ROUTE 0936		0.000	0.300	0.300	2	2	0	GR	
0117	20927		HOSTEL ACCESS ROAD	FROM WILSON CREEK ROAD TO ROUTE 0931		0.000	0.200	0.200	2	2	0	GR	
0118	3452		TALL TREES ACCESS ROAD	FROM ROUTE 5000 TO ROUTE 0930		0.000	6.150	6.150	2	2	0	GR	
0119	3458		FRESHWATER LAGOON ACCESS ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0933		0.000	0.300	0.300	2	1	0	GR	
0120	3472		SKUNK CABBAGE ROAD - SOUTH	FROM PRIVATE ROAD TO ROUTE 0929		0.000	0.500	0.500	2	2	0	GR	
0121	3474		WOLF CREEK ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0935		0.000	0.550	0.550	2	2	0	GR	
0202	3450		COASTAL DRIVE	FROM ROUTE 0110 TO ROUTE 0102		0.000	0.810	0.810	3	2	0	GR	
0205	15653		LOST MAN CREEK ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0932		0.900	0.000	0.900	3	2	0	AS	2
0207	13451		DAVISON ROAD	FROM ROUTE 0913 TO PARK BOUNDARY		0.000	3.000	3.000	3	2	0	GR	
0210	11047		REDWOOD CREEK TRAILHEAD ROAD	FROM ROUTE 5000 TO ROUTE 0915		0.430	0.000	0.430	3	2	0	AS	2
0215	11049		KUCHEL VISITOR CENTER ACCESS ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0900 AND ROUTE 0415		0.260	0.000	0.260	3	2	0	AS	2
0406	11024		SCHACH HOUSE/JED SMITH SERVICE ROAD	FROM U.S. HIGHWAY 199 TO MAINTENANCE YARD		0.000	0.170	0.170	5	2	0	GR	
0407	15618		RESIDENCE ROAD	FROM PJ MURPHY DRIVE TO ROUTE 0917		0.400	0.000	0.400	5	2	0	AS	1
0415	15655		KUCHEL VISITOR CENTER SERVICE ROAD	FROM ROUTE 0215 AT MP 0.26 AND ROUTE 0900 TO END		0.060	0.000	0.060	5	1	0	AS	2
0416	3445		OFF HIGHWAY ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0205		1.030	0.000	1.030	6	1	0	AS	2
0417	11033		FIRING RANGE ROAD	FROM ROUTE 0102 TO END		0.000	0.500	0.500	6	2	0	GR	
0418	11038		LANE RANCH ROAD	FROM ROUTE 5000 TO END		0.000	0.130	0.130	6	2	0	GR	
0419	11048		ROBBERS GULCH ROAD	FROM ROUTE 5000 TO END		0.000	1.000	1.000	6	2	0	GR	
0420	11050		SOUTH OPERATIONS CENTER ACCESS ROAD	FROM ROUTE 0460 TO END		0.000	0.500	0.500	6	2	0	GR	

# NPS/RIP Route ID Report

Road Inventory Program 07/19/2007

(Numerical By Route #)

Page 2 of 7

Shading Color Key:

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■ = Concession Route Flag ON

\*\* Unpaved Routes displayed on report were obtained from FMSS database and not inventoried by Road Inventory Program (RIP)

## REDW

### REDWOOD NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0421	11051		TRUCK SHOP ROAD	FROM ROUTE 0115 TO END		0.000	0.500	0.500	6	2	0	GR	
0422	13169		BRUSH DANCE ROAD	FROM KLAMATH BEACH ROAD TO END		0.000	0.150	0.150	6	2	0	GR	
0423	13468		ROGERS PEAK ROAD	FROM ROUTE 0466 TO END		0.000	1.400	1.400	5	2	0	GR	
0424	13490		Y - LINE ROAD	FROM B-LINE ROAD TO END		0.000	2.800	2.800	6	2	0	GR	
0425	13493		C-12 ROAD	FROM ROUTE 0454 TO END		0.000	1.100	1.100	6	2	0	GR	
0426	13494		M-11 ROAD	FROM ROUTE 0453 TO END		0.000	1.900	1.900	6	1	0	NV	
0427	13996		G-LINE/C-LINE (S) ROAD	FROM ROUTE 0466 TO END		0.000	0.500	0.500	6	2	0	GR	
0428	13997		G-6-1 ROAD	FROM ROUTE 0425 TO END		0.000	1.300	1.300	6	1	0	GR	
0429	14483		L-1 (E) ROAD	FROM ROUTE 0464 TO END		0.000	1.700	1.700	6	2	0	GR	
0430	14486		205 ROAD / SKUNK CABBAGE - NORTH	FROM ROUTE 0913 TO END		0.000	2.900	2.900	6	2	0	GR	
0431	14487		205 SPUR ROAD	FROM ROUTE 0430 TO END		0.000	0.600	0.600	6	2	0	GR	
0432	3468		LYONS RANCH ROAD	FROM BALD HILLS ROAD TO END		0.000	2.400	2.400	6	1	0	GR	
0433	14500		LONG RIDGE ROAD	FROM ROUTE 0432 TO ROUTE 0449		0.000	0.700	0.700	6	1	0	NV	
0434	14504		SPRING ROAD	FROM ROUTE 0450 TO END		0.000	0.500	0.500	6	1	0	GR	
0435	14506		LOWER SPRING ROAD	FROM ROUTE 0450 TO END		0.000	0.400	0.400	6	2	0	GR	
0436	14507		BOUNDARY ROAD	FROM ROUTE 0120 TO END		0.000	0.300	0.300	6	1	0	NV	
0437	14508		MID BASIN ROAD	FROM ROUTE 0450 TO END		0.000	0.900	0.900	6	1	0	GR	
0438	14511		T. BEAR ROAD	FROM ROUTE 0439 TO END		0.000	0.700	0.700	6	1	0	NV	
0439	14512		MAIN STEM ROAD	FROM ROUTE 0449 TO END		0.000	0.500	0.500	6	1	0	GR	
0440	14513		LOWER ROCK FORK ROAD	FROM ROUTE 0450 TO END		0.000	0.300	0.300	6	1	0	GR	
0441	14514		SCHOOLHOUSE PASTURE/PEAK ROAD	FROM ROUTE 0432 TO END		0.000	0.530	0.530	6	1	0	NV	
0442	14527		A-9-7 ROAD	FROM ROUTE 0466 TO END		0.000	1.100	1.100	6	1	0	NV	
0443	14530		L-2-2 ROAD	FROM ROUTE 0463 TO END		0.000	2.200	2.200	6	1	0	NV	
0444	14992		GENEVA ROAD	FROM ROUTE 0205 TO ROUTE 0461		0.000	4.350	4.350	6	1	0	GR	
0445	15324		B-5 (WSA) ROAD	FROM ROUTE 0466 TO B-LINE ROAD		0.000	4.800	4.800	6	2	0	GR	



# NPS/RIP Route ID Report

Road Inventory Program 07/19/2007

(Numerical By Route #)

Page 3 of 7

Shading Color Key:

White = Paved Routes, ARAN Driven

Yellow = Unpaved Routes, ARAN not Driven

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Green = All Unpaved Parking Areas

Red text denotes approx. mileage

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■ = Concession Route Flag ON

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## REDW

### REDWOOD NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0446	15328		M-2-1/2 ROAD	FROM ROUTE 0465 TO END		0.000	6.000	6.000	6	1	0	NV	
0447	15563		COYOTE PEAK ROAD	FROM BALD HILLS ROAD TO END		0.000	1.600	1.600	6	1	0	NV	
0448	15564		LOOKOUT ROAD	FROM BALD HILLS ROAD TO END		0.000	0.450	0.450	6	2	0	NV	
0449	15565		RANCH ROAD	FROM ROUTE 0433 TO ROUTE 0450		0.000	2.550	2.550	6	1	0	NV	
0450	15566		ROCK FORK ROAD	FROM ROUTE 0449 TO ROUTE 0447		0.000	2.750	2.750	6	2	0	GR	
0451	15567		ROCK FORK SPUR ROAD	FROM ROUTE 0450 TO END		0.000	0.350	0.350	6	1	0	NV	
0452	16657		DAVISON RANCH ROAD	FROM ROUTE 0115 TO END		0.000	0.200	0.200	6	1	0	GR	
0453	3440		A-9 ROAD	FROM ROUTE 0466 TO END		0.000	2.610	2.610	6	1	0	GR	
0454	3442		A-9-9 ROAD	FROM ROUTE 0466 TO ROUTE 0425		0.000	2.600	2.600	6	1	0	NV	
0455	3466		B-500 ROAD	FROM ROUTE 0205 TO END		0.000	1.400	1.400	6	2	0	GR	
0456	3448		B-LINE ROAD	FROM ROUTE 0445 TO ROUTE 0465		0.000	4.300	4.300	6	2	0	NV	
0457	3449		COYOTE CREEK ROAD	FROM SCHOOL LOOP ROAD TO END		0.000	1.500	1.500	6	1	0	NV	
0458	3453		C-LINE WEST ROAD	FROM ROUTE 0466 TO END		0.000	0.850	0.850	6	2	0	GR	
0459	3459		HOWLAND HILL OUTDOOR SCHOOL ROAD	FROM HOWLAND HILL ROAD TO END		0.000	0.700	0.700	6	1	0	GR	
0460	3460		HILTON ROAD	FROM U.S. HIGHWAY 101 TO ROUTE 0466		0.000	1.200	1.200	5	1	0	GR	
0461	3461		HOLTER RIDGE ROAD	FROM ROUTE 0444 TO ROUTE 5000		0.000	6.200	6.200	6	1	0	NV	
0462	3462		K&K ROAD	FROM ROUTE 5000 TO END		0.000	3.300	3.300	6	2	0	GR	
0463	3463		L-1 ROAD ON THE ORICK HORSE TRAIL OVERNIGHT LOOP	FROM ROUTE 0464 TO ROUTE 0443		0.000	2.800	2.800	6	2	0	GR	
0464	3464		L-1-1 ROAD	FROM ROUTE 0466 TO ROUTE 0463		0.000	3.300	3.300	6	1	0	GR	
0465	3469		M-LINE ROAD	FROM ROUTE 0456 TO END		0.000	5.250	5.250	6	2	0	GR	
0466	3476		WEST SIDE ACCESS ROAD	FROM ROUTE 0460 TO ROUTE 0445		0.000	10.900	10.900	6	2	0	GR	
0467	14534		240 ROAD	FROM ROUTE 0121 TO ROUTE 0468		0.000	2.700	2.700	6	1	0	GR	
0469	13170		MILL CREEK HORSE TRAIL ROAD	FROM STATE PARK ROAD TO END AT MILL CREEK HORSE TRAIL		0.000	4.500	4.500	6	1	0	NV	
0900	15619		KUCHEL VISITOR CENTER PARKING	AT END OF ROUTE 0215 AT MP 0.20		0.000	0.000	0.000			46,546	AS	2

# NPS/RIP Route ID Report

Road Inventory Program 07/19/2007

(Numerical By Route #)

Page 4 of 7

Shading Color Key:

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approx. mileage

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## REDW

### REDWOOD NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0901	15620		REDWOOD CREEK PICNIC AREA PARKING	ADJACENT TO ROUTE 0215 AT MP 0.02		0.000	0.000	0.000			25,635	AS	2
0902	11020		PARK HEADQUARTERS PARKING	ADJACENT TO 3RD STREET IN CRESCENT CITY		0.000	0.000	0.000			11,506	AS	1
0903	15612		HIOUCHI INFORMATION CENTER PARKING	ADJACENT TO U.S. HIGHWAY 199		0.000	0.000	0.000			29,898	AS	1
0904	15616		CRESCENT CITY OVERLOOK VISTA POINT PARKING	ADJACENT TO U.S. HIGHWAY 101		0.000	0.000	0.000			19,132	AS	1
0905	13408		CRESCENT BEACH DAY USE PARKING	ADJACENT TO ROUTE 0100 AT MP 0.17		0.000	0.000	0.000			41,096	AS	1
0906	15614		CRESCENT BEACH OVERLOOK PARKING	ADJACENT TO ROUTE 0100 AT MP 1.74		0.000	0.000	0.000			2,795	AS	1
0907	11037		LAGOON CREEK PARKING	ADJACENT TO U.S. HIGHWAY 101		0.000	0.000	0.000			36,683	AS	1
0908	15656		REQUA MAINTENANCE FACILITY AREA PARKING	ADJACENT TO PJ MURPHY DRIVE		0.000	0.000	0.000			138,493	AS	1
0909	15657		CCC HOUSING PARKING	ADJACENT TO ROUTE 0407 AT MP 0.22		0.000	0.000	0.000			27,958	AS	1
0910	11018		KLAMATH OVERLOOK PARKING	ADJACENT TO PJ MURPHY DRIVE		0.000	0.000	0.000			11,086	AS	1
0911	15613		CRESCENT BEACH ENVIRONMENTAL EDUCATION CENTER PARKING	ADJACENT TO ROUTE 0100 AT MP 0.04		0.000	0.000	0.000			32,065	AS	1
0912	15617		DOUGLAS BRIDGE PARKING	ADJACENT TO ROUTE 0102 AT MP 0.01		0.000	0.000	0.000			9,985	AS	1
0913	15658		ELK MEADOW DAY USE AREA PARKING	AT END OF ROUTE 0115 AT MP 0.36		0.000	0.000	0.000			45,095	AS	2
0914	11036		LADY BIRD JOHNSON GROVE PARKING	ADJACENT TO ROUTE 5000		0.000	0.000	0.000			13,524	AS	2
0915	13407		REDWOOD CREEK TRAILHEAD PARKING	AT END OF ROUTE 0210 AT MP 0.43		0.000	0.000	0.000			23,609	AS	2
0916	11045		REDWOOD CREEK OVERLOOK PARKING	ADJACENT TO ROUTE 5000		0.000	0.000	0.000			4,119	AS	2
0917	11031		REQUA HOUSING PARKING	AT END OF ROUTE 0407 AT MP 0.40		0.000	0.000	0.000			3,359	AS	1

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## REDW

### REDWOOD NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0918	11023		HIOUCHI TRAILER PARKING	ADJACENT TO U.S. HIGHWAY 199		0.000	0.000	0.000			9,511	AS	1
0919	15615		NICKEL CREEK PARKING	AT END OF ROUTE 0100 AT MP 1.77		0.000	0.000	0.000			8,671	AS	1
0920	3457		FALSE KLAMATH COVE PARKING	FROM U.S. HIGHWAY 101 TO U.S. HIGHWAY 101		0.000	0.000	0.000			9,652	AS	1
0921ZZ	15659		DAVISON ROAD ELK VIEWING PARKING AREAS	ADJACENT TO ROUTE 0115 AT MP 0.11		0.000	0.000	0.000			7,212	AS	2
0922	15645		HIOUCHI DORM PARKING	ADJACENT TO U.S. HIGHWAY 199		0.000	0.000	0.000			12,288	AS	1
0923	11032		DOLASON TRAILHEAD PARKING	ADJACENT TO BALD HILLS ROAD		0.000	0.000	0.000			8,487	GR	
0924	11039		MOUTH OF REDWOOD CREEK ROAD PARKING	ADJACENT TO HUFFORD ROAD		0.000	0.000	0.000			3,769	GR	
0925	11040		ORICK HORSE TRAIL PARKING	ADJACENT TO DRYDEN ROAD		0.000	0.000	0.000			2,498	GR	
0926	11269		LYONS RANCH TRAILHEAD PARKING	ADJACENT TO BALD HILLS ROAD		0.000	0.000	0.000			2,799	GR	
0927	13404		FLINT RIDGE PARKING	ADJACENT TO ROUTE 0202		0.000	0.000	0.000			2,500	GR	
0928	13405		HOWLAND HILL OUTDOOR SCHOOL PARKING	ADJACENT TO ROUTE 0459		0.000	0.000	0.000			9,873	GR	
0929	13406		SKUNK CABBAGE TRAILHEAD PARKING	AT END OF ROUTE 0120		0.000	0.000	0.000			5,300	GR	
0930	14876		TALL TREES ACCESS PARKING	AT END OF ROUTE 0118		0.000	0.000	0.000			4,963	GR	
0931	14983		DEMARTIN HOSTEL PARKING	AT END OF ROUTE 0117		0.000	0.000	0.000			6,500	GR	
0932	15684		LOST MAN CREEK PARKING	AT END OF ROUTE 0205		0.000	0.000	0.000			7,000	GR	
0933	15975		FRESHWATER LAGOON BOAT LAUNCH PARKING	AT END OF ROUTE 0119		0.000	0.000	0.000			18,900	GR	
0934	16031		WOLF CREEK FIRE CACHE PARKING	ADJACENT TO ROUTE 0121		0.000	0.000	0.000			13,800	GR	
0935	16034		WOLF CREEK OUTDOOR SCHOOL PARKING	AT END OF ROUTE 0121		0.000	0.000	0.000			17,100	GR	
0936	28017		HIGH BLUFF PARKING	AT END OF ROUTE 0116		0.000	0.000	0.000			7,000	GR	



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## 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, campgrounds, etc. Route Numbers 100-199.
- Class 3** 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.
- Class 5** 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, Video Log and Road Features only.

## Surface Type Abbreviations:

- 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**

# NPS/RIP Subcomponent Details for REDW

Road Inventory Program 07/18/2007

(Numerical By Subcomponent #)

Page 1 of 1

Shading Color Key:

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= Concession Route Flag ON

= Subcomponent Flag ON

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## REDW

*REDWOOD NATIONAL PARK*

### Asset Entered in FMSS System

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0921ZZ	15659		DAVISON ROAD ELK VIEWING PARKING AREAS	ADJACENT TO ROUTE 0115 AT MP 0.11				0.00	0.00	0.00	7,212

### Asset REDW-0921ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0921AZ	15659	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808000; border: 1px solid black;"></span>	DAVISON ROAD ELK VIEWING PARKING A	ADJACENT TO ROUTE 0115 AT MP 0.11				0.00	0.00	0.00	2,988
0921BZ	15659	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808000; border: 1px solid black;"></span>	DAVISON ROAD ELK VIEWING PARKING B	ADJACENT TO ROUTE 0115 AT MP 0.11				0.00	0.00	0.00	4,224

# Redwood National Park



## **Section 5** **Paved Route Condition Rating Sheets** **(CRS)**



PCR	Poor	<span style="display:inline-block; width:15px; height:15px; background-color:red;"></span>	Fair	<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	Good	<span style="display:inline-block; width:15px; height:15px; background-color:green;"></span>	Excellent	<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>
		(≤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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

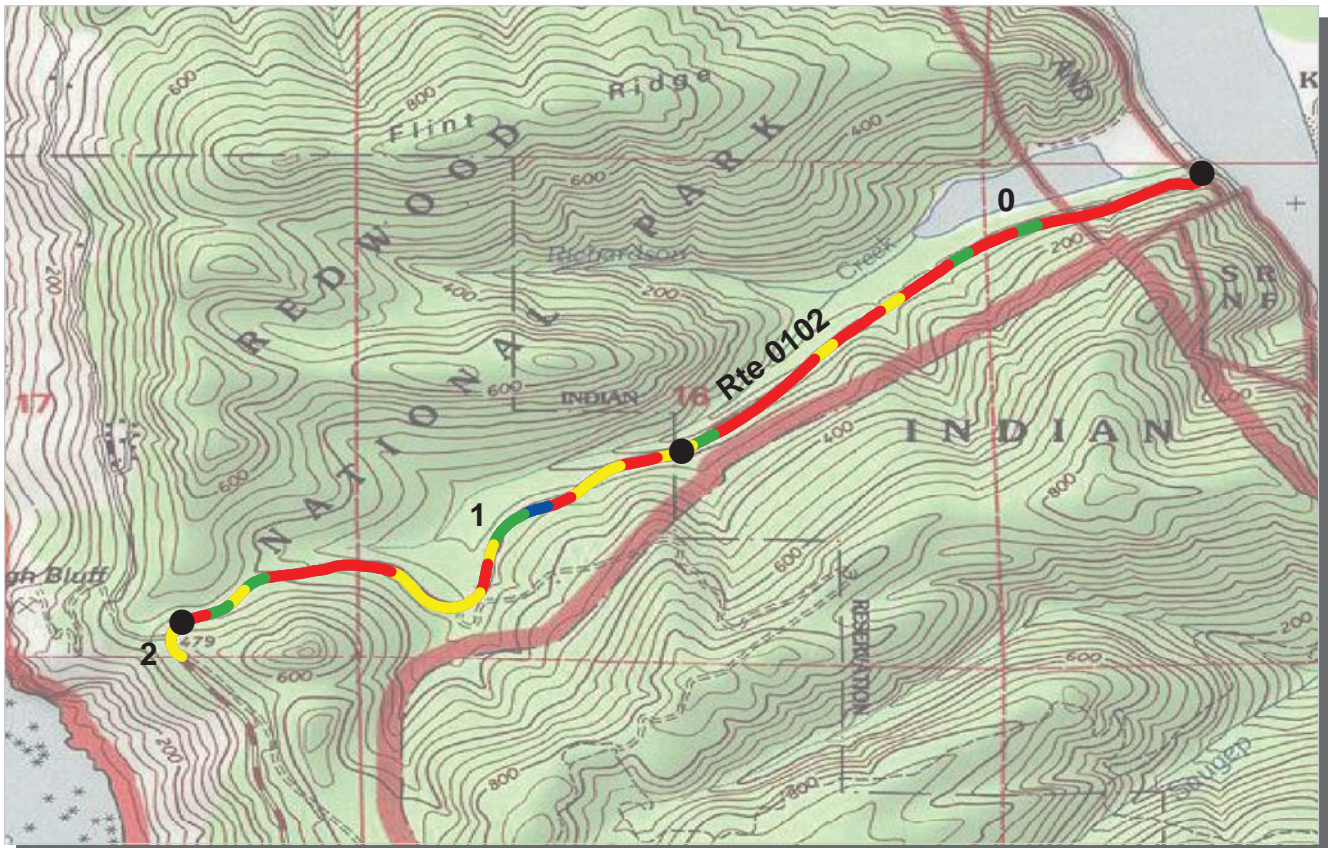
**ROUTE: 0100 ENDERTS BEACH ROAD** **TOTAL LENGTH: 1.77 Miles**

Section Number	0	1			
Section Length (mi)	1.00	0.77			
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	2	2			
Paved Width (ft)	25	23			
Lane Width (ft)	11	11			
Shoulder Width Right (ft)**	0	0			
Shoulder Width Left (ft)**	4	5			
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	68	64			
PCR (Pavement Condition Rating)	78	72			
<b>Distress Index Values</b>					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	99	99			
Transverse Cracking Index	100	99			
Patching Index	100	100			
Rutting Index	70	65			
Roughness Condition Index (RCI)	92	85			

**ROUTE: 0100 ENDERTS BEACH ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.





PCR    Poor ■    Fair ■    Good ■    Excellent ■  
           (<=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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0102 ALDER CAMP ROAD** **TOTAL LENGTH: 2.09 Miles**

Section Number	0	1	2		
Section Length (mi)	1.00	1.00	0.09		
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	2	2	2		
Paved Width (ft)	23	25	23		
Lane Width (ft)	10	11	12		
Shoulder Width Right (ft)**	0	5	2		
Shoulder Width Left (ft)**	3	0	2		
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	40	43	70		
PCR (Pavement Condition Rating)	47	55	70		
<b>Distress Index Values</b>					
Alligator Cracking Index	90	75	90		
Longitudinal Cracking Index	91	94	96		
Transverse Cracking Index	93	95	96		
Patching Index	99	100	100		
Rutting Index	65	74	87		
Roughness Condition Index (RCI)	66	76	70		

**ROUTE: 0102 ALDER CAMP ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



PCR    Poor (≤60)     Fair (61 - 84)     Good (85 - 94)     Excellent (95 - 100)

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

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0110 RED ALDER ROAD** **TOTAL LENGTH: 1.26 Miles**

<i>Section Number</i>	0	1			
<i>Section Length (mi)</i>	1.00	0.26			
<i>Traffic</i>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<i>Cross Section Information</i>					
Number of Lanes	2	2			
Paved Width (ft)	28	25			
Lane Width (ft)	12	14			
Shoulder Width Right (ft)**	3	2			
Shoulder Width Left (ft)**	4	5			
<i>Roadway Condition Information</i>					
SCR (Surface Condition Rating)	56	55			
PCR (Pavement Condition Rating)	65	68			
<i>Distress Index Values</i>					
Alligator Cracking Index	86	87			
Longitudinal Cracking Index	93	92			
Transverse Cracking Index	93	93			
Patching Index	100	100			
Rutting Index	79	81			
Roughness Condition Index (RCI)	80	88			

**ROUTE: 0110 RED ALDER ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



PCR	Poor	<span style="display:inline-block; width:15px; height:15px; background-color:red;"></span>	Fair	<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	Good	<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen;"></span>	Excellent	<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>
		(≤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.

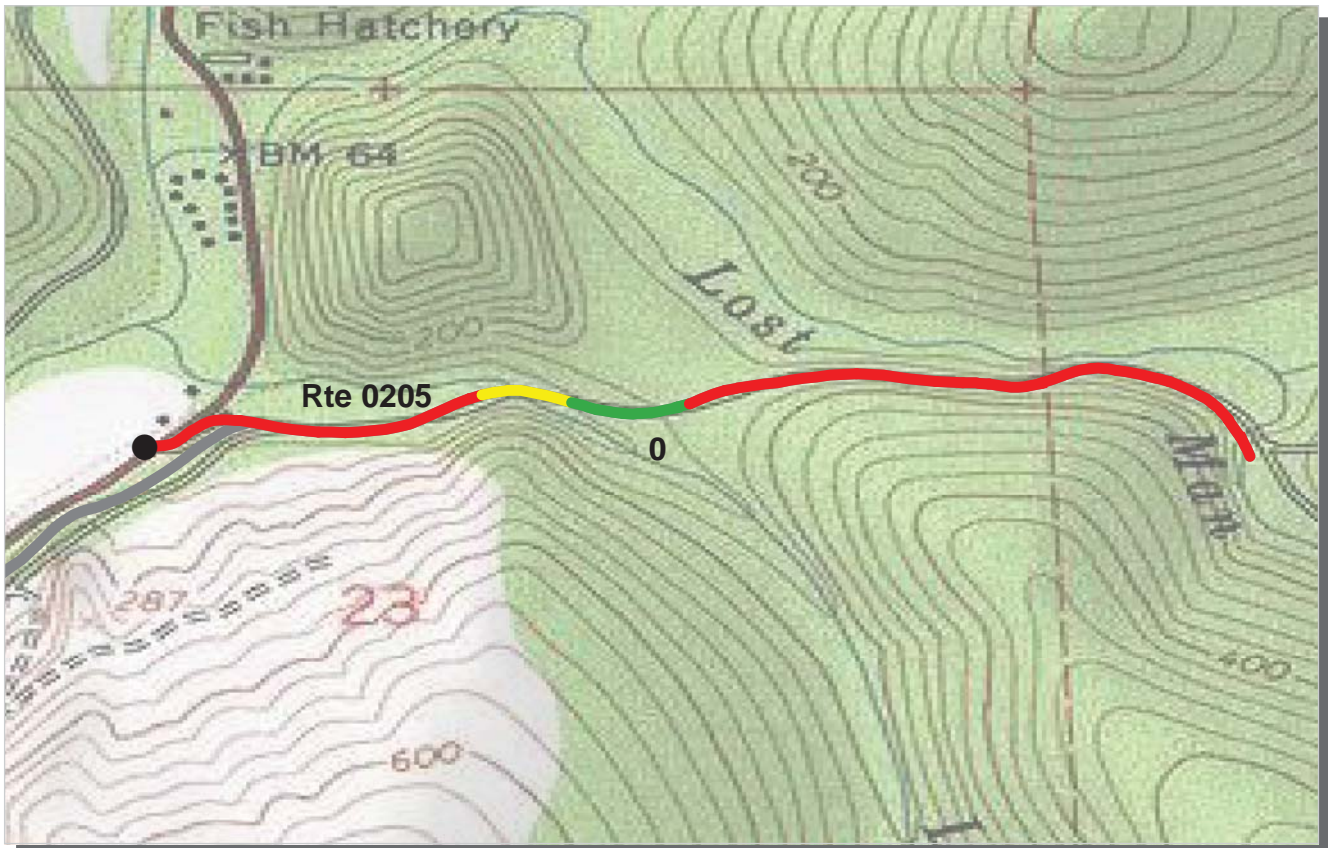
**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0115 DAVISON ROAD** **TOTAL LENGTH: 0.36 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.36				
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	12				
Shoulder Width Right (ft)**	2				
Shoulder Width Left (ft)**	2				
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	48				
PCR (Pavement Condition Rating)	44				
<b>Distress Index Values</b>					
Alligator Cracking Index	72				
Longitudinal Cracking Index	99				
Transverse Cracking Index	98				
Patching Index	99				
Rutting Index	70				
Roughness Condition Index (RCI)	41				

**ROUTE: 0115 DAVISON ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



PCR    Poor ■    Fair ■    Good ■    Excellent ■  
           (<=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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0205 LOST MAN CREEK ROAD** **TOTAL LENGTH: 0.90 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.90				
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	1				
Paved Width (ft)	20				
Lane Width (ft)	11				
Shoulder Width Right (ft)**	0				
Shoulder Width Left (ft)**	0				
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	76				
PCR (Pavement Condition Rating)	71				
<b>Distress Index Values</b>					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	99				
Patching Index	99				
Rutting Index	81				
Roughness Condition Index (RCI)	66				

**ROUTE: 0205 LOST MAN CREEK ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



**PCR**    **Poor**     **Fair**     **Good**     **Excellent**   
 (<=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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0210 REDWOOD CREEK TRAILHEAD ROAD                      TOTAL LENGTH: 0.43 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.43				
<b>Traffic</b> AADT SADT ADT Date	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b> Number of Lanes Paved Width (ft) Lane Width (ft) Shoulder Width Right (ft)** Shoulder Width Left (ft)**	2 21 9 0 9				
<b>Roadway Condition Information</b> SCR (Surface Condition Rating) PCR (Pavement Condition Rating)	61 68				
<b>Distress Index Values</b> Alligator Cracking Index Longitudinal Cracking Index Transverse Cracking Index Patching Index Rutting Index Roughness Condition Index (RCI)	98 99 99 100 65 80				

**ROUTE: 0210 REDWOOD CREEK TRAILHEAD ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



PCR	Poor	<span style="display:inline-block; width:15px; height:15px; background-color:red;"></span>	Fair	<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	Good	<span style="display:inline-block; width:15px; height:15px; background-color:green;"></span>	Excellent	<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>
		(≤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.

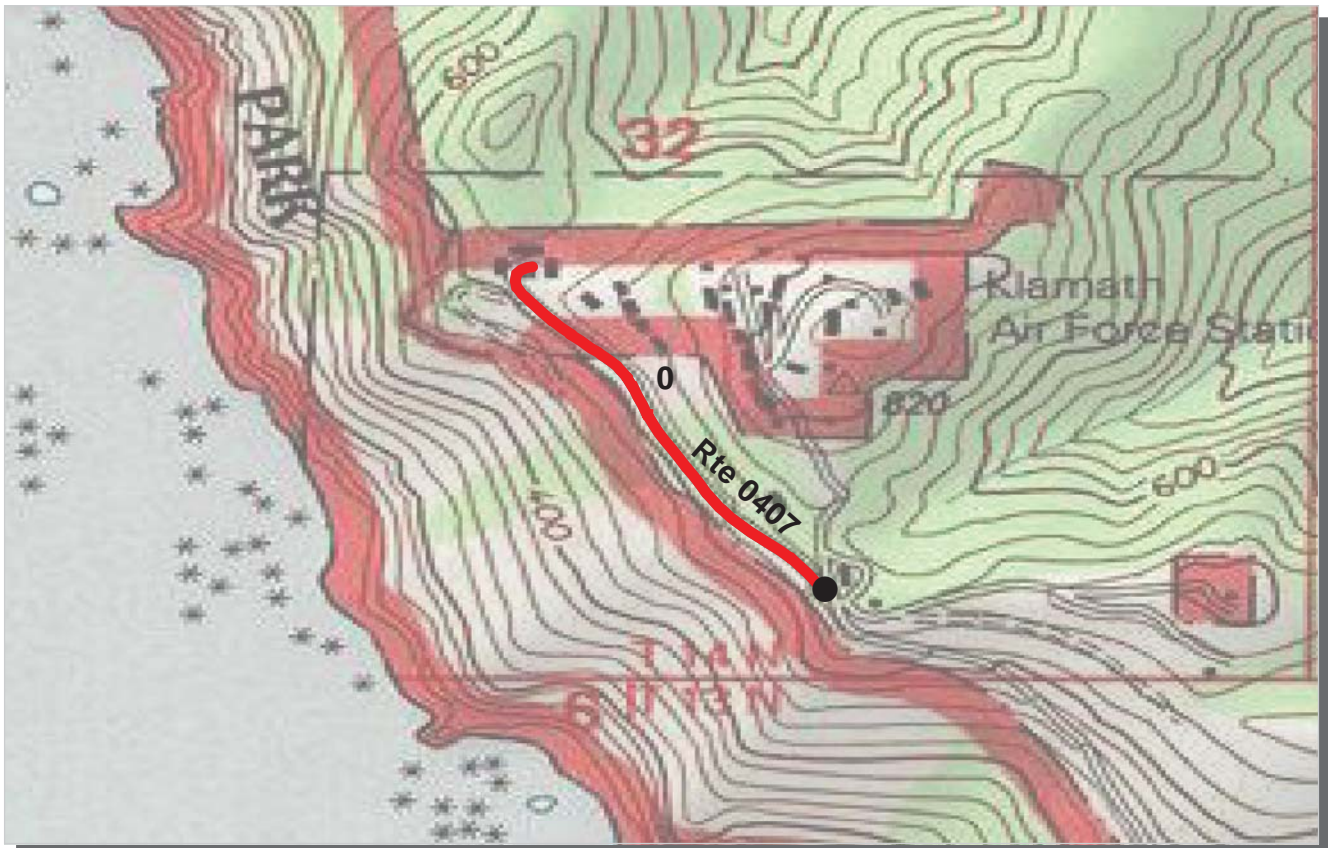
**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0215 KUCHEL VISITOR CENTER ACCESS ROAD TOTAL LENGTH: 0.26 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.26				
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	12				
Shoulder Width Right (ft)**	4				
Shoulder Width Left (ft)**	5				
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	59				
PCR (Pavement Condition Rating)	69				
<b>Distress Index Values</b>					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	60				
Roughness Condition Index (RCI)	92				

ROUTE: 0215 KUCHEL VISITOR CENTER ACCESS ROAD

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



PCR	Poor	<span style="display:inline-block; width:15px; height:15px; background-color:red;"></span>	Fair	<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	Good	<span style="display:inline-block; width:15px; height:15px; background-color:green;"></span>	Excellent	<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>
		(≤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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0407 RESIDENCE ROAD** **TOTAL LENGTH: 0.40 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.40				
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	12				
Shoulder Width Right (ft)**	0				
Shoulder Width Left (ft)**	0				
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	12				
PCR (Pavement Condition Rating)	13				
<b>Distress Index Values</b>					
Alligator Cracking Index	80				
Longitudinal Cracking Index	94				
Transverse Cracking Index	96				
Patching Index	94				
Rutting Index	33				
Roughness Condition Index (RCI)	36				

**ROUTE: 0407 RESIDENCE ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.



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

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

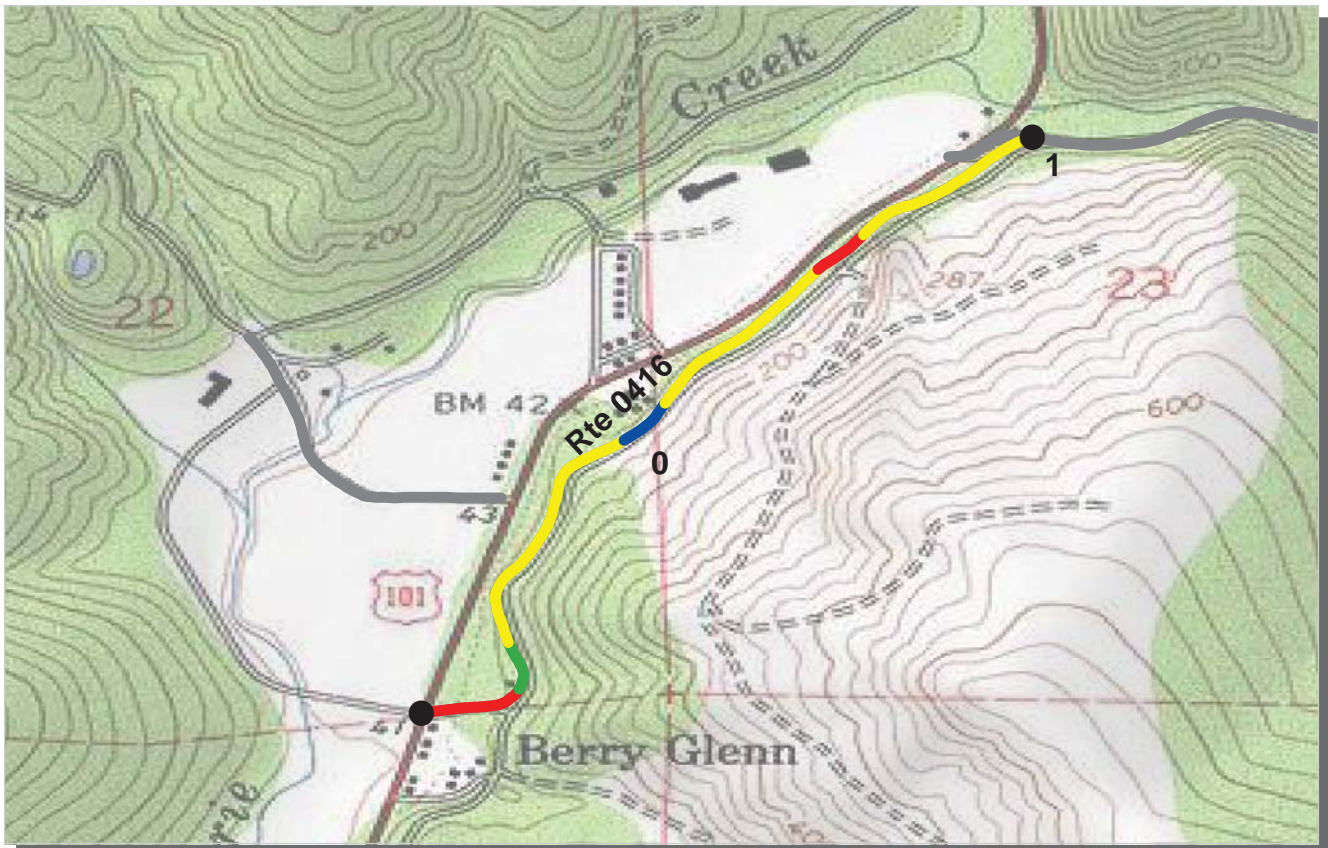
**ROUTE: 0415 KUCHEL VISITOR CENTER SERVICE ROAD TOTAL LENGTH: 0.06 Miles**

<b>Section Number</b>	0				
<b>Section Length (mi)</b>	0.06				
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	1				
Paved Width (ft)	12				
Lane Width (ft)	12				
Shoulder Width Right (ft)**	4				
Shoulder Width Left (ft)**	5				
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	60				
PCR (Pavement Condition Rating)	58				
<b>Distress Index Values</b>					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	60				
Roughness Condition Index (RCI)	57				

**ROUTE: 0415 KUCHEL VISITOR CENTER SERVICE ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.





PCR    Poor ■    Fair ■    Good ■    Excellent ■  
           (<=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.

**PACIFIC WEST REGION**  
**REDW : REDWOOD NATIONAL PARK**

**ROUTE: 0416 OFF HIGHWAY ROAD** **TOTAL LENGTH: 1.03 Miles**

Section Number	0	1			
Section Length (mi)	1.00	0.03			
<b>Traffic</b>	Traffic data may be found at <a href="http://www.efl.fhwa.dot.gov">www.efl.fhwa.dot.gov</a> Click on NPS Traffic Data (Note: Not all parks have traffic data)				
<b>Cross Section Information</b>					
Number of Lanes	1	1			
Paved Width (ft)	10	9			
Lane Width (ft)	10	9			
Shoulder Width Right (ft)**	2	4			
Shoulder Width Left (ft)**	0	4			
<b>Roadway Condition Information</b>					
SCR (Surface Condition Rating)	81	72			
PCR (Pavement Condition Rating)	72	72			
<b>Distress Index Values</b>					
Alligator Cracking Index	96	100			
Longitudinal Cracking Index	100	100			
Transverse Cracking Index	100	99			
Patching Index	100	100			
Rutting Index	85	73			
Roughness Condition Index (RCI)	53	-1			

**ROUTE: 0416 OFF HIGHWAY ROAD**

\*\* Shoulder widths are measured from video at 0.50 mile intervals along route tangents. Visibility of actual shoulders in video images may affect accuracy of measured shoulder widths.

# Redwood National Park



## **Section 6**

### **Manually Rated Paved Route Condition Rating Sheets (MRR)**

## **Section 6: Manually Rated Paved Route Condition Rating Sheets**

No data available for this section.

# Redwood National Park



## **Section 7** **Parking Area Condition Rating Sheets**

# REDWOOD NATIONAL PARK

## Route 0900

### KUCHEL VISITOR CENTER PARKING

AT END OF ROUTE 0215 AT MP 0.20

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0900	PUBLIC	5/17/2006	46546	0.80	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	3	0	CONCRETE CURB AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

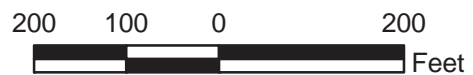
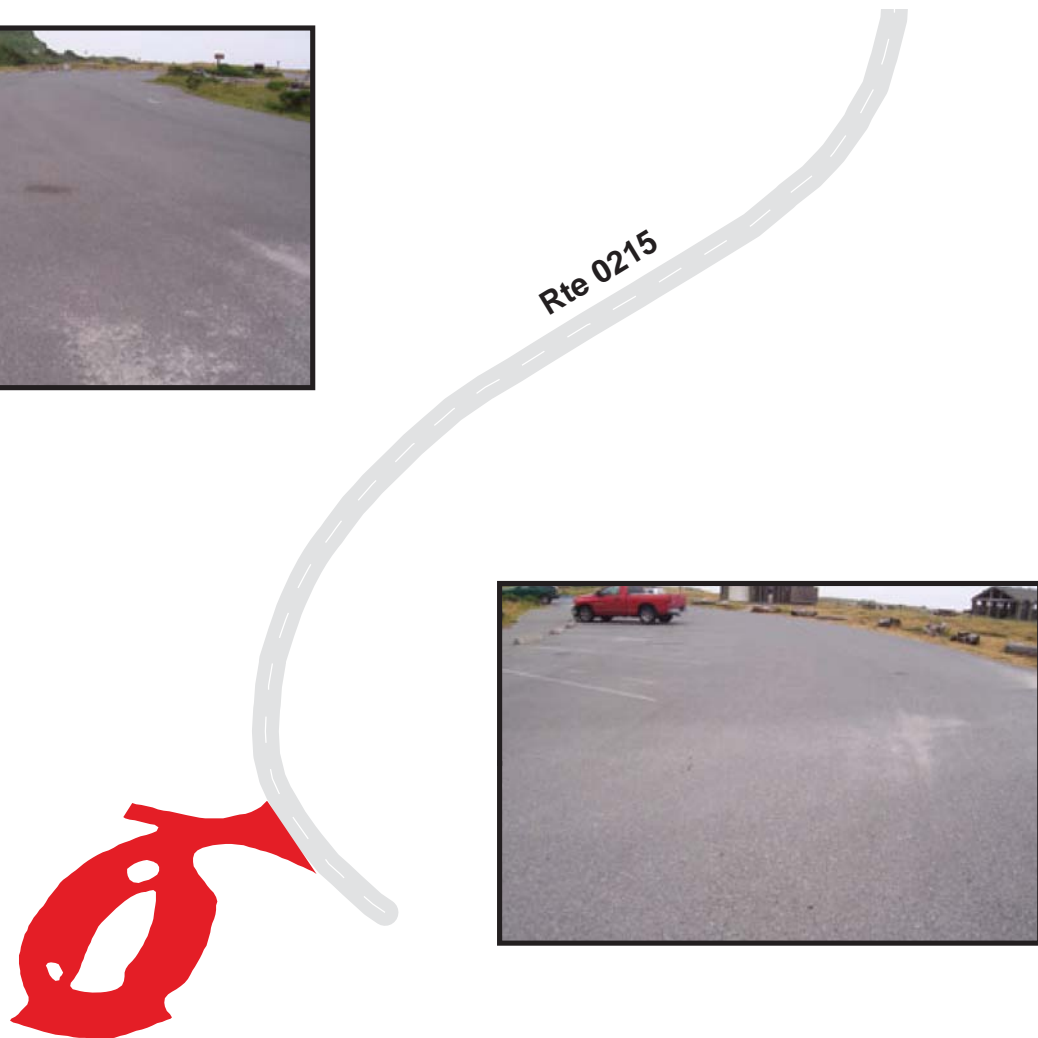
## Route 0901

### REDWOOD CREEK PICNIC AREA PARKING

ADJACENT TO ROUTE 0215 AT MP 0.02

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0901	PUBLIC	5/17/2006	25635	0.44	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



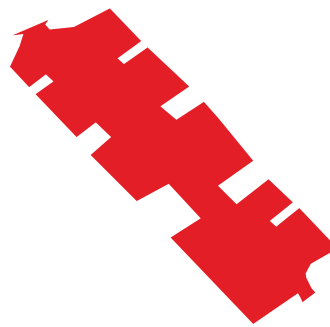
# REDWOOD NATIONAL PARK

## Route 0902

PARK HEADQUARTERS PARKING  
 ADJACENT TO 3RD STREET IN CRESCENT CITY

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0902	PUBLIC	5/17/2006	11506	0.20	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	3	0	CONCRETE CURB AND GUTTER	CONCRETE CURB	GOOD/90

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

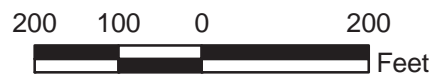
## Route 0903

### HIOUCHI INFORMATION CENTER PARKING

ADJACENT TO U.S. HIGHWAY 199

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0903	PUBLIC	5/17/2006	29898	0.51	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	STONE CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths





# REDWOOD NATIONAL PARK

## Route 0904

CRESCENT CITY OVERLOOK VISTA POINT PARKING  
ADJACENT TO U.S. HIGHWAY 101

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	5/18/2006	19132	0.33	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	ASPHALT CURB	GOOD/90

\* Lane miles are based on 11' lane widths



**REDWOOD NATIONAL PARK**  
**Route 0905**  
**CRESCENT BEACH DAY USE PARKING**  
**ADJACENT TO ROUTE 0100 AT MP 0.17**

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	5/17/2006	41096	0.71	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
2	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

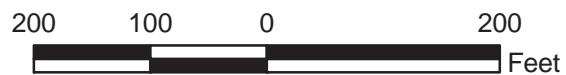
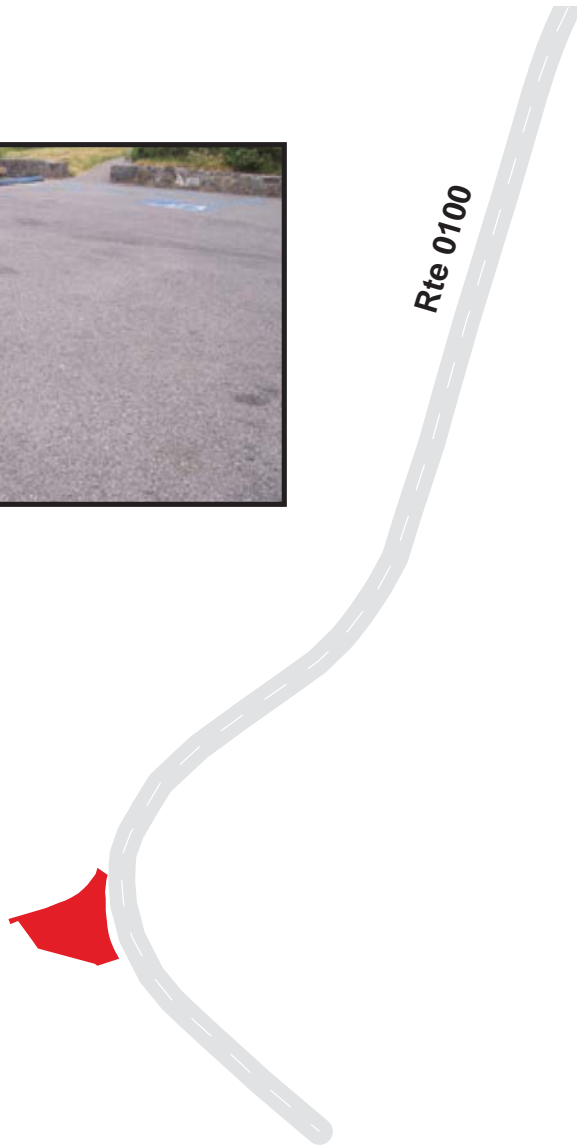
\* Lane miles are based on 11' lane widths



**REDWOOD NATIONAL PARK**  
**Route 0906**  
**CRESCENT BEACH OVERLOOK PARKING**  
**ADJACENT TO ROUTE 0100 AT MP 1.74**

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0906	PUBLIC	5/17/2006	2795	0.05	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



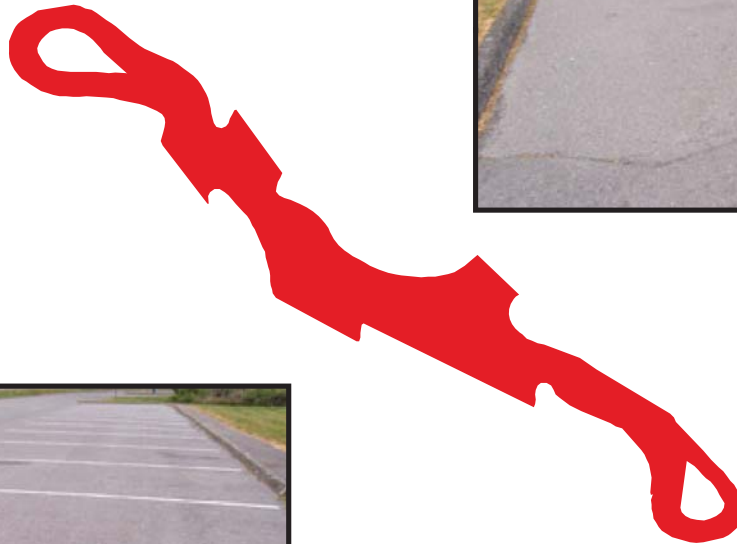
# REDWOOD NATIONAL PARK

## Route 0907

LAGOON CREEK PARKING  
ADJACENT TO U.S. HIGHWAY 101

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0907	PUBLIC	5/18/2006	36683	0.63	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	5	0	NO CURB AND GUTTER	ASPHALT CURB	GOOD/90

\* Lane miles are based on 11' lane widths



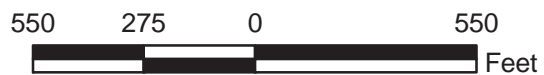
# REDWOOD NATIONAL PARK

## Route 0908

REQUA MAINTENANCE FACILITY AREA PARKING  
ADJACENT TO PJ MURPHY DRIVE

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0908	NONPUBLIC	5/18/2006	138493	2.38	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
7	3	2	NO CURB AND GUTTER	ASPHALT CURB	POOR/45

\* Lane miles are based on 11' lane widths



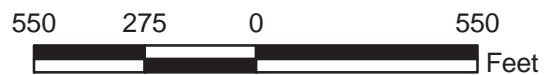
# REDWOOD NATIONAL PARK

## Route 0909

CCC HOUSING PARKING  
 ADJACENT TO ROUTE 0407 AT MP 0.22

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0909	NONPUBLIC	5/18/2006	27958	0.48	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
2	4	1	CONCRETE CURB AND GUTTER	STONE CURB	POOR/45

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0910

KLAMATH OVERLOOK PARKING  
ADJACENT TO PJ MURPHY DRIVE

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0910	PUBLIC	5/18/2006	11086	0.19	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	1	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0911

CRESCENT BEACH ENVIRONMENTAL EDUCATION CENTER PARKING  
ADJACENT TO ROUTE 0100 AT MP 0.04

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0911	PUBLIC	5/17/2006	32065	0.55	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	1	NO CURB AND GUTTER	CONCRETE CURB	GOOD/90

\* Lane miles are based on 11' lane widths





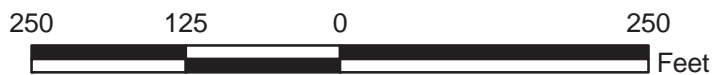
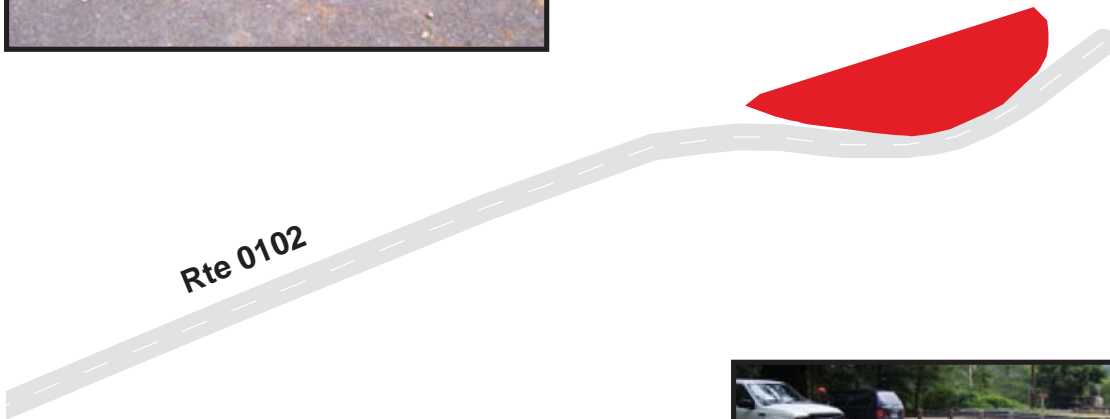
# REDWOOD NATIONAL PARK

## Route 0912

DOUGLAS BRIDGE PARKING  
ADJACENT TO ROUTE 0102 AT MP 0.01

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0912	PUBLIC	5/18/2006	9985	0.17	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	1	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

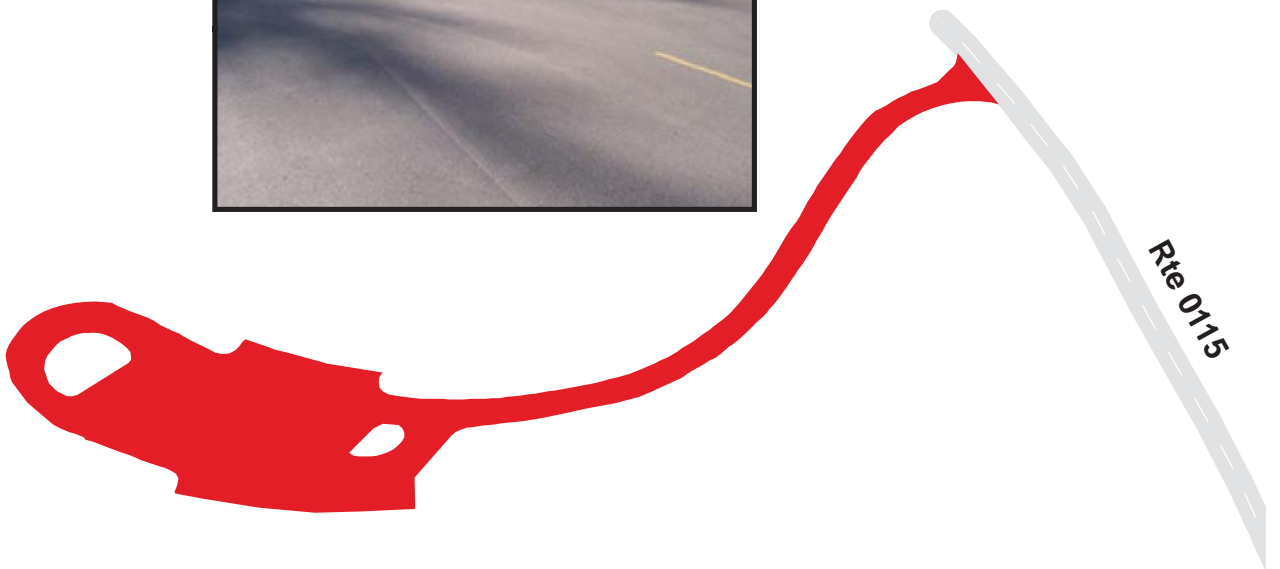
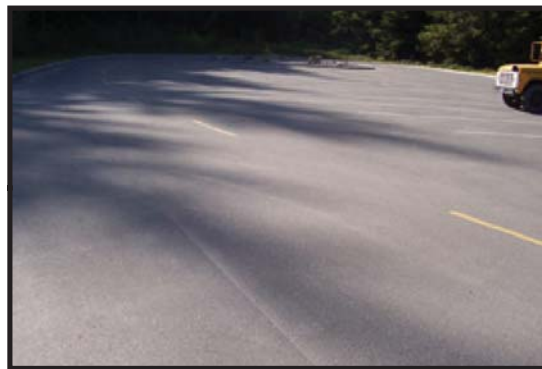
## Route 0913

### ELK MEADOW DAY USE AREA PARKING

AT END OF ROUTE 0115 AT MP 0.36

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0913	PUBLIC	5/17/2006	45095	0.78	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	1	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths



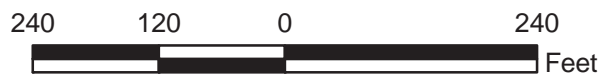
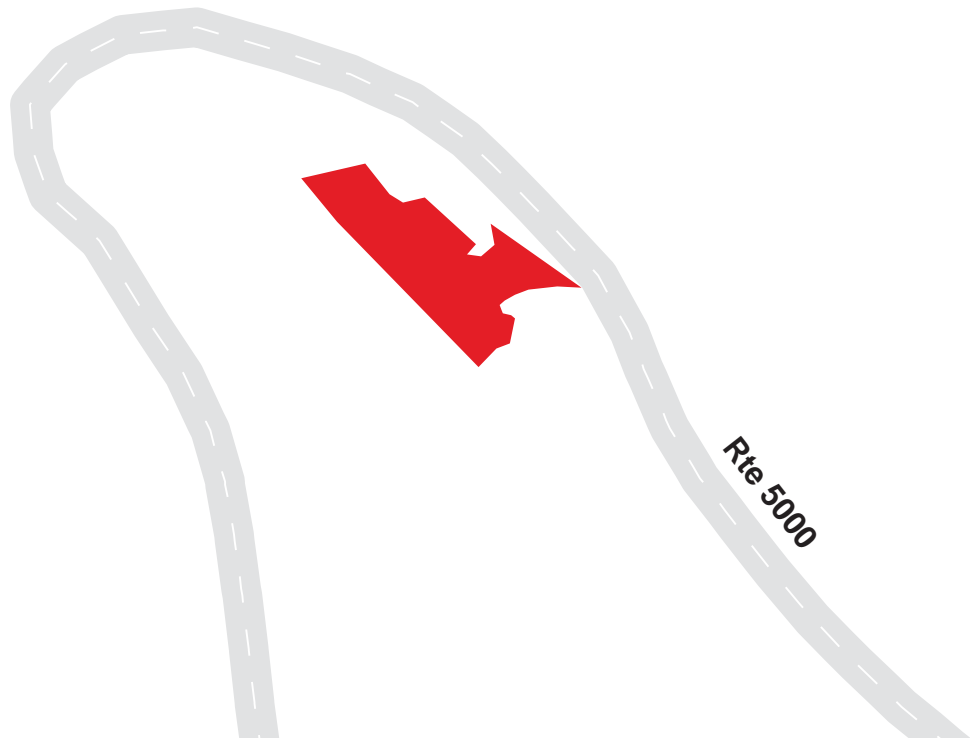
# REDWOOD NATIONAL PARK

## Route 0914

LADY BIRD JOHNSON GROVE PARKING  
ADJACENT TO ROUTE 5000

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0914	PUBLIC	5/17/2006	13524	0.23	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	ASPHALT CURB	GOOD/90

\* Lane miles are based on 11' lane widths



**REDWOOD NATIONAL PARK**  
**Route 0915**  
**REDWOOD CREEK TRAILHEAD PARKING**  
 AT END OF ROUTE 0210 AT MP 0.43

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0915	PUBLIC	5/17/2006	23609	0.41	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
1	2	0	CONCRETE CURB AND GUTTER	ASPHALT CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths



**REDWOOD NATIONAL PARK**  
**Route 0916**  
**REDWOOD CREEK OVERLOOK PARKING**  
**ADJACENT TO ROUTE 5000**

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0916	PUBLIC	5/17/2006	4119	0.07	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



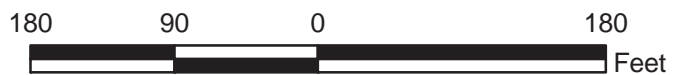
# REDWOOD NATIONAL PARK

## Route 0917

REQUA HOUSING PARKING  
AT END OF ROUTE 0407 AT MP 0.40

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0917	NONPUBLIC	5/18/2006	3359	0.06	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0918

HIOUCHI TRAILER PARKING  
 ADJACENT TO U.S. HIGHWAY 199

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0918	NONPUBLIC	5/17/2006	9511	0.16	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



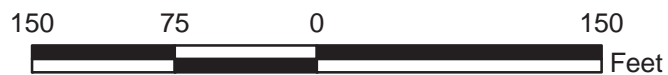
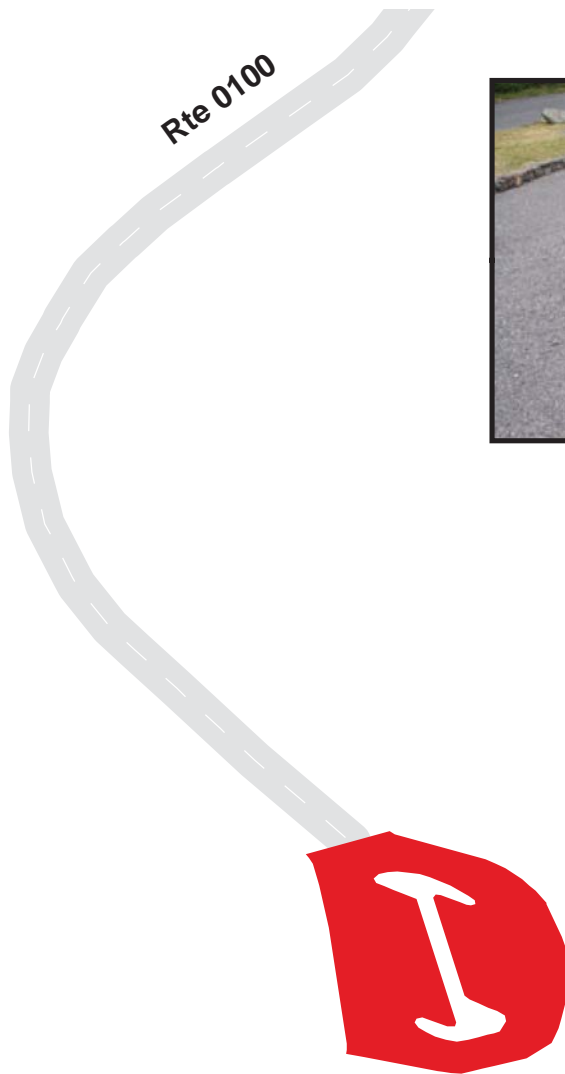
# REDWOOD NATIONAL PARK

## Route 0919

NICKEL CREEK PARKING  
AT END OF ROUTE 0100 AT MP 1.77

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0919	PUBLIC	5/17/2006	8671	0.15	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
1	0	0	NO CURB AND GUTTER	STONE CURB	GOOD/90

\* Lane miles are based on 11' lane widths





# REDWOOD NATIONAL PARK

## Route 0920

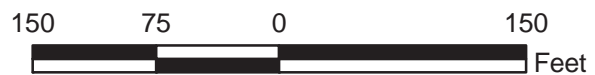
### FALSE KLAMATH COVE PARKING

FROM U.S. HIGHWAY 101

TO U.S. HIGHWAY 101

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0920	PUBLIC	5/18/2006	9652	0.17	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	ASPHALT CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0921ZZ

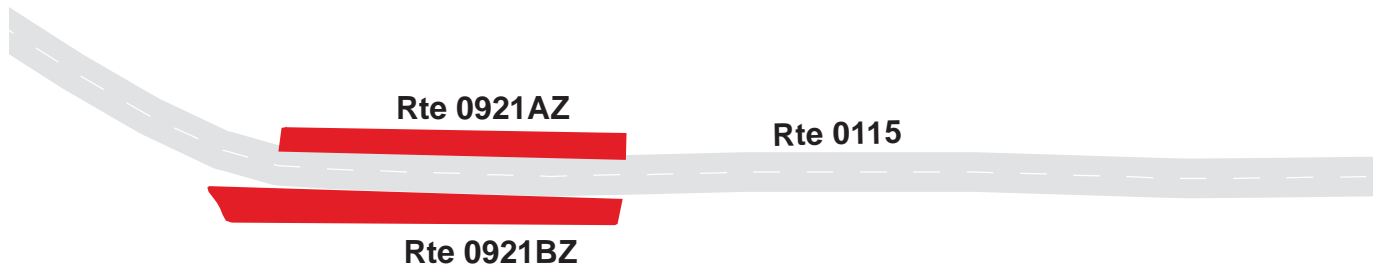
### DAVISON ROAD ELK VIEWING PARKING AREAS

ADJACENT TO ROUTE 0115 AT MP 0.11

Summary Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0921ZZ	PUBLIC	5/17/2006	7212	0.12	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	SUMMARY/97

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0921AZ

DAVISON ROAD ELK VIEWING PARKING A

ADJACENT TO ROUTE 0115 AT MP 0.11

Subcomponent Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0921AZ	PUBLIC	5/17/2006	2988	0.05	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths



# REDWOOD NATIONAL PARK

## Route 0921BZ

DAVISON ROAD ELK VIEWING PARKING B

ADJACENT TO ROUTE 0115 AT MP 0.11

Subcomponent Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0921BZ	PUBLIC	5/17/2006	4224	0.07	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

\* Lane miles are based on 11' lane widths



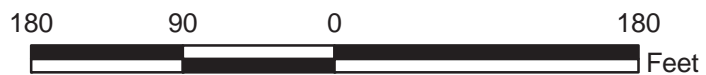
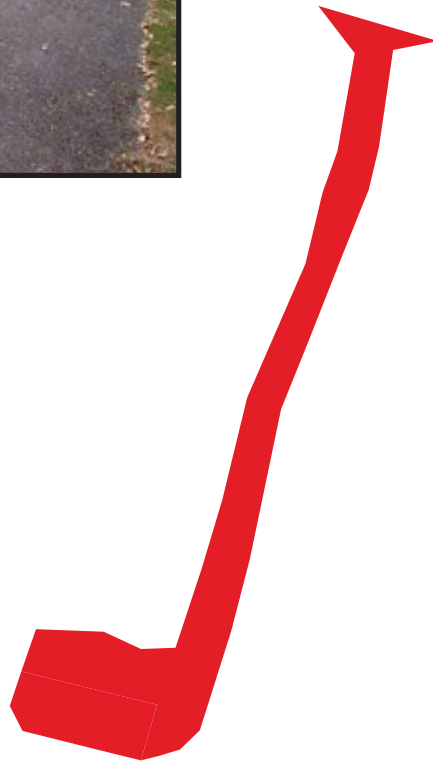
# REDWOOD NATIONAL PARK

## Route 0922

HIOUCHI DORM PARKING  
ADJACENT TO U.S. HIGHWAY 199

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0922	NONPUBLIC	5/17/2006	12288	0.21	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

\* Lane miles are based on 11' lane widths



# Redwood National Park



## **Section 8** **Parkwide / Route Maintenance** **Features Summaries**

## REDW: PARKWIDE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were marked only on a limited number of roads in Cycle 4, therefore the culvert and drop inlet count below includes only those select roads, plus culverts and drop inlets in paved parking areas.

FEATURE	LINEAR FEET	COUNT
BARRIER	1,209	--
BOLLARD	0	--
BRIDGE	--	3
CABLE	0	--
CATTLE GUARD	--	0
CULVERT	--	25
CURB	3,627	--
DROP INLET	--	23
FIRE HYDRANT	--	4
GATE	--	9
GUARD/GUIDE RAIL	1,209	--
GUARD/GUIDE WALL	0	--
INTERSECTION	--	53
LOW WATER CROSSING	111	1
MILE MARKER	--	1
OVERPASS	--	0
OVERHEAD SIGN	--	0
PARK BOUNDARY	--	0
PAVED DITCH	0	--
PULLOUT	--	3
RAILROAD CROSSING	--	0
RETAINING WALL	--	1
SIGN	--	105
STATE BOUNDARY	--	0
TEMPORARY BARRIER	0	--
TRAFFIC LIGHT	--	0
TUNNEL	--	0
TURNOUT	0	--

## REDW: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0100 ENDERTS BEACH ROAD	ROUTE 0102 ALDER CAMP ROAD	ROUTE 0110 RED ALDER ROAD	ROUTE 0115 DAVISON ROAD	ROUTE 0205 LOST MAN CREEK ROAD	ROUTE 0210 REDWOOD CREEK TRAILHEAD ROAD	UNIT
BARRIER	164	26	0	644	375	0	LINEAR FEET
BOLLARD	0	0	0	0	0	0	LINEAR FEET
BRIDGE	0	0	0	1	2	0	EACH
CABLE	0	0	0	0	0	0	LINEAR FEET
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	0	0	0	0	0	0	EACH
CURB	0	53	0	0	0	866	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	0	0	0	0	0	EACH
GATE	0	0	1	0	0	0	EACH
GUARD/GUIDE RAIL	164	26	0	644	375	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0	0	0	LINEAR FEET
INTERSECTION	5	9	3	7	4	3	EACH
LOW WATER CROSSING	0	0	0	1	0	0	EACH
LOW WATER CROSSING	0	0	0	111	0	0	LINEAR FEET
MILE MARKER	0	0	0	1	0	0	EACH
OVERHEAD SIGN	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	0	0	LINEAR FEET
PULLOUT	1	1	0	1	0	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	1	0	0	0	0	0	EACH
SIGN	30	21	15	15	7	5	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked only on a limited number of roads in Cycle 4, therefore the culvert and drop inlet count above includes only those select roads, plus culverts and drop inlets in paved parking areas.



## REDW: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0215 KUCHEL VISITOR CENTER ACCESS ROAD	ROUTE 0407 RESIDENCE ROAD	ROUTE 0415 KUCHEL VISITOR CENTER SERVICE ROAD	ROUTE 0416 OFF HIGHWAY ROAD			UNIT
BARRIER	0	0	0	0			LINEAR FEET
BOLLARD	0	0	0	0			LINEAR FEET
BRIDGE	0	0	0	0			EACH
CABLE	0	0	0	0			LINEAR FEET
CATTLE GUARD	0	0	0	0			EACH
CULVERT	0	0	0	12			EACH
CURB	0	2,709	0	0			LINEAR FEET
DROP INLET	0	0	0	0			EACH
FIRE HYDRANT	0	1	0	0			EACH
GATE	1	1	0	2			EACH
GUARD/GUIDE RAIL	0	0	0	0			LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0			LINEAR FEET
INTERSECTION	9	5	4	4			EACH
LOW WATER CROSSING	0	0	0	0			EACH
LOW WATER CROSSING	0	0	0	0			LINEAR FEET
MILE MARKER	0	0	0	0			EACH
OVERHEAD SIGN	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	0	0			EACH
RAILROAD CROSSING	0	0	0	0			EACH
RETAINING WALL	0	0	0	0			EACH
SIGN	4	5	1	2			EACH
STATE BOUNDARY	0	0	0	0			EACH
TEMPORARY BARRIER	0	0	0	0			LINEAR FEET
TRAFFIC LIGHT	0	0	0	0			EACH
TUNNEL	0	0	0	0			EACH
TURNOUT	0	0	0	0			LINEAR FEET

Notice: Culverts and drop inlets were marked only on a limited number of roads in Cycle 4, therefore the culvert and drop inlet count above includes only those select roads, plus culverts and drop inlets in paved parking areas.

## REDW: STRUCTURE LIST

<b>ROUTE NUMBER</b>	<b>FUNCTIONAL CLASS</b>	<b>MILEPOST START</b>	<b>MILEPOST END</b>	<b>FEATURE</b>	<b>STRUCTURE NUMBER</b>
0205	3	0.301	0.314	BRIDGE	8480-005
0205	3	0.86	0.876	BRIDGE	8480-002

# Redwood National Park



## **Section 9**

### **Park Route Maintenance Features**

### **Road Logs**

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0100: ENDERTS BEACH ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM PARK BOUNDARY AT PAVEMENT CHANGE
0.042	0.042	INTERSECTION	LEFT	ROUTE 0911 (CRESCENT BEACH ENVIRONMENTAL EDUCATION CENTER PARKING)
0.076	0.076	SIGN	RIGHT	WARNING, SOFT SHOULDER
0.096	0.096	SIGN	RIGHT	REGULATORY, ENFORCED BY RADAR
0.096	0.096	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
0.129	0.129	SIGN	RIGHT	GUIDE, CRESCENT OVERLOOK ENDERTS BEACH CRESCENT BEACH PICNIC AREA
0.172	0.172	INTERSECTION	RIGHT	ROUTE 0905 (CRESCENT BEACH DAY USE PARKING)
0.176	0.176	SIGN	LEFT	GUIDE, HIGHWAY 101 CRESCENT OVERLOOK ENDERTS BEACH
0.219	0.219	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.219	0.219	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.225	0.225	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.225	0.225	SIGN	LEFT	GUIDE, TRAIL
0.809	0.809	INTERSECTION	RIGHT	UNPAVED ROAD
0.903	0.922	PULLOUT	RIGHT	
1.205	1.205	SIGN	RIGHT	GUIDE, CRESCENT BEACH OVERLOOK
1.205	1.205	SIGN	LEFT	GUIDE, TRAIL
1.223	1.223	SIGN	RIGHT	REGULATORY, CAUTION
1.232	1.232	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
1.239	1.239	SIGN	RIGHT	WARNING, CAUTION WILDLIFE CROSSING
1.266	1.266	SIGN	RIGHT	WARNING, 10 M.P.H.
1.266	1.266	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.316	1.316	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT
1.320	1.320	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT
1.323	1.323	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT
1.327	1.327	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.334	1.334	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.337	1.337	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.397	1.397	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT
1.401	1.401	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0100: ENDERTS BEACH ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
1.626	1.626	SIGN	RIGHT	WARNING, 10 M.P.H.
1.626	1.626	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.661	1.661	SIGN	RIGHT	GUIDE, TRAIL
1.683	1.683	SIGN	RIGHT	REGULATORY, SPEED LIMIT 20
1.701	1.723	RETAINING WALL	RIGHT	
1.704	1.704	SIGN	RIGHT	GUIDE, CRESCENT BEACH OVERLOOK NO OVERNIGHT CAMPING
1.719	1.719	SIGN	RIGHT	GUIDE, CAUTION LOCK YOUR CAR KEEP VALUABLES WITH YOU
1.735	1.735	INTERSECTION	RIGHT	ROUTE 0906 (CRESCENT BEACH OVERLOOK PARKING)
1.739	1.770	GUARD/GUIDE RAIL	RIGHT	
1.770	1.770	INTERSECTION	N/A	ROUTE 0919 (NICKEL CREEK PARKING)
1.770	1.770	ROUTE END	N/A	TO ROUTE 0919

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0102: ALDER CAMP ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM KLAMATH BEACH ROAD
0.000	0.000	SIGN	N/A	GUIDE, KLAMATH BEACH RD
0.000	0.000	SIGN	N/A	GUIDE, HWY 101
0.000	0.000	INTERSECTION	LEFT	KLAMATH BEACH ROAD
0.000	0.000	INTERSECTION	RIGHT	KLAMATH BEACH ROAD
0.002	0.002	SIGN	RIGHT	REGULATORY, STOP
0.004	0.004	INTERSECTION	LEFT	SPUR TO KLAMATH BEACH ROAD
0.004	0.004	INTERSECTION	RIGHT	SPUR TO KLAMATH BEACH ROAD
0.009	0.014	GUARD/GUIDE RAIL	RIGHT	
0.013	0.013	INTERSECTION	RIGHT	ROUTE 0912 (DOUGLAS BRIDGE PARKING)
0.020	0.030	CURB	RIGHT	
0.043	0.043	INTERSECTION	RIGHT	ROUTE 0912 (DOUGLAS BRIDGE PARKING)
0.074	0.074	SIGN	RIGHT	GUIDE, FLINT RIDGE TRAIL
0.074	0.074	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.088	0.088	SIGN	RIGHT	GUIDE, RVS AND TRAILERS PROHIBITED
0.090	0.090	SIGN	RIGHT	WARNING, STOP AHEAD
0.093	0.093	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.093	0.093	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.113	0.113	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.171	0.171	SIGN	RIGHT	WARNING, 20 M.P.H.
0.171	0.171	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.353	1.382	PULLOUT	RIGHT	
1.929	1.929	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
2.039	2.039	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
2.043	2.043	INTERSECTION	RIGHT	UNPAVED ROAD
2.050	2.050	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
2.057	2.057	SIGN	RIGHT	GUIDE, COASTAL DR. SOUTH TO HWY 101
2.059	2.059	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
2.075	2.075	SIGN	RIGHT	WARNING, NEXT 3 MILES
2.075	2.075	SIGN	RIGHT	WARNING, ROUGH ROAD

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0102: ALDER CAMP ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
2.087	2.087	SIGN	RIGHT	REGULATORY, STOP
2.090	2.090	INTERSECTION	LEFT	ALDER CAMP ROAD (STATE MAINTAINED SECTION)
2.090	2.090	INTERSECTION	N/A	ROUTE 0202 (COASTAL DRIVE)
2.090	2.090	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
2.090	2.090	ROUTE END	N/A	TO ROUTE 0202 AND START OF STATE-MAINTAINED ROAD

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0110: RED ALDER ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5001
0.000	0.000	INTERSECTION	LEFT	ROUTE 5001 (NEWTON B DRURY PARKWAY (SCENIC PARKWAY))
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5001 (NEWTON B DRURY PARKWAY (SCENIC PARKWAY))
0.004	0.004	SIGN	RIGHT	REGULATORY, STOP
0.005	0.005	SIGN	RIGHT	GUIDE, CRESCENT CITY EUREKA
0.022	0.022	SIGN	RIGHT	GUIDE, RVS AND TRAILERS PROHIBITED
0.031	0.031	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.092	0.092	SIGN	LEFT	GUIDE, GARLAND FAMILY MEMORIAL GROVES
0.349	0.349	SIGN	RIGHT	GUIDE, THE ROBINSON FAMILY GROVE
0.415	0.415	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
1.021	1.021	SIGN	RIGHT	GUIDE, JESSAMINE RUGG MORRIL GODDARD
1.039	1.039	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
1.049	1.049	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.049	1.049	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
1.099	1.099	GATE	N/A	
1.144	1.144	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
1.190	1.190	SIGN	RIGHT	GUIDE, COASTAL DRIVE
1.229	1.229	SIGN	RIGHT	WARNING, 20 M.P.H.
1.229	1.229	SIGN	RIGHT	WARNING, ROUGH ROAD NEXT 3 MILES
1.260	1.260	INTERSECTION	N/A	ROUTE 0202 (COASTAL DRIVE)
1.260	1.260	ROUTE END	N/A	TO ROUTE 0202



# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0115: DAVISON ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM U.S. HIGHWAY 101
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.000	0.000	INTERSECTION	LEFT	US HIGHWAY 101
0.000	0.000	INTERSECTION	RIGHT	US HIGHWAY 101
0.020	0.020	SIGN	RIGHT	WARNING, NOT THROUGH ROAD
0.020	0.020	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.032	0.032	SIGN	RIGHT	WARNING, UNABLE TO READ FROM VIDEO
0.064	0.064	SIGN	RIGHT	GUIDE, ELK MEADOW DAY USE AREA 1/4 MI (RV & TRAILER TURNAROUND)
0.064	0.096	GUARD/GUIDE RAIL	RIGHT	
0.077	0.098	LOW WATER CROSSING	N/A	
0.113	0.113	INTERSECTION	LEFT	ROUTE 0921A^ (DAVISON ROAD ELK VIEWING PARKING A)
0.113	0.113	INTERSECTION	RIGHT	ROUTE 0921B^ (DAVISON ROAD ELK VIEWING PARKING B)
0.132	0.132	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.153	0.153	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.162	0.167	PULLOUT	LEFT	
0.175	0.175	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.186	0.186	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.188	0.188	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.189	0.235	GUARD/GUIDE RAIL	RIGHT	
0.191	0.235	GUARD/GUIDE RAIL	LEFT	
0.200	0.200	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.204	0.223	BRIDGE	N/A	
0.237	0.237	MILE MARKER	RIGHT	UNABLE TO READ FROM VIDEO
0.242	0.242	INTERSECTION	RIGHT	UNPAVED ROAD
0.312	0.312	INTERSECTION	LEFT	PAVED ROAD
0.351	0.351	SIGN	LEFT	GUIDE, ELK MEADOW DAY USE AREA
0.351	0.351	SIGN	RIGHT	GUIDE, ELK MEADOW DAY USE AREA
0.351	0.351	SIGN	RIGHT	GUIDE, TURNAROUND
0.360	0.360	INTERSECTION	LEFT	ROUTE 0913 (ELK MEADOW DAY USE AREA PARKING)

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0115: DAVISON ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.360	0.360	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.360	0.360	ROUTE END	N/A	TO ROUTE 0913

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0205: LOST MAN CREEK ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM U.S. HIGHWAY 101
0.000	0.000	INTERSECTION	LEFT	US HIGHWAY 101
0.000	0.000	INTERSECTION	RIGHT	US HIGHWAY 101
0.004	0.004	SIGN	RIGHT	REGULATORY, STOP
0.022	0.022	SIGN	RIGHT	GUIDE, LOST MAN CREEK PICNIC AREA
0.027	0.027	SIGN	LEFT	GUIDE, LOST MAN CREEK PICNIC AREA
0.043	0.043	SIGN	RIGHT	GUIDE, 1 MILE AHEAD
0.043	0.043	SIGN	RIGHT	GUIDE, NO CAMPING
0.054	0.054	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.124	0.124	INTERSECTION	RIGHT	UNPAVED ROUTE
0.148	0.148	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.298	0.314	GUARD/GUIDE RAIL	LEFT	
0.300	0.316	GUARD/GUIDE RAIL	RIGHT	
0.301	0.314	BRIDGE	N/A	8480-005
0.859	0.877	GUARD/GUIDE RAIL	RIGHT	
0.859	0.880	GUARD/GUIDE RAIL	LEFT	
0.860	0.876	BRIDGE	N/A	8480-002
0.895	0.895	INTERSECTION	N/A	ROUTE 0932 (LOST MAN CREEK PARKING)
0.900	0.900	ROUTE END	N/A	TO ROUTE 0932

## REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

### ROUTE 0210: REDWOOD CREEK TRAILHEAD ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5000
0.000	0.000	INTERSECTION	LEFT	ROUTE 5000 (BALD HILLS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5000 (BALD HILLS ROAD)
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.019	0.019	SIGN	LEFT	WARNING, GRAPHIC SIGN, NO TEXT
0.032	0.032	SIGN	RIGHT	GUIDE, TURNAROUND 0.5 MILES
0.064	0.064	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.331	0.430	CURB	LEFT	
0.365	0.430	CURB	RIGHT	
0.430	0.430	INTERSECTION	N/A	ROUTE 0915 (REDWOOD CREEK TRAILHEAD PARKING)
0.430	0.430	SIGN	RIGHT	GUIDE, REDWOOD CREEK TRAILHEAD REDWOOD NATIONAL PARK
0.430	0.430	ROUTE END	N/A	TO ROUTE 0915

## REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

### ROUTE 0215: KUCHEL VISITOR CENTER ACCESS ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM U.S. HIGHWAY 101
0.000	0.000	INTERSECTION	LEFT	US HIGHWAY 101
0.000	0.000	INTERSECTION	RIGHT	US HIGHWAY 101
0.000	0.000	SIGN	N/A	GUIDE, NORTH 101 SOUTH
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.022	0.022	INTERSECTION	LEFT	ROUTE 0901 (REDWOOD CREEK PICNIC AREA PARKING)
0.024	0.024	SIGN	RIGHT	GUIDE, PICNIC AREA INFORMATION
0.032	0.032	SIGN	RIGHT	GUIDE, INFORMATION CENTER HOURS 9:00 A.M. - 5:00 P.M. GATE LOCKED AFTER HOURS
0.033	0.033	GATE	N/A	HEAVY DUTY OPEN RAIL
0.173	0.173	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.190	0.190	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.203	0.203	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.223	0.223	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.260	0.260	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.260	0.260	INTERSECTION	RIGHT	ROUTE 0415 (KUCHEL VISITOR CENTER SERVICE ROAD)
0.260	0.260	ROUTE END	N/A	TO ROUTE 0900 AND ROUTE 0415

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0407: RESIDENCE ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM PJ MURPHY DRIVE
0.000	0.000	INTERSECTION	LEFT	PJ MURPHY DRIVE
0.000	0.000	INTERSECTION	RIGHT	PJ MURPHY DRIVE
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.006	0.171	CURB	LEFT	
0.007	0.182	CURB	RIGHT	
0.016	0.016	SIGN	RIGHT	GUIDE, LOCKED GATE AHEAD
0.034	0.034	GATE	N/A	
0.035	0.035	SIGN	LEFT	REGULATORY, AUTHORIZED VEHICLES ONLY
0.222	0.352	CURB	LEFT	
0.223	0.223	INTERSECTION	RIGHT	ROUTE 0909 (CCC HOUSING PARKING)
0.225	0.225	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.243	0.243	SIGN	RIGHT	GUIDE, NPS HOUSING
0.319	0.328	CURB	RIGHT	
0.359	0.359	INTERSECTION	LEFT	UNPAVED ROAD
0.360	0.362	CURB	RIGHT	
0.368	0.400	CURB	LEFT	
0.389	0.389	FIRE HYDRANT	RIGHT	
0.400	0.400	INTERSECTION	N/A	ROUTE 0917 (REQUA HOUSING PARKING)
0.400	0.400	ROUTE END	N/A	TO ROUTE 0917

## REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

### ROUTE 0415: KUCHEL VISITOR CENTER SERVICE ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0215 AT MP 0.26 AND ROUTE 0900
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0215 (KUCHEL VISITOR CENTER ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0900 (KUCHEL VISITOR CENTER PARKING)
0.008	0.008	SIGN	RIGHT	GUIDE, AUTHORIZED VEHICLES ONLY
0.043	0.043	INTERSECTION	RIGHT	UNPAVED PARKING
0.060	0.060	INTERSECTION	N/A	PAVED ROAD
0.060	0.060	ROUTE END	N/A	TO END

# REDW: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0416: OFF HIGHWAY ROAD

**Notice:** Culverts and drop inlets were marked only on select roads and are reflected in the Road Logs. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7), and in the Parkwide Maintenance Features Summary (Section 8)..

<b>FROM MILEPOST</b>	<b>TO MILEPOST</b>	<b>FEATURE</b>	<b>SIDE</b>	<b>COMMENT</b>
0.000	0.000	ROUTE BEGIN	N/A	FROM U.S. HIGHWAY 101
0.000	0.000	INTERSECTION	LEFT	US HIGHWAY 101
0.000	0.000	INTERSECTION	RIGHT	US HIGHWAY 101
0.022	0.022	SIGN	RIGHT	WARNING, CAUTION HIGHWAY CROSSING
0.090	0.090	SIGN	N/A	WARNING, GRAPHIC SIGN, NO TEXT
0.093	0.093	GATE	N/A	
0.114	0.114	CULVERT	N/A	
0.173	0.173	CULVERT	N/A	
0.288	0.288	CULVERT	N/A	
0.359	0.359	CULVERT	N/A	
0.424	0.424	CULVERT	N/A	
0.467	0.467	CULVERT	N/A	
0.494	0.494	CULVERT	N/A	
0.612	0.612	CULVERT	N/A	
0.660	0.660	CULVERT	N/A	
0.704	0.704	CULVERT	N/A	
0.874	0.874	CULVERT	N/A	
0.934	0.934	CULVERT	N/A	
1.011	1.011	GATE	N/A	
1.030	1.030	INTERSECTION	LEFT	ROUTE 0205 (LOST MAN CREEK ROAD)
1.030	1.030	INTERSECTION	RIGHT	ROUTE 0205 (LOST MAN CREEK ROAD)
1.030	1.030	ROUTE END	N/A	TO ROUTE 0205



# Redwood National Park



## **Section 10** **Appendix**

## **APPENDIX A: GLOSSARY OF TERMS AND ABBREVIATIONS**

<b>TERM OR ABBREVIATION</b>	<b>DESCRIPTION OR DEFINITION</b>
AADT	(Annual Average Daily Traffic) The estimate of typical daily traffic on a road segment for all days of the week over the period of one year.
CRS	Condition Rating Sheets. (Section 5)
Excellent	Excellent rating with an index value of 95 or greater
Fair	Fair rating with an index value from 61 to 84
Func. Class	Functional Classification (see Route ID, Section 4)
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
MRR	Manually Rated Route
N/A	Not Applicable
NC	Not Collected
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating (Appendix B, Section 10)
Poor	Poor Rating with an index value of 60 or less
RCI	Roughness Condition Index
SADT	(Seasonal Annual Daily Traffic) The AADT adjusted to represent just the period of the year containing 80 percent of the total annual traffic.
SCR	Surface Condition Rating (Appendix B, Section 10)
Shoulder Width	Distance from fogline to hinge point, or if no fogline, from edge-of-pavement to hinge point.

## **APPENDIX B: DESCRIPTION OF RATING SYSTEM**

A numerical roadway rating system is used to describe the overall condition of the paved roadways and paved parking areas. In this system, a numerical rating between 0 and 100 is ascribed to each 0.02 miles of road. This numerical rating is called a Pavement Condition Rating (PCR). A “perfect” road, newly constructed with no surface distresses and a smooth surface, would be assigned a PCR rating of 100. Based on the type, severity, and extent of surface distresses points are deducted from 100 to arrive at the final PCR.

Data is collected on the following distresses and conditions:

- **Alligator Cracking** - a series of interconnecting cracks resembling alligator skin or chicken wire, which can occur anywhere in the lane.
- **Longitudinal Cracking** - cracks which are parallel to the pavement centerline or asphalt lay-down direction.
- **Transverse Cracking** - cracks perpendicular to the pavement centerline.
- **Pothole (patch)** - a bowl-shaped hole in the pavement surface. May be patched or not.
- **Rutting** - surface depressions in the wheel paths.
- **Roughness** is collected as International Roughness Index (IRI) and is used in the PCR formula. Roughness is measured in inches of vertical displacement of the vehicle per mile traveled.

A Distress Rating Index value is calculated for each of the individual distresses at the 0.02 mile, or every 105.6 feet.

### **Calculation of Index Values**

**Note:** Index values < 0 default 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.

All severity protocols are taken from the SHRP Distress Identification Manual.

#### **Condition Ranges for all Indices**

Excellent	>=95
Good	>=85 and <95
Fair	>60 and <85
Poor	<=60

#### **Alligator Crack Index**

$$AC\_INDEX = 100 - 40 * [(\%LOW / 70) + (\%MED / 30) + (\%HI / 10)]$$

Where :

The values %LOW, %MED and %HI describe the percent of the total WX measured area that is affected by alligator cracking of each severity level. These values range from  $\geq 0$  to  $\leq 100$ .

$\%LOW$  = (Total square area WX measured low severity alligator cracking) / (Section length \* WX measured lane width)

$\%MED = (\text{Total square area WX measured medium severity alligator cracking}) / (\text{Section length} * \text{WX measured lane width})$

$\%HI = (\text{Total square area WX measured high severity alligator cracking}) / (\text{Section length} * \text{WX measured lane width})$

The denominators 70, 30, and 10 are the maximum allowable extents for the numerator value in the same units. For example, low severity alligator cracking totaling 70% of the measured section area would alone fail that section of road for this index.

The threshold for failure for this index is  $AC\_INDEX = 60$ .

#### Severity Levels:

Low severity alligator cracking describes an area of cracks with no or only a few connecting cracks; cracks are not spalled (cracked, broken, chipped, frayed along the cracks); pumping (water seepage from beneath the pavement through the cracks) is not evident. Any sealed alligator cracks are low severity alligator cracks, as long as the sealant is still in good condition. If the sealant has reopened, and the crack is visible and can be measured, the crack severity is assigned according to that measurement.

Medium severity alligator cracking describes an area of interconnected cracks forming a complete pattern; cracks may be slightly spalled; pumping is not evident.

High severity alligator cracking describes an area of moderately or severely spalled interconnected cracks forming a complete pattern; pieces may move when subjected to traffic; pumping may be evident.

#### Longitudinal Crack Index

$LC\_INDEX = 100 - 40 * [(\%LOW / 350) + (\%MED / 200) + (\%HI / 75)]$

#### Where:

The values %LOW, %MED and %HI describe the length of longitudinal cracking of each severity as a percent of the section length. These values are  $\geq 0$  and can exceed 100.

$\%LOW = (\text{Total linear feet WX measured low severity longitudinal cracking}) / (\text{Section length in linear feet})$

$\%MED = (\text{Total linear feet WX measured medium severity longitudinal cracking}) / (\text{Section length in linear feet})$

$\%HI = (\text{Total linear feet WX measured high severity longitudinal cracking}) / (\text{Section length in linear feet})$

The denominators 350, 200, and 75 are the maximum allowable extents for the numerator value in the same units. For example, medium severity longitudinal cracking with a total length that is 200% of the length of the section would alone fail that section of road for this index.

The threshold for failure for this index is  $LC\_INDEX = 60$ .

#### Severity Levels:

Low severity longitudinal cracks have a mean width  $\leq 1/4''$ , or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity longitudinal cracks have a mean width  $> 1/4''$  and  $\leq 3/4''$ .

High severity longitudinal cracks have a mean width  $> 3/4''$ .

### Transverse Crack Index

$$TC\_INDEX = 100 - \{[20 * ((LOW / 15.1) + (MED / 7.5))] + [40 * (HI / 1.9)]\}$$

Where:

The values **LOW**, **MED** and **HI** describe a count of the total number of transverse cracks of each severity level, where one transverse crack unit is equal to the WX measured lane width. These values are  $\geq 0$ .

**LOW** = (Total linear feet WX measured low severity transverse cracking) / (WX measured lane width)

**MED** = (Total linear feet WX measured medium severity transverse cracking) / (WX measured lane width)

**HI** = (Total linear feet WX measured high severity transverse cracking) / (WX measured lane width)

The denominators **15.1**, **7.5**, and **1.9** are the maximum allowable extents for the numerator value in the same units. For example, high severity transverse cracking with a total length that amounts to 1.9 times the WX measured lane width would alone fail that section of road for this index.

The threshold for failure for this index is  $TC\_INDEX = 60$ .

Severity Levels:

Low severity transverse cracks have a mean width  $\leq 1/4$ " , or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity transverse cracks have a mean width  $> 1/4$ " and  $\leq 3/4$ " .

High severity transverse cracks have a mean width  $> 3/4$ " .

### Patching Index

$$PATCH\_INDEX = 100 - 40 * (%PATCHING / 80)$$

Where:

The value **%PATCHING** describes the percent of the total WX measured area that is affected by patching. This value ranges from  $\geq 0$  to  $\leq 100$ .

**%PATCHING** = (Total area WX measured patching) / (Section length \* WX measured lane width)

The denominator **80** is the maximum allowable extent for the numerator value in the same units. Patching totaling 80% or more of the measured section area fails a section of road for this index.

The threshold for failure for this index is  $PATCH\_INDEX = 60$ .

There are no severity levels for patching.

### Rutting Index

$$RUT\_INDEX = 100 - 40 * [(%LOW / 160) + (%MED / 80) + (%HI / 40)]$$

Where:

10 ARAN rut depth measurements are taken per full .02 section for each of 2 wheel paths (left and right), resulting in a total of 20 measurements taken for both wheel paths. The values %LOW, %MED and %HI describe the number of ARAN rut depth measurements of both wheel paths in the section whose values are of each severity level, calculated as a percentage of the total number of ARAN rut depth measurements taken for a single wheel path in the section. These values range from  $\geq 0$  to  $\leq 200$ .

%LOW = (Total number of ARAN measured low severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)

%MED = (Total number of ARAN measured medium severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)

%HI = (Total number of ARAN measured high severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)

The denominators 160, 80, and 40 are the maximum allowable extents for the numerator value in the same units. For example, low severity ruts recorded in 16 of the 20 total readings (or 160% of a full wheel path's worth of readings) for a full .02 section would fail that section for this index.

The threshold for failure for this index is RUT\_INDEX = 60.

Severity Levels:

Ruts with an ARAN measured depth  $< 0.20''$  are not included in the distress calculations.

Low severity ruts have an ARAN measured depth  $\geq 0.20''$  and  $\leq 0.49''$ .

Medium severity ruts have an ARAN measured depth  $\geq 0.50''$  and  $\leq 0.99''$ .

High severity ruts have an ARAN measured depth  $\geq 1.00''$ .

### **Roughness Condition Index**

$$RCI = 32 * [5 * (2.718282 ^ (-0.0041 * AVG IRI))]$$

Where:

The value AVG IRI describes the average value of the Left IRI and Right IRI measurements for the section. This value can range from approximately 40 to over 1000.

$$AVG IRI = (ARAN \text{ measured Left IRI} + ARAN \text{ measured Right IRI}) / 2$$

There is no applicable threshold for failure for this index.

NOTE: Collection of roughness data is dependent on the data collection vehicle traveling at a minimum speed of 12 mph. In the event that a route cannot be safely traveled at this minimum speed, and results in no roughness data, the SCR only will be calculated.

### **Surface Condition Rating Index**

$$SCR = 100 - [(100 - AC\_INDEX) + (100 - LC\_INDEX) + (100 - TC\_INDEX) + (100 - PATCH\_INDEX) + (100 - RUT\_INDEX)]$$

Where:

See above for determinations of [AC\\_INDEX](#), [LC\\_INDEX](#), [TC\\_INDEX](#), [PATCH\\_INDEX](#) and [RUT\\_INDEX](#).

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

### **Pavement Condition Rating Index Asphaltic Concrete Pavement (AS)**

$$PCR = (0.60 * SCR) + (0.40 * RCI)$$

Where:

See above for determinations of [SCR](#) and [RCI](#).

The values [0.60](#) and [0.40](#) function as weights within the formula.

If [SCR](#) equals zero (which means that the road surface condition is very poor), then the formula simply reduces to:  $PCR = 0.40 * RCI$ .

If [RCI](#) equals zero (which means that this value was not available for some reason), then the formula becomes:  $PCR = SCR$ .

The threshold for failure for this index is  $PCR = 60$ .

### **Pavement Condition Rating Index Portland Cement Concrete Pavement (CO)**

$$\text{Concrete PCR} = -0.0012(IRI^2) + 0.0499(IRI) + 99.542$$

Where:

The threshold for failure for this index is  $PCR = 60$ .

### **Parking Lot and Manually Rated Road Condition Rating**

#### **Surface Condition Distresses- Chip Seal:**

- Raveling – loss of surface rock chips revealing previous surface
- Bleeding – asphalt or tar is bleeding through to the surface where surface looks slick with asphalt
- Rutting
- Potholes/Patching

#### **Ratings - Chip Seal:**

- Excellent – None of the surface affected by the above (recently constructed)
- Good – Less than 10% of surface affected by the above
- Fair – Between 10% and 40% of surface affected by the above
- Poor – More than 40% of surface affected by the above

#### **Surface Condition - Asphalt:**

- Cracking of any type
- Rutting
- Potholes/Patching

**Ratings - Asphalt:**

Excellent – None of the surface affected by the above (recently constructed)

Good – Less than 10% of surface affected by the above

Fair – Between 10% and 40% of surface affected by the above

Poor – More than 40% of surface affected by the above

**Index Values of Visual Ratings on Parking Lots and Manually Rated Roads**

Under Construction 100

Excellent 97

Good 90

Fair 73

Poor 45



## **APPENDIX C: GENERAL INFORMATION ON RIP SYSTEMS**

### **DMI (Distance Measuring Instrument)**

The DMI (Distance Measuring Instrument) obtains road length measurements that are highly accurate (to 0.001 miles). The DMI is connected to the outside of the rear wheel on the driver's side, and is wired into the antilock braking system (ABS). The number of pulses recorded for each wheel rotation by the ABS is registered by the DMI, which transmits a measurement of distance traveled to the processing computers in the ARAN. The DMI distance measurements are the foundation to which all the other subsystems are tied.

### **Digital Image Information**

All images collected in Cycle 4 are digital images in .jpg format. These images provide adequate resolution for identifying sign and feature inventories and pavement evaluations. The images can be viewed with an interactive software program called VisiData. Each park will receive a copy of the VisiData program. Cycle 4 data, as well as Cycle 3 data, can be viewed using the Visi-Data software program. This program is a data presentation and analysis tool that can be accessed either at the individual park, park region or at NPS headquarters. The data is organized in a hierarchical manner and presented in tabular and graphical formats. The user is able to perform queries and drill down through the data to find the particular information they are looking for. Associated digital right-of-way images from either the LAN, USB port, individual DVD can be presented along with GPS locations.

### **Right-of-way (ROW) Video**

Three digital cameras are mounted above the vehicle's windshield that point directly forward and slightly to the left and right. These cameras each collect one image every 0.002 miles (10.56 feet) in the primary-direction lane, to give a panoramic field-of-view of about 160 degrees. (Forward-facing video from the center camera only is collected in the opposite-direction lane of travel.)

If data collection speed exceeds 35-40 mph, the network and storage computers may become overwhelmed and may begin to drop individual video frames. Occasional common video quality issues include sun glare and rapid changes between sunlight and shadow. The camera system is equipped with auto risers that sometimes cannot adjust quickly enough to collect optimal video images.

<b>FHWA ARAN CAMERA SPECIFICATIONS</b>	
<b>Forward-Facing Cameras (ROW)</b>	
Focal length	10 mm
Chip size	8.71mm X 6.90mm
Naming convention of each image	chainage.jpg
Image resolution	1300 X 1030
Image pixel size	depends on distance
Relative position of the GPS unit to each camera	2.104 meters from front-center rutbar to camera
<i>The ARAN has a lever arm setting which tells the POS system where the center of the rutbar is with respect to the GPS antennas.</i>	

### **Pavement Video**

Pavement video images are collected by the data collection vehicle to use in later analysis to determine extents and severities of different types of pavement distress. The pavement in the primary-direction road lane is filmed continuously by two analog cameras attached to booms extended from the rear of the ARAN on the left and right sides. Strobe lights fire synchronously with the opening of the camera shutters to eliminate shadows and motion blur. The images from the two cameras overlap, and are stitched together in real time to create a continuous strip image of the pavement in the primary direction lane. This strip has a maximum width of 3.0 meters (actual width depends on pavement camera calibration) and is sectioned for ease of file management every 0.010 miles (52.8 feet).

The cameras both have a resolution of 640 x 480, making the threshold of visible pavement cracks about 3 mm. Because the cameras are triggered by time and not distance traveled, this subsystem requires a minimum operating speed of 6 mph, otherwise images are taken on top of one another and result in checkered or black pavement video.

<b>FHWA ARAN CAMERA SPECIFICATIONS</b>	
<b>Pavement Cameras</b>	
Image Pixel size	3.135 mm /side
Image Resolution	640 X 480
Area that images cover	1.5 m X 1.2 m
Full color or grayscale	grayscale
Vehicle speed limitations	80km/h
Aperture setting	Auto-iris
Exposure setting	1/50000

### **FHWA ARAN GPS & Inertial System**

GPS is collected by a NovAtel MiLlennium, 12 channel, dual frequency L1/L2, DGPS ready receiver with a MiLlennium 502 GPS antenna. An OmniStar 3000 LR provides real-time differential correction. An Applanix POS/LV is the inertial system that fills in when GPS is unavailable. The antenna is mounted in the center of the roof, slightly toward the rear of the vehicle, but a lever arm is applied to place the operational location of GPS recording at the center of the rutbar on the front bumper of the vehicle. Expected accuracy under ideal conditions is sub meter.

### **GPS Collected on Manually Rated Routes**

Parking areas and roads that are not fully drivable with the ARAN data collection vehicle are collected manually by field technicians. GPS is collected for these routes using GPS field data collection utilizes Trimble ProXRS or ProXH Receivers matched with Trimble TSC1 or Ranger handheld Data Loggers, connected to Trimble Hurricane Antennas giving sub meter accuracy in ideal conditions. This collection equipment has varied as technology has improved over the years of RIP data collection. Some GPS files collected as early as 1998 have been verified for accuracy and perpetuated through the current cycle of data collection.

### **GPS SHAPEFILES**

<b>Type of Route and Collection Shape Filename</b>		
Roads driven by ARAN	Line	park_road_04.dbf/.shp/.shx
Parking Areas	Polygon	park_pkg_04.dbf/.shp/.shx
Roads Manually Rated as Lines (not in every park)	Line	park_mrl_04.dbf/.shp/.shx
Roads Manually Rated as Polygons (not in every park)	Polygon	park_mrp_04.dbf/.shp/.shx

- Datum for all GPS shapefiles is LL\_WGS84\_DD (Latitude Longitude \_World Geodetic Survey 1984\_Decimal Degrees)
- In filename, “park” is NPS four-letter alphabetic code.
- The source for route data required for data processing and report production is the PARK\_RouteInfo.mdb.

### **Condition Photos Taken of Manually Rated Roads**

One or more digital photos are taken by Canon Power Shot G2 4.0 Mega Pixel digital camera for each manually rated route in a National Park. They are stored in .jpg format named with the four-letter NPS park alphabetic code, route number, and the photo number assigned by the camera. For example, YOSE\_0900\_4434.jpg is the filename of the photo named 4434 by the camera that was taken of Yosemite National Park route 0900.

### **Scenic Photos**

Scenic photos are taken by Canon Power Shot G2 4.0 Mega Pixel digital camera throughout each park and are named with the four-letter NPS park alphabetic code and the count of the photo taken in that park. For example, GRCA003.jpg is the filename of the third scenic photo taken in Grand Canyon National Park. The number of scenic photos provided will vary between parks.

## **APPENDIX D: METADATA**

### **FHWA – NPS Road Inventory Program Cycle 4 Metadata**

The purpose of these sheets is to provide users of the Road Inventory Program’s data with data accuracies and tolerances to help users define ways in which the RIP data can and cannot be used. For further information on specifics of data collection equipment, data collection procedures, equipment calibrations, or quality control/quality assurance procedures, please contact Jim Kennedy, Project Manager, Data Quality Assurance, at 720-963-3560 or jim.kennedy@fhwa.dot.gov.

All Road Inventory Program data undergoes quality control and quality assurance testing. This document represents the known data accuracies and tolerances for the data collection equipment, data collection procedures, and data processing procedures currently in use. Many additional tests conducted on the park databases during the quality assurance phase to ensure data integrity are not listed as a part of this document. Before it is delivered, a park database undergoes a large set of table design consistency, field data format consistency, data completeness, uniqueness of key fields, data reasonableness, acceptable data range, within-field data consistency, between-field data consistency, and between-table data consistency tests. Additional data sampling checks are conducted to ensure proper data upload from raw files into the park database and to quality check the pavement crack analysis. Further information is detailed in the FHWA – NPS RIP Quality Assurance Manual, available upon request.

This description of metadata includes only the known accuracies with which a data field matches its expected value. The tables that follow this page show each database field’s:

- Field – field name
- Format – data type and number of characters of field
- Expected Value – meaning of value assigned to field
- Source – when in process field value obtained
- Validation – how field value obtained
- Expected Accuracy – accuracy with which contents of field match Expected Value

Verifying and continually improving the accuracy of Road Inventory Program data is an ongoing goal of the Federal Highway Administration and the National Park Service. Field testing and post-collection analysis of ARAN (Automatic Road ANalyzer) -collected data will continue in Cycle 4. Data quality is expected to improve as the FHWA – NPS Road Inventory Program continues to operate, due to the fact that future data collection cycles will consist in large part of data updates. Also, technological improvements are expected to render the data increasingly consistent with actual roadway conditions as data collection cycles progress.

### **Specific Caveats**

- MUTCD based on contents & colors of sign, not on size
- Database records that show a Portland Cement Concrete (CO) surface type sometimes include distress index values that seem to show a perfect roadway. Condition assessments on concrete pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.
- On the USB drive, in the Database folder, parks are provided with intersection lists and exceptions lists. These documents should be treated as raw files and are not accurate. Refer to the final database for accurately post-processed intersection data.
- Most roadway data is collected in the primary direction lane of a roadway. To save data storage space and to reduce data analysis efforts, the assumption was made that the paved surface condition of a route’s primary lane adequately represents the surface condition of the full roadway. Therefore, in the database, opposite-direction records in the PMS\_Tenth table do not include assessed values for roadway surface distresses. Values such as 0, N/A, -1, or a repeat of the primary-direction assessed value indicate that no assessment was performed. The PMS\_20 and PMS\_Mile tables simply exclude all opposite routes.

- Roadway Data is collected in intervals of 0.010 miles (52.8feet) constituting a “station”.
- Most roadway features are collected relative to the primary direction lane of a roadway, using the primary-direction video and mileage. Signs and Mile Markers are the only features collected using the opposite-direction video with mileage location referenced to the primary direction lane of the roadway.
- Route\_GPS table contains GPS positional information collected by the ARAN and post processed with Applanix POSPac Land 5.0 post-processing software. No manual adjustments have occurred on this table.
- Modifications to the Park\_ROAD\_04.dbf/.shp/.shx files may have been necessary for report esthetics.
- Modifications to the Park\_PKG\_04.dbf/.shp/.shx files may have been necessary for report esthetics.
- Cycle 4 utilizes the Microsoft Office 2003 suite of products and Crystal Reports XI for document and data file generation and reporting.
- All PDF files are in Adobe Acrobat 7.0 Professional format.
- All ArcGIS files are created using ESRI Version 9.x software.
- Thumbnail images are created at 1/10 original image size for Right-of-Way and Pavement Images.
- FHWA is investigating the rutting methodology and calculated values it currently reports. Equipment limitations and analysis methods may be over reporting, low severity rutting.

### Key to Notes in Tables

(1): Note that only one value fits in field, so even if this value varies throughout the route, only predominant value is recorded here.

(2): Shoulder width is measured at route start and every half-mile along the route in the primary direction. Width is the entire width of the drivable shoulder, regardless of the presence or absence of pavement, from the fog line to the shoulder hinge point, or if no fog line exists, from the edge of pavement to the hinge point. Identification of shoulder hinge point can be problematic using video analysis. Some paved ditches may be mistakenly recorded as shoulders where the shoulder hinge point and change in slope are not easily distinguished from the video.

(3): Mileage is measured by the ARAN (Automatic Road ANalyzer) data collection vehicle out to the 0.001 decimal place. The DMI (distance measuring instrument) is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration.

(4): Features are measured differently depending on whether they are visible in the forward-facing video of the roadway, but every feature milepost measurement depends on the baseline measurement of the data collection vehicle’s mileage. The ARAN (Automatic Road ANalyzer) data collection vehicle’s mileage is measured by the DMI (distance measuring instrument) out to the 0.001 decimal place. The DMI is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration. If a feature will not be visible in the forward-facing video, its milepost is determined by the data collectors’ key press tagging the milepost when the ARAN passes the feature. Key presses are entered into the ARAN software when the vehicle travels typically between 15 and 45 miles/hour, so a delay of a single second as the vehicle passes a feature would result in an inaccuracy of 0.004 miles (22 feet) to 0.012 miles (66 feet). If a feature is visible in the video, its milepost is determined during post-processing using a video measurement software called Surveyor.

(5): Condition assessments on concrete (PCC) pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.

(6): Roadway cracking presence, type, severity, and extent are determined by filming the roadway in the primary lane continuously with two overlapping analog cameras of 640 x 480 resolutions. The images from both cameras are stitched together in real time to create a continuous strip image of the roadway pavement in the primary lane. Cracks 3 mm or greater in width are visible in this video. A semi-automatic process running the WiseCrax software with additional input by human operators provides the cracking quantities recorded in these database fields. Quality checks have determined that a consistent 80% or better of the visible cracks are recorded.

Access Database Metadata

MASTER Table Metadata:

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for data collection cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input / FHWA Determination	100%, Referenced to other tables (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100%, Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100%, Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input / FHWA Classification	100%, Referenced to other tables
6	RTE_NAME	(Text)	Route name	Route ID Meeting	Park Input	100%, Referenced to other tables. 100 characters fit in field
7	FUNCT_CLASS	X	Route functional classification	Route ID Meeting	Park Input / FHWA Classification	100%, Referenced to other tables
8	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input / FHWA Determination	100%,
9	BEG_MP_EST	999.999 (miles)	Estimated starting MP	Route ID Meeting	Park Input / FHWA Determination	Estimated before data collected
10	END_MP_EST	999.999 (miles)	Estimated ending MP	Route ID Meeting	Park Input / FHWA Determination	Estimated before data collected
11	RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100%
12	FROM_DESC	(Text)	Beginning terminus of route	Route ID Meeting	Park Input / FHWA Determination	100% Referenced to other tables
13	TO_DESC	(Text)	Ending terminus of route	Route ID Meeting	Park Input / FHWA Determination	100% Referenced to other tables
14	NO_LANES	X	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
15	SURF_TYPE	XX	Surface type of route	ARAN Data Collection	Survey Crew Input	100%, Referenced to other tables (1)
16	COMP_DIR	XX	Compass direction of route's primary lane (nearest cardinal direction)	Route ID Meeting	Park Input / FHWA Determination	Untested
17	COMMENTS	(Text)	Special information, if any	Contractor Post-processing	Contractor Input	Untested
18	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
19	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%

20	FKEY	9999999	Unique record ID	Contractor Post-processing	Database Processing	100%
21	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
22	BEG_MP	999.999 (miles)	Beginning MP collected	ARAN Data Collection	Automatic Output	100% (3)
23	END_MP	999.999 (miles)	Ending MP collected	ARAN Data Collection	Automatic Output	100% (3)

**PMS\_FEATURE Table Metadata:**

	<b>FIELD</b>	<b>FORMAT</b>	<b>EXPECTED VALUE</b>	<b>SOURCE</b>	<b>VALIDATION</b>	<b>EXPECTED ACCURACY</b>
1	RIP_CYCLE	XX	4, for data collection cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input / FHWA Determination	Untested (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input / FHWA Classification	100% Referenced to other tables
6	FMSS_EQUIP	XXXXXXXX	Facility Management Software System Equipment number	NPS FMSS application	NPS References	Untested
7	FUNCT_CLASS	X	Route functional class	Route ID Meeting	Park Input / FHWA Classification	100% Referenced to other tables
8	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input / FHWA Determination	100%
9	MP	999.999 (miles)	Feature location along route	ARAN Data Collection/Contractor Post-processing	Video Analysis	<=0.001 mile
10	BEG_MP	999.999 (miles)	Feature Beginning location along route	Contractor Post-processing	Video Analysis	<=0.001 mile
11	END_MP	999.999 (miles)	Feature Ending location along route	Contractor Post-processing	Video Analysis	<=0.001 mile
12	FEATURE_LENGTH	999.99 (Feet)	Linear Feature Length	Contractor Post-processing	Database Processing	100%
13	EVENT	XXXX	Event category of feature	Contractor Post-processing	Video Analysis	Untested
14	EVENT_CODE	XXXX	Event sub-category of feature	Contractor Post-processing	Video Analysis	Untested
15	FEATURE_TYPE	(Text)	Feature designation: LINEAR or POINT	Contractor Post-processing	Video Analysis	Untested
16	EVENT_DESC	(Text)	Description of feature/contents of sign	Contractor Post-processing	Video Analysis	Untested
17	MUTCD	(Text)	MUTCD Code of Sign	Contractor Post-processing	Database Processing	95%
18	CONDITION	“N/A”	Sign condition. N/A. Not to be populated	Contractor Post-processing	Video Analysis	Values inaccurate, defaulted to “N/A”
19	COMMENT	(Text)	Sign label, intersecting route, etc.	Contractor Post-processing	Database Processing	Untested
20	OFFSET	“N/A”	Offset from Road Edge. N/A. Not to be populated	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to “N/A”



	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
21	SIDE	(Text)	Side of route relative to lane driven	Contractor Post-processing	Video Analysis	95%
22	STR_NUMBER	(Text)	FHWA bridge structure number	FHWA Post-processing	Database Processing	Untested
23	BARR_MAT	(Text)	Barrier Material Type	Contractor Post-processing	Video Analysis	Untested
24	BARR_TYPE	(Text)	Barrier Type	Contractor Post-processing	Video Analysis	Untested
25	BARR_POST_MAT	(Text)	Barrier Post Materials	Contractor Post-processing	Video Analysis	Untested
26	BARR_BEG_TERM	(Text)	Barrier Approach Treatment	Contractor Post-processing	Video Analysis	Untested
27	BARR_END_TERM	(Text)	Barrier End Treatment	Contractor Post-processing	Video Analysis	Untested
28	CURB_MAT	(Text)	Curb Material Type	Contractor Post-processing	Video Analysis	Untested
29	PAVED_DITCH_MAT	(Text)	Paved Ditch Material Type	Contractor Post-processing	Video Analysis	Untested (2)
30	GATE_MAT	(Text)	Gate Material Type	Contractor Post-processing	Video Analysis	Untested
31	GATE_STYLE	(Text)	Gate Style	Contractor Post-processing	Video Analysis	Untested
32	BEG_GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
33	BEG_GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
34	BEG_GPS_ELEV	99999.9	GPS Elevation Feet	Contractor Post-processing	Video Analysis	Untested
35	BEG_GPS_MODE	(Text)	GPS Satellite Mode	Contractor Post-processing	Video Analysis	Untested
36	END_GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
37	END_GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
38	END_GPS_ELEV	99999.9	GPS Elevation Feet	Contractor Post-processing	Video Analysis	Untested
39	END_GPS_MODE	(Text)	GPS Satellite Mode	Contractor Post-processing	Video Analysis	Untested
40	DATUM	(Text)	LL_WGS84_DD	Contractor Post-processing	Database Processing	100%
41	VIDEO	<Park>C04VID<#>	Removable USB video hard drive number	Contractor Post-processing	Database Processing	Untested
42	IMAGE	(Text)	Filename of .jpg image showing feature	Contractor Post-processing	Automatic Output	Untested
43	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
44	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
45	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
46	FKEY	(Numeric)	Unique record ID	Contractor Post-processing	Database Processing	100%
47	VISI_FROM	999999 (millimiles)	Raw MP of first video frame showing feature	Contractor Post-processing	Database Processing	Untested
48	VISI_TO	999999 (millimiles)	Raw MP of last video frame showing feature	Contractor Post-processing	Database Processing	Untested

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
49	IDKEY	(Text)	Unique record ID used by VisiData	Contractor Post-processing	Database Processing	Untested
50	MP_REF	(Text)	Range of mileage to play in VisiData	Contractor Post-processing	Database Processing	Untested

List of Roadway Features						
#	EVENT	EVENT_CODE	FEATURE_TYPE	EVENT_DESC	STRUCTURE #	COLLECTED BY
1	BRIDGE	BRDG	LINEAR	BRIDGE	ALWAYS	ARAN
2	CATTLE GUARD	CGD	POINT	CATTLE GUARD	-	VIDEO RATING
3	CONSTRUCTION	CNST	LINEAR	CONSTRUCTION WORK ZONE	-	ARAN
4	CULVERT	CUL	POINT	CULVERT	SOMETIMES	ARAN
5	CURB	CRBL	LINEAR	CURB ON LEFT	-	VIDEO RATING
	""	CRBR	LINEAR	CURB ON RIGHT	-	VIDEO RATING
6	CURB-AND-GUTTER	CAGL	LINEAR	CURB-AND-GUTTER ON LEFT	-	VIDEO RATING
	""	CAGR	LINEAR	CURB-AND-GUTTER ON RIGHT	-	VIDEO RATING
7	DROP INLET	DINL	POINT	DROP INLET ON LEFT	-	ARAN
	""	DINR	POINT	DROP INLET ON RIGHT	-	ARAN
8	GATE	GATE	POINT	GATE	-	VIDEO RATING
9	FIRE HYDRANT	FHDL	POINT	FIRE HYDRANT ON LEFT	-	VIDEO RATING
	""	FHDR	POINT	FIRE HYDRANT ON RIGHT	-	VIDEO RATING
10	GUARD/GUIDE WALL	GGWL	LINEAR	GUARD/GUIDE WALL ON LEFT	-	VIDEO RATING
	""	GGWR	LINEAR	GUARD/GUIDE WALL ON RIGHT	-	VIDEO RATING
11	GUARD/GUIDE RAIL	GGRL	LINEAR	GUARD/GUIDE RAIL ON LEFT	-	VIDEO RATING
	""	GGRR	LINEAR	GUARD/GUIDE RAIL ON RIGHT	-	VIDEO RATING
12	INTERSECTION	INTL	POINT	INTERSECTION ON LEFT	-	ARAN
	""	INTR	POINT	INTERSECTION ON RIGHT	-	ARAN
	""	INTN	POINT	INTERSECTION SIDE N/A	-	ARAN

13	LANE DEVIATION	LADV	LINEAR	LANE DEVIATION	-	ARAN
14	LOW WATER CROSSING	LWCR	LINEAR	LOW WATER CROSSING	SOMETIMES	VIDEO RATING
15	MILE MARKER	MML	POINT	MILE MARKER ON LEFT	-	VIDEO RATING
	""	MMR	POINT	MILE MARKER ON RIGHT	-	VIDEO RATING
16	OVERPASS	OPV	POINT	OVERPASS VEHICULAR	SOMETIMES	ARAN
	""	OPP	POINT	OVERPASS PEDESTRIAN	SOMETIMES	ARAN
	""	OPRX	POINT	OVERPASS RAILROAD CROSSING	SOMETIMES	ARAN
17	PARK BOUNDARY	PRK	POINT	PARK BOUNDARY	-	ARAN
18	PAVED DITCH	PVDL	LINEAR	PAVED DITCH ON LEFT	-	VIDEO RATING
	""	PVDR	LINEAR	PAVED DITCH ON RIGHT	-	VIDEO RATING
19	PULLOUT	PLOL	LINEAR	PULLOUT ON LEFT	-	VIDEO RATING
	""	PLOR	LINEAR	PULLOUT ON RIGHT	-	VIDEO RATING
20	RAILROAD CROSSING	RRX	POINT	RAILROAD CROSSING	-	VIDEO RATING
21	RETAINING WALL	RTWL	LINEAR	RETAINING WALL ON LEFT	-	VIDEO RATING
	""	RTWR	LINEAR	RETAINING WALL ON RIGHT	-	VIDEO RATING
22	ROUTE BEGIN	RBEG	POINT	ROUTE BEGIN	-	ARAN
23	ROUTE END	REND	POINT	ROUTE END	-	ARAN
24	SIGN	REGU, WARN, GUID, UNKN	POINT	DOCUMENT CONTENTS OF SIGN. (WHAT THE SIGN SAYS) FOR GRAPHICS ONLY SIGNS POPULATED WITH ("GRAPHIC SIGN, NO TEXT") FOR UNREADABLE TEXT POPULATED WITH ("UNABLE TO READ FROM VIDEO")	-	VIDEO RATING
25	STATE BOUNDARY	STB	POINT	STATE BOUNDARY	-	ARAN
26	TRAFFIC LIGHT	TRF	POINT	TRAFFIC LIGHT	-	VIDEO RATING
27	TUNNEL	TUN	LINEAR	TUNNEL	ALWAYS	ARAN

**PMS\_20, PMS\_MILE, & PMS\_TENTH Tables Metadata:**

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested. (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
6	FUNCT_CLASS	X	Route functional class	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
7	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	100%
8	BEG_MP	999.999 (miles)	MP at start of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
9	END_MP	999.999 (miles)	MP at end of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
10	INT_LENGTH	999.9 (ft)	Length of road interval as aggregated for data table	Contractor Post-processing	Database Processing	100%
11	RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100% (3)
12	NO_LANES	99	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
13	LANE_NO	99	Data collection lane	Contractor Post-processing	Database Processing	Untested
14	D_LANE_WIDTH	99.999 (ft)	WiseCrax (crack detection software) analysis width	Contractor Post-processing	Automatic Output	Untested
15	LANE_WIDTH	99.9 (ft)	Width of lane	Contractor Post-processing	Video Analysis	95%, <=1.0 foot
16	PAVE_WIDTH	99.9 (ft)	Full pavement width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot
17	SHLD_WIDTH_L	99.9 (ft)	Left shoulder width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot (2)
18	SHLD_WIDTH_R	99.9 (ft)	Right shoulder width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot (2)
19	SHLD_COND_L	N/A	N/A. Intended to be Left shoulder condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to "N/A"
20	SHLD_COND_R	N/A	N/A. Intended to be Right shoulder condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to "N/A"
21	DRAIN_COND_L	N/A	N/A. Intended to be Left drainage condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to "N/A"
22	DRAIN_COND_R	N/A	N/A. Intended to be Right drainage condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to "N/A"

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
23	SURF_TYPE	XX	Surface type of route	ARAN Data Collection	Survey Crew Input	Untested. (1)
24	PCR	999	Pavement Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (6)
25	RCI	999	Roughness Condition Index; -1 if invalid IRI	Contractor Post-processing	Database Processing	100% for calculation
26	SCR	999	Surface Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
27	IRI_AVG	999.9 (inches/mile)	Average IRI	Contractor Post-processing	Database Processing	Untested
28	IRI_SD	999.9 (inches/mile)	IRI standard deviation	Contractor Post-processing	Database Processing	Untested
29	IRI_L	999.9 (inches/mile)	Left wheel path IRI	ARAN Data Collection	Automatic Output	Untested
30	IRI_R	999.9 (inches/mile)	Right wheel path IRI	ARAN Data Collection	Automatic Output	Untested
31	IRI_FLAG	0 or -1	-1 if invalid IRI data	Contractor Post-processing	Database Processing	Untested
32	RUT_INDEX	999	Rut index	Contractor Post-processing	Database Processing	100% for calculation (5)
33	RUT_AVG	99.99 (inches)	Average rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
34	RUT_MAX	99.99 (inches)	Maximum rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
35	RUT_SD	9.9	Rut depth standard deviation	Contractor Post-processing	Database Processing	Untested (5)
36	RUT_LOW	999 (%)	Percent of low severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
37	RUT_MED	999 (%)	Percent of medium severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
38	RUT_HI	999 (%)	Percent of high severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
39	XFALL	999.9 (% slope)	Cross fall at start of road interval	ARAN Data Collection	Automatic Output	Untested
40	GRADE	999.9 (% slope)	Grade at start of road interval	ARAN Data Collection	Automatic Output	Untested
41	AC_INDEX	999	Alligator cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
42	AC_LOW	999.9999 (%)	Percent of WiseCrax measured lane area with low-severity alligator cracking	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
43	AC_MED	999.9999 (%)	Percent of WiseCrax measured lane area with medium-severity alligator cracking	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
44	AC_HI	999.9999 (%)	Percent of WiseCrax measured lane area with high-severity alligator	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			cracking			
45	LC_INDEX	999	Longitudinal cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
46	LC_LOW	999.99 (%)	Low-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
47	LC_MED	999.99 (%)	Medium-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
48	LC_HI	999.99 (%)	High-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
49	TC_INDEX	999	Transverse cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
50	TC_LOW	999.99 (cracks)	Count of low-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
51	TC_MED	999.99 (cracks)	Count of medium-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
52	TC_HI	999.99 (cracks)	Count of high-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
53	PATCH_INDEX	999	Patching index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
54	PATCHING	999.9999 (%)	Percent of WiseCrax measured lane area affected by patching	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
55	GPS_LAT	999.999999	Latitude coordinate	ARAN Data Collection	Automatic Output	<= 3.00 feet
56	GPS_LON	-999.999999	Longitude coordinate	ARAN Data Collection	Automatic Output	<= 3.00 feet
57	GPS_ELEV	99999.9	Elevation	ARAN Data Collection	Automatic Output	Untested
58	GPS_MODE	XXX	GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	Untested
59	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Database Processing	100%
60	VIDEO	<Park>C04VID<#>	Removable USB video hard	Contractor Post-processing	Database Processing	Untested

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			drive number			
61	IMAGE	(Text)	Filename of .jpg image showing road interval	Contractor Post-processing	Automatic Output	Untested
62	SPEED	999 (miles/hour)	Average ARAN speed during data collection	ARAN Data Collection	Automatic Output	Untested
63	BRIDGE_FLAG	0 or 1	Flag indicating presence of bridge in interval	ARAN Data Collection	Survey Crew Input	Untested
64	CONSTR_FLAG	0 or 1	Flag indicating construction in interval	ARAN Data Collection	Survey Crew Input	Untested
65	LANEDEV_FLAG	0 or 1	Flag indicating lane deviation in interval	ARAN Data Collection	Survey Crew Input	Untested
66	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
67	NODISTRESS	0 OR 1	Flag indicating absence of pavement distress	Contractor Post-processing	Database Processing	100%
68	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
69	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
70	FKEY	(Numeric)	Unique record ID	Contractor Post-processing	Database Processing	100%
71	CONTRACTOR1	(Numeric)	Raw MP of first video frame in section	Contractor Post-processing	Database Processing	Untested
72	CONTRACTOR2	(Numeric)	Raw MP of last video frame in section	Contractor Post-processing	Database Processing	Untested
73	CONTRACTOR3	(Text)	Unique record ID used by VisiData	Contractor Post-processing	Database Processing	Untested
74	CONTRACTOR4	(Text)	Range of mileage to play in VisiData	Contractor Post-processing	Database Processing	Untested

**ROUTE\_GPS table metadata:**

	<b>FIELD</b>	<b>FORMAT</b>	<b>EXPECTED VALUE</b>	<b>SOURCE</b>	<b>VALIDATION</b>	<b>EXPECTED ACCURACY</b>
1	RIP_CYCLE	XX	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
6	FUNCT_CLASS	X	Route functional classification	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
7	RTE_NAME	(Text)	Route name	Route ID Meeting	Park Input	100% Referenced to other tables . 100 characters fit in field
8	LANE_NUMBER	99	Data collection lane	Contractor Post-processing	Database Processing	Untested
9	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	Untested
10	MP	999.999	Mile Post (at 0.01 record)	ARAN Data Collection, Contractor Post-processing	Survey Crew Input/GPS Processing	Untested (3)
11	GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	ARAN Data Collection, Contractor Post-processing	Automatic Output	<= 3.00 feet
12	GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	ARAN Data Collection, Contractor Post-processing	Automatic Output	<= 3.00 feet
13	GPS_ELEV	99999.9	Elevation	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
14	GPS_MODE	XXX	GPS Satellite Mode during collection	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
15	XFALL	999.9	Cross Fall: % Slope at GPS Location (Caution, Data not Validated)	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
16	GRADE	999.9	Grade: % Slope at GPS Location (Caution, Data not Validated)	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
17	HEADING	999.9	Heading Relative to True North	ARAN Data Collection	Automatic Output	Untested
18	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Database Processing	Untested
19	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	Untested
20	FKEY	9999999	Unique record ID	Contractor Post-processing	Database Processing	Untested



21	DATE	MM/DD/YY	ARAN Data Collection Date	ARAN Data Collection	Automatic Output	Untested
22	COMMENT	(Text)	Source of Any Digitized Data	ARAN Data Collection	Database Processing	Untested
23	CONTRACTOR1	(Numeric)	Visi_from	Contractor Post-processing	Database Processing	Untested
24	CONTRACTOR2	(Numeric)	Visi_to	Contractor Post-processing	Database Processing	Untested
25	CONTRACTOR3	(Text)	Visi_dir (ipdated to chapter 1)	Contractor Post-processing	Database Processing	Untested
26	CONTRACTOR4	(Text)	Comments/exceptions	Contractor Post-processing	Database Processing	Untested

**FHWA "Route ID Program" Database**  
**Database Name: ROUTEINFO.mdb**  
**Table Name: ROUTE\_ID**

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	ROUTE_IDENT	XXXX-9999XXX	The Park's Alpha Code + "-" + RTE_NO (below).	Route ID Meeting	Automatic Output	100%, Reference source for all tables
2	RIP_CYCLE	99	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100%, Reference source for all tables
3	PARK_ALPHA	XXXX	Park Alpha Code	Route ID Meeting	NPS References	100%, Reference source for all tables
4	GROUP_ALPHA	XXXX	Group Alpha Code	Route ID Meeting	NPS References	100%, Reference source for all tables
5	PARK_NO	9999	Park Numeric Code	Route ID Meeting	NPS References	100%, Reference source for all tables
6	PARK_NAME	(text)	NPS Name of Park	Route ID Meeting	NPS References	100%, Reference source for all tables
7	RTE_NO	9999XXX	Route Number	Route ID Meeting	Park Input	100%, Reference source for all tables
8	RTE_NAME	(Text)	Route Name	Route ID Meeting	Park Input	100%, Reference source for all tables
9	FROM_DESC	(Text)	Beginning terminus of route	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
10	TO_DESC	(Text)	Ending terminus of route	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
11	INSP_DATE	MM/DD/YYYY	Collection Date	ARAN Data Collection	FHWA Determination	100%, Reference source for all tables
12	FUNCT_CLASS	XX	Functional Class	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
13	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
14	STATE2	XX	Additional State Park Route traverses	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
15	FMSS_NO	(Text)	NPS's Facility Management Software System (FMSS) Asset number	Route ID Meeting	Park Input	100%, Reference source for all tables
16	FMSS_SUR_EQP	(Text)	FMSS Surface Equipment Number	Route ID Meeting	Park Input	Untested
17	M_DISTRICT	(Text)	Park Maintenance District Route resides in	Route ID Meeting	Park Input	100%, Reference source for all tables (1)
18	TOPOGRAPHY	(Text)	Predominate Terrain condition for	Route ID Meeting	FHWA Determination	100%, Reference source for all

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			Route. (FLAT, ROLLING, MOUNTAINOUS, or URBAN)			tables (1)
19	POSTED_SPEED	99	Posted Speed Limit for Route (Value is Predominate Speed Limit along Route)	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
20	ARAN_ROUTE	XXX	Yes/No	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
21	PARKING_AREA	XXX	Yes/No	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
22	CONCESSION	XXX	Yes/No	Route ID Meeting	Park Input	100%, Reference source for all tables
23	PAVED_MI	999.999	Paved mileage (to the nearest 0.001)	ARAN Data Collection	Automatic Output	100%, Reference source for all tables
24	UNPAVED_MI	999.999	Unpaved mileage (to the nearest 0.001)	Route ID Meeting	Automatic Output	100%, Reference source for all tables
25	RTE_LENGTH	999.999	Official Route Length	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
26	SURF_TYPE	XX	Surface type (PAVED: AS (asphalt, includes composite), CO (concrete), BR (brick/pavers), CB (cobblestone), OT (other))	Route ID Meeting	Survey Crew Input	100%, Reference source for all tables (1)
27	UNPAVED	XXXX	Unpaved Route (Yes/No/Both)	Route ID Meeting	Automatic Output	100%, Reference source for all tables
28	UNPAVED_CAT	XXX	Unpaved Road Category	Route ID Meeting	Automatic Output	Untested
29	CURB	(Text)	Parking Area with Curb around perimeter.	Route ID Meeting	Park Input/FHWA Determination	Untested
30	CURB_GUTTER	(Text)	Parking Area with Curb and Gutter around perimeter.	Route ID Meeting	Park Input/FHWA Determination	Untested
31	ADJ_ROUTE	9999XXX	Route number	Route ID Meeting	Automatic Output	100%, Reference source for all tables
32	USER_ACCESS	(Text)	Access Designation for Parking	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
33	PHOTO_NO	(Text)	Photo or Image	Route ID Meeting	Survey Crew Input	100%, Reference source for all tables
34	PLOT_SIZE	(Text)	Unpaved Parking Area Size	Route ID Meeting	Automatic Output	100%, Reference source for all tables
35	SQ_FEET	999.999	Route Square Footage	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
36	M_RATING	(Text)	Manual Rating	Route ID Meeting	Automatic Output	100%, Reference source for all tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
37	SQ_YARDS	999.999	Route Square Yardage	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
38	LANES	XX	Route travel lanes	Route ID Meeting	Automatic Output	Untested (1)
39	PAVE_WIDTH	999.99	Pavement Width (Weighted average)	RIP Post-processing	Automatic Output	100% Referenced to other tables
40	LANE_MILES	999.999	Route Equivalent Lane Miles	RIP Post-processing	Automatic Output	100%, Reference source for all tables
41	AREA_MAP	(Text)	1 or 2-digit number	Contractor Post-processing	FHWA/Contractor Input	100%, Reference source for all tables
42	REMARKS	(Memo)	General remarks on Park route and data collection operations.	Contractor Post-processing	FHWA/Contractor Input	Untested
43	SUMMARY_REC	XXXX-9999XXX	ROUTE_IDENT of summary Park Asset	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
44	NPS_REGION	(Text)	Park Region	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
45	DIVISION	(Text)	FHWA Division	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
46	PCR	999.99	Route Weighted Average PCR value	RIP Post-processing	Automatic Output	100% Referenced to other tables
47	SCR	999.99	Route Weighted Average SCR value	RIP Post-processing	Automatic Output	100% Referenced to other tables
48	AADT	999	Average Adjusted Daily Traffic	RIP	Automatic Output	Untested
49	SADT	999	Seasonal Adjusted Daily Traffic	RIP	Automatic Output	Untested
50	ADT_DATE	MM/DD/YYYY	Traffic Date of Collection	RIP	Automatic Output	Untested
51	BEG_LAT	999.999999	Route Begin GPS Latitude Coordinate (decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
52	BEG_LON	-999.999999	Route Begin GPS Longitude Coordinate (-decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
53	BEG_ELEV	99999.9	Route Begin Elevation	ARAN Data Collection	Automatic Output	100% Referenced to other tables
54	BEG_MODE	XXX	Route Begin GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	100% Referenced to other tables
55	END_LAT	999.999999	Route End GPS Latitude Coordinate (decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
56	END_LON	-999.999999	Route End GPS Longitude Co-ordinate (-decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
57	END_ELEV	99999.9	Route End Elevation	ARAN Data Collection	Automatic Output	100% Referenced to other tables
58	END_MODE	XXX	Route End GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	100% Referenced to other tables
59	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Automatic Output	100% Referenced to other tables
60	CHILD_ROUTE	XXX	Yes/No	Route ID Meeting	Automatic Output	100% Reference source for all tables
61	CULVERT_CNT	999	Route Culvert Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
62	DROP_INLET_CNT	999	Route Drop Inlet Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
63	GATE_CNT	999	Route Gate Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
64	TRAFLIGHT_CNT	999	Route Traffic Light Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
65	SIGN_CNT	999	Route Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
66	LWCROSS_CNT	999	Route Low Water Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
67	BRIDGE_CNT	999	Route Bridge Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
68	TUNNEL_CNT	999	Route Tunnel Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
69	PULLOUT_CNT	999	Route Pullout Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
70	INTERSEC_CNT	999	Route Intersection Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
71	ST_BNDRY_CNT	999	Route State Boundary Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
72	PRK_BNDRY_CNT	999	Route Park Boundary Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
73	RETWALL_CNT	999	Route Retaining Wall Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
74	RR_CROSS_CNT	999	Route RR Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
75	CATTLE_CNT	999	Route Cattle Guard Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
76	OVHDSIGN_CNT	999	Route Overhead Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
77	MILEMARK_CNT	999	Route Mile Marker Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
78	FHYD_CNT	999	Route Fire Hydrant Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
79	OVERPASS_CNT	999	Route Overpass Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
80	CABLE_TLNG	9999.999 (ft)	Route Total Length Cable Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
81	GDRAIL_TLNG	9999.999 (ft)	Route Total Length Guard/Guide Rail Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
82	GDWALL_TLNG	9999.999 (ft)	Route Total Length Guard/Guide Wall Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
83	TEMP_BARR_TLNG	9999.999 (ft)	Route Total Length Temporary Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
84	BOLLARD_TLNG	9999.999 (ft)	Route Total Length Bollard Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
85	BARRIER_TLNG	9999.999 (ft)	Route Total Length All Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
86	CURB_TLNG	9999.999 (ft)	Route Total Length Curbing (excludes Parking Areas)	RIP Post-processing	Automatic Output	100% Referenced to other tables
87	LWCROSS_TLNG	9999.999 (ft)	Route Total Length Low Water Crossings	RIP Post-processing	Automatic Output	100% Referenced to other tables
88	PAVDITCH_TLNG	9999.999 (ft)	Route Total Length Paved Ditch	RIP Post-processing	Automatic Output	100% Referenced to other tables (2)
89	TURNOUT_TLNG	9999.999 (ft)	Route Total Length Turnouts	RIP Post-processing	Automatic Output	100% Referenced to other tables
90	LANE_NUMBER	99	Number of Lane Tested	RIP Post-processing	Automatic Output	100% Referenced to other tables
91	LOCAL_FACTOR	9.9999	Park Location Factor	NPS Partner	Automatic Output	100% Reference source for all tables
92	E_ZONE	XXX	Route Environmental Zone	FHWA HPMA	Automatic Output	100% Reference source for all tables
93	PAVEMENT_DM	\$99,999,999.99	Pavement Deferred Maintenance	FHWA HPMA	Automatic Output	100% Reference source for all tables
94	CRV	\$99,999,999.99	Current Replacement Value	RIP Post-processing	Automatic Output	100% Reference source for all tables

Database Name: ROUTEINFO.mdb

Table Name: PARK\_TOTALS

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	99	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	PARK_ALPHA	XXXX	Park Alpha Code	Route ID Meeting	FHWA Determination	100% Referenced to other tables
3	GROUP_ALPHA	XXXX	Group Alpha Code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	9999	Park Numeric Code	Route ID Meeting	NPS References	100% Referenced to other tables
5	PARK_NAME	XXXX	NPS Name of Park	Route ID Meeting	NPS References	100% Referenced to other tables
6	INSP_DATE	MM/DD/YYYY	Date that data was collected in the park (completion date).	Route ID Meeting and ARAN Data Collection	FHWA Determination	100% Referenced to other tables
7	NPS_REGION	XXXX	Park Region	Route ID Meeting	Park Input	100% Referenced to other tables
8	DIVISION	XXXX	FHWA Division	Route ID Meeting	FHWA Determination	100% Referenced to other tables
9	T_PAVED_MI	999.999	Total Park Paved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
10	T_UNPAVED_MI	999.999	Total Park Unpaved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
11	T_ROUTE_MILES	999.999	Total Park Route Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
12	T_ARAN_DRIVEN	999.999	Total Park ARAN Driven Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
13	T_ARAN_LMILES	999.999	Total Park ARAN Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
14	T_CONCESS_PAVED	999.999	Total Park Concession Paved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
15	T_CONCESS_UNPAVED	999.999	Total Park Concession Unpaved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
16	T_PRK_PAVEDSQFT	999.999	Total Park Parking Paved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
17	T_PRK_UNPAVEDSQFT	999.999	Total Park Parking Unpaved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
18	T_CPRK_PAVEDSQFT	999.999	Total Park Concession Parking Paved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
19	T_CPRK_UNPAVEDSQFT	999.999	Total Park Concession Parking Unpaved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
20	T_PARKING_SQFT	999.999	Total Park Parking Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
21	T_PARKING_LMILES	999.999	Total Park Parking Equivalent Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
22	T_MRR_SQFT	999.999	Total Park Manually Rated Road Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
23	T_CMRR_SQFT	999.999	Total Park Concession Manually Rated Road Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
24	T_MRR_LMILES	999.999	Total Park Manually Rated Road Equivalent Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
25	T_LMILES	999.999	Total Park Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
26	T_CULVERT_CNT	999	Total Park Culvert Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
27	T_DROP_INLET_CNT	999	Total Park Drop Inlet Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
28	T_GATE_CNT	999	Total Park Gate Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
29	T_TRAFLIGHT_CNT	999	Total Park Traffic light Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
30	T_SIGN_CNT	999	Total Park Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
31	T_LWCROSS_CNT	999	Total Park Low Water Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
32	T_BRIDGE_CNT	999	Total Park Bridge Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
33	T_TUNNEL_CNT	999	Total Park Tunnel Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
34	T_PULLOUT_CNT	999	Total Park Pullout Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
35	T_INTERSEC_CNT	999	Total Park Intersections Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
36	T_ST_BNDRY_CNT	999	Total Park State Boundaries Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
37	T_PRK_BNDRY_CNT	999	Total Park Boundaries Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
38	T_RETWALL_CNT	999	Total Park Retaining Wall Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
39	T_RR_CROSS_CNT	999	Total Park RR Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other



	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
						tables
40	T_CATTLE_CNT	999	Total Park Cattle Guard Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
41	T_OVHDSIGN_CNT	999	Total Park Overhead Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
42	T_MILEMARK_CNT	999	Total Park Mile Marker Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
43	T_FHYD_CNT	999	Total Park Fire Hydrant Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
44	T_OVERPASS_CNT	999	Total Park Overpass Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
45	T_CABLE_TLNG	9999.999 (ft)	Total Length Park Cable Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
46	T_GDRAIL_TLNG	9999.999 (ft)	Total Length Park Guard/Guide Rail Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
47	T_GDWALL_TLNG	9999.999 (ft)	Total Length Park Guard/Guide Wall Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
48	T_TEMP_BARR_TLNG	9999.999 (ft)	Total Length Park Temporary Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
49	T_BOLLARD_TLNG	9999.999 (ft)	Total Length Park Bollard Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
50	T_BARRIER_TLNG	9999.999 (ft)	Total Length All Park Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
51	T_CURB_TLNG	9999.999 (ft)	Total Length Park Curbing	RIP Post-processing	Automatic Output	100% Referenced to other tables
52	T_LWCROSS_TLNG	9999.999 (ft)	Total Length Park Low Water Crossings	RIP Post-processing	Automatic Output	100% Referenced to other tables
53	T_PAVDITCH_TLNG	9999.999 (ft)	Total Length Park Paved Ditches	RIP Post-processing	Automatic Output	100% Referenced to other tables (2)
54	T_TURNOUT_TLNG	9999.999 (ft)	Total Length Park Turnouts	RIP Post-processing	Automatic Output	100% Referenced to other tables
55	PARK_PCR	99.99	Overall Park PCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
56	PARK_RCI	99.99	Overall Park RCI Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
57	PARK_SCR	99.99	Overall Park SCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
58	PARK_RUT_INDEX	99.99	Overall Park Rutting Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
59	PARK_AC_INDEX	99.99	Overall Park Alligator Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables

	<b>FIELD</b>	<b>FORMAT</b>	<b>EXPECTED VALUE</b>	<b>SOURCE</b>	<b>VALIDATION</b>	<b>EXPECTED ACCURACY</b>
60	PARK_LC_INDEX	99.99	Overall Park Longitudinal Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
61	PARK_TC_INDEX	99.99	Overall Park Transverse Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
62	PARK_PATCH_INDEX	99.99	Overall Park Patching Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
63	PARK_CONC_PCR	99.99	Overall Park Concession PCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables