

Federal Lands Highway Road Inventory Program

Road Inventory and Condition Assessment



Olympic National Park OLYM - 9500

Cycle 5 Report

Prepared By: Federal Highway Administration Road Inventory Program (RIP) Data Collection Date: 09/2010 Report Date: 03/2012

Olympic National Park in Washington

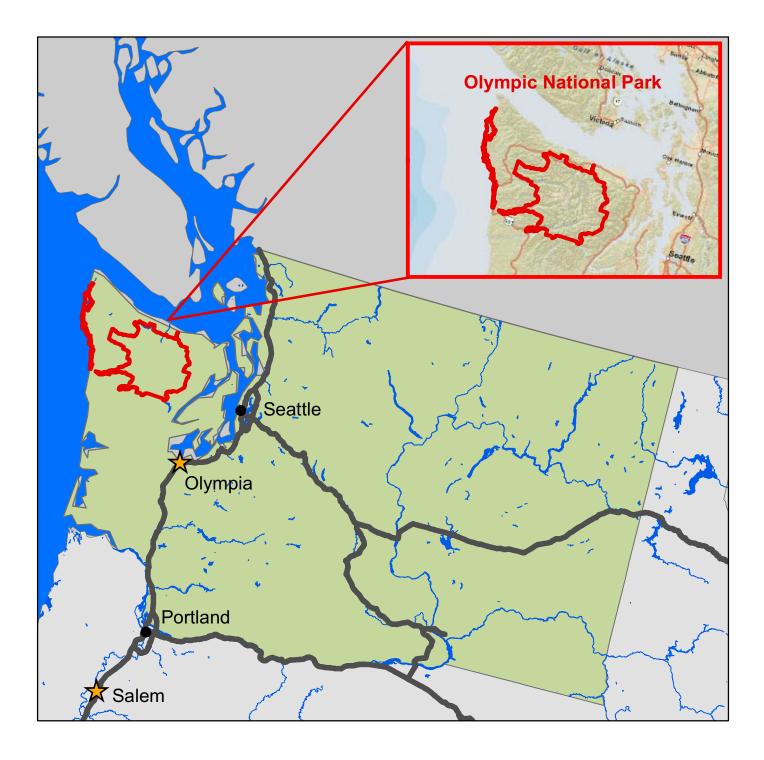




TABLE OF CONTENTS

	<u>SECTION</u>	PAGE
1.	INTRODUCTION	1 - 1
2.	PARK ROUTE INVENTORY Route IDs, Subcomponents & Changes Report (As Applicable)	2 – 1
3.	PARK SUMMARY INFORMATION Paved Route Miles and Percentages by Functional Class and PCR DCV Road Condition Summary	3 - 1 3 - 3
4.	PARK ROUTE LOCATION MAPS Route Location Key Map Route Location Area Map Route Condition Key Map – PCR Mile by Mile Route Condition Area Map – PCR Mile by Mile	4 - 1 4 - 2 4 - 11 4 - 12
5.	PAVED ROUTE CONDITION RATING SHEETS CRS Pages	5 – 1
6.	MANUALLY RATED PAVED ROUTE CONDITION RATING SHEETS MRR Pages	6 – 1
7.	PARKING AREA CONDITION RATING SHEETS Paved Parking Area Pages	7 – 1
8.	ROUTE MAINTENANCE FEATURES SUMMARIES DCV Route Maintenance Features Summary Structure List	8 - 1 8 - 2
9.	ROUTE MAINTENANCE FEATURES ROAD LOGS Route Maintenance Features Road Logs	9 – 1
10.	 APPENDIX Explanation of Changes to the RIP Index Equations and Determination of PCR Explanation of the Excellent, Good, Fair and Poor Condition Descriptions Description of Rating System Surface Distresses Index Formulas Data Collection Vehicle Subsystems Geodatabase – Background and Metadata Glossary of Terms and Abbreviations 	$10 - 1 \\ 10 - 2 \\ 10 - 3 \\ 10 - 5 \\ 10 - 12 \\ 10 - 16 \\ 10 - 19 \\ 10 - 20$

Section 1 Introduction



Olympic National Park



INTRODUCTION

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

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

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

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

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

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

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

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

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

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

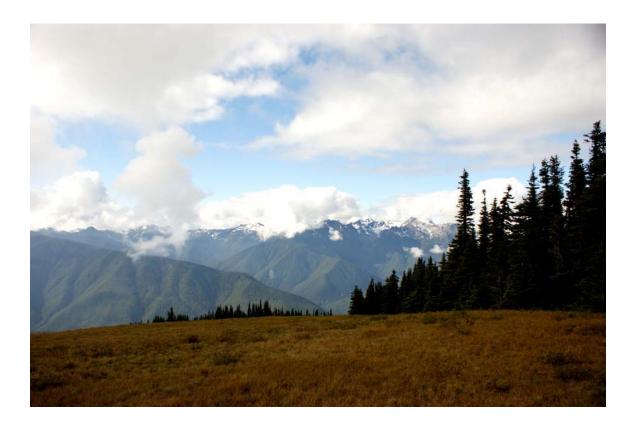
FLH is responsible for the accuracy of all data presented in this report. Any questions or comments concerning the contents of this report should be directed to the national RIP Coordinator located in Sterling, Virginia.

Respectfully,

FHWA RIP Team

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

Section 2 Park Route Inventory



Olympic National Park



Cycle S NPS/RIP Route ID Report Road Inventory Program 03/26/2012 (Numerical By Route #) Page 1 of 11 Shading Color Key: White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes Image: Concession Route Flag ON

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

** DCV - Data Collection Vehicle

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

OLYMPIC NATIONAL PARK

OLYM

Rte.	e ted	FMSS	ess te		Route Des	scription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0011	5	20881		LAKE CRESCENT HIGHWAY (US 101)	FROM EAST PARK BOUNDARY	TO WEST PARK BOUNDARY	LAKE CRESCENT / SOL DUC	12.29	0.00	12.29	1	0	AS	3
0012	5	20836		HURRICANE RIDGE ROAD	FROM MOUNT ANGELES ROAD	TO ROUTE 0905 (HURRICANE RIDGE VISITOR CENTER)	HURRICANE RIDGE	17.61	0.00	17.61	1	0	AS	7
0100	5	20703		ELWHA VALLEY ROAD	FROM NORTH PARK BOUNDARY	TO APPLETON PASS TRAILHEAD (UNPAVED PARKING)	ELWHA	8.15	0.00	8.15	2	0	AS	6
0102	5	20766		CAMP DAVID JR. ROAD	FROM ROUTE 0011 (LAKE CRESCENT HIGHWAY (US 101))	TO ROUTE 0102 (CAMP DAVID JR. ROAD) UNPAVED SECTION	LAKE CRESCENT / SOL DUC	1.54	2.93	4.47	2	0	AS	3
0103	5	48558		SOL DUC VALLEY ROAD	FROM ROUTE 0011 (LAKE CRESCENT HIGHWAY (US 101))	TO ROUTE 0927 (SOL DUC TRAILHEAD PARKING)	LAKE CRESCENT / SOL DUC	13.76	0.00	13.76	2	0	AS	3
0104ZZ	5	20665		QUINAULT NORTH SHORE ROAD	FROM SOUTH PARK BOUNDARY	ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)	QUINAULT	8.78	5.18	13.96	2	117,322	AS	5
0105	NC	27914		QUINAULT SOUTH SHORE ROAD	FROM WEST PARK BOUNDARY	ROUTE 0104CZ (QUINAULT NORTH SHORE ROAD C)	N/A	0.00	0.87	0.87	2	0	GR	
0106	NC	20873		LOWER QUEETS ROAD	FROM SOUTH PARK BOUNDARY	TO METHANEY CREEK BRIDGE	N/A	0.00	10.86	10.86	2	0	GR	
0107	5	20835		HOH ROAD	FROM WEST PARK BOUNDARY	TO ROUTE 0936 (HOH VISITOR CENTER PARKING)	нон	6.12	0.00	6.12	2	0	AS	4
0108	5	20604		EAST BEACH ROAD	FROM EAST PARK BOUNDARY	TO NORTH PARK BOUNDARY	LAKE CRESCENT / SOL DUC	2.93	0.00	2.93	2	0	AS	3
0113	5	43133		LAKE CRESCENT ROAD	FROM ROUTE 0011 (LAKE CRESCENT HIGHWAY (US 101)) AT MP 3.47 (ON RIGHT)	TO END OF LOOP	LAKE CRESCENT / SOL DUC	0.66	0.00	0.66	2	0	AS	3
0114	5	48571		HOKO ROAD	FROM END OF ROUTE 5114 AND SOUTH SIDE OF COAL CREEK BRIDGE (AT GUARD RAIL)	TO ROUTE 0943 (OZETTE PARKING)	OZETTE	0.12	0.00	0.12	2	0	AS	1
0115	5	48573		MORA ROAD	FROM EAST PARK BOUNDARY	TO ROUTE 0939 (RIALTO BEACH PARKING)	MORA	2.32	0.00	2.32	2	0	AS	2
0116	5	46806		LYRE RIVER ROAD	FROM ROUTE 0108 (EAST BEACH ROAD) AT MP 2.56 ON LEFT	TO ROUTE 0116 (LYRE RIVER ROAD) UNPAVED SECTION	LAKE CRESCENT / SOL DUC	0.68	0.22	0.90	2	0	AS	3

Cycle 5 NPS/RIP Route ID Report (Numerical By Route #) Road Inventory Program 03/26/2012 Page 2 of 11 White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Yellow = Unpaved Routes, DCV not Driven Red text denotes Black = State, Local or Private non-NPS Routes Grey = Paved Routes, DCV not Driven = Concession Route Flag ON approx. mileage *Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP). *** Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5 ** DCV - Data Collection Vehicle **OLYM OLYMPIC NATIONAL PARK**

Rte.	pa		S a		Route Des	scription	Maint		Un-	Total	1_ 1	Manual		
No.	Cycle Collected	FMSS No.	Concess Route	Route Name	From	То	Maint. District	Paved Miles	Paved Miles	Route Length	Func. Class	Rated SQ/FT	Surf. Type	Area Maps
0118	NC	48624		OIL CITY ROAD	FROM EAST PARK BOUNDARY	TO END (NORTH OF HOH RIVER / INDIAN RESERVATION)	N/A	0.00	0.55	0.55	2	0	GR	
0119	NC	112284		UPPER QUEETS ROAD	FROM ROUTE 0106 (LOWER QUEETS ROAD)	TO CAMPGROUND	N/A	0.00	5.50	5.50	2	0	GR	
0120	5	60991		HURRICANE HILL ROAD	FROM ROUTE 0905 (HURRICANE RIDGE VISITOR CENTER PARKING)	TO ROUTE 0908 (HURRICANE HILL TRAILHEAD PARKING)	HURRICANE RIDGE	1.21	0.00	1.21	2	0	AS	7
0200	5	48576		HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD	FROM ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 5.34 ON LEFT	TO BEGINNING OF ROUTE 0200ZZ (HEART O' THE HILLS CAMPGROUND LOOPS)	HURRICANE RIDGE	0.31	0.00	0.31	2	0	AS	7
0200ZZ	4	48576		HEART O' THE HILLS CAMPGROUND LOOPS	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD)	THROUGH CAMPGROUND LOOPS	HURRICANE RIDGE	1.20	0.00	1.20	3	0	AS	7
0201	4	48579		ALTAIRE CAMPGROUND	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 2.43 ON RIGHT	TO END OF LOOP	ELWHA	0.53	0.00	0.53	3	0	AS	6
0202	4	48582		ELWHA CAMPGROUND	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 0.98 ON LEFT	TO NORTH ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 1.08 ON LEFT	ELWHA	0.27	0.00	0.27	3	0	AS	6
0204	5	48584		FAIRHOLM CAMPGROUND ENTRANCE ROAD	FROM ROUTE 0102 (CAMP DAVID JR. ROAD) AT MP 0.16 ON RIGHT	TO ROUTE 0204ZZ (FAIRHOLM CAMPGROUND ROUTES)	LAKE CRESCENT / SOL DUC	0.21	0.00	0.21	2	0	AS	3
0204ZZ	4	48584		FAIRHOLM CAMPGROUND LOOPS	FROM ROUTE 0102 (CAMP DAVID JR. ROAD) AT MP 0.16 ON RIGHT	THROUGH CAMPGROUND LOOPS	LAKE CRESCENT / SOL DUC	0.61	0.00	0.61	3	0	AS	3
0205	5	20880		SOL DUC HOT SPRINGS ROAD	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.14 ON RIGHT	TO ROUTE 0955 (SOL DUC HOT SPRINGS PARKING)	LAKE CRESCENT / SOL DUC	0.04	0.00	0.04	3	5,784	AS	3
0206A	4	48679		SOL DUC CAMPGROUND LOOP A	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.50 ON RIGHT	TO END OF LOOP	LAKE CRESCENT / SOL DUC	0.37	0.00	0.37	3	0	AS	3
0206B	4	48680		SOL DUC CAMPGROUND LOOP B	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.72 ON RIGHT	TO END OF LOOP	LAKE CRESCENT / SOL DUC	0.37	0.00	0.37	3	0	AS	3
0207	5	20612		STAIRCASE ROAD	FROM SOUTH PARK BOUNDARY	TO BRIDGE	STAIRCASE	1.03	0.00	1.03	2	108,224	AS	8
0208ZZ	4	48587		STAIRCASE CAMPGROUND ROADS	FROM ROUTE 0207 (STAIRCASE ROAD)	THROUGH CAMPGROUND	STAIRCASE	0.51	0.00	0.51	3	0	AS	8
														_

Cycle 5 NPS/RIP Route ID Report

Road Inventory Program 03/26/2012

OLYM

(Numerical By Route #)

Shading Color Key:
Red text denotes
approx. mileageWhite = Paved Routes, DCV DrivenYellow = Unpaved Routes, DCV not DrivenBlue = All Paved Parking AreasGreen = All Unpaved Parking AreasGrey = Paved Routes, DCV not DrivenBlack = State, Local or Private non-NPS Routes= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

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

Page 3 of 11

OLYMPIC NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved	Total Route	Func. Class	Manual Rated	Surf. Type	Area Maps
	Colloc		ပ္ဂန						Miles	Length		SQ/FT	~	•
0209	NC	27911		NORTH FORK ROAD	FROM ROUTE 0104ZZ (QUINAULT NORTH SHORE ROAD)	TO END	N/A	0.00	3.54	3.54	4	0	GR	
0210	NC	20498		GRAVES CREEK ROAD	FROM ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)	TO END	N/A	0.00	6.48	6.48	4	0	GR	
0211	NC	48590		GRAVES CREEK CAMPGROUND	FROM ROUTE 0210 (GRAVES CREEK ROAD)	THROUGH CAMPGROUND	N/A	0.00	0.00	0.00	4	0	GR	
0212	NC	48593		QUEETS CAMPGROUND	FROM WEST ROUTE 0119 (QUEETS VALLEY ROAD)	TO EAST ROUTE 0119 (QUEETS VALLEY ROAD)	N/A	0.00	0.26	0.26	4	0	GR	
0213ZZ	4	48594		KALALOCH CAMPGROUND ROADS	FROM ROUTE 0956 (KALALOCH CAMPGROUND PARKING)	THROUGH CAMPGROUND	KALALOCH	1.70	0.00	1.70	3	0	AS	9
0214	4	48595		RUBY BEACH ROAD	FROM ROUTE 5000 (U.S. HIGHWAY 101)	TO ROUTE 0214 (RUBY BEACH ROAD) UNPAVED SECTION	KALALOCH	0.10	0.03	0.13	3	0	AS	9
0215	5	237487		HOH CAMPGROUND ENTRANCE ROAD	FROM ROUTE 0107 (HOH ROAD) AT MP 6.02	TO DEAD END	нон	0.29	0.00	0.29	2	0	AS	4
0215ZZ	4	48596		HOH CAMPGROUND ROADS	FROM ROUTE 0107 (HOH ROAD) AT MP 6.02	THROUGH CAMPGROUND	НОН	0.97	0.00	0.97	3	0	AS	4
0216	NC	20745		WHISKEY BEND ROAD	FROM ROUTE 0100 (ELWHA VALLEY ROAD)	TO END	N/A	0.00	4.51	4.51	4	0	GR	
0217	NC	48625		OBSTRUCTION POINT ROAD	FROM ROUTE 0012 (HURRICANE RIDGE ROAD)	TO END	N/A	0.00	7.76	7.76	4	0	GR	
0219	NC	48597		KALALOCH - SOUTH BEACH ROAD	FROM U.S. HIGHWAY 101	TO END	N/A	0.00	0.26	0.26	4	0	GR	
0222	5	48599		LOG CABIN ROAD	FROM ROUTE 0108 (HURRICANE RIDGE ROAD) AT MP 2.47	THROUGH LODGE AREA	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00	3	42,276	AS	3
0224	4	48600		LAKE CRESCENT LODGE ROAD	FROM ROUTE 0113 (LAKE CRESCENT ROAD)	FROM ROUTE 0113 (LAKE CRESCENT ROAD)	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00	3	86,760	AS	3
0225	NC	48626		LA POEL PICNIC AREA ROAD	FROM ROUTE 0011 (LAKE CRESCENT HIGHWAY (US 101)) AT MP 7.71	TO END	N/A	0.00	0.20	0.20	4	0	GR	
0226	4	48602		FAIRHOLM SPUR ROAD	FROM ROUTE 0102 (CAMP DAVID JR. ROAD) AT MP 0.04	TO BOAT RAMP	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00	3	44,433	AS	3
0227	NC	20684		OZETTE CAMPGROUND ROAD	FROM ROUTE 0114 (HOKO ROAD) AT MP 2.21	TO END	N/A	0.00	0.21	0.21	4	0	GR	

Cycle 5 NPS/RIP Route ID Report (Numerical By Route #) Road Inventory Program 03/26/2012 Page 4 of 11 White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage *Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP). ** DCV - Data Collection Vehicle *** Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5 **OLYM OLYMPIC NATIONAL PARK**

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0228	5	237488		MORA CAMPGROUND ACCESS ROAD	FROM ROUTE 0115 (MORA ROAD) AT MP 0.62 (ON LEFT)	TO ROUTE 0228ZZ (MORA CAMPGROUND LOOPS)	MORA	0.29	0.00	0.29	2	0	AS	2
0228ZZ	4	20871		MORA CAMPGROUND LOOPS	FROM ROUTE 0115 (MORA ROAD) AT MP 0.62 ON LEFT	THROUGH CAMPGROUND	MORA	1.19	0.00	1.19	3	0	AS	2
0229	4	20991		KALALOCH LODGE ROADS	FROM ROUTE 5000 (U.S. HIGHWAY 101)	TO ROUTE 5000 (U.S. HIGHWAY 101)	KALALOCH	0.00	0.00	0.00	3	76,058	AS	9
0230	NC	20990		BIG CEDAR TREE ROAD	FROM U.S. HIGHWAY 101	TO END	N/A	0.00	0.20	0.20	4	0	GR	
0237	4	20602		BARNES POINT ROAD	FROM ROUTE 0113 (LAKE CRESCENT ROAD) AT MP 0.15	TO END	LAKE CRESCENT / SOL DUC	0.34	0.00	0.34	4	0	AS	3
0239	NC	233376		STREATER'S CROSSING	FROM ROUTE 0106 (LOWER QUEETS ROAD)	TO END	N/A	0.00	0.60	0.60	4	0	GR	
0240	4	234040		HOH HORSE CORRAL AND MAINTENANCE AREA ACCESS ROAD	FROM ROUTE 0936 (HOH VISITOR CENTER PARKING)	TO ROUTE 0938 (HOH MAINTENANCE PARKING)	НОН	0.14	0.00	0.14	3	0	AS	4
0241	NC	40922		ROAD EAST BEACH LYRE RIVER UNPAVED	FROM BRIDGE ON LYRE RIVER ROAD	TO END	N/A	0.00	1.10	1.10	3	0	GR	
0242	NC	56313		ROAD LAKE OZETTE DUC POINT RD, UNPAVED, RT 412	FROM	TO END	N/A	0.00	1.00	1.00	4	0	GR	
0400	4	48604		HOH RESIDENCE ROAD	FROM ROUTE 0240 (HOH HORSE CORRAL AND MAINTENANCE AREA ACCESS ROAD) AT MP 0.08 (ON LEFT)	TO END OF LOOP	НОН	0.15	0.00	0.15	5	0	AS	4
0401	4	20831		HEADQUARTERS ROAD	FROM E PARK AVENUE	TO E PARK AVENUE	HURRICANE RIDGE	0.00	0.00	0.00	5	164,756	AS	7
0402	4	48606		HEART O' THE HILLS RESIDENCE ROAD	FROM ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 5.24 ON RIGHT	TO ROUTE 0944 (HEATHER PARK PARKING)	HURRICANE RIDGE	0.00	0.00	0.00	5	21,798	AS	7
0409	NC	48613		SOL DUC DUMP ROAD	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 2.35	TO END	N/A	0.00	0.30	0.30	6	0	GR	
0411	4	48615		MORA UTILITY AND RESIDENT ROAD	FROM ROUTE 0115 (MORA ROAD) AT MP 0.56	TO END	MORA	0.00	0.00	0.00	5	18,416	AS	2
0414	NC	48628		KALALOCH SEWAGE LAGOON ROAD	FROM U.S. HIGHWAY 101	TO END	KALALOCH	0.00	0.30	0.30	6	0	GR	
0415	4	48619		KALALOCH UTILITY AND RESIDENCE ROAD	FROM ROUTE 5000 (U.S. HIGHWAY 101)	TO END	KALALOCH	0.00	0.00	0.00	5	65,421	AS	9

Cycle 5 NPS/RIP Route ID Report

Road Inventory Program 03/26/2012

OLYM

(Numerical By Route #)

Shading Color Key:
Red text denotes
approx. mileageWhite = Paved Routes, DCV DrivenYellow = Unpaved Routes, DCV not DrivenBlue = All Paved Parking AreasGreen = All Unpaved Parking AreasGrey = Paved Routes, DCV not DrivenBlack = State, Local or Private non-NPS Routes= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

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

Page 5 of 11

OLYMPIC NATIONAL PARK

Rte.	e ted	FMSS	ess te		Route Des	cription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0416	NC	48620		QUINAULT MAINTENANCE AREA	FROM ROUTE 0104ZZ (QUINAULT NORTH SHORE ROAD) AT MP 5.37	TO END	QUINAULT	0.00	0.20	0.20	5	11,928	GR	
0418	4	48621		ALDER SITE SEWAGE ROAD	FROM ROUTE 0113 (LAKE CRESCENT ROAD) AT MP 0.55	THROUGH SEWAGE AREA	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00	6	13,105	AS	3
0419	NC	48623		CLARK SPUR ROAD	FROM	TO END	N/A	0.00	1.00	1.00	6	0	GR	
0900	4	48629		HEADQUARTERS ADMINISTRATIVE PARKING	FROM E. PARK AVENUE	TO PARKING	HURRICANE RIDGE	0.00	0.00	0.00		15,480	AS	7
0901	4	48630		HEART O' THE HILLS LOOKOUT PARKING	FROM ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 4.35	TO ROUTE 0012 (HURRICANE RIDGE ROAD)	HURRICANE RIDGE	0.00	0.00	0.00		11,157	AS	7
0902	4	48631		SIEGE OF ICE / RAINSHADOW PARKING	FROM ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 8.96	TO ROUTE 0012 (HURRICANE RIDGE ROAD)	HURRICANE RIDGE	0.00	0.00	0.00		6,629	AS	7
0903ZZ	5	48632		ANCIENT LAKE MORSE PARKING AREAS	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD)		HURRICANE RIDGE	0.00	0.00	0.00		14,053	AS	7
0904	5	48633		SWITCHBACK TRAILHEAD PARKING	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 14.91		HURRICANE RIDGE	0.00	0.00	0.00		9,467	AS	7
0905	5	48634		HURRICANE RIDGE VISITOR CENTER PARKING	FROM ROUTE 0012 (HURRICANE RIDGE ROAD)	TO ROUTE 0120 (HURRICANE HILL ROAD)	HURRICANE RIDGE	0.00	0.00	0.00		192,184	AS	7
0906	4	48635		HURRICANE RIDGE PICNIC PARKING #1	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 18.80		HURRICANE RIDGE	0.00	0.00	0.00		4,943	AS	7
0907	4	48636		HURRICANE RIDGE PICNIC PARKING #2	FROM ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 18.89	TO ROUTE 0012 (HURRICANE RIDGE ROAD)	HURRICANE RIDGE	0.00	0.00	0.00		21,399	AS	7
0908	4	48637		HURRICANE HILL TRAILHEAD PARKING	FROM END OF ROUTE 0012 (HURRICANE RIDGE ROAD)	TO PARKING	HURRICANE RIDGE	0.00	0.00	0.00		17,476	AS	7
0909	4	48638		FAIRHOLM STORE PARKING	ADJACENT TO ROUTE 0011 (LAKE CRESCENT HIGHWAY (US 101)) AT MP 10.25		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		8,052	AS	3
0910	4	48639		MADISON CREEK FALLS PARKING	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 0.06	TO ROUTE 0100 (ELWHA VALLEY ROAD)	ELWHA	0.00	0.00	0.00		6,597	AS	6
0911	4	48640		ELWHA AMPHITHEATER PARKING	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 1.12	TO ROUTE 0100 (ELWHA VALLEY ROAD)	ELWHA	0.00	0.00	0.00		17,429	AS	6

Concession Board Inventory Program 03/26/2012 Concession Route #) Page 6 of 11 Shading Color Key: White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes Image: Concession Route Flag ON

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

** DCV - Data Collection Vehicle

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

OLYMPIC NATIONAL PARK

OLYM

Rte.	e ted	FMSS	ess te		Route Des	scription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0912ZZ	4	48641		ELWHA RANGER STATION PARKING AREAS	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 1.92 ON LEFT AND RIGHT	TO PARKING	ELWHA	0.00	0.00	0.00		10,917	AS	6
0913	NC	48642		ELWHA MAINTENANCE PARKING	ADJACENT TO ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 1.93		N/A	0.00	0.00	0.00		0	GR	
0914	4	48643		LAKE CRESCENT BOAT LAUNCH PARKING	FROM ROUTE 0113 (LAKE CRESCENT ROAD) AT MP 0.09	TO PARKING	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		52,912	AS	3
0915	4	48644		LAKE CRESCENT RANGER STATION PARKING	FROM ROUTE 0113 (LAKE CRESCENT ROAD) AT MP 0.09	TO PARKING	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		25,560	AS	3
0916	4	48645		SOL DUC INFORMATION PARKING	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 0.15	TO ROUTE 0103 (SOL DUC VALLEY ROAD)	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		12,620	AS	3
0917	4	48646		SOL DUC ENTRANCE STATION PARKING	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 0.31	TO ROUTE 0103 (SOL DUC VALLEY ROAD)	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		2,474	AS	3
0918	4	48647		AURORA RIDGE PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 2.49		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		1,310	AS	3
0919	4	48648		PULSE OF RIVER PICNIC PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 6.66		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		4,193	AS	3
0920ZZ	4	48649		SALMON CASCADES PARKING AREAS	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD)		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		6,628	AS	3
0921	4	48650		RED ALDER PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 7.52		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		2,076	AS	3
0922	4	48651		NORTH FORK SOL DUC PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 8.28		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		1,803	AS	3
0923	4	48652		ANCIENT GROVES (NIGHT SHADOWS) NATURE TRAIL PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 8.81		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		3,045	AS	3
0924	4	48653		MINI RAIN FOREST PARKING	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 9.05		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		2,401	AS	3
0926	4	48655		EAGLE RANGER STATION PARKING	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.01	TO ROUTE 0103 (SOL DUC VALLEY ROAD)	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		23,433	AS	3

Cycle 5 NPS/RIP Route ID Report

Road Inventory Program	03/26/2012
-------------------------------	------------

OLYM

(Numerical By Route #)

Page 7 of 11 Shading Color Key: White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Yellow = Unpaved Routes, DCV not Driven Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage

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

** DCV - Data Collection Vehicle

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

OLYMPIC NATIONAL PARK

Rte.	e ted	FMSS	ess te		Route Des	cription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0927	4	48656		SOL DUC TRAILHEAD PARKING	FROM END OF ROUTE 0103 (SOL DUC VALLEY ROAD)	TO PARKING	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		47,706	AS	3
0928	4	48657		JULY CREEK PICNIC AREA PARKING	FROM ROUTE 0104ZZ (QUINAULT NORTH SHORE ROAD) AT MP 3.21	TO ROUTE 0104ZZ (QUINAULT NORTH SHORE ROAD)	QUINAULT	0.00	0.00	0.00		13,856	AS	5
0929	NC	48658		QUINAULT RIVER RANGER STATION PARKING	ADJACENT TO ROUTE 0104AZ (QUINAULT NORTH SHORE ROAD A) AT MP 5.42		N/A	0.00	0.00	0.00		0	GR	
0930	4	48659		HOH #1 PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 0.54 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 0.56 ON RIGHT	НОН	0.00	0.00	0.00		12,501	AS	4
0931	4	48660		HOH #2 PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 1.21 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 1.22 ON RIGHT	НОН	0.00	0.00	0.00		3,288	AS	4
0932	4	48661		HOH #3 PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 2.00 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 2.04 ON RIGHT	НОН	0.00	0.00	0.00		5,613	AS	4
0933	4	48662		BIG SPRUCE PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 3.50 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 3.52 ON RIGHT	НОН	0.00	0.00	0.00		4,694	AS	4
0934	4	48663		HOH #4 PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 3.66 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 3.68 ON RIGHT	НОН	0.00	0.00	0.00		4,567	AS	4
0935	4	48664		HOH #5 PARKING	FROM ROUTE 0107 (HOH ROAD) AT MP 4.98 ON RIGHT	TO ROUTE 0107 (HOH ROAD) AT MP 5.01 ON RIGHT	НОН	0.00	0.00	0.00		16,873	AS	4
0936	4	48665		HOH VISITOR CENTER PARKING	FROM END OF ROUTE 0107 (HOH ROAD)	TO BEGINNING OF ROUTE 0240 (HOH HORSE CORRAL AND MAINTENANCE AREA ACCESS ROAD)	НОН	0.00	0.00	0.00		48,007	AS	4
0937	4	48666		HOH CORRAL PARKING	ADJACENT TO ROUTE 0240 (HOH HORSE CORRAL AND MAINTENANCE AREA ACCESS ROAD) AT MP 0.10 ON RIGHT		НОН	0.00	0.00	0.00		3,917	AS	4
0938	4	48667		HOH MAINTENANCE PARKING	FROM END OF ROUTE 0240 (HOH HORSE CORRAL AND MAINTENANCE AREA ACCESS ROAD)	TO PARKING	НОН	0.00	0.00	0.00		16,851	AS	4

Cycle 5 NPS/RIP Route ID Report

Road Inventory Program	m 03/26/2012
-------------------------------	--------------

OLYM

(Numerical By Route #)

Page 8 of 11

Shading Color Key:
Red text denotes
approx. mileageWhite = Paved Routes, DCV DrivenYellow = Unpaved Routes, DCV not DrivenBlue = All Paved Parking AreasGreen = All Unpaved Parking AreasGrey = Paved Routes, DCV not DrivenBlack = State, Local or Private non-NPS Routes= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

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

OLYMPIC NATIONAL PARK

Rte.	e ted	FMSS	ess te		Route Des	scription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess Route	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0939	4	48668		RIALTO BEACH PARKING	FROM END OF ROUTE 0115 (MORA ROAD)	TO PARKING	MORA	0.00	0.00	0.00		21,224	AS	2
0940	4	48669		MORA RANGER STATION PARKING	FROM ROUTE 0411 (MORA UTILITY AND RESIDENT ROAD)	TO ROUTE 0228ZZ (MORA CAMPGROUND LOOPS)	MORA	0.00	0.00	0.00		10,906	AS	2
0941	4	48670		KALALOCH VISITOR CENTER PARKING	FROM ROUTE 0415 (KALALOCH UTILITY AND RESIDENCE ROAD)	TO ROUTE 5000 (U.S. HIGHWAY 101)	KALALOCH	0.00	0.00	0.00		16,285	AS	9
0942	4	48671		BEACH 4 PARKING	FROM ROUTE 5000 (Ú.S. HIGHWAY 101)	TO PARKING	KALALOCH	0.00	0.00	0.00		33,153	AS	9
0943	NC	48672		OZETTE PARKING	ADJACENT TO		N/A	0.00	0.00	0.00		0	GR	
0944	5	48673		HEATHER PARK PARKING	FROM ROUTE 0402 (HEART O' HILLS RESIDENCE ROAD)	TO PARKING	N/A	0.00	0.00	0.00		12,481	AS	7
0945	4	48674		STAIRCASE PUBLIC PARKING	ADJACENT TO ROUTE 0207 (STAIRCASE ROAD)		STAIRCASE	0.00	0.00	0.00		5,934	AS	8
0946	4	48675		STAIRCASE RANGER STATION	FROM ROUTE 0207 (STAIRCASE ROAD) AT MP 1.00 ON RIGHT	TO PARKING	STAIRCASE	0.00	0.00	0.00		1,073	AS	8
0947	4	48676		BOVEES MEADOW PARKING	ADJACENT TO ROUTE 0113 (LAKE CRESCENT ROAD) AT MP 0.61 ON RIGHT		LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		3,760	AS	3
0948	4	48677		HEART O' THE HILLS ENTRANCE STATION PARKING	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 5.27 ON RIGHT		HURRICANE RIDGE	0.00	0.00	0.00		2,214	AS	7
0950	4	48678		SOL DUC AMPHITHEATER PARKING	FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.34	TO ROUTE 0103 (SOL DUC VALLEY ROAD)	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		16,579	AS	3
0951	4			LITTLE RIVER OVERLOOK PARKING	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 18.16		HURRICANE RIDGE	0.00	0.00	0.00		2,844	AS	7
0952	4	114634		HEART O' THE HILLS CAMPGROUND PARKING	ADJACENT TO ROUTE 0200ZZ (HEART O' THE HILLS CAMPGROUND ROUTES) AT MP 0.20 ON LEFT		HURRICANE RIDGE	0.00	0.00	0.00		5,729	AS	7
0953ZZ	4	114635		FAIRHOLM CAMPGROUND PARKING AREAS	FROM ROUTE 0204ZZ (FAIRHOLM CAMPGROUND ROUTES)	TO PARKING	HURRICANE RIDGE	0.00	0.00	0.00		6,848	AS	3

Road I	nvento	ry Progra	am 03/	Cy	cle 5 NPS/	RIP Route	-	ort					Page	9 of 11
Shadi	ing Color	Key: W	/hite = Pa	aved Routes, DCV Driven	Yellow = Unpaved Rou	tes, DCV not Driven Blue	e = All Paved Parking	g Areas	6	Green = All	Unpaved	Parking Area	S	
	ext denot		rey = Pa	ved Routes, DCV not Drive	n Black = State, Local or	Private non-NPS Routes	= Concessio	n Route F	lag ON					
	LYM	*(DCV - D	route data was obtained fro ata Collection Vehicle IC NATIONAL PARK	m NPS and was not inventorie		ogram (RIP). unctional Class 1, 2,	& 7 routes	, and prev	viously unco	ollected ro	outes were co	llected in	Cycle 5
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
954ZZ	5	11463	5	HOH CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD)		нон	0.00	0.00	0.00		18,157	AS	4
0955	4	20880		SOL DUC HOT SPRINGS PARKING	FROM END OF ROUTE 0205 (SOL DUC HOT SPRINGS ROAD)	TO PARKING	LAKE CRESCENT / SOL DUC	0.00	0.00	0.00		68,704	AS	3
0956	4	114637	,	KALALOCH CAMPGROUND PARKING	FROM ROUTE 5000 (U.S. HIGHWAY 101)	TO PARKING	KALALOCH	0.00	0.00	0.00		36,598	AS	9
0957	5	11463	3	MORA CAMPGROUND AND DUMPSTATION PARKING	ADJACENT TO ROUTE 0228ZZ (MORA CAMPGROUND LOOPS) AT MP 0.13 ON LEFT		MORA	0.00	0.00	0.00		5,079	AS	2
0961	4	111141		LAKE CRESCENT LODGE CONCESSIONS WAREHOUSE	FROM ROUTE 0418 (ALDER SITE SEWAGE ROAD)	TO ROUTE 0418 (ALDER SITE SEWAGE ROAD)	N/A	0.00	0.00	0.00		24,193	AS	3
0962	4	111142		LAKE CRESCENT LODGE EMPLOYEE HOUSING PARKING	FROM ROUTE 0418 (ALDER SITE SEWAGE ROAD)	TO PARKING	N/A	0.00	0.00	0.00		7,744	AS	3
0963	5	48598		OLYMPIC VISITOR CENTER ROAD	FROM MOUNT ANGELES ROAD	TO MOUNT ANGELES ROAD	HURRICANE RIDGE	0.00	0.00	0.00		44,694	AS	7
5000	4			U.S. HIGHWAY 101	FROM PARK BOUNDARY	TO PARK BOUNDARY	N/A	12.61	0.00	12.61		0	AS	9
5001	4			FOREST SERVICE ROAD 21	FROM ROUTE 5000 (U.S. HIGHWAY 101)	TO END OF PAVEMENT	N/A	8.31	0.00	8.31		0	AS	5
5107	5			UPPER HOH ROAD	FROM U.S. HIGHWAY 101	TO ROUTE 0107 (HOH ROAD) AT PARK BOUNDARY	N/A	12.07	0.00	12.07		0	AS	4
5114	5			HOKO-OZETTE ROAD	FROM OLYMPIC NP SIGN ALONG HOKO-OZETTE ROAD			2.30	0.00	2.30		0	AS	1

Road Inventory Pro	ogram 03/26/2012	-	P Rou	te ID Report		Page 10 of 11					
Shading Color Key:	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DC	V not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking	Areas					
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private	non-NPS Rout	es 🛛 = Concession Route Flag ON							
	*Unpaved route data was obtained from NPS ** DCV - Data Collection Vehicle	and was not inventoried by th		ry Program (RIP). nly Functional Class 1, 2, & 7 routes, and p	reviously uncollected routes we	re collected in Cycle 5					
	CYCLE 5 COLLEC	TED SUMMARY	TOTALS	FOR OLYMPIC NATION	AL PARK						
CYC	CYCLE 5 COLLECTED ROUTE TOTALS CYCLE 5 COLLECTED CONCESSION TOTALS										
	DCV Driven Route Mi	les 76.17		Conces	sion Paved Route Miles	0.00					
	Manually Rated Route Mi	les 2.17		Concession Pa	on Paved Parking Area SQFT						
TOTAL PAR	K ROUTE MILES COLLECTED IN CYCLI	E 5 78.33		Concession Man	ually Rated Rotes SQFT	0					
	Manually Rated Routes (SQF	т) 273,606	CYCLE	5 COLLECTED WEIGHT	ED AVERAGE PAR	RK VALUES					
* <u>CYCLE 5</u>	COLLECTED PARKING A	REA TOTALS			DCV Driven PCR	81					
	Paved Parking (SQF	T) 287,379		**Man	ually Rated Routes PCR	69					
					**Parking PCR	90					
				***Tota	I Equivalent Lane Miles	173.34					

TOTAL PARK SUMMARY FOR OLYMPIC NATIONAL PARK

ROUTE TOTALS	
TOTAL PAVED PARK ROUTE MILES	86.78
TOTAL PAVED PARKING (SQFT)	1,052,913

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

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

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

oad Inven	itory Pro	ogram 03/26/2012	e 5 NPS/RIP Rou (Numerical By Rout		Drt Page 11 of 1
Shading Co Red text de approx. mile	enotes	White = Paved Routes, DCV Driven Grey = Paved Routes, DCV not Driven	Yellow = Unpaved Routes, DCV not Driven Black = State, Local or Private non-NPS Rout		
		*Unpaved route data was obtained from NF ** DCV - Data Collection Vehicle	PS and was not inventoried by the Road Inventor *** C	, , ,	routes, and previously uncollected routes were collected in Cycle s
Class 1	Princinal Par		constitute the main access route, circulatory tour, or th		Surface Type Abbreviations:
F <u>Class 2</u> (Route Numb Connector P	ark Road (Public Roads) - Roads which provide acces	AS - Asphaltic Concrete Pavement CO - Portland Cement Concrete Pavement BR - Brick or Pavers Road Bed		
		ose Park Road (Public Roads) - Roads which provide ire facilities, etc. These roads generally serve low-sp	CB - Cobble Stone Road Bed GR - Gravel Road Bed		
r r	roads freque Note: Funct	ently have no minimum design standards and their unional Classes 3 and 4 have the same route numbers	lation through remote areas and/or access to primitive use may be limited to specially equipped vehicles. Rout because, historically, they were numbered similarly.	e Numbers 200-299.	NV - Native or Dirt Material Road Bed
c	quarters, or	utility areas. Route Numbers 400-499.	oads intended for access to administrative development		
r	Note: Func	tional Classes 5 and 6 have the same route number	s because historically they were numbered similarly and housing are often closed to the public, this restriction w	d often there is little distinction betw	ween
a	an urban are		ies serve high volumes of park and non-park related tra e major parkways which serve as gateways to our natic bers 1-9.		
			usually extensions of the adjoining street system that n with accepted local engineering practice and local con		National Park

nationwide w	vhich are de		es for interpretive roads, and a 500 series for one-way r or these roads will be maintained for reporting consisten and 500 series will be discontinued for future use.		
		ers are assigned to Non-NPS Routes that are State, C /ideo Log only.	County or City owned which border, traverse, or provide	access to Park Facilities or Assets.	. 5000 Routes

Road Inventory Program 03/26/2012

(Numerical By Subcomponent #)

Page 1 of 7

Deal foot data states		Tollow Oliparod Rodios, Bot Hot Birton	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	s = Concession Route Flag ON	

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

OLYM

OLYMPIC NATIONAL PARK

Asset Entered in FMSS System

Rte.	FMSS	Cycle Collected		Route De	escription	Concess Route	Func. Class	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	ວິບິ	Route Name	From	То	ပီ ಜိ	C	Miles	Miles	Length	SQ/FT
0104ZZ	20665	5	QUINAULT NORTH SHORE ROAD	FROM SOUTH PARK BOUNDARY	ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)		2	8.78	5.18	13.96	117,322
0200ZZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOPS	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD)	THROUGH CAMPGROUND LOOPS		3	1.20	0.00	1.20	0
0204ZZ	48584	4	FAIRHOLM CAMPGROUND LOOPS	FROM ROUTE 0102 (CAMP DAVID JR. ROAD) AT MP 0.16 ON RIGHT	THROUGH CAMPGROUND LOOPS		3	0.61	0.00	0.61	0
0208ZZ	48587	4	STAIRCASE CAMPGROUND ROADS	FROM ROUTE 0207 (STAIRCASE ROAD)	THROUGH CAMPGROUND		3	0.51	0.00	0.51	0
0213ZZ	48594	4	KALALOCH CAMPGROUND ROADS	FROM ROUTE 0956 (KALALOCH CAMPGROUND PARKING)	THROUGH CAMPGROUND		3	1.70	0.00	1.70	0
0215ZZ	48596	4	HOH CAMPGROUND ROADS	FROM ROUTE 0107 (HOH ROAD) AT MP 6.02	THROUGH CAMPGROUND		3	0.97	0.00	0.97	0
0228ZZ	20871	4	MORA CAMPGROUND LOOPS	FROM ROUTE 0115 (MORA ROAD) AT MP 0.62 ON LEFT	THROUGH CAMPGROUND		3	1.19	0.00	1.19	0
0903ZZ	48632	5	ANCIENT LAKE MORSE PARKING AREAS	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD)				0.00	0.00	0.00	14,053
0912ZZ	48641	4	ELWHA RANGER STATION PARKING AREAS	FROM ROUTE 0100 (ELWHA VALLEY ROAD) AT MP 1.92 ON LEFT AND RIGHT	TO PARKING			0.00	0.00	0.00	10,917
0920ZZ	48649	4	SALMON CASCADES PARKING AREAS	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD)				0.00	0.00	0.00	6,628
0953ZZ	114635	4	FAIRHOLM CAMPGROUND PARKING AREAS	FROM ROUTE 0204ZZ (FAIRHOLM CAMPGROUND ROUTES)	TO PARKING			0.00	0.00	0.00	6,848
0954ZZ	114636	5	HOH CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD)				0.00	0.00	0.00	18,157

 Road Inventory Program
 03/26/2012
 (Numerical By Subcomponent #)
 Page 2 of 7

 Shading Color Key:
 Ked text denotes approx. mileage
 White = Paved Routes, DCV Driven
 Yellow = Unpaved Routes, DCV not Driven
 Blue = All Paved Parking Areas
 Green = All Unpaved Parking Areas

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

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

inpaved fould data was obtained from NFS and was not inventioned by the Road inventory Fro

OLYM

OLYMPIC NATIONAL PARK

Asset OLYM-0104ZZ Subcomponent Breakdown

Rte.	FMSS No.	/cle bllectec	Doute Name	Route Description				Paved	Un- Paved	Total Route	Manual Rated
No.	NO.	δö	Route Name	From	То	ပ ဗ	ЪЭ	Miles	Miles	Length	SQ/FT
0104AZ	20665	5	QUINAULT NORTH SHORE ROAD A	FROM SOUTH PARK BOUNDARY	TO ROUTE 0104BZ (QUINAULT NORTH SHORE ROAD B)		2	7.68	0.00	7.68	0
0104BZ	20665	NC	QUINAULT NORTH SHORE ROAD B	FROM ROUTE 0104AZ (QUINAULT NORTH SHORE ROAD A)	TO ROUTE 0104CZ (QUINAULT NORTH SHORE ROAD C)		2	0.00	5.18	5.18	0
0104CZ	20665	5	QUINAULT NORTH SHORE ROAD C	FROM ROUTE 0104BZ (QUINAULT NORTH SHORE ROAD B)	ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)		2	1.10	0.00	1.10	117,322

Rte.	FMSS	sle lectec		Route Description				Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Colle	Route Name	From	То	So Ro Ro	Func. Class	Miles	Miles	Length	SQ/FT
0200AZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOP A	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.10 ON LEFT	TO END OF LOOP		3	0.26	0.00	0.26	0
0200BZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOP B	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.14 ON RIGHT	TO ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.26 ON RIGHT		3	0.13	0.00	0.13	0
0200CZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOP C	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.25 ON LEFT	TO END OF LOOP		3	0.38	0.00	0.38	0
0200DZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOP D	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.31 ON RIGHT	TO ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.28 ON RIGHT		3	0.18	0.00	0.18	0
0200EZ	48576	4	HEART O' THE HILLS CAMPGROUND LOOP E	FROM ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.31 ON LEFT	TO ROUTE 0200 (HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD) AT MP 0.29 ON LEFT		3	0.25	0.00	0.25	0

Road Inventory Program 03/26/2012

(Numerical By Subcomponent #)

Page 3 of 7

 Shading Color Key:
 White = Paved Routes, DCV Driven
 Yellow = Unpaved Routes, DCV not Driven
 Blue = All Paved Parking Areas
 Green = All Unpaved Parking Areas

 Red text denotes approx. mileage
 Grey = Paved Routes, DCV not Driven
 Black = State, Local or Private non-NPS Routes
 = Concession Route Flag ON

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

OLYM

OLYMPIC NATIONAL PARK

Asset OLYM-0204ZZ Subcomponent Breakdown

Rte.	FMSS	cle llected		Route De	escription	ncess ute	SS SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Colle	Route Name	From	То	S S	Func. Class	Miles	Miles	Length	SQ/FT
0204AZ	48584	4	FAIRHOLM CAMPGROUND LOOP A	FROM ROUTE 0204 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.07 ON LEFT	TO END OF LOOP		3	0.15	0.00	0.15	0
0204BZ	48584	4	FAIRHOLM CAMPGROUND LOOP B	FROM ROUTE 0204 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.11 ON LEFT	TO ROUTE 0204 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.16 ON LEFT		3	0.24	0.00	0.24	0
0204CZ	48584	4	FAIRHOLM CAMPGROUND LOOP C	FROM ROUTE 0204 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.21	TO END OF LOOP		3	0.22	0.00	0.22	0

Asset	Asset OLYM-0208ZZ Subcomponent Breakdown												
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From To				Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT		
0208AZ	48587	4	STAIRCASE CAMPGROUND CONNECTOR ROAD	FROM ROUTE 0208Z (STAIRCASE CAMPGROUND LOOP) AT MP 0.08 ON LEFT	TO ROUTE 0208Z (STAIRCASE CAMPGROUND LOOP) AT MP 0.23 ON LEFT		3	0.13	0.00	0.13	0		
0208Z	48587	4	STAIRCASE CAMPGROUND LOOP	FROM ROUTE 0207 (STAIRCASE ROAD) AT MP 1.01 ON LEFT	TO END OF LOOP		3	0.38	0.00	0.38	0		

Road Inventory Program 03/26/2012

(Numerical By Subcomponent #)

Page 4 of 7

0 ,	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	= Concession Route Flag ON	

^tUnpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

OLYM

OLYMPIC NATIONAL PARK

Asset OLYM-0213ZZ Subcomponent Breakdown

Rte.	FMSS	cle llected		Route De	scription	ncess ute	Jc. SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Colle	Route Name	From	То	Con Rou	Func. Class	Miles	Miles	Length	SQ/FT
0213AAZ	48594	4	KALALOCH CAMPGROUND LOOP A CONNECTOR ROAD	FROM ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A) ON LEFT	TO ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A)		3	0.10	0.00	0.10	0
0213AZ	48594	4	KALALOCH CAMPGROUND LOOP A	FROM ROUTE 0956 (KALALOCH CAMPGROUND PARKING)	TO END OF LOOP		3	0.56	0.00	0.56	0
0213BZ	48594	4	KALALOCH CAMPGROUND LOOP B	FROM ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A) ON LEFT	TO ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A)		3	0.18	0.00	0.18	0
0213CZ	48594	4	KALALOCH CAMPGROUND LOOP C	FROM ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A) ON LEFT	TO ROUTE 0213AZ (KALALOCH CAMPGROUND LOOP A)		3	0.18	0.00	0.18	0
0213DZ	48594	4	KALALOCH CAMPGROUND LOOP D	FROM ROUTE 0956 (KALALOCH CAMPGROUND PARKING)	TO END OF LOOP		3	0.48	0.00	0.48	0
0213EZ	48594	4	KALALOCH CAMPGROUND LOOP E	FROM ROUTE 0213DZ (KALALOCH CAMPGROUND LOOP D)	TO ROUTE 0213DZ (KALALOCH CAMPGROUND LOOP D)		3	0.09	0.00	0.09	0
0213FZ	48594	4	KALALOCH CAMPGROUND LOOP F	FROM ROUTE 0213DZ (KALALOCH CAMPGROUND LOOP D)	TO ROUTE 0213DZ (KALALOCH CAMPGROUND LOOP D)		3	0.11	0.00	0.11	0

Asset OLYM-0215ZZ Subcomponent Breakdown

Rte.	FMSS	cle lected		Route Des	cription	ncess ute	ss Ss	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Colle	Route Name	From	То	Cor Roi	Func. Class	Miles	Miles	Length	SQ/FT
0215AAZ	48596	4	HOH CAMPGROUND LOOP A CONNECTOR ROAD	FROM ROUTE 0215AZ (HOH CAMPGROUND LOOP A)	FROM ROUTE 0215AZ (HOH CAMPGROUND LOOP A)		З	0.05	0.00	0.05	0
0215AZ	48596	4	HOH CAMPGROUND LOOP A	FROM INTERSECTION OF ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AND ROUTE 0215BZ (HOH CAMPGROUND LOOP B)	TO END OF LOOP		3	0.40	0.00	0.40	0
0215BZ	48596	4	HOH CAMPGROUND LOOP B	FROM INTERSECTION OF ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AND ROUTE 0215AZ (HOH CAMPGROUND LOOP A)	TO END OF LOOP		3	0.20	0.00	0.20	0
0215CZ	48596	4	HOH CAMPGROUND LOOP C	FROM ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD)	TO END OF LOOP		3	0.32	0.00	0.32	0

Road Inventory Program 03/26/2012

(Numerical By Subcomponent #)

Page 5 of 7

0 ,	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	= Concession Route Flag ON	

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

OLYM

OLYMPIC NATIONAL PARK

Asset OLYM-0228ZZ Subcomponent Breakdown

Rte.	FMSS	cle llected		Route De	ncess ute	.c. ss	Paved	Un- Paved	Total Route	Manual Rated	
No.	No.	Cycle Collee	Route Name	From	То		Func. Class	Miles	Miles	Length	SQ/FT
0228AZ	20871	4	MORA CAMPGROUND LOOP A	FROM ROUTE 0228DZ (MORA CAMPGROUND LOOP D) AT MP 0.18 (ON RIGHT)	TO END OF LOOP		3	0.25	0.00	0.25	0
0228BZ	20871	4	MORA CAMPGROUND LOOP B	FROM ROUTE 0228DZ (MORA CAMPGROUND LOOP D) AT MP 0.22 (ON RIGHT)	TO END OF LOOP		3	0.25	0.00	0.25	0
0228CZ	20871	4	MORA CAMPGROUND LOOP C	FROM ROUTE 0228DZ (MORA CAMPGROUND LOOP D) AT MP 0.28 (ON RIGHT)	TO END OF LOOP		3	0.23	0.00	0.23	0
0228DZ	20871	4	MORA CAMPGROUND LOOP D	FROM ROUTE 0228 (MORA CAMPGROUND ACCESS ROAD)	TO END OF LOOP		3	0.34	0.00	0.34	0
0228EZ	20871	4	MORA CAMPGROUND LOOP E	FROM ROUTE 0228DZ (MORA CAMPGROUND LOOP D) AT MP 0.29 (ON LEFT)	TO ROUTE 0228DZ (MORA CAMPGROUND LOOP D) AT MP 0.20 (ON LEFT)		3	0.12	0.00	0.12	0

Asset OLYM-0903ZZ Subcomponent Breakdown

Rte.	FMSS	cle lected		Route Description	ı	ncess ute	SS.	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycl	Route Name	From	То	Col	Func. Class	Miles	Miles	Length	SQ/FT
0903AZ	48632	5	ANCIENT LAKE MORSE PARKING AREA A	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 11.63				0.00	0.00	0.00	5,353
0903BZ	48632	5	ANCIENT LAKE MORSE PARKING AREA B	ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 11.70				0.00	0.00	0.00	8,700
<u> </u>											

Road Inventory Program 03/26/2012 (Numerical By Subcomponent #) Page 6 of 7 White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Green = All Unpaved Parking Areas Shading Color Key: Blue = All Paved Parking Areas Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage *Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP). OLYM **OLYMPIC NATIONAL PARK** Asset OLYM-0912ZZ Subcomponent Breakdown Concess Route Func. Class Total Un-Manual **Route Description** FMSS <u>e</u> Cycle Route Rte. Paved Rated Paved Length No. **Route Name** Miles SQ/FT No. From То Miles 0912AZ 48641 ELWHA RANGER STATION PARKING FROM ROUTE 0100 (ELWHA VALLEY TO PARKING 0.00 0.00 0.00 10,366 4 ROAD) AT MP 1.92 ON LEFT AREA A 0912BZ 48641 ELWHA RANGER STATION PARKING ADJACENT TO ROUTE 0100 (ELWHA 0.00 551 4 0.00 0.00 AREA B VALLEY ROAD) AT MP 1.92 ON RÍGHT

Asset OLYM-0920ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Descrij From	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT	
0920AZ	48649	4	SALMON CASCADES PARKING AREA A	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 7.18				0.00	0.00	0.00	3,881
0920BZ	48649	4	SALMON CASCADES PARKING AREA B	ADJACENT TO ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 7.23				0.00	0.00	0.00	2,747

Asset OLYM-0953ZZ Subcomponent Breakdown P a Concess Route Func. Class Total Un-Manual **Route Description** Cycle Collec FMSS Route Rte. Paved Rated Paved No. Length Route Name Miles SQ/FT No. Miles From То 0953AZ 114635 FAIRHOLM CAMPGROUND PARKING A FROM ROUTE 0204 (FAIRHOLM TO PARKING 0.00 0.00 0.00 2,920 4 CAMPGROUND ENTRANCE ROAD) AT MP 0.03 ON RIGHT 0953BZ 114635 4 FAIRHOLM CAMPGROUND PARKING B ADJACENT TO ROUTE 0204 0.00 0.00 0.00 1,637 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.14 ON RIGHT 0953CZ 114635 FAIRHOLM CAMPGROUND PARKING C ADJACENT TO ROUTE 0204 0.00 0.00 2,291 4 0.00 (FAIRHOLM CAMPGROUND ENTRANCE ROAD) AT MP 0.18 ON RIGHT

Road Inventory Program 03/26/2012

(Numerical By Subcomponent #)

Page 7 of 7

 Shading Color Key:
 White = Paved Routes, DCV Driven
 Yellow = Unpaved Routes, DCV not Driven
 Blue = All Paved Parking Areas
 Green = All Unpaved Parking Areas

 Red text denotes approx. mileage
 Grey = Paved Routes, DCV not Driven
 Black = State, Local or Private non-NPS Routes
 = Concession Route Flag ON

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

OLYM

OLYMPIC NATIONAL PARK

Asset OLYM-0954ZZ Subcomponent Breakdown

Rte.	FMSS	cle llected		Route Description				Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Collee	Route Name	From	То	Conce Route	Func. Class	Miles	Miles	Length	SQ/FT
0954AZ	114636	4	HOH CAMPGROUND PARKING A	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.05 ON RIGHT				0.00	0.00	0.00	7,014
0954BZ	114636	5	HOH CAMPGROUND PARKING B	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.07 ON LEFT				0.00	0.00	0.00	2,888
0954CZ	114636	5	HOH CAMPGROUND PARKING C	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.12 ON RIGHT				0.00	0.00	0.00	720
0954DZ	114636	5	HOH CAMPGROUND PARKING D	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.14 ON RIGHT				0.00	0.00	0.00	1,560
0954EZ	114636	4	HOH CAMPGROUND PARKING E (DUMP STATION)	FROM ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.20 ON RIGHT	TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MO 0.23 ON RIGHT			0.00	0.00	0.00	1,722
0954FZ	114636	5	HOH CAMPGROUND PARKING F	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.25 ON RIGHT				0.00	0.00	0.00	769
0954GZ	114636	5	HOH CAMPGROUND PARKING G	ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.27 ON LEFT				0.00	0.00	0.00	3,484

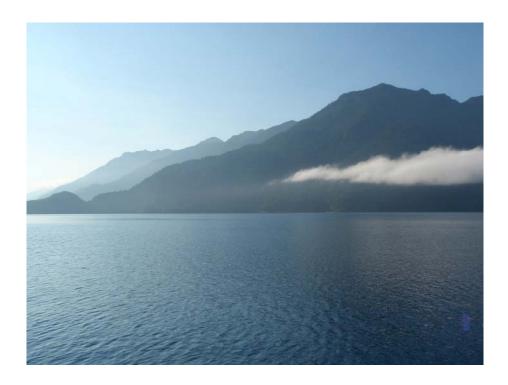
	ROUTES	S ADDED FROM PREVIOUS IN	VENTORY:
Route #	Route Name	Reason for Addition	Comments
0120	HURRICANE HILL ROAD	ROUTE SPLIT	CYCLE 4 ROUTE 0012 WAS SPLIT INTO ROUTES 0012, 0905, AND 0120 IN CYCLE 5. 0120 IS A NEW ROUTE NUMBER IN CYCLE 5.
5107	UPPER HOH ROAD	OTHER	PARK ADDED THIS ROUTE IN CYCLE 5 AND MADE SPECIAL REQUEST TO GET FULL CONDITION DATA ON THIS NON NPS ROUTE.
5114	HOKO-OZETTE ROAD	ROUTE SPLIT	THIS ROUTE WAS CREATED IN CYCLE 5 UPON FINDING THAT ROUTE 0114 WAS NOT OWNED BY NPS. CYCLE 4 ROUTE 0114 WAS SPLIT INTO ROUTES 0114 AND 5114 IN CYCLE 5 (ROUTE 5114 IS COUNTY OWNED)
	ROUTES	MODIFIED FROM PREVIOUS I	NVENTORY:
Route #	Route Name	Type of Modification	Comments
0012	HURRICANE RIDGE ROAD	ROUTE SPLIT	CYCLE 4 ROUTE 0012 WAS SPLIT INTO ROUTES 0012, 0905, AND 0120 IN CYCLE 5
0114	HOKO ROAD	ROUTE SPLIT	CYCLE 4 ROUTE 0114 WAS SPLIT INTO ROUTES 0114 AND 5114 IN CYCE 5 (ROUTE 5114 IS COUNTY OWNED)
0205	SOL DUC HOT SPRINGS ROAD	LENGTH CHANGE	IN CYCLE 5 NPS REQUESTED RIP NOT INCLUDE THE BRIDGE IN THE SHAPE OF THIS ROUTE. ROUTE LENGTH WAS SUBSEQUENTLY SHORTENED AS A RESULT.
0222	LOG CABIN ROAD	RECONSTRUCTED	IN CYCLE 5 NPS REQUESTED RIP RECOLLECT THIS ROUTE DUE TO RECONSTRUCTION.
0228	MORA CAMPGROUND ACCESS ROAD	ROUTE SPLIT	CYCLE 4 ROUTE 0228DZ WAS SPLIT INTO CYCLE 5 ROUTES 0228 AND 0228DZ. ROUTE 0228 IS THE ENTRANCE ROAD. ROUTE 0228DZ IS THE CAMPGROUND LOOP.
0228DZ	MORA CAMPGROUND LOOP D	ROUTE SPLIT	CYCLE 4 ROUTE 0228DZ WAS SPLIT INTO CYCLE 5 ROUTES 0228 AND 0228DZ. ROUTE 0228 IS THE ENTRANCE ROAD. ROUTE 0228D IS THE CAMPGROUND LOOP.

	ROUTES	MODIFIED FROM PREVIOUS I	NVENTORY:
Route #	Route Name	Type of Modification	Comments
0402	HEART O' THE HILLS RESIDENCE ROAD	ROUTE SPLIT	THE END SECTION OF ROUTE 0402 WAS SPLIT OUT INTO ROUTE 0944
0904	SWITCHBACK TRAILHEAD PARKING	SQ FEET CHANGE	RIP RECOLLECTED THIS PARKING LOT IN CYCLE 5 BECAUSE IT HAD SIGNIFICANTLY CHANGED SHAPE SINCE CYCLE 4.
0905	HURRICANE RIDGE VISITOR CENTER PARKING	SQ FEET CHANGE	IN CYCLE 5 THIS ROUTE WAS MODIFIED DUE TO IT BEING COMBINED WITH OTHER ROUTES TO FORM A SINGLE ASSET AT NPS REQUEST. ROUTE 0905 NOW INCLUDES A SECTION OF ROUTE 0012.
0944	HEATHER PARK PARKING	SURFACE TYPE CHANGE	ROUTE 0944 WAS IDENTIFIED BY THE NPS AS AN UNPAVED PARKING AREA IN CYCLE 4. IN CYCLE 5, THE NPS IDENTIFIED THIS AREA AS THE END SECTION OF WHAT WAS COLLECTED AS ROUTE 0402 IN CYCLE 4
0954ZZ	HOH CAMPGROUND PARKING AREAS	OTHER	ROUTE WAS RECOLLECTED IN CYCLE 5 DUE TO POOR GPS IN CYCLE 4.
0955	SOL DUC HOT SPRINGS PARKING	SQ FEET CHANGE	IN CYCLE 5 NPS REQUESTED RIP INCLUDE THE BRIDGE IN THE SHAPE OF THIS PARKING AREA INSTEAD OF ROUTE 0205 AS IT WAS IN CYCLE 4. ROUTE SQ FEET SUBSEQUENTLY INCREASED AS A RESULT.
0957	MORA CAMPGROUND AND DUMPSTATION PARKING	ROUTES COMBINED	ROUTE NOW INCLUDES THE FORMER ROUTE 0959. CYCLE 4 ROUTES 0957 AND 0959 WERE COMBINED INTO ROUTE 0957 IN CYCLE 5 (THE ROUTE NUMBER 0959 WAS REMOVED)
0961	LAKE CRESCENT LODGE CONCESSIONS WAREHOUSE	OTHER	ROUTE CHANGED FROM A ROAD (ROUTE 0300) IN CYCLE 4 TO A PARKING (ROUTE 0961) IN CYCLE 5.
0962	LAKE CRESCENT LODGE EMPLOYEE HOUSING PARKING	OTHER	ROUTE CHANGED FROM A ROAD (ROUTE 0301) IN CYCLE 4 TO A PARKING (ROUTE 0962) IN CYCLE 5.
0963	OLYMPIC VISITOR CENTER ROAD	OTHER	ROUTE CHANGED FROM A ROAD (ROUTE 0221) IN CYCLE 4 TO A PARKING (ROUTE 0963) IN CYCLE 5. THIS ROUTE WAS ALSO RECONSTRUCTED SINCE THE CYCLE 4 COLLECTION.

	OTHER C	CHANGES FROM PREVIOUS IN	IVENTORY:
Route #	Route Name	Type of Change	Comments
0104ZZ	QUINAULT NORTH SHORE ROAD	COLLECTION METHOD CHANGE	IN CYCLE 5, THE FIRST 7.7 MILES WAS COLLECTED WITH THE VEHICLE AS IT WAS IN CYCLE 4. THE NEXT 5.2 MILES IS UNPAVED AND WAS NOT COLLECTED BY RIP. THE LAST 1.1 MILES IS PAVED AND WAS COLLECTED MANUALLY.
0108	EAST BEACH ROAD	ROUTE NUMBER	ROUTE NUMBER WAS CHANGED FROM 0101 TO 0108 AT PARKS REQUEST.
0200ZZ	HEART O' THE HILLS CAMPGROUND LOOPS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0200A-0200E COMBINED TO FORM ONE ASSET.
0204ZZ	FAIRHOLM CAMPGROUND LOOPS	ROUTES COMBINED	CYCLE 4 ROUTES 0204AZ-CZ WERE COMBINED INTO 0204ZZ IN CYCLE 5 TO FORM ONE ASSET.
0207	STAIRCASE ROAD	COLLECTION METHOD CHANGE	THIS ROUTE WAS MANUALLY COLLECTED IN CYCLE 5 DUE TO AN UNPAVED SECTION IN THE ROAD THAT MAY HAVE DAMAGED THE DATA COLLECTION VEHICLE IF DRIVEN.
0208ZZ	STAIRCASE CAMPGROUND ROADS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0208 AND 0208A COMBINED TO FORM ONE ASSET.
0213ZZ	KALALOCH CAMPGROUND ROADS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0213A-0213F COMBINED TO FORM ONE ASSET.
0215ZZ	HOH CAMPGROUND ROADS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0215A-0215C COMBINED TO FORM ONE ASSET.
0228ZZ	MORA CAMPGROUND LOOPS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0228A-0228E COMBINED TO FORM ONE ASSET.
0903ZZ	ANCIENT LAKE MORSE PARKING AREAS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0903AZ AND 0903BZ COMBINED TO FORM ONE ASSET.

	OTHER CHANGES FROM PREVIOUS INVENTORY:										
Route #	Route Name	Type of Change	Comments								
0912ZZ	ELWHA RANGER STATION PARKING AREAS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0912A AND 0902B COMBINED TO FORM ONE ASSET.								
0920ZZ	SALMON CASCADES PARKING AREAS	ROUTES COMBINED	IN CYCLE 5 ROUTES 0920A AND 0920B COMBINED TO FORM ONE ASSET.								

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



Olympic National Park



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

		P	avement (Condition R	ating (PCF	र)			
	Poor (0-60)		Fair (61-84)		Good	Good (85-94)		(95-100)	TOTAL
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1	0.50	0.66%	2.96	3.89%	8.52	11.19%	17.92	23.53%	29.90
2	10.67	14.01%	15.62	20.51%	8.68	11.40%	11.30	14.84%	46.27
3									
4									
5									
6									
7									
8									
Totals	11.17	14.66%	18.58	24.39%	17.20	22.58%	29.22	38.36%	76.17

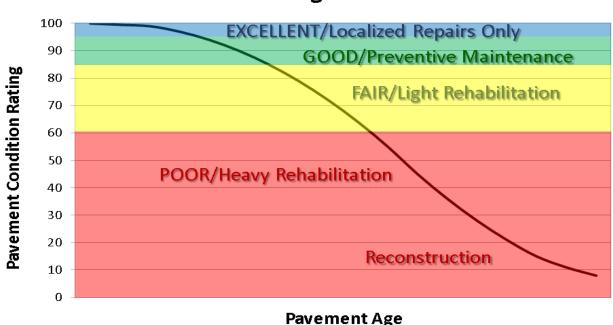
Note: The information in this table is derived from the PMS_20 table in the Park database, which only contains processed data from routes collected with the Data Collection Vehicle (DCV). Information for Manually Rated Routes (MRR) and Parking Areas is not reported in this table. Only Functional Class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

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

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

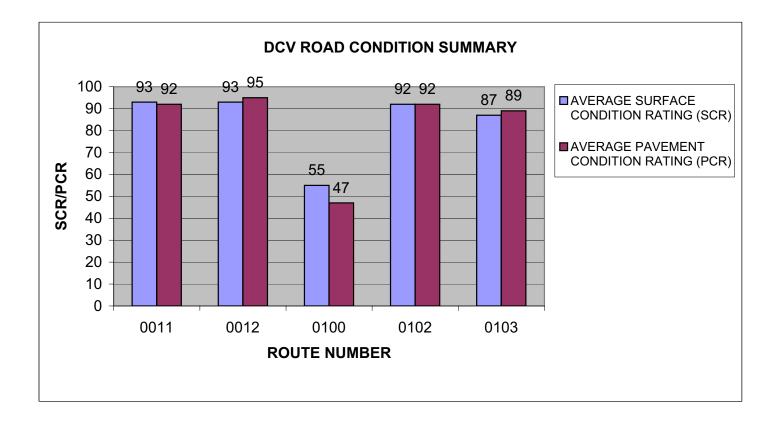
- Excellent/New: PCR of 95-100. Pavements in this range will require only spot repairs
- Good: PCR of 85-94. Pavements in this range will likely be candidates for Preventive Maintenance. Examples include Chip and Slurry Seals, Micro Surfacing and Thin Overlays.
- Fair: PCR of 61-84. Pavements in this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

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

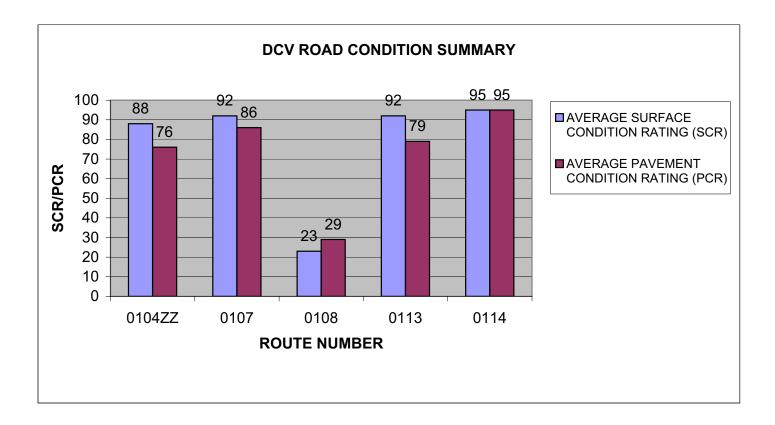


Condition Categories and Treatments

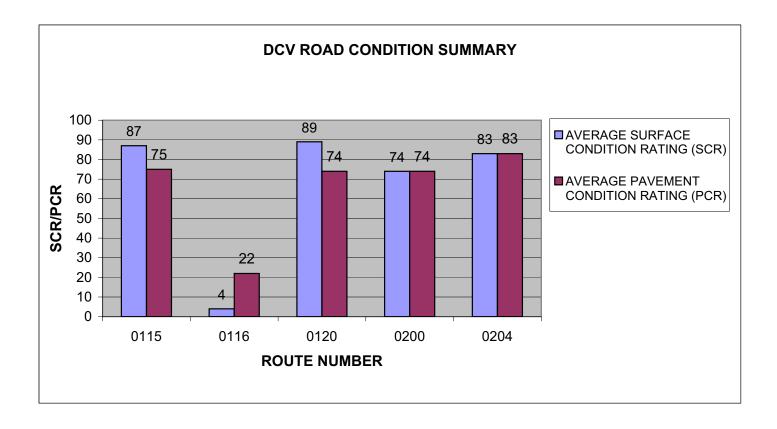
ROUTE NUMBER	ROUTE NAME		ROUTE LENGTH			AVERAGE PAVEMENT CONDITION RATING (PCR)
0011	LAKE CRESCENT HIGHWAY (US 101)	1	12.29	ASPHALT	93	92
0012	HURRICANE RIDGE ROAD	1	17.61	ASPHALT	93	95
0100	ELWHA VALLEY ROAD	2	8.15	ASPHALT	55	47
0102	CAMP DAVID JR. ROAD	2	4.47	ASPHALT	92	92
0103	SOL DUC VALLEY ROAD	2	13.76	ASPHALT	87	89



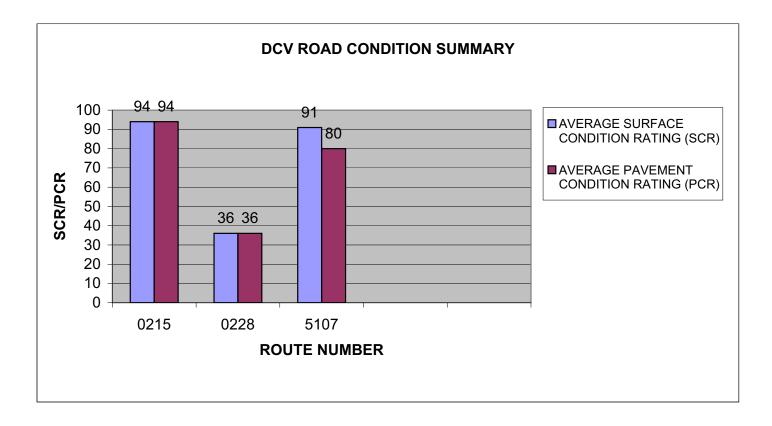
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0104ZZ	QUINAULT NORTH SHORE ROAD	2	13.96	ASPHALT	88	76
0107	HOH ROAD	2	6.12	ASPHALT	92	86
0108	EAST BEACH ROAD	2	2.93	ASPHALT	23	29
0113	LAKE CRESCENT ROAD	2	0.66	ASPHALT	92	79
0114	HOKO ROAD	2	0.12	ASPHALT	95	95



ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0115	MORA ROAD	2	2.32	ASPHALT	87	75
0116	LYRE RIVER ROAD	2	0.90	ASPHALT	4	22
0120	HURRICANE HILL ROAD	2	1.21	ASPHALT	89	74
	HEART O' THE HILLS CAMPGROUND ENTRANCE					
0200	ROAD	2	0.31	ASPHALT	74	74
0204	FAIRHOLM CAMPGROUND ENTRANCE ROAD	2	0.21	ASPHALT	83	83



					AVERAGE SURFACE	AVERAGE PAVEMENT
ROUTE		FUNCT	ROUTE	SURFACE	CONDITION	CONDITION
NUMBER	ROUTE NAME	CLASS	LENGTH	TYPE	RATING (SCR)	RATING (PCR)
0215	HOH CAMPGROUND ENTRANCE ROAD	2	0.29	ASPHALT	94	94
0228	MORA CAMPGROUND ACCESS ROAD	2	0.29	ASPHALT	36	36
5107	UPPER HOH ROAD	0	12.07	ASPHALT	91	80

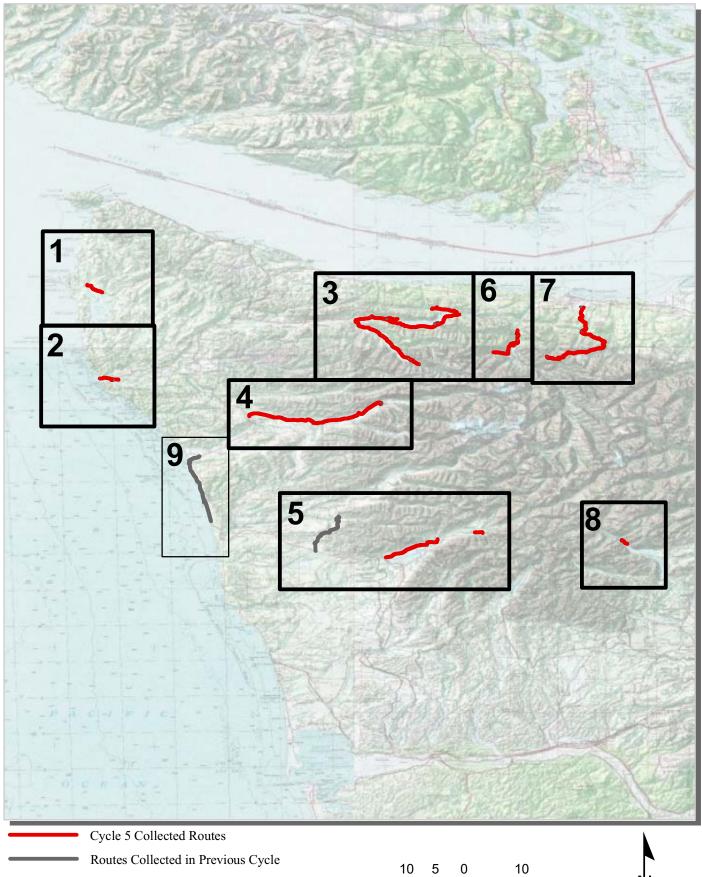


<u>Section 4</u> Park Route Location Maps



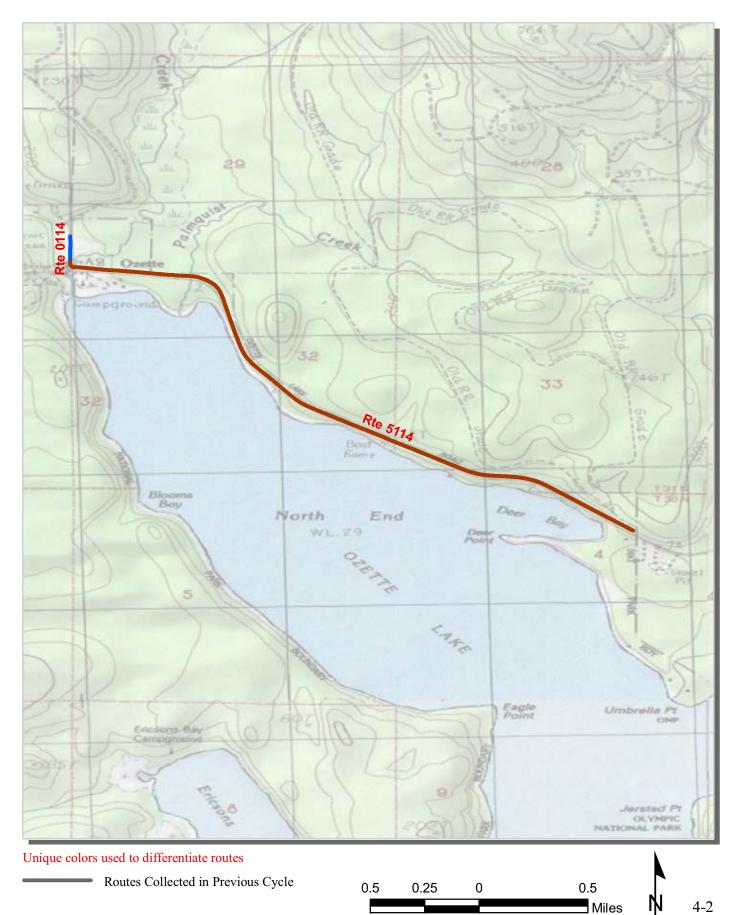
Olympic National Park

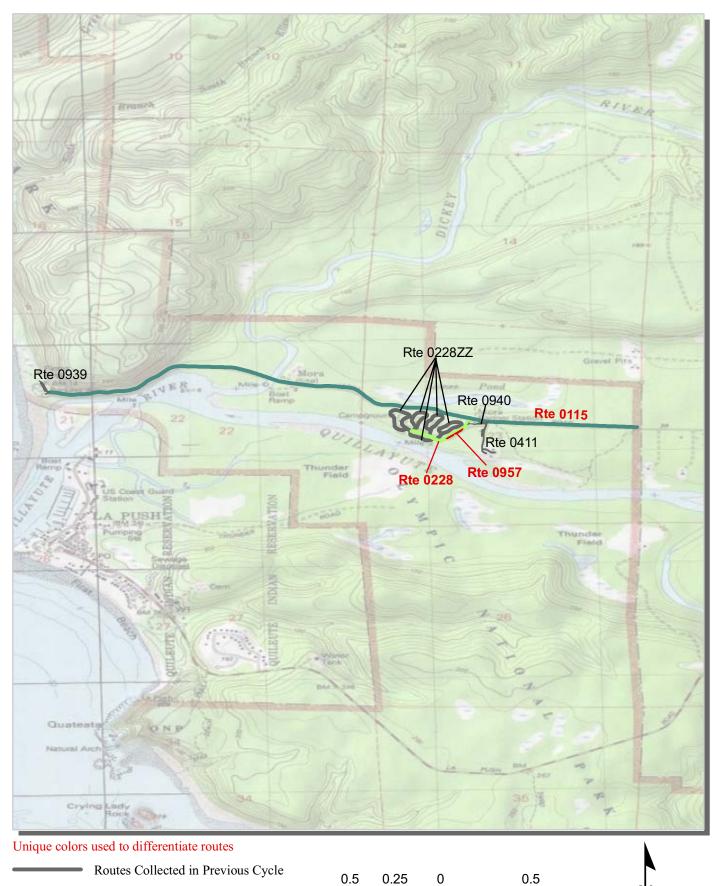




4-1

Miles

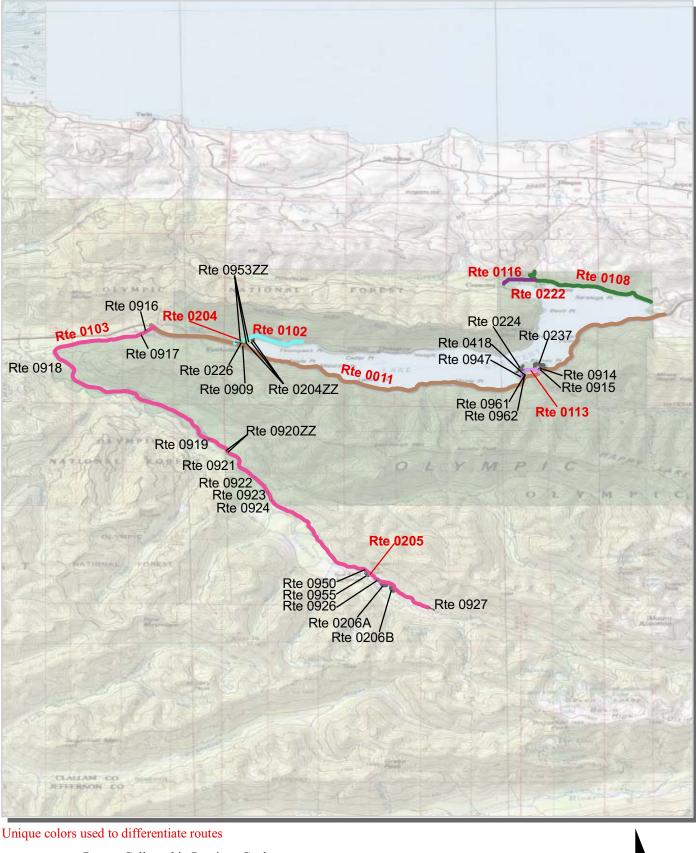




4-3

ĺγ

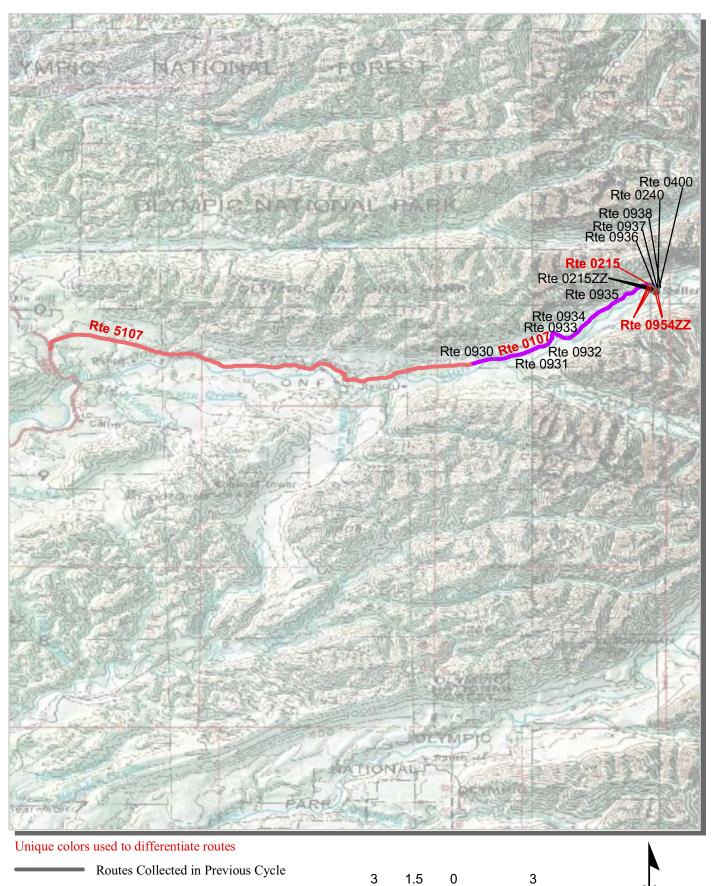
Miles



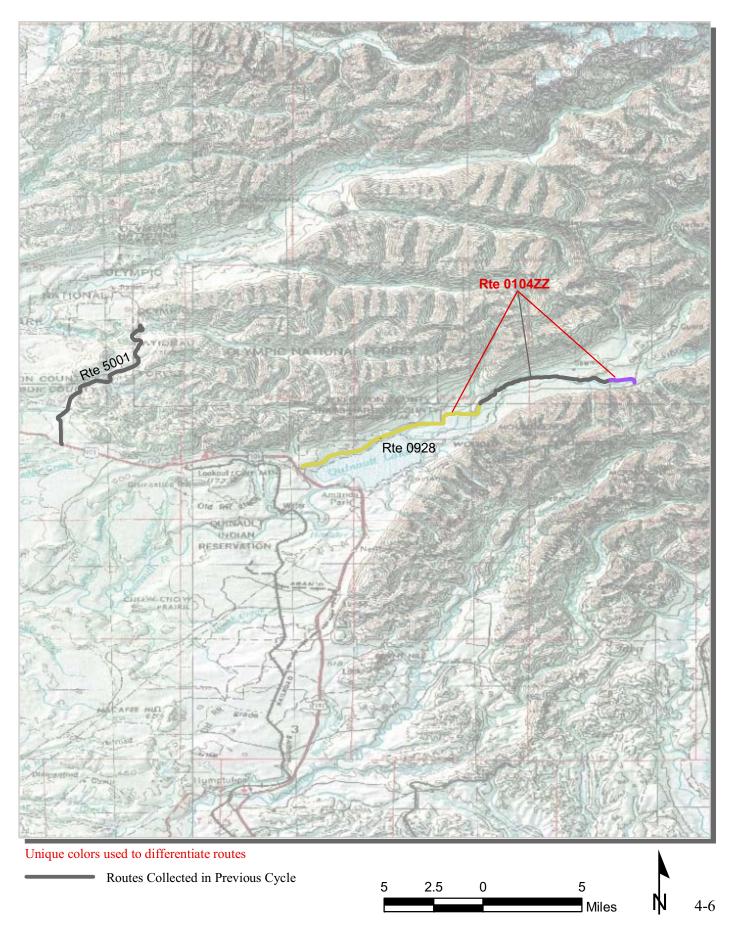
3

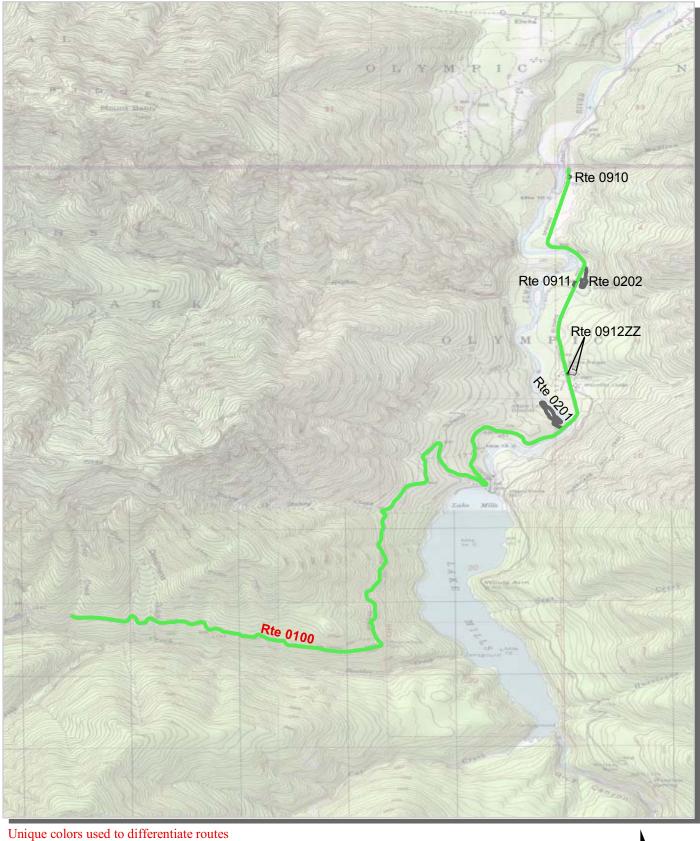
Routes Collected in Previous Cycle

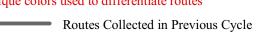




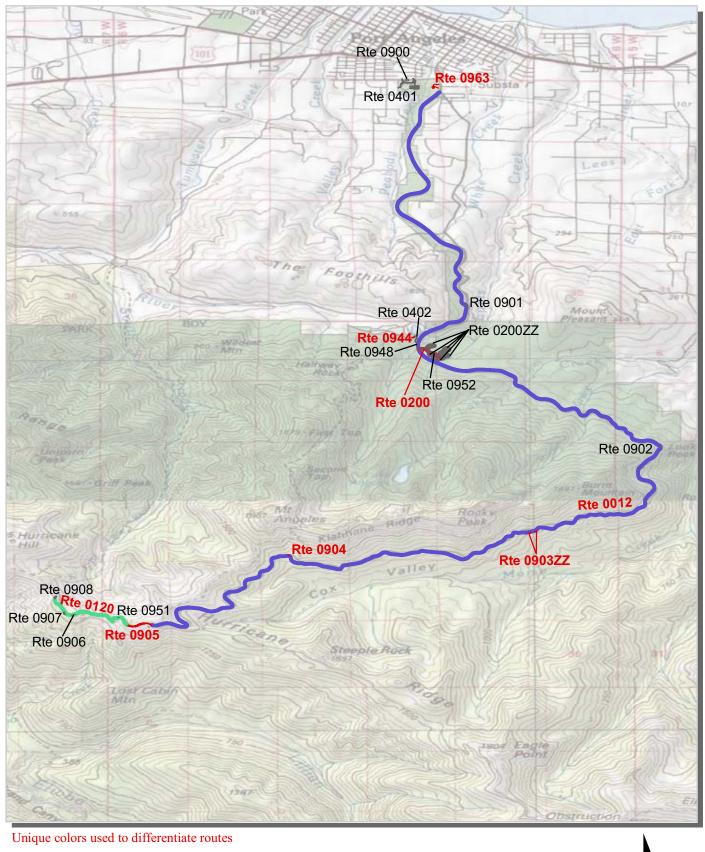
Miles



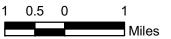




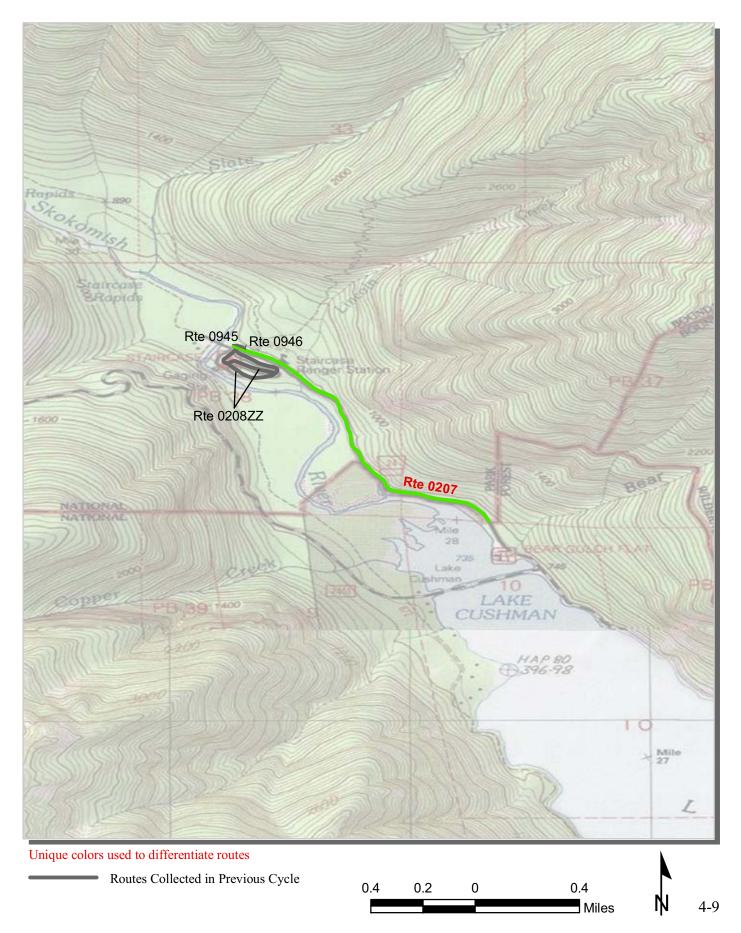


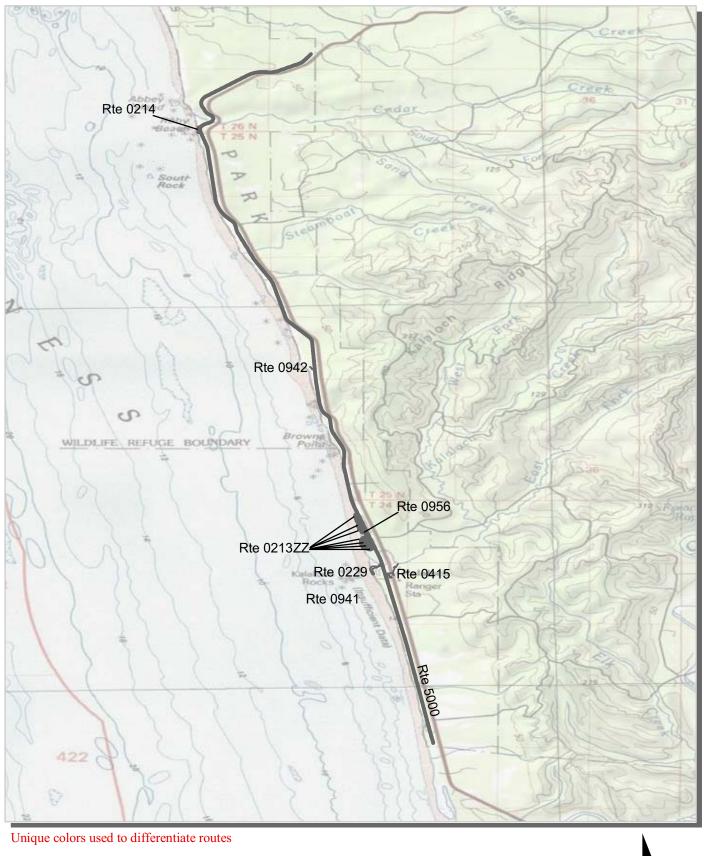


Routes Collected in Previous Cycle



4-8





0.5

1

0

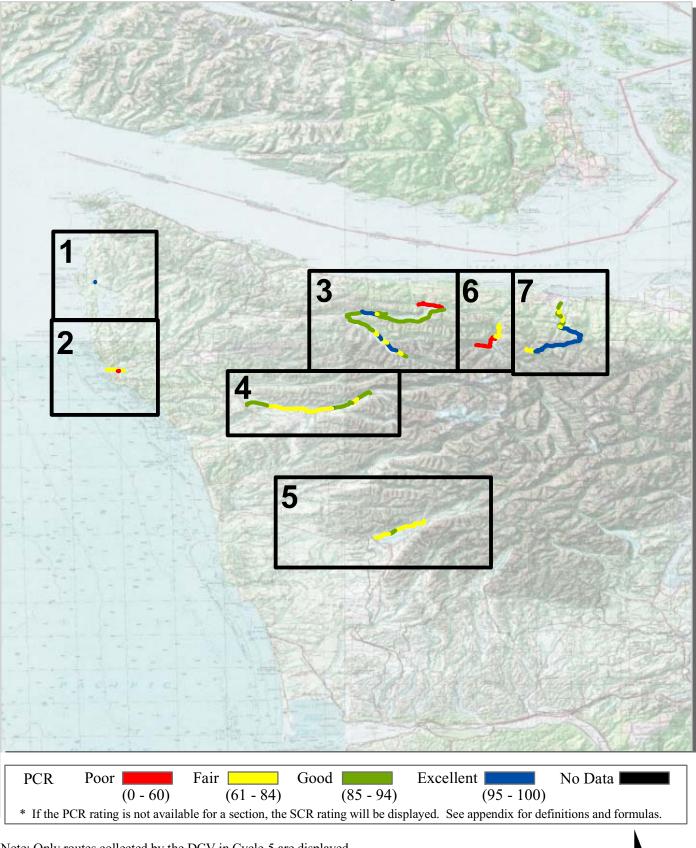
1

Miles

Routes Collected in Previous Cycle



ſŊ



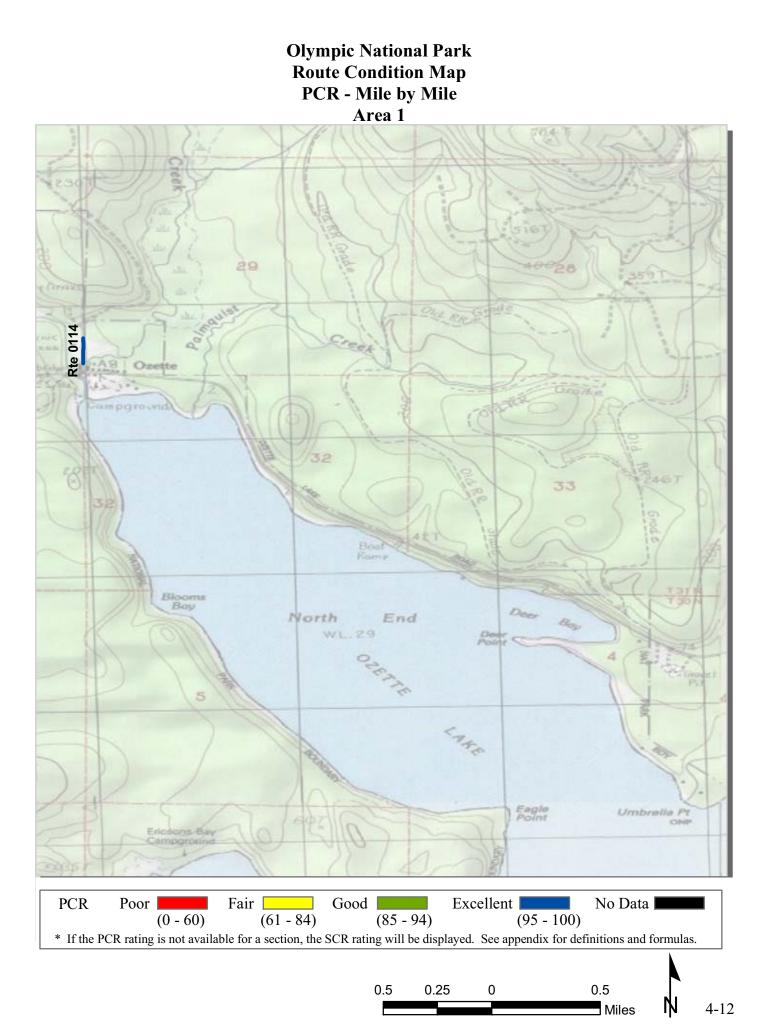
10

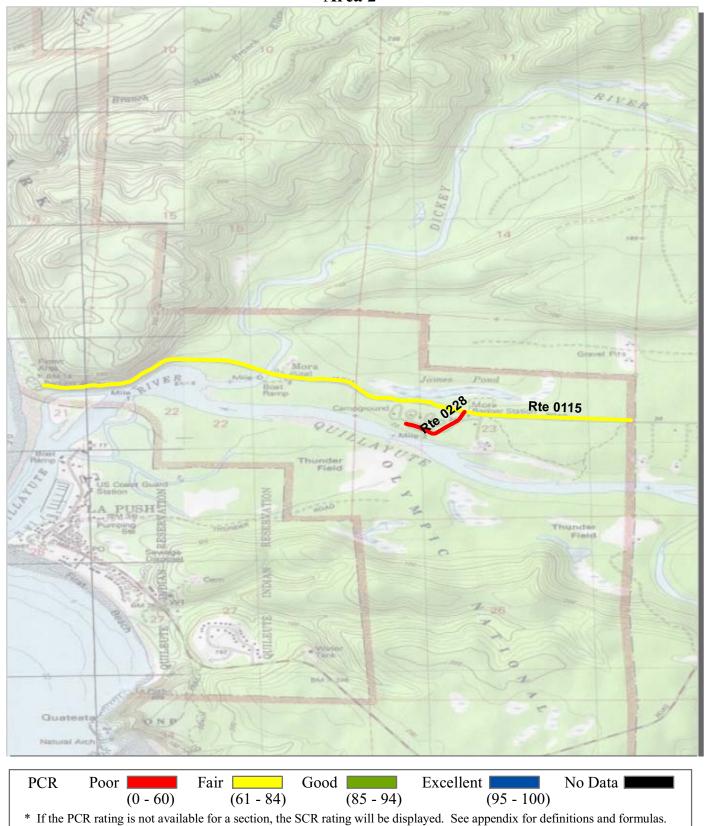
0

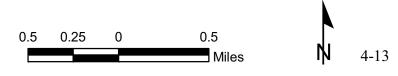
20

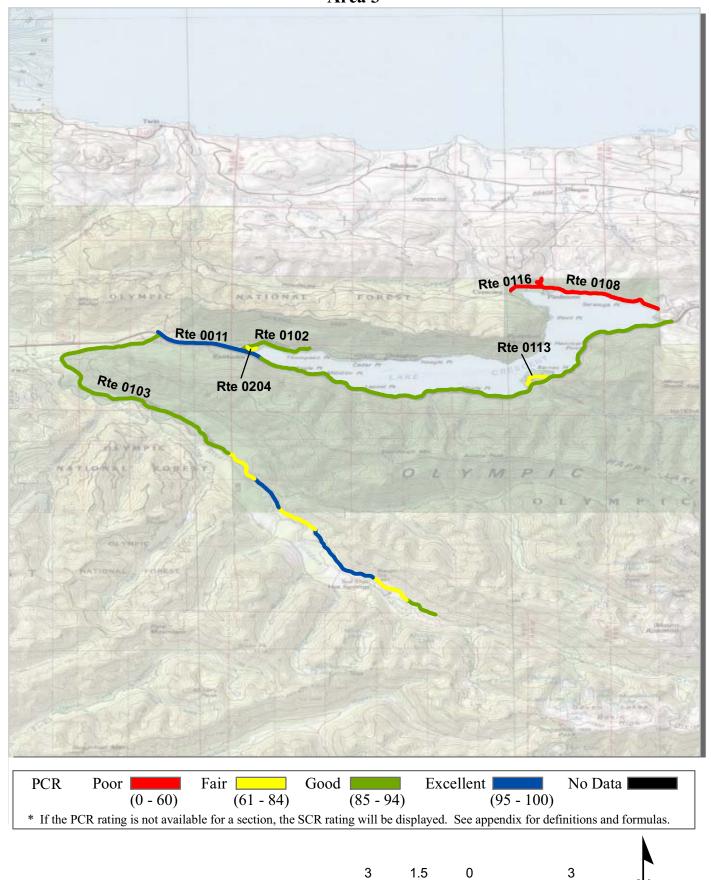
Miles

Note: Only routes collected by the DCV in Cycle-5 are displayed. 20

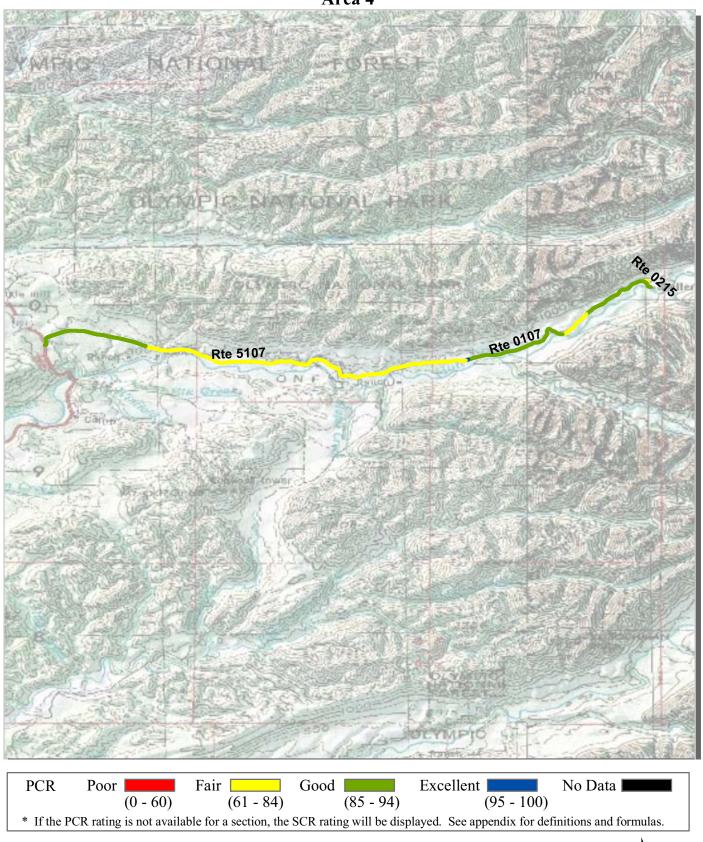






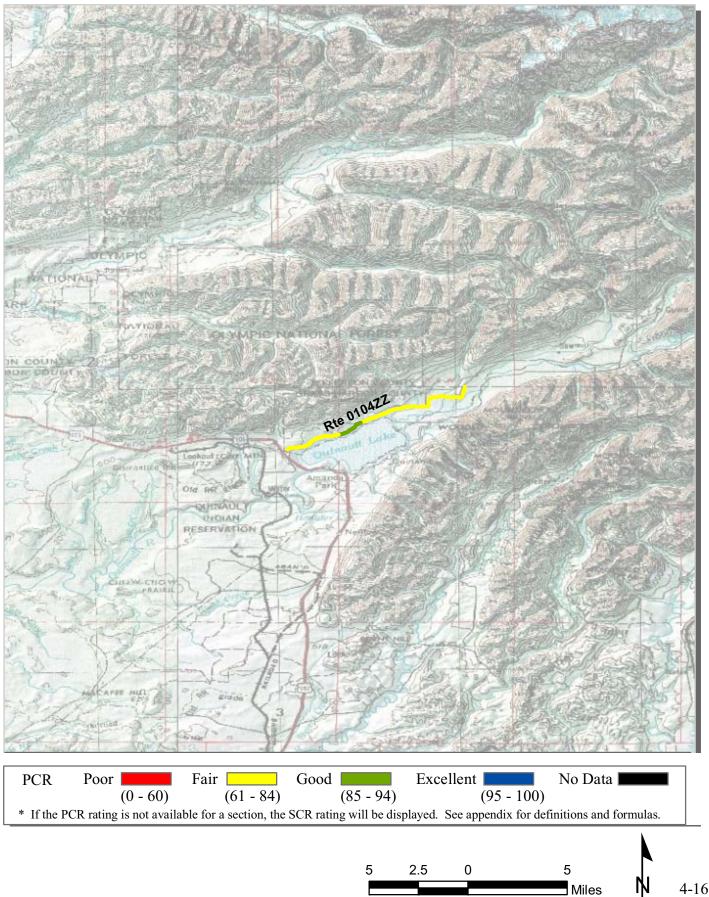


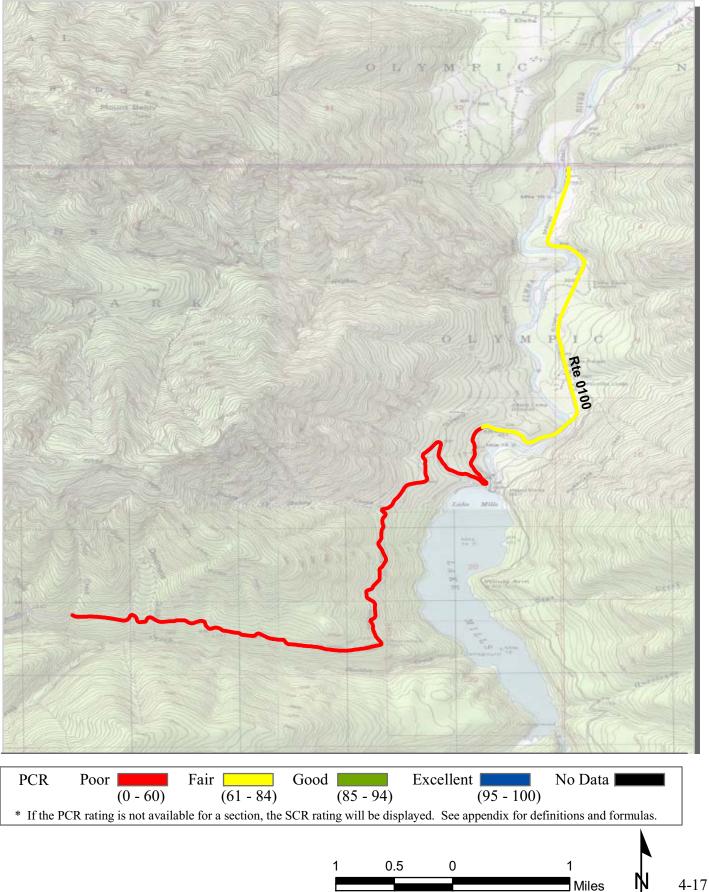
Miles



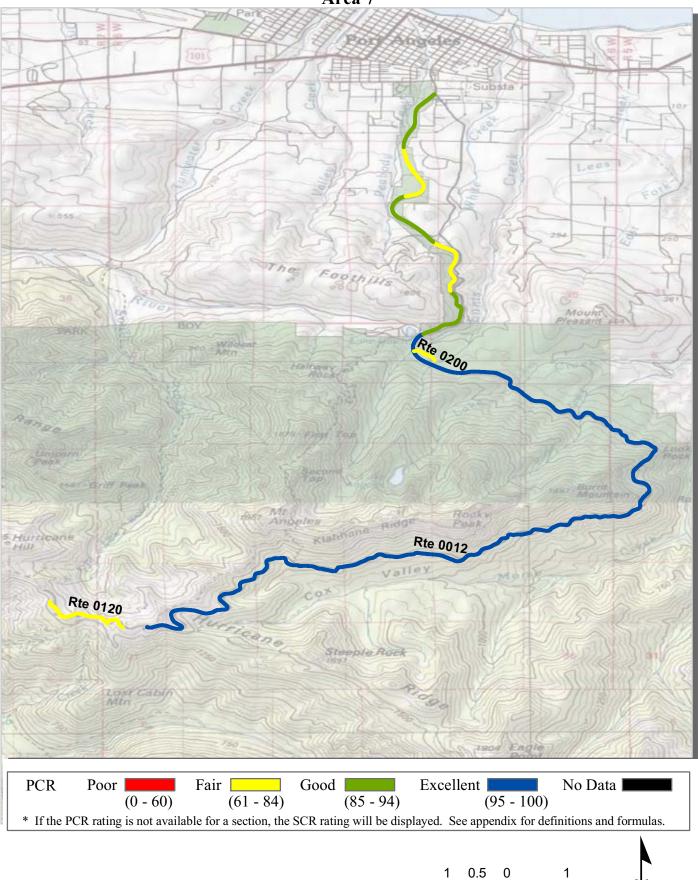
2







Area 7



IN

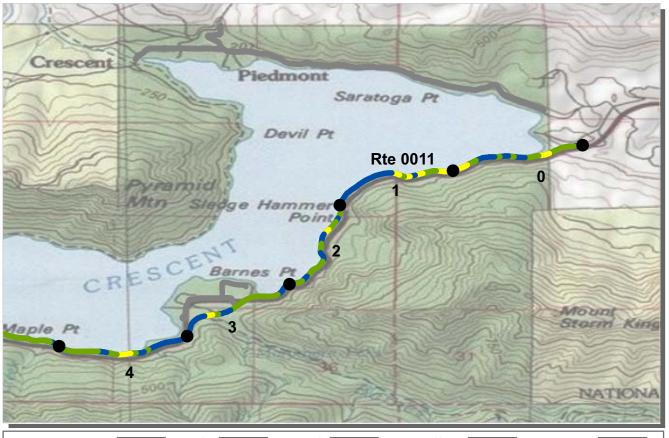
Miles

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



Olympic National Park





N

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

ROUTE: 0011 LAKE CRESCENT HIGHWAY (US 101) OLYM: OLYMPIC NATIONAL PARK

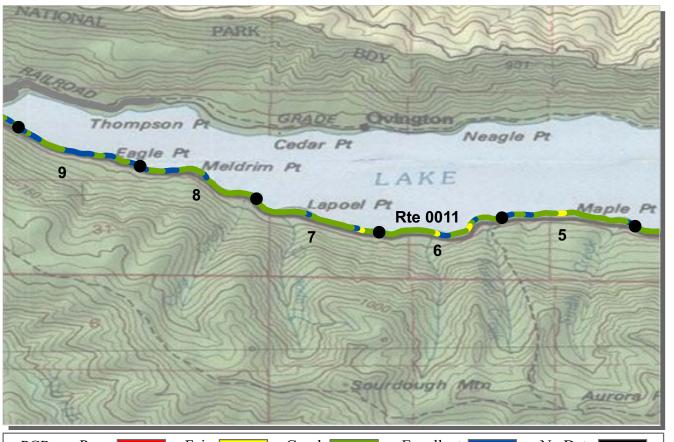
COLLECTED: 9/21/2010 PACIFIC WEST REGION TOTAL LENGTH: 12.29 Miles Section Number 1.00 1.00 1.00 1.00 1.00 Section Length (mi) **Cross Section Information** Number of Lanes Paved Width (ft) Lane Width (ft) **Roadway Condition Information** SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 92 **Distress Index Values** Structural Crack Index Transverse Cracking Index Patching Index Rutting Index Roughness Condition Index (RCI)

ROUTE: 0011 LAKE CRESCENT HIGHWAY (US 101)

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

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

NOTES:



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

ROUTE: 0011 LAKE CRESCENT HIGHWAY (US 101) OLYM: OLYMPIC NATIONAL PARK

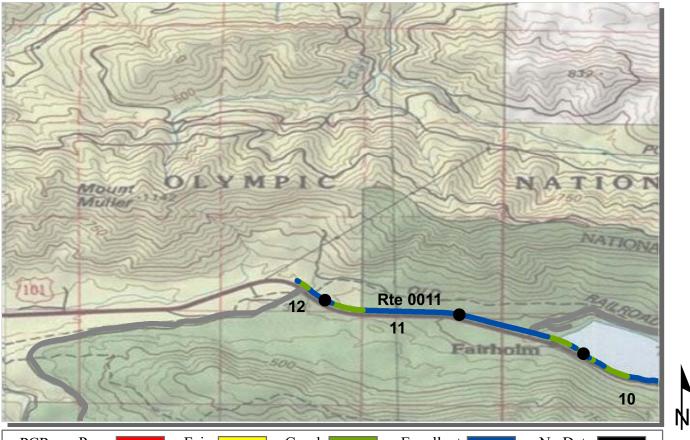
COLLECTED: 9/21/2010 PACIFIC WEST REGION TOTAL LENGTH: 12.29 Miles Section Number Q 1.00 1.00 1.00 1.00 1.00 Section Length (mi) **Cross Section Information** Number of Lanes Paved Width (ft) Lane Width (ft) **Roadway Condition Information** SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 89 **Distress Index Values** Structural Crack Index Transverse Cracking Index Patching Index Rutting Index Roughness Condition Index (RCI)

NOTES:

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

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

Ņ



PCR	Poor		Fair	Good	Excellent	No Data		
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)			
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.								
ROUTE: 0	011 LAF	KE CRES	CENT HIGHW	AY (US 101)				

OLYM: OLYMPIC NATIONAL PARK

CIEIC WEST DECION

COLLECTED: 9/21/2010 LENCTH 20 3 41

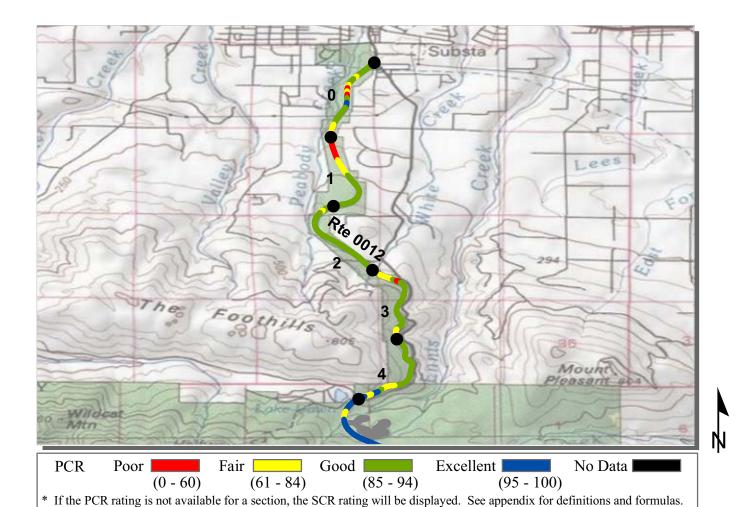
PACIFIC WEST REGION			ТОТА	TOTAL LENGTH: 12.29 M		
Section Number	10	11	12			
Section Length (mi)	1.00	1.00	0.29			
Cross Section Information						
Number of Lanes	3	3	3			
Paved Width (ft)	41	47	62			
Lane Width (ft)	11	12	12			
Roadway Condition Information						
SCR (Surface Condition Rating)	95	96	91			
PCR (Pavement Condition Rating)	97	98	95			
Distress Index Values						
Structural Crack Index	100	96	91			
Transverse Cracking Index	100	100	100			
Patching Index	100	100	100			
Rutting Index	95	99	99			
Roughness Condition Index (RCI)	100	100	100			

ROUTE: 0011 LAKE CRESCENT HIGHWAY (US 101)

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

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

NOTES:



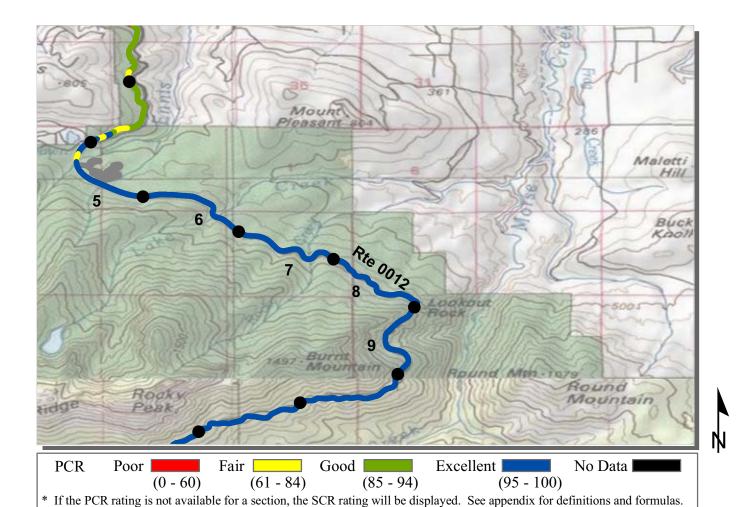
ROUTE: 0012 HURRICANE RIDGE ROAD OLYM : OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			ΤO	COLLECTE	ED: 9/21/2010 TH: 17.61 Miles
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	25	26	26	25	26
Lane Width (ft)	12	12	11	12	11
Roadway Condition Information					
SCR (Surface Condition Rating)	83	42	86	74	89
PCR (Pavement Condition Rating)	85	65	92	84	88
Distress Index Values					
Structural Crack Index	83	42	86	74	94
Transverse Cracking Index	99	100	100	99	99
Patching Index	100	100	100	100	99
Rutting Index	89	82	88	88	89
Roughness Condition Index (RCI)	88	100	100	100	86

ROUTE: 0012 HURRICANE RIDGE ROAD

NOTES:

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



ROUTE: 0012 HURRICANE RIDGE ROAD OLYM: OLYMPIC NATIONAL PARK

				COLLECTI	2D. 7/21/201
PACIFIC WEST REGION		TH: 17.61 Mile			
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	27	26	26	26	27
Lane Width (ft)	11	11	11	11	11
Roadway Condition Information					
SCR (Surface Condition Rating)	97	100	100	100	100
PCR (Pavement Condition Rating)	98	100	100	100	100
Distress Index Values					
Structural Crack Index	97	100	100	100	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	100	100	100	100	100
Rutting Index	99	100	100	100	100
Roughness Condition Index (RCI)	100	100	100	100	100

COLLECTED: 9/21/2010

NOTES:

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

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

5-5



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

ROUTE: 0012 HURRICANE RIDGE ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION				LLECTED: LENGTH:	9/21/2010
Section Number	10	11	101AI	13	17.01 Willes
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	26	27	26	26	27
Lane Width (ft)	11	11	11	11	11
Roadway Condition Information					
SCR (Surface Condition Rating)	100	100	100	100	100
PCR (Pavement Condition Rating)	100	100	100	100	100
Distress Index Values					
Structural Crack Index	100	100	100	100	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	100	100	100	100	100
Rutting Index	100	100	100	100	100
Roughness Condition Index (RCI)	100	100	100	100	100

ROUTE: 0012 HURRICANE RIDGE ROAD

Ŵ

NOTES:

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



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

ROUTE: 0012 HURRICANE RIDGE ROAD OLYM: OLYMPIC NATIONAL PARK

COLLECTED: 9/21/2010

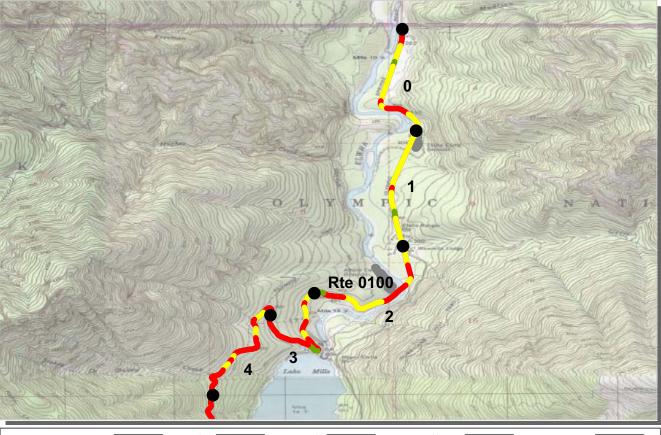
PACIFIC WEST REGION			TOTAL I	ENGTH:	17.61 Miles	
Section Number	15	16	17			
Section Length (mi)	1.00	1.00	0.61			
Cross Section Information						
Number of Lanes	2	2	2			
Paved Width (ft)	26	26	26			
Lane Width (ft)	11	11	11			
Roadway Condition Information						
SCR (Surface Condition Rating)	100	100	100			
PCR (Pavement Condition Rating)	100	100	100			
Distress Index Values						
Structural Crack Index	100	100	100			
Transverse Cracking Index	100	100	100			
Patching Index	100	100	100			
Rutting Index	100	100	100			
Roughness Condition Index (RCI)	100	100	100			

NOTES:

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

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

ſŅ



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

ROUTE: 0100 ELWHA VALLEY ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			ΤO	COLLECTED: FAL LENGTH:	9/21/2010 8.15 Miles
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	20	20	20	17	16
Lane Width (ft)	9	9	9	9	8
Roadway Condition Information					
SCR (Surface Condition Rating)	85	91	81	49	23
PCR (Pavement Condition Rating)	67	74	67	38	26
Distress Index Values					
Structural Crack Index	85	98	81	49	23
Transverse Cracking Index	98	100	99	99	99
Patching Index	100	99	99	100	91
Rutting Index	88	91	86	84	84
Roughness Condition Index (RCI)	39	49	45	22	31

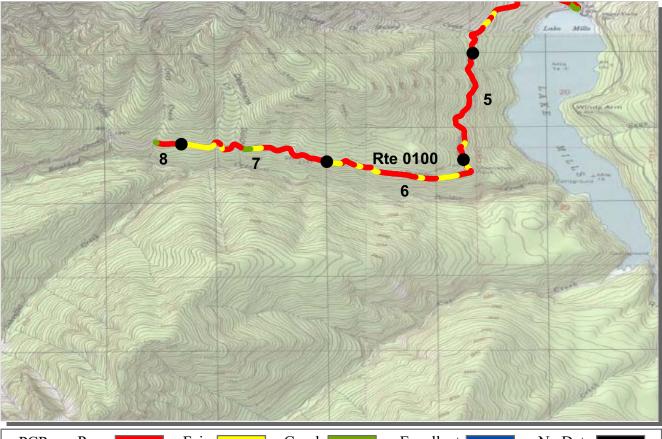
NOTES:

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

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

5-8

ψ



PCR	Poor		Fair 📃	Good	Excellent	No Data
		(0 - 60)	(61 - 84)) (85 - 94) (95 - 10	00)
* If the PCI	R rating is	s not availab	ble for a section, the	e SCR rating will be o	lisplayed. See appendix for	or definitions and formulas.

ROUTE: 0100 ELWHA VALLEY ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			TO	COLLECTED: FAL LENGTH:	9/21/2010 8.15 Miles
Section Number	5	6	7	8	0.15 1/11/5
Section Length (mi)	1.00	1.00	1.00	0.15	
Cross Section Information					
Number of Lanes	2	2	2	2	
Paved Width (ft)	17	16	16	17	
Lane Width (ft)	9	8	8	9	
Roadway Condition Information					
SCR (Surface Condition Rating)	0	59	57	0	
PCR (Pavement Condition Rating)	11	49	48	14	
Distress Index Values					
Structural Crack Index	0	59	57	0	
Transverse Cracking Index	100	100	100	100	
Patching Index	90	88	87	99	
Rutting Index	85	87	91	92	
Roughness Condition Index (RCI)	28	33	35	35	

NOTES:

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

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

ſŅ



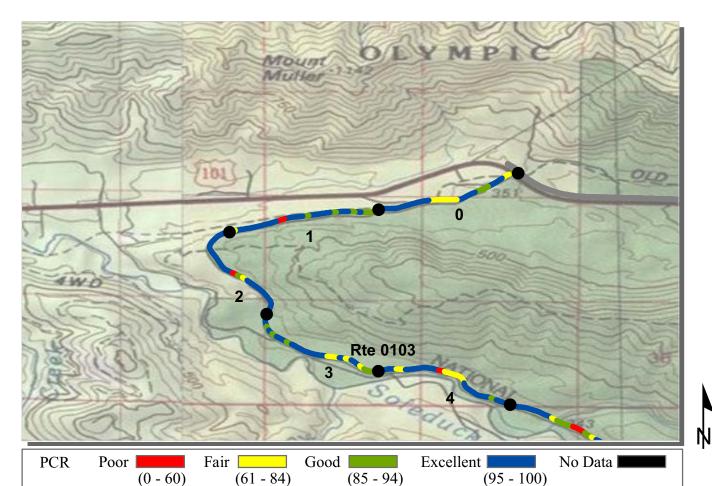
PCR	Poor	Fair 📃	Good	Exce	ellent	No Data
	(0 -	60) (61	- 84) (8	35 - 94)	(95 - 100))
* If the PCF	R rating is not a	vailable for a secti	on, the SCR rating	will be displayed.	See appendix for o	definitions and formulas.

ROUTE: 0102 CAMP DAVID JR. ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			LECTED: LENGTH:	9/21/2010 1.54 Miles
Section Number	0	1		ite i miles
Section Length (mi)	1.00	0.54		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	18	17		
Lane Width (ft)	9	8		
Roadway Condition Information				
SCR (Surface Condition Rating)	91	94		
PCR (Pavement Condition Rating)	91	94		
Distress Index Values				
Structural Crack Index	96	100		
Transverse Cracking Index	99	100		
Patching Index	96	100		
Rutting Index	91	94		
Roughness Condition Index (RCI)	NC	NC		

NOTES:

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



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

ROUTE: 0103 SOL DUC VALLEY ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			ΤO	COLLECTI TAL LENGI	ED: 9/29/2010 TH: 13.76 Miles
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	23	23	23	23	23
Lane Width (ft)	11	10	10	10	10
Roadway Condition Information					
SCR (Surface Condition Rating)	83	87	89	84	90
PCR (Pavement Condition Rating)	87	90	93	90	94
Distress Index Values					
Structural Crack Index	83	87	89	84	90
Transverse Cracking Index	100	100	100	100	100
Patching Index	99	98	100	100	98
Rutting Index	98	97	99	99	99
Roughness Condition Index (RCI)	93	94	100	100	100

ROUTE: 0103 SOL DUC VALLEY ROAD

NOTES:

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



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PCF	R rating i	s not availab	le for a section, the	SCR rating will be dia	splayed. See appendix fo	r definitions and formulas.

ROUTE: 0103 SOL DUC VALLEY ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION				LLECTED: LENGTH:	9/29/2010 13.76 Miles
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	23	23	24	24	23
Lane Width (ft)	10	10	11	11	10
Roadway Condition Information					
SCR (Surface Condition Rating)	85	86	72	94	62
PCR (Pavement Condition Rating)	85	91	77	96	74
Distress Index Values					
Structural Crack Index	85	86	72	94	62
Transverse Cracking Index	100	100	100	100	100
Patching Index	97	99	94	97	98
Rutting Index	98	99	97	99	98
Roughness Condition Index (RCI)	86	98	85	99	92

ROUTE: 0103 SOL DUC VALLEY ROAD

Ŵ

NOTES:

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



PCR	Poor	Fair 📃	Good Good	Excellent	No Data
	(0 - 60)) (61 - 84	k) (85 - 94)) (95 - 10	0)
* If the PCI	R rating is not avail	lable for a section. t	he SCR rating will be d	isplayed. See appendix for	r definitions and formulas.

ROUTE: 0103 SOL DUC VALLEY ROAD OLYM: OLYMPIC NATIONAL PARK

CIEIC WEST DECION

COLLECTED: 9/29/2010 OTI

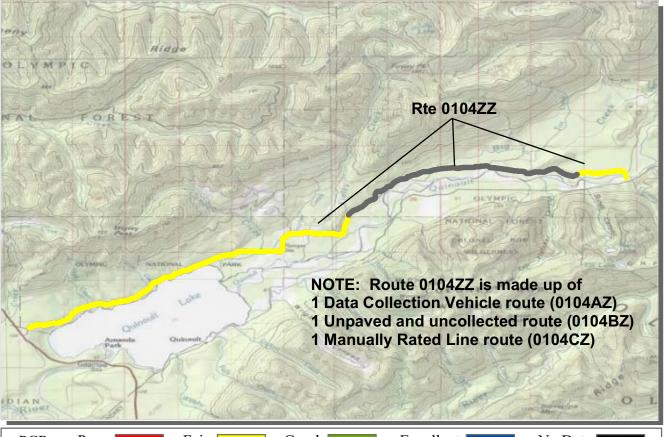
PACIFIC WEST REGION			TO	FAL LENGTH:	13.76 Miles
Section Number	10	11	12	13	
Section Length (mi)	1.00	1.00	1.00	0.76	
Cross Section Information					
Number of Lanes	2	2	2	2	
Paved Width (ft)	23	24	21	21	
Lane Width (ft)	10	10	9	9	
Roadway Condition Information					
SCR (Surface Condition Rating)	98	99	95	96	
PCR (Pavement Condition Rating)	99	99	83	85	
Distress Index Values					
Structural Crack Index	98	99	97	98	
Transverse Cracking Index	100	100	99	100	
Patching Index	100	100	100	98	
Rutting Index	100	99	95	96	
Roughness Condition Index (RCI)	100	100	65	69	

NOTES:

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

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

ψ



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

ROUTE: 0104ZZ QUINAULT NORTH SHORE ROAD OLYM: OLYMPIC NATIONAL PARK

Summary Record

PACIFIC WEST REGION

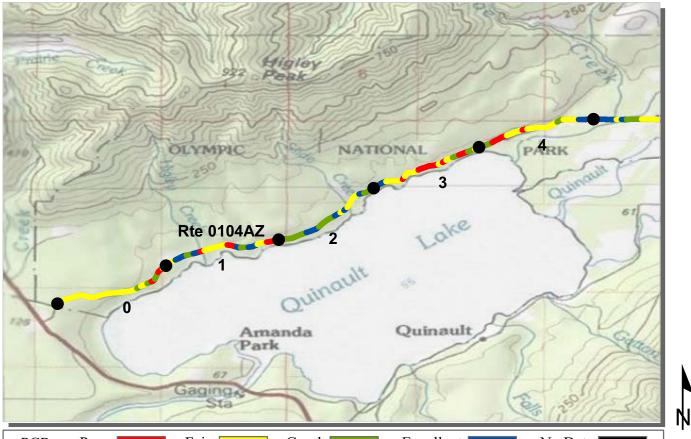
COLLECTED: 9/21/2010 TOTAL LENGTH: 13.96 Miles

FACIFIC WEST REGION		IUIAL LE	norn.	13.90 Miles
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	88			
PCR (Pavement Condition Rating)	76			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			

ROUTE: 0104ZZ QUINAULT NORTH SHORE ROAD

NOTES:

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



 PCR
 Poor
 Fair
 Good
 Excellent
 No Data

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

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

ROUTE: 0104AZ QUINAULT NORTH SHORE ROAD A OLYM : OLYMPIC NATIONAL PARK

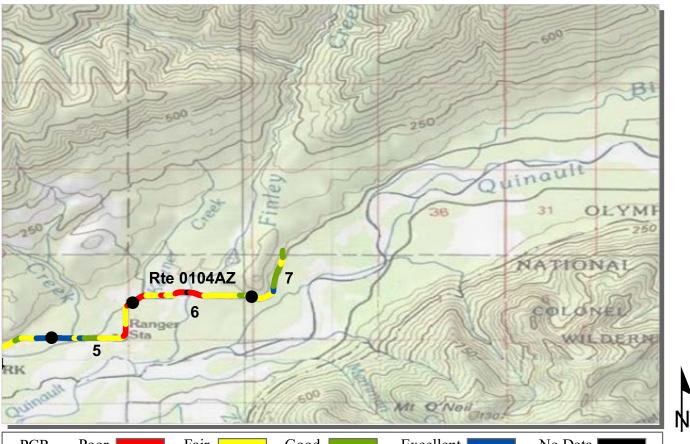
Subcomponent Record

COLLECTED: 9/21/2010

PACIFIC WEST REGION			ΤΟ	TOTAL LENGTH: 7.68 Miles		
Section Number	0	1	2	3	4	
Section Length (mi)	1.00	1.00	1.00	1.00	1.00	
Cross Section Information						
Number of Lanes	2	2	2	2	2	
Paved Width (ft)	20	20	20	20	21	
Lane Width (ft)	10	10	9	10	10	
Roadway Condition Information						
SCR (Surface Condition Rating)	83	87	95	90	90	
PCR (Pavement Condition Rating)	71	75	87	69	74	
Distress Index Values						
Structural Crack Index	83	87	95	93	90	
Transverse Cracking Index	99	100	100	100	100	
Patching Index	88	93	99	90	95	
Rutting Index	91	93	95	91	92	
Roughness Condition Index (RCI)	54	57	74	37	50	

NOTES:

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



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

ROUTE: 0104AZ QUINAULT NORTH SHORE ROAD A OLYM: OLYMPIC NATIONAL PARK

Subcomponent Record

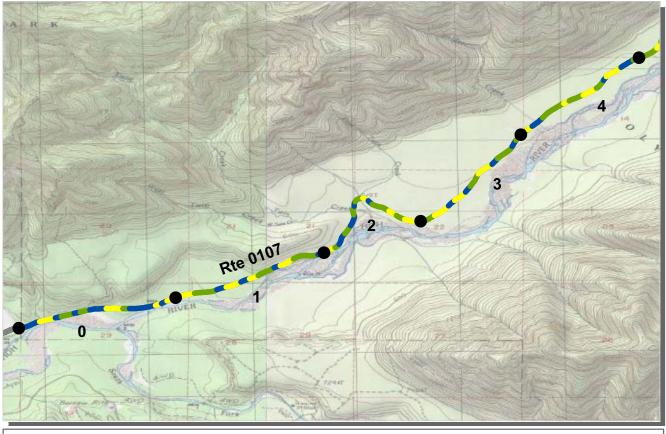
ACIFIC	WEST	REGION	
AUTIC		NEGION	

COLLECTED: 9/21/2010

PACIFIC WEST REGION	TOTAL LENGTH	: 7.68 Miles		
Section Number	5	6	7	
Section Length (mi)	1.00	1.00	0.68	
Cross Section Information				
Number of Lanes	2	2	2	
Paved Width (ft)	20	18	19	
Lane Width (ft)	9	9	10	
Roadway Condition Information				
SCR (Surface Condition Rating)	88	80	88	
PCR (Pavement Condition Rating)	72	64	82	
Distress Index Values				
Structural Crack Index	94	80	96	
Transverse Cracking Index	99	99	100	
Patching Index	98	95	100	
Rutting Index	88	83	88	
Roughness Condition Index (RCI)	48	40	74	

NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60) (61 - 84)) (85 - 94)	(95 - 10	00)
* If the PC	R rating is not ava	ilable for a section, th	e SCR rating will be di	splayed. See appendix for	or definitions and formulas.

ROUTE: 0107 HOH ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION				COLLECTED: FAL LENGTH:	9/22/2010 6.12 Miles
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	21	20	20	20	21
Lane Width (ft)	9	9	10	9	9
Roadway Condition Information					
SCR (Surface Condition Rating)	93	94	94	91	90
PCR (Pavement Condition Rating)	88	89	88	83	86
Distress Index Values					
Structural Crack Index	100	100	100	100	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	99	100	100	100	100
Rutting Index	93	94	94	91	90
Roughness Condition Index (RCI)	81	81	78	72	79

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

ROUTE: 0107 HOH ROAD



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

ROUTE: 0107 HOH ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			COLLECTED: TOTAL LENGTH:	
Section Number	5	6		
Section Length (mi)	1.00	0.12		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	21	21		
Lane Width (ft)	10	9		
Roadway Condition Information				
SCR (Surface Condition Rating)	91	93		
PCR (Pavement Condition Rating)	87	75		
Distress Index Values				
Structural Crack Index	100	100		
Transverse Cracking Index	100	100		
Patching Index	100	100		
Rutting Index	91	93		
Roughness Condition Index (RCI)	81	48		

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

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

Ŵ



 PCR
 Poor
 Fair
 Good
 Excellent
 No Data

 * If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.
 No Data

I ECTED.

0/21/2010

ROUTE: 0108 EAST BEACH ROAD OLYM: OLYMPIC NATIONAL PARK

			COLLECTED:	9/21/2010
PACIFIC WEST REGION	TOTAL LENGTH:	2.93 Miles		
Section Number	0	1	2	
Section Length (mi)	1.00	1.00	0.93	
Cross Section Information				
Number of Lanes	2	2	2	
Paved Width (ft)	19	19	19	
Lane Width (ft)	8	9	9	
Roadway Condition Information				
SCR (Surface Condition Rating)	0	27	42	
PCR (Pavement Condition Rating)	17	32	39	
Distress Index Values				
Structural Crack Index	0	27	42	
Transverse Cracking Index	95	95	99	
Patching Index	99	100	95	
Rutting Index	88	91	89	
Roughness Condition Index (RCI)	43	39	35	

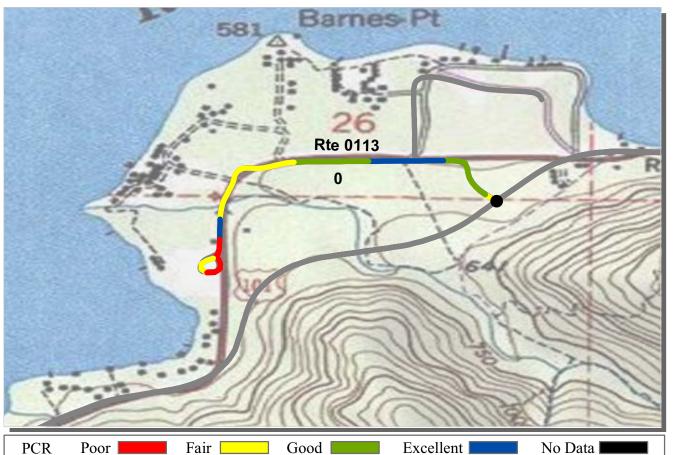
NOTES:

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

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

ROUTE: 0108 EAST BEACH ROAD

ψ



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

ECTED.

0/20/2010

ROUTE: 0113 LAKE CRESCENT ROAD OLYM: OLYMPIC NATIONAL PARK

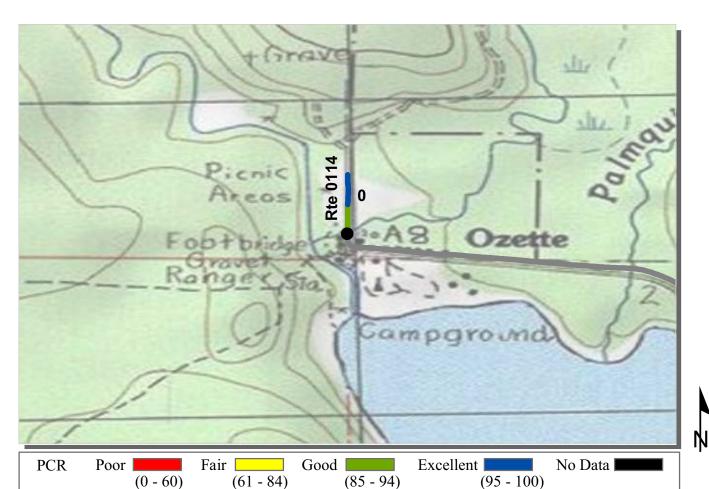
			CO	LLECTED:	9/29/2010
PACIFIC WEST REGION	TOTAL LENGTH		LENGTH:	0.66 Miles	
Section Number	0				
Section Length (mi)	0.66				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	25				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	92				
PCR (Pavement Condition Rating)	79				
Distress Index Values					
Structural Crack Index	92				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	94				
Roughness Condition Index (RCI)	60				

NOTES:

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

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

ψ



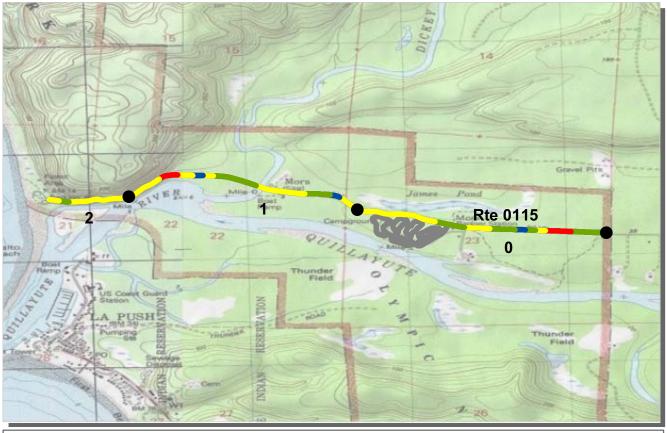
* If the PCR rating is not available for a section, the SCR rating will be di	
ROUTE: 0114 HOKO ROAD	

OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			LLECTED: LENGTH:	9/23/2010 0.12 Miles
Section Number	0			
Section Length (mi)	0.12			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	15			
Lane Width (ft)	15			
Roadway Condition Information				
SCR (Surface Condition Rating)	95			
PCR (Pavement Condition Rating)	95			
Distress Index Values				
Structural Crack Index	99			
Transverse Cracking Index	95			
Patching Index	100			
Rutting Index	96			
Roughness Condition Index (RCI)	NC			

NOTES:

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



ſŅ

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

ROUTE: 0115 MORA ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			COLLECTED: TOTAL LENGTH:	9/22/2010 2.32 Miles
Section Number	0	1	2	
Section Length (mi)	1.00	1.00	0.32	
Cross Section Information				
Number of Lanes	2	2	2	
Paved Width (ft)	20	21	20	
Lane Width (ft)	9	9	9	
Roadway Condition Information				
SCR (Surface Condition Rating)	87	86	87	
PCR (Pavement Condition Rating)	76	76	69	
Distress Index Values				
Structural Crack Index	100	100	100	
Transverse Cracking Index	100	100	100	
Patching Index	100	99	100	
Rutting Index	87	86	87	
Roughness Condition Index (RCI)	59	62	42	

NOTES:

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

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

5-22



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

ROUTE: 0116 LYRE RIVER ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			LLECTED: LENGTH:	9/21/2010 0.68 Miles
Section Number	0			
Section Length (mi)	0.68			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	17			
Lane Width (ft)	8			
Roadway Condition Information				
SCR (Surface Condition Rating)	4			
PCR (Pavement Condition Rating)	22			
Distress Index Values				
Structural Crack Index	4			
Transverse Cracking Index	98			
Patching Index	94			
Rutting Index	90			
Roughness Condition Index (RCI)	50			

NOTES:

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



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

ROUTE: 0120 HURRICANE HILL ROAD OLYM: OLYMPIC NATIONAL PARK

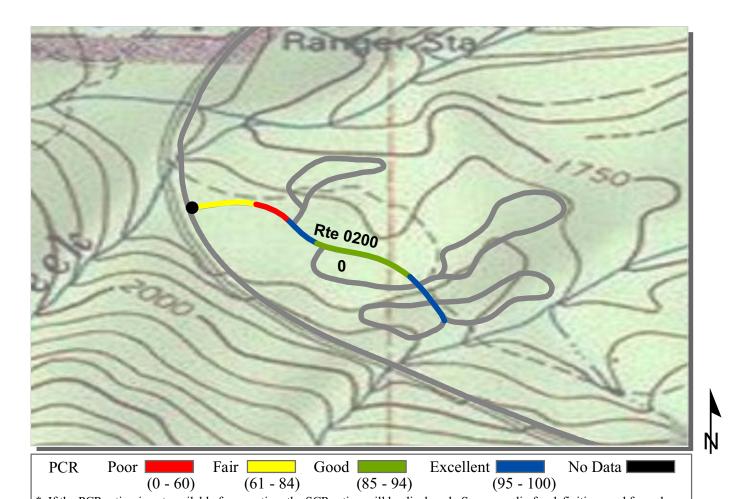
PACIFIC WEST REGION			 LLECTED: LENGTH:	9/21/2010 1.21 Miles
Section Number	0	1		
Section Length (mi)	1.00	0.21		
Cross Section Information				
Number of Lanes	2	2		
Paved Width (ft)	19	17		
Lane Width (ft)	8	8		
Roadway Condition Information				
SCR (Surface Condition Rating)	90	83		
PCR (Pavement Condition Rating)	74	74		
Distress Index Values				
Structural Crack Index	92	83		
Transverse Cracking Index	99	98		
Patching Index	98	100		
Rutting Index	90	91		
Roughness Condition Index (RCI)	50	61		

ROUTE: 0120 HURRICANE HILL ROAD

ψ

NOTES:

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



* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.
ROUTE: 0200 HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD

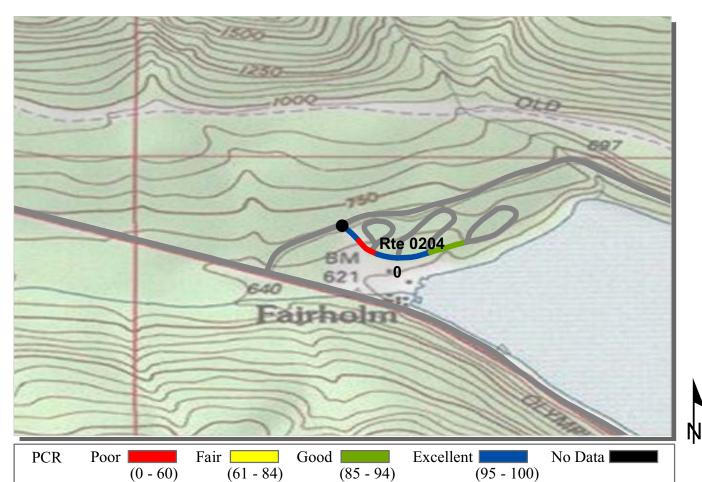
OLYM: OLYMPIC NATIONAL PARK

		CO	LLECTED:	9/21/2010
PACIFIC WEST REGION		TOTAL	LENGTH:	0.31 Miles
Section Number	0			
Section Length (mi)	0.31			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	20			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	74			
PCR (Pavement Condition Rating)	74			
Distress Index Values				
Structural Crack Index	74			
Transverse Cracking Index	98			
Patching Index	99			
Rutting Index	97			
Roughness Condition Index (RCI)	NC			

ROUTE: 0200 HEART O' THE HILLS CAMPGROUND ENTRANCE ROAD

0 10 1 10 0 1 0

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



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

I FOTED.

0/21/2010

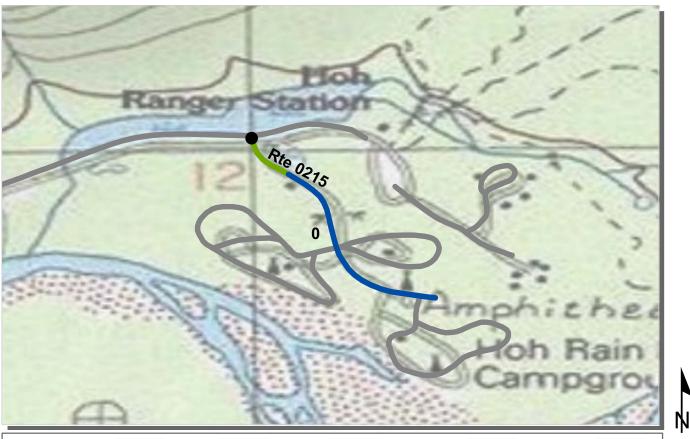
ROUTE: 0204 FAIRHOLM CAMPGROUND ENTRANCE ROAD OLYM : OLYMPIC NATIONAL PARK

			CO	LLECTED:	9/21/2010	
PACIFIC WEST REGION	TOTAL LENGTH			LENGTH:	0.21 Miles	
Section Number	0					
Section Length (mi)	0.21					
Cross Section Information						
Number of Lanes	2					
Paved Width (ft)	17					
Lane Width (ft)	8					
Roadway Condition Information						
SCR (Surface Condition Rating)	83					
PCR (Pavement Condition Rating)	83					
Distress Index Values						
Structural Crack Index	83					
Transverse Cracking Index	96					
Patching Index	99					
Rutting Index	93					
Roughness Condition Index (RCI)	NC					

ROUTE: 0204 FAIRHOLM CAMPGROUND ENTRANCE ROAD

NOTES:

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



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

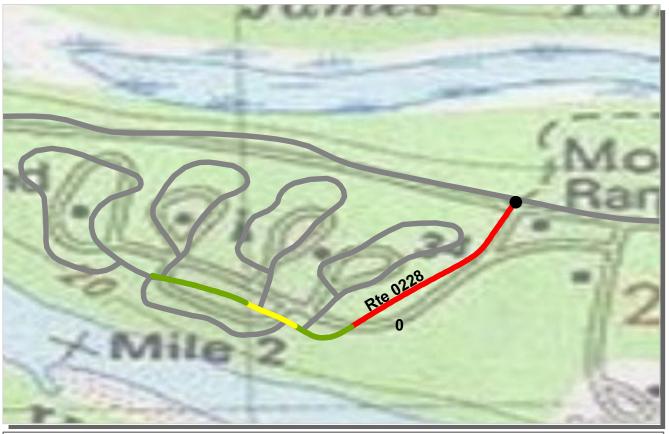
ROUTE: 0215 HOH CAMPGROUND ENTRANCE ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			LLECTED: LENGTH:	9/22/2010 0.29 Miles
Section Number	0			
Section Length (mi)	0.29			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	19			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	94			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	94			
Roughness Condition Index (RCI)	NC			

ROUTE: 0215 HOH CAMPGROUND ENTRANCE ROAD

NOTES:

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



	PCR	Poor	Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
*	If the PC	R rating is not availal	ble for a section, the	SCR rating will be dis	played. See appendix f	or definitions and formulas.

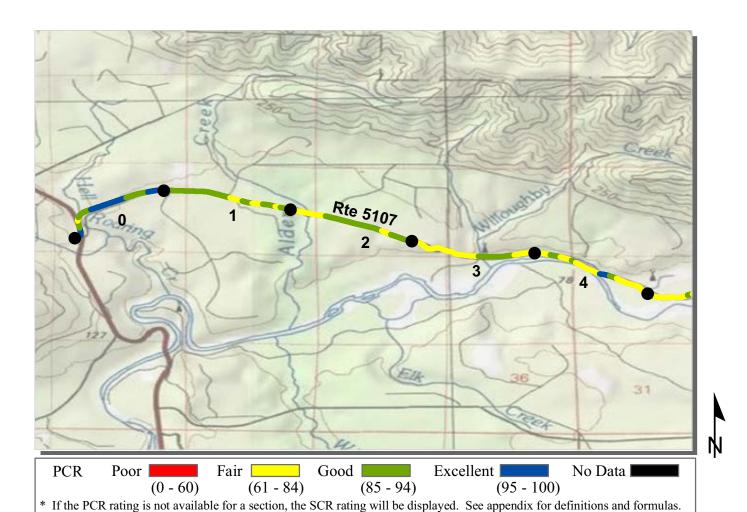
ROUTE: 0228 MORA CAMPGROUND ACCESS ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			LLECTED: LENGTH:	9/22/2010 0.29 Miles
Section Number	0			
Section Length (mi)	0.29			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	19			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	36			
PCR (Pavement Condition Rating)	36			
Distress Index Values				
Structural Crack Index	36			
Transverse Cracking Index	98			
Patching Index	100			
Rutting Index	90			
Roughness Condition Index (RCI)	NC			

ROUTE: 0228 MORA CAMPGROUND ACCESS ROAD

NOTES:

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



ROUTE: 5107 UPPER HOH ROAD OLYM : OLYMPIC NATIONAL PARK

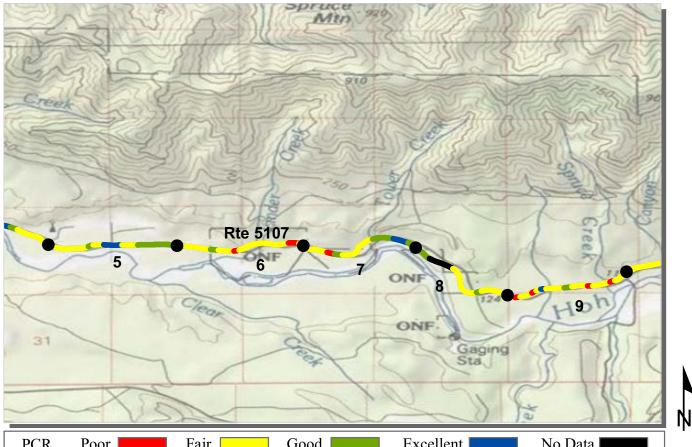
			CO	LLECTED:	9/22/2010
PACIFIC WEST REGION			ΤΟΤΑΙ	LENGTH:	12.07 Miles
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	27	28	22	22	22
Lane Width (ft)	11	11	11	10	10
Roadway Condition Information					
SCR (Surface Condition Rating)	95	91	93	92	94
PCR (Pavement Condition Rating)	91	87	85	76	81
Distress Index Values					
Structural Crack Index	100	100	100	99	100
Transverse Cracking Index	100	100	100	99	100
Patching Index	100	100	100	98	98
Rutting Index	95	91	93	92	94
Roughness Condition Index (RCI)	86	82	72	53	62

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



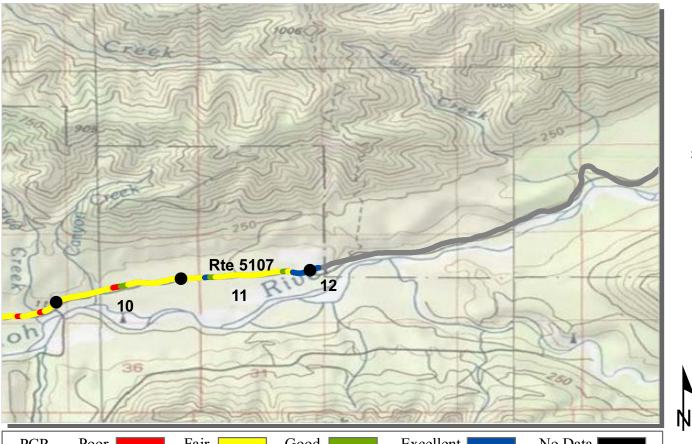
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100))
* If the PCR	R rating is not availa	ble for a section, the	SCR rating will be dist	played. See appendix for	definitions and formulas.

ROUTE: 5107 UPPER HOH ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION			TO	COLLECTE FAL LENGT	D: 9/22/2010 H: 12.07 Miles
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	21	20	20	21	20
Lane Width (ft)	10	10	10	11	10
Roadway Condition Information					
SCR (Surface Condition Rating)	95	88	90	92	81
PCR (Pavement Condition Rating)	83	74	80	76	70
Distress Index Values					
Structural Crack Index	100	99	99	99	98
Transverse Cracking Index	100	99	100	100	100
Patching Index	100	100	100	98	98
Rutting Index	95	88	90	92	81
Roughness Condition Index (RCI)	64	54	66	53	54

NOTES:

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



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

ROUTE: 5107 UPPER HOH ROAD OLYM: OLYMPIC NATIONAL PARK

PACIFIC WEST REGION

COLLECTED: 9/22/2010 TOTAL LENGTH: 12.07 Miles

PACIFIC WEST REGION	IUIAL LENGIH:	12.0/ NIII			
Section Number	10	11	12		
Section Length (mi)	1.00	1.00	0.07		
Cross Section Information					
Number of Lanes	2	2	2		
Paved Width (ft)	21	21	20		
Lane Width (ft)	10	11	9		
Roadway Condition Information					
SCR (Surface Condition Rating)	91	95	100		
PCR (Pavement Condition Rating)	75	78	100		
Distress Index Values					
Structural Crack Index	98	98	100		
Transverse Cracking Index	100	100	100		
Patching Index	100	100	100		
Rutting Index	91	95	100		
Roughness Condition Index (RCI)	52	53	100		

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

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

ROUTE: 5107 UPPER HOH ROAD

3

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



Olympic National Park



OLYMPIC NATIONAL PARK Route 0104ZZ

QUINAULT NORTH SHORE ROAD FROM SOUTH PARK BOUNDARY ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)

Summary Record

Route	Public /			Lane	MRL	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	Length (mi)	Width (ft)
0104ZZ	PUBLIC	9/21/2010	117,322	15.91	13.96	19.9
						Surface
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Туре
			NO CURB AND			
0	0	0	GUTTER	NO CURB	SUMMARY/76	AS

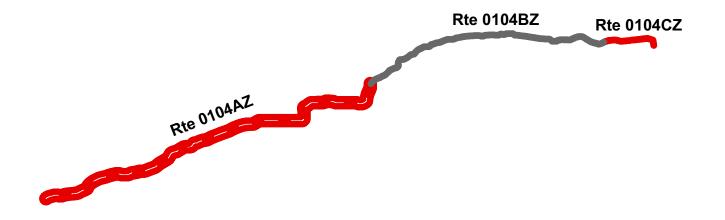
* Lane miles are based on 11' lane widths

NOTE: Route 0104ZZ is made up of

1 Data Collection Vehicle route (0104AZ)

1 Unpaved and uncollected route (0104BZ)

1 Manually Rated Line route (0104CZ)





OLYMPIC NATIONAL PARK Route 0104CZ

QUINAULT NORTH SHORE ROAD C FROM ROUTE 0104BZ (QUINAULT NORTH SHORE ROAD B) ROUTE 0105 (QUINAULT SOUTH SHORE ROAD)

Subcomponent Record

Route	Public /			Lane	MRL	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	Length (mi)	Width (ft)
0104CZ	PUBLIC	8/1/2010	117,322	2.02	1.10	20.2
						Surface
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Туре
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS











SOL DUC HOT SPRINGS ROAD FROM ROUTE 0103 (SOL DUC VALLEY ROAD) AT MP 12.14 ON RIGHT TO ROUTE 0955 (SOL DUC HOT SPRINGS PARKING)

Rte 0103

Route	Public /			Lane	MRL	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	Length (mi)	Width (ft)
0205	PUBLIC	9/16/2010	5,784	0.10	0.04	31.3
						Surface
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Туре
			NO CURB AND			
0	0	0	GUTTER	NO CURB	FAIR/73	AS

* Lane miles are based on 11' lane widths

Rte 0955





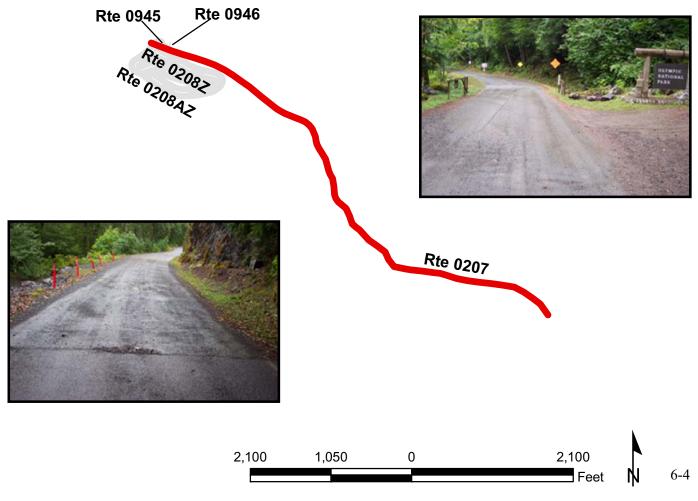
Rte 0205



STAIRCASE ROAD FROM SOUTH PARK BOUNDARY TO BRIDGE

Route	Public /			Lane	MRL	
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	Length (mi)	Width (ft)
0207	PUBLIC	9/16/2010	108,224	1.86	1.03	19.9
						Surface
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Туре
			NO CURB AND			
0	0	1	GUTTER	NO CURB	POOR/45	AS



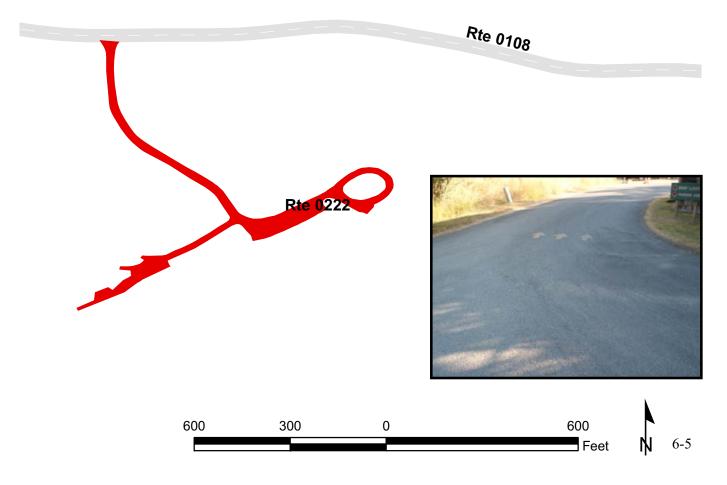


LOG CABIN ROAD FROM ROUTE 0108 (HURRICANE RIDGE ROAD) AT MP 2.47 THROUGH LODGE AREA

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0222	PUBLIC	8/2/2010	42,276	0.73	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	1	GUTTER	CURB	FAIR/73







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



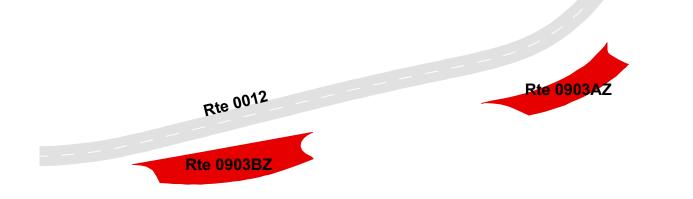
Olympic National Park



OLYMPIC NATIONAL PARK Route 0903ZZ

ANCIENT LAKE MORSE PARKING AREAS ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD)

	Summary Record								
Route	Public /								
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type				
0903ZZ	PUBLIC	8/2/2010	12,993	0.22	AS				
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR				
			CONCRETE CURB						
0	-		AND GUTTER	NO CURB	SUMMARY/90				





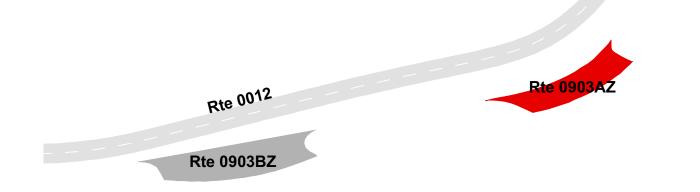
OLYMPIC NATIONAL PARK Route 0903AZ

ANCIENT LAKE MORSE PARKING AREA A ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 11.63

	Subcomponent Record								
Route	Public /								
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type				
0903AZ	PUBLIC	8/2/2010	6,482	0.11	AS				
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR				
			CONCRETE CURB						
0	1	0	AND GUTTER	NO CURB	GOOD/90				









OLYMPIC NATIONAL PARK Route 0903BZ

ANCIENT LAKE MORSE PARKING AREA B ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 11.70

	Subcomponent Record								
Route	Public /								
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type				
0903BZ	PUBLIC	8/2/2010	6,511	0.11	AS				
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR				
			CONCRETE CURB						
0	1	0	AND GUTTER	NO CURB	GOOD/90				







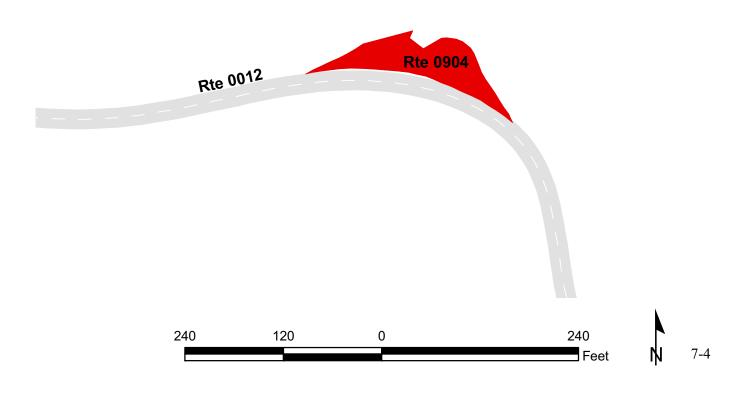


SWITCHBACK TRAILHEAD PARKING ADJACENT TO ROUTE 0012 (HURRICANE RIDGE ROAD) AT MP 14.91

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	8/2/2010	9,466	0.16	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
1	0	0	GUTTER	NO CURB	FAIR/73







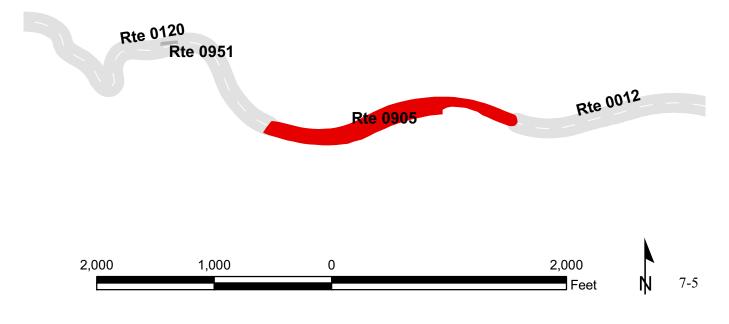
HURRICANE RIDGE VISITOR CENTER PARKING FROM ROUTE 0012 (HURRICANE RIDGE ROAD) TO ROUTE 0120 (HURRICANE HILL ROAD)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	9/16/2010	192,184	3.31	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			CONCRETE CURB		
0	10	0	AND GUTTER	NO CURB	EXCELLENT/97









HEATHER PARK PARKING

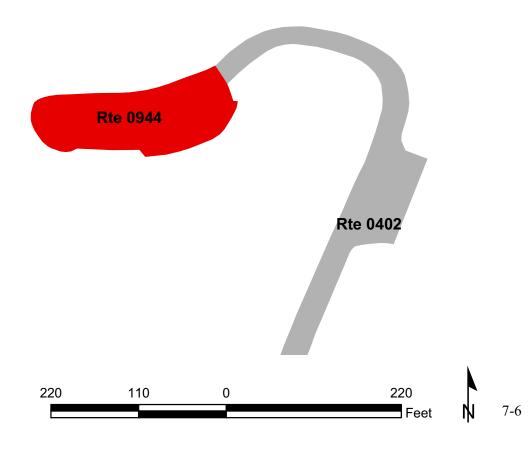
FROM ROUTE 0402 (HEART O' HILLS RESIDENCE ROAD)

TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0944	PUBLIC	8/1/2010	12,481	0.21	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			CONCRETE CURB		
0	0	0	AND GUTTER	NO CURB	FAIR/73







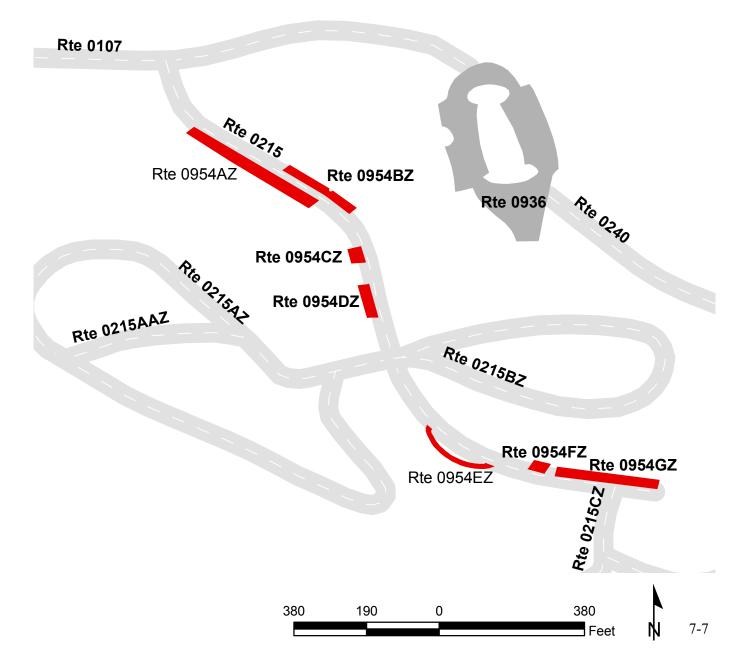
OLYMPIC NATIONAL PARK Route 0954ZZ

HOH CAMPGROUND PARKING AREAS ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD)

Summary Record							
Route	Public /						
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type		
0954ZZ	PUBLIC	8/1/2010	18,157	0.31	AS		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR		
NC**	NC**	NC**	NC**	NC**	NC**		

* Lane miles are based on 11' lane widths

** Only the following subcomponent routes were collected in Cycle-5: 0954BZ, 0954CZ, 0954DZ, 0954FZ & 0954GZ



OLYMPIC NATIONAL PARK Route 0954BZ

HOH CAMPGROUND PARKING B

ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.07 ON LEFT

Subcomponent Record						
Route	Public /					
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type	
0954BZ	PUBLIC	8/1/2010	2,888	0.05	AS	
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	
Culverts	Drop Inlets	Gates	Curb & Gutter CONCRETE CURB	Curb	PCR	

* Lane miles are based on 11' lane widths



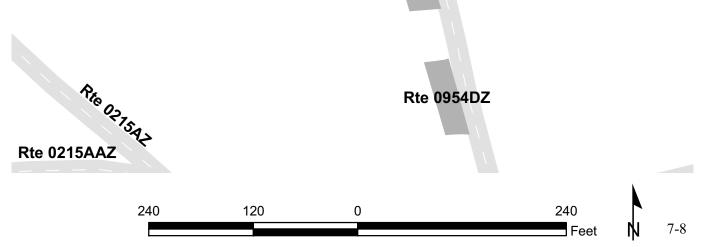
Rte 0954AZ

Rte 0215

Rte 0954BZ



Rte 0954CZ



OLYMPIC NATIONAL PARK Route 0954CZ

HOH CAMPGROUND PARKING C

ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.12 ON RIGHT

Subcomponent Record							
Route	Public /						
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type		
0954CZ	PUBLIC	8/1/2010	720	0.01	AS		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR		
			CONCRETE CURB				
0	0	0	AND GUTTER	NO CURB	GOOD/90		

* Lane miles are based on 11' lane widths

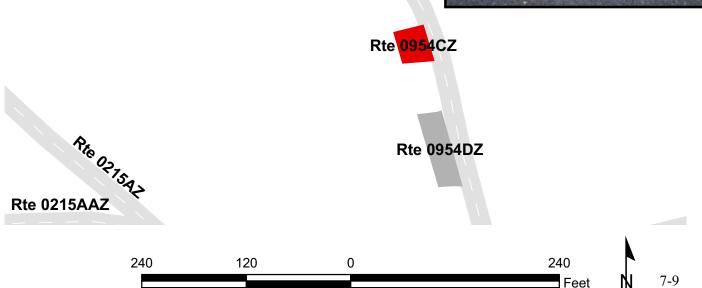


Rte 0954AZ

Rte 0215

Rte 0954BZ





OLYMPIC NATIONAL PARK Route 0954DZ

HOH CAMPGROUND PARKING D

ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.14 ON RIGHT

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0954DZ	PUBLIC	8/1/2010	1,560	0.03	AS
Culverte	Duon Inlota	Catar	Cruch & Crutton	Currh	PCR
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	run
	Drop Infets	Gates	CONCRETE CURB	Curb	FCK

* Lane miles are based on 11' lane widths



Rte 0954AZ

Rte 0215



Rte 0954BZ

0



120

240

Rte 0954CZ



240 Feet

7-10

OLYMPIC NATIONAL PARK Route 0954FZ

HOH CAMPGROUND PARKING F

ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.25 ON RIGHT

	Subcomponent Record						
Route	Public /						
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type		
0954FZ	PUBLIC	8/1/2010	769	0.01	AS		
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR		
			CONCRETE CURB				
0	0	0	AND GUTTER	NO CURB	GOOD/90		

* Lane miles are based on 11' lane widths

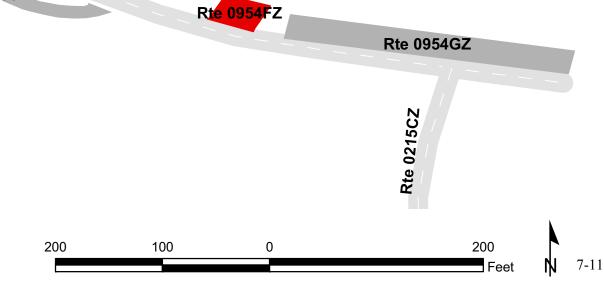
Rte 0215BZ







Rte 0215

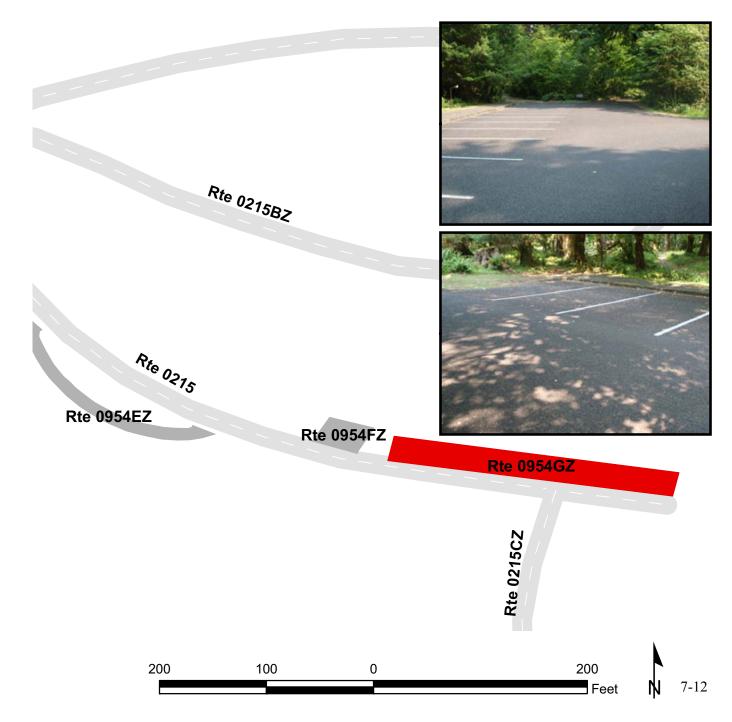


OLYMPIC NATIONAL PARK Route 0954GZ

HOH CAMPGROUND PARKING G

ADJACENT TO ROUTE 0215 (HOH CAMPGROUND ENTRANCE ROAD) AT MP 0.27 ON LEFT

Route	Public /		omponent Record		
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0954GZ	PUBLIC	8/1/2010	3,484	0.06	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
Culverts	Drop Inlets	Gates	Curb & Gutter CONCRETE CURB	Curb	PCR



MORA CAMPGROUND AND DUMPSTATION PARKING ADJACENT TO ROUTE 0228ZZ (MORA CAMPGROUND LOOPS) AT MP 0.13 ON LEFT

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0957	PUBLIC	8/1/2010	5,079	0.09	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			CONCRETE CURB		
0	0	0	AND GUTTER	NO CURB	FAIR/73

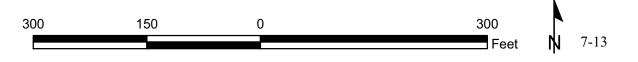
* Lane miles are based on 11' lane widths

Rte 0228AZ

Rte 0228







Rte 0957

OLYMPIC VISITOR CENTER ROAD FROM MOUNT ANGELES ROAD TO MOUNT ANGELES ROAD

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0963	PUBLIC	8/2/2010	44,694	0.77	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
2	1	0	GUTTER	CURB	FAIR/73

* Lane miles are based on 11' lane widths





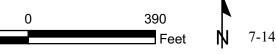






195

390



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



Olympic National Park



OLYM: DCV ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0114 HOKO ROAD	ROUTE 0120 HURRICANE HILL ROAD	UNIT
BRIDGE	1	0	EACH
CATTLE GUARD	0	0	EACH
CULVERT	0	0	EACH
CURB	0	0	LINEAR FEET
DROP INLET	0	0	EACH
GATE	0	0	EACH
GUARD/GUIDE RAIL	158	0	LINEAR FEET
CABLE	0	0	LINEAR FEET
NON-CABLE	158	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	LINEAR FEET
BOLLARD	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0	LINEAR FEET
INTERSECTION	6	6	EACH
LOW WATER CROSSING	0	0	EACH
LOW WATER CROSSING	0	0	LINEAR FEET
MILE MARKER	0	0	EACH
OVERPASS	0	0	EACH
PARK BOUNDARY	0	0	EACH
PAVED DITCH	0	0	LINEAR FEET
PULLOUT	0	0	EACH
PULLOUT	0	0	LINEAR FEET
RAILROAD CROSSING	0	0	EACH
RETAINING WALL	0	0	EACH
RETAINING WALL	0	0	LINEAR FEET
SIGN	7	6	EACH
STATE BOUNDARY	0	0	EACH
TRAFFIC LIGHT	0	0	EACH
TUNNEL	0	0	EACH
TUNNEL	0	0	LINEAR FEET

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

OLYM: STRUCTURE LIST

ROUTE	FUNCTIONAL	MILEPOST	MILEPOST		STRUCTURE
NUMBER	CLASS	START	END	FEATURE	NUMBER
0114	2	0.007	0.019	BRIDGE	9500-035

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



Olympic National Park



OLYM: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0114: HOKO ROAD

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

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM END OF ROUTE 5114 AND SOUTH SIDE OF COAL CREEK BRIDGE (AT GUARD RAIL)
0.000	0.000	INTERSECTION	N/A	ROUTE 5114 (HOKO-OZETTE ROAD)
0.006	0.006	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.006	0.006	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.006	0.021	GUARD/GUIDE RAIL	LEFT	N/A
0.006	0.021	GUARD/GUIDE RAIL	RIGHT	N/A
0.007	0.019	BRIDGE	N/A	9500-035 (COAL CREEK)
0.008	0.008	SIGN	RIGHT	WARNING, ONE LANE BRIDGE
0.022	0.022	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.022	0.022	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.022	0.022	SIGN	LEFT	WARNING, ONE LANE BRIDGE
0.029	0.029	INTERSECTION	LEFT	ROUTE 0943 (OZETTE PARKING)
0.066	0.066	INTERSECTION	LEFT	ROUTE 0943 (OZETTE PARKING)
0.086	0.086	SIGN	RIGHT	GUIDE, BOAT TRAILER PARKING
0.093	0.093	INTERSECTION	RIGHT	ROUTE 0943 (OZETTE PARKING)
0.118	0.118	INTERSECTION	N/A	PAVED ROUTE (DRIVEWAY)
0.118	0.118	INTERSECTION	LEFT	ROUTE 0943 (OZETTE PARKING)
0.118	0.118	ROUTE END	N/A	TO ROUTE 0943 (OZETTE PARKING)

OLYM: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0120: HURRICANE HILL ROAD

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

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0905 (HURRICANE RIDGE VISITOR CENTER PARKING)
0.000	0.000	INTERSECTION	N/A	ROUTE 0905 (HURRICANE RIDGE VISITOR CENTER PARKING)
0.183	0.183	INTERSECTION	RIGHT	ROUTE 0951 (LITTLE RIVER OVERLOOK PARKING)
0.273	0.273	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.335	0.335	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.814	0.814	INTERSECTION	LEFT	ROUTE 0906 (HURRICANE RIDGE PICNIC PARKING #1)
0.821	0.821	SIGN	RIGHT	GUIDE, HURRICANE HILL TRAIL A PICNIC AREA
0.920	0.920	INTERSECTION	LEFT	ROUTE 0907 (HURRICANE RIDGE PICNIC PARKING #2)
0.929	0.929	SIGN	LEFT	GUIDE, HURRICANE HILL TRAIL A PICNIC AREA
0.946	0.946	INTERSECTION	LEFT	ROUTE 0907 (HURRICANE RIDGE PICNIC PARKING #2)
1.191	1.191	SIGN	LEFT	REGULATORY, SPEED LIMIT 15
1.206	1.206	SIGN	N/A	REGULATORY, KEEP RIGHT
1.206	1.206	INTERSECTION	N/A	ROUTE 0908 (HURRICANE HILL TRAILHEAD PARKING)
1.206	1.206	ROUTE END	N/A	TO ROUTE 0908 (HURRICANE HILL TRAILHEAD PARKING)

Section 10 Appendix



Olympic National Park



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

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

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

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

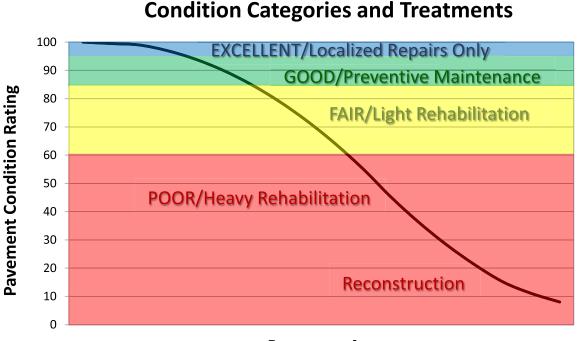
The changes that were implemented were endorsed by management at both the FHWA and NPS. In order to show the effectiveness of these changes, several sites were ground truth tested to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation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

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

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

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

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



Pavement Age

DESCRIPTION OF RATING SYSTEM

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

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

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

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

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

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

SURFACE DISTRESSES

Surface Condition Rating - SCR

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

Surface distresses determined from digital images

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

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

• Rutting

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

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

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

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

Roughness Condition Index - RCI

Additional condition data measured by DCV (lasers and accelerometers)

• Roughness (IRI)

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

Pavement Condition Rating - PCR

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

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

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

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

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

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

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

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

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

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

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

ALLIGATOR CRACKING

Description

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

Severity Levels

LOW

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

MEDIUM

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

HIGH

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

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

ALLIGATOR CRACKING SEVERITY LEVELS		Crack Pattern		
		LOW	MED	HIGH
	LOW	L	М	Н
rack /idth	MED	М	М	Н
Cr.	HI	Н	Н	Н

TABLE 2: Alligator Crack Severity Levels

LONGITUDINAL CRACKING

Description

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

Severity Levels

LOW

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

MED

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

HIGH

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

TRANSVERSE CRACKING

Description

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

Severity Levels

LOW

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

MED

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

HIGH

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

PATCHING AND POTHOLES

Description

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

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

Severity Levels

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

RUTTING

Description

Rutting is a longitudinal surface depression in the wheelpath.

Severity Levels

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

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

HIGH

Ruts with a measured depth ≥ 1.00 "

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

ROUGHNESS

Description

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

Severity Levels

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

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

INDEX FORMULAS

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

Alligator Crack Index

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

Where:

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

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

Percent of total area is computed as:

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

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

Longitudinal Crack Index

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

Where:

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

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

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

Structural Crack Index

SC_INDEX = [100 - ((100 - AC INDEX) + (100 - LC INDEX))]

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

Transverse Crack Index

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

Where:

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

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

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

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

Patching Index

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

Where:

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

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

Percent of total area is computed as:

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

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

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

Rutting Index

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

Where:

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

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

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

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

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

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

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

Roughness Condition Index (Asphalt)

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

Where:

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

Average IRI is computed as:

Left wheelpath IRI + Right wheelpath IRI 2

There is no applicable threshold for failure for this index.

Roughness Condition Index (Concrete)

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

For concrete, PCR = RCI

Surface Condition Rating Index

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

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

Where:

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

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

Data Collection Vehicle Subsystems

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

CAMERAS

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

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

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

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

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

DMI (Distance Measuring Instrument)

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

ROUGHNESS (IRI)

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

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

RUTTING

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

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

GPS & INERTIAL SYSTEMS

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

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

GPS on Manually Rated Roads (MRR)

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

Geodatabase - Background and Metadata

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

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

GLOSSARY OF TERMS AND ABBREVIATIONS

TERM ORABBREVIATIONDESCRIPTION OR DEFINITION

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