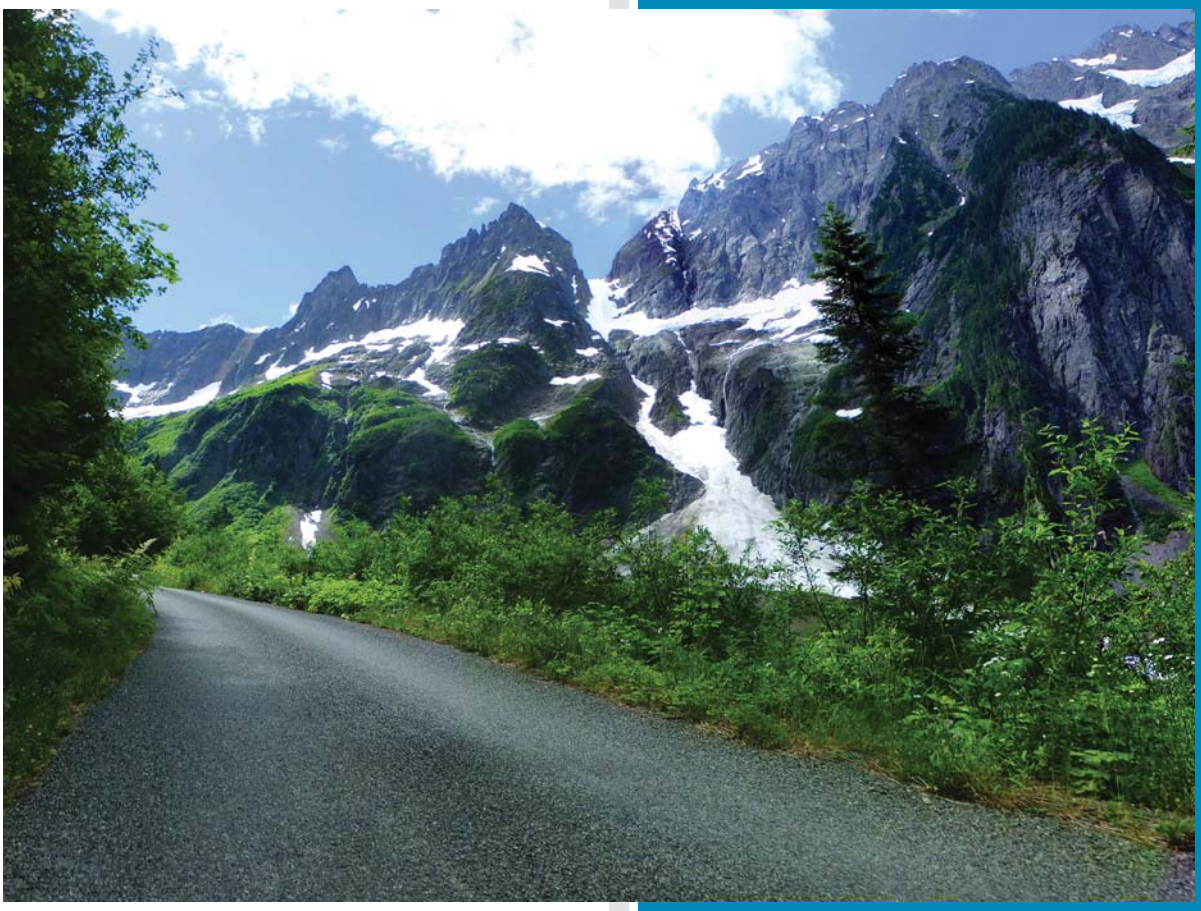
NOCA
Cycle 6

Final Report

Road Inventory and Condition Assessment of Paved Routes
North Cascades National Park

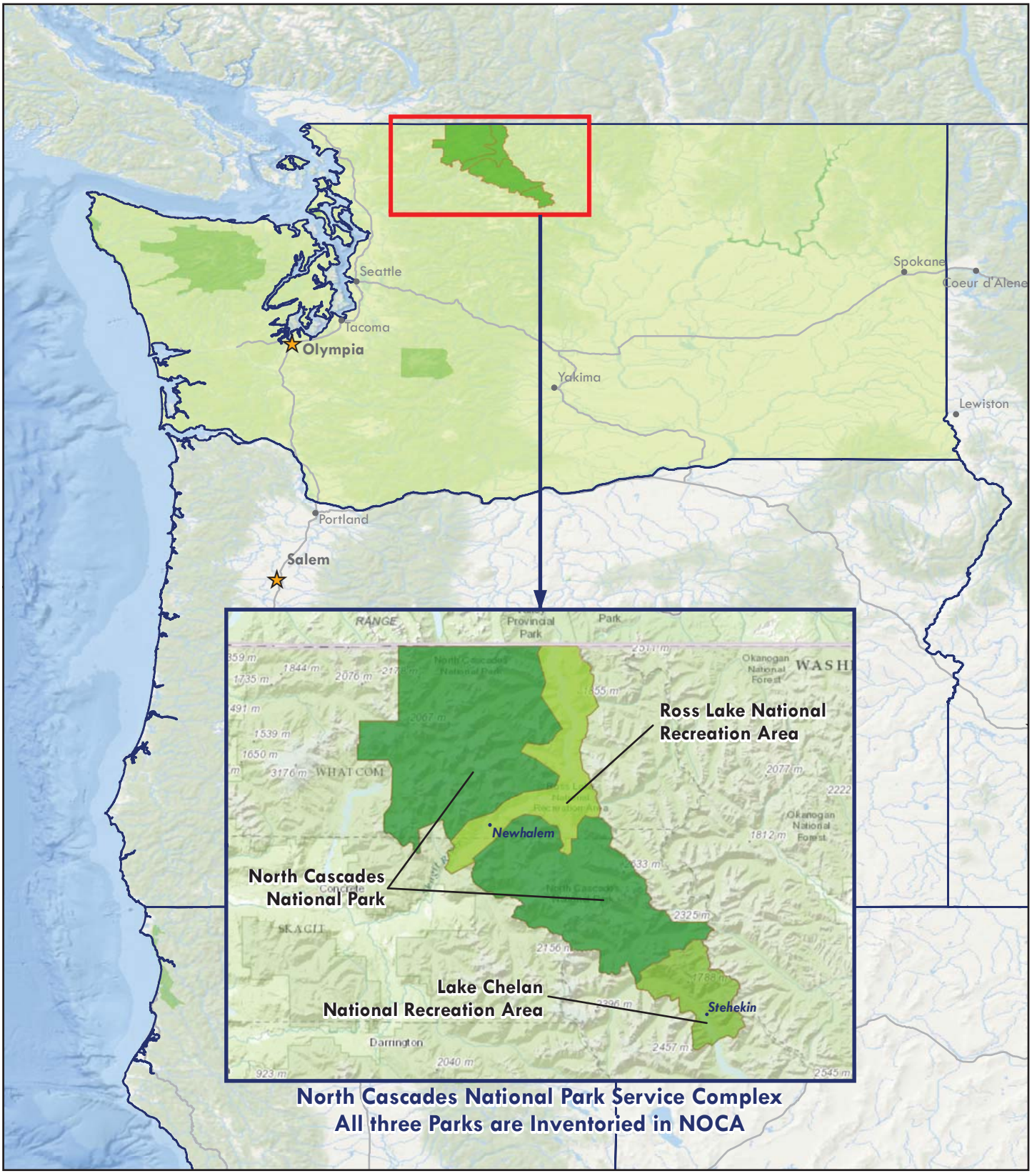


Federal Lands Highway
Road Inventory Program

Prepared By:
Federal Highway Administration
Eastern Federal Lands Highway Division
Road Inventory Program (RIP)

Report Date: April 2016

North Cascades National Park
in
Washington



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
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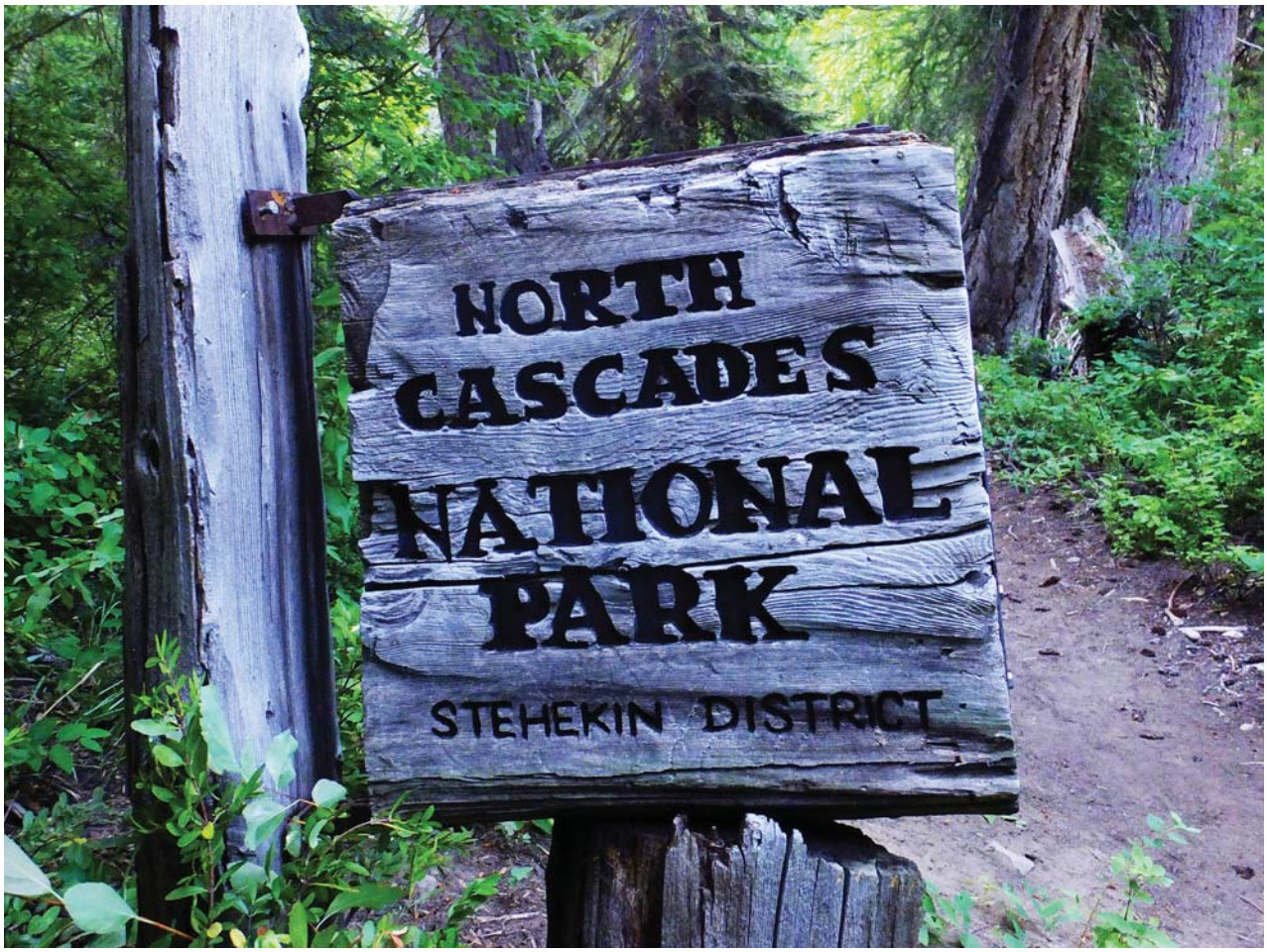
Introduction



North Cascades National Park

Federal Lands Highway
Road Inventory Program

Introduction

The Federal Highway Administration's (FHWA), Road Inventory Program (RIP) inventories all roads and parking areas in the National Park System, and performs condition inspections on all paved roads and parking areas for the National Park Service (NPS). This report contains the results of the Cycle 6 condition assessment of paved roads and parking lots for this park unit. This assessment was done using an automated, state-of-the-art pavement inspection vehicle as well as manual ratings. This information represents the condition of the paved assets at the time of the inspection. The pavement management system utilized by FHWA and the NPS uses these assessments to estimate future conditions and help prioritize pavement maintenance and rehabilitation projects. Further information about RIP data and its role in managing paved roads and bridges can be obtained by contacting the NPS Regional Transportation Program Manager.

A History of the Road Inventory Program:

The FHWA, in the mid-1970s, was charged with the task of identifying surface condition deficiencies and corrective priorities on 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 a Memorandum of Agreement (MOA) which established the RIP. This MOA was revised in 1980 to update RIP data collection standards and develop a long-range program to improve and maintain NPS roads to designated condition standards and establish a pavement management program.

The FHWA completed the initial phase of inventory in the early 1980s. As a result of this effort, each NPS unit included in the collection received a RIP Report known as the "Brown Book" which contained information that was inventoried during this first RIP phase. In the 1990s, a cyclical program was developed, and since then five cycles of collection have been completed. Cycle 6 is currently in progress. A summary of the RIP collection cycles is shown in the table below.

Cycle	Years	Parks Collected
Cycle 1	1994 - 1997	° 44 Large Parks
Cycle 2	1997 - 2001	° 79 Large Parks ° 5 Small Parks
Cycle 3	2001 - 2004	° All Large Parks ° All Small Parks
Cycle 4	2006 - 2010	° 86 Large Parks ° Several Small Parks
Cycle 5	2010 - 2014	° All Large Parks (Only functional class 1, 2, 7, and new/modified routes collected) ° All Small Parks (all roads and parking areas collected)
Cycle 6	2014 – 2020 (±)	° All roads and parking areas collected at all Parks ° Additional partial collections of functional class 1, 2, and 7 roads at Large Parks ° Cycle 6 is expected to last 6 years

Note: Large Parks have ≥ 10 Paved Miles; Small Parks have < 10 Paved Miles

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 Federal Lands Highway (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.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) amended Title 23 U.S.C., and under Section 203(c)(1-2) stated that the National Park Service in cooperation with the DOT/FHWA, shall maintain a comprehensive national inventory of their transportation facilities, with the goal of quantifying transportation infrastructure needs within the National Park System.

A History of the Pavement Management System:

In 2005, the FHWA began implementing the use of a pavement management system to assist the NPS in prioritizing Pavement Maintenance and Rehabilitation activities. The system used by FHWA is the Highway Pavement Management Application (HPMA), which 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. Regional prioritized lists and optimizations have been produced for most regions, and the Service's overall roadway Deferred Maintenance is calculated via the HPMA.

Overview of Cycle 6:

Cycle 6 launched in the spring of 2014 and will again comprise all NPS park units that are served by paved roads and/or parking areas. For Cycle 6, all paved roads (approximately 5,700 miles) and parking areas will be collected in all parks at least once, while the primary routes (functional class 1, 2, and 7 roads) at Large Parks will have additional collections. These multiple collections will provide updated condition data on a majority of the NPS's primary road network and help build a better pavement management system, allowing for more accurate pavement performance prediction models.

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

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Sterling, VA 20166
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Section 2
Park Route Inventory

North Cascades National Park

Federal Lands Highway
Road Inventory Program

Cycle 6 NPS / RIP Route ID Report

Report Date: 04/02/2016

(Numerical By Summary Route and Subcomponent #)

Federal Lands Highway
Road Inventory Program

Shading Color Key

White = Paved Routes, DCV Driven | Grey = Paved Routes, DCV not Driven | Black = Non-NPS Routes | = Concession Route

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DCV = Data Collection Vehicle
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NOCA *North Cascades National Park*

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
0010A	6	1	18118		STEHEKIN VALLEY ROAD (PAVED SECTION)	FROM ROUTE 0918A (STEHEKIN BOAT LANDING PARKING A) AND 0918B (STEHEKIN BOAT LANDING PARKING B)	TO ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	STEHEKIN	4.31	0.00	4.31	1		AS	5
0010B	NC		18121		STEHEKIN VALLEY ROAD (UNPAVED SECTION)	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0965 (CARWASH FALLS (END OF STEHEKIN VALLEY ROAD) PARKING)	STEHEKIN	0.00	8.31	8.31	1		GR	
0100A	6	1	60333		COMPANY CREEK ROAD (PAVED SECTION)	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	STEHEKIN	0.07	0.00	0.07	2		AS	5
0100B	NC		18010		COMPANY CREEK ROAD (UNPAVED SECTION)	FROM ROUTE 0100A (COMPANY CREEK ROAD (PAVED SECTION))	TO END AT PRIVATE PROPERTY (DRIVEWAY)	STEHEKIN	0.00	2.56	2.56	2		GR	
0101	6	1	17490		CASCADE RIVER ROAD	FROM END OF ROUTE 5002 (CASCADE RIVER ROAD (NON NPS SECTION)) AT WEST PARK BOUNDARY	TO ROUTE 0921 (CASCADE PASS TRAILHEAD PARKING)	SKAGIT	1.15	3.78	4.94	1		AS	4
0102	NC		17625		HOZOMEEN ROAD	FROM U.S. / CANADA BORDER	TO END	SKAGIT	0.00	2.28	2.28	2		GR	
0103	NC		17895		BUCKNER ORCHARD ACCESS ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END	STEHEKIN	0.00	0.50	0.50	2		GR	
0104	NC		18139		RAINBOW FALLS ACCESS ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END OF LOOP	STEHEKIN	0.00	0.15	0.15	2		GR	
0105	6	1	46862		ENVIRONMENTAL LEARNING CENTER ACCESS ROAD	FROM END OF ROUTE 5001 (DIABLO DAM ACCESS ROAD)	TO BEGINNING OF ROUTE 0430 (ELC/NCI ROADS) / END OF PAVEMENT AT SOUR DOUGH CREEK (GATE)	SKAGIT	0.19	0.00	0.19	2		AS	2
0106	NC		105662		HOZOMEEN EAST LANDING BOAT LAUNCH SPUR	FROM EAST LANDING FUEL AREA	TO EAST LANDING BOAT LAUNCH	SKAGIT	0.00	0.45	0.45	2		GR	

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0107	NC		105663		HOZOMEEN GOVERNMENT DOCK ROAD	FROM ROUTE 0102 (HOZOMEEN ROAD)	TO GOVERNMENT DOCK BOAT LAUNCH AND SHELTER	SKAGIT	0.00	0.33	0.33	2		GR	
0108	6	1	105644		OLSON CREEK ROAD	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO NPS PROPERTY LINE	SKAGIT	0.17	0.09	0.26	2		AS	1A
0109	NC		105656		GORGE LAKE CAMPGROUND ACCESS ROAD	FROM FOGLINE ON DIABLO ROAD	TO END OF ROAD AT ROMTEC	SKAGIT	0.00	0.09	0.09	2		GR	
0110	NC		105746		HIGH BRIDGE GARAGE ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT GARAGE	STEHEKIN	0.00	0.03	0.03	5		GR	
0200	6	1	28520		COLONIAL CREEK CAMPGROUND ACCESS SOUTH	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING) ON LEFT AND END OF ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A) ON RIGHT	SKAGIT	0.20	0.00	0.20	2		AS	2A
0200A	6	1	60409		COLONIAL CREEK CAMPGROUND LOOP A	FROM ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)	TO ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING) AND ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)	SKAGIT	0.53	0.00	0.53	3		AS	2A
0200B	6	1	60410		COLONIAL CREEK CAMPGROUND LOOP B	FROM ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)	TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)	SKAGIT	0.24	0.00	0.24	3		AS	2A
0200C	6	1	107959		COLONIAL CREEK CAMPGROUND LOOP C	FROM ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)	TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)	SKAGIT	0.08	0.00	0.08	3		AS	2A

Cycle 6 NPS / RIP Route ID Report

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NOCA *North Cascades National Park*

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
0200D	6	1	107960		COLONIAL CREEK CAMPGROUND LOOP D	FROM ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)	TO ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)	SKAGIT	0.03	0.00	0.03	3		AS	2A
0201	6	1	44086		GOODELL CREEK CAMPGROUND ACCESS ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A) ON RIGHT	SKAGIT	0.20	0.00	0.20	2		AS	1B
0201A	6	1	60417		GOODELL CREEK CAMPGROUND LOOP A	FROM END OF ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)	TO END OF LOOP	SKAGIT	0.27	0.00	0.27	3		AS	1B
0201B	6	1	60416		GOODELL CREEK CAMPGROUND LOOP B	FROM ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)	TO ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)	SKAGIT	0.16	0.00	0.16	3		AS	1B
0202	6	1	17457		NEWHALEM CREEK CAMPGROUND ACCESS ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO BEGINNING OF ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)	SKAGIT	0.10	0.00	0.10	2		AS	1B
0203	NC		17482		THORNTON LAKES ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO TRAILHEAD	SKAGIT	0.00	4.88	4.88	4		GR	
0204	6	1	46858		NORTH CASCADES VISITOR CENTER ACCESS ROAD	FROM ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)	TO END OF LOOP	SKAGIT	0.72	0.00	0.72	2		AS	1B
0205	6	1	60521		NEWHALEM RAFT LAUNCH LOOP	FROM ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)	TO ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)	SKAGIT	0.04	0.00	0.04	3		AS	1B
0206	6	1	60564		NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS	FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)	TO INTERSECTION OF ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A) AND ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)	SKAGIT	0.06	0.00	0.06	3		AS	1B

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0207	6	1	60565		NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS	FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)	TO INTERSECTION OF ROUTE 0210C (NEWHALEM CREEK CAMPGROUND LOOP C) AND ROUTE 0210D (NEWHALEM CREEK GROUP CAMPGROUND LOOP D)	SKAGIT	0.12	0.00	0.12	3		AS	1B
0208	6	1	60570		NEWHALEM CREEK CAMP TENDER STATION ROAD	FROM END OF ROUTE 0202 (NEWHALEM CREEK CAMPGROUND ACCESS ROAD)	TO END OF LOOP	SKAGIT	0.17	0.00	0.17	3		AS	1B
0209A	6	1	60411		COLONIAL CREEK CAMPGROUND NORTH LOOP A	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO END OF LOOP	SKAGIT	0.44	0.00	0.44	3		AS	2A
0209B	6	1	60412		COLONIAL CREEK CAMPGROUND NORTH LOOP B	FROM ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)	TO ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)	SKAGIT	0.04	0.00	0.04	3		AS	2A
0210A	6	1	60566		NEWHALEM CREEK CAMPGROUND LOOP A	FROM END OF ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS) ON RIGHT	TO END OF LOOP	SKAGIT	0.31	0.00	0.31	3		AS	1B
0210B	6	1	60567		NEWHALEM CREEK CAMPGROUND LOOP B	FROM END OF ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS) ON LEFT	TO END OF LOOP	SKAGIT	0.24	0.00	0.24	3		AS	1B
0210C	6	1	60568		NEWHALEM CREEK CAMPGROUND LOOP C	FROM ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)	TO END OF ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)	SKAGIT	0.42	0.00	0.42	3		AS	1B

Cycle 6 NPS / RIP Route ID Report

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ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
0210D	6	1	60569		NEWHALEM CREEK GROUP CAMPGROUND LOOP D	FROM END OF ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)	TO ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)	SKAGIT	0.17	0.00	0.17	3		AS	1B
0211	NC		46867		UPPER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD	FROM ROUTE 0407 (NEWHALEM GRAVEL STORAGE ROAD)	TO END	SKAGIT	0.00	0.81	0.81	3		GR	
0212	NC		46866		LOWER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO END	SKAGIT	0.00	0.39	0.39	3		GR	
0213	NC		60414		COPPER CREEK ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO RIVER	SKAGIT	0.00	0.29	0.29	3		GR	
0214	NC		60325		HARLEQUIN CAMPGROUND ROAD	FROM ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	TO END	STEHEKIN	0.00	0.17	0.17	4		NV	
0215	NC		46871		NEWHALEM CREEK TRAILHEAD ROAD SOUTH	FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)	TO TRAILHEAD	SKAGIT	0.00	1.44	1.44	2		GR	
0216	NC		46868		NEWHALEM FIRING RANGE ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO END	SKAGIT	0.00	0.20	0.20	6		GR	
0217	NC		105736		GOLDEN WEST VISITOR CENTER / HOUSE THAT JACK BUILT ROAD	FROM ROUTE 0402 (GOLDEN WEST ACCESS ROAD) AT GOLDEN WEST VISITOR CENTER	TO END AT HOUSE THAT JACK BUILT	STEHEKIN	0.00	0.03	0.03	3		GR	
0218	NC		105737		STEHEKIN LANDING LONG TERM PARKING LOT ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END AT LONG TERM PARKING	STEHEKIN	0.00	0.05	0.05	4		GR	
0219	NC		105744		STEHEKIN RAFT PUT-IN ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT RIVER BANK PARKING	STEHEKIN	0.00	0.06	0.06	4		GR	
0220	NC		105745		BULLION CAMP ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT CAMPGROUND END	STEHEKIN	0.00	0.07	0.07	4		GR	

Cycle 6 NPS / RIP Route ID Report

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Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
0221	NC		105747		HIGH BRIDGE CAMP ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT HIGH BRIDGE CAMPGROUND	STEHEKIN	0.00	0.07	0.07	3		GR	
0222	NC		105748		TUMWATER CAMP ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT TUMWATER CAMP	STEHEKIN	0.00	0.01	0.01	3		GR	
0223	NC		105666		HOZOMEEN CAMPGROUND LOWER LOOP ROAD	FROM ROUTE 0102 (HOZOMEEN ROAD) SOUTH	TO ROUTE 0102 (HOZOMEEN ROAD) NORTH	SKAGIT	0.00	0.22	0.22	3		GR	
0224	NC		105667		HOZOMEEN CAMPGROUND UPPER LOOP ROAD	FROM ROUTE 0102 (HOZOMEEN ROAD)	TO END OF LOOP (GAME CABIN)	SKAGIT	0.00	0.22	0.22	3		GR	
0225	NC		105729		HOZOMEEN WINNEBAGO FLATS CAMPGROUND LOOP	FROM ROUTE 0102 (HOZOMEEN ROAD) NORTH	TO ROUTE 0102 (HOZOMEEN ROAD) SOUTH	SKAGIT	0.00	0.12	0.12	3		GR	
0226	NC		105730		HOZOMEEN BASKETBALL COURT LOOP	FROM ROUTE 0102 (HOZOMEEN ROAD) NORTH	TO ROUTE 0102 (HOZOMEEN ROAD) SOUTH	SKAGIT	0.00	0.07	0.07	4		GR	
0227	NC		105645		MARBLEMOUNT POWER LINE ACCESS ROAD	FROM ROUTE 0108 (OLSON CREEK ROAD)	TO POWER LINE ROAD	SKAGIT	0.00	0.16	0.16	4		GR	
0228	NC		105652		NEWHALEM REARING PONDS ACCESS ROAD	FROM GATE AT ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	TO REARING PONDS	SKAGIT	0.00	1.16	1.16	6		GR	
0229	NC		105655		ELC WATER TREATMENT BUILDING SPUR	FROM MANHOLE ON ROUTE 0430 (ELC/NCI ROADS)	TO WATER TREATMENT BUILDING	SKAGIT	0.00	0.05	0.05	4		GR	
0230	NC		105659		ELC DEER CREEK / DRAINFIELD ROAD	FROM FORK AT ROUTE 0431 (ELC WATER TANK ROAD) AND ROUTE 0430 (ELC/NCI ROADS)	TO END OF DRAINFIELD PERIMETER	SKAGIT	0.00	0.32	0.32	4		GR	
0231	NC		105660		ELC BUSTER BROWN ROAD	FROM ROUTE 0230 (ELC DEER CREEK / DRAINFIELD ROAD)	TO BUSTER BROWN FLATS	SKAGIT	0.00	0.81	0.81	6		GR	
0232	NC		105732		COLONIAL CREEK CAMPGROUND WATER TANK ROAD	FROM GATE ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20)	TO WATER TANK VALVE BOX	SKAGIT	0.00	0.18	0.18	6		GR	

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NOCA *North Cascades National Park*

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
0233	NC		105657		GORGE LAKE NO-CAMPING ROAD	FROM FOGLINE ON DIABLO ROAD	TO END	SKAGIT	0.00	0.04	0.04	3		GR	
0400	6	1	60548		TREATMENT PLANT HILL ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END AT WASTE WATER TREATMENT PLANT	STEHEKIN	0.07	0.00	0.07	5		AS	5
0401	6	1	107961		NORTH CASCADES VISITOR CENTER SERVICE ROAD	FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)	TO END AND ROUTE 0916 (NORTH CASCADES VISITOR CENTER SERVICE PARKING)	SKAGIT	0.07	0.00	0.07	6		AS	1B
0402	NC		17787		GOLDEN WEST ACCESS ROAD	FROM BEGINNING OF ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END AT GOLDEN WEST VISITOR CENTER PARKING	STEHEKIN	0.00	0.26	0.26	3		GR	
0403	NC		60522		RAINBOW PIT ACCESS ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END OF LOOP	STEHEKIN	0.00	0.08	0.08	6		GR	
0404	NC		60343		AIRPORT, BONEYARD AND MAINTENANCE ACCESS LOOP	FROM ROUTE 0405 (COMPANY CREEK GRAVEL PIT ACCESS ROAD)	TO ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	STEHEKIN	0.00	0.20	0.20	5		GR	
0405	NC		60347		COMPANY CREEK GRAVEL PIT ACCESS ROAD	FROM ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	TO END	STEHEKIN	0.00	0.50	0.50	5		GR	
0406	NC		60348		MAINTENANCE YARD ACCESS ROAD	FROM ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	TO END OF LOOP	STEHEKIN	0.00	0.17	0.17	5		GR	
0407	NC		17439		NEWHALEM GRAVEL STORAGE ROAD	FROM END OF PAVEMENT ON DOT ACCESS ROAD	TO END OF LOOP	SKAGIT	0.00	0.30	0.30	5		GR	
0408	NC		105733		STEHEKIN WATER RESERVOIR / ANTENNA ROAD	FROM ROUTE 0409 (GOLDEN WEST VISITOR CENTER CABINS ROAD)	TO END	STEHEKIN	0.00	0.12	0.12	6		NV	
0409	NC		105734		GOLDEN WEST VISITOR CENTER CABINS ROAD	FROM ROUTE 0402 (GOLDEN WEST ACCESS ROAD)	TO END AT UPPER PUBLIC PARKING	STEHEKIN	0.00	0.09	0.09	5		GR	

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ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

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0410	NC		105735		CORRAL TO FIRE CACHE ROAD	FROM ROUTE 0402 (GOLDEN WEST ACCESS ROAD) AT GOLDEN WEST VISITOR CENTER	TO END AT CORRAL	STEHEKIN	0.00	0.11	0.11	6		GR	
0411	NC		105738		SILVER BAY ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END OF NPS LINE	STEHEKIN	0.00	0.03	0.03	2		GR	
0412	NC		105739		STEHEKIN CASTLE ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO END AT LOOP END	STEHEKIN	0.00	0.15	0.15	5		GR	
0413	NC		105740		STEHEKIN COMMUNITY HALL ROAD	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	0.00	0.10	0.10	3		GR	
0414	NC		105741		BUCKNER POWDER HOUSE ROAD	FROM ROUTE 0103 (BUCKNER ORCHARD ACCESS ROAD)	TO END AT POWDER HOUSE	STEHEKIN	0.00	0.12	0.12	6		GR	
0415	NC		105742		TOLBER SPUR ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT RIVERSIDE CHANNEL, OLD BRIDGE SITE	STEHEKIN	0.00	0.13	0.13	4		GR	
0416	NC		105743		STEHEKIN SHOOTING RANGE ROAD	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO END AT SHOOTING RANGE PARKING	STEHEKIN	0.00	0.10	0.10	4		GR	
0417	NC		105750		YACC SPUR ROAD	FROM ROUTE 0404 (AIRPORT, BONEYARD AND MAINTENANCE ACCESS LOOP)	TO END AT YACC RESIDENCES	STEHEKIN	0.00	0.04	0.04	4		GR	
0418	NC		105751		STEHEKIN BONEYARD SPUR ROAD	FROM ROUTE 0404 (AIRPORT, BONEYARD AND MAINTENANCE ACCESS LOOP)	TO END AT BONEYARD LOOP	STEHEKIN	0.00	0.09	0.09	4		GR	
0419	NC		105752		STEHEKIN CARPENTER SHOP ROAD	FROM ROUTE 0100B (COMPANY CREEK ROAD (UNPAVED SECTION))	TO END AT CARPENTER SHOP	STEHEKIN	0.00	0.03	0.03	5		GR	
0420	NC		105664		HOZOMEEN STORAGE AREA ROAD	FROM HOZOMEEN GOVERNMENT DOCK ROAD	TO GRAVEL STORAGE	SKAGIT	0.00	0.01	0.01	6		GR	
0421	NC		105665		HOZOMEEN WATER TANK ROAD	FROM ROUTE 0102 (HOZOMEEN ROAD)	TO WATER TANK	SKAGIT	0.00	0.04	0.04	6		GR	

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0422	NC		105728		HOZOMEEN HOUSING COMPOUND LOOP	FROM ROUTE 0102 (HOZOMEEN ROAD) NORTH	TO ROUTE 0102 (HOZOMEEN ROAD) SOUTH	SKAGIT	0.00	0.14	0.14	5		GR	
0423	NC		105646		MARBLEMOUNT BONEYARD LOOP	FROM ROUTE 0108 (OLSON CREEK ROAD)	TO ROUTE 0108 (OLSON CREEK ROAD)	SKAGIT	0.00	0.05	0.05	6		GR	
0424	NC		105647		MARBLEMOUNT NORTH PASTURE ROAD	FROM ROUTE 0423 (MARBLEMOUNT BONEYARD LOOP)	TO END	SKAGIT	0.00	0.15	0.15	6		GR	
0425	NC		105648		MARBLEMOUNT HELISPOT ROAD	FROM ROUTE 0108 (OLSON CREEK ROAD)	TO HELISPOT	SKAGIT	0.00	0.03	0.03	6		GR	
0426	6	1	105649		MARBLEMOUNT BARN ROAD	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO ROUTE 0108 (OLSON CREEK ROAD)	SKAGIT	0.05	0.00	0.05	5		AS	1A
0427	NC		105650		RICHMYER GRAVEL STORAGE ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO END	SKAGIT	0.00	0.08	0.08	6		GR	
0428	NC		105651		NEWHALEM WAREHOUSE LOOP ROAD	FROM END OF PAVEMENT AT WSDOT FACILITY	TO END OF LOOP	SKAGIT	0.00	0.14	0.14	5		GR	
0429	NC		105653		NEWHALEM TRAILER COURT ROAD	FROM ROUTE 0407 (NEWHALEM GRAVEL STORAGE ROAD)	TO BEGINNING OF PAVEMENT AT WSDOT FACILITY	SKAGIT	0.00	0.16	0.16	5		GR	
0430	NC		105654		ELC/NCI ROADS	FROM END OF ROUTE 0105 (ENVIRONMENTAL LEARNING CENTER ACCESS ROAD) / MAIN ENTRY GATE	TO FORK AT ROUTE 0431 (ELC WATER TANK ROAD) AND ROUTE 0230 (ELC DEER CREEK / DRAINFIELD ROAD)	SKAGIT	0.00	0.32	0.32	3		GR	
0431	NC		105658		ELC WATER TANK ROAD	FROM FORK A ROUTE 0430 (ELC/NCI ROADS) AND ROUTE 0230 (ELC DEER CREEK / DRAINFIELD ROAD)	TO WATER TANK ENCLOSURE	SKAGIT	0.00	0.10	0.10	6		GR	
0432	NC		105731		COLONIAL CREEK CAMPGROUND BOATHOUSE ROAD	FROM GATE ADJACENT TO THUNDER KNOB TRAIL PARKING	TO PAVED PAD FOR BOATHOUSE	SKAGIT	0.00	0.04	0.04	6		GR	

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ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

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0433	NC		106843		BURN PILE LOOP ROAD	FROM ROUTE 0404 (AIRPORT, BONEYARD AND MAINTENANCE ACCESS LOOP)	TO END OF LOOP	STEHEKIN	0.00	0.13	0.13	5		GR	
0434	NC		28521		STEHEKIN RANGER STATION REAR ACCESS ROAD	FROM ROUTE 0400 (TREATMENT PLANT HILL ROAD)	TO BEHIND OLD RANGER STATION PARKING	STEHEKIN	0.00	0.10	0.10	5		GR	
0435A	6	1	107962		MARBLEMOUNT COUNCIL OAK DRIVE	FROM END OF RANGER STATION ROAD	TO ROUTE 0108 (OLSON CREEK ROAD)	SKAGIT	0.39	0.00	0.39	5		AS	1A
0435B	6	1	107963		MARBLEMOUNT COUNCIL OAK SPUR	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	SKAGIT	0.03	0.00	0.03	5		AS	1A
0436	NC		105661		HAPPY LANDING ROAD	FROM ROUTE 0437 (ROSS HAUL ROAD)	TO END AT PIT TOILET	SKAGIT	0.00	0.06	0.06	5		GR	
0437	NC		114732		ROSS HAUL ROAD	FROM DIABLO LAKE GOVERNMENT DOCK	TO LANDING ON ROSS LAKE	SKAGIT	0.00	1.44	1.44	5		GR	

NON-NPS ROADS INVENTORY

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
5000	4	1			STATE HIGHWAY 20	FROM WEST BOUNDARY AT END OF BACON CREEK BRIDGE (APPROX MP 112)	TO EAST BOUNDARY AT SIGN (APPROX MP 141)	SKAGIT	30.25	0.00	30.25			AS	1,2,3
5001	4	1			DIABLO DAM ACCESS ROAD	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO BEGINNING OF ROUTE 0105 (ENVIRONMENTAL LEARNING CENTER ACCESS ROAD) / CITY LIGHT BOAT HOUSE	SKAGIT	1.01	0.00	1.01			AS	2
5002	6	1			CASCADE RIVER ROAD (NON NPS SECTION)	FROM STATE HIGHWAY 20 IN MARBLEMOUNT	TO BEGINNING OF ROUTE 0101 (CASCADE RIVER ROAD) AT PARK BOUNDARY	SKAGIT	10.28	7.80	18.07			AS	1,4

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PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0900A	6	1	16690		MARBLEMOUNT ADMINISTRATIVE PUBLIC PARKING	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO PARKING	SKAGIT	PUBLIC	4,490	AS	1A
0900B	6	1	60418		MARBLEMOUNT WIC PARKING	FROM ROUTE 0108 (OLSON CREEK ROAD)	TO INTERSECTION OF ROUTE 0108 (OLSON CREEK ROAD) AND ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	SKAGIT	PUBLIC	7,834	AS	1A
0900C	6	1	108073		MARBLEMOUNT ADMINISTRATIVE PRIVATE PARKING	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO PARKING	SKAGIT	NONPUBLIC	11,041	AS	1A
0900D	6	1	108074		MARBLEMOUNT SHOP PARKING	FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)	TO PARKING	SKAGIT	NONPUBLIC	14,666	AS	1A
0901	6	1	60552		WEST ENTRANCE SIGN PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO ROUTE 5000 (STATE HIGHWAY 20)	SKAGIT	PUBLIC	5,561	AS	1
0902A	6	1	114649		GOODELL CREEK RAFT LAUNCH PARKING A	ADJACENT TO ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)		SKAGIT	PUBLIC	2,557	AS	1B
0902B	6	1	108075		GOODELL CREEK RAFT LAUNCH PARKING B	ADJACENT TO ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)		SKAGIT	PUBLIC	1,946	AS	1B
0903A	6	1	17427		NORTH CASCADES VISITOR CENTER PARKING A	ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)		SKAGIT	PUBLIC	4,570	AS	1B
0903B	6	1	60510		NORTH CASCADES VISITOR CENTER PARKING B	ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)		SKAGIT	PUBLIC	4,865	AS	1B
0903C	6	1	60512		NORTH CASCADES VISITOR CENTER PARKING C	ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)		SKAGIT	PUBLIC	3,578	AS	1B

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Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0903D	6	1	60514		NORTH CASCADES VISITOR CENTER PARKING D	FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD) AT MP 0.6	TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)	SKAGIT	PUBLIC	6,635	AS	1B
0904	6	1	43978		GORGE CREEK OVERLOOK TRAILHEAD PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 123.2	TO ROUTE 5000 (STATE HIGHWAY 20)	SKAGIT	PUBLIC	27,656	AS	2
0905	6	1	60402		GORGE CREEK PHOTO-OP PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 123.35	TO ROUTE 5000 (STATE HIGHWAY 20)	SKAGIT	PUBLIC	11,183	AS	2
0906	6	1	46856		DIABLO LAKE OVERLOOK PARKING LOT	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 131.5	TO PARKING	SKAGIT	PUBLIC	56,922	AS	2
0907	6	1	17541		INTERPRETIVE PULLOUT (DIABLO LAKE)	ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 133		SKAGIT	PUBLIC	17,615	AS	3
0908	6	1	17561		ROSS DAM TRAILHEAD PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 134.25	TO PARKING	SKAGIT	PUBLIC	11,733	AS	3
0909	6	1	38579		HAPPY CREEK NATURE TRAIL PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 134	TO PARKING	SKAGIT	PUBLIC	9,521	AS	3
0910A	6	1	17563		ROSS LAKE OVERLOOK A	ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 134		SKAGIT	PUBLIC	9,635	AS	3
0910B	6	1	60523		ROSS LAKE OVERLOOK B	ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 134		SKAGIT	PUBLIC	5,141	AS	3
0911	6	1	60358		EAST ENTRANCE SIGN PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO PARKING	SKAGIT	PUBLIC	26,129	AS	3
0912	6	1	60419		NEWHALEM CREEK CAMP TENDER PARKING	ADJACENT TO ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)		SKAGIT	PUBLIC	1,041	AS	1B
0913	6	1	60562		NEWHALEM CREEK DUMP STATION	FROM ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)	TO ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)	SKAGIT	PUBLIC	4,513	AS	1B
0914	6	1	60407		COLONIAL CREEK CAMPGROUND ACCESS PARKING	FROM INTERSECTION OF ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH) AND ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)	TO ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)	SKAGIT	PUBLIC	65,181	AS	2A

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0915	6	1	60408		COLONIAL CREEK CAMPGROUND DUMP STATION	FROM ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)	TO ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)	SKAGIT	PUBLIC	11,296	AS	2A
0916	6	1	60516		NORTH CASCADES VISITOR CENTER SERVICE PARKING	ADJACENT TO ROUTE 0401 (NORTH CASCADES VISITOR CENTER SERVICE ROAD)		SKAGIT	NONPUBLIC	1,637	AS	1B
0916B	NC		245990		NORTH CASCADES VISITOR CENTER UNPAVED SERVICE PARKING	ADJACENT TO ROUTE 0401 (NORTH CASCADES VISITOR CENTER SERVICE ROAD)		SKAGIT	NONPUBLIC	612	GR	
0917	NC		60528		STEHEKIN RANGER STATION REAR PARKING	FROM ROUTE 0434 (STEHEKIN RANGER STATION REAR ACCESS ROAD)	TO PARKING	STEHEKIN	NONPUBLIC	800	GR	
0918A	6	1	17812		STEHEKIN BOAT LANDING PARKING A	ADJACENT TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))		STEHEKIN	PUBLIC	5,570	AS	5
0918B	6	1	46865		STEHEKIN BOAT LANDING PARKING B	ADJACENT TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))		STEHEKIN	PUBLIC	2,133	AS	5
0919	NC		60540		THORNTON LAKES TRAILHEAD PARKING	FROM ROUTE 0203 (THORNTON LAKES ROAD)	TO PARKING	SKAGIT	PUBLIC	300	GR	
0920A	NC		17564		EAST BANK TRAILHEAD PARKING A (WESTBOUND)	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 138	TO PARKING	SKAGIT	PUBLIC	9,000	GR	
0920B	NC		60413		EAST BANK TRAILHEAD PARKING B (EASTBOUND)	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 138	TO PARKING	SKAGIT	PUBLIC	6,021	GR	
0921	NC		17492		CASCADE PASS TRAILHEAD PARKING	FROM END OF ROUTE 0101 (CASCADE RIVER ROAD)	TO PARKING	SKAGIT	PUBLIC	11,176	GR	
0922	NC		60354		ENVIRONMENTAL LEARNING CENTER / DIABLO LAKE TRAILHEAD PARKING	FROM ROUTE 0105 (ENVIRONMENTAL LEARNING CENTER ACCESS ROAD)	TO ROUTE 0105 (ENVIRONMENTAL LEARNING CENTER ACCESS ROAD)	SKAGIT	PUBLIC	1,676	GR	
0926	6	1	81120		FIELDS POINT PARKING	FROM FIELDS POINT ROAD	TO PARKING	STEHEKIN	PUBLIC	205,342	AS	6
0927	NC		17560		PYRAMID LAKE TRAILHEAD PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 127	TO PARKING	SKAGIT	PUBLIC	3,996	GR	

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NOCA *North Cascades National Park*

PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0928	NC		105758		UPPER GOODELL CAMPGROUND DAY USE PARKING	FROM ROUTE 0211 (UPPER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD)	TO ROUTE 0211 (UPPER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD)	SKAGIT	PUBLIC	720	GR	
0929	NC		105783		STEHEKIN BUS/GAS PUMP PARKING	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	NONPUBLIC	750	GR	
0930	NC		105785		STEHEKIN SUMMER BARGE LANDING PARKING	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	NONPUBLIC	7,020	GR	
0931	NC		105788		COURTNEY LOG CABIN PARKING A	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	PUBLIC	1,820	GR	
0932	NC		105794		STEHEKIN HIGH BRIDGE PARKING	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	STEHEKIN	PUBLIC	2,100	GR	
0933	NC		105795		STEHEKIN MAINTENANCE YARD PARKING	FROM ROUTE 0406 (MAINTENANCE YARD ACCESS ROAD)	TO ROUTE 0406 (MAINTENANCE YARD ACCESS ROAD)	STEHEKIN	PUBLIC	3,800	GR	
0934	NC		105765		JOHNSON CABIN PARKING	FROM ROUTE 0101 (CASCADE RIVER ROAD)	TO ROUTE 0101 (CASCADE RIVER ROAD)	SKAGIT	PUBLIC	520	GR	
0935	NC		105766		VALUE MINES PARKING	FROM ROUTE 0101 (CASCADE RIVER ROAD)	TO ROUTE 0101 (CASCADE RIVER ROAD)	SKAGIT	PUBLIC	1,900	GR	
0936	NC		105769		THORNTON PARKING LEFT	FROM ROUTE 0203 (THORNTON LAKES ROAD)	TO ROUTE 0203 (THORNTON LAKES ROAD)	SKAGIT	PUBLIC	1,008	GR	
0937	NC		105781		STEHEKIN GOLDEN WEST PARKING	FROM ROUTE 0402 (GOLDEN WEST ACCESS ROAD)	TO ROUTE 0402 (GOLDEN WEST ACCESS ROAD)	STEHEKIN	PUBLIC	1,480	GR	
0938	NC		105784		STEHEKIN POST OFFICE PARKING	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	PUBLIC	3,924	GR	
0939	NC		105791		STEHEKIN COMMUNITY HALL PARKING	FROM ROUTE 0413 (STEHEKIN COMMUNITY HALL ROAD)	TO ROUTE 0413 (STEHEKIN COMMUNITY HALL ROAD)	STEHEKIN	PUBLIC	1,380	GR	
0940	NC		105753		COW HEAVEN TRAILHEAD PARKING	ADJACENT TO ROUTE 0108 (OLSON CREEK ROAD)		SKAGIT	PUBLIC	640	GR	
0941	NC		105755		NEWHALEM FIRING RANGE PARKING	FROM ROUTE 0216 (NEWHALEM FIRING RANGE ROAD)	TO ROUTE 0216 (NEWHALEM FIRING RANGE ROAD)	SKAGIT	NONPUBLIC	800	GR	

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NOCA *North Cascades National Park*

PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0942	NC		105763		BOUNDARY PARKING	FROM ROUTE 0101 (CASCADE RIVER ROAD)	TO ROUTE 0101 (CASCADE RIVER ROAD)	SKAGIT	PUBLIC	760	GR	
0943	NC		105764		COUNTY TURNAROUND PARKING	FROM ROUTE 0101 (CASCADE RIVER ROAD)	TO ROUTE 0101 (CASCADE RIVER ROAD)	SKAGIT	PUBLIC	2,200	GR	
0944	NC		105777		HOZOMEEN HOUSING COMPOUND PARKING	FROM ROUTE 0422 (HOZOMEEN HOUSING COMPOUND LOOP)	TO ROUTE 0422 (HOZOMEEN HOUSING COMPOUND LOOP)	SKAGIT	PUBLIC	4,050	GR	
0945	NC		105786		STEHEKIN LANDING LONG-TERM PARKING	FROM ROUTE 0218 (STEHEKIN LANDING LONG TERM PARKING LOT ROAD)	TO ROUTE 0218 (STEHEKIN LANDING LONG TERM PARKING LOT ROAD)	STEHEKIN	PUBLIC	13,296	GR	
0946	NC		105789		COURTNEY LOG CABIN PARKING B	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	PUBLIC	900	GR	
0947	NC		105792		STEHEKIN OLD SCHOOL PARKING	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	PUBLIC	1,925	GR	
0948	NC		105797		BUCKNER PACKING SHED PARKING	FROM ROUTE 0103 (BUCKNER ORCHARD ACCESS ROAD)	TO ROUTE 0103 (BUCKNER ORCHARD ACCESS ROAD)	STEHEKIN	PUBLIC	600	GR	
0949	NC		105754		OLSON CREEK ROAD PARKING	ADJACENT TO ROUTE 0108 (OLSON CREEK ROAD)		SKAGIT	PUBLIC	3,200	GR	
0950	NC		105761		NEWHALEM WATER TANK PARKING	FROM ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	TO ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	SKAGIT	PUBLIC	1,800	GR	
0951	NC		105780		COLONIAL CAMPGROUND NORTH WALK-IN SITES PARKING	FROM ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)	TO ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)	SKAGIT	PUBLIC	1,176	GR	
0952	NC		105782		STEHEKIN FIRE CACHE PARKING	FROM ROUTE 0402 (GOLDEN WEST ACCESS ROAD)	TO ROUTE 0402 (GOLDEN WEST ACCESS ROAD)	STEHEKIN	NONPUBLIC	1,200	GR	
0953	NC		105787		STEHEKIN WASTEWATER TREATMENT PLANT PARKING	FROM ROUTE 0400 (TREATMENT PLANT HILL ROAD)	TO ROUTE 0400 (TREATMENT PLANT HILL ROAD)	STEHEKIN	NONPUBLIC	840	GR	
0954	NC		105793		STEHEKIN RAINBOW FALLS PARKING	FROM ROUTE 0104 (RAINBOW FALLS ACCESS ROAD)	TO ROUTE 0104 (RAINBOW FALLS ACCESS ROAD)	STEHEKIN	PUBLIC	1,900	GR	
0955	NC		105799		TUMWATER CAMP PARKING	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	STEHEKIN	PUBLIC	500	GR	

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PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0956	NC		105757		UPPER GOODELL PICKETT ACCESS PARKING	FROM ROUTE 0211 (UPPER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD)	TO ROUTE 0211 (UPPER GOODELL CREEK GROUP CAMPGROUND ACCESS ROAD)	SKAGIT	PUBLIC	720	GR	
0957	NC		105762		NEWHALEM REARING PONDS PARKING	FROM ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	TO ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	SKAGIT	PUBLIC	480	GR	
0958	NC		105770		LOWER THORNTON (BULLETIN BOARD) PARKING RIGHT	FROM ROUTE 0203 (THORNTON LAKES ROAD)	TO ROUTE 0203 (THORNTON LAKES ROAD)	SKAGIT	PUBLIC	800	GR	
0959	NC		105756		NEWHALEM FIRING RANGE GATE PARKING	FROM ROUTE 0216 (NEWHALEM FIRING RANGE ROAD)	TO ROUTE 0216 (NEWHALEM FIRING RANGE ROAD)	SKAGIT	PUBLIC	448	GR	
0960	NC		105759		NEWHALEM WAREHOUSE PARKING	FROM ROUTE 0428 (NEWHALEM WAREHOUSE LOOP ROAD)	TO ROUTE 0428 (NEWHALEM WAREHOUSE LOOP ROAD)	SKAGIT	PUBLIC	3,000	GR	
0961	NC		105768		ELC/NCI PARKING	FROM ROUTE 0430 (ELC/NCI ROADS)	TO ROUTE 0430 (ELC/NCI ROADS)	SKAGIT	PUBLIC	4,480	GR	
0962	NC		105772		HOZOMEEN EAST LANDING BOAT LAUNCH PARKING	FROM ROUTE 0106 (HOZOMEEN EAST LANDING BOAT LAUNCH SPUR)	TO ROUTE 0106 (HOZOMEEN EAST LANDING BOAT LAUNCH SPUR)	SKAGIT	PUBLIC	2,500	GR	
0963	NC		105779		THUNDER KNOB TRAILHEAD PARKING	FROM ROUTE 5000 (STATE HIGHWAY 20)	TO ROUTE 5000 (STATE HIGHWAY 20)	SKAGIT	PUBLIC	4,800	GR	
0964	NC		105796		STEHEKIN YACC YARD PARKING	FROM ROUTE 0417 (YACC SPUR ROAD)	TO ROUTE 0417 (STEHEKIN YACC SPUR ROAD)	STEHEKIN	PUBLIC	640	GR	
0965	NC		105800		CARWASH FALLS (END OF STEHEKIN VALLEY ROAD) PARKING	FROM ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	TO ROUTE 0010B (STEHEKIN VALLEY ROAD (UNPAVED SECTION))	STEHEKIN	PUBLIC	700	GR	
0966	NC		105760		NEWHALEM CREEK TRAILHEAD PARKING	FROM ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	TO ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)	SKAGIT	PUBLIC	1,760	GR	
0967	NC		105767		GORGE LAKE BOAT LAUNCH PARKING	FROM ROUTE 0109 (GORGE LAKE CAMPGROUND ACCESS ROAD)	TO ROUTE 0109 (GORGE LAKE CAMPGROUND ACCESS ROAD)	SKAGIT	PUBLIC	1,600	GR	
0968	NC		105775		HOZOMEEN WILLOW LAKE PARKING	FROM ROUTE 0224 (HOZOMEEN CAMPGROUND UPPER LOOP ROAD)	TO ROUTE 0224 (HOZOMEEN CAMPGROUND UPPER LOOP ROAD)	SKAGIT	PUBLIC	1,600	GR	

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Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description From	Route Description To	Maintenance District	Access Level	Area (SQ FT)	Surf. Type	Area Map
0969	NC		105776		HOZOMEEN RANGER STATION PARKING	FROM ROUTE 0102 (HOZOMEEN ROAD)	TO ROUTE 0102 (HOZOMEEN ROAD)	SKAGIT	PUBLIC	2,000	GR	
0970	NC		105778		HOZOMEEN WINNEBAGO FLATS LAUNCH RAMP PARKING	FROM ROUTE 0225 (HOZOMEEN WINNEBAGO FLATS CAMPGROUND LOOP)	TO ROUTE 0225 (HOZOMEEN WINNEBAGO FLATS CAMPGROUND LOOP)	SKAGIT	PUBLIC	4,350	GR	
0971	NC		105798		BUCKNER HOUSE PARKING	FROM ROUTE 0103 (BUCKNER ORCHARD ACCESS ROAD)	TO ROUTE 0103 (BUCKNER ORCHARD ACCESS ROAD)	STEHEKIN	PUBLIC	1,210	GR	
0972	NC		105771		COPPER CREEK ROAD PARKING	FROM ROUTE 0213 (COPPER CREEK ROAD)	TO ROUTE 0213 (COPPER CREEK ROAD)	SKAGIT	PUBLIC	4,500	GR	
0973	NC		105773		HOZOMEEN GOVERNMENT DOCK PARKING	FROM ROUTE 0107 (HOZOMEEN GOVERNMENT DOCK ROAD)	TO ROUTE 0107 (HOZOMEEN GOVERNMENT DOCK ROAD)	SKAGIT	PUBLIC	720	GR	
0974	NC		105774		HOZOMEEN GOVERNMENT DOCK BOAT LAUNCH PARKING	FROM ROUTE 0107 (HOZOMEEN GOVERNMENT DOCK ROAD)	TO ROUTE 0107 (HOZOMEEN GOVERNMENT DOCK ROAD)	SKAGIT	PUBLIC	12,480	GR	
0975	NC		105790		STEHEKIN RAINBOW LOOP TRAIL PARKING	FROM ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))	STEHEKIN	PUBLIC	720	GR	
0976	NC		17499		ELDORADO PARKING	FROM ROUTE 0101 (CASCADE RIVER ROAD)	TO ROUTE 0101 (CASCADE RIVER ROAD)	SKAGIT	PUBLIC	6,300	GR	
0977	6	1			NEWHALEM CREEK WALK-IN SITES PARKING	ADJACENT TO ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)		SKAGIT	PUBLIC	946	AS	1B
0978	6	1			THUNDER CREEK TRAIL DAY USE PARKING A	ADJACENT TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A) ON LEFT		SKAGIT	PUBLIC	6,732	AS	2A
0979	6	1			THUNDER CREEK TRAIL DAY USE PARKING B	ADJACENT TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A) ON RIGHT		SKAGIT	PUBLIC	2,912	AS	2A

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Cycle 6 Summary Totals for North Cascades National Park

Cycle 6 Route Totals

	NPS Maintained	Concessionaire Maintained	Park Totals
Paved Roads, Data Collection Vehicle Rated (Miles)	5.44	0	**5.44**
Paved Roads, Manually Rated Length (Miles)	5.61	0	**5.61**
Paved Roads, Manually Rated Area (Sq. Ft.)	0	0	**0**
Unpaved Roads (Miles)	36.01	0	**36.01**
Paved Parking (Sq. Ft.)	550,581	0	**550,581**
Unpaved Parking (Sq. Ft.)	151,598	0	**151,598**

Cycle 6 Lane Miles and Overall Pavement Condition

	Lanes Miles*	Pavement Condition Rating**
Data Collection Vehicle Routes	7.87	91
Manually Rated Roads	7.82	77
Parking Areas	9.48	82

* Equivalent Lane Miles are calculated by route using the following equations:
- DCV and MRLs = (PAVE_WIDTH x PAVED_MI) / 11 foot lane
- MRPs and PKGs = SQ_FEET / 5280 / 11 foot lane

**Parking and Manually Rated Routes are assigned the following PCR values based on the type of observed distresses:
-Excellent = 97 -Good = 90 -Fair = 73
-Poor = 53, 30, or 0 -Construction / Not Rated = -1

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General Park Road Functional Classification (FC) Table

FC	Type	User Access	Description	Route Numbers
1	Principal Park Road Rural Parkway	Public	Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors. Rural Parkways (e.g. Natchez Trace) are numbered 0001 - 0009.	0001 - 0009 0010 - 0099
2	Connector Park Road	Public	Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc.	0100 - 0199
3	Special Purpose Park Road	Public	Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation.	0200 - 0299
4	Primitive Park Road	Public	Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.	0200 - 0299
5	Administrative Park Road	Public	All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas.	0400 - 0499
6	Administrative Park Road (Restricted Access)	Nonpublic	All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.	0400 - 0499
7	Urban Parkway	Public	These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category.	0001 - 0009
8	City Street	Public	City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions.	0600 - 0699
N/A	Non-NPS Roads	Public	State, County, or City owned roads which border, traverse, or provide access to Park Facilities or Locations. Non-NPS roads are not assigned functional classes and are driven for GPS and Video Log only.	5000 - 5999

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

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

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

Route Identification Changes to Paved Routes from Previous Cycle
North Cascades National Park

ROUTES ADDED FROM PREVIOUS INVENTORY:			
Route No.	**Route Name**	**Type of Change**	**Comments**
0977	NEWHALEM CREEK WALK-IN SITES PARKING	OTHER	PAVED PARKING AREA ADDED TO THE INVENTORY IN CYCLE 6 PER THE REQUEST OF THE PARK. FMSS LOCATION NUMBER NOT AVAILABLE AT THE TIME OF THIS REPORT PUBLICATION.
0978	THUNDER CREEK TRAIL DAY USE PARKING A	OTHER	PAVED PARKING AREA ADDED TO THE INVENTORY IN CYCLE 6 PER THE REQUEST OF THE PARK. FMSS LOCATION NUMBER NOT AVAILABLE AT THE TIME OF THIS REPORT PUBLICATION.
0979	THUNDER CREEK TRAIL DAY USE PARKING B	OTHER	PAVED PARKING AREA ADDED TO THE INVENTORY IN CYCLE 6 PER THE REQUEST OF THE PARK. FMSS LOCATION NUMBER NOT AVAILABLE AT THE TIME OF THIS REPORT PUBLICATION.
5002	CASCADE RIVER ROAD (NON NPS SECTION)	OTHER	NON-NPS ROAD ADDED TO THE INVENTORY IN CYCLE 6 PER THE REQUEST OF THE PARK. THE DATA COLLECTION VEHICLE COLLECTED VIDEO AND GPS ON THE PAVED PORTION. ONLY GPS WAS COLLECTED ON THE UNPAVED PORTION.

ROUTES MODIFIED FROM PREVIOUS INVENTORY:			
Route No.	**Route Name**	**Type of Change**	**Comments**
0101	CASCADE RIVER ROAD	LENGTH CHANGE	IMPROVED GPS WAS COLLECTED FOR THE 4 PAVED ROAD SECTIONS. GPS FOR THE 5 UNPAVED ROAD SECTIONS WAS COLLECTED BY RIP FOR THE FIRST TIME IN CYCLE 6. AFTER IMPROVEMENTS THE LENGTH DECREASED 0.21 MILES.
0108	OLSON CREEK ROAD	SURFACE TYPE CHANGE	THE BEGINNING PORTION OF THE ROAD HAS BEEN PAVED SINCE CYCLE 5. THE ROAD ENDS WITH AN UNPAVED SECTION.
0401	NORTH CASCADES VISITOR CENTER SERVICE ROAD	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS CHANGED FROM 5 TO 6 BECAUSE THE ROAD IS NONPUBLIC WITH RESTRICTED ACCESS.
0426	MARBLEMOUNT BARN ROAD	SURFACE TYPE CHANGE	ROUTE HAS BEEN PAVED SINCE CYCLE 5. SURFACE TYPE UPDATED FROM GRAVEL TO ASPHALT.
0435A	MARBLEMOUNT COUNCIL OAK DRIVE	RECONSTRUCTED	ROAD WAS RECONSTRUCTED SINCE CYCLE 5. ALIGNMENT IS NOW A COMPLETE LOOP RATHER THAN TERMINATING WITH A DEAD END. THE DATA COLLECTION VEHICLE CHANGED THE DIRECTION IN WHICH THE ROAD WAS COLLECTED BECAUSE THE ROUTE BEGINS FROM THE END OF RANGER ROAD AND THIS IS WHERE THE MAJORITY OF DRIVERS ENTER THE ROAD.

Route Identification Changes to Paved Routes from Previous Cycle
North Cascades National Park

ROUTES MODIFIED FROM PREVIOUS INVENTORY:			
Route No.	**Route Name**	**Type of Change**	**Comments**
0900A	MARBLEMOUNT ADMINISTRATIVE PUBLIC PARKING	RECONSTRUCTED	THE PARKING AREA WAS RECONSTRUCTED DURING THE MARBLEMOUNT ADMIN. AREA PROJECT (THE SOUTHERN ENTRANCE WAS REMOVED). GPS AND SQUARE FOOTAGE WERE UPDATED IN CYCLE 6.
0900B	MARBLEMOUNT WIC PARKING	OTHER	ACCESS CHANGED FROM NONPUBLIC TO PUBLIC. ROUTE NAME CHANGED FROM "MARBLEMOUNT WILDERNESS OFFICE PARKING" BECAUSE IT WAS TOO LONG TO FIT INTO FBMS. IMPROVED GPS AND SQUARE FOOTAGE COLLECTED IN CYCLE 6.
0900C	MARBLEMOUNT ADMINISTRATIVE PRIVATE PARKING	RECONSTRUCTED	THE PARKING AREA WAS RECONSTRUCTED DURING THE MARBLEMOUNT ADMIN. AREA PROJECT (ADDITIONAL PARKING SPACES WERE ADDED ON THE NORTH END). GPS AND SQUARE FOOTAGE WERE UPDATED IN CYCLE 6.
0911	EAST ENTRANCE SIGN PARKING	SURFACE TYPE CHANGE	SURFACE TYPE CHANGED FROM "OTHER" TO "ASPHALT" IN ORDER TO MATCH FMSS. THE PARK WANTS TO CONSIDER THIS PARKING AREA PAVED EVEN THOUGH EXISTING ASPHALT IS SEVERELY DETERIORATED AND IT APPEARS TO BE UNPAVED.
0912	NEWHALEM CREEK CAMP TENDER PARKING	ROUTE NAME	ROUTE NAME CHANGED FROM "NEWHALEM CREEK RANGER PARKING".
0916	NORTH CASCADES VISITOR CENTER SERVICE PARKING	OTHER	ACCESS CHANGED FROM PUBLIC TO NONPUBLIC.

Section 3
Park Summary Information

North Cascades National Park

Federal Lands Highway
Road Inventory Program

Parkwide Paved Route Condition Summary
North Cascades National Park

Table 1: Paved Route Miles and Parking Area Square Footages by Access Level and PCR

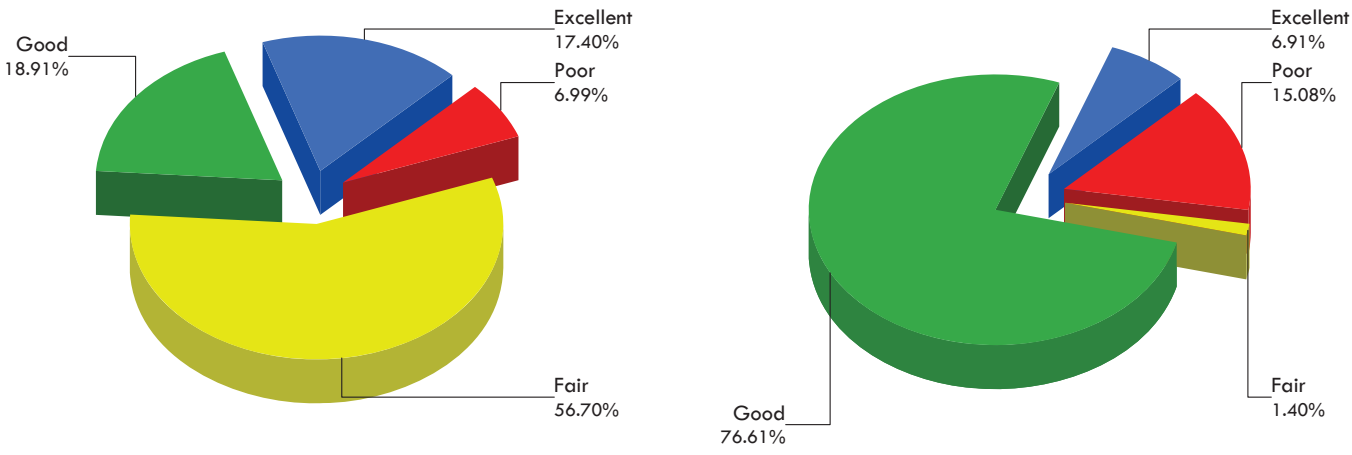
Breakdown of Pavement Condition Rating (PCR) Based on Access Level

	POOR (PCR of 0 - 60)	FAIR (PCR of 61 - 84)	GOOD (PCR of 85 - 94)	EXCELLENT (PCR of 95 -100)	
PAVED ROADS					
Functional Class	**Length (miles)**	**Length (miles)**	**Length (miles)**	**Length (miles)**	**Total Mileage by FC**
1	0.50	4.23	0.74		5.47
2		0.35	0.44	0.75	1.54
3	0.02	0.24	0.37	0.31	0.94
4					
5	0.07		0.06	0.41	0.55
6				0.01	0.01
7					
8					
Total Mileage by PCR	**0.59**	**4.82**	**1.61**	**1.48**	**8.50**
PAVED PARKING					
Access Level	**Area (sq. ft.)**	**Area (sq. ft.)**	**Area (sq. ft.)**	**Area (sq. ft.)**	**Total Area**
PUBLIC	83,051	7,703	420,159	12,324	523,237
NONPUBLIC			1,637	25,707	27,344
Total Area by PCR	**83,051**	**7,703**	**421,796**	**38,031**	**550,581**

NOTES:

1. Data are reported in the table only for paved roads and parking lots that received a condition rating.
   2.55 miles of paved road could not be rated due to debris (leaves /pine needles) on road at the time of data collection.
2. Quantities in the table above are derived from the route condition data within the PMS_20, PMS_MRL, PMS_MRP, and PMS_PKG tables in the Park geodatabase.

Parkwide Condition Percentages



Road Condition Percentages **Parking Area Condition Percentages**

Figure 1: Pavement Condition Rating Breakdown for Paved Roads and Parking Areas

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

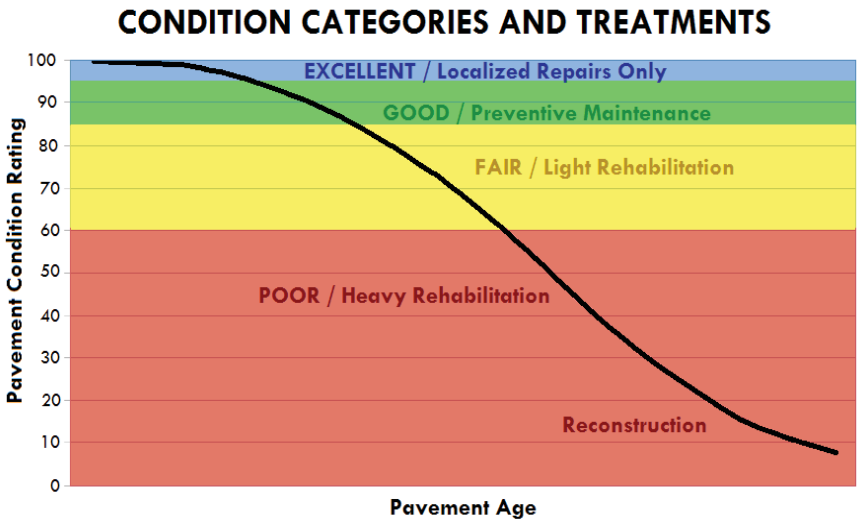
The Road Inventory Program aims to provide assistance in translating the excellent / good / fair / poor rating categories into pavement needs categories. The PCR can be used to indicate the place in the Pavement Life Cycle and the type of treatments that should be considered now and into the future.

- 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 singlelift 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 at the time in which the data were 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.

Federal Lands Highway
Road Inventory Program

Cycle 6 - Road Inventory Program
Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads
North Cascades National Park

Condition (Rating / Index) Legend

- EXCELLENT (95 - 100)
- GOOD (85 - 94)
- FAIR (61 - 84)
- POOR (0 - 60)
- NR = NOT RATED

Notes:

- This condition summary report contains only the roads rated with the Data Collection Vehicle (DCV).
- Condition on roads that were manually rated and parking areas are shown in separate reports.
- Additional details on individual road ratings can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route-Level Condition for Roads Rated with the Data Collection Vehicle (DCV)

Route No.	FMSS No.	Route Name	Functional Class	Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	Roughness Condition Index (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
NOCA-0105	46862	ENVIRONMENTAL LEARNING CENTER ACCESS ROAD	2	AS	0.19	82	NR	82	99	100	99	82	100	97
NOCA-0108	105644	OLSON CREEK ROAD	2	AS	0.17	100	NR	100	100	100	100	100	100	100
NOCA-0200	28520	COLONIAL CREEK CAMPGROUND ACCESS SOUTH	2	AS	0.20	96	NR	96	100	100	100	100	100	96
NOCA-0200A	60409	COLONIAL CREEK CAMPGROUND LOOP A	3	AS	0.53	82	NR	82	100	100	100	100	100	82
NOCA-0200B	60410	COLONIAL CREEK CAMPGROUND LOOP B	3	AS	0.24	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0200C	107959	COLONIAL CREEK CAMPGROUND LOOP C	3	AS	0.08	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0200D	107960	COLONIAL CREEK CAMPGROUND LOOP D	3	AS	0.03	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0201	44086	GOODELL CREEK CAMPGROUND ACCESS ROAD	2	AS	0.20	98	NR	98	100	100	100	100	100	98
NOCA-0201A	60417	GOODELL CREEK CAMPGROUND LOOP A	3	AS	0.27	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0201B	60416	GOODELL CREEK CAMPGROUND LOOP B	3	AS	0.16	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0202	17457	NEWHALEM CREEK CAMPGROUND ACCESS ROAD	2	AS	0.10	93	NR	93	99	100	99	93	100	98
NOCA-0204	46858	NORTH CASCADES VISITOR CENTER ACCESS ROAD	2	AS	0.72	86	67	98	99	100	99	100	100	98
NOCA-0205	60521	NEWHALEM RAFT LAUNCH LOOP	3	AS	0.04	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0206	60564	NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS	3	AS	0.06	97	NR	97	100	100	100	98	100	97
NOCA-0207	60565	NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS	3	AS	0.12	95	NR	95	98	100	98	100	100	95
NOCA-0208	60570	NEWHALEM CREEK CAMP TENDER STATION ROAD	3	AS	0.17	95	NR	95	99	100	99	95	100	97
NOCA-0209A	60411	COLONIAL CREEK CAMPGROUND NORTH LOOP A	3	AS	0.44	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0209B	60412	COLONIAL CREEK CAMPGROUND NORTH LOOP B	3	AS	0.04	98	NR	98	100	100	100	100	100	98
NOCA-0210A	60566	NEWHALEM CREEK CAMPGROUND LOOP A	3	AS	0.31	NR	NR	NR	NR	NR	NR	NR	NR	NR

Data Collection Date: 09/2015

Federal Lands Highway
Road Inventory Program

Cycle 6 - Road Inventory Program
Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads

North Cascades National Park

Condition (Rating / Index) Legend

- EXCELLENT (95 - 100)
- GOOD (85 - 94)
- FAIR (61 - 84)
- POOR (0 - 60)
- NR = NOT RATED

Notes:
- This condition summary report contains only the roads rated with the Data Collection Vehicle (DCV).
- Condition on roads that were manually rated and parking areas are shown in separate reports.
- Additional details on individual road ratings can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route-Level Condition for Roads Rated with the Data Collection Vehicle (DCV)

Route No.	FMSS No.	Route Name	Functional Class	Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	Roughness Condition Index (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
NOCA-0210B	60567	NEWHALEM CREEK CAMPGROUND LOOP B	3	AS	0.24	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0210C	60568	NEWHALEM CREEK CAMPGROUND LOOP C	3	AS	0.42	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0210D	60569	NEWHALEM CREEK GROUP CAMPGROUND LOOP D	3	AS	0.17	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0401	107961	NORTH CASCADES VISITOR CENTER SERVICE ROAD	6	AS	0.07	NR	NR	NR	NR	NR	NR	NR	NR	NR
NOCA-0426	105649	MARBLEMOUNT BARN ROAD	5	AS	0.05	99	NR	99	100	100	100	100	100	99
NOCA-0435A	107962	MARBLEMOUNT COUNCIL OAK DRIVE	5	AS	0.39	98	NR	98	100	100	100	100	100	98
NOCA-0435B	107963	MARBLEMOUNT COUNCIL OAK SPUR	5	AS	0.03	98	NR	98	100	100	100	100	100	98

Note: Route-level ratings of "Not Rated" are given when more than half of the pavement surface is not visible. At NOCA several roads were covered with debris (leaves / pine needles) at the time of data collection.

Data Collection Date: 09/2015

Federal Lands Highway
Road Inventory Program

Cycle 6 - Road Inventory Program
Road Condition Summary Report for Manually Rated Roads

North Cascades National Park

Condition (Rating / Index) Legend

- EXCELLENT (95 - 100)
- GOOD (85 - 94)
- FAIR (61 - 84)
- POOR (0 - 60)
- NR = NOT RATED

Notes:

- This condition summary report contains only the roads that were manually rated.
  - MRL = Manually Rated Line (a linear road)
  - MRP = Manually Rated Polygon (a non-linear road)
- Condition on roads that were rated with the Data Collection Vehicle (DCV) are shown in a separate report.
- A road is manually rated when it is determined to be unsuitable for the DCV to drive.
- Additional details on individual road ratings can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route-Level Condition for Manually Rated Line (MRL) Roads

Route No.	FMSS No.	Route Name	Functional Class	Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	Roughness Condition Index (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
NOCA-0010A	18118	STEHEKIN VALLEY ROAD (PAVED SECTION)	1	AS	4.31	77	NR	77	77	78	99	100	94	100
NOCA-0100A	60333	COMPANY CREEK ROAD (PAVED SECTION)	2	AS	0.07	100	NR	100	100	100	100	100	100	100
NOCA-0101	17490	CASCADE RIVER ROAD	1	AS	1.15	79	NR	79	99	100	99	100	98	79
NOCA-0400	60548	TREATMENT PLANT HILL ROAD	5	AS	0.07	0	NR	0	NR	NR	NR	NR	NR	NR

Data Collection Date: 06/2015

Federal Lands Highway
Road Inventory Program

Cycle 6 - Road Inventory Program
Parking Area Condition Summary Report
North Cascades National Park

Condition (Rating / Index) Legend

- EXCELLENT (97)
- GOOD (90)
- FAIR (73)
- POOR* (0, 30, 53)
- NR = NOT RATED

Notes:

- A PCR of 0 indicates a paved parking area in very poor condition. Individual distresses could not be identified.
- Additional details on individual parking areas can be found in Section 6 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Condition Rating Details for Parking Areas

Route No.	FMSS No.	Route Name	User Access	Surf. Type	Area (Sq. Ft.)	Pavement Condition Rating (PCR)	Asphalt Surface Distresses: Alligator Cracking	Asphalt Surface Distresses: Longitudinal / Tranverse Cracking	Asphalt Surface Distresses: Rutting / Distortions	Asphalt Surface Distresses: Potholes / Patching	Asphalt Surface Distresses: HMA Patching	Asphalt Surface Distresses: Surface Raveling / Bleeding	Concrete Surface Distresses: Joint Faulting	Concrete Surface Distresses: Slab Cracking	Concrete Surface Distresses: Joint Distresses	Concrete Surface Distresses: Delamination / Pop-Outs	Concrete Surface Distresses: Potholes / Patching
NOCA-0900A	16690	MARBLEMOUNT ADMINISTRATIVE PUBLIC PARKING	PUBLIC	AS	4,490	97	97	97	97	97	97	97					
NOCA-0900B	60418	MARBLEMOUNT WIC PARKING	PUBLIC	AS	7,834	97	97	97	97	97	97	97					
NOCA-0900C	108073	MARBLEMOUNT ADMINISTRATIVE PRIVATE PARKING	NONPUBLIC	AS	11,041	97	97	97	97	97	97	97					
NOCA-0900D	108074	MARBLEMOUNT SHOP PARKING	NONPUBLIC	AS	14,666	97	97	97	97	97	97	97					
NOCA-0901	60552	WEST ENTRANCE SIGN PARKING	PUBLIC	AS	5,561	90	97	97	97	97	97	90					
NOCA-0902A	114649	GOODELL CREEK RAFT LAUNCH PARKING A	PUBLIC	AS	2,557	90	97	90	90	97	97	90					
NOCA-0902B	108075	GOODELL CREEK RAFT LAUNCH PARKING B	PUBLIC	AS	1,946	90	97	97	90	97	97	90					
NOCA-0903A	17427	NORTH CASCADES VISITOR CENTER PARKING A	PUBLIC	AS	4,570	90	97	97	97	97	97	90					
NOCA-0903B	60510	NORTH CASCADES VISITOR CENTER PARKING B	PUBLIC	AS	4,865	90	97	97	97	97	97	90					
NOCA-0903C	60512	NORTH CASCADES VISITOR CENTER PARKING C	PUBLIC	AS	3,578	90	97	97	97	97	97	90					
NOCA-0903D	60514	NORTH CASCADES VISITOR CENTER PARKING D	PUBLIC	AS	6,635	90	97	97	97	97	97	90					
NOCA-0904	43978	GORGE CREEK OVERLOOK TRAILHEAD PARKING	PUBLIC	AS	27,656	90	97	90	90	97	97	90					
NOCA-0905	60402	GORGE CREEK PHOTO-OP PARKING	PUBLIC	AS	11,183	90	90	90	97	97	97	90					
NOCA-0906	46856	DIABLO LAKE OVERLOOK PARKING LOT	PUBLIC	AS	56,922	53	97	53	90	97	97	90					
NOCA-0907	17541	INTERPRETIVE PULLOUT (DIABLO LAKE)	PUBLIC	AS	17,615	90	97	90	90	97	97	97					
NOCA-0908	17561	ROSS DAM TRAILHEAD PARKING	PUBLIC	AS	11,733	90	90	90	90	97	97	90					
NOCA-0909	38579	HAPPY CREEK NATURE TRAIL PARKING	PUBLIC	AS	9,521	90	90	90	90	97	97	90					
NOCA-0910A	17563	ROSS LAKE OVERLOOK A	PUBLIC	AS	9,635	90	97	90	97	97	97	97					
NOCA-0910B	60523	ROSS LAKE OVERLOOK B	PUBLIC	AS	5,141	90	97	90	97	97	97	97					
NOCA-0911	60358	EAST ENTRANCE SIGN PARKING	PUBLIC	AS	26,129	0											
NOCA-0912	60419	NEWHALEM CREEK CAMP TENDER PARKING	PUBLIC	AS	1,041	90	97	90	90	97	97	90					
NOCA-0913	60562	NEWHALEM CREEK DUMP STATION	PUBLIC	AS	4,513	90	97	90	97	97	97	90					
NOCA-0914	60407	COLONIAL CREEK CAMPGROUND ACCESS PARKING	PUBLIC	AS	65,181	90	97	90	97	97	97	90					
NOCA-0915	60408	COLONIAL CREEK CAMPGROUND DUMP STATION	PUBLIC	AS	11,296	90	97	97	90	97	97	90					
NOCA-0916	60516	NORTH CASCADES VISITOR CENTER SERVICE PARKING	NONPUBLIC	AS	1,637	90	97	97	97	97	97	90					
NOCA-0918A	17812	STEHEKIN BOAT LANDING PARKING A	PUBLIC	AS	5,570	73	97	90	90	73	90	90					

Data Collection Date: 06/2015

Federal Lands Highway
Road Inventory Program

Cycle 6 - Road Inventory Program
Parking Area Condition Summary Report

North Cascades National Park

Condition (Rating / Index) Legend

- EXCELLENT (97)
- GOOD (90)
- FAIR (73)
- POOR* (0, 30, 53)
- NR = NOT RATED

Notes:
- A PCR of 0 indicates a paved parking area in very poor condition. Individual distresses could not be identified.
- Additional details on individual parking areas can be found in Section 6 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Condition Rating Details for Parking Areas

Route No.	FMSS No.	Route Name	User Access	Surf. Type	Area (Sq. Ft.)	Pavement Condition Rating (PCR)	Asphalt Surface Distresses: Alligator Cracking	Asphalt Surface Distresses: Longitudinal / Tranverse Cracking	Asphalt Surface Distresses: Rutting / Distortions	Asphalt Surface Distresses: Potholes / Patching	Asphalt Surface Distresses: HMA Patching	Asphalt Surface Distresses: Surface Raveling / Bleeding	Concrete Surface Distresses: Joint Faulting	Concrete Surface Distresses: Slab Cracking	Concrete Surface Distresses: Joint Distresses	Concrete Surface Distresses: Delamination / Pop-Outs	Concrete Surface Distresses: Potholes / Patching
NOCA-0918B	46865	STEHEKIN BOAT LANDING PARKING B	PUBLIC	AS	2,133	73	97	97	90	97	97	73					
NOCA-0926	81120	FIELDS POINT PARKING	PUBLIC	AS	205,342	90	97	90	97	97	90	97					
NOCA-0977	N/A	NEWHALEM CREEK WALK-IN SITES PARKING	PUBLIC	AS	946	90	97	97	97	97	97	90					
NOCA-0978	N/A	THUNDER CREEK TRAIL DAY USE PARKING A	PUBLIC	AS	6,732	90	97	97	97	97	97	90					
NOCA-0979	N/A	THUNDER CREEK TRAIL DAY USE PARKING B	PUBLIC	AS	2,912	90	97	97	97	97	97	90					

Data Collection Date: 06/2015

Section 4
Park Route Location Maps

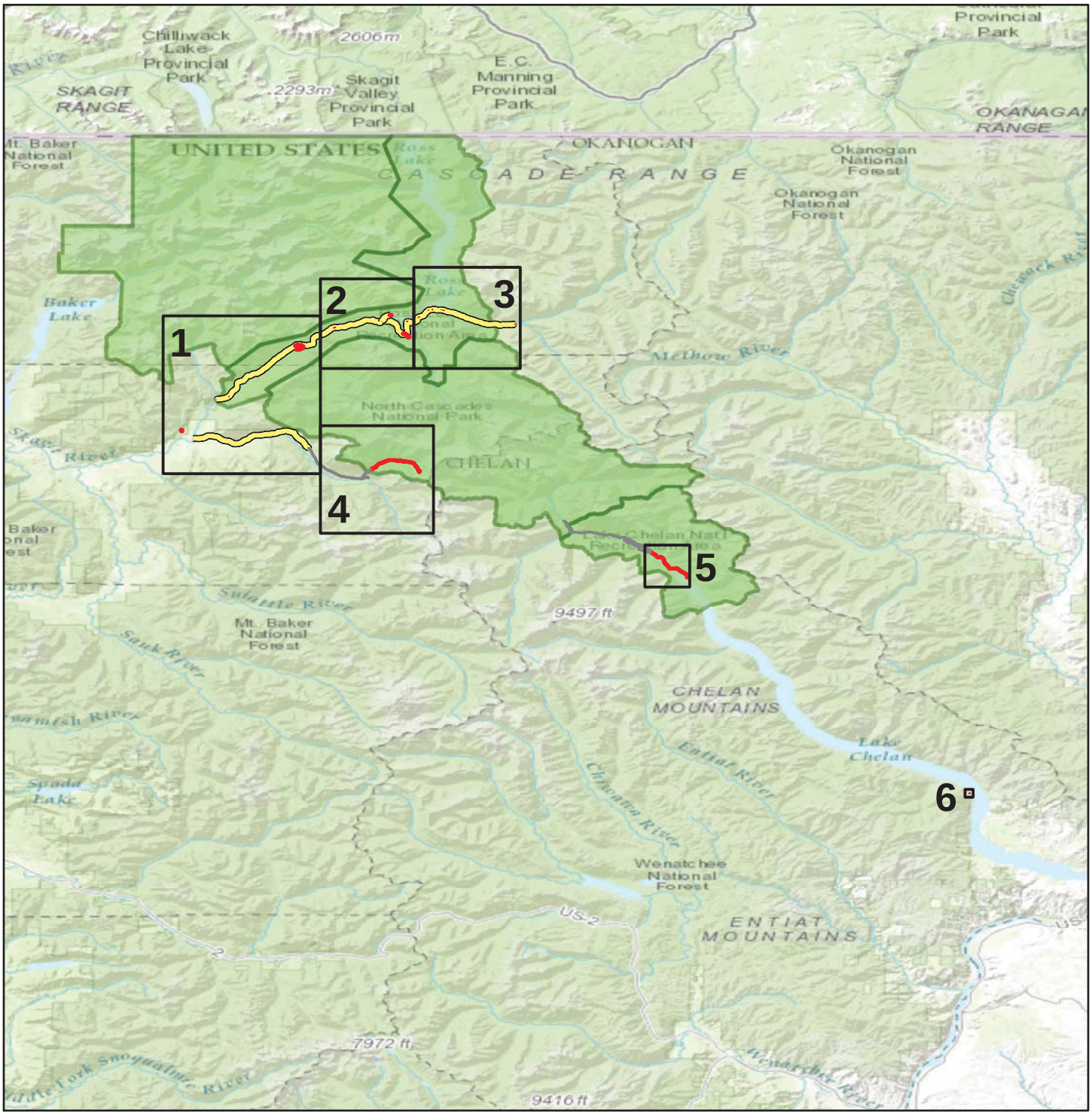
North Cascades National Park

Federal Lands Highway
Road Inventory Program

North Cascades National Park

ROUTE LOCATION MAP

Key Map



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

NPS Collected Routes **Non-NPS Collected Routes**

Miles

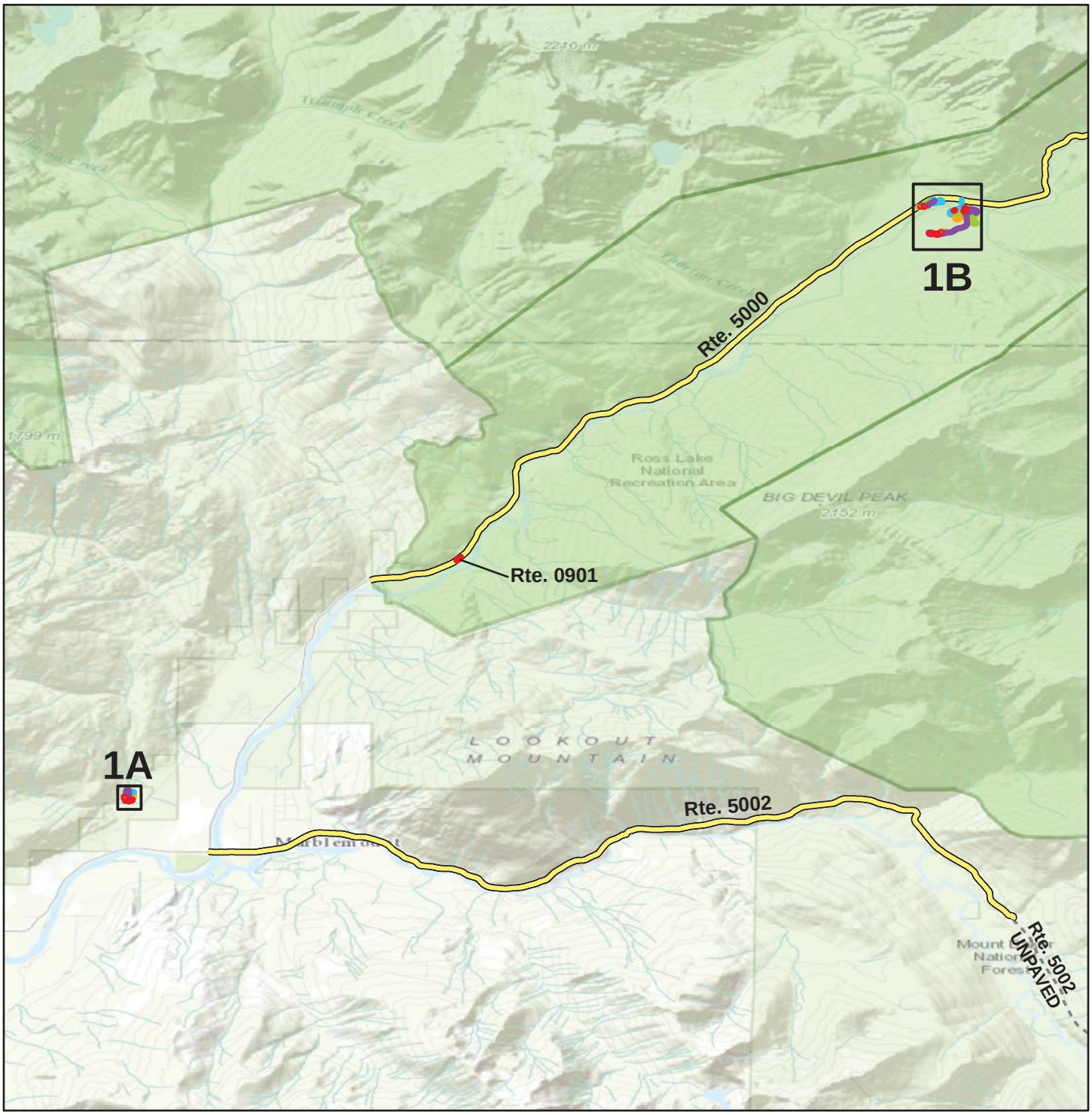
0 40 80

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 1



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

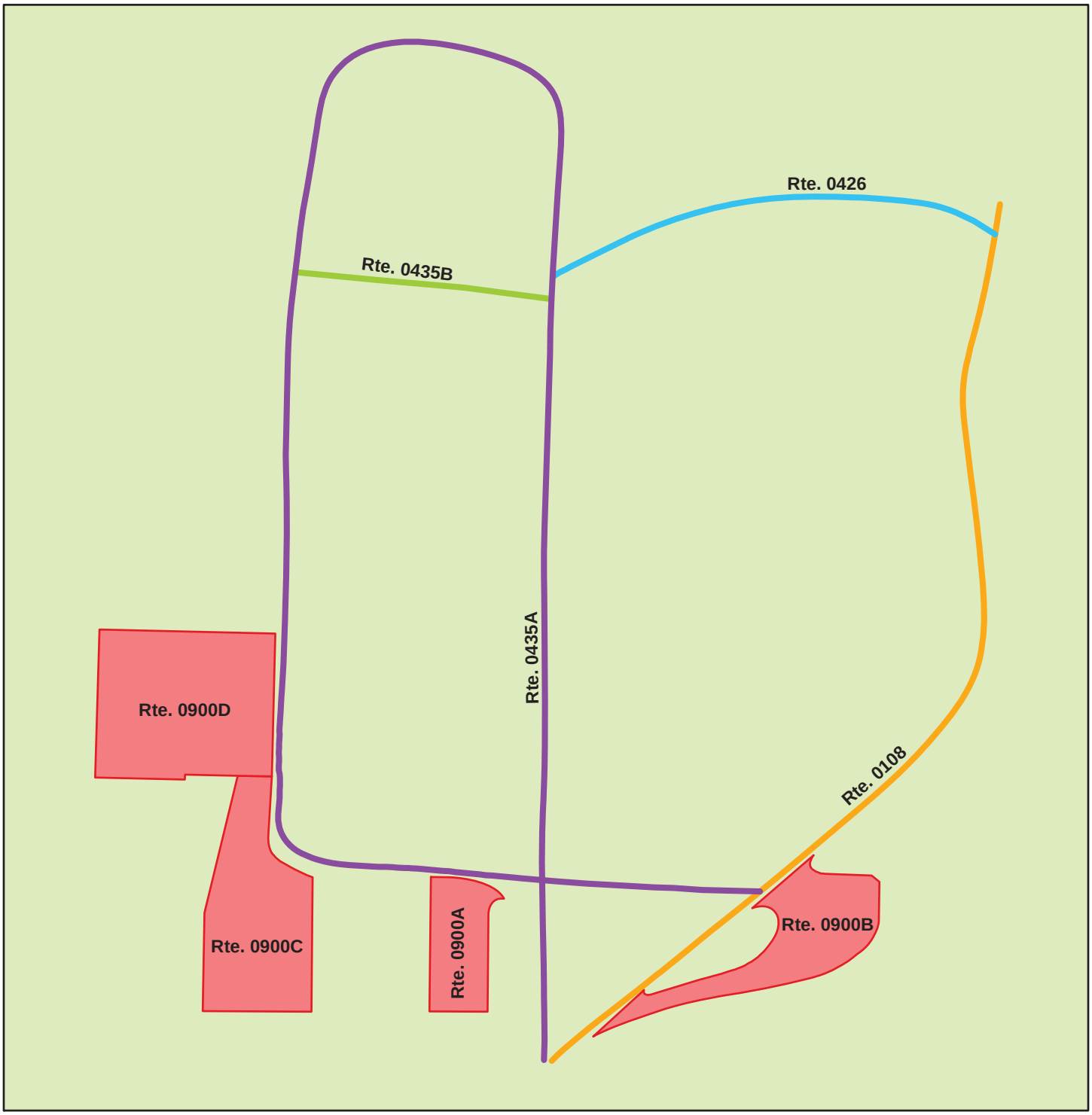
0 4 8

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 1A



Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

0 0.05 0.1

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 1B

Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

0 0.25 0.5

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 2

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

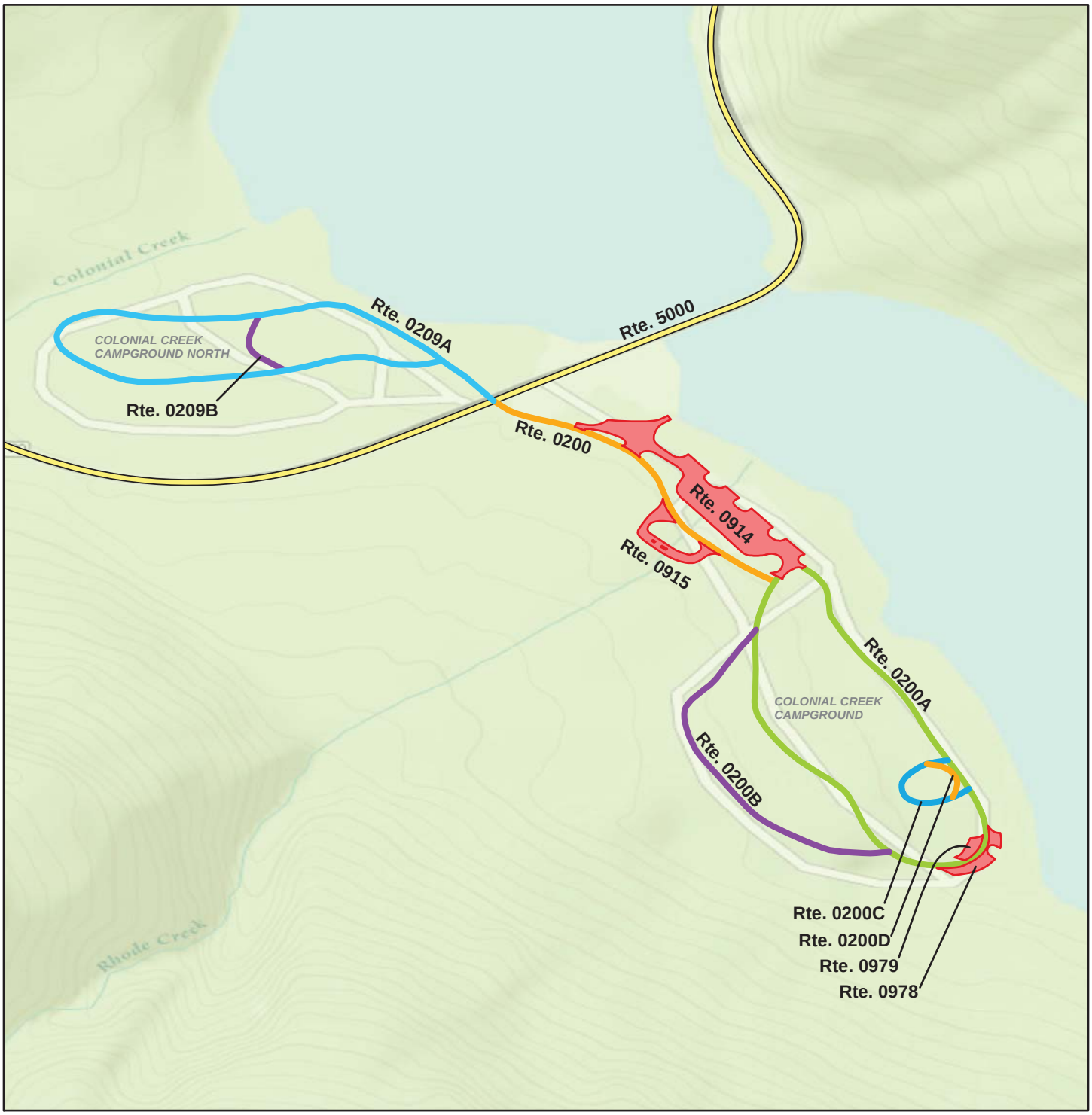
0 2 4

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 2A



Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

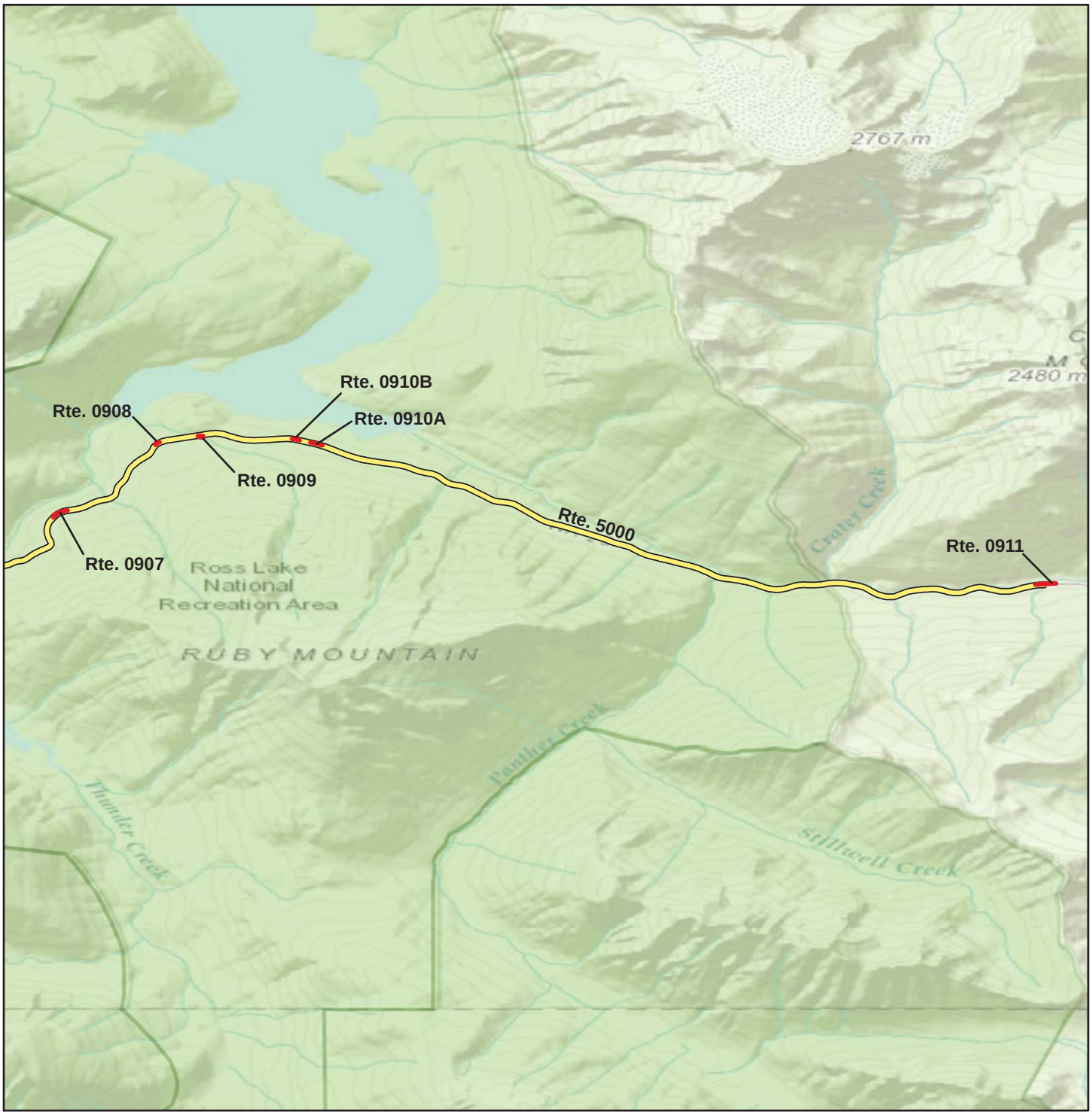
0 0.2 0.4

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 3



Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

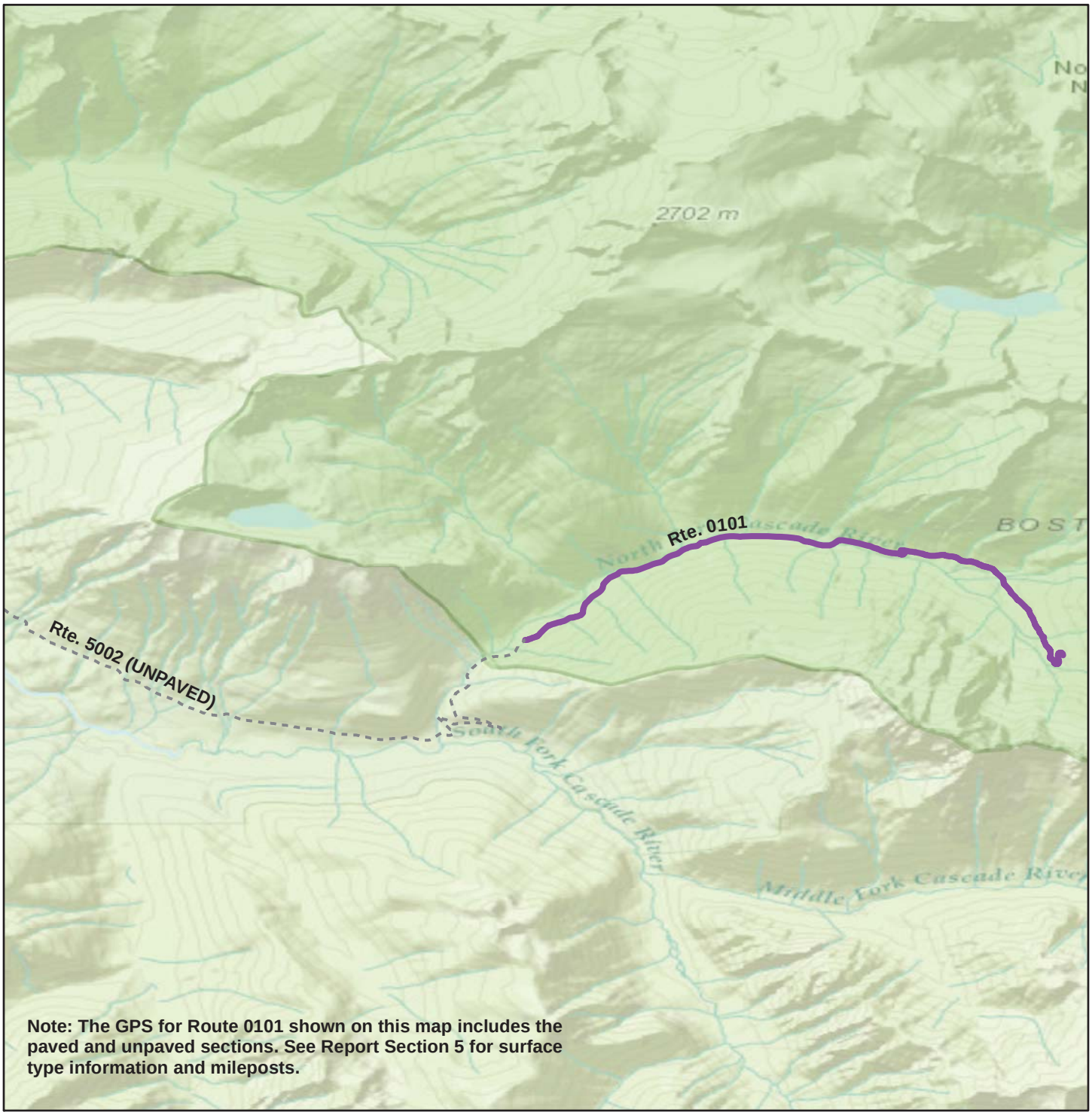
0 2 4

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 4



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

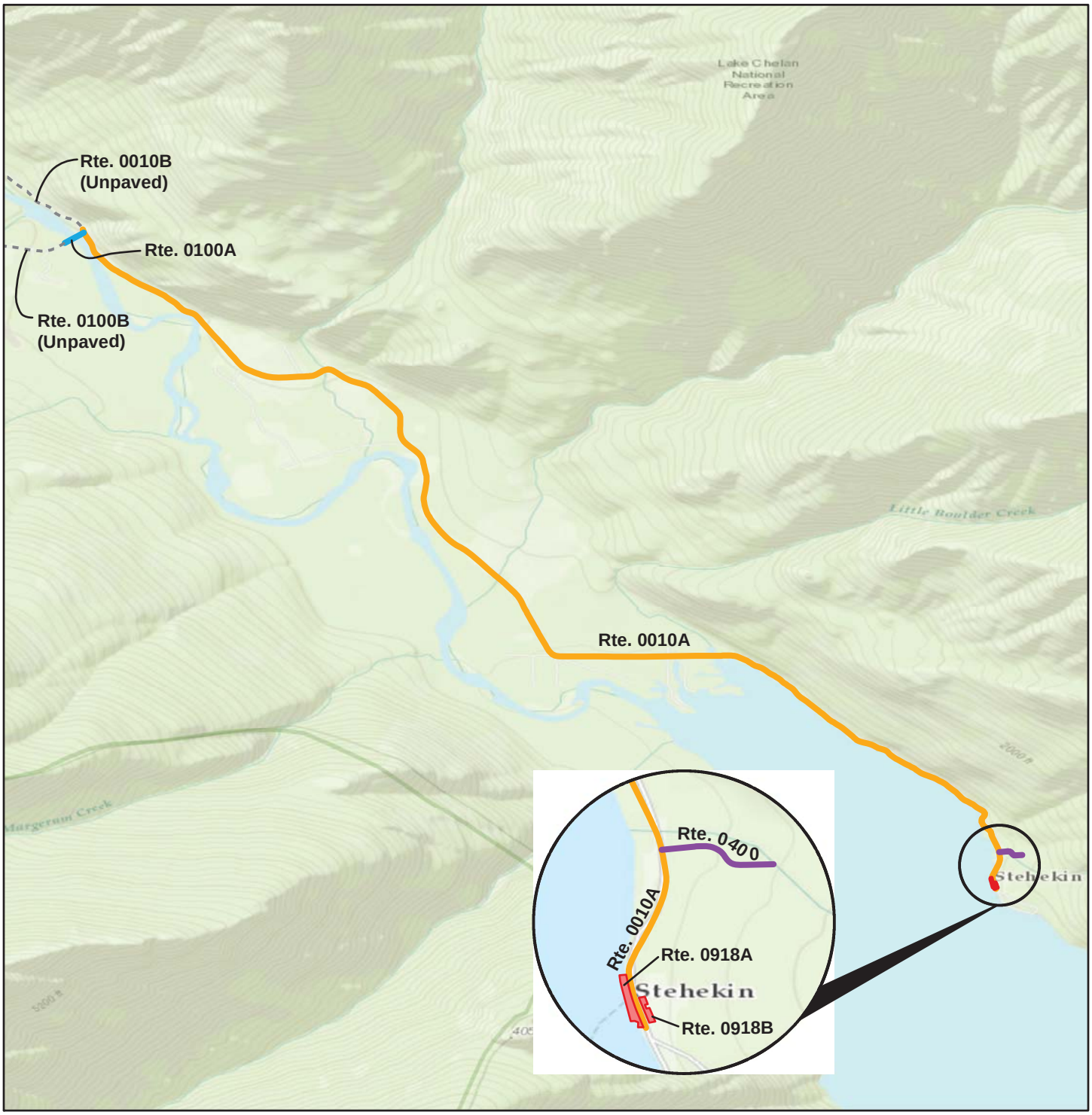
0 2 4

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 5



Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

Miles

0 1 2

N

North Cascades National Park

ROUTE LOCATION MAP

Area Map 6

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads

Non-NPS Collected Routes

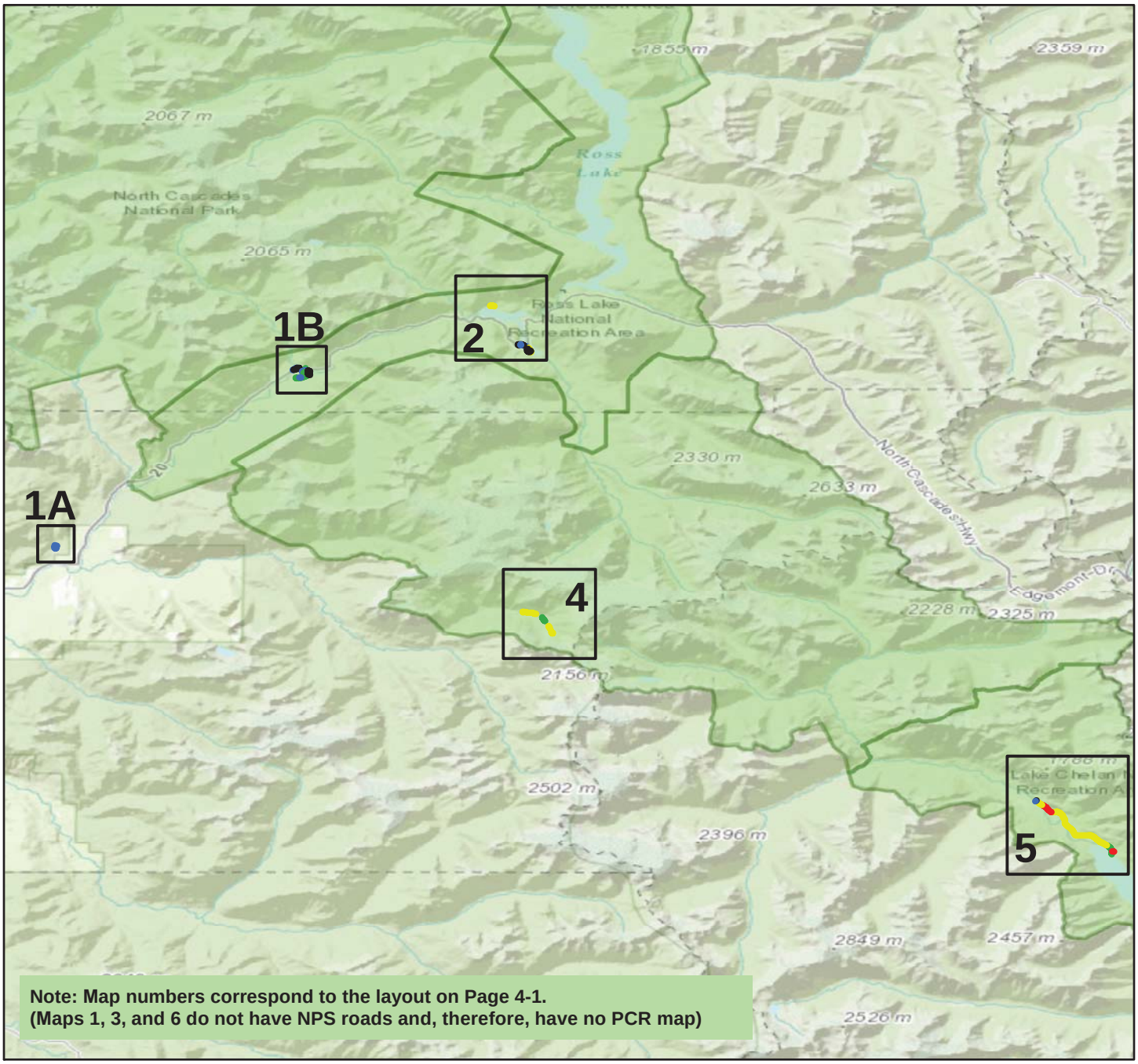
Miles

0 0.2 0.4

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Key Map



Note: Map numbers correspond to the layout on Page 4-1.
(Maps 1, 3, and 6 do not have NPS roads and, therefore, have no PCR map)

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

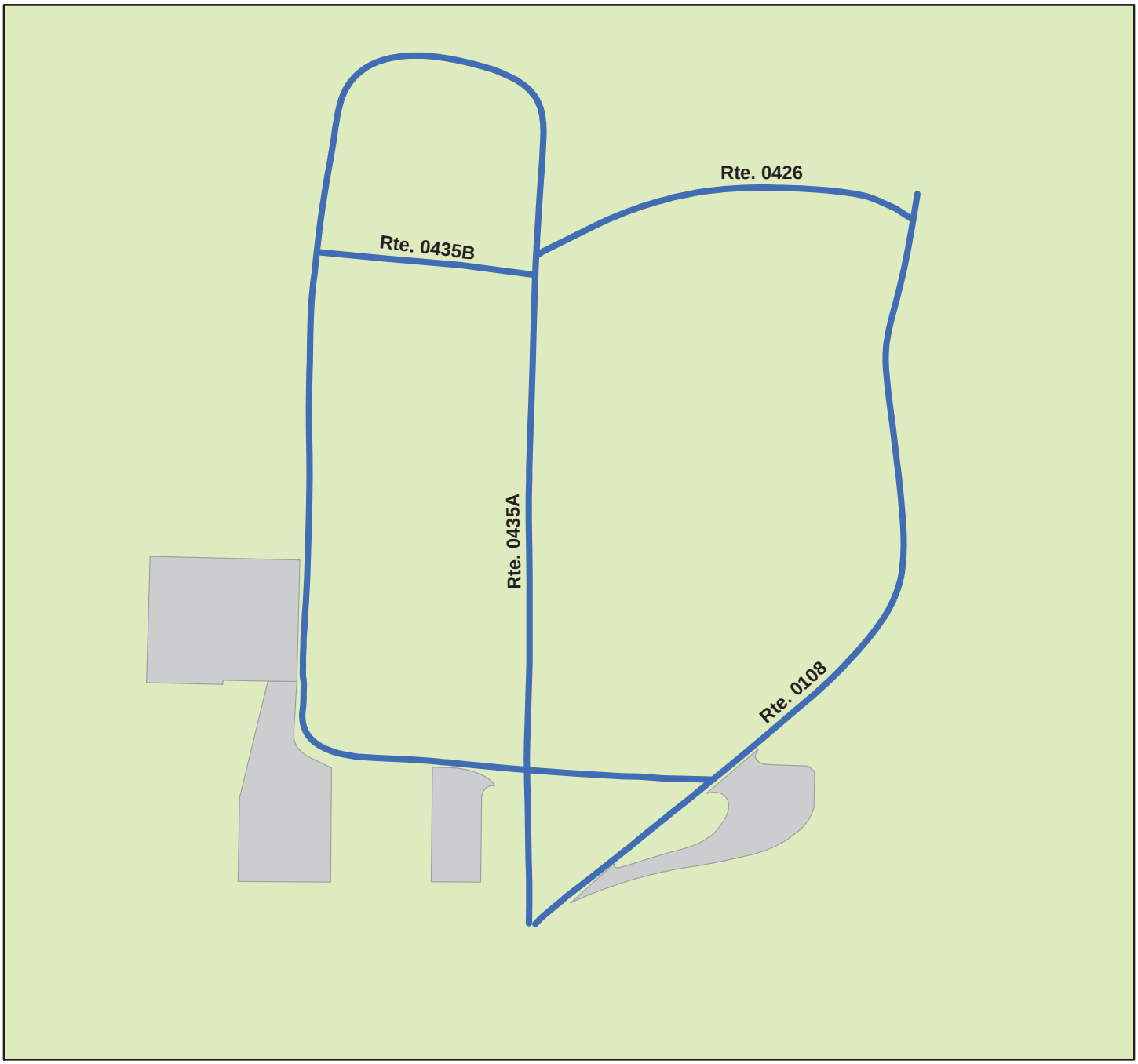
See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

Miles
0 20 40

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 1A



Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

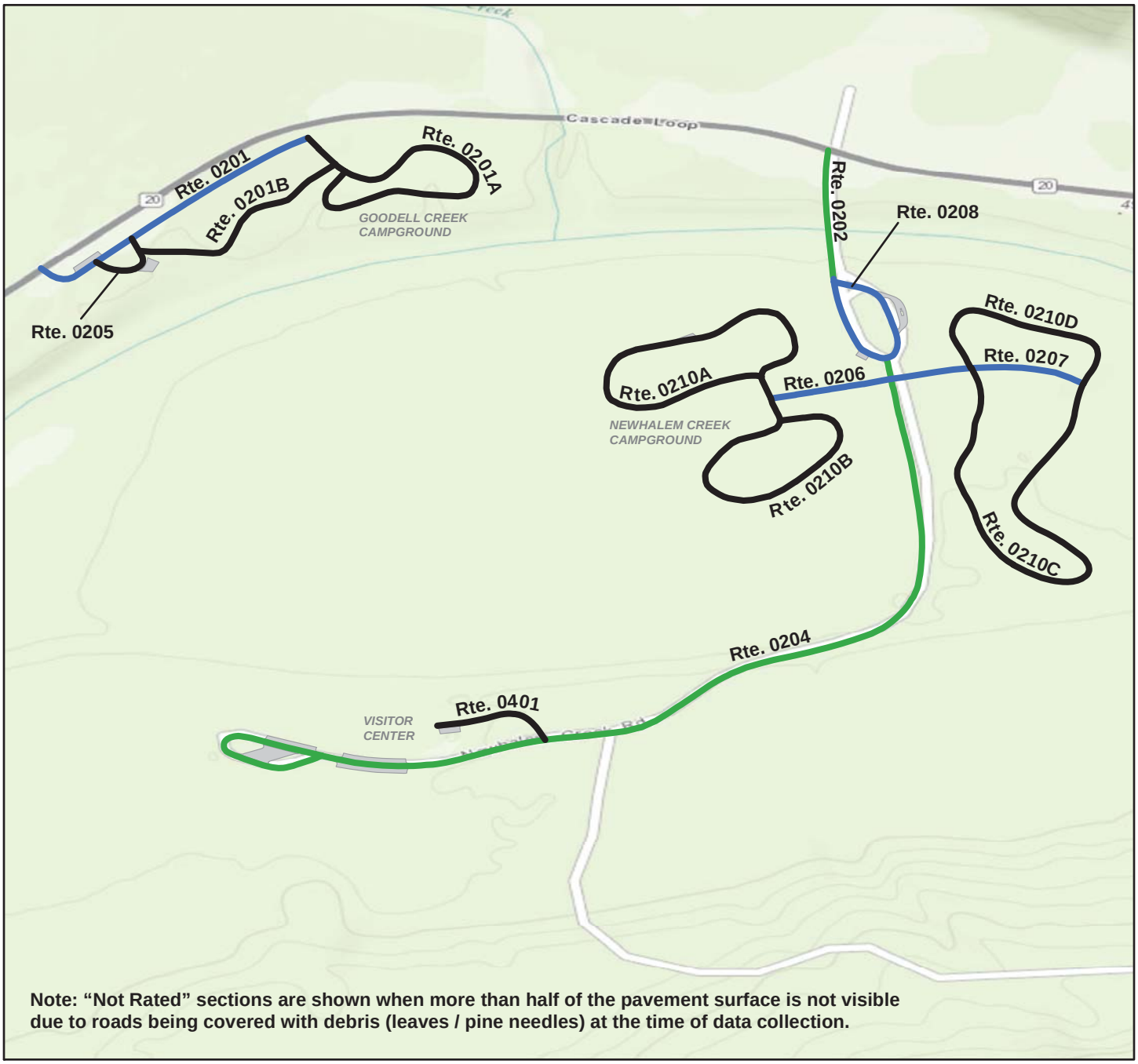
See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

Miles
0 0.05 0.1

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 1B



Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Only Data Collection Vehicle and Manually Rated Roads are displayed

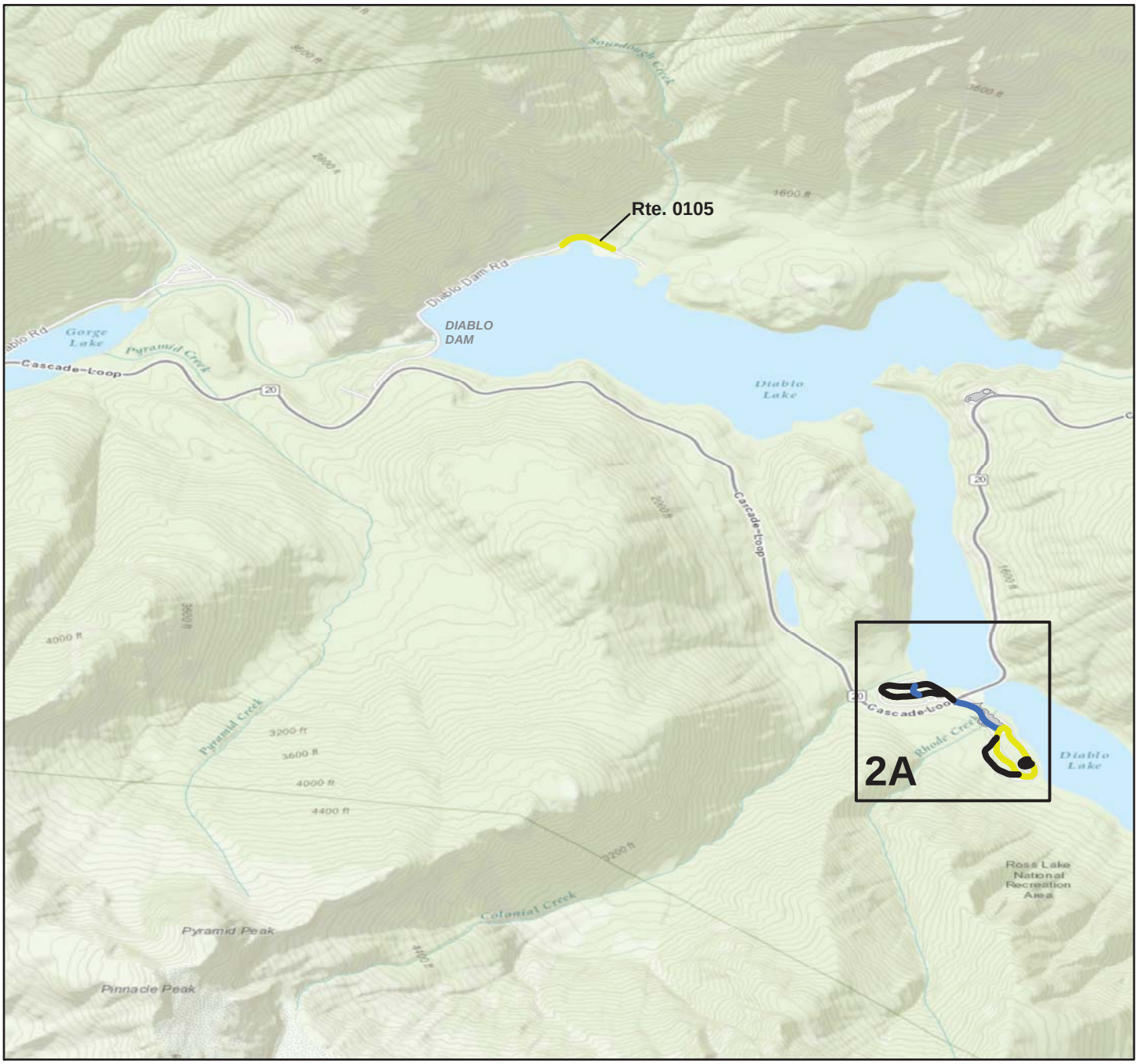
Miles

0 0.2 0.4

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 2



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

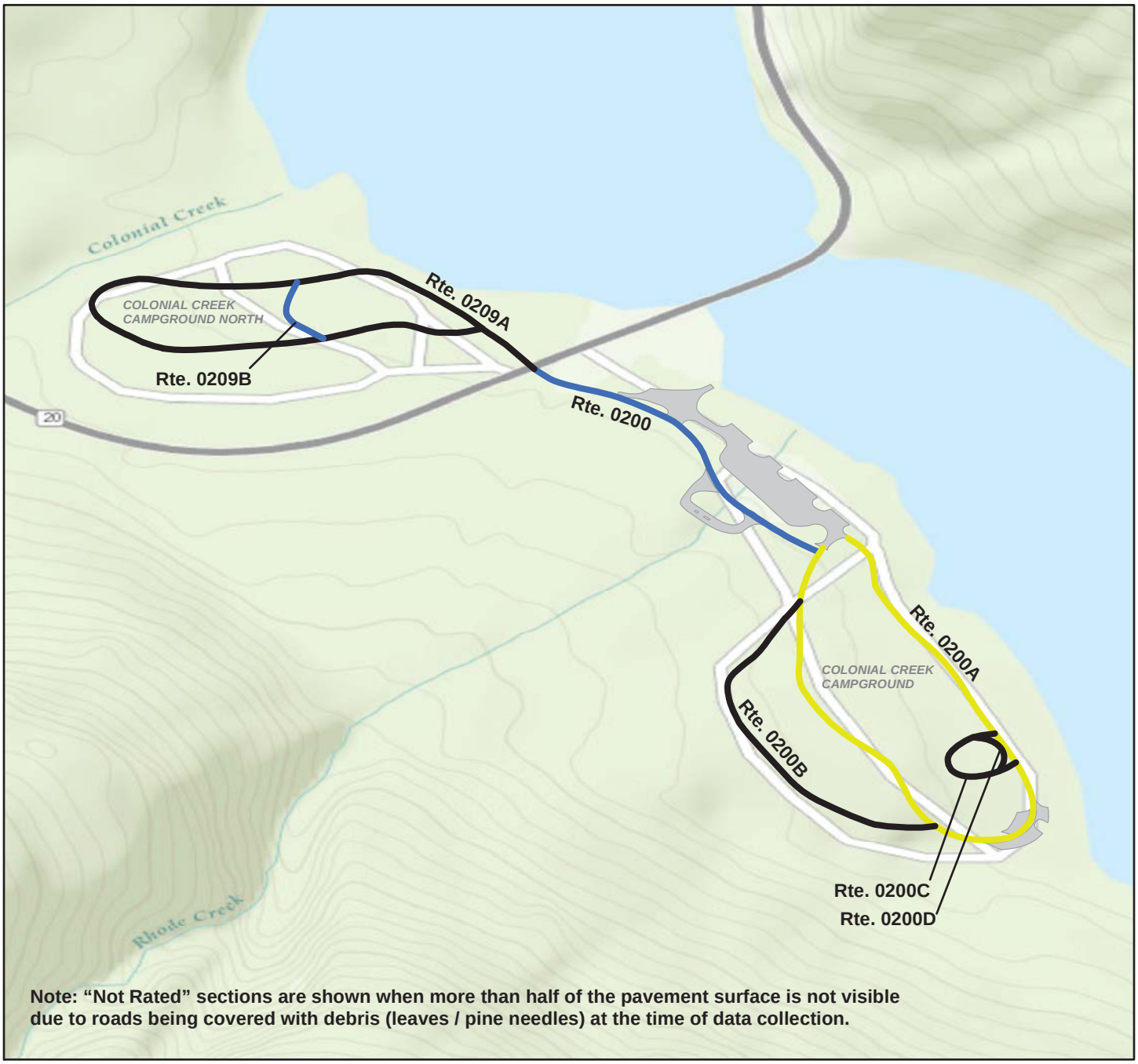
See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

Miles
0 1 2

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 2A



Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Only Data Collection Vehicle and Manually Rated Roads are displayed

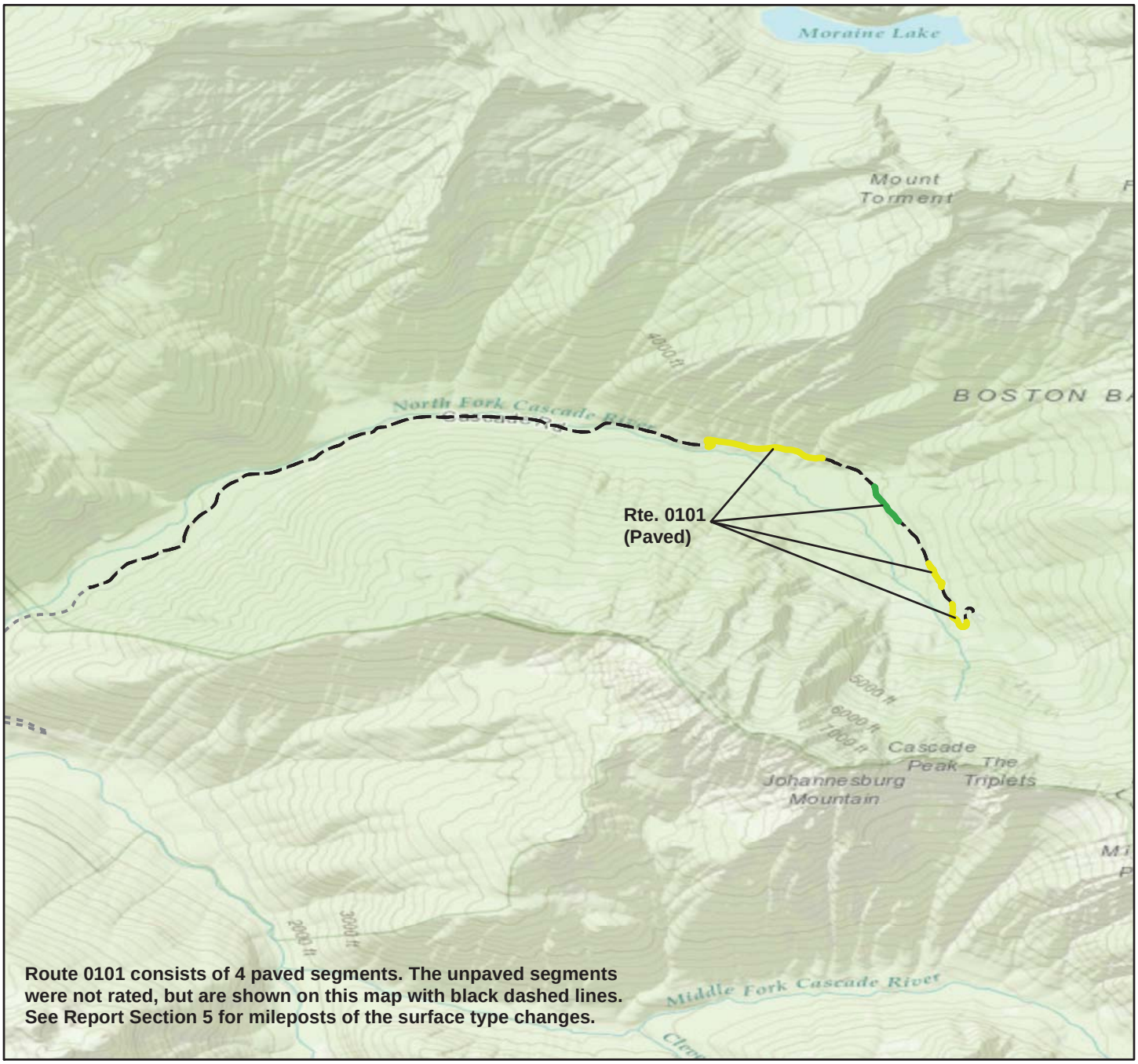
Miles

0 0.2 0.4

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 4



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

Miles
0 2 4

N

North Cascades National Park

ROUTE CONDITION MAP
PCR - MILE BY MILE
Map 5

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

Miles
0 1 2

N

Section 5
Paved Road Condition Rating Sheets

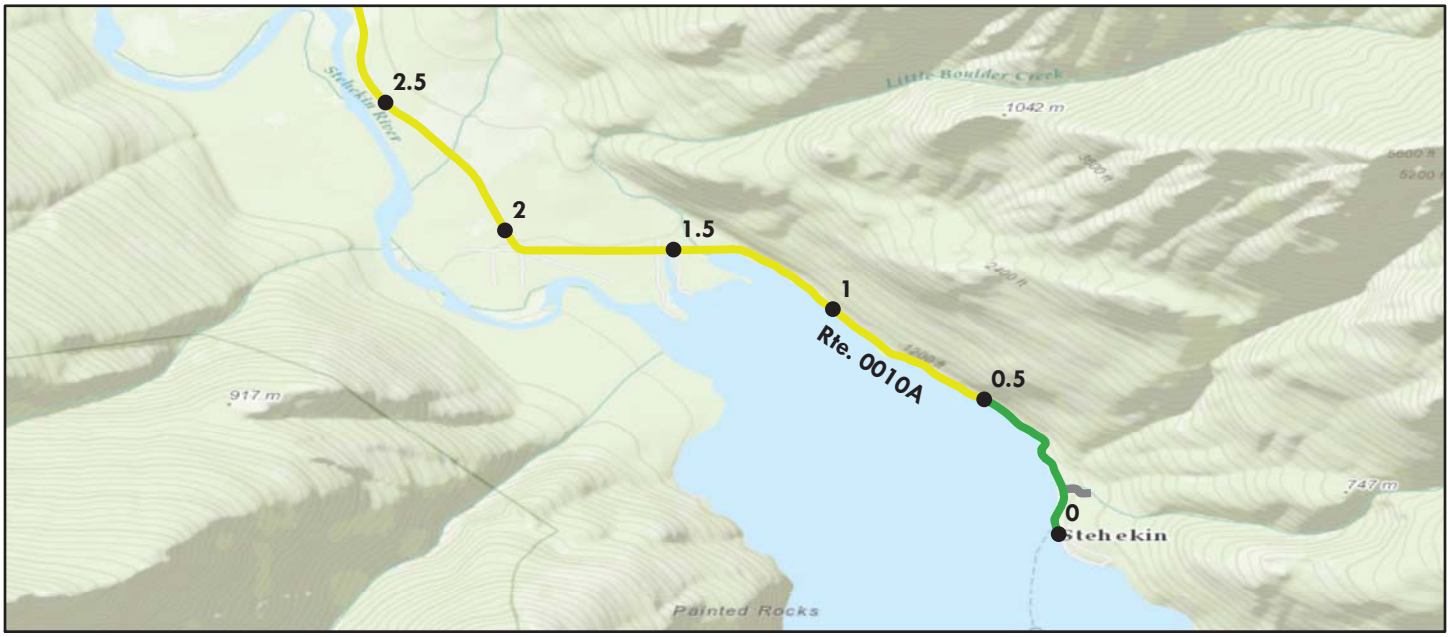
North Cascades National Park

Federal Lands Highway
Road Inventory Program

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

Manual Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

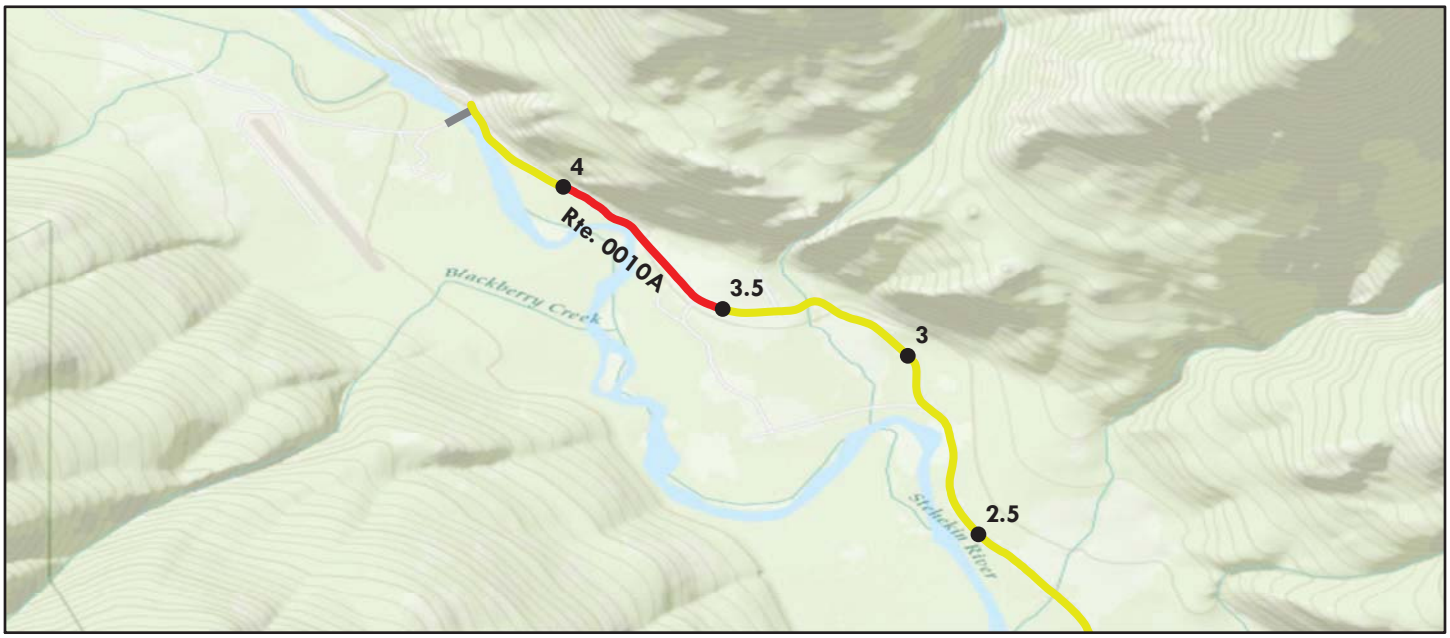
See Appendix for definitions and formulas

Inspection Date: 6/19/2015	**Beginning Section MP**	0.00	0.50	1.00	1.50	2.00
Paved Length (Miles): 4.31	**Section Length (MI)**	0.50	0.50	0.50	0.50	0.50
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	77	93	83	65	71	78
Surface Condition Rating (SCR)	77	93	83	65	71	78
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A	N/A	N/A
Distress Index Values						
Structural Crack Index	77	93	83	65	71	78
Alligator Crack Index	78	94	84	67	72	79
Longitudinal Crack Index	99	99	99	98	99	99
Transverse Cracking Index	100	100	100	100	100	100
Patching Index	94	93	98	97	95	94
Rutting Index	100	100	100	100	100	100
International Roughness Index (IRI)	N/A	N/A	N/A	N/A	N/A	N/A
Lane & Width Information						
Number of Lanes	1	1	1	1	1	1
Paved Width (ft)	16	16	16	16	16	16
Lane Width (ft)	16	16	16	16	16	16

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

Manual Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 6/19/2015	**Beginning Section MP**	2.50	3.00	3.50	4.00	
Paved Length (Miles): 4.31	**Section Length (MI)**	0.50	0.50	0.50	0.31	
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	77	82	73	59	78	
Surface Condition Rating (SCR)	77	82	73	59	78	
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A	N/A	
Distress Index Values						
Structural Crack Index	77	82	73	59	90	
Alligator Crack Index	78	82	76	59	91	
Longitudinal Crack Index	99	100	97	100	99	
Transverse Cracking Index	100	100	100	100	99	
Patching Index	94	98	98	89	78	
Rutting Index	100	100	100	100	100	
International Roughness Index (IRI)	N/A	N/A	N/A	N/A	N/A	
Lane & Width Information						
Number of Lanes	1	1	1	1	1	
Paved Width (ft)	16	16	16	16	16	
Lane Width (ft)	16	16	16	16	16	

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

SECTION 1: MILEPOST 0 - 0.50

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

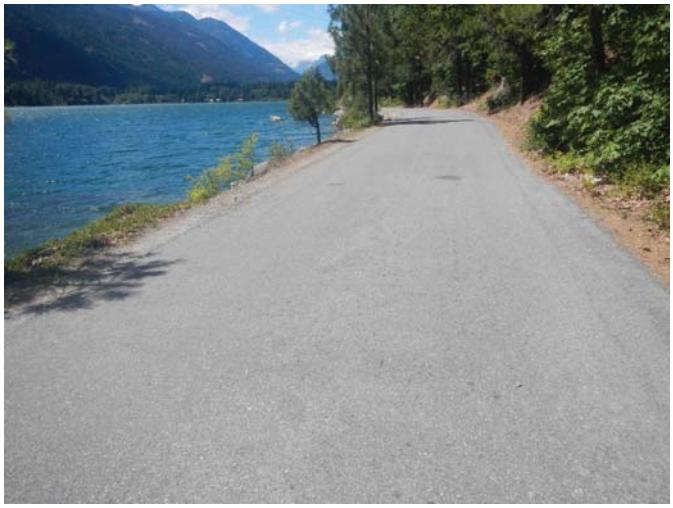
NOCA_0010A_1_0965.JPG

NOCA_0010A_1_0970.JPG

NOCA_0010A_1_0973.JPG

NOCA_0010A_1_0976.JPG

NOCA_0010A_1_0979.JPG



NOCA_0010A_1_0981.JPG

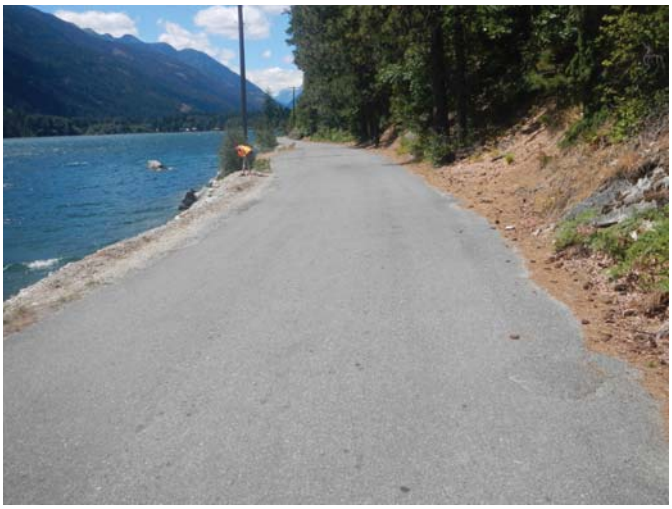
North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

SECTION 2: MILEPOST 0.50 - 1.00

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



NOCA_0010A_2_0982.JPG

NOCA_0010A_2_0984.JPG

NOCA_0010A_2_0986.JPG

NOCA_0010A_2_0987.JPG

NOCA_0010A_2_0991.JPG

NOCA_0010A_2_0992.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

SECTION 3: MILEPOST 1.00 - 1.50

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_3_0997.JPG

NOCA_0010A_3_0999.JPG

NOCA_0010A_3_1002.JPG

NOCA_0010A_3_1005.JPG

NOCA_0010A_3_1008.JPG

NOCA_0010A_3_1010.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)
SECTION 4: MILEPOST 1.50 - 2.00
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_4_0957.JPG

NOCA_0010A_4_0961.JPG

NOCA_0010A_4_0963.JPG

NOCA_0010A_4_1012.JPG

NOCA_0010A_4_1013.JPG

NOCA_0010A_4_1018.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

SECTION 5: MILEPOST 2.00 - 2.50

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_5_0942.JPG

NOCA_0010A_5_0943.JPG

NOCA_0010A_5_0948.JPG

NOCA_0010A_5_0949.JPG

NOCA_0010A_5_0953.JPG

NOCA_0010A_5_0956.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)
SECTION 6: MILEPOST 2.50 - 3.00
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_6_0928.JPG

NOCA_0010A_6_0929.JPG

NOCA_0010A_6_0931.JPG

NOCA_0010A_6_0932.JPG

NOCA_0010A_6_0936.JPG

NOCA_0010A_6_0937.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)

SECTION 7: MILEPOST 3.00 - 3.50

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_7_0918.JPG

NOCA_0010A_7_0922.JPG

NOCA_0010A_7_0923.JPG

NOCA_0010A_7_0925.JPG

NOCA_0010A_7_0926.JPG

NOCA_0010A_7_0927.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)
SECTION 8: MILEPOST 3.50 - 4.00
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_8_0895.JPG

NOCA_0010A_8_0899.JPG

NOCA_0010A_8_0900.JPG

NOCA_0010A_8_0902.JPG

NOCA_0010A_8_0905.JPG

NOCA_0010A_8_0915.JPG

North Cascades National Park

ROUTE 0010A: STEHEKIN VALLEY ROAD (PAVED SECTION)
SECTION 9: MILEPOST 4.00 - 4.31
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0010A_9_0882.JPG

NOCA_0010A_9_0886.JPG

NOCA_0010A_9_0888.JPG

NOCA_0010A_9_0889.JPG

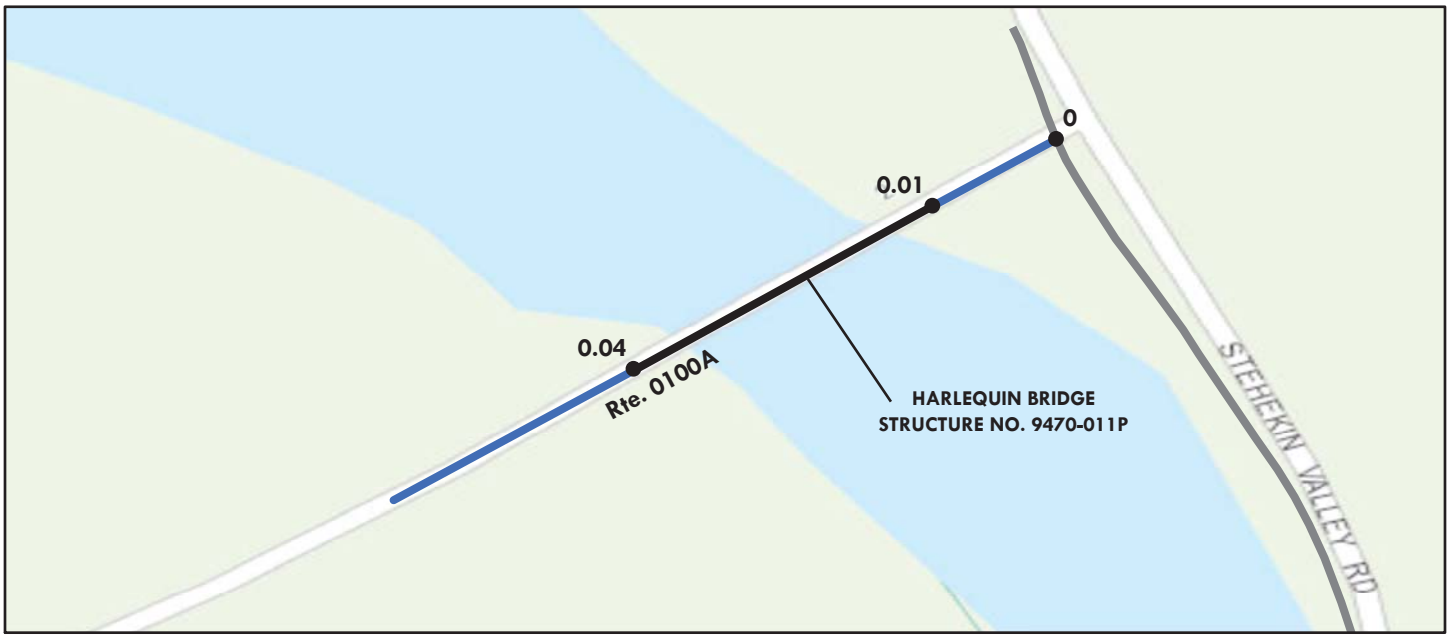
NOCA_0010A_9_0892.JPG

NOCA_0010A_9_0893.JPG

North Cascades National Park

ROUTE 0100A: COMPANY CREEK ROAD (PAVED SECTION)

Manual Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date:	6/19/2015	**Beginning Section MP**	0.00	0.01	0.04		
Paved Length (Miles):	0.07	**Section Length (MI)**	0.01	0.03	0.03		
Surface Type:	ASPHALT	**Route Summary**					
Roadway Condition Information							
Pavement Condition Rating (PCR)		100	100	N/A	100		
Surface Condition Rating (SCR)		100	100	N/A	100		
Roughness Condition Index (RCI)		N/A	N/A	N/A	N/A		
Distress Index Values							
Structural Crack Index		100	100	N/A	100		
Alligator Crack Index		100	100	N/A	100		
Longitudinal Crack Index		100	100	N/A	100		
Transverse Cracking Index		100	100	N/A	100		
Patching Index		100	100	N/A	100		
Rutting Index		100	100	N/A	100		
International Roughness Index (IRI)		N/A	N/A	N/A	N/A		
Lane & Width Information							
Number of Lanes		1	1	1	1		
Paved Width (ft)		16	16	16	16		
Lane Width (ft)		16	16	16	16		

Note: Route 0100A is a very short paved road consisting of a 170 ft. long wooden bridge deck with a 132 ft. long asphalt approach on the west end and a 67 ft. long asphalt approach on the east end. Condition ratings are only for the asphalt sections.

North Cascades National Park

ROUTE 0100A: COMPANY CREEK ROAD (PAVED SECTION)

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0100A_1020.JPG

NOCA_0100A_1021.JPG

NOCA_0100A_1022.JPG

NOCA_0100A_1023.JPG

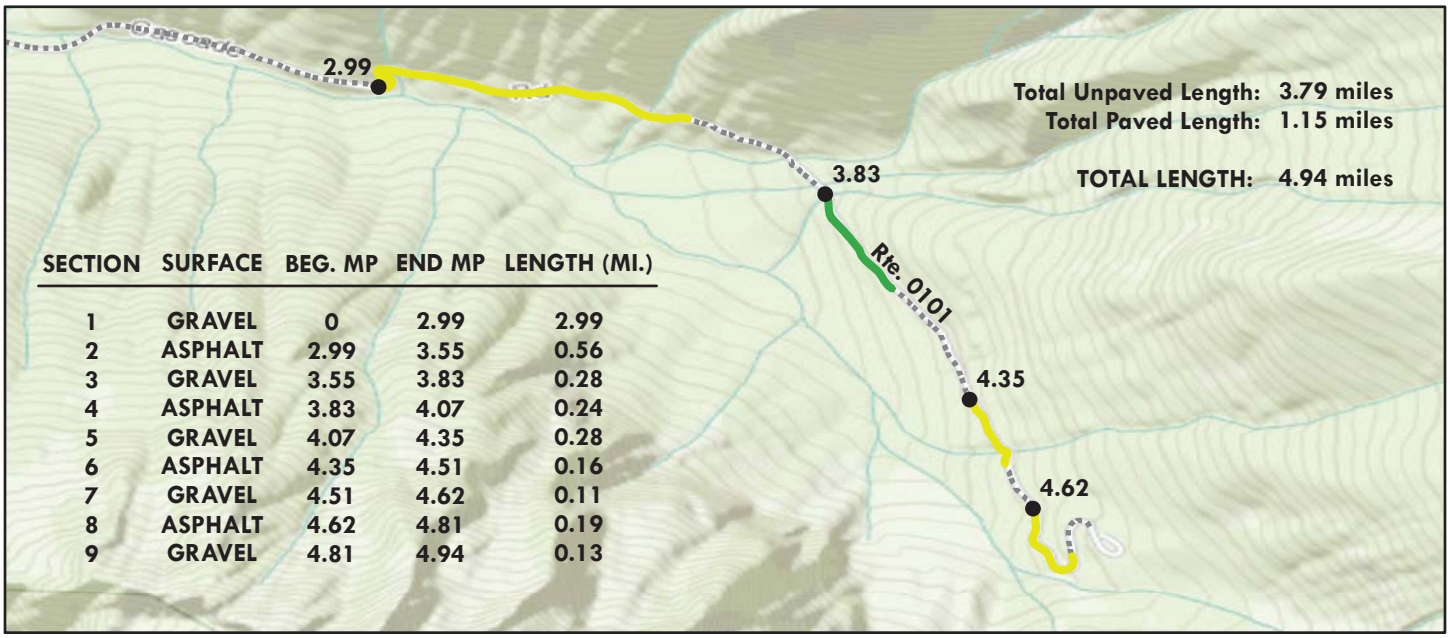
NOCA_0100A_1024.JPG

NOCA_0100A_1026.JPG

North Cascades National Park

ROUTE 0101: CASCADE RIVER ROAD

Manual Rating



Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 6/18/2015	**Beginning Section MP**	2.99	3.83	4.35	4.62	
Paved Length (Miles): 1.15	**Section Length (MI)**	0.56	0.24	0.16	0.19	
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	79	76	86	76	81	
Surface Condition Rating (SCR)	79	76	86	76	81	
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A	N/A	
Distress Index Values						
Structural Crack Index	99	99	98	100	100	
Alligator Crack Index	100	100	100	100	100	
Longitudinal Crack Index	99	99	98	100	100	
Transverse Cracking Index	100	100	100	100	100	
Patching Index	98	98	98	96	100	
Rutting Index	79	76	86	76	81	
International Roughness Index (IRI)	N/A	N/A	N/A	N/A	N/A	
Lane & Width Information						
Number of Lanes	1	1	1	1	1	
Paved Width (ft)	13	13	13	13	13	
Lane Width (ft)	13	13	13	13	13	

Note: Route 0101 consists of 5 unpaved sections and 4 asphalt sections. Only the paved sections received condition ratings.

North Cascades National Park

ROUTE 0101: CASCADE RIVER ROAD
PAVED SECTION 1: MILEPOST 2.99 - 3.55
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0101_1_0796.JPG

NOCA_0101_1_0799.JPG

NOCA_0101_1_0804.JPG

NOCA_0101_1_0807.JPG

NOCA_0101_1_0809.JPG

NOCA_0101_1_0820.JPG

North Cascades National Park

ROUTE 0101: CASCADE RIVER ROAD
PAVED SECTION 2: MILEPOST 3.83 - 4.07
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0101_2_0774.JPG

NOCA_0101_2_0778.JPG

NOCA_0101_2_0781.JPG

NOCA_0101_2_0784.JPG

NOCA_0101_2_0788.JPG

NOCA_0101_2_0789.JPG

North Cascades National Park

ROUTE 0101: CASCADE RIVER ROAD
PAVED SECTION 3: MILEPOST 4.35 - 4.51
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0101_3_0764.JPG

NOCA_0101_3_0766.JPG

NOCA_0101_3_0768.JPG

NOCA_0101_3_0770.JPG

NOCA_0101_3_0771.JPG

NOCA_0101_3_0772.JPG

North Cascades National Park

ROUTE 0101: CASCADE RIVER ROAD
PAVED SECTION 4: MILEPOST 4.62 - 4.81
Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0101_4_0753.JPG

NOCA_0101_4_0755.JPG

NOCA_0101_4_0756.JPG

NOCA_0101_4_0759.JPG

NOCA_0101_4_0761.JPG

NOCA_0101_4_0762.JPG

North Cascades National Park

ROUTE 0105: ENVIRONMENTAL LEARNING CENTER ACCESS ROAD

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

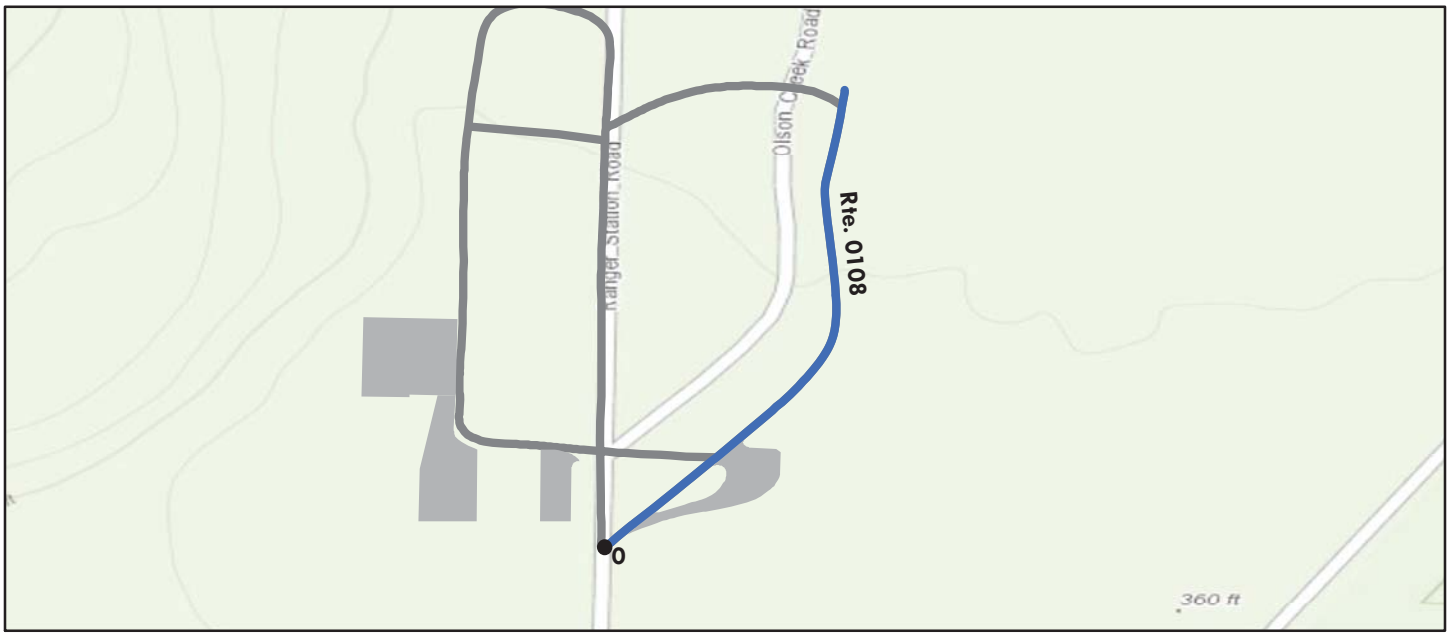
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.19	**Section Length (MI)**	0.19				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	82	82				
Surface Condition Rating (SCR)	82	82				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	99	99				
Alligator Crack Index	100	100				
Longitudinal Crack Index	99	99				
Transverse Cracking Index	82	82				
Patching Index	100	100				
Rutting Index	97	97				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	20	20				
Lane Width (ft)	10	10				

North Cascades National Park

ROUTE 0108: OLSON CREEK ROAD

Data Collection Vehicle (DCV) Rating



Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.17	**Section Length (MI)**	0.17				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	100	100				
Surface Condition Rating (SCR)	100	100				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	100	100				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.8	13.8				
Lane Width (ft)	13.8	13.8				

North Cascades National Park

ROUTE 0200: COLONIAL CREEK CAMPGROUND ACCESS SOUTH

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

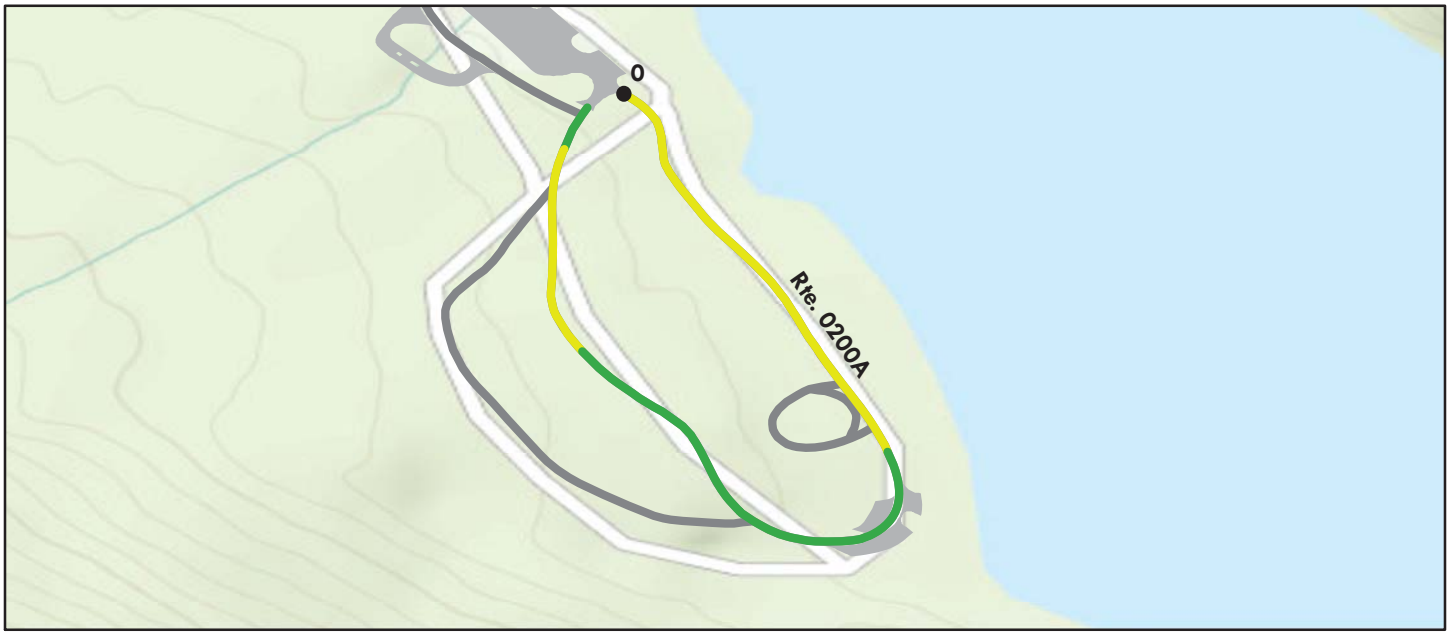
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.2	**Section Length (MI)**	0.2				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	96	96				
Surface Condition Rating (SCR)	96	96				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	96	96				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	17.3	17.3				
Lane Width (ft)	11.5	11.5				

North Cascades National Park

ROUTE 0200A: COLONIAL CREEK CAMPGROUND LOOP A

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

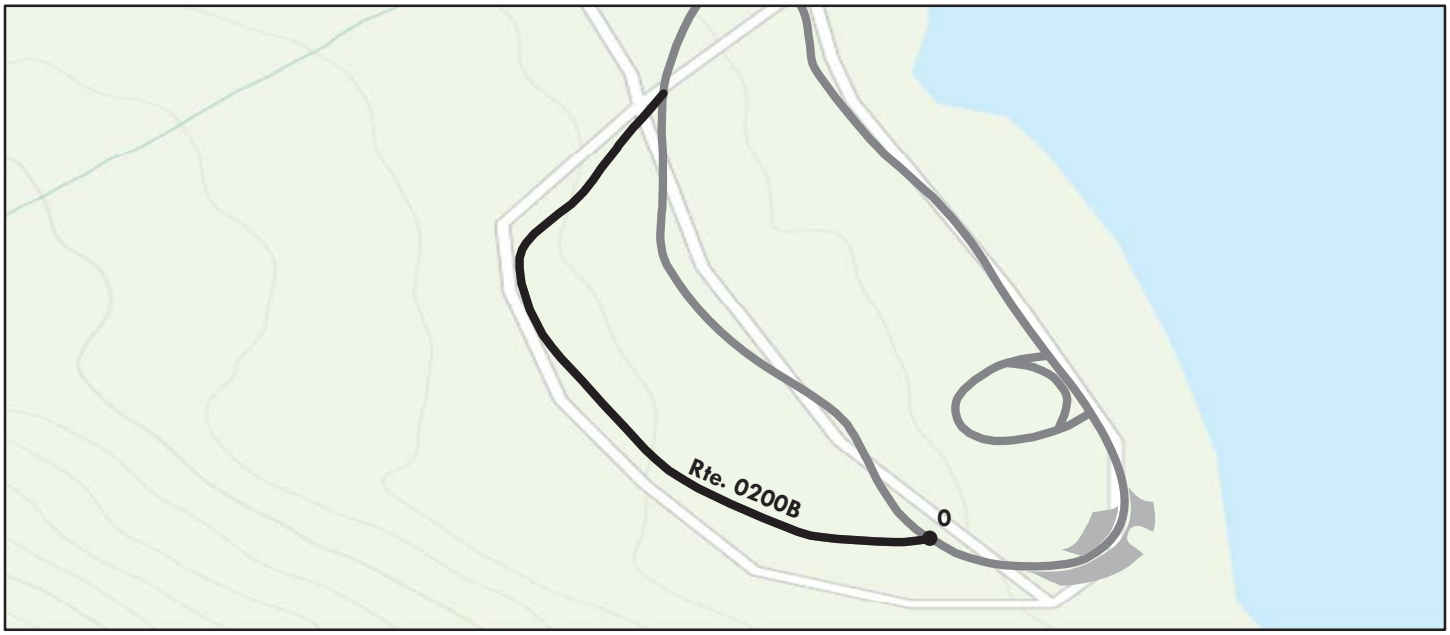
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.53	**Section Length (MI)**	0.53				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	82	82				
Surface Condition Rating (SCR)	82	82				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	82	82				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.7	12.7				
Lane Width (ft)	12.7	12.7				

North Cascades National Park

ROUTE 0200B: COLONIAL CREEK CAMPGROUND LOOP B

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

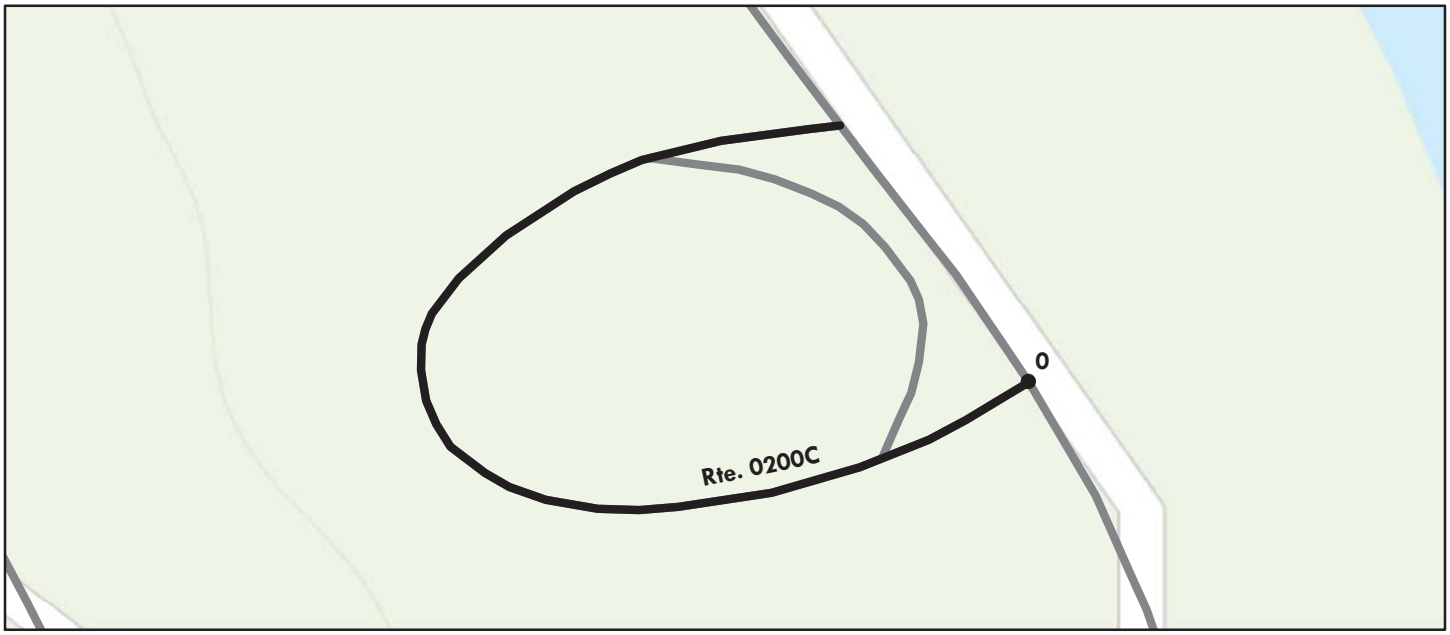
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.24	**Section Length (MI)**	0.24				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.2	12.2				
Lane Width (ft)	12.2	12.2				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0200C: COLONIAL CREEK CAMPGROUND LOOP C

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.08	**Section Length (MI)**	0.08				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	11.5	11.5				
Lane Width (ft)	11.5	11.5				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0200D: COLONIAL CREEK CAMPGROUND LOOP D

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

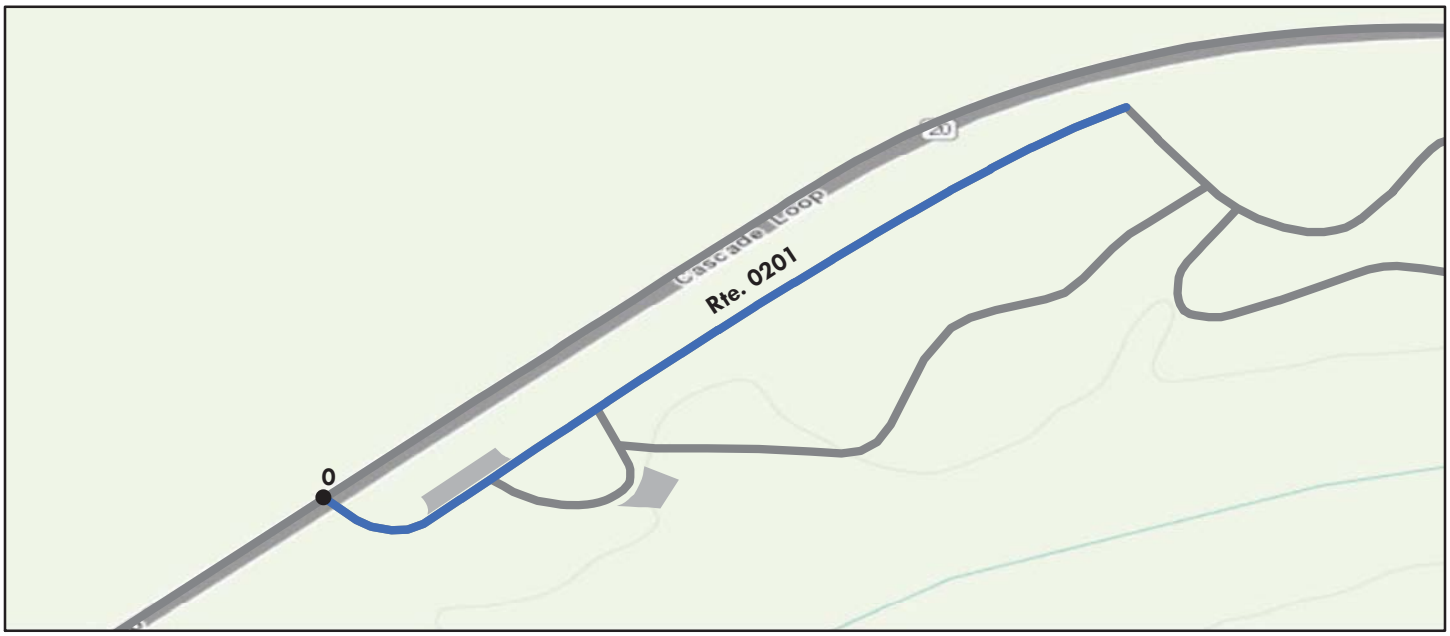
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.03	**Section Length (MI)**	0.03				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.3	13.3				
Lane Width (ft)	13.3	13.3				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0201: GOODELL CREEK CAMPGROUND ACCESS ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

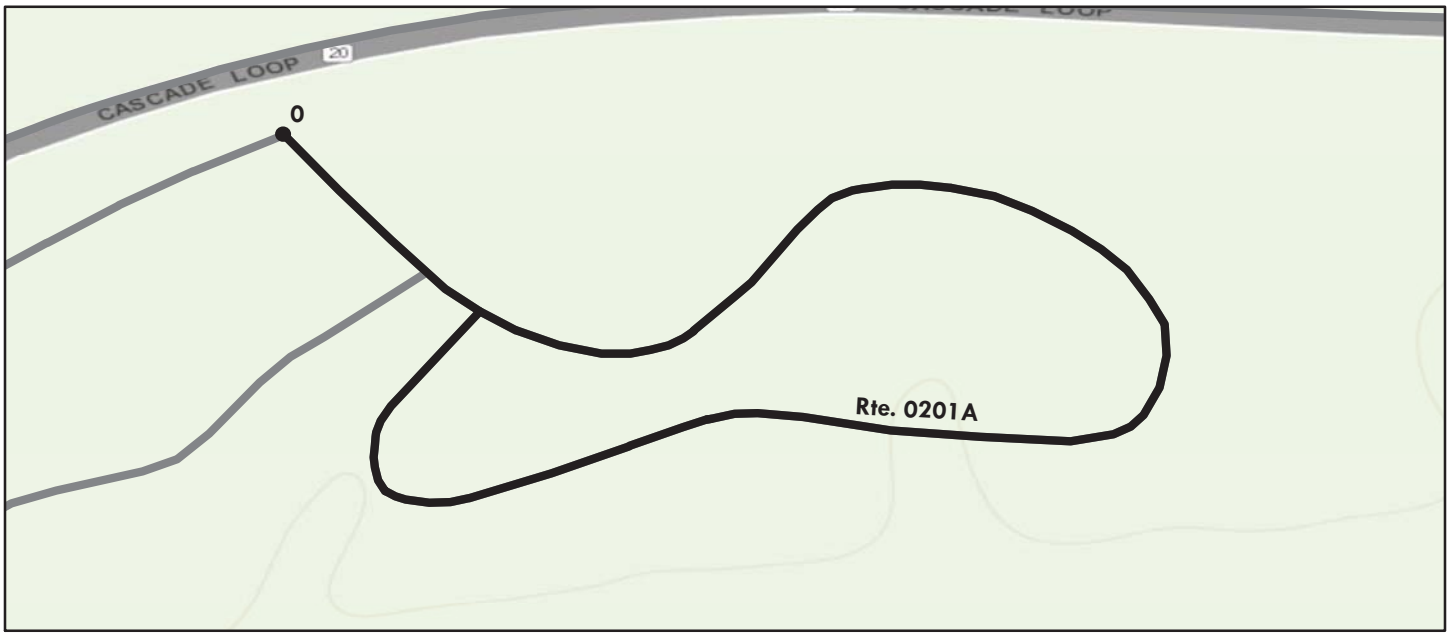
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.2	**Section Length (MI)**	0.2				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	98				
Surface Condition Rating (SCR)	98	98				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	24.5	24.5				
Lane Width (ft)	12.2	12.2				

North Cascades National Park

ROUTE 0201A: GOODELL CREEK CAMPGROUND LOOP A

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.27	**Section Length (MI)**	0.27				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	14.1	14.1				
Lane Width (ft)	12.7	12.7				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0201B: GOODELL CREEK CAMPGROUND LOOP B

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

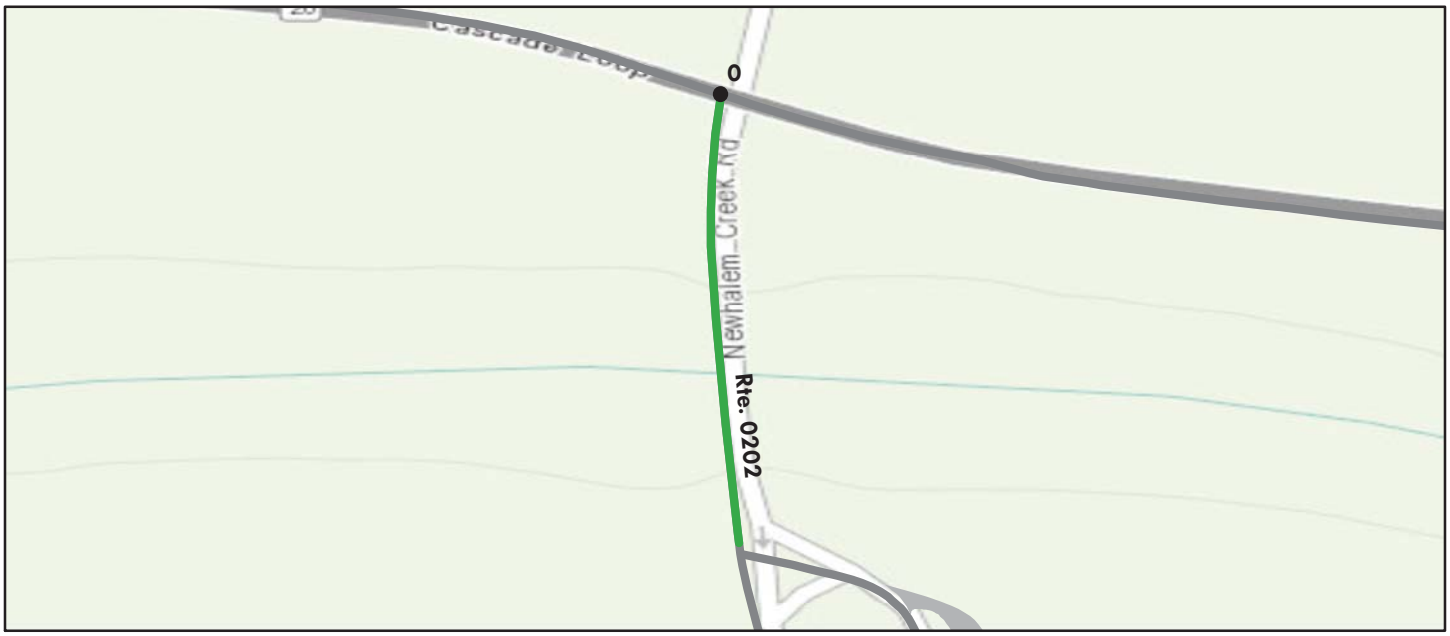
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.16	**Section Length (MI)**	0.16				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.2	12.2				
Lane Width (ft)	12.2	12.2				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0202: NEWHALEM CREEK CAMPGROUND ACCESS ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.1	**Section Length (MI)**	0.1				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	93	93				
Surface Condition Rating (SCR)	93	93				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	99	99				
Alligator Crack Index	100	100				
Longitudinal Crack Index	99	99				
Transverse Cracking Index	93	93				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	21.5	21.5				
Lane Width (ft)	15.1	15.1				

North Cascades National Park

ROUTE 0204: NORTH CASCADES VISITOR CENTER ACCESS ROAD

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

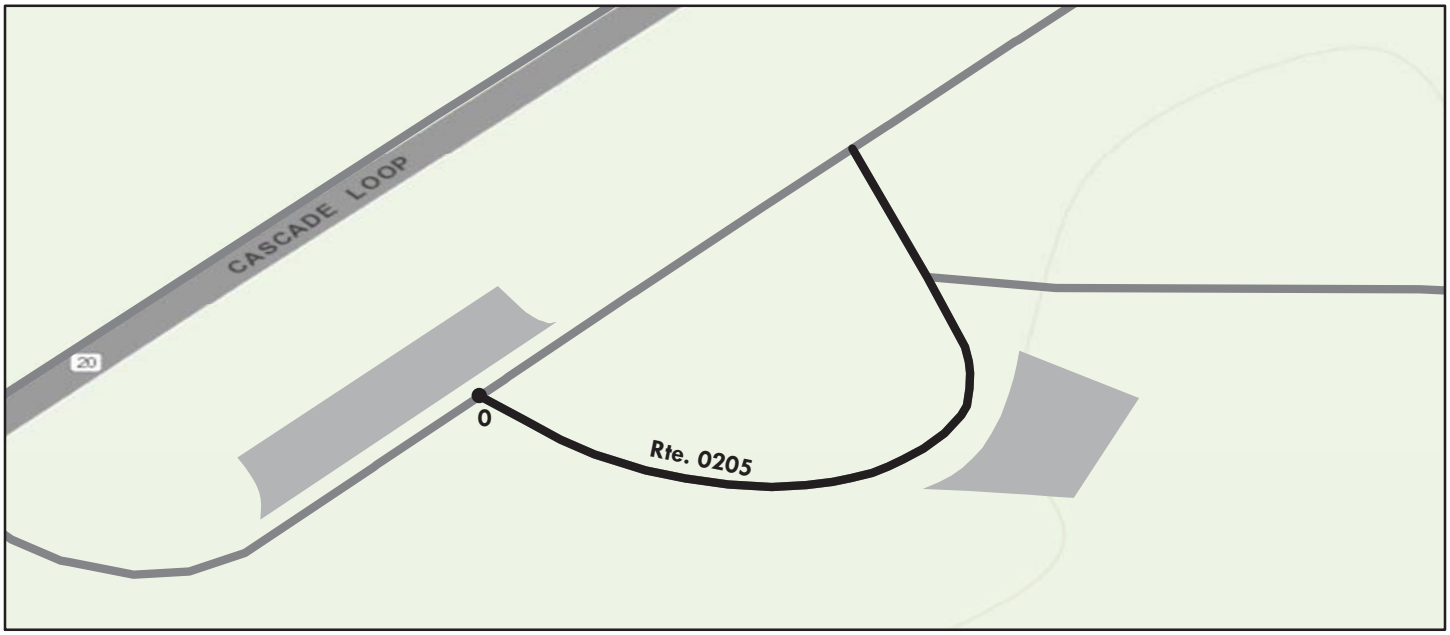
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.72	**Section Length (MI)**	0.72				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	86	86				
Surface Condition Rating (SCR)	98	98				
Roughness Condition Index (RCI)	67	67				
Distress Index Values						
Structural Crack Index	99	99				
Alligator Crack Index	100	100				
Longitudinal Crack Index	99	99				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	212	212				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	24	24				
Lane Width (ft)	12.7	12.7				

North Cascades National Park

ROUTE 0205: NEWHALEM RAFT LAUNCH LOOP

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

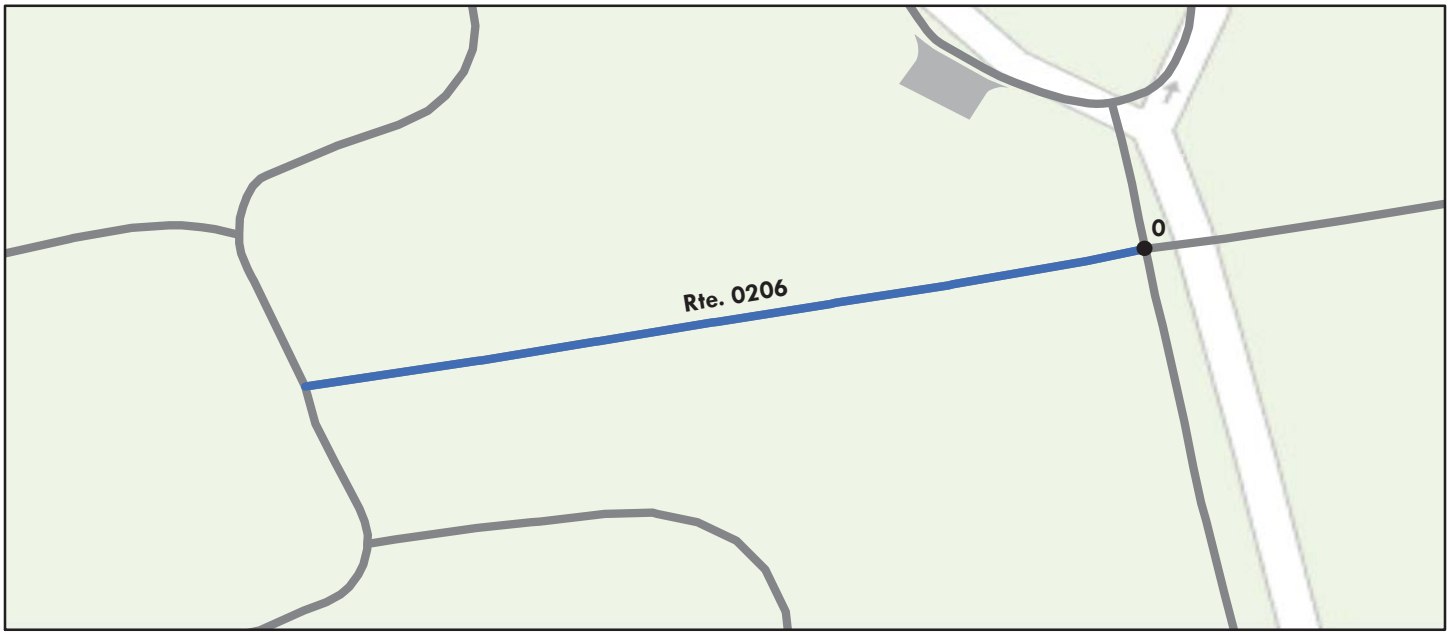
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.04	**Section Length (MI)**	0.04				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.8	12.8				
Lane Width (ft)	12.8	12.8				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0206: NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

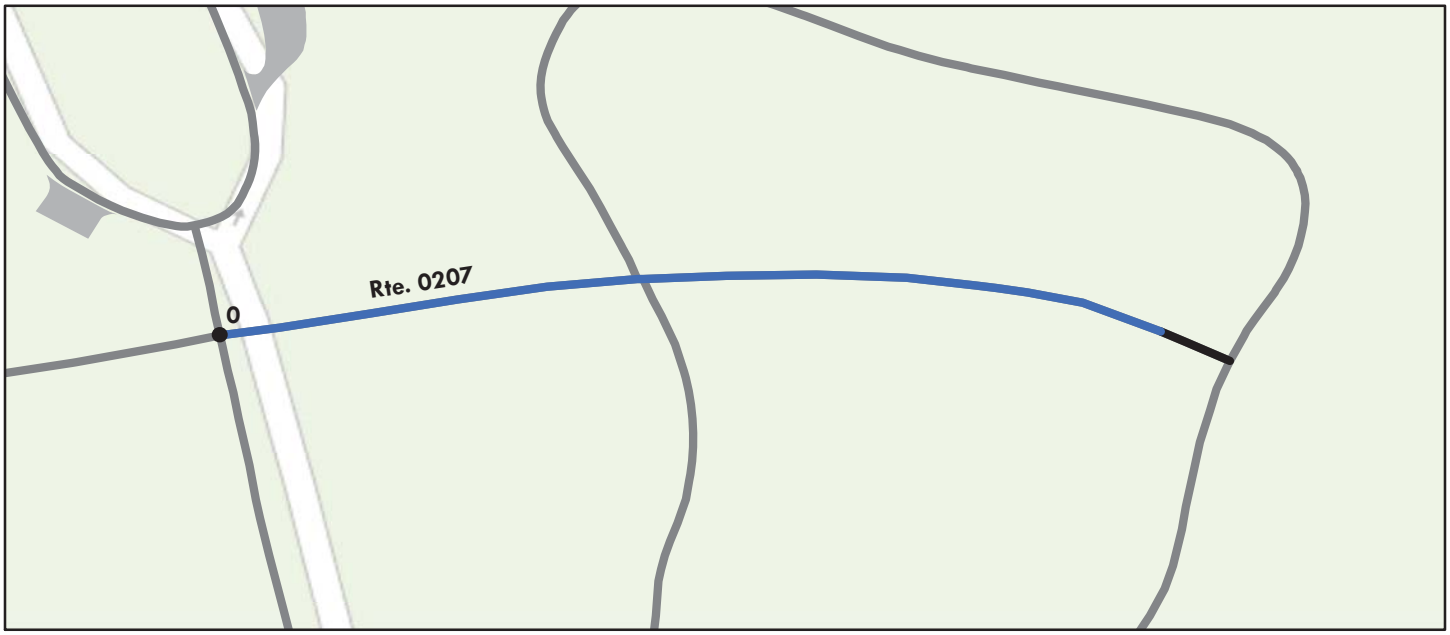
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.06	**Section Length (MI)**	0.06				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	97	97				
Surface Condition Rating (SCR)	97	97				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	98	98				
Patching Index	100	100				
Rutting Index	97	97				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	21.1	21.1				
Lane Width (ft)	10.7	10.7				

North Cascades National Park

ROUTE 0207: NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

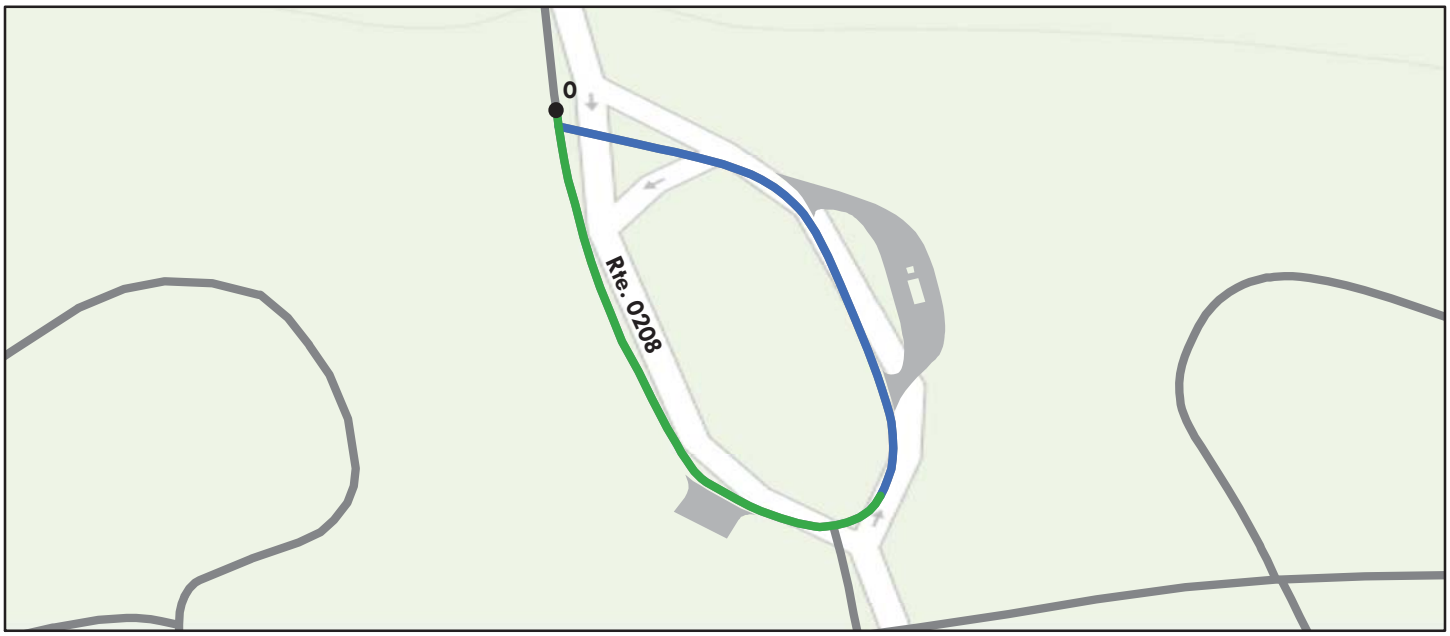
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.12	**Section Length (MI)**	0.12				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	95	95				
Surface Condition Rating (SCR)	95	95				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	98	98				
Alligator Crack Index	100	100				
Longitudinal Crack Index	98	98				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	95	95				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	21.7	21.7				
Lane Width (ft)	10.7	10.7				

North Cascades National Park

ROUTE 0208: NEWHALEM CREEK CAMP TENDER STATION ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

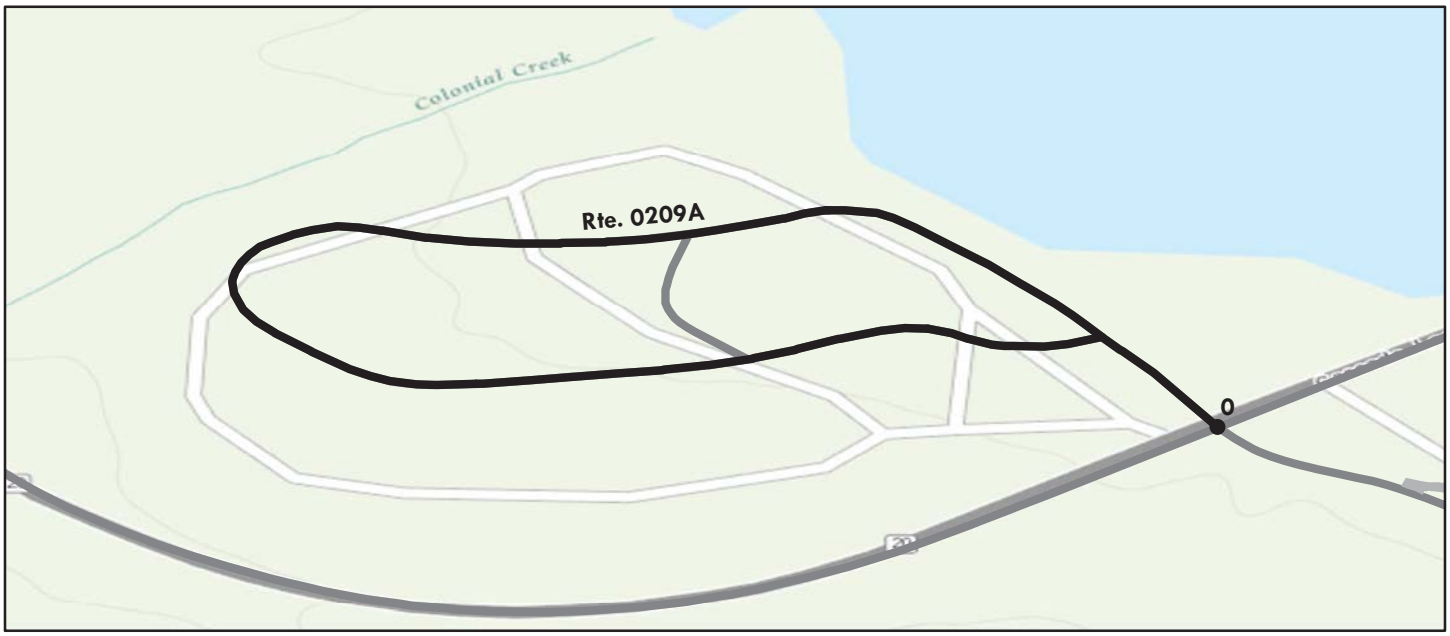
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.17	**Section Length (MI)**	0.17				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	95	95				
Surface Condition Rating (SCR)	95	95				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	99	99				
Alligator Crack Index	100	100				
Longitudinal Crack Index	99	99				
Transverse Cracking Index	95	95				
Patching Index	100	100				
Rutting Index	97	97				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.6	12.6				
Lane Width (ft)	12.6	12.6				

North Cascades National Park

ROUTE 0209A: COLONIAL CREEK CAMPGROUND NORTH LOOP A

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

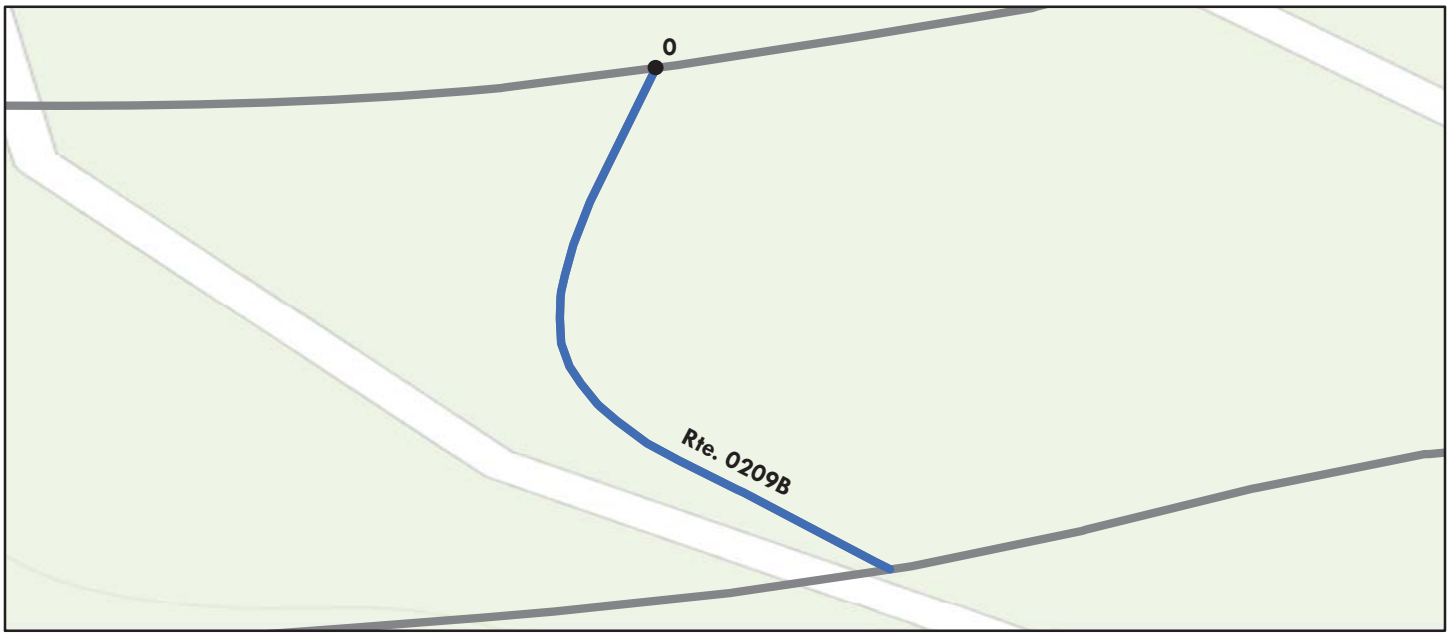
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.44	**Section Length (MI)**	0.44				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.3	13.3				
Lane Width (ft)	12.5	12.5				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles)..

North Cascades National Park

ROUTE 0209B: COLONIAL CREEK CAMPGROUND NORTH LOOP B

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

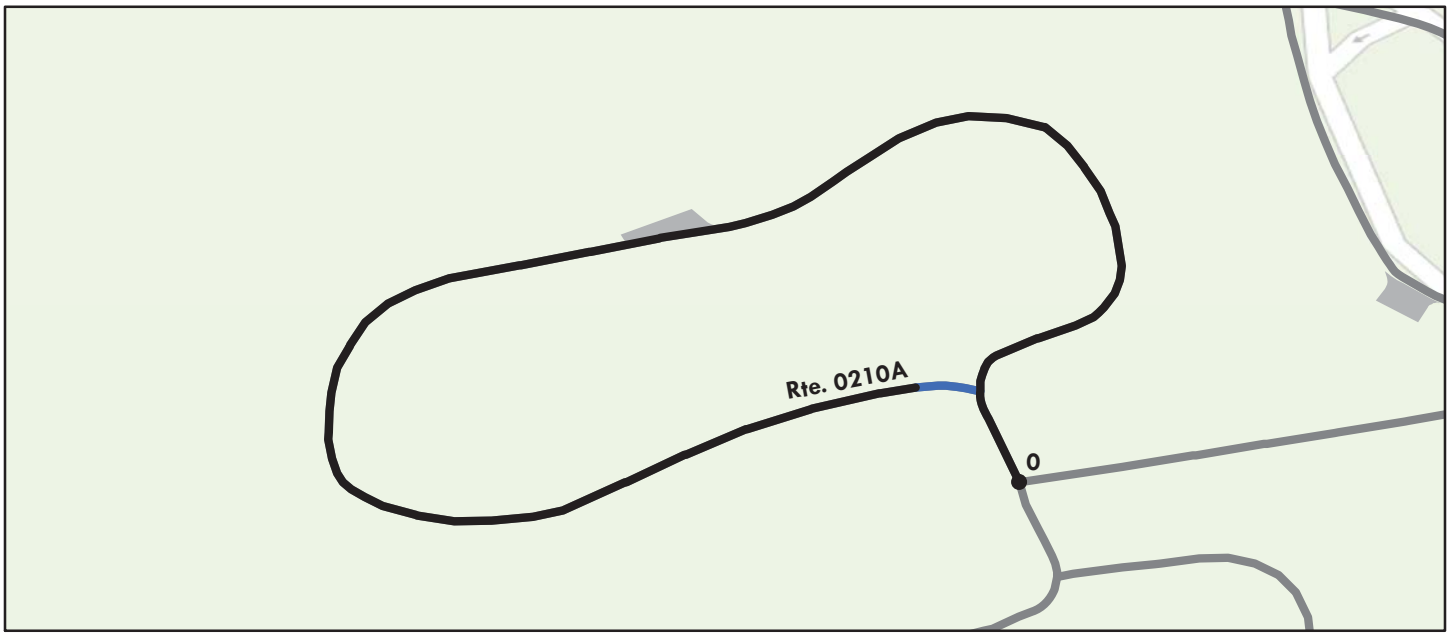
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.04	**Section Length (MI)**	0.04				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	98				
Surface Condition Rating (SCR)	98	98				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.7	12.7				
Lane Width (ft)	12.7	12.7				

North Cascades National Park

ROUTE 0210A: NEWHALEM CREEK CAMPGROUND LOOP A

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

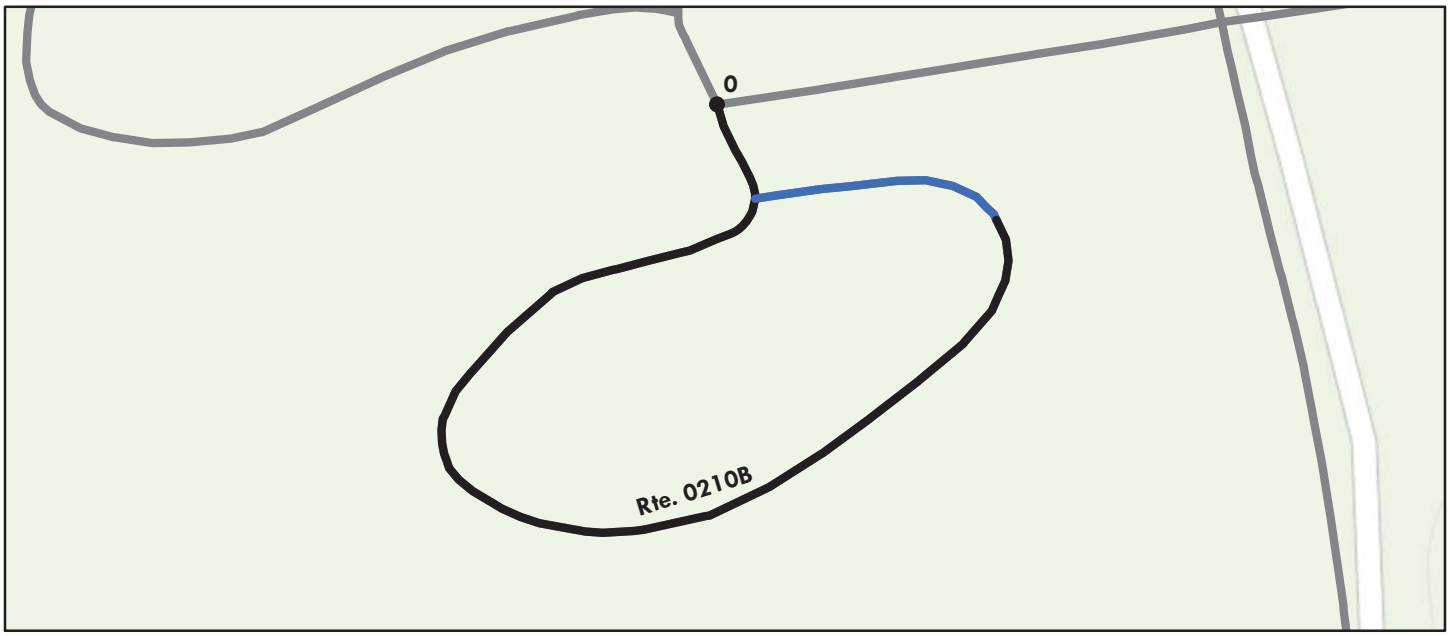
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.31	**Section Length (MI)**	0.31				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.6	13.6				
Lane Width (ft)	12.9	12.9				

Note: The majority of this road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0210B: NEWHALEM CREEK CAMPGROUND LOOP B

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

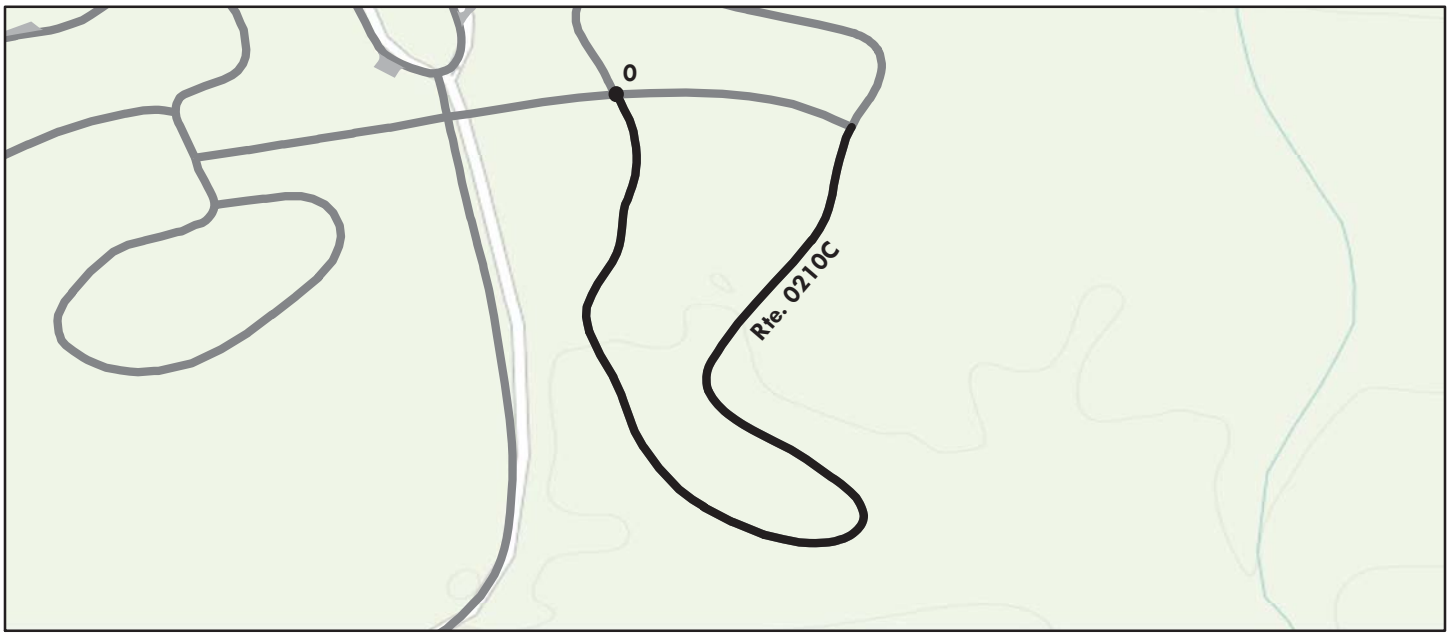
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.24	**Section Length (MI)**	0.24				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	11.2	11.2				
Lane Width (ft)	11.2	11.2				

Note: The majority of this road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0210C: NEWHALEM CREEK CAMPGROUND LOOP C

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.42	**Section Length (MI)**	0.42				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	11.8	11.8				
Lane Width (ft)	11.8	11.8				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0210D: NEWHALEM CREEK GROUP CAMPGROUND LOOP D

Data Collection Vehicle (DCV) Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.17	**Section Length (MI)**	0.17				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	10.2	10.2				
Lane Width (ft)	10.2	10.2				

Note: This road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0400: TREATMENT PLANT HILL ROAD

Manual Rating

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 6/19/2015	**Beginning Section MP**	0.00				
Paved Length (Miles): 0.07	**Section Length (MI)**	0.07				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	0	0				
Surface Condition Rating (SCR)	0	0				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12	12				
Lane Width (ft)	12	12				

Note: Individual pavement distresses could not be identified due to the route being in very poor condition and almost unpaved.

North Cascades National Park

ROUTE 0400: TREATMENT PLANT HILL ROAD

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.

NOCA_0400_0873.JPG

NOCA_0400_0874.JPG

NOCA_0400_0875.JPG

NOCA_0400_0876.JPG

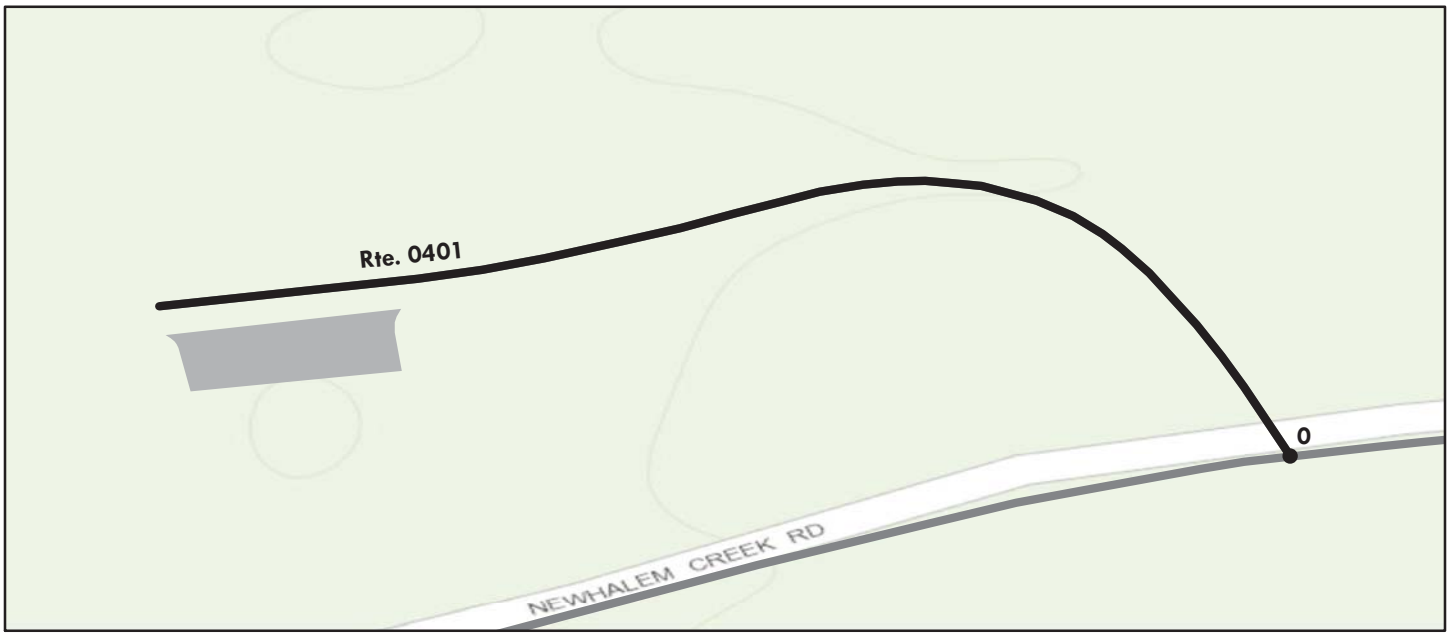
NOCA_0400_0879.JPG

NOCA_0400_0880.JPG

North Cascades National Park

ROUTE 0401: NORTH CASCADES VISITOR CENTER SERVICE ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

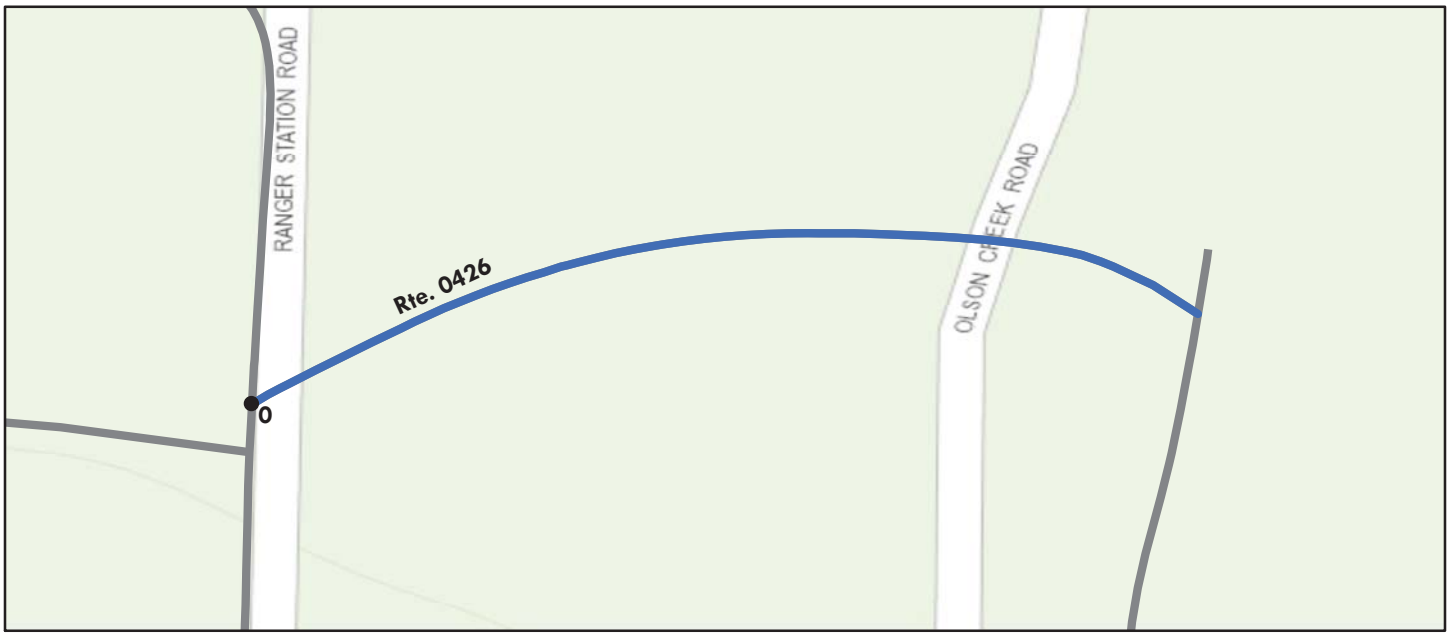
Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.07	**Section Length (MI)**	0.07				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	N/A	N/A				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	21	21				
Lane Width (ft)	10.5	10.5				

Note: The majority of this road did not receive a condition rating due to debris on road (leaves / pine needles).

North Cascades National Park

ROUTE 0426: MARBLEMOUNT BARN ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

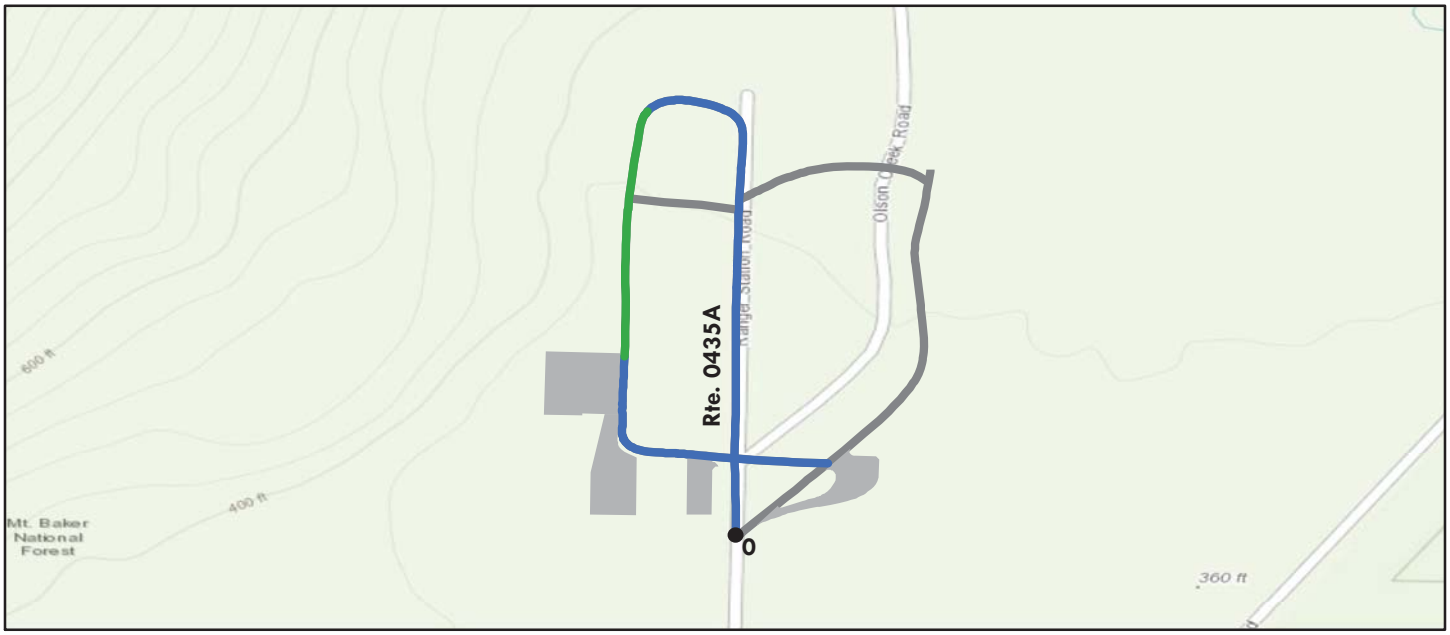
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.05	**Section Length (MI)**	0.05				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	99	99				
Surface Condition Rating (SCR)	99	99				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.6	13.6				
Lane Width (ft)	13.6	13.6				

North Cascades National Park

ROUTE 0435A: MARBLEMOUNT COUNCIL OAK DRIVE

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

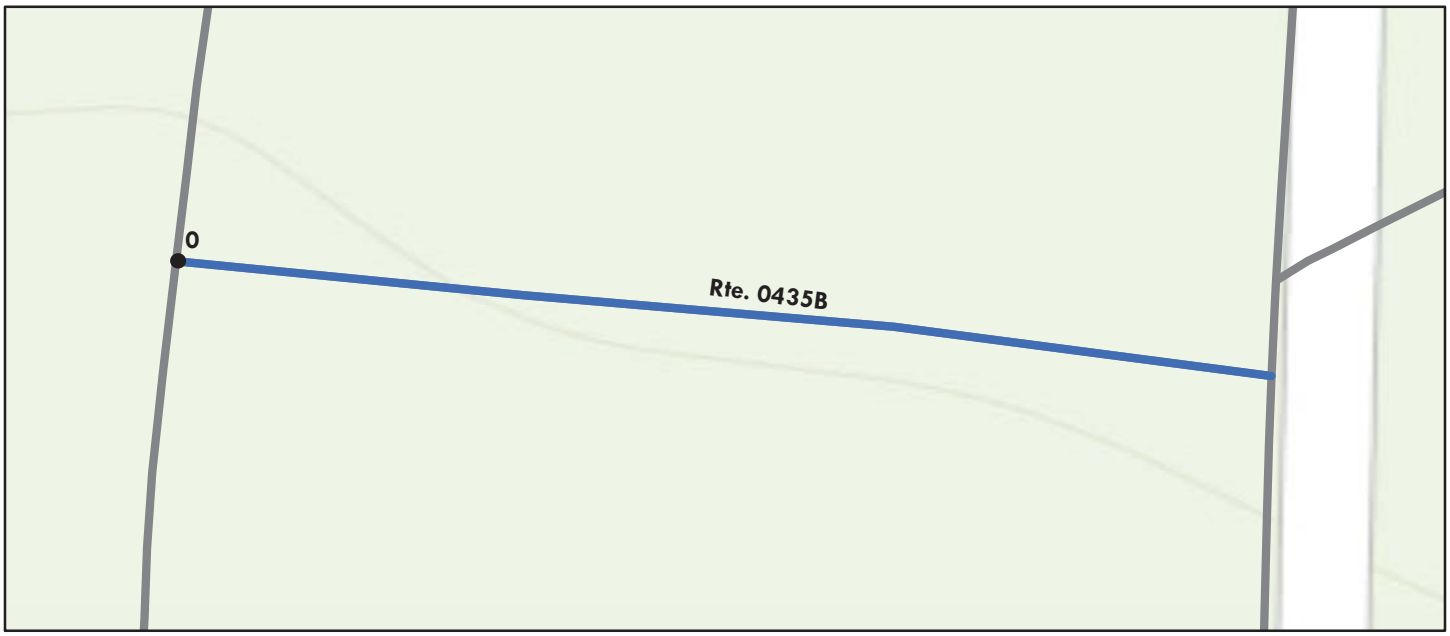
See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.39	**Section Length (MI)**	0.39				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	98				
Surface Condition Rating (SCR)	98	98				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	17.6	17.6				
Lane Width (ft)	17.6	17.6				

North Cascades National Park

ROUTE 0435B: MARBLEMOUNT COUNCIL OAK SPUR

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Inspection Date: 9/29/2015	**Beginning Section MP**	0				
Paved Length (Miles): 0.03	**Section Length (MI)**	0.03				
Surface Type: ASPHALT	**Route Summary**					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	98				
Surface Condition Rating (SCR)	98	98				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	98	98				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	13.4	13.4				
Lane Width (ft)	13.4	13.4				

Section 6
Paved Parking Area Condition Rating Sheets

North Cascades National Park

Federal Lands Highway
Road Inventory Program

North Cascades National Park

ROUTE 0900A: MARBLEMOUNT ADMINISTRATIVE PUBLIC PARKING

Manual Rating

FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)

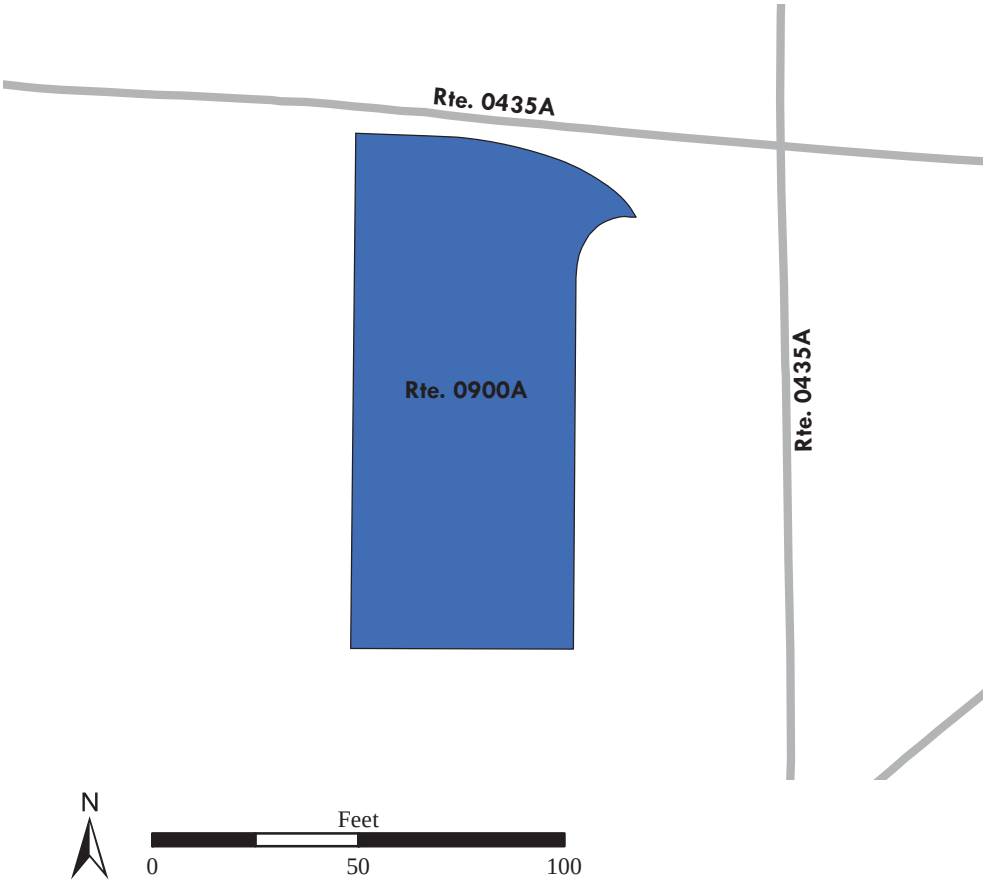
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	16690	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
4,490	0.077	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
DO NOTHING		EXCELLENT / 97	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0900B: MARBLEMOUNT WIC PARKING

Manual Rating

FROM ROUTE 0108 (OLSON CREEK ROAD)

TO INTERSECTION OF ROUTE 0108 (OLSON CREEK ROAD) AND ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)

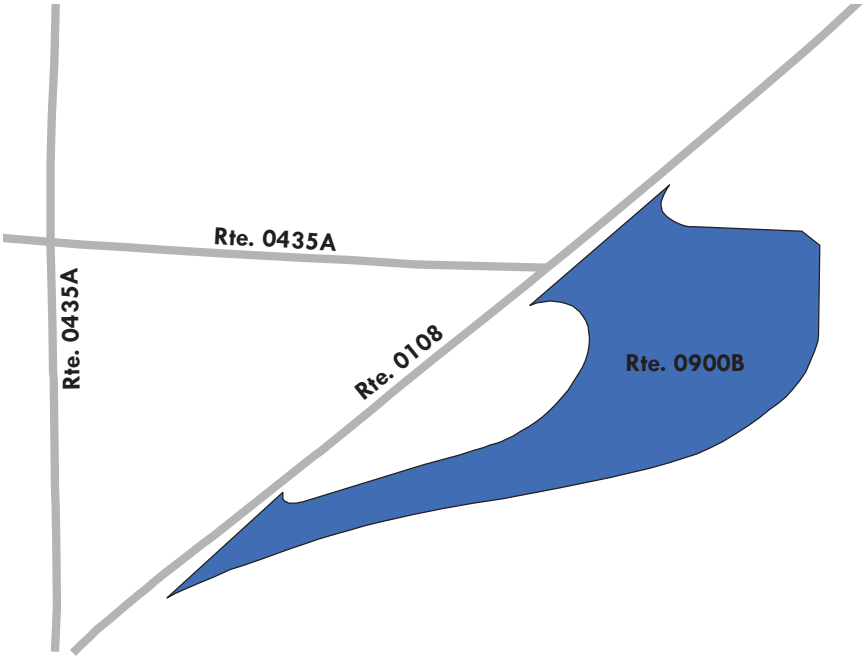
Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60418	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
7,834	0.135	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
DO NOTHING		EXCELLENT / 97	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Note: "WIC" in Route Name stands for "Wilderness Information Center".



North Cascades National Park

ROUTE 0900C: MARBLEMOUNT ADMINISTRATIVE PRIVATE PARKING

Manual Rating

FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)

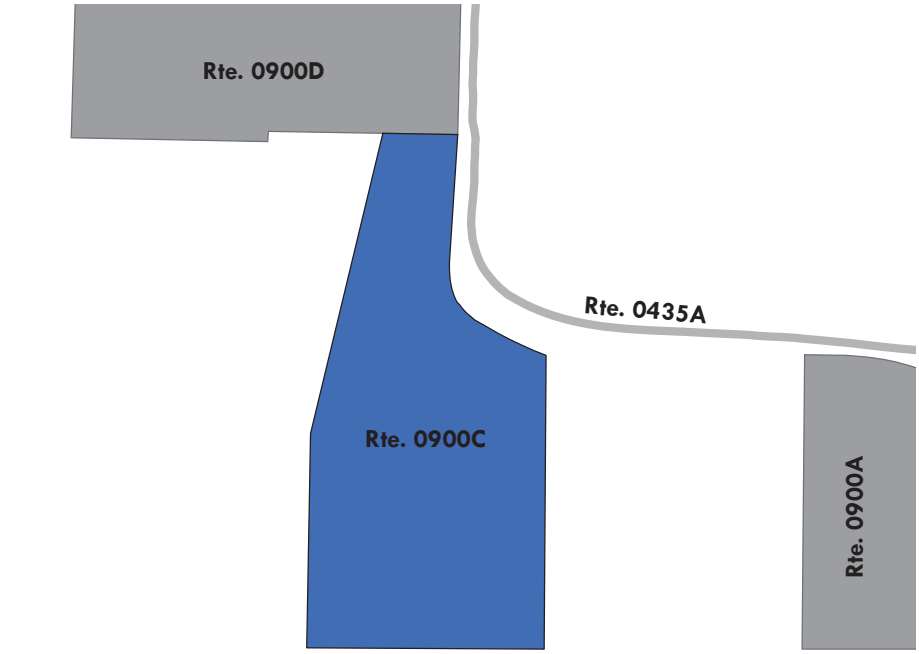
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	108073	NONPUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
11,041	0.19	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
DO NOTHING		EXCELLENT / 97	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0900D: MARBLEMOUNT SHOP PARKING

Manual Rating

FROM ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)

TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	108074	NONPUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
14,666	0.253	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
DO NOTHING		EXCELLENT / 97	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

North Cascades National Park

ROUTE 0901: WEST ENTRANCE SIGN PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20)

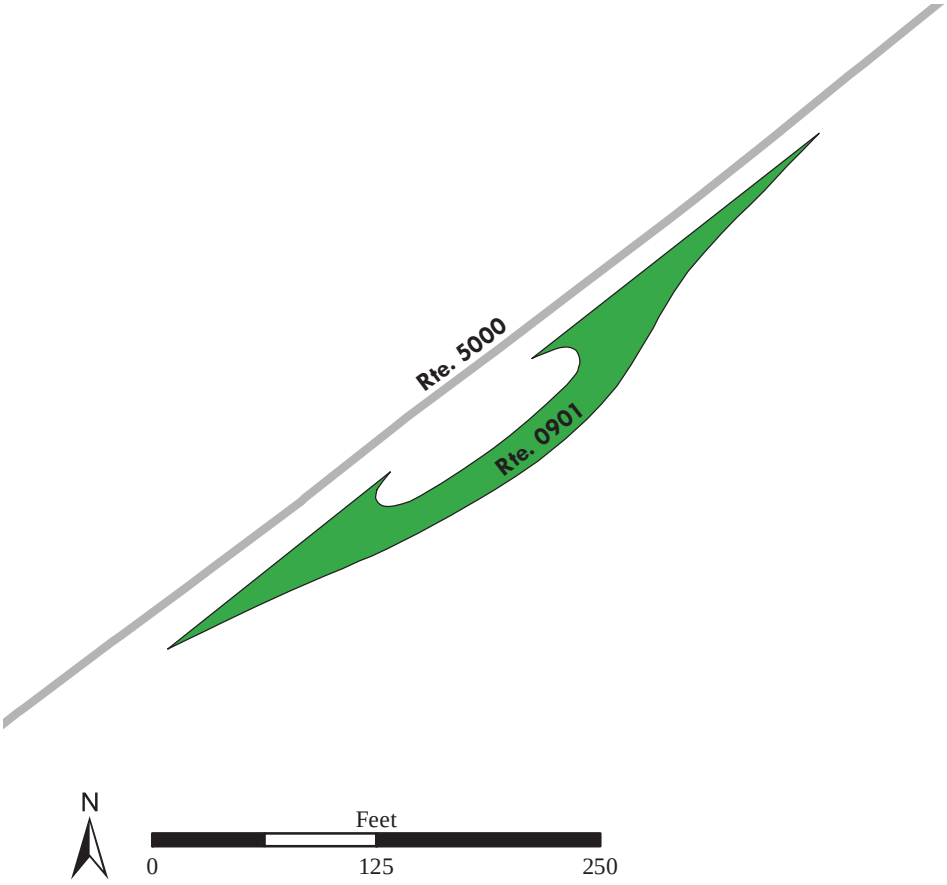
TO ROUTE 5000 (STATE HIGHWAY 20)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60552	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
5,561	0.096	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0902A: GOODELL CREEK RAFT LAUNCH PARKING A

Manual Rating

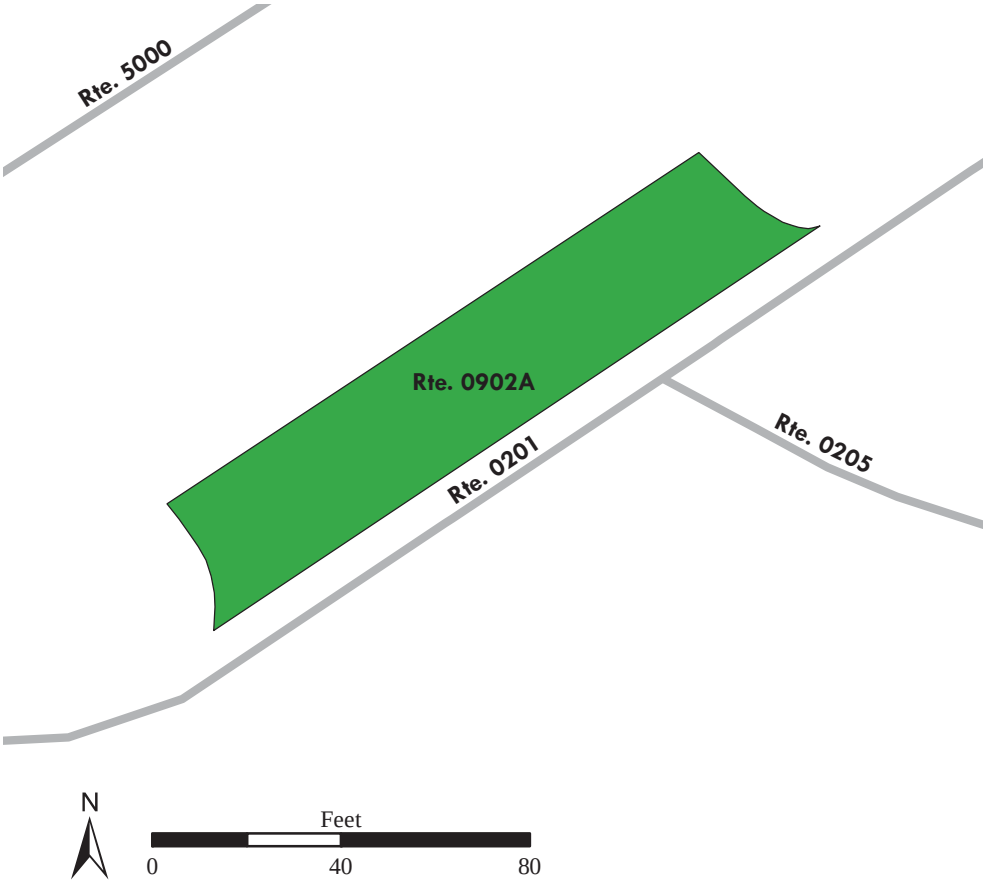
ADJACENT TO ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	114649	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
2,557	0.044	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0902B: GOODELL CREEK RAFT LAUNCH PARKING B

Manual Rating

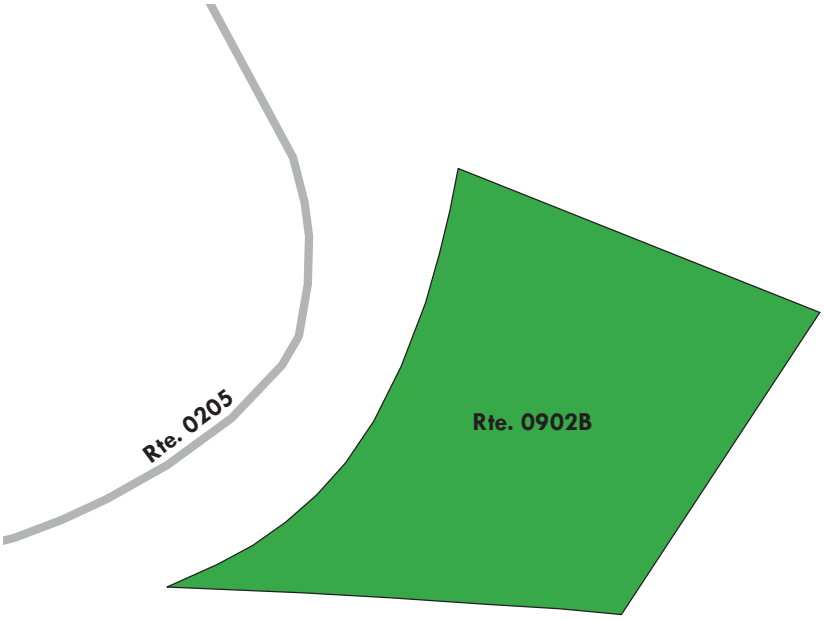
ADJACENT TO ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	108075	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
1,946	0.034	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0903A: NORTH CASCADES VISITOR CENTER PARKING A

Manual Rating

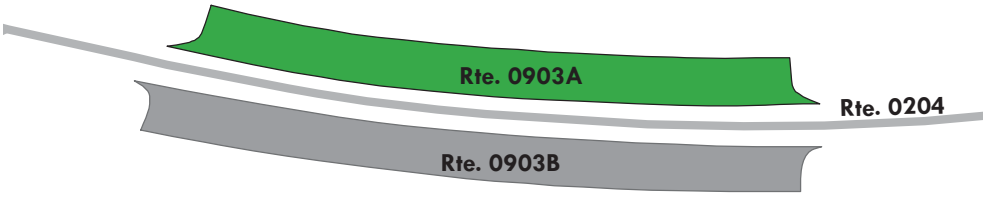
ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)

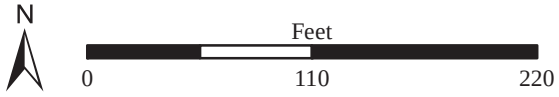
Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	17427	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
4,570	0.079	NOT APPLICABLE	LIGHT REPAIR
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas





North Cascades National Park

ROUTE 0903B: NORTH CASCADES VISITOR CENTER PARKING B

Manual Rating

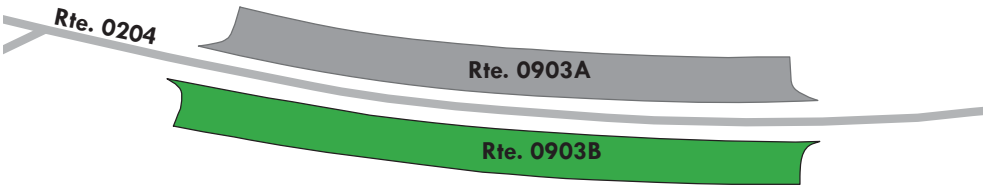
ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60510	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
4,865	0.084	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0903C: NORTH CASCADES VISITOR CENTER PARKING C

Manual Rating

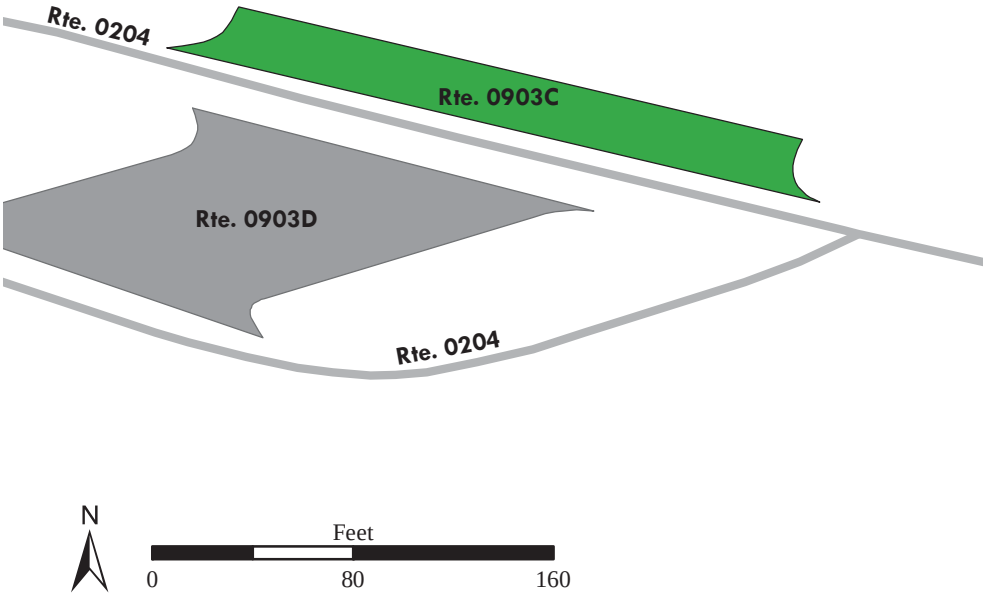
ADJACENT TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60512	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
3,578	0.062	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0903D: NORTH CASCADES VISITOR CENTER PARKING D

Manual Rating

FROM ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD) AT MP 0.6

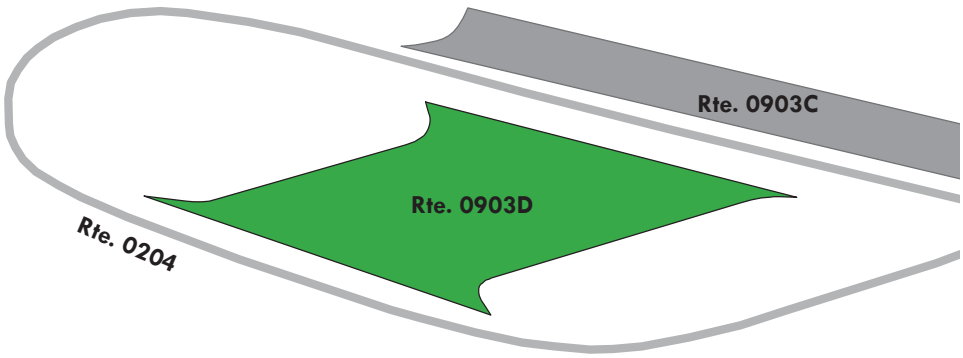
TO ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60514	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
6,635	0.114	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0904: GORGE CREEK OVERLOOK TRAILHEAD PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 123.2

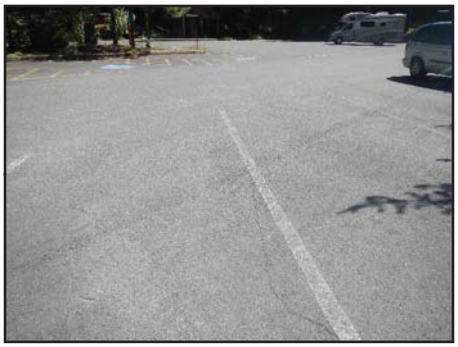
TO ROUTE 5000 (STATE HIGHWAY 20)

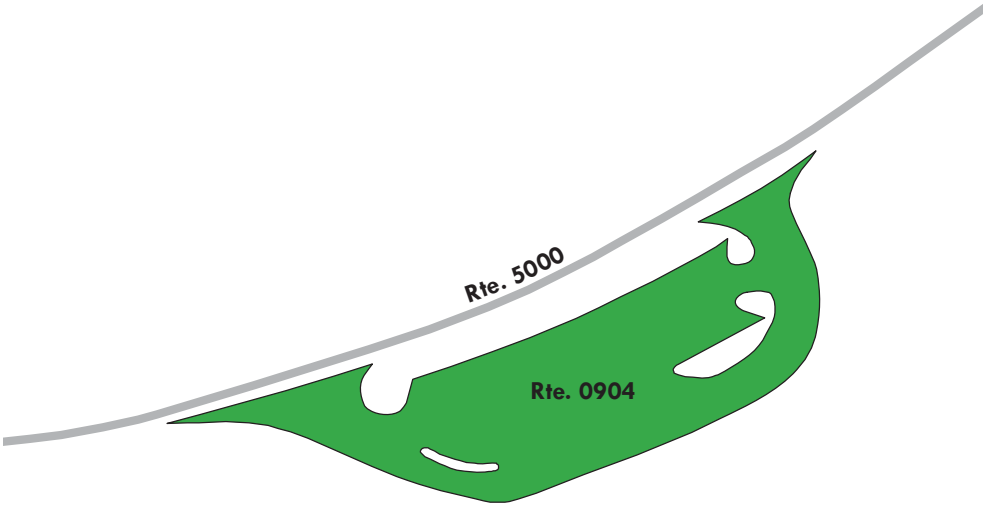
Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	43978	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
27,656	0.476	6	DO NOTHING
Curb Type		**Curb & Gutter Type**	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas





North Cascades National Park

ROUTE 0905: GORGE CREEK PHOTO-OP PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 123.35

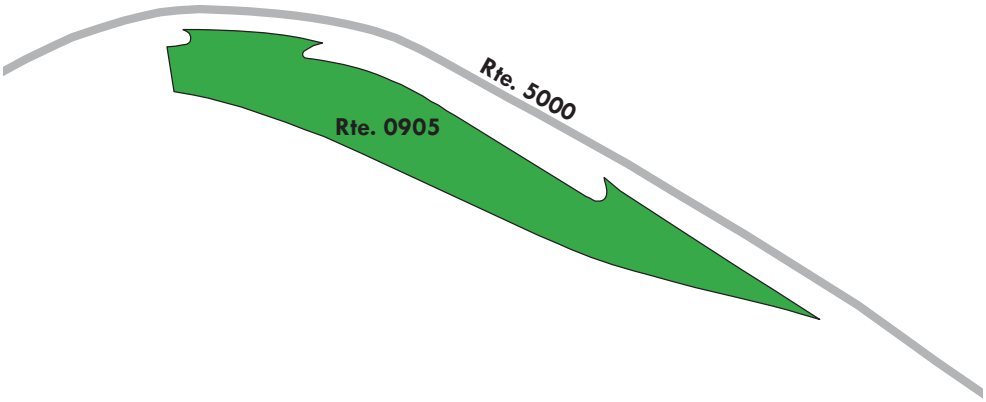
TO ROUTE 5000 (STATE HIGHWAY 20)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60402	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
11,183	0.193	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0906: DIABLO LAKE OVERLOOK PARKING LOT

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 131.5

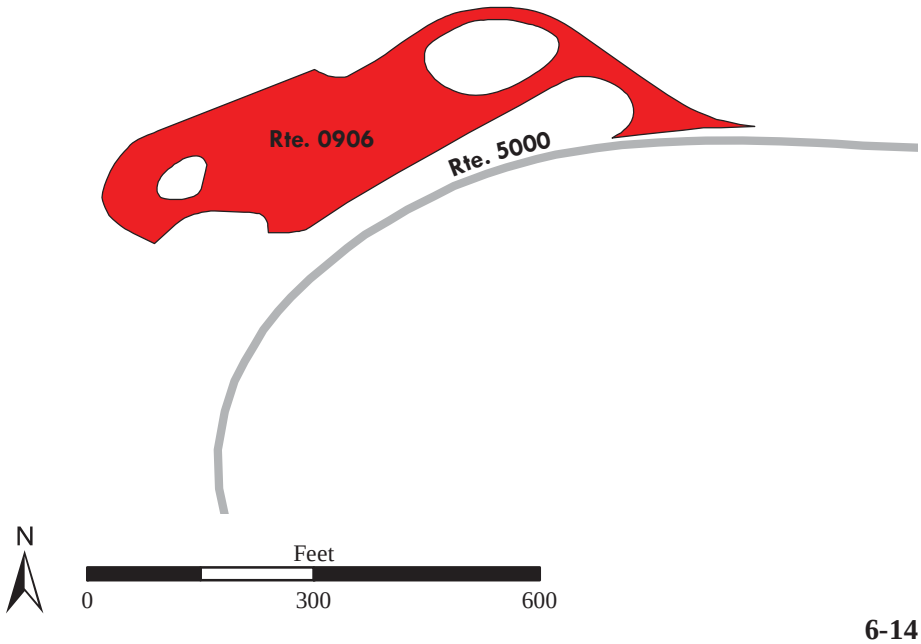
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	46856	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
56,922	0.98	1	DO NOTHING
Curb Type		**Curb & Gutter Type**	
CONCRETE		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
HEAVY 3R TREATMENTS		POOR / 53	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0907: INTERPRETIVE PULLOUT (DIABLO LAKE)

Manual Rating

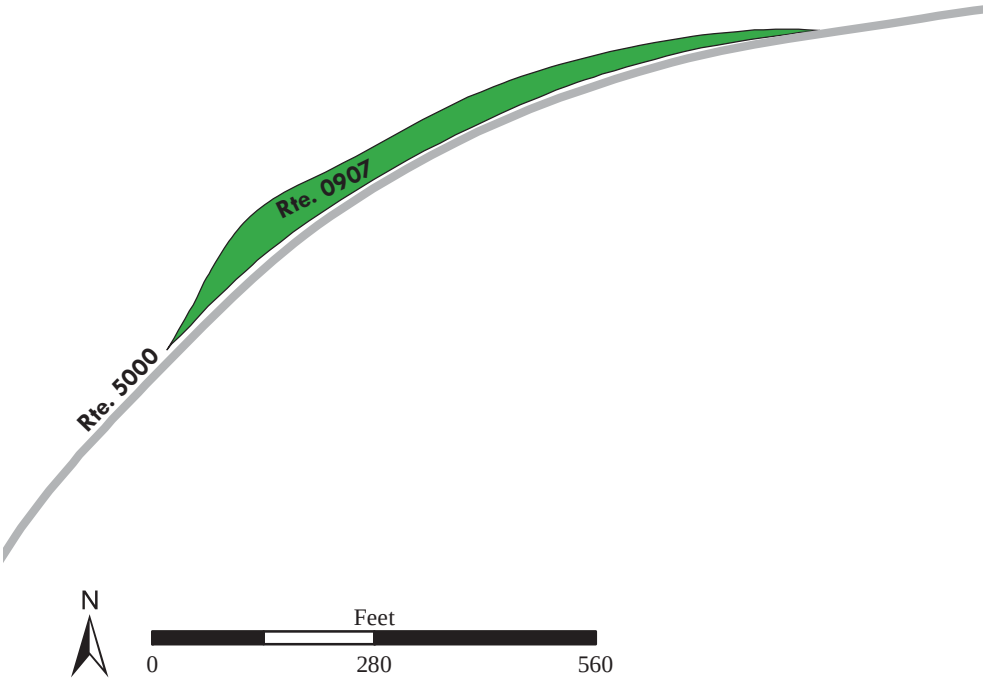
ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 133

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	17541	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
17,615	0.303	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0908: ROSS DAM TRAILHEAD PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 134.25

TO PARKING

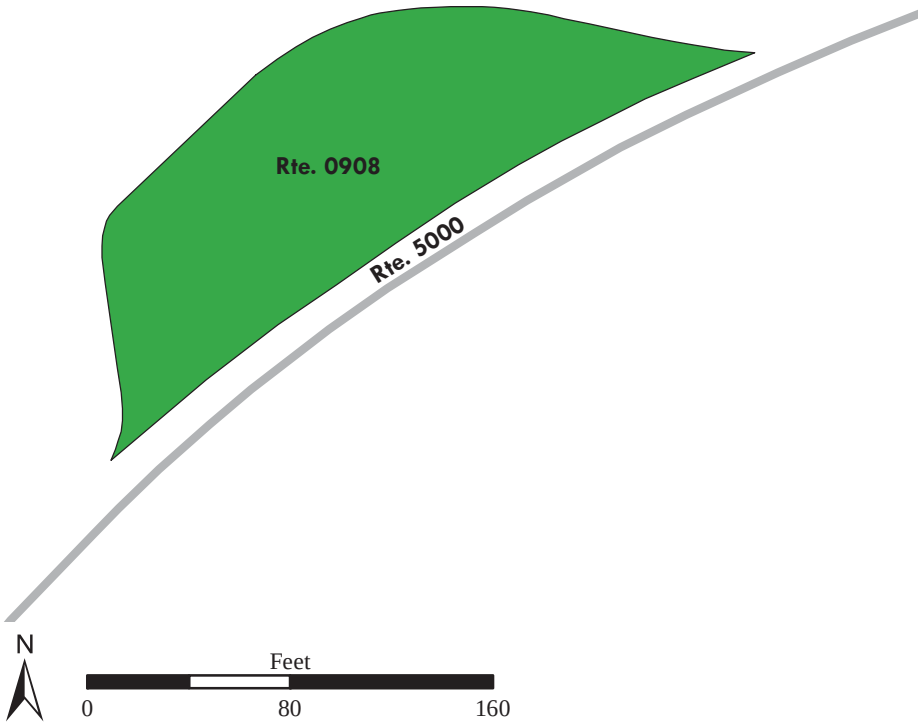
Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	17561	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
11,733	0.202	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas

Note: This parking lot has severe edge cracking because vehicles are parking on the unpaved perimeter around the parking lot edge.



North Cascades National Park

ROUTE 0909: HAPPY CREEK NATURE TRAIL PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20) AT MP 134

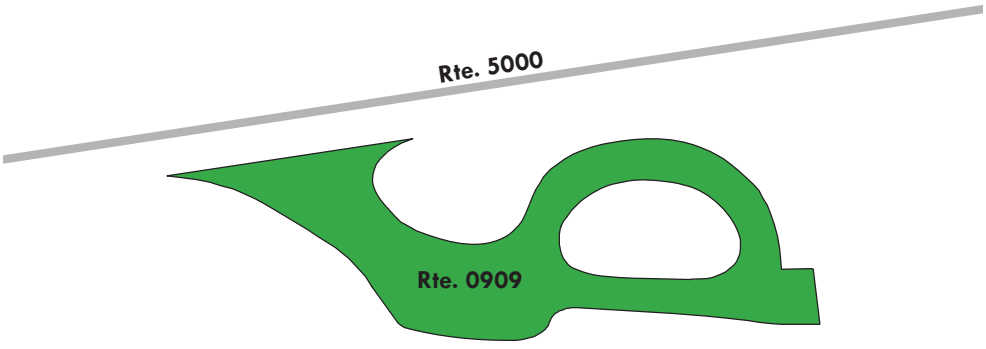
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	38579	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
9,521	0.164	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0910A: ROSS LAKE OVERLOOK A

Manual Rating

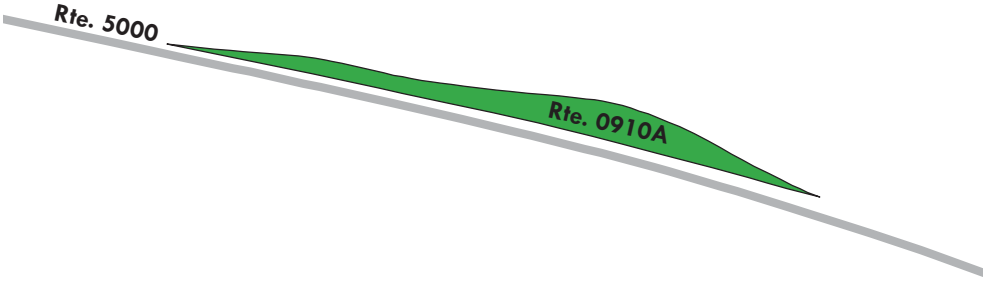
ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 134

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	17563	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
9,635	0.166	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0910B: ROSS LAKE OVERLOOK B

Manual Rating

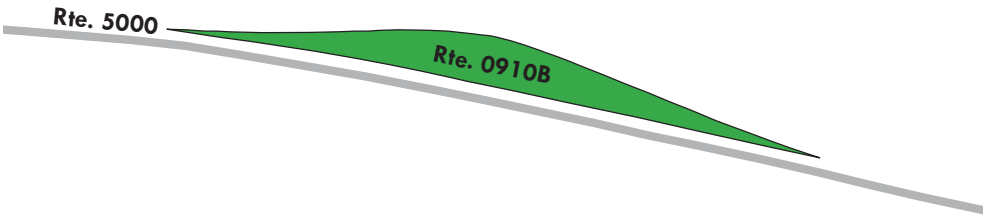
ADJACENT TO ROUTE 5000 (STATE HIGHWAY 20) AT MP 134

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60523	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
5,141	0.089	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0911: EAST ENTRANCE SIGN PARKING

Manual Rating

FROM ROUTE 5000 (STATE HIGHWAY 20)

TO PARKING

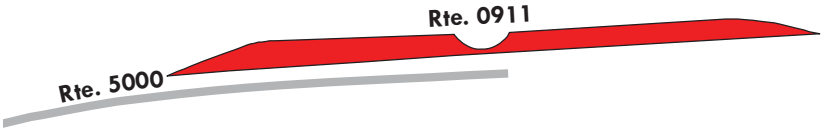
Inspection Date	FMSS Number	User Access	Surface Type
6/18/2015	60358	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
26,129	0.45	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
RECONSTRUCTION		POOR / 0	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas

Note: This parking area is considered paved by the Park and in FBMS. The condition rating is a PCR 0 because it appears to be unpaved with only traces of deteriorating pavement remaining.



North Cascades National Park

ROUTE 0912: NEWHALEM CREEK CAMP TENDER PARKING

Manual Rating

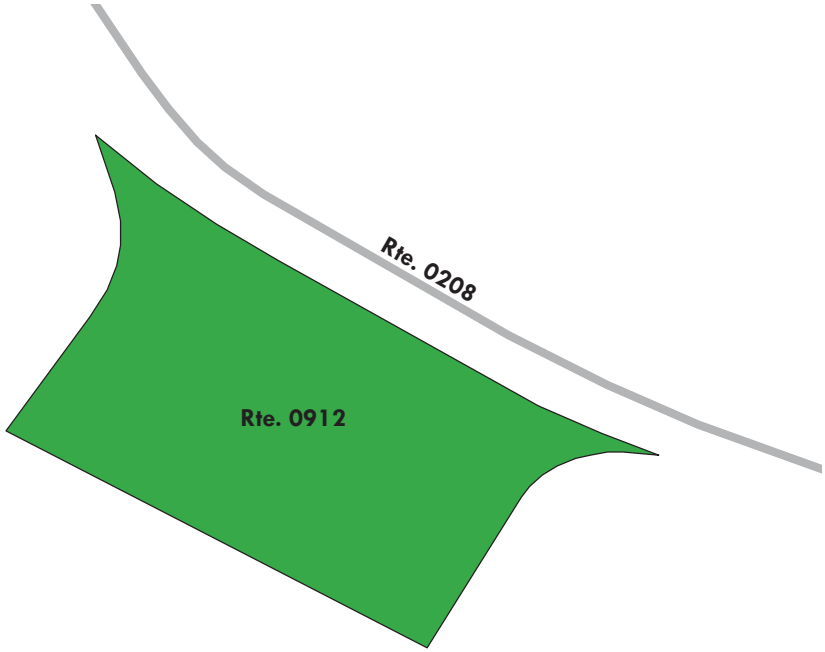
ADJACENT TO ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60419	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
1,041	0.018	NOT APPLICABLE	LIGHT REPAIR
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0913: NEWHALEM CREEK DUMP STATION

Manual Rating

FROM ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)

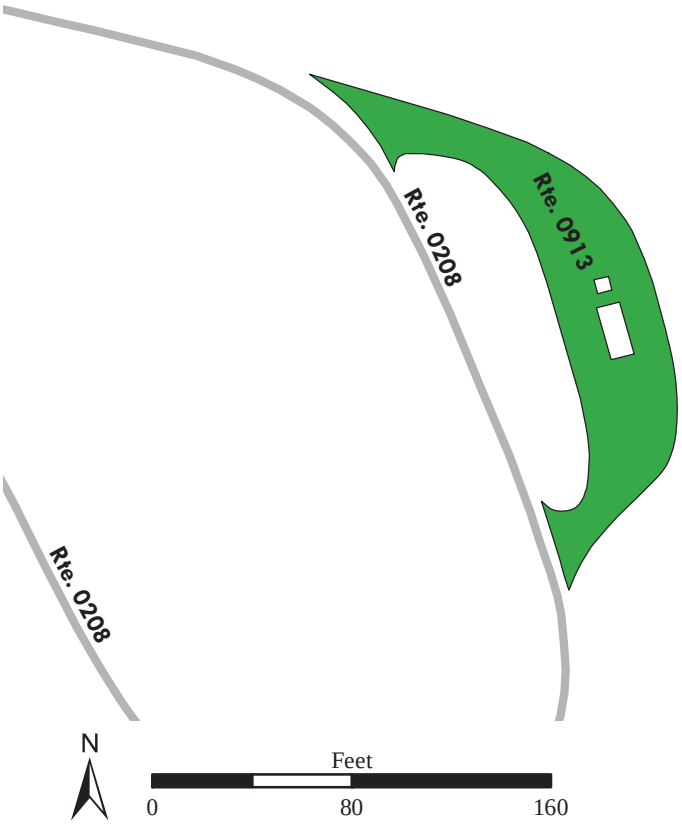
TO ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60562	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
4,513	0.078	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0914: COLONIAL CREEK CAMPGROUND ACCESS PARKING

Manual Rating

FROM INTERSECTION OF ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH) AND ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)

TO ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)

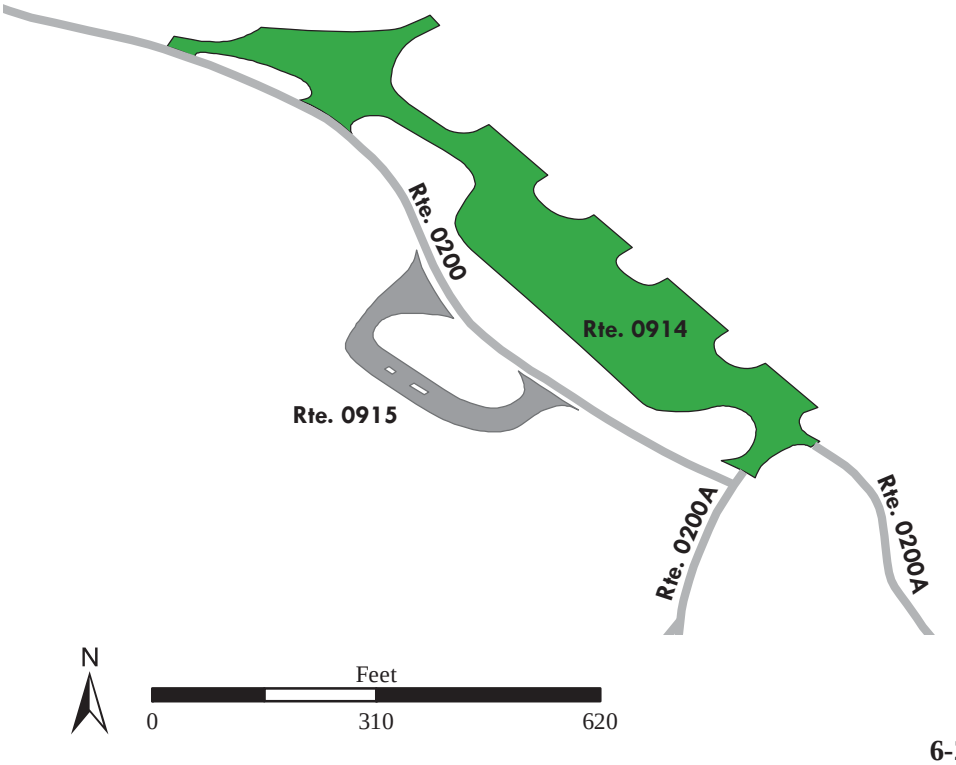
Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60407	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
65,181	1.122	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Note: The campground exit road (opposite direction travel lane of Route 0200) is encompassed within parking lot Route 0914.



North Cascades National Park

ROUTE 0915: COLONIAL CREEK CAMPGROUND DUMP STATION

Manual Rating

FROM ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)

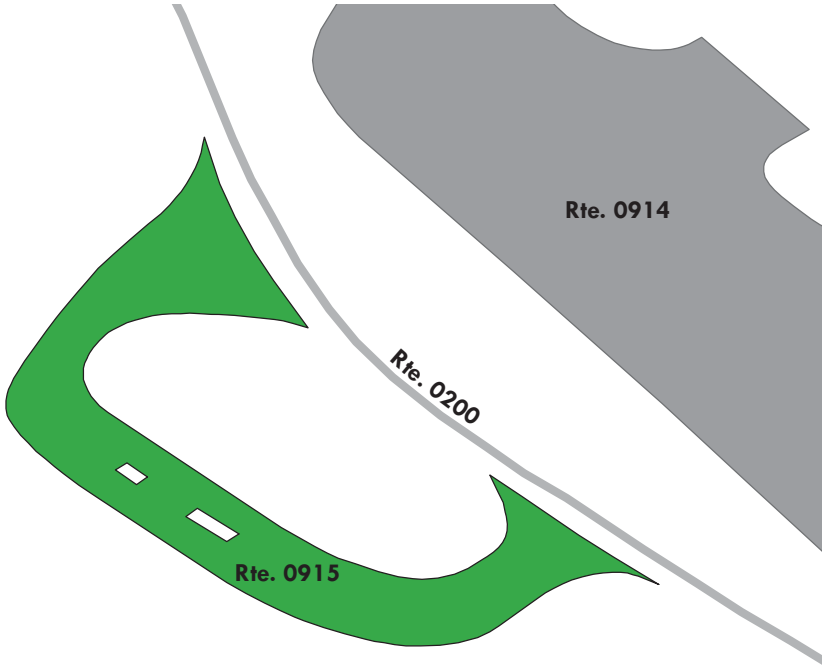
TO ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60408	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
11,296	0.194	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0916: NORTH CASCADES VISITOR CENTER SERVICE PARKING

Manual Rating

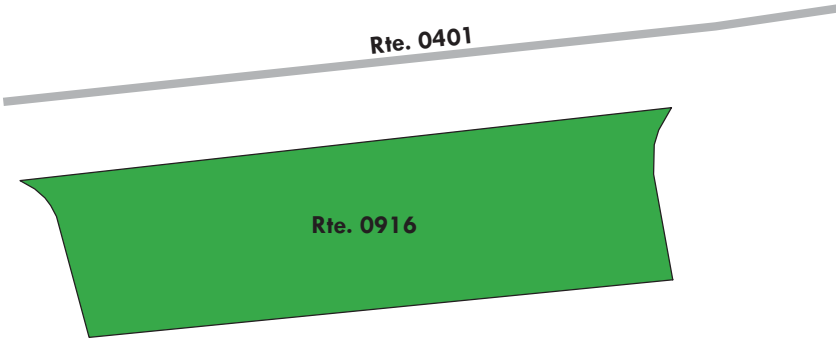
ADJACENT TO ROUTE 0401 (NORTH CASCADES VISITOR CENTER SERVICE ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	60516	NONPUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
1,637	0.028	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0918A: STEHEKIN BOAT LANDING PARKING A

Manual Rating

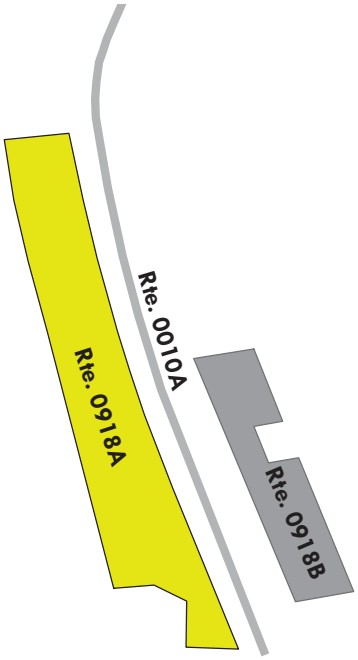
ADJACENT TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))

Inspection Date	FMSS Number	User Access	Surface Type
6/19/2015	17812	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
5,570	0.096	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
LIGHT 3R TREATMENTS		FAIR / 73	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0918B: STEHEKIN BOAT LANDING PARKING B

Manual Rating

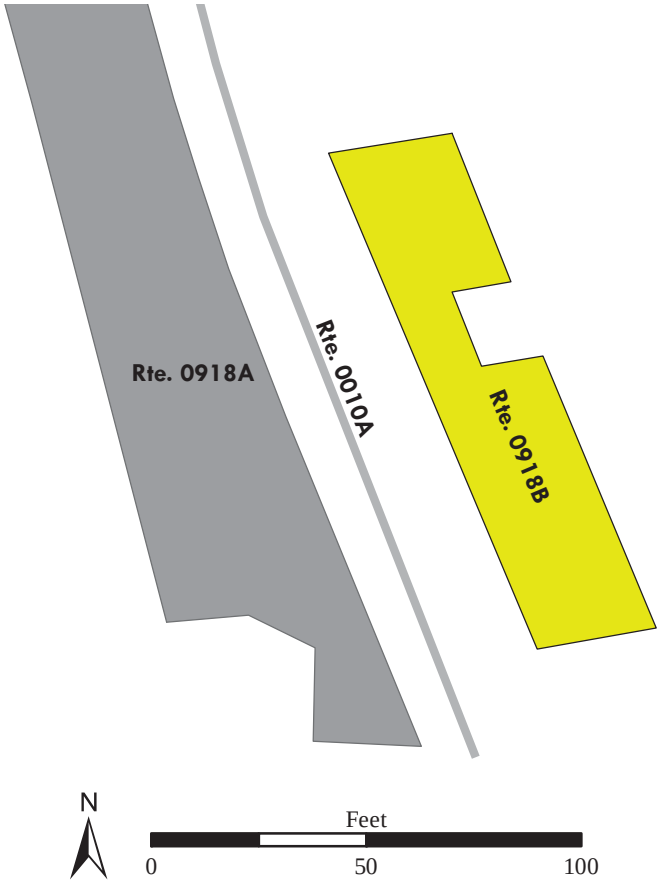
ADJACENT TO ROUTE 0010A (STEHEKIN VALLEY ROAD (PAVED SECTION))

Inspection Date	FMSS Number	User Access	Surface Type
6/19/2015	46865	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
2,133	0.037	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
LIGHT 3R TREATMENTS		FAIR / 73	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0926: FIELDS POINT PARKING

Manual Rating

FROM FIELDS POINT ROAD

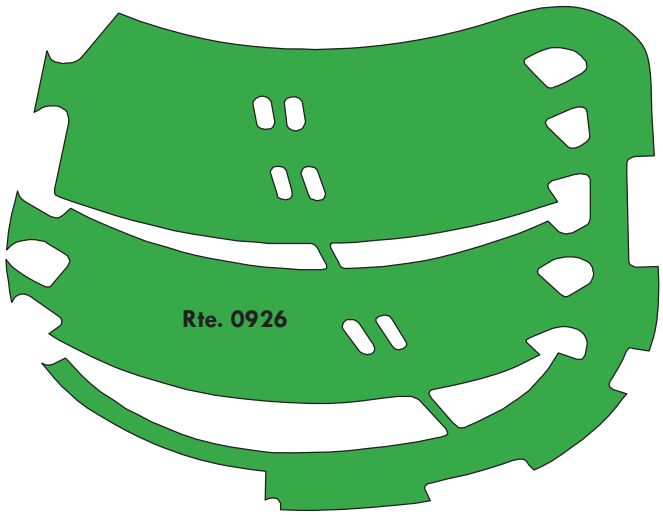
TO PARKING

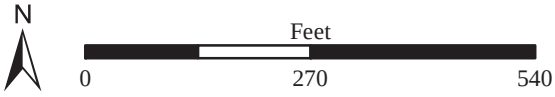
Inspection Date	FMSS Number	User Access	Surface Type
6/18/2015	81120	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
205,342	3.536	6	LIGHT REPAIR
Curb Type		**Curb & Gutter Type**	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas





North Cascades National Park

ROUTE 0977: NEWHALEM CREEK WALK-IN SITES PARKING

Manual Rating

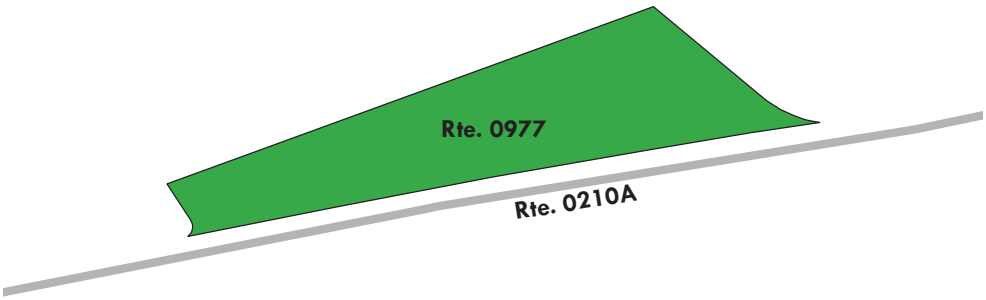
ADJACENT TO ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)

Inspection Date	FMSS Number	User Access	Surface Type
6/17/2015	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
946	0.016	NOT APPLICABLE	DO NOTHING
Curb Type		**Curb & Gutter Type**	
NO CURB		CONCRETE	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0978: THUNDER CREEK TRAIL DAY USE PARKING A

Manual Rating

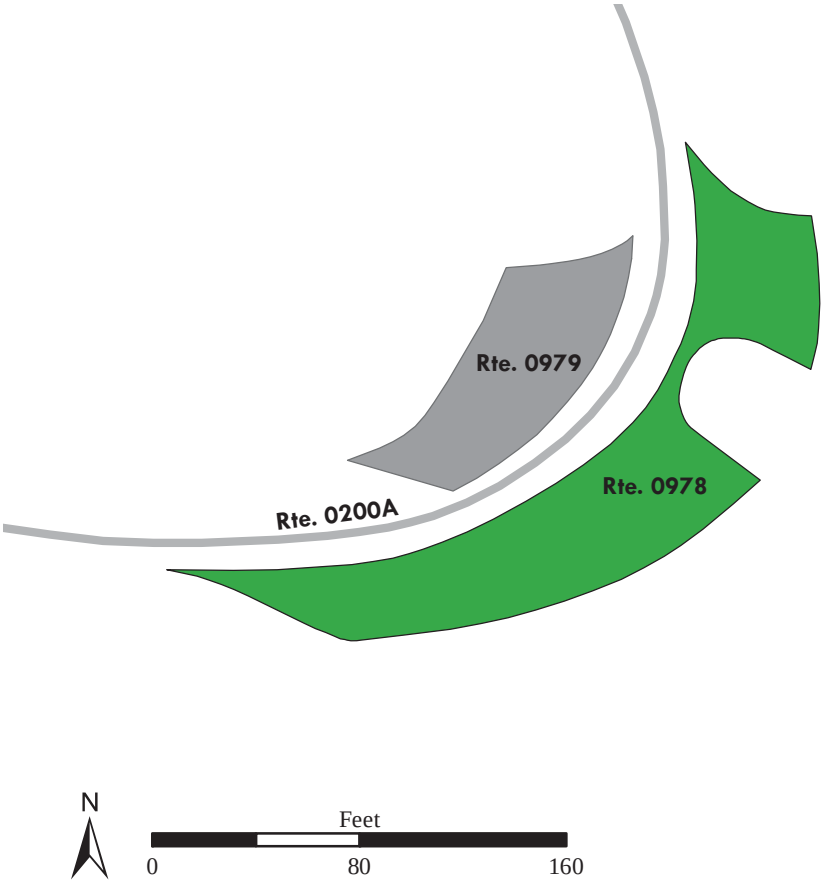
ADJACENT TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A) ON LEFT

Inspection Date	FMSS Number	User Access	Surface Type
6/18/2015	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
6,732	0.116	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60) | **Fair (61- 84)** | **Good (85 - 94)** | **Excellent (95 - 100)** | **Not Rated**

See Appendix for definitions and formulas



North Cascades National Park

ROUTE 0979: THUNDER CREEK TRAIL DAY USE PARKING B

Manual Rating

ADJACENT TO ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A) ON RIGHT

Inspection Date	FMSS Number	User Access	Surface Type
6/18/2015	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	**Lane Miles (11' Widths)**	**Curb Reveal (Inches)**	**Curb Recommendation**
2,912	0.05	NOT APPLICABLE	NOT APPLICABLE
Curb Type		**Curb & Gutter Type**	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		**Condition Rating / PCR**	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated

See Appendix for definitions and formulas

Section 7
Road Milepost Information

North Cascades National Park

Federal Lands Highway
Road Inventory Program

Road Milepost Information

This report section contains road milepost information for all paved roads in the park that were collected with the Data Collection Vehicle (DCV). The milepost data is obtained from the DCV by using a distance measuring instrument (DMI) that is calibrated to record mileage to the nearest thousandth of a mile. Park roads that were manually rated did not have milepost data collected, and thus are not included in this report section.

For Cycle 6, the information presented in this section differs from previous RIP cycles in that it does not contain the roadside features inventories for the paved park roads. Some examples of the features previously collected are signs, culverts/drop inlets, guardrails, curbing, pullouts, etc. If the park was collected in a previous RIP cycle, then the latest features data can be obtained by referencing the following:

Where to find the latest Features Inventories for NPS Parks:

- For Small Parks (parks with less than 10 miles of paved roads):
    - Refer to Cycle 5 data (collected 2010 - 2014)
        - Features were reported in Section 9 of the ***Cycle 5*** RIP report
        - Video of features can be viewed using the ***PathViewVO*** program and ***Cycle 5*** data

- For Large Parks (parks with more than 10 miles of paved roads):
    - Refer to Cycle 4 data (collected 2006 - 2009)
        - Features were reported in Section 9 of the ***Cycle 4*** RIP report
        - Video of features can be viewed using the ***VisiData*** program and ***Cycle 4*** data
    - Note: Features inventories were updated in Large Parks in ***Cycle 5*** only on a route by route basis if the route was new or modified in ***Cycle 5***. If this is the case for a particular route, then features for the route can be obtained using the ***PathViewVO*** program and ***Cycle 5*** data (same as above for Small parks).

Milepost Events Verified in Cycle 6

In Cycle 6, the following events were collected and reported in Section 7 of this report:

- Intersections with roads and parking areas
- All bridges and culverts with BIP Numbers (bridge inspection program numbers)
- Mile Marker Signs
- One-Way travel directions
- Overpasses
- Tunnels
- Low Water Crossings (LWCR)
- Surface type changes
- Construction areas where no pavement condition data was obtained

GPS Mileage Matching

A consistent survey milepost and constant route length as recorded by the Data Collection Vehicle (DCV) is a challenge to maintain from one collection cycle to the next. The challenge is due to many factors such as driver characteristics, DMI calibration, tire pressure etc. After Cycle 4 (~2010), a decision was made to hold constant the length of roads so long as there was no physical change from reconstruction projects or realignments that would result in a change to the length of a road. Consequently, the "GPS Mileage Match" was implemented to specify which cycle the route length is being matched. Route mileages and GPS are matched to a previous collection whenever there is no physical change to a route alignment. The route mileage and GPS is not matched to previous cycles whenever it is determined that a road length and GPS needs to be updated. When this happens the GPS and length is updated to the cycle that displays the change, and that collection cycle is used as the matching cycle in subsequent collections of the road. Thus, the Cycle 6 GIS could be either the survey length collected in Cycle 4, Cycle 5, or Cycle 6 and therefore, may not match the survey milepost displayed in the latest Cycle 6 DCV video which is viewable in ***PathView VO***.

The features inventories and road logs collected on NPS routes contain mileposts that are determined from the corresponding cycle that the GPS is matched to. Therefore, the mileposts contained in the Cycle 4 or 5 features inventories or the Cycle 6 road logs may not exactly match the survey milepost collected in the latest Cycle 6 video of the road.

Locating Mile Marker Signs

For routes that have mile marker signs along them, the milepost reported by RIP will most likely not line up exactly with the sign located in the field. This could be happening for many reasons, most likely due to either the error falling within the acceptable calibration range of the vehicle, or the level of accuracy that the mile marker signs were placed in the field.

Because mile marker signs are important features in many project plans and location descriptions, RIP is reporting locations of mile marker signs in three ways in Cycle 6:

1. Mileposts from Cycle 6 GIS: the official RIP milepost taken from the features inventories and the matching GPS/mileage cycle as described above. This is the milepost that should be used on project plans and when finding locations in the field

2. Mileposts from Cycle 6 Video: milepost shown to help locate the mile marker sign in the latest ***PathView VO*** video.

3. Latitude / Longitude: a constant way of locating a mile marker sign so long as the park has not moved the sign

The mileposts from Cycle 6 Video and GIS should be nearly the same, but on longer roads it has been observed that the Video milepost deviates more from the official GIS milepost that comes from the matching cycle.

NOCA: Route Milepost Log

ROUTE 0105: ENVIRONMENTAL LEARNING CENTER ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 5001 (DIABLO DAM ACCESS ROAD)
0.11	0.11	INTERSECTION	R	UNPAVED PARKING
0.12	0.12	INTERSECTION	R	UNPAVED PARKING
0.15	0.16	LOW WATER CROSSING	N/A	HIGH WATER FLOW AREA
0.17	0.17	INTERSECTION	R	ROUTE 0922 (ENVIRONMENTAL LEARNING CENTER / DIABLO LAKE TRAILHEAD PARKING)
0.19	0.19	INTERSECTION	R	ROUTE 0922 (ENVIRONMENTAL LEARNING CENTER / DIABLO LAKE TRAILHEAD PARKING)
0.19	0.19	INTERSECTION	N/A	ROUTE 0430 (ELC/NCI ROADS)

NOCA: Route Milepost Log

ROUTE 0108: OLSON CREEK ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 6.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.00	0.00	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.01	0.01	INTERSECTION	R	ROUTE 0227 (MARBLEMOUNT POWER LINE ACCESS ROAD)
0.02	0.02	INTERSECTION	R	ROUTE 0900B (MARBLEMOUNT WIC PARKING)
0.04	0.04	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.04	0.04	INTERSECTION	R	ROUTE 0900B (MARBLEMOUNT WIC PARKING)
0.08	0.08	INTERSECTION	R	ROUTE 0949 (OLSON CREEK ROAD PARKING)
0.10	0.10	INTERSECTION	R	ROUTE 0425 (MARBLEMOUNT HELISPOT ROAD)
0.15	0.15	INTERSECTION	R	UNPAVED PARKING
0.16	0.16	INTERSECTION	L	ROUTE 0426 (MARBLEMOUNT BARN ROAD)
0.17	0.17	INTERSECTION	N/A	ROUTE 0108 (OLSON CREEK ROAD) UNPAVED SECTION

NOCA: Route Milepost Log

ROUTE 0200: COLONIAL CREEK CAMPGROUND ACCESS SOUTH

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 5000 (STATE HIGHWAY 20)
0.00	0.00	INTERSECTION	N/A	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.00	0.00	INTERSECTION	L	ROUTE 5000 (STATE HIGHWAY 20)
0.04	0.04	INTERSECTION	L	ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)
0.07	0.07	INTERSECTION	L	ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)
0.12	0.12	INTERSECTION	R	ROUTE 0915 (COLONIAL CREEK CAMPGROUND DUMP STATION)
0.15	0.15	INTERSECTION	R	ROUTE 0915 (COLONIAL CREEK CAMPGROUND DUMP STATION)
0.20	0.20	INTERSECTION	R	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.20	0.20	INTERSECTION	L	ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)

ROUTE 0200A: COLONIAL CREEK CAMPGROUND LOOP A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)
0.00	0.00	ONE-WAY START	N/A	N/A
0.17	0.17	INTERSECTION	R	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.20	0.20	INTERSECTION	R	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.24	0.24	INTERSECTION	R	ROUTE 0979 (THUNDER CREEK TRAIL DAY USE PARKING B)
0.24	0.24	INTERSECTION	L	ROUTE 0978 (THUNDER CREEK TRAIL DAY USE PARKING A)
0.28	0.28	INTERSECTION	L	ROUTE 0200B (COLONIAL CREEK CAMPGROUND LOOP B)
0.47	0.47	INTERSECTION	L	ROUTE 0200B (COLONIAL CREEK CAMPGROUND LOOP B)
0.51	0.51	INTERSECTION	L	ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)
0.53	0.53	INTERSECTION	N/A	ROUTE 0914 (COLONIAL CREEK CAMPGROUND ACCESS PARKING)
0.53	0.53	ONE-WAY END	N/A	N/A

NOCA: Route Milepost Log

ROUTE 0200B: COLONIAL CREEK CAMPGROUND LOOP B

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	R	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.00	0.00	INTERSECTION	N/A	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.24	0.24	ONE-WAY END	N/A	N/A
0.24	0.24	INTERSECTION	N/A	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.24	0.24	INTERSECTION	R	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)

NOCA: Route Milepost Log

ROUTE 0200C: COLONIAL CREEK CAMPGROUND LOOP C

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.00	0.00	INTERSECTION	L	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.00	0.00	ONE-WAY START	N/A	N/A
0.02	0.02	INTERSECTION	R	ROUTE 0200D (COLONIAL CREEK CAMPGROUND LOOP D)
0.07	0.07	INTERSECTION	R	ROUTE 0200D (COLONIAL CREEK CAMPGROUND LOOP D)
0.08	0.08	INTERSECTION	R	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)
0.08	0.08	ONE-WAY END	N/A	N/A
0.08	0.08	INTERSECTION	L	ROUTE 0200A (COLONIAL CREEK CAMPGROUND LOOP A)

NOCA: Route Milepost Log

ROUTE 0200D: COLONIAL CREEK CAMPGROUND LOOP D

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.00	0.00	INTERSECTION	N/A	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.00	0.00	ONE-WAY START	N/A	N/A
0.03	0.03	INTERSECTION	N/A	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.03	0.03	INTERSECTION	L	ROUTE 0200C (COLONIAL CREEK CAMPGROUND LOOP C)
0.03	0.03	ONE-WAY END	N/A	N/A

NOCA: Route Milepost Log

ROUTE 0201: GOODELL CREEK CAMPGROUND ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 5000 (STATE HIGHWAY 20)
0.00	0.00	INTERSECTION	R	ROUTE 5000 (STATE HIGHWAY 20)
0.01	0.01	INTERSECTION	R	NON-NPS ROAD
0.03	0.03	INTERSECTION	L	ROUTE 0902A (GOODELL CREEK RAFT LAUNCH PARKING A)
0.04	0.04	INTERSECTION	R	ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)
0.06	0.06	INTERSECTION	R	ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)
0.20	0.20	INTERSECTION	R	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)

NOCA: Route Milepost Log

ROUTE 0201A: GOODELL CREEK CAMPGROUND LOOP A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)
0.01	0.01	INTERSECTION	R	CAMPGROUND REGISTRATION / MESSAGE STATION (UNPAVED)
0.02	0.02	INTERSECTION	R	CAMPGROUND REGISTRATION / MESSAGE STATION (UNPAVED)
0.02	0.02	INTERSECTION	R	ROUTE 0201B (GOODELL CREEK CAMPGROUND LOOP B)
0.04	0.04	ONE-WAY START	N/A	N/A
0.04	0.04	INTERSECTION	R	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)
0.27	0.27	INTERSECTION	R	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)
0.27	0.27	INTERSECTION	L	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)
0.27	0.27	ONE-WAY END	N/A	N/A

NOCA: Route Milepost Log

ROUTE 0201B: GOODELL CREEK CAMPGROUND LOOP B

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)
0.00	0.00	INTERSECTION	R	ROUTE 0201A (GOODELL CREEK CAMPGROUND LOOP A)
0.01	0.01	INTERSECTION	R	CAMPGROUND REGISTRATION / MESSAGE STATION (UNPAVED)
0.12	0.12	INTERSECTION	R	UNPAVED PICNIC PAVILLION PARKING
0.13	0.13	INTERSECTION	R	UNPAVED PICNIC PAVILLION PARKING
0.16	0.16	INTERSECTION	R	ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)
0.16	0.16	INTERSECTION	L	ROUTE 0205 (NEWHALEM RAFT LAUNCH LOOP)

NOCA: Route Milepost Log

ROUTE 0202: NEWHALEM CREEK CAMPGROUND ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	NON-NPS ROAD
0.00	0.00	INTERSECTION	R	ROUTE 5000 (STATE HIGHWAY 20)
0.00	0.00	INTERSECTION	L	ROUTE 5000 (STATE HIGHWAY 20)
0.04	0.10	BRIDGE	N/A	9470-015 (SKAGIT RIVER BRIDGE)
0.10	0.10	INTERSECTION	N/A	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)

NOCA: Route Milepost Log

ROUTE 0204: NORTH CASCADES VISITOR CENTER ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)
0.02	0.02	INTERSECTION	R	ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS)
0.02	0.02	INTERSECTION	L	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.43	0.43	INTERSECTION	L	ROUTE 0215 (NEWHALEM CREEK TRAILHEAD ROAD SOUTH)
0.47	0.47	INTERSECTION	R	ROUTE 0401 (NORTH CASCADES VISITOR CENTER SERVICE ROAD)
0.54	0.54	INTERSECTION	R	PULLOUT PARKING / VISITOR CENTER DROP OFF
0.57	0.57	INTERSECTION	R	ROUTE 0903A (NORTH CASCADES VISITOR CENTER PARKING A)
0.57	0.57	INTERSECTION	L	ROUTE 0903B (NORTH CASCADES VISITOR CENTER PARKING B)
0.60	0.60	INTERSECTION	L	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.62	0.62	INTERSECTION	L	ROUTE 0903D (NORTH CASCADES VISITOR CENTER PARKING D)
0.62	0.62	INTERSECTION	R	ROUTE 0903C (NORTH CASCADES VISITOR CENTER PARKING C)
0.69	0.69	INTERSECTION	L	ROUTE 0903D (NORTH CASCADES VISITOR CENTER PARKING D)
0.72	0.72	INTERSECTION	L	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.72	0.72	INTERSECTION	R	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)

NOCA: Route Milepost Log

ROUTE 0205: NEWHALEM RAFT LAUNCH LOOP

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)
0.02	0.02	INTERSECTION	R	ROUTE 0902B (GOODELL CREEK RAFT LAUNCH PARKING B)
0.03	0.03	INTERSECTION	R	ROUTE 0201B (GOODELL CREEK CAMPGROUND LOOP B)
0.04	0.04	INTERSECTION	L	ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)
0.04	0.04	INTERSECTION	R	ROUTE 0201 (GOODELL CREEK CAMPGROUND ACCESS ROAD)

ROUTE 0206: NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.00	0.00	INTERSECTION	N/A	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.06	0.06	INTERSECTION	R	ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)
0.06	0.06	INTERSECTION	L	ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)

NOCA: Route Milepost Log

ROUTE 0207: NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.00	0.00	INTERSECTION	N/A	ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS)
0.04	0.04	INTERSECTION	L	ROUTE 0210D (NEWHALEM CREEK GROUP CAMPGROUND LOOP D)
0.04	0.04	INTERSECTION	R	ROUTE 0210C (NEWHALEM CREEK CAMPGROUND LOOP C)
0.10	0.10	INTERSECTION	R	ROUTE 0210C (NEWHALEM CREEK CAMPGROUND LOOP C)
0.10	0.10	INTERSECTION	L	ROUTE 0210D (NEWHALEM CREEK GROUP CAMPGROUND LOOP D)
0.12	0.12	INTERSECTION	N/A	NON-NPS UNPAVED ROAD (NEWHALEM POWERHOUSE ROAD)

NOCA: Route Milepost Log

ROUTE 0208: NEWHALEM CREEK CAMP TENDER STATION ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0202 (NEWHALEM CREEK CAMPGROUND ACCESS ROAD)
0.01	0.01	INTERSECTION	L	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)
0.03	0.03	INTERSECTION	L	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)
0.04	0.04	INTERSECTION	R	CAMPGROUND REGISTRATION PULLOUT PARKING
0.08	0.08	INTERSECTION	R	ROUTE 0912 (NEWHALEM CREEK CAMP TENDER PARKING)
0.09	0.09	INTERSECTION	R	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.11	0.11	INTERSECTION	R	ROUTE 0913 (NEWHALEM CREEK DUMP STATION)
0.12	0.12	INTERSECTION	L	CAMPGROUND REGISTRATION PULLOUT PARKING
0.15	0.15	INTERSECTION	R	ROUTE 0913 (NEWHALEM CREEK DUMP STATION)
0.16	0.16	INTERSECTION	L	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)
0.17	0.17	INTERSECTION	R	ROUTE 0202 (NEWHALEM CREEK CAMPGROUND ACCESS ROAD)
0.17	0.17	INTERSECTION	L	ROUTE 0208 (NEWHALEM CREEK CAMP TENDER STATION ROAD)

NOCA: Route Milepost Log

ROUTE 0209A: COLONIAL CREEK CAMPGROUND NORTH LOOP A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 5000 (STATE HIGHWAY 20)
0.00	0.00	INTERSECTION	L	ROUTE 5000 (STATE HIGHWAY 20)
0.00	0.00	INTERSECTION	N/A	ROUTE 0200 (COLONIAL CREEK CAMPGROUND ACCESS SOUTH)
0.03	0.03	INTERSECTION	L	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.03	0.03	ONE-WAY START	N/A	N/A
0.14	0.14	INTERSECTION	L	ROUTE 0209B (COLONIAL CREEK CAMPGROUND NORTH LOOP B)
0.38	0.38	INTERSECTION	L	ROUTE 0209B (COLONIAL CREEK CAMPGROUND NORTH LOOP B)
0.44	0.44	ONE-WAY END	N/A	N/A
0.44	0.44	INTERSECTION	R	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.44	0.44	INTERSECTION	L	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)

ROUTE 0209B: COLONIAL CREEK CAMPGROUND NORTH LOOP B

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.00	0.00	INTERSECTION	L	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.00	0.00	ONE-WAY START	N/A	N/A
0.04	0.04	ONE-WAY END	N/A	N/A
0.04	0.04	INTERSECTION	R	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)
0.04	0.04	INTERSECTION	L	ROUTE 0209A (COLONIAL CREEK CAMPGROUND NORTH LOOP A)

NOCA: Route Milepost Log

ROUTE 0210A: NEWHALEM CREEK CAMPGROUND LOOP A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)
0.00	0.00	INTERSECTION	R	ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS)
0.02	0.02	ONE-WAY START	N/A	N/A
0.02	0.02	INTERSECTION	L	ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)
0.14	0.14	INTERSECTION	R	ROUTE 0977 (NEWHALEM CREEK WALK-IN SITES PARKING)
0.18	0.18	INTERSECTION	R	PAVED AMPHITHEATER PULLOUT PARKING
0.31	0.31	ONE-WAY END	N/A	N/A
0.31	0.31	INTERSECTION	N/A	ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)
0.31	0.31	INTERSECTION	L	ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)

NOCA: Route Milepost Log

ROUTE 0210B: NEWHALEM CREEK CAMPGROUND LOOP B

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0206 (NEWHALEM CREEK CAMPGROUND LOOPS A AND B ACCESS)
0.00	0.00	INTERSECTION	N/A	ROUTE 0210A (NEWHALEM CREEK CAMPGROUND LOOP A)
0.01	0.01	INTERSECTION	L	ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)
0.01	0.01	ONE-WAY START	N/A	N/A
0.24	0.24	ONE-WAY END	N/A	N/A
0.24	0.24	INTERSECTION	N/A	ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)
0.24	0.24	INTERSECTION	R	ROUTE 0210B (NEWHALEM CREEK CAMPGROUND LOOP B)

NOCA: Route Milepost Log

ROUTE 0210C: NEWHALEM CREEK CAMPGROUND LOOP C

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.00	0.00	INTERSECTION	R	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.00	0.00	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0210D (NEWHALEM CREEK GROUP CAMPGROUND LOOP D)
0.42	0.42	INTERSECTION	L	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.42	0.42	ONE-WAY END	N/A	N/A
0.42	0.42	INTERSECTION	N/A	ROUTE 0210D (NEWHALEM CREEK GROUP CAMPGROUND LOOP D)
0.42	0.42	INTERSECTION	R	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)

NOCA: Route Milepost Log

ROUTE 0210D: NEWHALEM CREEK GROUP CAMPGROUND LOOP D

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 6.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	R	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.00	0.00	INTERSECTION	L	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.00	0.00	INTERSECTION	N/A	ROUTE 0210C (NEWHALEM CREEK CAMPGROUND LOOP C)
0.17	0.17	INTERSECTION	L	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.17	0.17	INTERSECTION	R	ROUTE 0207 (NEWHALEM CREEK CAMPGROUND LOOPS C AND D ACCESS)
0.17	0.17	ONE-WAY END	N/A	N/A
0.17	0.17	INTERSECTION	N/A	ROUTE 0210C (NEWHALEM CREEK CAMPGROUND LOOP C)

NOCA: Route Milepost Log

ROUTE 0401: NORTH CASCADES VISITOR CENTER SERVICE ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0204 (NORTH CASCADES VISITOR CENTER ACCESS ROAD)
0.04	0.04	INTERSECTION	R	ROUTE 0916B (NORTH CASCADES VISITOR CENTER UNPAVED SERVICE PARKING)
0.07	0.07	INTERSECTION	L	ROUTE 0916 (NORTH CASCADES VISITOR CENTER SERVICE PARKING)
0.07	0.07	INTERSECTION	N/A	DEAD END

NOCA: Route Milepost Log

ROUTE 0426: MARBLEMOUNT BARN ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 6.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.00	0.00	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.00	0.00	INTERSECTION	N/A	ROUTE 0435B (MARBLEMOUNT COUNCIL OAK SPUR)
0.05	0.05	INTERSECTION	L	ROUTE 0108 (OLSON CREEK ROAD)
0.05	0.05	INTERSECTION	R	ROUTE 0108 (OLSON CREEK ROAD)

NOCA: Route Milepost Log

ROUTE 0435A: MARBLEMOUNT COUNCIL OAK DRIVE

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 6.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	RANGER STATION ROAD (NON-NPS)
0.01	0.01	INTERSECTION	R	ROUTE 0108 (OLSON CREEK ROAD)
0.03	0.03	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.03	0.03	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.14	0.14	INTERSECTION	L	ROUTE 0435B (MARBLEMOUNT COUNCIL OAK SPUR)
0.14	0.14	INTERSECTION	R	ROUTE 0426 (MARBLEMOUNT BARN ROAD)
0.24	0.24	INTERSECTION	L	ROUTE 0435B (MARBLEMOUNT COUNCIL OAK SPUR)
0.31	0.31	INTERSECTION	R	ROUTE 0900D (MARBLEMOUNT SHOP PARKING)
0.34	0.34	INTERSECTION	R	ROUTE 0900C (MARBLEMOUNT ADMINISTRATIVE PRIVATE PARKING)
0.36	0.36	INTERSECTION	R	ROUTE 0900A (MARBLEMOUNT ADMINISTRATIVE PUBLIC PARKING)
0.37	0.37	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.37	0.37	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.39	0.39	INTERSECTION	R	ROUTE 0108 (OLSON CREEK ROAD)
0.39	0.39	INTERSECTION	N/A	ROUTE 0900B (MARBLEMOUNT WIC PARKING)
0.39	0.39	INTERSECTION	L	ROUTE 0108 (OLSON CREEK ROAD)

NOCA: Route Milepost Log

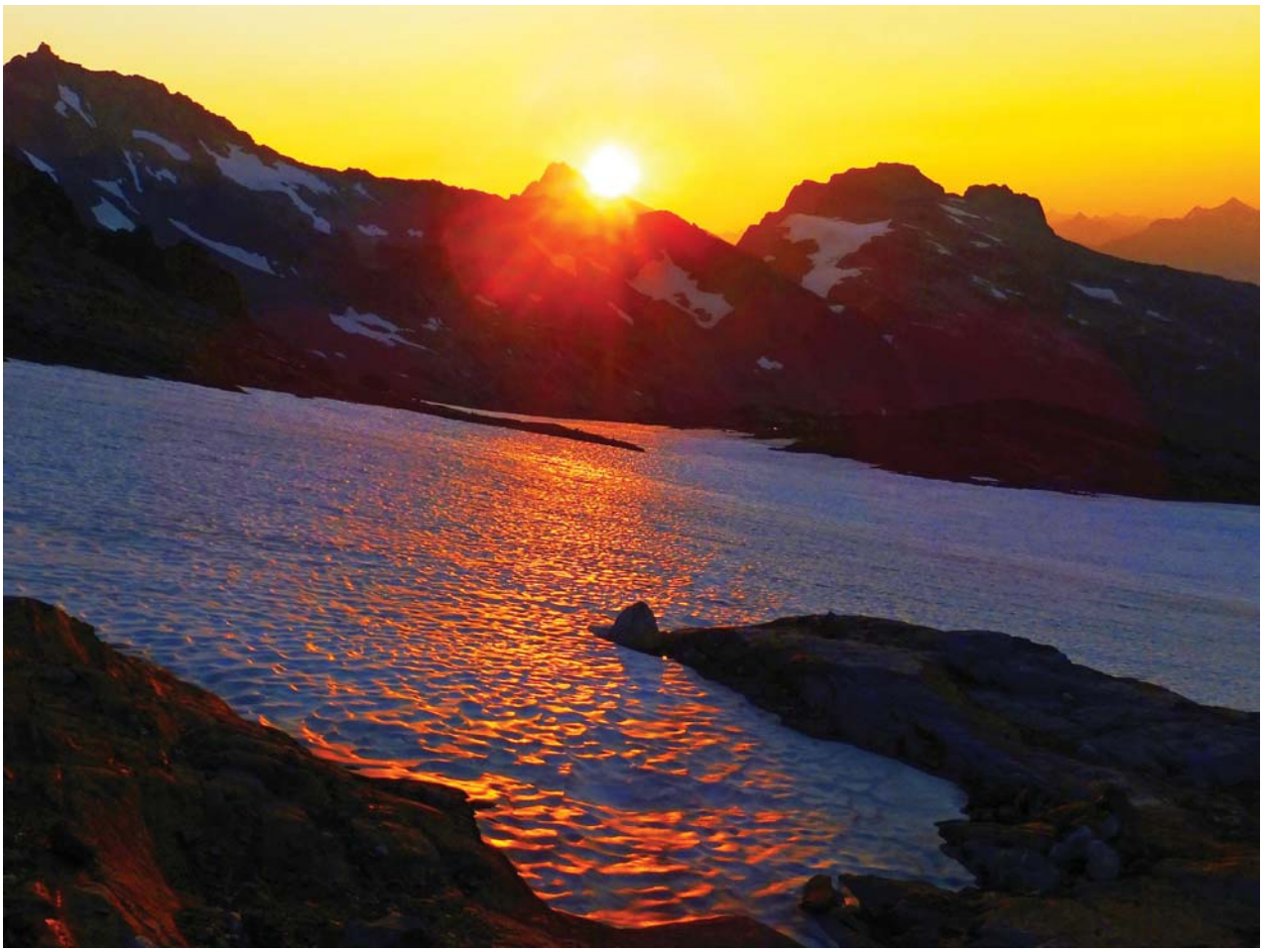
ROUTE 0435B: MARBLEMOUNT COUNCIL OAK SPUR

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.00	0.00	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.03	0.03	INTERSECTION	N/A	ROUTE 0426 (MARBLEMOUNT BARN ROAD)
0.03	0.03	INTERSECTION	L	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)
0.03	0.03	INTERSECTION	R	ROUTE 0435A (MARBLEMOUNT COUNCIL OAK DRIVE)

Data Collected on 9/2015

Section 8
Appendix



North Cascades National Park

Federal Lands Highway
Road Inventory Program

Improvements to the RIP Index Equations and Determination of PCR

In 2005, the Federal Highway Administration (FHWA) began implementing the use of a Pavement Management System (PMS) to assist the National Park Service (NPS) in prioritizing Pavement Maintenance and Rehabilitation activities. The PMS used by FHWA is the Highway Pavement Management Application (HPMA) which has the ability to store inventory and condition data from the Road Inventory Program (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 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 RIP 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.

Additionally, methodologies were updated in 2013 for Manually Rated Routes (paved routes that the collection vehicle is unable to drive) as well as Parking Areas to provide more accurate condition data to the HPMA. These updated methodologies allow for the efficient assessment of pavement conditions using a visual inspection method to denote specific distresses. These distresses are indicative of current conditions, the causes for current and future deterioration, and identify the level of targeted repair and rehabilitation practices required.

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 in early 2014 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.

Description of the Rating System

The Federal Highway Administration, National Park Service Road Inventory Program (NPS-RIP), 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) and manually using Manually Rated Route (MRR) procedures. Roads having brick or cobblestone surfacing are not normally surveyed with the DCV, but are manually rated for condition rating.

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

With the use of quality digital photography and automated crack detection software, FHWA RIP is tasked with executing a pavement condition assessment on a network of roughly 5,700 miles of National Park Service roads and parkways. Because a subset of roads will be collected multiple times this cycle, the total collection length will be around 13,000 miles. Foremost in setting up the basis of pavement distress identification is employing the distress identification protocols used by FHWA. There is no single distress identification system that is universal among entities conducting a program of distress identification. For the purpose of the NPS RIP, FHWA employs distress identification protocols that are specific to this program.

FHWA has referenced the "*Distress Identification Manual for the Long-Term Pavement Performance Program", Publication No. FHWA-RD 03-031, June 2003,* as the point-of- reference for distress types on NPS pavement. In truth, the FHWA RIP distress types are similar to those described in the LTPP manual with some modifications. This document, "*Distress Identification Manual for the NPS Road Inventory Program, Cycle 6, 2014-2020"* 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.

Cycle 6 has launched in the spring of 2014 and will again comprise all parks, large and small, that are served by paved roads and/or parking areas. For Cycle 6, roughly 333 large and small parks will have all paved routes and parking areas collected at least once in the cycle, some will have multiple collections depending on the size of the park and the functional class of the route.

This "*Distress Identification Manual for the NPS Road Inventory Program, Cycle 6, 2014-2020*" 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 6.

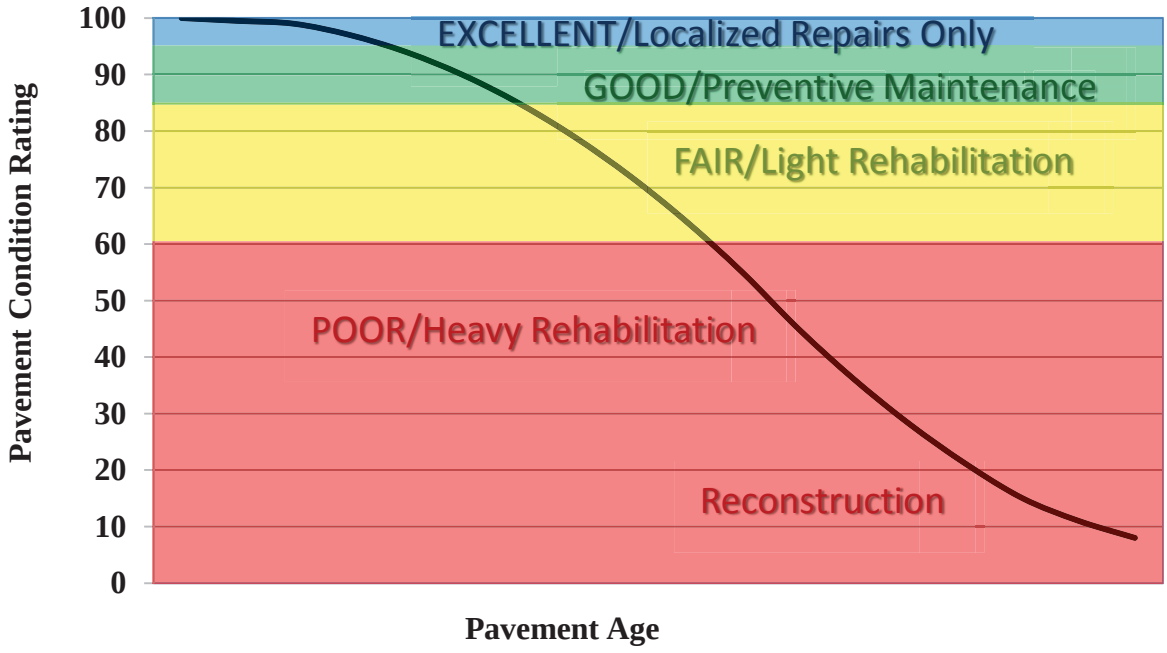
Explanation of the Condition Descriptions

In addition to the RIP Index changes that were 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 PMS data from our (HPMA) please contact the Eastern Federal Lands pavement team.

Condition Categories and Treatments



Description of Pavement Treatment Types

1. **Preventive Maintenance** is a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity). Preventive maintenance is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultra-thin hot-mix asphalt overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial and/or full-depth concrete repairs to restore functionality of individual slabs.

2. Pavement Rehabilitation consists of structural enhancements that extend the service life of an existing pavement and/or improve its load carrying capacity. Rehabilitation techniques include restoration treatments and structural overlays. Rehabilitation projects extend the life of existing pavement structures either by restoring existing structural capacity through the elimination of age-related, environmental cracking of embrittled pavement surface or by increasing pavement thickness to strengthen existing pavement sections to accommodate existing or projected traffic loading conditions. Two sub-categories result from these distinctions, which are directly related to the restoration or increase of structural capacity.

    - **Light Rehabilitation (L3R)** - Examples include single-lift overlays up to 2.5 inches in total thickness and milling and overlays for flexible pavements

    - **Heavy Rehabilitation (H3R)** – Requires rehabilitation with grade improvement. H3R stands for resurfacing, restoration, and rehabilitation projects. H3R projects typically involve multi-depth (overlays greater than 2.5 inches) pavement improvement work (short of full-depth replacement) and targeted safety improvements. H3R projects generally involve retention of the existing three-dimensional alignment.

3. **Reconstruction (4R)** is defined as the replacement of the entire existing pavement structure by the placement of the equivalent or increased pavement structure. Reconstruction usually requires the complete removal and replacement of the existing pavement structure. Reconstruction may utilize either new or recycled materials incorporated into the materials used for the reconstruction of the complete pavement section. Reconstruction is required when a pavement has either failed or has become functionally obsolete.

Appendix A

Methodology for Determining Condition Ratings with the Data Collection Vehicle (DCV)

Surface Distresses Identified by the Data Collection Vehicle

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 and rutting are determined from digital images that provide both the longitudinal and transverse profile. The images also provide an elevation profile of the road, creating a 3-dimensional image of the paved surface.

- Transverse Cracks
- Longitudinal Cracks
- Alligator Cracks
- Patching/Potholes
- 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 Surface Condition Rating (SCR).

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.

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 mile interval before it reaches MAE and fails.

The index formulas are based on a scale of 0 to 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 = (less than or equal to 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 less than 0 defaults to 0. Index values greater than 100 defaults 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-SURFACED PAVEMENT DISTRESS TYPES WITH RUTTING AND ROUGHNESS				
Distress Type	**Units Of Measure**	**Converted To**	**Defined Severity Levels?**	**Measured By**
Alligator Cracking	Square Feet	Percent of Lane Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Transverse Cracking	Linear feet	Number of Cracks Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Longitudinal Cracking	Linear feet	Percent of Lane Length Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Patching / Potholes	Square Feet	Percent of Lane Per 0.02 Mile	No	3 Dimensional pavement imaging system
Rutting	Inches	Rut Depth Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
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*

Table 1. Distress summary

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 with little to no interconnecting cracks with no visible spalling. Cracks are less than or equal to a mean width of 0.25 in. (6mm). 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 greater than 0.25 in. (6 mm) but less than or equal to 0.75 in. (19 mm) or any crack with a mean width less than or equal to 0.75 in. (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 greater than 0.75 in. (19mm) or any crack with a mean width less than or equal to 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 as shown in Table 2.

ALLIGATOR CRACKING SEVERITY LEVELS				
	CRACK SEVERITY	**CRACK PATTERN**		
		LOW	**MED**	**HIGH**
CRACK WIDTH	LOW	LOW	MED	HIGH
	MED	MED	MED	HIGH
	HIGH	HIGH	HIGH	HIGH

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 less than or equal to 0.25 in. (6 mm). This also includes sealed cracks with sealant in good condition and a width that cannot be determined.

MEDIUM
Cracks with a mean width greater than 0.25 in. (6 mm) but less than 0.75 in. (19 mm). Also, any crack with a mean width less than 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH
Cracks with a mean width greater than 0.75 in. (19 mm). Also, any crack with a mean width less than 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 less than or equal to 0.25 in. (6 mm). Sealed cracks with sealant in good condition and a width that cannot be determined.

MEDIUM
Cracks with a mean width greater 0.25 in. (6 mm) and less than or equal to 0.75 in. (19 mm). Also, any crack with a mean width less than 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH
Cracks with a mean width greater than 0.75 in. (19 mm). Also, any crack with a mean width less than 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 0.100 mi. (0.161 km). (Any full-lane patch exceeding 0.100 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.

Manhole covers should not be rated as patches unless there is obvious patching around the manhole.

Speed bumps should not be rated as patches

Severity Levels:

There are no stratified severities for Patching and 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 of 0.20 inches to 0.49 inches
Ruts less than 0.20 in. are not included in the distress calculations.

MEDIUM

Ruts with a measured depth of 0.50 inches to 0.99 inches

HIGH

Ruts with a measured depth greater than 1.00 inch

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.

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

Table 3. International Roughness Index

Roughness Collection Parameters

On shorter roads with a lower speed limit the usefulness in collecting and reporting IRI is negligible. Lower, inconsistent speeds can lead to a less accurate IRI value. Therefore RIP has put in place the following protocols for reporting IRI.

International Roughness Index (IRI) is not reported on routes with the following criteria:

- Posted speed limit is less than 25 mph
- Length of route is less than 0.50 miles

When a collected route has a posted speed limit of at least 25 mph and length of at least 0.50 miles, IRI will be collected except on road sections where the speed is less than 20 mph

Other situations may arise where the speed and length factors are met, but reporting IRI could lead to an inaccurate PCR. RIP will determine whether or not it is reasonable to report IRI on these routes on a case by case basis.

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:

$$\frac{\text{square foot area of alligator crack severity}}{\text{(0.02 mile)*(lane width)}}$$

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 greater than or equal to 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:

$$\frac{\text{length of respective longitudinal cracking}}{\text{(0.02 mile)*(105.6 ft.)}}$$

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 longitudinal 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 greater than or equal to 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:

$$\frac{\text{Total length of transverse cracks}}{\text{Lane width}}$$

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:

$$\frac{\text{square foot area of patching/potholes}}{\text{(0.02 mile)*(lane width)}}$$

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

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 report the percentage of the 40 measurements within that 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 wheel path based on 20 ruts.

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

$$\frac{\textbf{(total number of ruts within each severity in both wheelpaths)}}{\textbf{20}} \times \textbf{100}$$

In RUT_INDEX, the denominators 535, 205, and 40 are the Maximum Allowable Extents for each severity; Low, Medium, and High, respectively. Only the MAE for high severity rutting can fail a section, since 200% of *only* low severity ruts would yield a rut index of 85 and 200% of *only* medium severity ruts would yield a rut index of 61.

Roughness Condition Index (Asphalt)

RCI = $32 * [5 * (2.718282^{(-.0041 * \text{AVG IRI})})]$

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:

$$\frac{\text{(Left wheelpath IRI) + (Right wheelpath IRI)}}{2}$$

There is no applicable threshold for failure for this index.

Roughness Condition Index (Concrete)

RCI = $(-0.0012)(IRI^2) + (0.0499)(IRI) + 99.542$

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 is collected by FHWA using a Pathway Services Inc. Data Collection Vehicle (DCV), called a 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 jpeg digital imagery files at a frequency of every 26.4feet.

Two forward-facing cameras are mounted above the vehicle cab, one pointed straight ahead and the other to the right shoulder providing seamless roughly 120 degree viewing. A third camera is mounted in the rear of the vehicle, recording the left shoulder.

CAMERA SPECIFICATIONS TWO FORWARD / ONE REAR FACING CAMERA	
Camera lens/type	Prosilica GT 2750 (GigE Technology)
Image format	*.jpg
Image resolution	2750 x 2200, 18 frames/second
Image pixel size	depends on distance
Zoom ratio	16mm Fixed
Iris range	Aperture Range F 1.8 – Infinity (P-Iris, Automatic

Pavement Imaging and Rutting

High resolution rutting data and surface imaging are collected in a single data stream using a three-dimensional (3D) pavement surface transverse profile data acquisition system. The 3D camera captures a laser line as it is projected over the pavement surface and uses the location of this line to measure the height deviations of the pavement surface. These height deviations can be used to calculate rutting in both wheelpaths. These deviations also provide a grayscale image detailing the change in height throughout the surface, i.e. providing depth measurements for cracking.

THREE-DIMENSIONAL PAVEMENT SURFACE AND TRANSVERSE PROFILE DATA ACQUISITION SYSTEM	
Surface Image Specifications	
Image size	1536 pixels/scan @3000 Hz
Image width	4 meters (3950 mm nominal)
Laser class	3B
Power	16W (Two lasers @ 8W Ea)
Vehicle speed limitations	62 mph
Environment	Dry pavement, day or night
Sensor size (approximate)	1536 pixels x 512 pixels
Image display length	26.4 feet
Rutting Specifications	
Reported rut depth units	Inches
Vehicle speed limitations	Up to 62 mph
Sampling rate	3000 profiles/second
Transverse resolution	1536 points/profile
Transverse field-of-view	14 feet
Depth accuracy (nominal)	<1mm
Environment	Dry pavement, day or night, above 32 degrees F
Adherence to specifications	ASTM E1703M-95 (reapproved 2005)

Distance Measuring Instrument (DMI)

The DMI (Distance Measuring Instrument) obtains road length measurements that are accurate to 0.15% 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)

IRI SPECIFICATIONS	
Reported IRI units	Inches/mile
Vehicle speed limitations	12-62 mph
IRI equipment certification	Texas Transportation Institute (TTI)
Wavelengths accommodated	0.5 feet to 300 feet
IRI computed & reported	World Bank Technical Paper Number 46
Environment	Dry pavement, day or night, above 32 degrees
Adherence to specifications	ASTM E950 Class 1 & AASHTO M 328

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.

GPS & Inertial Systems

GPS is collected by an onboard system employing Omnistar real time correction and a spinning gyroscope to provide accurate positioning data in instances of satellite obstruction. All GPS coordinates are tied to an 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	± 1.75%
Grade	± 1.75%
Adherence to specifications	ASTM E1703M-95 (reapproved 2005)

*NOTE – GPS accuracy is dependent on many different factors. Satellite constellation, tree coverage, GPS receiver quality, and real-time correction availability can all affect the locational and elevation accuracies. The elevation (z coordinate) accuracy is less dependable than locational or horizontal accuracy (x/y coordinates or latitude/longitude). In areas of heavy tree coverage or poor satellite constellations, elevation data can vary by as much as +/- 100 feet.

Appendix B

Methodology for Determining Condition Ratings Using Manual Rating Procedures

Description of Manual Rating Methods

In 2013, the Federal Highway Administration updated existing Manual Rating Procedures in an effort to better align pavement conditions for Manually Rated Routes and Parking with the Highway Pavement Management Application (HPMA). HPMA is the Pavement Management System used by the FHWA to store inventory and condition data from the Road Inventory Program (RIP) and forecast future performance using prediction models. HPMA uses pavement condition data (collected by the Road Inventory Program) to develop life cycles for pavements and recommend treatments to maximize useable pavement life while minimizing costs associated with maintenance and repair.

The Federal Highway Administration (FHWA) developed a set of manual rating methods for pavement that are appropriate for Federal Roadways. Two different methods were developed for linear roads and a separate method was developed for parking areas and nonlinear roads. These methods employ a 0 to 100 rating scale and improve consistency and objectivity in the manual evaluation of surface distresses. They are compatible with ratings that are collected by the automated Data Collection Vehicle (DCV).

- The first of the two manual evaluation methods for roads uses rating criteria to assign index values to each distress type based on a visual evaluation of severity and extent.

- The second manual evaluation method for roads is very time demanding and is best employed on only a select set of routes which may have the highest visitor use and require a more intensive assessment. This method will be used for the Manual Rating of Function Class 1, 2, 7, and 8 Roads. This method is based on measurements that are recorded for each instance of a surface distress. These measurements are converted into index values using conversion formulas.

- Parking areas and non-linear roads are rated similar to the first method shown above, however, there are some slight differences due to the non-linear nature.

The details and criteria used for each of these rating methods are outlined below.

Visual Inspection Method for Manually Rating Secondary Roads

The visual inspection method for manually rated roads uses condition rating criteria that have been developed by FHWA. This criteria is based on a visual evaluation of the severity and extent of distresses to determine the overall condition of the roadway. This method is used for secondary roads that are Functional Class 3, 4, 5, and 6. This constitutes the majority of manually rated roads collected by the Road Inventory Program.

Rating Section Lengths

For this method, Manually Rated Roads are rated in sections. These sections may be made based on length of changes in surface type or condition as described below. The ratings are then aggregated to give an overall rating for the Route:

- Rating sections should be no longer than 0.25 miles in order to keep the area being rated manageable.
- A new rating section may be started based on changes in condition, width, or surface type if these changes represent a significant portion of the route (are not isolated instances).
- If the road condition, width, and surface type remain constant then new sections do not need to be created unless the road exceeds 0.25 miles.

Rating Criteria

For this method, Manually Rated Roads are evaluated using a visual inspection of the six distress types listed below. Each distress is assigned one of five index values. An overall Surface Condition Rating (SCR) and Pavement Condition Rating (PCR) are calculated based on these index values.

- Alligator Cracking
    - Rating based on percentage of road surface affected
- Longitudinal Cracking
    - Rating based on severity level (crack width) and percentage of road section length of longitudinal cracks
- Transverse Cracking
    - Rating based on crack width, crack spacing, and percentage of surface affected
- Patching
    - Rating based on percentage of road surface affected
- Rutting
    - Rating based on percentage of road section length affected by visible rutting (>1 inch depth) that requires remediation
- Roughness
    - Manual assessments of roughness are not made due to the subjectivity of the measurement. Therefore, roughness is not incorporated into the PCR calculation of manually rated roads.

Concrete Routes also receive a PCR rating based on visual evaluation of the following six distress types.

- Slab Faulting at Joints
- Slab Cracking and breakup
- Surface Delamination and Pop-outs
- Joint Distresses
- Patching

Distress Measurement Method for Manually Rating Primary Roads

A more intensive and time demanding assessment than our standard method was developed for Primary roads that are functional class 1, 2, 7, or 8. These high visitation roads are usually accessible by the automated Data Collection Vehicle but in rare instances may need to be manually rated. The method developed is based on measuring each instance of a distress. These measurements are totaled over each section length being measured and are then converted into index values between 0 and 100 (100 being a road with no distress) using index formula equations outlined below. The goal of this method is to produce measured index values which are directly comparable to the automated DCV.

Rating Section Lengths

For the distress measurement method roads are broken into sections in order to rate. Distress measurements are totaled for each section separately in order to determine the index value for that particular section. The section length to be rated is determined based on the following rules:

- Rating sections are between 0.25 and 0.50 miles long
- A new rating section is created if there is a significant change in condition or pavement width
- If there are no significant changes in condition or pavement width, rating sections are broken at equal intervals, typically 0.50 miles

Manual Distress Measurements

Alligator Cracking

- Alligator cracking is measured by area (square feet). Instances of Alligator cracking are measured along the length and multiplied by the average width of the distressed area.
- The index for alligator cracking takes the total area of cracking compared to the interval length and converts it to a percentage. That percentage is then input into an index formula that yields a value between 0 and 100 (0 being the most distressed).
- Severity levels are not defined for manually measured Alligator cracks. The Alligator Crack Index formula is calculated based on an assumption of medium severity.

Longitudinal Cracking

- Longitudinal cracking (cracking in the direction parallel to the roadway) is measured by length (ft.).
- The index for longitudinal cracking takes the total length of cracking compared to the interval length and converts it to a percentage broken down by severity. That percentage is then input into a formula that yields a value between 0 and 100 (0 being the most distressed).
- Two severity levels are defined for manually measured Longitudinal Cracks. Lower severity cracks are those with a mean width of less than 0.25 inches. Sealed cracks with sealant in good condition are also considered lower severity. Higher severity cracks are those with a mean width of greater than 0.25 inches.

Transverse Cracking

- Transverse cracking (cracking in the direction perpendicular to the roadway) is measured by length (ft).
- The index for transverse cracking takes the total number of cracks (1 crack would encompass the full lane) broken down by severity. The total numbers of each severity are then put into a formula that yields a value between 0 and 100 (0 being the most distressed).
- Two severity levels are defined for manually measured Transverse Cracks. Lower severity cracks are those with a mean width of less than or equal to 0.25 inches. Sealed cracks with sealant in

good condition are also considered lower severity. Higher severity cracks are those with a mean width of greater than 0.25 inches.

Patching and Potholes

- Patching and Potholes are measured by area (square feet). Instances of Patching are measured along the length and multiplied by the average width of the patch.
- Instances of full lane width patching cannot be longer than 0.100 miles, otherwise is should be considered a pavement change rather than a distress.
- There are no stratified severities for Patching. It is either present or it is not.

Rutting

- Visible rutting is measured by length (ft.) in each wheel path. Only visible ruts are rated, which are ruts greater than 1 inch deep.
- All rutting recorded in a manual rating is considered to be high severity (> 1 inch). Lesser severities are generally not distinguishable in a visual inspection.

Roughness

- Manual assessments of roughness are not made due to the subjectivity of the measurement. Therefore, roughness is not incorporated into the PCR calculation of manually rated roads.

Index Formulas for Distress Measurement Method:

The method used to convert distress measurements into index values is shown below. The Surface Condition Rating and Pavement Condition Rating are calculated based on these index values.

Alligator Crack Index for Manual Rating:

AC_INDEX = 100 – 40 * (%ALLIGATOR / 15)

Where:

%ALLIGATOR = Percent of total area of section being rated that contains Alligator cracking.

Longitudinal Crack Index for Manual Rating:

LC_INDEX = 100 – 40 * [(%LOW / 175) + (%MED / 75)]

Where:

%LOW = Percent length of longitudinal cracks where crack width less than or equal to 0.25 inches

%HIGH = Percent length of longitudinal cracks where crack width greater than 0.25 inches

Transverse Crack Index for Manual Rating:

TC_INDEX = (100 – 40) * [(LOW / 21.1) + (MED / 4.4)]

Where:

LOW = Count of the total number of transverse cracks within the section length where one transverse crack is equal to the lane width and the crack width <= 0.25 inches

HIGH = Count of the total number of transverse cracks within the section length where one transverse crack is equal to the lane width and the crack width > 0.25 inches

Number of cracks is computed as:

Total length of transverse cracks/Lane width

Patching Index for Manual Rating:

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

Where:

%PATCHING = Percentage of pavement section that contains patching/potholes.

Rutting Index for Manual Rating:

RUT_INDEX = 100 – 40 * (%RUTTING / 40)

Where:

%RUTTING = Percentage length of high severity rutting within the section being measured.

Method for Manually Rating Paved Parking Areas and Non-Linear Roads

Parking areas are evaluated based on a visual inspection using condition rating criteria that has been developed by FHWA. This criteria is based on a visual evaluation of the severity and extent of distresses to determine the overall condition of the parking area. This overall condition rating is linked to the level of repair and rehabilitation practices required.

A distress index is determined for each of the distresses listed below for Asphalt and Concrete Parking areas. The overall Pavement Condition Rating (PCR) of the parking lot is driven by the most severe distress present.

Rating Criteria:

Asphalt Parking Distress Types

- Alligator Cracking
  - Rating based on percentage of road surface affected
- Longitudinal, Transverse and Block cracking
  - Rating based on crack width, crack spacing, and percentage of surface affected
- Rutting and Distortions
  - Rating based on percentage of road surface affected
- Hot Mix Asphalt Patches
  - Rating based on overall percentage of HMA patches
- Potholes and Cold Patches
  - Rating based on percentage of road surface affected
- Surface Raveling and Bleeding
  - Rating based on percentage of road surface affected

Concrete Parking Distress Types

- Slab Faulting at Joints
  - Rating based on height differential between adjacent slabs or pieces of broken slabs
- Slab Cracking and breakup
  - Rating based on quantity of cracks and if slab is acting to able distribute load as designed
- Surface Delamination and Pop-outs
  - Rating based on percentage of road surface affected to include pop-outs, spalls and surface delamination
- Joint Distresses
  - Rating based on sealant condition and concrete distresses at/or adjacent to joints
- Patching
  - Rating based on percentage of road surface affected

Curb Inspection and Treatments

During inspections of manually rated parking lots and routes, the curb reveal and overall curb condition are evaluated. The curb condition is used to determine a recommendation.

Curb Reveal
The vertical distance on the curb face from the gutter flow line or pavement surface to the top of curb. When resurfacing adjacent to curb, the resulting curb reveal should be no less than 4 inches. Additionally, when resurfacing adjacent to a gutter, the resulting pavement surface should be flush with the gutter pan. In cases where a resurfacing would violate either of these parameters, the surface may need to be milled or removed to adjust to these field conditions.

Curb Recommendations
The following treatment categories are based on the overall percentage of distresses along the entire curb structure for a specific pavement structure. Distresses include spalling, cracking, loss of material and any other damage which prevents the curb from conveying storm runoff or failing to perform in its intended function.

- Overall curb damage ranging 0%-5%:
    - DO NOTHING
- Overall curb damage ranging 5%-20%
    - LIGHT REPAIR
- Overall curb damage ranging 20%-50%
    - MODERATE REPAIR
- Overall curb damage greater than 50%:
    - REPLACE

GPS for Manually Rated Roads and Parking

GPS information for Manually Collected Cycle 6 Routes will be recorded using the latest hardware and software by TRIMBLE 6000 Series GeoXT. Cycle 6 GPS collection units will allow access to GPS and GLONASS, improving overall GPS reliability, accuracy and precision to submeter accuracy. Additionally, the new GPS units have an enhanced ability to collect accurate signals underneath tree cover or adjacent to buildings or natural terrain with extreme vertical gradations that typically reduce GPS accuracy. Trees and buildings create "satellite shadows", limiting the areas where you can reliably collect high-accuracy GPS data. The updated GPS receiver will deliver improved usable data under tree canopy or in natural or urban canyons. Routes that were previously collected accurately will not be recollected in Cycle 6.

TRIMBLE 6000 SERIES GeoXT GPS SPECIFICATIONS	
Receiver	Trimble Maxwell™ 6 GNSS chipset
Channels	220 channels
Systems	GPS / GLONASS / WAAS
Accuracy	Sub-meter
Operation Temperature	–20 °C to +60 °C (–4 ºF to +140 ºF)
Cellular and Wireless	UMTS / HSDPA / GPRS / EDGE / Wi-Fi / Bluetooth
Internal Still Camera w/ GEOTAG ability	Autofocus 5 MP (JPG) and WMV w/ Audio

Appendix C

Description of Cycle 6 Deliverables

Interim Report Delivery

Partial report will be primarily focused on manually collected routes. The report will be released approximately four months after manual collection of parking lots and other manually collected routes to provide NPS an immediate report on the condition of routes collected manually.

The Interim Report Delivery consists of an Interim Report PDF that contains the following:

- Parking lot and manually rated route conditions
- Route ID Reports
- Route ID Changes Report.

Please note that since the Data Collection Vehicle will have not collected data at this point in time, the following will not be in the Interim Report:

- No park summary information will be provided in the report
- No DCV data will be provided in report
- No road logs will be provided in report
- No maps will be provided in report
- Any mileages collected will be approximate

All data provided in the Interim Report will also be included in the Final Report.

Final Report Delivery

The Final Report will contain all data collected by Manual Inspection and the Data Collection Vehicle. All information provided in the Interim Report will be included in the Final report. Manually collected information reported in the Interim Report may be updated in the Final Report if pavement conditions have substantially changed between the Manual Inspection and Data Collection Vehicle Inspection or other unforeseen circumstances.

The final report will be released approximately 8 months after the Data Collection Vehicle completes its collection of that specific park.

Data included in the Final Report package consists of the following:

- **Condition Photos:** All photos taken during Cycle 6.
- **Data Video:** Data and video of each route collected by the DCV will viewable through PATHVIEW software. PATHVIEW Software and training will be provided to NPS personnel by Eastern Federal Lands.
- **GPS on All Rated Routes:** All GPS data collected from the DCV will be provided. 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 units.
    - GPS will be provided as Shapefiles and KMLs
    - All GPS data related to road collection with be linear referenced to the collected length
- **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 allows RIP to facilitate easier updates and enhancements in the future. A geodatabase can be thought of as simply a database containing spatial data. 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.
- **Report (RIP Report and Route ID):** A PDF report will be provided that includes a list of all routes and key data. Condition reports for each route will be included. All changes, additions and deletions to any route will be included in the report. Features along routes will not be collected in Cycle 6.

Partial DCV Collections

Additional Partial DCV Collections may be done on specific parks depending on their size and overall mileage of routes within its boundaries during Cycle 6. Parks with greater than 10 miles of paved roadways will receive at least one additional Partial DCV collection during Cycle 6. Data collected during these Partial DCV Collections will not result in the delivery of an additional report to the park.

Data collected by the DCV during Partial DCV Collection will be used to improve HPMA modeling by providing additional "snapshots in time" of park pavement conditions. This improved HMPA modeling will assist in the programing and budgeting of future projects which will help maximize the life of pavement infrastructures.

Instead of receiving a report of conditions collected during the Partial DCV collection, the park will receive a formal letter from the Road Inventory Program requesting coordination for the additional Partial DCV collection, identifying the dates of the Partial DCV Collection and will reinforce the purpose and importance of the Partial DCV Collection.

Appendix D

Glossary of Terms and Abbreviations

Glossary of Terms and Abbreviations

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
AC	Alligator Cracking
CRS	Condition Rating Sheets (Section 5)
Curb Recommendation	Curb remediation based on overall percentage of curb distress
Curb Reveal	Height of curb exposed from gutter flow line to top of curb
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
HPMA	Highway Pavement Management Application
Lane Width	Width from road centerline to fogline, or from centerline to edge-of-pavement when no fogline exists
LC	Longitudinal Cracking
MRR	Manually Rated Route
MRL	Manually Rated Line
MRP	Manually Rated Polygon
N/A	Not Applicable
NC	Not Collected
PATCH	Patching and Potholes
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating
PKG	Parking Area
Poor	Poor rating with an index value of 0 to 60
RCI	Roughness Condition Index
SC	Structural Cracking
SCR	Surface Condition Rating
TC	Transverse Cracking