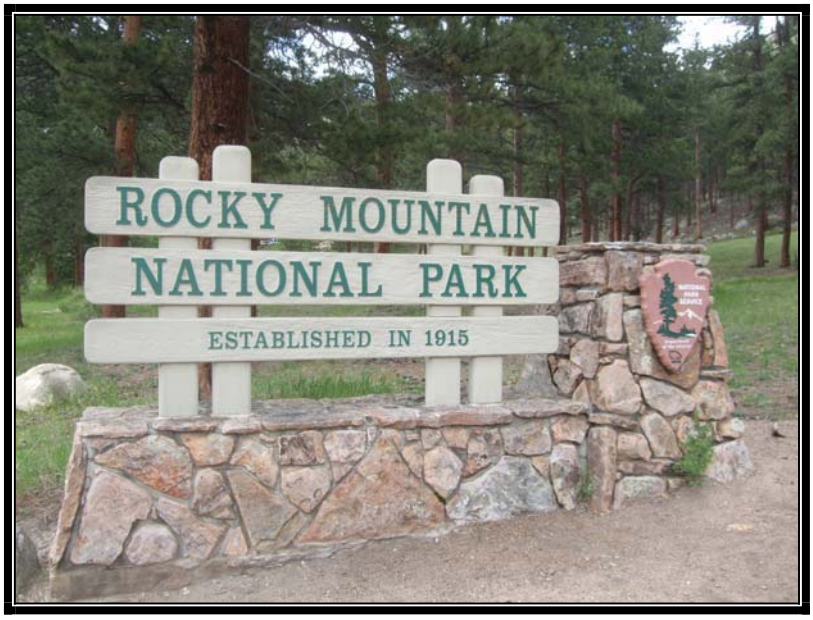
Federal Lands Highway

Road Inventory Program

Road Inventory and Condition Assessment

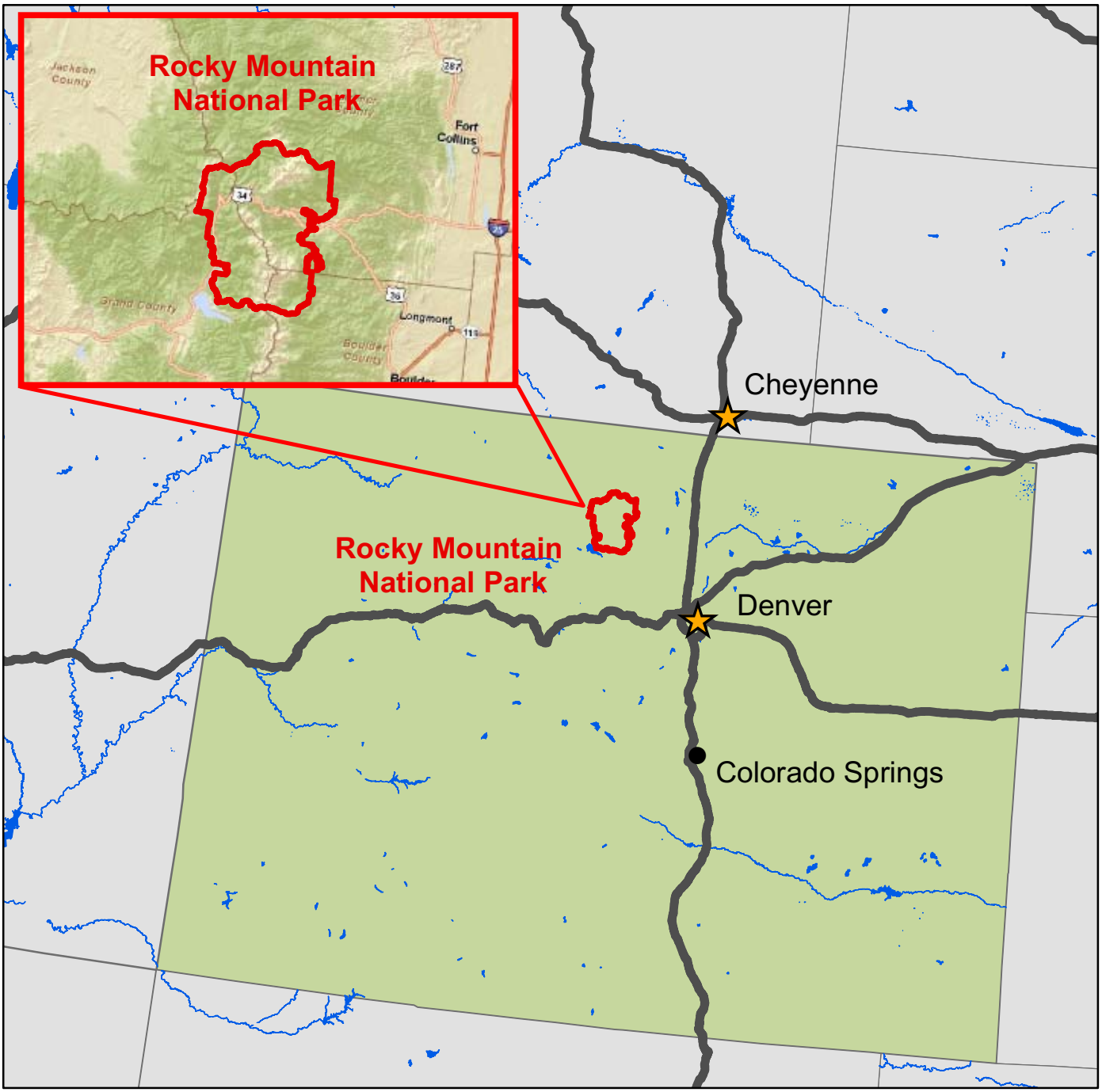


Rocky Mountain National Park
ROMO - 1520

Cycle 5 Report

Prepared By: Federal Highway Administration
Road Inventory Program (RIP)
Data Collection Date: 06/2010
Report Date: 12/2011

Rocky Mountain National Park
in
Colorado



DCV = Data Collection Vehicle

TABLE OF CONTENTS

Section 1
Introduction

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

INTRODUCTION

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

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

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

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

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

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

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

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

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

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

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

Respectfully,

FHWA RIP Team

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Section 2
Park Route Inventory

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

Cycle 5 NPS/RIP Route ID Report

Shading Color Key:
Red text denotes approx. mileage

White = Paved Routes, DCV Driven | Yellow = Unpaved Routes, DCV not Driven | Blue = All Paved Parking Areas | Green = All Unpaved Parking Areas
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*Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

** DCV - Data Collection Vehicle

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

ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0010	5	21852		TRAIL RIDGE ROAD	FROM EAST PARK BOUNDARY AT FALL RIVER ENTRANCE	TO WEST PARK BOUNDARY AT GRAND LAKE ENTRANCE	THOMPSON RIVER, FALL RIVER, COLORADO RIVER	42.73	0.00	42.73	1	0	AS	1,2,3,4, 5,6,7
0011	5	15119		BEAVER MEADOWS ROAD	FROM INTERSECTION OF HIGH DRIVE AND US 36 AT EAST PARK BOUNDARY (STOP LIGHT)	TO ROUTE 0010 (TRAIL RIDGE ROAD)	THOMPSON RIVER DISTRICT	5.26	0.00	5.26	1	0	AS	7,8,9
0012	5	15138		BEAR LAKE ROAD	FROM ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 2.41 ON LEFT	TO ROUTE 0951 (BEAR LAKE PARKING AREA)	THOMPSON RIVER DISTRICT	9.10	0.00	9.10	1	0	AS	8,10,11
0100	5	15131		ENDOVALLEY ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 2.32 ON RIGHT	TO ROUTE 0221 (ENDOVALLEY PICNIC AREA ROAD)	THOMPSON RIVER DISTRICT	1.87	0.00	1.87	2	0	AS	6
0101	5	56310		CONNECTOR ROAD TO COUNTY ROAD 49 (WESTERN ROAD)	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 42.60 ON RIGHT	TO WEST PARK BOUNDARY	COLORADO RIVER DISTRICT	0.41	0.00	0.41	2	0	AS	1
0102	5	37497		WINDING RIVER ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 41.75 ON RIGHT	TO WEST PARK BOUNDARY AT WINDING RIVER BRIDGE	COLORADO RIVER DISTRICT	1.39	0.00	1.39	2	0	AS	1
0103	NC	105282		TWIN SISTER ROAD	FROM STATE ROUTE 7 AT MP 6.5 ON LEFT	TO END	LONGS PEAK DISTRICT	0.00	0.41	0.41	2	0	GR	
0104	5	101704		LUMPY RIDGE ACCESS ROAD	FROM COUNTY ROAD 43 (DEVILS GULCH ROAD)	TO ROUTE 1038 (LUMPY RIDGE PARKING AREA)	FALL RIVER DISTRICT	0.22	0.00	0.22	2	0	AS	9
0200	5	37498		MORAINE PARK CAMPGROUND ROAD	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 1.27 ON RIGHT	TO ROUTE 0200E (MORAINE PARK CAMPGROUND LOOP E) AND ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A)	THOMPSON RIVER DISTRICT	0.75	0.00	0.75	2	0	AS	8
0200A	4	103617		MORAINE PARK CAMPGROUND LOOP A	FROM END OF ROUTE 0200 (MORAINE PARK CAMPGROUND ROAD) AT MP 0.75	TO END OF LOOP	THOMPSON RIVER DISTRICT	1.29	0.00	1.29	3	0	AS	8
0200B	4	103620		MORAINE PARK CAMPGROUND LOOP B	FROM ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.25 ON LEFT	TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.00	THOMPSON RIVER DISTRICT	0.36	0.00	0.36	3	0	AS	8

Cycle 5 NPS/RIP Route ID Report

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0200C	4	105196		MORAINE PARK CAMPGROUND LOOP C	FROM ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.33 ON LEFT	TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.57	THOMPSON RIVER DISTRICT	0.25	0.00	0.25	3	0	AS	8
0200D	4	105283		MORAINE PARK CAMPGROUND LOOP D	FROM ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.63 ON LEFT	TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.69	THOMPSON RIVER DISTRICT	0.22	0.00	0.22	3	0	AS	8
0200E	4	105208		MORAINE PARK CAMPGROUND LOOP E	FROM ROUTE 0200 (MORAINE PARK CAMPGROUND ROAD) AT MP 0.75 ON RIGHT	TO END OF LOOP	THOMPSON RIVER DISTRICT	0.28	0.00	0.28	3	0	AS	8
0201	4	37499		CUB LAKE / STABLES ROAD	FROM ROUTE 0200 (MORAINE PARK CAMPGROUND ROAD) AT MP 0.55 ON LEFT	TO END OF ROUTE 0216 (FERN LAKE TRAILHEAD ROAD)	THOMPSON RIVER DISTRICT	1.14	0.00	1.14	3	0	AS	8
0202	**5**	**37500**		**GLACIER BASIN CAMPGROUND ROAD**	**FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 4.92 ON LEFT AND ROUTE 0944 (PARK AND RIDE PARKING)**	**TO ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS)**	**THOMPSON RIVER DISTRICT**	**0.46**	**0.00**	**0.46**	**2**	**0**	**AS**	**10**
0202ZZ	4	105220		GLACIER BASIN CAMPGROUND LOOPS	FROM ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD)	THROUGH CAMPGROUND	THOMPSON RIVER DISTRICT	1.69	0.00	1.69	3	0	AS	10
0204	**5**	**37501**		**ASPENGLEN CAMPGROUND ROAD**	**FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 0.26 ON LEFT**	**TO ROUTE 0204ZZ (ASPENGLEN CAMPGROUND ROADS)**	**FALL RIVER DISTRICT**	**0.64**	**0.00**	**0.64**	**2**	**0**	**AS**	**7**
0204ZZ	4	105241		ASPENGLEN CAMPGROUND ROADS	FROM ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD)	THROUGH CAMPGROUND	FALL RIVER DISTRICT	0.65	0.00	0.65	3	0	AS	7
0205	**5**	**14829**		**TIMBER CREEK CAMPGROUND ENTRANCE ROAD**	**FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.50 ON RIGHT**	**TO ROUTE 0205ZZ (TIMBER CREEK CAMPGROUND ROADS)**	**COLORADO RIVER DISTRICT**	**0.32**	**0.00**	**0.32**	**2**	**0**	**AS**	**3**
0205ZZ	4	102437		TIMBER CREEK CAMPGROUND ROADS	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.50 ON RIGHT	THROUGH CAMPGROUND	COLORADO RIVER DISTRICT	0.57	0.00	0.57	3	0	AS	3
0207	NC	14783		BOWEN / BAKER ACCESS ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 35.1	TO END	COLORADO RIVER DISTRICT	0.00	1.04	1.04	5	0	GR	
0208	**5**	**16715**		**GRAND LAKE LODGE ROAD**	**FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 42.34 ON LEFT**	**TO PARK BOUNDARY**	**COLORADO RIVER DISTRICT**	**0.14**	**0.00**	**0.14**	**2**	**0**	**AS**	**1**

Cycle 5 NPS/RIP Route ID Report

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0209	NC	90334		GRAND LAKE CEMETERY ROAD	FROM ROUTE 0101 (CONNECTOR ROAD TO COUNTY ROAD 49 (WESTERN ROAD)) AT MP 0.02 ON RIGHT	TO ROUTE 0101 (CONNECTOR ROAD TO COUNTY ROAD 49 (WESTERN ROAD)) AT MP 0.12 ON RIGHT	COLORADO RIVER DISTRICT	0.00	0.20	0.20	3	0	GR	
0210	NC	37515		WILD BASIN ROAD	FROM ROUTE 1022 (SANDBEACH LAKE TRAILHEAD PARKING AREA) AT WEST END OF PARKING AREA	TO END OF LOOP	WILD BASIN DISTRICT	0.00	2.05	2.05	3	0	GR	
0211	**5**	**37516**		**LONGS PEAK CAMPGROUND ROAD**	**FROM LONGS PEAK ROAD (COUNTY ROAD) AT PAVEMENT CHANGE 0.9 MILES ALONG ROAD**	**TO END OF LOOP**	**WILD BASIN DISTRICT**	**0.36**	**0.00**	**0.36**	**2**	**0**	**AS**	**12**
0212	NC	37517		UPPER BEAVER MEADOWS ROAD	FROM ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 2.90 ON LEFT	TO END OF LOOP	THOMPSON RIVER DISTRICT	0.00	1.50	1.50	3	0	GR	
0214	**5**	**37518**		**HALLOWELL PARK ROAD**	**FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 3.57 ON RIGHT**	**TO END OF LOOP**	**THOMPSON RIVER DISTRICT**	**0.26**	**0.00**	**0.26**	**2**	**0**	**AS**	**8**
0215	4	37519		CABINS ROAD / KALEY COTTAGES	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 1.63 ON RIGHT	TO END AT STOCK TRAIL	THOMPSON RIVER DISTRICT	0.25	1.56	1.81	3	0	AS	8
0216	NC	37520		FERN LAKE TRAILHEAD ROAD	FROM END OF ROUTE 0201 (CUB LAKE / STABLES ROAD)	TO END	THOMPSON RIVER DISTRICT	0.00	1.08	1.08	3	0	GR	
0218	**5**	**37526**		**SPRAGUE LAKE PICNIC AREA ROAD**	**FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 5.60 ON LEFT**	**TO END OF LOOP**	**THOMPSON RIVER DISTRICT**	**0.46**	**0.00**	**0.46**	**2**	**0**	**AS**	**10**
0219	4	91142		GLACIER CREEK RIDING STABLE ROAD	FROM ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) AT MP 0.10 ON LEFT	TO END OF LOOP	THOMPSON RIVER DISTRICT	0.19	0.00	0.19	3	0	AS	10
0220	**5**	**84392**		**HIDDEN VALLEY ACCESS ROAD**	**FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 6.60**	**TO ROUTE 0914 (HIDDEN VALLEY PARKING AREA)**	**FALL RIVER DISTRICT**	**0.26**	**0.00**	**0.26**	**2**	**0**	**AS**	**6**
0221	4	37522		ENDOVALLEY PICNIC AREA ROAD	FROM END OF ROUTE 0100 (ENDOVALLEY ROAD)	TO END OF LOOP	FALL RIVER DISTRICT	0.40	0.00	0.40	3	0	AS	6
0222	NC	105357		LILY LAKE VC ROAD	FROM ROUTE 0103 (TWIN SISTER ROAD) AT MP 0.0 ON RIGHT	TO END	LONGS PEAK DISTRICT	0.00	0.04	0.04	3	0	GR	

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0223	NC	107906		KVC WATER TANK ACCESS ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD)	TO WATER TANK	COLORADO RIVER DISTRICT	0.00	0.51	0.51	6	0	GR	
0400ZZ	4	37529		HEADQUARTERS AREA ROADS	FROM ROUTE 0011 (BEAVER MEADOWS ROAD)	THROUGH MAINTENANCE AREA	THOMPSON RIVER DISTRICT	1.85	0.00	1.85	5	0	AS	9
0402	NC	37530		LITTLE HORSESHOE PARK SERVICE ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 3.48 ON LEFT	TO END	FALL RIVER DISTRICT	0.00	0.32	0.32	6	0	GR	
0403	NC	14764		GREEN MOUNTAIN HOUSING AREA ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 38.93 ON RIGHT	TO END	COLORADO RIVER DISTRICT	0.00	0.79	0.79	5	0	GR	
0405	NC	37736		DICKS ACCESS ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 37.24 ON RIGHT	TO END	COLORADO RIVER DISTRICT	0.00	0.41	0.41	5	0	GR	
0407	NC	14790		HOLZWARTH HISTORIC SITE ROAD	FROM ROUTE 0971 (HOLZWARTH HISTORIC PARKING AREA)	TO END	COLORADO RIVER DISTRICT	0.00	0.57	0.57	5	0	GR	
0409	4	14738		GLE HOUSING ROAD	FROM ROUTE 0102 (WINDING RIVER ROAD) AT MP 0.10 ON RIGHT	TO ROUTE 0102 (WINDING RIVER ROAD) AT MP 0.33	COLORADO RIVER DISTRICT	0.23	0.00	0.23	5	0	AS	1
0410	NC	59714		GUBBINS / JOHNSON ACCESS ROAD	FROM ROUTE 0405 (DICKS ACCESS ROAD)	TO END	COLORADO RIVER DISTRICT	0.00	2.12	2.12	5	0	GR	
0411	NC	50135		CHIEFS HEAD ROAD	FROM PARK BOUNDARY AT INTERSECTION WITH ROUTE 0432 (PIKA LANE)	TO ROUTE 0432 (PIKA LANE)	THOMPSON RIVER DISTRICT	0.00	0.40	0.40	5	0	GR	
0413	4	37531		MILL CREEK RESIDENCE ROAD	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 3.01 ON LEFT	TO END	THOMPSON RIVER DISTRICT	0.11	0.00	0.11	5	0	AS	8
0414	NC	37532		MORAINE PARK CAMPGROUND DUMP ROAD	FROM ROUTE 0200E (MORAINE PARK CAMPGROUND LOOP E) AT MP 0.07 ON LEFT	TO THE DUMP	THOMPSON RIVER DISTRICT	0.00	0.63	0.63	5	0	GR	
0420	NC	91143		BONEYARD EAST ROAD	FROM ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)	TO END OF LOOP	THOMPSON RIVER DISTRICT	0.00	0.25	0.25	6	0	GR	
0421	4	105232		461 / 462 RESIDENCE LOOP	FROM ROUTE 0409 (GLE HOUSING ROAD) AT MP 0.04 ON RIGHT	TO ROUTE 0409 (GLE HOUSING ROAD) AT MP 0.04 ON RIGHT	COLORADO RIVER DISTRICT	0.07	0.00	0.07	5	0	AS	1
0422	4	105235		KVC RESIDENCE TRAILER ROAD	FROM ROUTE 0409 (GLE HOUSING ROAD) AT MP 0.19 ON LEFT	TO END	COLORADO RIVER DISTRICT	0.00	0.00	0.00	5	3,406	AS	1

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ROCKY MOUNTAIN NATIONAL PARK

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0423	NC	87491		CRD MAINTENANCE YARD & BONEYARD ROAD	FROM ROUTE 0940 (MAINTENANCE YARD PARKING AREA CRD) AT END	TO END	COLORADO RIVER DISTRICT	0.00	0.15	0.15	6	0	GR	
0424	NC	91145		CRD MAINTENANCE AND RANGER CORRAL ROAD	FROM ROUTE 0940 (MAINTENANCE YARD PARKING AREA CRD) ALONG SOUTHEAST CORNER	TO END OF LOOP	COLORADO RIVER DISTRICT	0.00	0.15	0.15	6	0	GR	
0425	NC	91146		PONTIAC PIT ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 36.31 ON LEFT	TO END	COLORADO RIVER DISTRICT	0.00	0.28	0.28	6	0	NV	
0426	NC	91495		GLACIER BASIN CAMPGROUND DUMP ROAD	FROM ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS)	TO END	THOMPSON RIVER DISTRICT	0.00	0.07	0.07	6	0	GR	
0427	NC	105250		RESIDENCE 759 ROAD	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 2.47 ON LEFT	TO END	THOMPSON RIVER DISTRICT	0.00	0.11	0.11	6	0	GR	
0428	NC	105251		RESIDENCE 678 ROAD	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 2.19 ON LEFT	TO END	THOMPSON RIVER DISTRICT	0.00	0.26	0.26	6	0	GR	
0429	NC	14868		LA POUDRE PASS RANGER STATION ACCESS ROAD	FROM END OF LONG DRAW ROAD (OFF STATE ROUTE 14)	TO END AT POUDRE PASS RANGER STATION	COLORADO RIVER DISTRICT	0.00	0.11	0.11	6	0	GR	
0430	NC	40569		MCGRAW RANCH ROAD	FROM PARK BOUNDARY (NEAR COUNTY ROAD 43)	TO CONTINENTAL DIVIDE LEARNING CENTER	FALL RIVER DISTRICT	0.00	0.50	0.50	2	0	GR	
0431	NC	105252		TRAILER SITE ACCESS EASTSIDE	FROM ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)	TO END	THOMPSON RIVER DISTRICT	0.00	0.11	0.11	6	0	GR	
0432	NC	103982		PIKA LANE	FROM ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)	TO ROUTE 0411 (CHIEFS HEAD ROAD) AT MP 0.2 RIGHT	THOMPSON RIVER DISTRICT	0.00	0.04	0.04	5	0	GR	
0433	NC	104597		TIMBER CREEK CG WATER SYSTEM ACCESS ROAD	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.3 ON LEFT	TO END AT WATER TANK	COLORADO RIVER DISTRICT	0.00	0.10	0.10	6	0	GR	
0434	NC	104601		KVC PUMPHOUSE ACCESS ROAD	FROM ROUTE 0102 (WINDING RIVER ROAD) AT MP 0.3 ON RIGHT	TO END AT PUMPHOUSE	COLORADO RIVER DISTRICT	0.00	0.05	0.05	6	0	GR	
0435	NC	105315		SMITH SISTERS ACCESS ROAD	FROM ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD) AT MP 0.1 ON LEFT	TO END AT PUMPHOUSE	FALL RIVER DISTRICT	0.00	0.11	0.11	6	0	GR	

Cycle 5 NPS/RIP Route ID Report

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0438	NC	105284		HIGH DRIVE ROAD	FROM END OF PAVEMENT AT PARK BOUNDARY	TO END AT SIGN	THOMPSON RIVER DISTRICT	0.00	0.94	0.94	5	0	GR	
0442	NC	105288		MORAINE PARK STABLES RESIDENCE ROAD	FROM ROUTE 0201 (CUB LAKE / STABLES ROAD) AT MP 1.0 ON RIGHT	TO END AT CORRALS	THOMPSON RIVER DISTRICT	0.00	0.02	0.02	5	0	GR	
0443	NC	105289		ACCESS ROAD TO RESIDENCE 32	FROM ROUTE 0210 (WILD BASIN ROAD) (END OF LOOP)	TO END AT RESIDENCE	WILD BASIN DISTRICT	0.00	0.10	0.10	6	0	GR	
0444	NC	111450		LONGS PEAK WATER TREATMENT ACCESS ROAD	FROM ROUTE 0952 (LONGS PEAK TRAILHEAD PARKING)	TO END	WILD BASIN DISTRICT	0.00	0.08	0.08	6	0	GR	
0445	NC	110746		HOLZWARTH TO GRAND DITCH ACCESS ROAD	FROM ROUTE 0407 (HOLZWARTH HISTORIC SITE ROAD)	TO UNPAVED ROUTE (GRAND DITCH ACCESS ROAD / NON NPS)	COLORADO RIVER DISTRICT	0.00	2.00	2.00	6	0	GR	
0500	NC	15121		OLD FALL RIVER ROAD	FROM ROUTE 0100 (ENDOVALLEY ROAD) AT MP 1.80 ON RIGHT	TO ROUTE 0979 (FALL RIVER PASS PARKING (BEHIND STORE))	FALL RIVER DISTRICT	0.00	8.83	8.83	2	0	GR	
0900	4	37564		BEAVER MEADOWS VISITOR CENTER PARKING	FROM ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 1.05 ON LEFT	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		57,398	AS	9
0901	4	37567		LONGS PEAK OVERLOOK PARKING AREA	ADJACENT TO ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 4.55 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		6,430	AS	7
0904	4	37580		SHEEP LAKES PARKING AREA	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 1.91 ON LEFT	TO PARKING	FALL RIVER DISTRICT	0.00	0.00	0.00		16,227	AS	6
0905	4	37582		ENDOVALLEY CUL DE SAC	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 2.32 ON LEFT	TO PARKING	FALL RIVER DISTRICT	0.00	0.00	0.00		8,270	AS	6
0906	4	37583		LAWN LAKE TRAILHEAD PARKING	FROM ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.10 ON RIGHT	TO ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.20 ON RIGHT	FALL RIVER DISTRICT	0.00	0.00	0.00		17,863	AS	6
0907ZZ	4	37590		ENDOVALLEY ROAD PARKING AREAS	FROM ROUTE 0100 (ENDOVALLEY ROAD) ON RIGHT AND LEFT	TO PARKING	FALL RIVER DISTRICT	0.00	0.00	0.00		38,115	AS	6
0910	4	37596		WEST HORSESHOE PARK PARKING AREA	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 2.60 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 2.70	FALL RIVER DISTRICT	0.00	0.00	0.00		20,244	AS	6
0911	4	37597		HORSESHOE PARK OVERLOOK	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 3.27 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 3.32	FALL RIVER DISTRICT	0.00	0.00	0.00		12,710	AS	6

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0912	4	37599		THE WOOD PECKER ARMY PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 3.94 ON LEFT		FALL RIVER DISTRICT	0.00	0.00	0.00		3,230	AS	7
0913	4	37650		BEAVER PONDS EAST PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 5.96 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		3,115	AS	6
0914	4	37653		HIDDEN VALLEY PARKING AREA	FROM END OF ROUTE 0220 (HIDDEN VALLEY ACCESS ROAD)	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		59,028	AS	6
0915ZZ	4	37654		MANY PARKS CURVE PARKING AREAS	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) ON LEFT AND RIGHT AT MP 8.1		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		19,020	AS	6
0917	4	37656		RAINBOW CURVE PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 12.18 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		23,271	AS	5
0918	4	37657		FOREST CANYON OVERLOOK PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 15.12 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 15.14	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		17,494	AS	5
0920ZZ	4	37659		ROCK CUT PARKING AREAS	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) ON LEFT AND RIGHT AROUND MP 17		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		19,131	AS	5
0921	4	37660		ICEBERG PASS PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 17.62 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		4,992	AS	5
0922	4	37663		LAVA CLIFFS OVERLOOK PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 19.26 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		19,639	AS	5
0923	4	37664		GORE RANGE OVERLOOK PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 20.31 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 20.35	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		11,402	AS	5
0924	4	37666		ALPINE VISITORS CENTER PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 21.25 ON RIGHT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 21.28	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		80,568	AS	5
0925	4	37667		MEDICINE BOW CURVE PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 21.71 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		14,522	AS	5
0927	4	37670		CRATER TRAILHEAD PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 25.21 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		2,784	AS	4
0928	4	14860		MILNER PASS PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 25.54 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		10,053	AS	4

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0929	4	14854		LAKE IRENE PARKING AREA	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 26.08 ON RIGHT	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		14,404	AS	4
0930	4	14848		FARVIEW CURVE OVERLOOK PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 27.76 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		11,812	AS	4
0931	4	37675		COLORADO RIVER TRAILHEAD PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 31.93 ON RIGHT	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		52,716	AS	4
0932	4	14839		TIMBER LAKE TRAILHEAD PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 32.01 ON LEFT	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		47,546	AS	4
0933	4	14782		BOWEN / BAKER PARKING AREA	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 35.19 ON RIGHT	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		16,969	AS	2
0934	NC	14778		COYOTE VALLEY TRAILHEAD PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 35.82 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		2,800	GR	
0935	4	14774		ONAHU CREEK TRAILHEAD PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 38.20 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 38.25	COLORADO RIVER DISTRICT	0.00	0.00	0.00		11,235	AS	2
0936	4	14771		GREEN MOUNTAIN TRAILHEAD PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 38.77 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 38.82	COLORADO RIVER DISTRICT	0.00	0.00	0.00		17,746	AS	2
0937	4	37679		HARBISON PICNIC AREA PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 40.62 ON RIGHT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 40.68	COLORADO RIVER DISTRICT	0.00	0.00	0.00		21,628	AS	2
0938	4	14703		KAWUNEECHE EMPLOYEE PARKING	FROM ROUTE 0939 (KAWUNEECHE VISITOR CENTER PARKING)	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		7,735	AS	1
0939	4	37681		KAWUNEECHE VISITOR CENTER PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 41.77 ON LEFT	TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 41.86	COLORADO RIVER DISTRICT	0.00	0.00	0.00		27,323	AS	1
0940	4	14739		MAINTENANCE YARD PARKING AREA CRD	FROM ROUTE 0102 (WINDING RIVER ROAD) AT MP 0.21 ON LEFT	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		42,401	AS	1
0941	4	37684		MORAINE PARK VISITOR CENTER	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 1.24 ON LEFT	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		36,488	AS	8
0942	4	37688		MORAINE PARK STABLE PARKING	FROM ROUTE 0201 (CUB LAKE / STABLES ROAD) AT MP 1.06 ON RIGHT	TO ROUTE 0201 (CUB LAKE / STABLES ROAD) AT MP 1.12	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		7,663	AS	8

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0943	4	37690		YMCA PICNIC AREA PARKING	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 2.57 ON LEFT	TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 2.63	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		8,175	AS	8
0944	4	37691		PARK AND RIDE PARKING	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 4.92 ON RIGHT	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		176,340	AS	10
0945ZZ	4	37693		SPRAGUE LAKE PARKING AREAS	ADJACENT TO ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) ON LEFT AND RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		11,043	AS	10
0946	4	87501		BIERSTADT LAKE BUS STOP	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 6.59 ON RIGHT	TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 6.63 ON RIGHT	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		10,007	AS	11
0948	4	37697		BIERSTADT LAKE / STORM PASS TRAILHEAD PARKING	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 6.42 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		2,558	AS	11
0950	4	37699		GLACIER GORGE PARKING	FROM ROUTE 0012 (BEAR LAKE ROAD) AT MP 8.11 ON LEFT	TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 8.0 AND MP 8.14 ON LEFT	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		23,060	AS	11
0951	4	37700		BEAR LAKE PARKING AREA	FROM END OF ROUTE 0012 (BEAR LAKE ROAD)	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		86,113	AS	11
0952	4	37701		LONGS PEAK TRAILHEAD PARKING	ADJACENT TO ROUTE 0211 (LONGS PEAK CAMPGROUND ROAD) AT MP 0.07 ON LEFT		WILD BASIN DISTRICT	0.00	0.00	0.00		30,268	AS	12
0953ZZ	4	37705		HEADQUARTERS PARKING AREAS	FROM ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		209,480	AS	9
0958ZZ	4	37707		SUNDANCE CIRCLE PARKING AREAS	ADJACENT TO ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		14,915	AS	9
0959	NC	87853		LILY LAKE VISITOR CENTER PARKING	FROM COLORADO STATE ROUTE 7 BETWEEN MP 6 AND 7	TO PARKING	LONGS PEAK DISTRICT	0.00	0.00	0.00		21,218	GR	
0961	4	91166		BEAVER MEADOWS ENTRANCE FEE STATION PARKING	ADJACENT TO ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 2.17 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		3,018	AS	8
0962	NC	91169		BEAVER MEADOWS PARKING	ADJACENT TO ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 2.55 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		3,600	GR	

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0964	4	91464		PROSPECT CANYON PARKING	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 7.63 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		2,904	AS	11
0967A	4	105229		WEST ENTRANCE SIGN PARKING A	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 42.45 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		6,990	AS	1
0967B	4	105223		WEST ENTRANCE SIGN PARKING B	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 42.45 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		3,579	AS	1
0968A	4	105239		464 / 465 RESIDENCE PARKING	ADJACENT TO ROUTE 0409 (GLE HOUSING ROAD) AT MP 0.10 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		5,428	AS	1
0968B	4	105231		467 RESIDENCE PARKING	ADJACENT TO ROUTE 0409 (GLE HOUSING ROAD) AT MP 0.17 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		1,307	AS	1
0969	NC	91465		491 COLORADO RIVER PARKING	ADJACENT TO ROUTE 0102 (WINDING RIVER ROAD) AT MP 1.3 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		10,650	GR	
0970	4	105236		WEST ENTRANCE STATION PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 41.39 ON LEFT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		2,207	AS	1
0971	NC	14788		HOLZWARTH HISTORIC PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.88 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		19,440	GR	
0972ZZ	4	104620		TIMBER CREEK CAMPGROUNDS PARKING AREAS	FROM ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AND ROUTE 0010 (TRAIL RIDGE ROAD)	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		8,822	AS	3
0975	NC	14835		BEAVER PONDS PICNIC AREA PARKING CRD	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.40 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		4,400	GR	
0976	NC	91466		BEAVER PONDS ROADSIDE PARKING CRD	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 32.45 ON RIGHT		COLORADO RIVER DISTRICT	0.00	0.00	0.00		6,692	GR	
0977	4	105365		HIGH COUNTRY THOROUGHFARE PARKING	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 14.17 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		842	AS	5
0979	NC	105261		FALL RIVER PASS PARKING (BEHIND STORE)	FROM END OF ROUTE 0500 (OLD FALL RIVER ROAD)	TO PARKING	FALL RIVER DISTRICT	0.00	0.00	0.00		15,744	GR	

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ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0981ZZ	4	105246		ASPENGLEN CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0204ZZ (ASPENGLEN CAMPGROUND ROADS)		FALL RIVER DISTRICT	0.00	0.00	0.00		3,483	AS	7
0984ZZ	**5**	**105265**		**GLACIER BASIN CAMPGROUND PARKING AREAS**	**ADJACENT TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AND ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS)**		**THOMPSON RIVER DISTRICT**	**0.00**	**0.00**	**0.00**		**16,959**	**AS**	**10**
0986	NC	105224		GLACIER BASIN CAMPGROUND EMPLOYEE PARKING AREAS	ADJACENT TO ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS) ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		972	GR	
0989ZZ	4	91468		HALLOWELL PARK PARKING AREAS	ADJACENT TO ROUTE 0214 (HALLOWELL PARK ROAD) ON RIGHT AND LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		5,430	AS	8
0992	NC	105290		MORAINE PARK MAILBOX PARKING	ADJACENT TO ROUTE 0215 (CABINS ROAD / KALEY COTTAGES) AT MP 0.06 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		3,854	GR	
0993A	NC	105291		MORAINE PARK CAMPGROUND ENTRANCE PARKING A	ADJACENT TO ROUTE 0200 (MORAINE PARK CAMPGROUND ROAD) AT MP 0.6 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		2,200	GR	
0993B	NC	105292		MORAINE PARK CAMPGROUND ENTRANCE PARKING B	ADJACENT TO ROUTE 0200 (MORAINE PARK CAMPGROUND ROAD) AT MP 0.6 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		880	GR	
0994ZZ	4	105264		MORAINE PARK CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) , ROUTE 0200C (MORAINE PARK CAMPGROUND LOOP C) , AND ROUTE 0200E (MORAINE PARK CAMPGROUND LOOP E)		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		14,763	AS	8
1001	NC	14698		EAST INLET TRAILHEAD PARKING	FROM END OF EAST PORTAL ROAD (TOWN OF GRAND LAKE)	TO PARKING	COLORADO RIVER DISTRICT	0.00	0.00	0.00		16,200	GR	
1002	NC	14699		NORTH INLET TRAILHEAD PARKING	ADJACENT TO COUNTY ROAD		COLORADO RIVER DISTRICT	0.00	0.00	0.00		17,200	GR	

Cycle 5 NPS/RIP Route ID Report

Shading Color Key:
Red text denotes approx. mileage

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

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

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

** DCV - Data Collection Vehicle

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

ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
1005	NC	105356		WILD BASIN TRAILHEAD PARKING AREAS	ADJACENT TO ROUTE 0210 (WILD BASIN ROAD) ON LEFT AND RIGHT		WILD BASIN DISTRICT	0.00	0.00	0.00		27,885	GR	
1008A	4	105359		PARKING AREA A	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 6.08 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,595	AS	11
1008B	4	105360		PARKING AREA B	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 6.08 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,014	AS	11
1009	4	105361		PARKING AREA #3	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 5.50 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,889	AS	10
1010	4	105362		PARKING AREA #2	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 5.2 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,371	AS	10
1011	4	105363		PARKING AREA #1	ADJACENT TO ROUTE 0012 (BEAR LAKE ROAD) AT MP 5.03 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		907	AS	10
1012ZZ	4	105364		GLAICER CREEK STABLES PARKING AREAS	ADJACENT TO ROUTE 0219 (GLACIER CREEK RIDING STABLE ROAD) ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		4,755	AS	10
1016	4	105340		MORAINE PARK PARKING AREA	ADJACENT TO ROUTE 0201 (CUB LAKE / STABLES ROAD) AT MP 1.05 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,591	AS	8
1018A	NC	105266		LOWER TRAIL SHOP PARKING EASTSIDE	FROM ROUTE 0400Z (MILLS DRIVE)	TO ROUTE 0411 (CHIEFS HEAD ROAD) AT MP 0.1 ON RIGHT	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		17,500	GR	
1018B	NC	105267		UPPER TRAIL SHOP PARKING EASTSIDE	FROM ROUTE 0400Z (MILLS DRIVE)	TO ROUTE 0411 (CHIEFS HEAD ROAD) AT MP 0.1 ON RIGHT	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		6,486	GR	
1022	4	109844		SANDBEACH LAKE TRAILHEAD PARKING AREA	FROM COUNTY ROAD 84W	TO ROUTE 0210 (WILD BASIN ROAD) AT MP 0.00 (START OF ROUTE)	WILD BASIN DISTRICT	0.00	0.00	0.00		17,620	AS	13
1024	NC	105281		RESIDENCE 681, 682 AND 683 PARKING	ADJACENT TO ROUTE 0210 (WILD BASIN ROAD) AT MP 1.0 ON RIGHT		WILD BASIN DISTRICT	0.00	0.00	0.00		11,600	GR	
1027	NC	105347		LILY LAKE TRAILHEAD PARKING	ADJACENT TO STATE HIGHWAY 7 AT MP 6.5 ON RIGHT		LONGS PEAK DISTRICT	0.00	0.00	0.00		9,600	GR	
1028	NC	105349		DRIVEWAY RESIDENCE 715 AND 718	ADJACENT TO ROUTE 0438 (HIGH DRIVE ROAD) AT MP 0.2 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		13,637	GR	

Cycle 5 NPS/RIP Route ID Report

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

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** DCV - Data Collection Vehicle

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

ROMO

ROCKY MOUNTAIN NATIONAL PARK

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
1029	NC	105350		DRIVEWAY RESIDENCE 698	ADJACENT TO ROUTE 0438 (HIGH DRIVE ROAD) AT 0.4 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		476	GR	
1030	NC	105351		DRIVEWAY RESIDENCE 803	ADJACENT TO ROUTE 0438 (HIGH DRIVE ROAD) AT MP 0.6 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		634	GR	
1031	4	105352		UPPER BEAVER MEADOWS HELICOPTER PAD AND EMERGENCY PARKING	ADJACENT TO ROUTE 0212 (UPPER BEAVER MEADOWS ROAD) AT MP 0.5 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		8,627	AS	8
1033	NC	105354		BEAVER MEADOWS TRAILHEAD PARKING AREAS	ADJACENT TO ROUTE 0212 (UPPER BEAVER MEADOWS ROAD)		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		15,576	GR	
1034A	NC	105342		CUB LAKE TRAILHEAD PARKING A	ADJACENT TO ROUTE 0216 (FERN LAKE TRAILHEAD ROAD) AT MP 0.0 ON RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		2,640	GR	
1034B	NC	105348		CUB LAKE TRAILHEAD PARKING B	ADJACENT TO ROUTE 0216 (FERN LAKE TRAILHEAD ROAD) AT MP 0.0 ON LEFT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		1,200	GR	
1035	NC	105314		WINTER PARKING AREA	ADJACENT TO ROUTE 0216 (FERN LAKE TRAILHEAD ROAD) AT MP 0.5 ON LEFT AND RIGHT		THOMPSON RIVER DISTRICT	0.00	0.00	0.00		10,336	GR	
1036	NC	105346		FERN LAKE TRAILHEAD PARKING	FROM END OF ROUTE 0216 (FERN LAKE TRAILHEAD ROAD)	TO PARKING	THOMPSON RIVER DISTRICT	0.00	0.00	0.00		10,200	GR	
1037	NC	101437		TWIN OWLS RESIDENCE ROAD PARKING	FROM END OF MCGREGOR RANCH ROAD	TO PARKING	FALL RIVER DISTRICT	0.00	0.00	0.00		10,560	GR	
1038	**5**	**83613**		**LUMPY RIDGE PARKING AREA**	**FROM END OF ROUTE 0104 (LUMPY RIDGE ACCESS ROAD)**	**TO PARKING**	**FALL RIVER DISTRICT**	**0.00**	**0.00**	**0.00**		**41,465**	**AS**	**9**

Cycle 5 NPS/RIP Route ID Report

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

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** DCV - Data Collection Vehicle

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

CYCLE 5 COLLECTED SUMMARY TOTALS FOR ROCKY MOUNTAIN NATIONAL PARK

CYCLE 5 COLLECTED ROUTE TOTALS

DCV Driven Route Miles	64.63
Manually Rated Route Miles	0.00
TOTAL PARK ROUTE MILES COLLECTED IN CYCLE 5	64.63
Manually Rated Routes (SQFT)	0

* CYCLE 5 COLLECTED PARKING AREA TOTALS

Paved Parking (SQFT)	49,286

CYCLE 5 COLLECTED CONCESSION TOTALS

Concession Paved Route Miles	0.00
Concession Paved Parking Area SQFT	0
Concession Manually Rated Rotes SQFT	0

CYCLE 5 COLLECTED WEIGHTED AVERAGE PARK VALUES

DCV Driven PCR	93
**Manually Rated Routes PCR	N/A
**Parking PCR	91
***Total Equivalent Lane Miles	163.85

TOTAL PARK SUMMARY FOR ROCKY MOUNTAIN NATIONAL PARK

ROUTE TOTALS

TOTAL PAVED PARK ROUTE MILES	74.18
TOTAL PAVED PARKING (SQFT)	1,875,613

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

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

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

Cycle 5 NPS/RIP Route ID Report

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General Park Road Functional Classification Table

Class 1 Principal Park Road/Rural Parkway (Public Roads) Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors. Route Numbers 1 - 99. Note: Rural parkways (e.g. Natchez Trace) are numbered 1 - 9. State Routes Inventoried for Park. Route Numbers 5000-5999

Class 2 Connector Park Road (Public Roads) - Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc. Route Numbers 100-199.

Class 3 Special Purpose Park Road (Public Roads) - Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.

Class 4 Primitive Park Roads (Public Roads) - Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Route Numbers 200-299.
Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.

Class 5 Administrative Access Road (Administrative Roads) - All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas. Route Numbers 400-499.

Class 6 Restricted Road (Administrative Roads) - All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Route Numbers 400-499.
Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.

Class 7 Urban Parkway (Urban Parkways and City Streets) - These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category. Route Numbers 1-9.

Class 8 City Streets (Urban Parkways and City Streets) - City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

****

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

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

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

Surface Type Abbreviations:

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

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset Entered in FMSS System

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0202ZZ	105220	4	GLACIER BASIN CAMPGROUND LOOPS	FROM ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD)	THROUGH CAMPGROUND		3	1.69	0.00	1.69	0
0204ZZ	105241	4	ASPENGLEN CAMPGROUND ROADS	FROM ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD)	THROUGH CAMPGROUND		3	0.65	0.00	0.65	0
0205ZZ	102437	4	TIMBER CREEK CAMPGROUND ROADS	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.50 ON RIGHT	THROUGH CAMPGROUND		3	0.57	0.00	0.57	0
0400ZZ	37529	4	HEADQUARTERS AREA ROADS	FROM ROUTE 0011 (BEAVER MEADOWS ROAD)	THROUGH MAINTENANCE AREA		5	1.85	0.00	1.85	0
0907ZZ	37590	4	ENDOVALLEY ROAD PARKING AREAS	FROM ROUTE 0100 (ENDOVALLEY ROAD) ON RIGHT AND LEFT	TO PARKING			0.00	0.00	0.00	38,115
0915ZZ	37654	4	MANY PARKS CURVE PARKING AREAS	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) ON LEFT AND RIGHT AT MP 8.1				0.00	0.00	0.00	19,020
0920ZZ	37659	4	ROCK CUT PARKING AREAS	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) ON LEFT AND RIGHT AROUND MP 17				0.00	0.00	0.00	19,131
0945ZZ	37693	4	SPRAGUE LAKE PARKING AREAS	ADJACENT TO ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) ON LEFT AND RIGHT				0.00	0.00	0.00	11,043
0953ZZ	37705	4	HEADQUARTERS PARKING AREAS	FROM ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)	TO PARKING			0.00	0.00	0.00	209,480
0958ZZ	37707	4	SUNDANCE CIRCLE PARKING AREAS	ADJACENT TO ROUTE 0400ZZ (HEADQUARTERS AREA ROADS)				0.00	0.00	0.00	14,915
0972ZZ	104620	4	TIMBER CREEK CAMPGROUNDS PARKING AREAS	FROM ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AND ROUTE 0010 (TRAIL RIDGE ROAD)	TO PARKING			0.00	0.00	0.00	8,822
0981ZZ	105246	4	ASPENGLEN CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0204ZZ (ASPENGLEN CAMPGROUND ROADS)				0.00	0.00	0.00	3,483
0984ZZ	**105265**	**5**	**GLACIER BASIN CAMPGROUND PARKING AREAS**	**ADJACENT TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AND ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS)**				**0.00**	**0.00**	**0.00**	**16,959**
0989ZZ	91468	4	HALLOWELL PARK PARKING AREAS	ADJACENT TO ROUTE 0214 (HALLOWELL PARK ROAD) ON RIGHT AND LEFT				0.00	0.00	0.00	5,430

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

0994ZZ	105264	4	MORAINE PARK CAMPGROUND PARKING AREAS	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) , ROUTE 0200C (MORAINE PARK CAMPGROUND LOOP C) , AND ROUTE 0200E (MORAINE PARK CAMPGROUND LOOP E)			0.00	0.00	0.00	14,763
1012ZZ	105364	4	GLAICER CREEK STABLES PARKING AREAS	ADJACENT TO ROUTE 0219 (GLACIER CREEK RIDING STABLE ROAD) ON RIGHT			0.00	0.00	0.00	4,755

Asset ROMO-0202ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0202AZ	105220	4	GLACIER BASIN CAMPGROUND LOOP A	FROM ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.28 ON LEFT	TO END OF LOOP		3	0.32	0.00	0.32	0
0202BZ	105220	4	GLACIER BASIN CAMPGROUND LOOP B	FROM ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A) AT MP 0.04 ON RIGHT	TO ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A) AT MP 0.07		3	0.22	0.00	0.22	0
0202CZ	105220	4	GLACIER BASIN CAMPGROUND LOOP C	FROM ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.30 ON LEFT	TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.33		3	0.55	0.00	0.55	0
0202DZ	105220	4	GLACIER BASIN CAMPGROUND LOOP D	FROM END OF ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.37 ON LEFT	TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.37		3	0.19	0.00	0.19	0
0202EZ	105220	4	GLACIER BASIN CAMPGROUND GROUP SITE ROAD	FROM END OF ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD)	TO END OF LOOP		3	0.41	0.00	0.41	0

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0204ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0204AZ	105241	4	ASPENGLEN CAMPGROUND LOOP A	FROM ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD) AT MP 0.60 ON LEFT	TO END OF LOOP		3	0.12	0.00	0.12	0
0204BZ	105241	4	ASPENGLEN CAMPGROUND LOOP B	FROM ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD) AT MP 0.63 ON RIGHT	TO END OF LOOP		3	0.20	0.00	0.20	0
0204CZ	105241	4	ASPENGLEN CAMPGROUND LOOP C	FROM END OF ROUTE 0204 (ASPENGLEN CAMPGROUND ROAD)	TO END OF LOOP		3	0.33	0.00	0.33	0

Asset ROMO-0205ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0205AZ	102437	4	TIMBER CREEK CAMPGROUND ASPEN LOOP	FROM ROUTE 0205Z (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.16 ON LEFT	TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.05		3	0.11	0.00	0.11	0
0205BZ	102437	4	TIMBER CREEK CAMPGROUND BEAVER LOOP	FROM ROUTE 0205Z (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.22 ON LEFT	TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.19		3	0.20	0.00	0.20	0
0205CZ	102437	4	TIMBER CREEK CAMPGROUND COLUMBINE LOOP	FROM ROUTE 0205Z (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.30 ON LEFT	TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.25		3	0.14	0.00	0.14	0
0205DZ	102437	4	TIMBER CREEK CAMPGROUND DOGWOOD LOOP	FROM END OF ROUTE 0205Z (TIMBER CREEK CAMPGROUND ENTRANCE ROAD)	TO END OF LOOP		3	0.12	0.00	0.12	0

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0400ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0400Z	37529	4	MILLS DRIVE	FROM ROUTE 0011 (BEAVER MEADOWS ROAD) AT MP 0.71 ON LEFT	TO SOUTH PARK BOUNDARY AT FENCE LINE BEGINNING ON LEFT BEFORE SUN COTTAGES		5	0.73	0.00	0.73	0
0415Z	37529	4	SUNDANCE CIRCLE	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.59 ON RIGHT	TO END OF LOOP		5	0.35	0.00	0.35	0
0416Z	37529	4	ALPINE CIRCLE	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.36 ON RIGHT	TO ROUTE 0400Z (MILLS DRIVE) AT MP 0.48		5	0.33	0.00	0.33	0
0417Z	37529	4	MARMOT DRIVE	FROM ROUTE 0954Z (UTILITY ROAD MAINTENANCE PARKING)	TO ROUTE 0400Z (MILLS DRIVE) AT MP 0.6		5	0.24	0.00	0.24	0
0418Z	37529	4	THUNDER LANE	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.38 ON RIGHT	TO ROUTE 0416Z (ALPINE CIRCLE) AT MP 0.23		5	0.09	0.00	0.09	0
0419Z	37529	4	PTARMIGAN LANE	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.34 ON LEFT	TO ROUTE 0400Z (MILLS DRIVE) AT MP 0.4 ON LEFT		5	0.11	0.00	0.11	0

Asset ROMO-0907ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0907Z	37590	4	STOCK RAMP PARKING	FROM ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.36 ON LEFT	TO ROUTE 0100 (ENDOVALLEY ROAD)			0.00	0.00	0.00	7,322
0908Z	37590	4	EAST ALLUVIAL FAN PARKING	FROM ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.48 ON RIGHT	TO ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.53 ON RIGHT			0.00	0.00	0.00	10,645
0909Z	37590	4	WEST ALLUVIAL FAN PARKING	FROM ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.77 ON RIGHT	TO ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.82			0.00	0.00	0.00	17,084
0980AZ	37590	4	ASPEN SCARS PARKING AREA A	ADJACENT TO ROUTE 0100 (ENDOVALLEY ROAD) AT MP 0.95 ON LEFT				0.00	0.00	0.00	2,094
0980BZ	37590	4	ASPEN SCARS PARKING AREA B	ADJACENT TO ROUTE 0100 (ENDOVALLEY ROAD) AT MP 1.07 ON LEFT				0.00	0.00	0.00	970

NPS/RIP Subcomponent Details for ROMO

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

ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0915ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0915Z	37654	4	LOWER MANY PARKS CURVE PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 8.00 ON LEFT				0.00	0.00	0.00	6,788
0916Z	37654	4	UPPER MANY PARKS CURVE PARKING AREA	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 8.16 ON RIGHT				0.00	0.00	0.00	12,232

Asset ROMO-0920ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0920AZ	37659	4	ROCK CUT PARKING AREA A	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 17.23 ON RIGHT				0.00	0.00	0.00	10,829
0920BZ	37659	4	ROCK CUT PARKING AREA B	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 17.18 ON LEFT				0.00	0.00	0.00	5,044
1017Z	37659	4	TOLL MEMORIAL PARKING EAST OF ROCK CUT	ADJACENT TO ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 16.73 ON LEFT				0.00	0.00	0.00	3,258

Asset ROMO-0945ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0945AZ	37693	4	SPRAGUE LAKE PARKING AREA A	ADJACENT TO ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) AT MP 0.33 ON RIGHT				0.00	0.00	0.00	2,638
0945BZ	37693	4	SPRAGUE LAKE PARKING AREA B	ADJACENT TO ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) AT MP 0.38 ON RIGHT				0.00	0.00	0.00	7,624
0945CZ	37693	4	SPRAGUE LAKE COMFORT STATION PARKING	ADJACENT TO ROUTE 0218 (SPRAGUE LAKE PICNIC AREA ROAD) AT MP 0.41 ON LEFT				0.00	0.00	0.00	781

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0953ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0953Z	37705	4	VISITOR CENTER EMPLOYEE PARKING AREA HQ	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.29 ON RIGHT	TO PARKING			0.00	0.00	0.00	19,018
0954Z	37705	4	UTILITY ROAD MAINTENANCE PARKING	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.11 ON LEFT	TO ROUTE 0400Z (MILLS DRIVE) AT MP 0.52			0.00	0.00	0.00	140,624
0955Z	37705	4	GREENHOUSE PARKING	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.57 ON LEFT	TO PARKING			0.00	0.00	0.00	2,585
0956Z	37705	4	MAINTENANCE HEADQUARTER PARKING	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.68 ON LEFT	TO ROUTE 0417Z (MARMOT DRIVE)			0.00	0.00	0.00	37,104
0963Z	37705	4	PTARMIGAN LANE PARKING	FROM ROUTE 0419Z (PTARMIGAN LANE) AT MP 0.04 ON LEFT	TO PARKING			0.00	0.00	0.00	3,124
1004Z	37705	4	BCO PARKING AREA	FROM ROUTE 0400Z (MILLS DRIVE) AT MP 0.07 RIGHT	TO PARKING			0.00	0.00	0.00	7,025

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0958ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0958Z	37707	4	BLISTER RUST PARKING	FROM ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.1 ON RIGHT	TO PARKING			0.00	0.00	0.00	8,269
0965AZ	37707	4	SUNDANCE CIRCLE PARKING A	ADJACENT TO ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.17 ON LEFT				0.00	0.00	0.00	1,018
0965BZ	37707	4	SUNDANCE CIRCLE PARKING B	ADJACENT TO ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.19 ON LEFT				0.00	0.00	0.00	1,503
0965CZ	37707	4	SUNDANCE CIRCLE PARKING C	ADJACENT TO ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.21 ON LEFT				0.00	0.00	0.00	2,011
0965DZ	37707	4	SUNDANCE CIRCLE PARKING D	FROM ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.28 ON LEFT	TO PARKING			0.00	0.00	0.00	776
0965EZ	37707	4	SUNDANCE CIRCLE PARKING E	ADJACENT TO ROUTE 0415Z (SUNDANCE CIRCLE) AT MP 0.31 ON LEFT				0.00	0.00	0.00	516
0966Z	37707	4	BONEYARD RESIDENCE PARKING	ADJACENT TO ROUTE 0420 (BONEYARD EAST ROAD) AT MP 0.2 ON RIGHT				0.00	0.00	0.00	428
1006Z	37707	4	495 BONEYARD RESIDENCE PARKING	ADJACENT TO ROUTE 0420 (BONEYARD EAST ROAD) AT MP 0.2 ON LEFT				0.00	0.00	0.00	394

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0972ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0972AZ	104620	4	TCCG CAMPFIRE PROGRAM PARKING A	ADJACENT TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.1 ON RIGHT				0.00	0.00	0.00	981
0972BZ	104620	4	TCCG CAMPFIRE PROGRAM PARKING B	ADJACENT TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.1 ON RIGHT				0.00	0.00	0.00	1,977
0973Z	104620	4	TIMBER CREEK CAMPGROUND DUMP STATION	FROM ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AND ROUTE 0205A (TIMBER CREEK CAMPGROUND ASPEN LOOP)	TO ROUTE 0205 (TIMBER CREEK CAMPGROUND ENTRANCE ROAD) AT MP 0.01			0.00	0.00	0.00	2,536
0974Z	104620	4	TIMBER CREEK CAMPGROUND EMPLOYEE PARKING	FROM ROUTE 0010 (TRAIL RIDGE ROAD) AT MP 33.3 ON RIGHT	TO PARKING			0.00	0.00	0.00	3,328

Asset ROMO-0981ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0981Z	105246	4	ASPENGLEN COMFORT STATION LOOP C PARKING	ADJACENT TO ROUTE 0204CZ (ASPENGLEN CAMPGROUND LOOP C) AT MP 0.13 ON RIGHT				0.00	0.00	0.00	626
0982Z	105246	4	ASPENGLEN AMPHITHEATER PARKING	ADJACENT TO ROUTE 0204CZ (ASPENGLEN CAMPGROUND LOOP C) AT MP 0.30 ON RIGHT				0.00	0.00	0.00	2,455
0983Z	105246	4	ASPENGLEN LOOP B COMFORT STATION PARKING	ADJACENT TO ROUTE 0204BZ (ASPENGLEN CAMPGROUND LOOP B)				0.00	0.00	0.00	402

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0984ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0984Z	105265	4	GLACIER BASIN CAMPGROUND ENTRANCE PARKING	ADJACENT TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.29 ON RIGHT				0.00	0.00	0.00	2,732
0985Z	105265	4	GLACIER BASIN GROUP SITE PARKING	ADJACENT TO ROUTE 0202EZ (GLACIER BASIN CAMPGROUND GROUP SITE ROAD) AT MP 0.3 ON LEFT				0.00	0.00	0.00	3,957
0988Z	**105265**	**5**	**GLACIER BASIN CAMPGROUND BUS LOOP**	**FROM ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A) AT MP 0.0 ON RIGHT**	**TO ROUTE 0202BZ (GLACIER BASIN CAMPGROUND LOOP B) AT MP 0.01**			**0.00**	**0.00**	**0.00**	**2,118**
1013Z	105265	4	GLACIER BASIN CAMPGROUND DUMP STATION	ADJACENT TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD) AT MP 0.31 ON LEFT				0.00	0.00	0.00	2,449
1039Z	**105265**	**5**	**GLACIER BASIN AMPHITHEATER PARKING**	**ADJACENT TO ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A)**				**0.00**	**0.00**	**0.00**	**5,703**

Asset ROMO-0989ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0989Z	91468	4	HALLOWELL PARK ROAD PARKING #1	FROM ROUTE 0214 (HALLOWELL PARK ROAD) AT MP 0.07 ON RIGHT	TO ROUTE 0214 (HALLOWELL PARK ROAD) AT MP 0.09			0.00	0.00	0.00	2,791
0990Z	91468	4	HALLOWELL PARK ROAD PARKING #2	ADJACENT TO ROUTE 0214 (HALLOWELL PARK ROAD) AT MP 0.14 ON LEFT				0.00	0.00	0.00	451
0991Z	91468	4	HALLOWELL PARK ROAD PARKING #3	ADJACENT TO ROUTE 0214 (HALLOWELL PARK ROAD) AT MP 0.23 ON RIGHT				0.00	0.00	0.00	2,188

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-0994ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0994Z	105264	4	MORAINE PARK CAMPGROUND DUMP STATION	FROM ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.01 ON RIGHT	TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.01			0.00	0.00	0.00	2,743
0995Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 1	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.35 ON LEFT				0.00	0.00	0.00	1,295
0996Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 2	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.64 ON LEFT				0.00	0.00	0.00	1,043
0997Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 3	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.8 ON LEFT				0.00	0.00	0.00	937
0998Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 4	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 1.07 ON RIGHT				0.00	0.00	0.00	1,405
0999Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 5	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 1.23 ON RIGHT				0.00	0.00	0.00	825
1000AZ	105264	4	MORAINE PARK LOOP C AMPHITHEATER PARKING A	ADJACENT TO ROUTE 0200C (MORAINE PARK CAMPGROUND LOOP C) AT MP 0.06 ON RIGHT				0.00	0.00	0.00	3,033
1000BZ	105264	4	MORAINE PARK LOOP C AMPHITHEATER PARKING B	ADJACENT TO ROUTE 0200C (MORAINE PARK CAMPGROUND LOOP C) AT MP 0.08 ON LEFT				0.00	0.00	0.00	1,534
1014Z	105264	4	MORAINE PARK CAMPGROUND EMPLOYEE PARKING	ADJACENT TO ROUTE 0200E (MORAINE PARK CAMPGROUND LOOP E) AT MP 0.00 ON RIGHT				0.00	0.00	0.00	878
1015Z	105264	4	MORAINE PARK LOOP A COMFORT STATION PARKING 2B	ADJACENT TO ROUTE 0200A (MORAINE PARK CAMPGROUND LOOP A) AT MP 0.79 ON LEFT				0.00	0.00	0.00	1,070

NPS/RIP Subcomponent Details for ROMO

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ROMO

ROCKY MOUNTAIN NATIONAL PARK

Asset ROMO-1012ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
1012AZ	105364	4	GLACIER CREEK RIDING STABLE PARKING AREA A	ADJACENT TO ROUTE 0219 (GLACIER CREEK RIDING STABLE ROAD) AT MP 0.13 ON RIGHT				0.00	0.00	0.00	1,497
1012BZ	105364	4	GLACIER CREEK RIDING STABLE PARKING AREA B	ADJACENT TO ROUTE 0219 (GLACIER CREEK RIDING STABLE ROAD) AT MP 0.16 ON RIGHT				0.00	0.00	0.00	3,258

ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - ROMO

ROUTES ADDED FROM PREVIOUS INVENTORY:			
Route #	**Route Name**	**Reason for Addition**	**Comments**
0104	Lumpy Ridge Access Road	RECENTLY CONSTRUCTED ROUTE	ADDED TO THE RIP INVENTORY IN 2008 ALIGNMENT (AFTER CYCLE 4 COLLECTION WAS COMPLETED). COLLECTED IN CYCLE 5
1038	Lumpy Ridge Parking Area	RECENTLY CONSTRUCTED ROUTE	ADDED TO THE RIP INVENTORY IN 2008 ALIGNMENT (AFTER CYCLE 4 COLLECTION WAS COMPLETED). COLLECTED IN CYCLE 5

OTHER CHANGES FROM PREVIOUS INVENTORY:			
Route #	**Route Name**	**Type of Change**	**Comments**
0202ZZ	Glacier Basin Campground Loops	ROUTES COMBINED	CYCLE 4 ROUTES 0202A, 0202B, 0202C,0202D AND 0202E WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0204ZZ	Aspenglen Campground Roads	ROUTES COMBINED	CYCLE 4 ROUTES 0204A, 0204B AND 0204C WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0205ZZ	Timber Creek Campground Roads	ROUTES COMBINED	CYCLE 4 ROUTES 0205A, 0205B, 0205C & 0205D WERE COMBINED TO MAKE ROUTE 0205ZZ IN CYCLE 5
0400ZZ	Headquarters Area Roads	ROUTES COMBINED	CYCLE 4 ROUTES 0400, 0415, 0416,0417,0418 AND 0419 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0907ZZ	Endovalley Road Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0907,0908,0909,0980A AND 0980B WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0915ZZ	Many Parks Curve Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0915 AND 0916 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0920ZZ	Rock Cut Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0920A AND 0920B WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED

ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - ROMO

OTHER CHANGES FROM PREVIOUS INVENTORY:			
Route #	**Route Name**	**Type of Change**	**Comments**
0945ZZ	Sprague Lake Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0945A, 0945B AND 0945C WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0953ZZ	Headquarters Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0953,0954,0955,0956,0963 AND 1004 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0958ZZ	Sundance Circle Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0958,0965A,0965B,0965C,0965D,0965E,0966 Z AND 1006 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0972ZZ	Timber Creek Campgrounds Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0972A,0972B,0973 AND 0974 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0981ZZ	Aspenglen Campground Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0981,0982 AND 0983 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0984ZZ	Glacier Basin Campground Parking Areas	SQ FEET CHANGE	CYCLE 4 ROUTES 0984,0985 AND 1013 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED. THERE WERE ALSO TWO NEW SUBCOMPONENT ROUTES ADDED (0988Z AND 1039Z) TO THE EXISTING SUMMARY RECORD IN CYCLE 5
0989ZZ	Hallowell Park Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0989,0990 AND 0991 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
0994ZZ	Moraine Park Campground Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 0994,0995,0996,0997,0998,0999,1000A,1000B ,1014 AND 1015 WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED
1012ZZ	Glaicer Creek Stables Parking Areas	ROUTES COMBINED	CYCLE 4 ROUTES 1012A AND 1012B WERE COMBINED DURING THE 2008 ALIGNMENT THAT TOOK PLACE AFTER CYCLE 4 COLLECTION WAS COMPLETED

Section 3
Park Summary Information

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

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

F.C.	Pavement Condition Rating (PCR)								TOTAL MILES
	Poor (0-60)		Fair (61-84)		Good (85-94)		Excellent (95-100)		
	MILES	%	MILES	%	MILES	%	MILES	%	
1	12.78	19.77%	4.51	6.98%	7.54	11.67%	32.26	49.91%	**57.09**
2	1.23	1.90%	2.78	4.30%	1.55	2.40%	1.98	3.06%	**7.54**
3									
4									
5									
6									
7									
8									
Totals	**14.01**	**21.68%**	**7.29**	**11.28%**	**9.09**	**14.06%**	**34.24**	**52.98%**	**64.63**

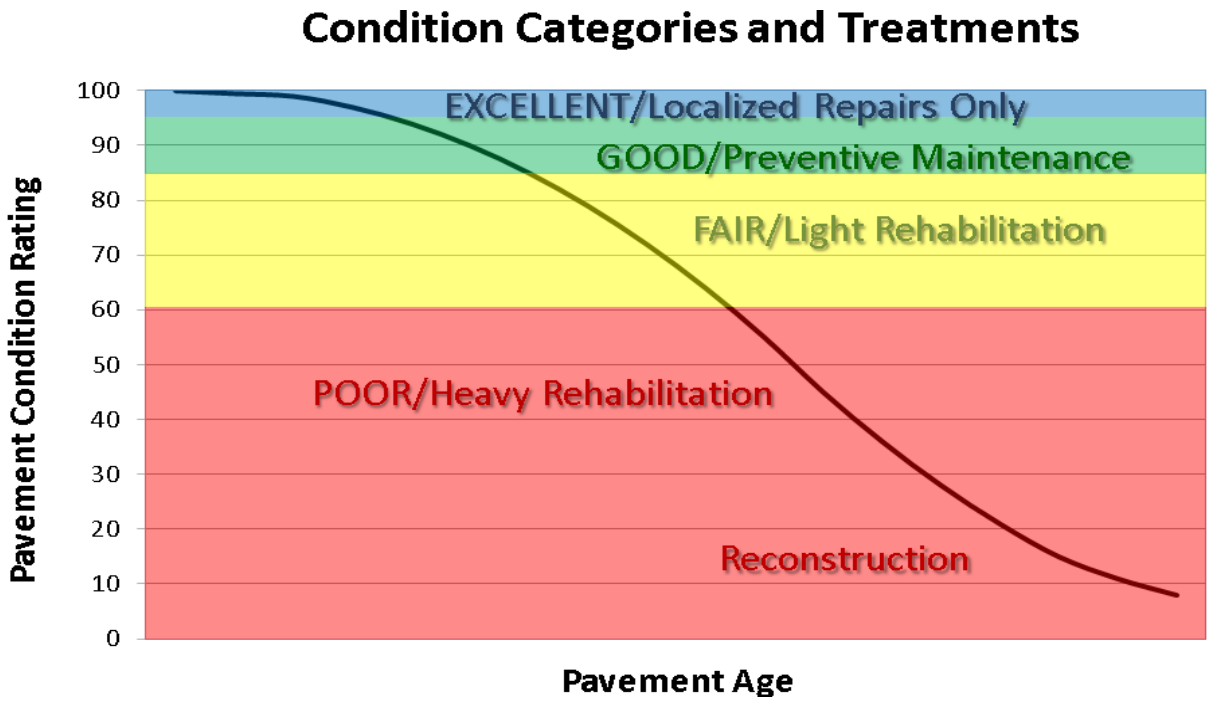
Note: **The information in this table is derived from the PMS_20 table in the Park database, which only contains processed data from routes collected with the Data Collection Vehicle (DCV). Information for Manually Rated Routes (MRR) and Parking Areas is not reported in this table. Only Functional Class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

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

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

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

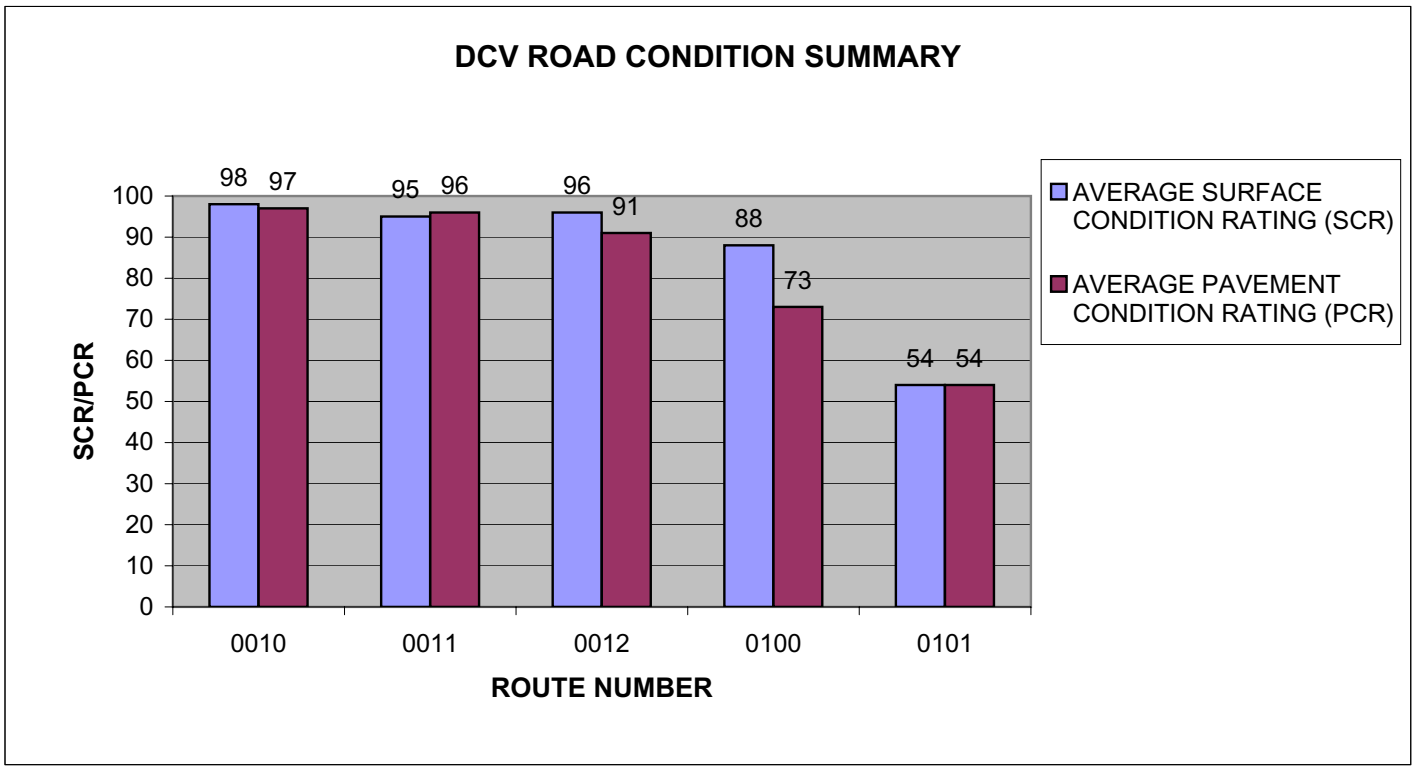
At this time, specific Maintenance and Rehabilitation activities should be evaluated and recommended at the project level. Site-specific conditions that influence treatment type should be determined based on performing a subsurface investigation and/or pavement condition survey, and not be based solely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



ROMO: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

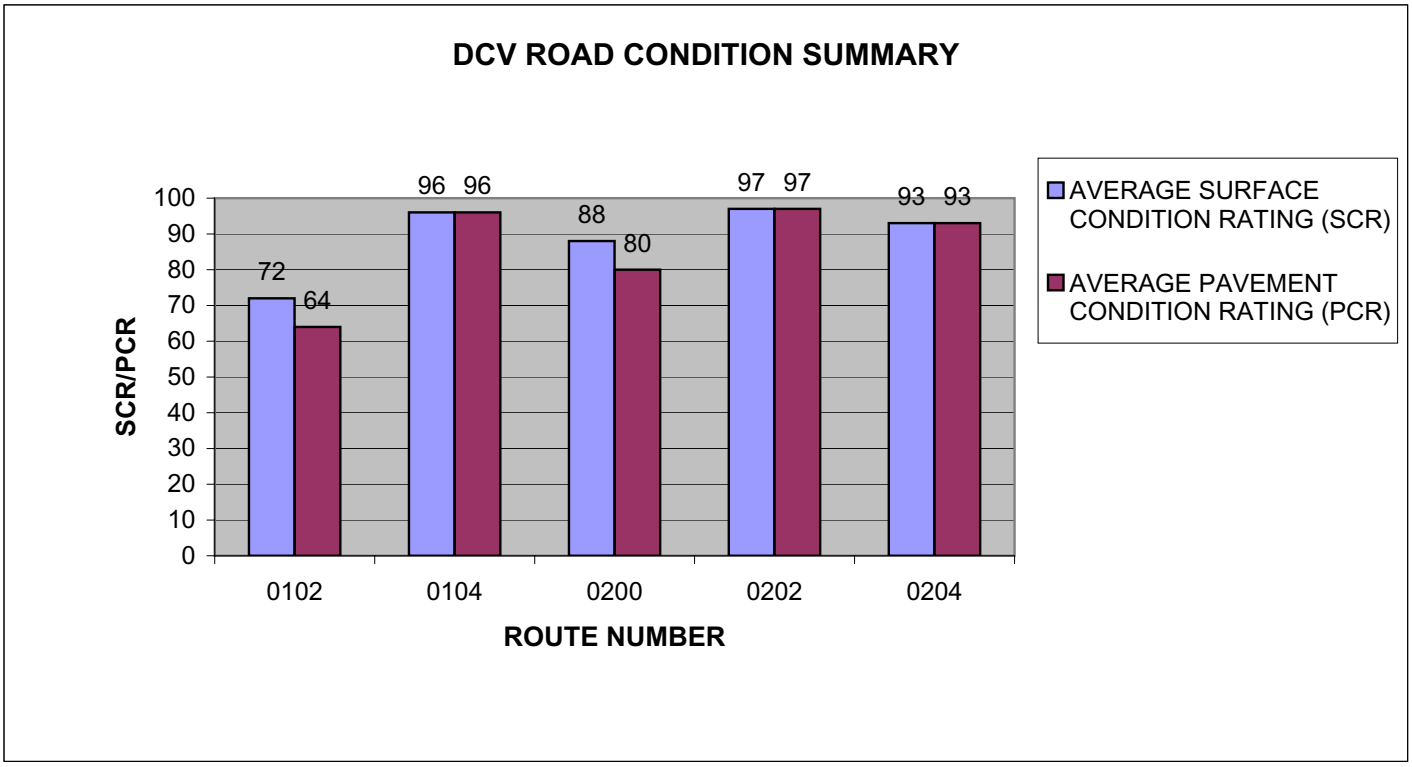
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	TRAIL RIDGE ROAD	1	42.73	ASPHALT	98	97
0011	BEAVER MEADOWS ROAD	1	5.26	ASPHALT	95	96
0012	BEAR LAKE ROAD	1	9.10	ASPHALT	96	91
0100	ENDOVALLEY ROAD	2	1.87	ASPHALT	88	73
0101	CONNECTOR ROAD TO COUNTY ROAD 49 (WESTERN ROAD)	2	0.41	ASPHALT	54	54



ROMO: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

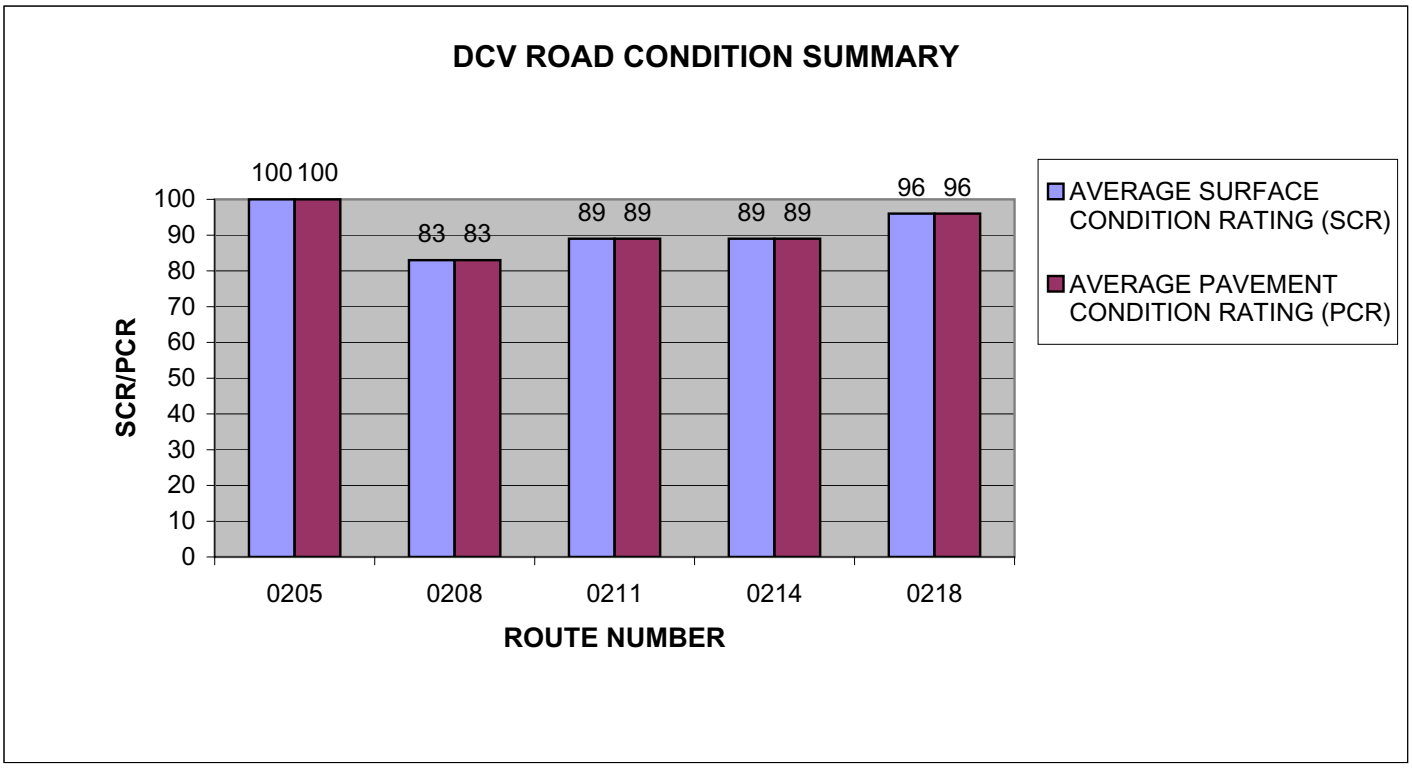
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0102	WINDING RIVER ROAD	2	1.39	ASPHALT	72	64
0104	LUMPY RIDGE ACCESS ROAD	2	0.22	ASPHALT	96	96
0200	MORAINE PARK CAMPGROUND ROAD	2	0.75	ASPHALT	88	80
0202	GLACIER BASIN CAMPGROUND ROAD	2	0.46	ASPHALT	97	97
0204	ASPENGLEN CAMPGROUND ROAD	2	0.64	ASPHALT	93	93



ROMO: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

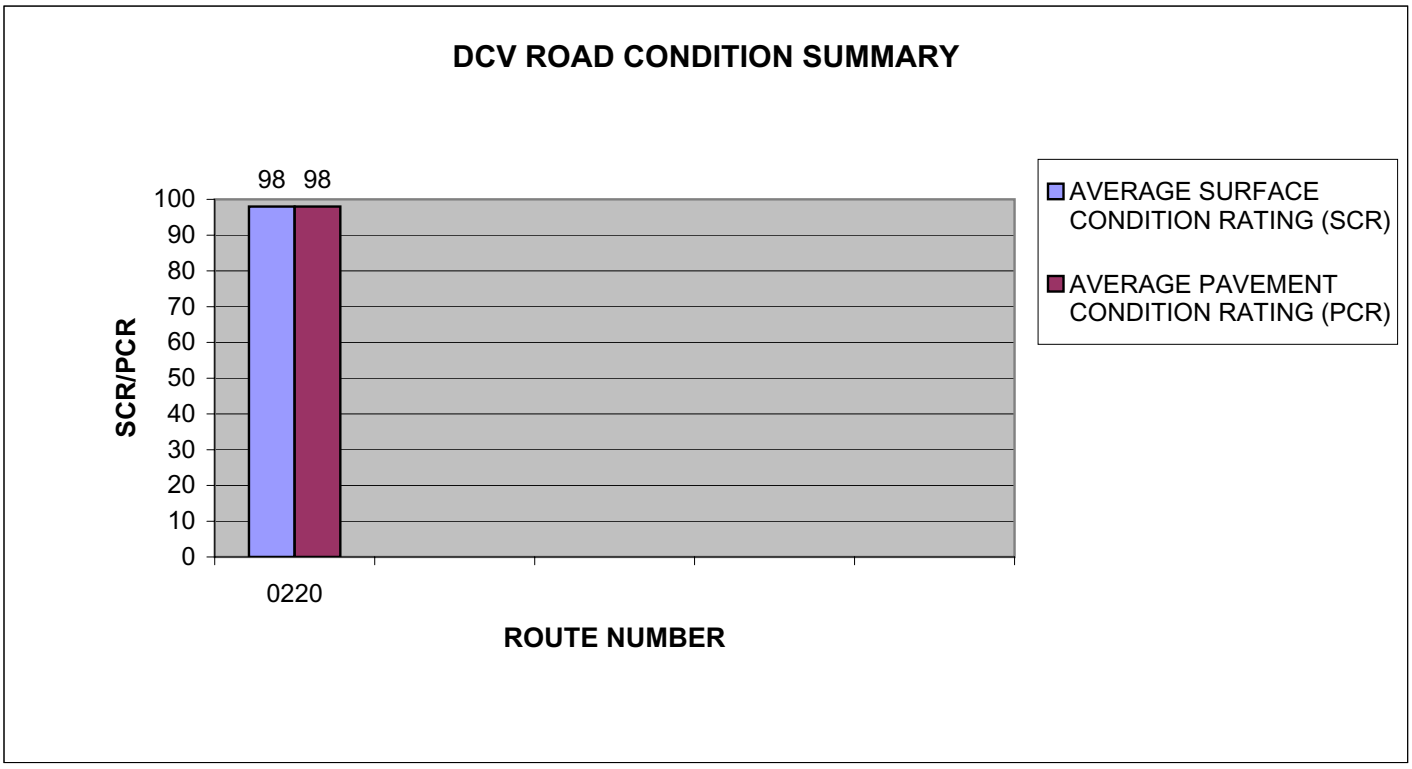
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0205	TIMBER CREEK CAMPGROUND ENTRANCE ROAD	2	0.32	ASPHALT	100	100
0208	GRAND LAKE LODGE ROAD	2	0.14	ASPHALT	83	83
0211	LONGS PEAK CAMPGROUND ROAD	2	0.36	ASPHALT	89	89
0214	HALLOWELL PARK ROAD	2	0.26	ASPHALT	89	89
0218	SPRAGUE LAKE PICNIC AREA ROAD	2	0.46	ASPHALT	96	96



ROMO: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0220	HIDDEN VALLEY ACCESS ROAD	2	0.26	ASPHALT	98	98

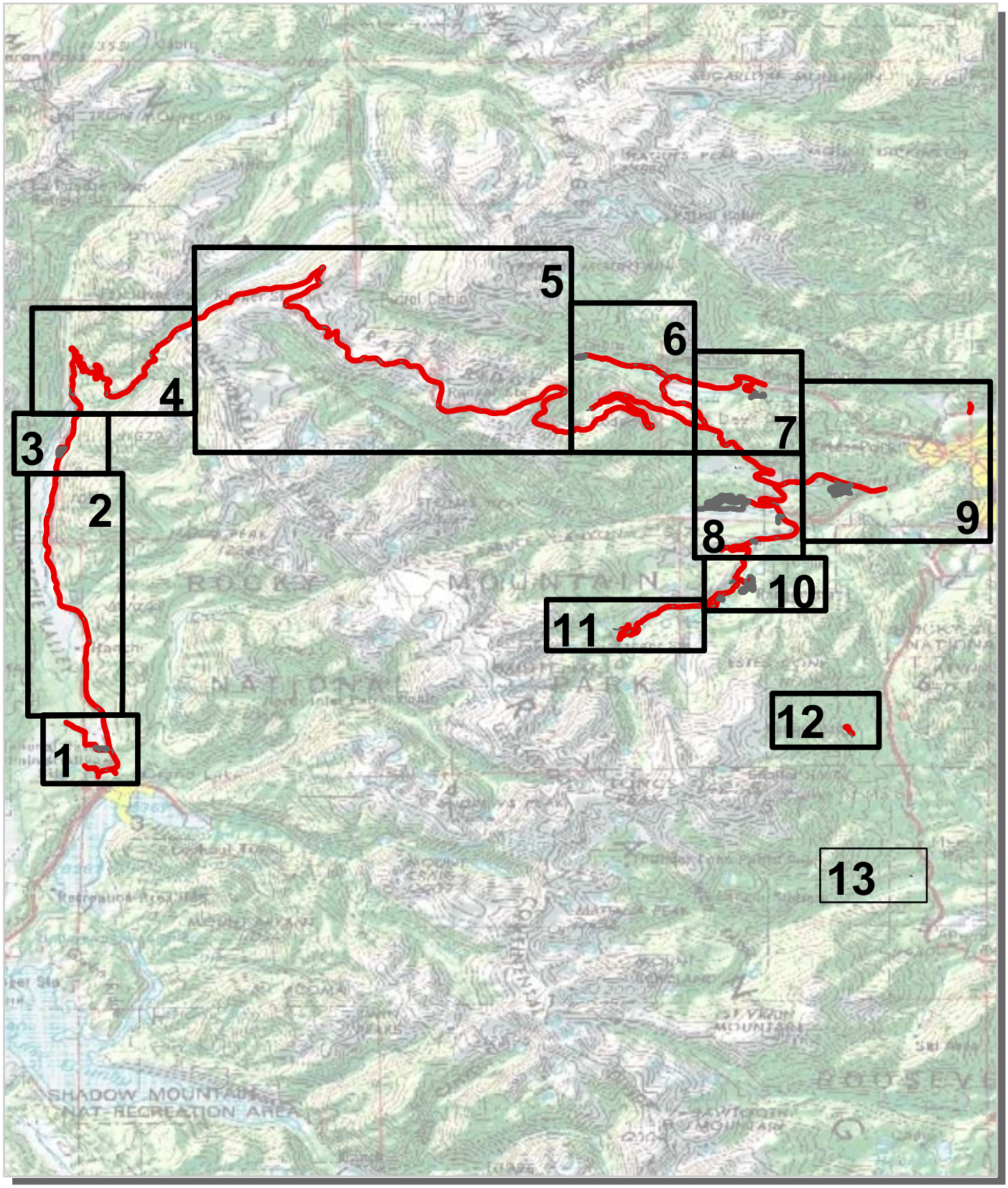


Section 4
Park Route Location Maps

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

Rocky Mountain National Park
Route Location Map
Key Map



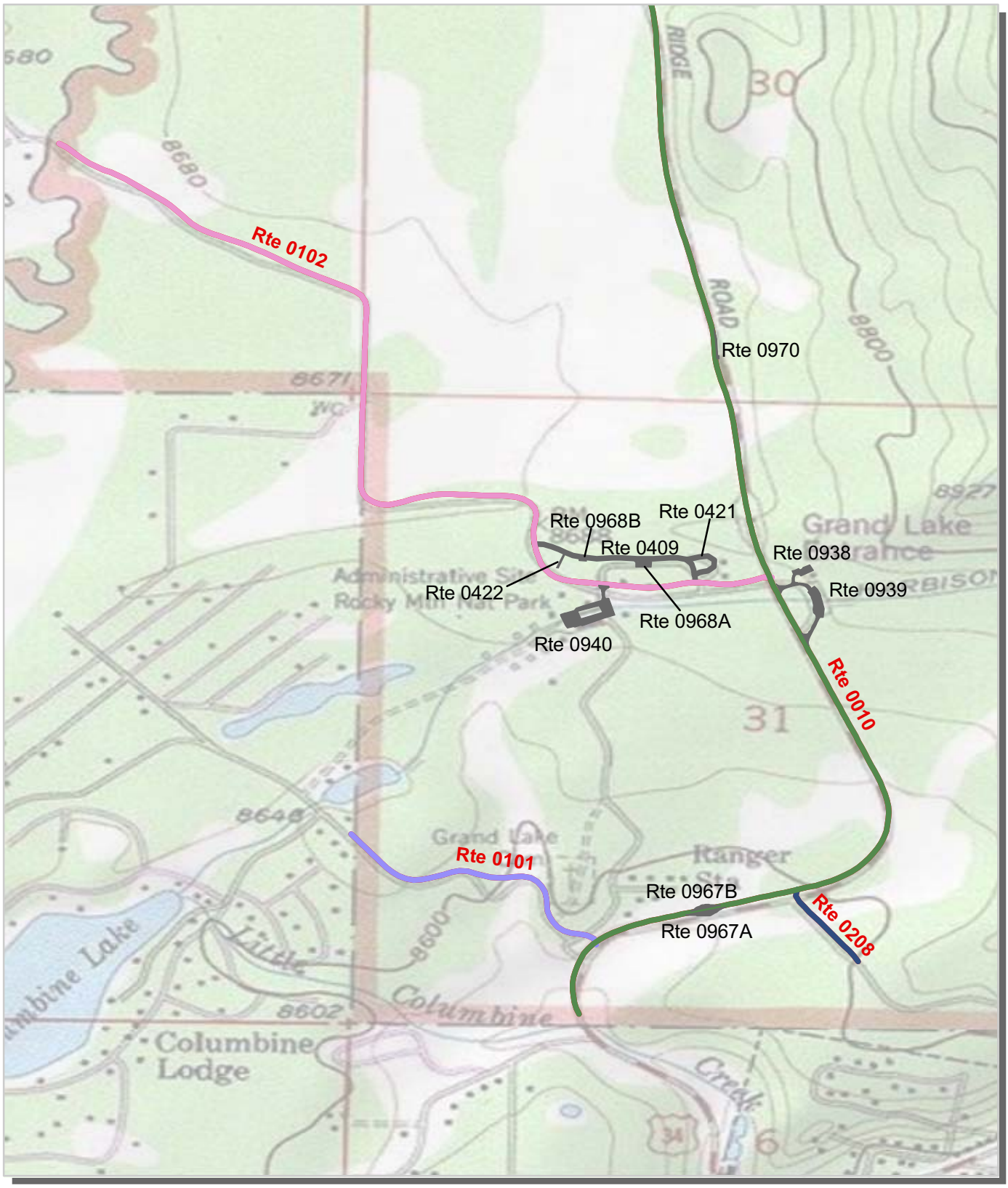
Cycle 5 Collected Routes

Routes Collected in Previous Cycle

3 1.5 0 3
Miles

N

Rocky Mountain National Park
Route Location Map
Area 1



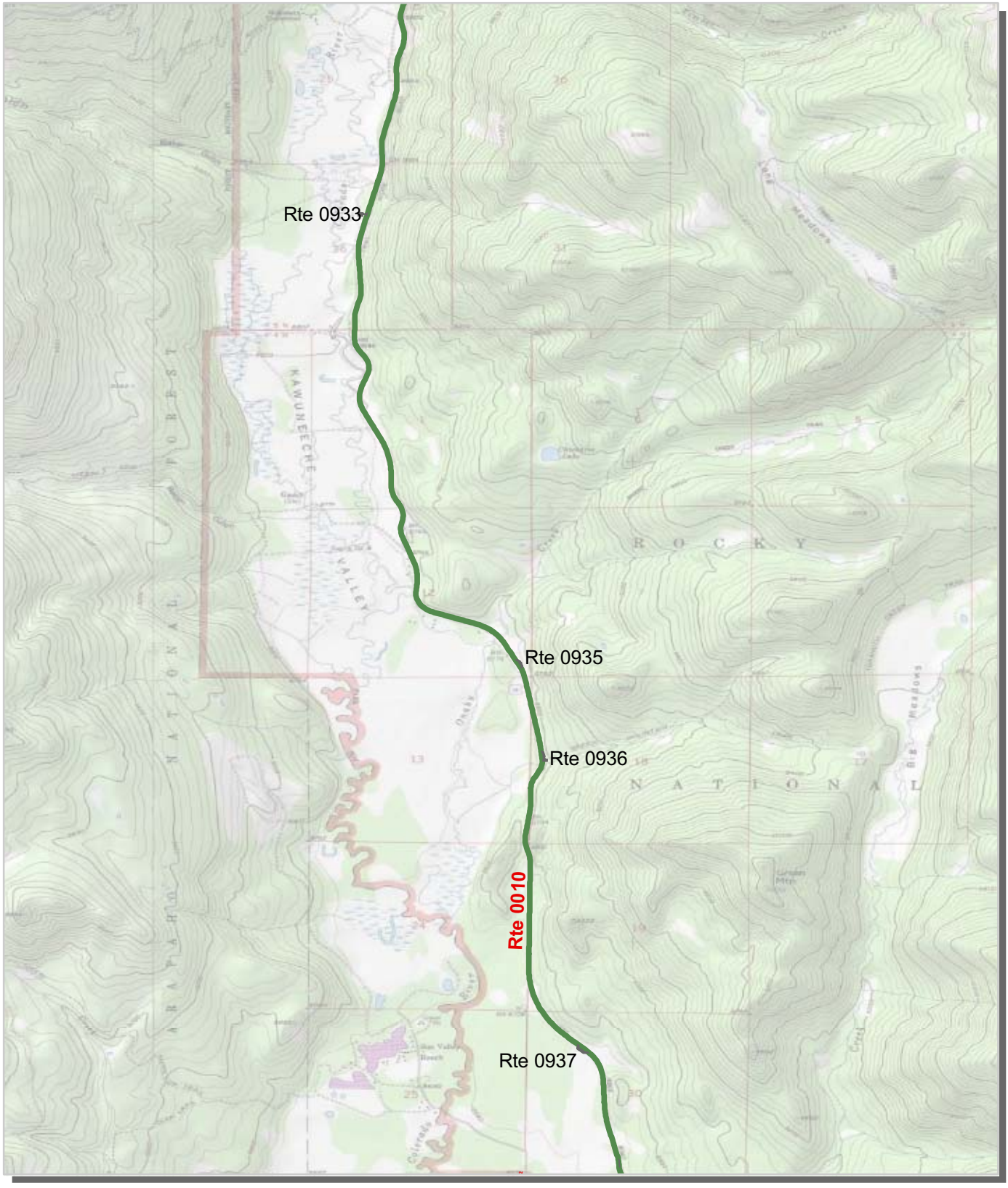
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.25 0.125 0 0.25 Miles

N

Rocky Mountain National Park
Route Location Map
Area 2



Unique colors used to differentiate routes

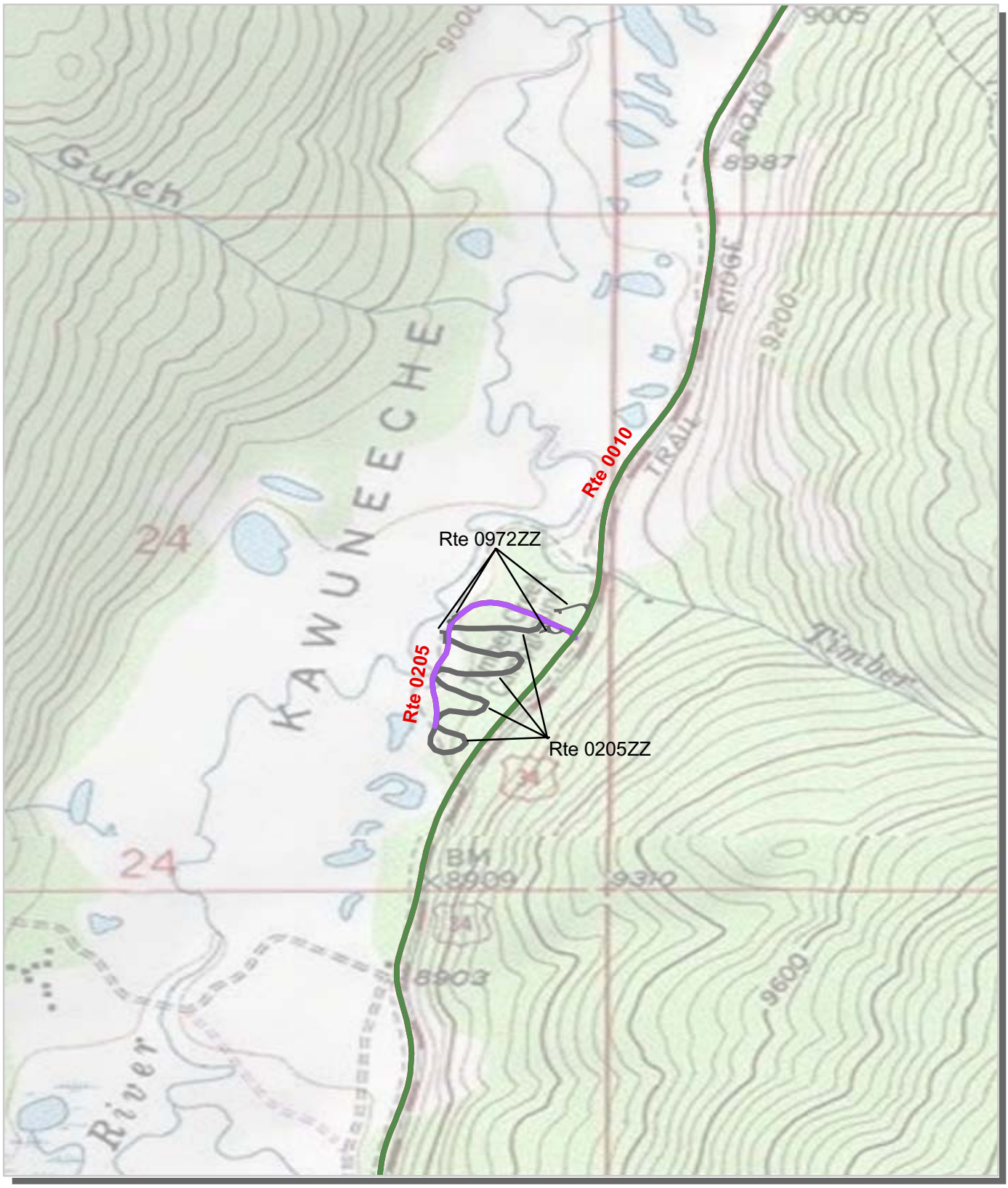
Routes Collected in Previous Cycle

0.9 0.45 0 0.9

Miles

N

Rocky Mountain National Park
Route Location Map
Area 3



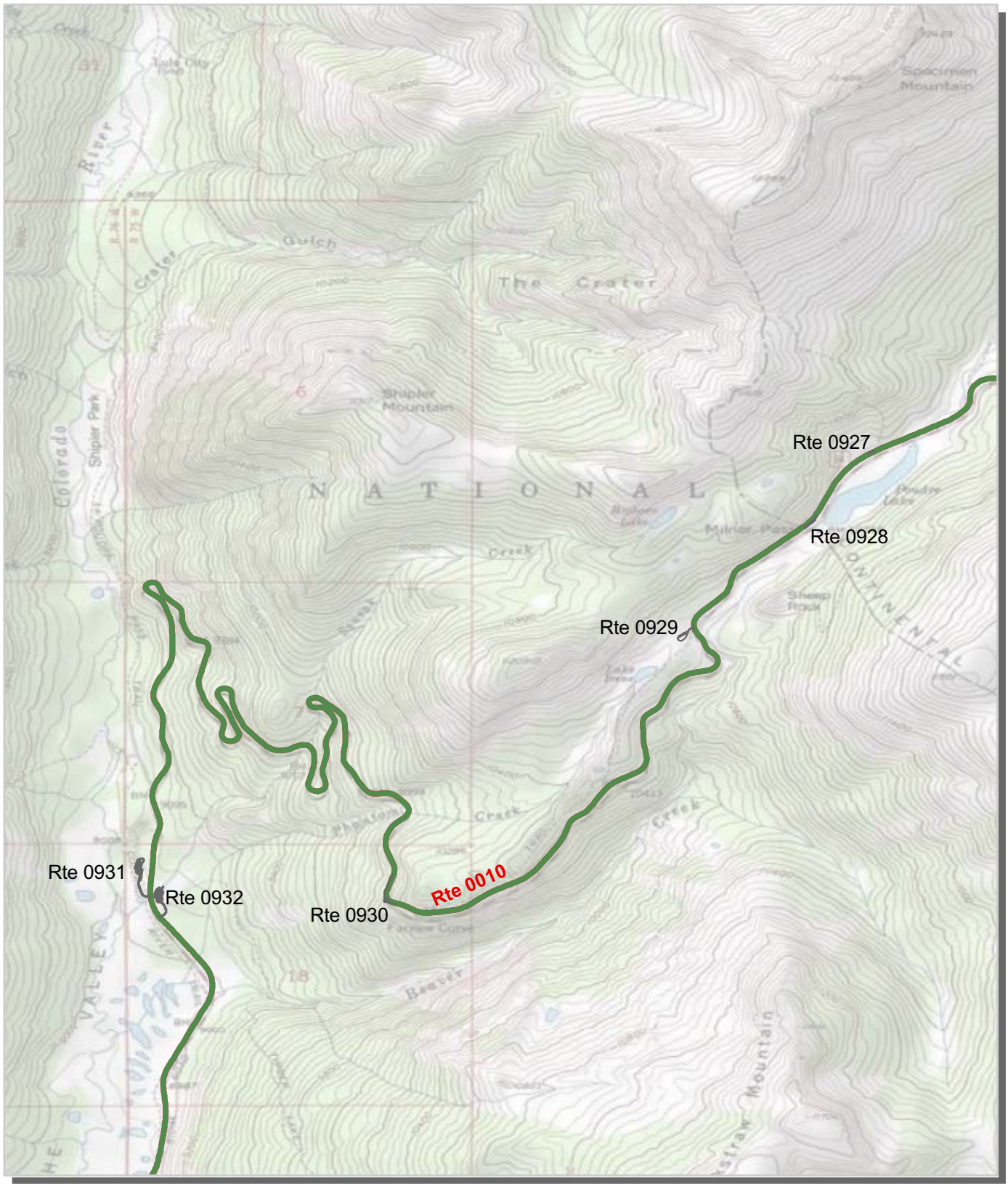
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.25 0.125 0 0.25 Miles

N

Rocky Mountain National Park
Route Location Map
Area 4



Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.7 0.35 0 0.7 Miles

N

Rocky Mountain National Park
Route Location Map
Area 5

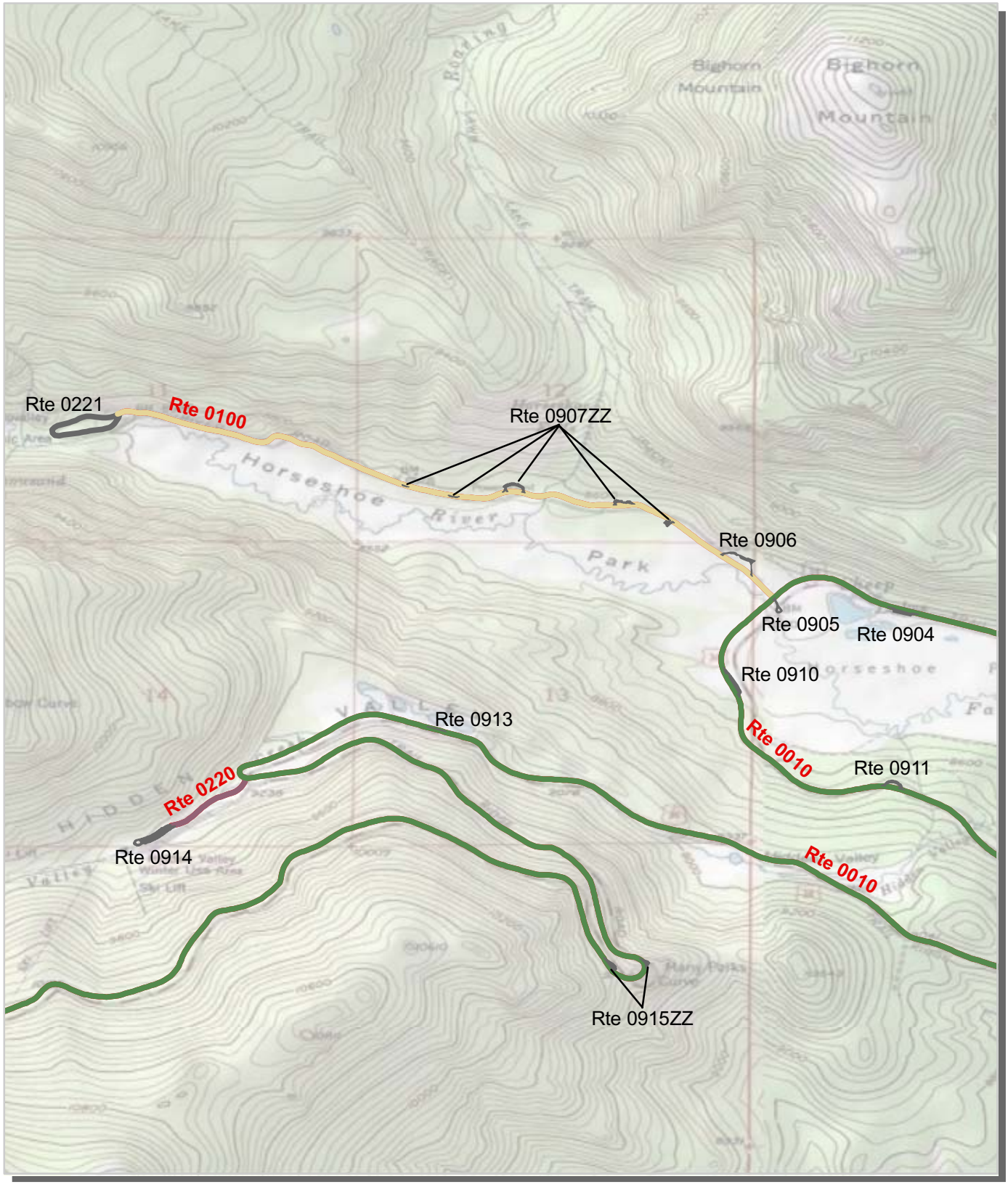
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

1 0.5 0 1 Miles

N

Rocky Mountain National Park
Route Location Map
Area 6



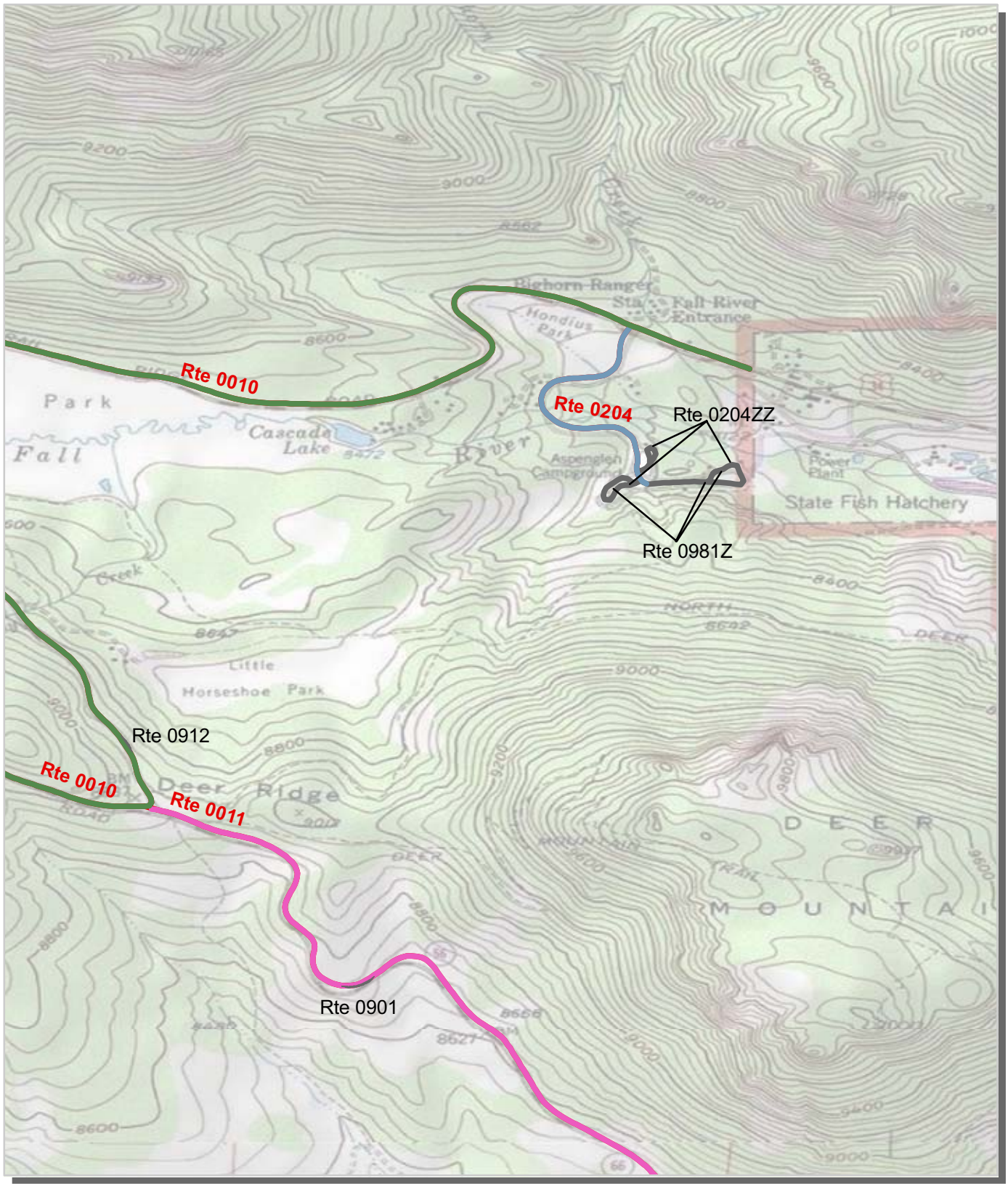
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.4 0.2 0 0.4 Miles

N

Rocky Mountain National Park
Route Location Map
Area 7



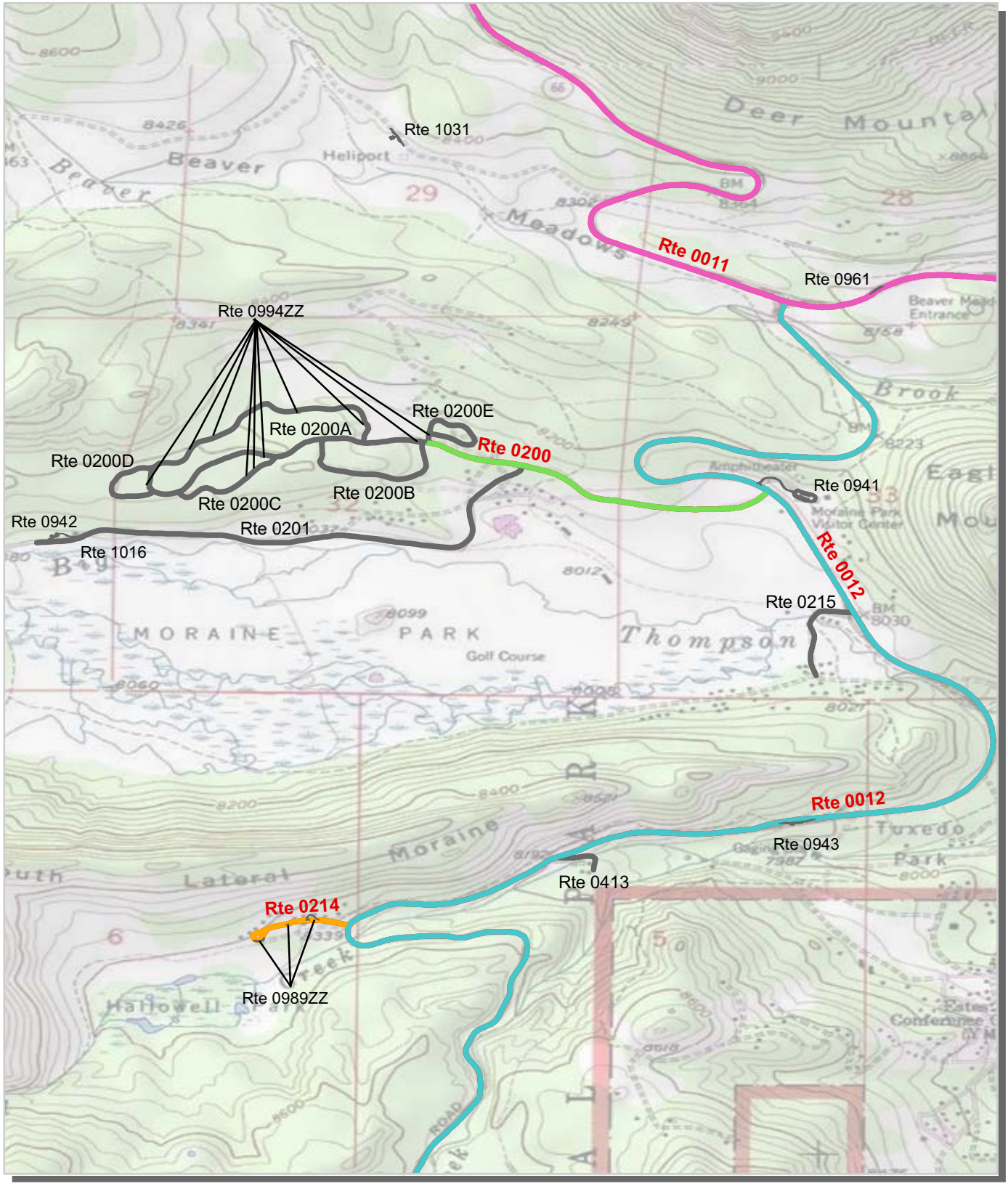
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.3 0.15 0 0.3 Miles

N

Rocky Mountain National Park
Route Location Map
Area 8



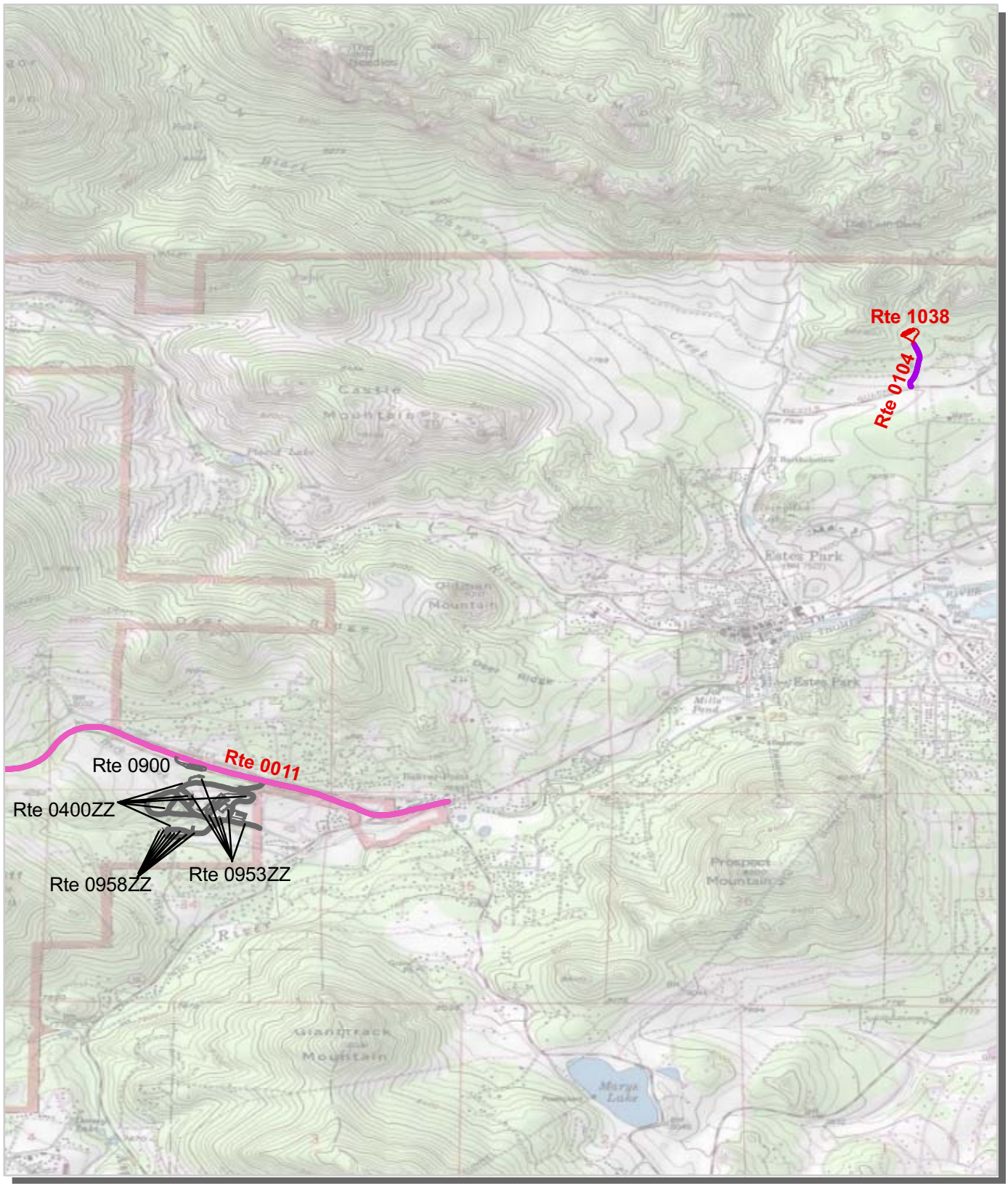
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.4 0.2 0 0.4 Miles

N

Rocky Mountain National Park
Route Location Map
Area 9



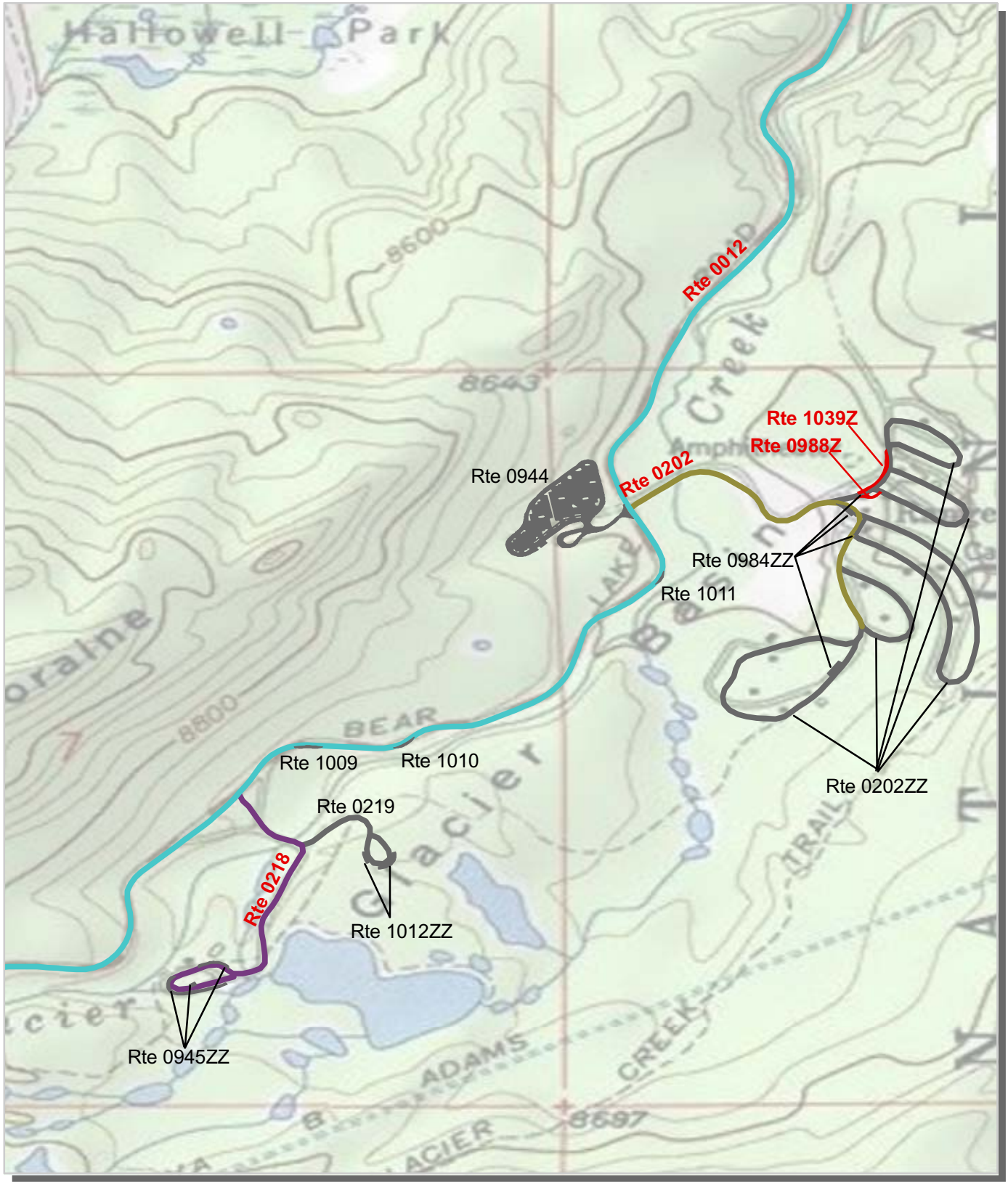
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.5 0.25 0 0.5 Miles

N

Rocky Mountain National Park
Route Location Map
Area 10



Unique colors used to differentiate routes

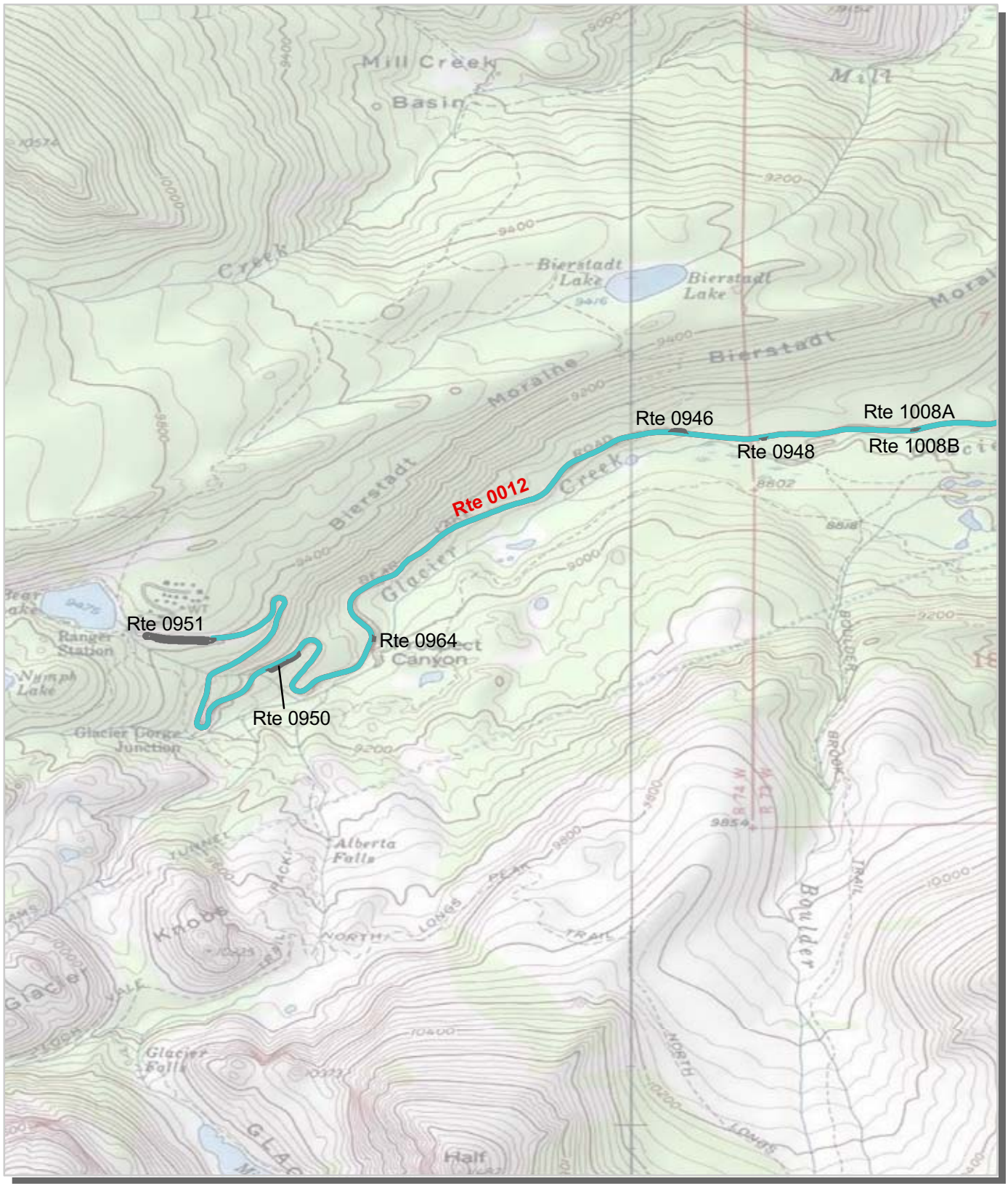
Routes Collected in Previous Cycle

0.25 0.125 0 0.25

Miles

N

Rocky Mountain National Park
Route Location Map
Area 11



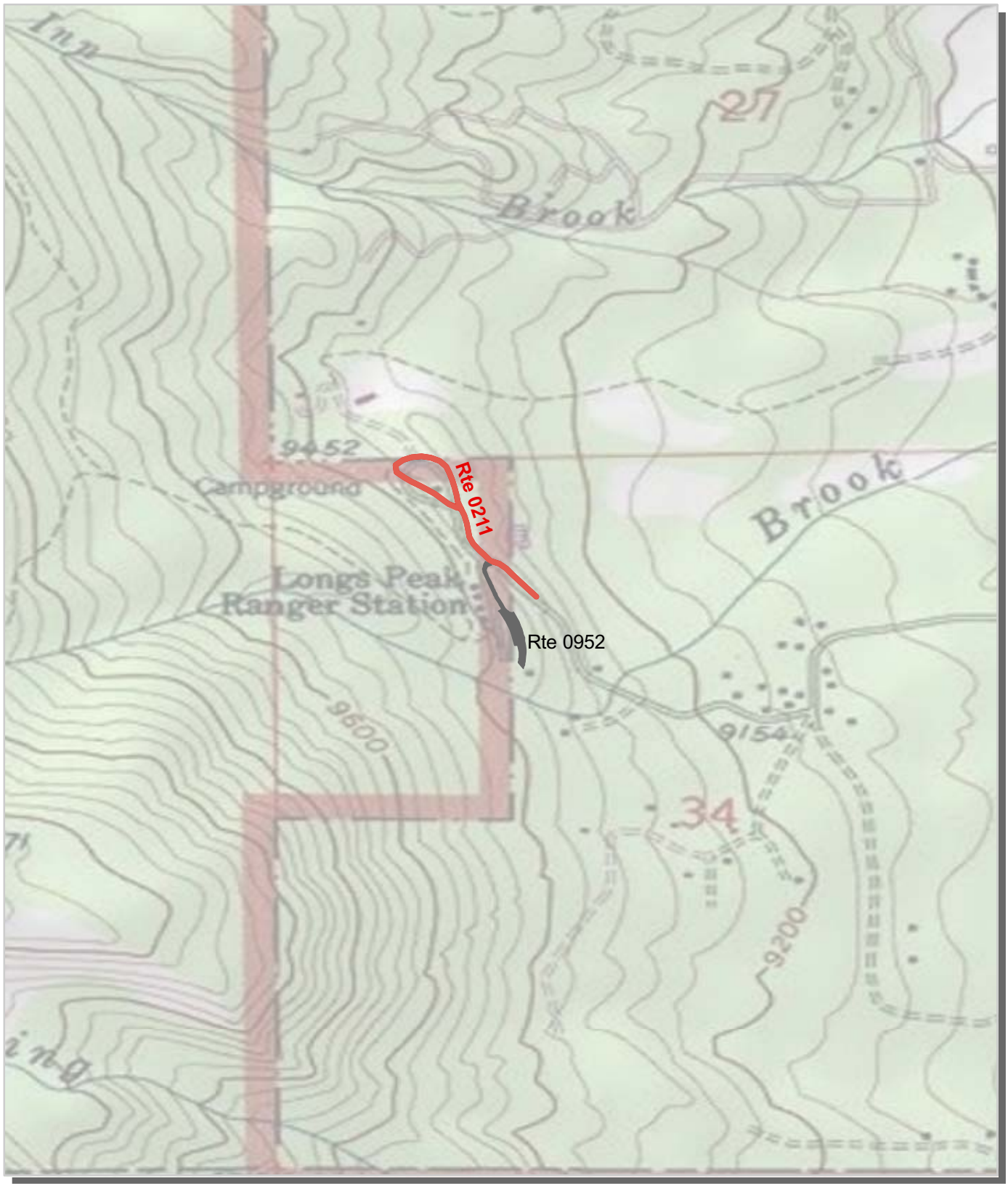
Unique colors used to differentiate routes

Routes Collected in Previous Cycle

0.5 0.25 0 0.5 Miles

N

Rocky Mountain National Park
Route Location Map
Area 12



Unique colors used to differentiate routes

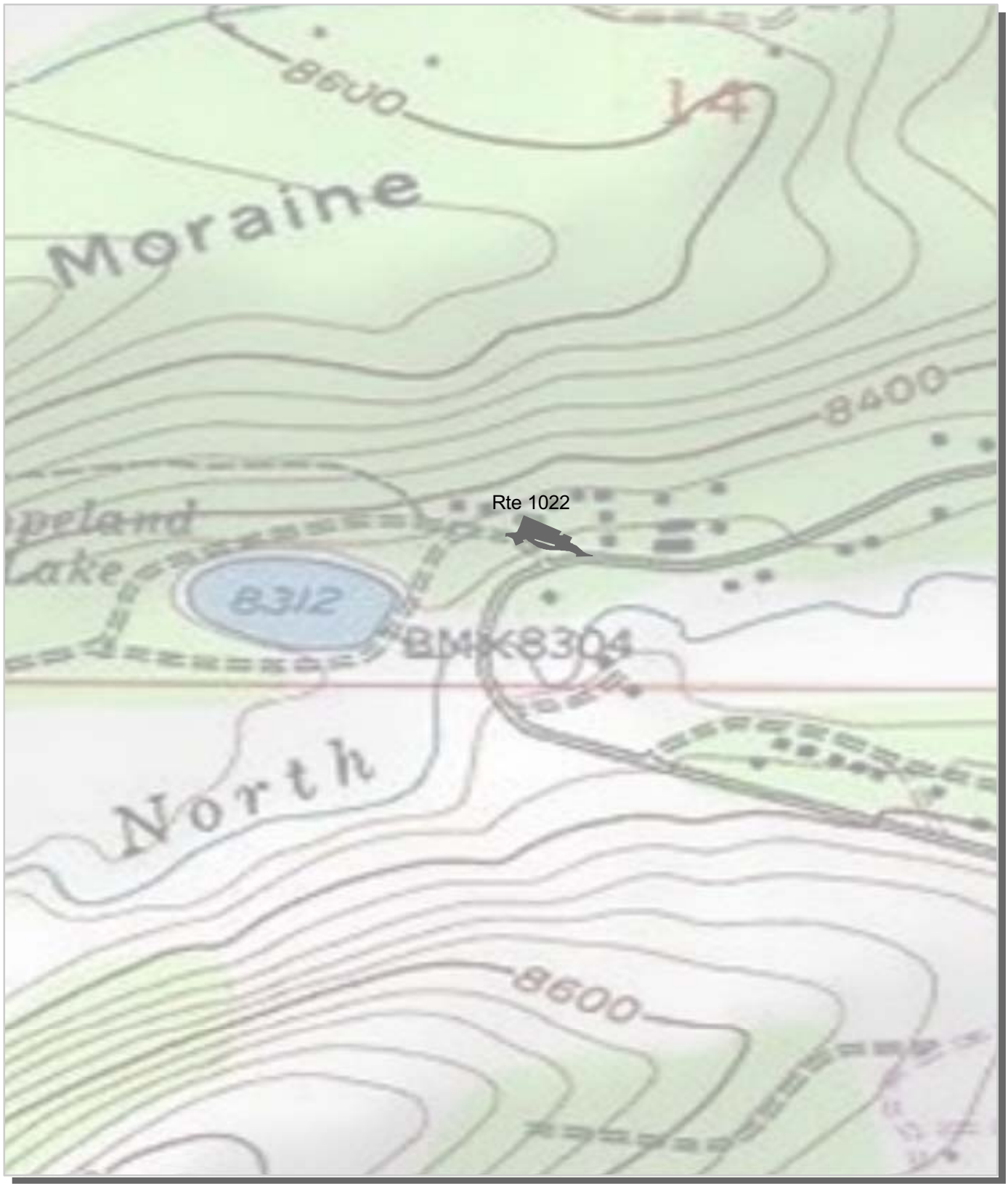
Routes Collected in Previous Cycle

0.25 0.125 0 0.25

Miles

N

Rocky Mountain National Park
Route Location Map
Area 13



Unique colors used to differentiate routes

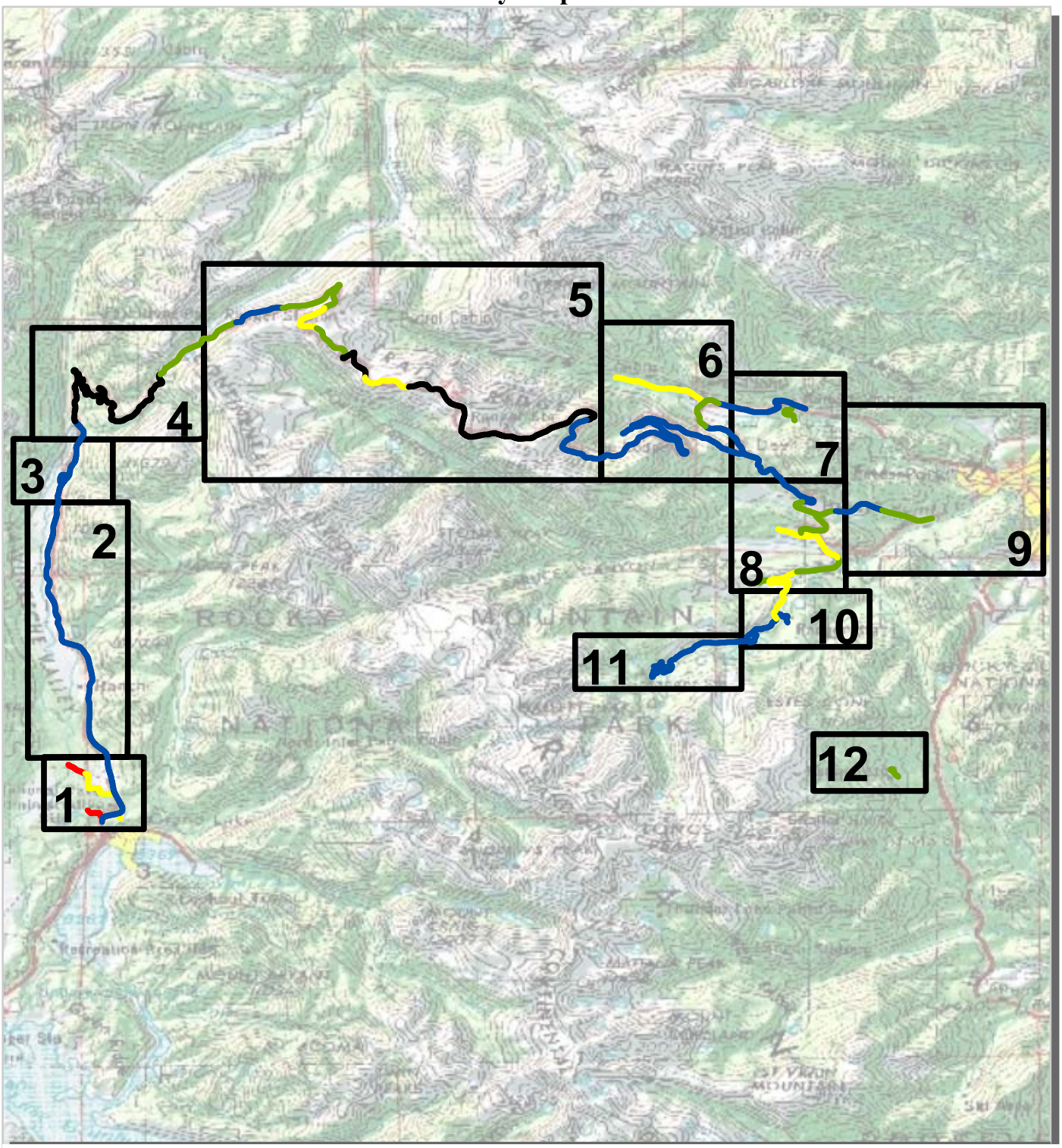
Routes Collected in Previous Cycle

0.1 0.05 0 0.1

Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Key Map



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

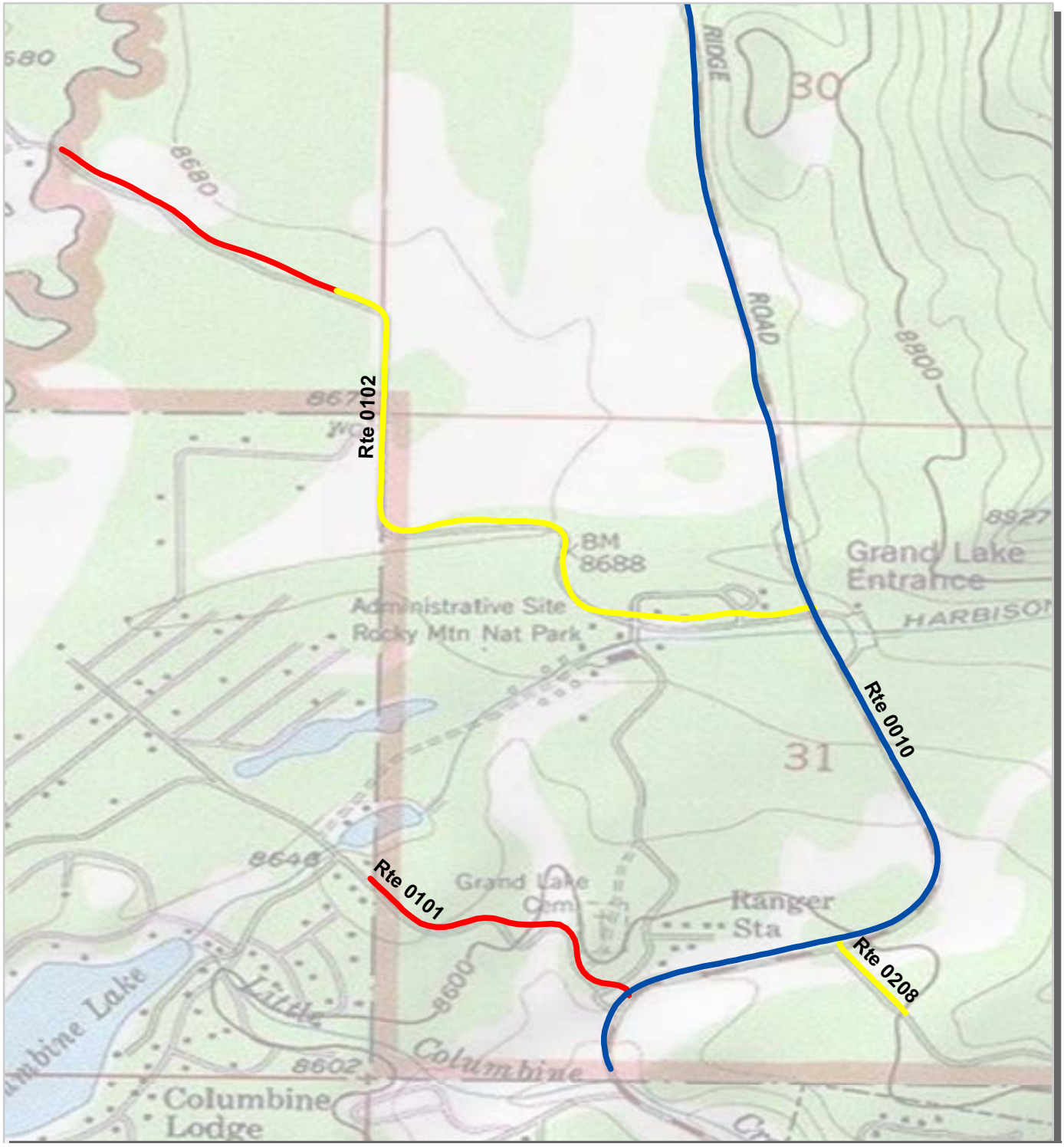
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

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

3 1.5 0 3 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 1



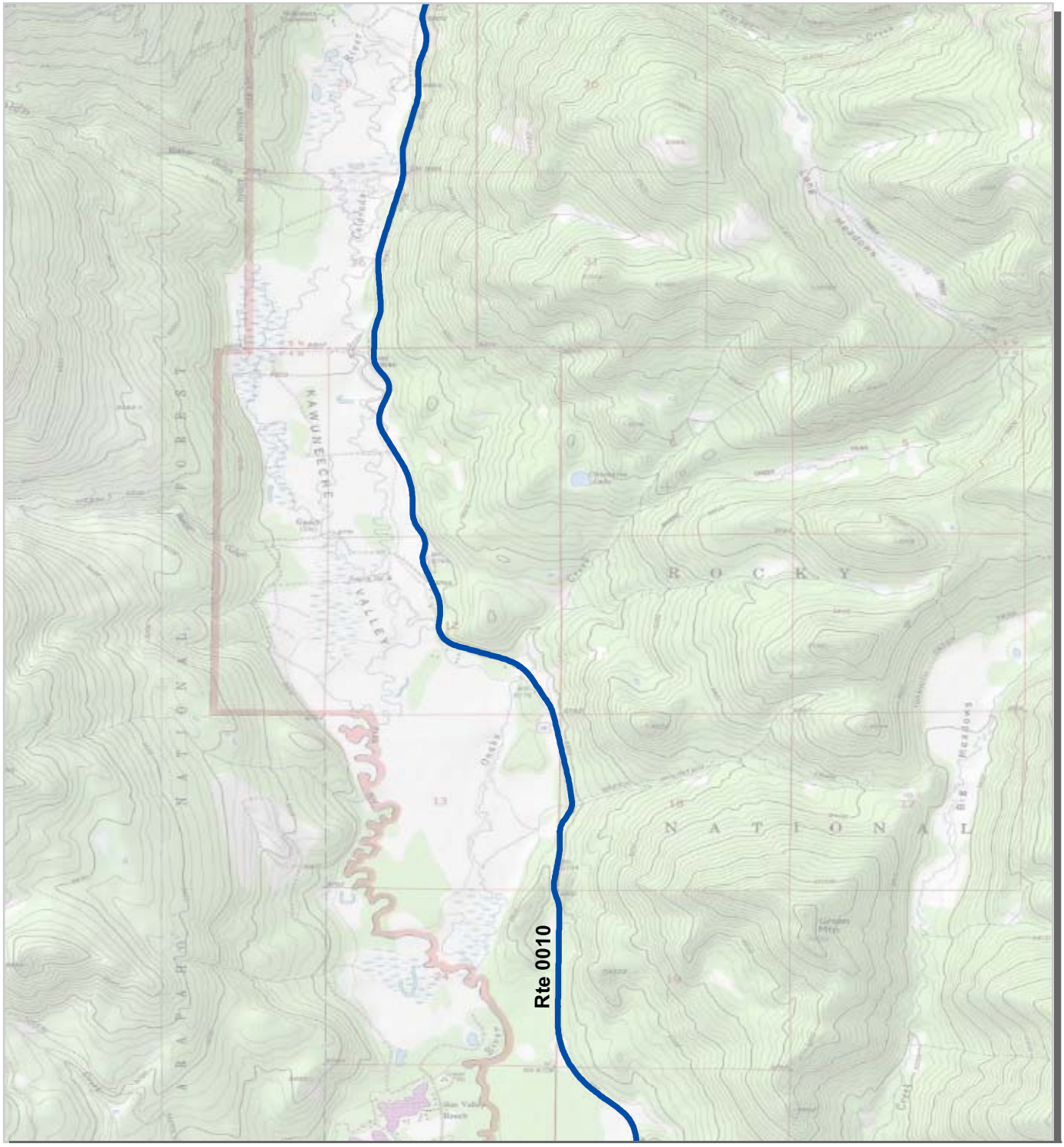
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.25 0.125 0 0.25 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 2



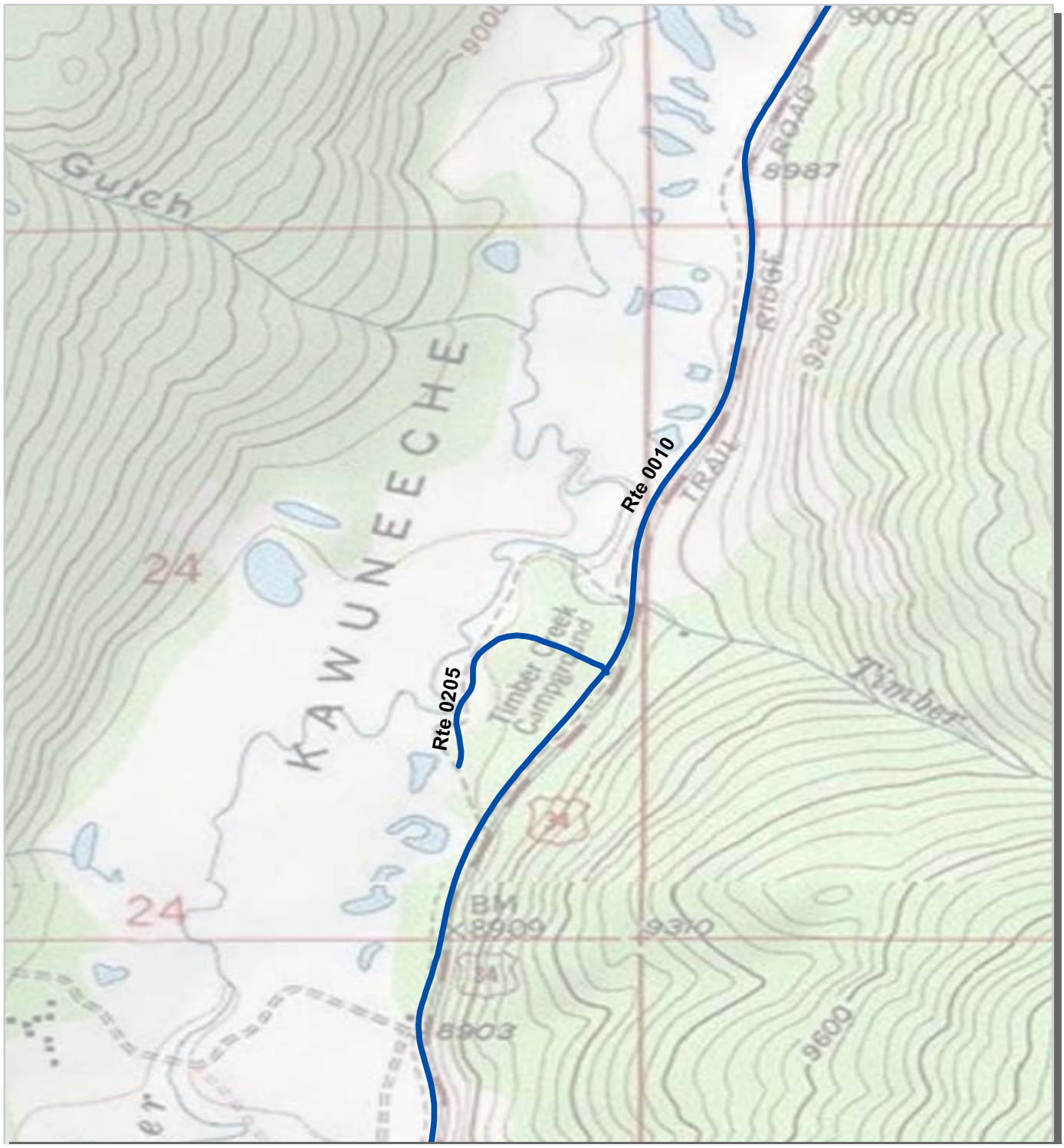
PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

0.9 0.45 0 0.9 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 3



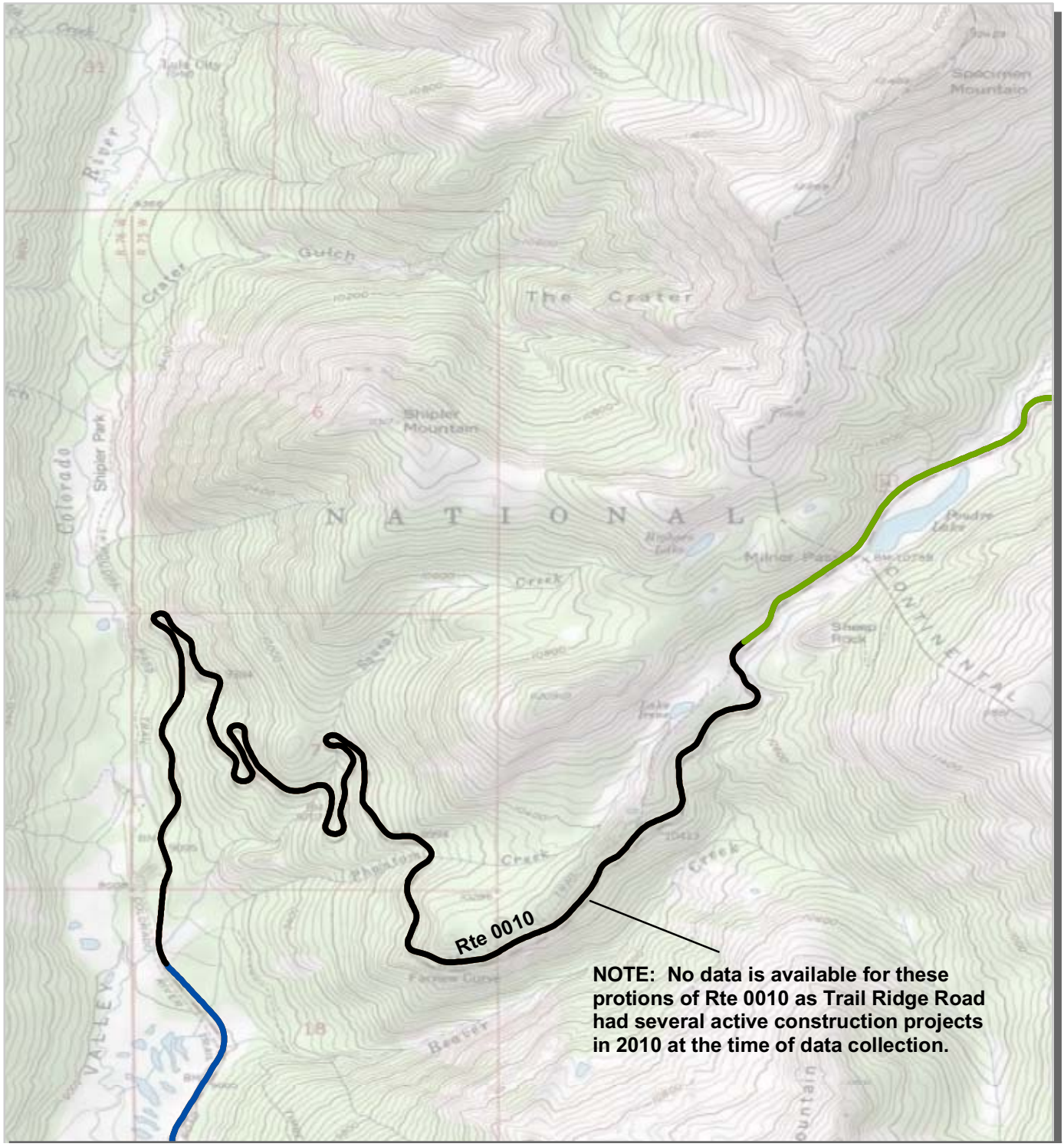
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.25 0.125 0 0.25 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 4



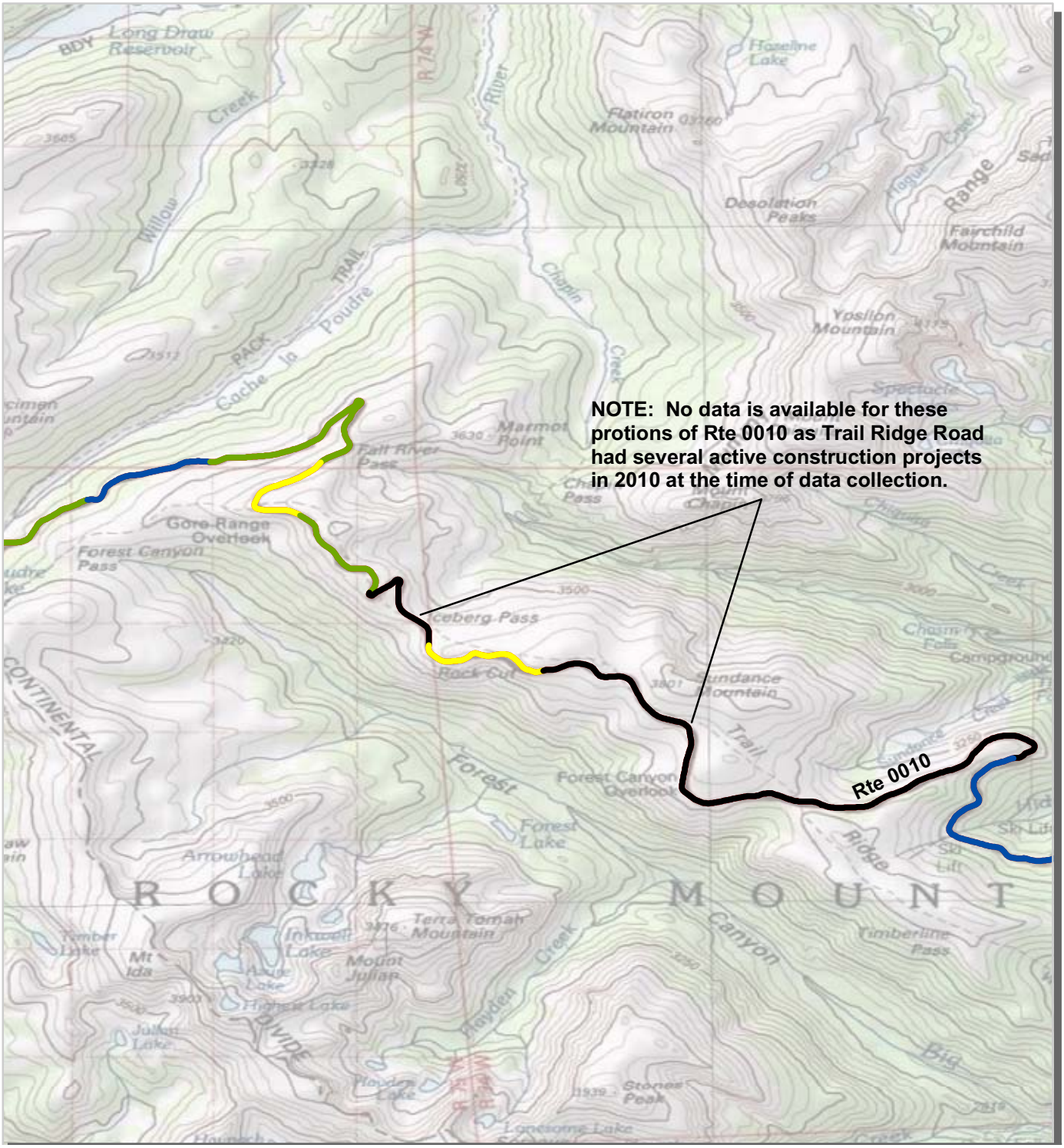
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.8 0.4 0 0.8 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 5



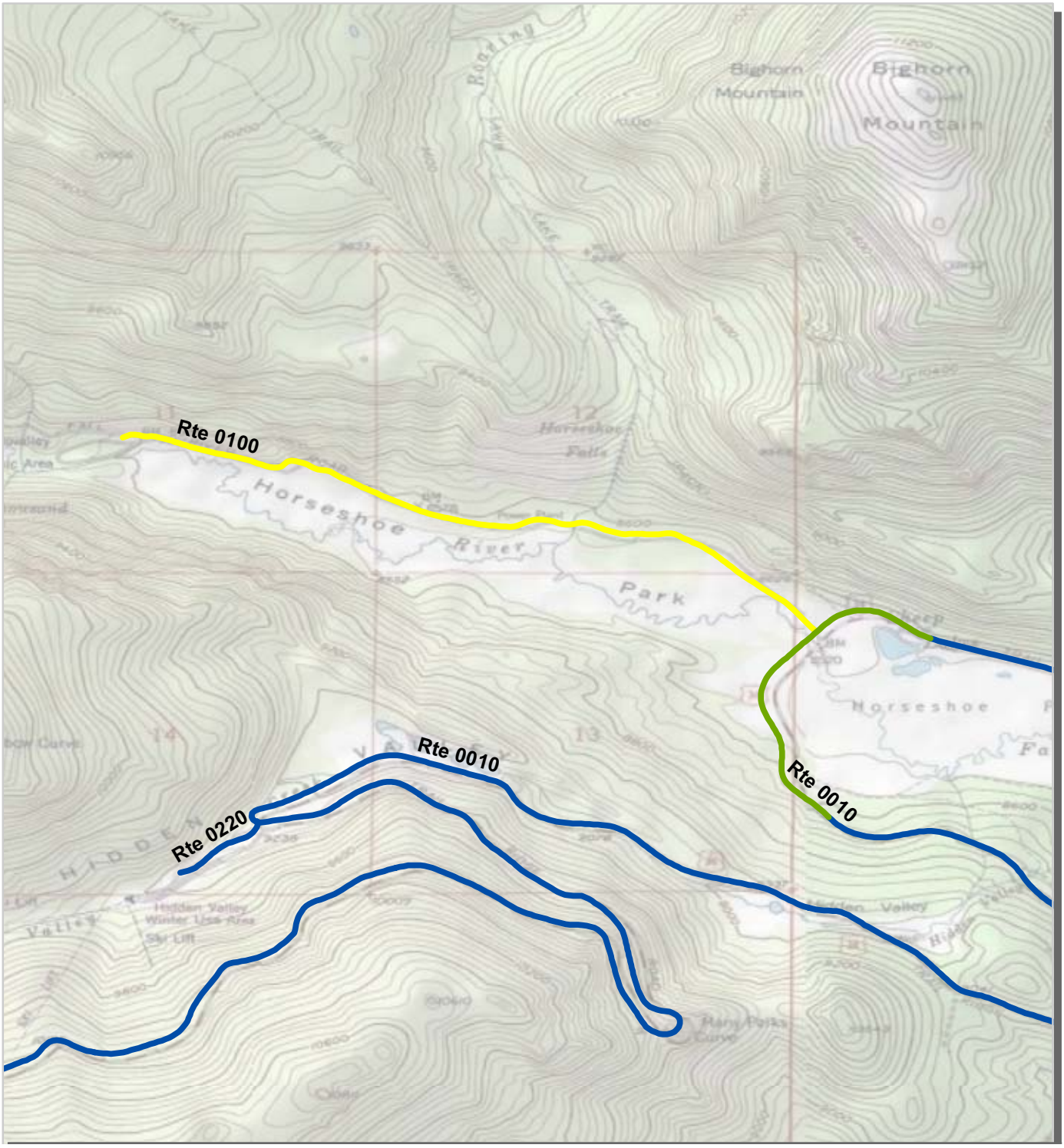
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

1 0.5 0 1 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 6



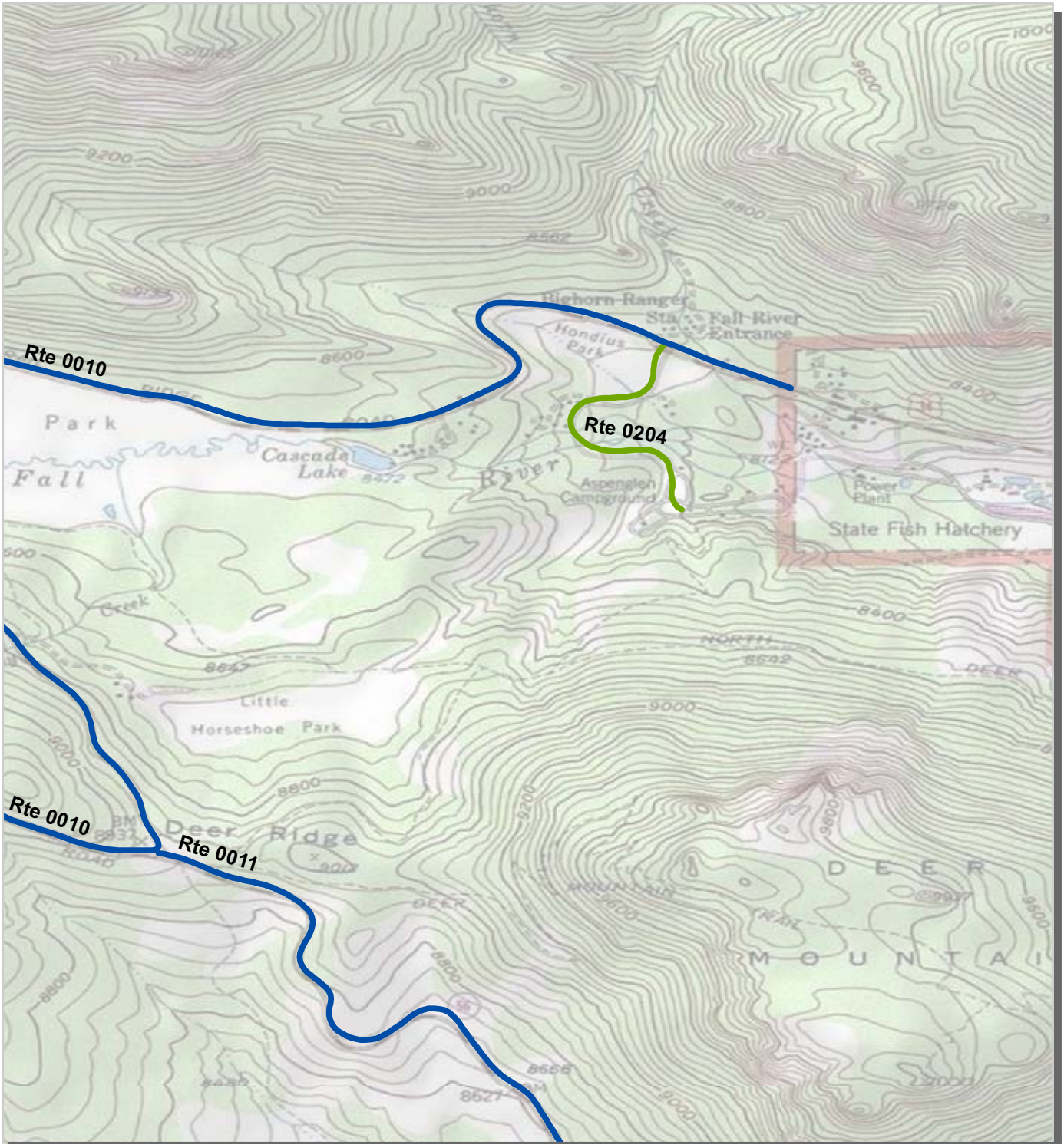
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.4 0.2 0 0.4 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 7



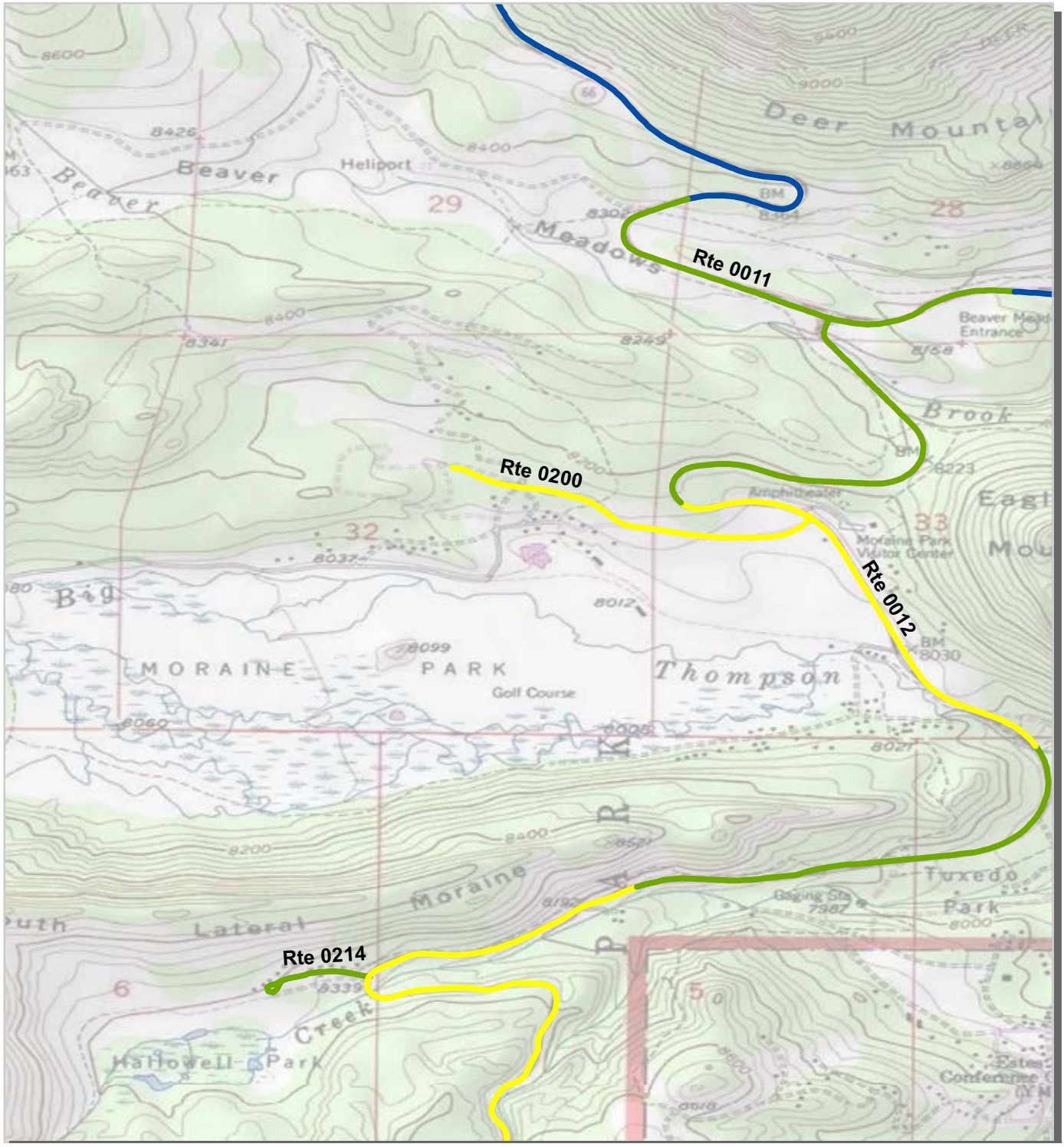
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.3 0.15 0 0.3 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 8



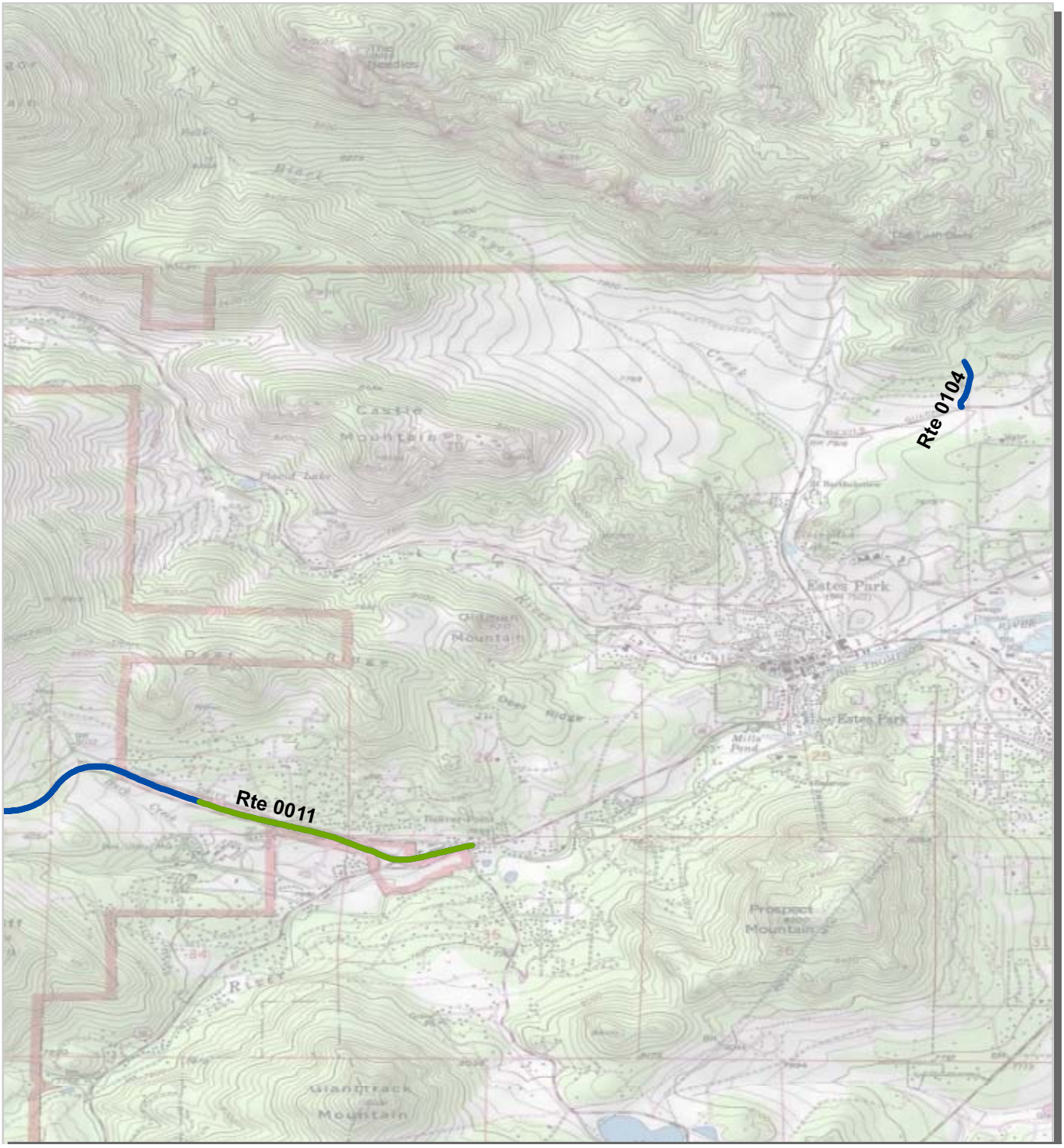
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.4 0.2 0 0.4 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 9



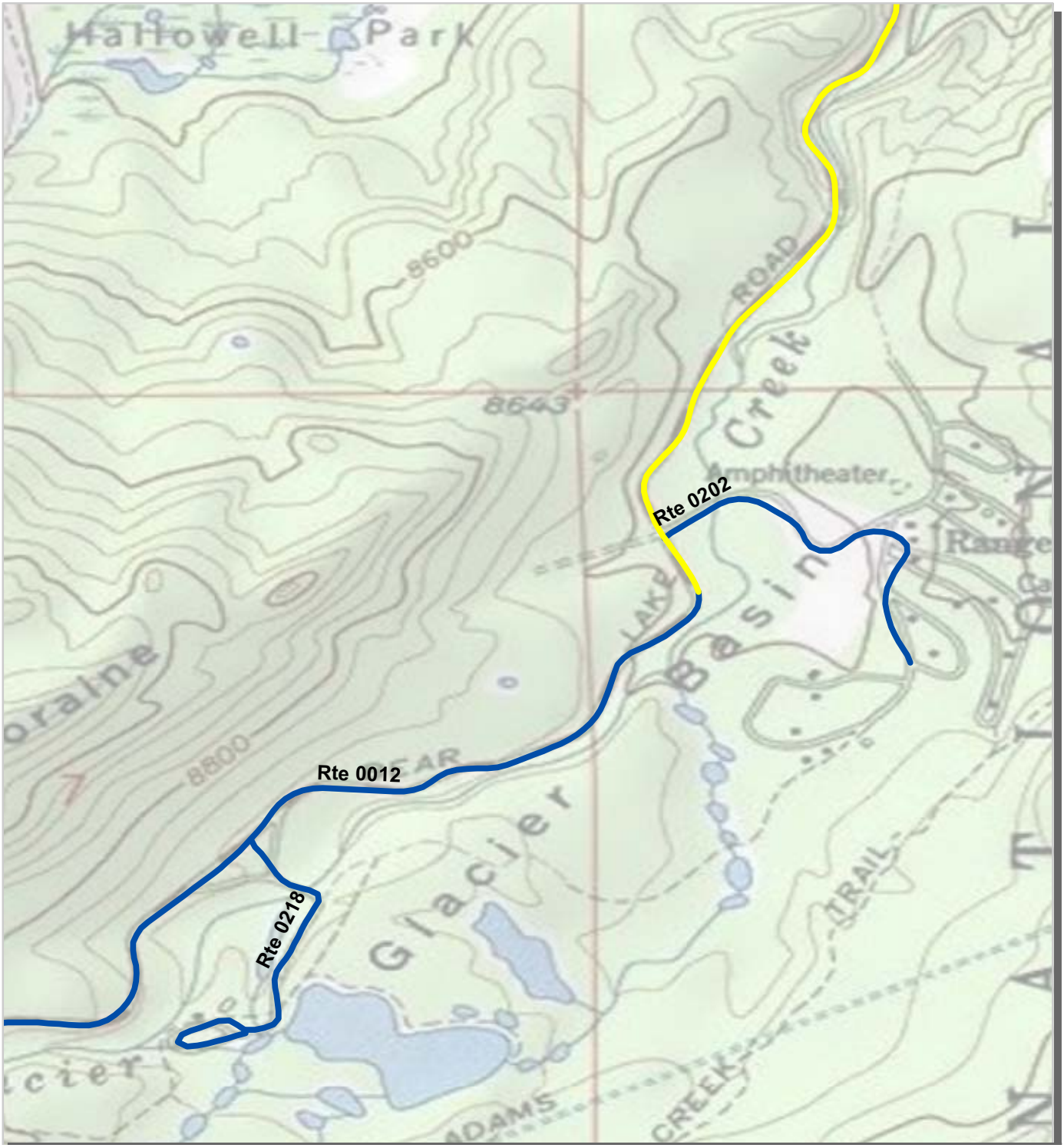
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.5 0.25 0 0.5 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 10



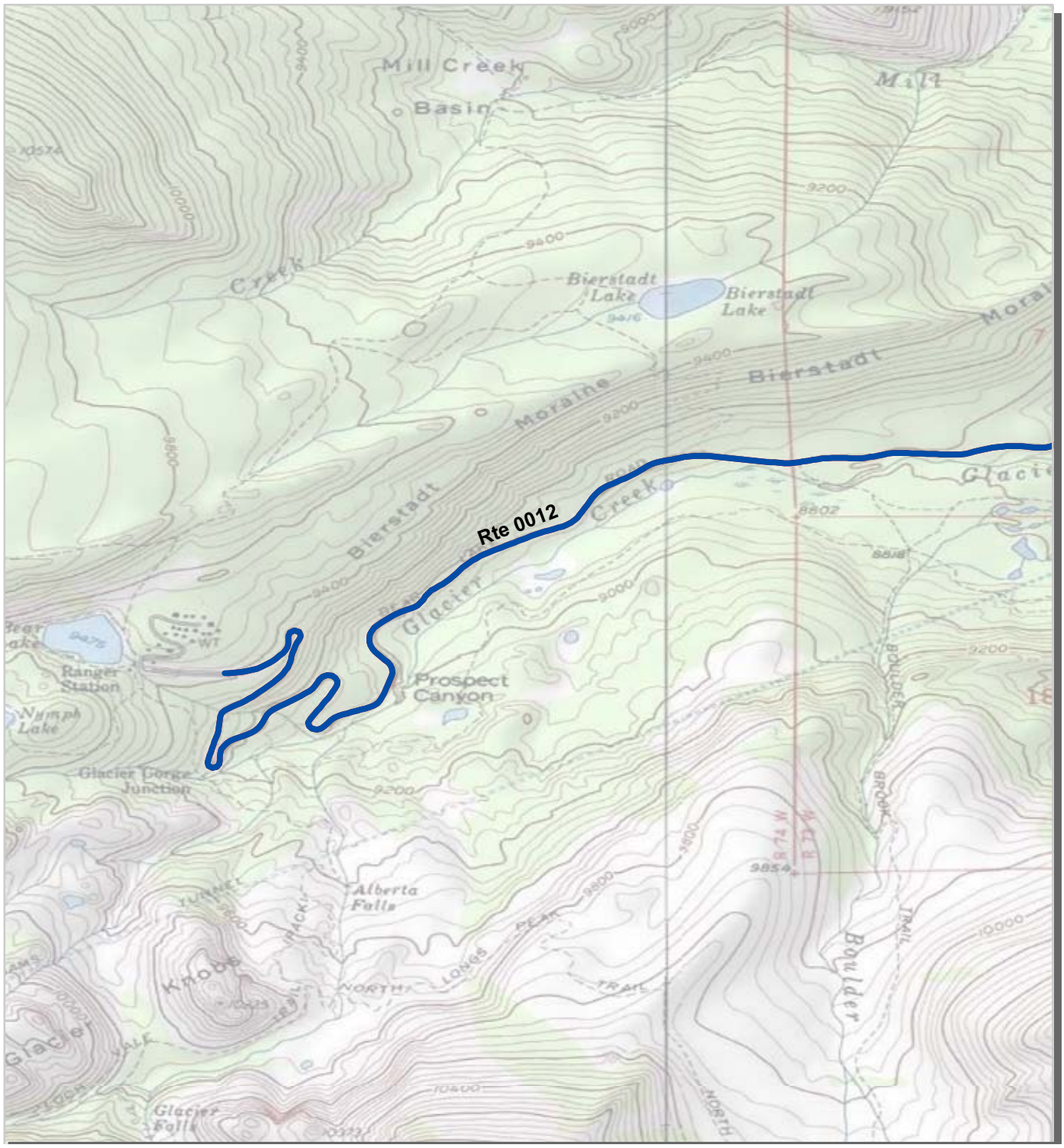
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.25 0.125 0 0.25 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 11



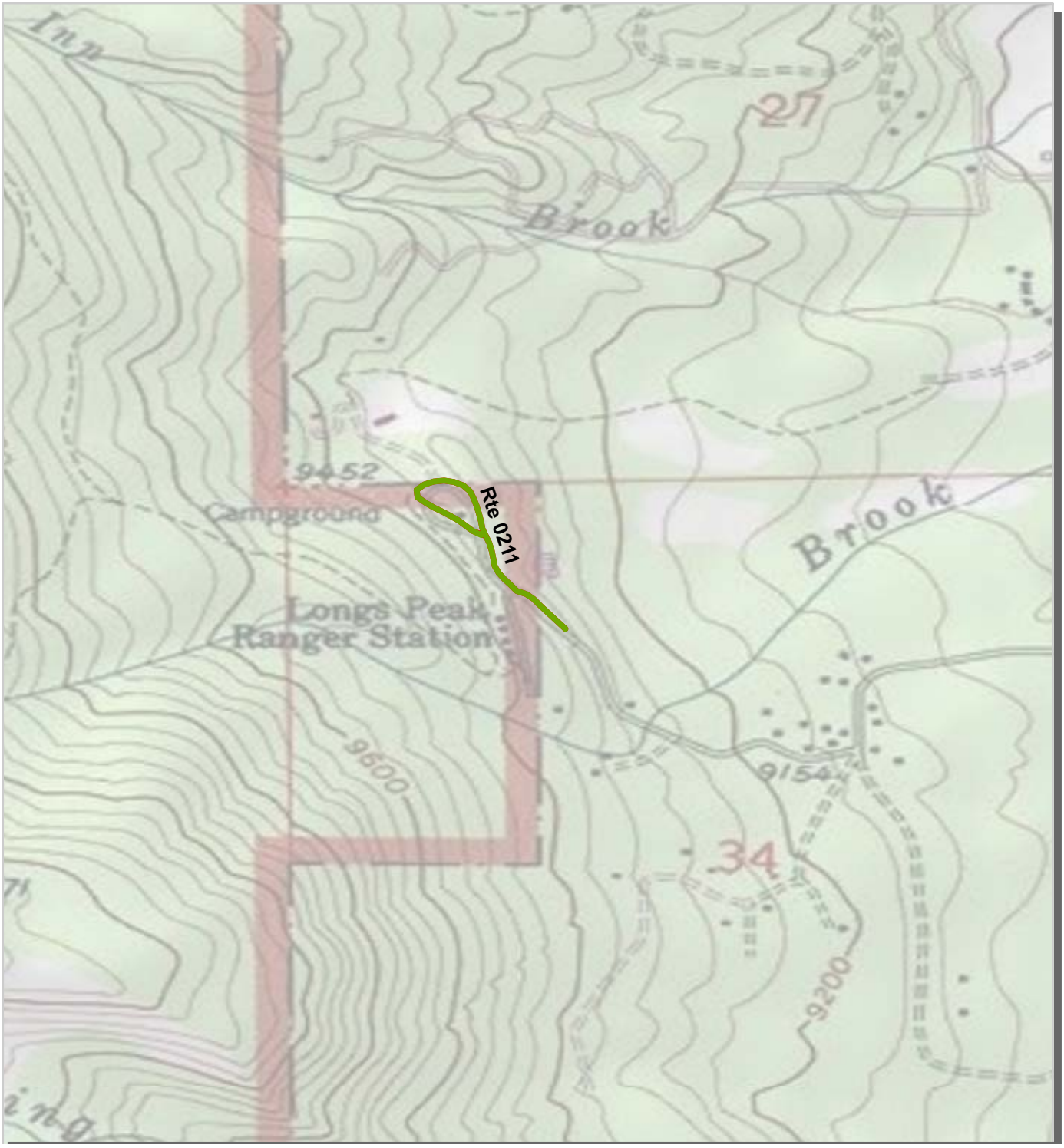
PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	

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

0.5 0.25 0 0.5 Miles

N

Rocky Mountain National Park
Route Condition Map
PCR - Mile by Mile
Area 12



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

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

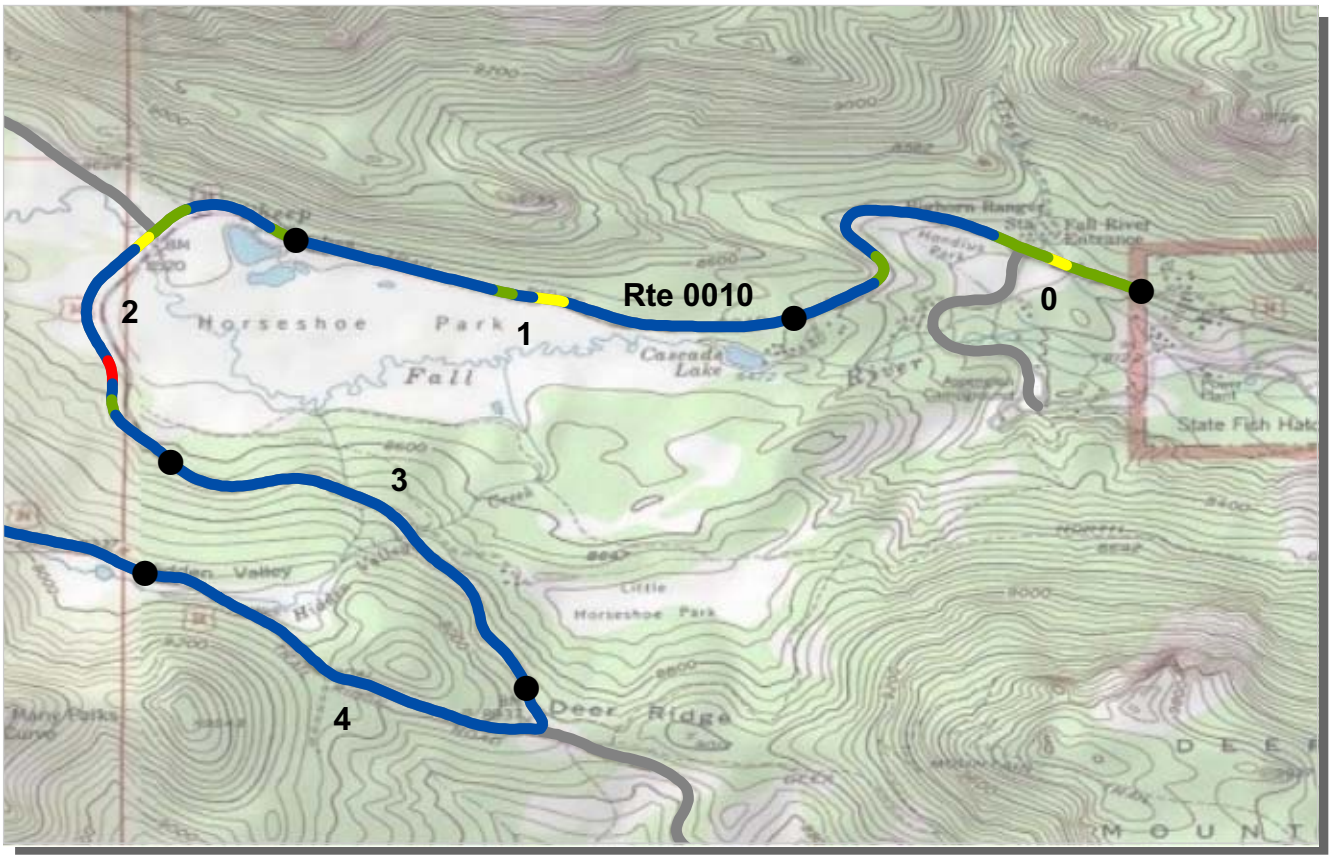
0.25 0.125 0 0.25 Miles

N

Section 5
Paved Route
Condition Rating Sheets

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

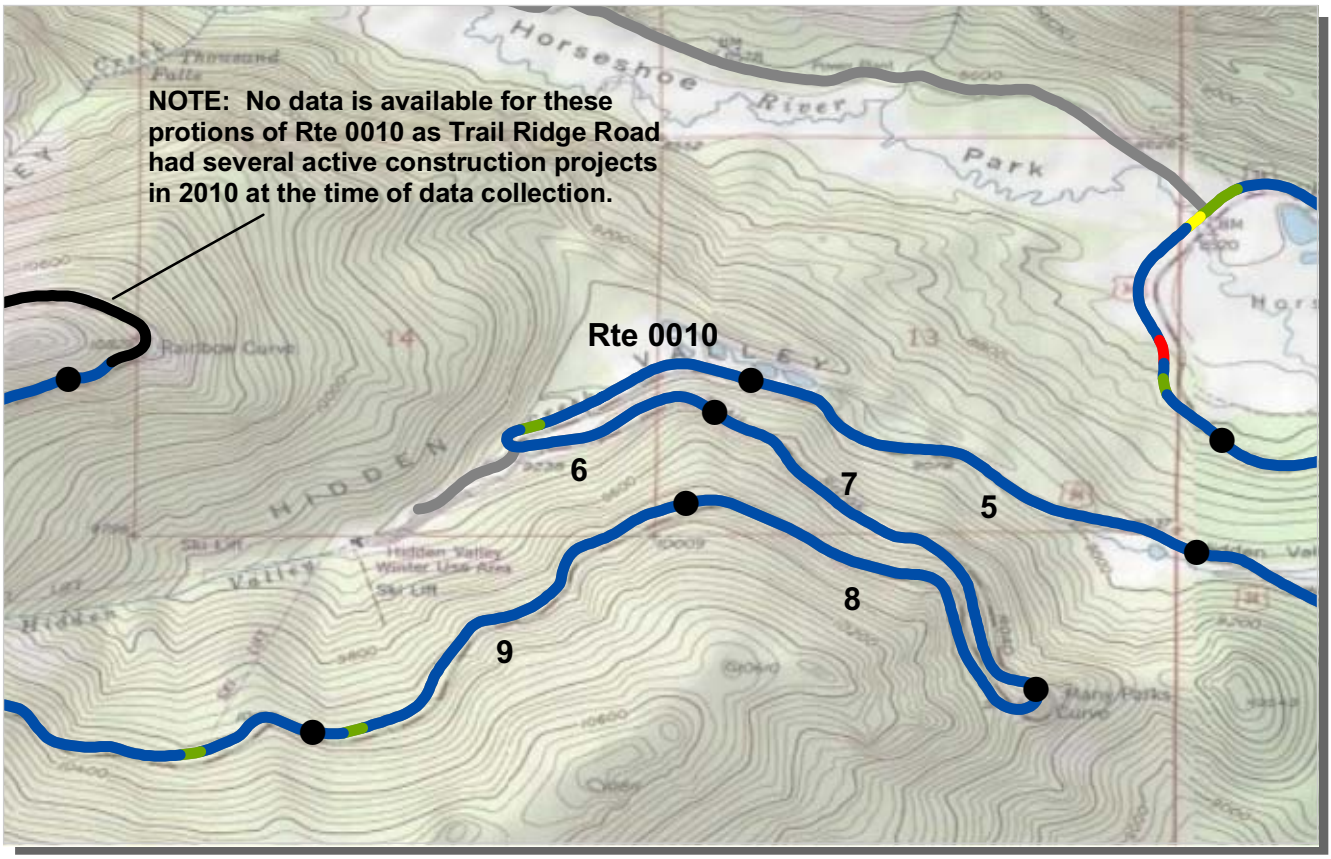
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	31	25	28	25	30
Lane Width (ft)	12	12	12	11	12
Roadway Condition Information					
SCR (Surface Condition Rating)	97	98	94	98	99
PCR (Pavement Condition Rating)	95	99	94	99	99
Distress Index Values					
Structural Crack Index	100	99	94	100	100
Transverse Cracking Index	100	100	99	99	99
Patching Index	100	100	100	100	99
Rutting Index	97	98	98	98	99
Roughness Condition Index (RCI)	92	100	93	100	100

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

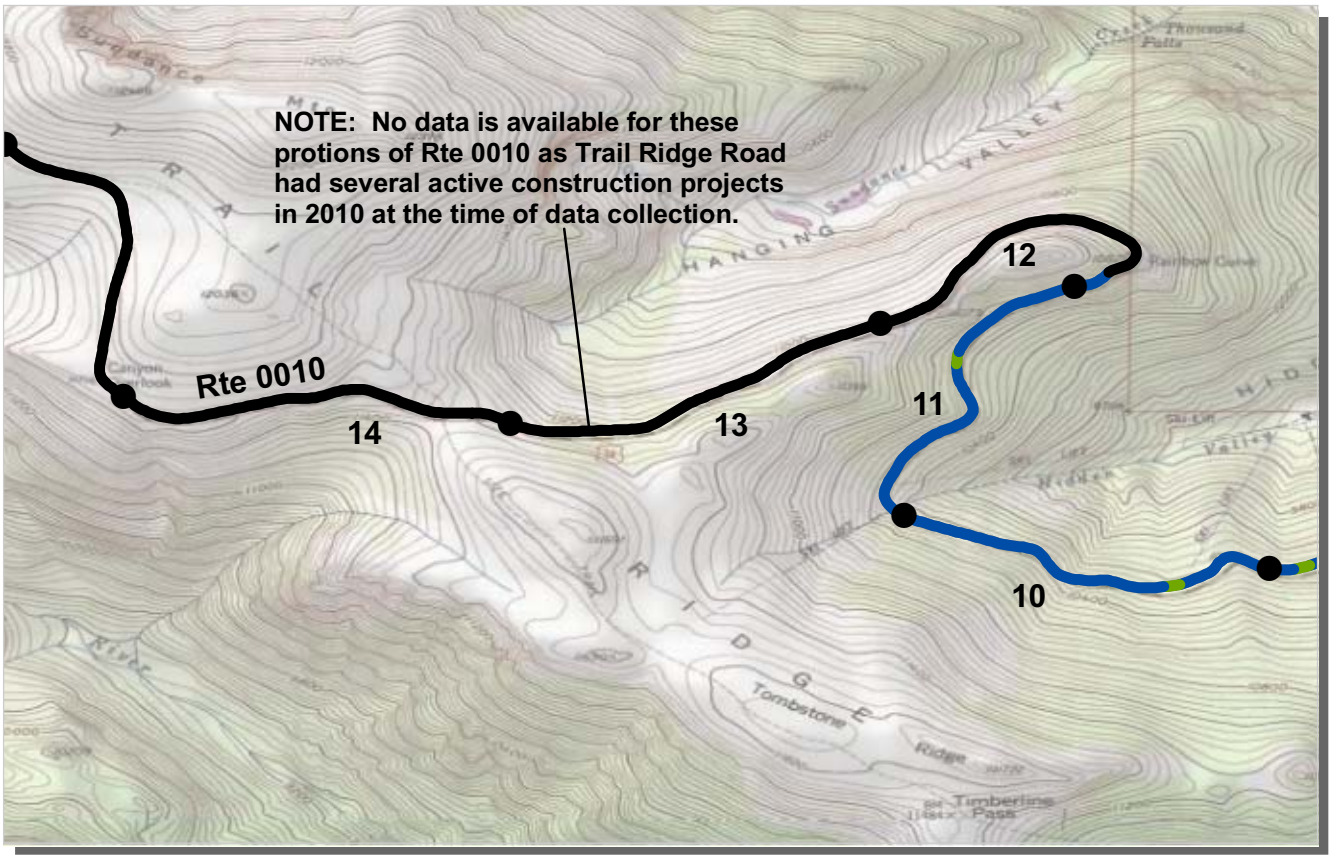
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	28	28	27	26	28
Lane Width (ft)	11	11	11	11	11
Roadway Condition Information					
SCR (Surface Condition Rating)	99	99	99	100	99
PCR (Pavement Condition Rating)	99	99	99	100	99
Distress Index Values					
Structural Crack Index	100	100	100	100	100
Transverse Cracking Index	99	99	99	100	100
Patching Index	100	100	100	100	99
Rutting Index	100	99	100	100	100
Roughness Condition Index (RCI)	100	100	100	100	100

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

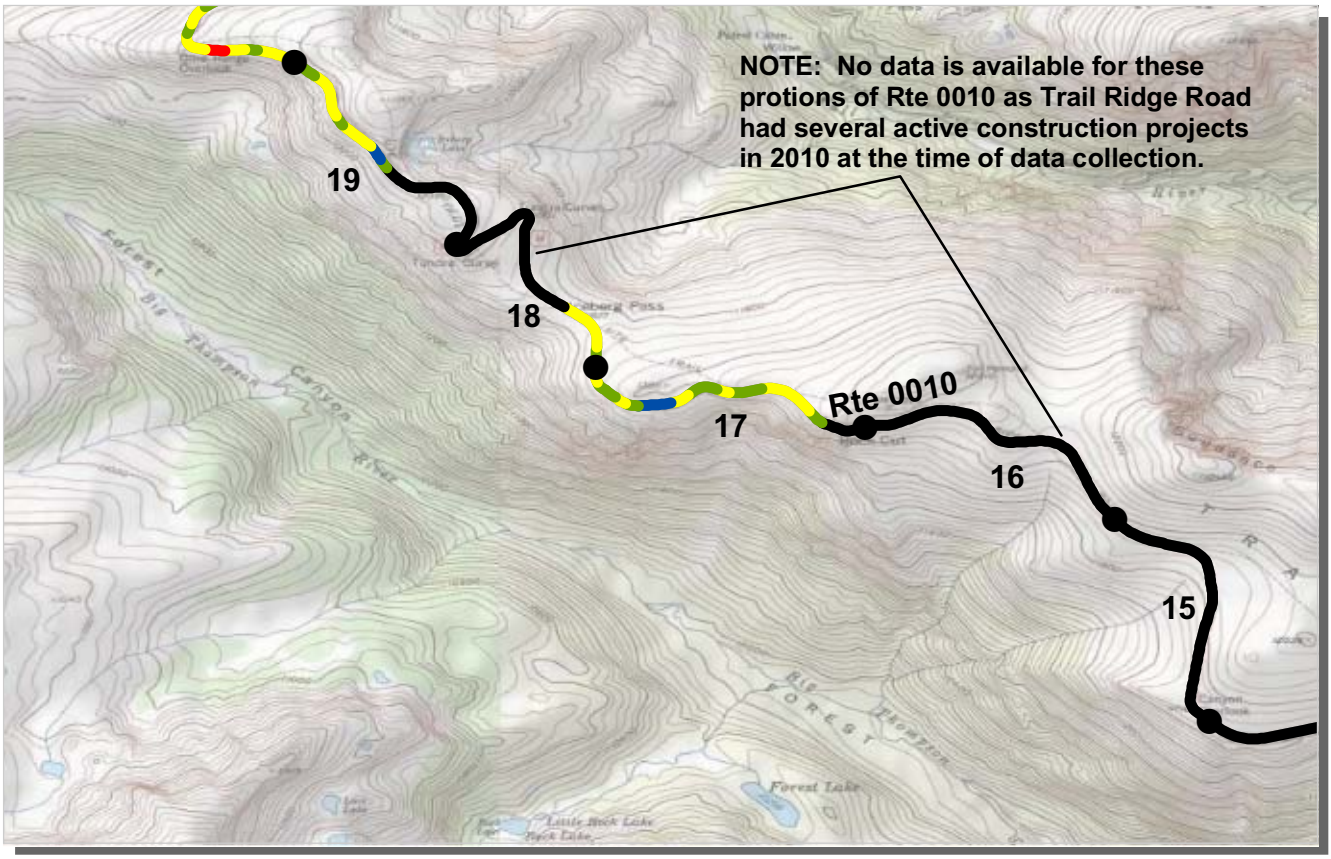
Section Number	10	11	12	13	14
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	28	28	27	28	29
Lane Width (ft)	12	11	12	12	12
Roadway Condition Information					
SCR (Surface Condition Rating)	100	99	NC	NC	NC
PCR (Pavement Condition Rating)	100	99	NC	NC	NC
Distress Index Values					
Structural Crack Index	100	100	NC	NC	NC
Transverse Cracking Index	100	100	NC	NC	NC
Patching Index	100	99	NC	NC	NC
Rutting Index	100	100	NC	NC	NC
Roughness Condition Index (RCI)	100	100	NC	NC	NC

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

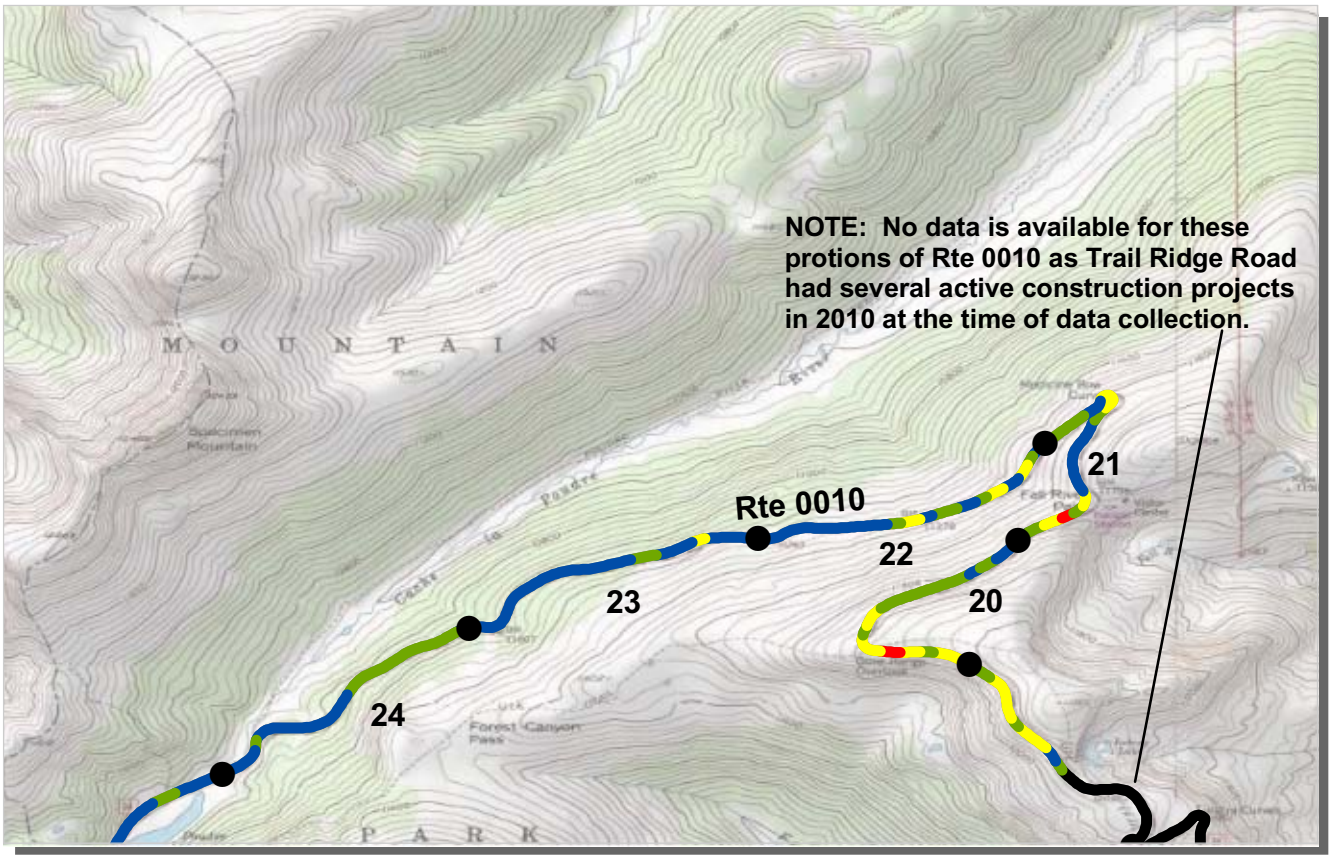
Section Number	15	16	17	18	19
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	29	30	29	30	29
Lane Width (ft)	12	12	12	12	12
Roadway Condition Information					
SCR (Surface Condition Rating)	NC	NC	95	NC	91
PCR (Pavement Condition Rating)	NC	NC	84	NC	91
Distress Index Values					
Structural Crack Index	NC	NC	100	NC	98
Transverse Cracking Index	NC	NC	99	NC	100
Patching Index	NC	NC	100	NC	100
Rutting Index	NC	NC	95	NC	91
Roughness Condition Index (RCI)	NC	NC	70	NC	NC

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

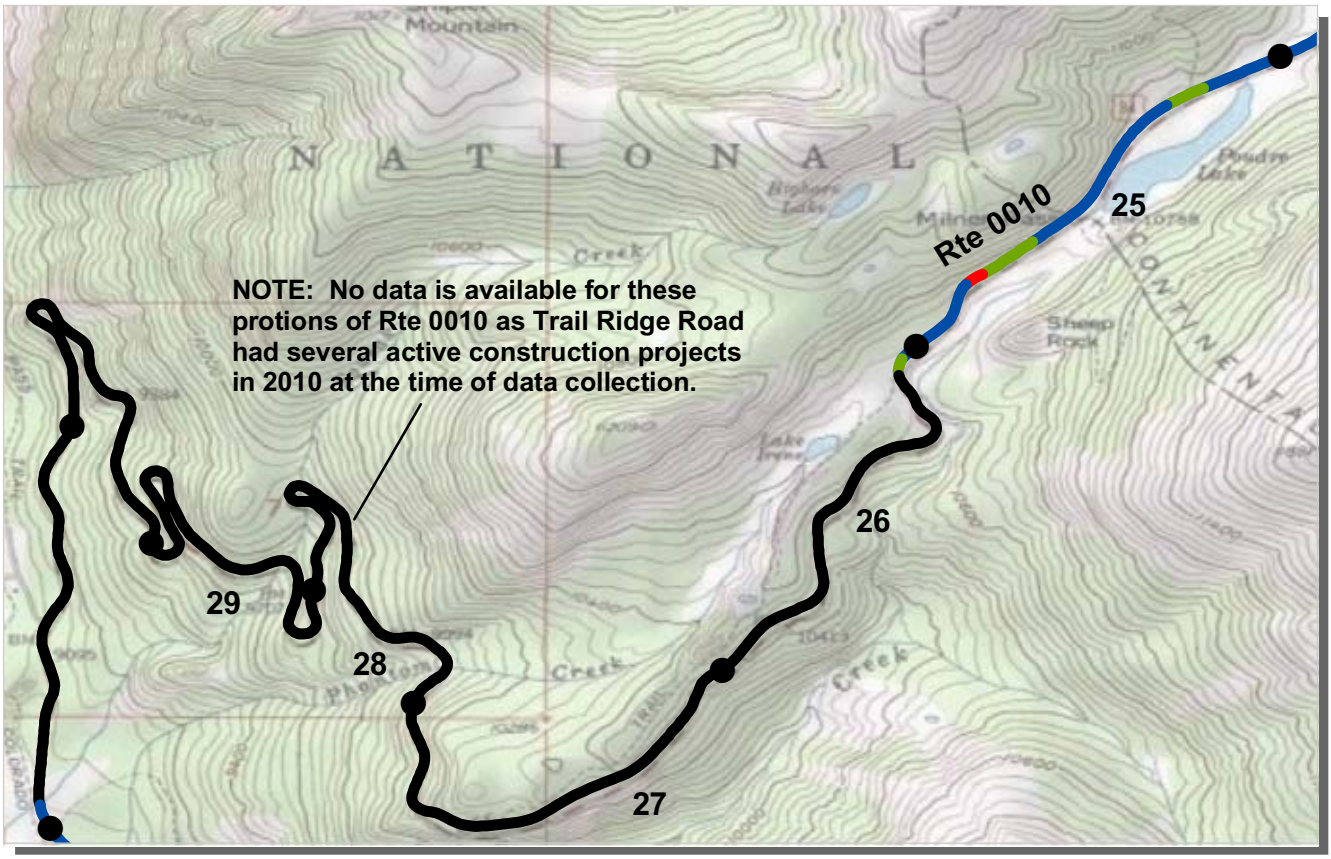
Section Number	20	21	22	23	24
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	28	28	26	27	27
Lane Width (ft)	12	12	13	13	13
Roadway Condition Information					
SCR (Surface Condition Rating)	96	96	98	99	99
PCR (Pavement Condition Rating)	84	90	93	95	94
Distress Index Values					
Structural Crack Index	97	96	100	100	100
Transverse Cracking Index	97	97	98	100	100
Patching Index	100	100	100	100	100
Rutting Index	96	98	99	99	99
Roughness Condition Index (RCI)	67	82	86	90	87

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

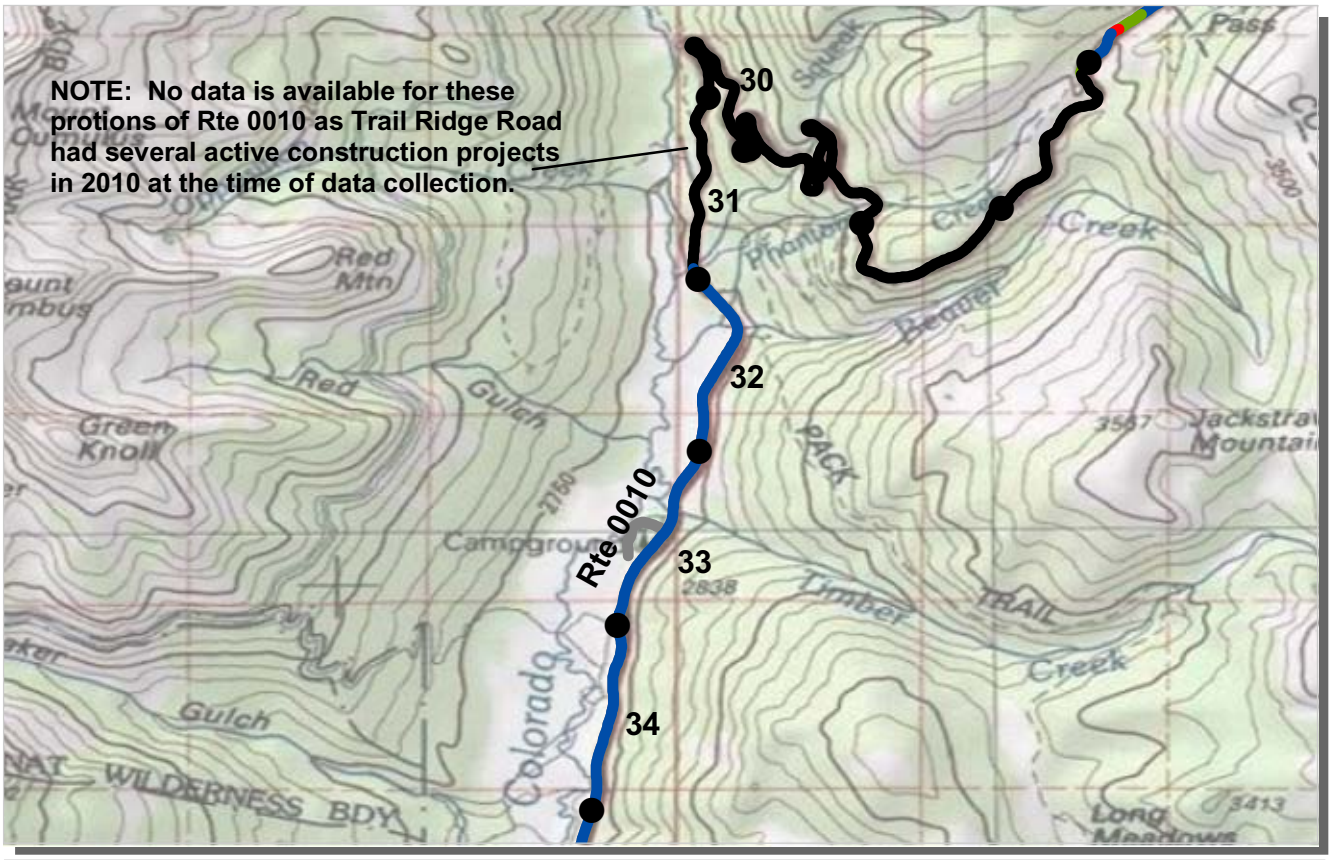
Section Number	25	26	27	28	29
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	26	27	27	27	27
Lane Width (ft)	12	12	13	12	12
Roadway Condition Information					
SCR (Surface Condition Rating)	94	NC	NC	NC	NC
PCR (Pavement Condition Rating)	94	NC	NC	NC	NC
Distress Index Values					
Structural Crack Index	100	NC	NC	NC	NC
Transverse Cracking Index	99	NC	NC	NC	NC
Patching Index	100	NC	NC	NC	NC
Rutting Index	94	NC	NC	NC	NC
Roughness Condition Index (RCI)	95	NC	NC	NC	NC

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

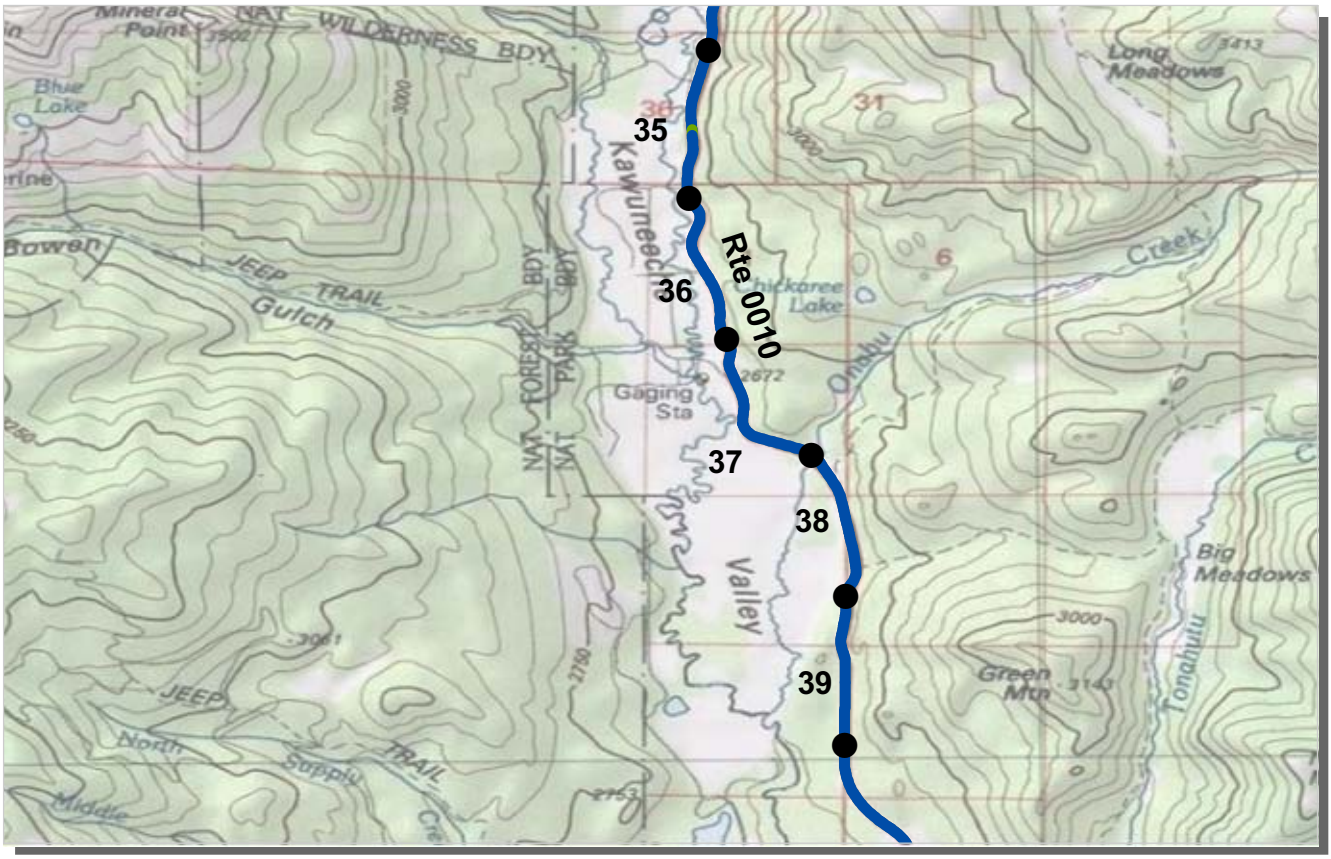
Section Number	30	31	32	33	34
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	27	30	35	36	33
Lane Width (ft)	12	13	12	13	13
Roadway Condition Information					
SCR (Surface Condition Rating)	NC	NC	100	100	100
PCR (Pavement Condition Rating)	NC	NC	100	100	100
Distress Index Values					
Structural Crack Index	NC	NC	100	100	100
Transverse Cracking Index	NC	NC	100	100	100
Patching Index	NC	NC	100	100	100
Rutting Index	NC	NC	100	100	100
Roughness Condition Index (RCI)	NC	NC	100	100	100

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

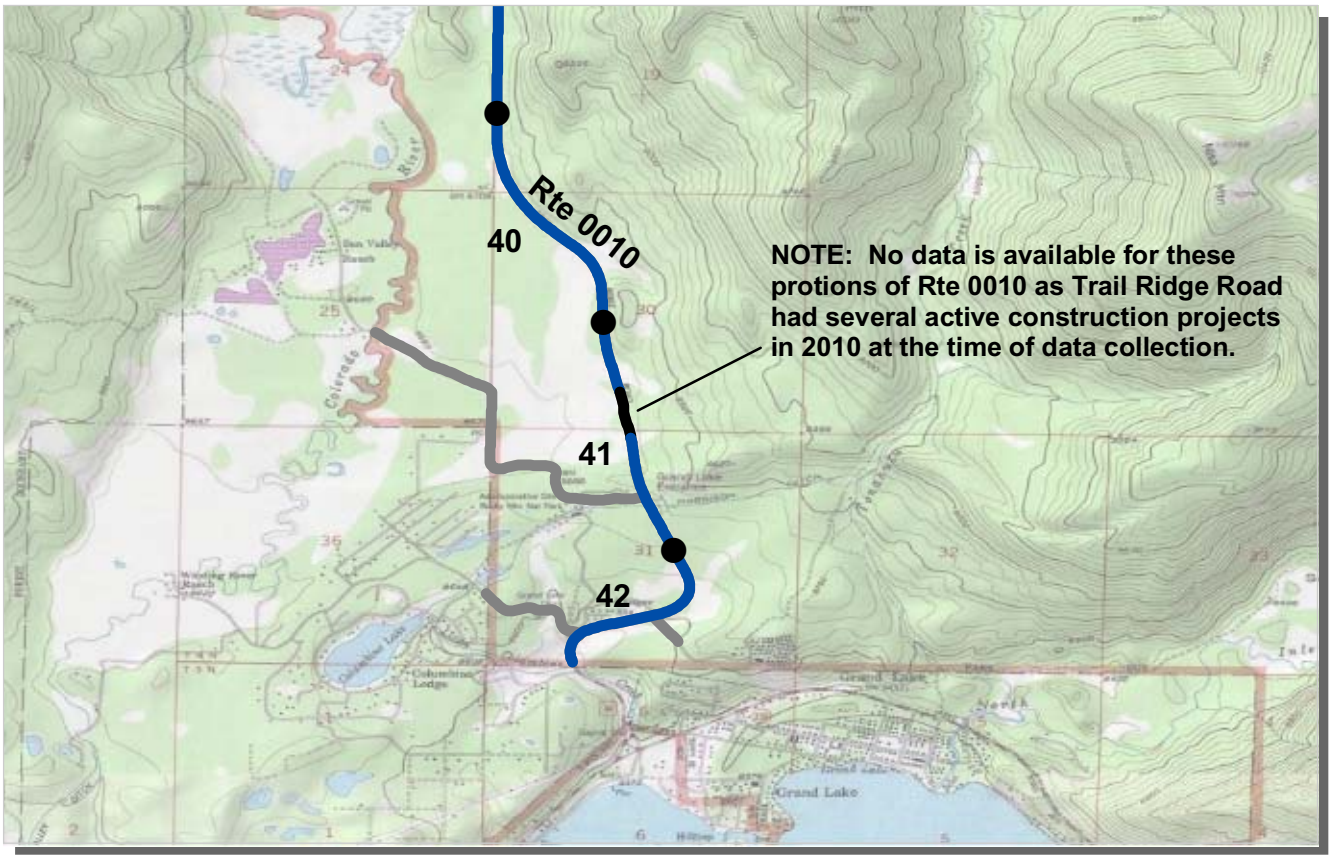
Section Number	35	36	37	38	39
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	34	34	31	33	31
Lane Width (ft)	12	13	13	12	12
Roadway Condition Information					
SCR (Surface Condition Rating)	98	100	99	99	100
PCR (Pavement Condition Rating)	99	100	99	99	100
Distress Index Values					
Structural Crack Index	98	100	99	99	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	100	100	100	100	100
Rutting Index	100	100	100	100	100
Roughness Condition Index (RCI)	100	100	100	100	100

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0010 TRAIL RIDGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 42.73 Miles**

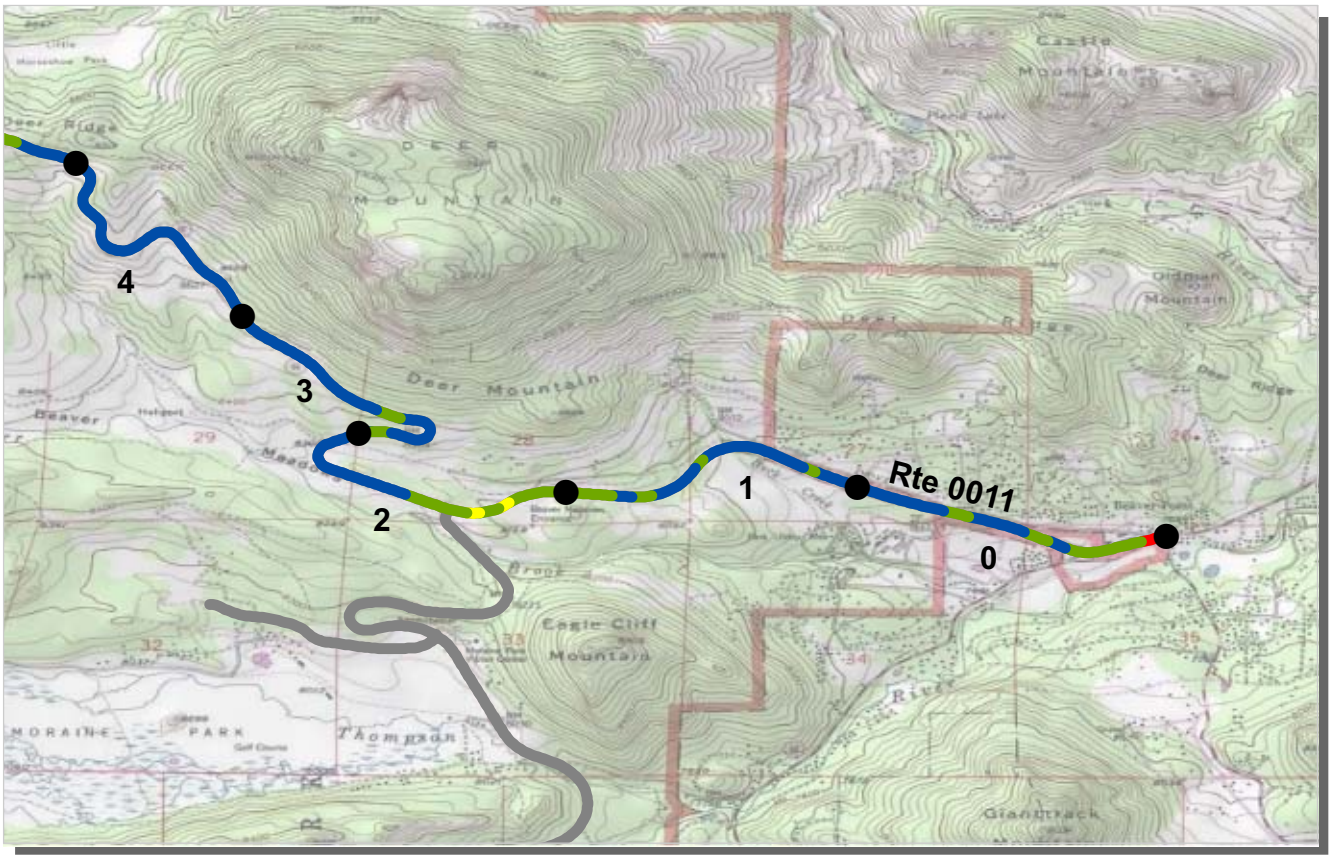
Section Number	40	41	42		
Section Length (mi)	1.00	1.00	0.73		
Cross Section Information					
Number of Lanes	2	2	2		
Paved Width (ft)	31	30	37		
Lane Width (ft)	13	12	13		
Roadway Condition Information					
SCR (Surface Condition Rating)	100	100	100		
PCR (Pavement Condition Rating)	100	100	100		
Distress Index Values					
Structural Crack Index	100	100	100		
Transverse Cracking Index	100	100	100		
Patching Index	100	100	100		
Rutting Index	100	100	100		
Roughness Condition Index (RCI)	100	100	100		

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0011 BEAVER MEADOWS ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 5.26 Miles**

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	41	31	33	24	24
Lane Width (ft)	12	12	12	11	11
Roadway Condition Information					
SCR (Surface Condition Rating)	85	94	96	98	99
PCR (Pavement Condition Rating)	90	96	93	99	99
Distress Index Values					
Structural Crack Index	85	100	98	100	100
Transverse Cracking Index	96	99	99	99	99
Patching Index	100	100	100	100	100
Rutting Index	96	94	96	98	99
Roughness Condition Index (RCI)	98	100	89	100	100

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0011 BEAVER MEADOWS ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 5.26 Miles**

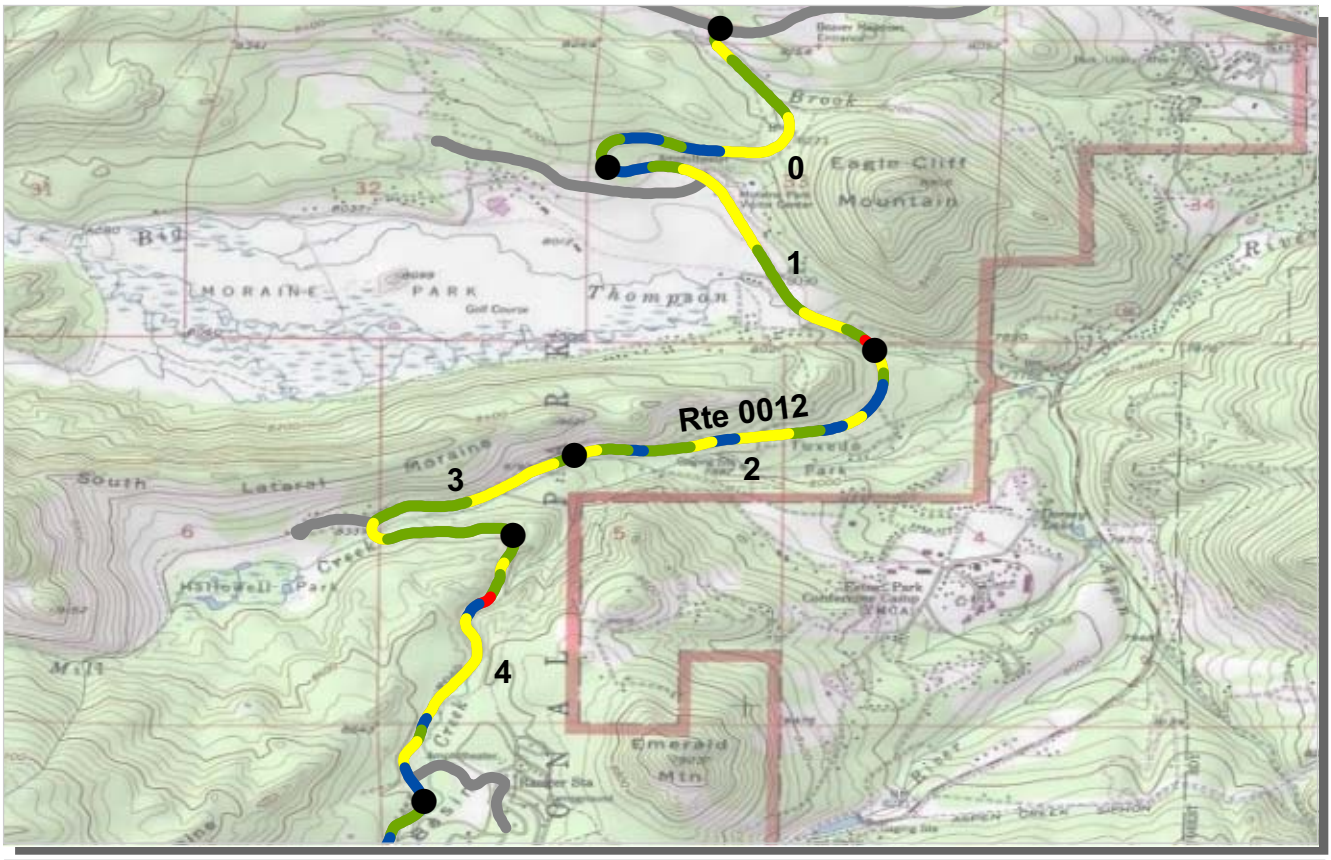
Section Number	5				
Section Length (mi)	0.26				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	34				
Lane Width (ft)	11				
Roadway Condition Information					
SCR (Surface Condition Rating)	99				
PCR (Pavement Condition Rating)	99				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	100				
Patching Index	99				
Rutting Index	99				
Roughness Condition Index (RCI)	100				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0012 BEAR LAKE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 9.10 Miles**

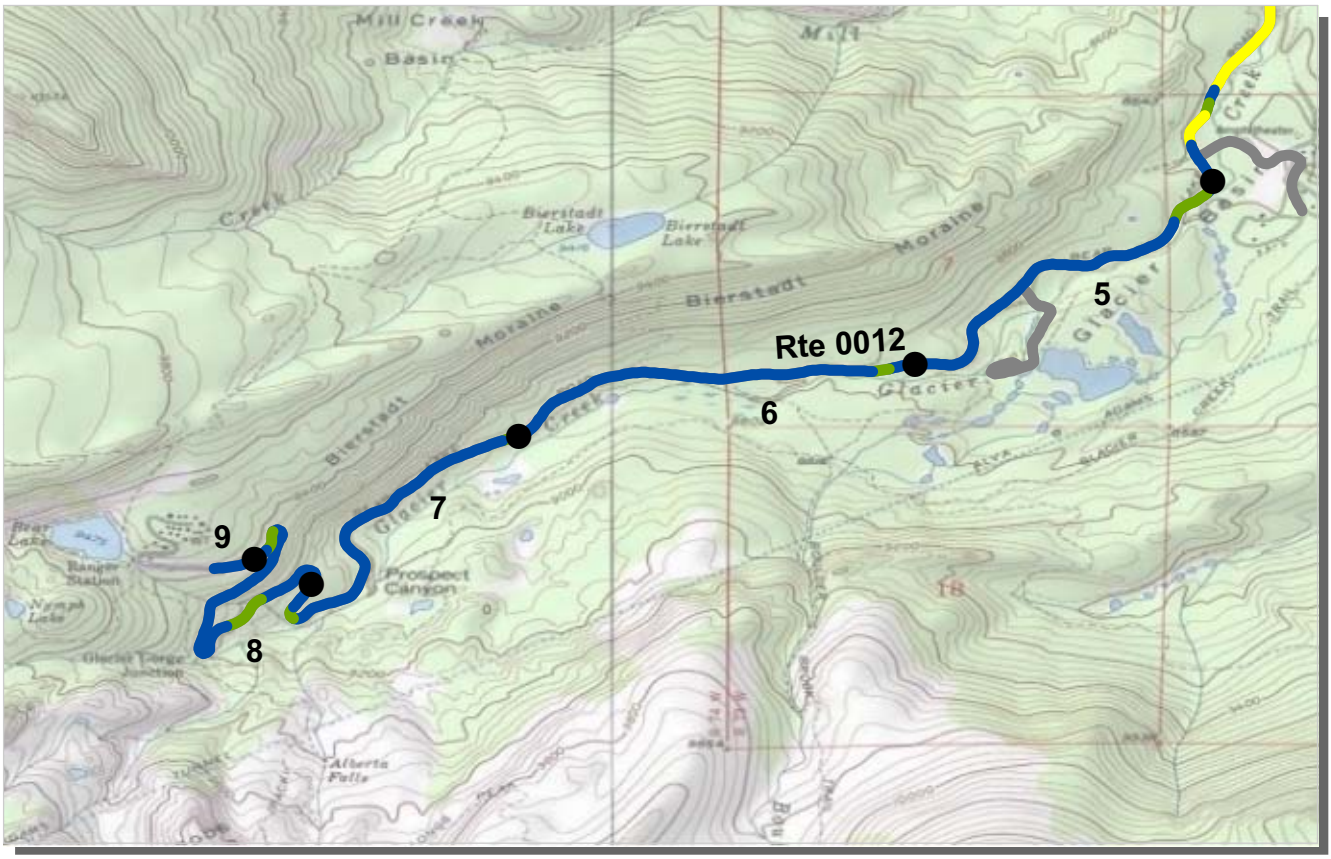
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	24	27	26	23	24
Lane Width (ft)	11	11	11	10	10
Roadway Condition Information					
SCR (Surface Condition Rating)	93	95	93	96	92
PCR (Pavement Condition Rating)	85	83	86	84	82
Distress Index Values					
Structural Crack Index	97	100	100	97	99
Transverse Cracking Index	98	98	98	98	99
Patching Index	100	100	100	100	100
Rutting Index	93	95	93	96	92
Roughness Condition Index (RCI)	72	66	76	67	66

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0012 BEAR LAKE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 9.10 Miles**

Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	0.10
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	26	24	26	27	25
Lane Width (ft)	10	10	10	11	11
Roadway Condition Information					
SCR (Surface Condition Rating)	99	99	99	99	100
PCR (Pavement Condition Rating)	99	99	99	97	100
Distress Index Values					
Structural Crack Index	100	100	100	100	100
Transverse Cracking Index	100	99	99	99	100
Patching Index	100	100	100	100	100
Rutting Index	99	100	100	100	100
Roughness Condition Index (RCI)	100	100	98	95	99

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0100 ENDOVALLEY ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 1.87 Miles**

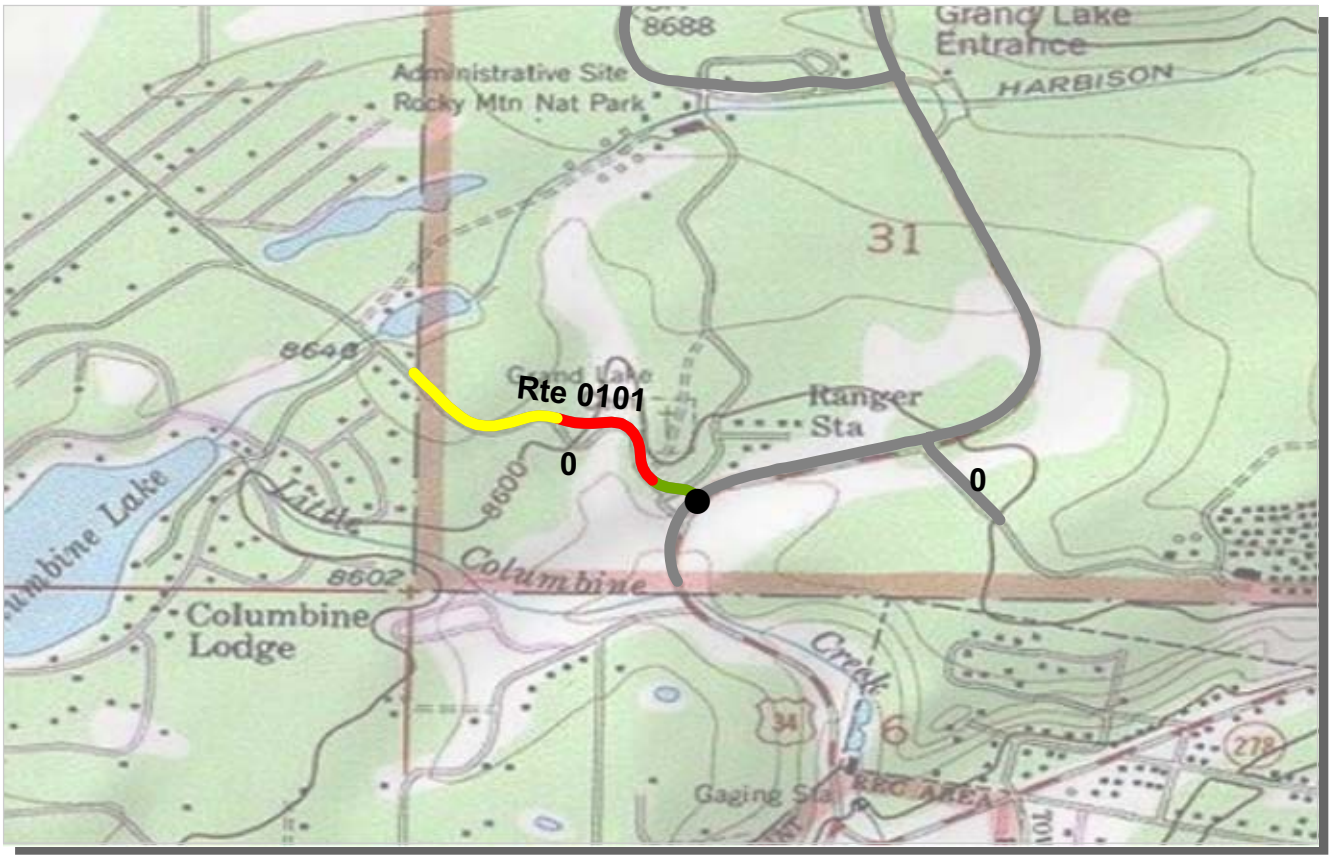
Section Number	0	1			
Section Length (mi)	1.00	0.87			
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	21	21			
Lane Width (ft)	11	10			
Roadway Condition Information					
SCR (Surface Condition Rating)	89	87			
PCR (Pavement Condition Rating)	75	70			
Distress Index Values					
Structural Crack Index	97	88			
Transverse Cracking Index	95	95			
Patching Index	100	100			
Rutting Index	89	87			
Roughness Condition Index (RCI)	55	45			

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

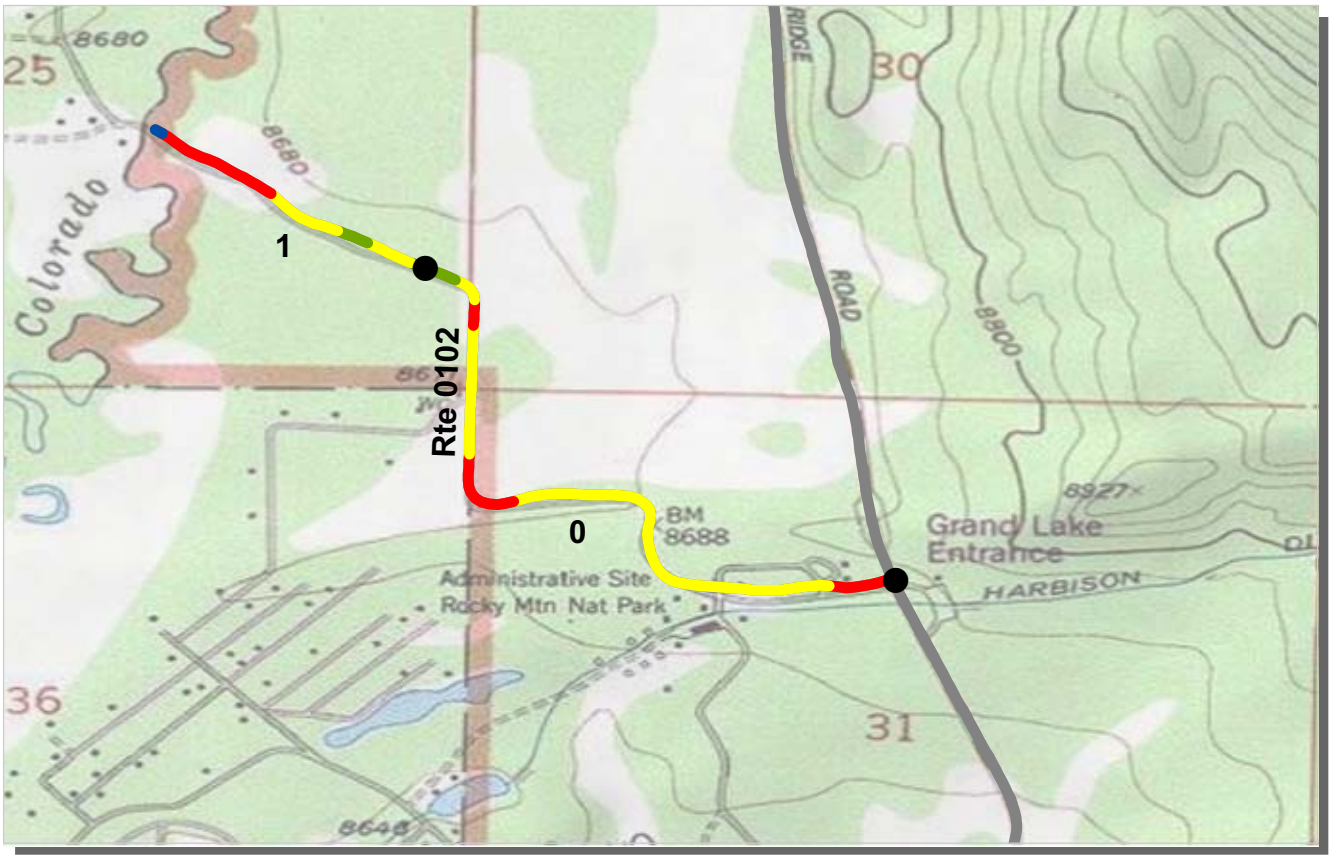
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0101 CONNECTOR ROAD TO COUNTY ROAD 49 (WESTERN ROAD)
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.41 Miles**

Section Number	0				
Section Length (mi)	0.41				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	23				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	54				
PCR (Pavement Condition Rating)	54				
Distress Index Values					
Structural Crack Index	54				
Transverse Cracking Index	79				
Patching Index	99				
Rutting Index	92				
Roughness Condition Index (RCI)	NC				

NOTES:
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.
See Section 10 for explanation of SCR, PCR, & all Distress Index Values.
NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0102 WINDING RIVER ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 1.39 Miles**

Section Number	0	1			
Section Length (mi)	1.00	0.39			
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	20	19			
Lane Width (ft)	11	10			
Roadway Condition Information					
SCR (Surface Condition Rating)	82	48			
PCR (Pavement Condition Rating)	68	53			
Distress Index Values					
Structural Crack Index	82	48			
Transverse Cracking Index	96	99			
Patching Index	99	99			
Rutting Index	85	86			
Roughness Condition Index (RCI)	46	60			

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0104 LUMPY RIDGE ACCESS ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.22 Miles**

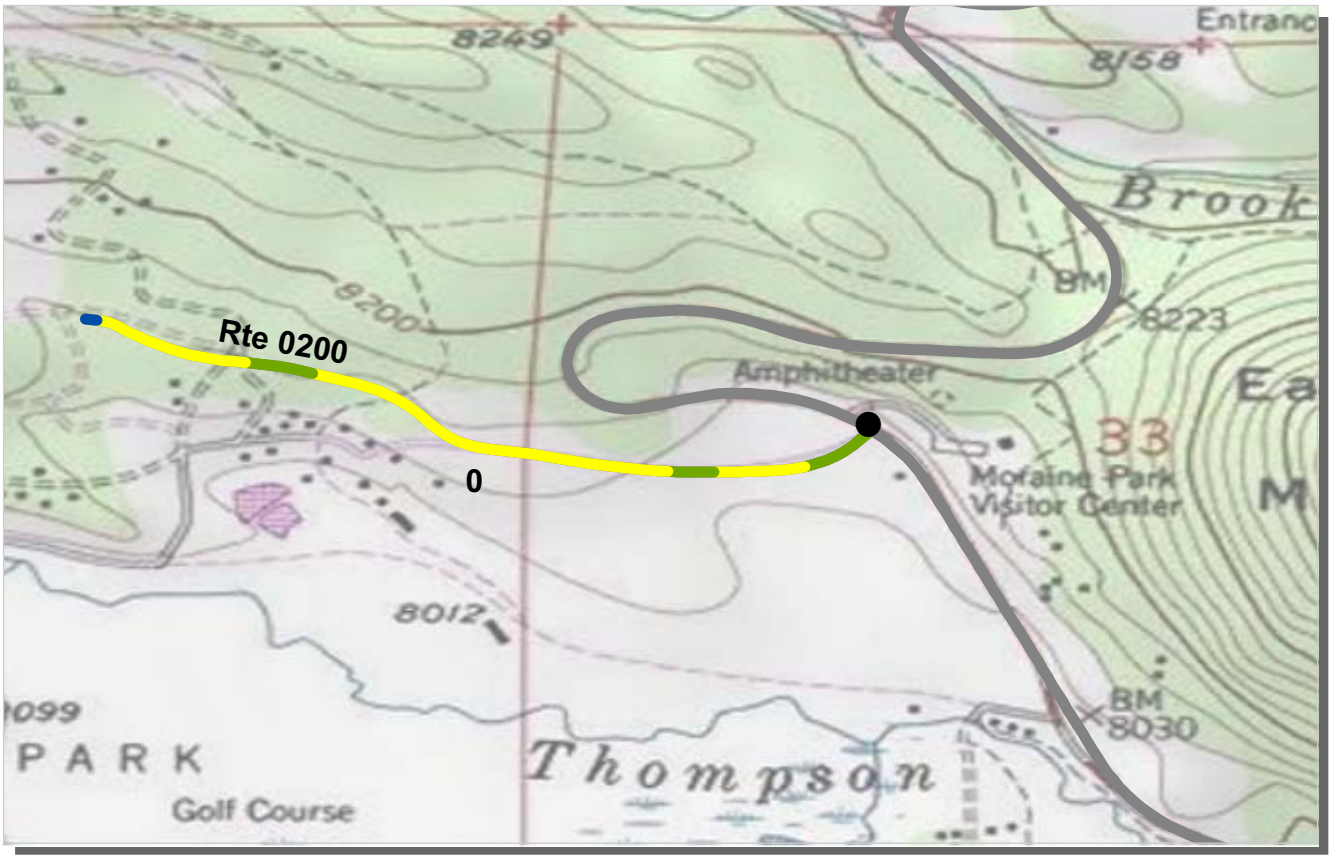
Section Number	0				
Section Length (mi)	0.22				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	96				
PCR (Pavement Condition Rating)	96				
Distress Index Values					
Structural Crack Index	96				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	99				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0200 MORAINE PARK CAMPGROUND ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.75 Miles**

Section Number	0				
Section Length (mi)	0.75				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	23				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	88				
PCR (Pavement Condition Rating)	80				
Distress Index Values					
Structural Crack Index	96				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	88				
Roughness Condition Index (RCI)	67				

NOTES:
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.
See Section 10 for explanation of SCR, PCR, & all Distress Index Values.
NC - Not Collected N/A - Non Applicable

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

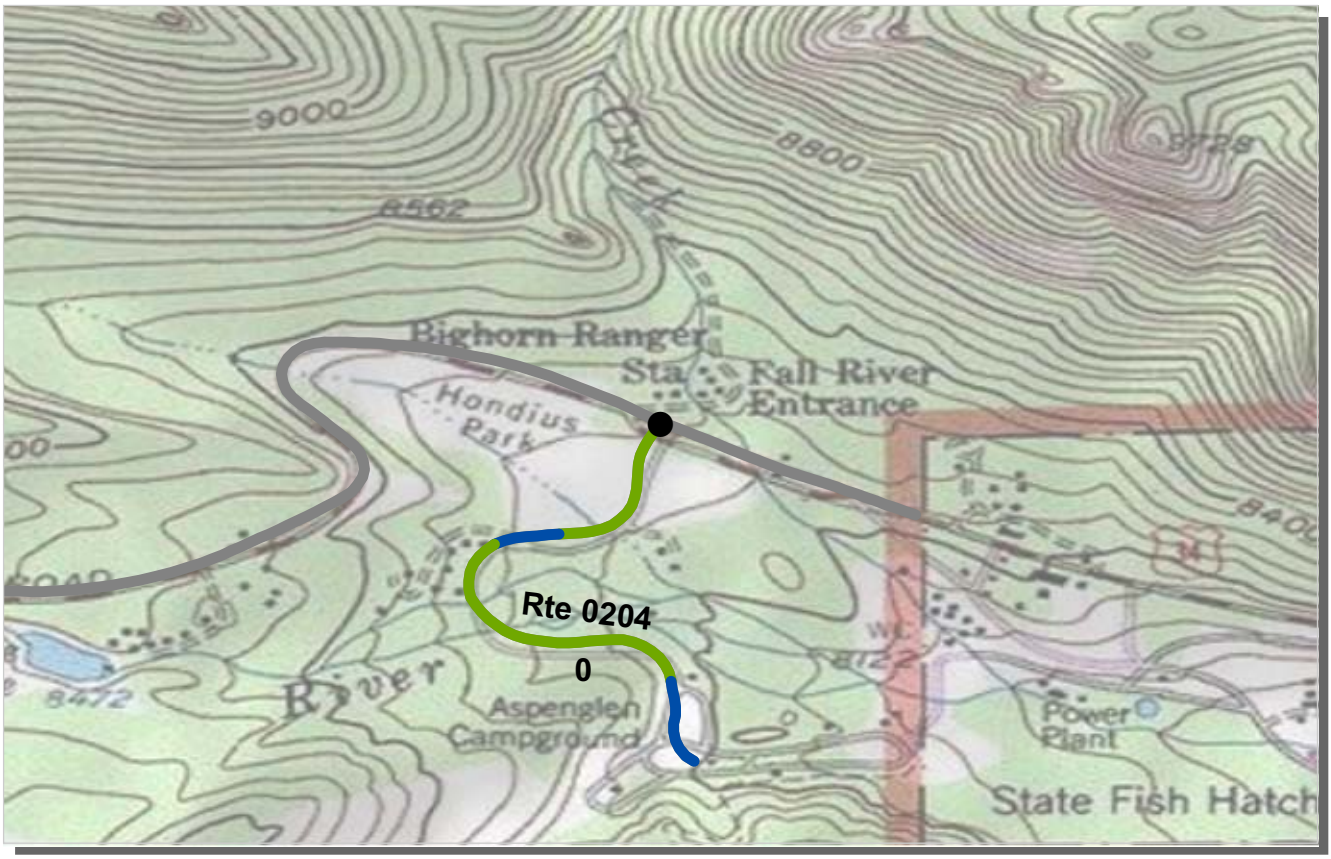
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0202 GLACIER BASIN CAMPGROUND ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.46 Miles**

Section Number	0				
Section Length (mi)	0.46				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	11				
Roadway Condition Information					
SCR (Surface Condition Rating)	97				
PCR (Pavement Condition Rating)	97				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	97				
Roughness Condition Index (RCI)	NC				

NOTES:
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.
See Section 10 for explanation of SCR, PCR, & all Distress Index Values.
NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0204 ASPENGLEN CAMPGROUND ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.64 Miles**

Section Number	0				
Section Length (mi)	0.64				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	11				
Roadway Condition Information					
SCR (Surface Condition Rating)	93				
PCR (Pavement Condition Rating)	93				
Distress Index Values					
Structural Crack Index	96				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	93				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0205 TIMBER CREEK CAMPGROUND ENTRANCE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.32 Miles**

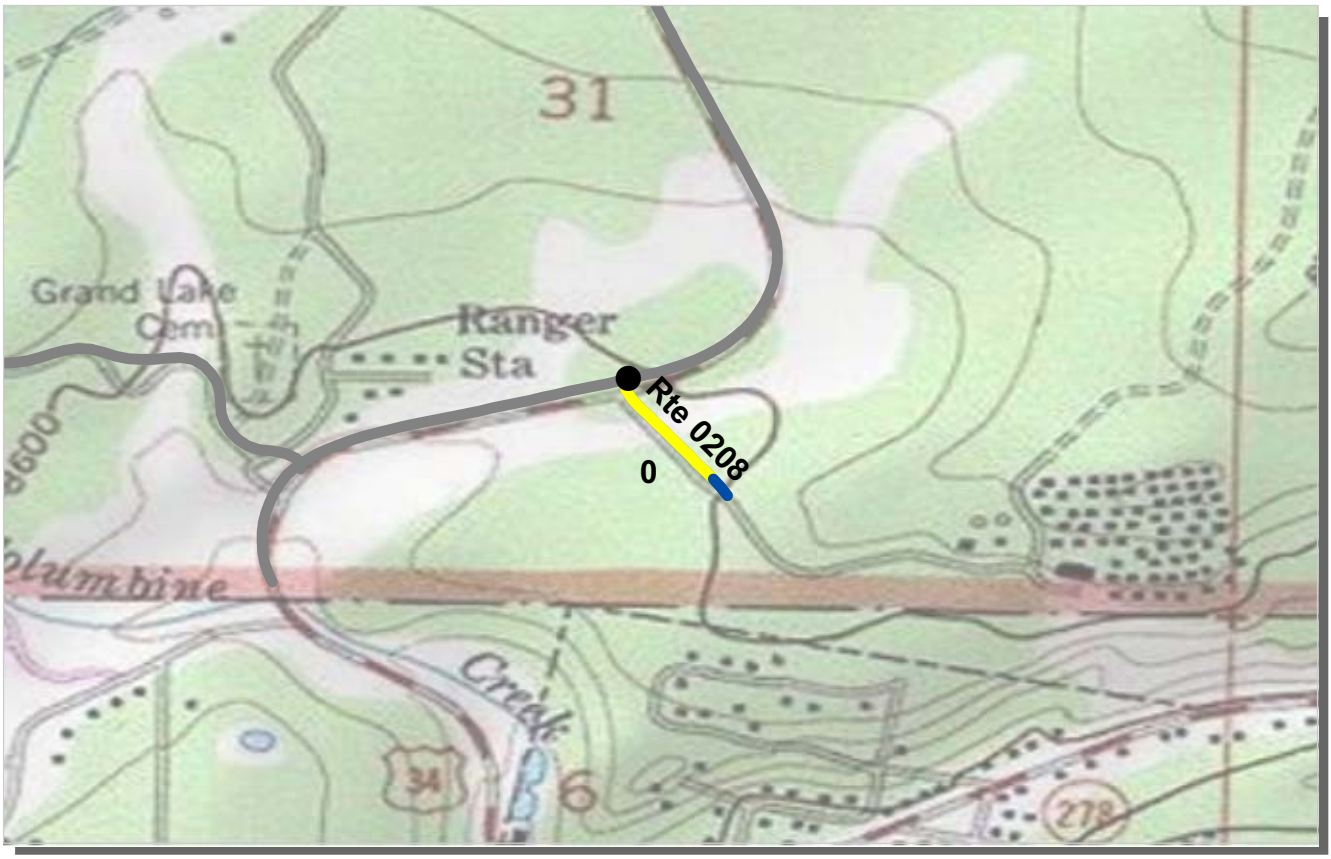
Section Number	0				
Section Length (mi)	0.32				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	20				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement Condition Rating)	100				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0208 GRAND LAKE LODGE ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.14 Miles**

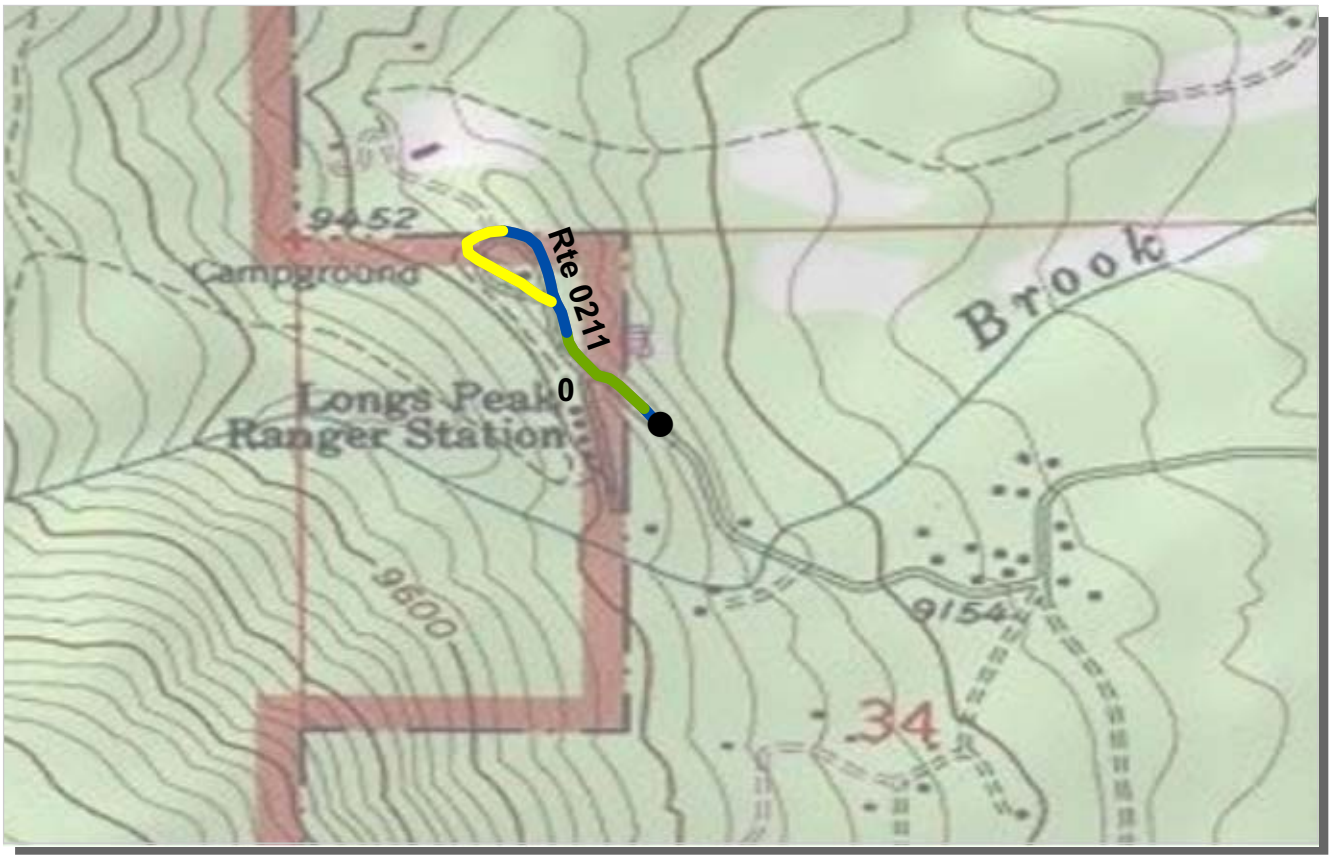
Section Number	0				
Section Length (mi)	0.14				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	20				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	83				
PCR (Pavement Condition Rating)	83				
Distress Index Values					
Structural Crack Index	83				
Transverse Cracking Index	91				
Patching Index	100				
Rutting Index	99				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable



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

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

ROUTE: 0211 LONGS PEAK CAMPGROUND ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/15/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.36 Miles**

Section Number	0				
Section Length (mi)	0.36				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	18				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	89				
PCR (Pavement Condition Rating)	89				
Distress Index Values					
Structural Crack Index	89				
Transverse Cracking Index	95				
Patching Index	100				
Rutting Index	92				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0214 HALLOWELL PARK ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.26 Miles**

Section Number	0				
Section Length (mi)	0.26				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	17				
Lane Width (ft)	10				
Roadway Condition Information					
SCR (Surface Condition Rating)	89				
PCR (Pavement Condition Rating)	89				
Distress Index Values					
Structural Crack Index	96				
Transverse Cracking Index	95				
Patching Index	100				
Rutting Index	89				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0218 SPRAGUE LAKE PICNIC AREA ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010
INTERMOUNTAIN REGION **TOTAL LENGTH: 0.46 Miles**

Section Number	0				
Section Length (mi)	0.46				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	20				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	96				
PCR (Pavement Condition Rating)	96				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	96				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

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

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

ROUTE: 0220 HIDDEN VALLEY ACCESS ROAD
ROMO : ROCKY MOUNTAIN NATIONAL PARK

COLLECTED: 6/14/2010

INTERMOUNTAIN REGION **TOTAL LENGTH: 0.26 Miles**

Section Number	0				
Section Length (mi)	0.26				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	12				
Roadway Condition Information					
SCR (Surface Condition Rating)	98				
PCR (Pavement Condition Rating)	98				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	98				
Roughness Condition Index (RCI)	NC				

NOTES:

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

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

NC - Not Collected N/A - Non Applicable

Section 6
Manually Rated Paved Route Condition Rating Sheets

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

MANUALLY RATED ROUTE CONDITION RATING SHEETS

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

Section 7
Parking Area
Condition Rating Sheets

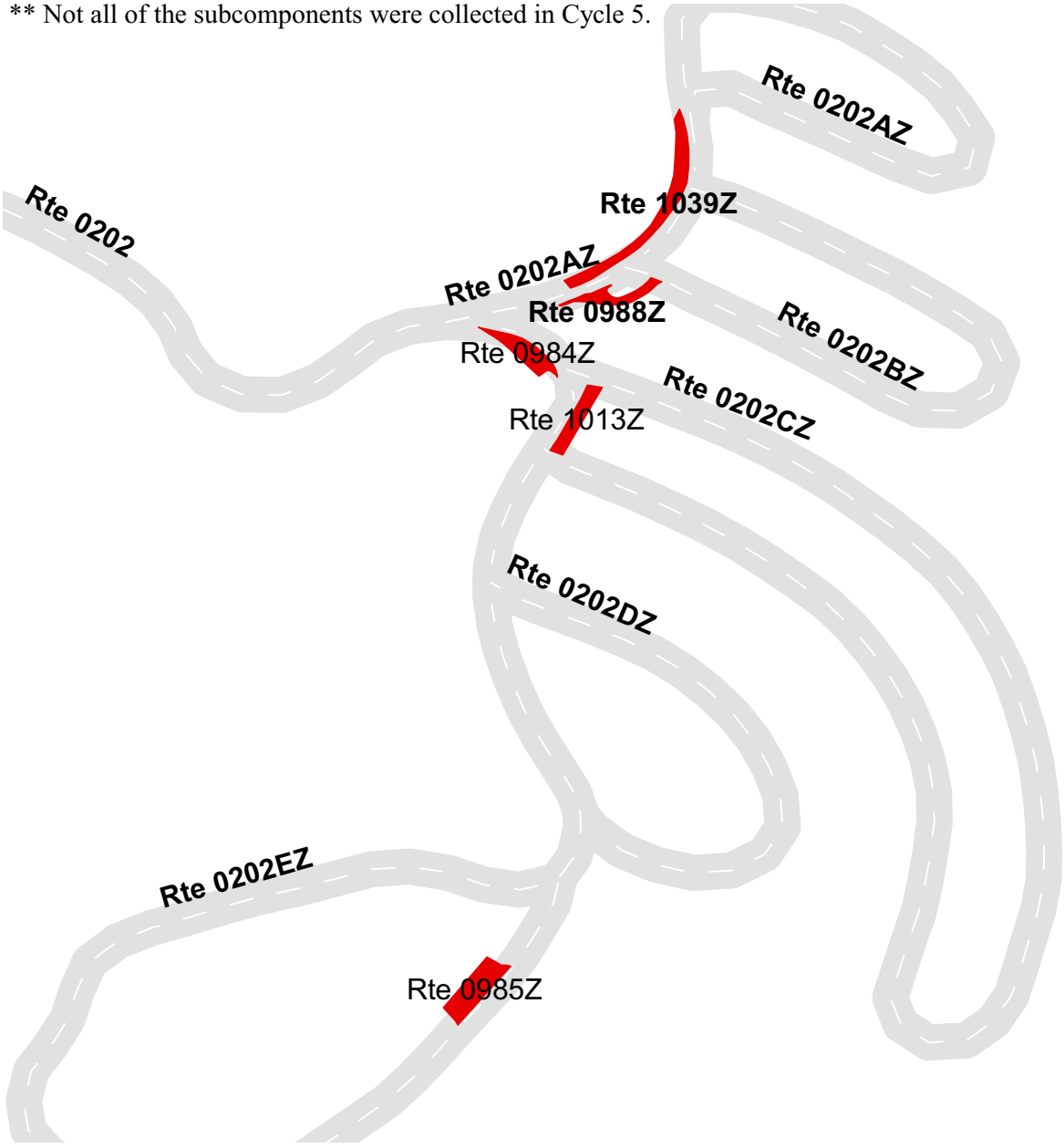
Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

ROCKY MOUNTAIN NATIONAL PARK
Route 0984ZZ
GLACIER BASIN CAMPGROUND PARKING AREAS
ADJACENT TO ROUTE 0202 (GLACIER BASIN CAMPGROUND ROAD)
AND ROUTE 0202ZZ (GLACIER BASIN CAMPGROUND LOOPS)
Summary Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0984ZZ	PUBLIC	6/14/2010	16,959	0.29	AS
Culverts	**Drop Inlets**	**Gates**	**Curb & Gutter**	**Curb**	**PCR**
NC**	NC**	NC**	N/A	N/A	NC**

* Lane miles are based on 11' lane widths
** Not all of the subcomponents were collected in Cycle 5.



ROCKY MOUNTAIN NATIONAL PARK
Route 0988Z
GLACIER BASIN CAMPGROUND BUS LOOP

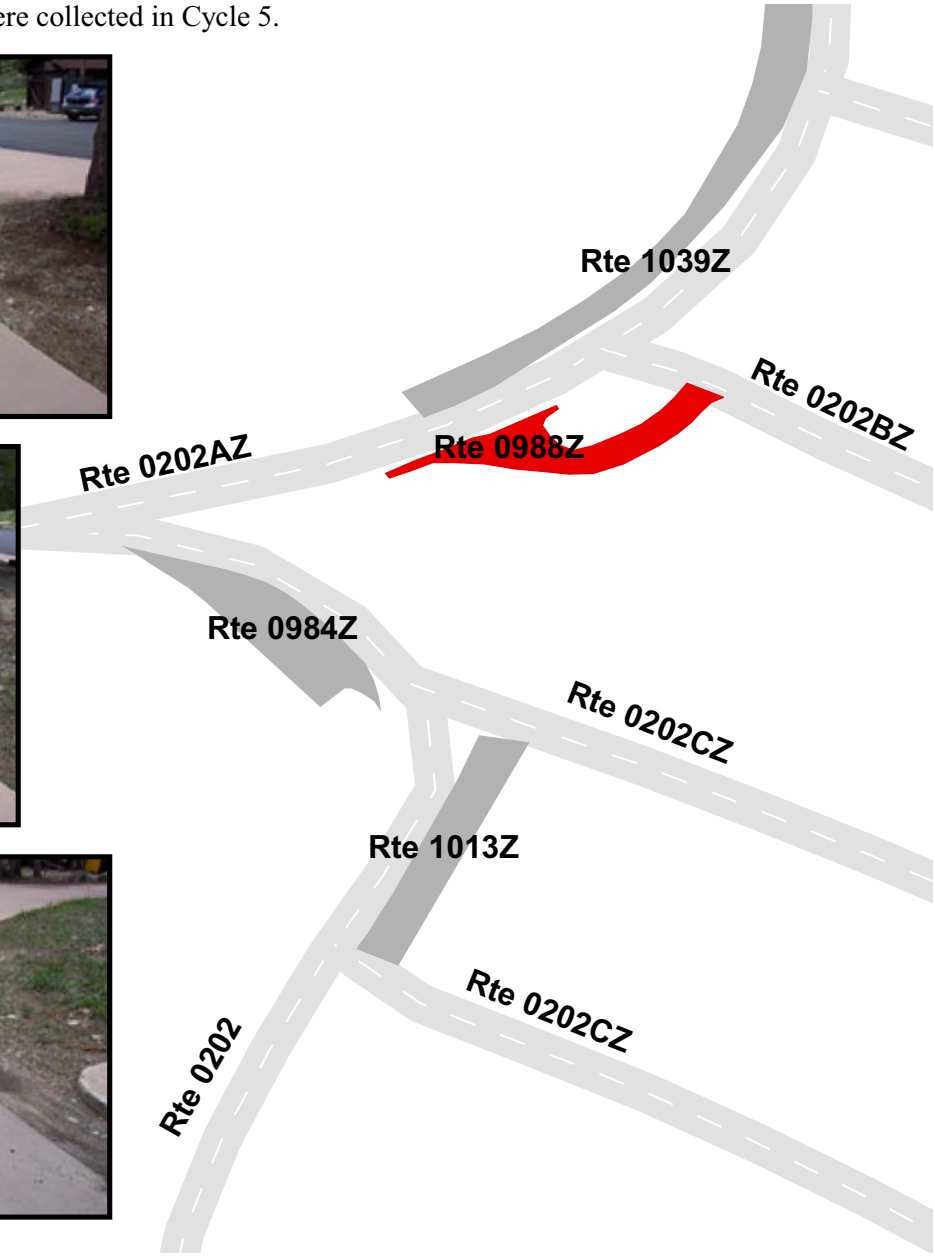
FROM ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A) AT MP 0.0 ON RIGHT
TO ROUTE 0202BZ (GLACIER BASIN CAMPGROUND LOOP B) AT MP 0.01

Subcomponent Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0988Z	PUBLIC	6/14/2010	2,118	0.04	CO
Culverts	**Drop Inlets**	**Gates**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

** Not all of the subcomponents were collected in Cycle 5.



225 112.5 0 225 Feet

N

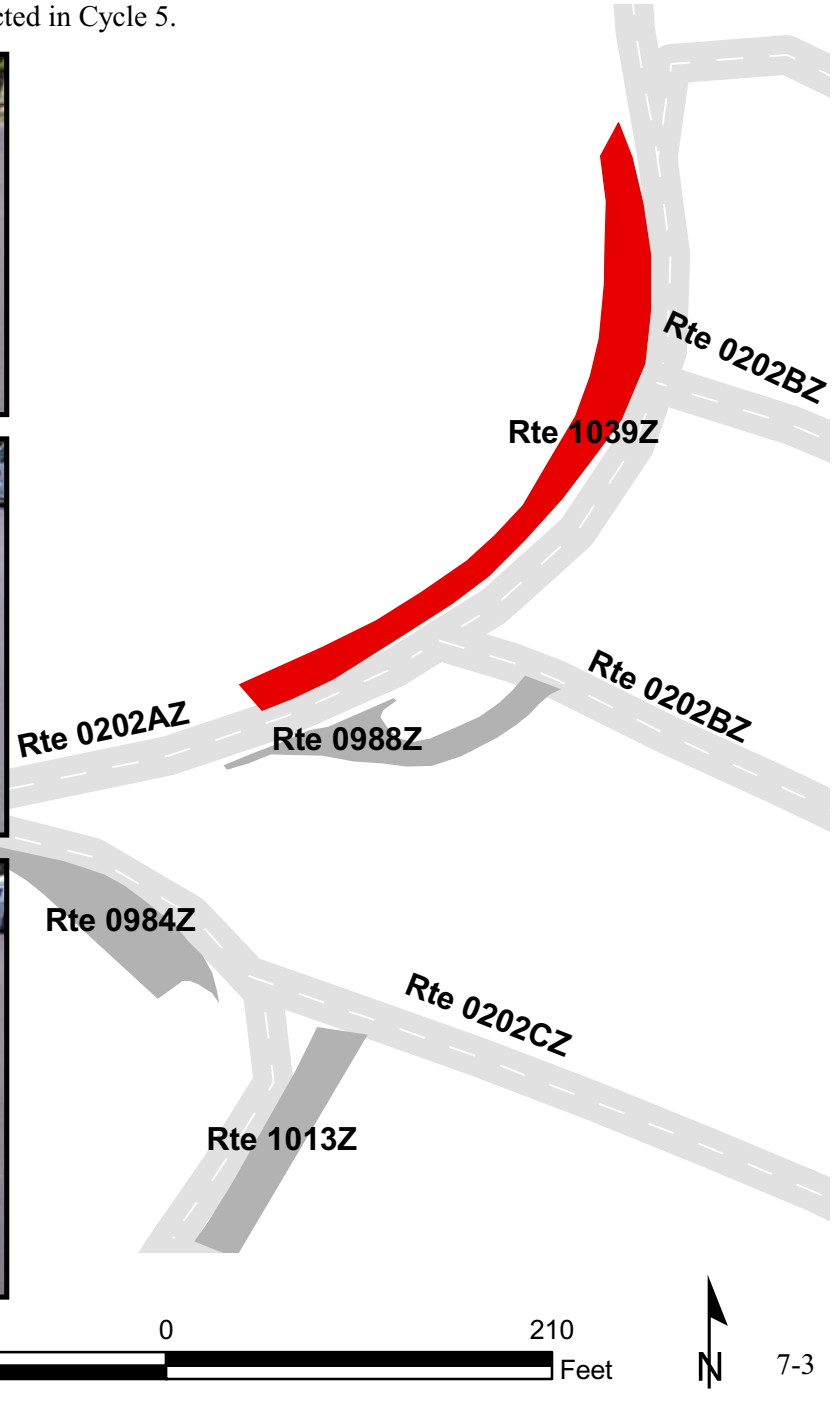
ROCKY MOUNTAIN NATIONAL PARK
Route 1039Z
GLACIER BASIN AMPHITHEATER PARKING
ADJACENT TO ROUTE 0202AZ (GLACIER BASIN CAMPGROUND LOOP A)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
1039Z	PUBLIC	6/14/2010	5,703	0.10	AS
Culverts	**Drop Inlets**	**Gates**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	NO CURB AND GUTTER	WOOD CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

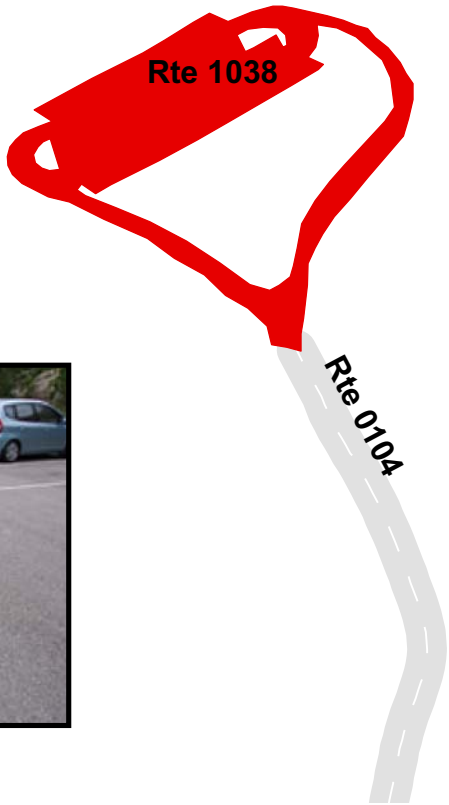
** Not all of the subcomponents were collected in Cycle 5.



ROCKY MOUNTAIN NATIONAL PARK
Route 1038
LUMPY RIDGE PARKING AREA
FROM END OF ROUTE 0104 (LUMPY RIDGE ACCESS ROAD)
TO PARKING

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
1038	PUBLIC	6/14/2010	41,465	0.71	AS
Culverts	**Drop Inlets**	**Gates**	**Curb & Gutter**	**Curb**	**PCR**
1	2	0	CONCRETE CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths
** Not all of the subcomponents were collected in Cycle 5.



410 205 0 410
Feet

N

Section 8
Route Maintenance Features Summaries

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

ROMO: DCV ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0104 LUMPY RIDGE ACCESS ROAD		UNIT
BARRIER	0		LINEAR FEET
BOLLARD	0		LINEAR FEET
BRIDGE	0		EACH
CABLE	0		LINEAR FEET
CATTLE GUARD	0		EACH
CULVERT	0		EACH
CURB	0		LINEAR FEET
DROP INLET	0		EACH
GATE	0		EACH
GUARD/GUIDE RAIL	0		LINEAR FEET
GUARD/GUIDE WALL	0		LINEAR FEET
INTERSECTION	3		EACH
LOW WATER CROSSING	0		EACH
LOW WATER CROSSING	0		LINEAR FEET
MILE MARKER	0		EACH
OVERHEAD SIGN	0		EACH
OVERPASS	0		EACH
PARK BOUNDARY	0		EACH
PAVED DITCH	0		LINEAR FEET
PULLOUT	0		EACH
PULLOUT	0		LINEAR FEET
RAILROAD CROSSING	0		EACH
RETAINING WALL	0		EACH
RETAINING WALL	0		LINEAR FEET
SIGN	10		EACH
STATE BOUNDARY	0		EACH
TEMPORARY BARRIER	0		LINEAR FEET
TRAFFIC LIGHT	0		EACH
TUNNEL	0		EACH
TUNNEL	0		LINEAR FEET

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

STRUCTURE LIST

No data available for this section.

Section 9
Route Maintenance Features
Road Logs

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

ROMO: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0104: LUMPY RIDGE ACCESS ROAD

Route 0104 is the only new route that was collected RIP Cycle-5 and so is the only route for which maintenance features were inventoried.

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

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM COUNTY ROAD 43 (DEVILS GULCH ROAD)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (DEVILS GULCH ROAD / CO ROAD 43)
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (DEVILS GULCH ROAD / CO ROAD 43)
0.008	0.008	SIGN	LEFT	REGULATORY, STOP
0.008	0.008	SIGN	LEFT	GUIDE, LUMPY RIDGE RD
0.022	0.022	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.086	0.086	SIGN	RIGHT	REGULATORY, NO PARKING PRIVATE DRIVE
0.086	0.086	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN NO TEXT
0.090	0.090	SIGN	LEFT	REGULATORY, NO PARKING PRIVATE DRIVE
0.090	0.090	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.117	0.117	SIGN	LEFT	REGULATORY, NO PARKING PRIVATE DRIVE
0.117	0.117	SIGN	LEFT	REGULATORY, GRAPHIC SIGN NO TEXT
0.215	0.215	SIGN	RIGHT	REGULATORY, KEEP RIGHT
0.216	0.216	INTERSECTION	N/A	ROUTE 1038 (LUMPY RIDGE PARKING AREA)
0.216	0.216	ROUTE END	N/A	TO ROUTE 1038 (LUMPY RIDGE PARKING AREA)

Section 10
Appendix

Rocky Mountain National Park

Federal Lands Highway
Road Inventory Program

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

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

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

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

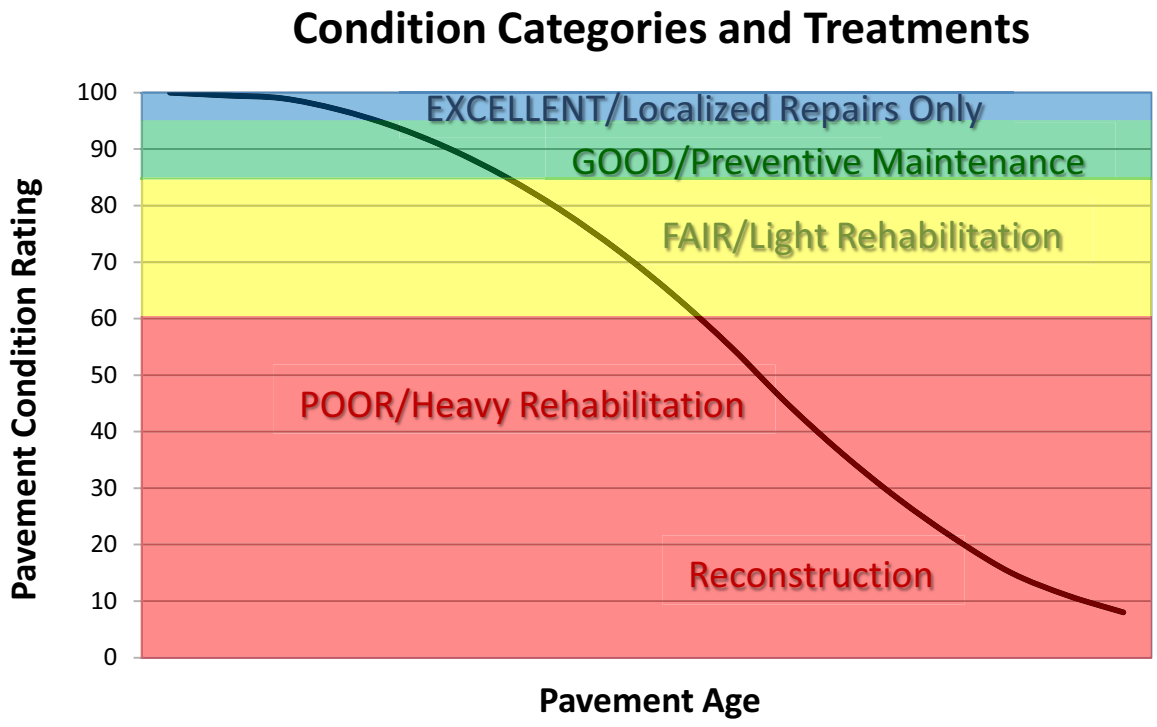
The changes that were implemented were endorsed by management at both the FHWA and NPS. In order to show the effectiveness of these changes, several sites were ground truth tested to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation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

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

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

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

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



DESCRIPTION OF RATING SYSTEM

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

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

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

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

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

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

SURFACE DISTRESSES

Surface Condition Rating - SCR

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

Surface distresses determined from digital images

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

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

- Rutting

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

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

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

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

Roughness Condition Index - RCI

Additional condition data measured by DCV (lasers and accelerometers)

- Roughness (IRI)

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

Pavement Condition Rating - PCR

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

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

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

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

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

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

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

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

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

TABLE 1: Distress Summary

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

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

ALLIGATOR CRACKING

Description

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

Severity Levels

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

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

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

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

TABLE 2: Alligator Crack Severity Levels

ALLIGATOR CRACKING SEVERITY LEVELS		Crack Pattern		
		LOW	**MED**	**HIGH**
Crack Width	**LOW**	L	M	H
	MED	M	M	H
	HI	H	H	H

LONGITUDINAL CRACKING

Description

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

Severity Levels

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

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

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

TRANSVERSE CRACKING

Description

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

Severity Levels

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

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

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

PATCHING AND POTHOLES

Description

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

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

Severity Levels

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

RUTTING

Description

Rutting is a longitudinal surface depression in the wheelpath.

Severity Levels

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

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

HIGH
Ruts with a measured depth ≥ 1.00"

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

ROUGHNESS

Description

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

Severity Levels

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

TABLE 3: IRI

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

INDEX FORMULAS

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

Alligator Crack Index

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

Where:

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

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

Percent of total area is computed as:

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

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 ≥ 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:

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

In LC_INDEX, the denominators 175, 75, and 25 are the Maximum Allowable Extents (MAE) for each severity. In other words, we will allow up to 175% of low severity alligator cracking for a 0.02 interval before failure, 75% for medium severity, and so on. As you can see, if any single severity reaches MAE the resulting index value is 60, or failure.

Structural Crack Index

SC_INDEX = [100 - ((100 - AC_INDEX) + (100 - LC_INDEX))]

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

Transverse Crack Index

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

Where:

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

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

Number of cracks is computed as:

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

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.

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

Rutting Index

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

Where:

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

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

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

$$\frac{\text{total number of ruts within each severity in both wheelpaths}}{20} * 100$$

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

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

Roughness Condition Index (Asphalt)

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

Where:

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

Average IRI is computed as:

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

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

CAMERAS

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

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

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

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

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

DMI (Distance Measuring Instrument)

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

ROUGHNESS (IRI)

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

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

RUTTING

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

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

GPS & INERTIAL SYSTEMS

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

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

GPS on Manually Rated Roads (MRR)

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

Geodatabase – Background and Metadata

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

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

GLOSSARY OF TERMS AND ABBREVIATIONS

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
AC	Alligator Cracking
CRS	Condition Rating Sheets (Section 5)
DCV	Data Collection Vehicle
Excellent	Excellent rating with an index value of 95 to 100
Fair	Fair rating with an index value from 61 to 84
FUNCT_CLASS	Functional Classification (see Route ID, Section 2)
Good	Good rating with an index value from 85 to 94
IRI	International Roughness Index
Lane Width	Width from road centerline to fogline, or from centerline to edge-of-pavement when no fogline exists
LC	Longitudinal Cracking
MRR	Manually Rated Route
MRL	Manually Rated Line
MRP	Manually Rated Polygon
N/A	Not Applicable
NC	Not Collected
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