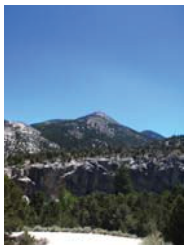
national park service

The Road Inventory
of
Great Basin National Park
GRBA – 8420
Cycle 4

Prepared By:
Federal Highway Administration
Road Inventory Program
Cycle 4

Great Basin National Park
in
Nevada



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Great Basin National Park

Section 1
Introduction

INTRODUCTION

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

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

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

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

Since 1984, the RIP Program has been funded through the Federal Lands Highway Program's Park Roads and Parkways (PRP) Program. Currently, the NPS Washington Headquarters' Park Facility Management Division is responsible for coordinating the RIP program with the FLH. The FLH Washington office coordinates policy and prepares national reports and needs assessment studies for congress.

In 1998, the Transportation Equity Act for the 21st Century (TEA-21) amended Title 23 U.S.C., and inserted Section 204(a)(6) which requires the Federal Highway Administration and the National Park Service, to develop, by rule, a Pavement Management System (PMS) for the park roads and parkways serving the National Park System. As a result of the requirements in TEA-21, the NPS and FHWA are in the process of developing a PMS. The PMS will assist the decision-makers in effectively spending limited PRP Program funds. The PMS

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

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

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

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

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

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

The FHWA RIP Team

FHWA/EFL HD
21400 Ridgetop Circle
Sterling, VA 20166
(703) 404-6371

FHWA/CFL HD
12300 West Dakota Ave.
Lakewood, CO 80228
(720) 963-3560

Great Basin National Park

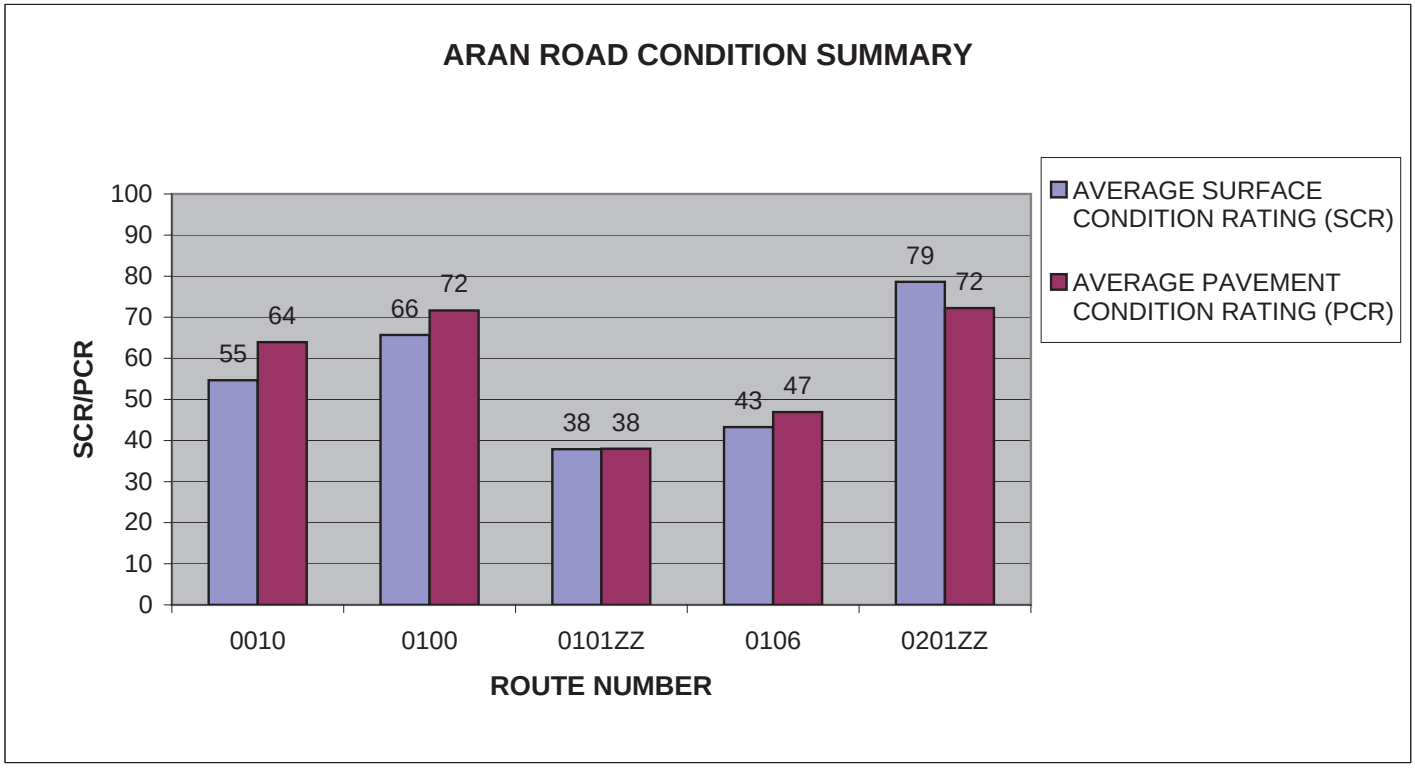
Section 2
Park Summary Information

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

F.C.	Pavement Condition Rating (PCR)								TOTAL MILES
	Poor (<=60)		Fair (61-84)		Good (85-94)		Excellent (95-100)		
	MILES	%	MILES	%	MILES	%	MILES	%	
1	0.16	1.06%	0.55	3.65%					**0.71**
2	2.46	16.31%	7.53	49.93%	1.70	11.27%	0.28	1.86%	**11.97**
3	0.87	5.77%	0.77	5.11%	0.29	1.92%	0.10	0.66%	**2.03**
4									
5									
6	0.36	2.39%	0.01	0.07%					**0.37**
7									
8									
Totals	**3.85**	**25.53%**	**8.86**	**58.75%**	**1.99**	**13.20%**	**0.38**	**2.52%**	**15.08**

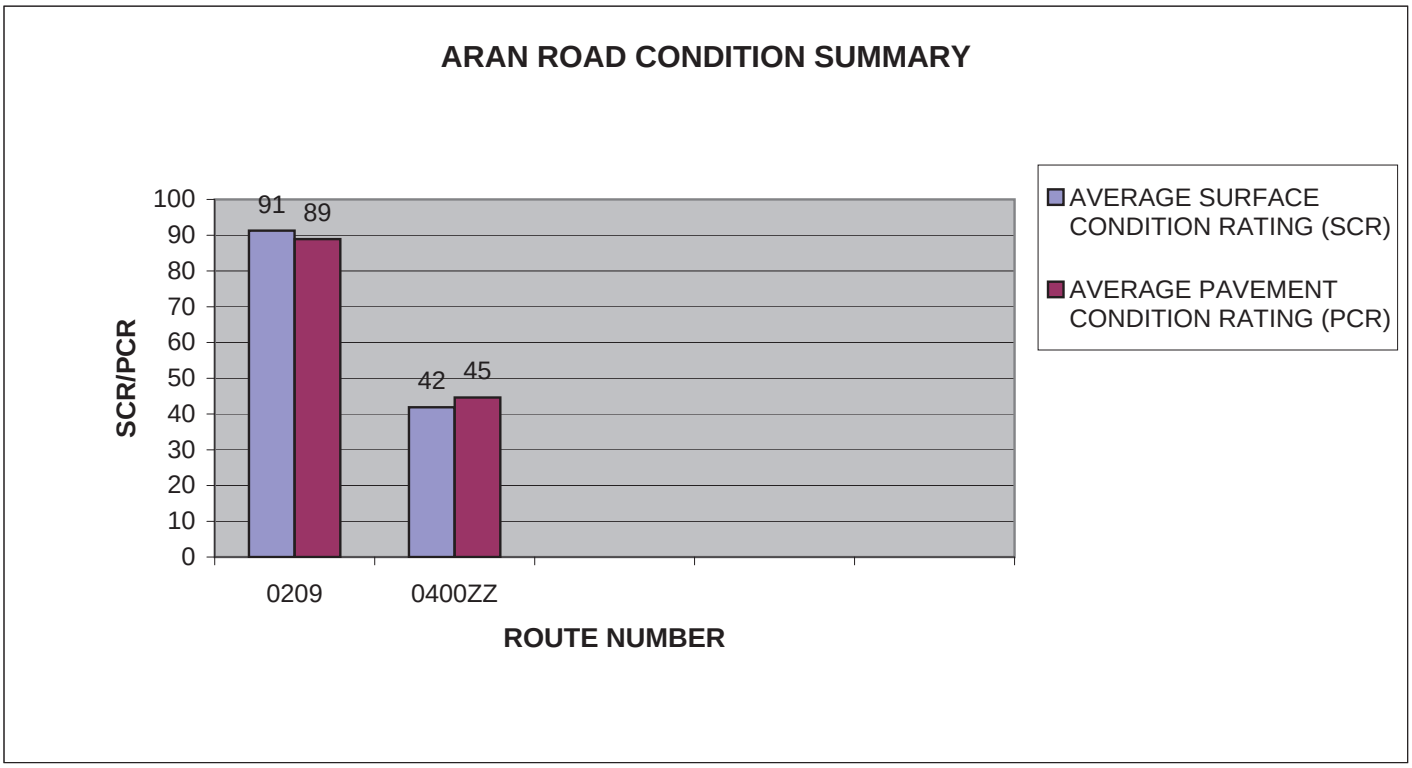
GRBA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	ENTRANCE ROAD	1	0.71	ASPHALT	55	64
0100	WHEELER PEAK SCENIC DRIVE	2	11.75	ASPHALT	66	72
0101ZZ	UPPER LEHMAN CREEK CAMPGROUND ROADS	3	0.89	ASPHALT	38	38
0106	MATHER OVERLOOK	2	0.37	ASPHALT	43	47
0201ZZ	WHEELER PEAK CAMPGROUND ROADS	3	0.83	ASPHALT	79	72



GRBA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0209	LOWER LEHMAN CREEK CAMPGROUND LOOP	3	0.31	ASPHALT	91	89
0400ZZ	RESIDENTIAL / MAINTENANCE ROADS	6	0.37	ASPHALT	42	45

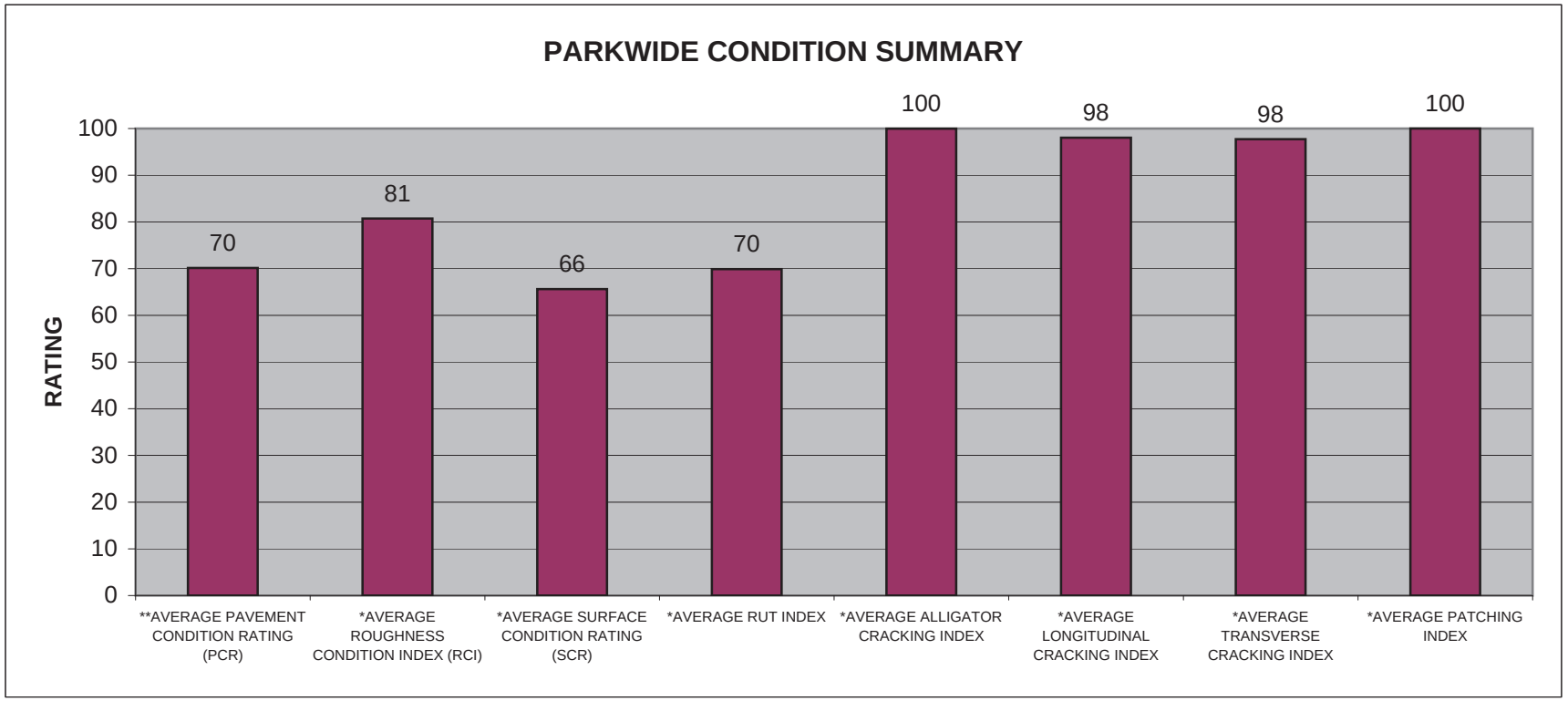


GRBA: PARKWIDE CONDITION SUMMARY

**AVERAGE PAVEMENT CONDITION RATING (PCR)	*AVERAGE ROUGHNESS CONDITION INDEX (RCI)	*AVERAGE SURFACE CONDITION RATING (SCR)	*AVERAGE RUT INDEX	*AVERAGE ALLIGATOR CRACKING INDEX	*AVERAGE LONGITUDINAL CRACKING INDEX	*AVERAGE TRANSVERSE CRACKING INDEX	*AVERAGE PATCHING INDEX
70	81	66	70	100	98	98	100

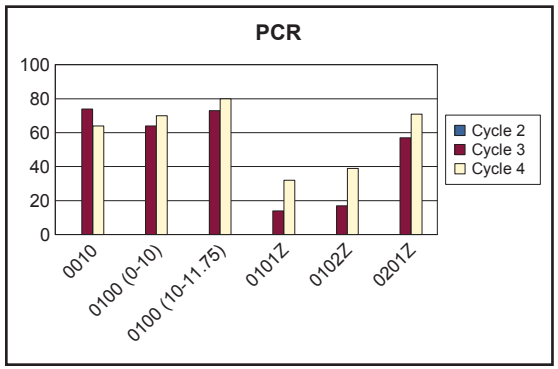
*** PCR Index is based on all ARAN-driven roads, parking areas, and manually rated routes.*

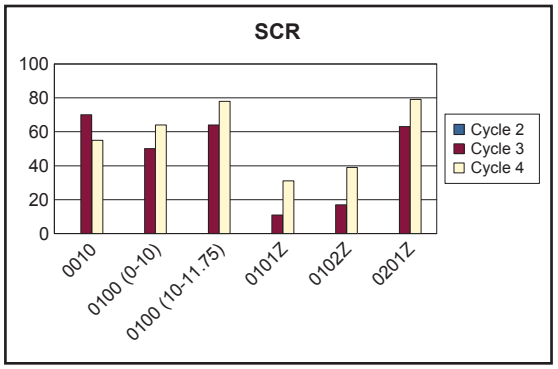
** Index values are based on ARAN-driven roads only.*

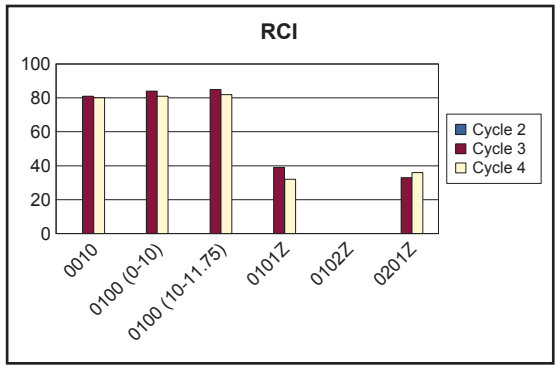


GRBA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0010	0.71	0.00	0.71	N/A	74	64	-14%	N/A	70	55	-21%	N/A	81	80	-1%	
0100	10.00	0.00	10.00	N/A	64	70	+9%	N/A	50	64	+28%	N/A	84	81	-4%	
0100	1.75	10.00	11.75	N/A	73	80	+10%	N/A	64	78	+22%	N/A	85	82	-4%	
0101Z	0.47	0.00	0.47	N/A	14	32	+129%	N/A	11	31	+182%	N/A	39	32	-18%	Route was 0101 in Cycle 3. Route combined with 0205 in Cycle 4.
0102Z	0.13	0.00	0.13	N/A	17	39	+129%	N/A	17	39	+129%	N/A	N/A	N/A	N/A	Route was 0102 in Cycle 3. Route combined with 0206 in Cycle 4. No RCI Collected in Cycle 3 or 4.
0201Z	0.60	0.00	0.60	N/A	57	71	+25%	N/A	63	79	+25%	N/A	33	36	+9%	Route was 0201 in Cycle 3. Route combined with 0202 in Cycle 4.



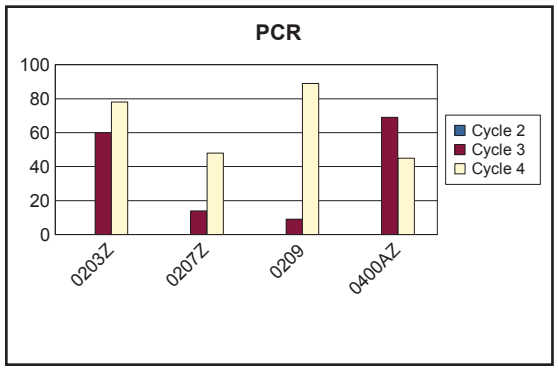


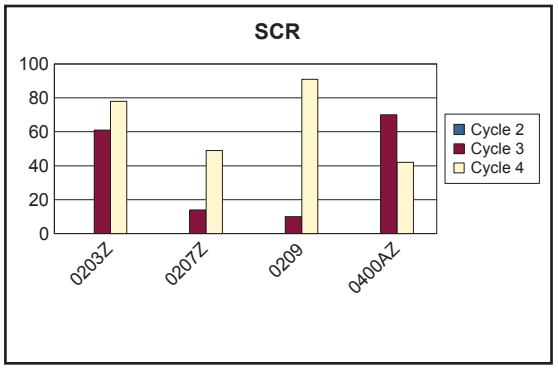


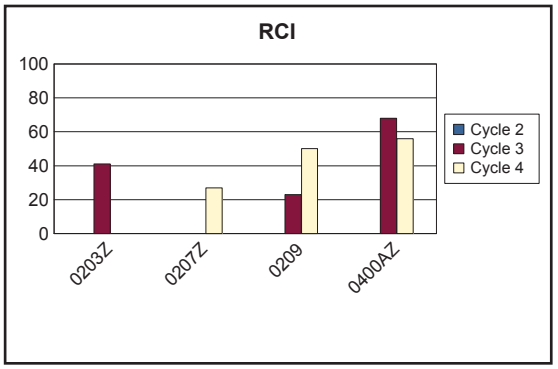
Cycle 4 Data Collected 9/29/2009 - 9/29/2009

GRBA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0203Z	0.23	0.00	0.23	N/A	60	78	+30%	N/A	61	78	+28%	N/A	41	N/A	N/A	Route was 0201 in Cycle 3. Route combined with 0204 in Cycle 4. No RCI collected in Cycle 4.
0207Z	0.29	0.00	0.29	N/A	14	48	+243%	N/A	14	49	+250%	N/A	N/A	27	N/A	Route was 0207 in Cycle 3. Route combined with 0208 in Cycle 4. No RCI collected in Cycle 3.
0209	0.31	0.00	0.31	N/A	9	89	+889%	N/A	10	91	+810%	N/A	23	50	+117%	
0400AZ	0.37	0.00	0.37	N/A	69	45	-35%	N/A	70	42	-40%	N/A	68	56	-18%	Route was 0400 in Cycle 3.





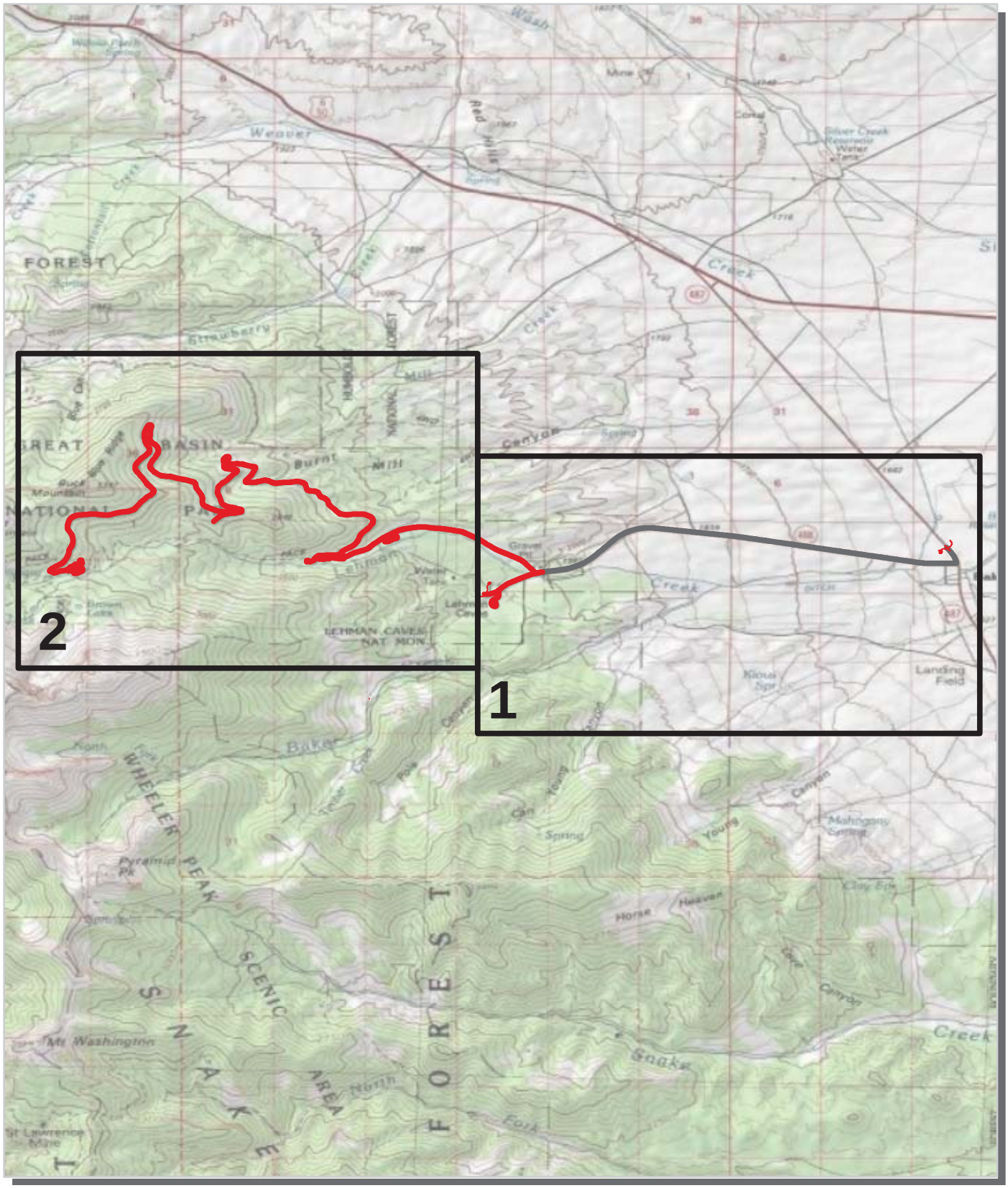


Cycle 4 Data Collected 9/29/2009 - 9/29/2009

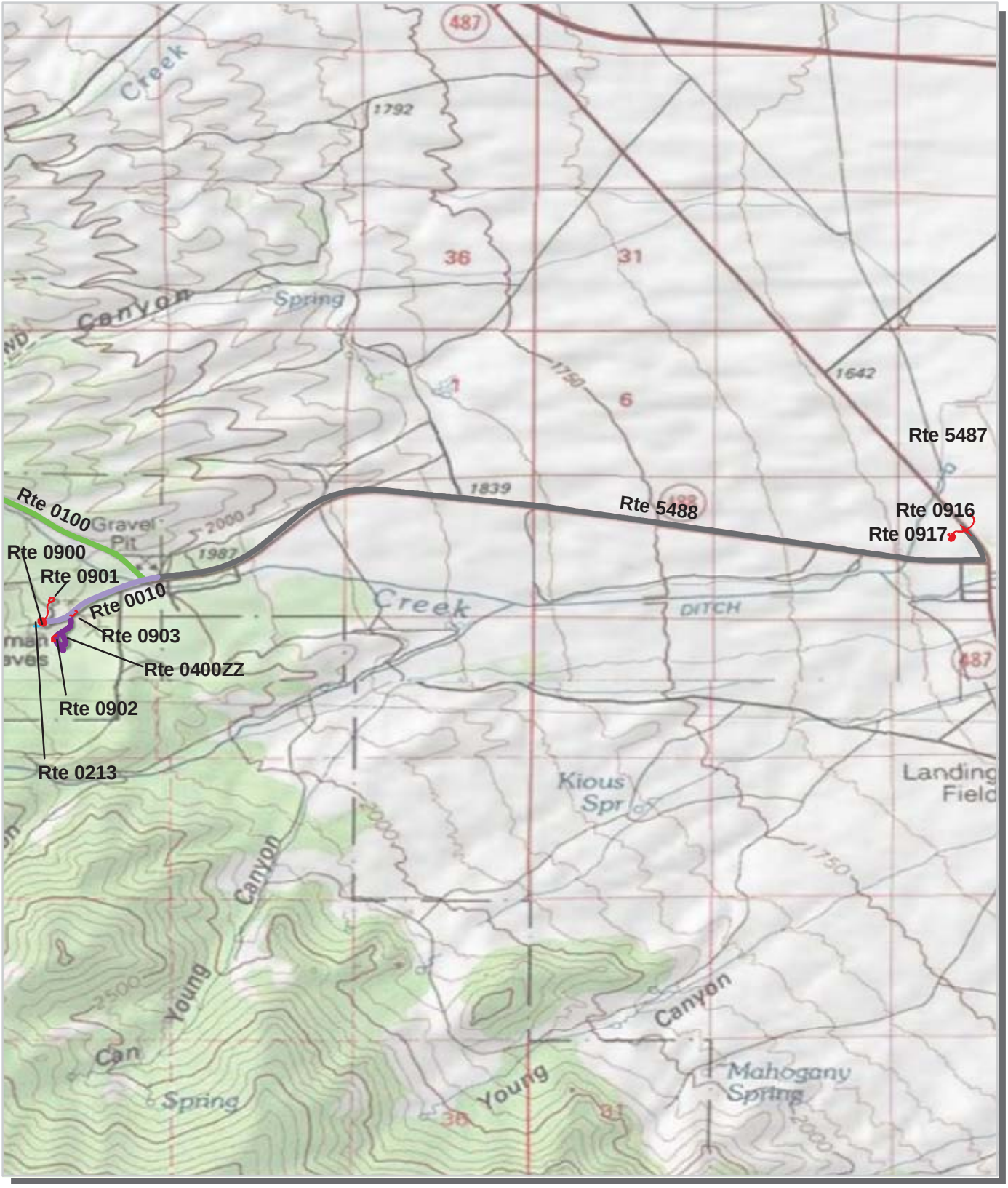
Great Basin National Park

Section 3
Park Route Location / Condition Maps

Great Basin National Park
Route Location Map
Key Map



Great Basin National Park
Route Location Map
Area 1



Unique colors used to differentiate routes

1 0.5 0 1 Miles

N

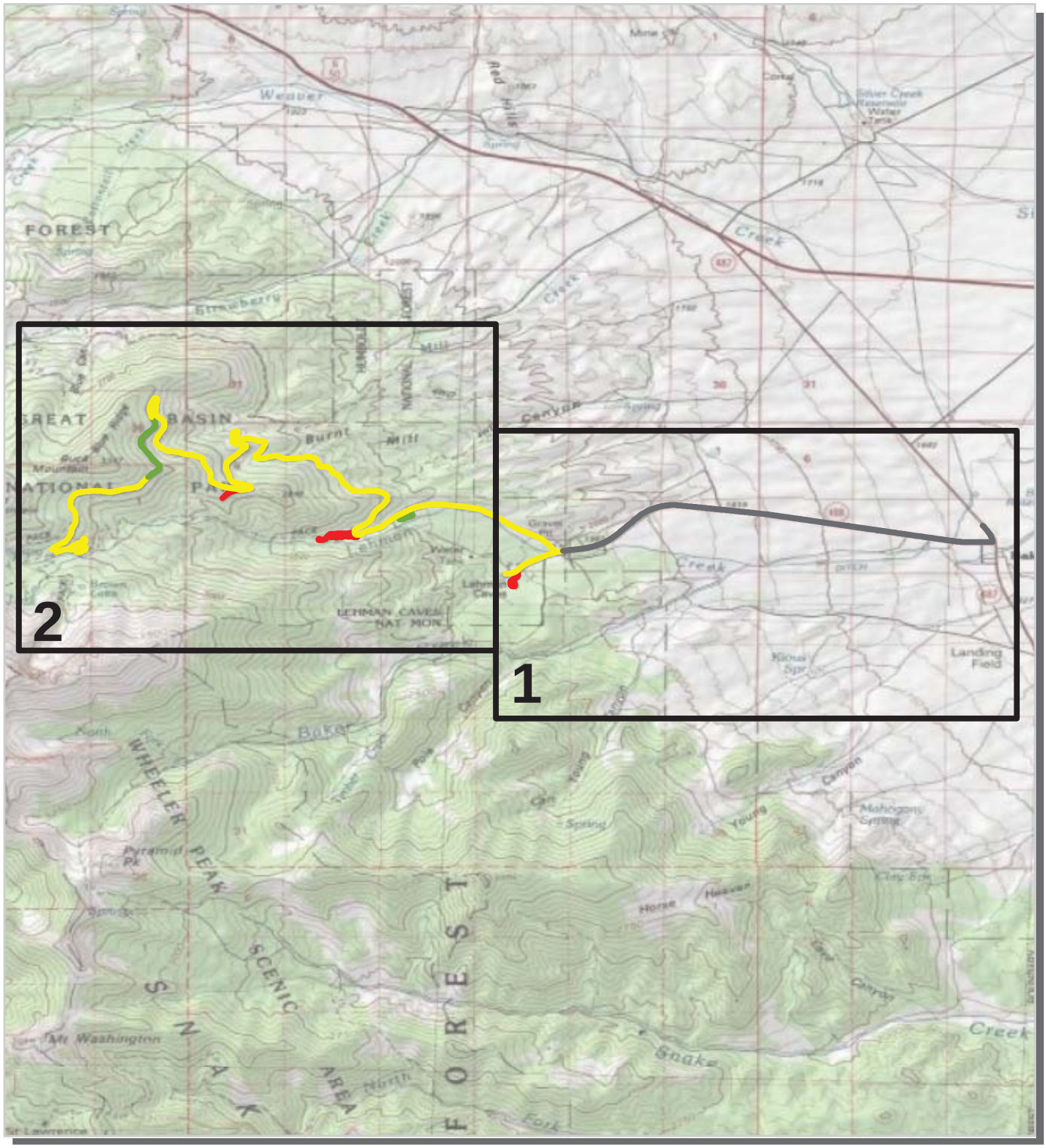
Great Basin National Park
Route Location Map
Area 2

Unique colors used to differentiate routes

1 0.5 0 1 Miles

N

Great Basin National Park
Route Condition Map
PCR - Mile by Mile
Key Map



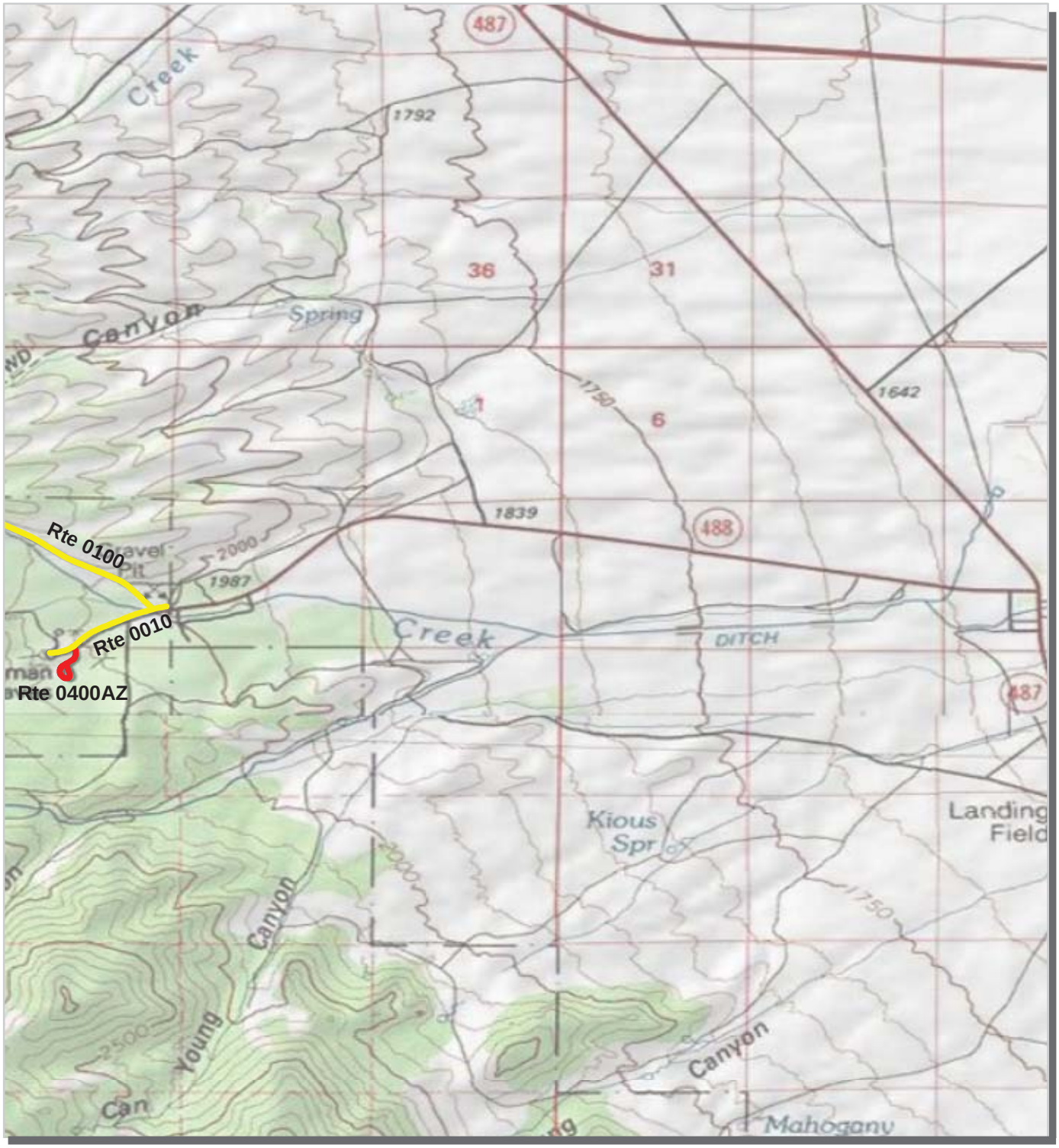
PCR — Poor (<=60) | Fair (61 - 84) | Good (85 - 94) | Excellent (95 - 100) | No Data

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

2 1 0 2 Miles

N

Great Basin National Park
Route Condition Map
PCR - Mile by Mile
Area 1



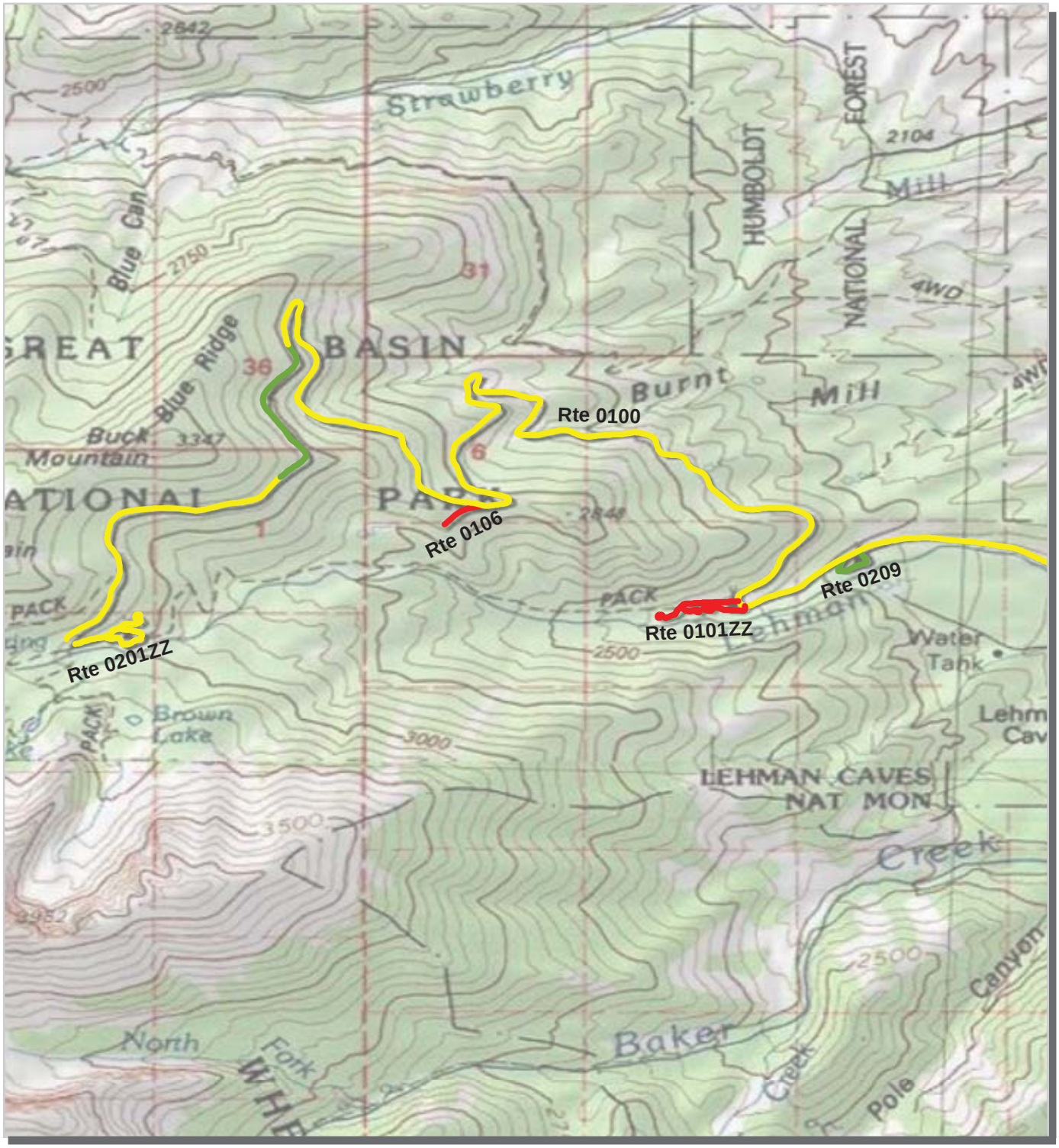
PCR	Poor	Fair	Good	Excellent	No Data
	(<=60)	(61 - 84)	(85 - 94)	(95 - 100)	

* 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

Great Basin National Park
Route Condition Map
PCR - Mile by Mile
Area 2



PCR	Poor	Fair	Good	Excellent	No Data
	(<=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

Great Basin National Park

Section 4
Park Route Inventory

NPS/RIP Route ID Report

Shading Color Key:
Red text denotes approx. mileage

White = Paved Routes, ARAN Driven
Yellow = Unpaved Routes, ARAN not Driven
Blue = All Paved Parking Areas
Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON

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

GRBA

GREAT BASIN NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0010	77068		ENTRANCE ROAD	FROM ROUTE 5488 (NV ROUTE 488) (AT CATTLE GUARD)	TO ROUTE 0900 (VISITOR CENTER PARKING)	N/A	0.710	0.000	0.710	1		0	AS	1
0100	77070		WHEELER PEAK SCENIC DRIVE	FROM ROUTE 0010 (ENTRANCE ROAD)	TO ROUTE 0904 (BRISTLECONE PARKING AREA)	N/A	11.750	0.000	11.750	2		0	AS	1, 2
0101ZZ	77073		UPPER LEHMAN CREEK CAMPGROUND ROADS	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	THROUGH CAMPGROUND	N/A	0.890	0.000	0.890	3		0	AS	2
0104	77355		LEXINGTON ARCH ROAD BLM	FROM NEVADA STATE LINE	TO DEAD END	N/A	0.000	16.000	16.000	2		0	GR	
0105	77080		BAKER CREEK ROAD	FROM ROUTE 0010 (ENTRANCE ROAD)	TO END OF LOOP	N/A	0.000	8.000	8.000	2		0	GR	
0106	77082		MATHER OVERLOOK	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO DEAD END	N/A	0.220	0.150	0.370	2		0	AS	2
0107	77086		POLE CANYON ROAD	FROM ROUTE 0105 (BAKER CREEK ROAD)	TO ROUTE 0214 (POLE CANYON BACK ROAD)	N/A	0.000	0.660	0.660	4		0	GR	
0108	77186		SNAKE CREEK ROAD	FROM ROUTE 0112 (SNAKE CREEK ROAD BLM)	TO SHOSHONE CAMPGROUND	N/A	0.000	7.300	7.300	2		0	GR	
0109	77190		STRAWBERRY CREEK ROAD	FROM ROUTE 0114 (STRAWBERRY CREEK ROAD BLM)	TO BLUE CANYON CREEK	N/A	0.000	3.190	3.190	2		0	GR	
0112	77386		SNAKE CREEK ROAD BLM	FROM SNAKE CREEK ROAD, WHITE PINE COUNTY NEVADA	TO ROUTE 0108 (SNAKE CREEK ROAD)	N/A	0.000	4.200	4.200	2		0	GR	
0114	77395		STRAWBERRY CREEK ROAD BLM	FROM NEVADA DOT MAINTENANCE ROAD	TO ROUTE 0109 (STRAWBERRY CREEK ROAD)	N/A	0.000	2.700	2.700	2		0	GR	
0115	77397		MOUNT WASHINGTON ROAD BLM	FROM SPRING VALLEY ROAD, WHITE PINE COUNTY, NV	TO ROUTE 0215 (MOUNT WASHINGTON ROAD)	N/A	0.000	3.000	3.000	4		0	GR	
0201ZZ	77072		WHEELER PEAK CAMPGROUND ROADS	FROM ROUTE 0904 (BRISTLECONE PARKING AREA)	THROUGH CAMPGROUND	N/A	0.830	0.000	0.830	3		0	AS	2
0209	77075		LOWER LEHMAN CREEK CAMPGROUND LOOP	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE) AT MP 1.89	TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE) AT MP 1.81	N/A	0.310	0.000	0.310	3		0	AS	2
0210	77081		BAKER CREEK CAMPGROUND ROAD	FROM ROUTE 0105 (BAKER CREEK ROAD)	TO DEAD END	N/A	0.000	1.000	1.000	3		0	GR	
0211	77089		GREY CLIFFS CAMPGROUND ROAD	FROM ROUTE 0107 (POLE CANYON ROAD)	TO DEAD END	N/A	0.000	1.020	1.020	3		0	GR	

NPS/RIP Route ID Report

Shading Color Key:
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White = Paved Routes, ARAN Driven
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** Unpaved Routes displayed on report were obtained from FMSS database and not inventoried by Road Inventory Program (RIP)

GRBA

GREAT BASIN NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0212	77409		MURPHY WASH ROAD BLM	FROM MURPHY WASH ROAD, SPRING VALLEY ROAD, WHITE PINE CO. NV	TO DEAD END	N/A	0.000	11.000	11.000	6		0	GR	
0213	91505		CAVE ACCESS ROAD	FROM ROUTE 0900 (VISITOR CENTER PARKING)	TO DEAD END	N/A	0.000	0.000	0.000	6		2,820	CO	1
0214	77100		POLE CANYON BACK ROAD	FROM ROUTE 0107 (POLE CANYON ROAD)	TO ROUTE 0112 (SNAKE CREEK ROAD BLM)	N/A	0.000	3.300	3.300	4		0	GR	
0215	77198		MOUNT WASHINGTON ROAD	FROM ROUTE 0115 (MOUNT WASHINGTON ROAD BLM)	TO DEAD END	N/A	0.000	2.850	2.850	4		0	GR	
0216	77199		NORTH DECATHON CANYON ROAD	FROM ROUTE 0217 (SOUTH DECATHON CANYON ROAD)	TO DEAD END	N/A	0.000	0.200	0.200	4		0	GR	
0217	77201		SOUTH DECATHON CANYON ROAD	FROM ROUTE 0220 (DECATHON CANYON ROAD BLM)	TO ROUTE 0216 (NORTH DECATHON CANYON ROAD)	N/A	0.000	0.094	0.094	4		0	GR	
0219	77403		BIG WASH ROAD BLM	FROM BIG WASH ROAD, WHITE PINE COUNTY, NV	TO DEAD END	N/A	0.000	6.500	6.500	4		0	GR	
0220	77405		DECATHON CANYON ROAD BLM	FROM ROUTE 0225 (BIG SPRINGS CONNECTION ROAD)	TO ROUTE 0217 (SOUTH DECATHON CANYON ROAD)	N/A	0.000	13.000	13.000	4		0	GR	
0221	79410		KIOUS BASIN ROAD	FROM ROUTE 0222 (KIOUS BASIN ROAD BLM)	TO DEAD END	N/A	0.000	2.430	2.430	4		0	GR	
0222	79411		KIOUS BASIN ROAD BLM	FROM KINOUS BASIN ROAD BLM	TO ROUTE 0221 (KIOUS BASIN ROAD)	N/A	0.000	2.430	2.430	4		0	GR	
0223	99941		JOHN WASH ROAD BLM	FROM ROUTE 0212 (MURPHY WASH ROAD BLM)	TO DEAD END	N/A	0.000	15.000	15.000	4		0	GR	
0224	99943		LINCOLN CANYON ROAD BLM	FROM SPRING VALLEY ROAD, WHITE PINE COUNTY, NEVADA	TO DEAD END	N/A	0.000	3.000	3.000	4		0	GR	
0225	99944		BIG SPRINGS CONNECTION ROAD	FROM BIG SPRING ROAD, MILLARD COUNTY, UT	TO ROUTE 0220 (DECATHON CANYON ROAD BLM)	N/A	0.000	45.000	45.000	4		0	GR	
0400ZZ	77076		RESIDENTIAL / MAINTENANCE ROADS	FROM ROUTE 0010 (ENTRANCE ROAD)	TO DEAD END	N/A	0.370	0.000	0.370	6		3,451	AS	1
0401	103133		WATER TANK ROAD	FROM ROUTE 0901 (VISITOR CENTER PICNIC AREA)	TO DEAD END	N/A	0.000	0.500	0.500	6		0	GR	
0402	77101		CAVE SPRINGS ACCESS ROAD	FROM ROUTE 0401 (WATER TANK ROAD)	TO DEAD END	N/A	0.000	0.580	0.580	6		0	GR	
0403	77084		BAKER RIDGE ROAD	FROM ROUTE 0105 (BAKER CREEK ROAD)	TO DEAD END	N/A	0.000	0.340	0.340	6		0	GR	
0404	77193		LAGOON ROAD	FROM ROUTE 0105 (BAKER CREEK ROAD)	TO DEAD END	N/A	0.000	0.180	0.180	6		0	GR	

NPS/RIP Route ID Report

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Yellow = Unpaved Routes, ARAN not Driven
Blue = All Paved Parking Areas
Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON

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

GRBA

GREAT BASIN NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0405	77200		BONEYARD ROAD	FROM ROUTE 0902 (MAINTENANCE YARD)	TO DEAD END	N/A	0.000	0.150	0.150	6		0	GR	
0406	77202		TANK FARM ROAD	FROM ROUTE 0400ZZ (RESIDENTIAL / MAINTENANCE ROADS)	TO TRAIL	N/A	0.000	0.080	0.080	6		0	GR	
0407	77205		GRAVEL PIT ROAD	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO DEAD END	N/A	0.000	0.140	0.140	6		0	GR	
0900	91295		VISITOR CENTER PARKING	FROM ROUTE 0010 (ENTRANCE ROAD)	TO PARKING	N/A	0.000	0.000	0.000			43,362	AS	1
0901	91558		VISITOR CENTER PICNIC AREA	FROM ROUTE 0900 (VISITOR CENTER PARKING)	TO PARKING	N/A	0.000	0.000	0.000			30,439	AS	1
0902	103835		MAINTENANCE YARD	FROM ROUTE 0400ZZ (RESIDENTIAL / MAINTENANCE ROADS)	TO ROUTE 0400ZZ (RESIDENTIAL / MAINTENANCE ROADS)	N/A	0.000	0.000	0.000			15,155	AS	1
0903	91553		R.V. DUMP STATION	FROM ROUTE 0010 (ENTRANCE ROAD)	TO ROUTE 0010 (ENTRANCE ROAD)	N/A	0.000	0.000	0.000			12,326	AS	1
0904	91294		BRISTLECONE PARKING AREA	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO ROUTE 0201ZZ (WHEELER PEAK CAMPGROUND ROADS)	N/A	0.000	0.000	0.000			31,407	AS	2
0905	103839		SUMMIT TRAILHEAD PARKING	ADJACENT TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)		N/A	0.000	0.000	0.000			8,723	AS	2
0907	103844		OSCEOLA DITCH TRAILHEAD PARKING	ADJACENT TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)		N/A	0.000	0.000	0.000			8,810	AS	2
0908ZZ	103849		LEHMAN CREEK PARKING AREAS	FROM ROUTE 0101ZZ (UPPER LEHMAN CREEK CAMPGROUND ROADS)	TO PARKING	N/A	0.000	0.000	0.000			15,892	AS	2
0914	103895		LEHMAN CREEK WINTER TRAILHEAD PARKING (UPPER LEHMAN CREEK CAMPGROUND)	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	N/A	0.000	0.000	0.000			11,459	AS	2
0915	77417		BAKER RANGER STATION PARKING AREA	FROM NEVADA HIGHWAY 487	TO PARKING	N/A	0.000	0.000	0.000			0	GR	
0916	87879		APARTMENT PARKING AREA	FROM ROUTE 5487 (NV ROUTE 487)	TO PARKING	N/A	0.000	0.000	0.000			21,572	AS	1
0917	87880		GREAT BASIN VC PARKING AREA	FROM ROUTE 5487 (NV ROUTE 487)	TO PARKING	N/A	0.000	0.000	0.000			59,034	AS	1

NPS/RIP Route ID Report

Shading Color Key:
Red text denotes approx. mileage

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Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON

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GRBA

GREAT BASIN NATIONAL PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0918	91497		UPPER BAKER CG ADA PARKING SPACE	ADJACENT TO ROUTE 0210 (BAKER CREEK CAMPGROUND ROAD)		N/A	0.000	0.000	0.000			280	CO	2
0919	91500		LOWER BAKER CG ADA PARKING SPACE	ADJACENT TO ROUTE 0105 (BAKER CREEK ROAD)		N/A	0.000	0.000	0.000			0	CO	
5487	N/A		NV ROUTE 487	FROM NV ROUTE 487 WITH 0916 (APARTMENT PARKING AREA) ON LEFT AND 0917 (GREAT BASIN VC PARKING AREA) ON RIGHT	TO INTERSECTION WITH ROUTE 5488 (NV ROUTE 488) ON RIGHT	N/A	0.250	0.000	0.250	0		0	AS	1
5488	N/A		NV ROUTE 488	FROM INTERSECTION WITH ROUTE 5487 (NV ROUTE 487)	TO BEGINNING OF ROUTE 0010 (ENTRANCE ROAD) (AT CATTLE GUARD)	N/A	4.850	0.000	4.850	0		0	AS	1

SUMMARY TOTALS FOR GREAT BASIN NATIONAL PARK

ROUTE TOTALS

ARAN Driven Route Miles	15.080
All Paved Route Miles	17.170
All Unpaved Route Miles	153.994
TOTAL PARK ROUTE MILES	171.164
All Manually Rated Roads (SQFT)	6,271

LANE MILE TOTALS

ARAN Driven Lane Miles	28.409
Paved Parking Lane Miles	4.449
Paved MRR Lane Miles	0.108
TOTAL PAVED LANE MILES	32.966

CONCESSION TOTALS

Concession Paved Route Miles	0.000
Concession Unpaved Route Miles	0.000
Concession Paved Parking Area SQFT	0
Concession Unpaved Parking Area SQFT	0
Concession Paved MRR SQFT	0

PARKING AREA TOTALS

All Paved Parking (SQFT)	258,459
All Unpaved Parking (SQFT)	0
TOTAL ALL PARKING (SQFT)	258,459

WEIGHTED AVERAGE PARK VALUES

PCR (Rating)	SCR (Rating)	RCI (Rating)	RUT (Index)	AC (Index)	LC (Index)	TC (Index)	PATCH (Index)	PCR (Concession)
70.14	65.63	80.72	69.90	99.98	98.03	97.72	100.00	N/A

NPS/RIP Route ID Report

Shading Color Key:
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Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
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= Concession Route Flag ON

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General Park Road Functional Classification Table

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

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

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

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

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

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

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

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

****

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

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

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

Surface Type Abbreviations:

AS - Asphaltic Concrete Pavement

CO - Portland Cement Concrete Pavement

BR - Brick or Pavers Road Bed

CB - Cobble Stone Road Bed

GR - Gravel Road Bed

SA - Sand Road Bed

NV - Native or Dirt Material Road Bed

OT - Other Materials Road Bed

NPS/RIP Subcomponent Details for GRBA

Shading Color Key:
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White = Paved Routes, ARAN Driven
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Blue = All Paved Parking Areas
Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON
= Subcomponent Flag ON

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GRBA

GREAT BASIN NATIONAL PARK

Asset Entered in FMSS System

Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0101ZZ	77073		UPPER LEHMAN CREEK CAMPGROUND ROADS	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	THROUGH CAMPGROUND		3	0.89	0.00	0.89	0
0201ZZ	77072		WHEELER PEAK CAMPGROUND ROADS	FROM ROUTE 0904 (BRISTLECONE PARKING AREA)	THROUGH CAMPGROUND		3	0.83	0.00	0.83	0
0400ZZ	77076		RESIDENTIAL / MAINTENANCE ROADS	FROM ROUTE 0010 (ENTRANCE ROAD)	TO DEAD END		6	0.37	0.00	0.37	3,451
0908ZZ	103849		LEHMAN CREEK PARKING AREAS	FROM ROUTE 0101ZZ (UPPER LEHMAN CREEK CAMPGROUND ROADS)	TO PARKING			0.00	0.00	0.00	15,892

Asset GRBA-0101ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0101Z	77073	■	UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO END OF LOOP		3	0.47	0.00	0.47	0
0102Z	77073	■	UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD	FROM ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)	TO END OF LOOP		3	0.13	0.00	0.13	0
0207Z	77073	■	UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)	TO END OF LOOP		3	0.29	0.00	0.29	0

Asset GRBA-0201ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0201Z	77072	■	WHEELER PEAK CAMPGROUND ROAD	FROM ROUTE 0904 (BRISTLECONE PARKING AREA)	TO END OF LOOP		3	0.60	0.00	0.60	0
0203Z	77072	■	WHEELER PEAK UPPER CAMPGROUND ROAD	FROM ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)	TO END OF LOOP		3	0.23	0.00	0.23	0

NPS/RIP Subcomponent Details for GRBA

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Blue = All Paved Parking Areas
Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON
= Subcomponent Flag ON

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

GRBA

GREAT BASIN NATIONAL PARK

Asset GRBA-0400ZZ Subcomponent Breakdown

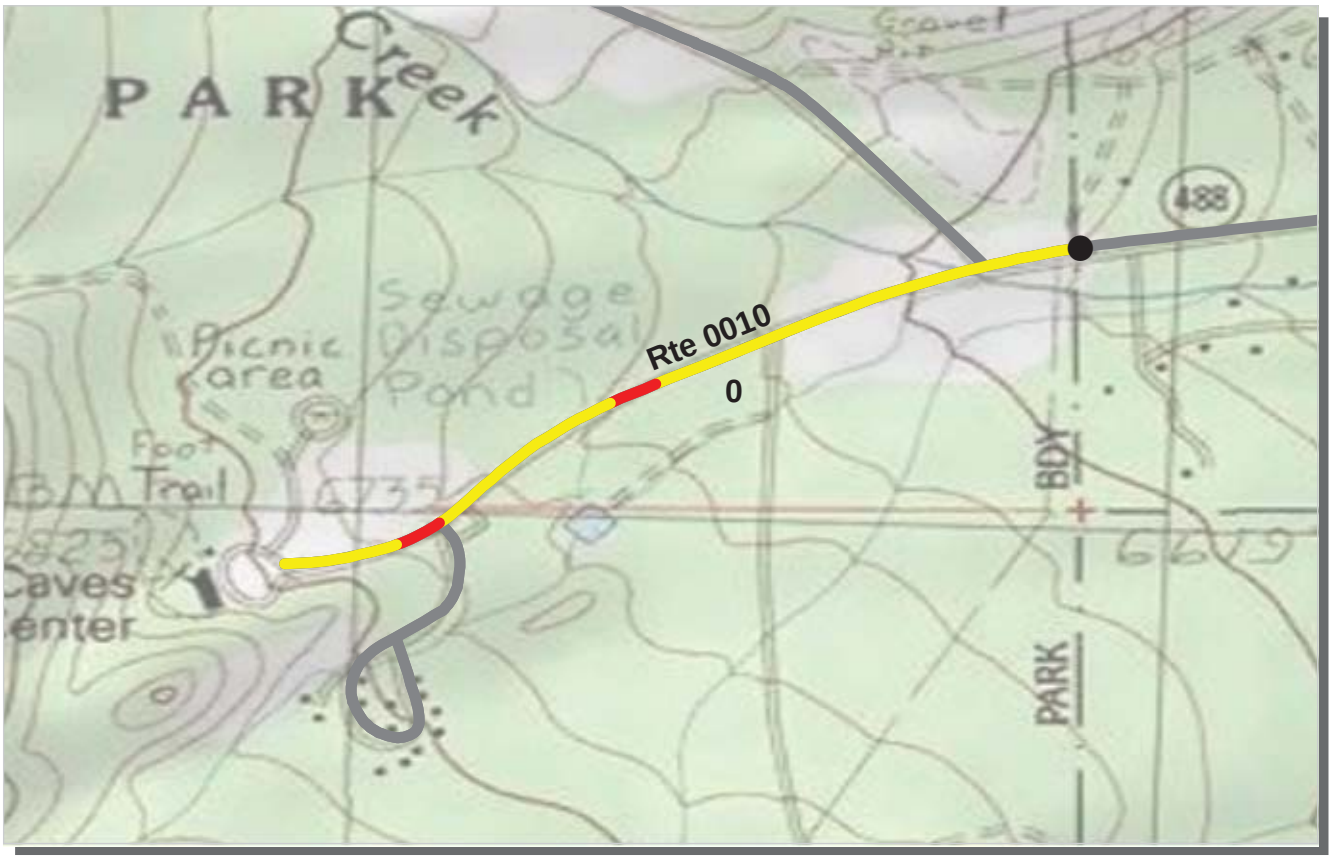
Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0400AZ	77076	☐	RESIDENTIAL / MAINTENANCE ROAD	FROM ROUTE 0010 (ENTRANCE ROAD)	TO END OF LOOP		6	0.37	0.00	0.37	0
0400BZ	77076	☐	RESIDENTIAL SPUR ROAD (RES 2)	FROM ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)	TO DEAD END		6	0.00	0.00	0.00	3,451

Asset GRBA-0908ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0908Z	103849	☐	LEHMAN CREEK TRAILHEAD PARKING	ADJACENT TO ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)				0.00	0.00	0.00	3,102
0909Z	103849	☐	LEHMAN CREEK LOWER TRAILHEAD PARKING	ADJACENT TO ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)				0.00	0.00	0.00	2,991
0910Z	103849	☐	UPPER LEHMAN CREEK UPPER CAMPGROUND PARKING	ADJACENT TO ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)				0.00	0.00	0.00	1,253
0911Z	103849	☐	UPPER LEHMAN CREEK PICNIC AREA PARKING	FROM ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)	TO ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)			0.00	0.00	0.00	4,934
0912Z	103849	☐	UPPER LEHMAN CREEK DAY USE PICNIC AREA PARKING	FROM ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)	TO PARKING			0.00	0.00	0.00	3,613

Great Basin National Park

Section 5
Paved Route Condition Rating Sheets (CRS)



PCR Poor (<=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.

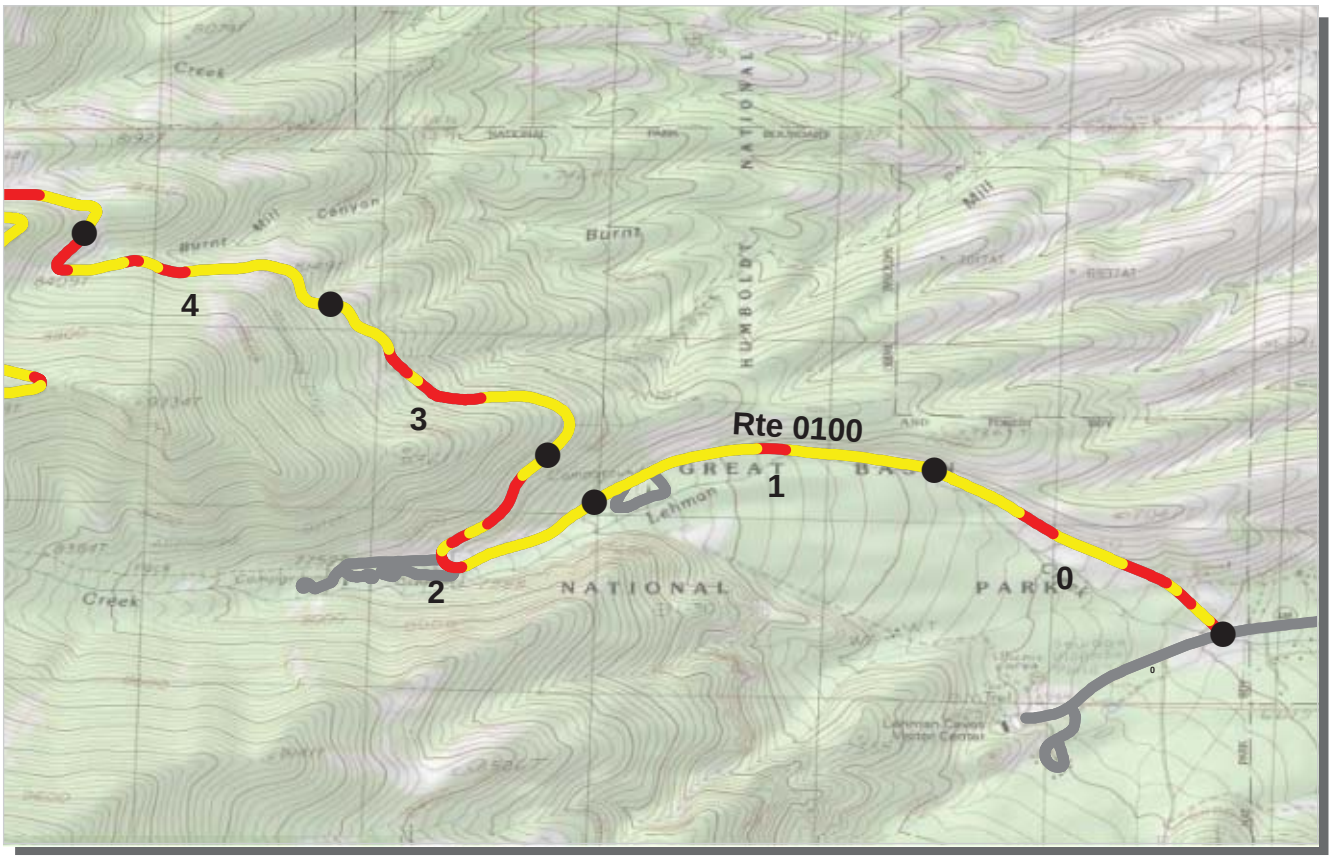
ROUTE: 0010 ENTRANCE ROAD
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 0.71 Miles**

Section Number	0				
Section Length (mi)	0.71				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	55				
PCR (Pavement Condition Rating)	64				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	99				
Tranverse Cracking Index	95				
Patching Index	100				
Rutting Index	61				
Roughness Condition Index (RCI)	80				

NC - Not Collected

ROUTE: 0010 ENTRANCE ROAD



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

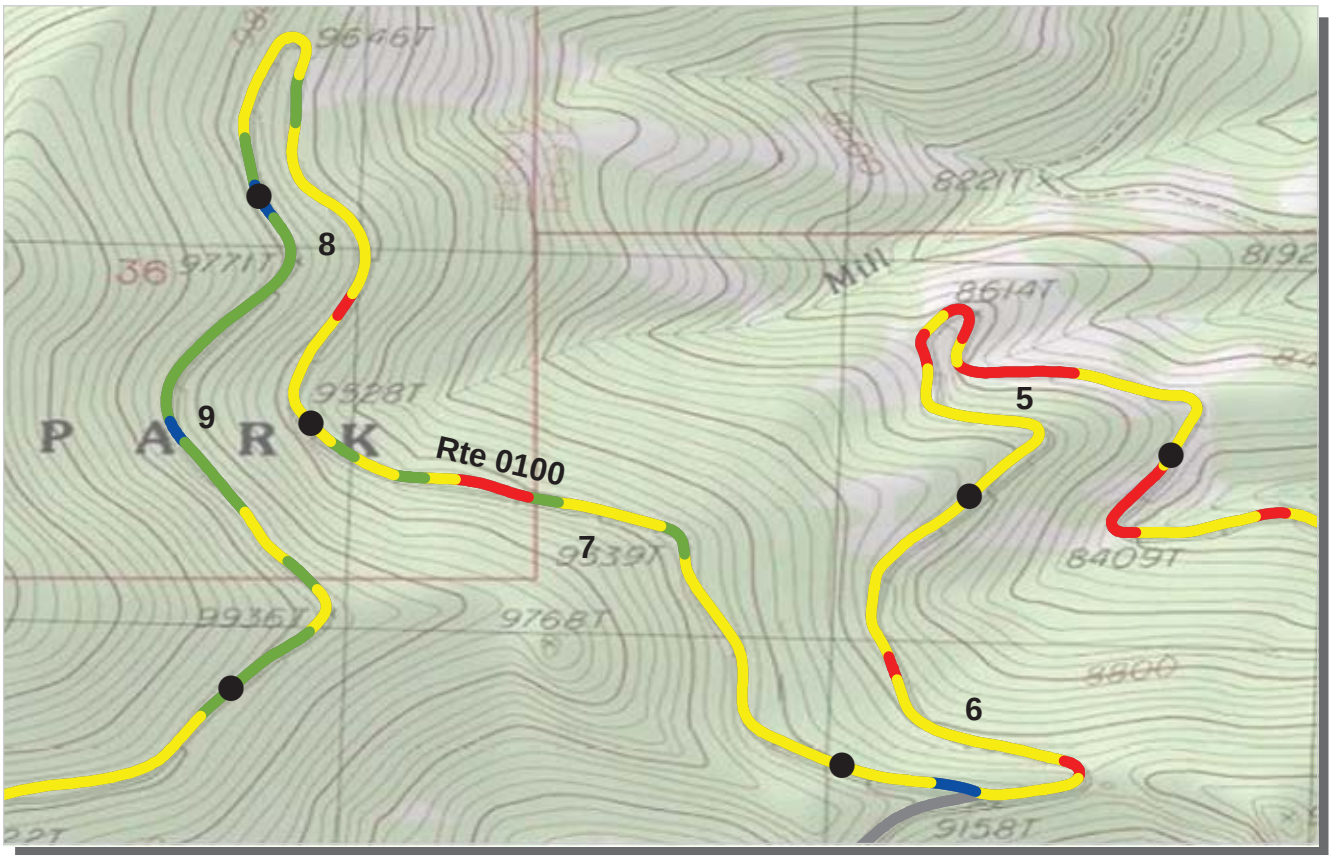
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0100 WHEELER PEAK SCENIC DRIVE
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 11.75 Miles**

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
AADT					
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	24	23	22	22	21
Lane Width (ft)	11	11	11	10	10
Shoulder Width Right (ft)	NC	NC	NC	NC	NC
Shoulder Width Left (ft)	NC	NC	NC	NC	NC
Roadway Condition Information					
SCR (Surface Condition Rating)	44	58	61	56	54
PCR (Pavement Condition Rating)	63	69	66	65	63
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	92	95	97	98	99
Tranverse Cracking Index	93	95	97	96	97
Patching Index	100	100	100	100	100
Rutting Index	59	68	67	62	58
Roughness Condition Index (RCI)	94	84	74	78	75

NC - Not Collected



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

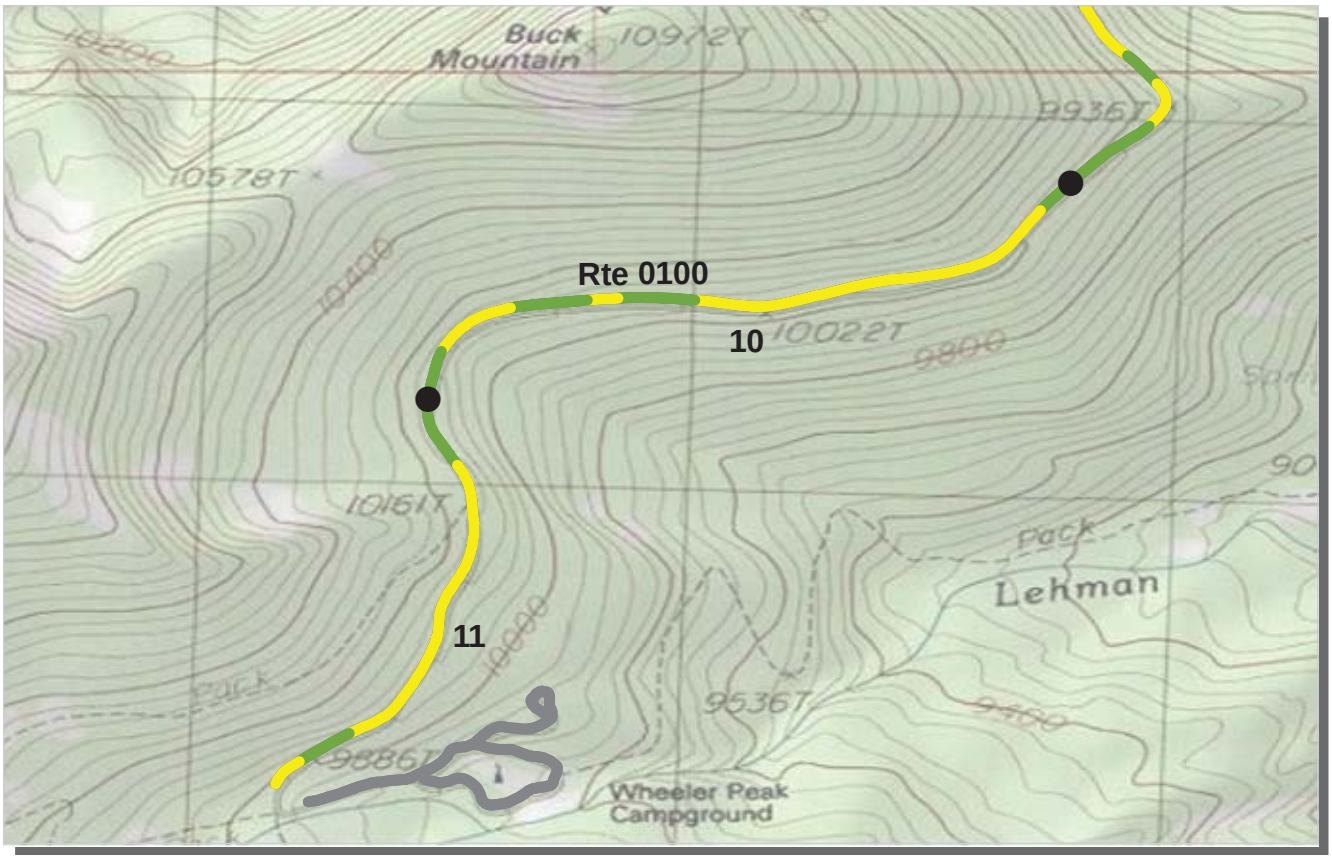
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0100 WHEELER PEAK SCENIC DRIVE
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 11.75 Miles**

Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	22	21	21	21	20
Lane Width (ft)	10	10	10	10	10
Shoulder Width Right (ft)	NC	NC	NC	NC	NC
Shoulder Width Left (ft)	NC	NC	NC	NC	NC
Roadway Condition Information					
SCR (Surface Condition Rating)	54	63	80	78	86
PCR (Pavement Condition Rating)	63	71	78	78	88
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	99	99	100	99	99
Tranverse Cracking Index	99	99	99	99	100
Patching Index	100	100	100	100	100
Rutting Index	56	65	81	80	88
Roughness Condition Index (RCI)	77	83	75	77	91

NC - Not Collected



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

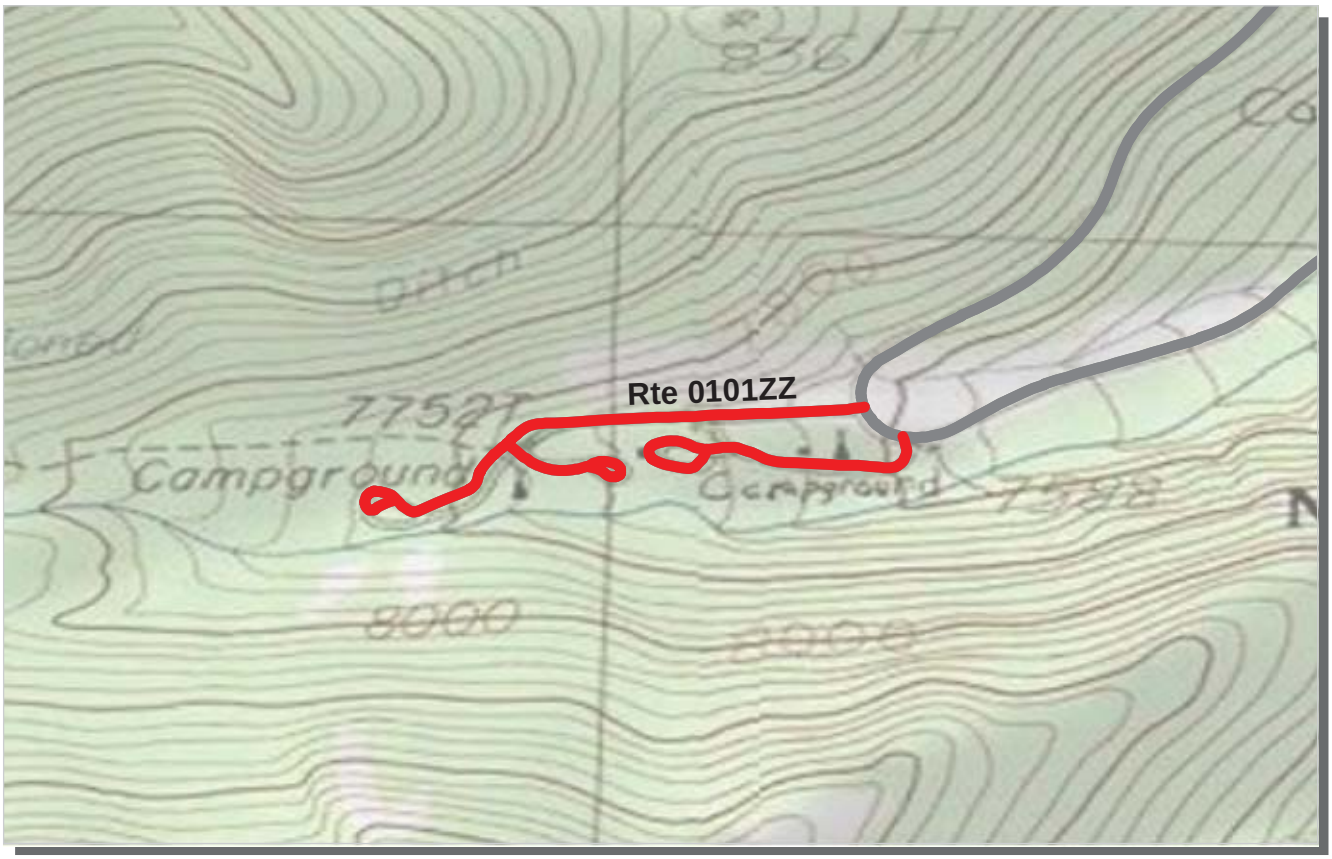
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0100 WHEELER PEAK SCENIC DRIVE
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 11.75 Miles**

Section Number	10	11			
Section Length (mi)	1.00	0.75			
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
AADT					
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	21	21			
Lane Width (ft)	10	10			
Shoulder Width Right (ft)	NC	NC			
Shoulder Width Left (ft)	NC	NC			
Roadway Condition Information					
SCR (Surface Condition Rating)	79	77			
PCR (Pavement Condition Rating)	81	78			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	99	100			
Tranverse Cracking Index	99	100			
Patching Index	100	100			
Rutting Index	81	77			
Roughness Condition Index (RCI)	84	79			

NC - Not Collected



PCR Poor (<=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: 0101ZZ UPPER LEHMAN CREEK CAMPGROUND ROADS
GRBA : GREAT BASIN NATIONAL PARK

Summary Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.89 Miles**

Section Number					
Section Length (mi)					
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
AADT					
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	N/A				
Paved Width (ft)	N/A				
Lane Width (ft)	N/A				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	38				
PCR (Pavement Condition Rating)	38				
Distress Index Values					
Alligator Cracking Index	N/A				
Longitudinal Cracking Index	N/A				
Tranverse Cracking Index	N/A				
Patching Index	N/A				
Rutting Index	N/A				
Roughness Condition Index (RCI)	N/A				

NC - Not Collected

PCR Poor (<=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: 0101Z UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.47 Miles**

Section Number	0				
Section Length (mi)	0.47				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	15				
Lane Width (ft)	8				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	32				
PCR (Pavement Condition Rating)	32				
Distress Index Values					
Alligator Cracking Index	87				
Longitudinal Cracking Index	93				
Tranverse Cracking Index	94				
Patching Index	100				
Rutting Index	53				
Roughness Condition Index (RCI)	32				

NC - Not Collected

PCR Poor (<=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: 0102Z UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.13 Miles**

Section Number	0				
Section Length (mi)	0.13				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	12				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	43				
PCR (Pavement Condition Rating)	43				
Distress Index Values					
Alligator Cracking Index	98				
Longitudinal Cracking Index	92				
Tranverse Cracking Index	92				
Patching Index	100				
Rutting Index	60				
Roughness Condition Index (RCI)	NC				

NC - Not Collected

ROUTE: 0102Z UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD

PCR Poor (<=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: 0207Z UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.29 Miles**

Section Number	0				
Section Length (mi)	0.29				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	14				
Lane Width (ft)	9				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	50				
PCR (Pavement Condition Rating)	50				
Distress Index Values					
Alligator Cracking Index	92				
Longitudinal Cracking Index	95				
Tranverse Cracking Index	95				
Patching Index	100				
Rutting Index	68				
Roughness Condition Index (RCI)	27				

NC - Not Collected

PCR Poor (<=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.

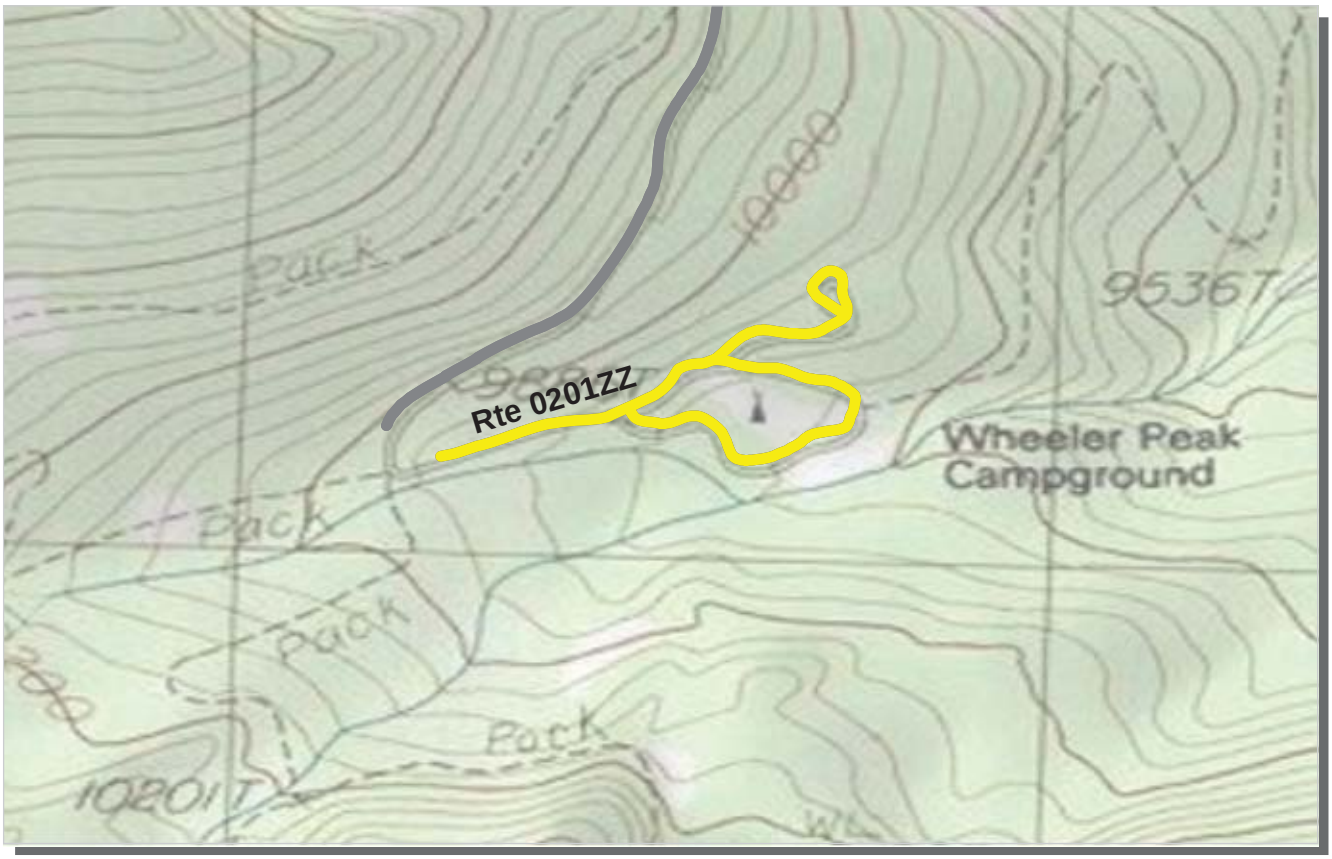
ROUTE: 0106 MATHER OVERLOOK
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 0.22 Miles**

Section Number	0				
Section Length (mi)	0.22				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	26				
Lane Width (ft)	13				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	43				
PCR (Pavement Condition Rating)	47				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	99				
Tranverse Cracking Index	99				
Patching Index	100				
Rutting Index	45				
Roughness Condition Index (RCI)	49				

NC - Not Collected

ROUTE: 0106 MATHER OVERLOOK



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

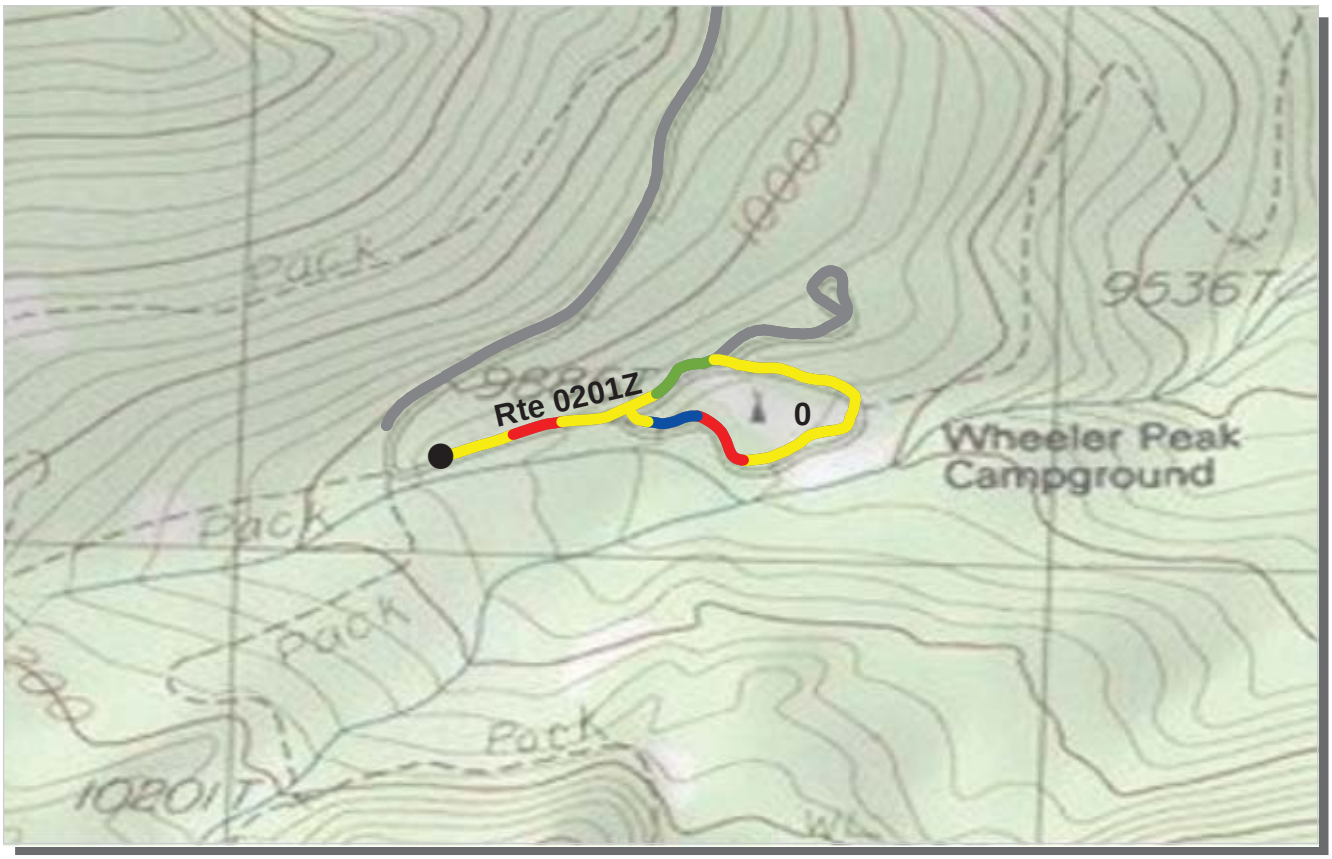
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0201ZZ WHEELER PEAK CAMPGROUND ROADS
GRBA : GREAT BASIN NATIONAL PARK

Summary Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.83 Miles**

Section Number					
Section Length (mi)					
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	N/A				
Paved Width (ft)	N/A				
Lane Width (ft)	N/A				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	79				
PCR (Pavement Condition Rating)	72				
Distress Index Values					
Alligator Cracking Index	N/A				
Longitudinal Cracking Index	N/A				
Tranverse Cracking Index	N/A				
Patching Index	N/A				
Rutting Index	N/A				
Roughness Condition Index (RCI)	N/A				

NC - Not Collected



PCR Poor (<=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.

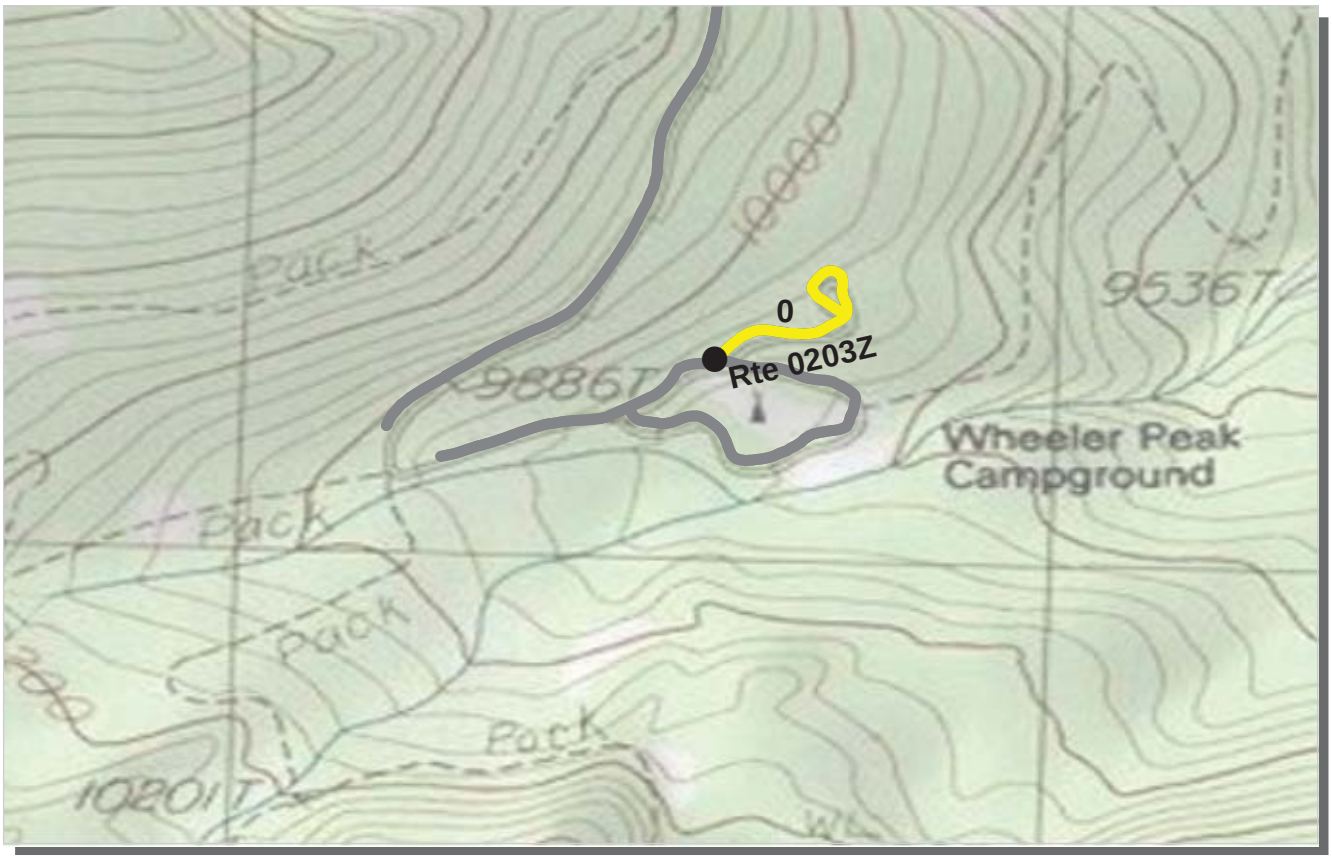
ROUTE: 0201Z WHEELER PEAK CAMPGROUND ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.60 Miles**

Section Number	0				
Section Length (mi)	0.60				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	16				
Lane Width (ft)	14				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	79				
PCR (Pavement Condition Rating)	71				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	79				
Roughness Condition Index (RCI)	36				

NC - Not Collected

ROUTE: 0201Z WHEELER PEAK CAMPGROUND ROAD



PCR Poor (<=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: 0203Z WHEELER PEAK UPPER CAMPGROUND ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.23 Miles**

Section Number	0				
Section Length (mi)	0.23				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	14				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	78				
PCR (Pavement Condition Rating)	78				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	78				
Roughness Condition Index (RCI)	NC				

NC - Not Collected

ROUTE: 0203Z WHEELER PEAK UPPER CAMPGROUND ROAD

PCR Poor (<=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: 0209 LOWER LEHMAN CREEK CAMPGROUND LOOP
GRBA : GREAT BASIN NATIONAL PARK

COLLECTED: 9/29/2009
PACIFIC WEST REGION **TOTAL LENGTH: 0.31 Miles**

Section Number	0				
Section Length (mi)	0.31				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	15				
Lane Width (ft)	15				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	91				
PCR (Pavement Condition Rating)	89				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Tranverse Cracking Index	98				
Patching Index	100				
Rutting Index	95				
Roughness Condition Index (RCI)	50				

NC - Not Collected

ROUTE: 0209 LOWER LEHMAN CREEK CAMPGROUND LOOP

PCR Poor (<=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: 0400ZZ RESIDENTIAL / MAINTENANCE ROADS
GRBA : GREAT BASIN NATIONAL PARK

Summary Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.37 Miles**

Section Number					
Section Length (mi)					
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	N/A				
Paved Width (ft)	N/A				
Lane Width (ft)	N/A				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	42				
PCR (Pavement Condition Rating)	45				
Distress Index Values					
Alligator Cracking Index	N/A				
Longitudinal Cracking Index	N/A				
Tranverse Cracking Index	N/A				
Patching Index	N/A				
Rutting Index	N/A				
Roughness Condition Index (RCI)	N/A				

NC - Not Collected

PCR Poor (<=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: 0400AZ RESIDENTIAL / MAINTENANCE ROAD
GRBA : GREAT BASIN NATIONAL PARK

Subcomponent Record **COLLECTED: 9/29/2009**
PACIFIC WEST REGION **TOTAL LENGTH: 0.37 Miles**

Section Number	0				
Section Length (mi)	0.37				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	19				
Lane Width (ft)	9				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	43				
PCR (Pavement Condition Rating)	45				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Tranverse Cracking Index	96				
Patching Index	100				
Rutting Index	49				
Roughness Condition Index (RCI)	56				

NC - Not Collected

ROUTE: 0400AZ RESIDENTIAL / MAINTENANCE ROAD

Great Basin National Park

Section 6
Manually Rated Paved Route Condition Rating Sheets (MRR)

GREAT BASIN NATIONAL PARK
Route 0213
CAVE ACCESS ROAD
FROM ROUTE 0900 (VISITOR CENTER PARKING)
TO DEAD END

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0213	NONPUBLIC	7/13/2009		2,820	0.05	CO
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	1	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

* Lane miles are based on 11' lane widths

220 110 0 220
Feet

GREAT BASIN NATIONAL PARK
Route 0400ZZ

RESIDENTIAL / MAINTENANCE ROADS

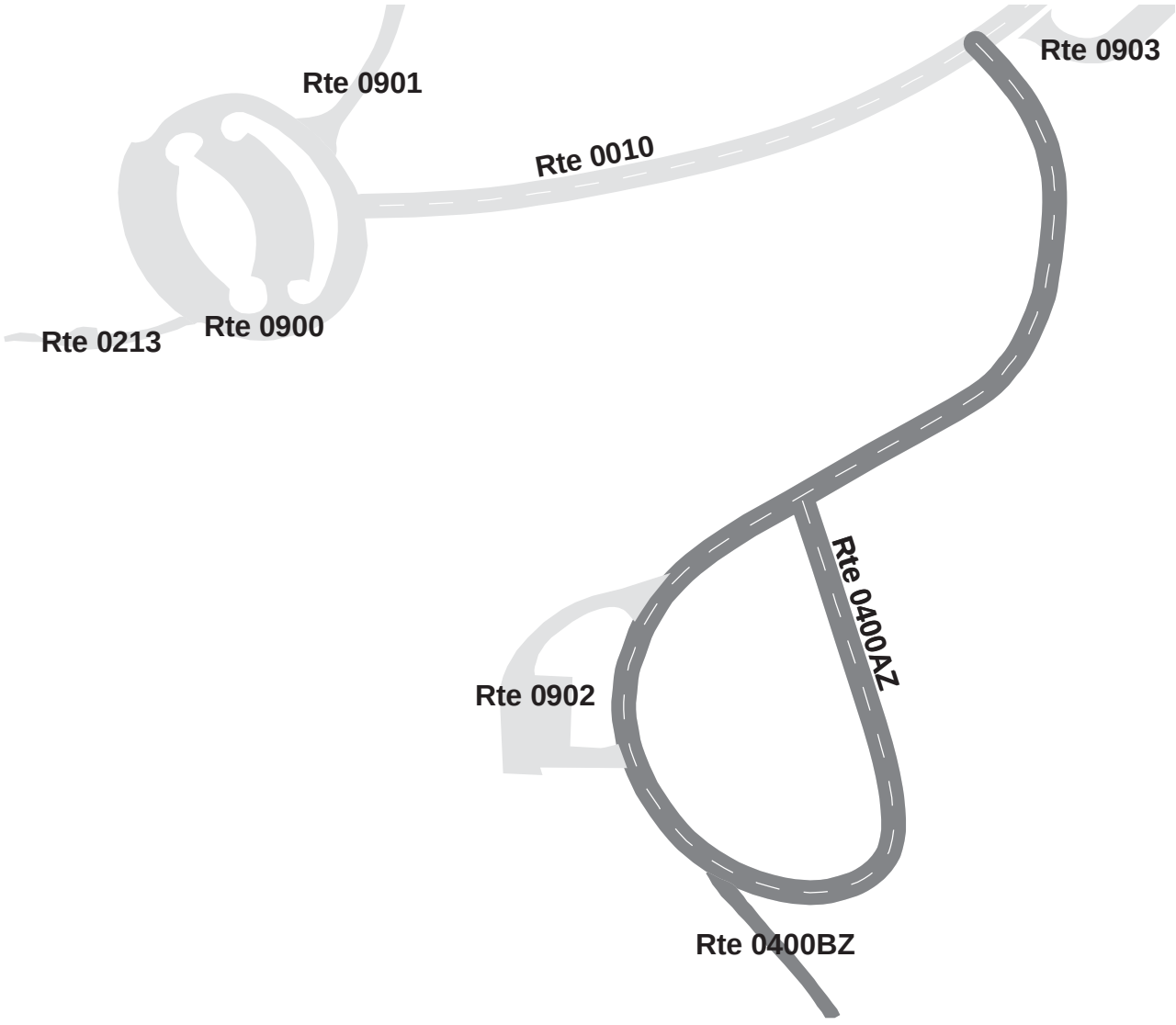
FROM ROUTE 0010 (ENTRANCE ROAD)

TO DEAD END

Summary Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0400ZZ	NONPUBLIC	9/29/2009		3,451	0.70	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
2	1	0	4	N/A	N/A	SUMMARY/44.61

* Lane miles are based on 11' lane widths



GREAT BASIN NATIONAL PARK
Route 0400BZ

RESIDENTIAL SPUR ROAD (RES 2)

FROM ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)

TO DEAD END

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0400BZ	NONPUBLIC	7/13/2009		3,451	0.06	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	1	NO CURB AND GUTTER	ASPHALT CURB	POOR/45

* Lane miles are based on 11' lane widths

440 220 0 440 Feet

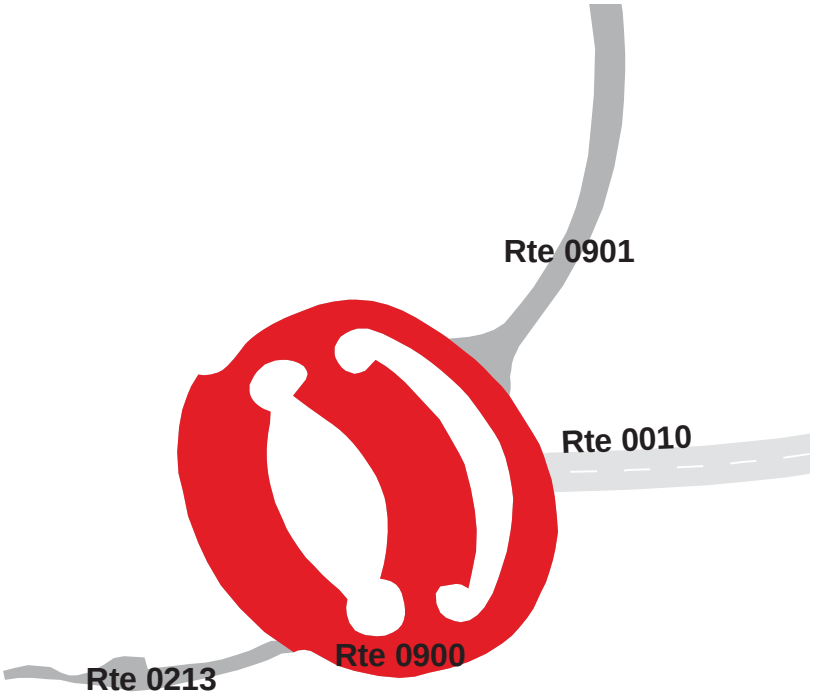
Great Basin National Park

Section 7
Parking Area Condition Rating Sheets

GREAT BASIN NATIONAL PARK
Route 0900
VISITOR CENTER PARKING
FROM ROUTE 0010 (ENTRANCE ROAD)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0900	PUBLIC	7/13/2009		43,362	0.75	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	3	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths

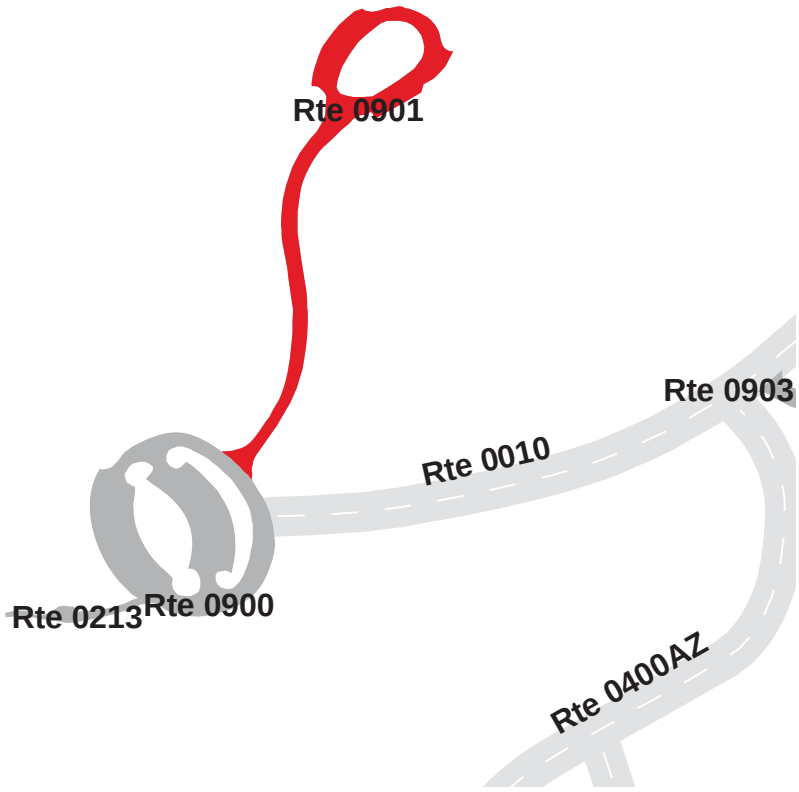


290 145 0 290
Feet

GREAT BASIN NATIONAL PARK
Route 0901
VISITOR CENTER PICNIC AREA
FROM ROUTE 0900 (VISITOR CENTER PARKING)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0901	PUBLIC	7/13/2009		30,439	0.52	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

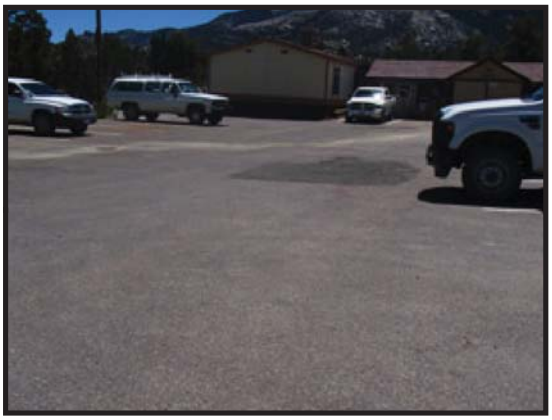
* Lane miles are based on 11' lane widths



GREAT BASIN NATIONAL PARK
Route 0902
MAINTENANCE YARD
FROM ROUTE 0400ZZ (RESIDENTIAL / MAINTENANCE ROADS)
TO ROUTE 0400ZZ (RESIDENTIAL / MAINTENANCE ROADS)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0902	NONPUBLIC	7/13/2009		15,155	0.26	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

* Lane miles are based on 11' lane widths



240 120 0 240
Feet

N

GREAT BASIN NATIONAL PARK
Route 0903
R.V. DUMP STATION
FROM ROUTE 0010 (ENTRANCE ROAD)
TO ROUTE 0010 (ENTRANCE ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0903	PUBLIC	7/13/2009		12,326	0.21	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

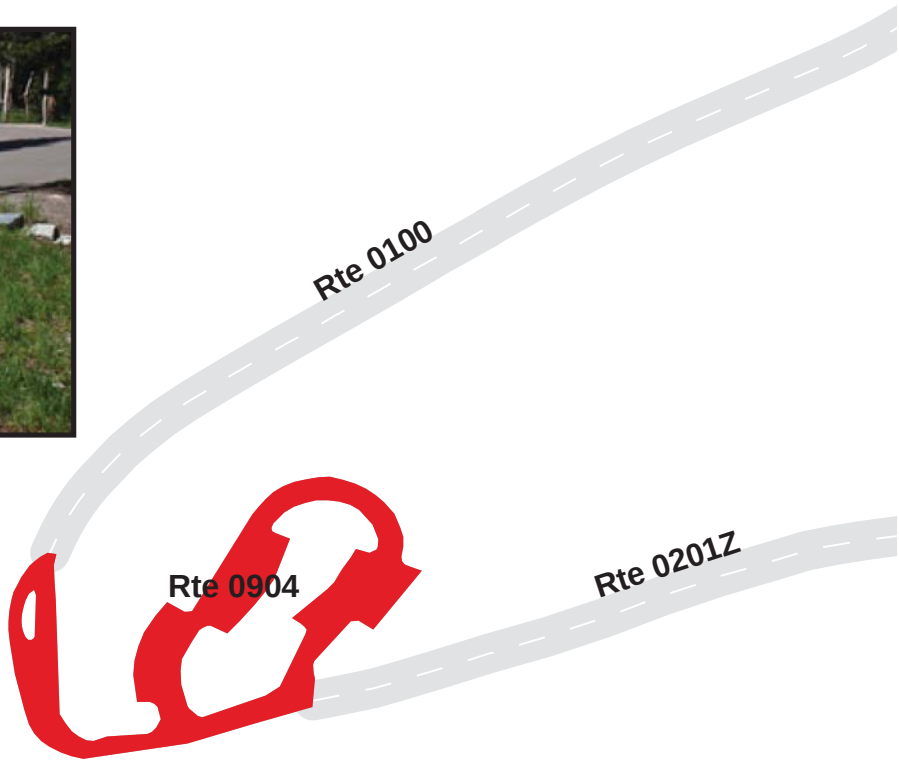
* Lane miles are based on 11' lane widths

230 115 0 230
Feet

GREAT BASIN NATIONAL PARK
Route 0904
BRISTLECONE PARKING AREA
FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
TO ROUTE 0201ZZ (WHEELER PEAK CAMPGROUND ROADS)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	7/13/2009		31,407	0.54	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	0	NO CURB AND GUTTER	ASPHALT & CONCRETE CURB	GOOD/90

* Lane miles are based on 11' lane widths

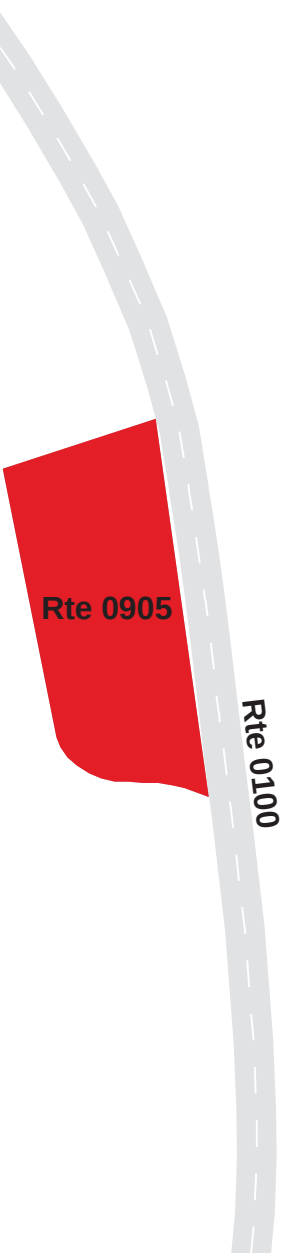


350 175 0 350
Feet

GREAT BASIN NATIONAL PARK
Route 0905
SUMMIT TRAILHEAD PARKING
ADJACENT TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	7/13/2009		8,723	0.15	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	ASPHALT CURB	GOOD/90

* Lane miles are based on 11' lane widths



150 75 0 150
Feet

N

GREAT BASIN NATIONAL PARK
Route 0907
OSCEOLA DITCH TRAILHEAD PARKING
ADJACENT TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)

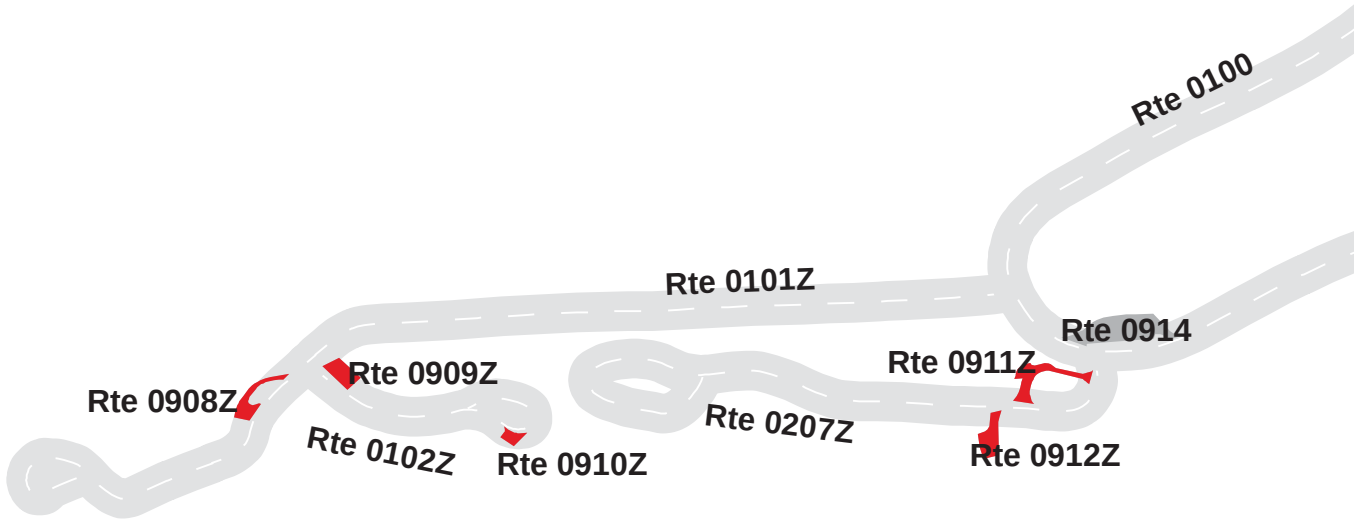
Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0907	PUBLIC	7/13/2009		8,810	0.15	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	ASPHALT CURB	FAIR/73

* Lane miles are based on 11' lane widths

GREAT BASIN NATIONAL PARK
Route 0908ZZ
LEHMAN CREEK PARKING AREAS
FROM ROUTE 0101ZZ (UPPER LEHMAN CREEK CAMPGROUND ROADS)
TO PARKING
Summary Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0908ZZ	PUBLIC	7/13/2009		15,892	0.27	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	SUMMARY/53.69

* Lane miles are based on 11' lane widths



800 400 0 800
Feet

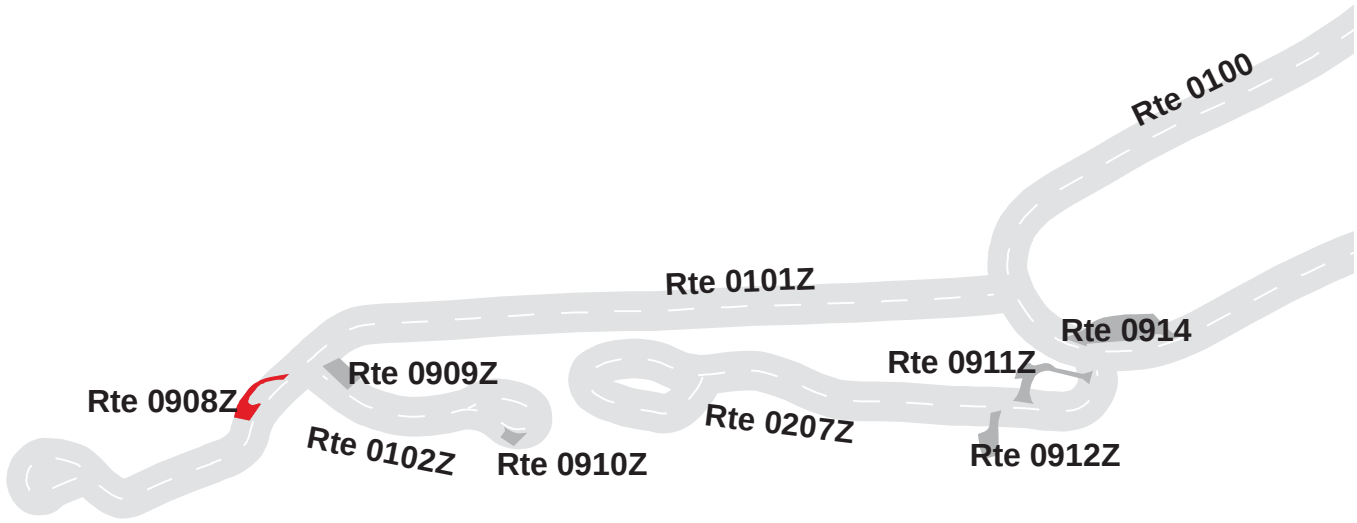
N

GREAT BASIN NATIONAL PARK
Route 0908Z
LEHMAN CREEK TRAILHEAD PARKING
ADJACENT TO ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0908Z	PUBLIC	7/13/2009		3,102	0.05	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



800 400 0 800
Feet

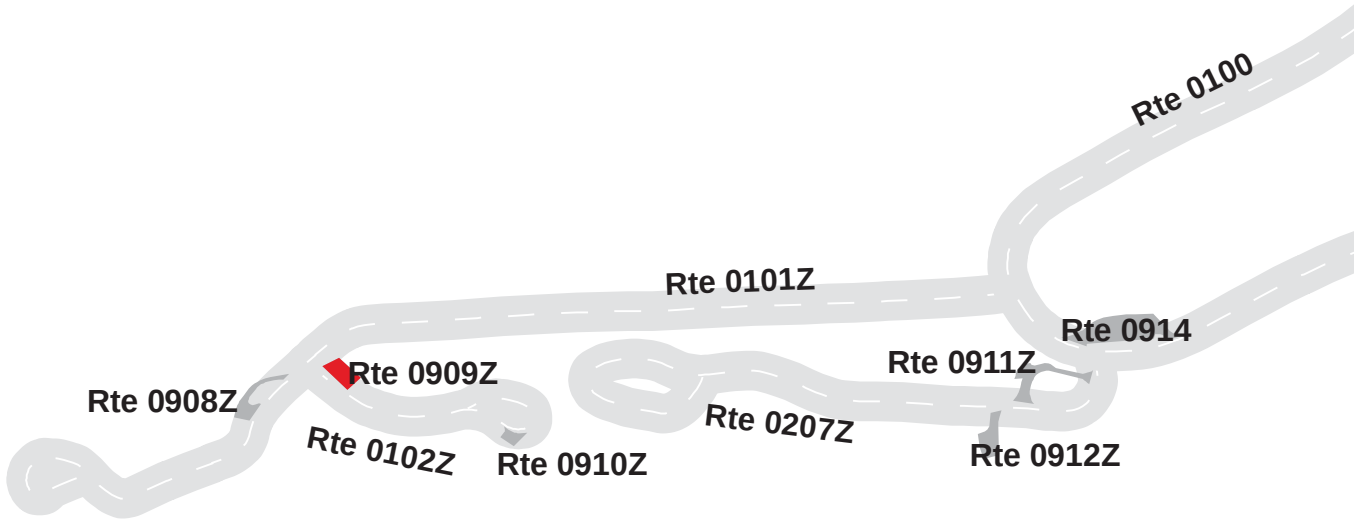
N

GREAT BASIN NATIONAL PARK
Route 0909Z
LEHMAN CREEK LOWER TRAILHEAD PARKING
ADJACENT TO ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0909Z	PUBLIC	7/13/2009		2,991	0.05	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



800 400 0 800
Feet

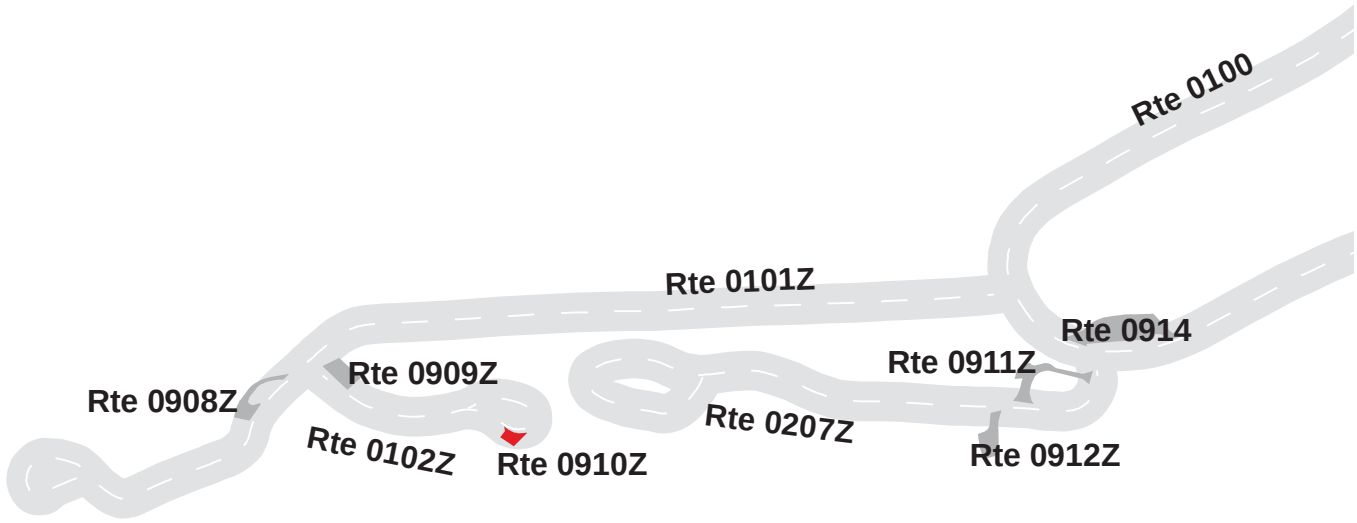
N

GREAT BASIN NATIONAL PARK
Route 0910Z
UPPER LEHMAN CREEK UPPER CAMPGROUND PARKING
ADJACENT TO ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0910Z	PUBLIC	7/13/2009		1,253	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



800 400 0 800
Feet

N

GREAT BASIN NATIONAL PARK
Route 0911Z
UPPER LEHMAN CREEK PICNIC AREA PARKING
FROM ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
TO ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0911Z	PUBLIC	7/13/2009		4,934	0.09	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths

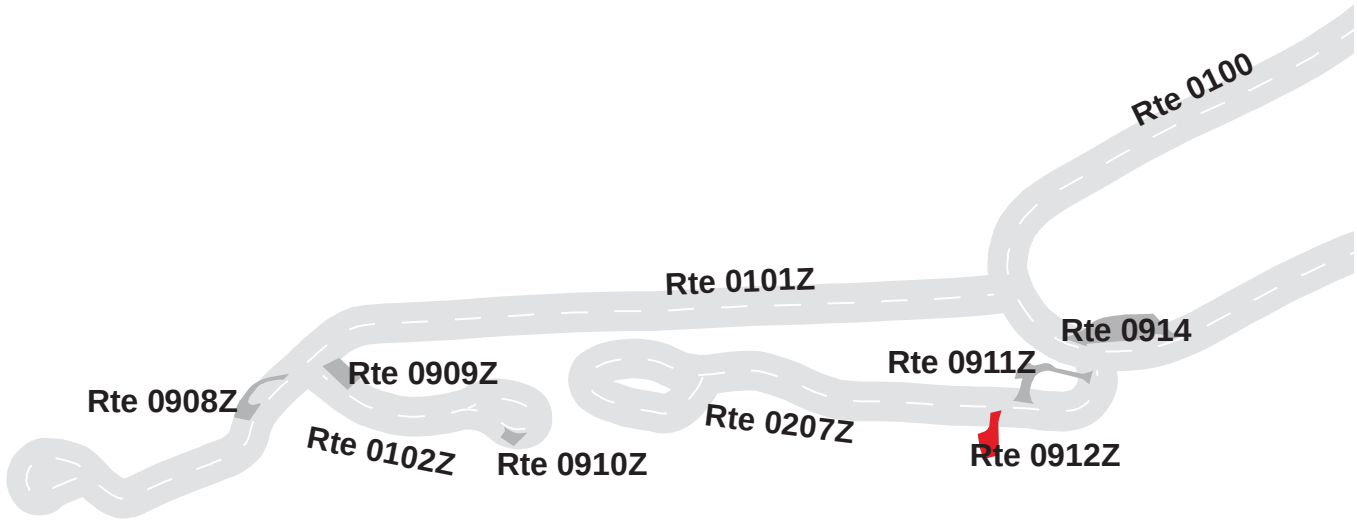
800 400 0 800
Feet

N

GREAT BASIN NATIONAL PARK
Route 0912Z
UPPER LEHMAN CREEK DAY USE PICNIC AREA PARKING
FROM ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
TO PARKING
Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0912Z	PUBLIC	7/13/2009		3,613	0.06	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



800 400 0 800
Feet

N

GREAT BASIN NATIONAL PARK

Route 0914

LEHMAN CREEK WINTER TRAILHEAD PARKING (UPPER LEHMAN CREEK CAMPGROUND)
FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0914	PUBLIC	7/13/2009		11,459	0.20	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths

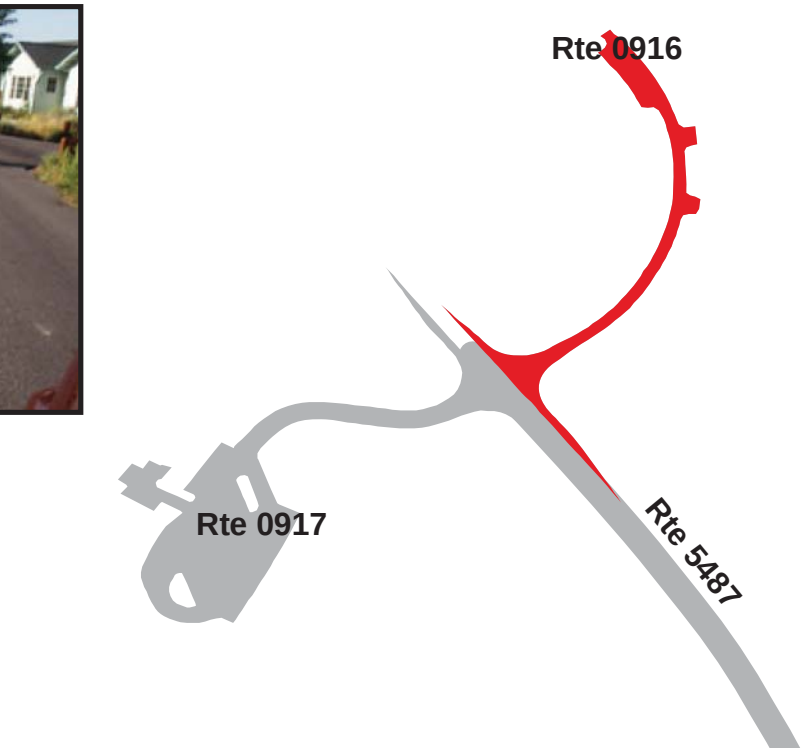
250 125 0 250
Feet

N

GREAT BASIN NATIONAL PARK
Route 0916
APARTMENT PARKING AREA
FROM ROUTE 5487 (NV ROUTE 487)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0916	PUBLIC	7/13/2009		21,572	0.37	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	1	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

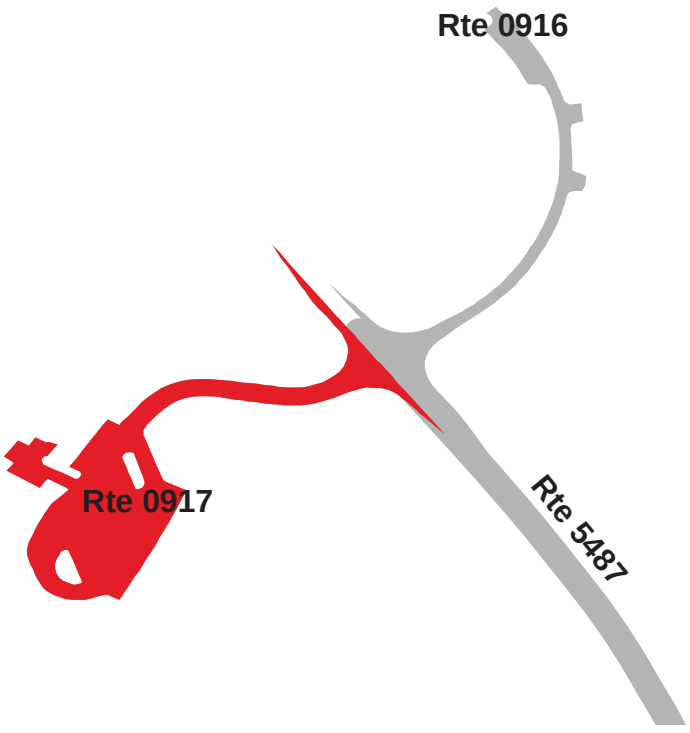
* Lane miles are based on 11' lane widths



GREAT BASIN NATIONAL PARK
Route 0917
GREAT BASIN VC PARKING AREA
FROM ROUTE 5487 (NV ROUTE 487)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0917	PUBLIC	7/13/2009		59,034	1.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	3	NO CURB AND GUTTER	CONCRETE CURB	GOOD/90

* Lane miles are based on 11' lane widths



GREAT BASIN NATIONAL PARK
Route 0918
UPPER BAKER CG ADA PARKING SPACE
ADJACENT TO ROUTE 0210 (BAKER CREEK CAMPGROUND ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0918	PUBLIC	7/13/2009		280	0.01	CO
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

30 15 0 30 Feet

N

GREAT BASIN NATIONAL PARK
Route 0919
LOWER BAKER CG ADA PARKING SPACE
ADJACENT TO ROUTE 0105 (BAKER CREEK ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0919	PUBLIC	N/C		0	0.00	CO
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	N/C	N/C	N/C

* Lane miles are based on 11' lane widths

NOTE: Route was not collected in Cycle 4. Route will be collected in Cycle 5.

Great Basin National Park

Section 8
Parkwide / Route Maintenance
Features Summaries

GRBA: PARKWIDE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count below includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

FEATURE	LINEAR FEET	COUNT
BARRIER	1,183	--
BOLLARD	0	--
BRIDGE	--	0
CABLE	0	--
CATTLE GUARD	--	0
CULVERT	--	85
CURB	5,586	--
DROP INLET	--	8
FIRE HYDRANT	--	9
GATE	--	7
GUARD/GUIDE RAIL	1,183	--
GUARD/GUIDE WALL	0	--
INTERSECTION	--	74
LOW WATER CROSSING	0	0
MILE MARKER	--	0
OVERPASS	--	0
OVERHEAD SIGN	--	0
PARK BOUNDARY	--	1
PAVED DITCH	412	--
PULLOUT	--	5
RAILROAD CROSSING	--	0
RETAINING WALL	0	0
SIGN	--	119
STATE BOUNDARY	--	0
TEMPORARY BARRIER	0	--
TRAFFIC LIGHT	--	0
TUNNEL	0	0
TURNOUT	0	--

GRBA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0010 ENTRANCE ROAD	ROUTE 0100 WHEELER PEAK SCENIC DRIVE	ROUTE 0101ZZ UPPER LEHMAN CREEK CAMPGROUND ROADS	ROUTE 0106 MATHER OVERLOOK	ROUTE 0201ZZ WHEELER PEAK CAMPGROUND ROADS	ROUTE 0209 LOWER LEHMAN CREEK CAMPGROUND LOOP	UNIT
BARRIER	0	1,183	0	0	0	0	LINEAR FEET
BOLLARD	0	0	0	0	0	0	LINEAR FEET
BRIDGE	0	0	0	0	0	0	EACH
CABLE	0	0	0	0	0	0	LINEAR FEET
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	1	71	5	2	1	3	EACH
CURB	549	2,212	0	0	2,825	0	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	0	0	0	0	0	EACH
GATE	0	4	2	0	1	0	EACH
GUARD/GUIDE RAIL	0	1,183	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0	0	0	LINEAR FEET
INTERSECTION	7	14	25	3	10	4	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	0	EACH
OVERHEAD SIGN	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	1	0	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	0	0	LINEAR FEET
PULLOUT	2	2	1	0	0	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	LINEAR FEET
SIGN	14	65	17	1	14	2	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	LINEAR FEET
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

GRBA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0400ZZ RESIDENTIAL / MAINTENANCE ROADS	UNIT
BARRIER	0	LINEAR FEET
BOLLARD	0	LINEAR FEET
BRIDGE	0	EACH
CABLE	0	LINEAR FEET
CATTLE GUARD	0	EACH
CULVERT	2	EACH
CURB	0	LINEAR FEET
DROP INLET	1	EACH
FIRE HYDRANT	4	EACH
GATE	0	EACH
GUARD/GUIDE RAIL	0	LINEAR FEET
GUARD/GUIDE WALL	0	LINEAR FEET
INTERSECTION	11	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	412	LINEAR FEET
PULLOUT	0	EACH
RAILROAD CROSSING	0	EACH
RETAINING WALL	0	EACH
RETAINING WALL	0	LINEAR FEET
SIGN	6	EACH
STATE BOUNDARY	0	EACH
TEMPORARY BARRIER	0	LINEAR FEET
TRAFFIC LIGHT	0	EACH
TUNNEL	0	EACH
TUNNEL	0	LINEAR FEET
TURNOUT	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

GRBA: STRUCTURE LIST

ROUTE NUMBER	FUNCTIONAL CLASS	MILEPOST START	MILEPOST END	FEATURE	STRUCTURE NUMBER

No data available for this section.

Great Basin National Park

Section 9
Park Route Maintenance Features
Road Logs

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: ENTRANCE ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5488 (NV ROUTE 488) (AT CATTLE GUARD)
0.000	0.000	PARK BOUNDARY	N/A	
0.000	0.000	INTERSECTION	N/A	ROUTE 5488 (NV ROUTE 488)
0.003	0.003	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.005	0.057	CURB-AND-GUTTER	LEFT	
0.006	0.058	CURB-AND-GUTTER	RIGHT	
0.006	0.060	PULLOUT	RIGHT	
0.007	0.054	PULLOUT	LEFT	
0.032	0.032	SIGN	RIGHT	GUIDE, CAMPGROUND
0.055	0.055	SIGN	RIGHT	GUIDE, GREAT BASIN NATIONAL PARK
0.078	0.078	SIGN	LEFT	GUIDE, WHEELER PEAK SCENIC DRIVE
0.078	0.078	SIGN	RIGHT	GUIDE, WHEELER PEAK SCENIC DRIVE
0.080	0.080	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.086	0.086	CULVERT	N/A	
0.212	0.212	SIGN	RIGHT	GUIDE, LEHMAN CAVES VISITOR CENTER BAKER CREEK ROAD TRAILHEAD CAMPGROUND
0.254	0.254	INTERSECTION	LEFT	ROUTE 0105 (BAKER CREEK ROAD)
0.310	0.310	SIGN	RIGHT	GUIDE, BAKER CREEK ROAD TRAILHEAD CAMPGROUND
0.410	0.410	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.413	0.413	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.490	0.490	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.490	0.490	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.525	0.525	INTERSECTION	LEFT	ROUTE 0903 (R.V. DUMP STATION)
0.568	0.568	INTERSECTION	LEFT	ROUTE 0903 (R.V. DUMP STATION)
0.581	0.581	INTERSECTION	LEFT	ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)
0.666	0.666	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.679	0.679	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.710	0.710	INTERSECTION	N/A	ROUTE 0900 (VISITOR CENTER PARKING)
0.710	0.710	SIGN	N/A	REGULATORY, KEEP RIGHT
0.710	0.710	ROUTE END	N/A	TO ROUTE 0900 (VISITOR CENTER PARKING)

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (ENTRANCE ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (ENTRANCE ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (ENTRANCE ROAD)
0.010	0.010	SIGN	RIGHT	REGULATORY, STOP
0.015	0.015	SIGN	RIGHT	GUIDE, LEHMAN CAVES VISITOR CENTER BAKER CREEK CAMPGROUND BAKER
0.042	0.042	SIGN	RIGHT	REGULATORY, DO NOT PASS NEXT 12 MILES
0.157	0.157	SIGN	RIGHT	WARNING, 8% UPGRADE FOR THE NEXT 10 MILES
0.237	0.237	INTERSECTION	RIGHT	UNPAVED ROUTE
0.255	0.255	INTERSECTION	RIGHT	UNPAVED ROUTE
0.266	0.266	CULVERT	N/A	
0.281	0.281	SIGN	RIGHT	WARNING, DEER XING
0.281	0.281	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.313	0.313	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.400	0.400	CULVERT	N/A	
0.612	0.612	CULVERT	N/A	
0.811	0.811	CULVERT	N/A	
1.088	1.088	SIGN	RIGHT	GUIDE, ELEV. 7000
1.113	1.113	CULVERT	N/A	
1.371	1.371	CULVERT	N/A	
1.588	1.588	CULVERT	N/A	
1.609	1.609	CULVERT	N/A	
1.749	1.749	CULVERT	N/A	
1.760	1.760	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
1.805	1.805	INTERSECTION	LEFT	ROUTE 0209 (LOWER LEHMAN CREEK CAMPGROUND LOOP)
1.808	1.808	SIGN	LEFT	REGULATORY, DO NOT ENTER
1.883	1.883	SIGN	LEFT	GUIDE, LOWER LEHMAN CREEK CAMPGROUND
1.883	1.883	SIGN	RIGHT	GUIDE, LOWER LEHMAN CREEK CAMPGROUND
1.894	1.894	INTERSECTION	LEFT	ROUTE 0209 (LOWER LEHMAN CREEK CAMPGROUND LOOP)
1.913	1.913	CULVERT	N/A	
2.122	2.122	CULVERT	N/A	
2.275	2.275	SIGN	RIGHT	GUIDE, ELEV. 7500
2.375	2.375	SIGN	RIGHT	WARNING, CAUTION NARROW STEEP WINDING MOUNTAIN ROAD NEXT 8 MILES

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.408	2.408	SIGN	RIGHT	REGULATORY, SINGLE VEHICLES OR TRAILERS OVER 24FT. PROHIBITED BEYOND UPPER LEHMAN CAMPGROUND
2.425	2.425	SIGN	RIGHT	WARNING, DEER XING
2.425	2.425	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
2.432	2.432	INTERSECTION	RIGHT	ROUTE 0914 (LEHMAN CREEK WINTER TRAILHEAD PARKING (UPPER LEHMAN CREEK CAMPGROUND))
2.437	2.437	SIGN	RIGHT	WARNING, ROAD GATE SLOW AHEAD
2.449	2.449	SIGN	LEFT	GUIDE, UPPER LEHMAN CREEK CAMPGROUND
2.450	2.450	SIGN	RIGHT	GUIDE, UPPER LEHMAN CREEK CAMPGROUND
2.460	2.460	INTERSECTION	LEFT	ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
2.469	2.469	INTERSECTION	RIGHT	ROUTE 0914 (LEHMAN CREEK WINTER TRAILHEAD PARKING (UPPER LEHMAN CREEK CAMPGROUND))
2.490	2.490	GATE	N/A	
2.509	2.509	INTERSECTION	LEFT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
2.594	2.594	SIGN	RIGHT	WARNING, 25 M.P.H.
2.594	2.594	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
2.854	2.854	CULVERT	N/A	
3.130	3.130	CULVERT	N/A	
3.265	3.265	CULVERT	N/A	
3.381	3.381	SIGN	RIGHT	WARNING, SOFT SHOULDER
3.504	3.504	CULVERT	N/A	
3.646	3.646	CULVERT	N/A	
3.727	3.727	CULVERT	N/A	
3.767	3.767	SIGN	LEFT	GUIDE, ELEV 8000
3.767	3.767	SIGN	RIGHT	GUIDE, ELEV. 8000
3.878	3.878	CULVERT	N/A	
4.064	4.064	CULVERT	N/A	
4.211	4.211	CULVERT	N/A	
4.432	4.432	CULVERT	N/A	
4.674	4.674	CULVERT	N/A	
4.726	4.726	SIGN	RIGHT	GUIDE, EXHIBIT AHEAD
4.796	4.796	INTERSECTION	RIGHT	ROUTE 0907 (OSCEOLA DITCH TRAILHEAD PARKING)
4.799	4.799	SIGN	LEFT	GUIDE, OSCEOLA DITCH
4.799	4.799	SIGN	RIGHT	GUIDE, OSCEOLA DITCH

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.826	4.826	CULVERT	N/A	
4.844	4.884	CURB	RIGHT	
4.847	4.847	CULVERT	N/A	
4.847	4.847	GATE	N/A	
4.847	4.847	SIGN	N/A	WARNING, GRAPHIC SIGN, NO TEXT
4.847	4.847	SIGN	N/A	WARNING, GRAPHIC SIGN, NO TEXT
4.885	4.885	SIGN	RIGHT	GUIDE, EXHIBIT AHEAD
5.105	5.105	SIGN	LEFT	GUIDE, ELEV. 8500
5.105	5.105	SIGN	RIGHT	GUIDE, ELEV. 8500
5.119	5.119	CULVERT	N/A	
5.248	5.269	CURB	RIGHT	
5.399	5.399	CULVERT	N/A	
5.458	5.458	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
5.481	5.530	PULLOUT	RIGHT	
5.507	5.559	GUARD/GUIDE RAIL	RIGHT	
5.532	5.532	CULVERT	N/A	
5.570	5.570	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
5.628	5.655	CURB	LEFT	
5.690	5.690	CULVERT	N/A	
5.821	5.880	GUARD/GUIDE RAIL	LEFT	
5.913	5.913	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
5.975	5.975	CULVERT	N/A	
6.245	6.245	CULVERT	N/A	
6.406	6.406	CULVERT	N/A	
6.459	6.459	SIGN	RIGHT	GUIDE, ELEV. 9000
6.497	6.497	CULVERT	N/A	
6.725	6.725	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
6.729	6.729	SIGN	RIGHT	GUIDE, OVERLOOK AHEAD
6.818	6.818	INTERSECTION	LEFT	ROUTE 0106 (MATHER OVERLOOK)
6.820	6.820	SIGN	LEFT	GUIDE, MATHER OVERLOOK
6.820	6.820	SIGN	RIGHT	GUIDE, MATHER OVERLOOK
6.836	6.836	CULVERT	N/A	
6.853	6.853	GATE	N/A	
6.890	6.890	CULVERT	N/A	

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
6.930	6.930	SIGN	RIGHT	GUIDE, OVERLOOK AHEAD
7.028	7.028	CULVERT	N/A	
7.140	7.140	CULVERT	N/A	
7.275	7.275	CULVERT	N/A	
7.420	7.420	CULVERT	N/A	
7.490	7.490	CULVERT	N/A	
7.533	7.533	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
7.612	7.612	CULVERT	N/A	
7.696	7.696	CULVERT	N/A	
7.860	7.860	CULVERT	N/A	
7.906	7.906	CULVERT	N/A	
7.949	7.949	SIGN	LEFT	GUIDE, ELEV. 9500
7.949	7.949	SIGN	RIGHT	GUIDE, ELEV. 9500
7.991	7.991	CULVERT	N/A	
8.053	8.053	CULVERT	N/A	
8.154	8.154	CULVERT	N/A	
8.292	8.292	CULVERT	N/A	
8.482	8.482	CULVERT	N/A	
8.566	8.689	CURB	RIGHT	
8.586	8.699	GUARD/GUIDE RAIL	RIGHT	
8.605	8.605	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
8.620	8.620	CULVERT	N/A	
8.792	8.792	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
8.886	8.949	CURB	LEFT	
8.892	8.892	CULVERT	N/A	
9.082	9.082	CULVERT	N/A	
9.250	9.250	CULVERT	N/A	
9.363	9.363	CULVERT	N/A	
9.444	9.444	CULVERT	N/A	
9.593	9.593	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
9.634	9.634	CULVERT	N/A	
9.660	9.660	SIGN	RIGHT	WARNING, 8% DOWNGRADE FOR THE NEXT 10 MILES
9.660	9.660	SIGN	RIGHT	WARNING, USE LOW GEAR TO PREVENT BURNING BRAKES
9.692	9.692	SIGN	RIGHT	GUIDE, OVERLOOK AHEAD

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
9.694	9.694	CULVERT	N/A	
9.775	9.775	SIGN	LEFT	GUIDE, WHEELER PEAK OVERLOOK
9.778	9.843	PULLOUT	LEFT	
9.779	9.843	CURB	LEFT	
9.847	9.847	SIGN	RIGHT	GUIDE, WHEELER PEAK OVERLOOK
9.860	9.860	CULVERT	N/A	
9.950	9.950	SIGN	RIGHT	GUIDE, OVERLOOK AHEAD
9.979	9.979	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
10.089	10.089	CULVERT	N/A	
10.097	10.097	SIGN	LEFT	GUIDE, ELEV. 10000
10.098	10.098	SIGN	RIGHT	GUIDE, ELEV. 10000
10.221	10.221	CULVERT	N/A	
10.356	10.356	CULVERT	N/A	
10.547	10.547	CULVERT	N/A	
10.700	10.700	CULVERT	N/A	
10.842	10.842	CULVERT	N/A	
10.958	10.958	CULVERT	N/A	
11.093	11.093	SIGN	RIGHT	GUIDE, PARKING AHEAD
11.115	11.115	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
11.173	11.173	SIGN	LEFT	GUIDE, SUMMIT TRAILHEAD
11.182	11.182	INTERSECTION	RIGHT	ROUTE 0905 (SUMMIT TRAILHEAD PARKING)
11.186	11.186	SIGN	RIGHT	GUIDE, SUMMIT TRAILHEAD
11.201	11.201	GATE	N/A	
11.242	11.242	SIGN	RIGHT	GUIDE, PARKING AHEAD
11.252	11.252	CULVERT	N/A	
11.305	11.349	CURB	LEFT	
11.312	11.312	CULVERT	N/A	
11.355	11.355	CULVERT	N/A	
11.364	11.401	CURB	LEFT	
11.442	11.442	CULVERT	N/A	
11.513	11.513	CULVERT	N/A	
11.642	11.642	CULVERT	N/A	
11.680	11.680	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
11.735	11.735	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0100: WHEELER PEAK SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
11.738	11.738	CULVERT	N/A	
11.750	11.750	INTERSECTION	N/A	ROUTE 0904 (BRISTLECONE PARKING AREA)
11.750	11.750	SIGN	N/A	REGULATORY, KEEP RIGHT
11.750	11.750	ROUTE END	N/A	TO ROUTE 0904 (BRISTLECONE PARKING AREA)

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0101Z: UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.004	0.004	SIGN	RIGHT	REGULATORY, STOP
0.011	0.011	GATE	N/A	
0.011	0.011	SIGN	N/A	REGULATORY, GRAPHIC SIGN, NO TEXT
0.011	0.011	SIGN	N/A	REGULATORY, GRAPHIC SIGN, NO TEXT
0.011	0.011	SIGN	N/A	REGULATORY, ROAD CLOSED
0.114	0.114	INTERSECTION	LEFT	ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD) CUT-THRU
0.122	0.122	SIGN	RIGHT	WARNING, ROUGH ROAD
0.178	0.178	CULVERT	N/A	
0.220	0.220	CULVERT	N/A	
0.235	0.235	CULVERT	N/A	
0.280	0.280	SIGN	RIGHT	GUIDE, SELF SERVICE PAY STATION
0.285	0.285	INTERSECTION	LEFT	ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)
0.290	0.290	SIGN	RIGHT	GUIDE, TRAILER USE NOT ADVISED
0.296	0.296	INTERSECTION	RIGHT	ROUTE 0908Z (LEHMAN CREEK TRAILHEAD PARKING)
0.316	0.316	INTERSECTION	RIGHT	ROUTE 0908Z (LEHMAN CREEK TRAILHEAD PARKING)
0.330	0.330	CULVERT	N/A	
0.347	0.363	PULLOUT	RIGHT	
0.394	0.394	CULVERT	N/A	
0.410	0.410	INTERSECTION	LEFT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.410	0.470	ONE-WAY	N/A	
0.470	0.470	INTERSECTION	RIGHT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.470	0.470	INTERSECTION	LEFT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.470	0.470	ROUTE END	N/A	TO END OF LOOP

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0102Z: UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROA

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD)
0.008	0.008	INTERSECTION	LEFT	ROUTE 0909Z (LEHMAN CREEK LOWER TRAILHEAD PARKING)
0.072	0.072	INTERSECTION	LEFT	ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)
0.072	0.130	ONE-WAY	N/A	
0.089	0.089	INTERSECTION	RIGHT	ROUTE 0910Z (UPPER LEHMAN CREEK UPPER CAMPGROUND PARKING)
0.128	0.128	INTERSECTION	LEFT	ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)
0.130	0.130	INTERSECTION	N/A	ROUTE 0102Z (UPPER LEHMAN CREEK UPPER CAMPGROUND ACCESS ROAD)
0.130	0.130	ROUTE END	N/A	TO END OF LOOP

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0106: MATHER OVERLOOK

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.009	0.009	SIGN	RIGHT	REGULATORY, STOP
0.020	0.020	CULVERT	N/A	
0.182	0.182	CULVERT	N/A	
0.220	0.220	INTERSECTION	N/A	DEAD END (OVERLOOK TURN AROUND)
0.220	0.220	ROUTE END	N/A	TO DEAD END

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0201Z: WHEELER PEAK CAMPGROUND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0904 (BRISTLECONE PARKING AREA)
0.000	0.000	INTERSECTION	N/A	ROUTE 0904 (BRISTLECONE PARKING AREA)
0.006	0.006	GATE	N/A	
0.006	0.036	CURB	RIGHT	
0.013	0.052	CURB	LEFT	
0.027	0.027	SIGN	RIGHT	GUIDE, US FEE AREA
0.027	0.027	SIGN	RIGHT	GUIDE, WHEELER PEAK CAMPGROUND
0.035	0.035	SIGN	RIGHT	GUIDE, CAMPGROUND HOST
0.038	0.038	SIGN	RIGHT	GUIDE, EVENING CAMPFIRE PROGRAM
0.051	0.051	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.081	0.089	CURB	RIGHT	
0.146	0.146	SIGN	RIGHT	GUIDE, SELF SERVICE PAY STATION
0.148	0.151	CURB	RIGHT	
0.148	0.148	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.153	0.153	INTERSECTION	RIGHT	ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.153	0.600	ONE-WAY	N/A	
0.176	0.189	CURB	RIGHT	
0.217	0.253	CURB	RIGHT	
0.242	0.242	INTERSECTION	LEFT	ROUTE 0203Z (WHEELER PEAK UPPER CAMPGROUND ROAD)
0.262	0.342	CURB	LEFT	
0.280	0.280	CULVERT	N/A	
0.349	0.363	CURB	LEFT	
0.369	0.421	CURB	RIGHT	
0.386	0.393	CURB	LEFT	
0.425	0.438	CURB	RIGHT	
0.491	0.517	CURB	LEFT	
0.524	0.550	CURB	LEFT	
0.565	0.600	CURB	RIGHT	
0.569	0.573	CURB	LEFT	
0.582	0.597	CURB	LEFT	
0.593	0.593	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.600	0.600	INTERSECTION	LEFT	ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.600	0.600	INTERSECTION	RIGHT	ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.600	0.600	SIGN	N/A	REGULATORY, EXIT

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0201Z: WHEELER PEAK CAMPGROUND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.600	0.600	SIGN	N/A	REGULATORY, YIELD
0.600	0.600	ROUTE END	N/A	TO END OF LOOP

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0203Z: WHEELER PEAK UPPER CAMPGROUND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.000	0.000	SIGN	N/A	REGULATORY, ONE WAY
0.000	0.000	INTERSECTION	N/A	ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0201Z (WHEELER PEAK CAMPGROUND ROAD)
0.007	0.007	SIGN	RIGHT	REGULATORY, YIELD
0.043	0.054	CURB	RIGHT	
0.065	0.087	CURB	LEFT	
0.066	0.072	CURB	RIGHT	
0.083	0.122	CURB	RIGHT	
0.118	0.118	INTERSECTION	LEFT	ROUTE 0203Z (WHEELER PEAK UPPER CAMPGROUND ROAD)
0.118	0.230	ONE-WAY	N/A	
0.122	0.122	SIGN	LEFT	REGULATORY, KEEP RIGHT
0.124	0.152	CURB	LEFT	
0.148	0.153	CURB	RIGHT	
0.167	0.190	CURB	LEFT	
0.224	0.224	SIGN	RIGHT	REGULATORY, YIELD
0.230	0.230	INTERSECTION	LEFT	ROUTE 0203Z (WHEELER PEAK UPPER CAMPGROUND ROAD)
0.230	0.230	INTERSECTION	RIGHT	ROUTE 0203Z (WHEELER PEAK UPPER CAMPGROUND ROAD)
0.230	0.230	ROUTE END	N/A	TO END OF LOOP

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0207Z: UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.004	0.004	SIGN	RIGHT	REGULATORY, STOP
0.008	0.008	SIGN	N/A	REGULATORY, NO PARKING
0.008	0.008	SIGN	N/A	REGULATORY, GRAPHIC SIGN, NO TEXT
0.008	0.008	GATE	N/A	
0.008	0.008	SIGN	N/A	REGULATORY, GRAPHIC SIGN, NO TEXT
0.011	0.011	INTERSECTION	RIGHT	ROUTE 0911Z (UPPER LEHMAN CREEK PICNIC AREA PARKING)
0.019	0.019	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.053	0.053	INTERSECTION	RIGHT	ROUTE 0911Z (UPPER LEHMAN CREEK PICNIC AREA PARKING)
0.063	0.063	INTERSECTION	LEFT	ROUTE 0912Z (UPPER LEHMAN CREEK DAY USE PICNIC AREA PARKING)
0.066	0.066	SIGN	RIGHT	GUIDE, SELF SERVICE PAY STATION
0.118	0.118	SIGN	LEFT	GUIDE, RESERVED PARKING
0.170	0.170	INTERSECTION	RIGHT	ROUTE 0101Z (UPPER LEHMAN CREEK CAMPGROUND ACCESS ROAD) CUT-THRU
0.171	0.171	SIGN	RIGHT	GUIDE, SITES 17-24
0.174	0.174	SIGN	RIGHT	GUIDE, TRAILER USE NOT ADVISED
0.180	0.180	INTERSECTION	LEFT	ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
0.180	0.290	ONE-WAY	N/A	
0.184	0.184	SIGN	LEFT	GUIDE, ONE WAY
0.290	0.290	INTERSECTION	LEFT	ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
0.290	0.290	INTERSECTION	N/A	ROUTE 0207Z (UPPER LEHMAN CREEK LOWER CAMPGROUND ROAD)
0.290	0.290	ROUTE END	N/A	TO END OF LOOP

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0209: LOWER LEHMAN CREEK CAMPGROUND LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0100 (WHEELER PEAK SCENIC DRIVE) AT MP 1.89
0.000	0.310	ONE-WAY	N/A	
0.000	0.000	INTERSECTION	LEFT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.020	0.020	CULVERT	N/A	
0.077	0.077	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.092	0.092	CULVERT	N/A	
0.247	0.247	CULVERT	N/A	
0.310	0.310	INTERSECTION	LEFT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.310	0.310	INTERSECTION	RIGHT	ROUTE 0100 (WHEELER PEAK SCENIC DRIVE)
0.310	0.310	SIGN	RIGHT	REGULATORY, STOP
0.310	0.310	ROUTE END	N/A	TO ROUTE 0100 (WHEELER PEAK SCENIC DRIVE) AT MP 1.81

GRBA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0400AZ: RESIDENTIAL / MAINTENANCE ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (ENTRANCE ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (ENTRANCE ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (ENTRANCE ROAD)
0.003	0.003	CULVERT	N/A	
0.006	0.006	SIGN	RIGHT	REGULATORY, STOP
0.009	0.087	PAVED DITCH	RIGHT	
0.010	0.010	SIGN	RIGHT	GUIDE, AUTHORIZED VEHICLES ONLY
0.010	0.010	SIGN	RIGHT	GUIDE, RESIDENTIAL & MAINTENANCE AREA
0.088	0.088	INTERSECTION	LEFT	UNPAVED ROUTE
0.108	0.108	CULVERT	N/A	
0.109	0.109	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.109	0.109	SIGN	RIGHT	WARNING, SLOW CHILDREN AT PLAY
0.141	0.141	INTERSECTION	LEFT	ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)
0.179	0.179	INTERSECTION	RIGHT	ROUTE 0902 (MAINTENANCE YARD)
0.205	0.205	INTERSECTION	RIGHT	UNPAVED PARKING
0.215	0.215	INTERSECTION	RIGHT	ROUTE 0902 (MAINTENANCE YARD)
0.220	0.220	FIRE HYDRANT	RIGHT	
0.253	0.253	INTERSECTION	RIGHT	ROUTE 0400BZ (RESIDENTIAL SPUR ROAD (RES 2))
0.301	0.301	FIRE HYDRANT	RIGHT	
0.303	0.303	INTERSECTION	RIGHT	UNPAVED ROUTE
0.346	0.346	FIRE HYDRANT	RIGHT	
0.350	0.350	DROP INLET	LEFT	
0.368	0.368	SIGN	RIGHT	REGULATORY, YIELD
0.370	0.370	INTERSECTION	LEFT	ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)
0.370	0.370	INTERSECTION	RIGHT	ROUTE 0400AZ (RESIDENTIAL / MAINTENANCE ROAD)
0.370	0.370	ROUTE END	N/A	TO END OF LOOP

Great Basin National Park

Section 10
Appendix

APPENDIX A: GLOSSARY OF TERMS AND ABBREVIATIONS

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
AADT	(Annual Average Daily Traffic) The estimate of typical daily traffic on a road segment for all days of the week over the period of one year.
CRS	Condition Rating Sheets. (Section 5)
Excellent	Excellent rating with an index value of 95 or greater
Fair	Fair rating with an index value from 61 to 84
Func. Class	Funtional Classification (see Route ID, Section 4)
Good	Good rating with an index value from 85 to 94
IRI	International Roughness Index
Lane Width	Width from road centerline to fogline, or from centerline to edge-of-pavement when no fogline exists
MRR	Manually Rated Route
N/A	Not Applicable
NC	Not Collected
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating (Appendix B, Section 10)
Poor	Poor Rating with an index value of 60 or less
RCI	Roughness Condition Index
SADT	(Seasonal Annual Daily Traffic) The AADT adjusted to represent just the period of the year containing 80 percent of the total annual traffic.
SCR	Surface Condition Rating (Appendix B, Section 10)
Shoulder Width	Distance from fogline to hinge point, or if no fogline, from edge-of-pavement to hinge point.

APPENDIX B: DESCRIPTION OF RATING SYSTEM

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

Data is collected on the following distresses and conditions:

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

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

Calculation of Index Values

Note: Index values < 0 default to 0. Index values > 100 default to 100.
For all indices, a higher value indicates a better road condition, and a lower value indicates a poorer road condition.
All severity protocols are taken from the SHRP Distress Identification Manual.

Condition Ranges for all Indices

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

Alligator Crack Index

AC_INDEX = 100 – 40 * [(%LOW / 70) + (%MED / 30) + (%HI / 10)]

Where :

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

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

%MED = (Total square area WX measured medium severity alligator cracking) / (Section length * WX measured lane width)
%HI = (Total square area WX measured high severity alligator cracking) / (Section length * WX measured lane width)

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

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

Severity Levels:

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

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

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

Longitudinal Crack Index

LC_INDEX = 100 – 40 * [(%LOW / 350) + (%MED / 200) + (%HI / 75)]

Where:

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

%LOW = (Total linear feet WX measured low severity longitudinal cracking) / (Section length in linear feet)
%MED = (Total linear feet WX measured medium severity longitudinal cracking) / (Section length in linear feet)
%HI = (Total linear feet WX measured high severity longitudinal cracking) / (Section length in linear feet)

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

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

Severity Levels:

Low severity longitudinal cracks have a mean width ≤ ¼”, or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity longitudinal cracks have a mean width > ¼” and ≤ ¾”.

High severity longitudinal cracks have a mean width > ¾”.

Transverse Crack Index

TC_INDEX = 100 – {[20 * ((LOW / 15.1) + (MED / 7.5))] + [40 * (HI / 1.9)]}

Where:

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

LOW = (Total linear feet WX measured low severity transverse cracking) / (WX measured lane width)
MED = (Total linear feet WX measured medium severity transverse cracking) / (WX measured lane width)
HI = (Total linear feet WX measured high severity transverse cracking) / (WX measured lane width)

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

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

Severity Levels:

Low severity transverse cracks have a mean width ≤ ¼", or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity transverse cracks have a mean width > ¼" and ≤ ¾".

High severity transverse cracks have a mean width > ¾".

Patching Index

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

Where:

The value %PATCHING describes the percent of the total WX measured area that is affected by patching. This value ranges from ≥ 0 to ≤ 100.

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

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

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

There are no severity levels for patching.

Rutting Index

RUT_INDEX = 100 – 40 * [(%LOW / 160) + (%MED / 80) + (%HI / 40)]

Where:

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

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

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

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

Severity Levels:

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

Low severity ruts have an ARAN measured depth ≥ 0.20" and ≤ 0.49".

Medium severity ruts have an ARAN measured depth ≥ 0.50" and ≤ 0.99".

High severity ruts have an ARAN measured depth ≥ 1.00".

Roughness Condition Index

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

Where:

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

AVG IRI = (ARAN measured Left IRI + ARAN measured Right IRI) / 2

There is no applicable threshold for failure for this index.

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

Surface Condition Rating Index

SCR = 100 - [(100 - AC_INDEX) + (100 - LC_INDEX) + (100 - TC_INDEX) + (100 - PATCH_INDEX) + (100 - RUT_INDEX)]

Where:

See above for determinations of AC_INDEX, LC_INDEX, TC_INDEX, PATCH_INDEX and RUT_INDEX.

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

Pavement Condition Rating Index Asphaltic Concrete Pavement (AS)

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

Where:

See above for determinations of SCR and RCI.

The values 0.60 and 0.40 function as weights within the formula.

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

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

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

Pavement Condition Rating Index Portland Cement Concrete Pavement (CO)

Concrete PCR = -0.0012(IRI^2)+0.0499(IRI)+99.542

Where:

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

Parking Lot and Manually Rated Road Condition Rating

Surface Condition Distresses- Chip Seal:

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

Ratings - Chip Seal:

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

Surface Condition - Asphalt:

Cracking of any type
Rutting
Potholes/Patching

Ratings - Asphalt:

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

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

Under Construction 100

Excellent 97

Good 90

Fair 73

Poor 45

APPENDIX C: GENERAL INFORMATION ON RIP SYSTEMS

DMI (Distance Measuring Instrument)

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

Digital Image Information

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

Right-of-way (ROW) Video

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

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

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

Pavement Video

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

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

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

FHWA ARAN GPS & Inertial System

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

GPS Collected on Manually Rated Routes

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

GPS SHAPEFILES

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

• Datum for all GPS shapefiles is LL_WGS84_DD (Latitude Longitude _World Geodetic Survey 1984_Decimal Degrees)
• In filename, “park” is NPS four-letter alphabetic code.
• The source for route data required for data processing and report production is the PARK_RouteInfo.mdb.

Condition Photos Taken of Manually Rated Roads

One or more digital photos are taken by Canon Power Shot G2 4.0 Mega Pixel digital camera for each manually rated route in a National Park. They are stored in .jpg format named with the four-letter NPS park alphabetic code, route number, and the photo number assigned by the camera. For example, YOSE_0900_4434.jpg is the filename of the photo named 4434 by the camera that was taken of Yosemite National Park route 0900.

Scenic Photos

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

APPENDIX D: METADATA

FHWA – NPS Road Inventory Program Cycle 4 Metadata

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

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

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

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

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

Specific Caveats

- MUTCD based on contents & colors of sign, not on size
- Database records that show a Portland Cement Concrete (CO) surface type sometimes include distress index values that seem to show a perfect roadway. Condition assessments on concrete pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.
- On the USB drive, in the Database folder, parks are provided with intersection lists and exceptions lists. These documents should be treated as raw files and are not accurate. Refer to the final database for accurately post-processed intersection data.
- Most roadway data is collected in the primary direction lane of a roadway. To save data storage space and to reduce data analysis efforts, the assumption was made that the paved surface condition of a route's primary lane adequately represents the surface condition of the full roadway. Therefore, in the database, opposite-direction records in the PMS_Tenth table do not include assessed values for roadway surface distresses. Values such as 0, N/A, -1, or a repeat of the primary-direction assessed value indicate that no assessment was performed. The PMS_20 and PMS_Mile tables simply exclude all opposite routes.

- Roadway Data is collected in intervals of 0.010 miles (52.8feet) constituting a "station".
- Most roadway features are collected relative to the primary direction lane of a roadway, using the primary-direction video and mileage. Signs and Mile Markers are the only features collected using the opposite-direction video with mileage location referenced to the primary direction lane of the roadway.
- Route_GPS table contains GPS positional information collected by the ARAN and post processed with Applanix POSPac Land 5.0 post-processing software. No manual adjustments have occurred on this table.
- Modifications to the Park_ROAD_04.dbf/.shp/.shx files may have been necessary for report esthetics.
- Modifications to the Park_PKG_04. dbf/.shp/.shx files may have been necessary for report esthetics.
- Cycle 4 utilizes the Microsoft Office 2003 suite of products and Crystal Reports XI for document and data file generation and reporting.
- All PDF files are in Adobe Acrobat 7.0 Professional format.
- All ArcGIS files are created using ESRI Version 9.x software.
- Thumbnail images are created at 1/10 original image size for Right-of-Way and Pavement Images.
- FHWA is investigating the rutting methodology and calculated values it currently reports. Equipment limitations and analysis methods may be over reporting, low severity rutting.

Key to Notes in Tables

(1): Note that only one value fits in field, so even if this value varies throughout the route, only predominant value is recorded here.
(2): Shoulder width is measured at route start and every half-mile along the route in the primary direction. Width is the entire width of the drivable shoulder, regardless of the presence or absence of pavement, from the fog line to the shoulder hinge point, or if no fog line exists, from the edge of pavement to the hinge point. Identification of shoulder hinge point can be problematic using video analysis. Some paved ditches may be mistakenly recorded as shoulders where the shoulder hinge point and change in slope are not easily distinguished from the video.
(3): Mileage is measured by the ARAN (Automatic Road ANalyzer) data collection vehicle out to the 0.001 decimal place. The DMI (distance measuring instrument) is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration.
(4): Features are measured differently depending on whether they are visible in the forward-facing video of the roadway, but every feature milepost measurement depends on the baseline measurement of the data collection vehicle's mileage. The ARAN (Automatic Road ANalyzer) data collection vehicle's mileage is measured by the DMI (distance measuring instrument) out to the 0.001 decimal place. The DMI is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration. If a feature will not be visible in the forward-facing video, its milepost is determined by the data collectors' key press tagging the milepost when the ARAN passes the feature. Key presses are entered into the ARAN software when the vehicle travels typically between 15 and 45 miles/hour, so a delay of a single second as the vehicle passes a feature would result in an inaccuracy of 0.004 miles (22 feet) to 0.012 miles (66 feet). If a feature is visible in the video, its milepost is determined during post-processing using a video measurement software called Surveyor.
(5): Condition assessments on concrete (PCC) pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.
(6): Roadway cracking presence, type, severity, and extent are determined by filming the roadway in the primary lane continuously with two overlapping analog cameras of 640 x 480 resolutions. The images from both cameras are stitched together in real time to create a continuous strip image of the roadway pavement in the primary lane. Cracks 3 mm or greater in width are visible in this video. A semi-automatic process running the WiseCrax software with additional input by human operators provides the cracking quantities recorded in these database fields. Quality checks have determined that a consistent 80% or better of the visible cracks are recorded.