

The Road Inventory
of
Theodore Roosevelt National Park
THRO - 1540



national park service







Road Inventory Program

Prepared By: Federal Highway Administration Eastern Federal Lands Highway Division Cycle 3



Theodore Roosevelt National Park in North Dakota





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INTRODUCTION

<u>Background:</u> In July 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 and short-range costs and programs to bring National Park Service (NPS) roads up to, or to maintain, designated standards, and to 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 data was collected in 44 large parks from 1994 to 1995. 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."

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 the 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 3: A third RIP cycle was initiated in 2001. Data was collected from March 2001 to July 2004, and is included in the Cycle 3 Reports. Cycle 3 includes 254 large and small parks with a combined total of 5,455 route miles.

In the Cycle 3 Reports, a general condition rating of excellent, good, fair and poor is ascribed to each onemile 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 of 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.

FHWA RIP Coordinator:

James A. Amenta FHWA/EFLHD Technical Services, HTS-15 21400 Ridgetop Circle Sterling, VA 20166 (703) 404-6366

Theodore Roosevelt National Park Summaries

Overall Park Mileage Summary

PARK TOTAL SUMMARY ITEMS	TOTAL	DATE
Paved ARAN Driven Route Miles	44.03	9/7/2002
Unpaved Estimated Route Miles	7.06	9/7/2002
Paved ARAN and Unpaved Route Miles	51.09	
Paved ARAN Driven Lane Miles	87.91	9/7/2002
Paved MRR Lane Miles	2.46	9/7/2002
Parking Lot Lane Miles	9.44	9/7/2002
Total Paved Lane Miles	99.82	

Notes: Total Paved Lane Miles includes the sum of Paved ARAN Driven Lane Miles, Paved MRR Lane Miles, and Parking Lot Lane Miles

Unpaved Route Miles are estimates, they have not been inventoried by the Roadway Inventory Program (RIP)

Theodore Roosevelt National Park Summaries

Cost to Improve to "Excellent" Condition

SOURCE	WORK PERFORMED	COST PER MILE	INITIAL CONDITION
FHWA Awarded Projects	Surface Maintenance	\$30,000	Excellent
FHWA Awarded Projects	3-R (Resurfacing)	\$110,000	Good
FHWA Awarded Projects	3-R (Resurfacing, Restoration, and Rehabilitation) Projects	\$560,000	Fair
FHWA Awarded Projects	4-R (Resurfacing, Restoration, Rehabilitation, and Reconstruction) Projects	\$1,540,000	Poor

Based on the above table, the cost to improve ARAN driven paved road condition miles to "Excellent" PCR are:

Existing Condition	Existing Miles	Estimated Cost to Improve
Excellent	3.96	\$118,800
Good	3.77	\$414,700
Fair	13.72	\$7,683,200
Poor	22.58	\$34,773,200
Totals	44.03	\$42,989,900

The above numbers include the 35% PE, CE and contingency costs and are national averages. The cost estimates were used in the calculations for the 2004 Reauthorization Bill to determine the level of funding required to bring all the NPS roads into a Pavement Condition Rating (PCR) of Good (85).

These numbers are for preliminary planning purposes only and should not be used for project level proposals. For park planning level analysis, apply your park multiplier for more accurate regional costs.

Theodore Roosevelt National Park Summaries

Paved Route Miles and Percentages by Functional Class and PCR for ARAN Driven Paved Roads

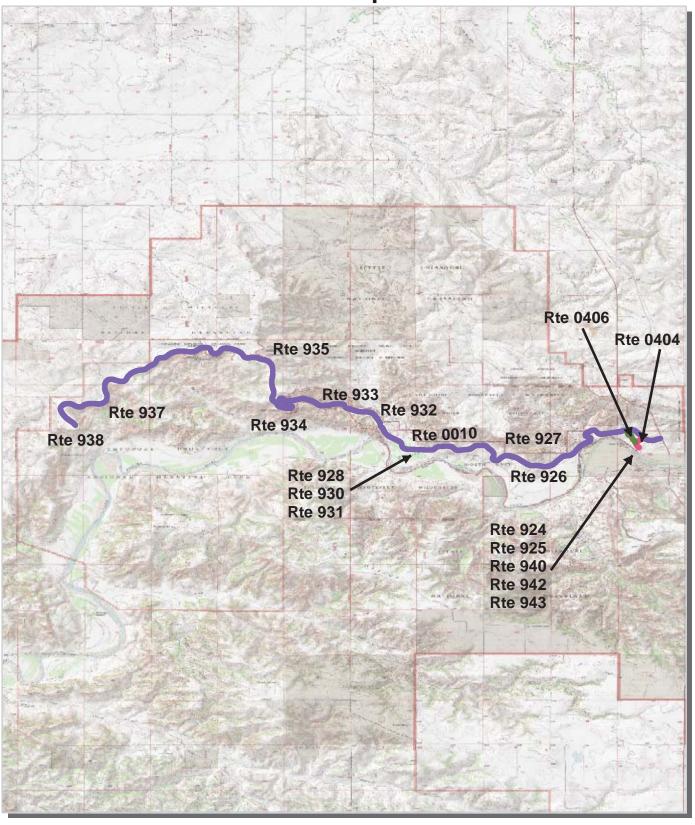
		Pavement Condition Rating											
	Poor (<=60)		Fair (61-84)		Good (85-94)		Excellent (95-100)		TOTAL				
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES				
1	21.34	48.47%	13.62	30.93%	3.69	8.38%	3.78	8.59%	42.43				
2	0.71	1.61%	0.02	0.05%					0.73				
3					0.08	0.18%	0.18	0.41%	0.26				
4													
5	0.53	1.20%	0.08	0.18%					0.61				
6													
7													
8													
Totals	22.58	51.28%	13.72	31.16%	3.77	8.56%	3.96	8.99%	44.03				

Theodore Roosevelt National Park Route Location Key Map





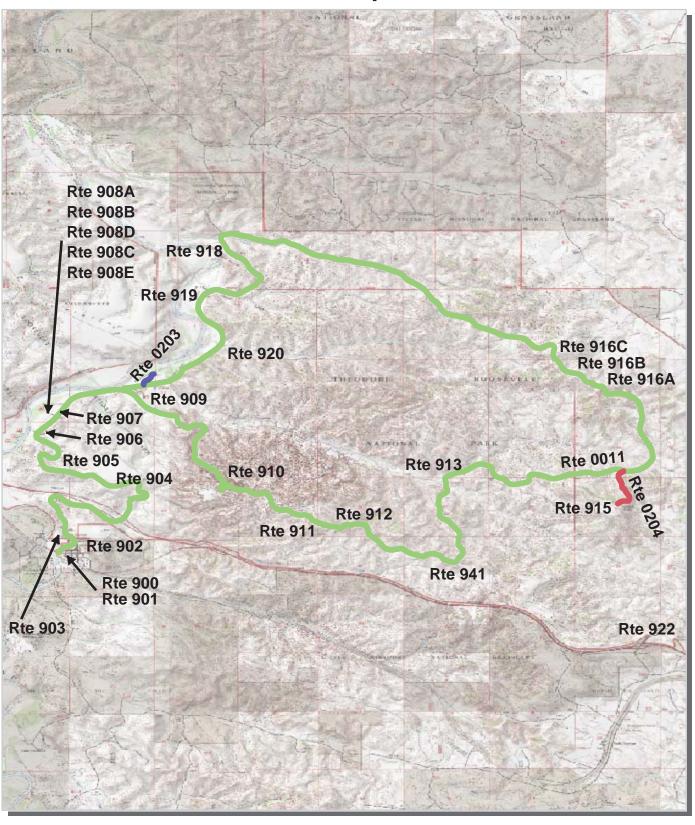
Theodore Roosevelt National Park Route Location Map Area Map 1



Unique colors used to differentiate routes



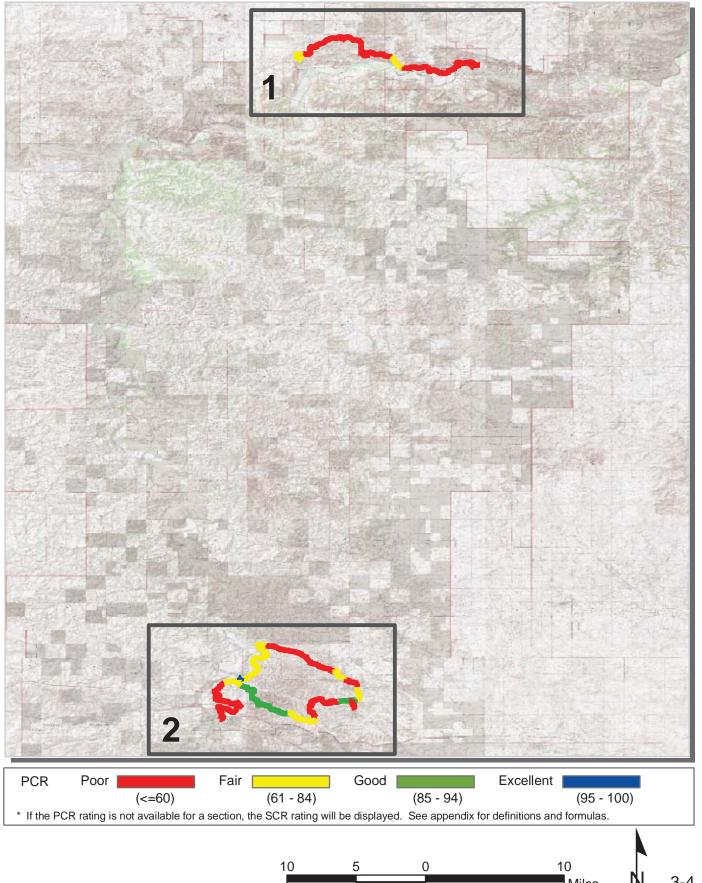
Theodore Roosevelt National Park Route Location Map Area Map 2



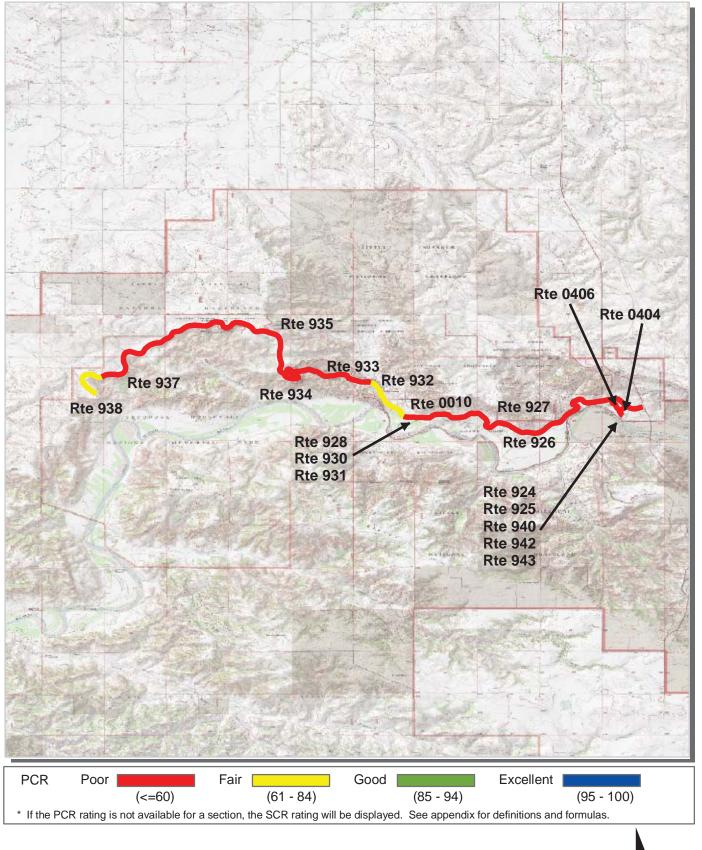
Unique colors used to differentiate routes

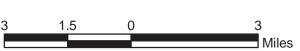


Theodore Roosevelt National Park Route Condition Key Map PCR - Mile by Mile

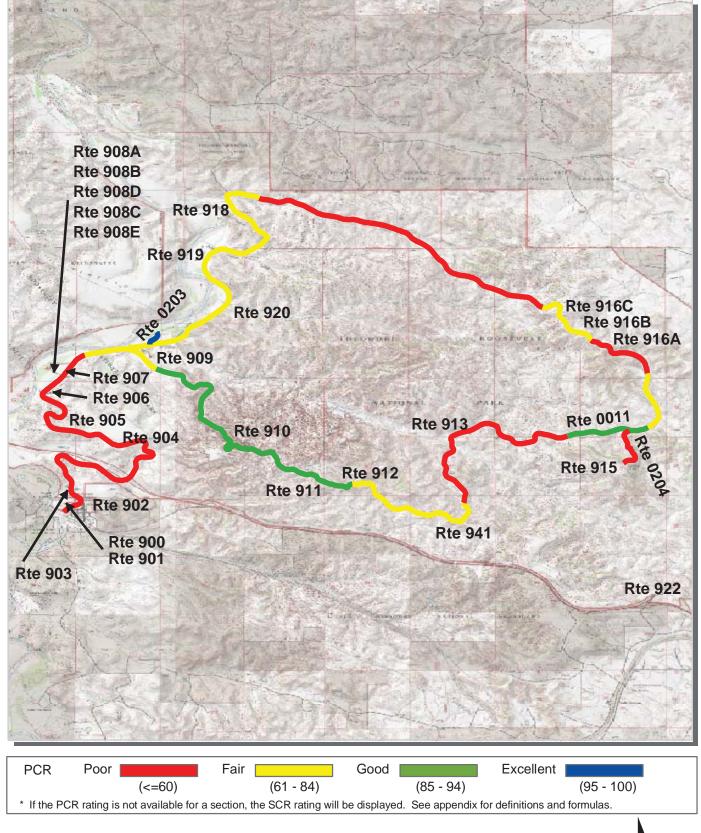


Theodore Roosevelt National Park Route Condition Area Map 1 PCR - Mile by Mile





Theodore Roosevelt National Park Route Condition Area Map 2 PCR - Mile by Mile





NPS/RIP Route ID Report

(Numerical By Route #)

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Shading Color Key: Red text denotes approx. mileage White = Paved Routes, ARAN Driven

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Purple =

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Theodore Roosevelt National Park

" Vecet Route Name					Paved	Un- Paved	Rte.	Func.	Rte.	Manual Rated	Surf.
#	#		From	То	Miles	Miles	Lgth	Class	Lanes	SQ/FT	Туре
0010	56765	SCENIC DRIVE	From U.S. 85	To Route 0938	13.86	0.00	13.86	1	2	0	AS
0011	49027	SCENIC LOOP	From U.S. Buisness 10 Southernly around loop	To Route 0011 at End of Loop	28.57	0.00	28.57	1	2	0	AS
0100	49039	NORTH BOUNDARY ROAD	From Route 0011 at MP 24.32 on right	To Park Boundary	0.00	1.31	1.31	2	2	0	GR
0200	28457	JUNIPER CAMPGROUND	From Route 0010 at MP 4.75 on left	Through Campground	0.00	0.00	0.00	3	2	146,208	ОС
0201	29484	COTTONWOOD CAMPGROUND ACCESS ROAD	From Route 0011 at MP 5.5 on left	To Route 0201A at Pavement Change	0.17	0.00	0.17	3	1	9,874	AS
0201A		COTTONWOOD CAMPGROUND LOOP A	From End of Route 0201, Right	To End of Loop	0.59	0.00	0.59	3	1	34,151	ОС
0201B		COTTONWOOD CAMPGROUND LOOP B	From Route 0201A, Left	To Route 0201A	0.33	0.00	0.33	3	1	20,592	ОС
0201C		COTTONWOOD CAMPGROUND PICNIC AREA LOOP	From Route 0201	To End of Loop	0.33	0.00	0.33	3	2	29,531	AS
0202	49041	PEACEFUL VALLEY PICNIC AREA	From Route 0011 at MP 28.4 on Left	To End	0.00	0.30	0.30	3	2	0	GR
0203	30276	PEACEFUL VALLEY RANCH ROAD	From Route 0011 at MP 28.3 on Right	To End of Pavement	0.26	0.00	0.26	3	2	0	AS
0204	49042	BUCK HILL SPUR	From Route 0011 at MP 16.8 on Right	To Route 0915	0.73	0.02	0.75	2	2	0	AS
0205	49007	HALLIDAY WELLS ROAD	From Route 0011 at MP 27.94 on Left	To End of Loop	0.00	0.54	0.54	3	2	0	GR
0206	49043	BURNING COAL VEIN ROAD	From Route 0011 at MP 15.29	To Parking Area	0.00	0.81	0.81	3	2	0	GR
0400	29405	THIRD AVENUE	From Park Boundary	To Route 0011 at MP 0. 02	0.04	0.00	0.04	5	2	4,669	AS
0401	48983	MIX PIT ROAD	From Route 0011 at MP 6.52 on Right	To Maintenance Buildings	0.00	0.60	0.60	6	2	0	GR
0402	48996	ROUNDUP HORSE CAMP ROAD	From Route 0100	To Corrals	0.00	0.90	0.90	6	2	0	GR
0403	28466	CORRAL AREA ACCESS ROAD	From Route 0010 at MP 2.71	To Corrals	0.00	0.93	0.93	5	2	0	GR
0404	28438	NORTH UNIT MAINTENANCE ROAD	From Route 0010 at MP 0.31	To Route 0940	0.30	0.00	0.30	5	2	0	AS
0405	56776	HEADQUARTERS STREET	From Park Boundary	To Dead End	0.38	0.00	0.38	8	2	44,325	AS
0406	28439	GRAY HOUSE ROAD	From Route 0404	To Residence	0.31	0.17	0.48	5	2	0	AS
0407	28441	HEADQUARTERS WELLHOUSE ACCESS ROAD	From Route 0406 at MP 0.11	To Well	0.00	0.15	0.15	5	1	0	GR
0408	28414	WEST BOUNDARY ACCESS ROAD	From Route 0010 at MP 13.38	To Park Boundary	0.00	0.33	0.33	6	1	0	GR
0409	28458	CAMPGROUND WELLHOUSE ACCESS ROAD	From Route 0010 at MP 5.36	To Well	0.00	0.09	0.09	5	1	0	GR
0410	28459	LAGOON ACCESS ROAD	From Route 0929	To Lagoons	0.00	0.36	0.36	5	1	0	GR
0411	28443	HEADQUARTERS RESERVOIR ACCESS ROAD	From Route 0010	To End	0.00	0.18	0.18	5	1	0	GR
0412	28444	RADIO EQUIPMENT ACCESS ROAD	From U.S. 85	To Radio Tower	0.00	0.37	0.37	5	1	0	GR
0900	56778	Medora Visitor's Center Parking	Adjacent to Route 0011 at MP 0.2 on Left		0.00	0.00	0.00	9		24,184	AS

01/19/2005

NPS/RIP Route ID Report

(Numerical By Route #)

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Shading Color Key: Red text denotes approx. mileage White = Paved Routes, ARAN Driven

Yellow = Unpaved Routes, ARAN not Driven

Purple =

Blue = All Paved Parking Areas

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Red =

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Rte. #	FMSS Asset #	Route Name	Route Description From To	Paved Miles	Un- Paved Miles	Rte. Lgth	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type
0901	56780	Medora Visitor's Center Employee Parking	Adjacent to Route 0011 at MP 0.1 on Left	0.00	0.00	0.00	9		5,271	AS
0902	56785	South Unit Maintenance Yard	From Route 0405 To Route 0011 at N	1P 0. 0.00	0.00	0.00	9		34,179	ОС
0903	56786	Medora Overlook	Adjacent to Route 0011 at MP 0.5 on Left	0.00	0.00	0.00	9		4,388	AS
0904	56790	Johnson Plateau Parking Area	Adjacent to Route 0011 at MP 3.3 on Right	0.00	0.00	0.00	9		4,841	AS
0905	56793	Skyline Vista	Adjacent to Route 0011 at MP 4.2 on Left	0.00	0.00	0.00	9		30,564	AS
0906	56794	River Woodland Overlook	Adjacent to Route 0011 at MP 5.3 on Left	0.00	0.00	0.00	9		8,390	AS
0907	56795	Cottonwood Campground Fee Station Parking	Adjacent to Route 0201 on Right at Fee Station	0.00	0.00	0.00	9		3,682	AS
)908A	56796	Cottonwood Campground Picnic Area Parking A	Adjacent to Route 0201C at MP 0.04 on Left	0.00	0.00	0.00	9		797	AS
)908B	56796	Cottonwood Campground Picnic Area Parking B	Adjacent to Route 0201C at MP 0.09 on Left	0.00	0.00	0.00	9		927	AS
)908C	56796	Cottonwood Campground Picnic Area Parking C	Adjacent to Route 0201C at MP 0.22 on Left	0.00	0.00	0.00	9		3,379	AS
)908D	56796	Cottonwood Campground Picnic Area Parking D	Adjacent to Route 0201C at MP 0.22 on Right	0.00	0.00	0.00	9		2,576	AS
0908E	56796	Cottonwood Campground Picnic Area Parking E	Adjacent to Route 0201C at MP 0.3 on Left	0.00	0.00	0.00	9		747	AS
0909	56797	Prairie Dog Town Parking Area	Adjacent to Route 0011 at MP 6.7 on Right	0.00	0.00	0.00	9		8,605	AS
0910	56798	Scoria Point Overlook	Adjacent to Route 0011 at MP 9.2 on Left	0.00	0.00	0.00	9		6,082	AS
0911	56799	Ridgeline Trailhead	Adjacent to Route 0011 at MP 10.6 on Right	0.00	0.00	0.00	9		2,592	AS
0912	56800	North Dakota Badlands Overlook	Adjacent to Route 0011 at MP 11.2 on Left	0.00	0.00	0.00	9		6,755	AS
0913	56801	Paddock Creek / Talkington Trailhead Parking	Adjacent to Route 0011 at MP 14.4 on Left	0.00	0.00	0.00	9		3,165	AS
0914		BURNING COAL VEIN PARKING	At End of Route 0206	0.00	0.00	0.00	9		0	GR
0915	56802	Buck Hill Overlook	At End of Route 0204	0.00	0.00	0.00	9		12,781	OC
)916A	56803	Boicourt Overlook Parking A	Adjacent to Route 0011 at MP 19.0 on Left	0.00	0.00	0.00	9		5,801	AS
)916B	56803	Boicourt Overlook Parking B	Adjacent to Route 0011 at MP 19.3 on Left	0.00	0.00	0.00	9		4,309	AS
0916C	56803	Boicourt Overlook Parking C	Adjacent to Route 0011 at MP 19.6 on Left	0.00	0.00	0.00	9		6,988	AS
0917		UPPER JONES CREEK TRAILHEAD PARKING	Adjacent to Route 0011 at MP 20.5 on left	0.00	0.00	0.00	9		0	GR
0918	56808	Wind Canyon Parking Area	Adjacent to Route 0011 at MP 24.7 on Right	0.00	0.00	0.00	9		24,002	AS
0919	56809	Beef Corral Pullout	Adjacent to Route 0011 at MP 26.1 on Right	0.00	0.00	0.00	9		3,697	AS
		Lower Jones Creek	Adjacent to Route 0011	0.00	0.00	0.00	9		10,073	AS

NPS/RIP Route ID Report

(Numerical By Route #)

Red =

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

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Rte.	FMSS	Davida Nassa	Route Desc	ription	Paved	Un-	Rte.	Func.	Rte.	Manual	Surf.
#	Asset #	Route Name	From	То	Miles	Paved Miles	Lgth		Lanes	Rated SQ/FT	Туре
0922	30291	Painted Canyon Visitors Center	From Cattleguard East	To End of Loop	0.00	0.00	0.00	9		119,249	AS
0923		WILDLIFE HANDLING FACILITY PARKING	At East Park Boundary		0.00	0.00	0.00	9		0	GR
0924	56970	North Unit Visitors Center	Adjacent to Route 0010 at MP 0.3 on Right at Visitor Center		0.00	0.00	0.00	9		14,127	AS
0925	56868	Residence Spur	Adjacent to Route 0404 on Right		0.00	0.00	0.00	9		15,162	AS
0926	56876	Longhorn Pullout	Adjacent to Route 0010 at MP 2.3 on Left		0.00	0.00	0.00	9		4,245	AS
0927	56877	Slump Block Pullout	Adjacent to Route 0010 at MP 2.9 on Right		0.00	0.00	0.00	9		3,552	OC
0928	56878	Cannonball Concretions Pullout	Adjacent to Route 0010 at MP 4.8 on Right		0.00	0.00	0.00	9		13,645	AS
0930	56881	Juniper Picnic Area	Adjacent to Route 0200		0.00	0.00	0.00	9		26,368	OC
0931		Juniper Group Site	Adjacent to Route 0200		0.00	0.00	0.00	9		17,497	ОС
0932	56889	Long X Trail Pullout	Adjacent to Route 0010 at MP 5.7 on Right		0.00	0.00	0.00	9		12,886	OC
0933	56898	Caprock Coulee Trail	Adjacent to Route 0010 at MP 6.4 on Right		0.00	0.00	0.00	9		9,129	AS
0934	56901	River Bend Overlook	Adjacent to Route 0010 at MP 8.0 on Left		0.00	0.00	0.00	9		13,661	AS
0935	56904	Bentonite Clay Overlook	Adjacent to Route 0010 at MP 9.0 on Right		0.00	0.00	0.00	9		7,756	AS
0936	56909	Man and Grass Pullout	Adjacent to Route 0010 at MP 9.8 on Right		0.00	0.00	0.00	9		8,383	OC
0937	56923	Edge of Glacier Pullout	Adjacent to Route 0010 at MP 12.65 on Right		0.00	0.00	0.00	9		7,314	OC
0938	56930	Oxbow Overlook	At End of Route 0010 around Loop		0.00	0.00	0.00	9		29,380	OC
0939		PEACEFUL VALLEY RANCH PARKING	At End of Route 0203		0.00	0.00	0.00	9		0	GR
0940	56941	North Unit Maintenance Yard	At End of Route 0404		0.00	0.00	0.00	9		12,475	AS
0941		OLD EAST ENTRANCE TRAILHEAD PARKING	Adjacent to Route 0011 at MP 12.7 on Right		0.00	0.00	0.00	9		8,020	AS
0942		NORTH UNIT MAINTENANCE YARD OVERFLOW PARKING	Adjacent to Route 0404 on Right		0.00	0.00	0.00	9		1,543	AS
0943		NORTH UNIT VISITOR CENTER TURNOUT	Adjacent to Route 0010 at MP 0.3 on Left across from Visitor Center		0.00	0.00	0.00	9		5,150	AS
				Totals	s: 45.86	7.06	52.92			837,666	

Roadway Inventory Program

NPS/RIP Route ID Report

(Numerical By Route #)

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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 Invetoried 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

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.
- Class 9 Boat Ramp (Public and Administrative) Route Numbers 800-899.
 Parking Area (Public and Administrative) Route Numbers 900-1999.

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

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 discontinuted for future use.

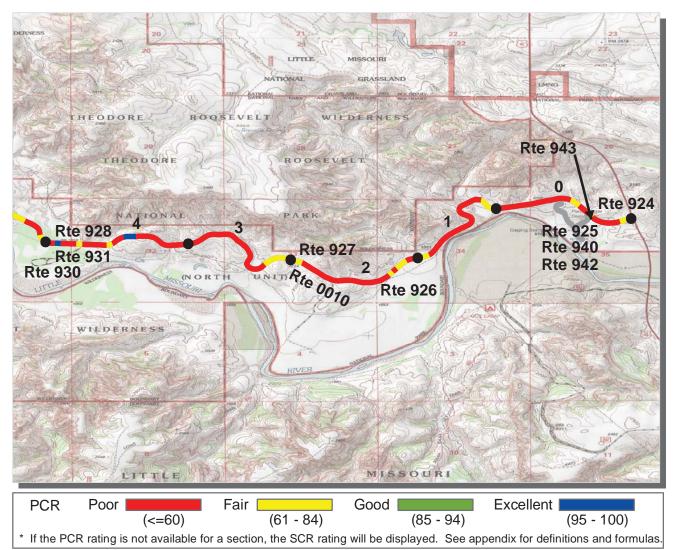
ZZ Functional Class Routes were added from FMSS Database. Final Route Number and Functional Class will be established during Park visit for Cycle 4 data collection.

road is not based on traffic volumes or design speed, but on the intended use or function of that road or route.

Surface Type Abbreviations:

- AS Asphaltic Concrete Pavement
- CO Portland Cement Concrete Pavement
- NC New Chip Seal Pavement (Under 5 Years)
- OC Old Chip Seal Pavement (5 Years and Greater)
- SS Slurry Seal Pavement
- GR Gravel Road Bed
- BR Brick or Pavers Road Bed
- CB Cobble Stone Road Bed
- SA Sand Road Bed
- DT Dirt or Native Material Road Bed
- OT Other Materials Road Bed





THRO: Theodore Roosevelt National Park

ROUTE: 0010 Scenic Drive

TOTAL LENGTH: 13.86 Miles

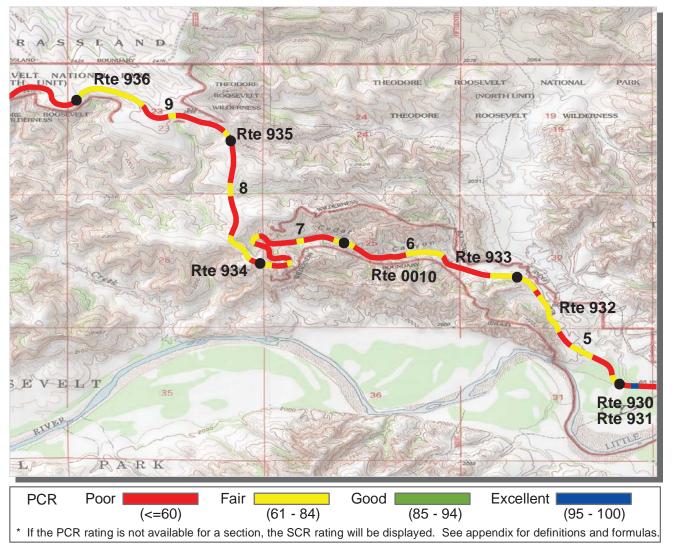
Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	27	24	24	25	24
Lane Width (ft)	15	12	13	12	12
Shoulder Width (ft)	4	5	3	4	4
Roadway Condition Information					
PCR (Pavement Condition Rating)	40	47	50	49	52
RCI (Roughness Condition Index)	64	62	72	69	72
SCR (Surface Condition Rating)	28	38	35	36	39
Alligator Cracking Index	92	98	96	98	99
Rutting Index	53	57	43	46	49
Patching Index	87	85	97	94	95
Tranverse Cracking Index	96	97	97	97	98
Longitudinal Cracking Index	95	97	98	97	96
Shoulder Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD
Drainage Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD

^{*} NC designates data not collected NA designates not applicable

ROUTE: 0010 Scenic Drive

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





THRO: Theodore Roosevelt National Park

ROUTE: 0010 Scenic Drive

TOTAL LENGTH: 13.86 Miles

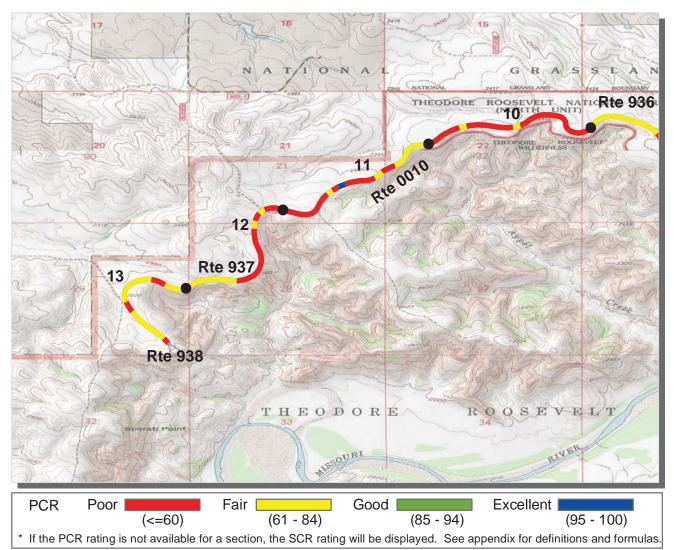
ROUTE: 0010 Scenic Drive			IOTAI	L LENGTH:	13.86 Willes
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	24	24	22	23	21
Lane Width (ft)	13	12	11	12	10
Shoulder Width (ft)	5	3	0	4	3
Roadway Condition Information					
PCR (Pavement Condition Rating)	65	53	55	54	57
RCI (Roughness Condition Index)	79	59	56	76	80
SCR (Surface Condition Rating)	55	50	55	38	41
Alligator Cracking Index	98	96	98	99	99
Rutting Index	62	69	69	57	56
Patching Index	100	90	95	91	93
Tranverse Cracking Index	96	96	95	93	94
Longitudinal Cracking Index	97	96	95	96	96
Shoulder Condition Rating	GOOD	GOOD	N/A	GOOD	GOOD
Drainage Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD

^{*} NC designates data not collected NA designates not applicable

ROUTE: 0010 Scenic Drive

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





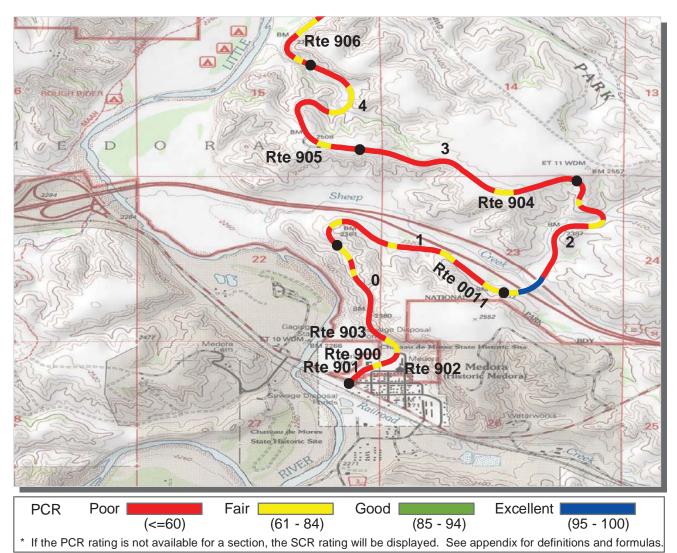
THRO: Theodore Roosevelt National Park

TOTAL LENGTH: 13.86 Miles ROUTE: 0010 Scenic Drive Section Number 10 11 12 13 Section Length (mi) 1.00 1.00 1.00 0.86 **AADT** SADT **ADT Date Cross Section Information** Number of Lanes 21 22 Paved Width (ft) 20 23 Lane Width (ft) 11 10 11 12 Shoulder Width (ft) 3 4 4 4 Roadway Condition Information PCR (Pavement Condition Rating) 54 51 56 61 RCI (Roughness Condition Index) 71 78 75 78 SCR (Surface Condition Rating) 42 43 51 44 Alligator Cracking Index 100 98 100 100 **Rutting Index** 52 51 55 56 100 95 100 Patching Index 98 Tranverse Cracking Index 95 95 94 95 Longitudinal Cracking Index 96 98 97 98 **Shoulder Condition Rating** GOOD GOOD GOOD GOOD **Drainage Condition Rating** GOOD GOOD GOOD GOOD

ROUTE: 0010 Scenic Drive

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm

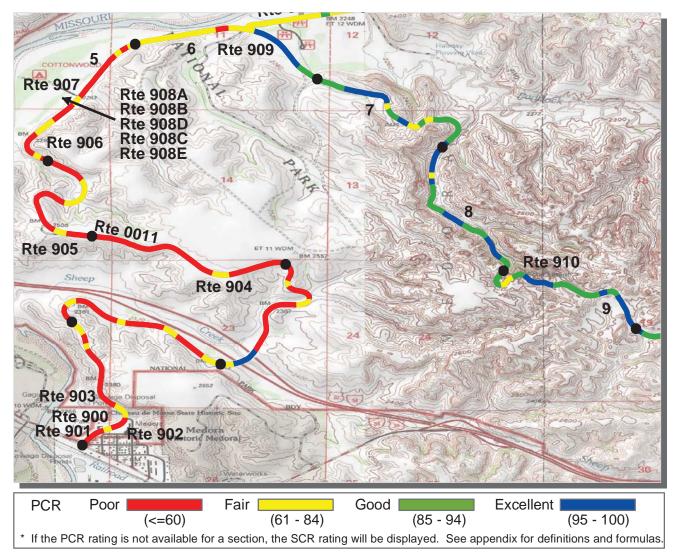


THRO: Theodore Roosevelt National Park

ROUTE: 0011 Scenic Loop TOTAL LENGTH: 28.57 Miles Section Number 1.00 1.00 1.00 1.00 1.00 Section Length (mi) **AADT** SADT **ADT Date Cross Section Information** Number of Lanes Paved Width (ft) 20 23 22 22 22 Lane Width (ft) 9 12 11 11 11 Shoulder Width (ft) 3 0 5 4 4 Roadway Condition Information PCR (Pavement Condition Rating) 53 52 56 58 51 RCI (Roughness Condition Index) 62 61 58 61 61 52 49 SCR (Surface Condition Rating) 49 54 45 99 Alligator Cracking Index 99 100 100 99 Rutting Index 61 62 67 63 55 100 100 96 Patching Index 97 100 Tranverse Cracking Index 91 91 91 90 90 Longitudinal Cracking Index 98 98 96 98 98 N/A GOOD GOOD GOOD **Shoulder Condition Rating** GOOD **Drainage Condition Rating** GOOD GOOD GOOD GOOD GOOD

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm



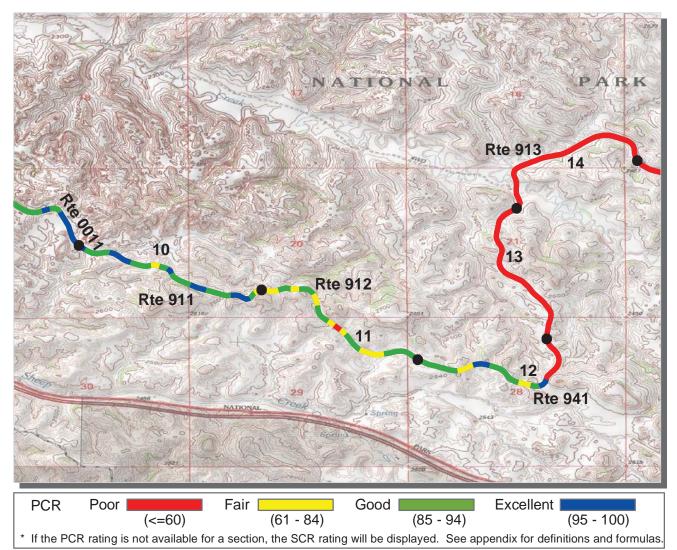
THRO: Theodore Roosevelt National Park

ROUTE: 0011 Scenic Loop

ROUTE: 0011 Scenic Loop			TOTAI	LENGTH:	28.57 Miles
Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	24	21	21	19	21
Lane Width (ft)	12	11	10	9	10
Shoulder Width (ft)	6	4	4	4	0
Roadway Condition Information					
PCR (Pavement Condition Rating)	54	81	90	92	89
RCI (Roughness Condition Index)	56	85	91	91	82
SCR (Surface Condition Rating)	53	78	90	92	92
Alligator Cracking Index	99	100	100	100	100
Rutting Index	64	82	90	93	92
Patching Index	98	99	100	100	100
Tranverse Cracking Index	91	95	99	99	99
Longitudinal Cracking Index	99	99	99	99	99
Shoulder Condition Rating	GOOD	GOOD	GOOD	GOOD	N/A
Drainage Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD

 $^{^{\}star}\,$ NC designates data not collected $\,\,$ NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm



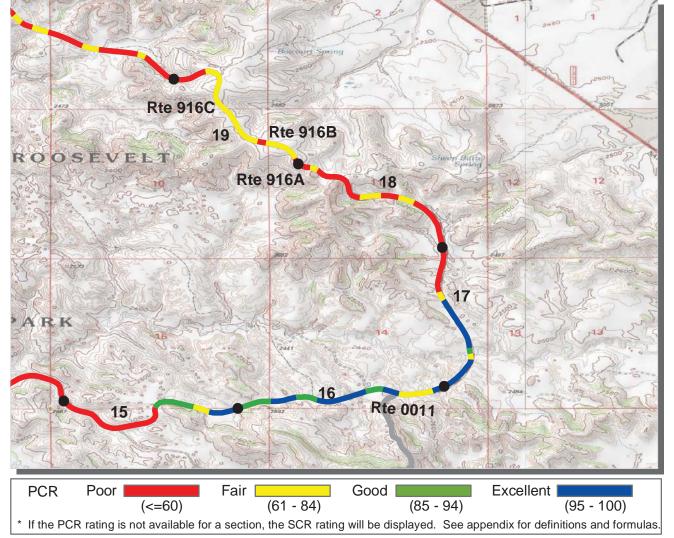
THRO: Theodore Roosevelt National Park

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ROUTE: 0011 Scenic Loop	TOTA	L LENGTH:	28.57 Miles		
Section Number	10	11	12	13	14
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	19	20	19	21	22
Lane Width (ft)	10	10	10	11	11
Shoulder Width (ft)	3	4	3	4	3
Roadway Condition Information					
PCR (Pavement Condition Rating)	91	83	65	30	34
RCI (Roughness Condition Index)	89	80	74	49	49
SCR (Surface Condition Rating)	92	83	64	18	24
Alligator Cracking Index	100	100	92	95	98
Rutting Index	92	84	67	37	39
Patching Index	100	100	99	96	99
Tranverse Cracking Index	100	99	96	86	87
Longitudinal Cracking Index	99	99	98	94	97
Shoulder Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD
Drainage Condition Rating	GOOD	GOOD	GOOD	GOOD	GOOD

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm



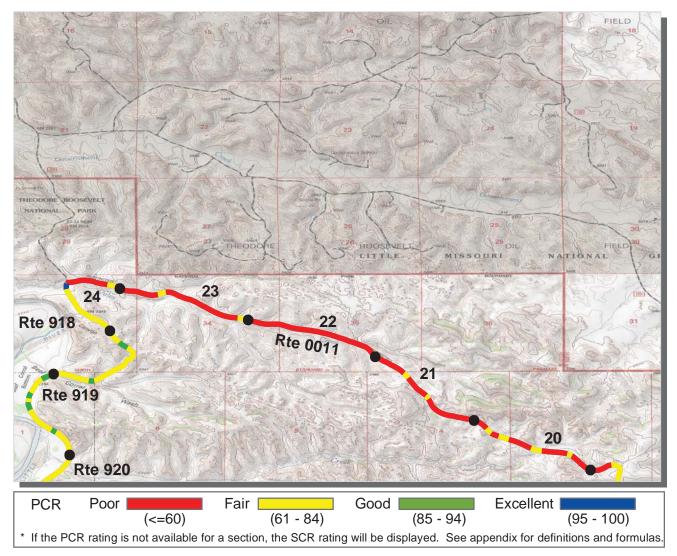
THRO: Theodore Roosevelt National Park

ROUTE: 0011 Scenic Loop

ROUTE: 0011 Scenic Loop	TAL LENG	ΓH: 28.57 Miles			
Section Number	15	16	17	18	19
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	21	20	22	21	21
Lane Width (ft)	11	10	11	10	11
Shoulder Width (ft)	4	0	3	4	3
Roadway Condition Information					
PCR (Pavement Condition Rating)	57	90	80	49	61
RCI (Roughness Condition Index)	65	92	83	58	86
SCR (Surface Condition Rating)	52	88	77	44	45
Alligator Cracking Index	99	100	98	99	99
Rutting Index	61	89	83	62	70
Patching Index	99	100	100	100	100
Tranverse Cracking Index	93	99	96	85	83
Longitudinal Cracking Index	97	99	99	96	93
Shoulder Condition Rating	N/C	N/A	N/C	N/C	N/C
Drainage Condition Rating	N/C	N/C	N/C	N/C	N/C

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm



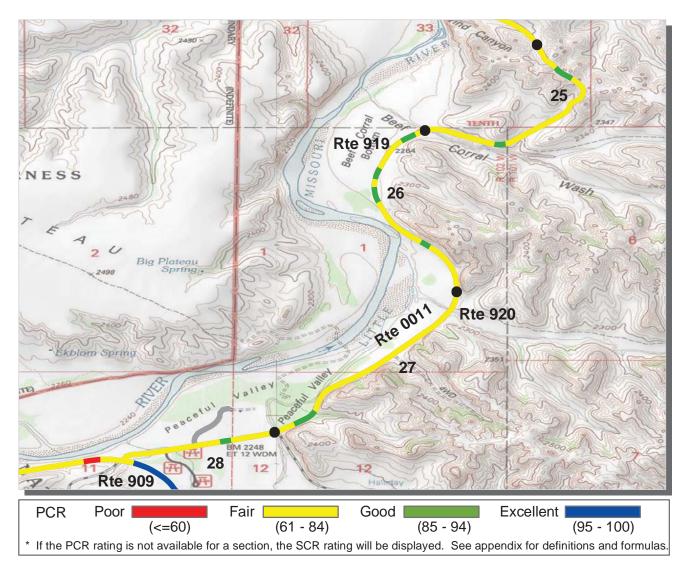
THRO: Theodore Roosevelt National Park

ROUTE: 0011 Scenic Loop

TOTAL LENGTH: 28.57 Miles Section Number 20 21 22 23 24 1.00 1.00 1.00 1.00 1.00 Section Length (mi) **AADT** SADT **ADT Date Cross Section Information** Number of Lanes Paved Width (ft) 21 19 22 20 21 Lane Width (ft) 11 10 11 10 10 Shoulder Width (ft) 4 4 3 0 Roadway Condition Information PCR (Pavement Condition Rating) 42 41 54 46 63 RCI (Roughness Condition Index) 67 57 58 50 68 SCR (Surface Condition Rating) 38 33 34 59 44 Alligator Cracking Index 98 96 94 94 99 Rutting Index 52 55 64 55 71 99 100 Patching Index 94 100 100 87 Tranverse Cracking Index 89 84 85 89 Longitudinal Cracking Index 97 98 97 96 99 N/C **Shoulder Condition Rating** N/A N/A N/C N/C N/C N/C N/C N/C **Drainage Condition Rating** N/C

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm



THRO: Theodore Roosevelt National Park

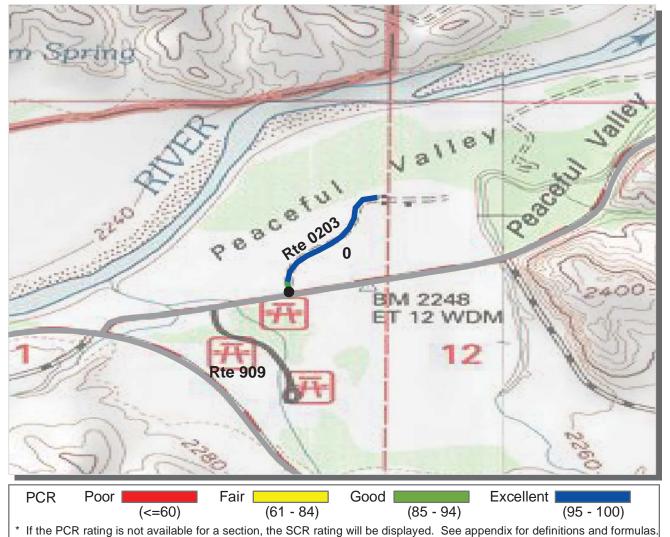
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ROUTE: 0011 Scenic Loop	TOTAL	LENGTH: 28.57 Miles		
Section Number	25	26	27	28
Section Length (mi)	1.00	1.00	1.00	0.57
AADT	**			
SADT	**			
ADT Date	**			
Cross Section Information				
Number of Lanes	2	2	2	2
Paved Width (ft)	20	21	19	19
Lane Width (ft)	10	11	9	8
Shoulder Width (ft)	4	3	3	0
Roadway Condition Information				
PCR (Pavement Condition Rating)	73	79	74	81
RCI (Roughness Condition Index)	66	75	66	80
SCR (Surface Condition Rating)	77	82	79	81
Alligator Cracking Index	100	100	100	100
Rutting Index	89	89	86	87
Patching Index	98	100	100	100
Tranverse Cracking Index	89	93	93	94
Longitudinal Cracking Index	99	99	99	99
Shoulder Condition Rating	N/C	N/C	N/C	N/A
Drainage Condition Rating	N/C	N/C	N/C	N/C

^{*} NC designates data not collected NA designates not applicable

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





THRO: Theodore Roosevelt National Park

POLITE: 0203 Pascoful Valloy Panch Poad	TOTAL LENGTH: 0.26 Miles

TOOTE. 0200 I cacciai vancy	ranon roac	•	 C LLIVOIII	0120 1111100
Section Number	0			
Section Length (mi)	0.26			
AADT	**			
SADT	**			
ADT Date	**			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	17			
Lane Width (ft)	8			
Shoulder Width (ft)	3			
Roadway Condition Information				
PCR (Pavement Condition Rating)	96			
RCI (Roughness Condition Index)	95			
SCR (Surface Condition Rating)	96			
Alligator Cracking Index	100			
Rutting Index	96			
Patching Index	100			
Tranverse Cracking Index	100			
Longitudinal Cracking Index	100			
Shoulder Condition Rating	GOOD			
Drainage Condition Rating	GOOD			

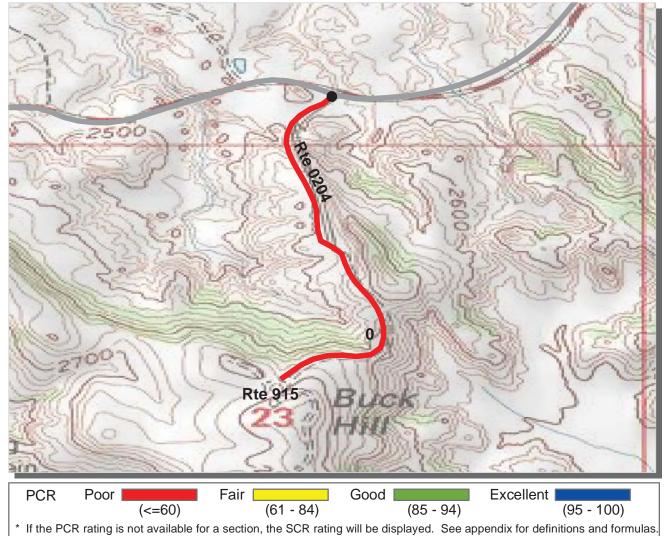
^{*} NC designates data not collected NA designates not applicable

5-10

ROUTE: 0203 Peaceful Valley Ranch Road

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





THRO: Theodore Roosevelt National Park

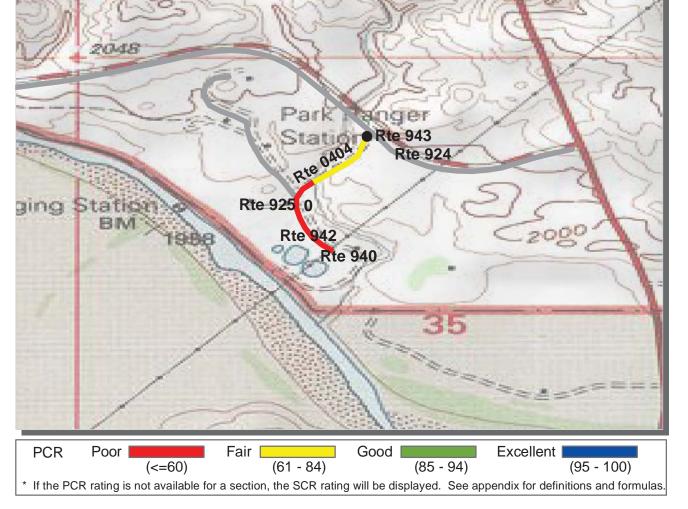
ROUTE: 0204 Buck Hill Spur		TOTA	L LENGTH	: 0.73 Miles
Section Number	0			
Section Length (mi)	0.73			
AADT	**			
SADT	**			
ADT Date	**			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	25			
Lane Width (ft)	10			
Shoulder Width (ft)	0			
Roadway Condition Information				
PCR (Pavement Condition Rating)	21			
RCI (Roughness Condition Index)	31			
SCR (Surface Condition Rating)	20			
Alligator Cracking Index	77			
Rutting Index	35			
Patching Index	99			
Tranverse Cracking Index	95			
Longitudinal Cracking Index	97			
Shoulder Condition Rating	N/A			
Drainage Condition Rating	POOR			

^{*} NC designates data not collected NA designates not applicable

ROUTE: 0204 Buck Hill Spur

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





THRO: Theodore Roosevelt National Park

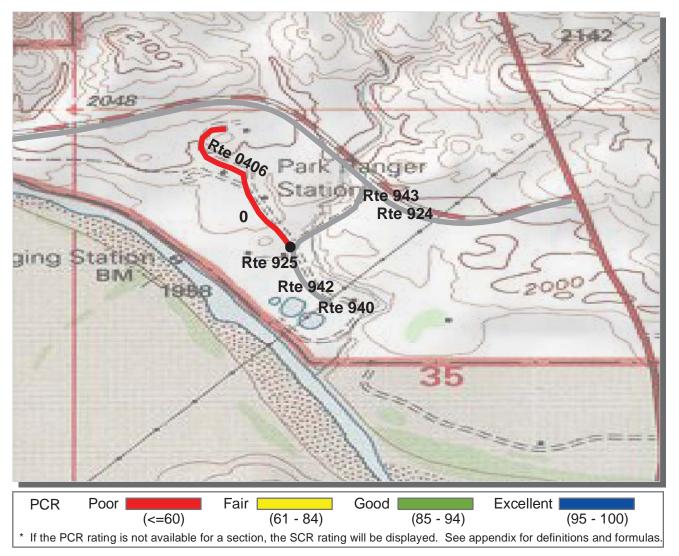
ROUTE: 0404 North Unit Maintenance Road			TOTA	L LENGTH	0.30 Miles
Section Number	0				
Section Length (mi)	0.30				
AADT	**				
SADT	**				
ADT Date	**				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	23				
Lane Width (ft)	14				
Shoulder Width (ft)	0				
Roadway Condition Information					
PCR (Pavement Condition Rating)	37				
RCI (Roughness Condition Index)	67				
SCR (Surface Condition Rating)	35				
Alligator Cracking Index	79				
Rutting Index	77				
Patching Index	96				
Tranverse Cracking Index	85				
Longitudinal Cracking Index	91				
Shoulder Condition Rating	N/A				
Drainage Condition Rating	GOOD				

^{*} NC designates data not collected NA designates not applicable

ROUTE: 0404 North Unit Maintenance Road

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm





THRO: Theodore Roosevelt National Park

ROUTE: 0406 Gray House Roa	ıd	TOTA	AL LENGTH	: 0.31 Miles

Red I E. e 100 e.a., Heade Red			
Section Number	0		
Section Length (mi)	0.31		
AADT	**		
SADT	**		
ADT Date	**		
Cross Section Information			
Number of Lanes	2		
Paved Width (ft)	21		
Lane Width (ft)	11		
Shoulder Width (ft)	0		
Roadway Condition Information			
PCR (Pavement Condition Rating)	43		
RCI (Roughness Condition Index)	58		
SCR (Surface Condition Rating)	42		
Alligator Cracking Index	100		
Rutting Index	47		
Patching Index	100		
Tranverse Cracking Index	95		
Longitudinal Cracking Index	99		
Shoulder Condition Rating	N/A		
Drainage Condition Rating	GOOD		

^{*} NC designates data not collected NA designates not applicable

ROUTE: 0406 Gray House Road

^{**} See website for traffic data: http://www.efl.fhwa.dot.gov/nps/index.htm

Theodore Roosevelt National Park Route 0201

Cottonwood Campground Access Road From Route 0011 at MP 5.5 on left

Route	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles *	Condition / PCR	Surface Type
0201	0.17	11.00	9874	0.17	EXCELLENT / 97	AS

^{*} Lane miles are based on 11' lane widths







500

250

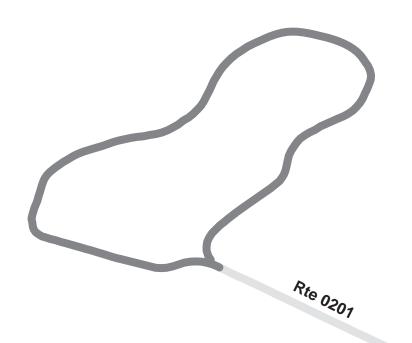
500 Feet

Theodore Roosevelt National Park Route 0201A

Cottonwood Campground Loop A From End of Route 0201, Right

Route	Length (mi)	Width (ft)	Area (sg ft)	Lane Miles *	Condition / PCR	Surface Type
0201A	0.59	11.00	34151	0.59	GOOD / 90	OC

^{*} Lane miles are based on 11' lane widths



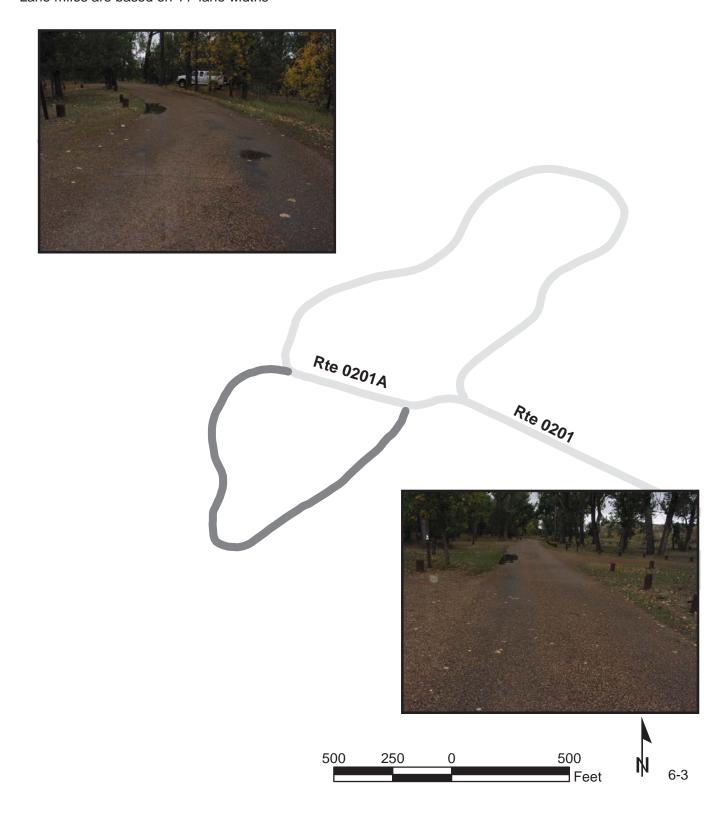


Theodore Roosevelt National Park Route 0201B

Cottonwood Campground Loop B From Route 0201A, Left

Route	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles *	Condition / PCR	Surface Type
0201B	0.33	12.00	20592	0.35	GOOD / 90	ОС

^{*} Lane miles are based on 11' lane widths

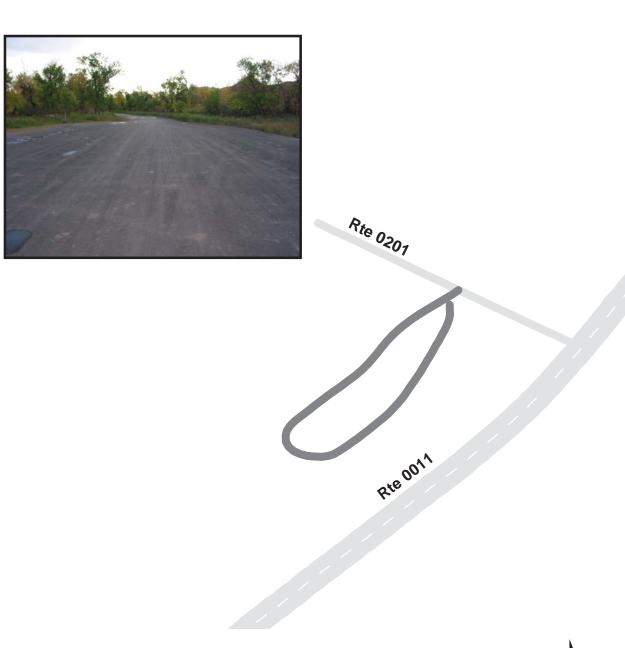


Theodore Roosevelt National Park Route 0201C

Cottonwood Campground Picnic Area Loop From Route 0201

Route	Length (mi)	Width (ft)	Area (sq ft)	I ane Miles *	Condition / PCR	Surface Type
Route	Length (IIII)	Wiath (it)	Alea (34 It)	Lane wines	Condition / I Cit	ourrace Type
0201C	0.33	17.00	29531	0.51	GOOD / 90	AS

^{*} Lane miles are based on 11' lane widths



500

250

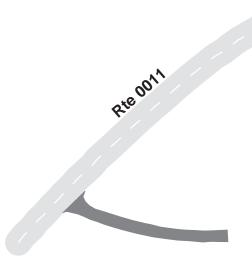
500

Theodore Roosevelt National Park Route 0400

Third Avenue From Park Boundary

Route	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles *	Condition / PCR	Surface Type
0400	0.04	0.00	4669	0.08	GOOD / 90	AS

^{*} Lane miles are based on 11' lane widths

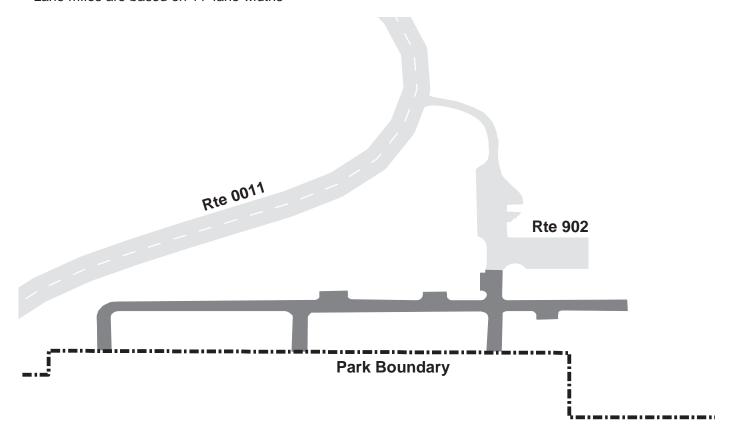




Headquarters Street From Park Boundary

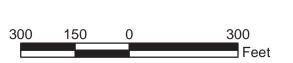
	Route	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles *	Condition / PCR	Surface Type
ĺ	0405	0.38	0.00	44325	0.76	GOOD / 90	AS

^{*} Lane miles are based on 11' lane widths





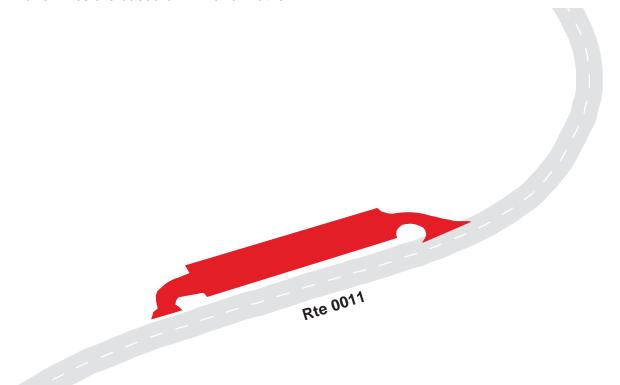




Medora Visitor'S Center Parking Adjacent to Route 0011 at MP 0.2 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0900	Public	9/19/2002	24184	0.42	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



200

100



Medora Visitor'S Center Employee Parking Adjacent to Route 0011 at MP 0.1 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0901	NonPublic	9/19/2002	5271	0.09	AS	GOOD / 90

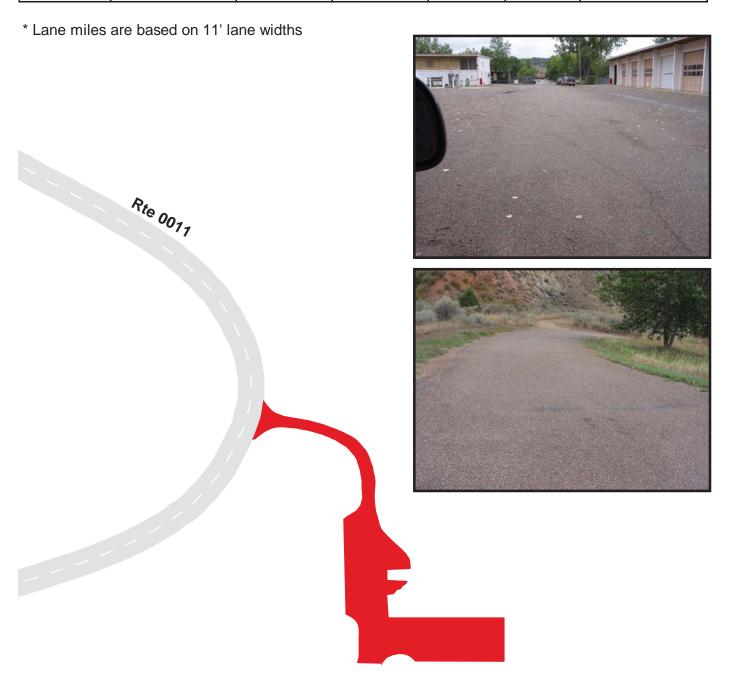
^{*} Lane miles are based on 11' lane widths





South Unit Maintenance Yard From Route 0405

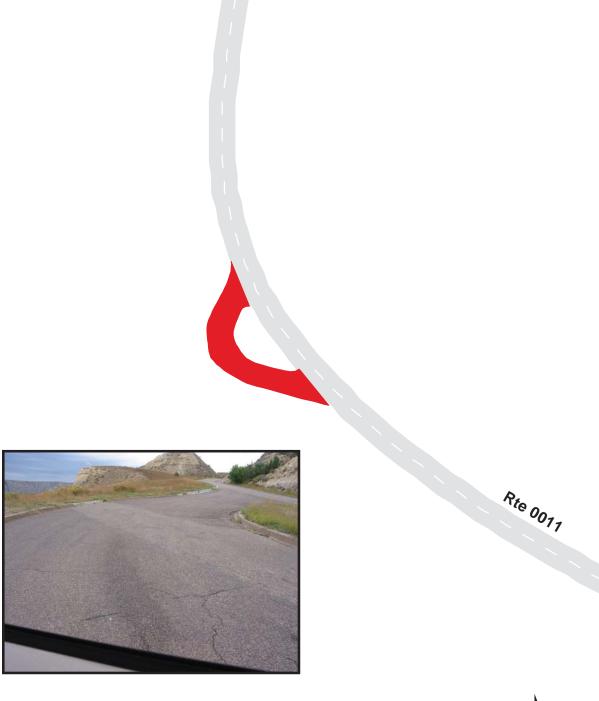
	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0902	NonPublic	9/19/2002	34179	0.59	OC	GOOD / 90



Medora Overlook Adjacent to Route 0011 at MP 0.5 on Left

Ī		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
ĺ	0903	Public	9/19/2002	4388	0.08	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



Johnson Plateau Parking Area Adjacent to Route 0011 at MP 3.3 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0904	Public	9/19/2002	4841	0.08	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths

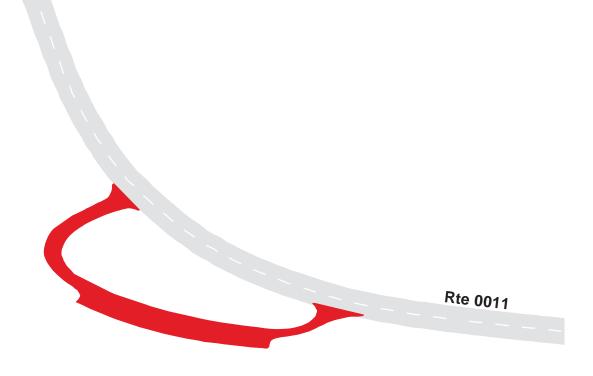




Skyline Vista Adjacent to Route 0011 at MP 4.2 on Left

ſ		Public /	Date		Lane	Surface	
ı	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0905	Public	9/19/2002	30564	0.53	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





River Woodland Overlook Adjacent to Route 0011 at MP 5.3 on Left

		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
ı	0906	Public	9/19/2002	8390	0.14	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



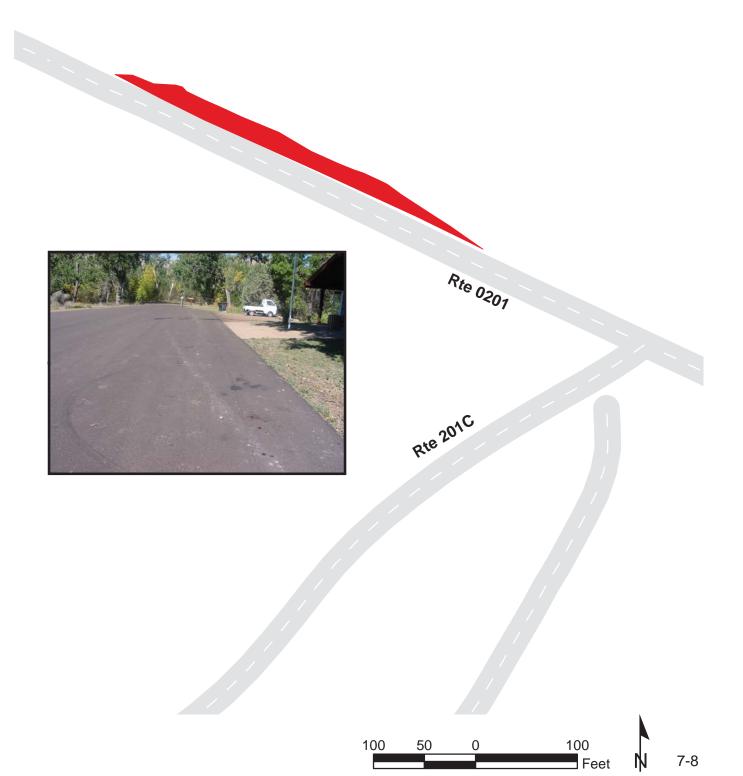
Rte 0011



Cottonwood Campground Fee Station Parking Adjacent to Route 0201 on Right at Fee Station

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0907	Public	9/19/2002	3682	0.06	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths



Cottonwood Campground Picnic Area Parking A Adjacent to Route 0201C at MP 0.04 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0908A	Public	9/18/2002	797	0.01	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths



Rte 201C

100

50



Cottonwood Campground Picnic Area Parking B Adjacent to Route 0201C at MP 0.09 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0908B	Public	9/18/2002	927	0.02	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths



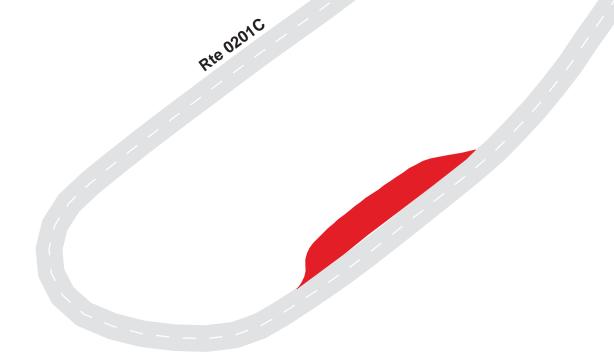
Rte 0201C

Cottonwood Campground Picnic Area Parking C Adjacent to Route 0201C at MP 0.22 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0908C	Public	9/18/2002	3379	0.06	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths



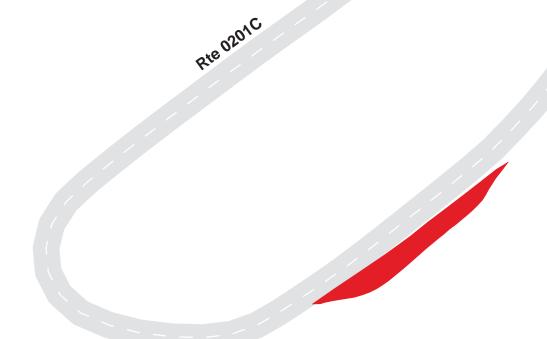


Cottonwood Campground Picnic Area Parking D Adjacent to Route 0201C at MP 0.22 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0908D	Public	9/18/2002	2576	0.04	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths





Cottonwood Campground Picnic Area Parking E Adjacent to Route 0201C at MP 0.3 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0908E	Public	9/18/2002	747	0.01	AS	EXCELLENT / 97

Rte 0201C

^{*} Lane miles are based on 11' lane widths



Rte 0201



Prairie Dog Town Parking Area Adjacent to Route 0011 at MP 6.7 on Right

ſ		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0909	Public	9/18/2002	8605	0.15	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



Pt6 0077

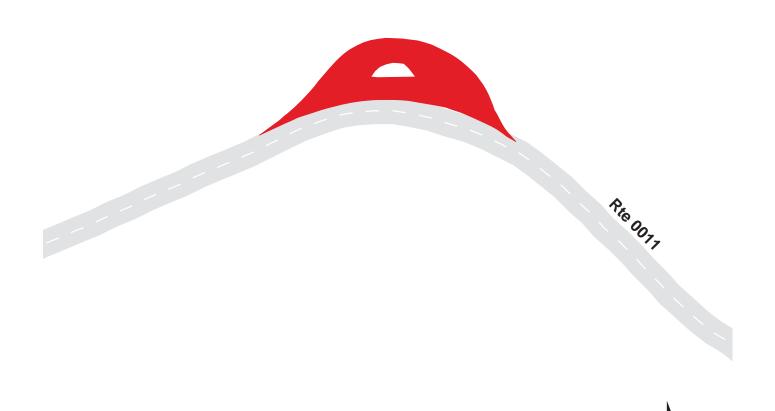


Scoria Point Overlook Adjacent to Route 0011 at MP 9.2 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0910	Public	9/18/2002	6082	0.10	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths





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Ridgeline Trailhead Adjacent to Route 0011 at MP 10.6 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0911	Public	9/18/2002	2592	0.04	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths





North Dakota Badlands Overlook Adjacent to Route 0011 at MP 11.2 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0912	Public	9/18/2002	6755	0.12	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths





Paddock Creek / Talkington Trailhead Parking Adjacent to Route 0011 at MP 14.4 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0913	Public	9/18/2002	3165	0.05	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



Rte 0011

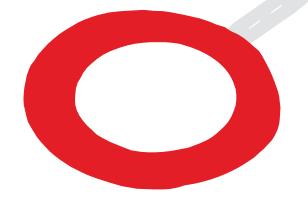
Buck Hill Overlook At End of Route 0204

		Public /	Date		Lane	Surface	
F	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0915	Public	9/18/2002	12781	0.22	OC	FAIR / 73

^{*} Lane miles are based on 11' lane widths





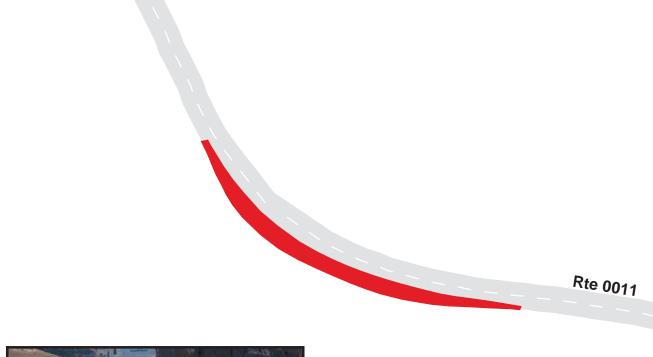




Boicourt Overlook Parking A Adjacent to Route 0011 at MP 19.0 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0916A	Public	9/19/2002	5801	0.10	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





Boicourt Overlook Parking B Adjacent to Route 0011 at MP 19.3 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0916B	Public	9/19/2002	4309	0.07	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





Boicourt Overlook Parking C Adjacent to Route 0011 at MP 19.6 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0916C	Public	9/19/2002	6988	0.12	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



Rte 0077

Wind Canyon Parking Area Adjacent to Route 0011 at MP 24.7 on Right

ſ		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
ľ	0918	Public	9/18/2002	24002	0.41	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



Beef Corral Pullout Adjacent to Route 0011 at MP 26.1 on Right

ĺ		Public /	Date		Lane	Surface	
١	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
ſ	0919	Public	9/18/2002	3697	0.06	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths

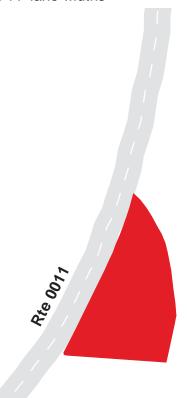




Lower Jones Creek Trailhead Adjacent to Route 0011 at MP 27.0 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0920	Public	9/18/2002	10073	0.17	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





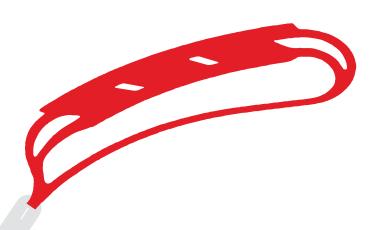
Painted Canyon Visitors Center From Cattleguard East

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0922	Public	9/18/2002	119249	2.05	AS	FAIR / 73

400

^{*} Lane miles are based on 11' lane widths





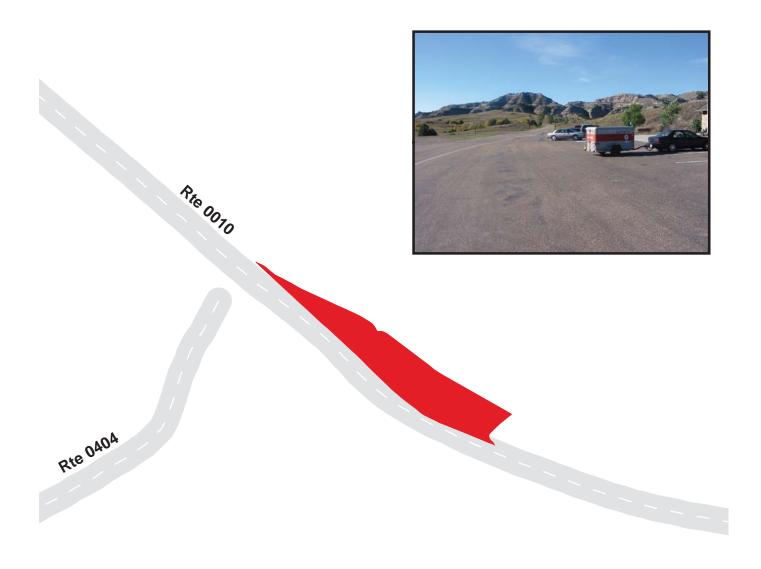
Sattlesuard East



North Unit Visitors Center Adjacent to Route 0010 at MP 0.3 on Right at Visitor Center

Ī		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0924	Public	9/19/2002	14127	0.24	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



Residence Spur Adjacent to Route 0404 on Right

		Public /	Date		Lane	Surface	
Rou	ıte	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
092	25	NonPublic	9/19/2002	15162	0.26	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



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Longhorn Pullout Adjacent to Route 0010 at MP 2.3 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0926	Public	9/19/2002	4245	0.07	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



Rte 0010

Slump Block Pullout Adjacent to Route 0010 at MP 2.9 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0927	Public	9/19/2002	3552	0.06	OC	GOOD / 90

^{*} Lane miles are based on 11' lane widths





Cannonball Concretions Pullout Adjacent to Route 0010 at MP 4.8 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0928	Public	9/19/2002	13645	0.23	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths





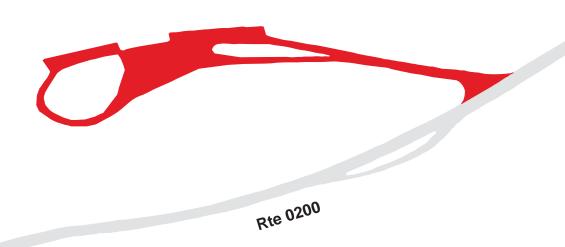
Juniper Picnic Area Adjacent to Route 0200

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0930	Public	9/19/2002	26368	0.45	OC	GOOD / 90

^{*} Lane miles are based on 11' lane widths



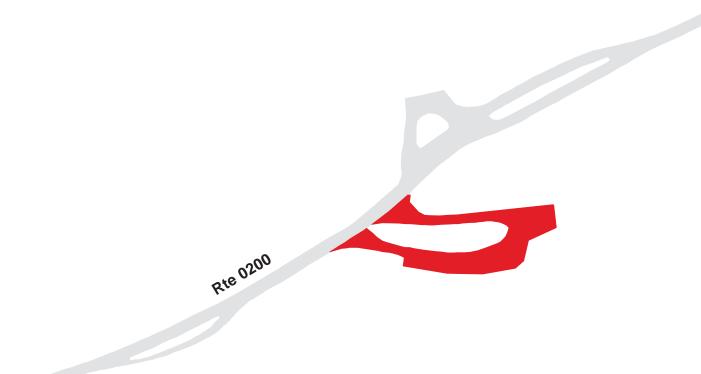




Juniper Group Site Adjacent to Route 0200

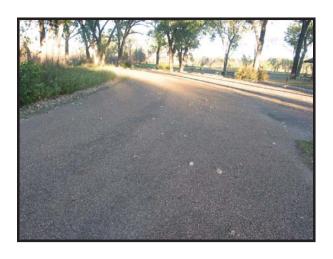
	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0931	Public	9/19/2002	17497	0.30	OC	GOOD / 90

^{*} Lane miles are based on 11' lane widths



200

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Long X Trail Pullout Adjacent to Route 0010 at MP 5.7 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0932	Public	9/19/2002	12886	0.22	OC	FAIR / 73

^{*} Lane miles are based on 11' lane widths





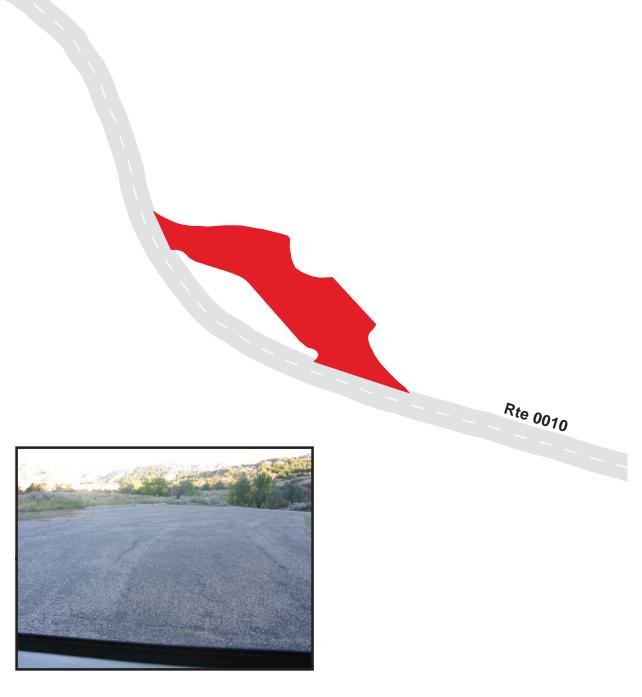




Caprock Coulee Trail
Adjacent to Route 0010 at MP 6.4 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0933	Public	9/19/2002	9129	0.16	AS	POOR / 45

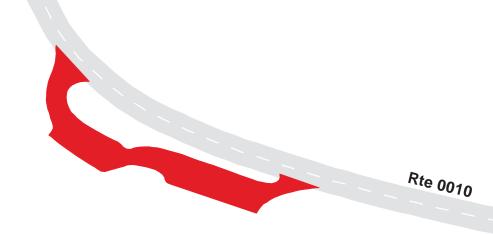
^{*} Lane miles are based on 11' lane widths



River Bend Overlook Adjacent to Route 0010 at MP 8.0 on Left

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0934	Public	9/19/2002	13661	0.24	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





Bentonite Clay Overlook Adjacent to Route 0010 at MP 9.0 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0935	Public	9/18/2002	7756	0.13	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths



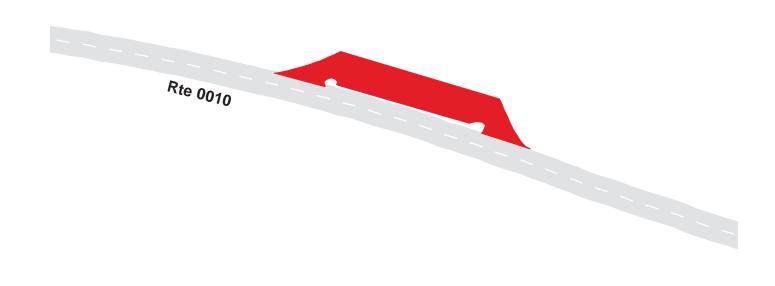


Man And Grass Pullout Adjacent to Route 0010 at MP 9.8 on Right

Ĭ		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
ĺ	0936	Public	9/18/2002	8383	0.14	OC	FAIR / 73

^{*} Lane miles are based on 11' lane widths





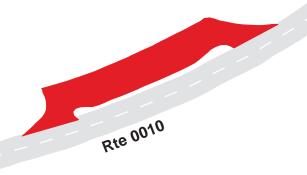
Edge Of Glacier Pullout Adjacent to Route 0010 at MP 12.65 on Right

	Public /	Date		Lane	Surface	
Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
0937	Public	9/18/2002	7314	0.13	OC	FAIR / 73

^{*} Lane miles are based on 11' lane widths







Oxbow Overlook At End of Route 0010 around Loop

Ì		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0938	Public	9/18/2002	29380	0.51	OC	FAIR / 73

^{*} Lane miles are based on 11' lane widths





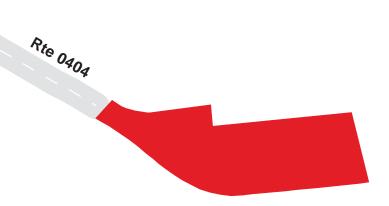




North Unit Maintenance Yard At End of Route 0404

Ī		Public /	Date		Lane	Surface	
ı	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0940	NonPublic	9/18/2002	12475	0.21	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths

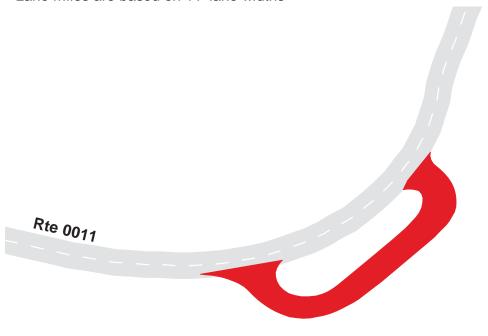




Old East Entrance Trailhead Parking Adjacent to Route 0011 at MP 12.7 on Right

Ī		Public /	Date		Lane	Surface	
١	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0941	Public	9/18/2002	8020	0.14	AS	EXCELLENT / 97

^{*} Lane miles are based on 11' lane widths



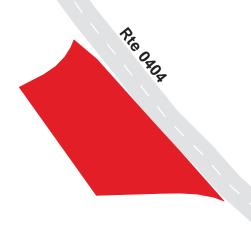


North Unit Maintenance Yard Overflow Parking Adjacent to Route 0404 on Right

Ī		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0942	NonPublic	9/19/2002	1543	0.03	AS	FAIR / 73

^{*} Lane miles are based on 11' lane widths





North Unit Visitor Center Turnout
Adjacent to Route 0010 at MP 0.3 on Left across from Visitor Center

ſ		Public /	Date		Lane	Surface	
	Route	NonPublic	Visited	Area (sq ft)	Miles *	Type	Condition / PCR
	0943	Public	9/19/2002	5150	0.09	AS	GOOD / 90

^{*} Lane miles are based on 11' lane widths



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THRO: PARKWIDE MAINTENANCE FEATURES SUMMARY

FEATURE	PARK TOTAL	UNIT
BRIDGE	5	EACH
CATTLE GUARD	3	EACH
CULVERT	154	EACH
CURB	66,876	LINEAR FEET
DROP INLET	37	EACH
GUARD WALL	0	LINEAR FEET
GUARDRAIL	18,142	LINEAR FEET
INTERSECTION	83	EACH
LOW WATER CROSSING	0	EACH
OVERHEAD SIGN	0	EACH
PARK BOUNDARY	0	EACH
PAVED DITCH	248	LINEAR FEET
PULLOUT	10	EACH
RAILROAD CROSSING	0	EACH
RETAINING WALL	0	EACH
STATE BOUNDARY	0	EACH
TRAFFIC LIGHT	0	EACH
TUNNEL	0	EACH
TURNOUT	0	LINEAR FEET

THRO: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0010 SCENIC DRIVE	ROUTE 0011 SCENIC LOOP	ROUTE 0203 PEACEFUL VALLEY RANCH RD	ROUTE 0204 BUCK HILL SPUR	ROUTE 0404 NORTH UNIT MAINTENANCE RD	ROUTE 0406 GRAY HOUSE RD	UNIT
BRIDGE	1	4	0	0	0	0	EACH
CATTLE GUARD	1	1	0	0	1	0	EACH
CULVERT	33	120	0	1	0	0	EACH
CURB	9,472	56,000	0	1,404	0	0	LINEAR FEET
DROP INLET	1	36	0	0	0	0	EACH
GUARD WALL	0	0	0	0	0	0	LINEAR FEET
GUARDRAIL	3,411	13,047	0	1,684	0	0	LINEAR FEET
INTERSECTION	26	40	4	3	7	3	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
OVERHEAD SIGN	0	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	0	0	EACH
PAVED DITCH	0	248	0	0	0	0	LINEAR FEET
PULLOUT	0	9	0	1	0	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TURNOUT	0	0	0	0	0	0	LINEAR FEET

ROUTE 0010 : SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT US 85
0.006	0.006	INTERSECTION	RIGHT	US 85
0.011	0.011	INTERSECTION	LEFT	US 85
0.183	0.183	CATTLE GUARD	N/A	
0.256	0.256	INTERSECTION	RIGHT	RTE 924, NORTH UNIT VISITOR CENTER PARKING
0.272	0.272	INTERSECTION	LEFT	RTE 943, NORTH UNIT VISITOR CENTER TURNOUT
0.301	0.301	INTERSECTION	LEFT	RTE 943, NORTH UNIT VISITOR CENTER TURNOUT
0.317	0.317	INTERSECTION	LEFT	ROUTE 404 NORTH UNIT MAINTENANCE RD
0.487	0.565	CURB	LEFT	
0.509	0.588	CURB	RIGHT	
0.623	0.623	INTERSECTION	RIGHT	UNPAVED ROAD
0.951	0.983	CURB	LEFT	
0.960	0.992	CURB	RIGHT	
0.977	0.977	CULVERT	N/A	
1.144	1.386	CURB	RIGHT	
1.232	1.280	GUARDRAIL	LEFT	
1.242	1.293	GUARDRAIL	RIGHT	
1.412	1.495	GUARDRAIL	RIGHT	
1.423	1.515	GUARDRAIL	LEFT	
1.453	1.453	CULVERT	N/A	
1.520	1.553	CURB	LEFT	
1.534	1.561	CURB	RIGHT	
1.630	1.679	CURB	RIGHT	
1.798	1.798	CULVERT	N/A	
1.857	1.880	GUARDRAIL	RIGHT	

ROUTE 0010 : SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	<i>FEATURE</i>	SIDE	COMMENT
1.857	1.881	GUARDRAIL	LEFT	
2.299	2.339	CURB	LEFT	
2.322	2.322	INTERSECTION	LEFT	RTE 926, LONGHORN PULLOUT
2.537	2.603	CURB	LEFT	
2.543	2.543	CULVERT	N/A	
2.616	2.616	CULVERT	N/A	
2.711	2.711	INTERSECTION	LEFT	RTE 403, CORRAL AREA ACCESS ROAD
2.909	2.940	CURB	RIGHT	
2.923	2.923	INTERSECTION	RIGHT	RTE 927, SLUMP BLOCK PULLOUT
3.311	3.335	GUARDRAIL	RIGHT	
3.316	3.342	GUARDRAIL	LEFT	
3.323	3.323	CULVERT	N/A	
3.396	3.422	CURB	LEFT	
3.577	3.577	CULVERT	N/A	
3.637	3.637	CULVERT	N/A	
3.815	3.815	CULVERT	N/A	
3.839	3.891	CURB	RIGHT	
3.867	3.883	CURB	LEFT	
4.072	4.150	GUARDRAIL	RIGHT	
4.078	4.201	GUARDRAIL	LEFT	
4.079	4.079	CULVERT	N/A	
4.113	4.113	CULVERT	N/A	
4.190	4.256	CURB	RIGHT	
4.198	4.234	CURB	LEFT	
4.280	4.280	CULVERT	N/A	
4.305	4.433	CURB	LEFT	

ROUTE 0010 : SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.321	4.423	CURB	RIGHT	
4.600	4.672	CURB	RIGHT	
4.756	4.756	INTERSECTION	LEFT	RTE 200, JUNIPER CAMPGROUND ACCESS ROAD
4.761	4.761	INTERSECTION	RIGHT	RTE 928, CANNONBALL CONCRETIONS PULLOUT
4.901	4.943	GUARDRAIL	RIGHT	
4.904	4.936	GUARDRAIL	LEFT	
4.916	4.929	BRIDGE	N/A	
5.014	5.014	CULVERT	N/A	
5.215	5.243	CURB	LEFT	
5.217	5.256	CURB	RIGHT	
5.363	5.363	INTERSECTION	LEFT	RTE 409, CAMPGROUND WELLHOUSE ACCESS ROAD
5.411	5.411	CULVERT	N/A	
5.540	5.540	CULVERT	N/A	
5.626	5.626	CULVERT	N/A	
5.713	5.713	INTERSECTION	RIGHT	RTE 932, LONG X TRAIL PULLOUT
5.768	5.768	CULVERT	N/A	
6.035	6.035	CULVERT	N/A	
6.273	6.273	CULVERT	N/A	
6.364	6.364	INTERSECTION	RIGHT	RTE 933, CAPROCK COULEE PULLOUT
6.406	6.406	INTERSECTION	RIGHT	
6.679	6.679	CULVERT	N/A	
6.711	6.711	CULVERT	N/A	
6.831	6.831	CULVERT	N/A	
6.919	6.919	CULVERT	N/A	
6.927	7.035	CURB	LEFT	

ROUTE 0010 : SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
6.994	7.035	CURB	RIGHT	
7.037	7.037	CULVERT	N/A	
7.306	7.306	CULVERT	N/A	
7.342	7.440	CURB	RIGHT	
7.361	7.361	DROP INLET	RIGHT	
7.385	7.413	CURB	LEFT	
7.674	7.782	CURB	LEFT	
7.675	7.715	CURB	RIGHT	
7.745	7.785	CURB	RIGHT	
7.826	7.883	CURB	RIGHT	
8.025	8.025	INTERSECTION	LEFT	RTE 934, RIVER BEND OVERLOOK
8.089	8.089	INTERSECTION	LEFT	RTE 934, RIVER BEND OVERLOOK
8.996	8.996	INTERSECTION	RIGHT	RTE 935, BENTONITIC CLAY OVERLOOK
9.022	9.022	INTERSECTION	RIGHT	RTE 935, BENTONITIC CLAY OVERLOOK
9.254	9.254	CULVERT	N/A	
9.331	9.331	CULVERT	N/A	
9.752	9.752	INTERSECTION	RIGHT	RTE 936, MAN AND GRASS PULLOUT
9.793	9.793	INTERSECTION	RIGHT	
10.386	10.386	CULVERT	N/A	
10.635	10.635	CULVERT	N/A	
12.642	12.642	INTERSECTION	RIGHT	RTE 937, EDGE OF GLACIER PULLOUT
12.679	12.679	INTERSECTION	RIGHT	
13.041	13.041	CULVERT	N/A	
13.245	13.245	CULVERT	N/A	

ROUTE 0010 : SCENIC DRIVE

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
13.283	13.283	CULVERT	N/A	
13.428	13.428	INTERSECTION	RIGHT	RTE 408, WEST BOUNDARY ACCESS ROAD
13.517	13.517	CULVERT	N/A	
13.860	13.860			ROUTE ENDS AT OXBOW OVERLOOK (RTE 938)
13.862	13.862	INTERSECTION	LEFT	RTE 938

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT US BUS 10 SOUTHERNLY AROUND LOOP
0.013	0.027	CURB	LEFT	
0.015	0.015	INTERSECTION	RIGHT	US BUS 10
0.016	0.016	INTERSECTION	LEFT	US BUS 10
0.024	0.024	INTERSECTION	RIGHT	RTE 400, THIRD AVENUE
0.068	0.077	CURB	LEFT	
0.092	0.092	INTERSECTION	LEFT	RTE 901, MEDORA VISITOR'S CENTER EMPLOYEE PARKI
0.139	0.139	INTERSECTION	LEFT	RTE 900, MEDORA VISITOR CENTER PARKING
0.217	0.217	INTERSECTION	LEFT	RTE 900, MEDORA VISITOR CENTER PARKING
0.250	0.392	CURB	LEFT	
0.278	0.278	INTERSECTION	RIGHT	RTE 902, SOUTH UNIT MAINTENANCE YARD
0.298	0.298	CULVERT	N/A	
0.339	0.378	CURB	RIGHT	
0.383	0.383	CULVERT	N/A	
0.386	0.433	PAVED DITCH	RIGHT	
0.450	0.450	CULVERT	N/A	
0.457	0.457	INTERSECTION	LEFT	RTE 903, MEDORA OVERLOOK
0.457	0.470	CURB	LEFT	
0.483	0.483	INTERSECTION	LEFT	RTE 903, MEDORA OVERLOOK
0.485	0.498	CURB	LEFT	
0.515	0.515	CULVERT	N/A	
0.520	0.614	CURB	RIGHT	
0.715	0.753	CURB	LEFT	
0.756	0.756	CULVERT	N/A	
0.756	0.833	CURB	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE COMMENT
0.832	0.832	DROP INLET	RIGHT
0.849	0.868	CURB	LEFT
0.880	0.991	CURB	LEFT
0.981	0.981	CULVERT	N/A
0.981	0.981	DROP INLET	LEFT
1.001	1.039	CURB	RIGHT
1.002	1.002	DROP INLET	RIGHT
1.021	1.021	CULVERT	N/A
1.051	1.104	CURB	RIGHT
1.214	1.258	CURB	RIGHT
1.258	1.258	DROP INLET	RIGHT
1.286	1.515	CURB	LEFT
1.393	1.393	CULVERT	N/A
1.545	1.578	CURB	LEFT
1.567	1.567	DROP INLET	RIGHT
1.567	1.607	CURB	RIGHT
1.589	1.589	CULVERT	N/A
1.678	1.722	CURB	RIGHT
1.772	1.906	CURB	LEFT
2.044	2.200	GUARDRAIL	RIGHT
2.045	2.210	GUARDRAIL	LEFT
2.074	2.102	BRIDGE	N/A
2.155	2.182	BRIDGE	N/A
2.211	2.211	CATTLE GUARD	N/A
2.347	2.387	CURB	LEFT
2.400	2.463	CURB	RIGHT
2.528	2.528	CULVERT	N/A

ROUTE 0011 : SCENIC LOOP

2.719 2.719 CULVERT N/A 2.766 2.856 CURB RIGHT 2.771 2.842 CURB LEFT 2.875 2.875 CULVERT N/A 2.884 2.927 CURB RIGHT 2.916 2.925 CURB LEFT 2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.252	FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.771 2.842 CURB LEFT 2.875 2.875 CULVERT N/A 2.884 2.927 CURB RIGHT 2.916 2.925 CURB LEFT 2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.252 4.252 CULVERT N/A 4.260 4.354 CURB	2.719	2.719	CULVERT	N/A	
2.875 2.875 CULVERT N/A 2.884 2.927 CURB RIGHT 2.916 2.925 CURB LEFT 2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 3.322 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.729 3.786 CURB LEFT 3.729 3.778 CURB RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.260 4.354 CURB LEFT <td>2.766</td> <td>2.856</td> <td>CURB</td> <td>RIGHT</td> <td></td>	2.766	2.856	CURB	RIGHT	
2.884 2.927 CURB RIGHT 2.916 2.925 CURB LEFT 2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.260 4.354 CURB LEFT 4.362 4.368 CURB	2.771	2.842	CURB	LEFT	
2.916 2.925 CURB LEFT 2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.252 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.260 4.354 CURB RIGHT 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.362 4.362 CULVERT <td< td=""><td>2.875</td><td>2.875</td><td>CULVERT</td><td>N/A</td><td></td></td<>	2.875	2.875	CULVERT	N/A	
2.997 2.997 CULVERT N/A 3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.362 4.362 CULVERT N/A	2.884	2.927	CURB	RIGHT	
3.076 3.172 CURB LEFT 3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.362 4.362 CULVERT RIGHT 4.362 4.362 CULVERT N/A 4.362 4.362 CULVERT N/A 4.362 4.362 CULVERT N/A 4.362 4.362 CULVERT N/A 4.364 CURB LEFT 4.365 A.365 CULVERT RIGHT 4.366 RIGHT RIGHT RIGHT 4.362 4.362 CULVERT N/A 4.364 RIGHT RIGHT RIGHT 4.365 4.366 CULVERT N/A 4.366 CULVERT N/A 4.367 RIGHT RIGHT RIGHT 4.368 CULVERT N/A 4.368 CULVERT N/A 4.369 A.360 CULVERT N/A 4.360 RIGHT RIGHT RIGHT 4.360 A.360 CULVERT N/A 4.361 RIGHT RIGHT RIGHT 4.362 A.362 CULVERT N/A 4.364 RIGHT RIGHT RIGHT 4.365 A.365 CULVERT N/A 4.366 RIGHT RIGHT RIGHT 4.366 RIGHT RIGHT RIGHT 4.362 A.362 CULVERT N/A 4.366 RIGHT RIGHT RIGHT 4.367 RIGHT RIGHT RIGHT 4.368 RIGHT RIGHT RIGHT 4.369 RIGHT RIGHT RIGHT RIGHT 4.360 RIGHT RIGHT RIGHT RIGHT 4.360 RIGHT RIGHT RIGHT RIGHT 4.361 RIGHT RIGHT RIGHT RIGHT RIGHT RIGHT RIGHT	2.916	2.925	CURB	LEFT	
3.092 3.140 CURB RIGHT 3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.362 4.368 CURB LEFT 4.362 4.362 CULVERT N/A	2.997	2.997	CULVERT	N/A	
3.164 3.164 CULVERT N/A 3.192 3.226 CURB LEFT 3.332 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 JA778 CURB RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.362 4.368 CURB LEFT 4.362 4.362 CULVERT N/A	3.076	3.172	CURB	LEFT	
3.192 3.226 CURB LEFT 3.332 3.332 INTERSECTION RIGHT ROUTE 904 JOHNSON PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.368 CURB LEFT 4.357 4.368 CURB LEFT 4.362 4.362 CULVERT N/A	3.092	3.140	CURB	RIGHT	
3.332 3.332 INTERSECTION RIGHT PLATEAU PULLOUT 3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 4.145 LEFT RIGHT 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 CULVERT N/A	3.164	3.164	CULVERT	N/A	
3.644 3.672 CURB LEFT 3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB RIGHT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.192	3.226	CURB	LEFT	
3.699 3.787 PULLOUT LEFT 3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.362 4.368 CURB LEFT 4.367 4.367 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.332	3.332	INTERSECTION	RIGHT	
3.701 3.786 CURB LEFT 3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.644	3.672	CURB	LEFT	
3.729 3.729 DROP INLET RIGHT 3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.699	3.787	PULLOUT	LEFT	
3.729 3.778 CURB RIGHT 4.145 4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.701	3.786	CURB	LEFT	
4.145 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.197 4.240 CURB RIGHT 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.729	3.729	DROP INLET	RIGHT	
4.197 4.240 CURB RIGHT 4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	3.729	3.778	CURB	RIGHT	
4.229 4.229 INTERSECTION LEFT RTE 905, SKYLINE VISTA 4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.145	4.145	INTERSECTION	LEFT	RTE 905, SKYLINE VISTA
4.252 4.252 CULVERT N/A 4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.197	4.240	CURB	RIGHT	
4.260 4.354 CURB RIGHT 4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.229	4.229	INTERSECTION	LEFT	RTE 905, SKYLINE VISTA
4.269 4.301 CURB LEFT 4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.252	4.252	CULVERT	N/A	
4.322 4.368 CURB LEFT 4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.260	4.354	CURB	RIGHT	
4.357 4.357 DROP INLET RIGHT 4.362 4.362 CULVERT N/A	4.269	4.301	CURB	LEFT	
4.362 4.362 CULVERT N/A	4.322	4.368	CURB	LEFT	
	4.357	4.357	DROP INLET	RIGHT	
4.383 4.413 PULLOUT RIGHT	4.362	4.362	CULVERT	N/A	
	4.383	4.413	PULLOUT	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.384	4.402	CURB	RIGHT	
4.418	4.418	CULVERT	N/A	
4.429	4.464	CURB	RIGHT	
4.525	4.563	CURB	RIGHT	
4.563	4.662	CURB	LEFT	
4.591	4.591	CULVERT	N/A	
4.731	4.896	CURB	LEFT	
4.766	4.766	CULVERT	N/A	
4.869	4.869	DROP INLET	LEFT	
4.906	4.906	CULVERT	N/A	
4.911	4.965	CURB	RIGHT	
4.965	4.965	DROP INLET	RIGHT	
4.993	5.054	CURB	LEFT	
5.008	5.008	CULVERT	N/A	
5.039	5.039	CULVERT	N/A	
5.092	5.114	CURB	RIGHT	
5.295	5.295	INTERSECTION	LEFT	ROUTE 906, RIVER WOODLAND PULLOUT
5.300	5.456	CURB	LEFT	
5.557	5.557	INTERSECTION	LEFT	RTE 201, COTTONWOOD CAMPGROUND AND PICNIC ACCES
5.650	5.650	CULVERT	N/A	
6.508	6.508	INTERSECTION	RIGHT	RTE 401, MIX PIT ROAD
6.523	6.523	INTERSECTION	LEFT	RTE 011
6.637	6.720	CURB	RIGHT	
6.687	6.687	INTERSECTION	RIGHT	ROUTE 909 PRAIRIE DOG TOWN (PULLOUT)
6.969	6.969	CULVERT	N/A	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
7.310	7.310	CULVERT	N/A	
7.607	7.607	CULVERT	N/A	
7.749	7.802	CURB	RIGHT	
7.800	7.800	DROP INLET	RIGHT	
7.863	7.863	CULVERT	N/A	
7.931	7.931	CULVERT	N/A	
8.022	8.022	CULVERT	N/A	
8.088	8.088	CULVERT	N/A	
8.232	8.232	CULVERT	N/A	
8.260	8.260	CULVERT	N/A	
8.340	8.340	CULVERT	N/A	
8.392	8.392	CULVERT	N/A	
8.659	8.700	PULLOUT	LEFT	
8.671	8.697	CURB	LEFT	
8.731	8.731	CULVERT	N/A	
8.846	8.846	CULVERT	N/A	
8.901	8.987	CURB	RIGHT	
8.906	8.906	DROP INLET	RIGHT	
9.079	9.079	CULVERT	N/A	
9.127	9.127	CULVERT	N/A	
9.186	9.186	CULVERT	N/A	
9.238	9.238	INTERSECTION	LEFT	RTE 910, SORIA POINT OVERLOOK
9.239	9.267	CURB	LEFT	
9.263	9.263	INTERSECTION	LEFT	RTE 910, SORIA POINT OVERLOOK
9.313	9.313	CULVERT	N/A	
9.417	9.417	CULVERT	N/A	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	<i>FEATURE</i>	SIDE	COMMENT
9.430	9.682	CURB	RIGHT	
9.433	9.433	DROP INLET	RIGHT	
9.583	9.583	DROP INLET	RIGHT	
9.730	9.730	CULVERT	N/A	
9.780	9.819	CURB	RIGHT	
9.780	9.820	PULLOUT	RIGHT	
10.008	10.091	GUARDRAIL	LEFT	
10.023	10.088	GUARDRAIL	RIGHT	
10.045	10.045	CULVERT	N/A	
10.210	10.210	CULVERT	N/A	
10.242	10.242	CULVERT	N/A	
10.321	10.354	CURB	RIGHT	
10.321	10.354	PULLOUT	RIGHT	
10.384	10.412	CURB	RIGHT	
10.385	10.385	DROP INLET	RIGHT	
10.445	10.445	CULVERT	N/A	
10.482	10.482	CULVERT	N/A	
10.561	10.674	CURB	RIGHT	
10.639	10.639	INTERSECTION	RIGHT	ROUTE 911 RIDGELINE TRAILHEAD
10.698	10.698	CULVERT	N/A	
10.709	10.783	CURB	RIGHT	
10.781	10.781	DROP INLET	RIGHT	
10.866	11.046	CURB	RIGHT	
10.950	10.950	DROP INLET	RIGHT	
11.016	11.016	DROP INLET	RIGHT	
11.108	11.322	CURB	RIGHT	
11.164	11.164	DROP INLET	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
11.206	11.206	INTERSECTION	LEFT	RTE 912, NORTH DAKOTA BADLANDS PULLOUT
11.206	11.240	CURB	LEFT	
11.229	11.229	INTERSECTION	LEFT	RTE 912, NORTH DAKOTA BADLANDS PULLOUT
11.274	11.274	DROP INLET	RIGHT	
11.318	11.318	DROP INLET	RIGHT	
11.378	11.378	CULVERT	N/A	
11.462	11.462	DROP INLET	RIGHT	
11.513	11.513	DROP INLET	RIGHT	
11.659	11.659	CULVERT	N/A	
11.726	11.769	GUARDRAIL	RIGHT	
11.752	11.752	CULVERT	N/A	
11.761	11.805	PULLOUT	RIGHT	
11.762	11.798	CURB	RIGHT	
11.836	11.836	CULVERT	N/A	
12.108	12.108	CULVERT	N/A	
12.236	12.236	CULVERT	N/A	
12.356	12.356	CULVERT	N/A	
12.358	12.358	CULVERT	N/A	
12.415	12.484	CURB	LEFT	
12.421	12.421	DROP INLET	RIGHT	
12.421	12.462	CURB	RIGHT	
12.423	12.423	DROP INLET	LEFT	
12.644	12.644	INTERSECTION	RIGHT	Route 941
12.680	12.680	INTERSECTION	RIGHT	Route 941
12.769	12.769	CULVERT	N/A	
12.813	12.841	GUARDRAIL	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
12.878	12.878	CULVERT	N/A	
13.381	13.381	CULVERT	N/A	
13.439	13.439	CULVERT	N/A	
13.485	13.485	CULVERT	N/A	
13.485	13.848	CURB	RIGHT	
13.514	13.514	CULVERT	N/A	
13.585	13.625	GUARDRAIL	LEFT	
13.597	13.597	CULVERT	N/A	
13.620	13.760	CURB	LEFT	
13.766	13.766	DROP INLET	RIGHT	
13.794	13.794	CULVERT	N/A	
13.977	14.090	CURB	LEFT	
14.181	14.181	CULVERT	N/A	
14.197	14.582	CURB	RIGHT	
14.353	14.353	DROP INLET	RIGHT	
14.383	14.436	CURB	LEFT	
14.422	14.422	INTERSECTION	LEFT	ROUTE 913 PADDOCK CREEK TURNOUT
14.645	14.645	CULVERT	N/A	
14.727	14.727	DROP INLET	RIGHT	
14.727	14.791	CURB	RIGHT	
14.841	14.858	CURB	RIGHT	
15.118	15.118	DROP INLET	RIGHT	
15.118	15.226	CURB	RIGHT	
15.319	15.435	CURB	LEFT	
15.321	15.321	CULVERT	N/A	
15.330	15.330	INTERSECTION	RIGHT	RTE 206, BURNING COAL VEIN ROAD

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
15.464	15.541	CURB	LEFT	
15.494	15.540	CURB	RIGHT	
15.738	15.781	CURB	RIGHT	
15.749	15.749	CULVERT	N/A	
15.883	15.986	CURB	LEFT	
15.962	16.019	GUARDRAIL	RIGHT	
15.970	16.015	GUARDRAIL	LEFT	
15.973	16.004	CURB	RIGHT	
15.989	15.989	CULVERT	N/A	
16.009	16.081	PULLOUT	LEFT	
16.188	16.188	CULVERT	N/A	
16.304	16.345	CURB	RIGHT	
16.322	16.322	CULVERT	N/A	
16.408	16.472	CURB	LEFT	
16.410	16.410	CULVERT	N/A	
16.432	16.553	CURB	RIGHT	
16.535	16.636	CURB	LEFT	
16.545	16.589	GUARDRAIL	LEFT	
16.560	16.590	GUARDRAIL	RIGHT	
16.563	16.712	CURB	RIGHT	
16.567	16.567	CULVERT	N/A	
16.699	16.802	CURB	LEFT	
16.730	16.763	CURB	RIGHT	
16.769	16.769	INTERSECTION	RIGHT	RTE 204, BUCK HILL SPUR
16.927	16.927	CULVERT	N/A	
17.044	17.044	CULVERT	N/A	
17.140	17.251	CURB	LEFT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
17.217	17.217	CULVERT	N/A	
17.312	17.403	CURB	LEFT	
17.329	17.415	PULLOUT	LEFT	
17.587	17.587	CULVERT	N/A	
17.733	17.733	CULVERT	N/A	
17.822	17.822	CULVERT	N/A	
17.911	17.911	CULVERT	N/A	
18.068	18.068	CULVERT	N/A	
18.319	18.319	CULVERT	N/A	
18.600	18.685	CURB	RIGHT	
18.649	18.790	CURB	LEFT	
18.686	18.765	GUARDRAIL	RIGHT	
18.695	18.695	DROP INLET	LEFT	
18.708	18.708	CULVERT	N/A	
18.811	18.872	GUARDRAIL	RIGHT	
18.826	18.888	CURB	RIGHT	
18.835	18.870	GUARDRAIL	LEFT	
18.868	19.089	CURB	LEFT	
18.935	18.935	CULVERT	N/A	
18.947	19.052	CURB	RIGHT	
19.009	19.009	INTERSECTION	LEFT	ROUTE 916A - BOICOURT OVERLOOK
19.058	19.058	CULVERT	N/A	
19.229	19.310	CURB	LEFT	
19.240	19.329	CURB	RIGHT	
19.279	19.279	INTERSECTION	LEFT	ROUTE 916B - BOICOURT OVERLOOK
19.536	19.600	CURB	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
19.542	19.542	CULVERT	N/A	
19.543	19.611	CURB	LEFT	
19.583	19.583	INTERSECTION	LEFT	ROUTE 916C - BOICOURT OVERLOOK
19.617	19.650	GUARDRAIL	LEFT	
19.645	19.879	CURB	LEFT	
19.811	19.811	CULVERT	N/A	
19.891	19.954	GUARDRAIL	RIGHT	
19.892	19.954	GUARDRAIL	LEFT	
19.898	20.026	CURB	RIGHT	
19.925	19.925	CULVERT	N/A	
20.001	20.032	GUARDRAIL	RIGHT	
20.006	20.048	GUARDRAIL	LEFT	
20.096	20.163	CURB	LEFT	
20.103	20.187	GUARDRAIL	RIGHT	
20.106	20.106	CULVERT	N/A	
20.106	20.106	DROP INLET	RIGHT	
20.107	20.167	CURB	RIGHT	
20.171	20.270	CURB	LEFT	
20.179	20.179	DROP INLET	RIGHT	
20.209	20.331	GUARDRAIL	RIGHT	
20.270	20.270	CULVERT	N/A	
20.279	20.330	CURB	RIGHT	
20.288	20.288	CULVERT	N/A	
20.289	20.331	GUARDRAIL	LEFT	
20.390	20.481	GUARDRAIL	LEFT	
20.398	20.410	GUARDRAIL	RIGHT	
20.404	20.404	CULVERT	N/A	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
20.600	20.600	INTERSECTION	LEFT	RTE 917, UPPER JONES CREEK TRAILHEAD
20.697	20.767	CURB	LEFT	
20.710	20.802	GUARDRAIL	LEFT	
20.727	20.754	CURB	RIGHT	
20.730	20.759	GUARDRAIL	RIGHT	
20.731	20.731	CULVERT	N/A	
20.793	20.895	CURB	RIGHT	
20.796	20.852	CURB	LEFT	
20.894	21.048	CURB	LEFT	
20.958	21.018	GUARDRAIL	RIGHT	
21.047	21.047	CULVERT	N/A	
21.108	21.108	CULVERT	N/A	
21.152	21.190	GUARDRAIL	RIGHT	
21.152	21.196	GUARDRAIL	LEFT	
21.166	21.166	CULVERT	N/A	
21.284	21.320	GUARDRAIL	LEFT	
21.286	21.318	CURB	RIGHT	
21.294	21.294	CULVERT	N/A	
21.341	21.375	GUARDRAIL	LEFT	
21.428	21.428	CULVERT	N/A	
21.475	21.519	GUARDRAIL	RIGHT	
21.504	21.504	CULVERT	N/A	
21.591	21.591	CULVERT	N/A	
21.707	21.707	CULVERT	N/A	
21.773	21.889	CURB	LEFT	
21.813	22.153	CURB	RIGHT	
21.975	21.975	DROP INLET	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE COMMENT
21.992	22.053	GUARDRAIL	LEFT
22.049	22.049	DROP INLET	RIGHT
22.181	22.181	CULVERT	N/A
22.237	22.397	CURB	RIGHT
22.276	22.276	DROP INLET	RIGHT
22.409	22.409	CULVERT	N/A
22.471	22.527	GUARDRAIL	LEFT
22.487	22.487	CULVERT	N/A
22.618	22.618	CULVERT	N/A
22.655	22.800	CURB	RIGHT
22.674	22.695	GUARDRAIL	LEFT
22.755	22.814	CURB	LEFT
22.856	22.907	GUARDRAIL	LEFT
22.860	22.898	CURB	RIGHT
22.871	22.871	CULVERT	N/A
23.047	23.047	CULVERT	N/A
23.432	23.467	CURB	LEFT
23.465	23.465	CULVERT	N/A
23.541	23.573	CURB	RIGHT
23.559	23.559	CULVERT	N/A
23.585	23.656	CURB	LEFT
23.610	23.610	CULVERT	N/A
23.643	23.810	CURB	RIGHT
23.726	23.726	CULVERT	N/A
23.729	23.729	DROP INLET	RIGHT
23.861	23.912	CURB	LEFT
23.913	24.178	CURB	RIGHT

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
23.945	23.945	DROP INLET	RIGHT	
24.212	24.212	CULVERT	N/A	
24.365	24.365	CULVERT	N/A	
24.436	24.442	BRIDGE	N/A	
24.451	24.766	CURB	LEFT	
24.643	24.643	CULVERT	N/A	
24.701	24.701	INTERSECTION	RIGHT	RTE 918, WIND CANYON PULLOUT
24.716	24.756	CURB	RIGHT	
24.765	24.765	INTERSECTION	RIGHT	RTE 918, WIND CANYON PULLOUT
25.064	25.100	CURB	LEFT	
25.114	25.151	CURB	RIGHT	
25.158	25.197	PULLOUT	LEFT	
25.164	25.164	CULVERT	N/A	
25.225	25.264	CURB	RIGHT	
25.265	25.461	GUARDRAIL	RIGHT	
25.367	25.377	CURB	LEFT	
25.941	25.998	CURB	LEFT	
25.994	26.016	GUARDRAIL	RIGHT	
25.997	25.997	CULVERT	N/A	
26.143	26.143	INTERSECTION	RIGHT	RTE 919, BEEF CORRAL PULLOUT
26.365	26.365	CULVERT	N/A	
26.856	26.856	CULVERT	N/A	
27.074	27.074	INTERSECTION	LEFT	RTE 920, LOWER JONES CREEK TRAILHEAD
27.090	27.113	GUARDRAIL	RIGHT	
27.094	27.109	CURB	RIGHT	

ROUTE 0011 : SCENIC LOOP

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
27.102	27.119	GUARDRAIL	LEFT	
27.103	27.103	CULVERT	N/A	
27.412	27.412	CULVERT	N/A	
27.723	27.789	GUARDRAIL	RIGHT	
27.985	28.025	GUARDRAIL	RIGHT	
27.986	27.996	CURB	RIGHT	
27.988	27.988	INTERSECTION	LEFT	RTE 205, HALLIDAY WELLS ROAD
28.002	28.030	GUARDRAIL	LEFT	
28.003	28.012	BRIDGE	N/A	
28.015	28.022	CURB	RIGHT	
28.295	28.295	INTERSECTION	RIGHT	RTE 203, PEACEFUL VALLEY RANCH ROAD
28.400	28.400	INTERSECTION	LEFT	UNPAVED ROAD
28.566	28.566	INTERSECTION	LEFT	RTE 011
28.566	28.566	INTERSECTION	RIGHT	RTE 011
28.570	28.570			ROUTE ENDS AT RTE 11 @ MP2852 (ALSO INTERSECTS RTE 11 @ MP653)

ROUTE 0203 : PEACEFUL VALLEY RANCH RD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT RTE 11 @ MP 2798
0.007	0.007	INTERSECTION	RIGHT	RTE 011
0.008	0.008	INTERSECTION	LEFT	RTE 011
0.242	0.242	INTERSECTION	LEFT	GRAVEL PARKING AREA
0.260	0.260			ROUTE ENDS AT END OF PAVEMENT
0.260	0.260	INTERSECTION	LEFT	RTE 939

ROUTE 0204 : BUCK HILL SPUR

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT RTE 11 @ MP 1674
0.006	0.006	INTERSECTION	LEFT	RTE 011
0.006	0.006	INTERSECTION	RIGHT	RTE 011
0.007	0.007	CULVERT	N/A	
0.011	0.027	GUARDRAIL	LEFT	
0.026	0.042	CURB	LEFT	
0.045	0.147	GUARDRAIL	RIGHT	
0.147	0.222	CURB	RIGHT	
0.164	0.212	CURB	LEFT	
0.248	0.261	CURB	RIGHT	
0.313	0.342	CURB	RIGHT	
0.314	0.341	PULLOUT	RIGHT	
0.494	0.562	GUARDRAIL	LEFT	
0.585	0.600	GUARDRAIL	LEFT	
0.616	0.734	GUARDRAIL	RIGHT	
0.668	0.726	CURB	LEFT	
0.705	0.732	CURB	RIGHT	
0.727	0.727	INTERSECTION	LEFT	RTE 915
0.730	0.730			ROUTE ENDS AT BUCK HILL OVERLOOK (RTE 915)

ROUTE 0404 : NORTH UNIT MAINTENANCE RD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT RTE 10 @ MP 031
0.008	0.008	INTERSECTION	LEFT	RTE 010
0.009	0.009	INTERSECTION	RIGHT	RTE 010
0.164	0.164	INTERSECTION	RIGHT	ROUTE 406 GRAY HOUSE RD
0.178	0.178	CATTLE GUARD	N/A	
0.194	0.194	INTERSECTION	RIGHT	RTE 925, NORTH UNIT RESIDENCE SPUR
0.219	0.219	INTERSECTION	RIGHT	RTE 942, NORTH UNIT MAINTENANCE YARD OVERFLOW P
0.238	0.238	INTERSECTION	RIGHT	
0.299	0.299	INTERSECTION	RIGHT	RTE 940
0.300	0.300			ROUTE ENDS AT MAINTENANCE YARD

ROUTE 0406 : GRAY HOUSE RD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000			ROUTE BEGINS AT RTE 404
0.006	0.006	INTERSECTION	LEFT	RTE 404
0.006	0.006	INTERSECTION	RIGHT	RTE 404
0.120	0.120	INTERSECTION	LEFT	RTE 407, HEADQUARTERS WELLHOUSE ACCESS ROAD
0.310	0.310			ROUTE ENDS AT RESIDENCE

APPENDIX A: GLOSSARY OF TERMS AND ABBREVIATIONS

TERM (DR
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ABBREVIATION DESCRIPTION OR DEFINITION

1540 Numeric Code for Theodore Roosevelt National Park

AADT Annually Adjusted Daily Traffic. Average daily traffic adjusted for the term

period comprising 80% of annual visitation

CRS Condition Rating Sheets. (Section 5)

Drainage Condition

Rating

A visual rating (Good, Poor) of the drainage condition. (see Section 10)

Excellent rating with an index value of 95 or greater

Fair rating with an index value between 61 and 84

Func. Class Functional Classification (see Route ID, Section 4)

Good Good rating with an index value between 85 and 94

IRI International Roughness Index

Lane Width

Distance from road centerline to fogline, or from centerline to edge-of-pavement

when no fogline exists

MRR Manually Rated Route

NA Not Applicable

NC Not Collected

Paved Width Distance from edge-of-pavement to edge-of-pavement

PCR Pavement Condition Rating (see Section 10)

Poor Poor Rating with an index value of 60 or less

RCI Roughness Condition Index

Seasonal Annual Daily Traffic. Average daily traffic for the total defined SADT

"season"

SCR Surface Condition Rating (see Section 10)

Shoulder Condition

Rating

Visual rating (Good, Poor) of the condition of shoulder. (see Section 10)

Distance from fogline to hinge point, or if no fogline, from edge-of-pavement to Shoulder Width

hinge point

THRO Alpha Code for Theodore Roosevelt National Park

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 1 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 ocurr 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.

Rating Index Formulas

```
Alligator Cracking Index = 100 - [40 * (\%low/70 + \%medium/30 + \%high/10)]

Longitudinal Cracking Index = 100 - [40 * (\%low/350 + \%medium/200 + \%high/75)]

Transverse Cracking Index = 100 - [(20 * (low/15.1 + medium/7.5)) + (40 * (high/1.9))]

Patching Index = 100 - [40 * (\%patching / 80)]

Rutting Index: 100 - [40 * ((low/160) + (med/80) + (high/40))]

Roughness Condition Index: (RCI) = 32 * [5 * e^{(-0.0041 * average |RI)}]
```

These 0.02 Distress Rating Index values are then averaged over one mile sections for the mile-by-mile Disitress Rating Indexes, Surface Condition Rating (SCR) and Pavement Condition Rating (PCR).

```
Surface Condition Rating (SCR) = 100 - [(100 - AC_INDEX) + (100 - LC_INDEX) + (100 - TC_INDEX) + (100 - PATCH_INDEX) + (100 - RUT_INDEX)]
```

```
Pavement Condition Rating (PCR) = (SCR * 0.60) + (RCI * 0.40)
```

NOTE: Collection of roughness data is dependant 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.

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

Excellent 97

Good 90

Fair 73

Poor 45

Drainage Condition Rating Definitions

Good: Minimal overall drainage problems. If funding were available for pavement maintenance,

25% or less is estimated to correct drainage deficiencies.

Poor: Problems exist that jeopardizes the integrity of the road in this section. If funding were

available for pavement maintenance, 50% to 100% is estimated to correct drainage

deficiencies.

Drainage Condition Rating Criteria

The following are examples of basic criteria to help the rater to identify the different drainage ratings. While in the field, many other flaws will be discovered, but these criteria should give a feel for where the flaws would apply in the ratings.

Good Drainage

Most water clears the road prism adequately with little concern of base saturation.

- X Pavement has minor deficiencies that interrupt water flow.
- X Shoulders are mostly adequate as they relate to surrounding terrain. Shoulder design generally coincides with the drainage design.
- X Curbs have deficiencies, but still function without erosion.
- X Down drains are placed properly, but show signs of some deterioration.
- X Culverts are adequate in numbers and size however, minor deficiencies are evident.
- X Ditches are not paved, but solid and have enough area to maintain and carry required volume of water.

Poor Drainage

This section has areas of inadequate drainage ability that is causing base saturation that could cause a road failure.

- X Pavement grade is irregular and holds dangerous amounts of water (hydroplaning is a concern), or shows massive alligator cracking.
- X Shoulder design induces ponding that encroaches on the pavement (drivers try to avoid ponds).
- X Portions of curbs are missing, allowing water to escape causing erosion.
- X Drop inlets, due to various reasons, are only able to drain 50% or less efficiently.
- X Down drains show signs of water exiting in areas by the down drain causing erosion.
- X Culverts are functionally deficient including size, installation, location, or grade giving water opportunity to saturate the road base.
- X Ditches allow water opportunity to saturate the road base through various reasons such as low places in ditch where design has not allowed for water to drain, little or no room in the road prism for a needed ditch, or water is disappearing within the ditch.

Shoulder Condition Rating Definitions

Good: The shoulder is generally in good functional condition.. If curbs are present, they are

functional.

Poor: There is no shoulder because erosion has removed it. If curbs are present, they need

to be replaced.

Shoulder Rating Criteria

The following are examples of basic criteria to help the rater to identify the different shoulder ratings. While in the field, many other flaws will be discovered, but these criteria should give a feel for where the flaws would apply in the ratings.

Good Shoulders

- X If shoulder is unpaved drop-offs are less than 1", but grading is required.
- X If shoulder is paved rut depth is less than 1/2", sealed cracks are present, and grading is required.
- X If curbs are present they are functional.

Poor Shoulder

- X If shoulder is unpaved drop-offs are greater than 4" and erosion has removed the shoulder.
- X If shoulder is paved rut depth is greater than 1". Open cracks are greater than 1/4" deep, and erosion has removed the shoulder.
- X If curbs are present they need replacement.
- X If curbs are present they need repairs, and there is erosion behind the curb.

APPENDIX C: DIGITAL IMAGE INFORMATION

All images collected in Cycle 3 are digital images. These images provide the best resolution for identifying sign inventories and pavement evaluations. The images can be viewed with an interactive software program called **Visi-Data**. Each park will have a copy of the Visi-Data program installed in the park for park personnel to access and use.

Only Cycle 3 data can be queried and reviewed using the Visi-Data software program. This program is a multimedia 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 trying to query. Associated digital right-of-way images from the either the LAN, USB port, individual DVD, or from the Visi-web application, can be presented along with the GPS locations.

APPENDIX D: METADATA

ARAN ROUTE GPS DATA

Background information of route spatial data.

GPS Records: GPS data for NPS routes is stored in the MS Access database for the park. The coordinates of the road traces are stored in the 'PMS_20' table in the 'GPS_LAT' and 'GPS_LON' fields.

Data Collection Device:

Vehicle Information: Ford Van

Type of GPS Unit: NovAtel MiLLennium, 12 channel, dual frequency L1/L2, DGPS ready

receiver w/MiLLennium 502 GPS antenna and OmniSTAR System 3000

LR

Inertial System: Applanix POS LV

Accuracy: Expected ground accuracy is 1 meter *

*The above accuracy assumes good GPS mission planning resulting in maximum GPS satellite observation and ideal environmental conditions. Due to less than ideal satellite and environmental conditions, some routes may lack the expected ground accuracy.

Geographic Datum: WGS 1984

Post Collection GPS Correction: Due to unanticipated GPS collection inaccuracies, some route locations have been digitized using DOQQ's and other data sources.

FHWA – NPS Road Inventory Program Cycle 3 Metadata for the Park Database

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

- Three canned reports are titled "Features in Good Condition", "Features in Fair Condition," and "Features in Poor Condition." These titles could be misleading. In Cycle 3, condition assessments have been conducted on **signs only**. Condition assessments have not been conducted on non-sign features, such as culverts, guardrails, pullouts, etc. Although the database and canned reports might report a default value of "good" for un-assessed features, these condition values are not valid for import into FMSS.
- Database records that show a concrete surface type sometimes include index values that seem
 to show a perfect roadway (e.g., a Pavement Condition Rating (PCR) of 100). The Road
 Inventory Program does not actually conduct condition assessments of concrete surfaces. The
 perfect values are just default values assigned to unassessed sections of pavement and do not
 represent an assessment of the roadway surface's quality.
- 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_Visidata 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.

 Most roadway features are collected relative to the primary direction lane of a roadway, using the primary-direction video. Signs are the only features collected using the opposite-direction video.

Key to Notes in Tables

- (1): Note that only one value fits in field, so even if this value varies throughout the route, only one value is recorded here.
- (2): Note that some MP values listed here are estimates recorded during the Route ID process for use by the data collection crew (e.g. "FROM ROUTE 0010 AT MILEPOST 30.3"). They are estimates only and are not expected to match the more accurate milepost values included elsewhere in the database in the BEG_MP, END_MP, and MP fields.
- (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. Features along the side of a roadway that are measured using the Surveyor software might not be located very accurately. Surveyor is known to be most accurate when measuring quantities near the center of the video frame, as opposed to in the edges of the video image.
- (5): Only signs are evaluated for condition. No other features' conditions are assessed, so "N/A" was originally intended to be the default value for unassessed features. However, some non-sign features do have condition ratings in the database. These are not accurate, because no assessment was ever done on non-sign features.
- (6): Condition assessments are not conducted on concrete (CO) surface types. Perfect values for concrete road sections are default values and do not represent a condition assessment of the concrete surfaces.
- (7): 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 resolution. The images from both cameras are stitched together in real time to create a continuous strip image of the roadway pavement in the primary lane. Cracks 3 mm or greater in width are visible in this video. A semi-automatic process running the WiseCrax software with additional input by human operators provides the cracking quantities recorded in these database fields. Quality checks have determined that a consistent 80% or better of the visible cracks are recorded.

Access Database Metadata

Master Table Metadata:

FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
RIP_CYCLE	×	3, for data collection cycle 3	Route ID Meeting	FHWA Determination	100%
STATE	×	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested. (1)
PARK_ALPHA	××××	Park alpha code	Route ID Meeting	NPS References	Untested
PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	Untested
RTE_NO	XXXXXX	Route number	Route ID Meeting	Park Input/FHWA Classification	Untested
RTE_NAME	(Text)	Route name	Route ID Meeting	Park Input	Untested. 50 characters fit in field
FUNCT_CLAS S	×	Route functional classification	Route ID Meeting	Park Input/FHWA Classification	Untested
DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	Untested
BEG_MP_EST	999.999 (miles)	Estimated starting MP	Route ID Meeting	Park Input/FHWA Determination	Estimated before data collected
END_MP_EST	999.999 (miles)	Estimated ending MP	Route ID Meeting	Park Input/FHWA Determination	Estimated before data collected
RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100%
FROM_DESC	(Text)	Beginning terminus of route	Route ID Meeting	Park Input/FHWA Determination	Estimated before data collected. (2)
TO_DESC	(Text)	Ending terminus of route	Route ID Meeting	Park Input/FHWA Determination	Estimated before data collected. (2)
NO_LANES	×	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
SURF_TYPE	××	Surface type of route	ARAN Data Collection	Survey Crew Input	Untested. (1)
COMP_DIR	×	Compass direction of route's primary lane (nearest cardinal direction)	Route ID Meeting	Park Input/FHWA Determination	Untested
COMMENTS	(Text)	Special information, if any	Contractor Post-processing	Contractor Input	Untested
FILENAME	XXXXXXX	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
SECTION	XXXXXX	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
FKEY	6666666	Unique record ID	Contractor Post-processing	Database Processing	100%
DATE	DD/MM/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
BEG_MP	999.999 (miles)	Beginning MP collected	ARAN Data Collection	Automatic Output	100% (3)
END_MP	999.999 (miles)	Ending MP collected	ARAN Data Collection	Automatic Output	100% (3)

PMS_Feature Table Metadata:

FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
RIP_CYCLE	×	3, for data collection cycle 3	Route ID Meeting	FHWA Determination	100%
STATE	X	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested. (1)
PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	Untested
PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	Untested
RTE_NO	XXXXXX	Route number	Route ID Meeting	Park Input/FHWA Classification	Untested
FUNCT_CLAS S	×	Route functional class	Route ID Meeting	Park Input/FHWA Classification	Untested
DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	Untested
MP	999.999 (miles)	Feature location along route	ARAN Data Collection/Contractor Post- processing	Survey Crew Input/Video Processing	Untested (4)
EVENT	XXXX	Event category of feature	Contractor Post-processing	Video Processing	Untested
EVENT_CODE	XXXX	Event sub-category of feature	Contractor Post-processing	Video Processing	Untested
EVENT_DESC	(Text)	Description of feature/contents of sign	Contractor Post-processing	Video Processing	Untested
MUTCD	"N/A"	N/A. Intended to be sign MUTCD code	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
CONDITION	XXX	Sign condition (G-D, F-R, P-R, N/A)	Contractor Post-processing	Video Processing	Untested (5)
COMMENT	(Text)	Sign label, intersecting route, etc.	Contractor Post-processing	Database Processing	Untested
OFFSET	"N/A"	N/A. Intended to be offset from pavement edge	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
SIDE	XXX	Side of route; "N/A" if not on one side	Contractor Post-processing	Video Processing	Untested
STR_NUMBER	XXXXXXXXX	FHWA bridge structure number	FHWA Post-processing	Database Processing	Untested
GPS_LAT	"N/A"	N/A. Intended to be latitude coordinate	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
GPS_LON	"N/A"	N/A. Intended to be longitude coordinate	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
GPS_ELEV	"N/A"	N/A. Intended to be elevation	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
GPS_MODE	"N/A"	N/A. Intended to be GPS mode	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to N/A
VIDEO	<park>C03VID<#</park>	Removable USB video hard drive number	Contractor Post-processing	Database Processing	Untested
IMAGE	(Text)	Filename of .jpg image showing feature	Contractor Post-processing	Automatic Output	Untested
DATE	DD/MM/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
FILENAME	XXXXXXX	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
SECTION	XXXXXX	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
FKEY	6666666	Unique record ID	Contractor Post-processing	Database Processing	100%
VISI_FROM	999999 (millimiles)	Raw MP of first video frame showing feature	Contractor Post-processing	Database Processing	Untested
VISI_TO	999999 (millimiles)	Raw MP of last video frame showing feature	Contractor Post-processing	Database Processing	Untested

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

PMS_20, PMS_Mile & PMS_Visidata Tables Metadata:

FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
RIP_CYCLE	×	3, for data collection cycle 3	Route ID Meeting	FHWA Determination	100%
STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested. (1)
PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	Untested
PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	Untested
RTE_NO	XXXXXX	Route number	Route ID Meeting	Park Input/FHWA Classification	Untested
FUNCT_CLASS	×	Route functional class	Route ID Meeting	Park Input/FHWA Classification	Untested
DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	Untested
BEG_MP	999.999 (miles)	MP at start of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
END_MP	999.999 (miles)	MP at end of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
INT_LENGTH	999.9 (ft)	Length of road interval as aggregated for data table	Contractor Post-processing	Database Processing	100%
RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100%
NO_LANES	×	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
LANE_NO	×	Data collection lane	Contractor Post-processing	Database Processing	Untested
WX_LANE_WID TH	99.999 (ft)	WiseCrax (crack detection software) analysis width	Contractor Post-processing	Automatic Output	Untested
LANE_WIDTH	99.999 (ft)	Width of lane	Contractor Post-processing	Video Processing	Untested
PAVE_WIDTH	99.999 (ft)	Full pavement width	Contractor Post-processing	Video Processing	Untested
SHLD_WIDTH_L	99.999 (ft)	Left shoulder width	Contractor Post-processing	Video Processing	Untested
SHLD_WIDTH_ R	99.999 (ft)	Right shoulder width	Contractor Post-processing	Video Processing	Untested
SHLD_COND_L	XXXX	Left shoulder condition	ARAN Data Collection	Survey Crew Input	Untested
SHLD_COND_R	XXXX	Right shoulder condition	ARAN Data Collection	Survey Crew Input	Untested
DRAIN_COND_L	XXXX	Left drainage condition	ARAN Data Collection	Survey Crew Input	Untested
DRAIN_COND_ R	XXXX	Right drainage condition	ARAN Data Collection	Survey Crew Input	Untested
SURF_TYPE	×	Surface type of route	ARAN Data Collection	Survey Crew Input	Untested. (1)
PCR	666	Pavement Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (6)
RCI	666	Roughness Condition Index; -1 if invalid IRI	Contractor Post-processing	Database Processing	100% for calculation

FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
SCR	666	Surface Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (6)
IRI_AVG	999.9 (inches/mile)	Average IRI	Contractor Post-processing	Database Processing	Untested
IRI_SD	999.9 (inches/mile)	IRI standard deviation	Contractor Post-processing	Database Processing	Untested
IRI_L	999.9 (inches/mile)	Left wheel path IRI	ARAN Data Collection	Automatic Output	Untested
IRI_R	999.9 (inches/mile)	Right wheel path IRI	ARAN Data Collection	Automatic Output	Untested
IRI_FLAG	0 or -1	-1 if invalid IRI data	Contractor Post-processing	Database Processing	Untested
RUT_INDEX	666	Rut index	Contractor Post-processing	Database Processing	100% for calculation (6)
RUT_AVG	99.99 (inches)	Average rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (6)
RUT_MAX	99.99 (inches)	Maximum rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (6)
RUT_SD	6.6	Rut depth standard deviation	Contractor Post-processing	Database Processing	Untested (6)
RUT_LOW	(%) 666	Percent of low severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (6)
RUT_MED	(%) 666	Percent of medium severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (6)
RUT_HI	(%) 666	Percent of high severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (6)
XFALL	999.9 (% slope)	Cross fall at start of road interval	ARAN Data Collection	Automatic Output	Precise but inaccurate. Not reported in Cycle 4
GRADE	999.9 (% slope)	Grade at start of road interval	ARAN Data Collection	Automatic Output	Precise but inaccurate. Not reported in Cycle 4
AC_INDEX	666	Alligator cracking index	Contractor Post-processing	Database Processing	100% for calculation (6)
AC_LOW	686.9899 (%)	Percent of WiseCrax measured lane area with low-severity alligator cracking	Contractor Post-processing	Automatic Output	(2) (9)
AC_MED	999.9999 (%)	Percent of WiseCrax measured lane area with medium-severity alligator cracking	Contractor Post-processing	Automatic Output	(2) (2)
AC_HI	999.9999 (%)	Percent of WiseCrax measured lane area with high-severity alligator cracking	Contractor Post-processing	Automatic Output	(2) (2)
LC_INDEX	666	Longitudinal cracking index	Contractor Post-processing	Database Processing	100% for calculation (6)
LC_LOW	999.99 (%)	Low-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Automatic Output	(6) (7)
LC_MED	999.99 (%)	Medium-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Automatic Output	(6) (7)
LC_HI	999.99 (%)	High-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Automatic Output	(2) (9)
TC_INDEX	666	Transverse cracking index	Contractor Post-processing	Database Processing	100% for calculation (6)
TC_LOW	999.99 (cracks)	Count of low-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Automatic Output	(2) (9)
TC_MED	999.99 (cracks)	Count of medium-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Automatic Output	(2) (9)
TC_HI	999.99 (cracks)	Count of high-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Automatic Output	(6) (7)
PATCH_INDEX	666	Patching index	Contractor Post-processing	Database Processing	100% for calculation (6)

FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
PATCHING	(%) 6666.666	Percent of WiseCrax measured lane area affected by patching	Contractor Post-processing	Manual Pavement Video Processing	Untested (6)
GPS_LAT	666666666666666666666666666666666666666	Latitude coordinate	ARAN Data Collection	Automatic Output	See GPS Metadata sheet distributed with data
GPS_LON	-999.999999	Longitude coordinate	ARAN Data Collection	Automatic Output	See GPS Metadata sheet distributed with data
GPS_ELEV	6.9999.9	Elevation	ARAN Data Collection	Automatic Output	See GPS Metadata sheet distributed with data
GPS_MODE	XXX	GPS mode during collection	ARAN Data Collection	Automatic Output	See GPS Metadata sheet distributed with data
VIDEO	<park>C03VID<#></park>	Removable USB video hard drive number	Contractor Post-processing	Database Processing	Untested
IMAGE	(Text)	Filename of .jpg image showing road interval	Contractor Post-processing	Automatic Output	Untested
SPEED	999 (miles/hour)	Average ARAN speed during data collection	ARAN Data Collection	Automatic Output	Untested
BRIDGE_FLAG	0 or 1	Flag indicating presence of bridge in interval	ARAN Data Collection	Survey Crew Input	Untested
CONSTR_FLAG	0 or 1	Flag indicating construction in interval	ARAN Data Collection	Survey Crew Input	Untested
LANEDEV_FLA G	0 or 1	Flag indicating lane deviation in interval	ARAN Data Collection	Survey Crew Input	Untested
DATE	DD/MM/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
NODISTRESS	0 OR 1	Flag indicating absence of pavement distress	Contractor Post-processing	Database Processing	100%
FILENAME	XXXXXXX	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
SECTION	XXXXX	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
FKEY	6666666	Unique record ID	Contractor Post-processing	Database Processing	100%
VISI_FROM	999999 (millimiles)	Raw MP of first video frame in section	Contractor Post-processing	Database Processing	Untested
VISI_TO	999999 (millimiles)	Raw MP of last video frame in section	Contractor Post-processing	Database Processing	Untested
IDKEY	(Text)	Unique record ID used by VisiData	Contractor Post-processing	Database Processing	Untested
MP_REF	(Text)	Range of mileage to play in VisiData	Contractor Post-processing	Database Processing	Untested

Cycle Shapefile Metadata

Metadata is provided for all shapefiles used for the creation of RIP report documents. The metadata for each shapefile associated with the park can be found in Section 10 of the PDF report provided on your park CD.

All shapefiles have the following spatial characteristics:

Geographic_Coordinate_Units: Decimal degrees Spheroid: WGS 1984

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thro_seg

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: The TSR Group
                 Publication_Date: 2005
                 Title: thro seg
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Routes
           Purpose: Road Inventory Program
           Supplemental_Information:
                 Data created by The TSR Group from GPS coordinates provided in the PMS_20
                 table. The shapefile is processed to aggregate adjacent segments with the same PCR
                 rating.
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 2005
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.533218
                 East_Bounding_Coordinate: -103.255295
                 North_Bounding_Coordinate: 47.628937
                 South_Bounding_Coordinate: 46.912361
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
```

thro_seg Page 2 of 5

Access_Constraints: None *Use_Constraints:* Redistribution meeds permission from EFLHD/NPS Point_of_Contact: *Contact_Information:* Contact_Person_Primary: Contact Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator Contact Address: Address_Type: mailing and physical address Address: 21400 Ridgetop Circle City: Sterling State_or_Province: Virginia Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Native Data Set Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good Completeness_Report: Complete for routes

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial Data Organization Information:

Direct_Spatial_Reference_Method: Vector Point_and_Vector_Object_Information: SDTS Terms Description:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 239

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866

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Semi-major_Axis: 6378206.400000

Denominator_of_Flattening_Ratio: 294.978698

Entity and Attribute Information: *Detailed_Description: Entity_Type:* Entity_Type_Label: thro_seg Attribute: *Attribute_Label:* FID Attribute_Definition: Internal feature number. Attribute Definition Source: ESRI Attribute_Domain_Values: *Unrepresentable_Domain:* Sequential unique whole numbers that are automatically generated. Attribute: Attribute_Label: Shape *Attribute_Definition:* Feature geometry. Attribute_Definition_Source: ESRI Attribute_Domain_Values: *Unrepresentable_Domain:* Coordinates defining the features. Attribute: Attribute_Label: FNODE_ Attribute_Definition: Length of feature Attribute_Definition_Source: ESRI Attribute: Attribute_Label: TNODE_ Attribute: Attribute_Label: LPOLY_ *Attribute_Definition:* Route number Attribute_Definition_Source: Route ID Meeting Attribute: Attribute_Label: RPOLY_ Attribute Definition: Collected route length Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: LENGTH Attribute_Definition: Numeric PCR definition. Average PCR value based on programatic averaging of adjacent segments. Attribute_Domain_Values: Range_Domain: Range_Domain_Minimum: 0 Range_Domain_Maximum: 100 Attribute: Attribute_Label: THRO_SEG_ Attribute_Definition: Verbal PCR definition based on value in PCRAV field Attribute_Domain_Values: *Enumerated_Domain:* Enumerated_Domain_Value: POOR

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> *Enumerated_Domain_Value_Definition:* PCR value <= 60 Enumerated Domain: Enumerated_Domain_Value: FAIR Enumerated_Domain_Value_Definition: PCR value 61-84 *Enumerated_Domain:* Enumerated Domain Value: GOOD Enumerated_Domain_Value_Definition: PCR value 85-94 Enumerated_Domain: Enumerated_Domain_Value: EXCELLENT Enumerated_Domain_Value_Definition: PCR value 95-100 Attribute_Label: THRO_SEG_I Attribute Definition: Indicates whether feature has been edited for graphic purposes. Attribute_Domain_Values: Enumerated_Domain: Enumerated Domain Value: 1 Enumerated_Domain_Value_Definition: Edit has been made to feature for graphic purposes Enumerated_Domain: Enumerated_Domain_Value: 0 Enumerated_Domain_Value_Definition: No edit made to feature. Attribute Label: ID Attribute_Label: RTE NO Attribute_Label: BMP Attribute_Label: EMP *Attribute_Label:* PCR Attribute_Label: PCR_RATE

Attribute:

Attribute:

Attribute:

Attribute:

Attribute:

Attribute:

Attribute:

Attribute:

Attribute Label: RT LENGTH

Attribute:

Attribute_Label: PCRMI

Attribute:

Attribute_Label: PCR_RATEMI

Attribute:

Attribute_Label: PCR_RATEAV

Attribute:

Attribute_Label: PCRAV

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

thro_seg Page 5 of 5

Transfer_Size: 0.016

Metadata_Reference_Information:

Metadata Date: 20050701

Metadata_Contact:

Contact Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder Contact Position: GIS Coordinator

Contact Address:

Address_Type: mailing and physical address

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata Extensions:

Online_Linkage: <a href="mailto:http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:51:54 2005

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thro_mi

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: The TSR Group
                 Publication Date: 2005
                 Title: thro mi
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Routes
           Purpose: Road Inventory Program
           Supplemental_Information:
                 Data created by The TSR Group from GPS coordinates provided in the PMS_20
                 table. The shapefile is processed to aggregate adjacent segments with the same PCR
                 rating provided in the PMS_mile table.
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 2005
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.533218
                 East_Bounding_Coordinate: -103.255295
                 North_Bounding_Coordinate: 47.628937
                 South_Bounding_Coordinate: 46.912361
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
```

thro_mi Page 2 of 5

Access_Constraints: None
Use_Constraints: Redistribution meeds permission from EFLHD/NPS
Point_of_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Dan VanGilder
Contact_Organization: EFLHD
Contact_Position: GIS Coordinator
Contact_Address:
Address_Type: mailing and physical address
Address: 21400 Ridgetop Circle
City: Sterling
State_or_Province: Virginia
Postal_Code: 20166
Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Native Data Set Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good Completeness_Report: Complete for routes

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial Data Organization Information:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 19

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866

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Semi-major_Axis: 6378206.400000

Denominator_of_Flattening_Ratio: 294.978698

Entity and Attribute Information: Detailed_Description: Entity_Type: Entity_Type_Label: thro_mi Attribute: *Attribute_Label:* FID Attribute_Definition: Internal feature number. Attribute Definition Source: ESRI Attribute_Domain_Values: *Unrepresentable_Domain:* Sequential unique whole numbers that are automatically generated. Attribute: Attribute_Label: Shape *Attribute_Definition:* Feature geometry. Attribute_Definition_Source: ESRI Attribute_Domain_Values: *Unrepresentable_Domain:* Coordinates defining the features. Attribute: Attribute_Label: FNODE_ Attribute_Definition: Length of feature Attribute_Definition_Source: ESRI Attribute: Attribute_Label: TNODE_ Attribute: Attribute_Label: LPOLY_ *Attribute_Definition:* Route number Attribute_Definition_Source: Route ID Meeting Attribute: Attribute_Label: RPOLY_ Attribute Definition: Collected route length Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: LENGTH Attribute_Definition: Numeric PCR definition Attribute_Domain_Values: Range_Domain: Range_Domain_Minimum: 0 Range_Domain_Maximum: 100 Attribute: Attribute_Label: THRO_MI_ Attribute_Definition: Verbal PCR definition Attribute_Domain_Values: Enumerated Domain: Enumerated_Domain_Value: POOR Enumerated_Domain_Value_Definition: PCR value <= 60 Enumerated_Domain:

thro_mi Page 4 of 5

Enumerated_Domain_Value: FAIR Enumerated_Domain_Value_Definition: PCR value 61-84 Enumerated_Domain: Enumerated_Domain_Value: GOOD Enumerated_Domain_Value_Definition: PCR value 85-94 Enumerated Domain: Enumerated_Domain_Value: EXCELLENT Enumerated_Domain_Value_Definition: PCR value 95-100 Attribute_Label: THRO_MI_ID Attribute_Definition: Indicates whether feature has been edited for graphic purposes. Attribute_Domain_Values: Enumerated Domain: Enumerated_Domain_Value: 1 Enumerated_Domain_Value_Definition: Edit has been made to feature for graphic purposes Enumerated Domain: Enumerated Domain Value: 0 *Enumerated_Domain_Value_Definition:* No edit made to feature. Attribute_Label: ID Attribute Label: RTE NO Attribute_Label: BMP Attribute_Label: EMP Attribute_Label: PCR Attribute_Label: PCR_RATE Attribute_Label: RT_LENGTH Attribute Label: PCRMI Attribute_Label: PCR_RATEMI

Attribute_Label: PCR_RATEAV

Attribute:

ute:

Attribute:

Attribute_Label: PCRAV

Distribution_Information:

 $Resource_Description: \ Download able \ Data$

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information: Transfer_Size: 0.016 thro_mi Page 5 of 5

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder Contact_Position: GIS Coordinator

Contact Address:

Address_Type: mailing and physical address

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:51:00 2005

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thro_mi_pt

Metadata also available as

Metadata:

- Identification_Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: The TSR Group
                 Publication_Date: 2005
                 Title: thro mi pt
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Mile Points
           Purpose: Road Inventory Program
           Supplemental_Information:
                 Data created by The TSR Group from GPS coordinates provided in the PMS_20
                 table. All attributes found in the PMS_20 table are found on the miles points.
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 2005
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: Not Available
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.531151
                 East_Bounding_Coordinate: -103.255295
                 North_Bounding_Coordinate: 47.627522
                 South_Bounding_Coordinate: 46.914711
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access_Constraints: None
```

thro_mi_pt Page 2 of 10

Use_Constraints: Redistribution needs permission from EFLHD/NPS *Point_of_Contact: Contact_Information:* Contact_Person_Primary: Contact_Person: Dan VanGilder Contact Organization: EFLHD Sterling Contact_Position: GIS Coordinator Contact_Address: Address_Type: mailing and physical address Address: 21400 Ridgetop Circle City: Sterling State_or_Province: Virginia Postal Code: 20166 Country: United States Contact_Voice_Telephone: 703-404-6361 Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov *Native_Data_Set_Environment:* Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog

Data_Quality_Information:
 Attribute_Accuracy:
 Attribute_Accuracy

8.3.0.800

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for mile points

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector Point_and_Vector_Object_Information: SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity point

Point_and_Vector_Object_Count: 47

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000 thro_mi_pt Page 3 of 10

Denominator_of_Flattening_Ratio: 294.978698

```
Entity_and_Attribute_Information:
     Detailed Description:
           Entity_Type:
                  Entity_Type_Label: thro_mi_pt
           Attribute:
                 Attribute_Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute Domain Values:
                        Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute_Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute Domain Values:
                        Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: RIP_CYCLE
                 Attribute_Definition: 3, for data collection cycle 3
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute Label: STATE
                 Attribute_Definition: State where route is located
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute Label: PARK NO
                 Attribute_Definition: Park numeric code
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE NO
                 Attribute_Definition: Route number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: FUNCT_CLAS
                 Attribute_Definition: Route functional class
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: DIRECTION
                 Attribute_Definition: Survey lane: PRI (primary) or OPP (opposite)
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: BEG_MP
```

thro_mi_pt Page 4 of 10

Attribute_Definition: MP at end of road interval described by database record Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: END_MP

Attribute_Definition: MP at end of road interval described by database record

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: INT_LENGTH

Attribute_Definition: Length of road interval as aggregated from data table

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: RTE_LENGTH

Attribute_Definition: Collected route length

Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute Label: NO LANES

Attribute_Definition: Number of lanes in route

Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute_Label: LANE_NO

Attribute Definition: Data collection lane

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: WX_LANE_WI

Attribute_Definition: WiseCrax (crack detection software) analysis width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: LANE_WIDTH

Attribute_Definition: Width of lane

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: PAVE_WIDTH

Attribute_Definition: Full pavement width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: SHLD WIDTH

Attribute_Definition: Left shouler width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: SHLD_WID_1

Attribute_Definition: Right shoulder width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: SHLD_COND_

Attribute_Definition: Left shoulder condition

Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute_Label: SHLD_COND1

Attribute Definition: Right shoulder condition

Attribute Definition Source: ARAN Data Collection

Attribute:

thro_mi_pt Page 5 of 10

Attribute_Label: DRAIN_COND Attribute_Definition: Left drainage condition Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: DRAIN_CO_1 Attribute Definition: Right drainage condition Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: SURF_TYPE Attribute_Definition: Surface type of route Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute Label: PCR Attribute_Definition: Pavement Condition Rating Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute Label: RCI Attribute_Definition: Roughness Condition Index; -1 if invalid IRI Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: SCR Attribute_Definition: Surface Condition Rating Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: IRI_AVG Attribute_Definition: Average IRI Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: IRI_SD Attribute_Definition: IRI Standard Deviation Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: IRI_L Attribute_Definition: Left wheel path IRI Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: IRI_R Attribute_Definition: Rigth wheel path IRI Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: IRI_FLAG Attribute Definition: -1 if invalid IRI data Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute Label: RUT INDEX Attribute Definition: Rut index Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute Label: RUT AVG

Attribute_Definition: Average rut depth of both wheelpaths Attribute_Definition_Source: Contractor Post-processing

thro_mi_pt Page 6 of 10

Attribute:

Attribute_Label: RUT_MAX

Attribute_Definition: Maximum rut depth of both wheelpaths Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute Label: RUT SD

Attribute_Definition: Rut depth standard deviation

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: RUT_LOW

Attribute_Definition:

Percent of low severity ruts (on a 0-200% scale) in both wheelpaths

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: RUT_MED

Attribute_Definition:

Percent of medium severity ruts (on a 0-200% scale) in both wheelpaths

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: RUT_HI

Attribute_Definition:

Percent of high severity ruts (on a 0-200% scale) in both wheelpaths

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: XFALL

Attribute_Definition: Cross fall at start of road interval

Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute_Label: GRADE

Attribute_Definition: Grade at start of road interval

Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute_Label: AC_INDEX

Attribute_Definition: Alligator cracking index

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: AC_LOW

Attribute_Definition:

Percent of WiseCrax measured lane area with low-severity alligator cracking

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute Label: AC MED

Attribute_Definition:

Percent of WiseCrax measured lane area with medium-severity alligator

cracking

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: AC_HI

Attribute Definition:

Percent of WiseCrax measured lane area with high-severity alligator cracking

Attribute_Definition_Source: Contractor Post-processing

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Attribute:

Attribute_Label: LC_INDEX

Attribute_Definition: Longitudinal cracking index

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute Label: LC LOW

Attribute_Definition:

Low-severity longitudinal cracking in lane as a percentage of road interval

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: LC_MED

Attribute_Definition:

Medium-severity longitudinal cracking in lane as a percentage of road interval length

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: LC_HI

Attribute_Definition:

High-severity longitudinal cracking in lane as a percentage of road interval length

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: TC_INDEX

Attribute_Definition: Transverse cracking index

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: TC_LOW

Attribute_Definition:

Count of low-severity transverse cracks, where one crack unit equals the WiseCrax measured land width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: TC_MED

Attribute Definition:

Count of medium-severity transverse cracks, where one crack unit equals the WiseCrax measured land width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: TC_HI

Attribute_Definition:

Count of high-severity transverse cracks, where one crack unit equals the WiseCrax measured land width

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: PATCH_INDE

Attribute_Definition: Patching index

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: PATCHING

Attribute_Definition: Percent of WiseCrax measured lane area affected by patching

Page 8 of 10 thro_mi_pt

> Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: GPS_LAT Attribute_Definition: Latitude coordinate Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: GPS_LON Attribute_Definition: Longitude coordinate Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: GPS_ELEV Attribute_Definition: Elevation Attribute Definition Source: ARAN Data Collection Attribute: Attribute_Label: GPS_MODE Attribute_Definition: GPS mode during collection Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: VIDEO Attribute_Definition: Removable USB video hard drive number Attribute Definition Source: Contractor Post-processing Attribute: Attribute_Label: IMAGE Attribute_Definition: Filename of .jpg image showing road interval Attribute_Definition_Source: Contractor Post-processing Attribute: Attribute_Label: SPEED Attribute_Definition: Average ARAN speed during data collection Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: BRIDGE_FLA Attribute_Definition: Flag indicating presence of bridge in interval Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute Label: CONSTR FLA Attribute_Definition: Flag indicating construction in interval Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: LANEDEV_FL Attribute_Definition: Flag indicating lane deviation in interval Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: DATE Attribute_Definition: Data collection date Attribute_Definition_Source: ARAN Data Collection Attribute: Attribute_Label: NODISTRESS

Attribute_Definition: Flag indicating absence of pavement distress

Attribute Definition Source: Contractor Post-processing

Attribute:

Attribute_Label: FILENAME

thro_mi_pt Page 9 of 10

Attribute_Definition: Filename of raw data files Attribute_Definition_Source: ARAN Data Collection

Attribute:

Attribute_Label: SECTION

Attribute_Definition: route section ID

Attribute_Definition_Source: Route ID Meeting / ARAN Data Collection

Attribute:

Attribute_Label: FKEY

Attribute_Definition: Unique record ID

Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: VISI_FROM

Attribute_Definition: Raw MP of first video frame in section Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: VISI_TO

Attribute_Definition: Raw MP of last video frame in section Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: IDKEY

Attribute_Definition: Unique record ID used by VisiData Attribute_Definition_Source: Contractor Post-processing

Attribute:

Attribute_Label: MP_REF

Attribute_Definition: Range of mileage to play in VisiData Attribute_Definition_Source: Contractor Post-processing

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information: Transfer Size: 0.030

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

thro_mi_pt Page 10 of 10

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:51:14 2005

THRO_mrl_03_map

Metadata also available as

Metadata:

- Identification_Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
```

Citation:

Citation_Information:

Originator: Eastern Federal Lands Highway Division

Publication_Date: Published Materials

Title: THRO_mrl_03_map

Geospatial_Data_Presentation_Form: vector digital data

Online_Linkage: Not Available

Description:

Abstract: Copy of Manually Rated Roads - Lines

Purpose: Road Inventory Program

Supplemental_Information:

This shapefile is a copy of the source manually rated lines shapefile. The features are edited as needed for graphic purposes.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 7/11/1998

Currentness_Reference: ground condition

Status:

Progress: Complete

Maintenance_and_Update_Frequency: As per RIP cycle

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -103.534182 East_Bounding_Coordinate: -103.528186 North_Bounding_Coordinate: 46.952605 South_Bounding_Coordinate: 46.947136

Keywords:

Theme:

Theme_Keyword_Thesaurus: THRO

Theme_Keyword: THRO

Access_Constraints: None

Use_Constraints: Redistribution needs permission from EFLHD/NPS *Point_of_Contact: Contact_Information:* Contact_Person_Primary: Contact_Person: Dan VanGilder Contact Organization: EFLHD Contact_Position: GIS Coordinator Contact_Address: Address_Type: mailing and physical address Address: 21400 Ridgetop Circle City: Sterling State_or_Province: Virginia Postal Code: 20166 Country: United States Contact_Voice_Telephone: 703-404-6361 Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov *Native_Data_Set_Environment:* Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800 *Data_Quality_Information:* Attribute_Accuracy: Attribute_Accuracy_Report: Good Completeness_Report: Complete for parking areas Lineage: *Source_Information: Type_of_Source_Media:* GPS *Spatial_Data_Organization_Information:* Direct Spatial Reference Method: Vector Point_and_Vector_Object_Information: *SDTS_Terms_Description:* SDTS_Point_and_Vector_Object_Type: String Point_and_Vector_Object_Count: 4 *Spatial_Reference_Information:* Horizontal_Coordinate_System_Definition: Geographic: Latitude_Resolution: 0.000000

```
Horizontal_Coordinate_System_Definition:
Geographic:
Latitude_Resolution: 0.000000
Longitude_Resolution: 0.000000
Geographic_Coordinate_Units: Decimal degrees
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1927
Ellipsoid_Name: Clarke 1866
Semi-major_Axis: 6378206.400000
```

```
Entity_and_Attribute_Information:
     Detailed Description:
           Entity_Type:
                 Entity_Type_Label: THRO_mrl_03_map
                 Entity_Type_Definition_Source: GPS
           Attribute:
                 Attribute_Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute Definition Source: ESRI
                 Attribute_Domain_Values:
                       Enumerated_Domain:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute_Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NO
                 Attribute_Definition: Route Number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NAME
                 Attribute_Definition: Route Name
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute Label: SURF TYPE
                 Attribute Definition: Route Section ID
                 Attribute_Definition_Source: Route ID Meeting / ARAN Data Collection
           Attribute:
                 Attribute Label: CONDITION
                 Attribute Definition: Surface type of route
                 Attribute_Definition_Source: ARAN Data Collection
           Attribute:
                 Attribute_Label: PHOTOS
                 Attribute_Definition: Condition rating
                 Attribute_Domain_Values:
           Attribute:
                 Attribute Label: COMMENT
                 Attribute_Definition: Field comment
           Attribute:
```

Attribute_Label: WIDTH

Attribute_Definition: Date of GPS Collection

Attribute:

Attribute_Label: GPS_DATE

Attribute:

Attribute_Label: DATAFILE

Attribute_Definition: Width of the paved area

Attribute:

Attribute_Label: PAVED_MI

Attribute_Definition: Calculated paved miles

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Transfer_Size: 0.037

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact Organization Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact_Position: GIS Coordinator

Contact Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166

Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:37:46 2005

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THRO_mrl_03

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: Eastern Federal Lands Highway Division
                 Publication Date: Published Materials
                 Title: THRO mrl 03
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Manually Rated Roads - Lines
           Purpose: Road Inventory Program
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 7/11/1998
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.534182
                 East_Bounding_Coordinate: -103.528186
                 North_Bounding_Coordinate: 46.952605
                 South_Bounding_Coordinate: 46.947136
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access Constraints: None
      Use_Constraints: Redistribution needs permission from EFLHD/NPS
     Point_of_Contact:
           Contact_Information:
```

THRO_mrl_03 Page 2 of 4

Contact_Person_Primary:

Contact_Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact Electronic Mail Address: dvangilder@fhwa.dot.gov

Native_Data_Set_Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog

8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for parking areas

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 4

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000

THRO_mrl_03 Page 3 of 4

```
Entity_and_Attribute_Information:
     Detailed_Description:
           Entity_Type:
                 Entity_Type_Label: THRO_mrl_03
                 Entity_Type_Definition_Source: GPS
           Attribute:
                 Attribute_Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Enumerated_Domain:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute_Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute Definition Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE NO
                 Attribute_Definition: Route Number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NAME
                 Attribute_Definition: Route Name
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: SURF_TYPE
                 Attribute_Definition: Route Section ID
                 Attribute_Definition_Source: Route ID Meeting / ARAN Data Collection
           Attribute:
                 Attribute_Label: CONDITION
                 Attribute_Definition: Surface type of route
                 Attribute_Definition_Source: ARAN Data Collection
           Attribute:
                 Attribute_Label: PHOTOS
                 Attribute Definition: Condition rating
                 Attribute_Domain_Values:
           Attribute:
                 Attribute Label: COMMENT
                 Attribute_Definition: Field comment
           Attribute:
                 Attribute_Label: WIDTH
                 Attribute Definition: Date of GPS Collection
           Attribute:
                 Attribute_Label: GPS_DATE
```

THRO_mrl_03 Page 4 of 4

Attribute:

Attribute_Label: DATAFILE

Attribute_Definition: Width of the paved area

Attribute:

Attribute_Label: PAVED_MI

Attribute_Definition: Calculated paved miles

Distribution_Information:

Resource_Description: Downloadable Data

 $Standard_Order_Process:$

Digital_Form:

Digital_Transfer_Information:

Transfer_Size: 0.037

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact_Position: GIS Coordinator

Contact Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166

Country: United States

Contact_Voice_Telephone: 703-404-6361

 $Contact_Electronic_Mail_Address: \ dvangilder@fhwa.dot.gov$

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata Time Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:37:25 2005

thro_mrp_03 Page 1 of 4

thro_mrp_03

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: Eastern Federal Lands Highway Division
                 Publication_Date: Unknown
                 Title: thro mrp 03
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Manually Rated Roads - Polygons
           Purpose: Road Inventory Program
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 9/19/2002
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.527594
                 East_Bounding_Coordinate: -103.331999
                 North_Bounding_Coordinate: 47.596807
                 South_Bounding_Coordinate: 46.914713
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access Constraints: None
     Use Constraints: None
     Point_of_Contact:
           Contact_Information:
```

thro_mrp_03 Page 2 of 4

Contact_Person_Primary:

Contact_Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Native_Data_Set_Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog

8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for manually rated roads.

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: G-polygon

Point_and_Vector_Object_Count: 3

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000

thro_mrp_03 Page 3 of 4

Entity_and_Attribute_Information: Detailed_Description: Entity_Type: Entity_Type_Label: thro_mrp_03 Attribute: Attribute Label: FID Attribute_Definition: Internal feature number. Attribute_Definition_Source: ESRI Attribute_Domain_Values: *Unrepresentable_Domain:* Sequential unique whole numbers that are automatically generated. Attribute: Attribute Label: Shape Attribute_Definition: Feature geometry. Attribute_Definition_Source: ESRI Attribute Domain Values: *Unrepresentable_Domain:* Coordinates defining the features. Attribute: Attribute_Label: PARK_ALPHA Attribute_Definition: Park alpha code Attribute_Definition_Source: Route ID Meeting Attribute: Attribute_Label: RTE_NO Attribute_Definition: Route Number Attribute_Definition_Source: Route ID Meeting Attribute: Attribute_Label: RTE_NAME Attribute_Definition: Route Name Attribute_Definition_Source: Route ID Meeting Attribute: Attribute_Label: SECTION_ Attribute Definition: Route section ID Attribute: Attribute_Label: SURF_TYPE Attribute_Definition: Surface type of route Attribute: Attribute_Label: CONDITION Attribute_Definition: Condition rating Attribute: Attribute_Label: COMMENT Attribute_Definition: Field comment Attribute: Attribute_Label: GPS DATE Attribute_Definition: Date of GPS collection Attribute: Attribute Label: DATAFILE Attribute: *Attribute_Label:* SQ_FT Attribute Definition: Area of manually rated road in squre feet Attribute: Attribute_Label: PROJECTN

thro_mrp_03 Page 4 of 4

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

 $Digital_Transfer_Information:$

Transfer_Size: 0.187

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata Extensions:

Online_Linkage: <a href="mailto:http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

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thro_mrp_03_map Page 1 of 4

thro_mrp_03_map

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: Eastern Federal Lands Highway Division
                 Publication_Date: Unknown
                 Title: thro mrp 03 map
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Manually Rated Roads - Polygons
           Purpose: Road Inventory Program
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                      Calendar_Date: 9/19/2002
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.527594
                 East_Bounding_Coordinate: -103.331999
                 North_Bounding_Coordinate: 47.596807
                 South_Bounding_Coordinate: 46.914713
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access Constraints: None
     Use Constraints: None
     Point_of_Contact:
           Contact_Information:
```

thro_mrp_03_map Page 2 of 4

Contact_Person_Primary:

Contact_Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Native_Data_Set_Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog

8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for manually rated roads.

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector *Point_and_Vector_Object_Information:*

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: G-polygon

Point_and_Vector_Object_Count: 3

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000

thro_mrp_03_map Page 3 of 4

```
Entity_and_Attribute_Information:
     Detailed_Description:
           Entity_Type:
                 Entity_Type_Label: thro_mrp_03_map
           Attribute:
                 Attribute Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute Domain Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute Definition Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NO
                 Attribute_Definition: Route Number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NAME
                 Attribute_Definition: Route Name
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: SECTION_
                 Attribute Definition: Route section ID
           Attribute:
                 Attribute_Label: SURF_TYPE
                 Attribute_Definition: Surface type of route
           Attribute:
                 Attribute_Label: CONDITION
                 Attribute_Definition: Condition rating
           Attribute:
                 Attribute_Label: COMMENT
                 Attribute_Definition: Field comment
           Attribute:
                 Attribute_Label: GPS DATE
                 Attribute_Definition: Date of GPS collection
           Attribute:
                 Attribute Label: DATAFILE
           Attribute:
                 Attribute_Label: SQ_FT
                 Attribute Definition: Area of manually rated road in squre feet
           Attribute:
                 Attribute_Label: PROJECTN
```

thro_mrp_03_map Page 4 of 4

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Transfer_Size: 0.187

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

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nonnps Page 1 of 4

nonnps

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: The TSR Group
                 Publication_Date: 2005
                 Title: nonnps
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: non-NPS roads
           Purpose: Road Inventory Program
           Supplemental_Information:
                 Data created by The TSR Group from heads-up digitizing of roads representing non-
                 NPS roads for graphic purposes
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                      Calendar_Date: 2005
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.526648
                 East_Bounding_Coordinate: -103.382573
                 North_Bounding_Coordinate: 46.915395
                 South_Bounding_Coordinate: 46.886613
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access_Constraints: None
```

nonnps Page 2 of 4

Use_Constraints: Redistribution needs permission from EFLHD/NPS *Point_of_Contact: Contact_Information:* Contact_Person_Primary: Contact_Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator Contact_Address: *Address_Type:* mailing and physical address Address: 21400 Ridgetop Circle City: Sterling State_or_Province: Virginia Postal Code: 20166 Country: United States Contact_Voice_Telephone: 703-404-6361 Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov *Native_Data_Set_Environment:* Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog

Data_Quality_Information:

Attribute_Accuracy:

8.3.0.800

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for non-NPS roads

Lineage:

Source_Information:

Type_of_Source_Media: Heads-up digitized

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 2

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000 nonnps Page 3 of 4

Denominator_of_Flattening_Ratio: 294.978698

```
Entity_and_Attribute_Information:
     Detailed_Description:
           Entity_Type:
                 Entity_Type_Label: nonnps
           Attribute:
                 Attribute_Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute_Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: ID
                 Attribute_Definition: Name of road if available
           Attribute:
                 Attribute_Label: NAME
Distribution_Information:
     Resource_Description: Downloadable Data
     Standard_Order_Process:
           Digital_Form:
                 Digital_Transfer_Information:
                       Transfer_Size: 0.008
Metadata_Reference_Information:
     Metadata_Date: 20050701
     Metadata Contact:
           Contact_Information:
                 Contact_Organization_Primary:
                       Contact_Organization: EFLHD Sterling
                       Contact_Person: Dan VanGilder
                 Contact Position: GIS Coordinator
                 Contact_Address:
                       Address_Type: mailing and physical address
                       Address: 21400 Ridgetop Circle
                       City: Sterling
```

State_or_Province: Virginia

nonnps Page 4 of 4

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

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THRO_parking_03 Page 1 of 4

THRO_parking_03

Metadata also available as

Metadata:

- Identification Information
- Data Quality_Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>
- Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: Eastern Federal Lands Highway Division
                 Publication_Date: Unknown
                 Title: THRO parking 03
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Parking Areas
           Purpose: Road Inventory Program
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                      Calendar_Date: 7/11/1998
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.532443
                 East_Bounding_Coordinate: -103.259920
                 North_Bounding_Coordinate: 47.628594
                 South_Bounding_Coordinate: 46.893632
     Keywords:
           Theme:
                 Theme_Keyword_Thesaurus: THRO
                 Theme_Keyword: THRO
     Access Constraints: None
     Use_Constraints: Redistribution needs permission from EFLHD/NPS
     Point_of_Contact:
           Contact_Information:
```

Contact_Person_Primary:

Contact_Person: Dan VanGilder Contact_Organization: EFLHD Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Native_Data_Set_Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good

Completeness_Report: Complete for parking areas

Lineage:

Source_Information:

Type_of_Source_Media: GPS

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector *Point_and_Vector_Object_Information:*

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: G-polygon

Point_and_Vector_Object_Count: 44

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000 Longitude_Resolution: 0.000000

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1927

Ellipsoid_Name: Clarke 1866 Semi-major_Axis: 6378206.400000

```
Entity_and_Attribute_Information:
     Detailed_Description:
           Entity_Type:
                 Entity_Type_Label: THRO_parking_03
           Attribute:
                 Attribute Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute Domain Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NO
                 Attribute_Definition: Route number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NAME
                 Attribute_Definition: Route name
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: FEATURE
           Attribute:
                 Attribute_Label: SURF_TYPE
                 Attribute_Definition: Surface type of route
                 Attribute Domain Values:
           Attribute:
                 Attribute_Label: CONDITION
                 Attribute_Definition: Condition rating for route
           Attribute:
                 Attribute_Label: PHOTOS
                 Attribute_Definition: Photo filename associated with feature
           Attribute:
                 Attribute_Label: COMMENT
                 Attribute_Definition: Field comment
           Attribute:
                 Attribute_Label: GPS_DATE
                 Attribute_Definition: Date of GPS collection
           Attribute:
                 Attribute Label: DATAFILE
           Attribute:
                 Attribute_Label: SQ_FT
```

THRO_parking_03 Page 4 of 4

Attribute_Definition: Feature area in square feet

Attribute:

Attribute_Label: PROJECTN

Distribution_Information:

Resource_Description: Downloadable Data

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Transfer_Size: 0.018

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Country. Officed States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata Standard Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.7.33 on Fri Jul 01 10:38:34 2005

THRO_parking_03_map

Metadata also available as

Metadata:

- Identification_Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity_and_Attribute_Information
- <u>Distribution_Information</u>

Keywords:

Theme:

Access_Constraints: None

• Metadata Reference Information

```
Identification_Information:
     Citation:
           Citation_Information:
                 Originator: Eastern Federal Lands Highway Division
                 Publication_Date: Unknown
                 Title: THRO_parking_03_map
                 Geospatial_Data_Presentation_Form: vector digital data
                 Online_Linkage: Not Available
     Description:
           Abstract: Copy of Parking Areas
           Purpose: Road Inventory Program
           Supplemental_Information:
                 This shapefile is a copy of the source parking shapefile. The features are edited as
                 needed for graphic purposes.
     Time_Period_of_Content:
           Time_Period_Information:
                 Single_Date/Time:
                       Calendar_Date: 7/11/1998
           Currentness_Reference: ground condition
     Status:
           Progress: Complete
           Maintenance_and_Update_Frequency: As per RIP cycle
     Spatial_Domain:
           Bounding_Coordinates:
                 West_Bounding_Coordinate: -103.532443
                 East_Bounding_Coordinate: -103.259920
                 North_Bounding_Coordinate: 47.628638
```

South_Bounding_Coordinate: 46.893632

Theme_Keyword_Thesaurus: THRO

Theme_Keyword: THRO

Use_Constraints: Redistribution needs permission from EFLHD/NPS *Point_of_Contact: Contact_Information:* Contact_Person_Primary: Contact_Person: Dan VanGilder Contact Organization: EFLHD Contact_Position: GIS Coordinator Contact_Address: Address_Type: mailing and physical address Address: 21400 Ridgetop Circle City: Sterling State_or_Province: Virginia Postal Code: 20166 Country: United States Contact_Voice_Telephone: 703-404-6361 Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov *Native_Data_Set_Environment:* Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800 *Data_Quality_Information:* Attribute_Accuracy: Attribute_Accuracy_Report: Good Completeness_Report: Complete for parking areas Lineage: *Source_Information: Type_of_Source_Media:* GPS *Spatial_Data_Organization_Information:* Direct Spatial Reference Method: Vector Point_and_Vector_Object_Information: SDTS_Terms_Description: SDTS_Point_and_Vector_Object_Type: G-polygon Point_and_Vector_Object_Count: 44

```
Spatial_Reference_Information:
    Horizontal_Coordinate_System_Definition:
    Geographic:
        Latitude_Resolution: 0.000000
        Longitude_Resolution: 0.000000
        Geographic_Coordinate_Units: Decimal degrees
    Geodetic_Model:
        Horizontal_Datum_Name: North American Datum of 1927
        Ellipsoid_Name: Clarke 1866
        Semi-major_Axis: 6378206.400000
```

```
Entity_and_Attribute_Information:
     Detailed Description:
           Entity_Type:
                 Entity_Type_Label: THRO_parking_03_map
           Attribute:
                 Attribute_Label: FID
                 Attribute_Definition: Internal feature number.
                 Attribute_Definition_Source: ESRI
                 Attribute_Domain_Values:
                       Unrepresentable_Domain:
                             Sequential unique whole numbers that are automatically generated.
           Attribute:
                 Attribute_Label: Shape
                 Attribute_Definition: Feature geometry.
                 Attribute_Definition_Source: ESRI
                 Attribute Domain Values:
                       Unrepresentable_Domain: Coordinates defining the features.
           Attribute:
                 Attribute_Label: PARK_ALPHA
                 Attribute_Definition: Park alpha code
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute Label: RTE NO
                 Attribute_Definition: Route number
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute_Label: RTE_NAME
                 Attribute_Definition: Route name
                 Attribute_Definition_Source: Route ID Meeting
           Attribute:
                 Attribute Label: FEATURE
           Attribute:
                 Attribute Label: SURF TYPE
                 Attribute_Definition: Surface type of route
                 Attribute_Domain_Values:
           Attribute:
                 Attribute Label: CONDITION
                 Attribute_Definition: Condition rating for route
           Attribute:
                 Attribute_Label: PHOTOS
                 Attribute_Definition: Photo filename associated with feature
           Attribute:
                 Attribute_Label: COMMENT
                 Attribute_Definition: Field comment
           Attribute:
                 Attribute_Label: GPS_DATE
                 Attribute_Definition: Date of GPS collection
```

Attribute:

Attribute_Label: DATAFILE

Attribute:

Attribute_Label: SQ_FT

Attribute_Definition: Feature area in square feet

Attribute:

Attribute_Label: PROJECTN

Distribution_Information:

Resource_Description: Downloadable Data

 $Standard_Order_Process:$

Digital_Form:

Digital_Transfer_Information: Transfer_Size: 0.018

Metadata_Reference_Information:

Metadata_Date: 20050701

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EFLHD Sterling

Contact_Person: Dan VanGilder

Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: 21400 Ridgetop Circle

City: Sterling

State_or_Province: Virginia

Postal_Code: 20166 Country: United States

Contact_Voice_Telephone: 703-404-6361

Contact_Electronic_Mail_Address: dvangilder@fhwa.dot.gov

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

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