



Federal Lands Highway Road Inventory Program

Road Inventory and Condition Assessment



Assateague Island National Seashore ASIS

Cycle 5 Report

Prepared By: Federal Highway Administration

Road Inventory Program (RIP)

Data Collected: 08/2013 Report Date: 03/2014

Assateague Island National Seashore in Maryland and Virginia

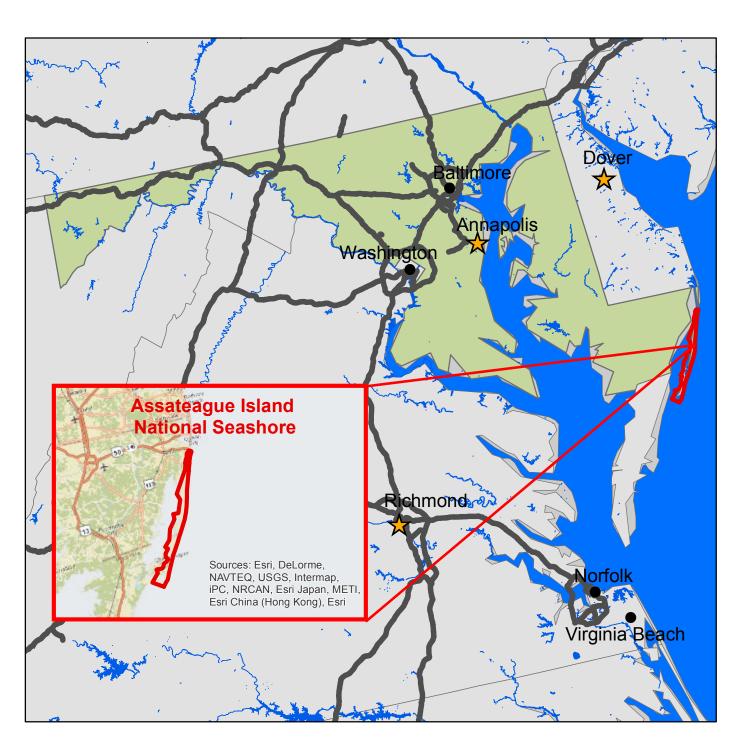




TABLE OF CONTENTS

	<u>SECTION</u>	<u>PAGE</u>
1.	INTRODUCTION	1-1
2.	PARK ROUTE INVENTORY	
	Route IDs, Subcomponents & Changes Report (As Applicable)	2 – 1
3.	PARK SUMMARY INFORMATION	
	Paved Route Miles and Percentages by Functional Class and PCR	3 - 1
	DCV Road Condition Summary	3 - 3
	Parkwide DCV Condition Summary	3 - 5
4.	PARK ROUTE LOCATION MAPS	
	Route Location Key Map	4 - 1
	Route Location Area Map	4 - 2
	Route Condition Key Map – PCR Mile by Mile Route Condition Area Map – PCR Mile by Mile	4-5 $4-6$
	Route Condition Area Map – FCR Mile by Mile	4 – 0
5.	PAVED ROUTE CONDITION RATING SHEETS	
	CRS Pages	5 – 1
6.	MANUALLY RATED PAVED ROUTE CONDITION RATING SHEETS	
	MRR Pages	6 - 1
7.	PARKING AREA CONDITION RATING SHEETS	
, ,	Paved Parking Area Pages	7 – 1
8.	PARKWIDE / ROUTE MAINTENANCE FEATURES SUMMARIES	
	Parkwide Maintenance Features Summary	8 - 1
	DCV Route Maintenance Features Summary	8 - 2
	Structure List	8 – 4
9.	ROUTE MAINTENANCE FEATURES ROAD LOGS	
	Route Maintenance Features Road Logs	9 – 1
10.	APPENDIX	
	Explanation of Changes to the RIP Index Equations and Determination of PCR	10 - 1
	Explanation of the Excellent, Good, Fair and Poor Condition Descriptions	10 - 2
	Description of Rating System	10 - 3
	Surface Distresses	10 - 5
	Index Formulas Data Collection Vehicle Subsystems	10 - 12
	Geodatabase – Background and Metadata	10 - 16 $10 - 19$
	Glossary of Terms and Abbreviations	10 - 10 $10 - 20$
	•	

Section 1 Introduction



Assateague Island National Seashore



INTRODUCTION

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

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

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

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

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

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

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

Cycle 5 has launched in the summer of 2010 and will again comprise all parks, large and small, that are served by paved roads and/or parking areas. For Cycle 5, the decision was made to collect condition data in large parks on Functional Class 1, 2, and 7 paved routes only, as well as any new routes that were previously not collected. In small parks, all paved routes and parking areas will be collected. As a result, this will include 81 large parks with 4,459 paved route miles and 231 small parks with 529 paved route miles and associated paved parking areas.

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

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

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

Respectfully,

FHWA RIP Team

FHWA/Eastern Federal Lands 21400 Ridgetop Circle Sterling, VA 20166 (703) 404-6371 FHWA/Central Federal Lands 12300 West Dakota Ave Lakewood, CO 80228 (720) 963-3556

Section 2 Park Route Inventory



Assateague Island National Seashore



Road Inventory Program 03/21/2014 (Numerical By Route #) Page 1 of 6

Shading Color Key: Red text denotes approx. mileage

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

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

NC - Not Collected

ASIS

Rte.	e ted	FMSS	SS		Route De	escription	Maint.	Paved	Un-	Total	Func.	Manual	Surf.	Area
No.	Cycle Collected	No.	Concess	Route Name	From	То	District	Miles	Paved Miles	Route Length	Class	Rated SQ/FT	Туре	Maps
0010ZZ	5	47237		BAYBERRY DRIVE	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO CIRCLE AND ROUTE 0214 (OSV OCEAN ROUTE)	MARYLAND DISTRICT	3.77	0.00	3.77	1		AS	1,2
0011	5	47525		BEACH ROAD	FROM END OF ROUTE 5000 (FWS BEACH ROAD (NON NPS)) AT PAVEMENT CHANGE	TO ROUTE 0210 (TOMS COVE ROAD)	VIRGINIA DISTRICT	0.15	0.00	0.15	1		AS	3
0012	5	102531		MADDOX BOULEVARD	FROM PAVEMENT CHANGE ON MADDOX BOULEVARD	TO BEGINNING OF ROUTE 5000 (FWS BEACH ROAD (NON NPS)) / PAVEMENT CHANGE AT END OF BRIDGE	VIRGINIA DISTRICT	0.47	0.00	0.47	1		AS	3
0013	5	106724		MARSH VIEW LANE	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO UMES PROPERTY AT END OF PAVEMENT	MARYLAND DISTRICT	0.08	0.00	0.08	1		AS	1
0100	5	47250		FERRY LANDING ROAD	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0926 (FERRY LANDING PARKING)	MARYLAND DISTRICT	0.29	0.00	0.29	2		AS	2
0200ZZ	5	81018		OCEANSIDE DRIVE	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0010ZZ (BAYBERRY DRIVE)	MARYLAND DISTRICT	1.07	0.00	1.07	2		AS	2
0202	5	47246		BAYSIDE DRIVE	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0905 (BAYSIDE PARKING AREA)	MARYLAND DISTRICT	0.79	0.00	0.79	1		AS	2
0203ZZ	5	81024		BAYSIDE CAMPGROUND ROADS	FROM ROUTE 0202 (BAYSIDE DRIVE)	TO ROUTE 0202 (BAYSIDE DRIVE) AND THROUGH BAYSIDE CAMPGROUND	MARYLAND DISTRICT	1.02	0.00	1.02	3		AS	2
0204ZZ	5	81025		OCEANSIDE CAMPGROUND LOOPS	FROM ROUTE 0200ZZ (OCEANSIDE DRIVE)	TO ROUTE 0200ZZ (OCEANSIDE DRIVE)	MARYLAND DISTRICT	0.40	0.00	0.40	3		AS	2
0210	NC	81017		TOMS COVE ROAD	FROM END OF ROUTE 0011 (BEACH ROAD) / TURNAROUND LOOP	TO TURNAROUND LOOP AT END OF ROUTE 0933 (TOMS COVE PARKING AREA 3)	VIRGINIA DISTRICT	0.00	1.31	1.31	3		ОТ	
0211	NC	92712		FOX HILL ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO BAY	MARYLAND DISTRICT	0.00	0.60	0.60	4		SA	
0212	NC	92714		BIG LEVELS ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO BAY	MARYLAND DISTRICT	0.00	0.60	0.60	4		SA	
0213	NC	92724		BLINDS 12 AND 13 ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO BLINDS 12 AND 13 PARKING	MARYLAND DISTRICT	0.00	0.60	0.60	4		SA	

Road Inventory Program 03/21/2014 (Numerical By Route #) Page 2 of 6

Shading Color Key: Red text denotes approx. mileage

White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

NC - Not Collected

ASIS

Rte. No.	Cycle Collected	FMSS No.	Concess	Route Name	Route De From	escription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0214	NC			OSV OCEAN ROUTE	FROM END OF ROUTE 0010ZZ (BAYBERRY DRIVE)	TO VIRGINIA STATE LINE	MARYLAND DISTRICT	0.00	12.00	12.00	4		SA	
0400	5	102720		BONEYARD ACCESS ROAD	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0912 (BONEYARD AREA)	MARYLAND DISTRICT	0.04	0.00	0.04	6	4,251	AS	2
0401	NC	106516		SHELL ROAD	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO END	MARYLAND DISTRICT	0.00	0.32	0.32	6		ОТ	
0402	NC	92330		TINGLES ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO TINGLES CAMPGROUND	MARYLAND DISTRICT	0.00	0.69	0.69	6		SA	
0403	NC	92703		HUNGERFORDS ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO HUNGERSFORD LODGE	MARYLAND DISTRICT	0.00	0.45	0.45	6		SA	
0404	NC	92708		PINE TREE ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO PINE TREE CAMPGROUND	MARYLAND DISTRICT	0.00	1.10	1.10	6		SA	
0405	NC	92711		BUNTINGS ROAD	FROM ROUTE 0404 (PINE TREE ROAD)	TO BUNTINGS PROPERTY	MARYLAND DISTRICT	0.00	0.40	0.40	6		SA	
0406	NC	92720		VALENTINE'S ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO VALENTINES PROPERTY	MARYLAND DISTRICT	0.00	1.60	1.60	6		SA	
0407	NC	92723		POPE BAY ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO POPE BAY CAMPGROUND	MARYLAND DISTRICT	0.00	0.70	0.70	6		SA	
0408	NC	92726		BOAT LAUNCH ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO BAY	MARYLAND DISTRICT	0.00	0.50	0.50	6		SA	
0409	NC	92733		CLEMENT'S BOATHOUSE ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO CLEMENTS BOATHOUSE	MARYLAND DISTRICT	0.00	0.80	0.80	6		SA	
0410	NC			GREEN RUN ROAD	FROM ROUTE 0214 (OSV OCEAN ROUTE)	TO GREEN RUN CAMPGROUND AND PROPERTY	MARYLAND DISTRICT	0.00	0.36	0.36	6		SA	
0900	5	47220		ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO ROUTES 0901 (HOUSING ACCESS ROAD AND PARKING AREA) AND 0902 (HEADQUARTERS PARKING AREA)	MARYLAND DISTRICT	0.00	0.00	0.00		22,363	AS	1
0901	5	102569		HOUSING ACCESS ROAD AND PARKING AREA	FROM ROUTE 0900 (ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING)	TO PARKING AND HOUSING AREA	MARYLAND DISTRICT	0.00	0.00	0.00		36,805	AS	1

Road Inventory Program 03/21/2014 (Numerical By Route #) Page 3 of 6

Shading Color Key: Red text denotes approx. mileage

White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

** DCV - Data Collection Vehicle

NC - Not Collected

ASIS

Rte. No.	Cycle Collected	FMSS No.	Concess	Route Name	Route De From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0902	5	81033		HEADQUARTERS PARKING AREA	FROM ROUTE 0900 (ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING)	TO MAINTENANCE / HEADQUARTERS AREA	MARYLAND DISTRICT	0.00	0.00	0.00		38,416	AS	1
0903	5	47219		VISITOR CENTER ACCESS PARKING	FROM ROUTE 0013 (MARSH VIEW LANE)	TO ROUTE 0013 (MARSH VIEW LANE)	MARYLAND DISTRICT	0.00	0.00	0.00		57,268	AS	1
0904	5	102616		BAYSIDE DUMP STATION	FROM ROUTE 0203ZZ (BAYSIDE CAMPGROUND ROADS)	TO ROUTE 0203ZZ (BAYSIDE CAMPGROUND ROADS)	MARYLAND DISTRICT	0.00	0.00	0.00		1,330	AS	2
0905	5	88476		BAYSIDE PARKING AREA	FROM END OF ROUTE 0202 (BAYSIDE DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		43,219	AS	2
0909	5	81022		LIFE OF THE MARSH TRAIL PARKING	FROM ROUTE 0202 (BAYSIDE DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		18,632	AS	2
0910	5	47244		NORTH BEACH RANGER STATION PARKING	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		42,579	AS	2
0911	5	47243		NORTH BEACH PARKING	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0010ZZ (BAYBERRY DRIVE)	MARYLAND DISTRICT	0.00	0.00	0.00		244,653	AS	2
0912	NC	102636		BONEYARD AREA	FROM END OF ROUTE 0400 (BONEYARD ACCESS ROAD)	TO BONEYARD	MARYLAND DISTRICT	0.00	0.00	0.00		14,000	GR	
0914	5	81023		OCEANSIDE CAMPGROUND GROUP PARKING	FROM ROUTE 0200ZZ (OCEANSIDE DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		28,647	AS	2
0918ZZ	5	102721		OCEANSIDE WALK-IN CAMPGROUND PARKING LOTS	ADJACENT TO 0200ZZ (OCEANSIDE DRIVE) ON LEFT		MARYLAND DISTRICT	0.00	0.00	0.00		19,356	AS	2
0921	5	47249		SOUTH OCEAN BEACH PARKING	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		38,360	AS	2
0923	5	102742		AIR PUMP STATION PARKING AREA	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0010ZZ (BAYBERRY DRIVE)	MARYLAND DISTRICT	0.00	0.00	0.00		8,270	AS	2
0924	5	81019		LIFE OF THE DUNES PARKING	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		20,499	AS	2
0925	5	81020		LIFE OF THE FOREST TRAIL PARKING	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		14,135	AS	2
0926	5			FERRY LANDING PARKING	FROM END OF ROUTE 0100 (FERRY LANDING ROAD)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		22,072	AS	2

Road Inventory Program 03/21/2014 (Numerical By Route #) Page 4 of 6

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

Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

** DCV - Data Collection Vehicle NC - Not Collected

ASIS

Rte. No.	Cycle Collected	FMSS No.	Concess	Route Name	Route Des	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0927	5	81021		HISTORIC BOATHOUSE EXHIBIT PARKING AREA	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO PARKING	MARYLAND DISTRICT	0.00	0.00	0.00		15,210	AS	2
0931	NC	47522		TOMS COVE PARKING AREA 1	FROM ROUTE 0210 (TOMS COVE ROAD) NORTH OF CIRCLE	TO PARKING	VIRGINIA DISTRICT	0.00	0.00	0.00		36,964	ОТ	
0932	NC	102777		TOMS COVE PARKING AREA 2	ADJACENT TO ROUTE 0210 (TOMS COVE ROAD) ON LEFT AND RIGHT		VIRGINIA DISTRICT	0.00	0.00	0.00		72,319	ОТ	
0933	NC	102778		TOMS COVE PARKING AREA 3	ADJACENT TO ROUTE 0210 (TOMS COVE ROAD) ON LEFT AND RIGHT		VIRGINIA DISTRICT	0.00	0.00	0.00		37,018	ОТ	
0936	5	102791		OCEANSIDE DUMP STATION	FROM ROUTE 0200ZZ (OCEANSIDE DRIVE)	TO ROUTE 0200ZZ (OCEANSIDE DRIVE)	MARYLAND DISTRICT	0.00	0.00	0.00		2,069	AS	2
0937	NC	81026		VA MAINTENANCE GROUNDS AND UNPAVED PARKING	FROM VIRGINIA STATE ROUTE 175	TO MAINTENANCE AREA	VIRGINIA DISTRICT	0.00	0.00	0.00		200,000	GR	
5000	5			FWS BEACH ROAD (NON NPS)	FROM END OF ROUTE 0012 (MADDOX BOULEVARD) AT PAVEMENT CHANGE	TO BEGINNING OF ROUTE 0011 (BEACH ROAD) AT PAVEMENT CHANGE	VIRGINIA DISTRICT	2.65	0.00	2.65			AS	3
5611	5			MARYLAND STATE ROUTE 611	FROM MARYLAND STATE ROUTE 611 AT ASSATEAGUE STATE PARK HEADQUARTERS MAINTENANCE SHOP ACCESS DRIVE	TO ROUTE 0401 (SHELL ROAD) ON LEFT	MARYLAND DISTRICT	1.59	0.00	1.59			AS	1

Road Inventory Program 03/21/2014 (Numerical By Route #) Page 5 of 6

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

Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Green = All Unpaved Parking Areas

= Concession Route Flag ON

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

** DCV - Data Collection Vehicle NC - Not Collected

CYCLE 5 SUMMARY TOTALS FOR ASSATEAGUE ISLAND NATIONAL SEASHORE **CYCLE 5 ROUTE TOTALS CYCLE 5 CONCESSION TOTALS DCV Driven Route Miles Concession Paved Route Miles** 0.00 8.03 0.04 **Concession Unpaved Route Miles** 0.00 **Manually Rated Route Miles TOTAL PARK ROUTE MILES COLLECTED IN CYCLE 5** 8.07 **TOTAL CONCESSION ROUTE MILES** 0.00 Manually Rated Routes (SQFT) 0.00 0 **Concession Paved Parking Area SQFT TOTAL UNPAVED PARK ROUTE MILES** 22.03 0 Concession Unpaved Parking Area SQFT **TOTAL CONCESSION PARKING AREA SOFT Concession Manually Rated Routes SQFT** * CYCLE 5 PARKING AREA TOTALS **CYCLE 5 WEIGHTED AVERAGE PARK VALUES** 93 Paved Parking (SQFT) DCV Driven PCR 673,883 Unpaved Parking (SQFT) 360,301 **Manually Rated Routes PCR 45 TOTAL PARKING (SQFT) 1,034,184 68 **Parking PCR 27.38 ***Total Equivalent Lane Miles

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

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

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

Road Inventory Program 03/21/2014 (Numerical By Route #) Page 6 of 6

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

Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Green = All Unpaved Parking Areas

Green = All Unpaved Parking Areas

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

** DCV - Data Collection Vehicle NC - Not Collected

General Park Road Functional Classification Table

- Class 1 Principal Park Road/Rural Parkway (Public Roads) Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors.

 Route Numbers 1 99. Note: Rural parkways (e.g. Natchez Trace) are numbered 1 9. State Routes Inventoried for Park. Route Numbers 5000-5999
- Class 2 Connector Park Road (Public Roads) Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc. Route Numbers 100-199.
- Class 3 Special Purpose Park Road (Public Roads) Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.
- Class 4 Primitive Park Roads (Public Roads) Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Route Numbers 200-299.
 Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.
- <u>Class 5</u> Administrative Access Road (Administrative Roads) All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas. Route Numbers 400-499.
- Class 6 Restricted Road (Administrative Roads) All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Route Numbers 400-499. Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.
- Class 7 Urban Parkway (Urban Parkways and City Streets) These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category. Route Numbers 1-9.
- Class 8 City Streets (Urban Parkways and City Streets) City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

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

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

Surface Type Abbreviations:

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

NPS/RIP Subcomponent Details for ASIS

Road Inventory Program 03/21/2014

(Numerical By Subcomponent #)

Page 1 of 3

Shading Color Key: Red text denotes approx. mileage

White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven

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

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

ASIS

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route D	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0010ZZ	47237	5	BAYBERRY DRIVE	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO CIRCLE AND ROUTE 0214 (OSV OCEAN ROUTE)		1	3.77	0.00	3.77	
0200ZZ	81018	5	OCEANSIDE DRIVE	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)	TO ROUTE 0010ZZ (BAYBERRY DRIVE)		2	1.07	0.00	1.07	
0203ZZ	81024	5	BAYSIDE CAMPGROUND ROADS	FROM ROUTE 0202 (BAYSIDE DRIVE)	TO ROUTE 0202 (BAYSIDE DRIVE) AND THROUGH BAYSIDE CAMPGROUND		3	1.02	0.00	1.02	
0204ZZ	81025	5	OCEANSIDE CAMPGROUND LOOPS	FROM ROUTE 0200ZZ (OCEANSIDE DRIVE)	TO ROUTE 0200ZZ (OCEANSIDE DRIVE)		3	0.40	0.00	0.40	
0918ZZ	102721	5	OCEANSIDE WALK-IN CAMPGROUND PARKING LOTS	ADJACENT TO 0200ZZ (OCEANSIDE DRIVE) ON LEFT				0.00	0.00	0.00	19,356

ASIS-0	010ZZ S	Subc	component Breakdown								
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De From	scription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0010AZ	47237	5	BAYBERRY DRIVE MAIN PARK ACCESS	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)	TO END OF LOOP		1	3.60	0.00	3.60	
0010BZ	47237	5	BAYBERRY DRIVE OSV ROAD ACCESS	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	TO BEGINNING OF ROUTE 0214 (OSV OCEAN ROUTE)		1	0.15	0.00	0.15	
0010CZ	47237	5	BAYBERRY DRIVE CIRCLE SPUR	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		1	0.02	0.00	0.02	

NPS/RIP Subcomponent Details for ASIS

Road Inventory Program 03/21/2014

(Numerical By Subcomponent #)

Shading Color Key: Red text denotes approx. mileage

White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven

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

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Page 2 of 3

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

ASIS

ASIS-0	200ZZ S	Subc	omponent Breakdown								
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De From	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0200AZ	81018	5	OCEANSIDE DRIVE - CAMPGROUND ACCESS	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		2	0.96	0.00	0.96	
0200BZ	81018	5	OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		2	0.07	0.00	0.07	
0200CZ	81018	5	OCEANSIDE DRIVE - CONNECTOR FROM BAYBERRY	FROM ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)		2	0.03	0.00	0.03	

ASIS-0	203ZZ 9	Subc	omponent Breakdown								
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Do	escription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0203AZ	81024	5	BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44	FROM ROUTE 0202 (BAYSIDE DRIVE)	TO ROUTE 0202 (BAYSIDE DRIVE)		3	0.56	0.00	0.56	
0203BZ	81024	5	BAYSIDE CAMPGROUND - MIDDLE ACCESS	FROM ROUTE 0202 (BAYSIDE DRIVE)	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)		3	0.04	0.00	0.04	
0203CZ	81024	5	BAYSIDE CAMPGROUND - LOOP A, SITES 14-24	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)		3	0.20	0.00	0.20	
0203DZ	81024	5	BAYSIDE CAMPGROUND - LOOP B, SITES 33-37	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)		3	0.12	0.00	0.12	
0203EZ	81024	5	BAYSIDE CAMPGROUND - LOOP C, SITES 45-49	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)		3	0.11	0.00	0.11	

NPS/RIP Subcomponent Details for ASIS

Road Inventory Program 03/21/2014 (Numerical By Subcomponent #) Page 3 of 3

Shading Color Key: Red text denotes approx. mileage White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven

Blue = All Paved Parking Areas

Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven

Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

ASIS

ASIS-0	204ZZ S	ubc	omponent Breakdown								
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route I From	Description To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0204AZ	81025	5	OCEANSIDE CAMPGROUND LOOP 1, SITES 1-19	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)		3	0.19	0.00	0.19	
0204BZ	81025	5	OCEANSIDE CAMPGROUND LOOP 2, SITES 20-41	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)		3	0.21	0.00	0.21	

ASIS-0	918ZZ 9	Subc	component Breakdown								
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Descri From	ption To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0918Z	102721	5	OCEANSIDE WALK-IN CAMPGROUND 42-65 PARKING	ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT				0.00	0.00	0.00	7,072
0919Z	102721	5	OCEANSIDE WALK-IN CAMPGROUND 66-85 PARKING	ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT				0.00	0.00	0.00	6,441
0920Z	102721	5	OCEANSIDE WALK-IN CAMPGROUND 86-104 PARKING	ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT				0.00	0.00	0.00	5,843

	ROUT	TES ADDED FROM PREVIOUS INVE	ENTORY:				
Route #	Route Name	Reason for Addition	Comments				
0013	MARSH VIEW LANE	OTHER	ADDED TO INVENTORY THROUGH ALIGNMENT.				
5000	FWS BEACH ROAD (NON NPS)	OTHER	NON NPS ROAD ADDED TO INVENTORY IN CYCLE 5.				
5611	MARYLAND STATE ROUTE 611	OTHER	NON NPS ROAD ADDED TO INVENTORY IN CYCLE 5.				
	ROUTE	S MODIFIED FROM PREVIOUS IN	VENTORY:				
Route #	Route Name	Type of Modification	Comments				
0011	BEACH ROAD	LENGTH CHANGE	ROAD WAS SHORTENED SINCE CYCLE 3 BECAUSE A PORTION OF THE ROAD WAS TAKEN OVER BY THE OCEAN.				
0903	VISITOR CENTER ACCESS PARKING	RECONSTRUCTED	PARKING LOT WAS RECONSTRUCTED. ROUTE NAME CHANGED FROM "HIGHWAY 611 BRIDGE PARKING".				
0905	BAYSIDE PARKING AREA	OTHER	A LARGE PORTION ON THE NORTH END OF THE PARKING LOT WAS RECENTLY REMOVED. ROUTE NAME CHANGED FROM "BAYSIDE PICNIC AREA". PARK PLANS TO TURN PARKING TO UNPAVED AND RELOCATE IT NORTHWARD IN THE FUTURE.				
0910	NORTH BEACH RANGER STATION PARKING	OTHER	A PORTION OF THE PARKING LOT WAS REMOVED DUE TO THE ADDITION OF THE RANGER STATION BUILDING. ROUTE NAME CHANGED FROM "RECYCLING CENTER".				
0911	NORTH BEACH PARKING	RECONSTRUCTED	PARKING AREA WAS RECONSTRUCTED SINCE CYCLE 3.				

OTHER CHANGES FROM PREVIOUS INVENTORY:									
Route #	Route Name	Type of Change	Comments						
0010ZZ	BAYBERRY DRIVE	ROUTES COMBINED	ROUTE 0010 WAS EXTENDED AROUND THE CIRCLE NEAR THE END OF THE ROUTE AND INCLUDES A SEGMENT PROVIDING ACCESS TO THE OSV ROAD. THE CIRCLE SECTIONS AND THE SEGMENT PROVIDING ACCESS TO THE OSV ROAD WERE INCLUDED IN ROUTES 0921, 0922, AND 0924 IN CYCLE 3.						
0012	MADDOX BOULEVARD	ROUTE NAME	ROUTE NAME CHANGED FROM "MADDOX BOULEVARD BRIDGE".						
0100	FERRY LANDING ROAD	ROUTE SPLIT	THE ACCESS ROAD WAS SPLIT FROM CYCLE 3 ROUTE 0926 DUE TO ITS LENGTH AND BECAUSE THE PARK HAS THE ROUTE IN FMSS AS A ROAD (NOT PARKING).						
0200ZZ	OCEANSIDE DRIVE	ROUTES COMBINED	CYCLE 3 ROUTES 0200 AND 0917 WERE COMBINED IN CYCLE 5. FUNCTIONAL CLASS CHANGED FROM 3 TO 2 BECAUSE IT PROVIDES ACCESS TO THE CAMPGROUND LOOPS.						
0202	BAYSIDE DRIVE	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS CHANGED FROM 3 TO 1 BECAUSE IT IS A PRIMARY ROAD FOR PARK VISITORS.						
0203ZZ	BAYSIDE CAMPGROUND ROADS	ROUTES COMBINED	CYCLE 3 ROUTES 0906, 0907, AND 0908 WERE COMBINED AND CHANGED FROM PARKING AREAS TO ROADS IN ORDER TO MATCH FMSS.						
0204ZZ	OCEANSIDE CAMPGROUND LOOPS	ROUTES COMBINED	CYCLE 3 ROUTES 0915 AND 0916 WERE COMBINED AND CHANGED FROM PARKING AREAS TO ROADS IN ORDER TO MATCH FMSS.						
0400	BONEYARD ACCESS ROAD	ROUTE NUMBER	ROUTE 0400 WAS ROUTE 0913 IN CYCLE 3. THE ROUTE WAS CHANGED TO A FUNCTIONAL CLASS 6 ROAD IN CYCLE 5 IN ORDER TO MATCH FMSS.						
0900	ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING	ROUTE NAME	ROUTE NAME CHANGED FROM "BARRIER ISLAND VISITOR CENTER ACCESS AND PARKING".						
0901	HOUSING ACCESS ROAD AND PARKING AREA	OTHER	TWO SMALL SECTIONS OF PAVEMENT WERE ADDED TO THE SHAPE. ROUTE NAME CHANGED FROM "HOUSING AREA".						
0902	HEADQUARTERS PARKING AREA	ROUTE NAME	ROUTE NAME CHANGED FROM "MAINTENANCE AREA".						

OTHER CHANGES FROM PREVIOUS INVENTORY:									
Route #	Route Name	Type of Change	Comments						
0904	BAYSIDE DUMP STATION	ROUTE NAME	ROUTE NAME CHANGED FROM "DUMP STATION 1".						
0918ZZ	OCEANSIDE WALK-IN CAMPGROUND PARKING LOTS	ROUTES COMBINED	CYCLE 3 ROUTES 0918, 0919, AND 0920 WERE COMBINED INTO ROUTE 0918ZZ IN CYCLE 5.						
0921	SOUTH OCEAN BEACH PARKING	ROUTE SPLIT	A PORTION OF ROUTE 0921 (BAYBERRY DRIVE CIRCLE SECTION) WAS TRANSFERRED TO ROUTE 0010ZZ. GPS WAS UPDATED IN CYCLE 5.						
0923	AIR PUMP STATION PARKING AREA	ROUTE NAME	ROUTE NAME CHANGED FROM "AIR-UP STATION".						
0924	LIFE OF THE DUNES PARKING	ROUTE SPLIT	A PORTION OF ROUTE 0924 (BAYBERRY DRIVE CIRCLE SECTION) WAS TRANSFERRED TO ROUTE 0010ZZ. GPS WAS UPDATED IN CYCLE 5.						
0926	FERRY LANDING PARKING	ROUTE SPLIT	PARKING AREA SPLIT IN CYCLE 5 BY SEPARATING THE ACCESS ROAD FROM THE PARKING LOT. THE ACCESS ROAD IS NOW ROUTE 0100 (ROUTE SPLIT BECAUSE THE PARK HAS THE ACCESS ROAD IN FMSS AS A ROAD, RATHER THAN A PARKING AREA, AND BECAUSE THE ROAD IS LONGER THAN A QUARTER MILE). AN FMSS NUMBER FOR THE PARKING AREA WAS NOT AVAILABLE AT THE TIME OF THIS REPORT PUBLICATION.						
0927	HISTORIC BOATHOUSE EXHIBIT PARKING AREA	ROUTE NAME	ROUTE NAME CHANGED FROM "HISTORY EXHIBIT".						
0936	OCEANSIDE DUMP STATION	ROUTE NAME	ROUTE NAME CHANGED FROM "DUMP STATION 2".						
	ROUTE	S REMOVED FROM PREVIOUS IN	VENTORY:						
Route #	Route Name	Reason for Removal	Comments						
0935	ENTRANCE STATION	OTHER	REMOVED BECAUSE THIS PARKING AREA IS CONSIDERED PART OF ROUTE 0010ZZ.						

Section 3 Park Summary Information



Assateague Island National Seashore



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

		Pavement Condition Rating (PCR)							
	Poor (0-60) Fair (61-84) Good (85-94)		(85-94)	Excellent	(95-100)	TOTAL			
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1	0.18	2.24%	0.66	8.23%	2.47	30.80%	1.94	24.19%	5.25
2			0.28	3.49%	0.80	9.98%	0.27	3.37%	1.35
3	0.04	0.50%	0.13	1.62%	0.67	8.35%	0.58	7.23%	1.42
4									
5									
6									
7									
8									
Totals	0.22	2.74%	1.07	13.34%	3.94	49.13%	2.79	34.79%	8.02

Note:

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

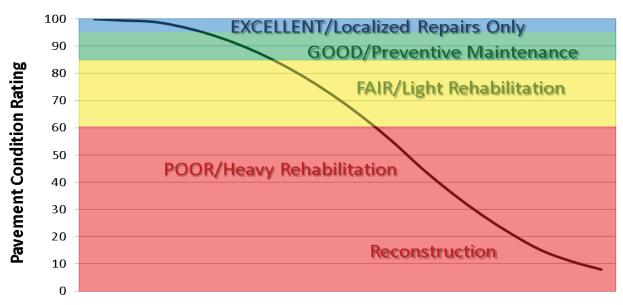
Explanation of the Excellent, Good, Fair and Poor Condition Descriptions

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

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

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

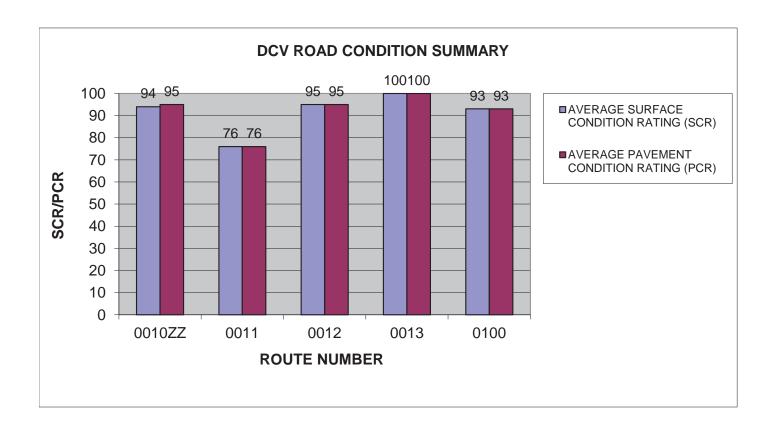
Condition Categories and Treatments



ASIS: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

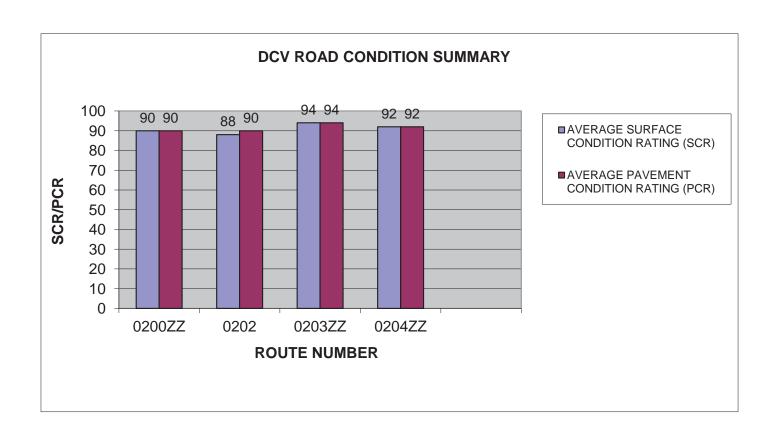
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010ZZ	BAYBERRY DRIVE	1	3.77	ASPHALT	94	95
0011	BEACH ROAD	1	0.15	ASPHALT	76	76
0012	MADDOX BOULEVARD	1	0.47	ASPHALT	95	95
0013	MARSH VIEW LANE	1	0.08	ASPHALT	100	100
0100	FERRY LANDING ROAD	2	0.29	ASPHALT	93	93



ASIS: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

					AVERAGE	AVERAGE
					SURFACE	PAVEMENT
ROUTE		FUNCT	PAVED	SURFACE	CONDITION	CONDITION
NUMBER	ROUTE NAME	CLASS	LENGTH	TYPE	RATING (SCR)	RATING (PCR)
0200ZZ	OCEANSIDE DRIVE	2	1.07	ASPHALT	90	90
0202	BAYSIDE DRIVE	1	0.79	ASPHALT	88	90
0203ZZ	BAYSIDE CAMPGROUND ROADS	3	1.02	ASPHALT	94	94
0204ZZ	OCEANSIDE CAMPGROUND LOOPS	3	0.40	ASPHALT	92	92

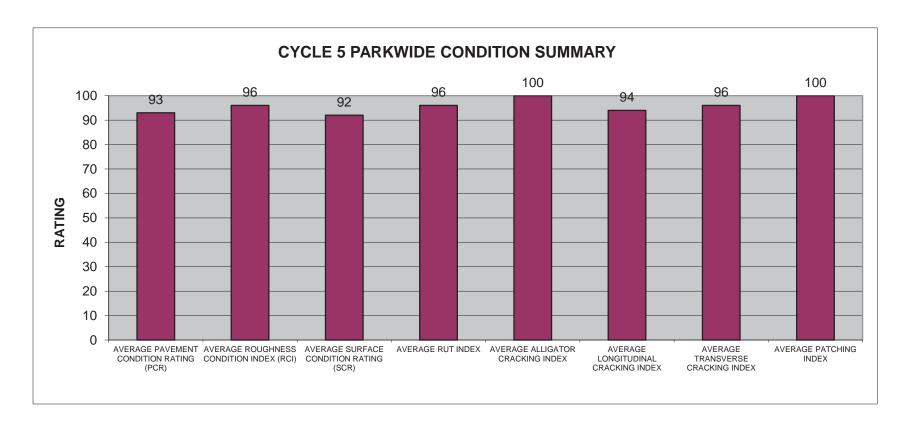


ASIS: PARKWIDE DCV CONDITION SUMMARY

AVERAGE	AVERAGE	AVERAGE		AVERAGE	AVERAGE	AVERAGE	
PAVEMENT	ROUGHNESS	SURFACE		ALLIGATOR	LONGITUDINAL	TRANSVERSE	AVERAGE
CONDITION	CONDITION	CONDITION	AVERAGE	CRACKING	CRACKING	CRACKING	PATCHING
RATING (PCR)	INDEX (RCI)	RATING (SCR)	RUT INDEX	INDEX	INDEX	INDEX	INDEX
93	96	92	96	100	94	96	100

All Index values are based on Data Collection Vehicle (DCV) driven roads that were collected in Cycle-5.

Roughness data is only collected on routes with lengths greater than 0.5 miles and a posted speed limit of 25 MPH or greater.



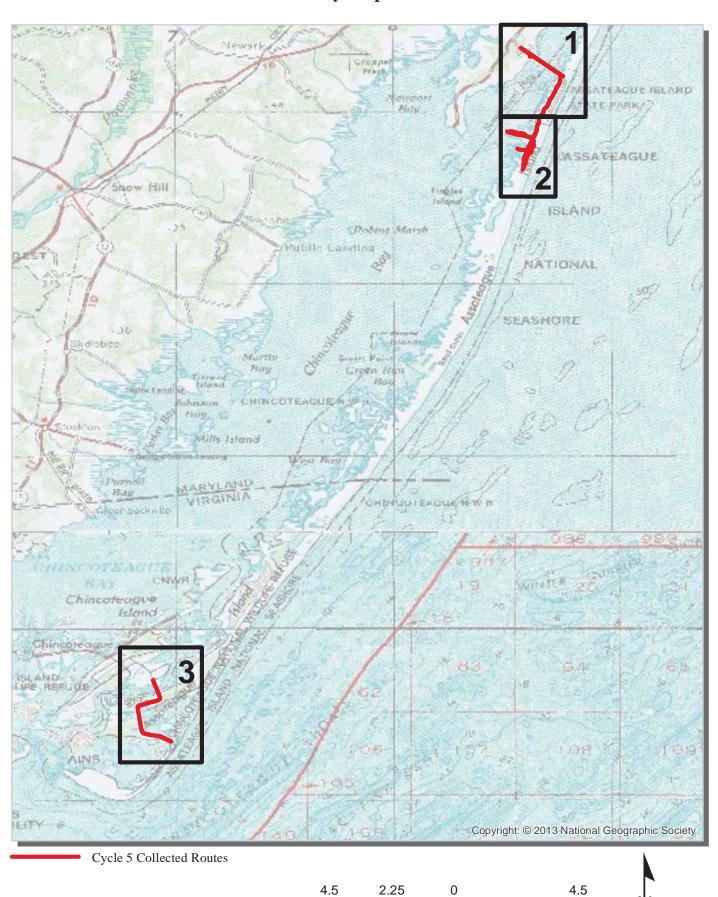
Section 4 Park Route Location Maps



Assateague Island National Seashore



Assateague Island National Seashore Route Location Map Key Map



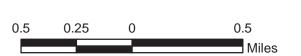
4-1

Miles

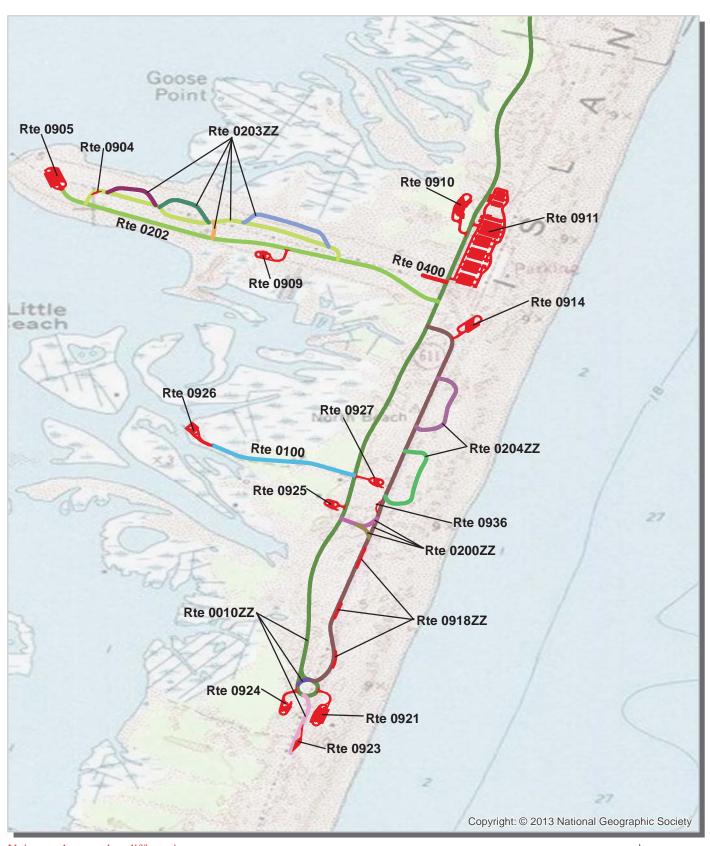
Assateague Island National Seashore Route Location Map Area 1



Unique colors used to differentiate routes



Assateague Island National Seashore Route Location Map Area 2



Unique colors used to differentiate routes

Assateague Island National Seashore Route Location Map Area 3

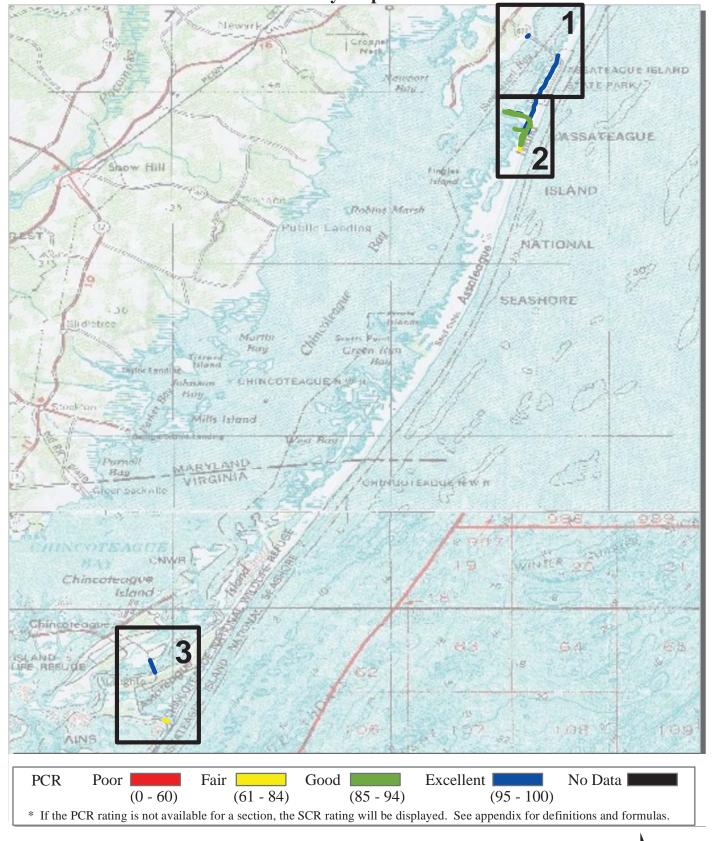


Unique colors used to differentiate routes



Assateague Island National Seashore Route Condition Map PCR - Mile by Mile

Key Map



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

Assateague Island National Seashore Route Condition Map PCR - Mile by Mile Area 1



Assateague Island National Seashore Route Condition Map PCR - Mile by Mile Area 2



0.25

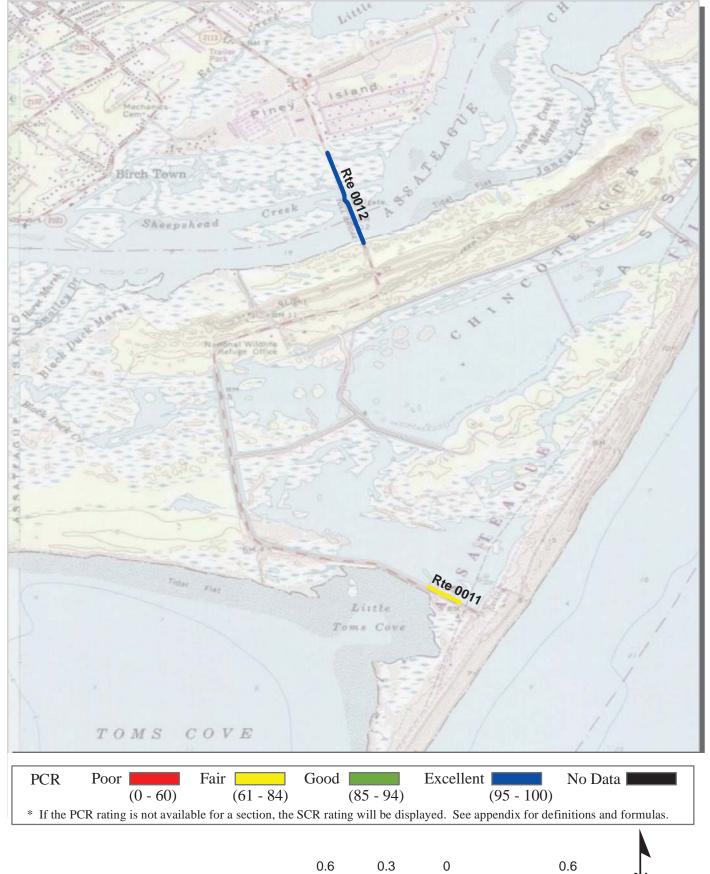
0.125

0

0.25

Miles

Assateague Island National Seashore Route Condition Map PCR - Mile by Mile Area 3



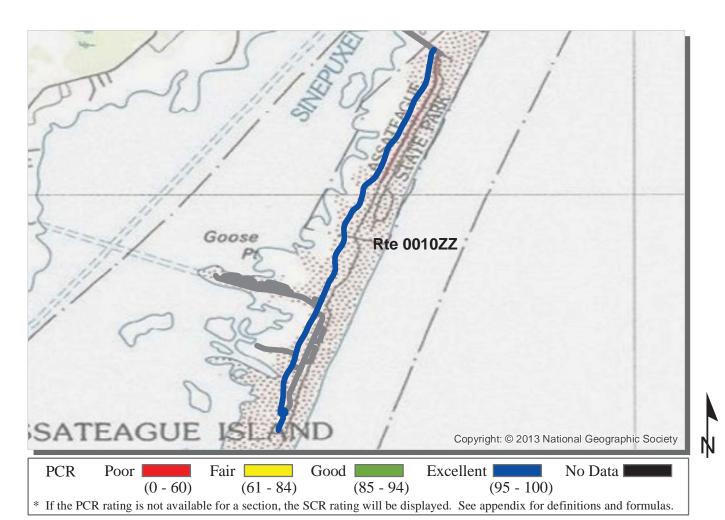
Miles

Section 5 Paved Route Condition Rating Sheets



Assateague Island National Seashore





ROUTE: 0010ZZ BAYBERRY DRIVE

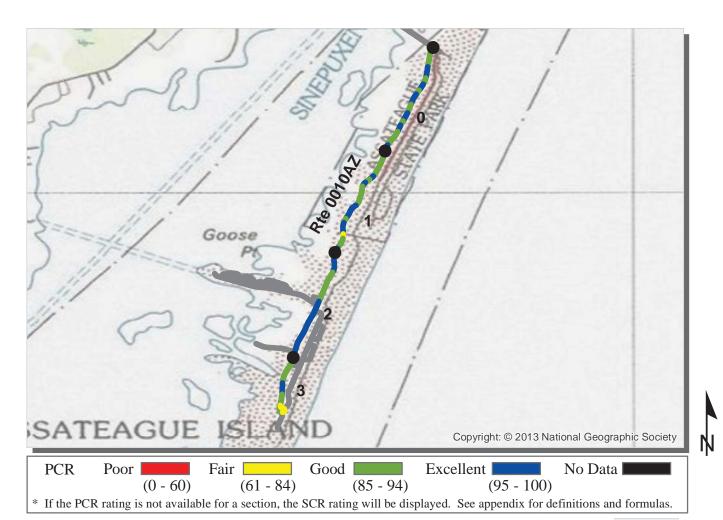
ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Summary Record COLLECTED: 8/26/2013
NOPTHEAST DECION TOTAL LENGTH: 3.77 Miles

NORTHEAST REGION		TOTAL	LENGTH:	3.77 Miles
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	95			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.



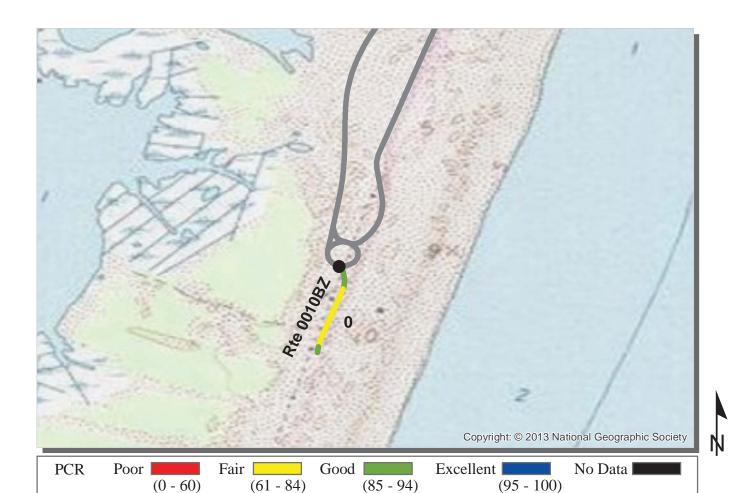
ROUTE: 0010AZ BAYBERRY DRIVE MAIN PARK ACCESS

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NORTHEAST REGION TOTAL LENGTH: 3 60 Miles

NORTHEAST REGION	TOTAL	3.60 Miles			
Section Number	0	1	2	3	
Section Length (mi)	1.00	1.00	1.00	0.60	
Cross Section Information					
Number of Lanes	2	2	2	2	
Paved Width (ft)	29	24	25	22	
Lane Width (ft)	11	11	11	12	
Roadway Condition Information					
SCR (Surface Condition Rating)	94	93	95	93	
PCR (Pavement Condition Rating)	96	95	96	92	
Distress Index Values					
Structural Crack Index	97	98	95	93	
Transverse Cracking Index	99	99	97	94	
Patching Index	99	99	100	100	
Rutting Index	94	93	97	98	
Roughness Condition Index (RCI)	98	98	98	91	

NOTES:



ROUTE: 0010BZ BAYBERRY DRIVE OSV ROAD ACCESS ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013

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

NORTHEAST REGION		TOTAL	LENGTH:	0.15 Miles
Section Number	0			
Section Length (mi)	0.15			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	21			
Lane Width (ft)	9			
Roadway Condition Information				
SCR (Surface Condition Rating)	82			
PCR (Pavement Condition Rating)	82			
Distress Index Values				
Structural Crack Index	82			
Transverse Cracking Index	89			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

NOTES:



ROUTE: 0010CZ BAYBERRY DRIVE CIRCLE SPUR ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

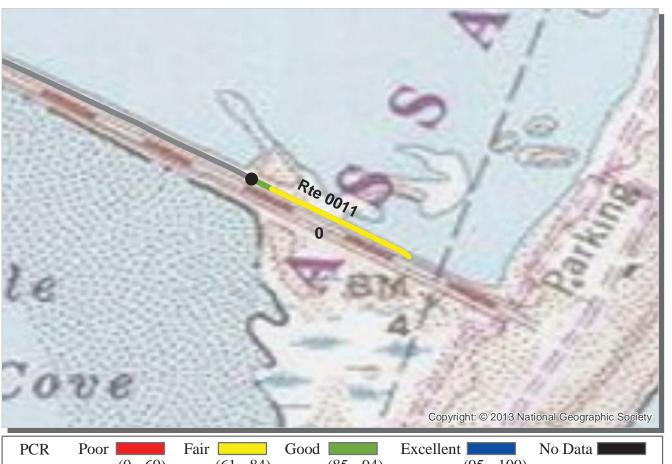
Subcomponent Record COLLECTED: 8/26/2013
NOPTHEAST DECION TOTAL LENGTH: 0.02 Miles

NORTHEAST REGION		TOTAL	LENGTH:	0.02 Miles
Section Number	0			
Section Length (mi)	0.02			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	28			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	88			
PCR (Pavement Condition Rating)	88			
Distress Index Values				
Structural Crack Index	98			
Transverse Cracking Index	88			
Patching Index	100			
Rutting Index	96			
Roughness Condition Index (RCI)	NC			

NOTES:

 $Structural\,Crack\,Index\,is\,\,a\,\,combination\,\,of\,\,the\,\,Longitudinal\,\,Cracking\,\,Index\,and\,\,Alligator\,\,Cracking\,\,Index.$ See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

8/26/2013



(0 - 60)(61 - 84)(85 - 94)(95 - 100)* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0011 BEACH ROAD

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

COLLECTED: NORTHEAST REGION TOTAL LENGTH: **0.15 Miles** Section Number 0 0.15 Section Length (mi) **Cross Section Information** Number of Lanes Paved Width (ft) 21 10 Lane Width (ft) Roadway Condition Information SCR (Surface Condition Rating) 76 PCR (Pavement Condition Rating) | 76 Distress Index Values Structural Crack Index 76 94 Transverse Cracking Index Patching Index 100

NOTES:

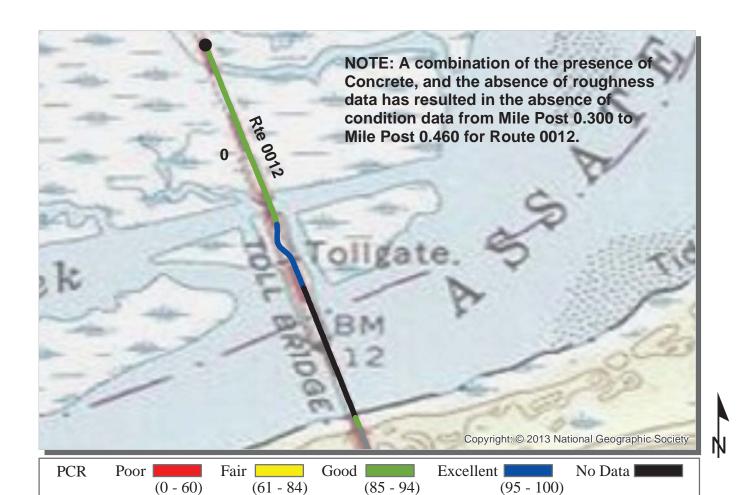
Rutting Index

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

94

NC

Roughness Condition Index (RCI)



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

COLLECTED:

8/26/2013

ROUTE: 0012 MADDOX BOULEVARD

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

				0,20,2020
NORTHEAST REGION		TOTAL	LENGTH:	0.47 Miles
Section Number	0			
Section Length (mi)	0.47			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	21			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	95			
PCR (Pavement Condition Rating)	95			
Distress Index Values				
Structural Crack Index	95			
Transverse Cracking Index	98			
Patching Index	99			
Rutting Index	95			
Roughness Condition Index (RCI)	NC			

NOTES:



COLLECTED:

8/26/2013

ROUTE: 0013 MARSH VIEW LANE

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

		COLLECTED	0/20/2013
NORTHEAST REGION		TOTAL LENGTH	I: 0.08 Miles
Section Number	0		
Section Length (mi)	0.08		
Cross Section Information			
Number of Lanes	2		
Paved Width (ft)	23		
Lane Width (ft)	12		
Roadway Condition Information			
SCR (Surface Condition Rating)	100		
PCR (Pavement Condition Rating)	100		
Distress Index Values			

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

100

100

100

100

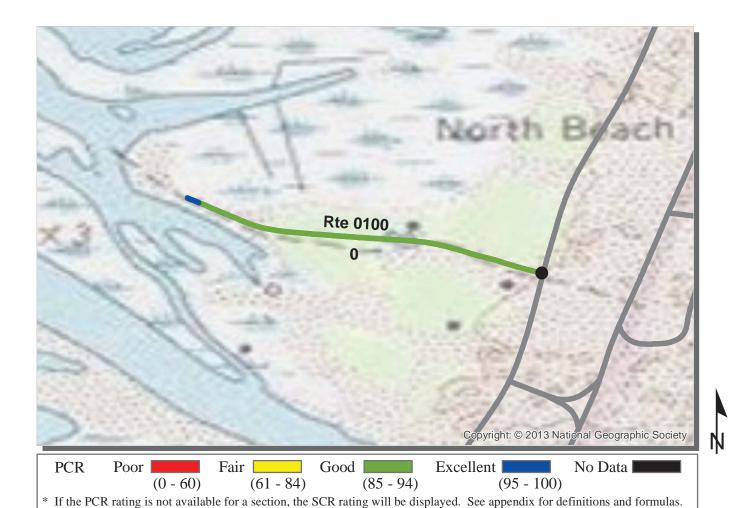
NC

Roughness Condition Index (RCI)

Structural Crack Index

Patching Index Rutting Index

Transverse Cracking Index



ROUTE: 0100 FERRY LANDING ROAD

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

		COLLECTED:	8/26/2013
NORTHEAST REGION		TOTAL LENGTH:	0.29 Miles
Section Number	0		
Section Length (mi)	0.29		
Cross Section Information			
Number of Lanes	2		
Paved Width (ft)	19		
Lane Width (ft)	9		
Roadway Condition Information			
SCR (Surface Condition Rating)	93		
PCR (Pavement Condition Rating)	93		
Distress Index Values			
Structural Crack Index	97		
Transverse Cracking Index	97		
Patching Index	100		
Rutting Index	93		
Roughness Condition Index (RCI)	NC		

NOTES:





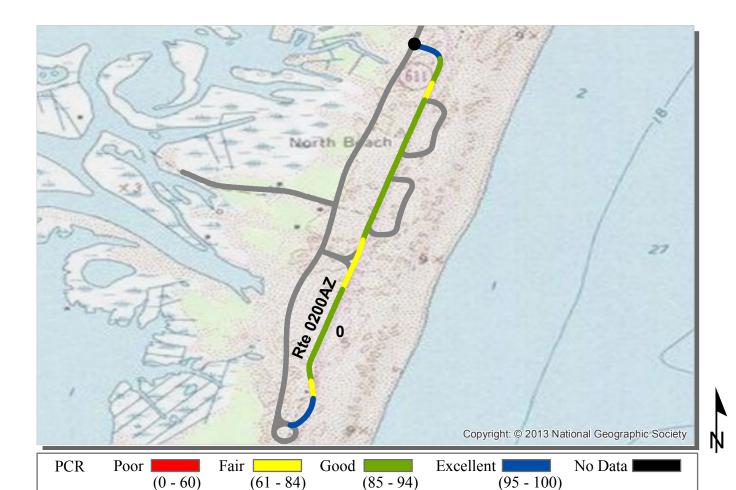
ROUTE: 0200ZZ OCEANSIDE DRIVE

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Summary Record COLLECTED: 8/26/2013
NOPTHEAST RECION TOTAL LENGTH: 1 07 Miles

NORTHEAST REGION		TOTAL	LENGTH:	1.07 Miles
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	90			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			

NOTES:



ROUTE: 0200AZ OCEANSIDE DRIVE - CAMPGROUND ACCESS

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013

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

NORTHEAST REGION		TOTAL	LENGTH:	0.96 Miles
Section Number	0			
Section Length (mi)	0.96			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	21			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	90			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	90			
Transverse Cracking Index	97			
Patching Index	100			
Rutting Index	97			
Roughness Condition Index (RCI)	NC			

NOTES:



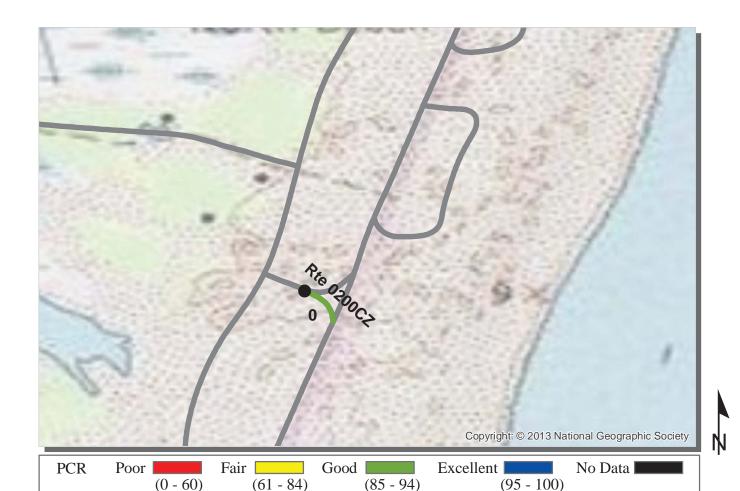
ROUTE: 0200BZ OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NORTHEAST REGION TOTAL LENGTH: 0.07 Miles

NORTHEAST REGION		TOTAL	LENGTH:	0.07 Miles
Section Number	0			
Section Length (mi)	0.07			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	17			
Lane Width (ft)	13			
Roadway Condition Information				
SCR (Surface Condition Rating)	92			
PCR (Pavement Condition Rating)	92			
Distress Index Values				
Structural Crack Index	92			
Transverse Cracking Index	97			
Patching Index	100			
Rutting Index	98			
Roughness Condition Index (RCI)	NC			

NOTES:



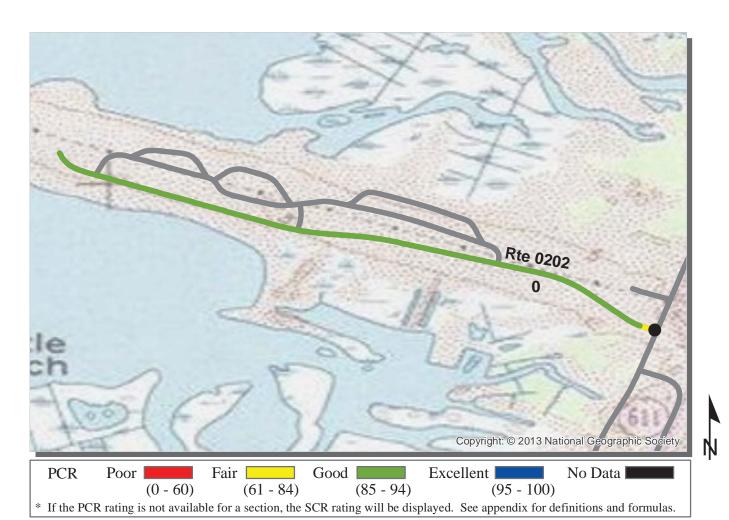
ROUTE: 0200CZ OCEANSIDE DRIVE - CONNECTOR FROM BAYBERRY ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NOPTHEAST DECION TOTAL LENGTH: 0.03 Miles

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

NORTHEAST REGION		TOTAL	LENGTH:	0.03 Miles
Section Number	0			
Section Length (mi)	0.03			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	14			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	93			
PCR (Pavement Condition Rating)	93			
Distress Index Values				
Structural Crack Index	93			
Transverse Cracking Index	96			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

NOTES:



ROUTE: 0202 BAYSIDE DRIVE

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

		CO	LLECTED:	8/26/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.79 Miles
Section Number	0			
Section Length (mi)	0.79			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	23			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	88			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	89			
Transverse Cracking Index	88			
Patching Index	100			
Rutting Index	97			
Roughness Condition Index (RCI)	94			

NOTES:



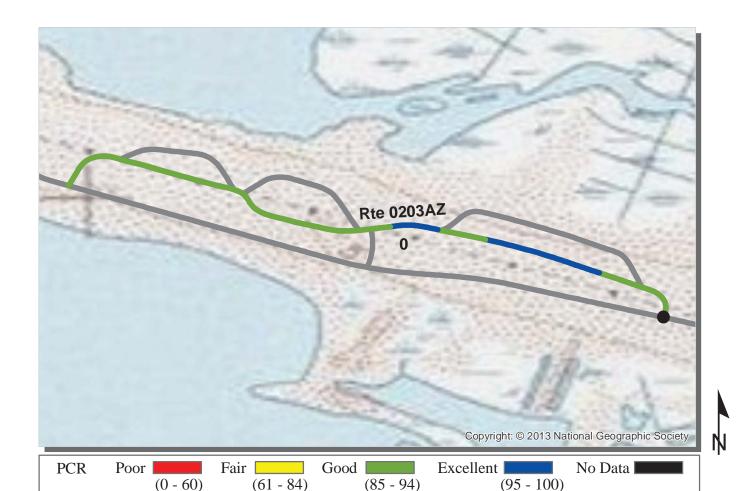
ROUTE: 0203ZZ BAYSIDE CAMPGROUND ROADS ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Summary Record COLLECTED: 8/26/2013
NOPTHEAST RECION TOTAL LENGTH: 1.02 Miles

NORTHEAST REGION		TOTAL	LENGTH:	1.02 Miles
Section Number				
Section Length (mi)				
Cross Section Information				
Number of Lanes	N/A			
Paved Width (ft)	N/A			
Lane Width (ft)	N/A			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	94			
Distress Index Values				
Structural Crack Index	N/A			
Transverse Cracking Index	N/A			
Patching Index	N/A			
Rutting Index	N/A			
Roughness Condition Index (RCI)	N/A			

NOTES:

 $Structural\,Crack\,Index\,is\,\,a\,\,combination\,\,of\,\,the\,\,Longitudinal\,\,Cracking\,\,Index\,and\,\,Alligator\,\,Cracking\,\,Index.$ See Section 10 for explanation of SCR, PCR, & all Distress\,\,Index\,\,Values\,.



ROUTE: 0203AZ BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NOPTHEAST RECION TOTAL LENGTH: 0.56 Miles

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

NORTHEAST REGION		TOTAL	LENGTH:	0.56 Miles
Section Number	0			
Section Length (mi)	0.56			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	94			
Distress Index Values				
Structural Crack Index	94			
Transverse Cracking Index	94			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

NOTES:



ROUTE: 0203BZ BAYSIDE CAMPGROUND - MIDDLE ACCESS

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NORTHEAST REGION TOTAL LENGTH: 0.04 Miles

NORTHEAST REGION TOTAL LE			LENGIH:	0.04 Milles	
Section Number	0				
Section Length (mi)	0.04				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	9				
Roadway Condition Information					
SCR (Surface Condition Rating)	90				
PCR (Pavement Condition Rating)	90				
Distress Index Values					
Structural Crack Index	95				
Transverse Cracking Index	90				
Patching Index	100				
Rutting Index	99				
Roughness Condition Index (RCI)	NC				

NOTES:



ROUTE: 0203CZ BAYSIDE CAMPGROUND - LOOP A, SITES 14-24

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NORTHEAST RECION TOTAL LENGTH: 0.20 Miles

NORTHEAST REGION		IUIAL	LENGIH:	0.20 Miles
Section Number	0			
Section Length (mi)	0.20			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	95			
PCR (Pavement Condition Rating)	95			
Distress Index Values				
Structural Crack Index	96			
Transverse Cracking Index	95			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

SITES 14-24



ROUTE: 0203DZ BAYSIDE CAMPGROUND - LOOP B, SITES 33-37

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

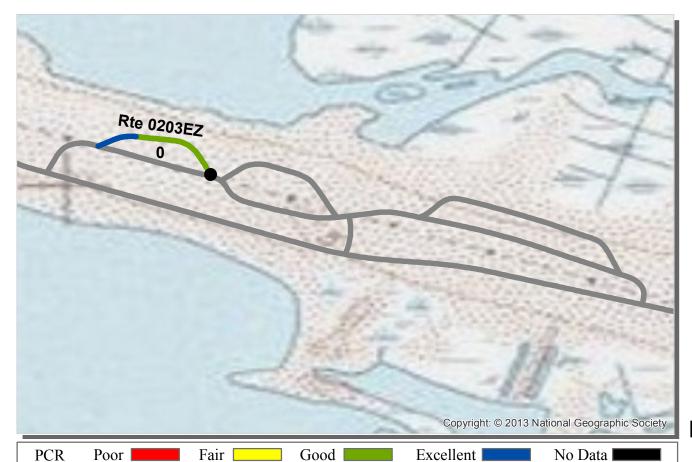
Subcomponent Record COLLECTED: 8/26/2013
NORTHEAST RECION TOTAL LENGTH: 0.12 Miles

NORTHEAST REGION		IUIAL	LENGIH:	0.12 Miles
Section Number	0			
Section Length (mi)	0.12			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	13			
Lane Width (ft)	13			
Roadway Condition Information				
SCR (Surface Condition Rating)	93			
PCR (Pavement Condition Rating)	93			
Distress Index Values				
Structural Crack Index	93			
Transverse Cracking Index	98			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

SITES 33-37



(0-60) (61-84) (85-94) (95-100)* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

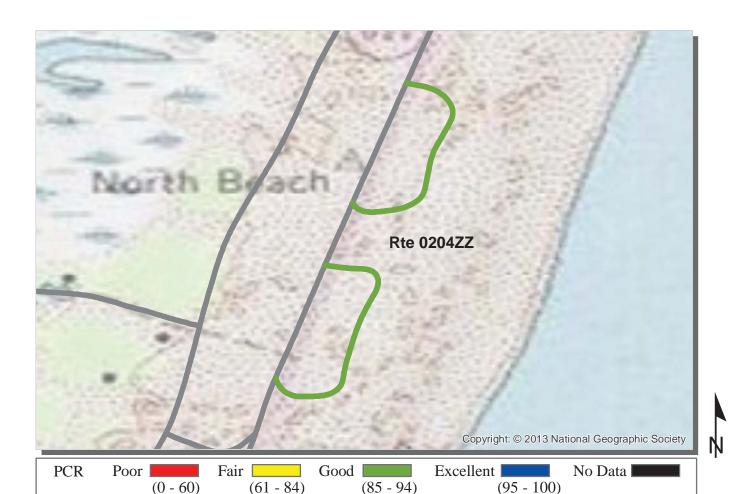
ROUTE: 0203EZ BAYSIDE CAMPGROUND - LOOP C, SITES 45-49

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/2013
NOPTHEAST DECION TOTAL LENGTH: 0.11 Miles

NORTHEAST REGION		TOTAL	LENGTH:	0.11 Miles
Section Number	0			
Section Length (mi)	0.11			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	13			
Lane Width (ft)	13			
Roadway Condition Information				
SCR (Surface Condition Rating)	96			
PCR (Pavement Condition Rating)	96			
Distress Index Values				
Structural Crack Index	96			
Transverse Cracking Index	96			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

NOTES:



ROUTE: 0204ZZ OCEANSIDE CAMPGROUND LOOPS ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

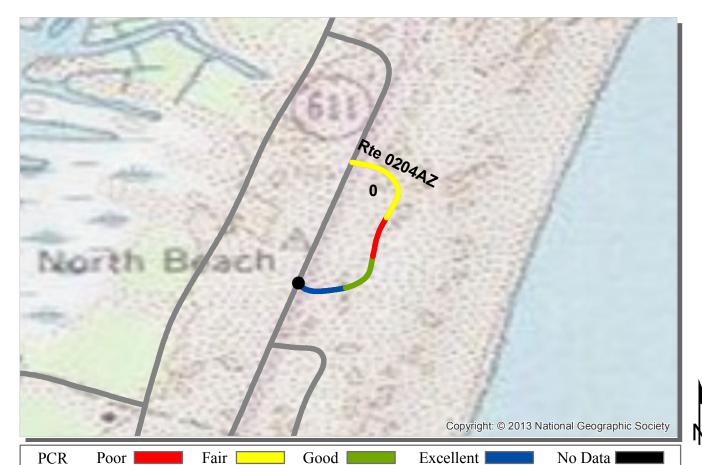
Summary Record COLLECTED: 8/26/2013
NORTHEAST REGION TOTAL LENGTH: 0.40 Miles

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

NORTHEAST REGION TOTAL LENG.			LENGIH:	0.40 Miles	
Section Number					
Section Length (mi)					
Cross Section Information					
Number of Lanes	N/A				
Paved Width (ft)	N/A				
Lane Width (ft)	N/A				
Roadway Condition Information					
SCR (Surface Condition Rating)	92				
PCR (Pavement Condition Rating)	92				
Distress Index Values					
Structural Crack Index	N/A				
Transverse Cracking Index	N/A				
Patching Index	N/A				
Rutting Index	N/A				
Roughness Condition Index (RCI)	N/A				

NOTES:

 $Structural\,Crack\,Index\,is\,\,a\,\,combination\,\,of\,\,the\,\,Longitudinal\,\,Cracking\,\,Index\,and\,\,Alligator\,\,Cracking\,\,Index.$ See Section 10 for explanation of SCR, PCR, & all Distress Index Values.



(0 - 60)(61 - 84)(85 - 94)(95 - 100)* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0204AZ OCEANSIDE CAMPGROUND LOOP 1, SITES 1-19

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

COLLECTED: Subcomponent Record 8/26/2013 NODTHEAST DECION

NORTHEAST REGION		TOTAL	LENGTH:	0.19 Miles
Section Number	0			
Section Length (mi)	0.19			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	85			
PCR (Pavement Condition Rating)	85			
Distress Index Values				
Structural Crack Index	85			
Transverse Cracking Index	94			
Patching Index	100			
Rutting Index	98			
Roughness Condition Index (RCI)	NC			

NOTES:



ROUTE: 0204BZ OCEANSIDE CAMPGROUND LOOP 2, SITES 20-41

ASIS: ASSATEAGUE ISLAND NATIONAL SEASHORE

Subcomponent Record COLLECTED: 8/26/201:
NOPTHEAST RECION TOTAL LENGTH: 0.21 Miles

NORTHEAST REGION	ON TOTAL LENG			LENGTH:	0.21 Miles
Section Number	0				
Section Length (mi)	0.21				
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	14				
Lane Width (ft)	14				
Roadway Condition Information					
SCR (Surface Condition Rating)	97				
PCR (Pavement Condition Rating)	97				
Distress Index Values					
Structural Crack Index	97				
Transverse Cracking Index	97				
Patching Index	99				
Rutting Index	99				
Roughness Condition Index (RCI)	NC				

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index. See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

SITES 20-41

Section 6 Manually Rated Paved Route Condition Rating Sheets



Assateague Island National Seashore

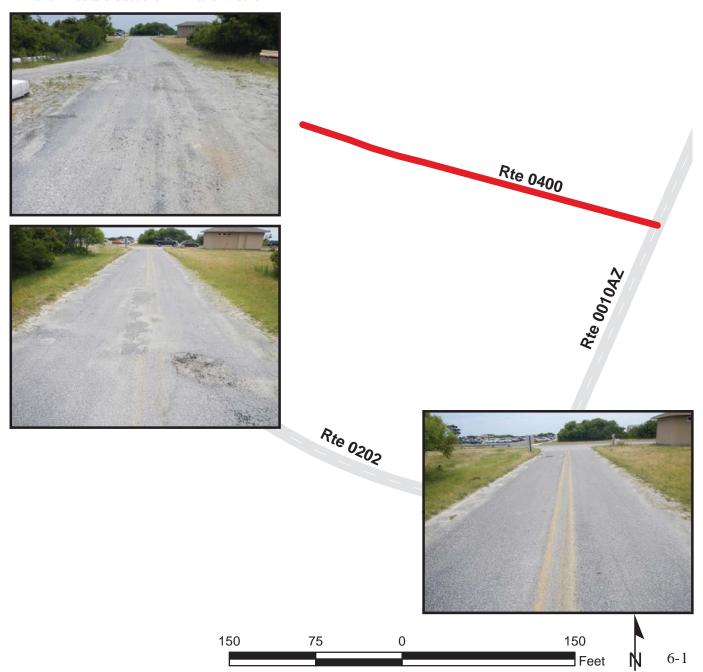


BONEYARD ACCESS ROAD

FROM ROUTE 0010ZZ (BAYBERRY DRIVE) TO ROUTE 0912 (BONEYARD AREA)

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0400	NONPUBLIC	7/1/2013	4,251	0.07	0.04	18.3
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	1	0	GUTTER	NO CURB	POOR/45	AS

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



Section 7 Parking Area Condition Rating Sheets



Assateague Island National Seashore



ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING

FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)

TO ROUTES 0901 (HOUSING ACCESS ROAD AND PARKING AREA) AND 0902 (HEADQUARTERS PARKING AREA)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0900	PUBLIC	7/1/2013	22,363	0.39	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	1	0	GUTTER	NO CURB	POOR/45

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



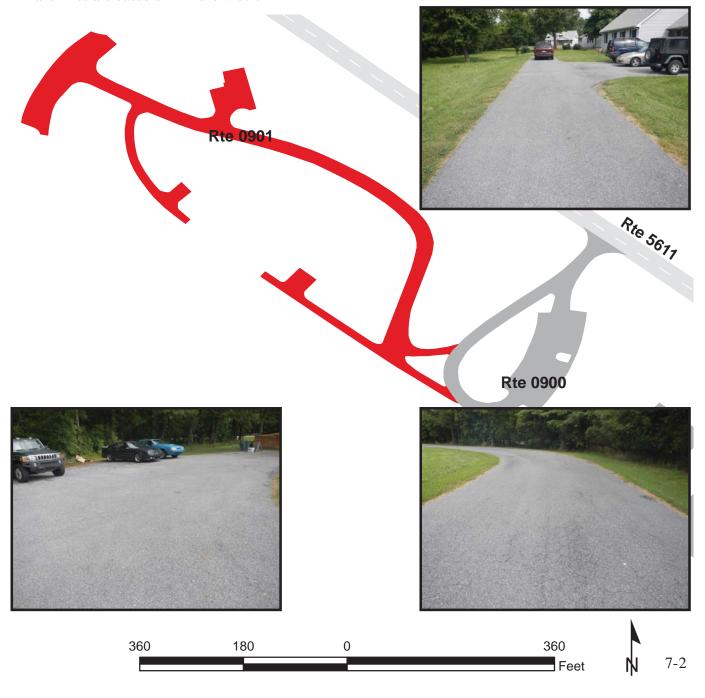
7-1

Feet

HOUSING ACCESS ROAD AND PARKING AREA FROM ROUTE 0900 (ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING) TO PARKING AND HOUSING AREA

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0901	NONPUBLIC	7/1/2013	36,805	0.63	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
1	3	0	GUTTER	NO CURB	FAIR/73

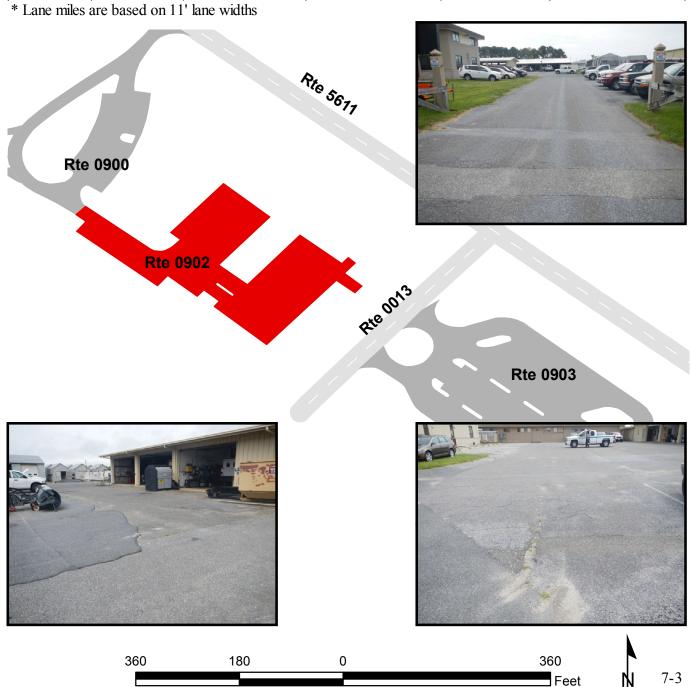
^{*} Lane miles are based on 11' lane widths



HEADQUARTERS PARKING AREA

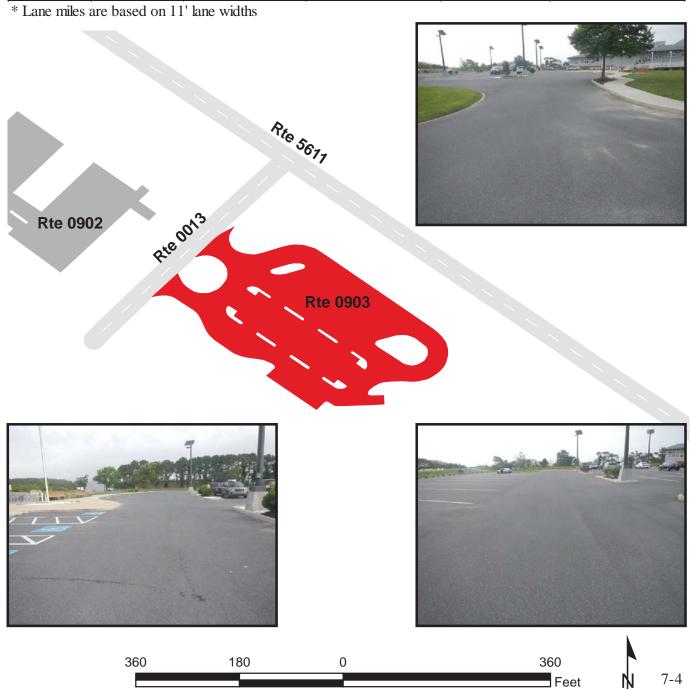
FROM ROUTE 0900 (ENVIRONMENTAL EDUCATION CENTER ACCESS PARKING)
TO MAINTENANCE / HEADQUARTERS AREA

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0902	NONPUBLIC	7/1/2013	38,416	0.66	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	4	1	GUTTER	WOOD CURB	POOR/45



VISITOR CENTER ACCESS PARKING FROM ROUTE 0013 (MARSH VIEW LANE) TO ROUTE 0013 (MARSH VIEW LANE)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0903	PUBLIC	7/1/2013	57,268	0.99	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	GOOD/90



BAYSIDE DUMP STATION

FROM ROUTE 0203ZZ (BAYSIDE CAMPGROUND ROADS)
TO ROUTE 0203ZZ (BAYSIDE CAMPGROUND ROADS)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	7/1/2013	1,330	0.02	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90

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



5000 P



Rte 0904

Rte 0202



7-5

Route 0905

BAYSIDE PARKING AREA

FROM END OF ROUTE 0202 (BAYSIDE DRIVE) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	7/1/2013	43,219	0.74	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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









Rte 0202

Route 0909

LIFE OF THE MARSH TRAIL PARKING

FROM ROUTE 0202 (BAYSIDE DRIVE)

TO PARKING

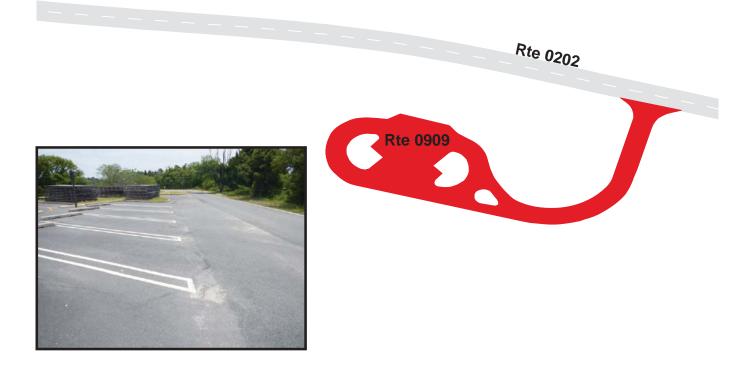
Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0909	PUBLIC	7/1/2013	18,632	0.32	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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



Rte 0203AZ





270 Feet

Route 0910

NORTH BEACH RANGER STATION PARKING

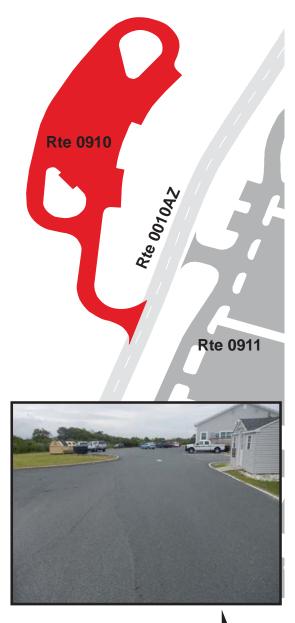
FROM ROUTE 0010ZZ (BAYBERRY DRIVE)
TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0910	PUBLIC	7/1/2013	42,579	0.73	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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







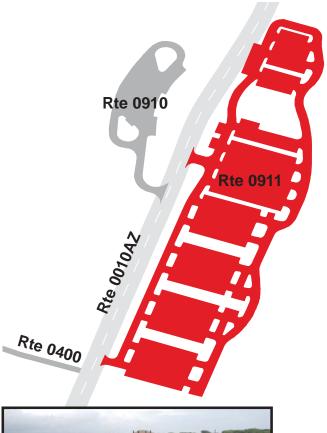


NORTH BEACH PARKING

FROM ROUTE 0010ZZ (BAYBERRY DRIVE) TO ROUTE 0010ZZ (BAYBERRY DRIVE)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0911	PUBLIC	7/1/2013	244,653	4.21	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	20	0	GUTTER	CURB	GOOD/90

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











Route 0914

OCEANSIDE CAMPGROUND GROUP PARKING FROM ROUTE 0200ZZ (OCEANSIDE DRIVE) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0914	PUBLIC	7/1/2013	28,647	0.49	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45



720

360

720

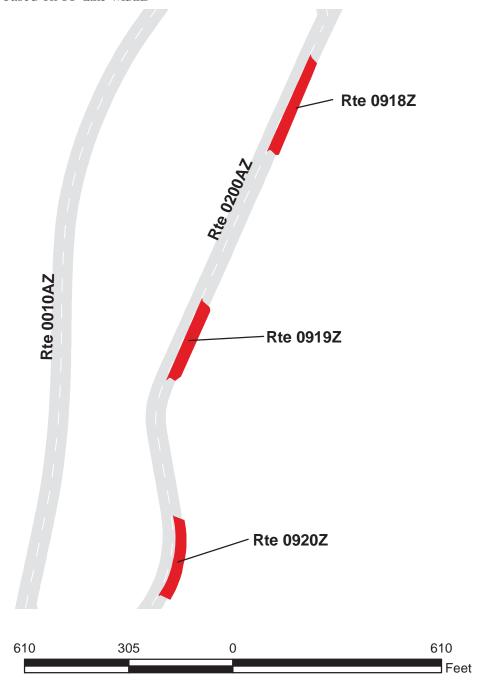
Feet

OCEANSIDE WALK-IN CAMPGROUND PARKING LOTS ADJACENT TO 0200ZZ (OCEANSIDE DRIVE) ON LEFT

Summary Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0918ZZ	PUBLIC	7/1/2013	19,356	0.33	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	SUMMARY/45

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

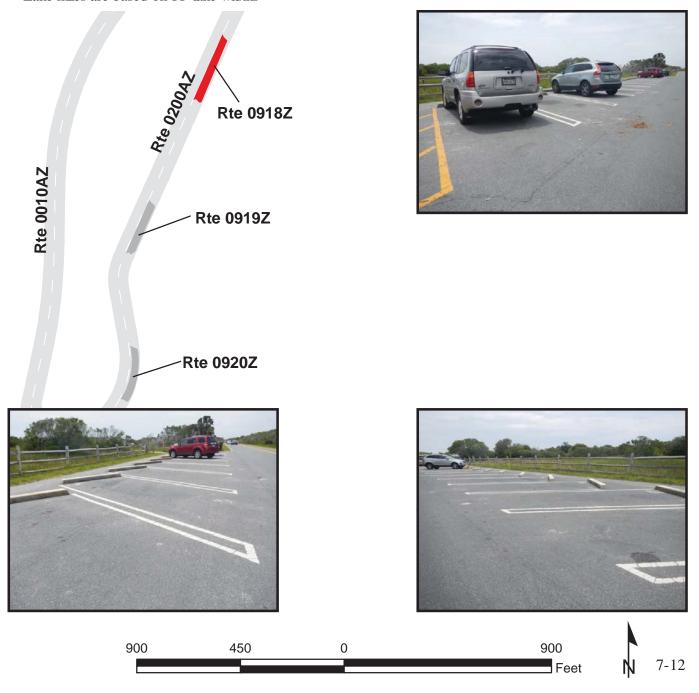


OCEANSIDE WALK-IN CAMPGROUND 42-65 PARKING ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT

Subcomponent Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0918Z	PUBLIC	7/1/2013	7,072	0.12	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	POOR/45

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

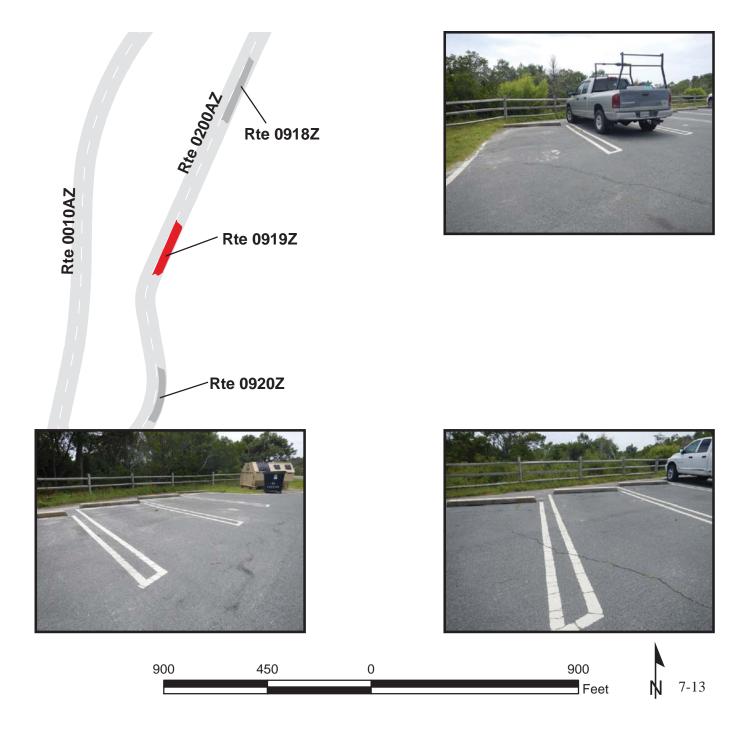


OCEANSIDE WALK-IN CAMPGROUND 66-85 PARKING ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT

Subcomponent Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0919Z	PUBLIC	7/1/2013	6,441	0.11	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	POOR/45

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

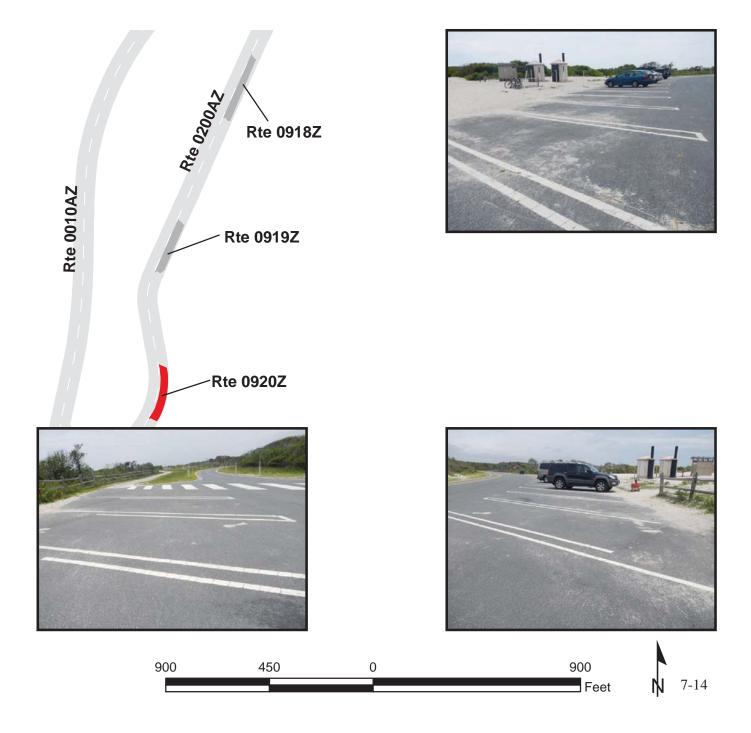


OCEANSIDE WALK-IN CAMPGROUND 86-104 PARKING ADJACENT TO 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS) ON LEFT

Subcomponent Record

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0920Z	PUBLIC	7/1/2013	5,843	0.10	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	POOR/45

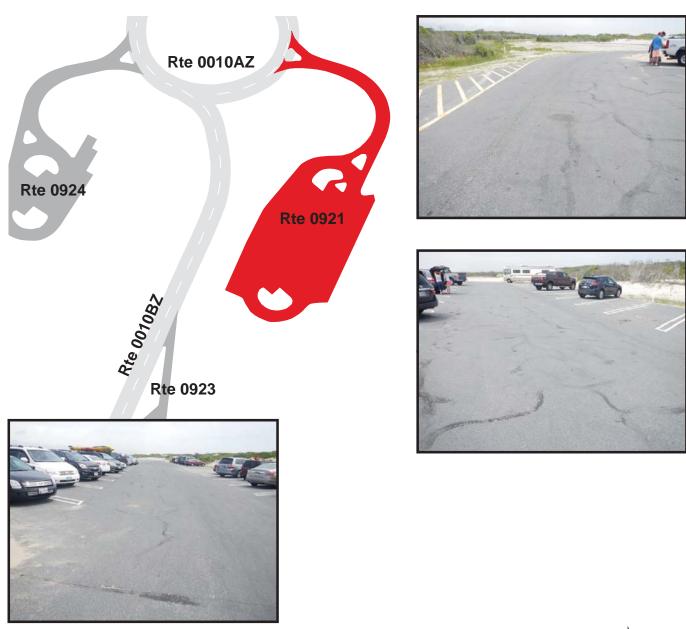
^{*} Lane miles are based on 11' lane widths



SOUTH OCEAN BEACH PARKING FROM ROUTE 0010ZZ (BAYBERRY DRIVE) TO PARKING

Route Number	Public / NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0921	PUBLIC	7/1/2013	38,360	0.66	AS
0)21	TOBLIC	7/1/2013	30,300	0.00	TIS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	POOR/45

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



180

360

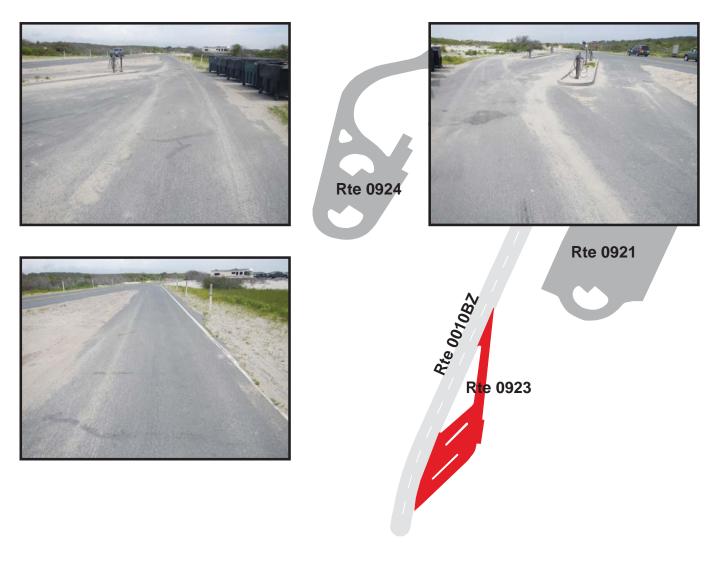
360

AIR PUMP STATION PARKING AREA FROM ROUTE 0010ZZ (BAYBERRY DRIVE)

TO ROUTE 0010ZZ (BAYBERRY DRIVE)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0923	PUBLIC	7/1/2013	8,270	0.14	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	FAIR/73

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

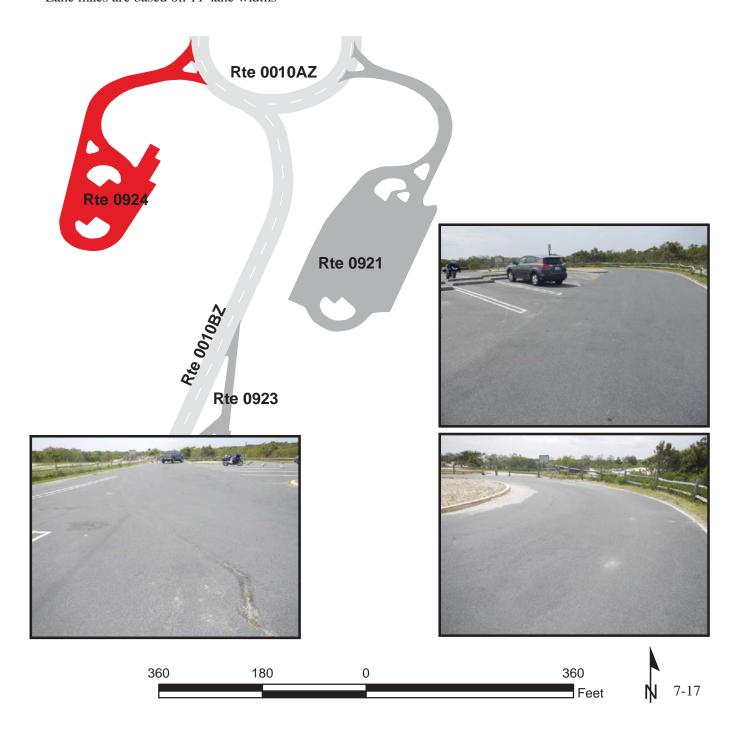




LIFE OF THE DUNES PARKING FROM ROUTE 0010ZZ (BAYBERRY DRIVE) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0924	PUBLIC	7/1/2013	20,499	0.35	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	FAIR/73

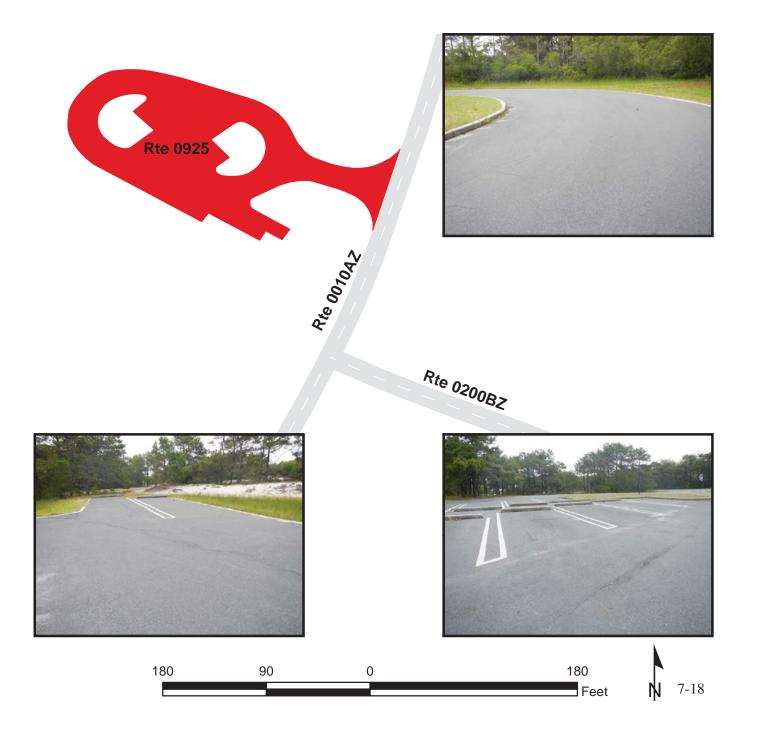
^{*} Lane miles are based on 11' lane widths



LIFE OF THE FOREST TRAIL PARKING FROM ROUTE 0010ZZ (BAYBERRY DRIVE) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0925	PUBLIC	7/1/2013	14,135	0.24	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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

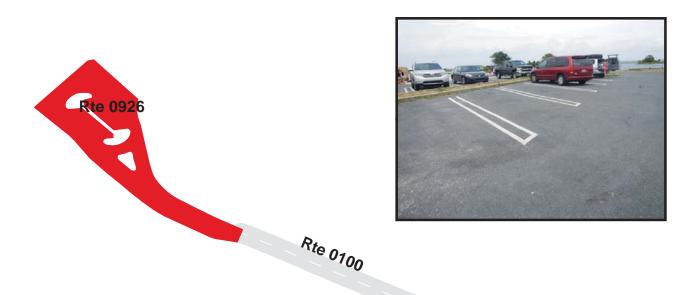


FERRY LANDING PARKING

FROM END OF ROUTE 0100 (FERRY LANDING ROAD) TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0926	PUBLIC	7/1/2013	22,072	0.38	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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







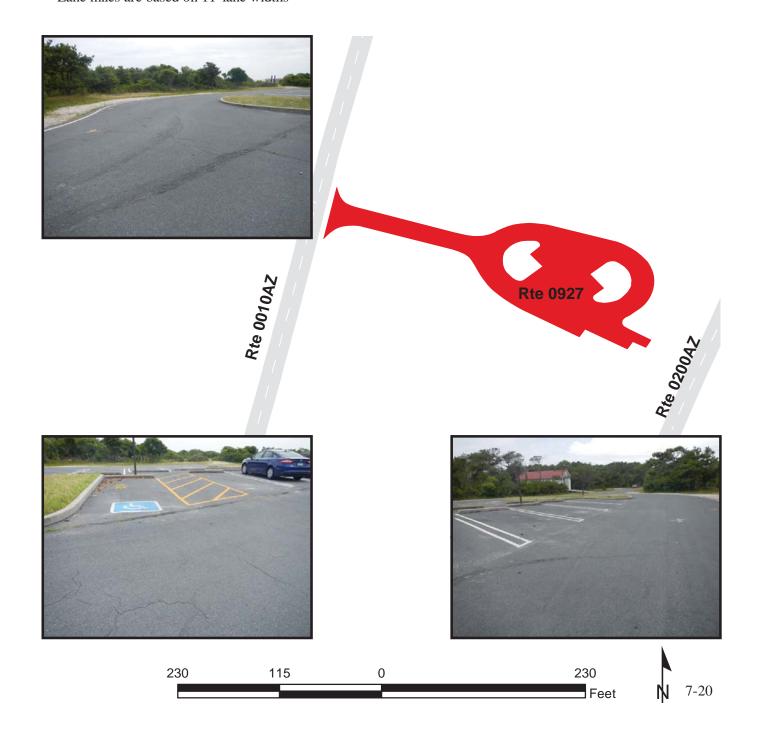


HISTORIC BOATHOUSE EXHIBIT PARKING AREA FROM ROUTE 0010ZZ (BAYBERRY DRIVE)

TO PARKING

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0927	PUBLIC	7/1/2013	15,210	0.26	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
0	0	0	GUTTER	CURB	POOR/45

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



OCEANSIDE DUMP STATION

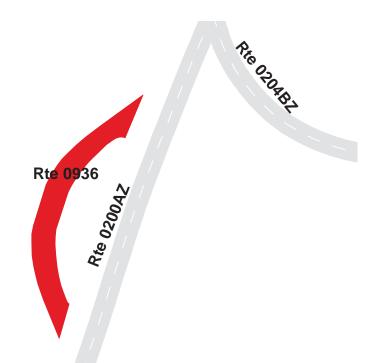
FROM ROUTE 0200ZZ (OCEANSIDE DRIVE)

TO ROUTE 0200ZZ (OCEANSIDE DRIVE)

Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0936	PUBLIC	7/1/2013	2,069	0.04	AS
Culverts	Drop Inlets	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90

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







140

Rte 0200EZ



Section 8 Parkwide/Route Maintenance Features Summaries



Assateague Island National Seashore



ASIS: PARKWIDE MAINTENANCE FEATURES SUMMARY Includes DCV, MRL, MRP & PKG routes collected in Cycle-5

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all DCV driven routes. Culverts, drop inlets, and gates were also collected on all Manually Rated Routes and Paved Parking areas. Those totals are reflected below.

FEATURE	LINEAR FEET	COUNT
BRIDGE		2
CATTLE GUARD		0
CULVERT		48
CURB	1,127	
DROP INLET		32
GATE		5
GUARD/GUIDE RAIL	15,295	
CABLE	0	
NON-CABLE	15,295	
GUARD/GUIDE WALL	1,917	
BOLLARD	0	
TEMPORARY BARRIER	0	
NON TEMP/BOLLARD	1,917	
INTERSECTION		131
LOW WATER CROSSING	0	0
MILE MARKER		0
OVERPASS		0
PARK BOUNDARY		0
PAVED DITCH	0	
PULLOUT	966	7
RAILROAD CROSSING		0
RETAINING WALL	0	0
SIGN		212
STATE BOUNDARY		0
TRAFFIC LIGHT		0
TUNNEL	0	0

ASIS: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5.

FEATURE	ROUTE 0010ZZ BAYBERRY DRIVE	ROUTE 0011 BEACH ROAD	ROUTE 0012 MADDOX BOULEVARD	ROUTE 0013 MARSH VIEW LANE	ROUTE 0100 FERRY LANDING ROAD	ROUTE 0200ZZ OCEANSIDE DRIVE	UNIT
BRIDGE	0	0	2	0	0	0	EACH
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	33	0	0	0	0	4	EACH
CURB	915	0	132	80	0	0	LINEAR FEET
DROP INLET	0	0	3	0	0	0	EACH
GATE	3	0	1	0	0	0	EACH
GUARD/GUIDE RAIL	12,677	0	2,618	0	0	0	LINEAR FEET
CABLE	0	0	0	0	0	0	LINEAR FEET
NON-CABLE	12,677	0	2,618	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	1,917	0	0	0	LINEAR FEET
BOLLARD	0	0	0	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0	1,917	0	0	0	LINEAR FEET
INTERSECTION	36	6	5	5	4	31	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	0	0	LINEAR FEET
PULLOUT	2	2	0	0	0	0	EACH
PULLOUT	407	269	0	0	0	0	LINEAR FEET
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	LINEAR FEET
SIGN	83	15	33	5	3	30	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
TUNNEL	0	0	0	0	0	0	LINEAR FEET

ASIS: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5.

FEATURE	ROUTE 0202 BAYSIDE DRIVE	ROUTE 0203ZZ BAYSIDE CAMPGROUND ROADS	ROUTE 0204ZZ OCEANSIDE CAMPGROUND LOOPS	UNIT
BRIDGE	0	0	0	EACH
CATTLE GUARD	0	0	0	EACH
CULVERT	8	0	2	EACH
CURB	0	0	0	LINEAR FEET
DROP INLET	0	0	0	EACH
GATE	0	0	0	EACH
GUARD/GUIDE RAIL	0	0	0	LINEAR FEET
CABLE	0	0	0	LINEAR FEET
NON-CABLE	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	LINEAR FEET
BOLLARD	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0	0	LINEAR FEET
INTERSECTION	7	29	8	EACH
LOW WATER CROSSING	0	0	0	EACH
LOW WATER CROSSING	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	EACH
OVERPASS	0	0	0	EACH
PARK BOUNDARY	0	0	0	EACH
PAVED DITCH	0	0	0	LINEAR FEET
PULLOUT	0	3	0	EACH
PULLOUT	0	290	0	LINEAR FEET
RAILROAD CROSSING	0	0	0	EACH
RETAINING WALL	0	0	0	EACH
RETAINING WALL	0	0	0	LINEAR FEET
SIGN	11	23	9	EACH
STATE BOUNDARY	0	0	0	EACH
TRAFFIC LIGHT	0	0	0	EACH
TUNNEL	0	0	0	EACH
TUNNEL	0	0	0	LINEAR FEET

ASIS: STRUCTURE LIST

ROUTE	FUNCTIONAL	MILEPOST	MILEPOST		STRUCTURE
NUMBER	CLASS	START	END	FEATURE	NUMBER
0012	1	0.171	0.186	BRIDGE	4190-002
0012	1	0.306	0.463	BRIDGE	4190-001

Section 9 Route Maintenance Features Road Logs



Assateague Island National Seashore



ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO	inventoried by RIP in Cycle 3 on an paved routes.				
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT		
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)		
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5611 (MARYLAND STATE ROUTE 611)		
0.000	0.000	INTERSECTION	LEFT	ROUTE 5611 (MARYLAND STATE ROUTE 611)		
0.007	0.007	SIGN	LEFT	GUIDE, BIKE ROUTE		
0.007	0.007	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO		
0.007	0.007	SIGN	LEFT	GUIDE, GRAPHIC SIGN NO TEXT		
0.008	0.008	SIGN	LEFT	REGULATORY, STOP		
).044	0.044	CULVERT	N/A	N/A		
0.052	0.052	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30		
0.107	0.107	SIGN	LEFT	REGULATORY, DO NOT ENTER		
).114	0.114	INTERSECTION	LEFT	PAVED ROUTE (ACCESS TO STATE PARK / NON NPS)		
).119	0.119	SIGN	LEFT	REGULATORY, DO NOT ENTER		
).119	0.119	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT		
0.133	0.133	CULVERT	N/A	N/A		
).135	0.135	SIGN	LEFT	REGULATORY, SPEED LIMIT 25		
).167	0.392	GUARD/GUIDE RAIL	LEFT	N/A		
0.238	0.238	SIGN	RIGHT	GUIDE, HORSES BITE, KICK & CHARGE KEEP AT LEAST 10 FEET AWAY NO FEEDING, TOUCHING, ATTRACTING \$ 100 MINIMU		
0.306	0.306	CULVERT	N/A	N/A		
0.400	0.510	GUARD/GUIDE RAIL	LEFT	N/A		
0.421	0.421	CULVERT	N/A	N/A		
).441	0.441	SIGN	LEFT	REGULATORY, SPEED LIMIT 30		
).446	0.446	CULVERT	N/A	N/A		
0.503	0.503	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30		
).517	0.715	GUARD/GUIDE RAIL	LEFT	N/A		
).580	0.580	CULVERT	N/A	N/A		
).670	0.670	CULVERT	N/A	N/A		
).711	0.711	CULVERT	N/A	N/A		
0.724	0.777	GUARD/GUIDE RAIL	LEFT	N/A		
0.781	0.983	GUARD/GUIDE RAIL	LEFT	N/A		

ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO		inventoried by RIP in Cycle 5 on all paved routes.	
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT
0.877	0.877	CULVERT	N/A	N/A
0.927	0.927	CULVERT	N/A	N/A
0.977	0.977	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
0.990	1.243	GUARD/GUIDE RAIL	LEFT	N/A
0.997	0.997	CULVERT	N/A	N/A
1.145	1.145	SIGN	RIGHT	REGULATORY, NO PARKING STOPPING OR STANDING
1.145	1.145	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
1.160	1.160	SIGN	RIGHT	REGULATORY, NO PARKING STOPPING OR STANDING
1.166	1.166	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
1.169	1.169	CULVERT	N/A	N/A
1.246	1.246	INTERSECTION	LEFT	UNPAVED ROUTE (ACCESS TO STATE PARK / NON NPS)
1.248	1.248	SIGN	LEFT	REGULATORY, UNABLE TO READ FROM VIDEO
1.248	1.464	GUARD/GUIDE RAIL	LEFT	N/A
1.281	1.281	SIGN	LEFT	REGULATORY, SPEED LIMIT 30
1.287	1.287	CULVERT	N/A	N/A
1.381	1.381	CULVERT	N/A	N/A
1.401	1.401	CULVERT	N/A	N/A
1.427	1.427	CULVERT	N/A	N/A
1.463	1.463	SIGN	RIGHT	WARNING, 20 M.P.H.
1.463	1.463	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
1.469	1.625	GUARD/GUIDE RAIL	LEFT	N/A
1.517	1.517	CULVERT	N/A	N/A
1.522	1.522	CULVERT	N/A	N/A
1.561	1.561	CULVERT	N/A	N/A
1.602	1.602	CULVERT	N/A	N/A
1.628	1.741	GUARD/GUIDE RAIL	LEFT	N/A
1.668	1.668	CULVERT	N/A	N/A
1.673	1.673	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
1.698	1.698	CULVERT	N/A	N/A
1.722	1.722	CULVERT	N/A	N/A

ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.748	1.801	GUARD/GUIDE RAIL	LEFT	N/A
1.788	1.788	SIGN	LEFT	GUIDE, DO NOT APPROACH TOUCH OR FEED WILDLIFE INCLUDING HORSES CITATIONS WILL BE ISSUED
1.806	1.953	GUARD/GUIDE RAIL	LEFT	N/A
1.810	1.810	SIGN	RIGHT	GUIDE, FEE AREA
1.826	1.826	CULVERT	N/A	N/A
1.919	1.957	PULLOUT	RIGHT	N/A
1.950	1.950	SIGN	RIGHT	GUIDE, ASSATEAGUE ISLAND NATIONAL SEASHORE MARYLAND DISTRICT
1.960	2.081	GUARD/GUIDE RAIL	LEFT	N/A
1.962	2.081	GUARD/GUIDE RAIL	RIGHT	N/A
2.020	2.020	CULVERT	N/A	N/A
2.082	2.206	GUARD/GUIDE RAIL	RIGHT	N/A
2.086	2.201	GUARD/GUIDE RAIL	LEFT	N/A
2.119	2.119	CULVERT	N/A	N/A
2.120	2.120	CULVERT	N/A	N/A
2.181	2.181	SIGN	LEFT	REGULATORY, SPEED LIMIT 30
2.202	2.202	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.211	2.211	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.220	2.220	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.224	2.224	SIGN	N/A	GUIDE, PLEASE USE BOTH LANES
2.224	2.224	SIGN	N/A	GUIDE, UNABLE TO READ FROM VIDEO
2.230	2.230	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.234	2.234	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
2.238	2.238	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.246	2.255	CURB	N/A	N/A
2.246	2.246	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME
2.246	2.255	CURB	N/A	N/A
2.249	2.249	SIGN	N/A	GUIDE, OFF ROAD VEHICLE ZONE STATUS OPEN
2.249	2.249	SIGN	N/A	REGULATORY, WARNING NO LIFEGUARD ON DUTY
2.249	2.249	SIGN	N/A	REGULATORY, STOP

ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.249	2.249	SIGN	N/A	REGULATORY, STOP
2.252	2.252	GATE	N/A	N/A
2.252	2.252	SIGN	N/A	GUIDE, CAMPSITE CHECK-OUT BOX
2.254	2.254	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
2.274	2.274	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
2.284	2.284	INTERSECTION	LEFT	ROUTE 0911 (NORTH BEACH PARKING)
2.286	2.286	SIGN	RIGHT	GUIDE, CAMPGROUND OFFICE AND RANGER STATION
2.312	2.312	INTERSECTION	RIGHT	ROUTE 0910 (NORTH BEACH RANGER STATION PARKING)
2.313	2.419	CURB	LEFT	N/A
2.316	2.428	GUARD/GUIDE RAIL	RIGHT	N/A
2.318	2.318	SIGN	RIGHT	GUIDE, NORTH OCEAN BEACH
2.337	2.337	CULVERT	N/A	N/A
2.360	2.360	SIGN	LEFT	GUIDE, CAMPGROUND OFFICE AND RANGER STATION
2.363	2.363	SIGN	RIGHT	GUIDE, LIFEGUARDED BEACH
2.425	2.425	INTERSECTION	LEFT	ROUTE 0911 (NORTH BEACH PARKING)
2.437	2.437	INTERSECTION	RIGHT	ROUTE 0400 (BONEYARD ACCESS ROAD)
2.443	2.443	SIGN	LEFT	GUIDE, NORTH OCEAN BEACH
2.448	2.478	GUARD/GUIDE RAIL	RIGHT	N/A
2.465	2.465	SIGN	RIGHT	GUIDE, BAYSIDE DR.
2.465	2.465	SIGN	RIGHT	GUIDE, CANOE & BICYCLE RENTAL
2.465	2.465	SIGN	RIGHT	GUIDE, BAYSIDE CAMPING AND RECREATION
2.488	2.488	INTERSECTION	RIGHT	ROUTE 0202 (BAYSIDE DRIVE)
2.494	2.548	GUARD/GUIDE RAIL	RIGHT	N/A
2.508	2.508	SIGN	RIGHT	GUIDE, OCEANSIDE CAMPGROUND CAMPERS ONLY
2.517	2.517	SIGN	LEFT	GUIDE, BAYSIDE CAMPING AND RECREATION
2.517	2.517	SIGN	LEFT	GUIDE, CANOE & BICYCLE RENTAL
2.517	2.517	SIGN	LEFT	GUIDE, BAYSIDE DR.
2.533	2.533	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
2.539	2.539	CULVERT	N/A	N/A
2.550	2.550	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS

ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO			inventoried by RIP in Cycle 5 on all paved routes.	
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT	
2.580	2.580	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT	
2.592	2.592	SIGN	LEFT	GUIDE, OCEANSIDE CAMPGROUND CAMPERS ONLY	
2.737	2.737	CULVERT	N/A	N/A	
2.742	2.742	CULVERT	N/A	N/A	
2.891	2.891	SIGN	RIGHT	GUIDE, OLD FERRY LANDING	
2.891	2.891	SIGN	RIGHT	GUIDE, HISTORY EXHIBIT	
2.918	2.918	SIGN	LEFT	REGULATORY, SPEED LIMIT 30	
2.946	2.946	INTERSECTION	RIGHT	ROUTE 0100 (FERRY LANDING ROAD)	
2.946	2.946	INTERSECTION	LEFT	ROUTE 0927 (HISTORIC BOATHOUSE EXHIBIT PARKING AREA)	
2.998	2.998	SIGN	LEFT	GUIDE, OLD FERRY LANDING	
2.998	2.998	SIGN	LEFT	GUIDE, HISTORY EXHIBIT	
3.003	3.003	SIGN	RIGHT	GUIDE, LIFE OF THE FOREST TRAIL	
3.003	3.003	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT	
3.026	3.026	INTERSECTION	RIGHT	ROUTE 0925 (LIFE OF THE FOREST TRAIL PARKING)	
3.043	3.043	SIGN	LEFT	GUIDE, LIFE OF THE FOREST TRAIL	
3.043	3.043	SIGN	LEFT	GUIDE, GRAPHIC SIGN NO TEXT	
3.055	3.055	INTERSECTION	LEFT	ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)	
3.133	3.133	CULVERT	N/A	N/A	
3.195	3.195	CULVERT	N/A	N/A	
3.433	3.433	SIGN	LEFT	REGULATORY, SPEED LIMIT 30	
3.441	3.441	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15	
3.448	3.599	ONE-WAY	N/A	N/A	
3.448	3.448	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	
3.452	3.467	CURB	N/A	N/A	
3.463	3.463	SIGN	RIGHT	REGULATORY, YIELD	
3.473	3.473	SIGN	RIGHT	GUIDE, LIFE OF THE DUNES TRAIL	
3.476	3.476	INTERSECTION	LEFT	ROUTE 0010CZ (BAYBERRY DRIVE CIRCLE SPUR)	
3.481	3.481	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME	
3.487	3.487	INTERSECTION	RIGHT	ROUTE 0924 (LIFE OF THE DUNES PARKING)	

ROUTE 0010AZ: BAYBERRY DRIVE MAIN PARK ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
		-		
3.491	3.493	CURB	N/A	N/A
3.498	3.498	INTERSECTION	RIGHT	ROUTE 0924 (LIFE OF THE DUNES PARKING)
3.510	3.510	INTERSECTION	RIGHT	ROUTE 0010BZ (BAYBERRY DRIVE OSV ROAD ACCESS)
3.510	3.510	SIGN	RIGHT	WARNING, OSV ZONE PERMIT REQUIRED BEYOND THIS POINT
3.512	3.517	CURB	N/A	N/A
3.523	3.523	INTERSECTION	RIGHT	ROUTE 0010BZ (BAYBERRY DRIVE OSV ROAD ACCESS) SPUR
3.533	3.533	SIGN	RIGHT	GUIDE, SOUTH OCEAN BEACH
3.535	3.535	INTERSECTION	RIGHT	ROUTE 0921 (SOUTH OCEAN BEACH PARKING)
3.536	3.540	CURB	N/A	N/A
3.540	3.540	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
3.544	3.544	INTERSECTION	RIGHT	ROUTE 0921 (SOUTH OCEAN BEACH PARKING)
3.561	3.561	SIGN	RIGHT	REGULATORY, DO NOT ENTER
3.564	3.564	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
3.576	3.576	INTERSECTION	LEFT	ROUTE 0010CZ (BAYBERRY DRIVE CIRCLE SPUR)
3.580	3.591	CURB	N/A	N/A
3.599	3.599	INTERSECTION	N/A	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
3.599	3.599	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
3.599	3.599	ROUTE END	N/A	TO END OF LOOP

ROUTE 0010BZ: BAYBERRY DRIVE OSV ROAD ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	N/A	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.004	0.007	CURB	N/A	N/A
0.005	0.005	GATE	N/A	N/A
0.006	0.006	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.007	0.007	SIGN	LEFT	REGULATORY, YIELD
0.010	0.010	INTERSECTION	LEFT	ROUTE 0010BZ (BAYBERRY DRIVE OSV ROAD ACCESS) SPUR
0.022	0.022	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.077	0.077	INTERSECTION	LEFT	ROUTE 0923 (AIR PUMP STATION PARKING AREA)
0.106	0.145	PULLOUT	RIGHT	N/A
0.128	0.128	INTERSECTION	LEFT	ROUTE 0923 (AIR PUMP STATION PARKING AREA)
0.143	0.143	SIGN	RIGHT	GUIDE, REGULATIONS PROHIBIT: DRIVING ON DUNES OR VEGETATION DOGS OFF LEASH OPEN CONTAINERS OF ALCOHOLIC BE
0.143	0.143	SIGN	RIGHT	GUIDE, OVER SAND VEHICLE ZONE OSV PERMIT REQUIRED DAY ONLY \$90 DAY & NIGHT \$110 BULL PEN \$150
0.144	0.144	SIGN	RIGHT	GUIDE, AT 145 VEHICLE LIMIT ONE VEHICLE MUST EXIT BEFORE GATE WILL OPEN
0.145	0.145	GATE	N/A	N/A
0.150	0.150	INTERSECTION	N/A	ROUTE 0214 (OSV OCEAN ROUTE)
0.150	0.150	SIGN	N/A	REGULATORY, UNABLE TO READ FROM VIDEO
0.150	0.150	SIGN	N/A	REGULATORY, UNABLE TO READ FROM VIDEO
0.150	0.150	ROUTE END	N/A	TO BEGINNING OF ROUTE 0214 (OSV OCEAN ROUTE)

ROUTE 0010CZ: BAYBERRY DRIVE CIRCLE SPUR

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO			
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.021	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	N/A	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.005	0.014	CURB	N/A	N/A
0.021	0.021	INTERSECTION	N/A	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.021	0.021	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.021	0.021	ROUTE END	N/A	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)

ROUTE 0011: BEACH ROAD

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM END OF ROUTE 5000 (FWS BEACH ROAD (NON NPS)) AT PAVEMENT CHANGE
0.000	0.000	INTERSECTION	N/A	ROUTE 5000 (FWS BEACH ROAD (NON NPS))
0.000	0.000	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.000	0.000	SIGN	RIGHT	GUIDE, VALID SW FISHING LICENSE REQUIRED
0.000	0.025	PULLOUT	LEFT	N/A
0.000	0.026	PULLOUT	RIGHT	N/A
0.004	0.004	SIGN	RIGHT	GUIDE, TOMS COVE VISITOR CENTER
0.012	0.012	SIGN	LEFT	GUIDE, AIR PUMP
0.013	0.013	SIGN	LEFT	GUIDE, AIR STATION
0.050	0.050	INTERSECTION	RIGHT	UNPAVED PARKING
0.061	0.061	SIGN	RIGHT	GUIDE, VISITOR CENTER 9 A.M - 5 P.M
0.061	0.061	SIGN	RIGHT	GUIDE, OPEN
0.077	0.077	INTERSECTION	RIGHT	UNPAVED PARKING
0.085	0.085	INTERSECTION	LEFT	UNPAVED PARKING
0.098	0.098	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.114	0.114	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.127	0.127	SIGN	RIGHT	REGULATORY, NO PARKING ANY TIME
0.133	0.133	SIGN	RIGHT	REGULATORY, NO PARKING ANY TIME
0.135	0.135	SIGN	RIGHT	GUIDE, LIFEGUARD BEACH
0.144	0.144	SIGN	RIGHT	GUIDE, PROHIBITED PETS NUDITY ALCOHOL LITTERING METAL DETECTORS
0.145	0.145	SIGN	RIGHT	REGULATORY, YIELD
0.145	0.145	INTERSECTION	LEFT	ROUTE 0210 (TOMS COVE ROAD)
0.145	0.145	INTERSECTION	RIGHT	ROUTE 0210 (TOMS COVE ROAD)
0.145	0.145	SIGN	N/A	REGULATORY, KEEP RIGHT
0.145	0.145	ROUTE END	N/A	TO ROUTE 0210 (TOMS COVE ROAD)

ROUTE 0012: MADDOX BOULEVARD

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO	inventoried by RIP in Cycle 5 on all paved routes.				
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT		
0.000	0.000	ROUTE BEGIN	N/A	FROM PAVEMENT CHANGE ON MADDOX BOULEVARD		
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (MADDOX BOULEVARD / NON NPS)		
0.036	0.053	GUARD/GUIDE RAIL	LEFT	N/A		
0.037	0.037	SIGN	LEFT	REGULATORY, NO PARKING ANY TIME		
0.038	0.053	GUARD/GUIDE RAIL	RIGHT	N/A		
0.039	0.039	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT		
0.039	0.039	SIGN	RIGHT	REGULATORY, NO PARKING ANY TIME		
0.042	0.042	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25		
0.042	0.042	SIGN	RIGHT	REGULATORY, SPEED CHECKED BY RADAR		
0.052	0.052	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT		
0.052	0.052	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT		
0.054	0.054	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO		
0.056	0.164	GUARD/GUIDE RAIL	RIGHT	N/A		
0.056	0.170	GUARD/GUIDE RAIL	LEFT	N/A		
0.133	0.133	SIGN	RIGHT	GUIDE, ENTRANCE FEE REQUIRED INFORMATION AHEAD		
0.133	0.133	SIGN	RIGHT	GUIDE, NO PETS ALLOWED ON THE REFUGE (NOT EVEN IN YOUR VEHICLE)		
0.162	0.162	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT		
0.162	0.162	SIGN	RIGHT	GUIDE, VALID SW FISHING LICENSE REQUIRED		
0.162	0.162	SIGN	RIGHT	GUIDE, PROHIBITED PETS NUDITY ALCOHOL LITTERING METAL DETECTORS		
0.162	0.162	SIGN	RIGHT	WARNING, 15 M.P.H.		
0.165	0.170	GUARD/GUIDE RAIL	RIGHT	N/A		
0.170	0.187	GUARD/GUIDE WALL	LEFT	N/A		
0.170	0.188	GUARD/GUIDE WALL	RIGHT	N/A		
0.170	0.170	SIGN	LEFT	REGULATORY, NO FISHING FROM BRIDGE		
0.171	0.186	BRIDGE	N/A	4190-002 (SHEEPSHEAD CREEK BRIDGE)		
0.172	0.172	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO		
0.186	0.186	SIGN	LEFT	REGULATORY, NO FISHING FROM BRIDGE		
0.187	0.303	GUARD/GUIDE RAIL	LEFT	N/A		
0.188	0.303	GUARD/GUIDE RAIL	RIGHT	N/A		

ROUTE 0012: MADDOX BOULEVARD

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.207	0.207	SIGN	LEFT	REGULATORY, UNABLE TO READ FROM VIDEO
0.216	0.261	ONE-WAY	N/A	N/A
0.216	0.216	INTERSECTION	LEFT	ROUTE 0012 (MADDOX BOULEVARD) SPUR
0.223	0.223	SIGN	RIGHT	GUIDE, AREA OPEN 5 AM- 10 PM
0.225	0.242	CURB	N/A	N/A
0.228	0.228	SIGN	N/A	GUIDE, CHINCOTEAGUE NATIONAL WILDLIFE REFUGE ASSATEAGUE ISLAND NATIONAL SEASHORE
0.244	0.244	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.246	0.254	CURB	N/A	N/A
0.247	0.247	INTERSECTION	LEFT	ROUTE 0012 (MADDOX BOULEVARD) CUT-THROUGH
0.249	0.249	SIGN	N/A	REGULATORY, UNABLE TO READ FROM VIDEO
0.249	0.249	SIGN	N/A	GUIDE, UNABLE TO READ FROM VIDEO
0.249	0.249	SIGN	N/A	REGULATORY, STOP
0.250	0.250	GATE	N/A	N/A
0.250	0.250	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.258	0.258	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.261	0.261	INTERSECTION	LEFT	ROUTE 0012 (MADDOX BOULEVARD) SPUR
0.272	0.272	SIGN	LEFT	WARNING, 15 M.P.H.
0.272	0.272	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.301	0.301	SIGN	LEFT	REGULATORY, UNABLE TO READ FROM VIDEO
0.303	0.303	SIGN	RIGHT	REGULATORY, NO STOPPING ON BRIDGE
0.303	0.303	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.303	0.467	GUARD/GUIDE WALL	LEFT	N/A
0.303	0.467	GUARD/GUIDE WALL	RIGHT	N/A
0.306	0.463	BRIDGE	N/A	4190-001 (ASSATEAGUE CHANNEL BRIDGE)
0.310	0.310	DROP INLET	RIGHT	N/A
0.310	0.310	DROP INLET	LEFT	N/A
0.316	0.316	DROP INLET	RIGHT	N/A
0.467	0.470	GUARD/GUIDE RAIL	RIGHT	N/A
0.467	0.470	GUARD/GUIDE RAIL	LEFT	N/A

ROUTE 0012: MADDOX BOULEVARD

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.470	0.470	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.470	0.470	INTERSECTION	N/A	ROUTE 5000 (FWS BEACH ROAD (NON NPS))
0.470	0.470	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT
0.470	0.470	ROUTE END	N/A	TO BEGINNING OF ROUTE 5000 (FWS BEACH ROAD (NON NPS)) / PAVEMENT CHANGE AT END OF BRIDGE

ROUTE 0013: MARSH VIEW LANE

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5611 (MARYLAND STATE ROUTE 611)
0.000	0.000	SIGN	N/A	REGULATORY, UNABLE TO READ FROM VIDEO
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5611 (MARYLAND STATE ROUTE 611)
0.000	0.000	INTERSECTION	LEFT	ROUTE 5611 (MARYLAND STATE ROUTE 611)
0.005	0.005	SIGN	RIGHT	GUIDE, MARSHVIEW LANE
0.006	0.006	SIGN	LEFT	REGULATORY, STOP
0.019	0.019	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.030	0.030	INTERSECTION	LEFT	ROUTE 0903 (VISITOR CENTER ACCESS PARKING)
0.032	0.032	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.050	0.050	INTERSECTION	LEFT	ROUTE 0903 (VISITOR CENTER ACCESS PARKING)
0.051	0.064	CURB	LEFT	N/A
0.065	0.067	CURB	LEFT	N/A
0.075	0.075	INTERSECTION	N/A	END OF PAVEMENT / UMES PROPERTY
0.075	0.075	ROUTE END	N/A	TO UMES PROPERTY AT END OF PAVEMENT

ROUTE 0100: FERRY LANDING ROAD

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	N/A	ROUTE 0927 (HISTORIC BOATHOUSE EXHIBIT PARKING AREA)
0.000	0.000	SIGN	LEFT	GUIDE, BAYBERRY DRIVE PARK EXIT
0.006	0.006	SIGN	LEFT	REGULATORY, STOP
0.016	0.016	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.290	0.290	INTERSECTION	N/A	ROUTE 0926 (FERRY LANDING PARKING)
0.290	0.290	ROUTE END	N/A	TO ROUTE 0926 (FERRY LANDING PARKING)

ROUTE 0200AZ: OCEANSIDE DRIVE - CAMPGROUND ACCESS

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO			inventoried by RIP in Cycle 5 on all paved routes.	
		FEATURE	SIDE	COMMENT	
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS	
0.000	0.959	ONE-WAY	N/A	N/A	
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)	
0.005	0.005	CULVERT	N/A	N/A	
0.032	0.032	SIGN	RIGHT	GUIDE, GROUP CAMPGROUND RESERVATIONS REQUIRED	
0.058	0.058	INTERSECTION	LEFT	ROUTE 0914 (OCEANSIDE CAMPGROUND GROUP PARKING)	
0.102	0.102	SIGN	LEFT	REGULATORY, SPEED LIMIT 15	
0.137	0.137	SIGN	LEFT	REGULATORY, DO NOT ENTER	
0.137	0.137	SIGN	LEFT	GUIDE, QUIET HOURS 10 P.M 6 A.M.	
0.137	0.137	SIGN	LEFT	GUIDE, CAMP IN DESIGNATED SITES ONLY	
0.138	0.138	CULVERT	N/A	N/A	
0.162	0.162	INTERSECTION	LEFT	ROUTE 0204AZ (OCEANSIDE CAMPGROUND LOOP 1, SITES 1-19	
0.162	0.162	SIGN	LEFT	REGULATORY, DO NOT ENTER	
0.257	0.257	INTERSECTION	LEFT	UNPAVED ROUTE (RESTROOM ACCESS ROAD)	
0.271	0.271	SIGN	LEFT	GUIDE, SITE NUMBERS 1-19	
0.289	0.289	INTERSECTION	LEFT	ROUTE 0204AZ (OCEANSIDE CAMPGROUND LOOP 1, SITES 1-19	
0.343	0.343	SIGN	LEFT	REGULATORY, DO NOT ENTER	
0.352	0.352	INTERSECTION	LEFT	ROUTE 0204BZ (OCEANSIDE CAMPGROUND LOOP 2, SITES 20-41)	
0.352	0.352	SIGN	LEFT	REGULATORY, DO NOT ENTER	
0.359	0.359	CULVERT	N/A	N/A	
0.441	0.441	INTERSECTION	LEFT	UNPAVED ROUTE (RESTROOM ACCESS ROAD)	
0.445	0.445	SIGN	LEFT	GUIDE, SITE NUMBERS 20-41	
0.471	0.471	INTERSECTION	LEFT	ROUTE 0204BZ (OCEANSIDE CAMPGROUND LOOP 2, SITES 20-41)	
0.476	0.476	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT	
0.483	0.483	INTERSECTION	RIGHT	ROUTE 0936 (OCEANSIDE DUMP STATION)	
0.504	0.504	SIGN	RIGHT	GUIDE, WATER	
0.513	0.513	INTERSECTION	RIGHT	ROUTE 0936 (OCEANSIDE DUMP STATION)	
0.515	0.515	SIGN	LEFT	WARNING, GRAPHIC SIGN NO TEXT	

ROUTE 0200AZ: OCEANSIDE DRIVE - CAMPGROUND ACCESS

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM	TO			inventorica by Kir in Cycle 3 on an paved routes.		
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT		
0.524	0.524	INTERSECTION	LEFT	UNPAVED ROUTE (RESTROOM ACCESS ROAD)		
0.529	0.529	INTERSECTION	RIGHT	ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)		
0.573	0.573	INTERSECTION	RIGHT	ROUTE 0200CZ (OCEANSIDE DRIVE - CONNECTOR FROM BAYBERRY)		
0.576	0.576	SIGN	LEFT	REGULATORY, SPEED LIMIT 10		
0.586	0.586	SIGN	LEFT	GUIDE, WALK IN CAMPGROUND SITES 42-65 PARKING FOR CAMPERS ONLY		
0.586	0.586	SIGN	LEFT	REGULATORY, DO NOT ENTER		
0.626	0.626	INTERSECTION	LEFT	ROUTE 0918Z (OCEANSIDE WALK-IN CAMPGROUND 42-65 PARKING)		
0.690	0.690	INTERSECTION	LEFT	UNPAVED ROUTE (RESTROOM ACCESS ROAD)		
0.731	0.731	SIGN	LEFT	GUIDE, WALK IN CAMPGROUND SITES 66-85 PARKING FOR CAMPERS ONLY		
0.765	0.765	INTERSECTION	LEFT	ROUTE 0919Z (OCEANSIDE WALK-IN CAMPGROUND 66-85 PARKING)		
0.818	0.818	INTERSECTION	LEFT	UNPAVED ROUTE (HORSE CAMP GROUP SITE)		
0.852	0.852	INTERSECTION	LEFT	UNPAVED ROUTE		
0.856	0.856	SIGN	LEFT	GUIDE, WALK-IN CAMPGROUND SITES 86-104 PARKING FOR CAMPERS ONLY		
0.856	0.856	SIGN	LEFT	REGULATORY, WRONG WAY		
0.886	0.886	INTERSECTION	LEFT	ROUTE 0920Z (OCEANSIDE WALK-IN CAMPGROUND 86-104 PARKING)		
0.946	0.946	SIGN	RIGHT	REGULATORY, YIELD		
0.950	0.950	CULVERT	N/A	N/A		
0.959	0.959	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		
0.959	0.959	INTERSECTION	N/A	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		
0.959	0.959	ROUTE END	N/A	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)		

ROUTE 0200BZ: OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	INTERSECTION	N/A	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.040	ONE-WAY	N/A	N/A
0.017	0.017	SIGN	RIGHT	WARNING, GRAPHIC SIGN NO TEXT
0.017	0.017	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.039	0.039	SIGN	LEFT	REGULATORY, SPEED LIMIT 10
0.040	0.040	INTERSECTION	LEFT	ROUTE 0200CZ (OCEANSIDE DRIVE - CONNECTOR FROM BAYBERRY)
0.043	0.043	SIGN	LEFT	GUIDE, PARKING RESERVED FOR REGISTERED CAMPERS ALL OTHERS SUBJECT TO FINES AND/OR TOWING
0.066	0.066	SIGN	RIGHT	REGULATORY, STOP
0.072	0.072	SIGN	N/A	GUIDE, BAYBERRY DR. PARK EXIT
0.072	0.072	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.072	0.072	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.072	0.072	ROUTE END	N/A	TO ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)

ROUTE 0200CZ: OCEANSIDE DRIVE - CONNECTOR FROM BAYBERRY

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
THEET OF T		TEITTERE	DIDL	COMMITTEE
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)
0.000	0.034	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)
0.000	0.000	INTERSECTION	N/A	ROUTE 0200BZ (OCEANSIDE DRIVE - CONNECTOR TO BAYBERRY)
0.009	0.009	SIGN	N/A	REGULATORY, GRAPHIC SIGN NO TEXT
0.023	0.023	SIGN	RIGHT	REGULATORY, YIELD
0.024	0.024	SIGN	N/A	WARNING, GRAPHIC SIGN NO TEXT
0.034	0.034	SIGN	N/A	REGULATORY, ONE WAY
0.034	0.034	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.034	0.034	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.034	0.034	ROUTE END	N/A	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)

ROUTE 0202: BAYSIDE DRIVE

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010ZZ (BAYBERRY DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010AZ (BAYBERRY DRIVE MAIN PARK ACCESS)
0.000	0.000	SIGN	N/A	GUIDE, BAYBERRY DRIVE PARK EXIT
0.005	0.005	SIGN	LEFT	REGULATORY, STOP
0.031	0.031	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.200	0.200	SIGN	RIGHT	GUIDE, BAYSIDE CAMPGROUND LOOP A CAMPERS ONLY
0.222	0.222	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38 44)
0.251	0.251	CULVERT	N/A	N/A
0.258	0.258	SIGN	RIGHT	GUIDE, BAYSIDE PARKING AREA AHEAD
0.267	0.267	CULVERT	N/A	N/A
0.273	0.273	CULVERT	N/A	N/A
0.304	0.304	SIGN	RIGHT	GUIDE, LIFE OF THE MARSH TRAIL
0.324	0.324	INTERSECTION	LEFT	ROUTE 0909 (LIFE OF THE MARSH TRAIL PARKING)
0.340	0.340	CULVERT	N/A	N/A
0.414	0.414	CULVERT	N/A	N/A
0.453	0.453	SIGN	RIGHT	GUIDE, BAYSIDE CAMPGROUND LOOP B&C CAMPERS ONLY
0.472	0.472	INTERSECTION	RIGHT	ROUTE 0203BZ (BAYSIDE CAMPGROUND - MIDDLE ACCESS)
0.496	0.496	CULVERT	N/A	N/A
0.708	0.708	SIGN	LEFT	REGULATORY, SPEED LIMIT 25
0.715	0.715	CULVERT	N/A	N/A
0.729	0.729	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.731	0.731	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.747	0.747	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.756	0.756	CULVERT	N/A	N/A
0.791	0.791	SIGN	RIGHT	GUIDE, NO OVERNIGHT PARKING OR CAMPING
0.791	0.791	INTERSECTION	N/A	ROUTE 0905 (BAYSIDE PARKING AREA)
0.791	0.791	ROUTE END	N/A	TO ROUTE 0905 (BAYSIDE PARKING AREA)

ROUTE 0203AZ: BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0202 (BAYSIDE DRIVE)
0.000	0.557	ONE-WAY	N/A	N/A
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0202 (BAYSIDE DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0202 (BAYSIDE DRIVE)
0.012	0.012	SIGN	RIGHT	REGULATORY, SPEED LIMIT 10
0.025	0.025	SIGN	RIGHT	GUIDE, QUIET HOURS 10 P.M 6 A.M.
0.034	0.034	SIGN	RIGHT	GUIDE, SITE NUMBERS A1-A13-A14-A24
0.042	0.042	INTERSECTION	RIGHT	ROUTE 0203CZ (BAYSIDE CAMPGROUND - LOOP A, SITES 14-24)
0.045	0.045	SIGN	LEFT	GUIDE, BAYSIDE CAMPGROUND HOST
0.062	0.062	SIGN	LEFT	GUIDE, BAYSIDE CAMPGROUND HOST
0.208	0.208	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.216	0.216	INTERSECTION	RIGHT	ROUTE 0203CZ (BAYSIDE CAMPGROUND - LOOP A, SITES 14-24)
0.227	0.227	SIGN	RIGHT	REGULATORY, SPEED LIMIT 10
0.267	0.267	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.276	0.276	INTERSECTION	LEFT	ROUTE 0203BZ (BAYSIDE CAMPGROUND - MIDDLE ACCESS)
0.285	0.285	INTERSECTION	RIGHT	ROUTE 0203DZ (BAYSIDE CAMPGROUND - LOOP B, SITES 33-37)
0.288	0.288	SIGN	RIGHT	GUIDE, SITE NUMBERS B25-B32 B33-B37
0.288	0.288	SIGN	RIGHT	GUIDE, LOOP B GENERATORS PROHIBITED
0.387	0.387	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.397	0.397	INTERSECTION	RIGHT	ROUTE 0203DZ (BAYSIDE CAMPGROUND - LOOP B, SITES 33-37)
0.406	0.406	INTERSECTION	RIGHT	ROUTE 0203EZ (BAYSIDE CAMPGROUND - LOOP C, SITES 45-49)
0.408	0.408	SIGN	RIGHT	GUIDE, SITE NUMBERS C38-C44 C45-C49
0.493	0.493	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.501	0.501	INTERSECTION	RIGHT	ROUTE 0203EZ (BAYSIDE CAMPGROUND - LOOP C, SITES 45-49)
0.510	0.510	INTERSECTION	LEFT	ROUTE 0904 (BAYSIDE DUMP STATION)
0.528	0.528	INTERSECTION	LEFT	ROUTE 0904 (BAYSIDE DUMP STATION)
0.552	0.552	SIGN	RIGHT	REGULATORY, STOP
0.557	0.557	INTERSECTION	LEFT	ROUTE 0202 (BAYSIDE DRIVE)
0.557	0.557	INTERSECTION	RIGHT	ROUTE 0202 (BAYSIDE DRIVE)
0.557	0.557	ROUTE END	N/A	TO ROUTE 0202 (BAYSIDE DRIVE)

ROUTE 0203BZ: BAYSIDE CAMPGROUND - MIDDLE ACCESS

<u>Notice:</u> Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0202 (BAYSIDE DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0202 (BAYSIDE DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0202 (BAYSIDE DRIVE)
0.006	0.006	SIGN	LEFT	REGULATORY, STOP
0.011	0.011	SIGN	RIGHT	GUIDE, CAMP IN DESIGNATED SITES ONLY
0.021	0.021	SIGN	RIGHT	GUIDE, QUIET HOURS 10 P.M 6 A.M.
0.032	0.032	SIGN	RIGHT	REGULATORY, STOP
0.035	0.035	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.035	0.035	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.035	0.035	SIGN	N/A	REGULATORY, ONE WAY
0.035	0.035	ROUTE END	N/A	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)

ROUTE 0203CZ: BAYSIDE CAMPGROUND - LOOP A, SITES 14-24

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.197	ONE-WAY	N/A	N/A
0.088	0.108	PULLOUT	LEFT	N/A
0.190	0.190	SIGN	RIGHT	REGULATORY, YIELD
0.197	0.197	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.197	0.197	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.197	0.197	SIGN	N/A	REGULATORY, ONE WAY
0.197	0.197	ROUTE END	N/A	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)

ROUTE 0203DZ: BAYSIDE CAMPGROUND - LOOP B, SITES 33-37

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.015	0.031	PULLOUT	LEFT	N/A
0.114	0.114	SIGN	RIGHT	REGULATORY, YIELD
0.120	0.120	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.120	0.120	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.120	0.120	SIGN	N/A	REGULATORY, ONE WAY
0.120	0.120	ROUTE END	N/A	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)

ROUTE 0203EZ: BAYSIDE CAMPGROUND - LOOP C, SITES 45-49

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.000	0.111	ONE-WAY	N/A	N/A
0.007	0.026	PULLOUT	LEFT	N/A
0.111	0.111	INTERSECTION	LEFT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.111	0.111	INTERSECTION	RIGHT	ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)
0.111	0.111	ROUTE END	N/A	TO ROUTE 0203AZ (BAYSIDE CAMPGROUND - SITES 1-13, 25-32, 38-44)

ROUTE 0204AZ: OCEANSIDE CAMPGROUND LOOP 1, SITES 1-19

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

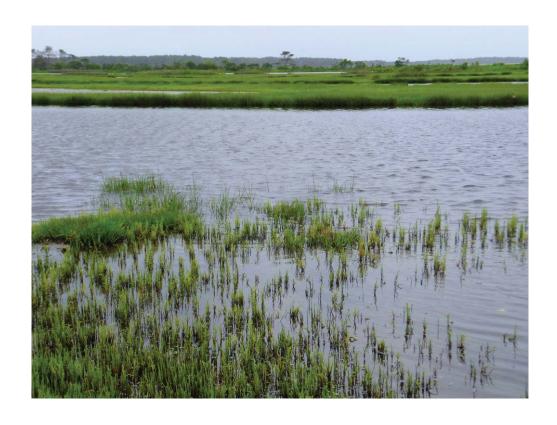
FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.191	ONE-WAY	N/A	N/A
0.008	0.008	CULVERT	N/A	N/A
0.008	0.008	SIGN	RIGHT	REGULATORY, SPEED LIMIT 10
0.015	0.015	SIGN	RIGHT	GUIDE, OCEANSIDE CAMPGROUND HOST
0.025	0.025	SIGN	RIGHT	GUIDE, OCEANSIDE CAMPGROUND HOST
0.189	0.189	SIGN	RIGHT	REGULATORY, STOP
0.191	0.191	SIGN	N/A	REGULATORY, ONE WAY
0.191	0.191	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.191	0.191	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.191	0.191	ROUTE END	N/A	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)

ROUTE 0204BZ: OCEANSIDE CAMPGROUND LOOP 2, SITES 20-41

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 5 on all paved routes.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	CULVERT	N/A	N/A
0.000	0.000	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.000	0.212	ONE-WAY	N/A	N/A
0.008	0.008	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.008	0.008	SIGN	RIGHT	REGULATORY, SPEED LIMIT 10
0.209	0.209	SIGN	RIGHT	REGULATORY, STOP
0.212	0.212	SIGN	N/A	REGULATORY, ONE WAY
0.212	0.212	INTERSECTION	LEFT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.212	0.212	INTERSECTION	RIGHT	ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)
0.212	0.212	ROUTE END	N/A	TO ROUTE 0200AZ (OCEANSIDE DRIVE - CAMPGROUND ACCESS)

Section 10 Appendix



Assateague Island National Seashore



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

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

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

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

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

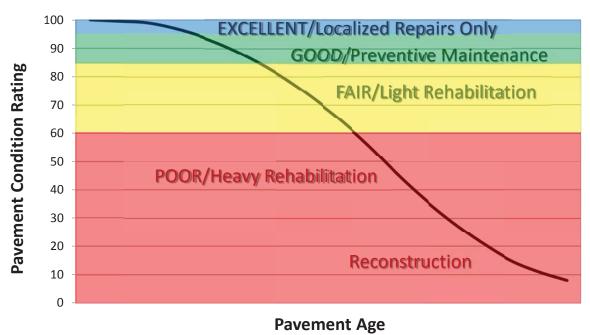
Explanation of the Excellent, Good, Fair and Poor Condition Descriptions

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

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

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

Condition Categories and Treatments



DESCRIPTION OF RATING SYSTEM

The Federal Highway Administration (FHWA), National Park Service Road Inventory Program (NPS-RIP), collects condition data on paved roads, parkways, and parking areas in park units nationwide. Road surface condition data is collected using an automated Data Collection Vehicle (DCV). Roads having brick, cobblestone, or wood surfaces are not normally surveyed with the DCV, but are manually rated for the purpose of assigning a condition rating. Unpaved roads, parkways, and parking areas are not currently being evaluated for condition. Paved campground pads and driveways are also not currently being evaluated for condition.

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

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

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

In 2010, FHWA RIP began the fifth cycle of data collection in national parks. For Cycle 5, data will be collected in approximately 81 large parks (10 or more paved route miles) on Functional Class 1, 2, and 7 routes plus any new routes or parking areas previously not collected, totaling an estimated 4,459 paved route miles. Additionally, 231 small parks will be collected comprising approximately 529 paved route miles and associated paved parking areas. The data is used to support the National Park Service road maintenance program and Pavement Management System (PMS) developed and maintained by FHWA.

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

SURFACE DISTRESSES

Surface Condition Rating - SCR

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

Surface distresses determined from digital images

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

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

Rutting

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

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

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

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

Roughness Condition Index - RCI

Additional condition data measured by DCV (lasers and accelerometers)

• Roughness (IRI)

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

Pavement Condition Rating - PCR

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

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

A detailed description of each distress index formula, roughness index formula, SCR and PCR is provided in this document beginning on page 8.

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

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

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

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

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

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

TABLE 1: Distress Summary

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

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

ALLIGATOR CRACKING

Description

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

Severity Levels

LOW

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

MEDIUM

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

HIGH

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

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

TABLE 2: Alligator Crack Severity Levels

ALLICATION CDACKING CE	Crack Pattern			
ALLIGATOR CRACKING SE LEVELS	LOW	MED	HIGH	
	LOW	L	M	Н
rack	MED	M	M	Н
C. K.	HI	Н	Н	Н

LONGITUDINAL CRACKING

Description

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

Severity Levels

LOW

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

MED

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

HIGH

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

TRANSVERSE CRACKING

Description

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

Severity Levels

LOW

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

MED

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

HIGH

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

PATCHING AND POTHOLES

Description

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

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

Severity Levels

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

RUTTING

Description

Rutting is a longitudinal surface depression in the wheelpath.

Severity Levels

LOW

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

MED

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

HIGH

Ruts with a measured depth ≥ 1.00"

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

ROUGHNESS

Description

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

Severity Levels

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

TABLE 3: IRI

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

INDEX FORMULAS

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

Alligator Crack Index

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

Where:

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

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

Percent of total area is computed as:

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

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

Longitudinal Crack Index

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

Where:

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

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

Percent of interval length is computed as:

length of respective longitudinal cracking 0.02 mile (105.6 feet)

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

Structural Crack Index

$$SC_{INDEX} = [100 - ((100 - AC_{INDEX}) + (100 - LC_{INDEX}))]$$

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

Transverse Crack Index

$$TC_{INDEX} = 100 - 40 * [(LOW / 21.1) + (MED / 4.4) + (HI / 2.6)]$$

Where:

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

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

Number of cracks is computed as:

Total length of transverse cracks
Lane width

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

Patching Index

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

Where:

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

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

Percent of total area is computed as:

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

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

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

Rutting Index

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

Where:

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

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

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

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

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

total number of ruts within each severity in both wheelpaths 20 * 100

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

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

Roughness Condition Index (Asphalt)

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

Where:

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

Average IRI is computed as:

There is no applicable threshold for failure for this index.

Roughness Condition Index (Concrete)

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

For concrete, PCR = RCI

Surface Condition Rating Index

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

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

Where:

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

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

Data Collection Vehicle Subsystems

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

CAMERAS

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

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

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

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

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

DMI (Distance Measuring Instrument)

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

ROUGHNESS (IRI)

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

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

RUTTING

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

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

GPS & INERTIAL SYSTEMS

GPS is collected by an onboard system employing OmniSTAR real-time correction and a gyroscope (spin-type) to provide accurate positioning data (pitch/roll/heading) in instances of satellite obstruction. All GPS coordinates are tied to image and linear distance measurements.

GPS SPECIFICATIONS	
Static accuracy	Sub-meter
Dynamic accuracy	2-3 meters
Receiver	12 satellite tracking
Coordinate system	Lat Lon WGS 84
Environment	Day or night
Cross-slope	+- 0.5 degrees
Grade	+- 0.5 degrees

GPS on Manually Rated Roads (MRR)

Parking areas, some roads, and other paved areas that are not fully drivable with the DCV are collected manually by field technicians. GPS is collected for these routes using portable Trimble GPS backpack units. Paved campground pads and driveways are not typically included in the inventory or GPS.

Geodatabase - Background and Metadata

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

A geodatabase can be thought of as simply a database containing spatial data. Many different tables are contained with the park's geodatabase. A complete and thorough description of the tables and fields contained within this geodatabase can be found in the *metadata*. The metadata is attached directly within the geodatabase and can be accessed via ESRI's ArcCatalog. The metadata portion of the geodatabase also includes data dictionary report functionality that formats the metadata into an easy to read report.

GLOSSARY OF TERMS AND ABBREVIATIONS

TERM OR

<u>ABBREVIATION</u> <u>DESCRIPTION OR DEFINITION</u>

AC Alligator Cracking

CRS Condition Rating Sheets (Section 5)

DCV Data Collection Vehicle

Excellent rating with an index value of 95 to 100

Fair Fair rating with an index value from 61 to 84

FUNCT_CLASS Functional Classification (see Route ID, Section 2)

Good Good rating with an index value from 85 to 94

IRI International Roughness Index

Lane Width Width from road centerline to fogline, or from centerline to edge-

of-pavement when no fogline exists

LC Longitudinal Cracking

MRR Manually Rated Route

MRL Manually Rated Line

MRP Manually Rated Polygon

N/A Not Applicable

NC Not Collected

PATCH Patching and Potholes

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

PCR Pavement Condition Rating

PKG Parking Area

Poor Poor rating with an index value of 0 to 60

RCI Roughness Condition Index

SC Structural Cracking

SCR Surface Condition Rating

TC Transverse Cracking