





The Road Inventory for Cape Hatteras National Seashore



national park service



Road Inventory Program

Prepared By: Federal Highway Administration Eastern Federal Lands Highway Division August 1999





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INTRODUCTION

Background: In July 1976, amended December 1980, The National Park Service (NPS) and the Federal Highway Administration (FHWA) entered into a Memorandum of Agreement (MOA), establishing the Road Inventory Program (RIP). The purpose of RIP, per the 1980 MOA, was to develop long range and short range costs and programs to bring NPS roads up to, or to maintain, designated standards; as well as provide a database so the NPS can revise their Maintenance Management System, if necessary.

Since 1984 the funding has been derived from the NPS FLHP (Title 23) planning funds and coordinated by the National Park Service Park Facility Management Division. The need for a total road information data base was mandated by the requirements for continuing, comprehensive, and coordinated (3-C) planning process and Maintenance Management System.

The Federal Lands Highway (FLH) was assigned the task to inventory maintenance items (pavement type and quantities; location of culverts, signs, guardrail, etc.), identify pavement distresses and evaluate the condition of existing park roads, summarize the data and findings in a report, and provide a videolog of the NPS roads system.

Objective: The objective of the RIP report is to provide NPS personnel at all levels with the basic information needed for effective road and road system planning, management, operations, and maintenance. This information will be documented in a Blue Book for each park, which will replace the old Brown Books.

The Blue Book reports will be in a standard format and content with comprehensive data analysis for each park. The data presented in each report will vary greatly from park to park, but the presentation of the report will be uniform in format. Therefore, the Blue Book will become a seamless document throughout the park system displaying site specific data for each park.

Scope: The Road Inventory Program is a national program coordinated by the FHWA for the NPS. The FHWA goal for the paved park roads is stated as "the quality, standard and condition of the paved portion of park roads and parkways that serves the resource goals of the National Park System does not deteriorate further over the next five years".

In an effort to track the condition of the park roads, per the FHWA goal, a cyclic data collection and reporting process was implemented for all parks and regions. Monitoring the condition and system performance of the paved roads over time using a percent good, fair, and poor condition rating provided a realistic means of assessing the funding needs for road improvements. The pavement condition rating system is described in Section IX of this report. This pavement condition performance assessment will determine the level of paved park road deterioration throughout the park road system as identified in the FHWA goal.

The report will include a Park Summary, a Park Summary Map, a Park Route Inventory, a Maintenance Features Summary, a Paved Route Condition Rating and a Features

Inventory. Also included is a listing of all unpaved routes in each park and various Appendices.

The FHWA highway engineers and technicians inspect, rate, inventory the roads, and prepare the final reports for distribution to the National Park Service. All the field work is coordinated with the site specific park and the regional offices to ensure customer satisfaction. The FHWA Washington office coordinates policy and prepares national reports and needs assessment studies to congress.

The FHWA is responsible for all the data presented in this report. Anyone having questions or comments regarding the contents of this report are encouraged to contact the FHWA RIP Coordinator or the NPS RIP Coordinator in your Cluster Support Office.

FHWA RIP Coordinator:

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Cape Hatteras National Park Summaries

Overall Park Mileage Summary

PARK TOTAL SUMMARY ITEMS	TOTAL	DATE
PAVED ROUTE MILES	28.72	8/99
UNPAVED ROUTE ESTIMATED MILES	3.94	8/99
PAVED AND UNPAVED ROUTE MILES	32.66	8/99
PARKING LOT LANE MILES	13.86	8/99
PAVED LANE MILES	65.61	8/99
DEFICIENT LANE MILES	28.12	8/99

Note: Paved and Deficient Lane Miles include parking lot areas which have been converted to lane miles using an 11-foot lane width.

Estimated Unpaved Mileage Summary By Functional Class

F. C.	MILEAGE	PERCENTAGE
I		-
		-
111	1.09	28%
IV	-	-
V	2.85	72%
VI	-	-
VII	-	-
VIII	-	-

Cape Hatteras National Park Summaries

Cost to Improve to "Excellent" Condition Based on Historic and Estimated Data

AWARD DATE	SOURCE	WORK PERFORMED	LENGTH (MILES)	COST	COST PER MILE	INITIAL CONDITION
1995-97	FHWA Projects	3-R (Resurfacing)	52.07	\$3,776,479	\$72,527	Good
1995-97	FHWA Projects	3-R (Resurfacing, Restoration, and Rehabilitation) Projects	12.80	\$3,252,902	\$254,133	Fair
1998	FHWA Current Projects	4-R (Resurfacing, Restoration, Rehabilitation, and Reconstruction) Projects	9.18	\$5,185,644	\$564,885	Poor

Based on the above table, the cost to improve existing condition miles to "Excellent" PCR are:

Existing Condition	Existing Miles	Estimated Cost to Improve
Excellent	0.60	\$0
Good	5.89	\$427,184
Fair	19.81	\$5,034,375
Poor	2.42	\$1,367,022
Totals	28.72	\$6,828,580

Cape Hatteras National Seashore Summaries

	Pavement Condition Rating (PCR)								
	Excelle	nt (95-100)	Good	Good (85-94)		(61-84)	Pool	r (<=60)	TOTAL
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
I	0	0.00%	1.9	17.43%	7.54	69.17%	1.46	13.39%	10.9
11	0	0.00%	0.5	48.08%	0.46	44.23%	0.08	7.69%	1.04
j]]	0.38	10.70%	2.59	1.00%	11.53	76.66%	0.54	3.59%	15.04
١V	-	-	-		-	-	-		
V	0.22	12.64%	0.9	<u>5</u> 1.72%	0.28	16.09%	0.34	19.54%	1.74
VI	-	-	-	-	-	-	-	-	-
VII	-	-		-	-	-	-	-	-
VIII	-	-	-	-	-	-		-	
Totals	0.60	2.09%	5.89	20.51%	19.81	68.98%	2.42	8.43%	28.72

Paved Route Miles and Percentages by Functional Class and PCR

Includes paved roads visually rated that were not driven with the ARAN.

Paved Lane Miles (Parking Areas)

				Visual Cond	lition Ra	ting			
	Exc	ellent	C	bood		Fair	Po	oor	TOTAL
	LANE		LANE		LANE		LANE		LANE
F. C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
-	-	-	17.04	122.94%	2.49	17.97%	-	-	13.86



3-1





CAPE HATTERAS NATIONAL SEASHORE ROUTE LOCATION AREA MAP 3



CAPE HATTERAS NATIONAL SEASHORE ROUTE LOCATION AREA MAP 4



CAPE HATTERAS NATIONAL SEASHORE ROUTE CONDITION KEY MAP PCR/DCR - Mile by Mile

FUNCTIONAL CLASSIFICATION I, II, VII, VIII ROADS



8/99

CAPE HATTERAS NATIONAL SEASHORE - CAHA - 5190 ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes, ARAN Driven Blue = All Paved Parking Areas Grey = Paved Routes, ARAN not Driven Green = All Unpaved Parking Areas Red Denotes Approximate Mileage Yellow = Unpaved Routes, ARAN not Driven

RTE #	ROUTE NAME	RTE	ROUTE DESCRIPTION	PAVED MILES	UN- PAVED MILES	LANES	FUNC CLASS
010	NC State Route 12	8.26	From North Entrance to Park Boundary	8.26	0.00	2	1
012	Buxton Road	4.22	From Rte 010 to Rte 254	2.64	0.00	2	1
014	Frisco Campground Access	1.84	From Rte 010 to Rte 227	1.04	0.00	2	2
201	Coquina Beach Access	1.06	From Rte 010 to Rte 010	1.92		2	3
202	Bodie Island Lighthouse Access	1.92	From Rte 010 to End of Parking Loop	1.20	0.00	2	3
204	Oregon Inlet Campground Access	0.13	From Rite 010 to Rite 206	2.03	0.00	2	3
208	Oregon Inlet Marina Access	0.58	From Rte 010 to End of Loop	2.48	0.00	2	3
209	Oregon Inlet Bridge Parking Access	0.29	From Rte 010 to End of Loop	2.22	0.00	2	3
210	Pea Island Day Use Road	0.75	From Rte 010 to End	0.24	0.00	2	3
211	Pea Island Beach Access	0.11	From Rte 210 to End	0.00	0.11	2	3
214	Salvo Day Use Area	0.56	From Rte 010 Rte 214	1.59	0.00	2	3
216	Pea Island Observation Turnout No 1	0.98	From Rte 010 to Parking Area	0.00	0.98	2	3
223	Avon Road Relocation	2.35	From Rte 010 to Rte 010	0.34	0.00	2	3
225	Cape Point Campground Perimeter Loop	1.95	From Rte 12 to End of Loop	5.11	0.00	1	3
230	Coast Guard Access at Hatteras	0.39	From Rte 010 to Coast Guard Entrance Gate	0.14	0.00	2	5
234	Okracoke Campground PerimeterLoop Road	1.11	From Rte 015 to Rte 015	2.93	0.00	2	3
237	Ramp 52 Parking Area Access	0.10	From Okracoke Airport Access to Ramp 52	0.21	0.00	2	3
400	Bodie Island Maintenance and Residence Access Road	0.63	From Rte 010 Business to End of Loop	0.36	0.00	2	5
401	Oregon Island Coast Guard Access	0.30	From Rte 010 to Coast Guard	0.30	0.00	1	5
402	Bodie Island Well Field Access	1.18	From Rte 010 to End of Loop	0.00	1.18	2	5
403	Bodie Island Residence No. 100 Access	0.06	From Rte 010 to Residence No. 100	0.02	0.00	1	5
404	Ranger Station at Coquina Beach Access	0.13	From Rte 201 to End of Loop	0.28	0.00	2	3
405	Bodie Island Sub District Bone Yard Road		From Rte 202 to Maintenance Yard	0.26	0.00	2	5
408	Little Kinnakeet Station Access	0.18	From Rte 010 to End	0.00	0.18	2	5
410	Buxton Residence Area Road	1.59	From Rte 012 to Rte 412	0.54	0.00	2	5
411	Cedar Glen Road	0.11	From Rte 410 to End	0.14	0.00	2	5
413	Frisco Water Tower Road	0.15	From Rte 014 to End of Loop	0.00	0.15	2	5
414	Frisco Well Access	1.34	From Rte 227 to End of Loop	0.00	1.34	2	5
417	Okracoke Residence Access	0.21	From Okracoke Town Road to End	0.26	0.00		5
901	Whalebone Information Station Access	0.24	From Rte 010 to Rte 012	0.24	0.00	-	-
902	Bodie Island Maintenance Area	0.77	At End of route 400	0.77	0.00	-	-
903	Bodie Island Light House Parking	0.94	At End of route 202	0.94	0.00	-	-
906	Oregon Inlet Bridge Parking Access	0.83	From Rte 010 to End of Loop	0.83	0.00	-	-
	Turnout MP 10		End Rte 010	0.11	0.00	-	-
908	Pea Island Observation Turnout No 2	0.22	From Rte 010 to Rte 010	0.22	0.00	-	-

CAPE HATTERAS NATIONAL SEASHORE - CAHA - 5190 ROUTE IDENTIFICATION LIST (NUMERIC)

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Shading Color Key:

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 White = Paved Routes, ARAN Driven
 Blue = All Paved Parking Areas

 Grey = Paved Routes, ARAN not Driven
 Green = All Unpaved Parking Areas

 Yellow = Unpaved Routes, ARAN not Driven
 Red Denotes Approximate Mileage

RTE #	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MILES	UN- PAVED MILES	LANES	FUNC. CLASS
909	Salvo Campground Turnout	0.17	From Rte 010 to Rte 010	0.17	0.00	-	-
910	Turnout MP 28	0.25	From Rte 010 to Rte 010	0.25	0.00	-	
911	Turnout MP 30	0.23	From Rte 010 to Rte 010	0.23	0.00	-	-
912	Turnout MP 34	0.23	From Rte 010 to Rte 010	0.23	0.00	-	-
914	Canadian Hole Parking	0.83	Parking along NC Rte 12	0.83	0.00	-	
915	Soundside Turnout Parking	0.22	Rte 010 on the West Side	0.22	0.00	•	-
916	Cape Hatteras Light House Parking	0.57	From NC State Rte 12 to lighthouse	0.57	0.00	-	-
917	Buxton Woods Trailhead Parking	0.17	North side of Rte 010	0.17	0.00	-	-
918	Buxton Maintenance Access	0.63	From Rte 410 to Maintenance Area	0.63	0.00	-	-
919	Buxton Woods Dump Station	0.13	East Side of Rte 010	0.13	0.00	-	-
920	Cape Hatteras Light House Parking	0.51	West Side of Rte 010	0.51	0.00	-	-
921	Cape Point Beach Day Use Parking	0.31	West Side of Rte 010	0.31	0.00	-	
922	Ampitheater Parking Area Access	0.38	From Rte 225 to End of Loop	0.38	0.00	-	-
923	Turnout at MP 51	0.60	From Rte 010 to Rte 010	0.60	0.00	-	Ŧ
924	Sandy Bay Soundside Parking	0.41	Rte 010 on the North Side	0.41	0.00	-	-
925	Turnout at MP 52.5	0.22	From Rte 010 to Rte 010	0.22	0.00		-
926	Parking Access at Hatteras Inlet Ferry	0.26	From Rte 010 to Parking Area	0.26	0.00	-	-
927	Turnout at MP 59.5	0.20	From Rte 010 to Rte 010	0.20	0.00	-	-
928	Turnout at MP 64	0.2 9	From Rte 010 to Rte 010	0.29	0.00	•	-
929	Pony Pen Access	0.29	From Rte 010 to End	0.29	0.00	_	-
930	Trailer Dump Station Road/Hammock Hills at Okracoke	0.32	From Rte 010 to End of Loop	0.32	0.00	-	-
931	Okracoke Day Use Parking Area Access	0.85	From Rte 010 to Parking Area	0.85	0.00		-
932	Okracoke Maintenance Access	0.47	From Okracoke Town Road to Maintenance Yard	0.47	0.00	-	-
933	Okracoke Day Use Parking Area Access	2.02	From Rte 010 to Parking Area	2.02	0.00	-	-
934	Okracoke Visitor Center Parking Access	0.19	From Rte 010 to Parking Area	0.19	0.00	-	-

CAPE HATTERAS NATIONAL SEASHORE - CAHA - 5190 ROUTE IDENTIFICATION LIST (ALPHABETIC)

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 Green = All Unpaved Parking Areas

 Yellow = Unpaved Routes, ARAN not Driven
 Red Denotes Approximate Wileage

RTE # ROUTE NAME	RTE MI	小学校 网络白龙 网络白色 医白色 医外侧 医白色 网络白色 网络白色 网络白色 网络白色 网络白色	PAVED MILES	UN- PAVED MILES	LANES	FUNC. CLASS
922 Ampitheater Parking Area Access	0.38	From Rte 225 to End of Loop	0.38	0.00	-	-
223 Avon Road Relocation	2.35	From Rte 010 to Rte 010	0.34	0.00	2	3
903 Bodie Island Light House Parking	0.94	At End of route 202	0.94	0.00	-	-
202 Bodie Island Lighthouse Access	1.92	From Rte 010 to End of Parking Loop	1.20	0.00	2	3
400 Bodie Island Maintenance and Residence Access Road	0.63	From Rte 010 Business to End of Loop	0.36	0.00	2	5
902 Bodie Island Maintenance Area	0.77	At End of route 400	0.77	0.00		-
403 Bodie Island Residence No. 100	0.06	From Rte 010 to Residence No. 100	0.02	0.00	1	5
405 Bodie Island Sub District Bone Yard Road	0.50	From Rte 202 to Maintenance Yard	0.26	0.00	2	5
402 Bodie Island Well Field Access	1.18	From Rte 010 to End of Loop	0.00	1.18	2	5
918 Buxton Maintenance Access	0.63	From Rte 410 to Maintenance Area	0.63	0.00	-	-
410 Buxton Residence Area Road	1.59	From Rte 012 to Rte 412	0.54	0.00	2	5
012 Buxton Road	4.22	From Rte 010 to Rte 254	2.64	0.00	2	1
919 Buxton Woods Dump Station	0.13	East Side of Rte 010	0.13	0.00	-	-
917 Buxton Woods Trailhead Parking	0.17	North side of Rte 010	0.17	0.00	-	-
914 Canadian Hole Parking	0.83	Parking along NC Rte 12	0.83	0.00	-	_ ·
916 Cape Hatteras Light House Parking	0.57	From NC State Rte 12 to lighthouse	0.57	0.00	-	-
920 Cape Hatteras Light House Parking	0.51	West Side of Rte 010	0.51	0.00	-	-
921 Cape Point Beach Day Use Parking	0.31	West Side of Rte 010	0.31	0.00	-	· -
225 Cape Point Campground Perimeter	1.95	From Rte 12 to End of Loop	5.11	0.00	1	3
411 Cedar Glen Road	0.11	From Rte 410 to End	0.14	0.00	2	5
230 Coast Guard Access at Hatteras	0.39	From Rte 010 to Coast Guard Entrance Gate	0.14	0.00	2	5
201 Coquina Beach Access	1.06	From Rte 010 to Rte 010	1.92		2	3
014 Frisco Campground Access	1.84	From Rte 010 to Rte 227	1.04	0.00	2	2
413 Frisco Water Tower Road	0,15	From Rte 014 to End of Loop	0.00	0.15	2	5
414 Frisco Well Access	1.34	From Rte 227 to End of Loop	0.00	1.34	2	5
408 Little Kinnakeet Station Access	0.18	From Rte 010 to End	0.00	0.18	2	5
010 NC State Route 12	8.26	From North Entrance to Park Boundary	8.26	0.00	2	1
234 Okracoke Campground PerimeterLoop Road	1.11	From Rte 015 to Rte 015	2.93	0.00	2	3
931 Okracoke Day Use Parking Area Access	0,85	From Rte 010 to Parking Area	0.85	0.00	-	-
933 Okracoke Day Use Parking Area Access	2.02	From Rte 010 to Parking Area	2.02	0.00	-	-
932 Okracoke Maintenance Access	0.47	From Okracoke Town Road to Maintenance Yard	0.47	0.00	-	-
417 Okracoke Residence Access	0.21	From Okracoke Town Road to End	0.26	0.00	1	5

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	Grey = Paved Routes, ARAN not Driven	Green ≈ All Unpaved Parking Areas
	Yellow ≈ Unpaved Routes, ARAN not Driven	Red Denotes Approximate Mileage

RTE #	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MILES	UN- PAVED MILES	LANES	FUNC. CLASS
934	Okracoke Visitor Center Parking Access	0.1 9	From Rte 010 to Parking Area	0.19	0.00	-	-
209	Oregon Inlet Bridge Parking Access	0.29	From Rte 010 to End of Loop	2.22	0.00	2	3
906	Oregon Inlet Bridge Parking Access	0.83	From Rte 010 to End of Loop	0.83	0.00	-	-
204	Oregon Inlet Campground Access	0,13	From Rte 010 to Rte 206	2.03	0.00	2	3
208	Oregon Inlet Marina Access	0.58	From Rte 010 to End of Loop	2.48	0.00	2	3
401	Oregon Island Coast Guard Access	0.30	From Rte 010 to Coast Guard	0.30	0.00	1	5
926	Parking Access at Hatteras Inlet Ferry	0.26	From Rte 010 to Parking Area	0.26	0.00	-	-
211	Pea Island Beach Access	0.11	From Rte 210 to End	0.00	0.11	2	3
210	Pea Island Day Use Road	0.75	From Rte 010 to End	0,24	0.00	2	3
216	Pea Island Observation Turnout No 1	0.98	From Rte 010 to Parking Area	0.00	0.98	2	3
908	Pea Island Observation Turnout No 2	0.22	From Rte 010 to Rte 010	0.22	0.00	-	-
929	Pony Pen Access	0.29	From Rte 010 to End	0.29	0.00	-	-
237	Ramp 52 Parking Area Access	0.10	From Okracoke Airport Access to Ramp 52	0.21	0.00	2	3
404	Ranger Station at Coquina Beach Access	0.13	From Rte 201 to End of Loop	0.28	0.00	2	3
909	Salvo Campground Turnout	0.17	From Rte 010 to Rte 010	0.17	0.00	-	-
214	Saivo Day Use Area	0.56	From Rte 010 Rte 214	1.59	0.00	2	3
924	Sandy Bay Soundside Parking	0.41	Rte 010 on the North Side	0.41	0.00	-	-
915	Soundside Turnout Parking	0.22	Rte 010 on the West Side	0.22	0.00		-
930	Trailer Dump Station Road/Hammock Hills at Okracoke	0.32	From Rte 010 to End of Loop	0.32	0.00	-	
923	Tumout at MP 51	0.60	From Rte 010 to Rte 010	0.60	0.00	-	-
925	Turnout at MP 52.5	0.22	From Rte 010 to Rte 010	0.22	0.00	-	
927	Turnout at MP 59.5	0.20	From Rte 010 to Rte 010	0.20	0.00		-
928	Turnout at MP 64	0.29	From Rte 010 to Rte 010	0.29	0.00	-	-
907	Turnout MP 10	0.11	End Rte 010	0.11	0.00	-	-
910	Turnout MP 28	0.25	From Rte 010 to Rte 010	0.25	0.00	•	-
911	Turnout MP 30	0.23	From Rte 010 to Rte 010	0.23	0.00	-	
912	Turnout MP 34	0.23	From Rte 010 to Rte 010	0.23	0.00		-
901	Whalebone Information Station Access	0.24	From Rte 010 to Rte 012	0.24	0.00	-	÷

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SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE:	010	NC State Route 12

ROUTE: 010 NC State Route 12			ΤΟΤΑ	LENGTH:	8.26 Miles
Section Number	1	2	3	4	5
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
AADT	6390	6390	6390	6390	6390
SADT	8131	8131	8131	8131	8131
ADT Date	NA	NA	NA	NA	NA
Cross Section Information					1
Number of Lanes	4	2	2	2	2
Paved Width (ft)	22	22	22	22	22
Lane Width (ft)	11	11	11	11	11
Shoulder Width (ft)	3	3	3	2	2
Roadway Condition Information	ļ				
PCR (Pavement Condition Rating)	90	89	89	90	89
Roughness Index	96	94	93	96	95
SCR (Surface Condition Rating)	87	86	87	86	85
Alligator Cracking	100	100	100	100	100
Rutting Index	73	72	73	71	70
Patching Index	100	100	100	100	100
Transverse Cracking	100	100	100	100	100
Longitudinal Cracking	100	100	100	100	100
Shoulder Condition Rating	Excellent	Excellent	Excellent	Excellent	Excellent
Drainage Condition Rating	Good	Good	Good	Good	Good

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

ROUTE: 010 NC State Route 12



SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE: 010 NC State Route 12

ROUTE: 010 NC State Route 12			TOTAL	LENGTH: 8.26 Miles
Section Number	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	0.26
AADT	6390	6390	6390	6390
SADT	8131	8131	8131	8131
ADT Date	NA	NA	NA	NA
Cross Section Information				
Number of Lanes	2	2	2	2
Paved Width (ft)	22	24	24	24
Lane Width (ft)	11	12	12	12
Shoulder Width (ft)	2	1	1	1
Roadway Condition Information			e	
PCR (Pavement Condition Rating)	89	88	89	79
Roughness Index	94	98	94	80
SCR (Surface Condition Rating)	85	81	86	77
Alligator Cracking	100	100	100	100
Rutting Index	70	63	71	56
Patching Index	100	100	100	100
Transverse Cracking	100	100	100	100
Longitudinal Cracking	100	100	100	100
Shoulder Condition Rating	Excellent	Excellent	Excellent	Excellent
Drainage Condition Rating	Good	Good	Good	Good

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

ROUTE: 010 NC State Route 12



TOTAL LENGTH: 2.64 Miles

SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE: 012 Buxton Road

ROOTE: 012 Baxton Road			1 - 17	
Section Number	1	2	3	
Section Length (mi)	1.00	1.00	0.64	
AADT	NA	NA	NA	
SADT	NA	NA	NA	
ADT Date	NA	NA	NA	
Cross Section Information	ľ			
Number of Lanes	2	2	2	
Paved Width (ft)	28	24	24	
Lane Width (ft)	14	10	10	
Shoulder Width (ft)	6	2	2	
Roadway Condition Information		-		
PCR (Pavement Condition Rating)	90	90	89	
Roughness Index	91	97	86	
SCR (Surface Condition Rating)	89	85	90	[
Alligator Cracking	100	100	100	
Rutting Index	84	70	83	
Patching Index	100	100	100	
Transverse Cracking	100	100	100	
Longitudinal Cracking	100	100	100	
Shoulder Condition Rating	Good	Good	Good	
Drainage Condition Rating	Good	Good	Good	

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

ROUTE: 012 Buxton Road



SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE: 014 Frisco Campground A	ccess		TOTAL LENGTH: 1.04 Miles
Section Number	1	2	
Section Length (mi)	1.00	0.04	
AADT	NA	NA	
SADT	NA	NA	
ADT Date	NA	NA	
Cross Section Information			
Number of Lanes	2	2	
Paved Width (ft)	22	22	
Lane Width (ft)	11	11	
Shoulder Width (ft)	4	4	
Roadway Condition Information			
PCR (Pavement Condition Rating)	85	72	
Roughness Index	76	57	
SCR (Surface Condition Rating)	92	81	
Alligator Cracking	100	100	
Rutting Index	84	63	
Patching Index	100	100	
Transverse Cracking	100	100	
Longitudinal Cracking	100	100	
Shoulder Condition Rating	Fair	Fair	
Drainage Condition Rating	Fair	Fair	

COMMENTS:

MP 0.00 Pic #5 - Typical Section MP 0.09 Intersection Right (411), Pavement Change - Old Chipseal MP 0.12 Intersection Left (918)



SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE:	202	Bodie Island Lighthouse Access
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1	2			
1.00	0.20			
NA	NA			
NA	NA			
NA	NA			
1				
2	2			
18	18			
9	9			
1	1			
75	71			
81	38			
71	82			
99	100			
89	91	-		
100	100			
85	90			
95	99			
Good	Good			
Good	Good			
	NA NA NA 2 18 9 1 75 81 71 99 89 100 85 95 Good	1.00 0.20 NA NA 2 2 18 18 9 9 1 1 75 71 81 38 71 82 99 100 89 91 100 100 85 90 95 99 Good Good	1.00 0.20 NA NA 18 18 9 9 1 1 75 71 81 38 71 82 99 100 89 91 100 100 85 90 95 99 Good Good	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

TOTAL LENGTH: 1.2 Miles



SER: Southeast Region

CAHA: Cape Hatteras National Seashore

ROUTE: 210 Pea Island Day Use Ro	oad	TOTAL LENGTH: 0.24 Miles
Section Number	1	
Section Length (mi)	0.24	
AADT	NA	
SADT	NA	
ADT Date	NA	
Cross Section Information		
Number of Lanes	2	
Paved Width (ft)	20	
Lane Width (ft)	10	
Shoulder Width (ft)	6	
Roadway Condition Information		
PCR (Pavement Condition Rating)	62	
Roughness Index	41	
SCR (Surface Condition Rating)	72	
Alligator Cracking	98	
Rutting Index	85	
Patching Index	100	
Transverse Cracking	92	
Longitudinal Cracking	93	
Shoulder Condition Rating	Fair	
Drainage Condition Rating	Poor	

COMMENTS:

MP 0.00 Pic #5 - Typical Section MP 0.09 Intersection Right (411), Pavement Change - Old Chipseal MP 0.12 Intersection Left (918)



SER: Southeast Region

CAHA: Cape Hatteras National Seashore

ROUTE: 230 Hatteras Coast Guard	Access	TOTAL LENGTH: 0,14 Miles
Section Number	1	
Section Length (mi)	0.14	
AADT	NA	
SADT	NA	
ADT Date	NA	
Cross Section Information		
Number of Lanes	2	
Paved Width (ft)	22	
Lane Width (ft)	11	
Shoulder Width (ft)	0	
Roadway Condition Information		
PCR (Pavement Condition Rating)	84	
Roughness Index	57	
SCR (Surface Condition Rating)	94	
Alligator Cracking	100	
Rutting Index	87	
Patching Index	100	
Transverse Cracking	100	
Longitudinal Cracking	100	
Shoulder Condition Rating	N/A	
Drainage Condition Rating	Good	

COMMENTS:

MP 0.00 Pic #5 - Typical Section MP 0.09 Intersection Right (411), Pavement Change - Old Chipseal MP 0.12 Intersection Left (918)



Z

SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE: 400	Bodie Island Maint and Residence Access	TOTAL LENGTH: 0.36 Miles
Section Number	1	

Section Number	1					
Section Length (mi)	0.36				j	
AADT	NA					
SADT	NA					
ADT Date	ŇA		1	1		
Cross Section Information						
Number of Lanes	2					
Paved Width (ft)	28					
Lane Width (ft)	14	ļ			j	
Shoulder Width (ft)	1			 		
Roadway Condition Information		j				
PCR (Pavement Condition Rating)	81					
Roughness Index	59					
SCR (Surface Condition Rating)	92					
Alligator Cracking	100			 1		
Rutting Index	96					
Patching Index	100					
Transverse Cracking	98			}		
Longitudinal Cracking	99		_			
Shoulder Condition Rating	Good					
Drainage Condition Rating	Good	[

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

ROUTE: 400



SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE:	401	Oregon	Island	Coast	Guard Access
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		-
Section Number	1	
Section Length (mi)	0.30	1
AADT	NA	
SADT	NA	
ADT Date	NA	
Cross Section Information		1
Number of Lanes	1	
Paved Width (ft)	10	
Lane Width (ft)	10	
Shoulder Width (ft)	1	_
Roadway Condition Information		1
PCR (Pavement Condition Rating)	84	
Roughness Index	55	
SCR (Surface Condition Rating)	88	
Alligator Cracking	101	
Rutting Index	82	
Patching Index	100	
Transverse Cracking	100	1
Longitudinal Cracking	100	_
Shoulder Condition Rating	Good	
Drainage Condition Rating	Good	

COMMENTS:

MP 0.00 Pic #2919 - Typical Section

ROUTE: 401 Oregon Island Coast Guard Access

TOTAL LENGTH: 0.3 Miles



SER: Southeast Region CAHA: Cape Hatteras National Seashore

ROUTE: 405 Bone Yard Road		TOTAL LENGTH: 0.26 Miles
Section Number	1	
Section Length (mi)	0.26	
AADT	NA	
SADT	NA	
ADT Date	NA	
Cross Section Information		
Number of Lanes	2	
Paved Width (ft)	12	
Lane Width (ft)	6	
Shoulder Width (ft)	0	
Roadway Condition Information		
PCR (Pavement Condition Rating)	49	
Roughness Index	37	
SCR (Surface Condition Rating)	52	
Alligator Cracking	98	
Rutting Index	74	
Patching Index	100	
Transverse Cracking	65	
Longitudinal Cracking	97	
Shoulder Condition Rating	N/A	
Drainage Condition Rating	Good	

COMMENTS:

MP 0.00 Pic #5 - Typical Section MP 0.09 Intersection Right (411), Pavement Change - Old Chipseal MP 0.12 Intersection Left (918)



SER: Southeast Region

CAHA: Cape Hatteras National Seashore

ROUTE: 410 Buxton Residence Area	a Road	TOTAL LENGTH: 0.54 Miles
Section Number	1	
Section Length (mi)	0.54	
AADT	NA	
SADT	NA	
ADT Date	NA	
Cross Section Information		
Number of Lanes	2	
Paved Width (ft)	20	
Lane Width (ft)	10	
Shouider Width (ft)	6	
Roadway Condition Information		
PCR (Pavement Condition Rating)	82	
Roughness Index	46	
SCR (Surface Condition Rating)	91	
Alligator Cracking	102	
Rutting Index	94	
Patching Index	100	
Transverse Cracking	96	
Longitudinal Cracking	100	
Shoulder Condition Rating	Good	
Drainage Condition Rating	Fair	

COMMENTS:

MP 0.00 Pic #5 - Typical Section MP 0.09 Intersection Right (411), Pavement Change - Old Chipseal MP 0.12 Intersection Left (918)

Cape Hatteras National Seashore Route 201P

Coquina Beach Access

From NC State Route 12 to NC State Route 12

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
201P	111,433	1.91	0.40	NA	94	63	88	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 204P

Oregon Inlet Campground Access

From NC State Route 12 to Rte 206

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	Ri	PCR	Condition
204P	117,932	2.03	NA	NA	NA	NA	NA	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 208P

Oregon Inlet Marina Access

From NC State Route 12 to End of Loop

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
208P	144,425	2.48	NA	NA	NA	NA	NA	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



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Cape Hatteras National Seashore Route 209P

Oregon Inlet Bridge Parking Access From NC State Route 12 to End of Loop

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
209P	129,364	2.22	NA	NA	NA	NA	NA	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 215P

Salvo Day Use Area

From Route 213 to Route 213

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
214P	92,542	1.59	NA	NA	89	56	78	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 223P

Avon Road Relocation

From NC State Route 12 to NC State Route 12

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
223P	20,160	0.34	NA	NA	NA	NA	NA	FAIR

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



N

Cape Hatteras National Seashore Route 225P

Cape Point Campground Perimeter Loop

From Rte 12 to End of Loop

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
225P	297,218	5.11	NA	NA	91	73	85	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths







Cape Hatteras National Seashore Route 234P

Okracoke Campground PerimeterLoop Road

From Rte 015 to Rte 015

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
234P	170,345	2.93	NA	NA	NA	NA	NA	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths


Cape Hatteras National Seashore Route 237P

Ramp 52 Parking Area Access

From Okracoke Airport Access to Ramp 52

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
237P	12,395	2.22	NA	0.21	NA	NA	NA	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 403N

Bodie Island Residence No. 100 Access

From Rte 010 to Residence No. 100

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
403N	1,728	0.02	NA	NA	NA	NA	NA	FAIR

- Length and width will be used when applicable - Lane miles are based on 11' lane widths







Cape Hatteras National Seashore Route 404P

Ranger Station at Coquina Beach Access

From Rte 201 to End of Loop

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
404P	16,800	0.28	NA	NA	NA	NA	NA	FAIR

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 411P

Cedar Glen Road

From Rte 410 to End

R	oute	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
4	111P	8,170	0.14	NA	NA	NA	NA	NA	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 417N

Okracoke Residence Access

From Okracoke Town Road to End

Route	Area (sq ft)	Lane Miles	Sample Section (mi)	Width (ft)	SCR	RI	PCR	Condition
417N	15,328	0.26	NA	NA	NA	NA	NA	FAIR

300

Length and width will be used when applicableLane miles are based on 11' lane widths

100



200



400

500 Feet

Cape Hatteras National Seashore Route 901P

Whalebone Information Station Access

From Rte 010 to Rte 012

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
901P	NC	990520	NA	NA	14,095	0.24	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 902N

Bodie Island Maintenance Area

At End of Route 400

Route	State	Date Visíted	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
902N	NC	990521	NA	NA	45,123	0.77	FAIR

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 903P

Bodie Island Light House Parking

At End of Route 202

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
903P	NC	990521	NA	NA	55,080	0.94	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths



7-3

Cape Hatteras National Seashore Route 906P

Oregon Inlet Bridge Parking Access

From NC State Route 12 to End of Loop

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
906P	NC	990521	NA	NA	48,544	0.83	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 907P

Turnout MP 10

End NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
907P	NC	990520	NA	NA	6,936	0.11	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 908P

Pea Island Observation Turnout No 2

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
908P	NC	990520	NA	NA	13,061	0.22	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 909P

Salvo Campground Turnout

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
909P	NC	990520	NA	NA	10,007	0.17	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 910P

Turnout MP 28

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
910P	NC	990520	NA	NA	14,958	0.25	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 911P

Turnout MP 30

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
911P	NC	990520	NA	NA	13,931	0.23	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 912P

Turnout MP 34

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
912P	NC	990520	NA	NA	13,860	0.23	GOOD
- Lengtl - Lane r	h and widt miles are b	h will be used v ased on 11' lan	when applicable e widths				
			ŗ				
	0	60	120)	180	240 Feet	

Cape Hatteras National Seashore Route 914P

Canidian Hole Parking

Parking along NC Rte 12.

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
914P	NC	990520	NA	NA	48,536	0.83	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 915P

Soundside Turnout Parking

NC State Route 12 on the West Side

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
915P	NC	990520	NA	NA	12,996	0.22	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 916P

Cape Hatteras Light House Parking From NC Rte 12 to lighthouse

Ro	oute	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
9	16P	NC	990522	NA	NA	33,592	0.57	GOOD

Length and width will be used when applicableLane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 917P

Buxton Woods Trailhead Parking North side of NC Rte 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
917P	NC	990522	NA	NA	10,291	0.17	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 918N

Buxton Maintenance Access

From Rte 410 to Maintenance Area

oute	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Conditio
18N	NC	990522	NA	NA	36,947	0.63	GOOD
- Lengt	miles are b	ased on 11' lar					
			A State of the State				

Cape Hatteras National Seashore Route 919N

Buxton Woods Dump Station

East Side of NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
919N	NC	990522	NA	NA	7,664	0.13	FAIR



Cape Hatteras National Seashore Route 920P

Cape Hatteras Light House Parking

West Side of NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
920P	NC	990522	NA	NA	29,818	0.51	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 921P

Cape Point Beach Day Use Parking

West Side of NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
921P	NC	990522	NA	NA	18,388	0.31	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 922P

Ampitheater Parking Area Access

From Rte 225 to End of Loop

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
922P	NC	990522	NA	NA	22,438	0.38	FAIR

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 923P

Turnout at MP 51

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
923P	NC	990520	NA	NA	3,588	0.6	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 924P

Sandy Bay Soundside Parking

NC State Route 12 on North Side

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
924P	NC	990520	NA	NA	24,326	0.41	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 925P

Turnout at MP 52.5

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
925P	NC	990520	NA	NA	13,257	0.22	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 926P

Parking Access at Hatteras Inlet Ferry From NC State Route 12 to Parking Area

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
926P	NC	990521	NA	NA	15,417	0.26	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 927P

Turnout at MP 59.5

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
927P	NC	990521	NA	NA	12,090	0.2	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 928P

Turnout at MP 64

From NC State Route 12 to NC State Route 12

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
928P	NC	990521	NA	NA	17,171	0.29	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 929P

Pony Pen Access

From NC State Route 12 to End

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
929P	NC	990521	NA	NA	17,318	0.29	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 930P

Trailer Dump Station Road/Hammock Hill From NC State Route 12 to End of Loop

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
930P	NC	990521	NA	NA	18,988	0.32	GOOD

- Length and width will be used when applicable

- Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 931P

Okracoke Day Use Parking Area Access From NC State Route 12 to Parking Area

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
931P	NC	990521	NA	NA	49,385	0.85	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 932N

Okracoke Maintenance Access

From Okracoke Town Road to Maintenance Yard

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
932N	NC	990521	NA	NA	27,334	0.47	GOOD

- Length and width will be used when applicable - Lane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 933P

Okracoke Day Use Parking Area Access From NC State Route 12 to Parking Area

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
933P	NC	990521	NA	NA	117,693	2.02	GOOD

Length and width will be used when applicableLane miles are based on 11' lane widths



Cape Hatteras National Seashore Route 934P

Okracoke Visitor Center Parking Access From NC State Route 12 to Parking Area

Route	State	Date Visited	Length (mi)	Width (ft)	Area (sq ft)	Lane Miles	Condition
934P	NC	990521	NA	NA	11,593	0.19	GOOD

Length and width will be used when applicable
Lane miles are based on 11' lane widths


PARKWIDE MAINTENANCE FEATURES SUMMARY Southeast Region : CAHA : 5190

ICAP CODE	FEATURE	PARK TOTAL	UNIT
1152	PULLOUT (PAVED)	7	EACH
1153	INTERSECTION	18	EACH
1190	TURNOUT (PASSING LANE)	344	LINEAR FEET
1320	PAVED DITCH	0	LINEAR FEET
1331	CULVERT	8	EACH
1333	DROP INLET	0	EACH
1340	CURB	0	LINEAR FEET
1530	TRAFFIC LIGHT	0	EACH
1540	GUARDRAIL	0	LINEAR FEET
1542	GUARD WALL	0	LINEAR FEET
1545	CATTLE GUARD	0	EACH
1720	BRIDGE	0	EACH
1740	TUNNEL	0	EACH
3361	RETAINING WALL	0	EACH
5833	LIGHT POLE	0	EACH
8390	OVERHEAD SIGN	0	EACH
8400	RAILROAD CROSSING	0	EACH
	PARK BOUNDARY	1	EACH

ROUTE MAINTENANCE FEATURES SUMMARY

Southeast Region : CAHA : 5190

ROUTE:010 : NC State Route 12

ICAP CODE	FEATURE	PARK TOTAL	UNIT
1152	PULLOUT (PAVED)	4	EACH
1153	INTERSECTION	9	EACH
1190	TURNOUT (PASSING LANE)	0	LINEAR FEET
1320	PAVED DITCH	0	LINEAR FEET
1331	CULVERT OPENING	6	EACH
1333	DROP INLET	0	EACH
1340	CURB	0	LINEAR FEET
1530	TRAFFIC LIGHT	0	EACH
1540	GUARDRAIL	0	LINEAR FEET
1542	GUARD WALL	0	LINEAR FEET
1545	CATTLE GUARD	0	EACH
1720	BRIDGE	0	EACH
1740	TUNNEL	0	EACH
3361	RETAINING WALL	0	EACH
5833	LIGHT POLE	0	EACH
8390	OVERHEAD SIGN	0	EACH
8400	RAILROAD CROSSING	0	EACH
	PARK BOUNDARY	1	EACH

ROUTE MAINTENANCE FEATURES SUMMARY

Southeast Region : CAHA : 5190

ROUTE:012 : Buxton Road

ICAP CODE	FEATURE	PARK TOTAL	UNIT
1152	PULLOUT (PAVED)	3	EACH
1153	INTERSECTION	8	EACH
1190	TURNOUT (PASSING LANE)	0	LINEAR FEET
1320	PAVED DITCH	0	LINEAR FEET
1331	CULVERT OPENING	2	EACH
1333	DROP INLET	0	EACH
1340	CURB	0	LINEAR FEET
1530	TRAFFIC LIGHT	0	EACH
1540	GUARDRAIL	0	LINEAR FEET
1542	GUARD WALL	0	LINEAR FEET
1545	CATTLE GUARD	0	EACH
1720	BRIDGE	0	EACH
1740	TUNNEL	0	EACH
3361	RETAINING WALL	0	EACH
5833		0	EACH
8390	OVERHEAD SIGN	0	EACH
8400	RAILROAD CROSSING	0	EACH
	PARK BOUNDARY	0	EACH

ROUTE MAINTENANCE FEATURES SUMMARY

Southeast Region : CAHA : 5190

ICAP CODE	FEATURE	PARK TOTAL	UNIT
1152	PULLOUT (PAVED)	0	EACH
1153	INTERSECTION	1	EACH
1190	TURNOUT (PASSING LANE)	344	LINEAR FEET
1320	PAVED DITCH	0	LINEAR FEET
1331	CULVERT OPENING	0	EACH
1333	DROP INLET	0	EACH
1340	CURB	0	LINEAR FEET
1530	TRAFFIC LIGHT	0	EACH
1540	GUARDRAIL	0	LINEAR FEET
1542	GUARD WALL	0	LINEAR FEET
1545	CATTLE GUARD	0	EACH
1720	BRIDGE	0	EACH
1740	TUNNEL	0	EACH
3361	RETAINING WALL	0	EACH
5833	LIGHT POLE	0	EACH
8390	OVERHEAD SIGN	0	EACH
8400	RAILROAD CROSSING	0	EACH
	PARK BOUNDARY	0	EACH

ROUTE MAINTENANCE FEATURES ROAD LOG CAPE HATTERAS NATIONAL SEASHORE

ROUTE	010			NC STATE ROUTE 12
MILE P BEGIN	OST END	FEATURE DESCRIPTION LEFT	FEATURE DESCRIPTION RIGHT	REMARKS
0.006	0.000		Boundary	
0.125	0.000		Intersection	Rte 901
0.995	0.000		Culvert	
1.283	0.000		Culvert	
1.501	0.000		Pullout	
1.549	0.000		Culvert	
2.363	0.000		Culvert	
2.817	0.000		Culvert	
3.108	0.000		Pullout	
3.664	0.000		Pullout	
4.323	0.000		Pullout	
4.613	0.000	Intersection		Rte 400
4.648	0.000		Cuivert	
4.849	0.000		Intersection	Rte 402
5.123	0.000	Intersection		Rte 403
5.227	0.000	Intersection		Rte 201
5.778	0.000		Intersection	Rte 202
5.782	0.000	Intersection		Rte 201
7.885	0.000	Intersection		Rte 204
8.016	0.000		Intersection	Rte 208

8/99

ROUTE MAINTENANCE FEATURES ROAD LOG CAPE HATTERAS NATIONAL SEASHORE

ROUTE	012	· · · · · · · · · · · · · · · · · · ·	;		BUXTON ROAD
MILE P BEGIN		FEATURE DESCRIPTION LEFT	FEATURE DESCRIPTION RIGHT		REMARKS
0.121	0.000		Culvert		
0.345	0.000		Intersection		
0.648	0.000	Pullout			
0.969	0.000	intersection			
1.164	0.000		Pullout	Rte 917	
1.370	0.000		Intersection	Rte 410	
1.673	0.000	Intersection		Rte 919	
1.714	0.000	Intersection			
1.732	0.000		Intersection	Rte 920	
2.057	0.000	Culvert			
2,424	0.000		Intersection	Rte 225	
2.499	0.000		Intersection	Rte 225	
2.570	0.000	Pullout			

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ROUTE MAINTENANCE FEATURES ROAD LOG CAPE HATTERAS NATIONAL SEASHORE

ROUTE	202	BODIE ISLAND LIGHTHOUSE ACCESS				
MILE P BEGIN		FEATURE DESCRIPTION LEFT	FEATURE DESCRIPTION RIGHT	REMARKS		
0.720	0.000		Intersection	Rte 405		
1.069	1.096		Turnout			
1.118	1.156		Turnout			

PARK NUMBER: 5190 ROUTE NUMBER: 010 DATE: 05/99



Photo #2909 - MP 0.00 Whalebone intersection-begin with four lanes



Photo #2910 - MP 0.20 - Roads tapers to two lanes-typical pavement section

PARK NUMBER: 5190 ROUTE NUMBER: 010 DATE: 05/99



Photo #2911 - MP 3.30 - Typical pavement section with corrugations



Photo #2913 - MP 6.00 - Typical pavement section.

PARK NUMBER: 5190 ROUTE NUMBER: 012 DATE: 05/99



Photo #2 - MP 0.00 - Typical pavement section-beginning of route



Photo #3 - MP 0.83 - Intersection with Rte 916 on right.

PARK NUMBER: 1430 ROUTE NUMBER: 012 DATE: 05/99



Photo #4 - MP 2.36 - Intersection with Rte 225 on right.

PARK NUMBER: 5190 ROUTE NUMBER: 014 DATE: 05/99



Photo #6 - MP 0.00 - Beginning of route-typical pavement section.



Photo #20 - MP 1.01 - End at closed campground and road to beach.

PARK NUMBER: 5190 ROUTE NUMBER: 202 DATE: 05/99



Photo #2914 - MP 0.02 - Begin route - typical pavement section



Photo #2915 - MP 0.60 - Localized pavement distress

PARK NUMBER: 5190 ROUTE NUMBER: 202 DATE: 05/99



Photo #2917 - MP 0.80 - Patch faulting

PARK NUMBER: 5190 ROUTE NUMBER: 210 DATE: 05/99



Photo #1 - MP 0.00 - Poor road condition.

PARK NUMBER: 5190 ROUTE NUMBER: 230 DATE: 05/99



Photo #8 - MP 0.09 - Typical pavement section

PARK NUMBER: 5190 ROUTE NUMBER: 400 DATE: 05/99



Photo #2913 - MP 0.00 - Begin route-typical pavement section

PARK NUMBER: 5190 ROUTE NUMBER: 401 DATE: 05/99



Photo #2919 - MP 0.00 - Begin route to USCS Station-typical pavement section

PARK NUMBER: 5190 ROUTE NUMBER: 410 DATE: 05/99



Photo #5 - MP 0.00 - Beginning of route-typical pavement section.

XI. UNPAVED ROUTES

Unpaved routes are not addressed in this report at this time. Section "IV. ROUTE INVENTORY" includes a current register of all unpaved routes (name, number, estimated mileage to the nearest 0.01, functional class, number of lanes, and termini description). Any further information will be added post 1997-99 data collection. Data was collected for unpaved routes in numerous parks during the '94-'96 data collection cycle. This data (digital images, GPS traces, features inventory, and condition assessments) may be processed in the future.

PAVED ROUTE NO.	MILEAGE AT BEGINNING FRAME	FROM	TO	BEGINNING FRAME NO.	ENDING FRAME NO.	VIDEO TAPE NO.*	DATE	DIR: PRIM/ OPP
010	0.00	N BNDRY	BRIDGE	6489	27735	2	990520	Р
010	8.26	BRIDGE	N BNDRY	61359	82221	2	990520	0
12	0.00	NC RTE 12	NC RTE 12	146382	155115	2	990303	0
12	2.64	NC RTE 12	NC RTE 12	159306	167214	2	990303	0
014	0.00	RTE 012	CMPGRND	187809	191001	2	990303	P
014	1.04	CMPGRND	RTE 012	194216	197214	2	990303	0
201	0.40	NC RTE 12	END PRKNG	99695	101714	2	990303	Р
202	1.20	RTE 010	ENL	104126	108507	2	990303	Р
210	0.24	RTE 010	END	128877	129670	2	990303	Р
215	1.08	NC RTE 12	NC RTE 12	138752	143112	2	990303	Р
225	1.56	RTE 012	END	171766	178706	2	990303	P
230	0.14	NC RTE 12	GATE	203659	204211	2	990303	Р
400	0.36	INT 011	ENL	85372	86834	2	990303	P
401	0.30	RTE 010	END	119230	120746	2	990303	Р
405	0.26	END	RTE 202	115736	116741	2	990303	Р
410	0.54	RTE 012	END	180325	1832914	2	990303	Р

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CAPE HATTERAS NATIONAL SEASHORE - CAHA - 5190 - R.O.W. VIDEO TAPE INDEX

GLOSSARY OF TERMS AND ABBREVIATIONS

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
5190	Cape Hatteras National Seashore Numeric Code
AADT	Annually adjusted average daily traffic. Average daily traffic for the term period comprising 80% of annual vistation.
CAHA	Cape Hatteras National Seashore Alpha Code
CRS	Condition Rating Sheet. Index rating for pavement distresses, roadway condition and cross section information.
DCR	Drainage Condition Rating
Defecient Lane Miles	Lane Miles rated in POOR Condition.
DIRI	Driver International Roughness Index
Drainage Condition Rating	Drainage condition rating. An alpha rating from P (failed) to E (excellent) based on visual observations.
EXCELLENT	Excellent rating. PCR (or SCR) 95 or greater.
FC	Functional Class. See Table 1 in appendix.
FAIR	Fair rating. PCR (or SCR) between 61 and 84.
GOOD	Good rating. PCR or (SCR) between 85 and 94
IRI	International Roughness Index
Lane	The portion of roadway from centerline to fogline or edge of pavement if no fog line exists.
Lane Miles	Mileage of total pavement coverage, based on a standard lane width. Either calculated as straight route mileage times the number of lanes, or as an area converted to 11 foot lane widths.
LRUT	Left Rut

13-1

NA	Not applicable.
PAV_MI	Paved portion of route, length in miles.
Pavement Width	The entire portion of roadway from edge of pavement to edge of pavement.
PCR	Pavement condition rating. Numerical rating form 0 (failed) to 100 (excellent). Based on the surface condition and roughness of the road.
POOR	Poor rating, PCR (or SCR) 60 or less.
RI	Roughness Index.
RMR	Rocky Mountain Region
RRUT	Right Rut
RT#	Route number.
RTE_DESCRIPTION	Description of the route terminus.
RTE_MI	Total route length in miles.
RTE_NAME	Route name.
SADT	Seasonal Annual Daily Traffic. Average daily traffic for the total "season".
SCR	Surface Condition Rating. Numerical rating from 0 (failed)to 100 (excellent). Based on the extent of alligator cracking, patching, longitudinal cracking, rutting, and transverse cracking.
Shoulder Condition Rating	Alpha rating from P (failed) to E (excellent). Visual and measured observations of the adequacy of a section of shoulder. Also applies to curb and gutter.
Shoulder Width	If fogline exists, the portion of pavement outside lane, from fogline to edge of pavement.
UNPAV_MI	Unpaved portion of route, length in miles.

GENERAL PARK ROAD FUNCTIONAL CLASSIFICATION - TABLE 1

Class I	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.
	All other FC 1 routes have two digit numbers.
Class II	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 III	Special Purpose Park Road (Public Roads) - Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionalre facilities, etc.
	These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.
Class IV	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 III and IV have the same route numbers because, historically, they were numbered similarly.
Class V	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 VI	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 V and VI 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 VI rather than FC V.
Class VII	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 VIII	City Streets (Urban Parkways and City Streets) - City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service.
	The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

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

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

DESCRIPTION OF RATING SYSTEM

Data is collected on the following distresses and conditions:

- Alligator Cracking a series of interconnecting cracks resembling alligator skin or chicken wire which usually occur in the wheel path.
- **Longitudinal Cracking** cracks which are parallel to the pavement centerline or asphalt lay down direction.
- **Transverse Cracking** cracks perpendicular to the pavement centerline.
- **Pothole (patch)** a bowl-shaped hole in the pavement surface.
- **Rutting** surface depressions in the wheel paths.
 - In addition, **Roughness** has been collected and is used in the PCR formula.

A Rating Index value is calculated for each of these at the 0.02 mile, or every 105.6 feet. **Rating Index Formulas**

Alligator Cracking Index = 100 - [40 * (%low/70 + %medium/30 + %high/10)] Longitudinal Cracking Index = 100 - [40 * (%low/350 + %medium/200 + %high/75)] Transverse Cracking Index = 100 - [40 * (low/15.1 + medium/7.5 + high/1.9)] Patching Index = 100 - [40 * (%patching / 80)] Rutting Index: Asphalt Surface = [13.33 * (deepest rut)²] - [86.67 * deepest rut] + 100 Chipseal (1-5 yrs. old) = [9.53 * (deepest rut)²] - [86.67 * deepest rut] + 108.57 Chipseal (>5 yrs. old) = [3.85 * (deepest rut)²] - [83.46 * deepest rut] + 116.53 Roughness Index: (RI) = 29 * [5 * e^(-0.0041 * average RI)]

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

Surface Condition Rating (SCR) = 100 - [40 * (LOW ALLIGATOR CRACKING/70 + MEDIUM ALLIGATOR CRACKING/30 + HIGH ALLIGATOR CRACKING/10 + PATCHING/80 + LOW TRANSVERSE CRACKING/15.1 + MEDIUM TRANSVERSE CRACKING/7.5 + HIGH TRANSVERSE CRACKING/1.9 + LOW LONGITUDINAL CRACKING/350 + MEDIUM LONGITUDINAL CRACKING/200 + HIGH LONGITUDINAL CRACKING/75 + MAXIMUM RUT VALUE)]

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

NOTE: Collection of roughness data is dependent on the data collection vehicle traveling at a minimum speed of 22 mph. In the event that a route cannot be safely traveled at this minimum speed, and results in no roughness data, the SCR only will be calculated.

Drainage Condition Rating Definitions

Excellent:	No drainability problem. If funding were available for pavement maintenance, no funds would be required for drainage concerns.
Good:	Minimal overall drainability problems. If funding were available for pavement maintenance, 25% or less is estimated to correct drainage deficiencies.
Fair:	Moderate problems with drainability that needs correcting before it deteriorates to a poor rating. If funding were available for pavement maintenance in this section, 25% to 50% is estimated to correct deficiencies.
Poor:	Severe problems exist that jeopardizes the integrity of the road in this section. If funding were available for pavement maintenance, 50% to 100% is estimated to correct drainage deficiencies.

Drainage Rating Criteria

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

A. Excellent Drainability

All water clears the road prism adequately without any chance of base saturation.

- Pavement drains without interruption.
- Curbs are flawless with the exception of minor cracking.
- Down drains are secure and placed properly.
- Drop inlets are at the correct grade and location with no deficiencies.
- Culverts are adequate in numbers, size, and condition.
- Ditches are constructed of asphalt and are sufficient to carry required volumes of water.

B. Good Drainability

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

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

C. Fair Drainability

Some areas have questionable ability for the water to clear the road prism with an uncomfortable concern for base saturation.

- Pavement shows moderate flaws, such as rutting, and other irregularities that would hold minor amounts of water, interrupting the flow of water.
- Shoulder grades restrict the flow of water, however, water exits after some ponding.
- Down drains show evidence that limited water is causing erosion as a result of deterioration, or other similar flaws (e.g. missing asphalt that guides water to down drain).
- Drop inlet encasements are cracked, iron is bent, or are misaligned to cause limited water to escape,
- Culvert headwalls show moderate damage or are inadequate, the exit shows some damage to fill areas, or entry asphalt is moderately damaged.
- Ditches have some permeable material, unmovable obstructions to interrupt flow obviously hard to maintain due to inconsistencies, or have a less than desirable area to carry required volumes of water.

D. Poor Drainability

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

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

Shoulder Condition Rating Definitions

- **Excellent**: Shoulder is new or under construction. It meets or exceeds standards. The curb is new.
- **Good:** The shoulder is below standard width for posted speed and grading is required. The curb is functional.
- **Fair**: There are variations in the shoulder, irregular width with material replacement required. The curb is in need of repairs or adjustments.
- **Poor:** There isn't any shoulder, erosion has removed it. The curb needs replacement.

Shoulder Rating Criteria

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

The overall shoulder condition rating for a section is determined by the lowest individual rating for any one of the above categories (width, rutting, cracking, erosion, drop-off, and curbs).

A. Excellent Shoulders

- If shoulder is unpaved there will not be any drop-offs or erosion.
- If shoulder is paved there isn't any rutting, cracking, or erosion.
- Curbs are flawless with the exception of minor cracking and no erosion behind curb.

B. Good Shoulders

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

C. Fair Shoulder

- If shoulder is unpaved drop-offs are from 1" to 4" and replacement of material required.
- If shoulder is paved rut depth is from 1/2" to 1". Open cracks are present but less than 1/4" deep, replacement of material is needed from erosion.
- If curbs are present they need repairs, and there is erosion behind the curb.

D. Poor Shoulder

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