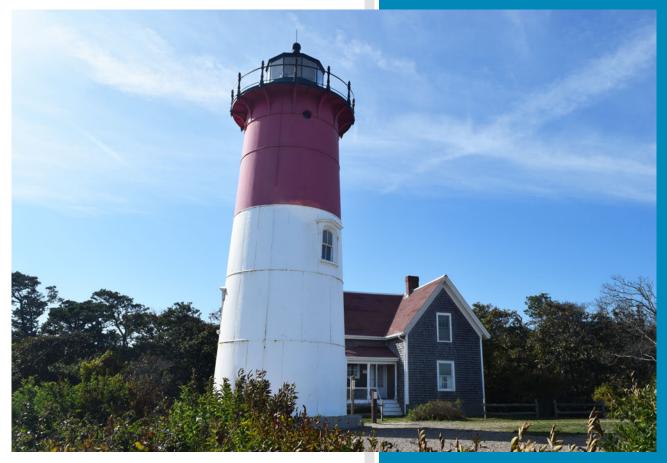


Final Report

Road Inventory and Condition Assessment of Paved Routes Cape Cod National Seashore





Federal Lands Highway Road Inventory Program Prepared By: Federal Highway Administration Eastern Federal Lands Highway Division Road Inventory Program (RIP)

Report Date: August 2021



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

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Section 1 Introduction





Introduction

The Federal Highway Administration's (FHWA), Road Inventory Program (RIP) inventories all roads and parking areas in the National Park System, and performs condition inspections on all paved roads and parking areas for the National Park Service (NPS). This report contains the results of the Cycle 6 condition assessment of paved roads and parking lots for this park unit. This assessment was done using an automated, state-of-the-art pavement inspection vehicle as well as manual ratings. This information represents the condition of the paved assets at the time of the inspection. The pavement management system utilized by FHWA and the NPS uses these assessments to estimate future conditions and help prioritize pavement maintenance and rehabilitation projects. Further information about RIP data and its role in managing paved roads and bridges can be obtained by contacting the NPS Regional Transportation Program Manager.

A History of the Road Inventory Program:

The FHWA, in the mid-1970s, was charged with the task of identifying surface condition deficiencies and corrective priorities on 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 a Memorandum of Agreement (MOA) which established the RIP. This MOA was revised in 1980 to update RIP data collection standards and develop a long-range program to improve and maintain NPS roads to designated condition standards and establish a pavement management program.

The FHWA completed the initial phase of inventory in the early 1980s. As a result of this effort, each NPS unit included in the collection received a RIP Report known as the "Brown Book" which contained information that was inventoried during this first RIP phase. In the 1990s, a cyclical program was developed, and since then five cycles of collection have been completed. Cycle 6 is currently in progress. A summary of the RIP collection cycles is shown in the table below.

Cycle	Years	Parks Collected
Cycle 1	1994 - 1997	° 44 Large Parks
Cycle 2	1997 - 2001	 79 Large Parks 5 Small Parks
Cycle 3	2001 - 2004	 All Large Parks All Small Parks
Cycle 4	2006 - 2010	 86 Large Parks Several Small Parks
Cycle 5	2010 - 2014	 All Large Parks (Only functional class 1, 2, 7, and new/modified routes collected) All Small Parks (all roads and parking areas collected)
Cycle 6	2014 – 2020 (±)	 All roads and parking areas collected at all Parks Additional partial collections of functional class 1, 2, and 7 roads at Large Parks Cycle 6 is expected to last 6 years

Note: Large Parks have ≥ 10 Paved Miles; Small Parks have < 10 Paved Miles

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 Federal Lands Highway (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.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) amended Title 23 U.S.C., and under Section 203(c)(1-2) stated that the National Park Service in cooperation with the DOT/FHWA, shall maintain a comprehensive national inventory of their transportation facilities, with the goal of quantifying transportation infrastructure needs within the National Park System.

A History of the Pavement Management System:

In 2005, the FHWA began implementing the use of a pavement management system to assist the NPS in prioritizing Pavement Maintenance and Rehabilitation activities. The system used by FHWA is the Highway Pavement Management Application (HPMA), which 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. Regional prioritized lists and optimizations have been produced for most regions, and the Service's overall roadway Deferred Maintenance is calculated via the HPMA.

Overview of Cycle 6:

Cycle 6 launched in the spring of 2014 and will again comprise all NPS park units that are served by paved roads and/or parking areas. For Cycle 6, all paved roads (approximately 5,700 miles) and parking areas will be collected in all parks at least once, while the primary routes (functional class 1, 2, and 7 roads) at Large Parks will have additional collections. These multiple collections will provide updated condition data on a majority of the NPS's primary road network and help build a better pavement management system, allowing for more accurate pavement performance prediction models.

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 Ashburn, Virginia.

Respectfully,

FHWA RIP Team

FHWA/Eastern Federal Lands 22001 Loudoun County Parkway Building E-2, Suite 200 Ashburn, VA 20147 (571) 434-1574 FHWA/Central Federal Lands 12300 West Dakota Ave Lakewood, CO 80228 (720) 963-3556

Section 2 Park Route Inventory





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Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Non-NPS Routes	Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon

PKG = Parking Areas NC = Not Collected

	ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)															
Route No.	Cycle Collected	lteration Collected	FMSS Number	Concessio	Route Name	Route Des	cription To	Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Function Class	Area (SQ FT)	Surf. Type	Area Map
0010	6	2	32428		DOANE ROAD	FROM ROUTE 0019 (NAUSET ROAD) AT MP 0.21	TO ROUTE 5001 (OCEAN VIEW DRIVE) AT START		YES	1.01	0.00	1.01	1		AS	5
0011	6	2	32431		CABLE ROAD	FROM NAUSET ROAD	TO INTERSECTION OF ROUTE 0211 (NAUSET LIGHT BEACH ACCESS ROAD) AND ROUTE 5001 (OCEAN VIEW DRIVE)		YES	0.93	0.00	0.93	1		AS	5
0012	6	2	32437		MARCONI BEACH ROAD	FROM STATE HIGHWAY 6	TO ROUTE 0906 (MARCONI BEACH PARKING)		YES	1.62	0.00	1.62	1		AS	4
0013	6	2	32440		MARCONI SITE ROAD	FROM ROUTE 0012 (MARCONI BEACH ROAD) AT MP 0.13	TO ROUTE 0907 (MARCONI STATION SITE PARKING)		YES	0.98	0.00	0.98	1		AS	4
0014	6	2	32451		RACE POINT ROAD	FROM PARK BOUNDARY AT PAVEMENT CHANGE	TO ROUTE 0902 (RACE POINT BEACH PARKING)		YES	1.94	0.00	1.94	1		AS	1
0015	6	2	32456		PROVINCE LANDS ROAD	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.19	TO INTERSECTION OF ROUTE 0017 (MOORS ROAD) AND ROUTE 0018ZZ (STATE ROUTE 6)		YES	2.27	0.00	2.27	1		AS	1
0017	6	2	32459		MOORS ROAD	FROM INTERSECTION OF ROUTE 0015 (PROVINCE LANDS ROAD) AND ROUTE 0018ZZ (STATE ROUTE 6)	TO PARK BOUNDARY AT PAVEMENT CHANGE		YES	0.89	0.00	0.89	1		AS	1
0018ZZ	6	2	32463		STATE ROUTE 6	FROM INTERSECTION OF ROUTE 0015 (PROVINCE LANDS ROAD) AND ROUTE 0017 (MOORS ROAD)	TO PARK BOUNDARY AT PAVEMENT CHANGE		YES	0.60	0.00	0.60	1		AS	1
0019	6	2	32467		NAUSET ROAD	FROM ROUTE 0223 (MACPHERSON WAY)	TO STATE HIGHWAY 6		YES	0.87	0.00	0.87	1		AS	5

Page 2 of 10 Report Date: 0		Cycle 6 NPS / RIP Rou (Numerical By Summary Route and S	Federal Lands Highway Road Inventory Program			
Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Non-NPS Routes	Concession Route		
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas			
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon		

PKG = Parking Areas NC = Not Collected

	ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)															
Route No.	Cycle Collected	lteration Collected	FMSS Number	Concessio	Route Name	Route Dese	cription To	Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	:unction Class	Area (SQ FT)	Surf. Type	Area Map
0020	6	2	32471		OLD DEWLINE ROAD		TO INTERSECTION OF ROUTE 0232 (NTAFS ACCESS ROAD) AND ROUTE 0227 (NTAFS LANDING ROAD)		YES	0.53	0.00	0.53	1		AS	3
0200	6	2	32476		FORT HILL AREA ROAD	FROM GOVERNOR PRENCE ROAD (TOWN ROAD)	TO ROUTE 091 <i>5</i> (FORT HILL AREA PARKING)		YES	0.30	0.00	0.30	3		AS	5
0201	6	2	32477		DOANE ROCK PICNIC AREA ROAD		TO ROUTE 0911B (DOANE ROCK AREA 2 PARKING)		YES	0.14	0.00	0.14	3		AS	5
0202ZZ	6	2	32478		TOMAHAWK TRAIL ROADS	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.31	TO END OF LOOPS		YES	0.65	0.00	0.65	3		AS	5
0204	6	2	32480		MARCONI EMPLOYEE PARKING ROAD	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.05	TO ROUTE 0917 (PARK HEADQUARTERS EMPLOYEE PARKING)		YES	0.13	0.00	0.13	5		AS	4
0205	6	2	32481		HEAD OF THE MEADOW BEACH ROAD	FROM HEAD OF THE MEADOW ROAD (TOWN ROAD)	TO ROUTE 0927 (HEAD OF THE MEADOW PARKING)		YES	0.12	0.00	0.12	3		AS	2
0206	6	2	32483		PILGRIM HEIGHTS ROAD	FROM STATE HIGHWAY 6	TO END OF LOOP		YES	0.87	0.00	0.87	3		AS	2
0207	6	2	32484		HIGH HEAD ROAD	FROM TOWN ROAD	TO ROUTE 0920 (HIGH HEAD ROAD PARKING)		NO	0.00	0.20	0.20	3		NV	2
0209	6	2	32487		RACE POINT COAST GUARD STATION ROAD	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.87	TO ROUTE 0928 (RACE POINT RANGER STATION PARKING)		YES	0.16	0.00	0.16	3		AS	1
0211	6	2	32489		NAUSET LIGHT BEACH ACCESS ROAD	FROM INTERSECTION OF ROUTE 0011 (CABLE ROAD) AND ROUTE 5001 (OCEAN VIEW DRIVE)	TO ROUTE 0912 (NAUSET LIGHT BEACH PARKING)		YES	0.06	0.00	0.06	3		AS	5
0223	6	2	32517		MACPHERSON WAY	FROM ROUTE 0019 (NAUSET ROAD) AT START	TO END OF PAVEMENT		YES	0.14	0.00	0.14	3		AS	5

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				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

	ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)															
Route No.	Cycle Collected	lteration Collected	FMSS Number	Concessi	Route Name	Route Desc	cription To	Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functio Class	Area (SQ FT)	Surf. Type	Area Map
0227	6	2	32524		NTAFS LANDING ROAD	ROUTE 0232 (NTAFS ACCESS	TO INTERSECTION OF ROUTE 0233 (NTAFS FUEL HOUSE ROAD) AND ROUTE 0229ZZ (SEWAGE TREATMENT PARKING ROADS)		NO	0.19	0.00	0.19	6		AS	3
0228	6	2	32525		WELL ROAD	FROM ROUTE 0230ZZ (NTAFS RESIDENCE ACCESS ROADS)	TO END OF PAVEMENT		NO	0.06	0.00	0.06	6		AS	3
0229ZZ	6	2	32529		SEWAGE TREATMENT PARKING ROADS	FROM INTERSECTION OF ROUTE 0227 (NTAFS LANDING ROAD) AND ROUTE 0233 (NTAFS FUEL HOUSE ROAD)	TO END		NO	0.30	0.00	0.30	6		AS	3
0230ZZ	6	2	32527		NTAFS RESIDENCE ACCESS ROADS	FROM ROUTE 0227 (NTAFS LANDING ROAD)	TO RESIDENCE AREA		NO	0.46	0.00	0.46	6		AS	3
0231	6	2	32538		NAC LABORATORY ACCESS ROAD	FROM ROUTE 0020 (OLD DEWLINE ROAD) AT MP 0.49	TO ROUTE 0922 (NAC LABORATORY PARKING)		YES	0.08	0.00	0.08	5		AS	3
0232	6	2	32541		NTAFS ACCESS ROAD	FROM INTERSECTION OF ROUTE 0020 (OLD DEWLINE ROAD) AND ROUTE 0227 (NTAFS LANDING ROAD)	TO PAVEMENT CHANGE AT FAA ACCESS ROAD		NO	0.19	0.00	0.19	6		AS	3
0233	6	2	32544		NTAFS FUEL HOUSE ROAD	ACCESS ROAD) AT MP 0.15	TO INTERSECTION OF ROUTE 0227 (NTAFS LANDING ROAD) AND ROUTE 0229ZZ (SEWAGE TREATMENT PARKING ROADS)		NO	0.09	0.00	0.09	6		AS	3
0235	6	2	253720		HIGHLAND LIGHTHOUSE ROAD	FROM ROUTE 0949 (HIGHLAND MUSEUM PARKING)	to end at lighthouse		YES	0.12	0.00	0.12	3		AS	3
0236ZZ	6	2	253729		BOUND BROOK ISLAND ROADS	FROM BOUND BOOK ISLAND ROAD	TO END		YES	0.29	0.82	1.11	3		AS	6
0237	NC		253730		BOUND BROOK WAY	FROM ROUTE 0236ZZ (BOUND BROOK ISLAND ROADS)	TO END		NO	0.00	0.73	0.73	3		GR	6

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PKG = Parking Areas NC = Not Collected

	ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)															
Route No.	Cycle Collected	lteration Collected	FMSS Number	Concessio	Route Name	Route Des	cription To	Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Function Class	Area (SQ FT)	Surf. Type	Area Map
0401	6	2	32553		B-WELL ROAD	FROM ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.28	TO END OF PAVEMENT		YES	0.25	0.00	0.25	4		AS	4
0402	6	2	32554		MARCONI RESIDENCE ROAD	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.07	TO END		YES	0.14	0.00	0.14	5		AS	4
0403	6	2	32556		MARCONI MAINTENANCE AREA ROAD	FROM ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.04	TO ROUTE 0909ZZ (MARCONI MAINTENANCE PARKING AREAS)		YES	0.11	0.00	0.11	5		AS	4
0405	6	2	32558		COAST GUARD BEACH SHUTTLE PICKUP ROAD	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.43	TO END OF LOOP		YES	0.23	0.00	0.23	3		AS	5
0407ZZ	6	2	32567		TIN PAN ALLEYS	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 0.08	THROUGH RESIDENCE AREA		YES	0.18	0.00	0.18	3		AS	1

	NON-NPS ROADS INVENTORY														
Route	Cycle Collected Iteration Collected	FMSS	ncessio	D . N	Route Des	cription	Maintenance	₽	Paved	Unpaved	Total t	ass	Area	Surf.	Area
No.		Number	ů	Route Name	From	То	District	Ë	Miles	Miles	Mileage	2 ở	(SQ FT)	Туре	Мар
5001	4 1			OCEAN VIEW DRIVE	FROM ROUTE 0010 (DOANE ROAD) AT END	TO INTERSECTION OF ROUTE 0011 (CABLE ROAD) AND ROUTE 0211 (NAUSET LIGHT BEACH ACCESS ROAD)		NO	0.90	0.00	0.90			AS	5

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	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon

PKG = Parking Areas NC = Not Collected

				Ę	PAR	KING AREA INVENTORY (1300 SERIES FMSS LOCATI	ONS)					
Route	cle lected	lteration Collected	FMSS	Icessio		Route De	scription	Maintenance	£	YES PUBLIC 45,0 YES PUBLIC 96,2 YES PUBLIC 139,4 YES PUBLIC 9,72 YES PUBLIC 9,72 YES PUBLIC 4,72		Surf.	Area
No.	δõ	Col	Number	Ŝ	Route Name	From	То	District	<u></u>	Level	(SQ FT)	Туре	Мар
0900	6	2	32578		BEECH FOREST PARKING	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 0.13	TO PARKING		YES	PUBLIC	45,019	AS	1
0901	6	2	32580		PROVINCE LANDS VISITOR CENTER PARKING	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.00	TO PARKING		YES	PUBLIC	96,268	AS	1
0902	6	2	32581		RACE POINT BEACH PARKING	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.90	TO ROUTE 0014 (RACE POINT ROAD) AT END		YES	PUBLIC	139,477	AS	1
0903	6	2	32582		RACE POINT AIR STATION PARKING	ADJACENT TO ROUTE 0209 (RACE POINT COAST GUARD STATION ROAD) AT MP 0.06			YES	PUBLIC	9,723	AS	1
0904	6	2	32583		PROVINCE LANDS ROAD PARKING	FROM ROUTE 0015 (PROVINCE LANDS ROAD) AT MP 0.41	TO PARKING		YES	PUBLIC	4,726	AS	1
0905AZZ	6	2	32584		PILGRIM HEIGHTS WEST PARKING AREAS	ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44 ON LEFT AND RIGHT			YES	PUBLIC	18,166	AS	2
0905BZZ	6	2	32585		PILGRIM HEIGHTS EAST PARKING AREAS	ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65 ON LEFT AND RIGHT			YES	PUBLIC	20,163	AS	2
0906	6	2	32586		MARCONI BEACH PARKING	FROM ROUTE 0012 (MARCONI BEACH ROAD) AT MP 1.42	TO ROUTE 0012 (MARCONI BEACH ROAD) AT END		YES	PUBLIC	223,538	AS	4
0907	6	2	32587		MARCONI STATION SITE PARKING	FROM ROUTE 0013 (MARCONI SITE ROAD) AT END	TO PARKING		YES	PUBLIC	23,354	AS	4
0908	6	2	32588		PARK HEADQUARTERS PARKING	FROM ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.14	TO ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.22		YES	PUBLIC	22,892	AS	4
0909ZZ	6	2	32589		MARCONI MAINTENANCE PARKING AREAS	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.10	TO PARKING		NO	NONPUBLIC	57,874	AS	4
0910	6	2	32590		MARCONI RESIDENCE ROAD PARKING	ADJACENT TO ROUTE 0402 (MARCONI RESIDENCE ROAD) AT MP 0.06			YES	PUBLIC	1,332	AS	4
0911A	6	2	32593		DOANE ROCK AREA 1 PARKING	FROM ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT MP 0.04	TO ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT MP 0.06		YES	PUBLIC	7,352	AS	5

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Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	= Paved Routes, DCV not Driven Black = Non-NPS Routes	
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				PAR	KING AREA INVENTORY	1300 SERIES FMSS LOCATI	ONS)					
Route	e ected	lteration Collected	FMSS	cessio	Route De	escription	Maintenance	£	Access	Area	Surf.	Area
No.		ltero Coll	Number	S Route Name	From	То	District	FLTP	Level	(SQ FT)	Туре	Мар
0911B	6	2	32594	DOANE ROCK AREA 2 PARKING	FROM ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT END	TO PARKING		YES	PUBLIC	14,635	AS	5
0912	6	2	32595	NAUSET LIGHT BEACH PARKING	FROM ROUTE 0211 (NAUSET LIGHT BEACH ACCESS ROAD) AT END	TO PARKING		YES	PUBLIC	73,171	AS	5
0913	6	2	32596	COAST GUARD BEACH ENVIRONMENTAL EDUCATION CENTER PARKING	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.97	TO PARKING		YES	PUBLIC	57,107	AS	5
0914	6	2	32597	COAST GUARD BEACH BUS STOP PARKING	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.42	TO PARKING		YES	PUBLIC	209,689	AS	5
0915	6	2	32598	FORT HILL AREA PARKING	FROM ROUTE 0200 (FORT HILL AREA ROAD) AT END	TO PARKING		YES	PUBLIC	4,132	AS	5
0916	6	2	32599	FORT HILL LOWER PARKING	FROM ROUTE 0200 (FORT HILL AREA ROAD) AT MP 0.12	TO PARKING		YES	PUBLIC	4,738	AS	5
091 <i>7</i>	6	2	32600	PARK HEADQUARTERS EMPLOYEE PARKING	FROM ROUTE 0204 (MARCONI EMPLOYEE PARKING ROAD) AT END	TO HELIPAD		YES	PUBLIC	28,404	AS	4
0918	6	2	32601	OLD VEHICLE STORAGE PARKING	FROM ROUTE 0204 (MARCONI EMPLOYEE PARKING ROAD) AT MP 0.13	TO PARKING		NO	NONPUBLIC	6,606	со	4
0919	6	2	32602	SALT POND VISITOR CENTER PARKING	FROM ROUTE 0019 (NAUSET ROAD) AT MP 0.64	TO ROUTE 0019 (NAUSET ROAD) AT MP 0.80		YES	PUBLIC	98,044	AS	5
0920	NC		242585	HIGH HEAD ROAD PARKING	FROM ROUTE 0207 (HIGH HEAD ROAD) AT END	TO PARKING		NO	PUBLIC	4,285	GR	6
0921	NC		242586	SPECTACLE POND ROAD AND PARKING	FROM LONG POND ROAD	TO PARKING		NO	PUBLIC	2,779	GR	KEY
0922	6	2	32648	NAC LABORATORY PARKING	FROM ROUTE 0231 (NAC LABORATORY ACCESS ROAD) AT END	TO PARKING		NO	NONPUBLIC	8,445	AS	3
0925	6	2	32649	PROVINCE LANDS MAINTENANCE PARKING	FROM ROUTE 0407ZZ (TIN PAN ALLEYS)	TO ROUTE 0407ZZ (TIN PAN ALLEYS) AT MP 0.05		YES	PUBLIC	31,892	AS	1

Page 7 of 10 Report Date: 0		Cycle 6 NPS / RIP Rou (Numerical By Summary Route and S	Federal Lands Highway Road Inventory Program	
Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Non-NPS Routes	= Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

			_	Ē	PAR	KING AREA INVENTORY (1300 SERIES FMSS LOCATI	ONS)					
Route	le ected	ation lected	FMSS	cessio		Route De	scription	Maintenance	FLTP	Access	Area	Surf.	Area
No.	ς Ω Ω	ltera Collo	Number	Con	Route Name	From	То	District	5	Level	(SQ FT)	Туре	Мар
0927	6	2	32651		HEAD OF THE MEADOW PARKING	FROM ROUTE 0205 (HEAD OF THE MEADOW BEACH ROAD) AT END	TO PARKING		YES	PUBLIC	121,253	AS	2
0928	6	2	32652		RACE POINT RANGER STATION PARKING	FROM ROUTE 0209 (RACE POINT COAST GUARD STATION ROAD) AT END	TO PARKING		YES	PUBLIC	19,418	AS	1
0929	6	2	32653		HERRING COVE SOUTH BEACH PARKING	FROM ROUTE 001 <i>5</i> (PROVINCE LANDS ROAD)	TO ROUTE 0017 (MOORS ROAD)		YES	PUBLIC	201,139	AS	1
0930	6	2	32654		GREAT ISLAND TRAIL AND PICNIC PARKING	FROM CHEQUESSET NECK ROAD (WELLFLEET TOWN ROAD)	TO PARKING		YES	PUBLIC	28,101	AS	6
0931	6	2	32655		NAUSET RANGER STATION PARKING	FROM NAUSET ROAD	TO PARKING		YES	PUBLIC	4,006	AS	5
0935A	6	2	32656		OLD DEWLINE ROAD PARKING A	ADJACENT TO ROUTE 0020 (OLD DEWLINE ROAD) AT MP 0.51			YES	PUBLIC	3,810	AS	3
0935B	6	2	32657		OLD DEWLINE ROAD PARKING B	ADJACENT TO ROUTE 0020 (OLD DEWLINE ROAD) AT MP 0.49			YES	PUBLIC	1,521	AS	3
0937A	6	2	32658		NTAFS ACCESS ROAD A PARKING	ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.06			NO	PUBLIC	8,146	AS	3
0937B	6	2	32659		NTAFS ACCESS ROAD B PARKING	ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.06			NO	PUBLIC	9,742	AS	3
0937C	6	2	32660		NTAFS ACCESS ROAD C PARKING	ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.12			NO	PUBLIC	2,201	AS	3
0938	6	2	32661		AIR FORCE MAINTENANCE AREA PARKING	FROM ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.13	TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.15		NO	NONPUBLIC	38,399	AS	3
0939A	6	2	32662		NTAFS FUEL HOUSE ROAD A PARKING	ADJACENT TO ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON RIGHT			NO	PUBLIC	3,126	AS	3
0939B	6	2	32663		NTAFS FUEL HOUSE ROAD B PARKING	ADJACENT TO ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON LEFT			NO	PUBLIC	4,083	AS	3
0939C	6	2	32664		NTAFS FUEL HOUSE ROAD C PARKING	FROM ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON LEFT	TO PARKING		NO	PUBLIC	6,062	AS	3

Page 8 of 10 Report Date: 0	8/23/2021	Cycle 6 NPS / RIP Rou (Numerical By Summary Route and S	Federal Lands Highway Road Inventory Program	
Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Non-NPS Routes	= Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas

NC = Not Collected

				Ę	PAR	KING AREA INVENTORY (1300 SERIES FMSS LOCAT	IONS)					
Route	Cycle Collected	rtion ected	FMSS	cessio		Route De	scription	Maintenance	FLTP	Access	Area	Surf.	Area
No.	လိုမ်ိဳ	Coll Coll	Number	ő	Route Name	From	То	District	E	Level	(SQ FT)	Туре	Мар
0940	NC		32665		HEAT PLANT PARKING	FROM ROUTE 0227 (NTAFS LANDING ROAD)	TO ROUTE 0233 (NTAFS FUEL HOUSE ROAD)		NO	NONPUBLIC	6,738	GR	3
0941	6	2	32666		WATER PLANT PARKING	FROM ROUTE 0227 (NTAFS LANDING ROAD)	TO ROUTE 0937A (NTAFS ACCESS ROAD A PARKING)		NO	NONPUBLIC	20,673	AS	3
0943	6	2	32668		SEWAGE TREATMENT PARKING	FROM HELIPAD OFF ROUTE 0229ZZ (SEWAGE TREATMENT PARKING ROADS)	TO PARKING		NO	NONPUBLIC	2,433	AS	3
0944	NC		32551		CRANBERRY BOG TRAIL PARKING	ADJACENT TO NORTH PAMET ROAD			NO	PUBLIC	1,963	GR	KEY
0945	NC		242587		HATCHES HARBOR PARKING	FROM ROUTE 001 <i>5</i> (PROVINCE LANDS ROAD) AT MP 0.89	TO PARKING		YES	PUBLIC	1,802	GR	1
0946	6	2	242588		HERRING COVE NORTH BEACH PARKING	FROM ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)	TO PARKING		YES	PUBLIC	98,832	AS	1
0947	NC		114118		MARCONI TRAILER PAD	ADJACENT TO ROUTE 0402 (MARCONI RESIDENCE ROAD) ON RIGHT			NO	NONPUBLIC	1,467	GR	4
0949	6	2	253721		HIGHLAND MUSEUM PARKING	FROM HIGHLAND ROAD	TO ROUTE 0235 (HIGHLAND LIGHTHOUSE ROAD)		YES	PUBLIC	47,313	AS	3
0950	6	2	253722		HIGHLAND LIGHTHOUSE HANDICAPPED PARKING	ADJACENT TO ROUTE 0235 (HIGHLAND LIGHTHOUSE ROAD) ON RIGHT			YES	PUBLIC	1,013	AS	3
0951	6	2	253723		NAUSET KNOLLS MOTEL PARKING	FROM BEACH ROAD	TO PARKING		YES	PUBLIC	17,293	AS	KEY
0952	6	2	253734		EAST HARBOR PARKING LOT	FROM STATE HIGHWAY 6	TO PARKING		YES	PUBLIC	23,124	AS	KEY
0953	6	2	253735		NORTH TRURO LIFE SAVING STATION PARKING	FROM NORTH PAMET ROAD	TO PARKING		YES	PUBLIC	18,476	AS	KEY
0954	6	2	253732		THREE SISTERS PARKING	ADJACENT TO ROUTE 0011 (CABLE ROAD)			YES	PUBLIC	1,024	AS	5

Page 9 of 10 Report Date: 08/23/2021		Cycle 6 NPS / RIP Rou (Numerical By Summary Route and S	Federal Lands Highway Road Inventory Program	
Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Non-NPS Routes	= Concession Route
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				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

Cycle 6 Route Totals								
	NPS Maintained	Concessionaire Maintained	Park Totals					
Paved Roads, Data Collection Vehicle Rated (Miles)	15.39	0.12	15.51					
Paved Roads, Manually Rated Length (Miles)	1.39	0	1.39					
Paved Roads, Manually Rated Area (Sq. Ft.)	0	0	0					
Unpaved Roads (Miles)	1.75	0	1.75					
Paved Parking (Sq. Ft.)	1,822,316	65,619	1,887,935					
Unpaved Parking (Sq. Ft.)	19,034	0	19,034					

Cycle 6 Lane Miles and Overall Pavement Condition								
	Lanes Miles*	Pavement Condition Rating**						
Data Collection Vehicle Routes	33.08	84						
Manually Rated Roads	1.94	60						
Parking Areas	32.51	78						

* Equivalent Lane Miles are calculated by route using the following equations: - DCV and MRLs = (PAVE_WIDTH x PAVED_MI) / 11 foot lane **Parking and Manually Rated Routes are assigned the following PCR values based on the type of observed distresses:

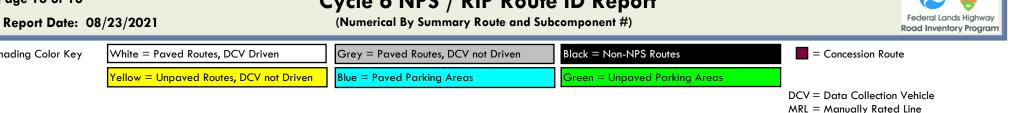
- MRPs and PKGs = SC

SQ_FEET / 5280 / 11 foot lane

-Excellent = 97 -Good = 90 -Fair = 73 -Poor = 53, 30, or 0 -Construction / Not Rated = -1 Page 10 of 10

Shading Color Key

Cycle 6 NPS / RIP Route ID Report



MRP = Manually Rated Polygon

- PKG = Parking Areas
- NC = Not Collected

FC	Туре	User Access	Description	Route Numbers	Surface Types
1	Principal Park Road Rural Parkway	Public	Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors. Rural Parkways (e.g. Natchez Trace) are numbered 0001 - 0009.	0001 - 0009 0010 - 0099	AS - Asphaltic Concrete Pavement
2	Connector Park Road	Public	Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc.	0100 - 0199	BR - Brick or Pavers Road Bed CB - Cobble Stone Road Bed
3	Special Purpose Park Road	Public	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.	0200 - 0299	CO - Portland Cement Concrete Pavemen GR - Gravel Road Bed
4	Primitive Park Road	Public	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. Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.	0200 - 0299	NV - Native or Dirt Material Road Bed
5	Administrative Park Road	Public	All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas.	0400 - 0499	OT - Other Materials Road Bed
6	Administrative Park Road (Restricted Access)	Nonpublic	All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. 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.	0400 - 0499	
7	Urban Parkway	Public	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.	0001 - 0009	
8	City Street	Public	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.	0600 - 0699	
N/A	Non-NPS Roads	Public	State, County, or City owned roads which border, traverse, or provide access to Park Facilities or Locations. Non-NPS roads are not assigned functional classes and are driven for GPS and Video Log only.	5000 - 5999	

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 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.

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Report Date: 08/23/2021

NPS / RIP Subcomponent Details for CACO

(Numerical By Summary Route and Subcomponent #)



Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Paved Routes, Non-NPS	Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas

NC = Not Collected

	SUMMARY ROUTE INVENTORY FOR ROADS (1100 SERIES FMSS LOCATIONS)												
Route Number	FMSS Number	Cycle Collected	lteration Collected	Concessia	Route Name	Route Des	cription To	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Function Class	Area (SQ FT)
0018ZZ	32463	6	2		STATE ROUTE 6	FROM INTERSECTION OF ROUTE 0015 (PROVINCE LANDS ROAD) AND ROUTE 0017 (MOORS ROAD)	TO PARK BOUNDARY AT PAVEMENT CHANGE	YES	0.60	0.00	0.60	1	
0202ZZ	32478	6	2		TOMAHAWK TRAIL ROADS	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.31	TO END OF LOOPS	YES	0.65	0.00	0.65	3	
0229ZZ	32529	6	2		SEWAGE TREATMENT PARKING ROADS	FROM INTERSECTION OF ROUTE 0227 (NTAFS LANDING ROAD) AND ROUTE 0233 (NTAFS FUEL HOUSE ROAD)	TO END	Ю	0.30	0.00	0.30	6	
0230ZZ	32527	6	2		NTAFS RESIDENCE ACCESS ROADS	FROM ROUTE 0227 (NTAFS LANDING ROAD)	TO RESIDENCE AREA	NO	0.46	0.00	0.46	6	
0236ZZ	253729	6	2		BOUND BROOK ISLAND ROADS	FROM BOUND BOOK ISLAND ROAD	TO END	YES	0.29	0.82	1.11	3	
0407ZZ	32567	6	2		TIN PAN ALLEYS	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 0.08	THROUGH RESIDENCE AREA	YES	0.18	0.00	0.18	3	

SUMMARY ROUTE INVENTORY FOR PARKING AREAS (1300 SERIES FMSS LOCATIONS)										
Route	FMSS Number	cle llected	ation lected	ncessio		Route Desc	ription		User	Area
Number	Number	δ̈́ð	Ler Col	Ŝ	Route Name	From	То	FLT	Access	(SQ FT)
0905AZZ	32584	6	2		PILGRIM HEIGHTS WEST PARKING AREAS	ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44 ON LEFT AND RIGHT		YES	PUBLIC	18,166
0905BZZ	32585	6	2		PILGRIM HEIGHTS EAST PARKING AREAS	ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65 ON LEFT AND RIGHT		YES	PUBLIC	20,163
0909ZZ	32589	6	2		MARCONI MAINTENANCE PARKING AREAS	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.10	TO PARKING	NO	NONPUBLIC	57,874

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Report Date: 08/23/2021

NPS / RIP Subcomponent Details for CACO

(Numerical By Summary Route and Subcomponent #)



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	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

				5.	oonent Breakdown							ē	
Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concessio	Route Name	Route Des	rcription To	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Function Class	Area (SQ FT)
0018AZ	32463	6	2		WESTBOUND STATE ROUTE 6	FROM INTERSECTION OF ROUTE 0015 (PROVINCE LANDS ROAD) AND ROUTE 0017 (MOORS ROAD)	TO PARK BOUNDARY AT PAVEMENT CHANGE	YES	0.35	0.00	0.35	1	
0018BZ	32463	6	2		EASTBOUND STATE ROUTE 6	FROM PARK BOUNDARY AT PAVEMENT CHANGE	TO MERGE WITH ROUTE 0018AZ (WESTBOUND STATE ROUTE 6)	YES	0.25	0.00	0.25	1	

CACO-	0202Z	Z Su	bco	mp	onent Breakdown							-	
Route Number	FMSS	cle llected	ation lected	ncessio		Route Des	cription	- <u>-</u>		Unpaved		nctionc 15 S	Area
Number	Number	δ̈́̈́̈́́́	lter Col	Ŝ	Route Name	From	То	FLT	Miles	Miles	Mileage	20	(SQ FT)
0202AZ	32478	6	2		TOMAHAWK TRAIL ROAD A	FROM ROUTE 0010 (DOANE ROAD) AT MP 0.31	TO END OF LOOP	YES	0.59	0.00	0.59	3	
0202BZ	32478	6	2		tomahawk trail road b	FROM ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)	TO END OF LOOP	YES	0.06	0.00	0.06	3	

CACO-	CACO-0229ZZ Subcomponent Breakdown												
Route Number	FMSS Number	Cycle Collected	lteration Collected	Concessio	Route Name	Route Des	cription To	FLTP –	Paved Miles	Unpaved Miles	Total Mileage	Function Class	Area (SQ FT)
0229AZ	32529	6	2		SEWAGE TREATMENT PARKING ROAD A	FROM INTERSECTION OF ROUTE 0227 (NTAFS LANDING ROAD) AND ROUTE 0233 (NTAFS FUEL HOUSE ROAD)	TO END OF PAVEMENT	NO	0.17	0.00	0.17	6	
0229BZ	32529	6	2		SEWAGE TREATMENT PARKING ROAD B	FROM ROUTE 0229AZ (SEWAGE TREATMENT PARKING ROAD A)	TO END OF PAVEMENT	NO	0.13	0.00	0.13	6	

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NPS / RIP Subcomponent Details for CACO

(Numerical By Summary Route and Subcomponent #)



Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Paved Routes, Non-NPS	Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

CACO Cape Cod National Seashore

CACO-0230ZZ Subcomponent Breakdown lteration Collected Concessi Inpaved Total 년 Miles Mileage 문 Area **Route Description** Route FMSS Paved Unpaved Total Class Cycle Collec FLTP (SQ FT) Miles Number Number **Route Name** From То 32527 0230AZ 2 NTAFS RESIDENCE STREET A FROM INTERSECTION OF ROUTE 0230Z TO END OF PAVEMENT NO 0.06 0.00 0.06 6 6 (NTAFS RESIDENCE ACCESS ROAD) AND ROUTE 0230BZ (NTAFS RESIDENCE STREET B) 0230BZ 32527 6 2 NTAFS RESIDENCE STREET B FROM INTERSECTION OF ROUTE 0230Z TO END OF PAVEMENT NO 0.05 0.00 0.05 6 (NTAFS RESIDENCE ACCESS ROAD) AND ROUTE 0230AZ (NTAFS RESIDENCE STREET A) 6 2 TO ROUTE 0227 (NTAFS LANDING ROAD) NO 0230Z 32527 NTAFS RESIDENCE ACCESS ROAD FROM ROUTE 0227 (NTAFS LANDING 0.36 0.00 0.36 6 ROAD) CACO-0236ZZ Subcomponent Breakdown

Route	FMSS	cle lected	ration Ilected	ncession		Route Des	cription	- 2		Unpaved			Area (SQ FT)
Number	Number	Š S S	Co Her	ð	Route Name	From	То	E	Miles	Miles	Mileage	Ξõ	(30(1)
0236AZ	253729	6	2		BOUND BROOK ISLAND ROAD A		to route 0236bz (bound brook Island road b)	YES	0.29	0.00	0.29	3	
0236BZ	253729				BOUND BROOK ISLAND ROAD B	FROM ROUTE 0236AZ (BOUND BROOK ISLAND ROAD A)	TO END	YES	0.00	0.82	0.82	3	

CACO-	0407Z	Z Su	bco	mp	oonent Breakdown							a	
Route	FMSS Number		sration ollected	oncessic	Route Name	Route Des	•	- ₽ ,	Paved Miles	Unpaved	Total Mileage	unction lass	Area (SQ FT)
Number	Number	ΰŭ	≚ŭ	ŭ	Route Name	From	То	Ē	miles	Miles	Mileage	ΨŪ	(
0407AZ	32567	6	2		TIN PAN ALLEY A	FROM ROUTE 0014 (RACE POINT ROAD) AT MP 0.08	TO END OF PAVEMENT	YES	0.14	0.00	0.14	3	
0407BZ	32567	6	2		TIN PAN ALLEY B	FROM ROUTE 0407AZ (TIN PAN ALLEY A)	TO END OF PAVEMENT	YES	0.04	0.00	0.04	3	

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Report Date: 08/23/2021

NPS / RIP Subcomponent Details for CACO

(Numerical By Summary Route and Subcomponent #)



Shading Color Key	White = Paved Routes, DCV Driven	Grey = Paved Routes, DCV not Driven	Black = Paved Routes, Non-NPS	Concession Route
	Yellow = Unpaved Routes, DCV not Driven	Blue = Paved Parking Areas	Green = Unpaved Parking Areas	
				DCV = Data Collection Vehicle MRL = Manually Rated Line MRP = Manually Rated Polygon PKG = Parking Areas NC = Not Collected

CACO Cape Cod National Seashore

CACO-0905AZZ Subcomponent Breakdown

Route	FMSS	cle lected	ration llected	Icessio		Route Desc	ription	۵.	User	Area
Number	Number	δõ	Col	ŝ	Route Name	From	То	FLT	Access	(SQ FT)
0905AAZ	32584	6	2			ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44		YES	PUBLIC	10,073
0905ABZ	32584	6	2			ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44		YES	PUBLIC	8,093

CACO-	0905B	ZZ S	Suba	or	nponent Breakdown					
Route	FMSS	le lected	ation lected	Icessio		Route Desc	ription	- •	User	Area
Number	Number	δů	Coll	Cor	Route Name	From	То	FLTI	Access	(SQ FT)
0905BAZ	32585	6	2		PILGRIM HEIGHTS EAST PARKING AREA A	ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65		YES	PUBLIC	9,603
0905BBZ	32585	6	2		PILGRIM HEIGHTS EAST PARKING AREA B			YES	PUBLIC	10.560

AT MP 0.65

CACO-0909ZZ Subcomponent Breakdown

Route	FMSS	le lected	ation lected	Icessio		Route Description				Area
Numb	er Numbe	ròö	Ltero Coll	Con	Route Name	From	То	FLT	Access	(SQ FT)
0909A	Z 32589	6	2		MARCONI MAINTENANCE PARKING A	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT END	TO PARKING	NO	NONPUBLIC	48,486
0909B	32589	6	2		MARCONI MAINTENANCE PARKING B	FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.10	TO PARKING	NO	NONPUBLIC	9,388

Route Identification Changes to Routes from Previous Cycle Cape Cod National Seashore

	ROUTES REMOVED FROM PREVIOUS INVENTORY:											
Route No.	Route Name	Type of Change	Comments									
0234ZZ	NORTH OF HIGHLAND CAMPGROUND ROADS	OTHER	NPS REQUESTED REMOVAL FROM IN CYCLE 6.									
0948ZZ	NORTH OF HIGHLAND CAMPGROUND PARKING AREAS	OTHER	NPS REQUESTED REMOVAL FROM IN CYCLE 6.									

	ROUTE	ES ADDED FROM PREVI	OUS INVENTORY:
Route No.	Route Name	Type of Change	Comments
0236ZZ	BOUND BROOK ISLAND ROADS	OTHER	ROAD ADDED DURING CYCLE 6 ROUTE ID MEETING.
0237	BOUND BROOK WAY	OTHER	UNPAVED ROAD ADDED DURING CYCLE 6 ROUTE ID MEETING.
0952	EAST HARBOR PARKING LOT	OTHER	PAVED, PUBLIC PARKING AREA ADDED IN CYCLE 6.
0953	NORTH TRURO LIFE SAVING STATION PARKING	OTHER	PAVED, PUBLIC PARKING AREA ADDED IN CYCLE 6.
0954	THREE SISTERS PARKING	OTHER	PAVED, PUBLIC PARKING AREA ADDED IN CYCLE 6.

	ROUTES MODIFIED FROM PREVIOUS INVENTORY:												
Route No.	Route Name	Type of Change	Comments										
0015	PROVINCE LANDS ROAD	REALIGNED	ROUTE REALIGNED AT MP 1.8 TO THE END (ROUTE RECONSTRUCTED FARTHER AWAY FROM COASTLINE).										
0207	HIGH HEAD ROAD	SURFACE TYPE CHANGE	SURFACE TYPE CHANGED FROM GRAVEL TO NATIVE (SAND).										
0407ZZ	TIN PAN ALLEYS	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS CHANGED FROM 5 TO 3.										
0914	COAST GUARD BEACH BUS STOP PARKING	ROUTE NAME	ROUTE NAME CHANGED FROM "LITTLE CREEK PARKING" TO ALIGN WITH FMSS.										
0920	HIGH HEAD ROAD PARKING	OTHER	FMSS NUMBER CHANGED FROM 32603 TO 242585.										
0921	SPECTACLE POND ROAD AND PARKING	OTHER	FMSS NUMBER CHANGED FROM 38488 TO 242586.										

Route Identification Changes to Routes from Previous Cycle Cape Cod National Seashore

	ROUTES	MODIFIED FROM PREV	VIOUS INVENTORY:
Route No.	Route Name	Type of Change	Comments
0937A	NTAFS ACCESS ROAD A PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0937B	NTAFS ACCESS ROAD B PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0937C	NTAFS ACCESS ROAD C PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0939A	NTAFS FUEL HOUSE ROAD A PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0939B	NTAFS FUEL HOUSE ROAD B PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0939C	NTAFS FUEL HOUSE ROAD C PARKING	OTHER	ACCESS LEVEL CHANGED TO PUBLIC PER PARK REQUEST.
0940	HEAT PLANT PARKING	SURFACE TYPE CHANGE	SURFACE TYPE CHANGED FROM ASPHALT TO GRAVEL.
0946	HERRING COVE NORTH BEACH PARKING	RECONSTRUCTED	RECONSTRUCTED TO MOVE NORTH END INLAND AWAY FROM COASTLINE.

Section 3 Park Summary Information





Parkwide Paved Route Condition Summary Cape Cod National Seashore

Table 1: Paved Route Miles and Parking Area Square Footages by Access Level and PCR

	POOR (PCR of 0 - 60)	FAIR (PCR of 61 - 84)	GOOD (PCR of 85 - 94)	EXCELLENT (PCR of 95 -100)	
		PAVED	ROADS		
Functional Class	Length (miles)	Length (miles)	Length (miles)	Length (miles)	Total Mileage by FC
1	0.30	3.25	2.98	5.11	11.64
2					
3	1.65	0.15	0.61	0.79	3.21
4	0.25				0.25
5	0.40	0.02	0.04		0.46
6	0.82	0.19	0.17		1.18
7					
8					
Total Mileage by PCR	3.42	3.61	3.81	5.90	16.74
		PAVED P	ARKING		
Access Level	Area (sq. ft.)	Area (sq. ft.)	Area (sq. ft.)	Area (sq. ft.)	Total Area
PUBLIC	467,097	205,049	638,767	428,143	1,739,056
NONPUBLIC	68,111	66,319			134,430
Total Area by PCR	535,208	271,368	638,767	428,143	1,873,486

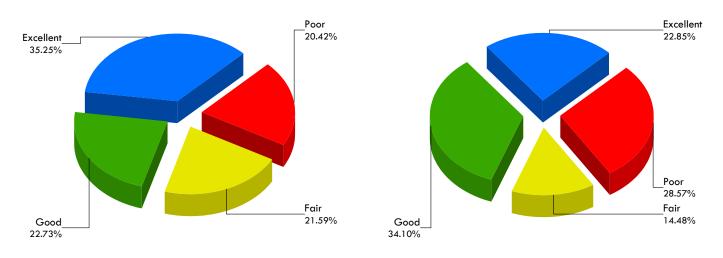
Breakdown of Pavement Condition Rating (PCR) Based on Access Level

NOTES:

1. Data are reported in the table only for paved roads and parking lots that received a condition rating.

2. Non-linear roads (MRP collected routes) are measured by area and converted to equivalent route miles based on a 22-ft pavement width in order to be included in the mileage totals for paved roads shown above.

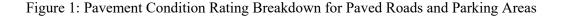
3. Quantities in the table above are derived from the route condition data within the PMS_20, PMS_MRL, PMS_MRP, and PMS_PKG tables in the Park geodatabase.



Parkwide Condition Percentages

Road Condition Percentages

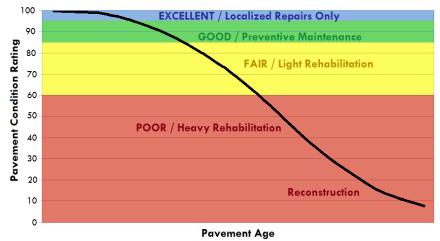
Parking Area Condition Percentages



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

The Road Inventory Program aims to provide assistance in translating the excellent / good / fair / poor rating categories into pavement needs categories. The PCR can be used to indicate the place in the Pavement Life Cycle and the type of treatments that should be considered now and into the future.

- Excellent / New: PCR of 95-100
 - o Pavements in this range will require only spot repairs
- Good: PCR of 85-94
 - o 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
 - o Pavements in this range will likely be candidates of Light Rehabilitation (L3R). Examples include singlelift overlays up to 2.5 inches in total thickness, milling and overlays.
- Poor: PCR of 0-60
 - o Pavements in this range will likely be candidates of Heavy Rehabilitation or Reconstruction (H3R or 4R). Examples include Pulverization, Multiple Lift Overlays, and Reconstruction.



CONDITION CATEGORIES AND TREATMENTS

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 at the time in which the data were 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.



Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads

Cape Cod National Seashore

Notes:

• This condition summary report contains only the roads rated with the Data Collection Vehicle (DCV).

- Condition on roads that were manually rated and parking areas are shown in separate reports.
- Route-level scores shown on this page may not represent scores at smaller intervals (due to rollup calculations).
- Additional details on individual road ratings at 0.10-mile and 1-mile intervals can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route No.	<u>Route-</u> FMSS No.	Level Condition for Roads Rated with the Data Collection Vehicle Route Name	<mark>≥ (DCV)</mark> Functiona Class	l Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	Roughness Condition Index (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
CACO-0010	32428	DOANE ROAD	1	AS	1.01	95	100	91	93	100	93	95	100	91
CACO-0011	32431	CABLE ROAD	1	AS	0.93	90	100	84	95	100	95	84	98	97
CACO-0012	32437	MARCONI BEACH ROAD	1	AS	1.62	83	95	75	97	100	97	75	100	97
CACO-0013	32440	MARCONI SITE ROAD	1	AS	0.98	83	100	71	94	100	94	71	100	100
CACO-0014	32451	RACE POINT ROAD	1	AS	1.94	92	100	87	87	100	87	93	100	97
CACO-0015	32456	PROVINCE LANDS ROAD	1	AS	2.27	99	100	99	100	100	100	100	100	99
CACO-0017	32459	MOORS ROAD	1	AS	0.89	91	83	97	98	100	98	100	100	97
CACO-0018AZ	32463	WESTBOUND STATE ROUTE 6	1	AS	0.35	88	NR	88	100	100	100	100	100	88
CACO-0018BZ	32463	EASTBOUND STATE ROUTE 6	1	AS	0.25	91	NR	91	99	100	99	100	100	91
CACO-0019	32467	NAUSET ROAD	1	AS	0.87	79	85	75	96	100	96	97	75	93
CACO-0020	32471	OLD DEWLINE ROAD	1	AS	0.53	98	97	98	100	100	100	100	100	98
CACO-0200	32476	FORT HILL AREA ROAD	3	AS	0.30	97	NR	97	100	100	100	100	100	97
CACO-0201	32477	DOANE ROCK PICNIC AREA ROAD	3	AS	0.14	39	NR	39	84	100	84	39	100	94
CACO-0202AZ	32478	TOMAHAWK TRAIL ROAD A	3	AS	0.59	95	NR	95	99	100	99	99	100	95
CACO-0202BZ	32478	TOMAHAWK TRAIL ROAD B	3	AS	0.06	53	NR	NR	NR	NR	NR	NR	NR	NR
CACO-0204	32480	MARCONI EMPLOYEE PARKING ROAD	5	AS	0.13	0	NR	0	13	100	13	0	97	99
CACO-0205	32481	HEAD OF THE MEADOW BEACH ROAD	3	AS	0.12	97	NR	97	100	100	100	99	100	97
CACO-0206	32483	PILGRIM HEIGHTS ROAD	3	AS	0.87	40	40	40	54	99	55	40	100	94
CACO-0209	32487	RACE POINT COAST GUARD STATION ROAD	3	AS	0.16	53	NR	NR	NR	NR	NR	NR	NR	NR

Condition (Rating / Index) Legend

EXCELLENT (95 - 100)
GOOD (85 - 94)
FAIR (61 - 84)
POOR (0 - 60)
NR = NOT RATED



Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads

Cape Cod National Seashore

Notes:

• This condition summary report contains only the roads rated with the Data Collection Vehicle (DCV).

- Condition on roads that were manually rated and parking areas are shown in separate reports.
- Route-level scores shown on this page may not represent scores at smaller intervals (due to rollup calculations).
- Additional details on individual road ratings at 0.10-mile and 1-mile intervals can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route No.	<u>Route-</u> FMSS No.	Level Condition for Roads Rated with the Data Collection	on Vehicle (DCV) Functional Class	Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	Roughness Condition Index (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
CACO-0211	32489	NAUSET LIGHT BEACH ACCESS ROAD	3	AS	0.06	95	NR	95	98	100	98	95	100	97
CACO-0223	32517	MACPHERSON WAY	3	AS	0.14	34	NR	34	74	99	75	34	100	97
CACO-0231	32538	NAC LABORATORY ACCESS ROAD	5	AS	0.08	74	NR	74	99	100	99	74	100	98
CACO-0232	32541	NTAFS ACCESS ROAD	6	AS	0.19	16	NR	16	26	98	28	16	97	93
CACO-0235	N/A	HIGHLAND LIGHTHOUSE ROAD	3	AS	0.12	93	NR	93	100	100	100	99	100	93
CACO-0401	32553	B-WELL ROAD	4	AS	0.25	0	NR	0	0	98	0	0	100	88
CACO-0402	32554	MARCONI RESIDENCE ROAD	5	AS	0.14	25	NR	25	49	100	49	25	100	96
CACO-0403	32556	MARCONI MAINTENANCE AREA ROAD	5	AS	0.11	16	NR	16	17	99	18	16	99	97
CACO-0405	32558	COAST GUARD BEACH SHUTTLE PICKUP ROAD	3	AS	0.23	91	NR	NR	NR	NR	NR	NR	NR	NR
CACO-0407AZ	32567	TIN PAN ALLEY A	3	AS	0.14	68	NR	NR	NR	NR	NR	NR	NR	NR
CACO-0407BZ	32567	TIN PAN ALLEY B	3	AS	0.04	58	NR	58	70	99	71	58	100	95

Condition (Rating / Index) Legend

EXCELLENT (95 - 100)
GOOD (85 - 94)
FAIR (61 - 84)
POOR (0 - 60)
NR = NOT RATED



Road Condition Summary Report for Manually Rated Roads

Cape Cod National Seashore

Notes:

- This condition summary report contains only the roads that were manually rated.
 - MRL: Manually Rated Line (a linear road)
 - MRP: Manually Rated Polygon (a non-linear road)
- Condition on roads that were rated with the Data Collection Vehicle (DCV) are shown in a separate report.
- A road is manually rated when it is determined to be unsuitable for the DCV to drive.
- Additional details on individual road ratings at 0.10-mile and 1-mile intervals can be found in Section 5 of the Cycle 6 RIP Report.
- Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Route No.	FMSS No.	Route-Level Condition for Manually Rated Line (MRL) Roads	Functiona Class	l Surf. Type	Paved Length (Miles)	Pavement Condition Rating (PCR)	ughness lex (RCI)	Surface Condition Rating (SCR)	Structural Crack Index	Alligator Crack Index	Longitudinal Cracking Index	Transverse Cracking Index	Patch / Pothole Index	Rutting Index
CACO-0227	32524	NTAFS LANDING ROAD	6	AS	0.19	73	NR	73	NR	90	90	73	90	90
CACO-0228	32525	WELL ROAD	6	AS	0.06	53	NR	53	NR	73	73	73	53	90
CACO-0229AZ	32529	SEWAGE TREATMENT PARKING ROAD A	6	AS	0.17	90	NR	90	NR	90	90	90	97	90
CACO-0229BZ	32529	SEWAGE TREATMENT PARKING ROAD B	6	AS	0.13	53	NR	53	NR	53	73	90	90	90
CACO-0230AZ	32527	NTAFS RESIDENCE STREET A	6	AS	0.06	NR	NR	NR	NR	NR	NR	NR	NR	NR
CACO-0230BZ	32527	NTAFS RESIDENCE STREET B	6	AS	0.05	NR	NR	NR	NR	NR	NR	NR	NR	NR
CACO-0230Z	32527	NTAFS RESIDENCE ACCESS ROAD	6	AS	0.36	53	NR	53	NR	73	73	73	53	90
CACO-0233	32544	NTAFS FUEL HOUSE ROAD	6	AS	0.09	53	NR	53	NR	90	73	53	90	53
CACO-0236AZ	253729	BOUND BROOK ISLAND ROAD A	3	AS	0.29	53	NR	53	NR	53	90	90	73	90

Condition (Rating / Index) Legend

EXCELLENT (95 - 100)
GOOD (85 - 94)
FAIR (61 - 84)
POOR (0 - 60)
NR = NOT RATED



Parking Area Condition Summary Report

Cape Cod National Seashore

Notes:

• A PCR of 0 indicates a paved parking area in very poor condition. Individual distresses could not be identified.

• Additional details on individual parking areas can be found in Section 6 of the Cycle 6 RIP Report.

• Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Condition (Rating / Index) Legend

EXCELLENT (97)
GOOD (90)
FAIR (73)
POOR* (0, 30, 53)
NR = NOT RATED

Concrete Surface Distresses

Asphalt Surface Distresses

Route No.	FMSS No.	Condition Rating Details for Paved Parking Areas	User Access	Surf. Type	Area (Sq. Ft.)	Pavement Condition Rating (PCR)	Alligator Cracking	Longitudinal / Tranverse Cracking	Rutting / Distortions	Potholes / Patching	HMA Patching	Surface Raveling / Bleeding	Joint Faulting	Slab Cracking	Joint Distresses	Velamination / Pop-Outs	Potholes / Patching
CACO-0900	32578	BEECH FOREST PARKING	PUBLIC	AS	45,019	53	90	90	53	90	97	90					
CACO-0901	32580	PROVINCE LANDS VISITOR CENTER PARKING	PUBLIC	AS	96,268	97	97	97	97	97	97	97					
CACO-0902	32581	RACE POINT BEACH PARKING	PUBLIC	AS	139,477	90	97	97	90	97	97	97					
CACO-0903	32582	RACE POINT AIR STATION PARKING	PUBLIC	AS	9,723	NR											
CACO-0904	32583	PROVINCE LANDS ROAD PARKING	PUBLIC	AS	4,726	NR											
CACO-0905AAZ	32584	PILGRIM HEIGHTS WEST PARKING AREA A	PUBLIC	AS	10,073	73	90	90	73	97	97	90					
CACO-0905ABZ	32584	PILGRIM HEIGHTS WEST PARKING AREA B	PUBLIC	AS	8,093	73	90	90	73	97	97	90					
CACO-0905BAZ	32585	PILGRIM HEIGHTS EAST PARKING AREA A	PUBLIC	AS	9,603	73	90	90	73	97	97	90					
CACO-0905BBZ	32585	PILGRIM HEIGHTS EAST PARKING AREA B	PUBLIC	AS	10,560	73	90	90	73	97	97	90					
CACO-0906	32586	MARCONI BEACH PARKING	PUBLIC	AS	223,538	90	97	97	90	97	97	97					
CACO-0907	32587	MARCONI STATION SITE PARKING	PUBLIC	AS	23,354	97	97	97	97	97	97	97					
CACO-0908	32588	PARK HEADQUARTERS PARKING	PUBLIC	AS	22,892	9 0	90	90	90	97	97	90					
CACO-0909AZ	32589	MARCONI MAINTENANCE PARKING A	NONPUBLIC	AS AS	48,486	73	73	90	90	90	90	90					
CACO-0909BZ	32589	MARCONI MAINTENANCE PARKING B	NONPUBLIC	: AS	9,388	73	73	90	90	90	90	90					
CACO-0910	32590	MARCONI RESIDENCE ROAD PARKING	PUBLIC	AS	1,332	73	90	90	90	97	97	73					
CACO-0911A	32593	DOANE ROCK AREA 1 PARKING	PUBLIC	AS	7,352	73	90	90	73	97	97	90					
CACO-0911B	32594	DOANE ROCK AREA 2 PARKING	PUBLIC	AS	14,635	73	90	90	73	97	97	90					
CACO-0912	32595	NAUSET LIGHT BEACH PARKING	PUBLIC	AS	73,171	73	90	90	90	73	97	90					
CACO-0913	32596	COAST GUARD BEACH ENVIRONMENTAL EDUCATION CENTER PARKING	PUBLIC	AS	57,107	90	97	97	90	97	97	97					
CACO-0914	32597	COAST GUARD BEACH BUS STOP PARKING	PUBLIC	AS	209,689	97	97	97	97	97	97	97					
CACO-0915	32598	FORT HILL AREA PARKING	PUBLIC	AS	4,132	90	97	97	90	97	97	97					
CACO-0916	32599	FORT HILL LOWER PARKING	PUBLIC	AS	4,738	90	97	97	90	97	90	97					
CACO-0917	32600	PARK HEADQUARTERS EMPLOYEE PARKING	PUBLIC	AS	28,404	53	53	90	73	90	97	90					
CACO-0918	32601	OLD VEHICLE STORAGE PARKING	NONPUBLIC	CO	6,606	53							73	73	73	53	90
CACO-0919	32602	SALT POND VISITOR CENTER PARKING	PUBLIC	AS	98,044	53	90	53	90	90	97	90					
CACO-0922	32648	NAC LABORATORY PARKING	NONPUBLIC	: AS	8,445	73	90	90	73	90	90	73					



Parking Area Condition Summary Report

Cape Cod National Seashore

Notes:

• A PCR of 0 indicates a paved parking area in very poor condition. Individual distresses could not be identified.

• Additional details on individual parking areas can be found in Section 6 of the Cycle 6 RIP Report.

• Refer to the RIP Report Appendix for an explanation of the rating system and rating methods.

Condition (Rating / Index) Legend

EXCELLENT (97)
GOOD (90)
FAIR (73)
POOR* (0, 30, 53)
NR = NOT RATED

Concrete Surface Distresses

Asphalt Surface Distresses

		Condition Rating Details for Paved Parking Areas	User	Surf.	Area	Pavement Condition Rating (PCR)	Alligator Cracking	Longitudinal / Tranverse Cracking	utting / Distortions	Potholes / Patching	A Patching	Surface Raveling / Bleeding	nt Faulting	o Cracking	Joint Distresses	op-Outs op-lots otholes / Patching
Route No.	FMSS No.	Route Name	Access	Туре	(Sq. Ft.)	Pav Rat	Alli	Lon Tra	Rut	Pot	ΨH	Surfa Bleed	Joint	Slab	loi	Pot Pot
CACO-0925	32649	PROVINCE LANDS MAINTENANCE PARKING	PUBLIC	AS	31,892	53	53	90	90	90	97	90				
CACO-0927	32651	HEAD OF THE MEADOW PARKING	PUBLIC	AS	121,253	90	97	90	90	97	97	90				
CACO-0928	32652	RACE POINT RANGER STATION PARKING	PUBLIC	AS	19,418	73	90	90	90	73	90	73				
CACO-0929	32653	HERRING COVE SOUTH BEACH PARKING	PUBLIC	AS	201,139	53	90	53	90	90	97	90				
CACO-0930	32654	GREAT ISLAND TRAIL AND PICNIC PARKING	PUBLIC	AS	28,101	73	90	90	90	90	97	73				
CACO-0931	32655	NAUSET RANGER STATION PARKING	PUBLIC	AS	4,006	30	30	53	30	30	97	73				,
CACO-0935A	32656	OLD DEWLINE ROAD PARKING A	PUBLIC	AS	3,810	73	73	90	90	97	97	73				
CACO-0935B	32657	OLD DEWLINE ROAD PARKING B	PUBLIC	AS	1,521	53	73	53	90	90	97	73				
CACO-0937A	32658	NTAFS ACCESS ROAD A PARKING	PUBLIC	AS	8,146	73	90	90	90	73	97	73				
CACO-0937B	32659	NTAFS ACCESS ROAD B PARKING	PUBLIC	AS	9,742	73	73	90	90	90	90	73				
CACO-0937C	32660	NTAFS ACCESS ROAD C PARKING	PUBLIC	AS	2,201	53	90	53	90	90	97	73				
CACO-0938	32661	AIR FORCE MAINTENANCE AREA PARKING	NONPUBLIC	C AS	38,399	53	90	53	90	90	90	73				
CACO-0939A	32662	NTAFS FUEL HOUSE ROAD A PARKING	PUBLIC	AS	3,126	53	73	90	90	53	97	73				
CACO-0939B	32663	NTAFS FUEL HOUSE ROAD B PARKING	PUBLIC	AS	4,083	53	90	90	90	53	97	73				
CACO-0939C	32664	NTAFS FUEL HOUSE ROAD C PARKING	PUBLIC	AS	6,062	53	53	90	90	73	97	73				
CACO-0941	32666	WATER PLANT PARKING	NONPUBLIC	C AS	20,673	53	73	53	73	73	97	73				,
CACO-0943	32668	SEWAGE TREATMENT PARKING	NONPUBLIC	C AS	2,433	30	53	53	30	73	90	73				
CACO-0946	242588	HERRING COVE NORTH BEACH PARKING	PUBLIC	AS	98,832	97	97	97	97	97	97	97				,
CACO-0949	253721	HIGHLAND MUSEUM PARKING	PUBLIC	AS	47,313	90	90	90	90	90	97	90				
CACO-0950	253722	HIGHLAND LIGHTHOUSE HANDICAPPED PARKING	PUBLIC	AS	1,013	73	90	97	90	97	97	73				
CACO-0951	253723	NAUSET KNOLLS MOTEL PARKING	PUBLIC	AS	17,293	90	97	90	90	97	90	97				
CACO-0952	253734	EAST HARBOR PARKING LOT	PUBLIC	AS	23,124	53	73	53	90	90	97	73				li internet de la constante de
CACO-0953	253735	NORTH TRURO LIFE SAVING STATION PARKING	PUBLIC	AS	18,476	0										
CACO-0954	253732	THREE SISTERS PARKING	PUBLIC	AS	1,024	90	97	90	97	97	97	90				

Section 4 Park Route Location Maps

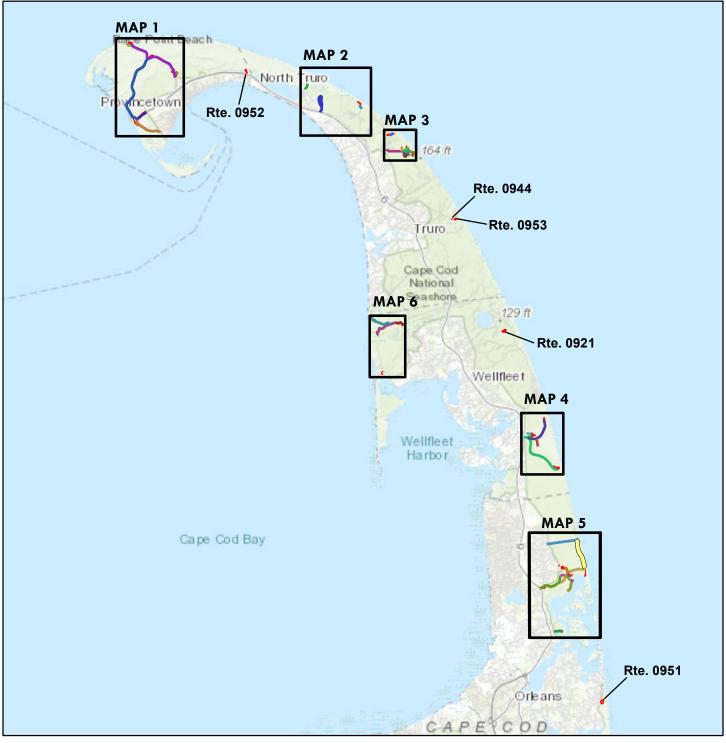




Cape Cod National Seashore

ROUTE LOCATION MAP

KEY MAP



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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Note: Unique colors are used to differentiate roads

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Miles 6.5

Non-NPS Collected Routes

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Cape Cod National Seashore

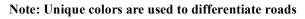
ROUTE LOCATION MAP

MAP 1

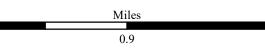


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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Cape Cod National Seashore ROUTE LOCATION MAP

MAP 2



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads

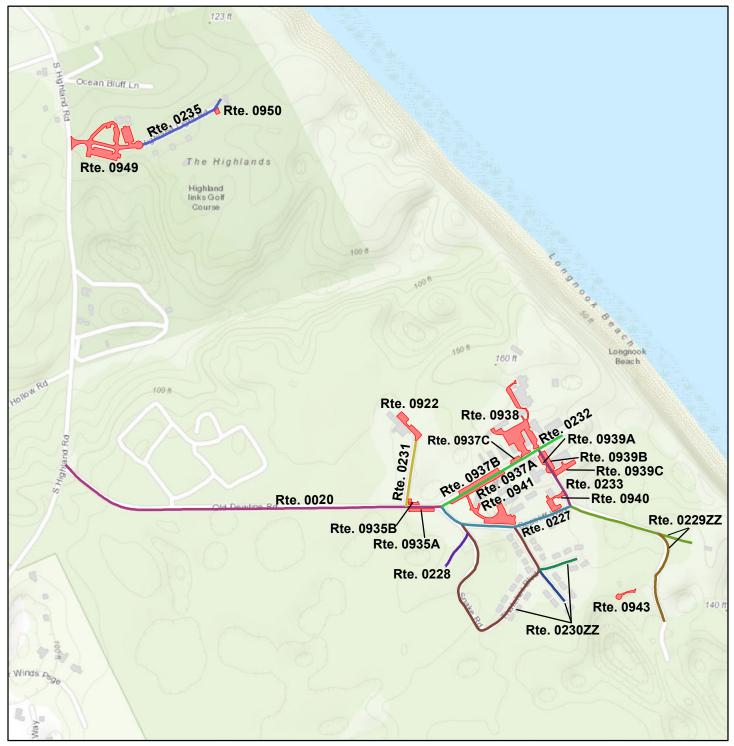
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Cape Cod National Seashore

ROUTE LOCATION MAP

MAP 3



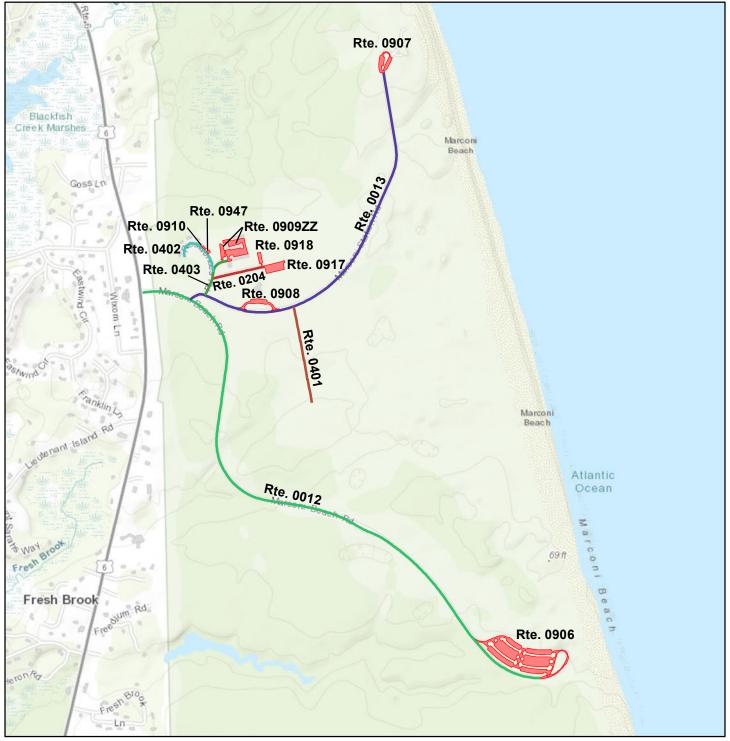
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads



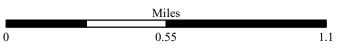
ROUTE LOCATION MAP

MAP 4



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: Unique colors are used to differentiate roads



ROUTE LOCATION MAP

MAP 5



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

1.8

Note: Unique colors are used to differentiate roads

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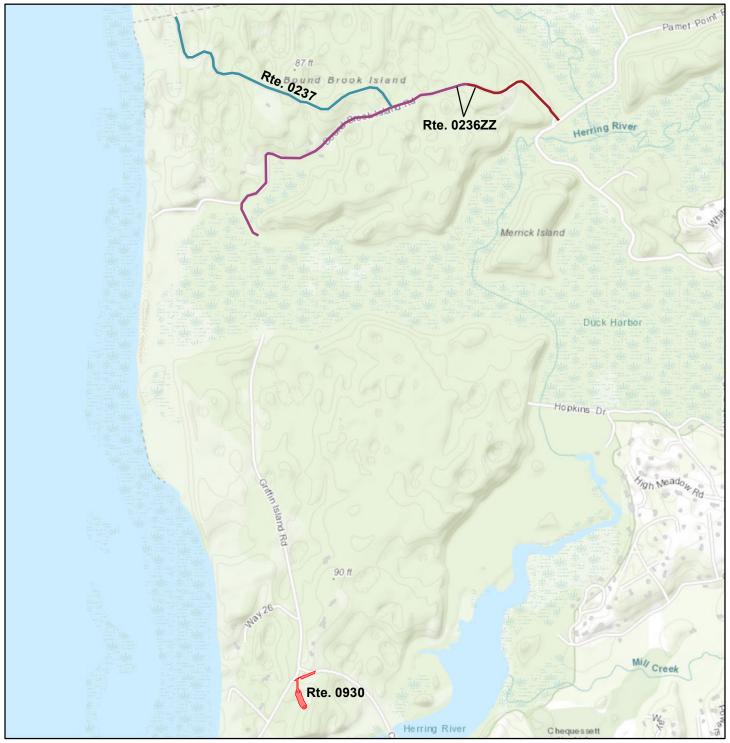
Miles 0.9

Non-NPS Collected Routes

N

ROUTE LOCATION MAP

MAP 6



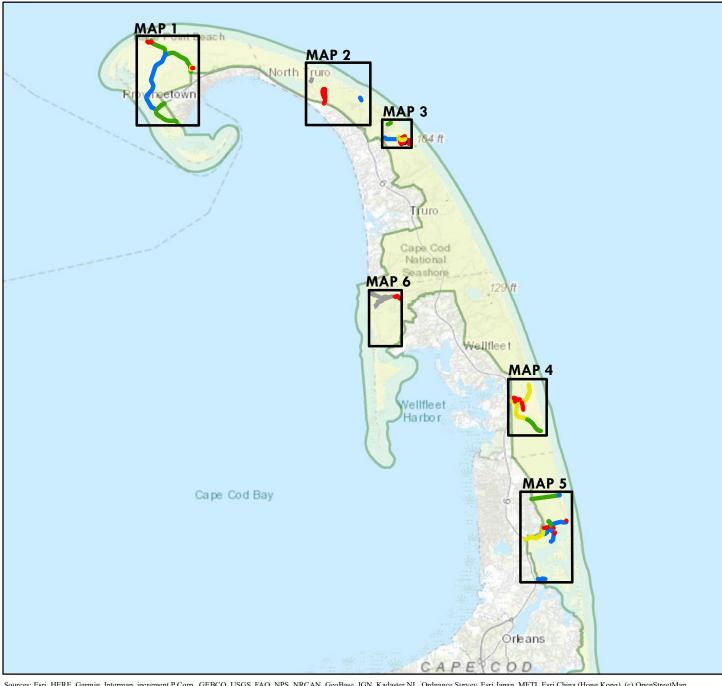
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

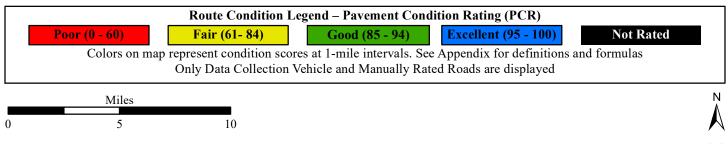
Note: Unique colors are used to differentiate roads

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ROUTE CONDITION MAP PCR - MILE BY MILE Key Map

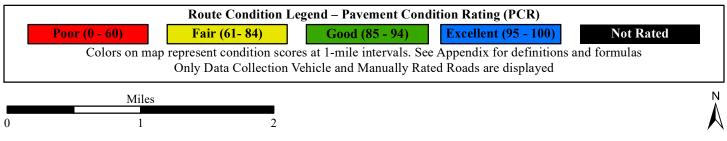




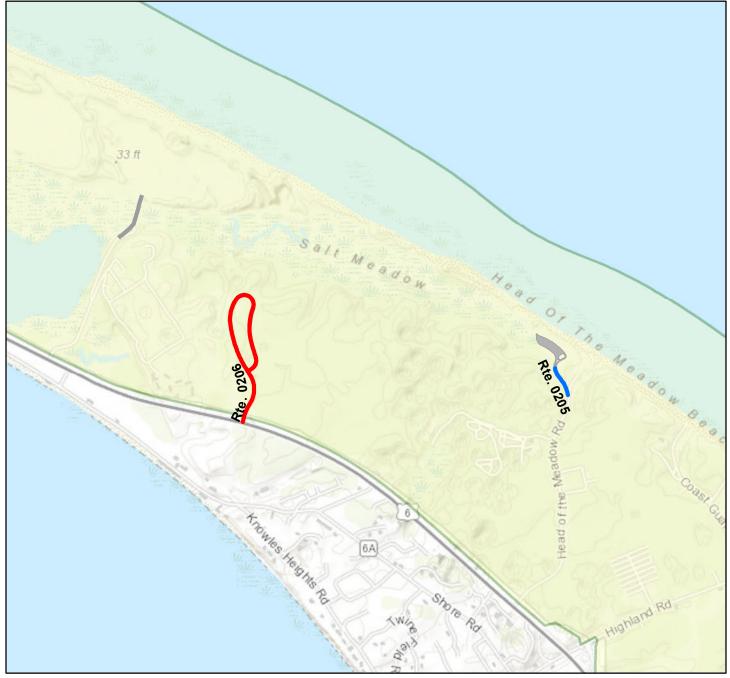
ROUTE CONDITION MAP PCR - MILE BY MILE Area Map 1

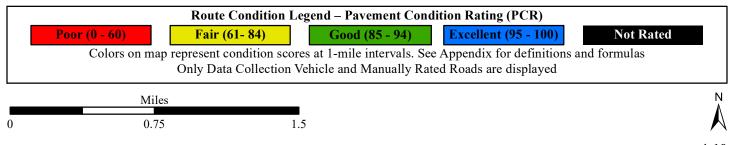


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



ROUTE CONDITION MAP PCR - MILE BY MILE Area Map 2

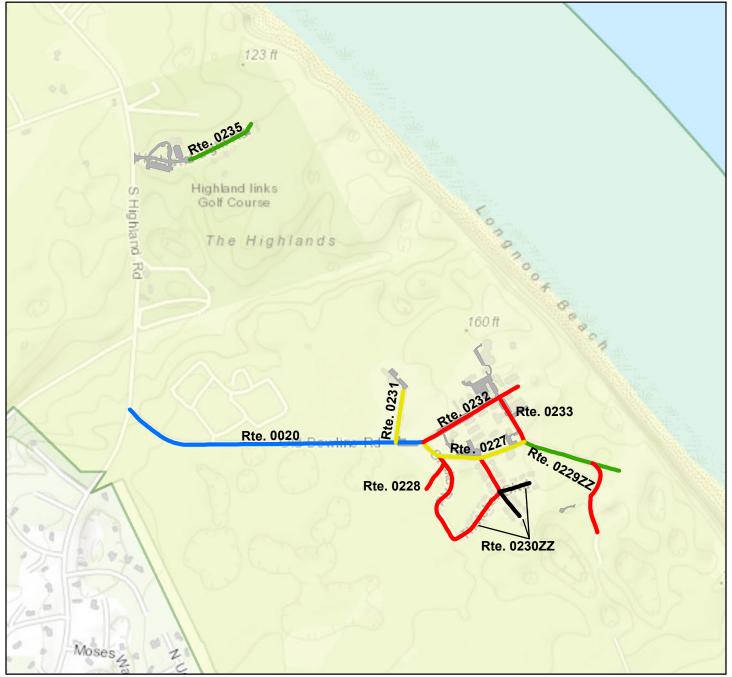


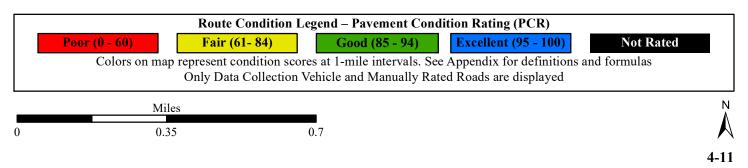


⁴⁻¹⁰

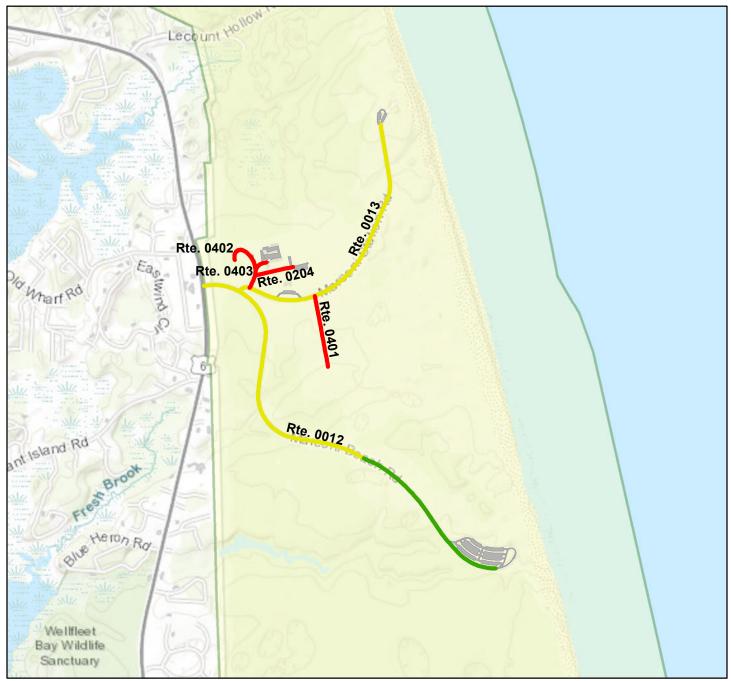
ROUTE CONDITION MAP PCR - MILE BY MILE

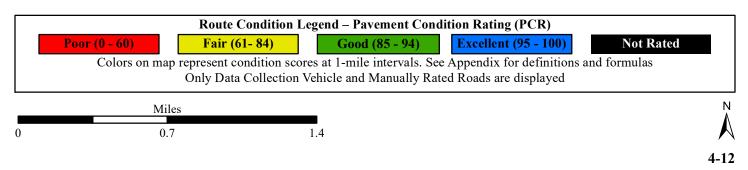
Area Map 3





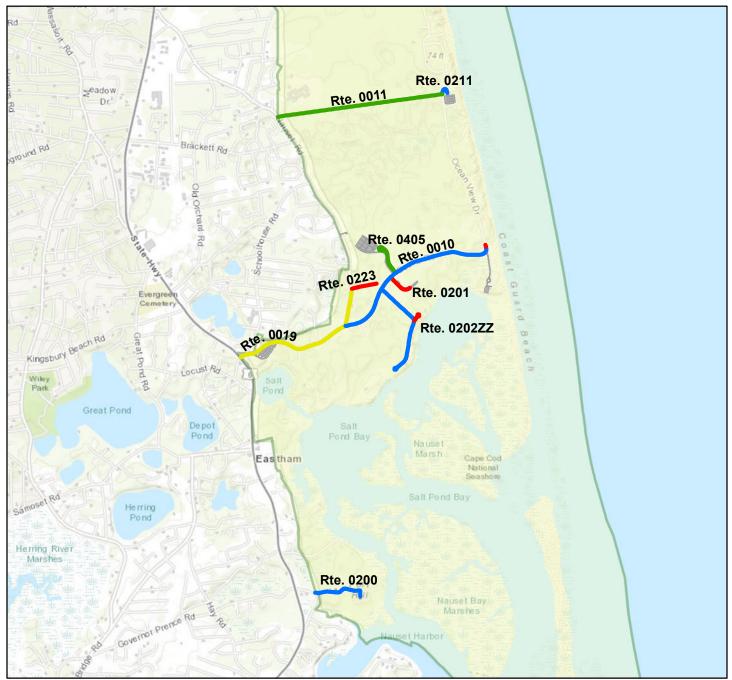
ROUTE CONDITION MAP PCR - MILE BY MILE Area Map 4

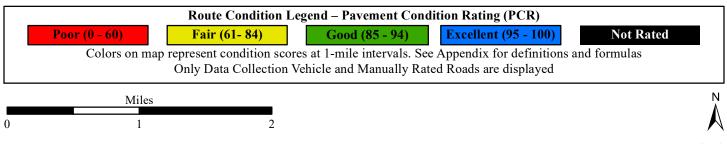




ROUTE CONDITION MAP PCR - MILE BY MILE

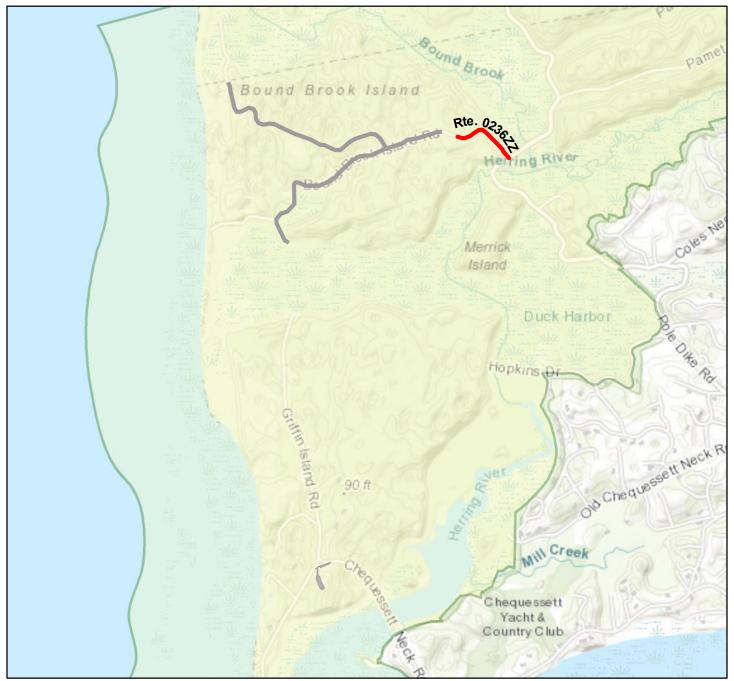
Area Map 5

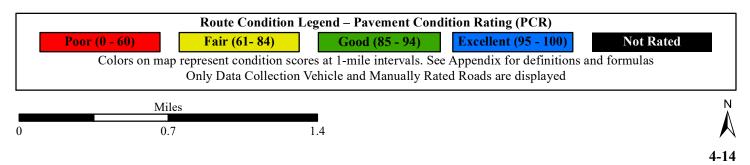




ROUTE CONDITION MAP PCR - MILE BY MILE

Area Map 6





Section 5 Paved Road Condition Rating Sheets



Cape Cod National Seashore



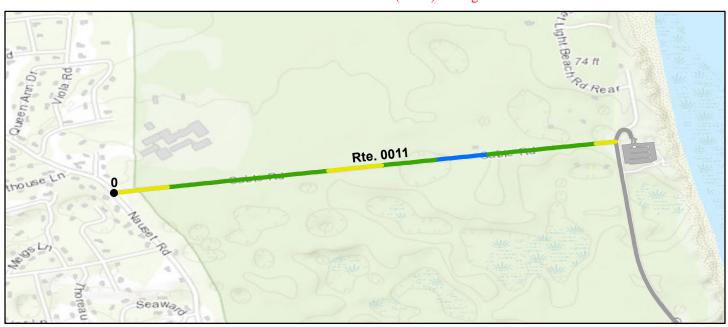
ROUTE 0010: DOANE ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route (Condition Legend – Pav	ement Condi	tion Rating (PCR)		
Poor (0 - 60)	Fair (6	1- 84) Good ((85 - 94)	Excellent (95 - 100)	Not Rat	ted
Colors of	n map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix fo	or definition	s and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0	1			
Paved Length (Miles): 1.01	Section Length (MI)	1	0.01			
Surface Type:	ASPHALT	Route Summary					
Roadway Condition	Information						
Pavement Condition	Rating (PCR)	95	95	23			
Surface Condition Ra	ting (SCR)	91	91	4			
Roughness Condition	Index (RCI)	100	100	51			
Distress Index Value	8						
Structural Crack Ind	ex	93	94	47			
Alligator Crack Inde	X	100	100	100			
Longitudinal Crack	Index	93	94	47			
Transverse Cracking	Index	95	96	4			
Patching Index		100	100	100			
Rutting Index		91	91	94			
International Rought	ness Index (IRI)	97	95	281			
Lane & Width Infor	mation						
Number of Lanes		2	2	2			
Paved Width (ft)		24.2	24.3	26			
Lane Width (ft)		10.3	10.3	10.2			

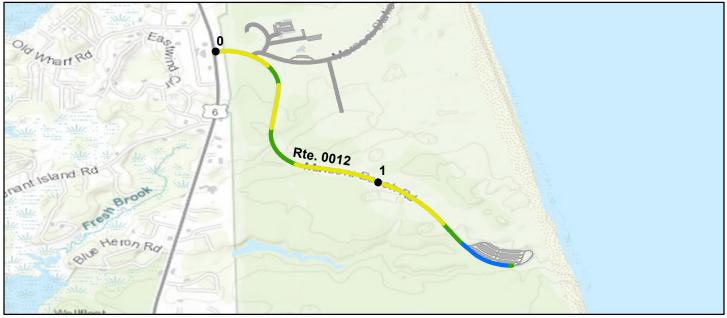
ROUTE 0011: CABLE ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	tion Rating (PC	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60) Fair (6	Good (85 - 94)		Excellent (95 - 100)		Not Rated						
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for d	efinitions a	and formulas.						
Inspection Date: 10/31/2020	Beginning Section MP	0									
Paved Length (Miles): 0.93	Section Length (MI)	0.93									
Surface Type: ASPHALT	Route Summary										
Roadway Condition Information											
Pavement Condition Rating (PCR)	90	90									
Surface Condition Rating (SCR)	84	84									
Roughness Condition Index (RCI)	100	100									
Distress Index Values											
Structural Crack Index	95	95									
Alligator Crack Index	100	100									
Longitudinal Crack Index	95	95									
Transverse Cracking Index	84	84									
Patching Index	98	98									
Rutting Index	97	97									
International Roughness Index (IRI)	115	115									
Lane & Width Information											
Number of Lanes	2	2									
Paved Width (ft)	23.4	23.4									
Lane Width (ft)	9.6	9.6									

Cape Cod National Seashore ROUTE 0012: MARCONI BEACH ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	tion Rating (I	PCR)	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60) Fair (6	6 <mark>1- 84) Good</mark> ((85 - 94)	Excellent (9	5 - 100)	Not Rated							
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix foi	definitions	s and formulas.	-						
Inspection Date: 10/31/2020	Beginning Section MP	0	1									
Paved Length (Miles): 1.62	Section Length (MI)	1	0.62									
Surface Type: ASPHALT	Route Summary				•							
Roadway Condition Information												
Pavement Condition Rating (PCR)	83	81	88									
Surface Condition Rating (SCR)	75	71	83									
Roughness Condition Index (RCI)	95	96	95									
Distress Index Values												
Structural Crack Index	97	96	99									
Alligator Crack Index	100	100	100									
Longitudinal Crack Index	97	96	99									
Transverse Cracking Index	75	71	83									
Patching Index	100	100	100									
Rutting Index	97	98	95									
International Roughness Index (IRI)	126	125	128									
Lane & Width Information												
Number of Lanes	2	2	2									
Paved Width (ft)	25.2	25.7	24.4									
Lane Width (ft)	10.5	10.4	10.7									

Cape Cod National Seashore ROUTE 0013: MARCONI SITE ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route C	Condition Legend – Pav	ement Condi	tion Rating (PC	CR)		
Poor (0 - 60) Fair (6	1- 84) Good (85 - 94)		Excellent (95 - 100)		Not Rated	
Colors on map represent con	dition scores at 0.10-mile	intervals. Se	e Appendix for a	lefinitions	and formulas.	
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.98	Section Length (MI)	0.98				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	83	83				
Surface Condition Rating (SCR)	71	71				
Roughness Condition Index (RCI)	100	100				
Distress Index Values						
Structural Crack Index	94	94				
Alligator Crack Index	100	100				
Longitudinal Crack Index	94	94				
Transverse Cracking Index	71	71				
Patching Index	100	100				
Rutting Index	100	100				
International Roughness Index (IRI)	113	113				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	21.1	21.1				
Lane Width (ft)	10.8	10.8				

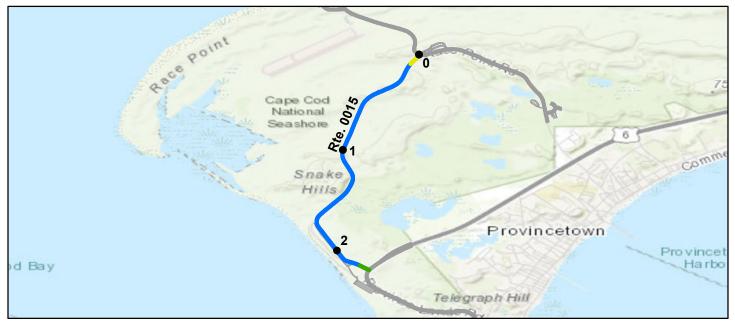
Cape Cod National Seashore ROUTE 0014: RACE POINT ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	tion Rating (I	PCR)		
Poor (0 - 60) Fair (61- 84) Good ((85 - 94)	Excellent (9	5 - 100)	Not Ra	ted
Colors on map represent con	ndition scores at 0.10-mile	intervals. Se	e Appendix for	r definition	s and formulas.	
Inspection Date: 10/31/2020	Beginning Section MP	0	1			
Paved Length (Miles): 1.94	Section Length (MI)	1	0.94			
Surface Type: ASPHALT	Route Summary		•			
Roadway Condition Information						
Pavement Condition Rating (PCR)	92	90	93			
Surface Condition Rating (SCR)	87	83	89			
Roughness Condition Index (RCI)	100	100	100			
Distress Index Values						
Structural Crack Index	87	83	89			
Alligator Crack Index	100	99	100			
Longitudinal Crack Index	87	84	89			
Transverse Cracking Index	93	96	89			
Patching Index	100	100	100			
Rutting Index	97	98	97			
International Roughness Index (IRI)	114	114	113			
Lane & Width Information						
Number of Lanes	2	2	2			
Paved Width (ft)	24.8	23.4	26.5			
Lane Width (ft)	10.2	10	10.5			

ROUTE 0015: PROVINCE LANDS ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60) Fair (6	1- 84) Good (85 - 94)		Excellent (95 - 100)		Not Rated				
Colors on map represent con	dition scores at 0.10-mile	intervals. Se	e Appendix fo	or definitions	and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0	1	2					
Paved Length (Miles): 2.27	Section Length (MI)	1	1	0.27					
Surface Type: ASPHALT	Route Summary				• •				
Roadway Condition Information									
Pavement Condition Rating (PCR)	99	99	100	99					
Surface Condition Rating (SCR)	99	99	100	98					
Roughness Condition Index (RCI)	100	100	100	100					
Distress Index Values									
Structural Crack Index	100	100	100	100					
Alligator Crack Index	100	100	100	100					
Longitudinal Crack Index	100	100	100	100					
Transverse Cracking Index	100	100	100	100					
Patching Index	100	100	100	100					
Rutting Index	99	99	100	98					
International Roughness Index (IRI)	77	80	66	114					
Lane & Width Information									
Number of Lanes	2	2	2	2					
Paved Width (ft)	23.5	23	23.6	24.8					
Lane Width (ft)	10.3	10.2	10.4	10.6					

ROUTE 0017: MOORS ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route C	Condition Legend – Pav	ement Condi	tion Rating (PC	CR)		
Poor (0 - 60) Fair (6	61- 84) Good (85 - 94)		Excellent (95 - 100)		Not Rat	ted
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for d	lefinitions a	and formulas.	
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.89	Section Length (MI)	0.89				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	91	91				
Surface Condition Rating (SCR)	97	97				
Roughness Condition Index (RCI)	83	83				
Distress Index Values						
Structural Crack Index	98	98				
Alligator Crack Index	100	100				
Longitudinal Crack Index	98	98				
Transverse Cracking Index	100	100				
Patching Index	100	100				
Rutting Index	97	97				
International Roughness Index (IRI)	161	161				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	32	32				
Lane Width (ft)	11.1	11.1				

ROUTE 0018ZZ: STATE ROUTE 6

Summary Route

		XC	
	50 ft 58 ft		
~)		R1e.001822	
0			
Some 1	2//		

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

	Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (6		1- 84) Good (85 - 94)		Excellent (95 - 100)		Not Rated	
		See Appendix for de	finitions and f	formulas			
Inspection Date:	10/31/2020						
Paved Length (Mile	es): 0.6						
Surface Type:	ASPHALT	Route Summary					
Roadway Condition	1 Information						
Pavement Conditio	n Rating (PCR)	89					
Lane & Width Info	rmation						
Number of Lanes		4					
Paved Width (ft)		42.5					
Lane Width (ft)		11.1					

Cape Cod National Seashore ROUTE 0018AZ: WESTBOUND STATE ROUTE 6

Subcomponent of Route CACO-0018ZZ Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	ition Rating (PCR)	
Poor (0 - 60) Fair	(61- 84) Good	61- 84) Good (85 - 94)		Not Rated
Colors on map represent co	ndition scores at 0.10-mile	e intervals. Se	e Appendix for definitio	ns and formulas.
Inspection Date: 10/31/2020	Beginning Section MP	0		
Paved Length (Miles): 0.35	Section Length (MI)	0.35		
Surface Type: ASPHALT	Route Summary		• •	
Roadway Condition Information				
Pavement Condition Rating (PCR)	88	88		
Surface Condition Rating (SCR)	88	88		
Roughness Condition Index (RCI)	N/A	N/A		
Distress Index Values				
Structural Crack Index	100	100		
Alligator Crack Index	100	100		
Longitudinal Crack Index	100	100		
Transverse Cracking Index	100	100		
Patching Index	100	100		
Rutting Index	88	88		
International Roughness Index (IRI)	N/A	N/A		
Lane & Width Information				
Number of Lanes	4	4		
Paved Width (ft)	52	52		
Lane Width (ft)	10.8	10.8		

Cape Cod National Seashore ROUTE 0018BZ: EASTBOUND STATE ROUTE 6

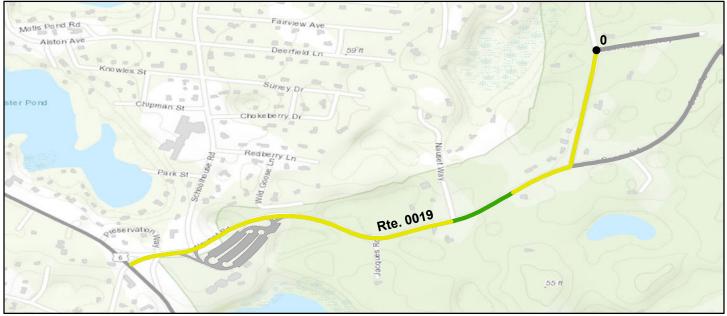
Subcomponent of Route CACO-0018ZZ Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route C	Condition Legend – Pav	ement Cond	ition Rating (PCR)		
Poor (0 - 6)) Fair (6	1- 84) Good ((85 - 94)	Excellent (9	95 - 100)	Not Ra	ted
Colors on map represent con		dition scores at 0.10-mile	e intervals. Se	e Appendix fo	r definitions	and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0				
Paved Length (Mile	es): 0.25	Section Length (MI)	0.25				
Surface Type:	ASPHALT	Route Summary		•		•	
Roadway Condition	n Information						
Pavement Conditio	on Rating (PCR)	91	91				
Surface Condition R	lating (SCR)	91	91				
Roughness Conditio	n Index (RCI)	N/A	N/A				
Distress Index Valu	es						
Structural Crack In	dex	99	99				
Alligator Crack Inc	lex	100	100				
Longitudinal Crack	x Index	99	99				
Transverse Crackin	ng Index	100	100				
Patching Index		100	100				
Rutting Index		91	91				
International Roug	hness Index (IRI)	N/A	N/A				
Lane & Width Info	rmation						
Number of Lanes		2	2				
Paved Width (ft)		29.3	29.3				
Lane Width (ft)		11.5	11.5				

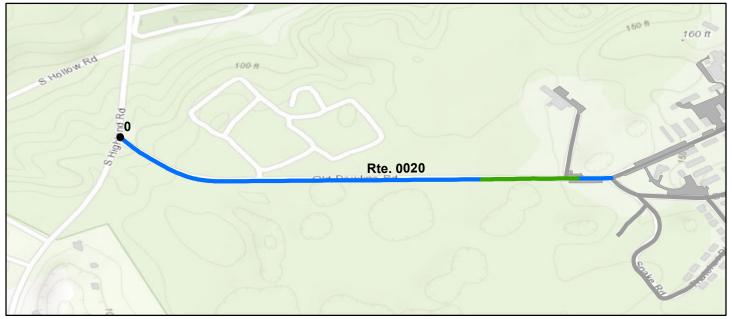
Cape Cod National Seashore ROUTE 0019: NAUSET ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60) Fair (0	61- 84) Good	1- 84) Good (85 - 94)		Not Rated					
Colors on map represent con	ndition scores at 0.10-mile	e intervals. Se	e Appendix for definition	ns and formulas.					
Inspection Date: 10/31/2020	Beginning Section MP	0							
Paved Length (Miles): 0.87	Section Length (MI)	0.87							
Surface Type: ASPHALT	Route Summary		•						
Roadway Condition Information									
Pavement Condition Rating (PCR)	79	79							
Surface Condition Rating (SCR)	75	75							
Roughness Condition Index (RCI)	85	85							
Distress Index Values									
Structural Crack Index	96	96							
Alligator Crack Index	100	100							
Longitudinal Crack Index	96	96							
Transverse Cracking Index	97	97							
Patching Index	75	75							
Rutting Index	93	93							
International Roughness Index (IRI)	155	155							
Lane & Width Information									
Number of Lanes	2	2							
Paved Width (ft)	26	26							
Lane Width (ft)	10.7	10.7							

ROUTE 0020: OLD DEWLINE ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60)	Fair (61	- 84) Good	(85 - 94)	Excellent (9	95 - 100)	Not Ra	ted	
Colors on map re	present cond	lition scores at 0.10-mile	e intervals. Se	e Appendix fo	r definitions	and formulas.		
Inspection Date: 10/31/	/2020	Beginning Section MP	0					
Paved Length (Miles): 0.53		Section Length (MI)	0.53					
Surface Type: ASPH	IALT	Route Summary				•		
Roadway Condition Informa	ation							
Pavement Condition Rating	(PCR)	98	98					
Surface Condition Rating (SC	R)	98	98					
Roughness Condition Index (F	RCI)	97	97					
Distress Index Values								
Structural Crack Index		100	100					
Alligator Crack Index		100	100					
Longitudinal Crack Index		100	100					
Transverse Cracking Index		100	100					
Patching Index		100	100					
Rutting Index		98	98					
International Roughness Inde	ex (IRI)	123	122					
Lane & Width Information								
Number of Lanes		2	2					
Paved Width (ft)		19.9	19.9					
Lane Width (ft)		9.1	9.1					

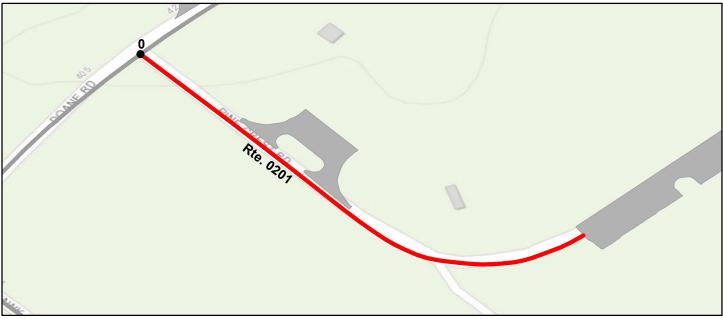
Cape Cod National Seashore ROUTE 0200: FORT HILL AREA ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route	Condition Legend – Pav	ement Cond	ition Rating (PCR)	
Poor (0 - 6)) Fair (6	61- 84) Good ((85 - 94)	Excellent (95 - 10	0) Not Rated
Colors	on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for defir	nitions and formulas.
Inspection Date:	10/31/2020	Beginning Section MP	0		
Paved Length (Mile	es): 0.3	Section Length (MI)	0.3		
Surface Type:	ASPHALT	Route Summary		•	•
Roadway Conditior	1 Information				
Pavement Conditio	n Rating (PCR)	97	97		
Surface Condition R	ating (SCR)	97	97		
Roughness Conditio	n Index (RCI)	N/A	N/A		
Distress Index Valu	es				
Structural Crack In	dex	100	100		
Alligator Crack Ind	lex	100	100		
Longitudinal Crack	. Index	100	100		
Transverse Crackin	ig Index	100	100		
Patching Index		100	100		
Rutting Index		97	97		
International Roug	hness Index (IRI)	N/A	N/A		
Lane & Width Info	rmation				
Number of Lanes		2	2		
Paved Width (ft)		17.3	17.3		
Lane Width (ft)		8.5	8.5		

Cape Cod National Seashore ROUTE 0201: DOANE ROCK PICNIC AREA ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	tion Rating (PCR)		
Poor (0 - 60) Fair (6	1- 84) Good ((85 - 94)	Excellent (9	95 - 100)	Not Ra	ted
Colors on map represent con	dition scores at 0.10-mile	intervals. Se	e Appendix fo	r definitions	and formulas.	
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.14	Section Length (MI)	0.14				
Surface Type: ASPHALT	Route Summary				•	
Roadway Condition Information						
Pavement Condition Rating (PCR)	39	39				
Surface Condition Rating (SCR)	39	39				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	84	84				
Alligator Crack Index	100	100				
Longitudinal Crack Index	84	84				
Transverse Cracking Index	39	39				
Patching Index	100	100				
Rutting Index	94	94				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	22.1	22.1				
Lane Width (ft)	11.1	11.1				

Cape Cod National Seashore ROUTE 0202ZZ: TOMAHAWK TRAIL ROADS

Summary Route



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

	Route C	Condition Legend – Pa	vement Conc	lition Rating (P	CR)		
Poor (0 - 6) Fair (6	<mark>1- 84) Good</mark>	(85 - 94)	Excellent (95	5 - 100)	Not Ra	ted
		See Appendix for de	efinitions and	formulas			
Inspection Date:	10/31/2020						
Paved Length (Mile	es): 0.65						
Surface Type:	ASPHALT	Route Summary		•			
Roadway Condition	n Information						
Pavement Condition	on Rating (PCR)	92					
Lane & Width Info	rmation						
Number of Lanes		2					
Paved Width (ft)		14.3					
Lane Width (ft)		7.6					

Cape Cod National Seashore ROUTE 0202AZ: TOMAHAWK TRAIL ROAD A

Subcomponent of Route CACO-0202ZZ Data Collection Vehicle (DCV) Rating

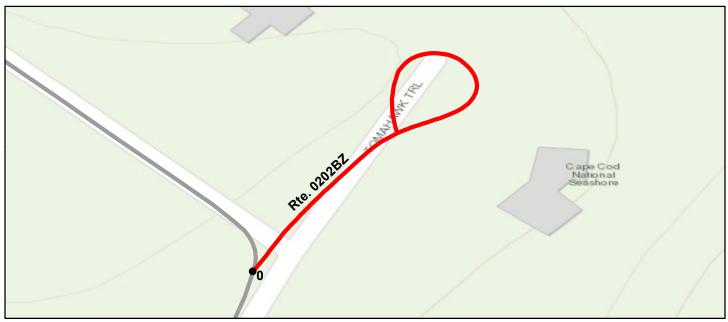


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route (Condition Legend – Pav	ement Cond	ition Rating (PCR)		
Poor (0 - 6)) Fair (6	1- 84) Good ((85 - 94)	Excellent (9	95 - 100)	Not Ra	ted
Colors	on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix fo	r definitions	s and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0				
Paved Length (Mile	es): 0.59	Section Length (MI)	0.59				
Surface Type:	ASPHALT	Route Summary		•		•	
Roadway Conditior	1 Information						
Pavement Conditio	n Rating (PCR)	95	95				
Surface Condition R	ating (SCR)	95	95				
Roughness Conditio	n Index (RCI)	N/A	N/A				
Distress Index Valu	es						
Structural Crack In	dex	99	99				
Alligator Crack Ind	lex	100	100				
Longitudinal Crack	. Index	99	99				
Transverse Crackin	ig Index	99	99				
Patching Index		100	100				
Rutting Index		95	95				
International Roug	hness Index (IRI)	N/A	N/A				
Lane & Width Info	rmation						
Number of Lanes		2	2				
Paved Width (ft)		14.7	14.7				
Lane Width (ft)		7.4	7.4				

Cape Cod National Seashore ROUTE 0202BZ: TOMAHAWK TRAIL ROAD B

Subcomponent of Route CACO-0202ZZ Data Collection Vehicle (DCV) Rating

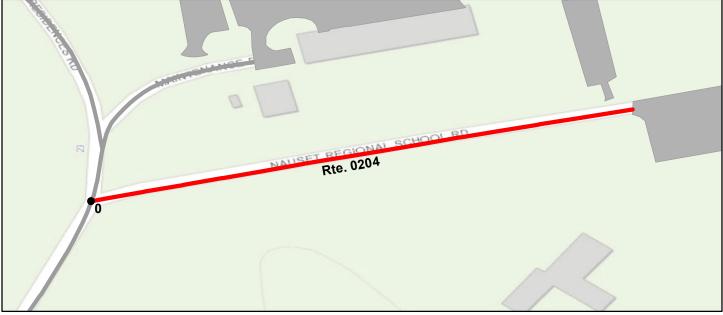


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Cond	ition Rating (PCR)	
Poor (0 - 60) Fair	(61- 84) Good	Good (85 - 94) Excellent (95 - 100)		
Colors on map represent co	ndition scores at 0.10-mile	e intervals. Se	e Appendix for definition	ns and formulas.
Inspection Date: 10/31/2020	Beginning Section MP	0		
Paved Length (Miles): 0.06	Section Length (MI)	0.06		
Surface Type: ASPHALT	Route Summary			
Roadway Condition Information				
Pavement Condition Rating (PCR)	53	53		
Surface Condition Rating (SCR)	N/A	N/A		
Roughness Condition Index (RCI)	N/A	N/A		
Distress Index Values				
Structural Crack Index	N/A	N/A		
Alligator Crack Index	N/A	N/A		
Longitudinal Crack Index	N/A	N/A		
Transverse Cracking Index	N/A	N/A		
Patching Index	N/A	N/A		
Rutting Index	N/A	N/A		
International Roughness Index (IRI)	N/A	N/A		
Lane & Width Information				
Number of Lanes	1	1		
Paved Width (ft)	9.7	9.7		
Lane Width (ft)	9.7	9.7		

MANUALLY RATED DUE TO DEBRIS ON ROAD

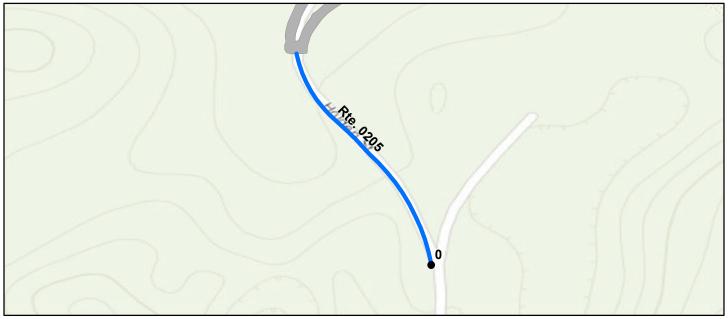
Cape Cod National Seashore ROUTE 0204: MARCONI EMPLOYEE PARKING ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route C	Condition Legend – Pav	ement Condi	tion Rating (P	PCR)			
Poor (0 - 60) Fair (6	I- 84) Good (85 - 94) Excellent (95 - 100)			5 - 100)	Not Rated		
Colors on map represent cond	dition scores at 0.10-mile	intervals. Se	e Appendix for	definitions	and formulas.		
Inspection Date: 10/31/2020	Beginning Section MP	0					
Paved Length (Miles): 0.13	Section Length (MI)	0.13					
Surface Type: ASPHALT	Route Summary						
Roadway Condition Information							
Pavement Condition Rating (PCR)	0	0					
Surface Condition Rating (SCR)	0	0					
Roughness Condition Index (RCI)	N/A	N/A					
Distress Index Values							
Structural Crack Index	13	13					
Alligator Crack Index	100	100					
Longitudinal Crack Index	13	13					
Transverse Cracking Index	0	0					
Patching Index	97	97					
Rutting Index	99	99					
International Roughness Index (IRI)	N/A	N/A					
Lane & Width Information							
Number of Lanes	2	2					
Paved Width (ft)	24.4	24.4					
Lane Width (ft)	11.4	11.4					

Cape Cod National Seashore ROUTE 0205: HEAD OF THE MEADOW BEACH ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	Route Condition Legend – Pavement Condition Rating (PCR)								
Poor (0 - 60) Fair (6	1- 84) Good ((85 - 94)	Excellent (95 - 100)	Not Rated							
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for definiti	ions and formulas.							
Inspection Date: 10/31/2020	Beginning Section MP	0									
Paved Length (Miles): 0.12	Section Length (MI)	0.12									
Surface Type: ASPHALT	Route Summary			• •							
Roadway Condition Information											
Pavement Condition Rating (PCR)	97	97									
Surface Condition Rating (SCR)	97	97									
Roughness Condition Index (RCI)	N/A	N/A									
Distress Index Values											
Structural Crack Index	100	100									
Alligator Crack Index	100	100									
Longitudinal Crack Index	100	100									
Transverse Cracking Index	99	99									
Patching Index	100	100									
Rutting Index	97	97									
International Roughness Index (IRI)	N/A	N/A									
Lane & Width Information											
Number of Lanes	2	2									
Paved Width (ft)	26.8	26.8									
Lane Width (ft)	9.5	9.5									

Cape Cod National Seashore ROUTE 0206: PILGRIM HEIGHTS ROAD

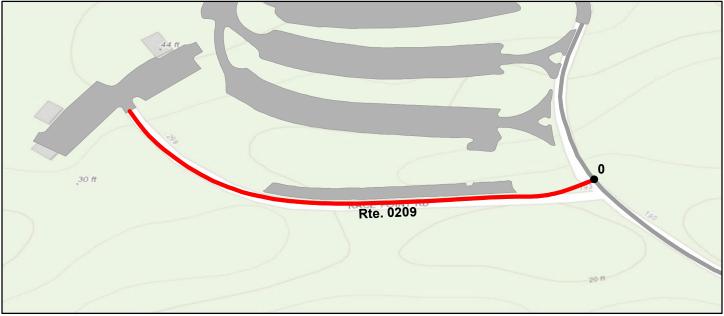


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60) Fair (6	1-84) Good	(85 - 94)	Excellent (95 - 1	00) Not Rated				
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for defi	nitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0						
Paved Length (Miles): 0.87	Section Length (MI)	0.87						
Surface Type: ASPHALT	Route Summary			• •				
Roadway Condition Information								
Pavement Condition Rating (PCR)	40	40						
Surface Condition Rating (SCR)	40	40						
Roughness Condition Index (RCI)	40	40						
Distress Index Values								
Structural Crack Index	54	54						
Alligator Crack Index	99	99						
Longitudinal Crack Index	55	55						
Transverse Cracking Index	40	40						
Patching Index	100	100						
Rutting Index	94	94						
International Roughness Index (IRI)	340	340						
Lane & Width Information								
Number of Lanes	1	1						
Paved Width (ft)	16.4	16.4						
Lane Width (ft)	12.7	12.7						

Cape Cod National Seashore ROUTE 0209: RACE POINT COAST GUARD STATION ROAD

Data Collection Vehicle (DCV) Rating

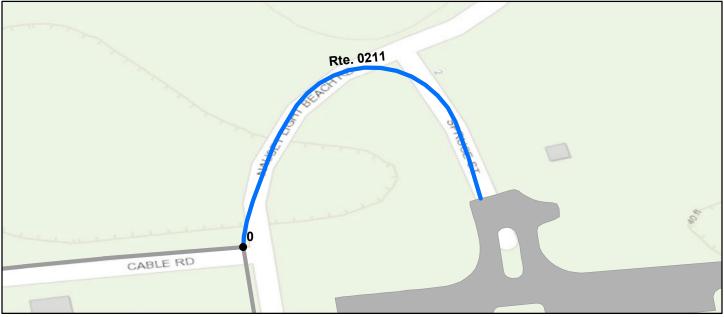


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	Route Condition Legend – Pavement Condition Rating (PCR)								
Poor (0 - 60) Fair (61- 84) Good	(85 - 94)	Excellent (95 - 100)	Not Rated							
Colors on map represent con	ndition scores at 0.10-mile	e intervals. Se	e Appendix for definiti	ons and formulas.							
Inspection Date: 10/31/2020	Beginning Section MP	0									
Paved Length (Miles): 0.16	Section Length (MI)	0.16									
Surface Type: ASPHALT	Route Summary										
Roadway Condition Information											
Pavement Condition Rating (PCR)	53	53									
Surface Condition Rating (SCR)	N/A	N/A									
Roughness Condition Index (RCI)	N/A	N/A									
Distress Index Values											
Structural Crack Index	N/A	N/A									
Alligator Crack Index	N/A	N/A									
Longitudinal Crack Index	N/A	N/A									
Transverse Cracking Index	N/A	N/A									
Patching Index	N/A	N/A									
Rutting Index	N/A	N/A									
International Roughness Index (IRI)	N/A	N/A									
Lane & Width Information											
Number of Lanes	2	2									
Paved Width (ft)	19.5	19.5									
Lane Width (ft)	9.3	9.3									

MANUALLY RATED DUE TO DEBRIS ON ROAD

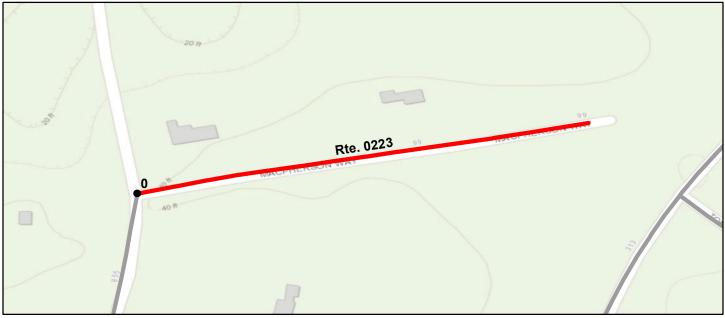
Cape Cod National Seashore ROUTE 0211: NAUSET LIGHT BEACH ACCESS ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	tion Rating (PCR)	
Poor (0 - 60) Fair (6	1- 84) Good ((85 - 94)	Excellent (95 - 10	0) Not Rated
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for defin	itions and formulas.
Inspection Date: 10/31/2020	Beginning Section MP	0		
Paved Length (Miles): 0.06	Section Length (MI)	0.06		
Surface Type: ASPHALT	Route Summary		•	• •
Roadway Condition Information				
Pavement Condition Rating (PCR)	95	95		
Surface Condition Rating (SCR)	95	95		
Roughness Condition Index (RCI)	N/A	N/A		
Distress Index Values				
Structural Crack Index	98	98		
Alligator Crack Index	100	100		
Longitudinal Crack Index	98	98		
Transverse Cracking Index	95	95		
Patching Index	100	100		
Rutting Index	97	97		
International Roughness Index (IRI)	N/A	N/A		
Lane & Width Information				
Number of Lanes	3	3		
Paved Width (ft)	32.6	32.6		
Lane Width (ft)	11.7	11.7		

ROUTE 0223: MACPHERSON WAY

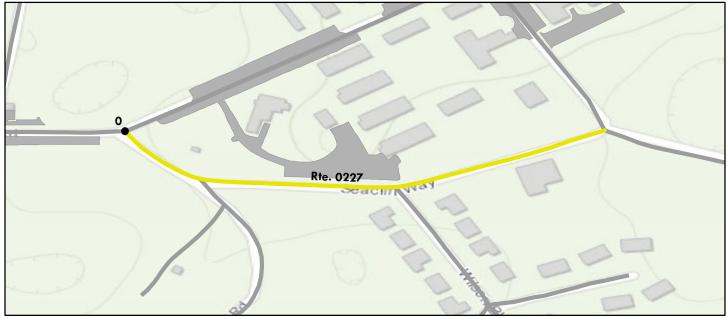


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route (Condition Legend – Pav	ement Condi	ition Rating (PCR)		
Poor (0 - 60)	Fair (6		(85 - 94)	Excellent (. ,	Not Ra	ted
Colors on	map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix fo	or definitions	and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0				
Paved Length (Miles):	0.14	Section Length (MI)	0.14				
Surface Type:	ASPHALT	Route Summary				•	
Roadway Condition In	nformation						
Pavement Condition F	Rating (PCR)	34	34				
Surface Condition Ration	ng (SCR)	34	34				
Roughness Condition In	ndex (RCI)	N/A	N/A				
Distress Index Values							
Structural Crack Index	x	74	74				
Alligator Crack Index		99	99				
Longitudinal Crack In	dex	75	75				
Transverse Cracking I	ndex	34	34				
Patching Index		100	100				
Rutting Index		97	97				
International Roughne	ess Index (IRI)	N/A	N/A				
Lane & Width Inform	ation						
Number of Lanes		2	2				
Paved Width (ft)		17.7	17.7				
Lane Width (ft)		8.9	8.9				

ROUTE 0227: NTAFS LANDING ROAD

Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)				
Poor (0 - 60) Fair (6	1- 84) Good ((85 - 94)	Excellent (95 - 100)	Not Rated
See Appendix for definitions and formulas				
Inspection Date: 10/1/2020	Beginning Section MP	0.00		
Paved Length (Miles): 0.19	Section Length (MI)	0.19		
Surface Type: ASPHALT	Route Summary		• •	
Roadway Condition Information				
Pavement Condition Rating (PCR)	73	73		
Surface Condition Rating (SCR)	73	73		
Roughness Condition Index (RCI)	N/A	N/A		
Distress Index Values				
Structural Crack Index	N/A	N/A		
Alligator Crack Index	90	90		
Longitudinal Crack Index	90	90		
Transverse Cracking Index	73	73		
Patching Index	90	90		
Rutting Index	90	90		
International Roughness Index (IRI)	N/A	N/A		
Lane & Width Information				
Number of Lanes	2	2		
Paved Width (ft)	20	20		
Lane Width (ft)	10	10		

Cape Cod National Seashore ROUTE 0227: NTAFS LANDING ROAD

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0227_1.JPG



CACO_0227_17.JPG



CACO_0227_4.JPG



CACO_0227_13.JPG



CACO_0227_19.JPG

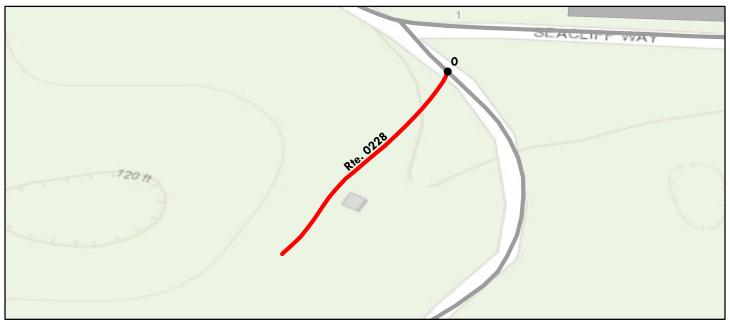


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Cape Cod National Seashore

ROUTE 0228: WELL ROAD





Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Route Condition Legend – Pavement Condition Rating (PCR)										
Poor (0 - 60) Fair (0	61- 84) Good (1- 84) Good (85 - 94) Excellent (95 - 100)									
	See Appendix for definitions and formulas										
Inspection Date: 10/1/2020	Beginning Section MP	0.00									
Paved Length (Miles): 0.06	Section Length (MI)	0.06									
Surface Type: ASPHALT	Route Summary			•							
Roadway Condition Information											
Pavement Condition Rating (PCR)	53	53									
Surface Condition Rating (SCR)	53	53									
Roughness Condition Index (RCI)	N/A	N/A									
Distress Index Values											
Structural Crack Index	N/A	N/A									
Alligator Crack Index	73	73									
Longitudinal Crack Index	73	73									
Transverse Cracking Index	73	73									
Patching Index	53	53									
Rutting Index	90	90									
International Roughness Index (IRI)	N/A	N/A									
Lane & Width Information											
Number of Lanes	1	1									
Paved Width (ft)	10	10									
Lane Width (ft)	10	10									

Cape Cod National Seashore

ROUTE 0228: WELL ROAD

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0228_1.JPG



CACO_0228_3.JPG



CACO_0228_5.JPG



CACO_0228_2.JPG



CACO_0228_4.JPG



CACO_0228_6.JPG

Cape Cod National Seashore ROUTE 0229ZZ: SEWAGE TREATMENT PARKING ROADS

Summary Route



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

	Route C	Condition Legend – Pa	vement Cond	lition Rating (PCR)		
Poor (0 - 6 ()) Fair (6)	1- 84) Good	(85 - 94)	Excellent (9	Excellent (95 - 100)		ted
		See Appendix for de	efinitions and	formulas			
Inspection Date:	10/1/2020						
Paved Length (Mile	es): 0.3						
Surface Type:	ASPHALT	Route Summary					
Roadway Conditior	1 Information						
Pavement Conditio	n Rating (PCR)	74					
Lane & Width Info	rmation						
Number of Lanes		1					
Paved Width (ft)		8					
Lane Width (ft)		8					

Cape Cod National Seashore ROUTE 0229AZ: SEWAGE TREATMENT PARKING ROAD A

Subcomponent of Route CACO-0229ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)											
Poor (0 - 60) Fair	(61- 84) Good	1- 84) Good (85 - 94) Excellent (95 - 100)									
	See Appendix for definitions and formulas										
Inspection Date: 10/1/2020	Beginning Section MP	0.00									
Paved Length (Miles): 0.17	Section Length (MI)	0.17									
Surface Type: ASPHALT	Route Summary		• •	•							
Roadway Condition Information											
Pavement Condition Rating (PCR)	90	90									
Surface Condition Rating (SCR)	90	90									
Roughness Condition Index (RCI)	N/A	N/A									
Distress Index Values											
Structural Crack Index	N/A	N/A									
Alligator Crack Index	90	90									
Longitudinal Crack Index	90	90									
Transverse Cracking Index	90	90									
Patching Index	97	97									
Rutting Index	90	90									
International Roughness Index (IRI)	N/A	N/A									
Lane & Width Information											
Number of Lanes	1	1									
Paved Width (ft)	8	8									
Lane Width (ft)	8	8									

Cape Cod National Seashore ROUTE 0229AZ: SEWAGE TREATMENT PARKING ROAD A

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0229AZ_14.JPG



CACO_0229AZ_19.JPG



CACO_0229AZ_5.JPG



CACO_0229AZ_17.JPG



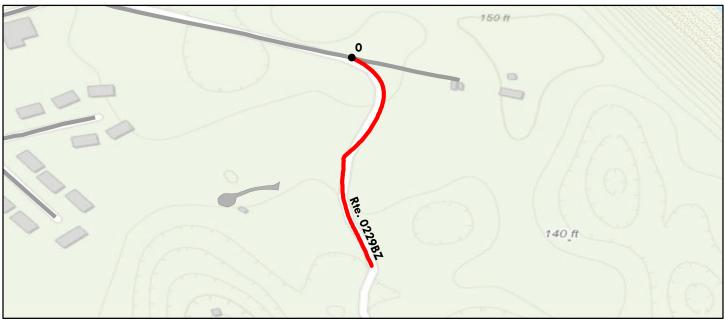
CACO_0229AZ_2.JPG



CACO_0229AZ_7.JPG

Cape Cod National Seashore ROUTE 0229BZ: SEWAGE TREATMENT PARKING ROAD B

Subcomponent of Route CACO-0229ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Rou	Route Condition Legend – Pavement Condition Rating (PCR)									
Poor (0 - 60) Fai	r (61- 84) Good	I- 84) Good (85 - 94) Excellent (95 - 100)								
See Appendix for definitions and formulas										
Inspection Date: 10/1/2020	Beginning Section MP	0.00								
Paved Length (Miles): 0.13	Section Length (MI)	0.13								
Surface Type: ASPHALT	Route Summary									
Roadway Condition Information										
Pavement Condition Rating (PCR)	53	53								
Surface Condition Rating (SCR)	53	53								
Roughness Condition Index (RCI)	N/A	N/A								
Distress Index Values										
Structural Crack Index	N/A	N/A								
Alligator Crack Index	53	53								
Longitudinal Crack Index	73	73								
Transverse Cracking Index	90	90								
Patching Index	90	90								
Rutting Index	90	90								
International Roughness Index (IRI)	N/A	N/A								
Lane & Width Information										
Number of Lanes	1	1								
Paved Width (ft)	8	8								
Lane Width (ft)	8	8								

Cape Cod National Seashore ROUTE 0229BZ: SEWAGE TREATMENT PARKING ROAD B

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0229BZ_10.JPG



CACO_0229BZ_14.JPG



CACO_0229BZ_5.JPG



CACO_0229BZ_13.JPG



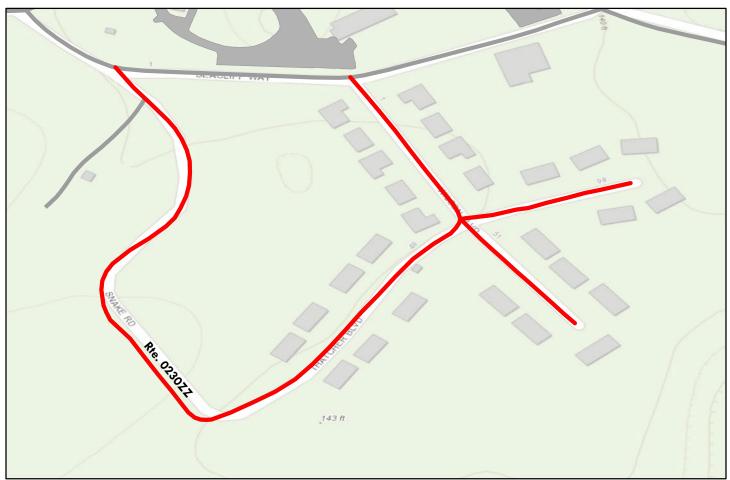
CACO_0229BZ_2.JPG



CACO_0229BZ_7.JPG

Cape Cod National Seashore ROUTE 0230ZZ: NTAFS RESIDENCE ACCESS ROADS

Summary Route



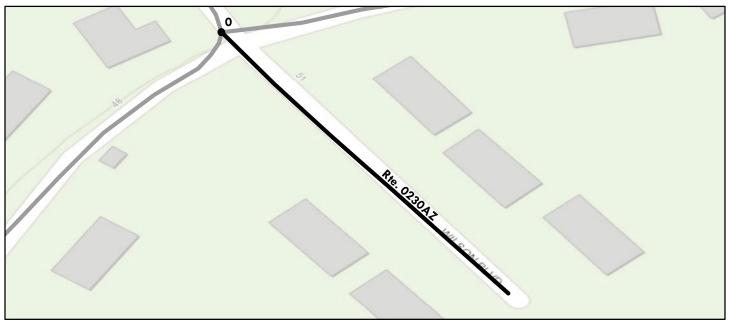
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)									
Poor (0 - 60)	Fair (61	<mark>1- 84) Good</mark>	(85 - 94)	Excellent (95 - 100)		Not Ra	ted		
		See Appendix for de	finitions and f	formulas					
Inspection Date: 10.	/1/2020								
Paved Length (Miles): 0.4	46								
Surface Type: AS	SPHALT	Route Summary		•					
Roadway Condition Info	rmation								
Pavement Condition Rati	ng (PCR)	53							
Lane & Width Information	on								
Number of Lanes		2							
Paved Width (ft)		20							
Lane Width (ft)		10							

Cape Cod National Seashore ROUTE 0230AZ: NTAFS RESIDENCE STREET A

Subcomponent of Route CACO-0230ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	ition Rating (PCR)	
Poor (0 - 60) Fair (0	61- 84) Good ((85 - 94)	Excellent (95 - 100)	Not Rated
	See Appendix for def	initions and f	formulas	
Inspection Date: 10/1/2020	Beginning Section MP	0.00		
Paved Length (Miles): 0.06	Section Length (MI)	0.06		
Surface Type: ASPHALT	Route Summary			•
Roadway Condition Information				
Pavement Condition Rating (PCR)	N/A	N/A		
Surface Condition Rating (SCR)	N/A	N/A		
Roughness Condition Index (RCI)	N/A	N/A		
Distress Index Values				
Structural Crack Index	N/A	N/A		
Alligator Crack Index	N/A	N/A		
Longitudinal Crack Index	N/A	N/A		
Transverse Cracking Index	N/A	N/A		
Patching Index	N/A	N/A		
Rutting Index	N/A	N/A		
International Roughness Index (IRI)	N/A	N/A		
Lane & Width Information				
Number of Lanes	2	2		
Paved Width (ft)	20	20		
Lane Width (ft)	10	10		

NOT RATED: CLOSED BY A FENCE ON 0230Z AND AREA IS ABANDONED.

Cape Cod National Seashore ROUTE 0230AZ: NTAFS RESIDENCE STREET A

Condition Photos

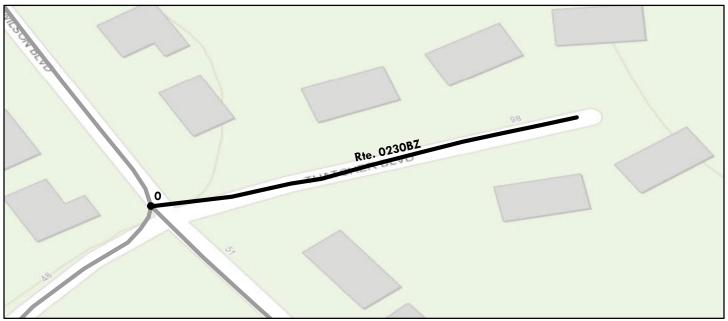
Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0230AZ_1.JPG

Cape Cod National Seashore ROUTE 0230BZ: NTAFS RESIDENCE STREET B

Subcomponent of Route CACO-0230ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)									
Poor (0 - 60) Fair (0	61- 84) Good (1- 84) Good (85 - 94) Excellent (95 - 100)							
	See Appendix for def	initions and f	formulas						
Inspection Date: 10/1/2020	Beginning Section MP	0.00							
Paved Length (Miles): 0.05	Section Length (MI)	0.05							
Surface Type: ASPHALT	Route Summary			• •					
Roadway Condition Information									
Pavement Condition Rating (PCR)	N/A	N/A							
Surface Condition Rating (SCR)	N/A	N/A							
Roughness Condition Index (RCI)	N/A	N/A							
Distress Index Values									
Structural Crack Index	N/A	N/A							
Alligator Crack Index	N/A	N/A							
Longitudinal Crack Index	N/A	N/A							
Transverse Cracking Index	N/A	N/A							
Patching Index	N/A	N/A							
Rutting Index	N/A	N/A							
International Roughness Index (IRI)	N/A	N/A							
Lane & Width Information									
Number of Lanes	2	2							
Paved Width (ft)	20	20							
Lane Width (ft)	10	10							

NOT RATED: CLOSED BY A FENCE ON 0230Z AND AREA IS ABANDONED.

Cape Cod National Seashore ROUTE 0230BZ: NTAFS RESIDENCE STREET B

Condition Photos

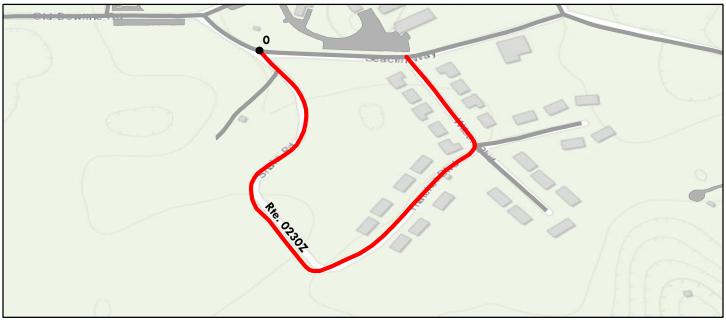
Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0230BZ_1.JPG

Cape Cod National Seashore ROUTE 0230Z: NTAFS RESIDENCE ACCESS ROAD

Subcomponent of Route CACO-0230ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Condition Legend – Pav	ement Condi	ition Rating (PCR)			
Poor (0 - 60) Fair (6	1- 84) Good (85 - 94) Excellent (95 - 100)) Not Rated		
	See Appendix for def	initions and f	ormulas			
Inspection Date: 10/1/2020	Beginning Section MP	0.00				
Paved Length (Miles): 0.36	Section Length (MI)	0.36				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	53	53				
Surface Condition Rating (SCR)	53	53				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	73	73				
Longitudinal Crack Index	73	73				
Transverse Cracking Index	73	73				
Patching Index	53	53				
Rutting Index	90	90				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	20	20				
Lane Width (ft)	10	10				

MIDDLE PORTION FROM MP 0.2 TO 0.3 WAS NOT RATED; CLOSED BY A FENCE AND AREA IS ABANDONED.

Cape Cod National Seashore ROUTE 0230Z: NTAFS RESIDENCE ACCESS ROAD

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0230Z_1.JPG



CACO_0230Z_12.JPG



CACO_0230Z_16.JPG



CACO_0230Z_10.JPG

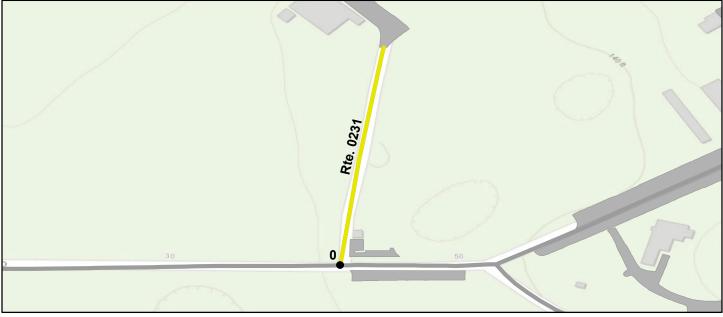


CACO_0230Z_14.JPG



CACO_0230Z_4.JPG

Cape Cod National Seashore ROUTE 0231: NAC LABORATORY ACCESS ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)								
Poor (0 - 60) Fair (6	1- 84) Good	Excellent (95	- 100)	Not Rated				
Colors on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix for d	efinitions a	and formulas.			
Inspection Date: 10/31/2020	Beginning Section MP	0						
Paved Length (Miles): 0.08	Section Length (MI)	0.08						
Surface Type: ASPHALT	Route Summary							
Roadway Condition Information								
Pavement Condition Rating (PCR)	74	74						
Surface Condition Rating (SCR)	74	74						
Roughness Condition Index (RCI)	N/A	N/A						
Distress Index Values								
Structural Crack Index	99	99						
Alligator Crack Index	100	100						
Longitudinal Crack Index	99	99						
Transverse Cracking Index	74	74						
Patching Index	100	100						
Rutting Index	98	98						
International Roughness Index (IRI)	N/A	N/A						
Lane & Width Information								
Number of Lanes	2	2						
Paved Width (ft)	22	22						
Lane Width (ft)	10.5	10.5						

Cape Cod National Seashore

ROUTE 0232: NTAFS ACCESS ROAD

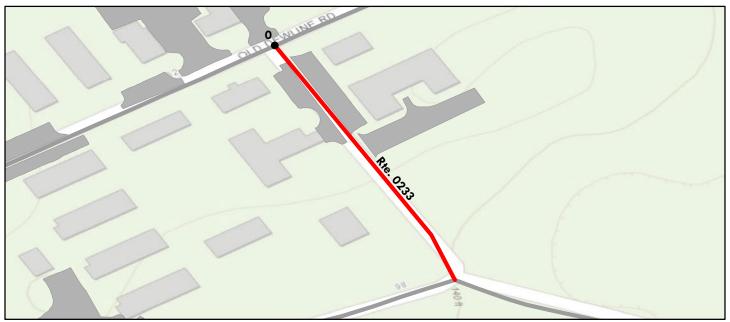


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route C	Condition Legend – Pav	ement Cond	ition Rating (PCR)		
Poor (0 - 60)			(85 - 94)	Excellent (, ,	Not Ra	ted
Colors or	n map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix fo	or definitions	s and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0				
Paved Length (Miles)): 0.19	Section Length (MI)	0.19				
Surface Type:	ASPHALT	Route Summary					
Roadway Condition	Information						
Pavement Condition	Rating (PCR)	16	16				
Surface Condition Rat	ting (SCR)	16	16				
Roughness Condition	Index (RCI)	N/A	N/A				
Distress Index Values	5						
Structural Crack Inde	ex	26	26				
Alligator Crack Inde	X	98	98				
Longitudinal Crack I	ndex	28	28				
Transverse Cracking	Index	16	16				
Patching Index		97	97				
Rutting Index		93	93				
International Roughr	ness Index (IRI)	N/A	N/A				
Lane & Width Inforr	nation						
Number of Lanes		2	2				
Paved Width (ft)		19.3	19.3				
Lane Width (ft)		9.6	9.6				

Cape Cod National Seashore ROUTE 0233: NTAFS FUEL HOUSE ROAD

Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route	Route Condition Legend – Pavement Condition Rating (PCR)											
Poor (0 - 60) Fair (61- 84) Good ((85 - 94)	Excellent (95 - 100)	Not Rated								
	See Appendix for definitions and formulas											
Inspection Date: 10/1/2020	Beginning Section MP	0.00										
Paved Length (Miles): 0.09	Section Length (MI)	0.09										
Surface Type: ASPHALT	Route Summary		• •	• •								
Roadway Condition Information												
Pavement Condition Rating (PCR)	53	53										
Surface Condition Rating (SCR)	53	53										
Roughness Condition Index (RCI)	N/A	N/A										
Distress Index Values												
Structural Crack Index	N/A	N/A										
Alligator Crack Index	90	90										
Longitudinal Crack Index	73	73										
Transverse Cracking Index	53	53										
Patching Index	90	90										
Rutting Index	53	53										
International Roughness Index (IRI)	N/A	N/A										
Lane & Width Information												
Number of Lanes	1	1										
Paved Width (ft)	20	20										
Lane Width (ft)	10	10										

Cape Cod National Seashore ROUTE 0233: NTAFS FUEL HOUSE ROAD

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0233_1.JPG



CACO_0233_4.JPG



CACO_0233_8.JPG



CACO_0233_2.JPG



CACO_0233_5.JPG



CACO_0233_9.JPG

Cape Cod National Seashore ROUTE 0235: HIGHLAND LIGHTHOUSE ROAD

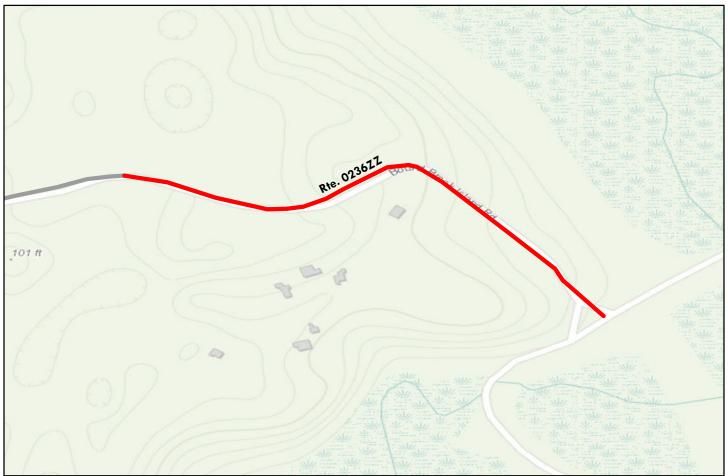


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

	Route (Condition Legend – Pav	ement Cond	ition Rating (l	PCR)		
Poor (0 - 60) Fair (6	1- 84) Good ((85 - 94)	Excellent (9	5 - 100)	Not Ra	ted
Colors o	on map represent con	dition scores at 0.10-mile	e intervals. Se	e Appendix fo	r definitions	and formulas.	
Inspection Date:	10/31/2020	Beginning Section MP	0				
Paved Length (Mile	s): 0.12	Section Length (MI)	0.12				
Surface Type:	ASPHALT	Route Summary				•	
Roadway Condition	Information						
Pavement Condition	n Rating (PCR)	93	93				
Surface Condition Ra	ating (SCR)	93	93				
Roughness Condition	n Index (RCI)	N/A	N/A				
Distress Index Value	es						
Structural Crack Inc	dex	100	100				
Alligator Crack Ind	ex	100	100				
Longitudinal Crack	Index	100	100				
Transverse Cracking	g Index	99	99				
Patching Index		100	100				
Rutting Index		93	93				
International Rough	nness Index (IRI)	N/A	N/A				
Lane & Width Infor	rmation						
Number of Lanes		2	2				
Paved Width (ft)		13.6	13.6				
Lane Width (ft)		6.8	6.8				

Cape Cod National Seashore ROUTE 0236ZZ: BOUND BROOK ISLAND ROADS

Summary Route



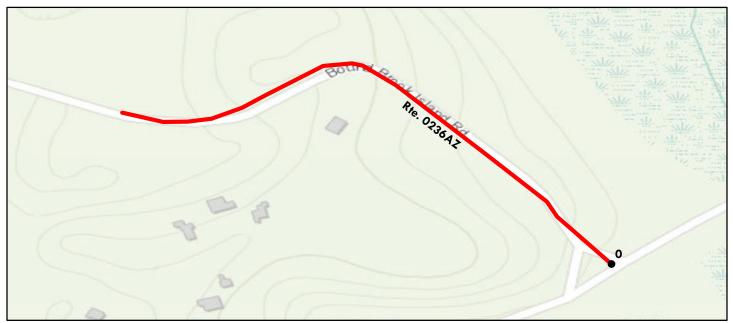
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 -	100) Not Rated		
	See App	endix for definitions a	nd formulas			
Inspection Date: 10/1/2020						
Paved Length (Miles): 0.29						
Surface Type: ASPHAL	Route Sum	ımary	• •	• •		
Roadway Condition Information	1					
Pavement Condition Rating (PC)	R)	53				
Lane & Width Information						
Number of Lanes		1				
Paved Width (ft)	1	12				
Lane Width (ft)	1	12				

Cape Cod National Seashore ROUTE 0236AZ: BOUND BROOK ISLAND ROAD A

Subcomponent of Route CACO-0236ZZ Manual Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (6)	1- 84) Good ((85 - 94) Excellent (95 - 100)		Not Rated		
	See Appendix for def	initions and f	ormulas			
Inspection Date: 10/1/2020	Beginning Section MP	0.00				
Paved Length (Miles): 0.29	Section Length (MI)	0.23				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	53	53				
Surface Condition Rating (SCR)	53	53				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	53	53				
Longitudinal Crack Index	90	90				
Transverse Cracking Index	90	90				
Patching Index	73	73				
Rutting Index	90	90				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12	12				
Lane Width (ft)	12	12				

Cape Cod National Seashore ROUTE 0236AZ: BOUND BROOK ISLAND ROAD A

Condition Photos

Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



CACO_0236AZ_1.JPG



CACO_0236AZ_4.JPG



CACO_0236AZ_7.JPG



CACO_0236AZ_3.JPG



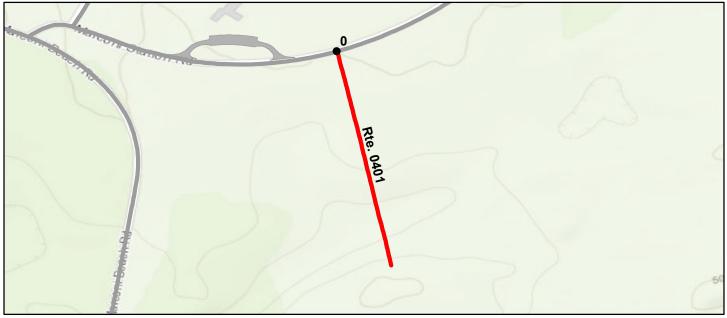
CACO_0236AZ_6.JPG



CACO_0236AZ_8.JPG

Cape Cod National Seashore

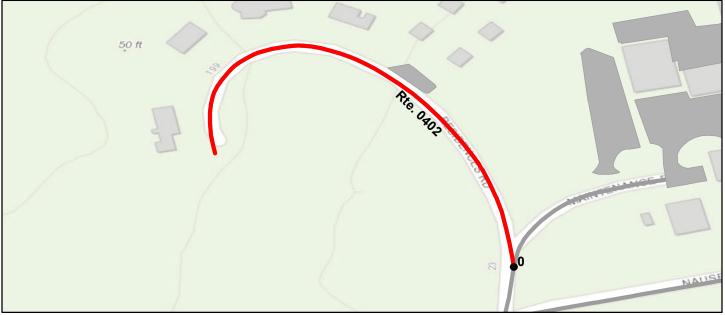
ROUTE 0401: B-WELL ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60)	Fair (61	l- 84) Good	(85 - 94)	Excellent (95 - 100)	Not Ra	ted
Colors on map	epresent cond	lition scores at 0.10-mile	on scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/3	1/2020	Beginning Section MP	0				
Paved Length (Miles): 0.25		Section Length (MI)	0.25				
Surface Type: ASP	HALT	Route Summary				•	
Roadway Condition Inform	ation						
Pavement Condition Rating	(PCR)	0	0				
Surface Condition Rating (SO	CR)	0	0				
Roughness Condition Index ((RCI)	N/A	N/A				
Distress Index Values							
Structural Crack Index		0	0				
Alligator Crack Index		98	98				
Longitudinal Crack Index		0	0				
Transverse Cracking Index		0	0				
Patching Index		100	100				
Rutting Index		88	88				
International Roughness Inc	dex (IRI)	N/A	N/A				
Lane & Width Information							
Number of Lanes		1	1				
Paved Width (ft)		13.4	13.4				
Lane Width (ft)		11.1	11.1				

Cape Cod National Seashore ROUTE 0402: MARCONI RESIDENCE ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (6	1- 84) Good	(85 - 94)	Excellent (95	- 100)	Not Ra	ted
Colors on map represent con	dition scores at 0.10-mile	ion scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.14	Section Length (MI)	0.14				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	25	25				
Surface Condition Rating (SCR)	25	25				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	49	49				
Alligator Crack Index	100	100				
Longitudinal Crack Index	49	49				
Transverse Cracking Index	25	25				
Patching Index	100	100				
Rutting Index	96	96				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	19.8	19.8				
Lane Width (ft)	9.9	9.9				

Cape Cod National Seashore ROUTE 0403: MARCONI MAINTENANCE AREA ROAD



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84) Good	(85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represe	nt condition scores at 0.10-mil	on scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MI	P 0				
Paved Length (Miles): 0.11	Section Length (MI)	0.11				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR	16	16				
Surface Condition Rating (SCR)	16	16				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	17	17				
Alligator Crack Index	99	99				
Longitudinal Crack Index	18	18				
Transverse Cracking Index	16	16				
Patching Index	99	99				
Rutting Index	97	97				
International Roughness Index (IR	I) N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	23.8	23.8				
Lane Width (ft)	11.6	11.6				

Cape Cod National Seashore ROUTE 0405: COAST GUARD BEACH SHUTTLE PICKUP ROAD

Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

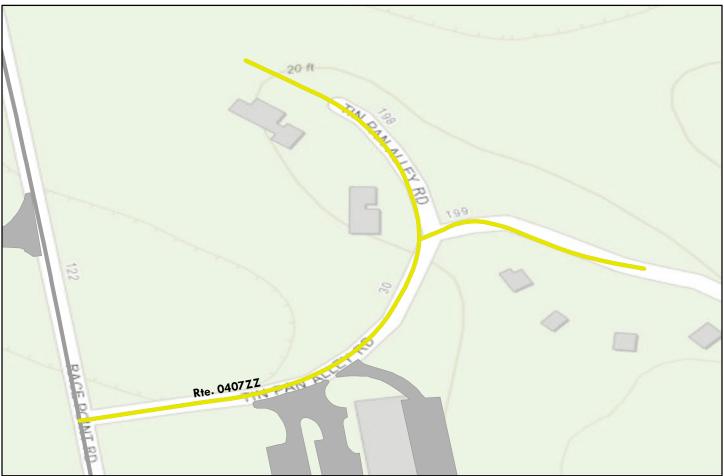
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (6	Good (85 - 94)		Excellent (95 - 100)	Not Rated		
Colors on map represent con	dition scores at 0.10-mile	ion scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.23	Section Length (MI)	0.23				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	91	91				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.3	12.3				
Lane Width (ft)	12.3	12.3				

MANUALLY RATED SECTIONS DUE TO DEBRIS ON ROAD

Cape Cod National Seashore

ROUTE 0407ZZ: TIN PAN ALLEYS

Summary Route



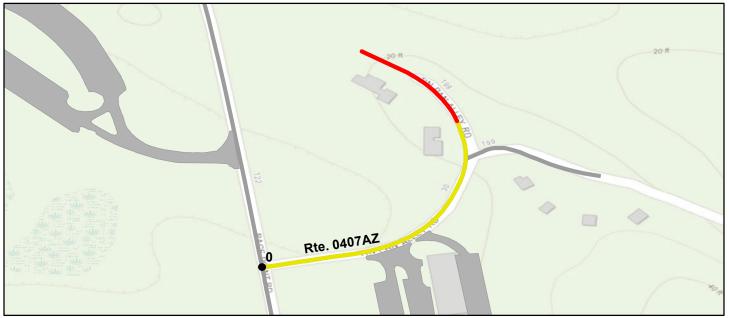
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)							
Poor (0 - 60)	Fair (61	<mark>1- 84) Goo</mark>	d (85 - 94)	Excellent (9	5 - 100)	Not Ra	ted
		See Appendix for d	efinitions and	formulas			
Inspection Date:	10/31/2020						
Paved Length (Miles)	:0.18						
Surface Type:	ASPHALT	Route Summary		•			
Roadway Condition I	nformation						
Pavement Condition	Rating (PCR)	66					
Lane & Width Inforn	nation						
Number of Lanes		2					
Paved Width (ft)		17.5					
Lane Width (ft)		10.5					

Cape Cod National Seashore ROUTE 0407AZ: TIN PAN ALLEY A

Subcomponent of Route CACO-0407ZZ Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (0	Good (85 - 94)		Excellent (95 - 100)	Not Rated		
Colors on map represent cor	dition scores at 0.10-mile	ion scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.14	Section Length (MI)	0.14				
Surface Type: ASPHALT	Route Summary			- • •		
Roadway Condition Information						
Pavement Condition Rating (PCR)	68	68				
Surface Condition Rating (SCR)	N/A	N/A				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	N/A	N/A				
Longitudinal Crack Index	N/A	N/A				
Transverse Cracking Index	N/A	N/A				
Patching Index	N/A	N/A				
Rutting Index	N/A	N/A				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	18.4	18.4				
Lane Width (ft)	9.2	9.2				

MANUALLY RATED SECTIONS DUE TO DEBRIS ON ROAD

Cape Cod National Seashore ROUTE 0407BZ: TIN PAN ALLEY B

Subcomponent of Route CACO-0407ZZ Data Collection Vehicle (DCV) Rating



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60) Fair (0	61- 84) Good	(85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent con	dition scores at 0.10-mile	ion scores at 0.10-mile intervals. See Appendix for definitions and formulas.				
Inspection Date: 10/31/2020	Beginning Section MP	0				
Paved Length (Miles): 0.04	Section Length (MI)	0.04				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	58	58				
Surface Condition Rating (SCR)	58	58				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	70	70				
Alligator Crack Index	99	99				
Longitudinal Crack Index	71	71				
Transverse Cracking Index	58	58				
Patching Index	100	100				
Rutting Index	95	95				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	14.6	14.6				
Lane Width (ft)	14.6	14.6				

Section 6 Paved Parking Area Condition Rating Sheets



Cape Cod National Seashore

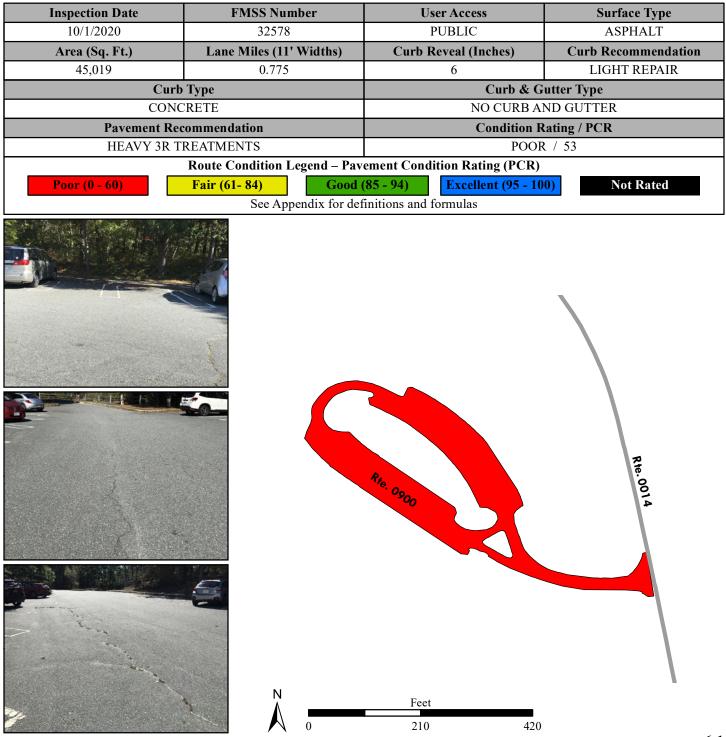


Cape Cod National Seashore ROUTE 0900: BEECH FOREST PARKING

Manual Rating

FROM ROUTE 0014 (RACE POINT ROAD) AT MP 0.13

TO PARKING

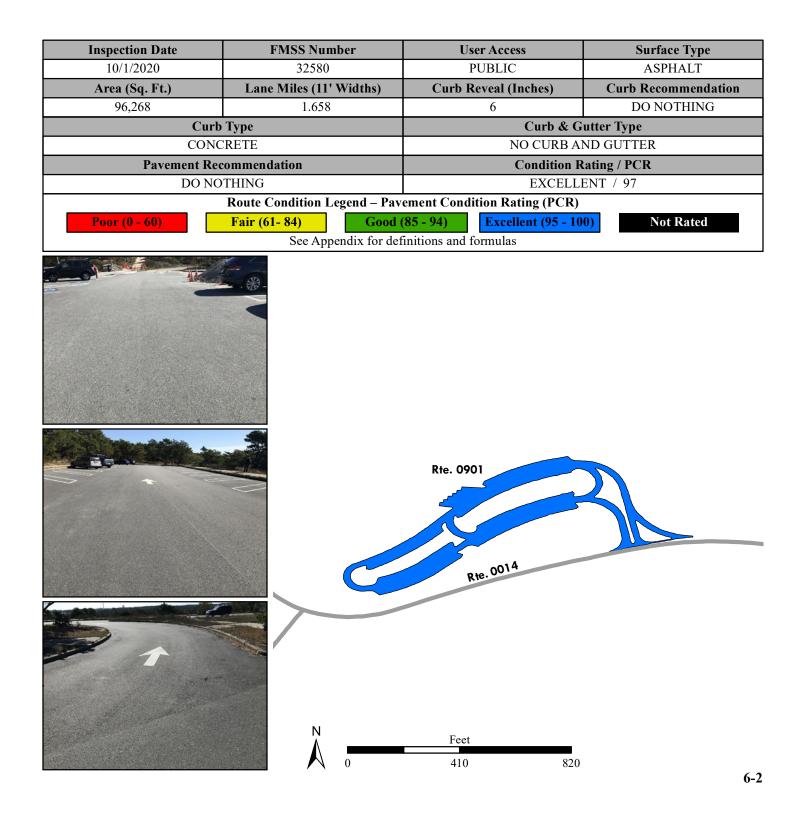


Cape Cod National Seashore ROUTE 0901: PROVINCE LANDS VISITOR CENTER PARKING

Manual Rating

FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.00

TO PARKING

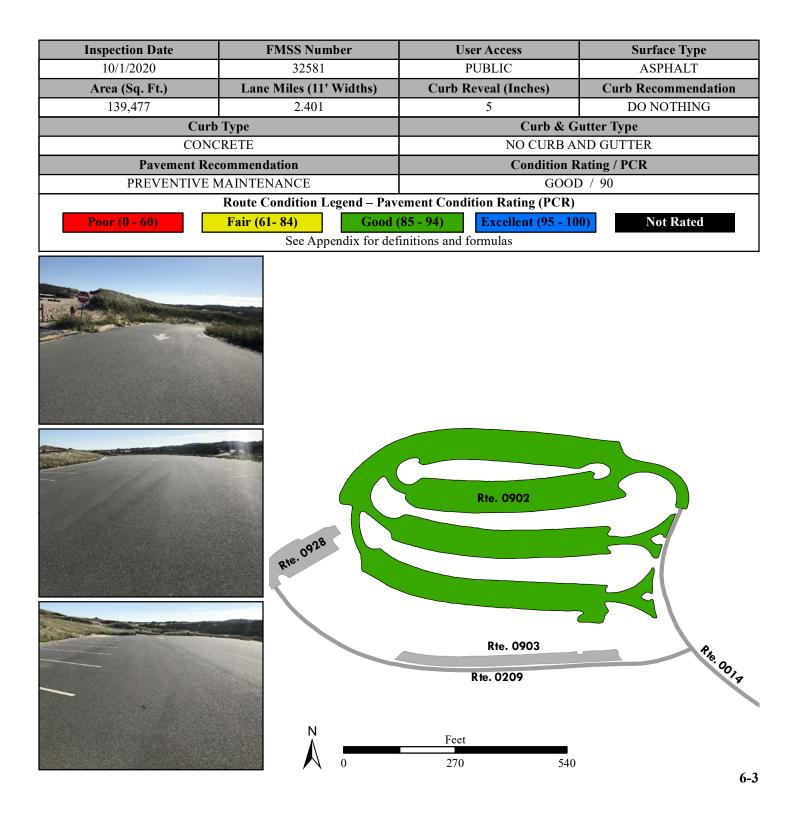


Cape Cod National Seashore ROUTE 0902: RACE POINT BEACH PARKING

Manual Rating

FROM ROUTE 0014 (RACE POINT ROAD) AT MP 1.90

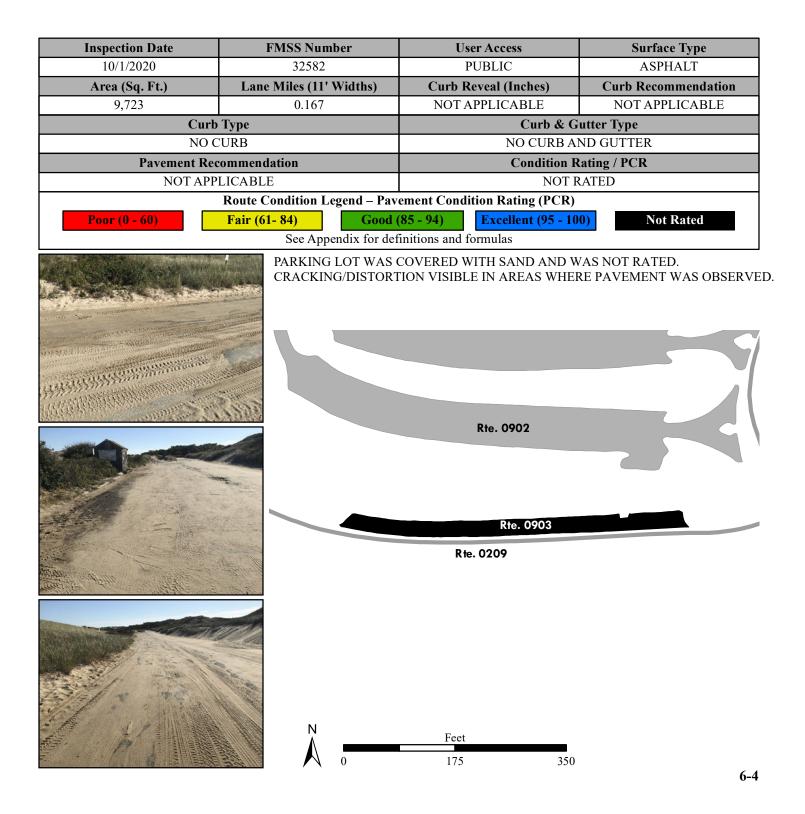
TO ROUTE 0014 (RACE POINT ROAD) AT END



Cape Cod National Seashore ROUTE 0903: RACE POINT AIR STATION PARKING

Manual Rating

ADJACENT TO ROUTE 0209 (RACE POINT COAST GUARD STATION ROAD) AT MP 0.06

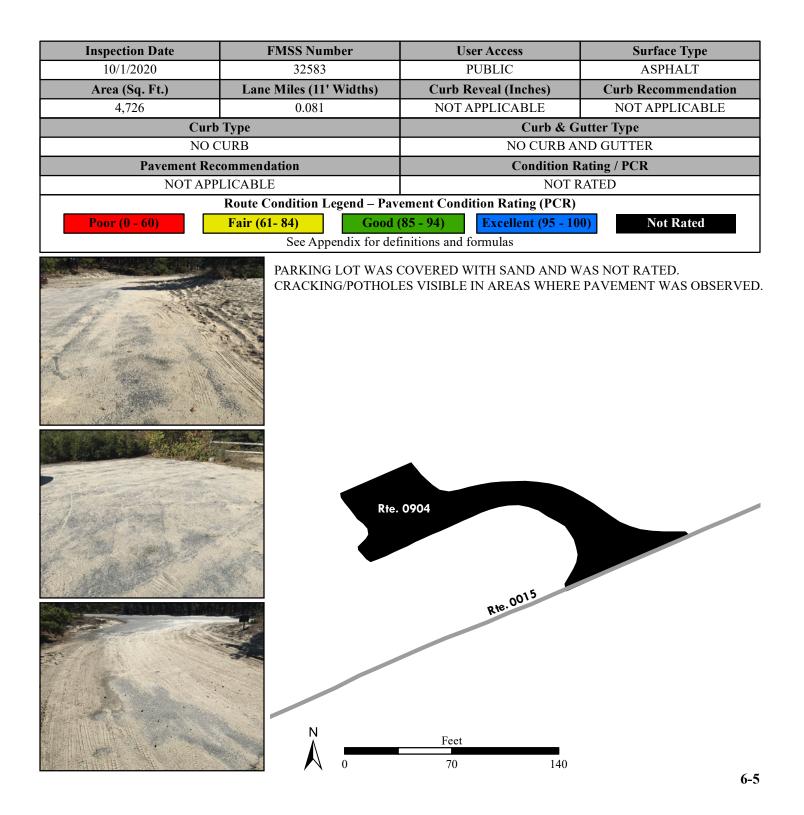


Cape Cod National Seashore ROUTE 0904: PROVINCE LANDS ROAD PARKING

Manual Rating

FROM ROUTE 0015 (PROVINCE LANDS ROAD) AT MP 0.41

TO PARKING



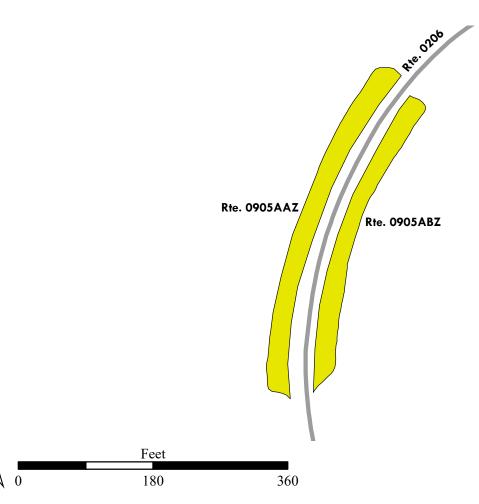
Cape Cod National Seashore ROUTE 0905AZZ: PILGRIM HEIGHTS WEST PARKING AREAS

Summary Route Manual Rating

ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44 ON LEFT AND RIGHT

Inspection Date	FMSS Number	User Access	Surface Type			
10/1/2020	32584	PUBLIC	ASPHALT			
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition R	ating / PCR			
18,166	0.312	SUMMARY	73			
	Route Condition Legend – Pavement Condition Rating (PCR)					
Poor (0 - 60)	Fair (61- 84)Good ((85 - 94) Excellent (95 - 10	0) Not Rated			
	See Appendix for definitions and formulas					

The condition shown on this page reflects the overall route condition and may not reflect individual subcomponent ratings.

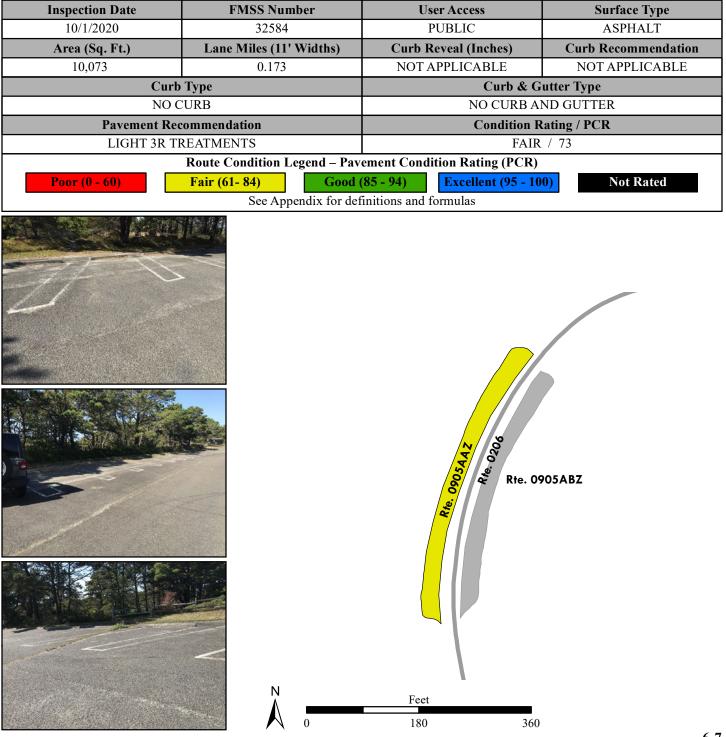


Rte. 0905AZZ (2 SUBCOMPONENTS)

Cape Cod National Seashore ROUTE 0905AAZ: PILGRIM HEIGHTS WEST PARKING AREAA

Subcomponent of Route CACO-0905AZZ Manual Rating

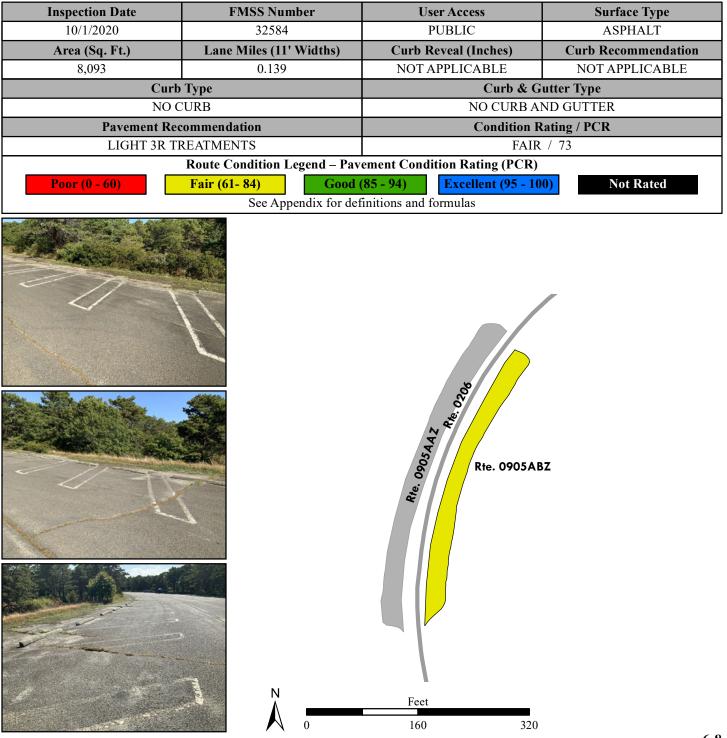
ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44



Cape Cod National Seashore ROUTE 0905ABZ: PILGRIM HEIGHTS WEST PARKING AREA B

Subcomponent of Route CACO-0905AZZ Manual Rating

ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.44



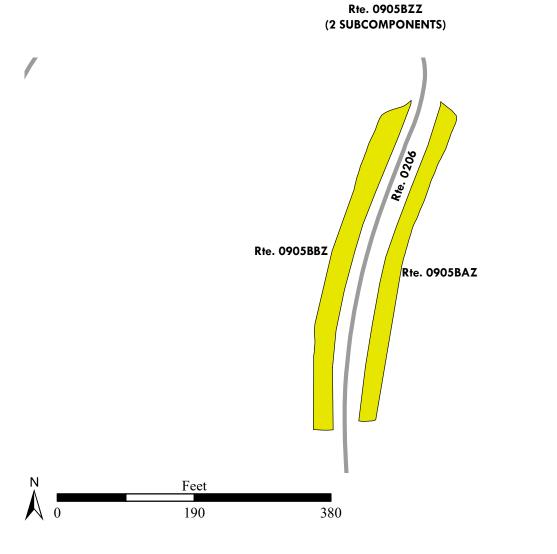
Cape Cod National Seashore ROUTE 0905BZZ: PILGRIM HEIGHTS EAST PARKING AREAS

Summary Route Manual Rating

ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65 ON LEFT AND RIGHT

Inspection Date	FMSS Number	User Access	Surface Type		
10/1/2020	32585	PUBLIC	ASPHALT		
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR			
20,163	0.347	SUMMARY	7 / 73		
Route Condition Legend – Pavement Condition Rating (PCR)					
Poor (0 - 60)	Fair (61- 84) Good ((85 - 94) Excellent (95 - 10	0) Not Rated		
See Appendix for definitions and formulas					

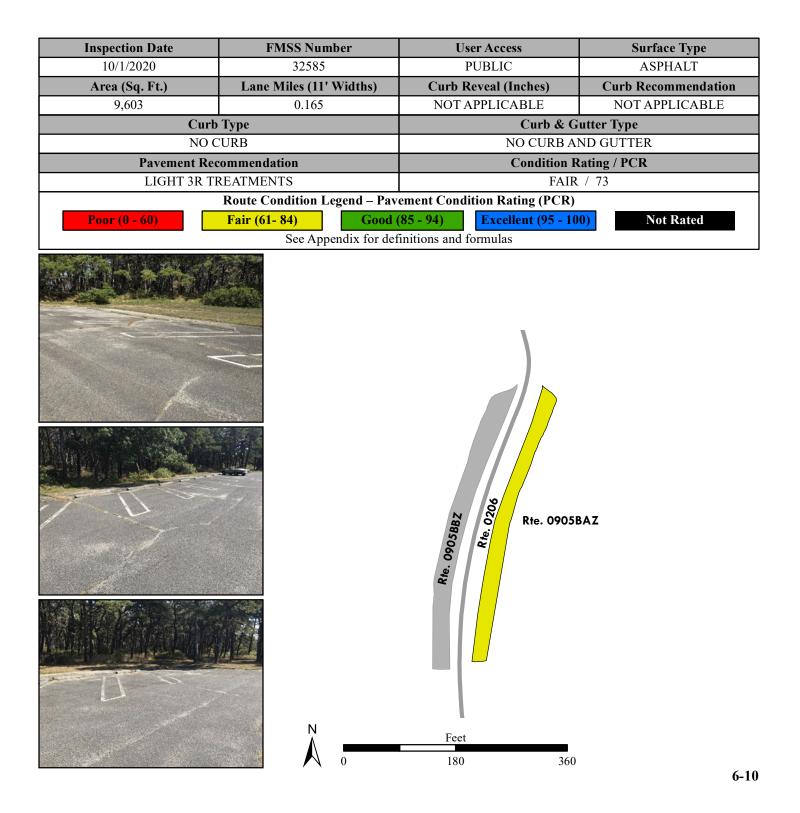
The condition shown on this page reflects the overall route condition and may not reflect individual subcomponent ratings.



Cape Cod National Seashore ROUTE 0905BAZ: PILGRIM HEIGHTS EAST PARKING AREAA

Subcomponent of Route CACO-0905BZZ Manual Rating

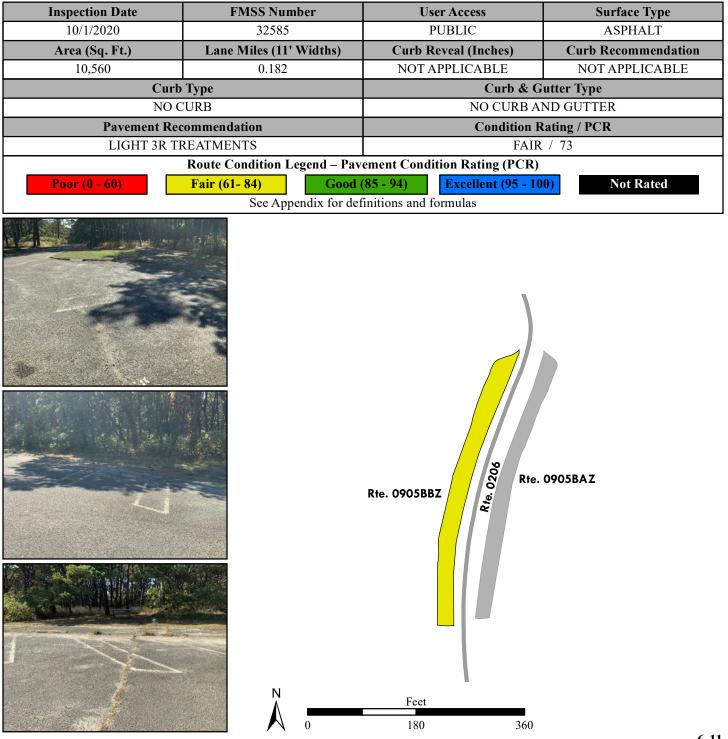
ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65



Cape Cod National Seashore ROUTE 0905BBZ: PILGRIM HEIGHTS EAST PARKING AREA B

Subcomponent of Route CACO-0905BZZ Manual Rating

ADJACENT TO ROUTE 0206 (PILGRIM HEIGHTS ROAD) AT MP 0.65

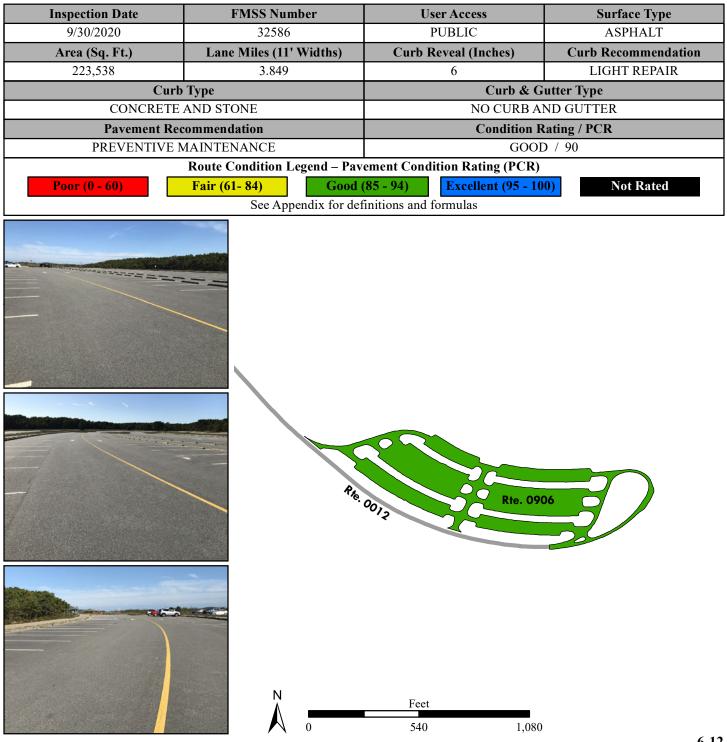


Cape Cod National Seashore ROUTE 0906: MARCONI BEACH PARKING

Manual Rating

FROM ROUTE 0012 (MARCONI BEACH ROAD) AT MP 1.42

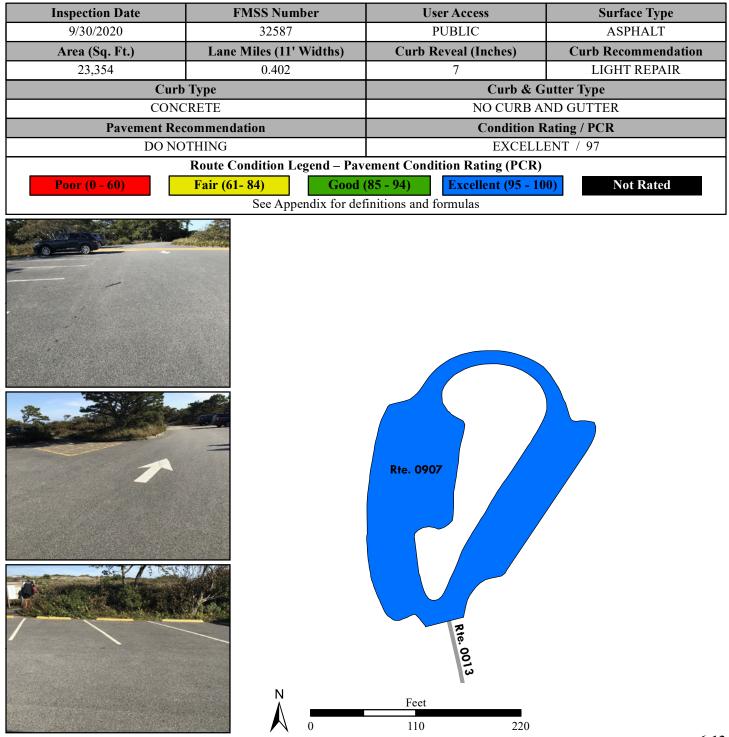
TO ROUTE 0012 (MARCONI BEACH ROAD) AT END



Cape Cod National Seashore ROUTE 0907: MARCONI STATION SITE PARKING

Manual Rating

FROM ROUTE 0013 (MARCONI SITE ROAD) AT END

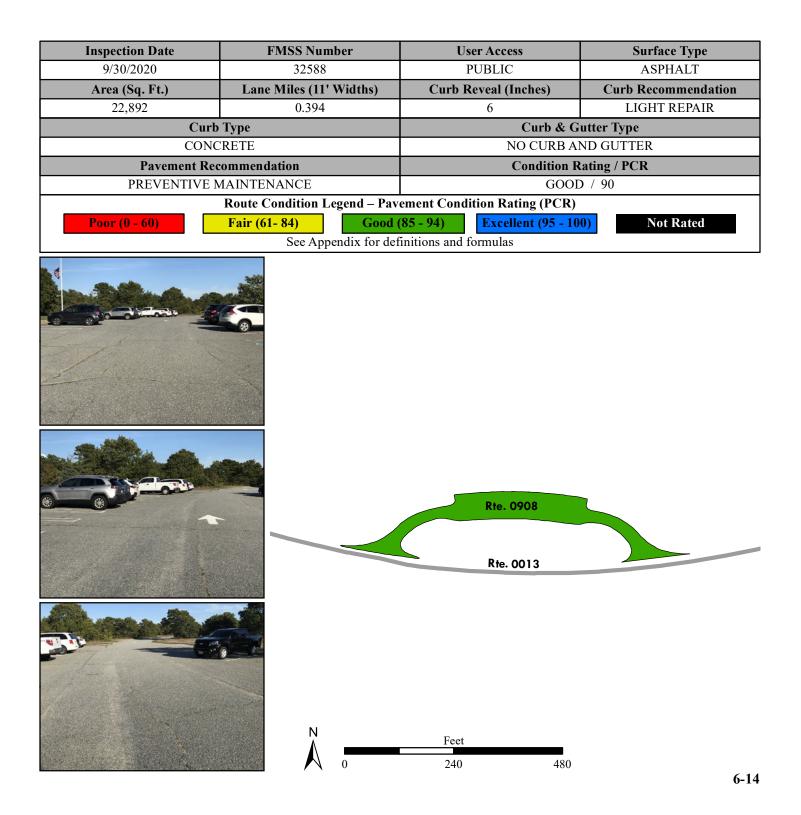


Cape Cod National Seashore ROUTE 0908: PARK HEADQUARTERS PARKING

Manual Rating

FROM ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.14

TO ROUTE 0013 (MARCONI SITE ROAD) AT MP 0.22



Cape Cod National Seashore ROUTE 0909ZZ: MARCONI MAINTENANCE PARKING AREAS

Summary Route Manual Rating

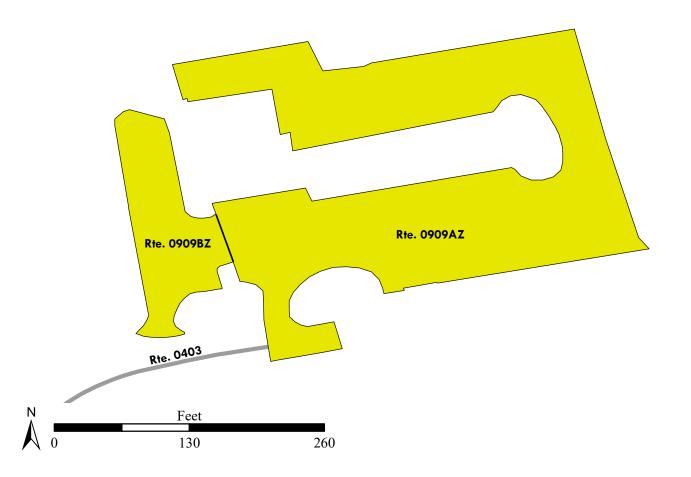
FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.10

TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type		
9/30/2020	32589	NONPUBLIC	ASPHALT		
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR			
57874	0.997	SUMMARY	7 / 73		
Route Condition Legend – Pavement Condition Rating (PCR)					
Poor (0 - 60)	Fair (61- 84)Good ((85 - 94) Excellent (95 - 10	0) Not Rated		
See Appendix for definitions and formulas					

The condition shown on this page reflects the overall route condition and may not reflect individual subcomponent ratings.

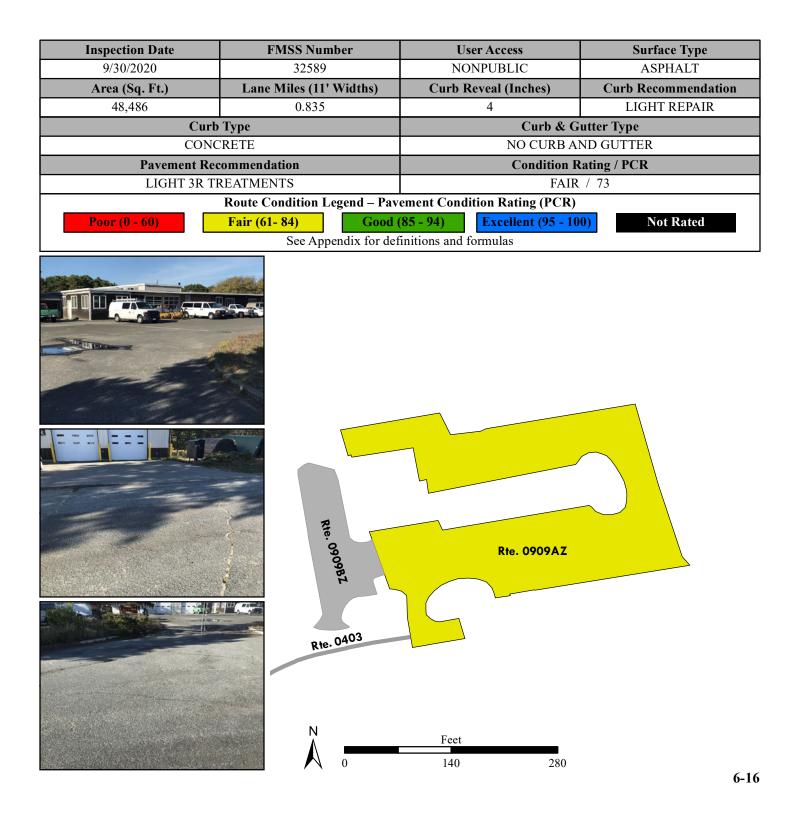
Rte. 0909AZZ (2 SUBCOMPONENTS)



Cape Cod National Seashore ROUTE 0909AZ: MARCONI MAINTENANCE PARKING A

Subcomponent of Route CACO-0909ZZ Manual Rating

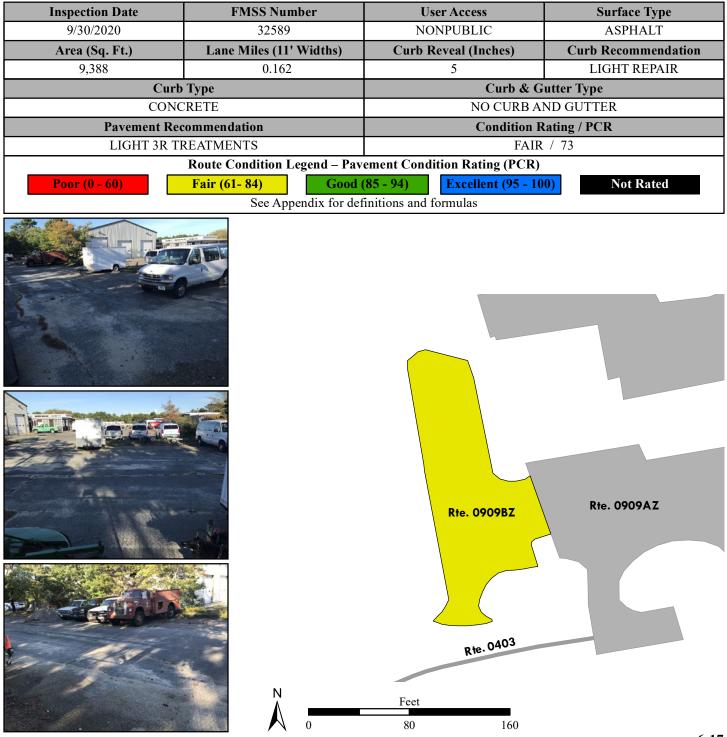
FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT END



Cape Cod National Seashore ROUTE 0909BZ: MARCONI MAINTENANCE PARKING B

Subcomponent of Route CACO-0909ZZ Manual Rating

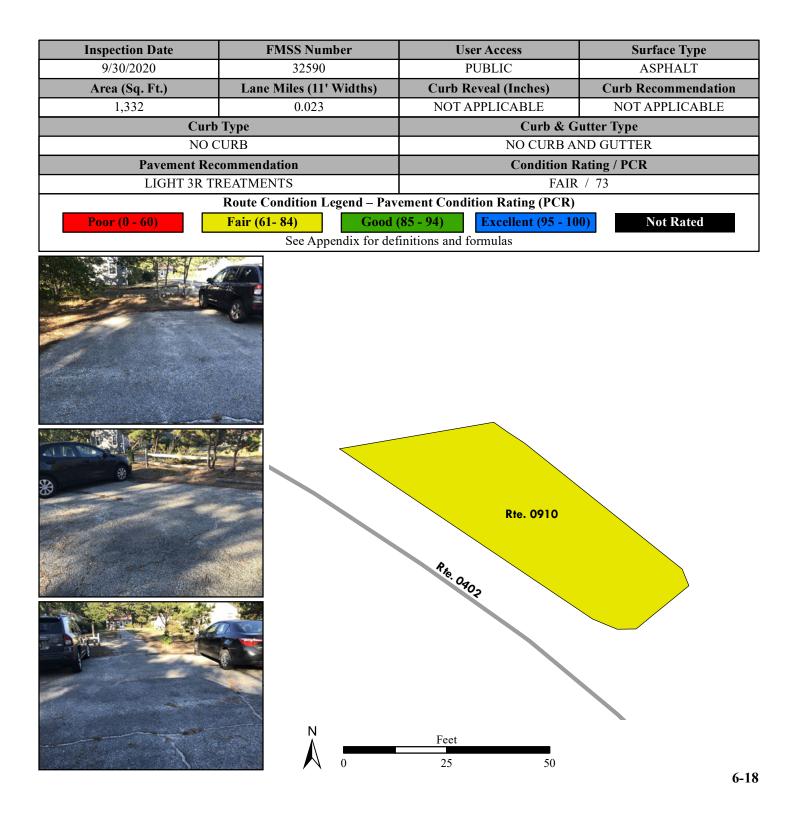
FROM ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD) AT MP 0.10



Cape Cod National Seashore ROUTE 0910: MARCONI RESIDENCE ROAD PARKING

Manual Rating

ADJACENT TO ROUTE 0402 (MARCONI RESIDENCE ROAD) AT MP 0.06

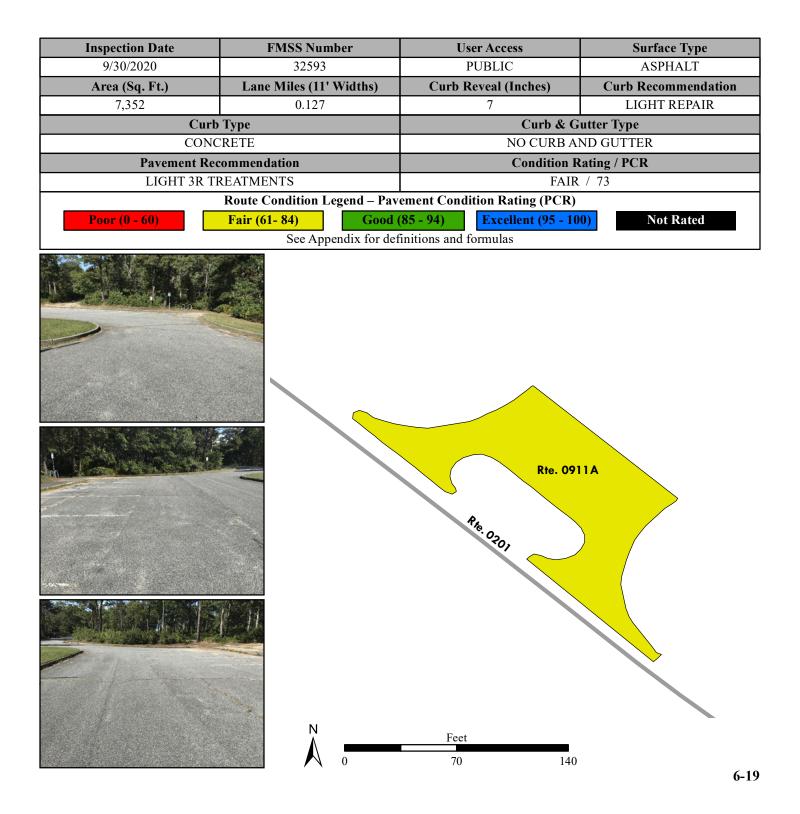


Cape Cod National Seashore ROUTE 0911A: DOANE ROCK AREA 1 PARKING

Manual Rating

FROM ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT MP 0.04

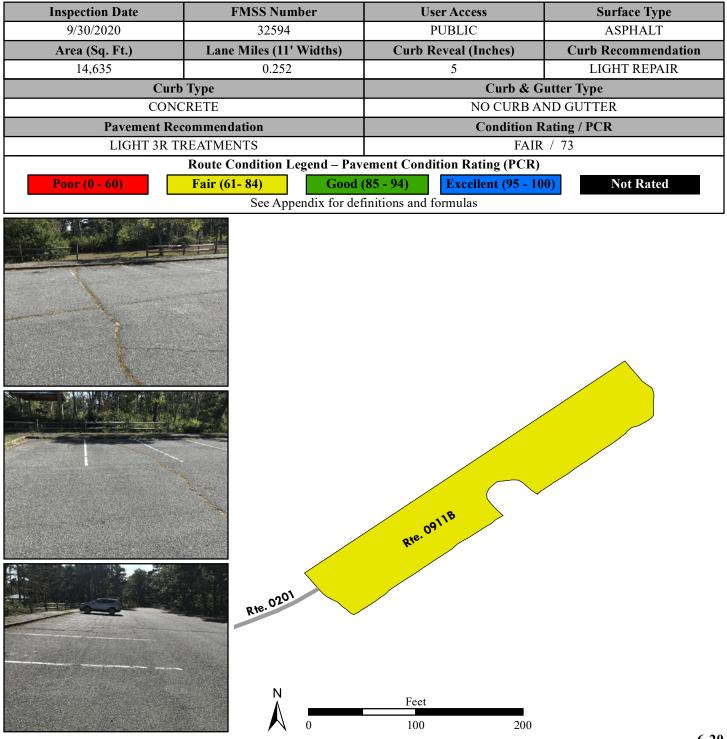
TO ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT MP 0.06



Cape Cod National Seashore ROUTE 0911B: DOANE ROCK AREA 2 PARKING

Manual Rating

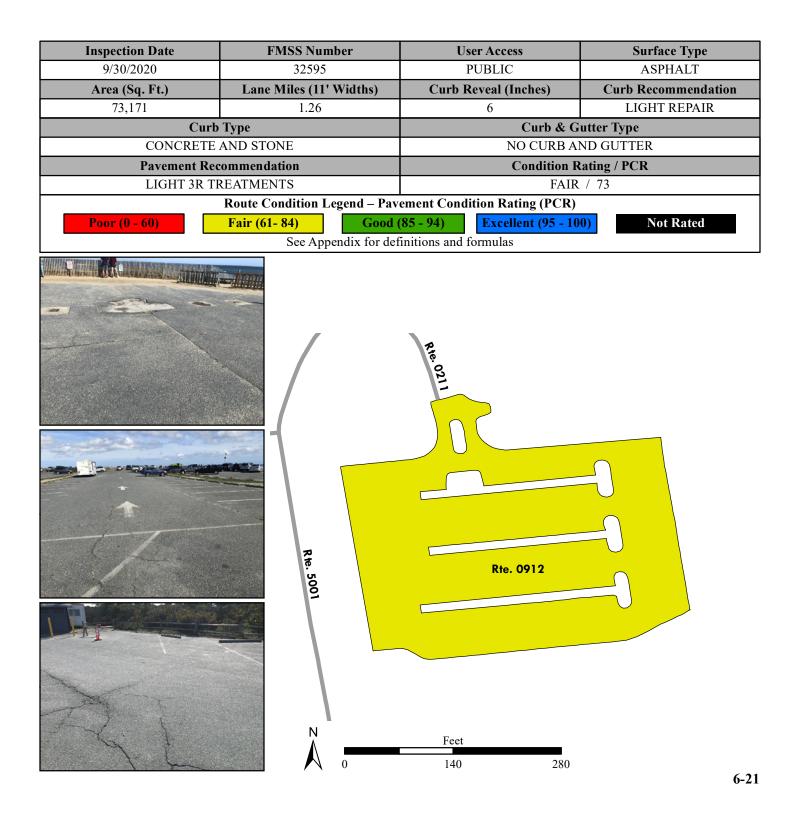
FROM ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD) AT END



Cape Cod National Seashore ROUTE 0912: NAUSET LIGHT BEACH PARKING

Manual Rating

FROM ROUTE 0211 (NAUSET LIGHT BEACH ACCESS ROAD) AT END

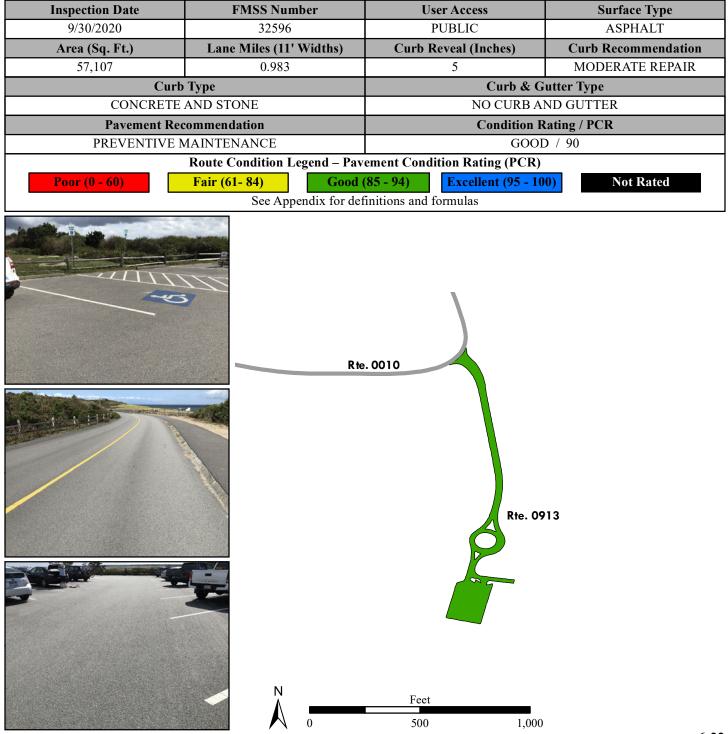


Cape Cod National Seashore

ROUTE 0913: COAST GUARD BEACH ENVIRONMENTAL EDUCATION CENTER PARKING

Manual Rating

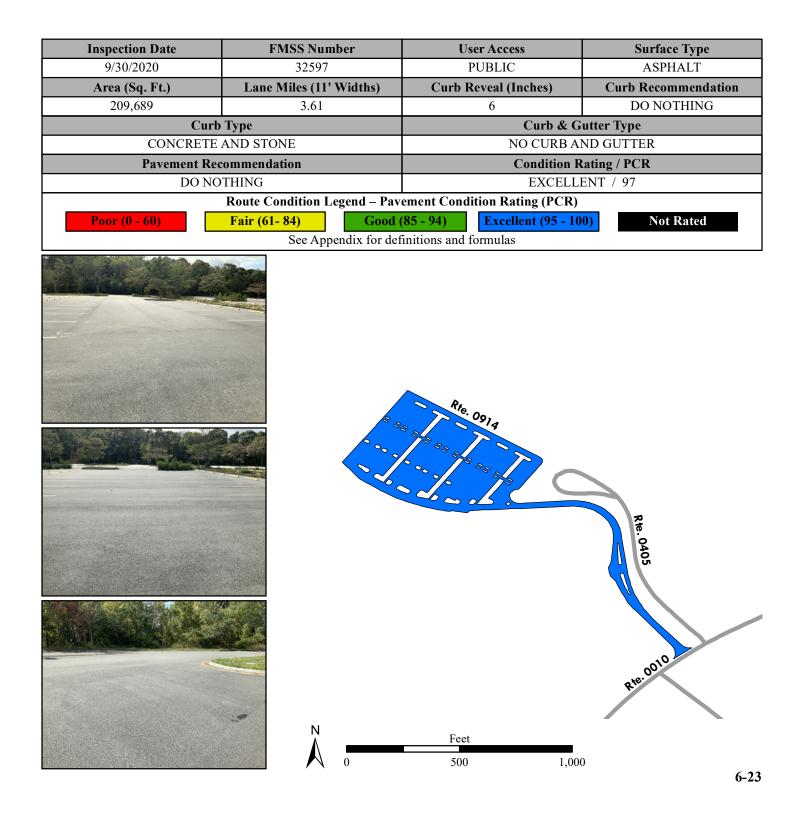
FROM ROUTE 0010 (DOANE ROAD) AT MP 0.97



Cape Cod National Seashore ROUTE 0914: COAST GUARD BEACH BUS STOP PARKING

Manual Rating

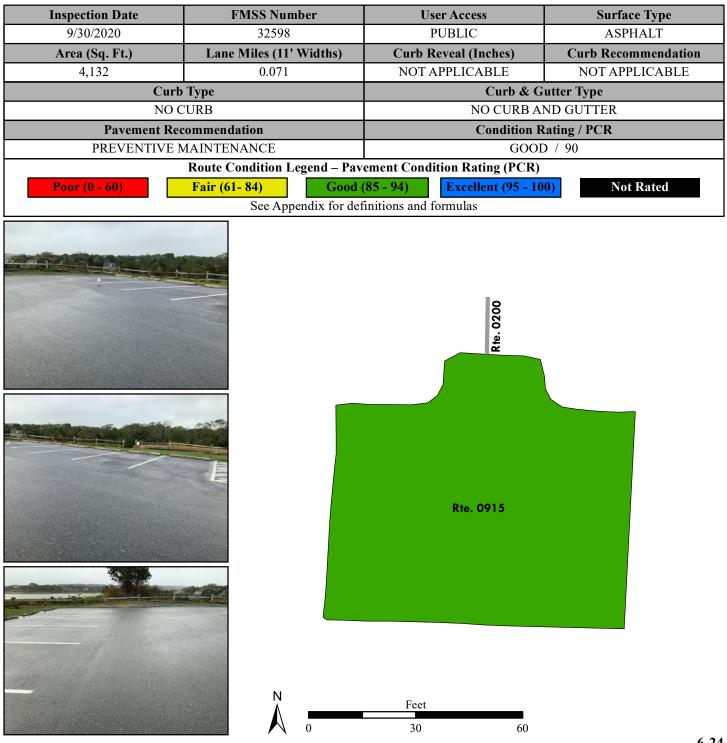
FROM ROUTE 0010 (DOANE ROAD) AT MP 0.42



Cape Cod National Seashore ROUTE 0915: FORT HILL AREA PARKING

Manual Rating

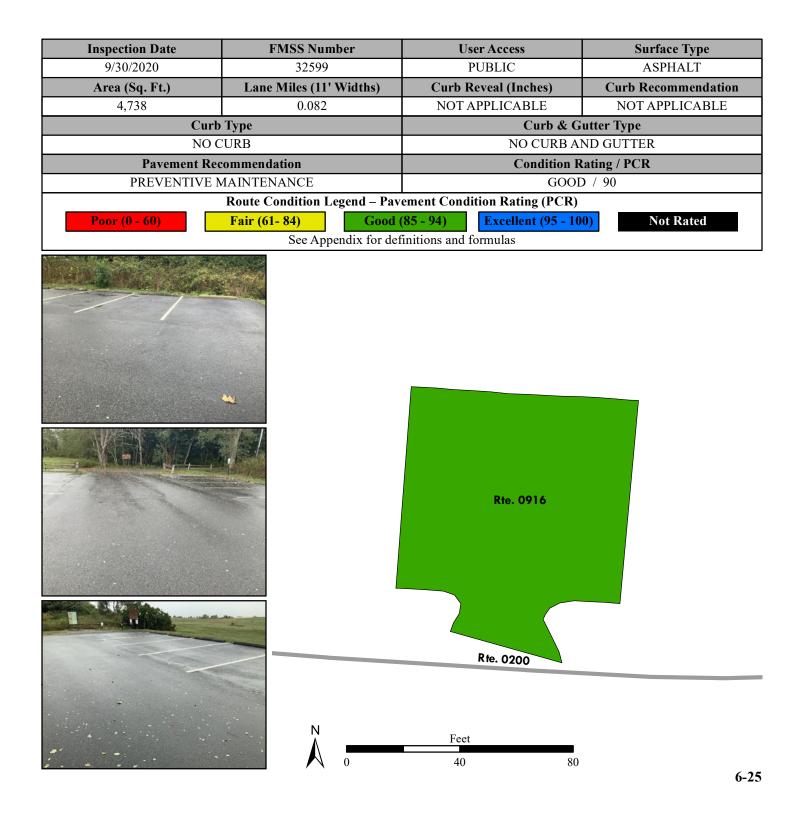
FROM ROUTE 0200 (FORT HILL AREA ROAD) AT END



Cape Cod National Seashore ROUTE 0916: FORT HILL LOWER PARKING

Manual Rating

FROM ROUTE 0200 (FORT HILL AREA ROAD) AT MP 0.12



Cape Cod National Seashore ROUTE 0917: PARK HEADQUARTERS EMPLOYEE PARKING

Manual Rating

FROM ROUTE 0204 (MARCONI EMPLOYEE PARKING ROAD) AT END

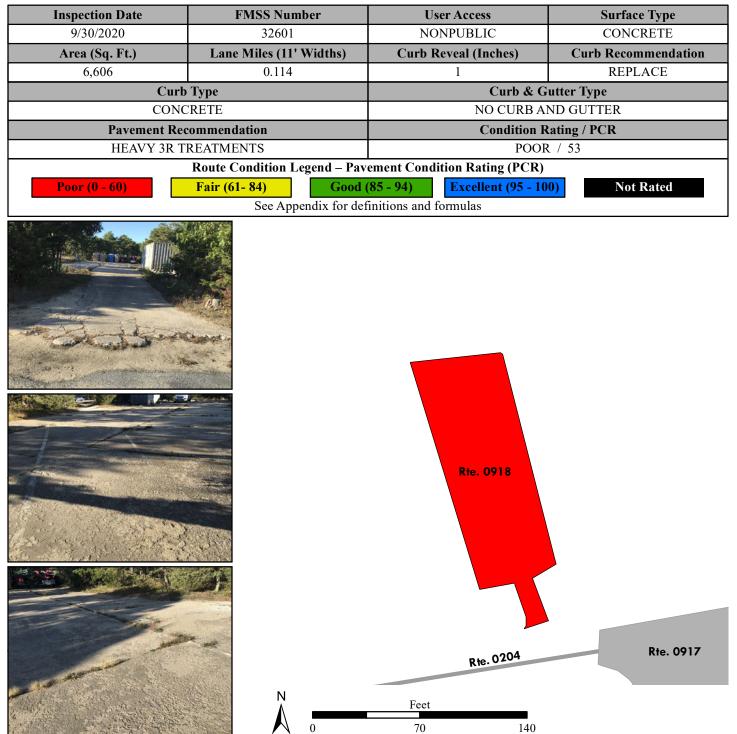
TO HELIPAD



Cape Cod National Seashore ROUTE 0918: OLD VEHICLE STORAGE PARKING

Manual Rating

FROM ROUTE 0204 (MARCONI EMPLOYEE PARKING ROAD) AT MP 0.13

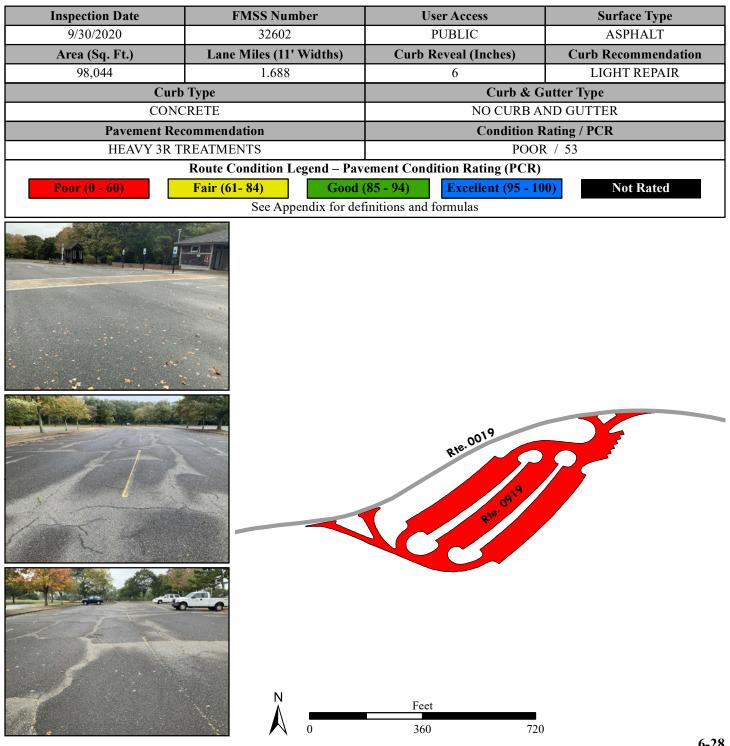


Cape Cod National Seashore ROUTE 0919: SALT POND VISITOR CENTER PARKING

Manual Rating

FROM ROUTE 0019 (NAUSET ROAD) AT MP 0.64

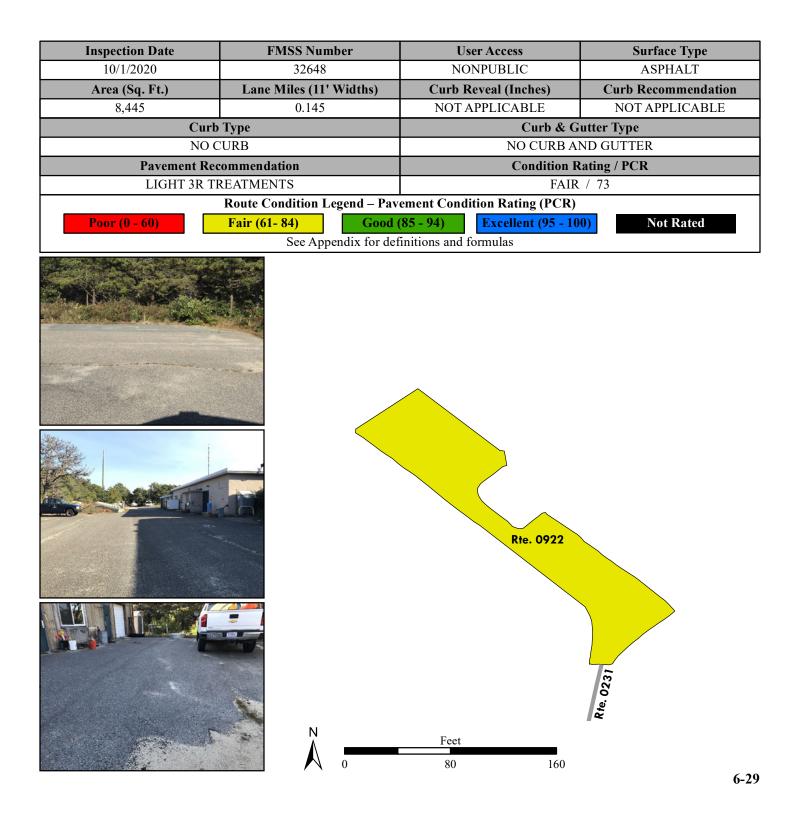
TO ROUTE 0019 (NAUSET ROAD) AT MP 0.80



Cape Cod National Seashore ROUTE 0922: NAC LABORATORY PARKING

Manual Rating

FROM ROUTE 0231 (NAC LABORATORY ACCESS ROAD) AT END

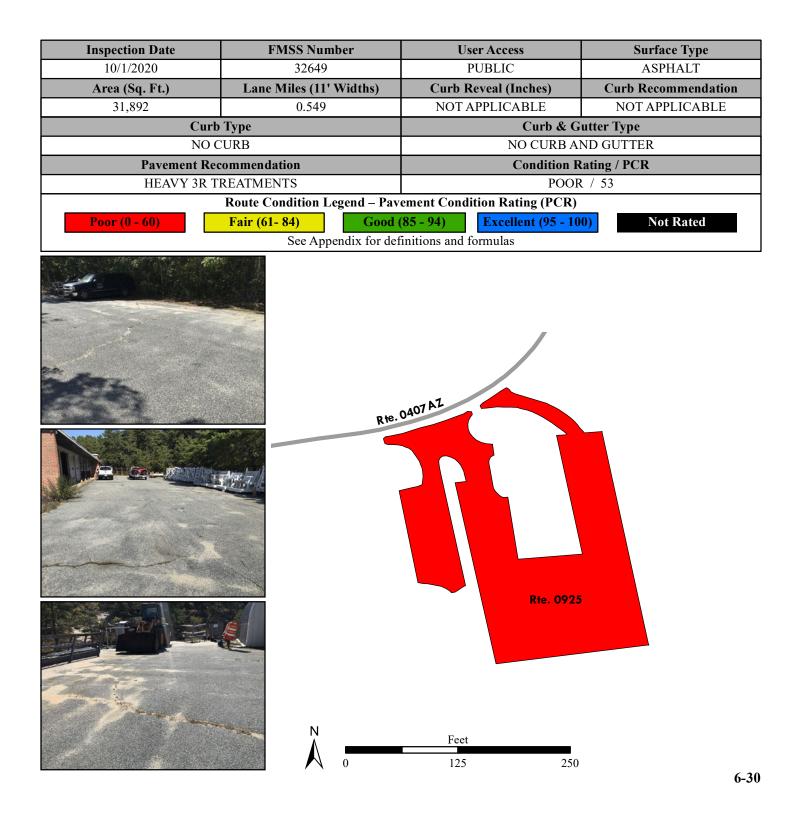


Cape Cod National Seashore ROUTE 0925: PROVINCE LANDS MAINTENANCE PARKING

Manual Rating

FROM ROUTE 0407ZZ (TIN PAN ALLEYS)

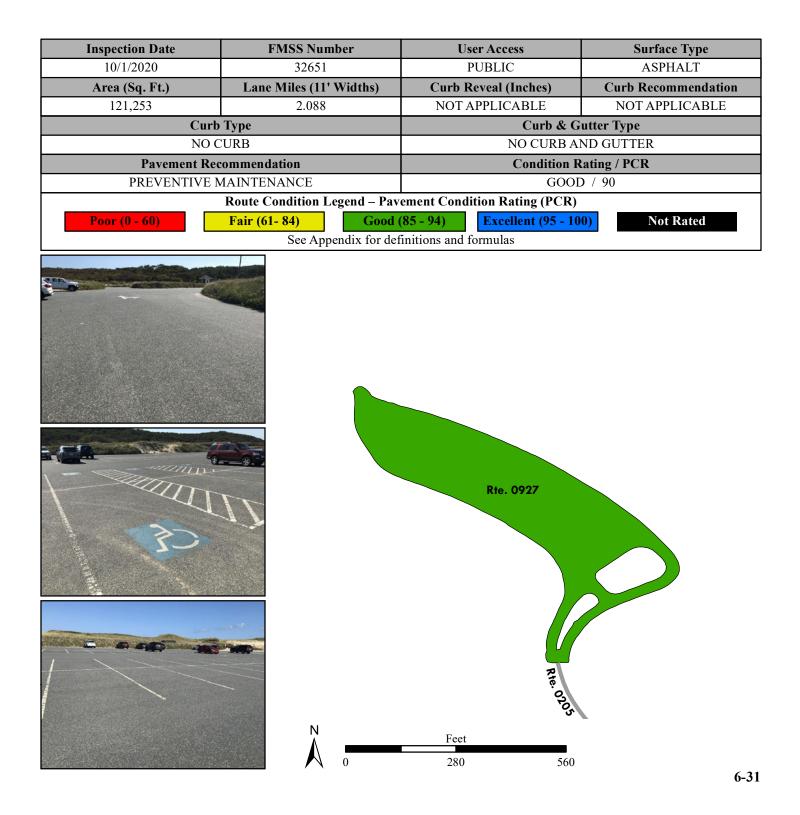
TO ROUTE 0407ZZ (TIN PAN ALLEYS) AT MP 0.05



Cape Cod National Seashore ROUTE 0927: HEAD OF THE MEADOW PARKING

Manual Rating

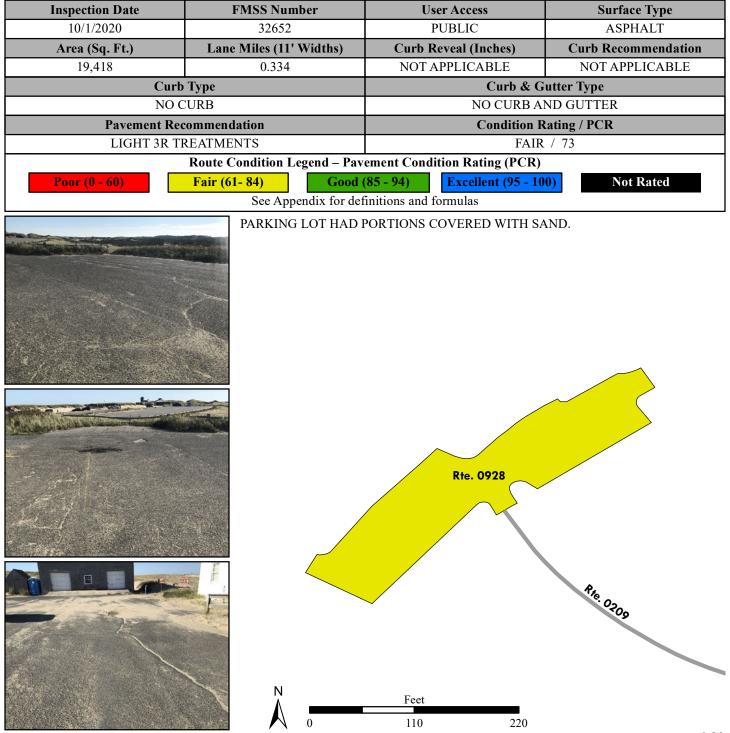
FROM ROUTE 0205 (HEAD OF THE MEADOW BEACH ROAD) AT END



Cape Cod National Seashore ROUTE 0928: RACE POINT RANGER STATION PARKING

Manual Rating

FROM ROUTE 0209 (RACE POINT COAST GUARD STATION ROAD) AT END

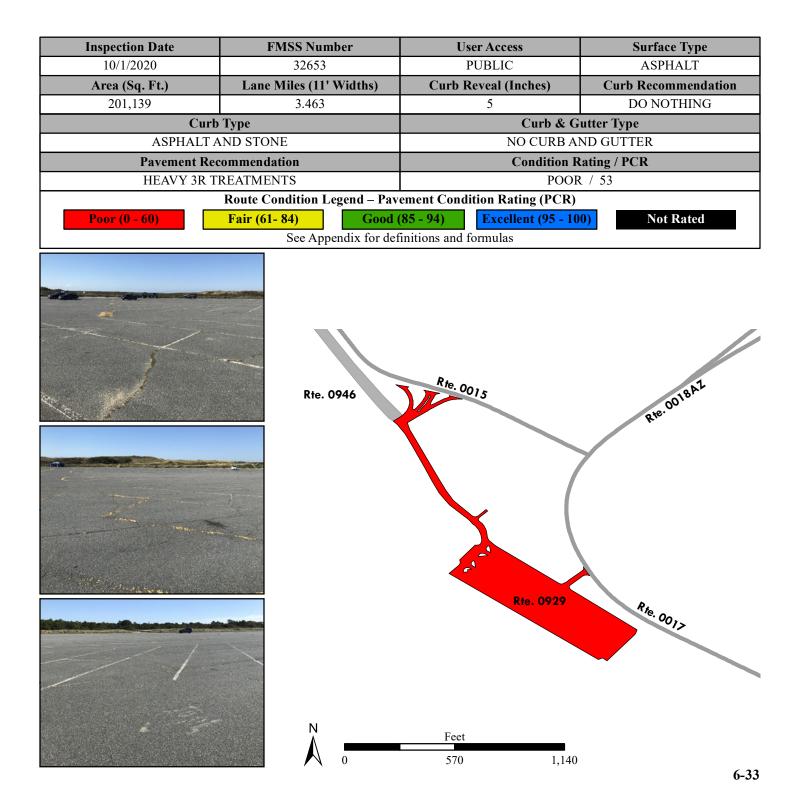


Cape Cod National Seashore ROUTE 0929: HERRING COVE SOUTH BEACH PARKING

Manual Rating

FROM ROUTE 0015 (PROVINCE LANDS ROAD)

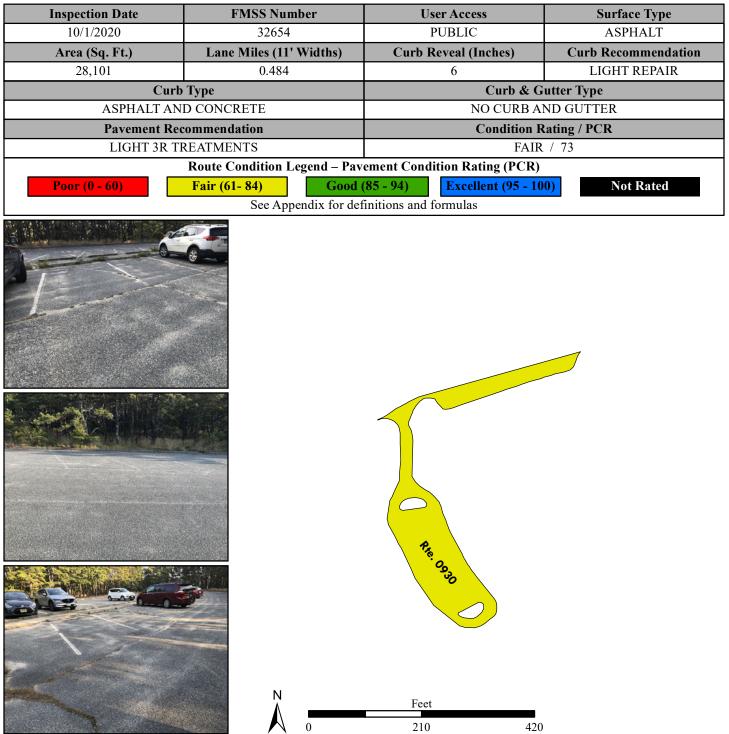
TO ROUTE 0017 (MOORS ROAD)



Cape Cod National Seashore ROUTE 0930: GREAT ISLAND TRAIL AND PICNIC PARKING

Manual Rating

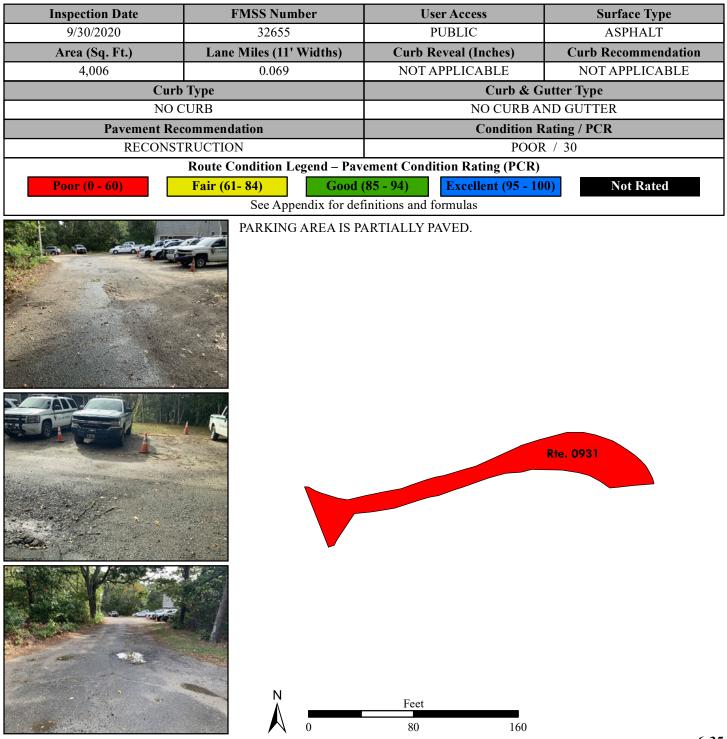
FROM CHEQUESSET NECK ROAD (WELLFLEET TOWN ROAD)



Cape Cod National Seashore ROUTE 0931: NAUSET RANGER STATION PARKING

Manual Rating

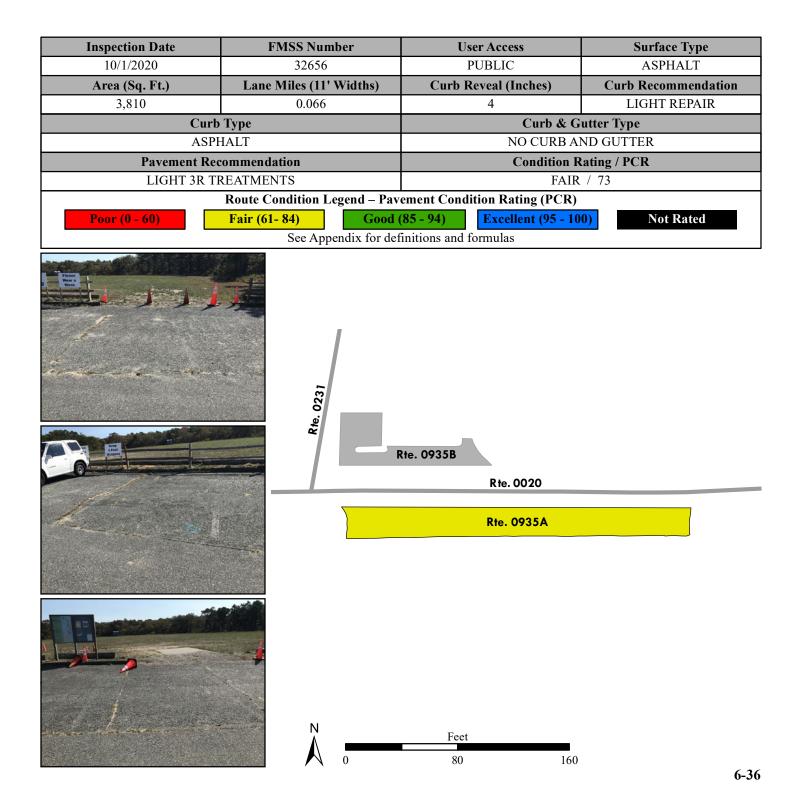
FROM NAUSET ROAD



Cape Cod National Seashore ROUTE 0935A: OLD DEWLINE ROAD PARKING A

Manual Rating

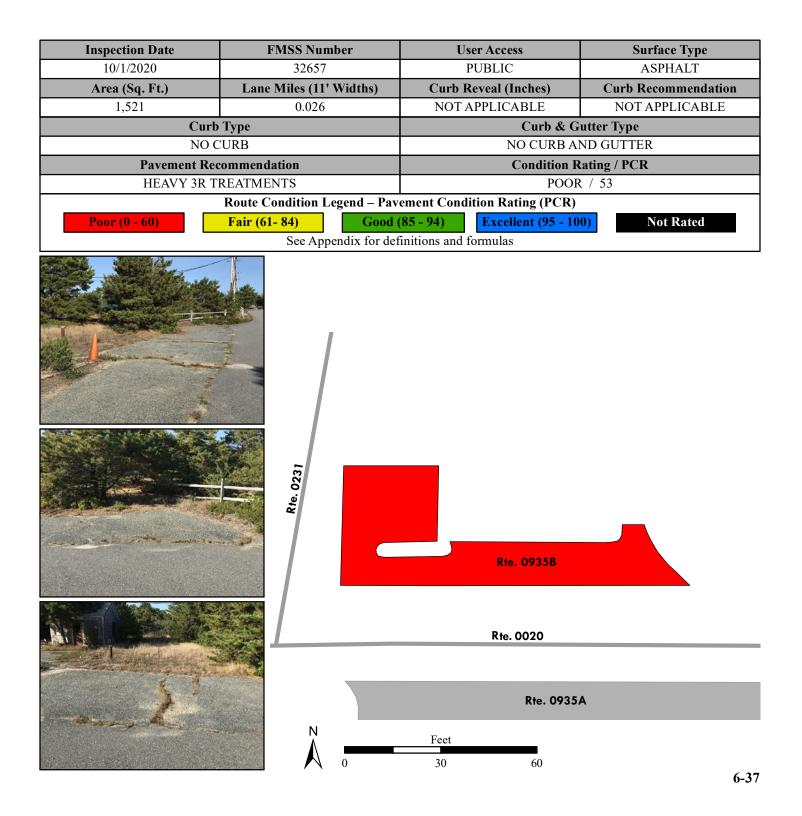
ADJACENT TO ROUTE 0020 (OLD DEWLINE ROAD) AT MP 0.51



Cape Cod National Seashore ROUTE 0935B: OLD DEWLINE ROAD PARKING B

Manual Rating

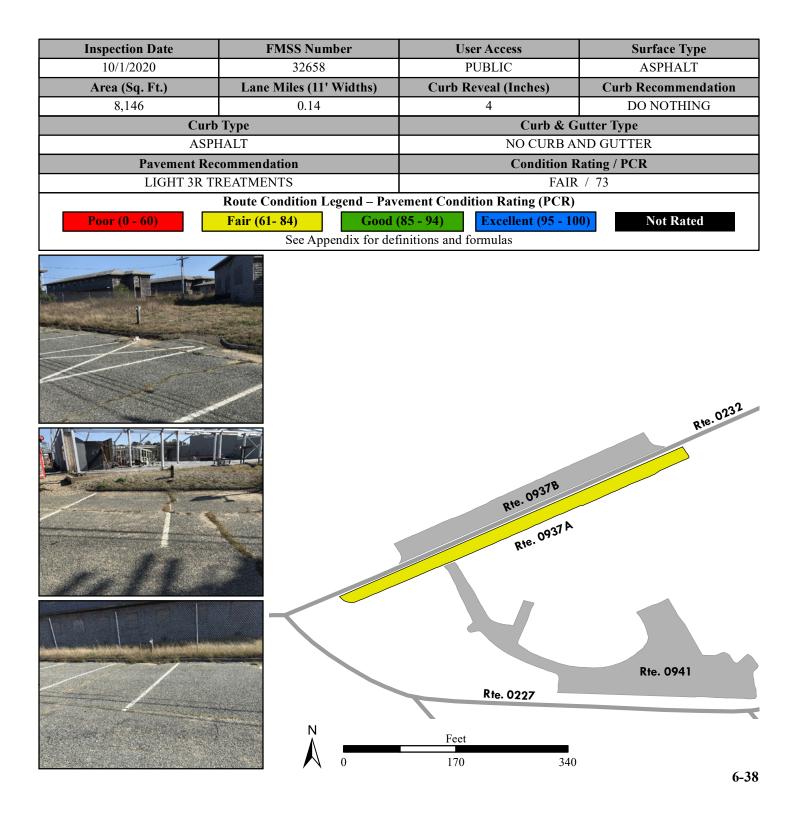
ADJACENT TO ROUTE 0020 (OLD DEWLINE ROAD) AT MP 0.49



Cape Cod National Seashore ROUTE 0937A: NTAFS ACCESS ROAD A PARKING

Manual Rating

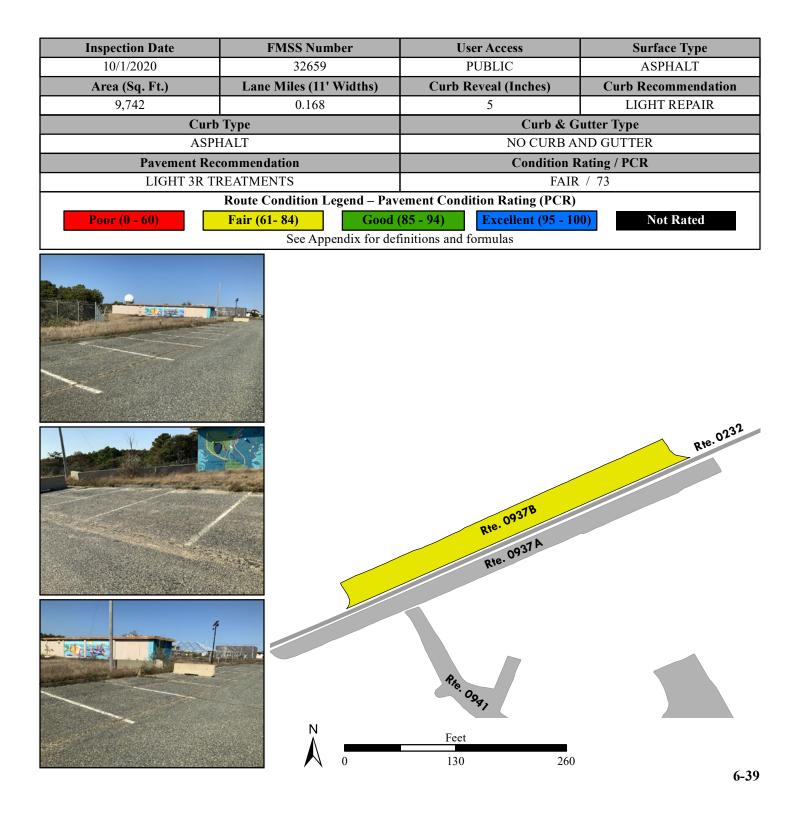
ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.06



Cape Cod National Seashore ROUTE 0937B: NTAFS ACCESS ROAD B PARKING

Manual Rating

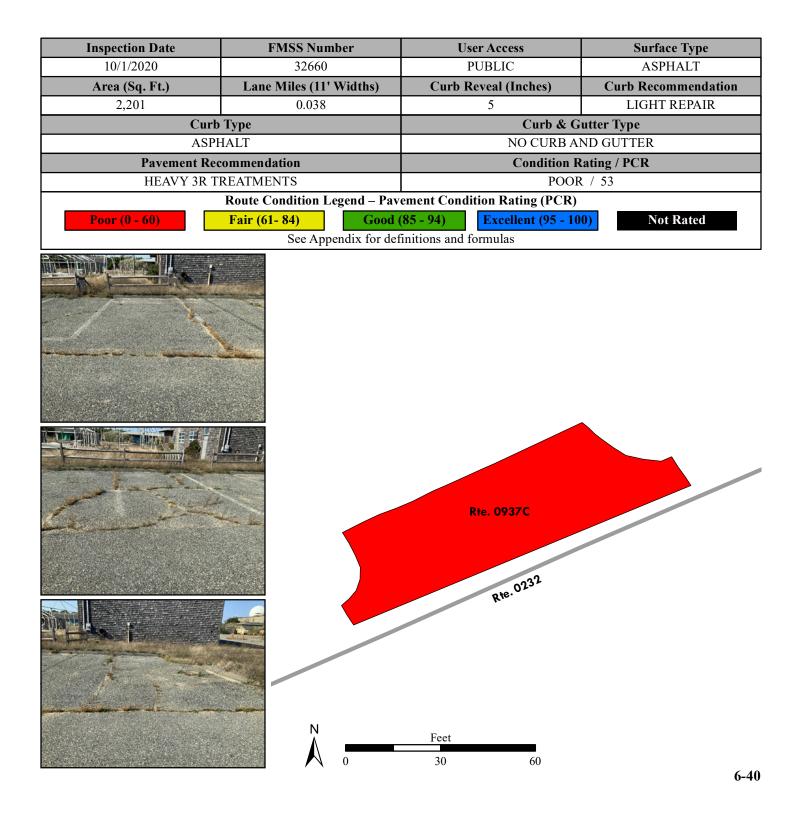
ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.06



Cape Cod National Seashore ROUTE 0937C: NTAFS ACCESS ROAD C PARKING

Manual Rating

ADJACENT TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.12

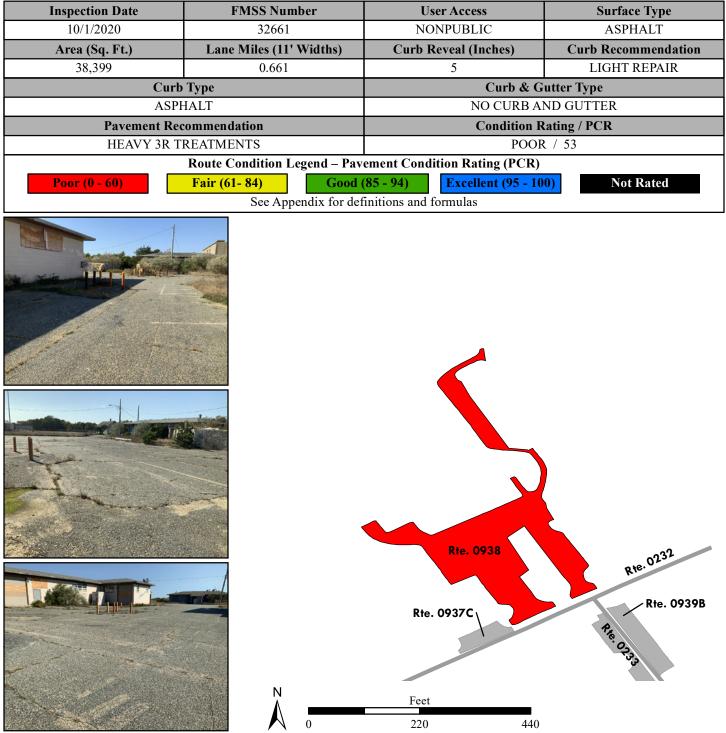


Cape Cod National Seashore ROUTE 0938: AIR FORCE MAINTENANCE AREA PARKING

Manual Rating

FROM ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.13

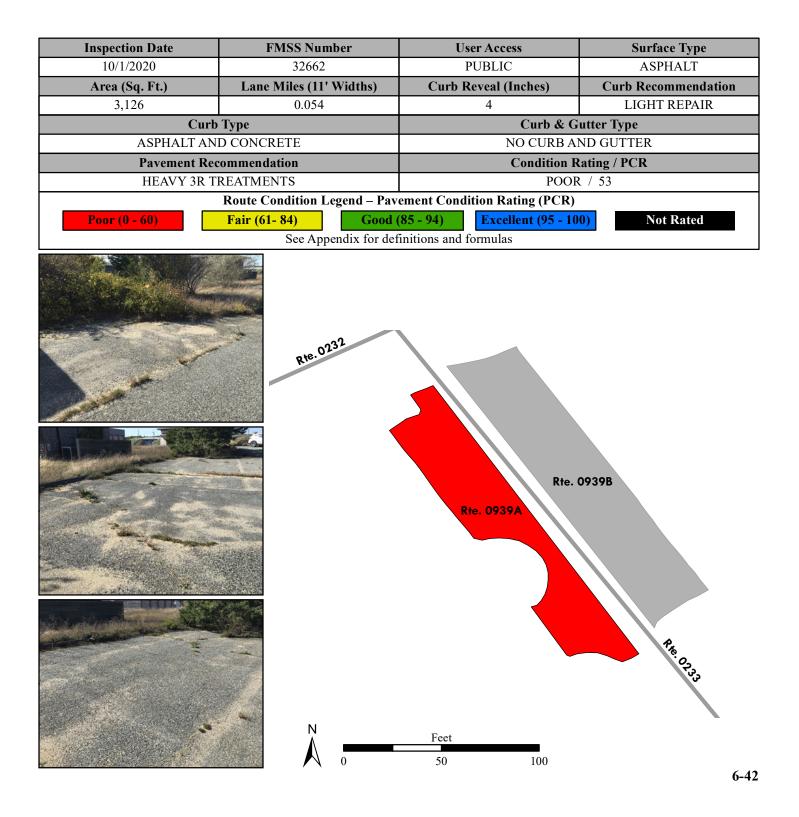
TO ROUTE 0232 (NTAFS ACCESS ROAD) AT MP 0.15



Cape Cod National Seashore ROUTE 0939A: NTAFS FUEL HOUSE ROAD A PARKING

Manual Rating

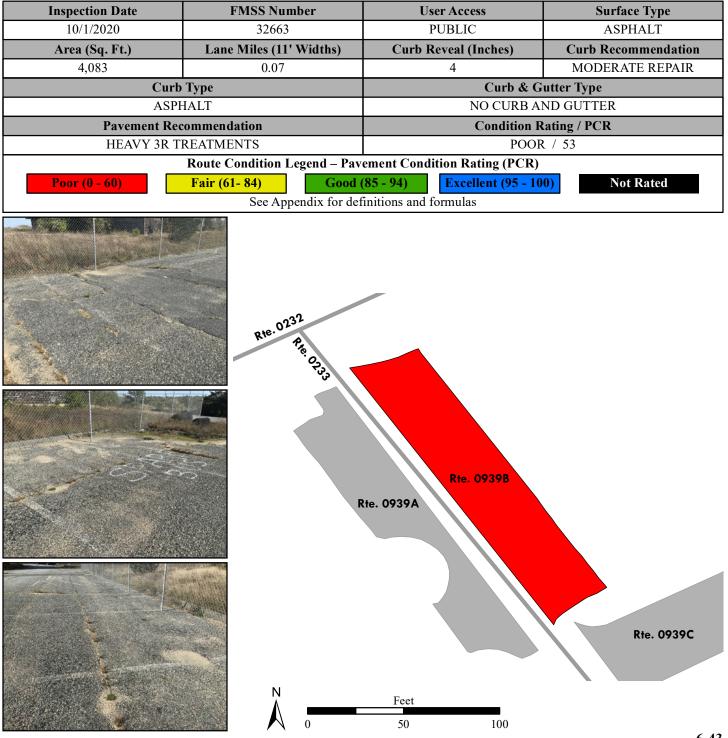
ADJACENT TO ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON RIGHT



Cape Cod National Seashore ROUTE 0939B: NTAFS FUEL HOUSE ROAD B PARKING

Manual Rating

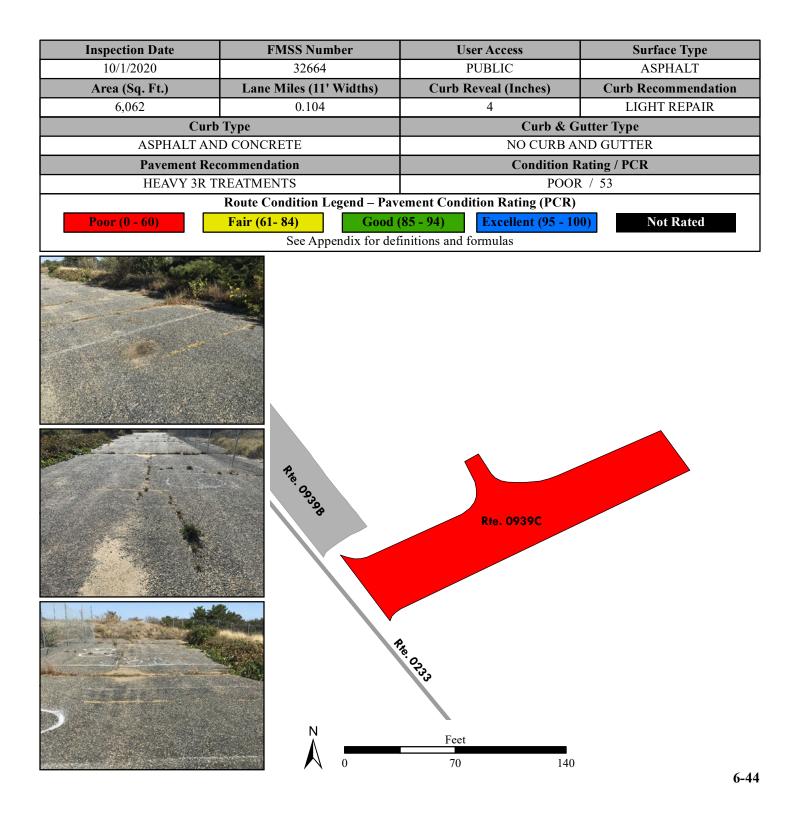
ADJACENT TO ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON LEFT



Cape Cod National Seashore ROUTE 0939C: NTAFS FUEL HOUSE ROAD C PARKING

Manual Rating

FROM ROUTE 0233 (NTAFS FUEL HOUSE ROAD) ON LEFT

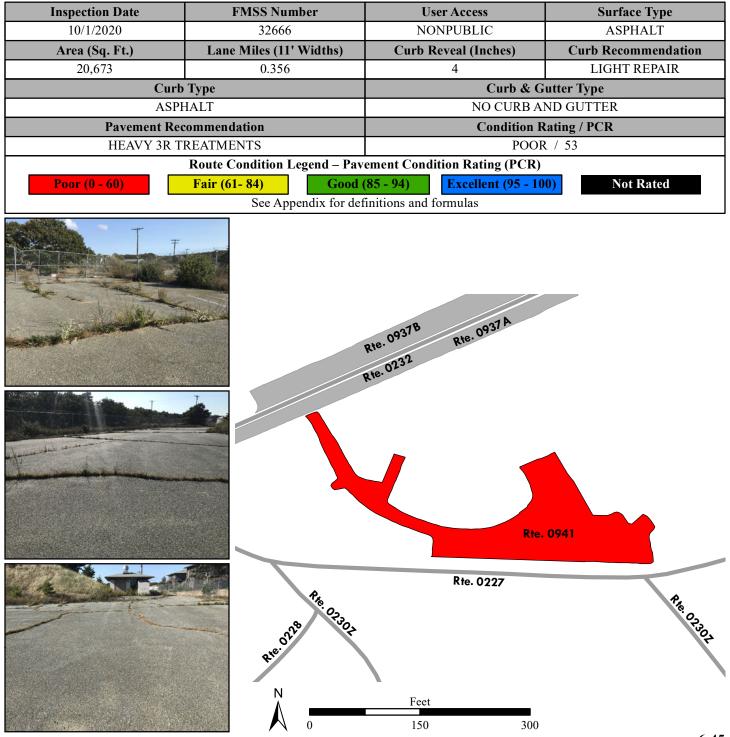


Cape Cod National Seashore ROUTE 0941: WATER PLANT PARKING

Manual Rating

FROM ROUTE 0227 (NTAFS LANDING ROAD)

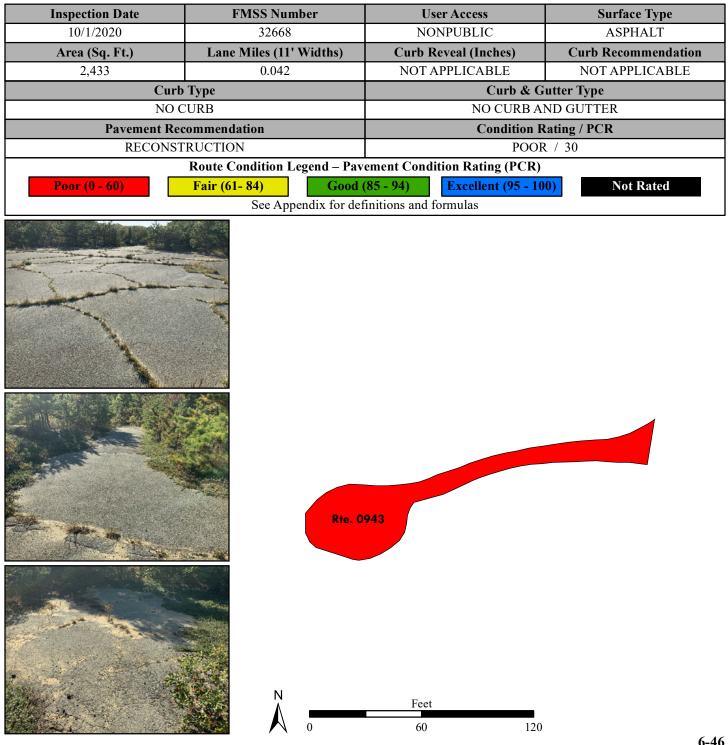
TO ROUTE 0937A (NTAFS ACCESS ROAD A PARKING)



Cape Cod National Seashore ROUTE 0943: SEWAGE TREATMENT PARKING

Manual Rating

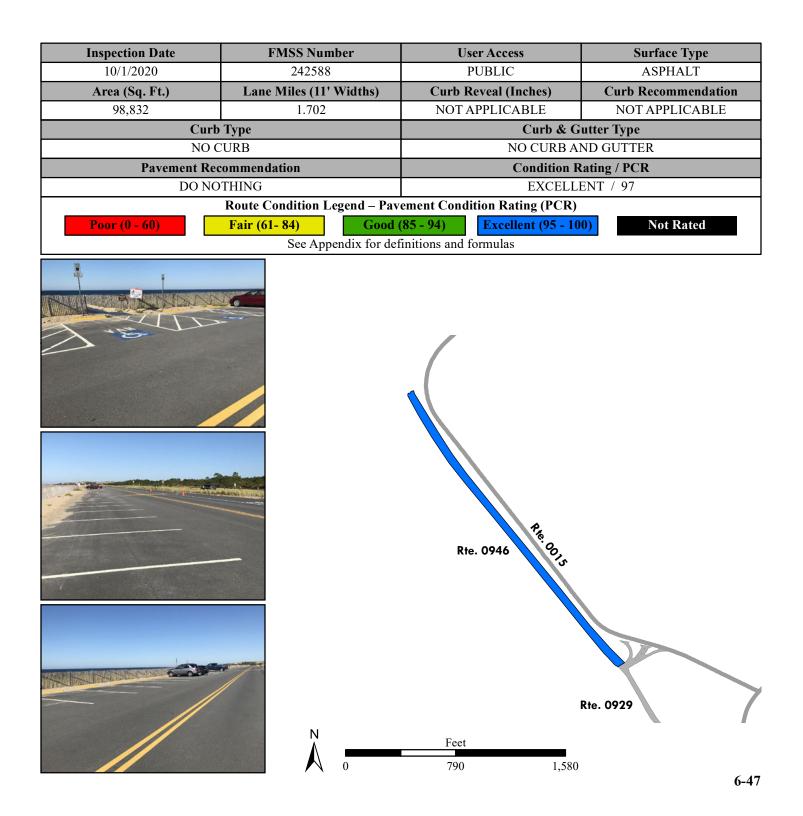
FROM HELIPAD OFF ROUTE 0229ZZ (SEWAGE TREATMENT PARKING ROADS)



Cape Cod National Seashore ROUTE 0946: HERRING COVE NORTH BEACH PARKING

Manual Rating

FROM ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)

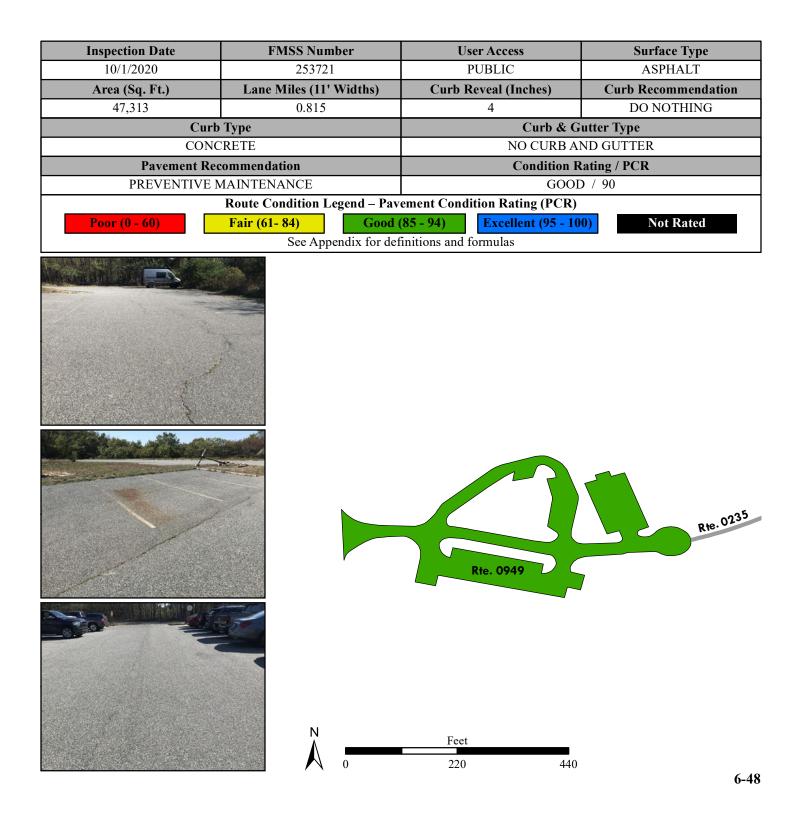


Cape Cod National Seashore ROUTE 0949: HIGHLAND MUSEUM PARKING

Manual Rating

FROM HIGHLAND ROAD

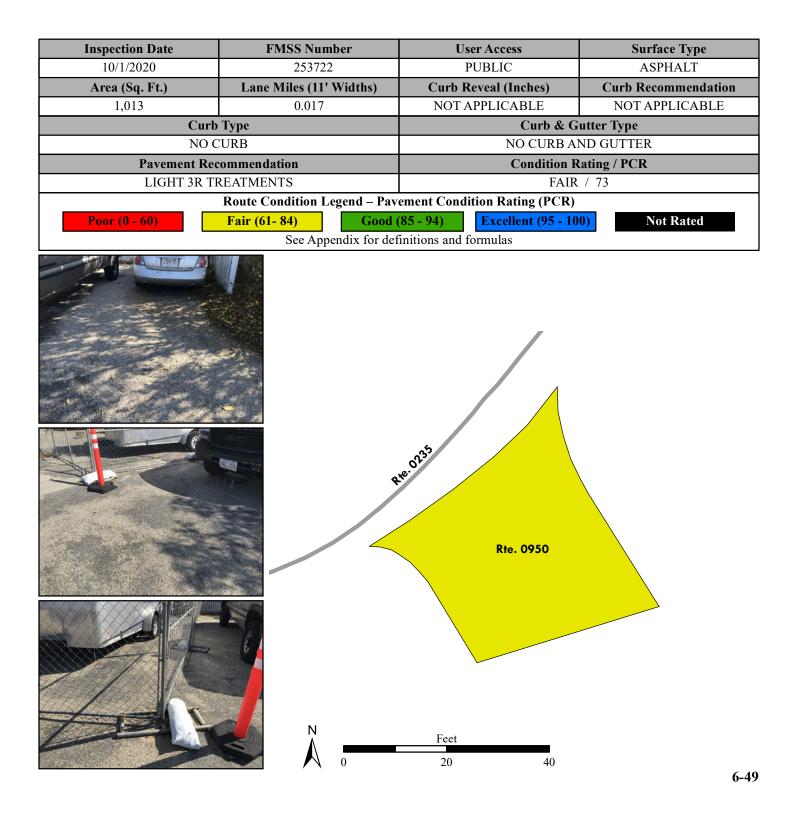
TO ROUTE 0235 (HIGHLAND LIGHTHOUSE ROAD)



Cape Cod National Seashore ROUTE 0950: HIGHLAND LIGHTHOUSE HANDICAPPED PARKING

Manual Rating

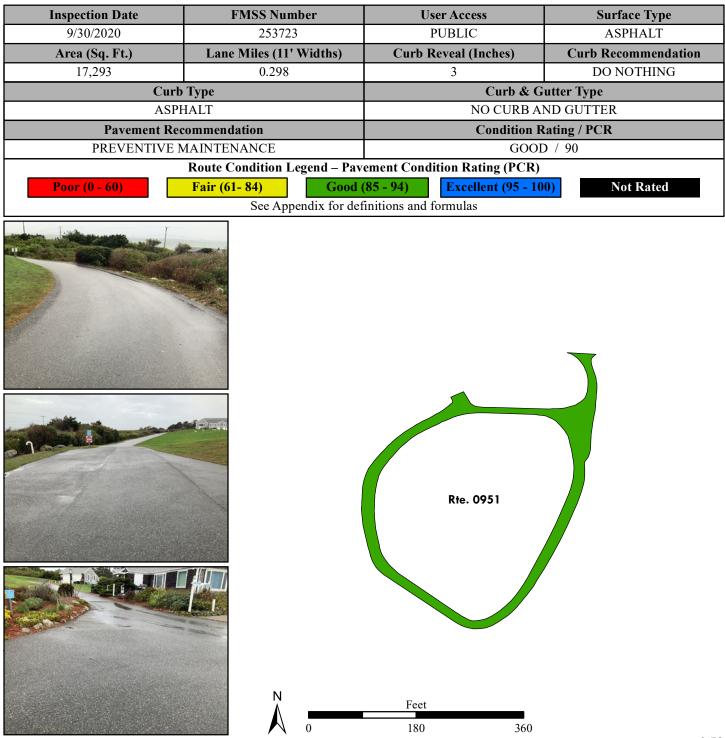
ADJACENT TO ROUTE 0235 (HIGHLAND LIGHTHOUSE ROAD) ON RIGHT



Cape Cod National Seashore ROUTE 0951: NAUSET KNOLLS MOTEL PARKING

Manual Rating

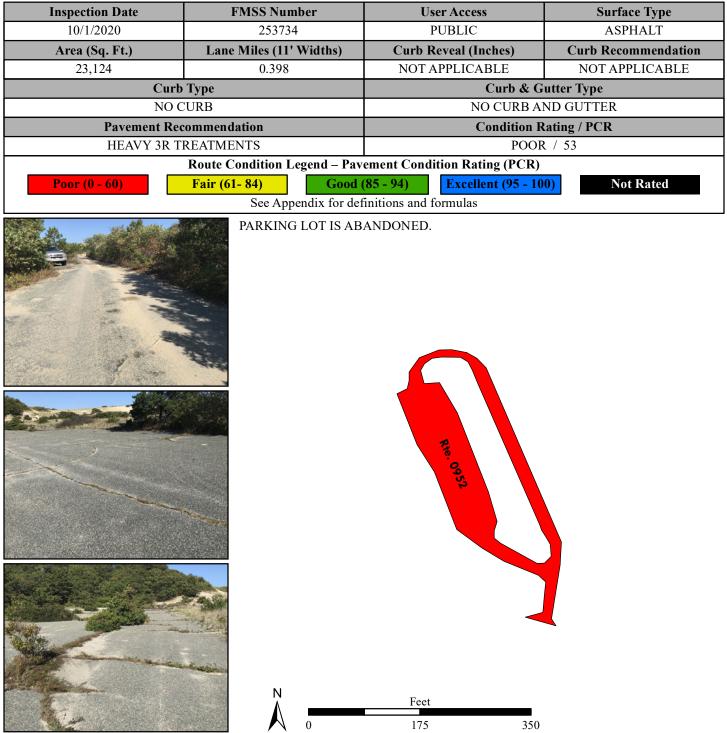
FROM BEACH ROAD



Cape Cod National Seashore ROUTE 0952: EAST HARBOR PARKING LOT

Manual Rating

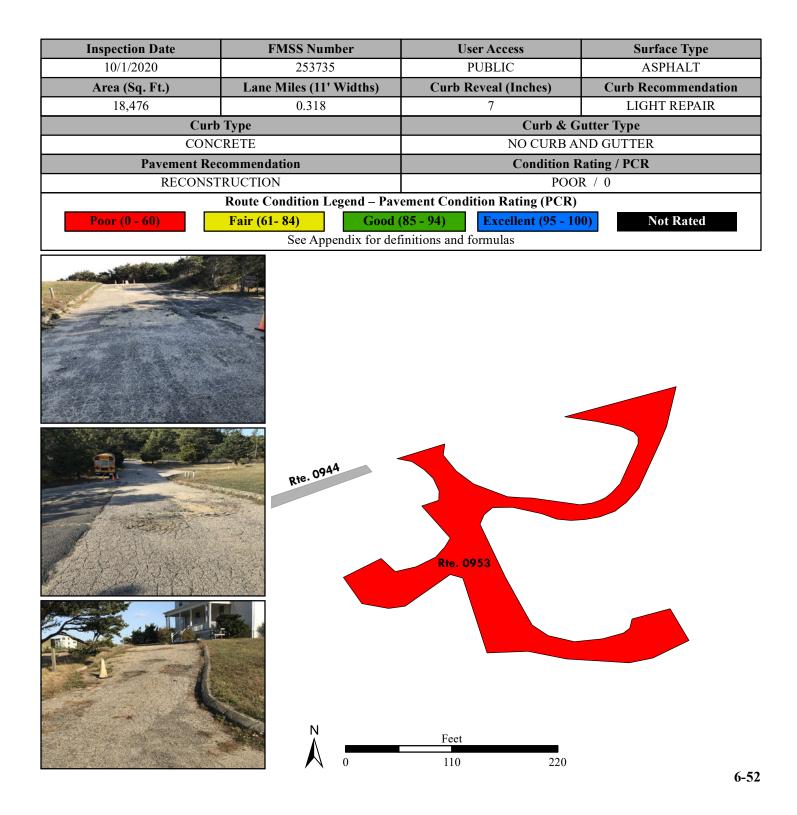
FROM STATE HIGHWAY 6



Cape Cod National Seashore ROUTE 0953: NORTH TRURO LIFE SAVING STATION PARKING

Manual Rating

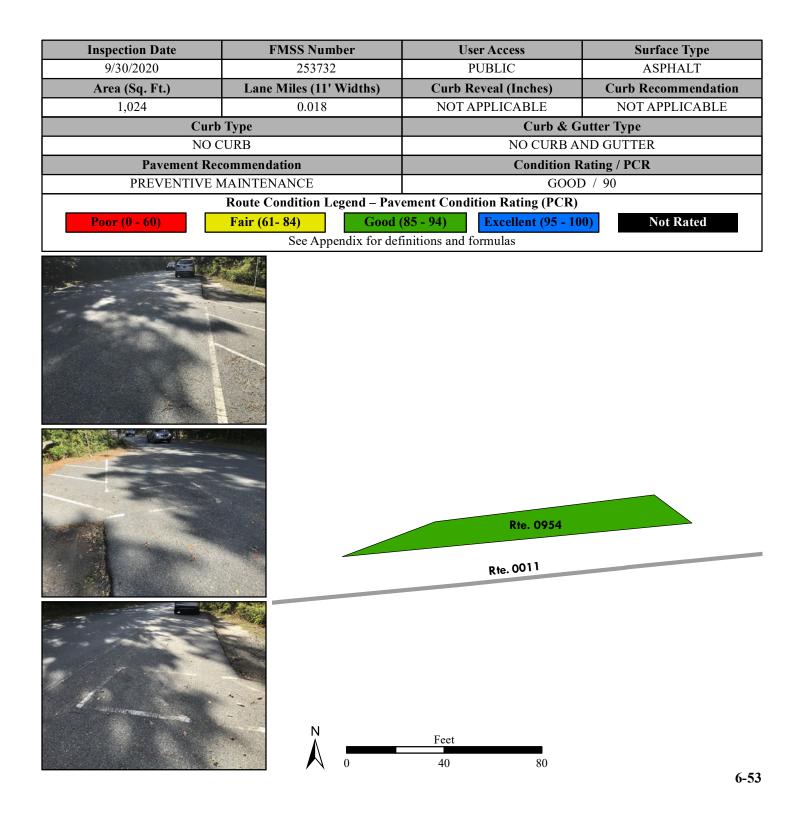
FROM NORTH PAMET ROAD



Cape Cod National Seashore ROUTE 0954: THREE SISTERS PARKING

Manual Rating

ADJACENT TO ROUTE 0011 (CABLE ROAD)



Section 7 Road Milepost Information



Cape Cod National Seashore



Road Milepost Information

This report section contains road milepost information for all paved roads in the park that were collected with the Data Collection Vehicle (DCV). The milepost data is obtained from the DCV by using a distance measuring instrument (DMI) that is calibrated to record mileage to the nearest thousandth of a mile. Park roads that were manually rated did not have milepost data collected, and thus are not included in this report section.

For Cycle 6, the information presented in this section differs from previous RIP cycles in that it does not contain the roadside features inventories for the paved park roads. Some examples of the features previously collected are signs, culverts/drop inlets, guardrails, curbing, pullouts, etc. If the park was collected in a previous RIP cycle, then the latest features data can be obtained by referencing the following:

Where to find the latest Features Inventories for NPS Parks:

- For Small Parks (parks with less than 10 miles of paved roads):
 - Refer to Cycle 5 data (collected 2010 2014)
 - Features were reported in Section 9 of the *Cycle 5* RIP report
 - Video of features can be viewed using the *PathViewVO* program and *Cycle 5* data
- For Large Parks (parks with more than 10 miles of paved roads):
 - Refer to Cycle 4 data (collected 2006 2009)
 - Features were reported in Section 9 of the *Cycle 4* RIP report
 - Video of features can be viewed using the *VisiData* program and *Cycle 4* data
 - Note: Features inventories were updated in Large Parks in *Cycle 5* only on a route by route basis if the route was new or modified in *Cycle 5*. If this is the case for a particular route, then features for the route can be obtained using the *PathViewVO* program and *Cycle 5* data (same as above for Small parks).

Milepost Events Verified in Cycle 6

In Cycle 6, the following events were collected and reported in Section 7 of this report:

- Intersections with roads and parking areas
- All bridges and culverts with BIP Numbers (bridge inspection program numbers)
- Mile Marker Signs
- One-Way travel directions
- Overpasses
- Tunnels
- Low Water Crossings (LWCR)
- Surface type changes
- Construction areas where no pavement condition data was obtained

GPS Mileage Matching

A consistent survey milepost and constant route length as recorded by the Data Collection Vehicle (DCV) is a challenge to maintain from one collection cycle to the next. The challenge is due to many factors such as driver characteristics, DMI calibration, tire pressure etc. After Cycle 4 (~2010), a decision was made to hold constant the length of roads so long as there was no physical change from reconstruction projects or realignments that would result in a change to the length of a road. Consequently, the "GPS Mileage Match" was implemented to specify which cycle the route length is being matched. Route mileages and GPS are matched to a previous collection whenever there is no physical change to a route alignment. The route mileage and GPS is not matched to previous cycles whenever it is determined that a road length and GPS needs to be updated. When this happens the GPS and length is updated to the cycle that displays the change, and that collection cycle is used as the matching cycle in subsequent collections of the road. Thus, the Cycle 6 GIS could be either the survey length collected in Cycle 4, Cycle 5, or Cycle 6 and therefore, may not match the survey milepost displayed in the latest Cycle 6 DCV video which is viewable in **PathView VO**.

The features inventories and road logs collected on NPS routes contain mileposts that are determined from the corresponding cycle that the GPS is matched to. Therefore, the mileposts contained in the Cycle 4 or 5 features inventories or the Cycle 6 road logs may not exactly match the survey milepost collected in the latest Cycle 6 video of the road.

Locating Mile Marker Signs

For routes that have mile marker signs along them, the milepost reported by RIP will most likely not line up exactly with the sign located in the field. This could be happening for many reasons, most likely due to either the error falling within the acceptable calibration range of the vehicle, or the level of accuracy that the mile marker signs were placed in the field.

Because mile marker signs are important features in many project plans and location descriptions, RIP is reporting locations of mile marker signs in three ways in Cycle 6:

- 1. Mileposts from Cycle 6 GIS: the official RIP milepost taken from the features inventories and the matching GPS/mileage cycle as described above. This is the milepost that should be used on project plans and when finding locations in the field
- 2. Mileposts from Cycle 6 Video: milepost shown to help locate the mile marker sign in the latest *PathView VO* video.
- 3. Latitude / Longitude: a constant way of locating a mile marker sign so long as the park has not moved the sign

The mileposts from Cycle 6 Video and GIS should be nearly the same, but on longer roads it has been observed that the Video milepost deviates more from the official GIS milepost that comes from the matching cycle.

ROUTE 0010: DOANE ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0019 (NAUSET ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0019 (NAUSET ROAD)
0.07	0.07	INTERSECTION	R	UNPAVED ROUTE
0.31	0.31	INTERSECTION	R	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)
0.39	0.39	INTERSECTION	R	ROUTE 0201 (DOANE ROCK PICNIC AREA ROAD)
0.42	0.42	INTERSECTION	L	ROUTE 0914 (COAST GUARD BEACH BUS STOP PARKING)
0.43	0.43	INTERSECTION	L	ROUTE 0405 (COAST GUARD BEACH SHUTTLE PICKUP ROAD)
0.70	0.70	INTERSECTION	R	UNPAVED ROUTE (FIRE ROAD)
0.97	0.97	INTERSECTION	R	ROUTE 0913 (COAST GUARD BEACH ENVIRONMENTAL EDUCATION CENTER PARKING)
1.01	1.01	INTERSECTION	N/A	ROUTE 5001 (OCEAN VIEW DRIVE)

ROUTE 0011: CABLE ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	PAVED ROUTE (NAUSET ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (NAUSET ROAD / NON NPS)
0.09	0.09	INTERSECTION	L	PAVED PARKING (NAUSET REGIONAL HIGH SCHOOL / NON NPS)
0.23	0.23	INTERSECTION	L	PAVED PARKING (NAUSET REGIONAL HIGH SCHOOL / NON NPS)
0.70	0.70	INTERSECTION	L	ROUTE 0954 (THREE SISTERS PARKING)
0.93	0.93	INTERSECTION	R	ROUTE 5001 (OCEAN VIEW DRIVE)
0.93	0.93	INTERSECTION	L	ROUTE 0211 (NAUSET LIGHT BEACH ACCESS ROAD)

ROUTE 0012: MARCONI BEACH ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	PAVED ROUTE (STATE ROUTE 6 / NON NPS)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 6 / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 6 / NON NPS)
0.13	0.13	INTERSECTION	L	ROUTE 0013 (MARCONI SITE ROAD)
0.56	0.56	INTERSECTION	R	UNPAVED ROUTE (FIRE ROAD)
1.00	1.00	INTERSECTION	L	ROUTE 0012 (MARCONI BEACH ROAD) SPUR
1.42	1.42	INTERSECTION	L	ROUTE 0906 (MARCONI BEACH PARKING)
1.62	1.62	INTERSECTION	N/A	ROUTE 0906 (MARCONI BEACH PARKING)

ROUTE 0013: MARCONI SITE ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0012 (MARCONI BEACH ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0012 (MARCONI BEACH ROAD)
0.04	0.04	INTERSECTION	L	ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD)
0.14	0.14	INTERSECTION	L	ROUTE 0908 (PARK HEADQUARTERS PARKING)
0.22	0.22	INTERSECTION	L	ROUTE 0908 (PARK HEADQUARTERS PARKING)
0.28	0.28	INTERSECTION	R	ROUTE 0401 (B-WELL ROAD)
0.48	0.48	INTERSECTION	L	UNPAVED ROUTE (WATER TOWER ACCESS)
0.98	0.98	INTERSECTION	N/A	ROUTE 0907 (MARCONI STATION SITE PARKING)

ROUTE 0014: RACE POINT ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	PARK BOUNDARY	N/A	N/A
0.00	0.00	INTERSECTION	N/A	PAVED ROUTE (RACE POINT ROAD)
0.08	0.08	INTERSECTION	R	ROUTE 0407AZ (TIN PAN ALLEY A)
0.13	0.13	INTERSECTION	L	ROUTE 0900 (BEECH FOREST PARKING)
0.98	0.98	INTERSECTION	R	ROUTE 0901 (PROVINCE LANDS VISITOR CENTER PARKING)
1.00	1.00	INTERSECTION	R	ROUTE 0901 (PROVINCE LANDS VISITOR CENTER PARKING)
1.01	1.01	INTERSECTION	R	ROUTE 0901 (PROVINCE LANDS VISITOR CENTER PARKING)
1.18	1.18	INTERSECTION	L	ROUTE 0015 (PROVINCE LANDS ROAD) SPUR
1.19	1.19	INTERSECTION	L	ROUTE 0015 (PROVINCE LANDS ROAD)
1.20	1.20	INTERSECTION	L	ROUTE 0015 (PROVINCE LANDS ROAD) SPUR
1.70	1.70	INTERSECTION	L	PAVED ROUTE (PROVINCETOWN MUNICIPAL AIRPORT / NON NPS)
1.78	1.78	INTERSECTION	L	PAVED PARKING (PROVINCETOWN MUNICIPAL AIRPORT PARKING / NON NPS)
1.87	1.87	INTERSECTION	R	UNPAVED ROUTE (OVERSAND ROAD)
1.87	1.87	INTERSECTION	L	ROUTE 0209 (RACE POINT COAST GUARD STATION ROAD)
1.91	1.91	INTERSECTION	L	ROUTE 0902 (RACE POINT BEACH PARKING)
1.92	1.92	INTERSECTION	L	ROUTE 0902 (RACE POINT BEACH PARKING)
1.93	1.93	INTERSECTION	L	ROUTE 0902 (RACE POINT BEACH PARKING)
1.94	1.94	INTERSECTION	N/A	ROUTE 0902 (RACE POINT BEACH PARKING)

ROUTE 0015: PROVINCE LANDS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 6.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0014 (RACE POINT ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0014 (RACE POINT ROAD)
0.01	0.01	INTERSECTION	R	ROUTE 0014 (RACE POINT ROAD) SPUR
0.01	0.01	INTERSECTION	L	ROUTE 0014 (RACE POINT ROAD) SPUR
0.10	0.11	BRIDGE	N/A	1730-002 (PROVINCE LANDS BICYCLE TRAIL BRIDGE #1)
0.41	0.41	INTERSECTION	R	ROUTE 0904 (PROVINCE LANDS ROAD PARKING)
0.89	0.89	INTERSECTION	R	ROUTE 0945 (HATCHES HARBOR PARKING)
0.93	0.94	BRIDGE	N/A	1730-003 (PROVINCE LANDS BICYCLE TRAIL BRIDGE #2)
1.42	1.42	INTERSECTION	L	UNPAVED ROUTE (FIRE ROAD)
2.13	2.13	INTERSECTION	R	ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)
2.14	2.14	INTERSECTION	R	ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)
2.16	2.16	INTERSECTION	R	ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)
2.24	2.24	INTERSECTION	L	ROUTE 0018AZ (WESTBOUND STATE ROUTE 6) SPUR
2.27	2.27	INTERSECTION	R	ROUTE 0017 (MOORS ROAD)
2.27	2.27	INTERSECTION	L	ROUTE 0018AZ (WESTBOUND STATE ROUTE 6)

ROUTE 0017: MOORS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0018AZ (WESTBOUND STATE ROUTE 6)
0.00	0.00	INTERSECTION	R	ROUTE 0015 (PROVINCE LANDS ROAD)
0.12	0.12	INTERSECTION	R	ROUTE 0929 (HERRING COVE SOUTH BEACH PARKING)
0.89	0.89	PARK BOUNDARY	N/A	N/A

ROUTE 0018AZ: WESTBOUND STATE ROUTE 6

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0015 (PROVINCE LANDS ROAD)
0.00	0.00	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0017 (MOORS ROAD)
0.12	0.12	INTERSECTION	L	ROUTE 0018BZ (EASTBOUND STATE ROUTE 6)
0.35	0.35	ONE-WAY END	N/A	N/A
0.35	0.35	PARK BOUNDARY	N/A	N/A

ROUTE 0018BZ: EASTBOUND STATE ROUTE 6

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	ONE-WAY START	N/A	N/A
0.00	0.00	PARK BOUNDARY	N/A	N/A
0.25	0.25	ONE-WAY END	N/A	N/A
0.25	0.25	INTERSECTION	N/A	ROUTE 0018AZ (WESTBOUND STATE ROUTE 6)
0.25	0.25	INTERSECTION	L	ROUTE 0018AZ (WESTBOUND STATE ROUTE 6)

ROUTE 0019: NAUSET ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	PAVED ROUTE (NAUSET ROAD / NON NPS)
0.00	0.00	INTERSECTION	L	ROUTE 0223 (MACPHERSON WAY)
0.21	0.21	INTERSECTION	L	ROUTE 0010 (DOANE ROAD)
0.64	0.64	INTERSECTION	L	ROUTE 0919 (SALT POND VISITOR CENTER PARKING)
0.66	0.66	INTERSECTION	L	ROUTE 0919 (SALT POND VISITOR CENTER PARKING)
0.78	0.78	INTERSECTION	L	ROUTE 0919 (SALT POND VISITOR CENTER PARKING)
0.78	0.78	INTERSECTION	R	PAVED ROUTE (SCHOOLHOUSE ROAD / NON NPS)
0.80	0.80	INTERSECTION	L	ROUTE 0919 (SALT POND VISITOR CENTER PARKING)
0.82	0.82	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 6 / NON NPS) SPUR
0.83	0.83	INTERSECTION	R	PAVED ROUTE (PRESERVATION WAY / NON NPS)
0.84	0.84	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 6 / NON NPS) SPUR
0.87	0.87	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 6 / NON NPS)
0.87	0.87	INTERSECTION	N/A	PAVED ROUTE (STATE ROUTE 6 / NON NPS)
0.87	0.87	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 6 / NON NPS)

ROUTE 0020: OLD DEWLINE ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	PAVED ROUTE (SOUTH HIGHLANDS ROAD (TOWN ROAD))
0.00	0.00	INTERSECTION	L	PAVED ROUTE (SOUTH HIGHLANDS ROAD (TOWN ROAD))
0.17	0.17	INTERSECTION	L	UNPAVED ROUTE
0.29	0.29	INTERSECTION	R	UNPAVED ROUTE
0.49	0.49	INTERSECTION	L	ROUTE 0231 (NAC LABORATORY ACCESS ROAD)
0.50	0.50	INTERSECTION	L	ROUTE 0935B (OLD DEWLINE ROAD PARKING B)
0.51	0.51	INTERSECTION	R	ROUTE 0935A (OLD DEWLINE ROAD PARKING A)
0.53	0.53	INTERSECTION	N/A	ROUTE 0232 (NTAFS ACCESS ROAD)
0.53	0.53	INTERSECTION	R	ROUTE 0227 (NTAFS LANDING ROAD)
0.53	0.53	INTERSECTION	L	PAVED ROUTE (FAA ROAD)

Data Collected on 10/2020

ROUTE 0200: FORT HILL AREA ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	PAVED ROUTE (GOVERNOR PRENCE ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (GOVERNOR PRENCE ROAD / NON NPS)
0.02	0.02	INTERSECTION	R	PAVED ROUTE (GOVERNOR PRENCE ROAD E / NON NPS) SPUR
0.12	0.12	INTERSECTION	L	ROUTE 0916 (FORT HILL LOWER PARKING)
0.30	0.30	INTERSECTION	N/A	ROUTE 0915 (FORT HILL AREA PARKING)

ROUTE 0201: DOANE ROCK PICNIC AREA ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0010 (DOANE ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0010 (DOANE ROAD)
0.04	0.04	INTERSECTION	L	ROUTE 0911A (DOANE ROCK AREA 1 PARKING)
0.06	0.06	INTERSECTION	L	ROUTE 0911A (DOANE ROCK AREA 1 PARKING)
0.09	0.09	INTERSECTION	R	UNPAVED ROUTE (PINECREST DRIVE)
0.14	0.14	INTERSECTION	N/A	ROUTE 0911B (DOANE ROCK AREA 2 PARKING)

ROUTE 0202AZ: TOMAHAWK TRAIL ROAD A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0010 (DOANE ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0010 (DOANE ROAD)
0.04	0.04	INTERSECTION	R	UNPAVED ROUTE
0.25	0.25	INTERSECTION	L	ROUTE 0202BZ (TOMAHAWK TRAIL ROAD B)
0.56	0.56	INTERSECTION	L	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)
0.59	0.59	INTERSECTION	N/A	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)
0.59	0.59	INTERSECTION	L	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)

ROUTE 0202BZ: TOMAHAWK TRAIL ROAD B

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 5.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)
0.00	0.00	INTERSECTION	N/A	ROUTE 0202AZ (TOMAHAWK TRAIL ROAD A)
0.03	0.03	INTERSECTION	L	ROUTE 0202BZ (TOMAHAWK TRAIL ROAD B)
0.06	0.06	INTERSECTION	R	ROUTE 0202BZ (TOMAHAWK TRAIL ROAD B)
0.06	0.06	INTERSECTION	N/A	ROUTE 0202BZ (TOMAHAWK TRAIL ROAD B)

ROUTE 0204: MARCONI EMPLOYEE PARKING ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD)
0.13	0.13	INTERSECTION	N/A	ROUTE 0917 (PARK HEADQUARTERS EMPLOYEE PARKING)
0.13	0.13	INTERSECTION	L	ROUTE 0918 (OLD VEHICLE STORAGE PARKING)

ROUTE 0205: HEAD OF THE MEADOW BEACH ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	PAVED ROUTE (HEAD OF THE MEADOW ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (HEAD OF THE MEADOW ROAD / NON NPS)
0.12	0.12	INTERSECTION	N/A	ROUTE 0927 (HEAD OF THE MEADOW PARKING)

ROUTE 0206: PILGRIM HEIGHTS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 6)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 6)
0.04	0.04	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 6) SPUR
0.21	0.21	INTERSECTION	R	ROUTE 0206 (PILGRIM HEIGHTS ROAD)
0.21	0.21	ONE-WAY START	N/A	N/A
0.22	0.22	INTERSECTION	R	ROUTE 0206 (PILGRIM HEIGHTS ROAD) SPUR
0.44	0.44	INTERSECTION	L	ROUTE 0905AAZ (PILGRIM HEIGHTS WEST PARKING AREA A)
0.44	0.44	INTERSECTION	R	ROUTE 0905ABZ (PILGRIM HEIGHTS WEST PARKING AREA B)
0.65	0.65	INTERSECTION	L	ROUTE 0905BAZ (PILGRIM HEIGHTS EAST PARKING AREA A)
0.65	0.65	INTERSECTION	R	ROUTE 0905BBZ (PILGRIM HEIGHTS EAST PARKING AREA B)
0.86	0.86	INTERSECTION	R	ROUTE 0206 (PILGRIM HEIGHTS ROAD) SPUR
0.87	0.87	INTERSECTION	L	ROUTE 0206 (PILGRIM HEIGHTS ROAD)
0.87	0.87	INTERSECTION	R	ROUTE 0206 (PILGRIM HEIGHTS ROAD)
0.87	0.87	ONE-WAY END	N/A	N/A

ROUTE 0209: RACE POINT COAST GUARD STATION ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0014 (RACE POINT ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0014 (RACE POINT ROAD)
0.06	0.06	INTERSECTION	R	ROUTE 0903 (RACE POINT AIR STATION PARKING)
0.13	0.13	INTERSECTION	L	UNPAVED ROUTE (VIEW POWERLINE ROAD)
0.16	0.16	INTERSECTION	N/A	ROUTE 0928 (RACE POINT RANGER STATION PARKING)

ROUTE 0211: NAUSET LIGHT BEACH ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM	ТО			
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 5001 (OCEAN VIEW DRIVE)
0.00	0.00	INTERSECTION	L	ROUTE 0011 (CABLE ROAD)
0.04	0.04	INTERSECTION	L	PAVED ROUTE (NAUSET LIGHT BEACH ROAD / NON NPS)
0.06	0.06	INTERSECTION	N/A	ROUTE 0912 (NAUSET LIGHT BEACH PARKING)

ROUTE 0223: MACPHERSON WAY

FROM	ТО			
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0019 (NAUSET ROAD)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (NAUSET ROAD / NON NPS)
0.14	0.14	INTERSECTION	N/A	TO END OF PAVEMENT

ROUTE 0231: NAC LABORATORY ACCESS ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0020 (OLD DEWLINE ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0020 (OLD DEWLINE ROAD)
0.01	0.01	INTERSECTION	R	ROUTE 0935B (OLD DEWLINE ROAD PARKING B)
0.08	0.08	INTERSECTION	N/A	ROUTE 0922 (NAC LABORATORY PARKING)

ROUTE 0232: NTAFS ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0020 (OLD DEWLINE ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0227 (NTAFS LANDING ROAD)
0.06	0.06	INTERSECTION	L	ROUTE 0937B (NTAFS ACCESS ROAD B PARKING)
0.06	0.06	INTERSECTION	R	ROUTE 0937A (NTAFS ACCESS ROAD A PARKING)
0.12	0.12	INTERSECTION	L	ROUTE 0937C (NTAFS ACCESS ROAD C PARKING)
0.13	0.13	INTERSECTION	L	ROUTE 0938 (AIR FORCE MAINTENANCE AREA PARKING)
0.15	0.15	INTERSECTION	L	ROUTE 0938 (AIR FORCE MAINTENANCE AREA PARKING)
0.15	0.15	INTERSECTION	R	ROUTE 0233 (NTAFS FUEL HOUSE ROAD)
0.19	0.19	INTERSECTION	N/A	PAVED ROUTE (FAA ROAD)

ROUTE 0235: HIGHLAND LIGHTHOUSE ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 5.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0949 (HIGHLAND MUSEUM PARKING)
0.02	0.02	INTERSECTION	R	GOLF CART ROAD / PATH
0.03	0.03	INTERSECTION	L	UNPAVED PARKING
0.04	0.04	INTERSECTION	L	UNPAVED PARKING
0.07	0.07	INTERSECTION	R	UNPAVED ROUTE (GOLF COURSE ACCESS)
0.11	0.11	INTERSECTION	R	ROUTE 0950 (HIGHLAND LIGHTHOUSE HANDICAPPED PARKING)
0.12	0.12	INTERSECTION	N/A	DEAD END AT LIGHTHOUSE

ROUTE 0401: B-WELL ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM	ТО			
MILEPOST	MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0013 (MARCONI SITE ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0013 (MARCONI SITE ROAD)
0.12	0.12	INTERSECTION	L	UNPAVED ROUTE
0.25	0.25	INTERSECTION	N/A	DEAD END
0.25	0.25	INTERSECTION	R	UNPAVED ROUTE (MARCONI STATION ROAD)

ROUTE 0402: MARCONI RESIDENCE ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	N/A	ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0403 (MARCONI MAINTENANCE AREA ROAD)
0.05	0.05	INTERSECTION	R	ROUTE 0947 (MARCONI TRAILER PAD)
0.06	0.06	INTERSECTION	R	ROUTE 0910 (MARCONI RESIDENCE ROAD PARKING)
0.14	0.14	INTERSECTION	N/A	DEAD END

Data Collected on 10/2020

ROUTE 0403: MARCONI MAINTENANCE AREA ROAD

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0013 (MARCONI SITE ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0013 (MARCONI SITE ROAD)
0.05	0.05	INTERSECTION	R	ROUTE 0204 (MARCONI EMPLOYEE PARKING ROAD)
0.07	0.07	INTERSECTION	L	ROUTE 0402 (MARCONI RESIDENCE ROAD)
0.10	0.10	INTERSECTION	L	ROUTE 0909BZ (MARCONI MAINTENANCE PARKING B)
0.11	0.11	INTERSECTION	N/A	ROUTE 0909AZ (MARCONI MAINTENANCE PARKING A)

ROUTE 0405: COAST GUARD BEACH SHUTTLE PICKUP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	L	ROUTE 0010 (DOANE ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0010 (DOANE ROAD)
0.14	0.14	INTERSECTION	L	ROUTE 0405 (COAST GUARD BEACH SHUTTLE PICKUP ROAD)
0.23	0.23	INTERSECTION	N/A	ROUTE 0405 (COAST GUARD BEACH SHUTTLE PICKUP ROAD)
0.23	0.23	INTERSECTION	L	ROUTE 0405 (COAST GUARD BEACH SHUTTLE PICKUP ROAD)

ROUTE 0407AZ: TIN PAN ALLEY A

Road logs are verified in Cycle 6 and mileposts for this route are matched to GPS collected in Cycle 4.

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0014 (RACE POINT ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0014 (RACE POINT ROAD)
0.04	0.04	INTERSECTION	R	ROUTE 0925 (PROVINCE LANDS MAINTENANCE PARKING)
0.05	0.05	INTERSECTION	R	ROUTE 0925 (PROVINCE LANDS MAINTENANCE PARKING)
0.09	0.09	INTERSECTION	R	ROUTE 0407BZ (TIN PAN ALLEY B)
0.14	0.14	INTERSECTION	N/A	DEAD END

ROUTE 0407BZ: TIN PAN ALLEY B

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.00	0.00	INTERSECTION	R	ROUTE 0407AZ (TIN PAN ALLEY A)
0.00	0.00	INTERSECTION	L	ROUTE 0407AZ (TIN PAN ALLEY A)
0.04	0.04	INTERSECTION	N/A	DEAD END

Section 8 Appendix



Cape Cod National Seashore



Improvements to the RIP Index Equations and Determination of PCR

In 2005, the Federal Highway Administration (FHWA) began implementing the use of a Pavement Management System (PMS) to assist the National Park Service (NPS) in prioritizing Pavement Maintenance and Rehabilitation activities. The PMS used by FHWA is the Highway Pavement Management Application (HPMA) which has the ability to store inventory and condition data from the Road Inventory Program (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 the distresses and indexes that comprise the Pavement Condition Rating (PCR), an extensive study was completed throughout 2010 that has resulted in changes to the RIP 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.

Additionally, methodologies were updated in 2013 for Manually Rated Routes (paved routes that the collection vehicle is unable to drive) as well as Parking Areas to provide more accurate condition data to the HPMA. These updated methodologies allow for the efficient assessment of pavement conditions using a visual inspection method to denote specific distresses. These distresses are indicative of current conditions, the causes for current and future deterioration, and identify the level of targeted repair and rehabilitation practices required.

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 in early 2014 to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation needs that were represented. The changes will allow greater use of RIP and HPMA data for not simply condition data reporting, but also as a reliable tool for project identification and selection.

Description of the Rating System

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

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

With the use of quality digital photography and automated crack detection software, FHWA RIP is tasked with executing a pavement condition assessment on a network of roughly 5,700 miles of National Park Service roads and parkways. Because a subset of roads will be collected multiple times this cycle, the total collection length will be around 13,000 miles. Foremost in setting up the basis of pavement distress identification is employing the distress identification protocols used by FHWA. There is no single distress identification system that is universal among entities conducting a program of distress identification. For the purpose of the NPS RIP, FHWA employs distress identification protocols that are specific to this program.

FHWA has referenced the "Distress Identification Manual for the Long-Term Pavement Performance Program", Publication No. FHWA-RD 03-031, June 2003, as the point-of- reference for distress types on NPS pavement. In truth, the FHWA RIP distress types are similar to those described in the LTPP manual with some modifications. This document, "Distress Identification Manual for the NPS Road Inventory Program, Cycle 6, 2014-2020" was developed using the "Distress Identification Manual for the Long-Term Pavement Performance Program" as a guideline. Definitions of severity levels based on crack width contained in this document adhere to the LTPP Distress ID Manual. Modifications have been made to the definition of Alligator and Longitudinal Cracking and determination of Alligator Cracking severity. This manual also addresses Rutting and Roughness and its application to RIP.

Cycle 6 has launched in the spring of 2014 and will again comprise all parks, large and small, that are served by paved roads and/or parking areas. For Cycle 6, roughly 333 large and small parks will have all paved routes and parking areas collected at least once in the cycle, some will have multiple collections depending on the size of the park and the functional class of the route.

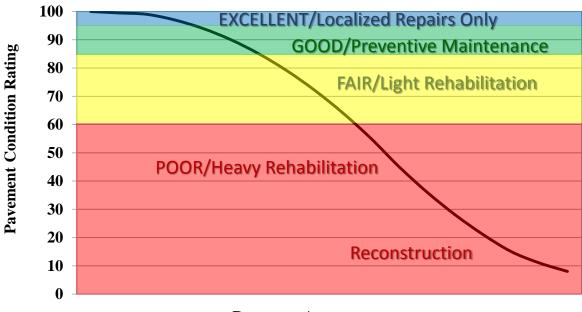
This "Distress Identification Manual for the NPS Road Inventory Program, Cycle 6, 2014-2020" will be used as a reference resource in crack detection and classification, determination of distress severity and extent, and in the calculation of distress index values for the FHWA RIP Cycle 6.

Explanation of the Condition Descriptions

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

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

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



Condition Categories and Treatments

Pavement Age

Description of Pavement Treatment Types

- 1. **Preventive Maintenance** is a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity). Preventive maintenance is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultrathin hot-mix asphalt overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial and/or full-depth concrete repairs to restore functionality of individual slabs.
- 2. Pavement Rehabilitation consists of structural enhancements that extend the service life of an existing pavement and/or improve its load carrying capacity. Rehabilitation techniques include restoration treatments and structural overlays. Rehabilitation projects extend the life of existing pavement structures either by restoring existing structural capacity through the elimination of age-related, environmental cracking of embrittled pavement surface or by increasing pavement thickness to strengthen existing pavement sections to accommodate existing or projected traffic loading conditions. Two sub-categories result from these distinctions, which are directly related to the restoration or increase of structural capacity.
 - Light Rehabilitation (L3R) Examples include single-lift overlays up to 2.5 inches in total thickness and milling and overlays for flexible pavements
 - Heavy Rehabilitation (H3R) Requires rehabilitation with grade improvement. H3R stands for resurfacing, restoration, and rehabilitation projects. H3R projects typically involve multi-depth (overlays greater than 2.5 inches) pavement improvement work (short of full-depth replacement) and targeted safety improvements. H3R projects generally involve retention of the existing three-dimensional alignment.
- 3. **Reconstruction** (4**R**) is defined as the replacement of the entire existing pavement structure by the placement of the equivalent or increased pavement structure. Reconstruction usually requires the complete removal and replacement of the existing pavement structure. Reconstruction may utilize either new or recycled materials incorporated into the materials used for the reconstruction of the complete pavement section. Reconstruction is required when a pavement has either failed or has become functionally obsolete.

Appendix A

Methodology for Determining Condition Ratings with the Data Collection Vehicle (DCV)

Surface Distresses Identified by the Data Collection Vehicle

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 and rutting are determined from digital images that provide both the longitudinal and transverse profile. The images also provide an elevation profile of the road, creating a 3-dimensional image of the paved surface.

- Transverse Cracks
- Longitudinal Cracks
- Alligator Cracks
- Patching/Potholes
- 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 Surface Condition Rating (SCR).

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.

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 mile interval before it reaches MAE and fails.

The index formulas are based on a scale of 0 to 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 = (less than or equal to 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.

<u>Note:</u> 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 less than 0 defaults to 0. Index values greater than 100 defaults 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.

ASPHALT-SURFACED PAVEMENT DISTRESS TYPES WITH RUTTING AND ROUGHNESS				
Distress Type	Units Of Measure	Converted To	Defined Severity Levels?	Measured By
Alligator Cracking	Square Feet	Percent of Lane Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Transverse Cracking	Linear feet	Number of Cracks Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Longitudinal Cracking	Linear feet	Percent of Lane Length Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
Patching / Potholes	Square Feet	Percent of Lane Per 0.02 Mile	No	3 Dimensional pavement imaging system
Rutting	Inches	Rut Depth Per 0.02 Mile	Yes	3 Dimensional pavement imaging system
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

Table 1. Distress summary

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 with little to no interconnecting cracks with no visible spalling. Cracks are less than or equal to a mean width of 0.25 in. (6mm). 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 greater than 0.25 in. (6 mm) but less than or equal to 0.75 in. (19 mm) or any crack with a mean width less than or equal to 0.75 in. (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 greater than 0.75 in. (19mm) or any crack with a mean width less than or equal to 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 as shown in Table 2.

ALLIGATOR CRACKING SEVERITY LEVELS				
	CRACK	CRACK PATTERN		
	SEVERITY	LOW	MED	HIGH
	LOW	LOW	MED	HIGH
CRACK WIDTH	MED	MED	MED	HIGH
	HIGH	HIGH	HIGH	HIGH

Table 2. Alligator Crack Severity Levels

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 less than or equal to 0.25 in. (6 mm). This also includes sealed cracks with sealant in good condition and a width that cannot be determined.

MEDIUM

Cracks with a mean width greater than 0.25 in. (6 mm) but less than 0.75 in. (19 mm). Also, any crack with a mean width less than 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH

Cracks with a mean width greater than 0.75 in. (19 mm). Also, any crack with a mean width less than 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 less than or equal to 0.25 in. (6 mm). Sealed cracks with sealant in good condition and a width that cannot be determined.

MEDIUM

Cracks with a mean width greater 0.25 in. (6 mm) and less than or equal to 0.75 in. (19 mm). Also, any crack with a mean width less than 0.75 in. (19 mm) and adjacent random low severity cracking.

HIGH

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

Patching and Potholes

Description:

Patching is an area of pavement surface that has been removed and replaced with patching material or an area of pavement surface that has had additional patching material applied. Patching may encompass partial lane or full lane width. On full lane width patching; the total, contiguous length of patch may not exceed 0.100 mi. (0.161 km). (Any full-lane patch exceeding 0.100 mi. in length is considered a pavement change). Patching must have a quantifiable area.

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

Manhole covers should not be rated as patches unless there is obvious patching around the manhole.

Speed bumps should not be rated as patches

Severity Levels:

There are no stratified severities for Patching and 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 of 0.20 inches to 0.49 inches Ruts less than 0.20 in. are not included in the distress calculations.

MEDIUM

Ruts with a measured depth of 0.50 inches to 0.99 inches

HIGH

Ruts with a measured depth greater than 1.00 inch

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.

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	

Table 3. International Roughness Index

Roughness Collection Parameters

On shorter roads with a lower speed limit the usefulness in collecting and reporting IRI is negligible. Lower, inconsistent speeds can lead to a less accurate IRI value. Therefore RIP has put in place the following protocols for reporting IRI.

International Roughness Index (IRI) is not reported on routes with the following criteria:

- Posted speed limit is less than 25 mph
- Length of route is less than 0.50 miles

When a collected route has a posted speed limit of at least 25 mph and length of at least 0.50 miles, IRI will be collected except on road sections where the speed is less than 20 mph

Other situations may arise where the speed and length factors are met, but reporting IRI could lead to an inaccurate PCR. RIP will determine whether or not it is reasonable to report IRI on these routes on a case by case basis.

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 greater than or equal to 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 ft.)

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 longitudinal 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 greater than or equal to 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.

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 report the percentage of the 40 measurements within that 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 wheel path 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; Low, Medium, and High, respectively. Only the MAE for high severity rutting can fail a section, since 200% of *only* low severity ruts would yield a rut index of 85 and 200% of *only* medium severity ruts would yield a rut index of 61.

Roughness Condition Index (Asphalt)

$$\mathbf{RCI} = 32 * [5 * (2.718282^{(-.0041 * AVG IRI)})]$$

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:

(Left wheelpath IRI) + (Right wheelpath IRI) 2

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 is collected by FHWA using a Pathway Services Inc. Data Collection Vehicle (DCV), called a 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 jpeg digital imagery files at a frequency of every 26.4feet.

Two forward-facing cameras are mounted above the vehicle cab, one pointed straight ahead and the other to the right shoulder providing seamless roughly 120 degree viewing. A third camera is mounted in the rear of the vehicle, recording the left shoulder.

CAMERA SPECIFICATIONS TWO FORWARD / ONE REAR FACING CAMERA		
Camera lens/type	Prosilica GT 2750 (GigE Technology)	
Image format	*.jpg	
Image resolution	2750 x 2200, 18 frames/second	
Image pixel size	depends on distance	
Zoom ratio	16mm Fixed	
	Aperture Range F 1.8 – Infinity (P-Iris,	
Iris range	Automatic	

Pavement Imaging and Rutting

High resolution rutting data and surface imaging are collected in a single data stream using a threedimensional (3D) pavement surface transverse profile data acquisition system. The 3D camera captures a laser line as it is projected over the pavement surface and uses the location of this line to measure the height deviations of the pavement surface. These height deviations can be used to calculate rutting in both wheelpaths. These deviations also provide a grayscale image detailing the change in height throughout the surface, i.e. providing depth measurements for cracking.

PAVEMENT SURFACE AND TRANSVERSE PROFILE DATA ACQUISITION SYSTEM		
Surface Image Specifications		
Image size	1536 pixels/scan @3000 Hz	
Image width	4 meters (3950 mm nominal)	
Laser class	3B	
Power	16W (Two lasers @ 8W Ea)	
Vehicle speed limitations	62 mph	
Environment	Dry pavement, day or night	
Sensor size (approximate)	1536 pixels x 512 pixels	
Image display length	26.4 feet	
Rutting Specifications		
Reported rut depth units	Inches	
Vehicle speed limitations	Up to 62 mph	
Sampling rate	3000 profiles/second	
Transverse resolution	1536 points/profile	
Transverse field-of-view	14 feet	
Depth accuracy (nominal)	<1mm	
Environment	Dry pavement, day or night, above 32 degrees F	
Adherence to specifications	ASTM E1703M-95 (reapproved 2005)	

THREE-DIMENSIONAL

Distance Measuring Instrument (DMI)

The DMI (Distance Measuring Instrument) obtains road length measurements that are accurate to 0.15%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)

IRI SPECIFICATIONS		
Reported IRI units	Inches/mile	
Vehicle speed limitations	12-62 mph	
IRI equipment certification	Texas Transportation Institute (TTI)	
Wavelengths accommodated	0.5 feet to 300 feet	
IRI computed & reported	World Bank Technical Paper Number 46	
Environment	Dry pavement, day or night, above 32 degrees	
Adherence to specifications	ASTM E950 Class 1 & AASHTO M 328	

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.

GPS & Inertial Systems

GPS is collected by an onboard system employing Omnistar real time correction and a spinning gyroscope to provide accurate positioning data in instances of satellite obstruction. All GPS coordinates are tied to an 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	± 1.75%	
Grade	± 1.75%	
Adherence to specifications	ASTM E1703M-95 (reapproved 2005)	

*NOTE – GPS accuracy is dependent on many different factors. Satellite constellation, tree coverage, GPS receiver quality, and real-time correction availability can all affect the locational and elevation accuracies. The elevation (z coordinate) accuracy is less dependable than locational or horizontal accuracy (x/y coordinates or latitude/longitude). In areas of heavy tree coverage or poor satellite constellations, elevation data can vary by as much as +/- 100 feet.

Appendix B

Methodology for Determining Condition Ratings Using Manual Rating Procedures

Description of Manual Rating Methods

In 2013, the Federal Highway Administration updated existing Manual Rating Procedures in an effort to better align pavement conditions for Manually Rated Routes and Parking with the Highway Pavement Management Application (HPMA). HPMA is the Pavement Management System used by the FHWA to store inventory and condition data from the Road Inventory Program (RIP) and forecast future performance using prediction models. HPMA uses pavement condition data (collected by the Road Inventory Program) to develop life cycles for pavements and recommend treatments to maximize useable pavement life while minimizing costs associated with maintenance and repair.

The Federal Highway Administration (FHWA) developed a set of manual rating methods for pavement that are appropriate for Federal Roadways. Two different methods were developed for linear roads and a separate method was developed for parking areas and nonlinear roads. These methods employ a 0 to 100 rating scale and improve consistency and objectivity in the manual evaluation of surface distresses. They are compatible with ratings that are collected by the automated Data Collection Vehicle (DCV).

- The first of the two manual evaluation methods for roads uses rating criteria to assign index values to each distress type based on a visual evaluation of severity and extent.
- The second manual evaluation method for roads is very time demanding and is best employed on only a select set of routes which may have the highest visitor use and require a more intensive assessment. This method will be used for the Manual Rating of Function Class 1, 2, 7, and 8 Roads. This method is based on measurements that are recorded for each instance of a surface distress. These measurements are converted into index values using conversion formulas.
- Parking areas and non-linear roads are rated similar to the first method shown above, however, there are some slight differences due to the non-linear nature.

The details and criteria used for each of these rating methods are outlined below.

Visual Inspection Method for Manually Rating Secondary Roads

The visual inspection method for manually rated roads uses condition rating criteria that have been developed by FHWA. This criteria is based on a visual evaluation of the severity and extent of distresses to determine the overall condition of the roadway. This method is used for secondary roads that are Functional Class 3, 4, 5, and 6. This constitutes the majority of manually rated roads collected by the Road Inventory Program.

Rating Section Lengths

For this method, Manually Rated Roads are rated in sections. These sections may be made based on length of changes in surface type or condition as described below. The ratings are then aggregated to give an overall rating for the Route:

- Rating sections should be no longer than 0.25 miles in order to keep the area being rated manageable.
- A new rating section may be started based on changes in condition, width, or surface type if these changes represent a significant portion of the route (are not isolated instances).
- If the road condition, width, and surface type remain constant then new sections do not need to be created unless the road exceeds 0.25 miles.

Rating Criteria

For this method, Manually Rated Roads are evaluated using a visual inspection of the six distress types listed below. Each distress is assigned one of five index values. An overall Surface Condition Rating (SCR) and Pavement Condition Rating (PCR) are calculated based on these index values.

- Alligator Cracking
 - o Rating based on percentage of road surface affected
- Longitudinal Cracking
 - o Rating based on severity level (crack width) and percentage of road section length of longitudinal cracks
- Transverse Cracking
 - o Rating based on crack width, crack spacing, and percentage of surface affected
- Patching
 - o Rating based on percentage of road surface affected
- Rutting
 - o Rating based on percentage of road section length affected by visible rutting (>1 inch depth) that requires remediation
- Roughness
 - o Manual assessments of roughness are not made due to the subjectivity of the measurement. Therefore, roughness is not incorporated into the PCR calculation of manually rated roads.

Concrete Routes also receive a PCR rating based on visual evaluation of the following six distress types.

- Slab Faulting at Joints
- Slab Cracking and breakup
- Surface Delamination and Pop-outs
- Joint Distresses
- Patching

Distress Measurement Method for Manually Rating Primary Roads

A more intensive and time demanding assessment than our standard method was developed for Primary roads that are functional class 1, 2, 7, or 8. These high visitation roads are usually accessible by the automated Data Collection Vehicle but in rare instances may need to be manually rated. The method developed is based on measuring each instance of a distress. These measurements are totaled over each section length being measured and are then converted into index values between 0 and 100 (100 being a road with no distress) using index formula equations outlined below. The goal of this method is to produce measured index values which are directly comparable to the automated DCV.

Rating Section Lengths

For the distress measurement method roads are broken into sections in order to rate. Distress measurements are totaled for each section separately in order to determine the index value for that particular section. The section length to be rated is determined based on the following rules:

- Rating sections are between 0.25 and 0.50 miles long
- A new rating section is created if there is a significant change in condition or pavement width
- If there are no significant changes in condition or pavement width, rating sections are broken at equal intervals, typically 0.50 miles

Manual Distress Measurements

Alligator Cracking

- Alligator cracking is measured by area (square feet). Instances of Alligator cracking are measured along the length and multiplied by the average width of the distressed area.
- The index for alligator cracking takes the total area of cracking compared to the interval length and converts it to a percentage. That percentage is then input into an index formula that yields a value between 0 and 100 (0 being the most distressed).
- Severity levels are not defined for manually measured Alligator cracks. The Alligator Crack Index formula is calculated based on an assumption of medium severity.

Longitudinal Cracking

- Longitudinal cracking (cracking in the direction parallel to the roadway) is measured by length (ft.).
- The index for longitudinal cracking takes the total length of cracking compared to the interval length and converts it to a percentage broken down by severity. That percentage is then input into a formula that yields a value between 0 and 100 (0 being the most distressed).
- Two severity levels are defined for manually measured Longitudinal Cracks. Lower severity cracks are those with a mean width of less than 0.25 inches. Sealed cracks with sealant in good condition are also considered lower severity. Higher severity cracks are those with a mean width of greater than 0.25 inches.

Transverse Cracking

- Transverse cracking (cracking in the direction perpendicular to the roadway) is measured by length (ft).
- The index for transverse cracking takes the total number of cracks (1 crack would encompass the full lane) broken down by severity. The total numbers of each severity are then put into a formula that yields a value between 0 and 100 (0 being the most distressed).
- Two severity levels are defined for manually measured Transverse Cracks. Lower severity cracks are those with a mean width of less than or equal to 0.25 inches. Sealed cracks with sealant in

good condition are also considered lower severity. Higher severity cracks are those with a mean width of greater than 0.25 inches.

Patching and Potholes

- Patching and Potholes are measured by area (square feet). Instances of Patching are measured along the length and multiplied by the average width of the patch.
- Instances of full lane width patching cannot be longer than 0.100 miles, otherwise is should be considered a pavement change rather than a distress.
- There are no stratified severities for Patching. It is either present or it is not.

Rutting

- Visible rutting is measured by length (ft.) in each wheel path. Only visible ruts are rated, which are ruts greater than 1 inch deep.
- All rutting recorded in a manual rating is considered to be high severity (> 1 inch). Lesser severities are generally not distinguishable in a visual inspection.

Roughness

• Manual assessments of roughness are not made due to the subjectivity of the measurement. Therefore, roughness is not incorporated into the PCR calculation of manually rated roads.

Index Formulas for Distress Measurement Method:

The method used to convert distress measurements into index values is shown below. The Surface Condition Rating and Pavement Condition Rating are calculated based on these index values.

Alligator Crack Index for Manual Rating:

AC_INDEX = 100 - 40 * (% ALLIGATOR / 15)

Where:

%ALLIGATOR = Percent of total area of section being rated that contains Alligator cracking.

Longitudinal Crack Index for Manual Rating:

 $LC_{INDEX} = 100 - 40 * [(\%LOW / 175) + (\%MED / 75)]$

Where:

%LOW = Percent length of longitudinal cracks where crack width less than or equal to 0.25 inches

%HIGH = Percent length of longitudinal cracks where crack width greater than 0.25 inches

Transverse Crack Index for Manual Rating:

 $TC_INDEX = (100 - 40) * [(LOW / 21.1) + (MED / 4.4)]$

Where:

LOW = Count of the total number of transverse cracks within the section length whereone transverse crack is equal to the lane width and the crack width <= 0.25 inchesHIGH = Count of the total number of transverse cracks within the section length whereone transverse crack is equal to the lane width and the crack width > 0.25 inches Number of cracks is computed as: Total length of transverse cracks/Lane width

Patching Index for Manual Rating:

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

Where:

%PATCHING = Percentage of pavement section that contains patching/potholes.

Rutting Index for Manual Rating:

RUT_INDEX = 100 - 40 * (% RUTTING / 40)

Where:

%RUTTING = Percentage length of high severity rutting within the section being measured.

Method for Manually Rating Paved Parking Areas and Non-Linear Roads

Parking areas are evaluated based on a visual inspection using condition rating criteria that has been developed by FHWA. This criteria is based on a visual evaluation of the severity and extent of distresses to determine the overall condition of the parking area. This overall condition rating is linked to the level of repair and rehabilitation practices required.

A distress index is determined for each of the distresses listed below for Asphalt and Concrete Parking areas. The overall Pavement Condition Rating (PCR) of the parking lot is driven by the most severe distress present.

Rating Criteria:

Asphalt Parking Distress Types

- Alligator Cracking
 - o Rating based on percentage of road surface affected
- Longitudinal, Transverse and Block cracking
 - o Rating based on crack width, crack spacing, and percentage of surface affected
- Rutting and Distortions
 - o Rating based on percentage of road surface affected
- Hot Mix Asphalt Patches
 - o Rating based on overall percentage of HMA patches
- Potholes and Cold Patches
 - o Rating based on percentage of road surface affected
- Surface Raveling and Bleeding
 - o Rating based on percentage of road surface affected

Concrete Parking Distress Types

- Slab Faulting at Joints
 - o Rating based on height differential between adjacent slabs or pieces of broken slabs
- Slab Cracking and breakup
 - o Rating based on quantity of cracks and if slab is acting to able distribute load as designed
- Surface Delamination and Pop-outs
 - o Rating based on percentage of road surface affected to include pop-outs, spalls and surface delamination
- Joint Distresses
 - o Rating based on sealant condition and concrete distresses at/or adjacent to joints
- Patching
 - o Rating based on percentage of road surface affected

Curb Inspection and Treatments

During inspections of manually rated parking lots and routes, the curb reveal and overall curb condition are evaluated. The curb condition is used to determine a recommendation.

Curb Reveal

The vertical distance on the curb face from the gutter flow line or pavement surface to the top of curb. When resurfacing adjacent to curb, the resulting curb reveal should be no less than 4 inches. Additionally, when resurfacing adjacent to a gutter, the resulting pavement surface should be flush with the gutter pan. In cases where a resurfacing would violate either of these parameters, the surface may need to be milled or removed to adjust to these field conditions.

Curb Recommendations

The following treatment categories are based on the overall percentage of distresses along the entire curb structure for a specific pavement structure. Distresses include spalling, cracking, loss of material and any other damage which prevents the curb from conveying storm runoff or failing to perform in its intended function.

- Overall curb damage ranging 0%-5%: o DO NOTHING
- Overall curb damage ranging 5%-20% o LIGHT REPAIR
- Overall curb damage ranging 20%-50% o MODERATE REPAIR
- Overall curb damage greater than 50%: o REPLACE

GPS for Manually Rated Roads and Parking

GPS information for Manually Collected Cycle 6 Routes will be recorded using the latest hardware and software by TRIMBLE 6000 Series GeoXT. Cycle 6 GPS collection units will allow access to GPS and GLONASS, improving overall GPS reliability, accuracy and precision to submeter accuracy. Additionally, the new GPS units have an enhanced ability to collect accurate signals underneath tree cover or adjacent to buildings or natural terrain with extreme vertical gradations that typically reduce GPS accuracy. Trees and buildings create "satellite shadows", limiting the areas where you can reliably collect high-accuracy GPS data. The updated GPS receiver will deliver improved usable data under tree canopy or in natural or urban canyons. Routes that were previously collected accurately will not be recollected in Cycle 6.

TRIMBLE 6000 SERIES GeoXT GPS SPECIFICATIONS		
Receiver	Trimble Maxwell [™] 6 GNSS chipset	
Channels	220 channels	
Systems	GPS / GLONASS / WAAS	
Accuracy	Sub-meter	
Operation Temperature	-20 °C to +60 °C (-4 °F to +140 °F)	
Cellular and Wireless	UMTS / HSDPA / GPRS / EDGE / Wi-Fi / Bluetooth	
Internal Still Camera w/ GEOTAG ability	Autofocus 5 MP (JPG) and WMV w/ Audio	

Appendix C Description of Cycle 6 Deliverables

Final Report Delivery

The Final Report will contain all data collected by Manual Inspection and the Data Collection Vehicle. All information provided in the Interim Report will be included in the Final report. Manually collected information reported in the Interim Report may be updated in the Final Report if pavement conditions have substantially changed between the Manual Inspection and Data Collection Vehicle Inspection or other unforeseen circumstances.

The final report will be released approximately 8 months after the Data Collection Vehicle completes its collection of that specific park.

Data included in the Final Report package consists of the following:

- Condition Photos: All photos taken during Cycle 6.
- **Data Video:** Data and video of each route collected by the DCV will viewable through PATHVIEW software. PATHVIEW Software and training will be provided to NPS personnel by Eastern Federal Lands.
- **GPS on All Rated Routes:** All GPS data collected from the DCV will be provided. 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 units.
 - o GPS will be provided as Shapefiles and KMLs
 - o All GPS data related to road collection with be linear referenced to the collected length
- **Geodatabase Background and Metadata:** In addition to this park report, a geodatabase containing both tabular and spatial data specific to this park has been provided.
 - All data disseminated in the preceding report has been obtained from the tables and fields within said geodatabase. The geodatabase can be referenced for tabular data via Microsoft Access or for both tabular and spatial data via ESRI's ArcGIS Suite of software which consists of; ArcMap, ArcCatalog and ArcExplorer.
 - Consolidating the RIP data into one database creates a seamless relationship of tables and geographic data. It allows RIP to facilitate easier updates and enhancements in the future. A geodatabase can be thought of as simply a database containing spatial data. 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.
- **Report (RIP Report and Route ID):** A PDF report will be provided that includes a list of all routes and key data. Condition reports for each route will be included. All changes, additions and deletions to any route will be included in the report. Features along routes will not be collected in Cycle 6.

Partial DCV Collections

Additional Partial DCV Collections may be done on specific parks depending on their size and overall mileage of routes within its boundaries during Cycle 6. Parks with greater than 10 miles of paved roadways will receive at least one additional Partial DCV collection during Cycle 6. Data collected during these Partial DCV Collections will not result in the delivery of an additional report to the park.

Data collected by the DCV during Partial DCV Collection will be used to improve HPMA modeling by providing additional "snapshots in time" of park pavement conditions. This improved HMPA modeling will assist in the programing and budgeting of future projects which will help maximize the life of pavement infrastructures.

Instead of receiving a report of conditions collected during the Partial DCV collection, the park will receive a formal letter from the Road Inventory Program requesting coordination for the additional Partial DCV collection, identifying the dates of the Partial DCV Collection and will reinforce the purpose and importance of the Partial DCV Collection.

Appendix D

Glossary of Terms and Abbreviations

Glossary of Terms and Abbreviations

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
AC	Alligator Cracking
CRS	Condition Rating Sheets (Section 5)
Curb Recommendation	Curb remediation based on overall percentage of curb distress
Curb Reveal	Height of curb exposed from gutter flow line to top of curb
DCV	Data Collection Vehicle
Excellent	Excellent rating with an index value of 95 to 100
Fair	Fair rating with an index value from 61 to 84
FUNCT_CLASS	Functional Classification (see Route ID, Section 2)
Good	Good rating with an index value from 85 to 94
IRI	International Roughness Index
HPMA	Highway Pavement Management Application
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
РАТСН	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
ТС	Transverse Cracking