

COLO Cycle 6

Final Report

Road Inventory and Condition Assessment of Paved Routes Colonial National Historical Park



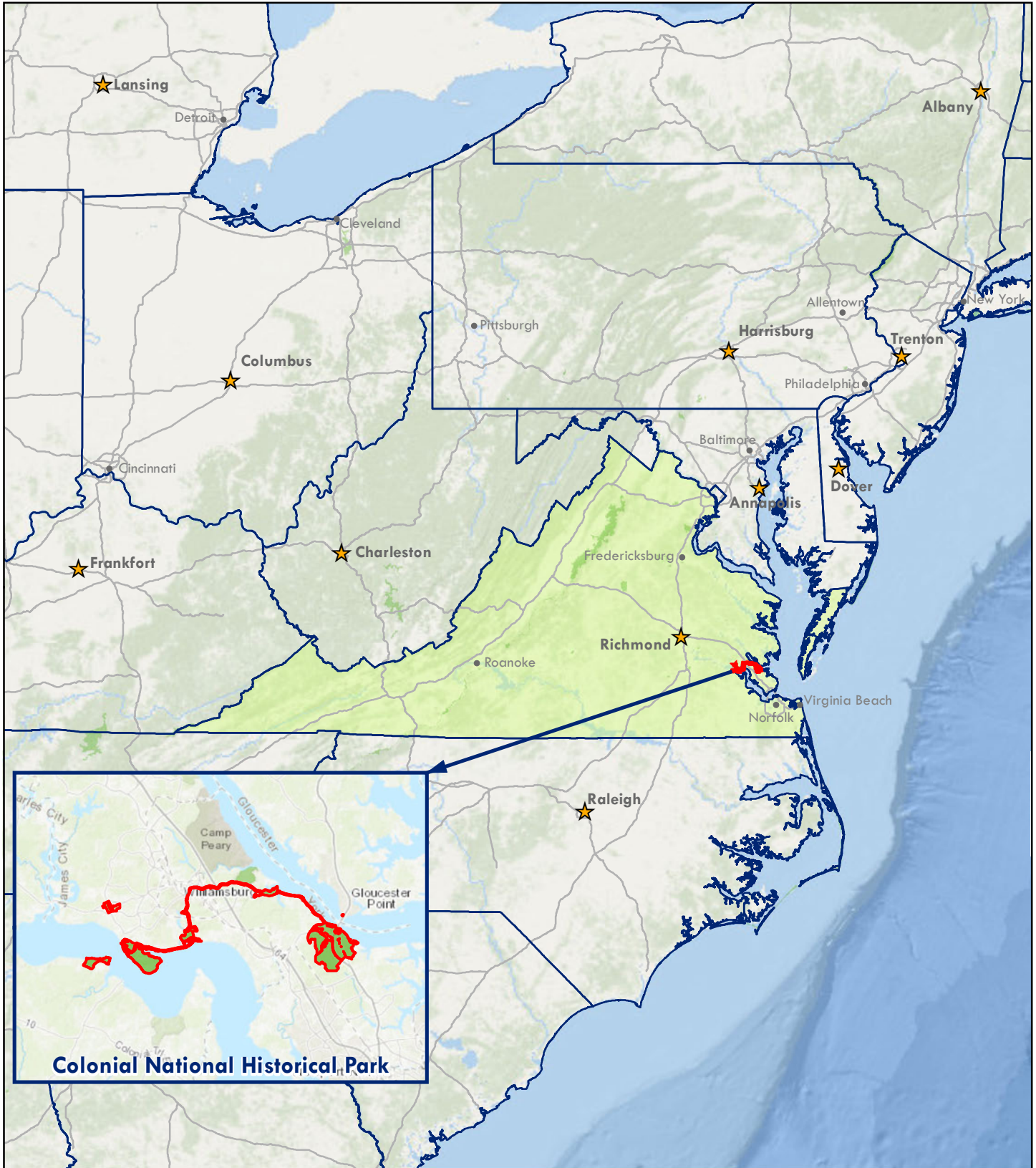
**Federal Lands Highway
Road Inventory Program**

Prepared By:

**Federal Highway Administration
Eastern Federal Lands Highway Division
Road Inventory Program (RIP)**

Report Date: December 2021

Colonial National Historical Park in Virginia



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



Table of Contents

SECTION	PAGE NO.
1. INTRODUCTION	1 - 1
2. PARK ROUTE INVENTORY Route ID Report, Subcomponent Report, and Changes Report (As Applicable)	2 - 1
3. PARK SUMMARY INFORMATION Parkwide Paved Route Condition Summary	3 - 1
Explanation of Condition Descriptions	3 - 2
Route-Level Condition Summary Reports for Data Collection Vehicle, Manually Rated, and Parking Area Routes (As Applicable)	3 - 3
4. PARK ROUTE LOCATION MAPS Route Location Key Map	4 - 1
Route Location Area Map(s)	4 - 2
Route Condition Key Map – PCR Mile by Mile	4 - 7
Route Condition Area Map(s) – PCR Mile by Mile	4 - 8
5. PAVED ROAD CONDITION RATING SHEETS Paved Road Pages	5 - 1
6. PAVED PARKING AREA CONDITION RATING SHEETS Paved Parking Area Pages	6 - 1
7. ROAD MILEPOST INFORMATION Road Milepost Information and Logs	7 - 1
8. APPENDIX Improvements to the RIP Index Equations and Determination of PCR	8 - 1
Description of the Rating System	8 - 2
Explanation of the Condition Descriptions	8 - 3
Description of Pavement Treatment Types	8 - 4
Appendix A: Methodology for Determining Condition Ratings with the Data Collection Vehicle (DCV)	8 - 5
Appendix B: Methodology for Determining Condition Ratings Using Manual Rating Procedures	8 - 20
Appendix C: Description of Cycle 6 Deliverables	8 - 29
Appendix D: Glossary of Terms and Abbreviations	8 - 32

Section 1 Introduction



Colonial National Historical Park



**Federal Lands Highway
Road Inventory Program**

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



Colonial National Historical Park



Federal Lands Highway
Road Inventory Program

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
						From	To									
0001	6	2	49952		COLONIAL PARKWAY	FROM ROUTE 0901 (YORKTOWN VISITOR CENTER PARKING)	TO BEGIN OF ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS) AT GATE	YORKTOWN	YES	22.87	0.00	22.87	1		CO	1,1A,2,3,4
0100	6	2	54847		UNTOUCHED REDOUBT ROAD	FROM INTERSECTION OF ROUTE 0500 (WEST TOUR ROAD) AND STATE HIGHWAY 238 (GOOSLEY ROAD)	TO END OF LOOP	YORKTOWN	YES	0.41	0.00	0.41	1		AS	4
0101	6	2	54840		GRAND FRENCH BATTERY ROAD	FROM STATE HIGHWAY 704 (COOK ROAD)	TO END OF LOOP	YORKTOWN	YES	0.20	0.00	0.20	1		AS	4
0102ZZ	6	2	102863		SURRENDER FIELD ACCESS ROADS	FROM INTERSECTION OF ROUTE 0225 (SURRENDER ROAD) AND ROUTE 0502 (AFTERMATH ROAD)	TO END OF LOOP	YORKTOWN	YES	0.24	0.00	0.24	1		AS	4
0103	6	2	54843		REDOUBT 9 AND 10 ACCESS ROAD	FROM INTERSECTION OF ROUTE 0503ZZ (EAST TOUR ROADS) AND BALLARD STREET	TO END OF LOOP	YORKTOWN	YES	0.22	0.00	0.22	1		AS	4
0104	6	2	54845		MOORE HOUSE ACCESS ROAD	FROM INTERSECTION OF ROUTE 0503ZZ (EAST TOUR ROADS) AND BALLARD STREET	TO ROUTE 0928 (MOORE HOUSE PARKING)	YORKTOWN	YES	0.18	0.00	0.18	1		AS	4
0105A	6	2	99196		U.S. HIGHWAY 17 ACCESS ROAD A	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 0.75 (ON RIGHT)	TO U.S. HIGHWAY 17	YORKTOWN	YES	0.18	0.00	0.18	1		CO	4
0105B	6	2	99197		U.S. HIGHWAY 17 ACCESS ROAD B	FROM U.S. HIGHWAY 17	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 0.54 (ON LEFT)	YORKTOWN	YES	0.18	0.00	0.18	1		CO	4
0106	6	2	99198		FUSILIER'S ROAD	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 1.66 (ON RIGHT)	TO OLD WILLIAMSBURG ROAD / WATER STREET	YORKTOWN	YES	0.35	0.00	0.35	1		AS	3
0107A	6	2	99199		CHEATHAM ANNEX ACCESS ROAD A	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 8.39 (ON RIGHT)	TO SANDA AVENUE	YORKTOWN	YES	0.04	0.00	0.04	1		AS	2

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)

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

COLO Colonial National Historical Park

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
						From	To									
0107B	6	2	99200		CHEATHAM ANNEX ACCESS ROAD B	FROM PENNIMAN ROAD	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 8.51 (ON LEFT)	YORKTOWN	YES	0.12	0.00	0.12	1		AS	2
0108A	6	2	99201		QUEENS LAKE ACCESS A	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 11.21 (ON LEFT)	TO HUBBARD LANE	JAMESTOWN	YES	0.14	0.00	0.14	1		AS	2
0108B	6	2	99202		QUEENS LAKE ACCESS B	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 11.31 (ON RIGHT)	TO HUBBARD LANE	JAMESTOWN	YES	0.13	0.00	0.13	1		AS	2
0109A	6	2	99203		PARKWAY DRIVE ACCESS ROAD A	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 11.90 (ON RIGHT)	TO PARKWAY DRIVE	JAMESTOWN	YES	0.10	0.00	0.10	1		AS	2
0109B	6	2	99204		PARKWAY DRIVE ACCESS ROAD B	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 12.09 (ON LEFT)	TO PARKWAY DRIVE	JAMESTOWN	YES	0.12	0.00	0.12	1		AS	2
0110	6	2	99205		STATE HIGHWAY 359	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.81	TO PARK BOUNDARY AT PAVEMENT CHANGE (CONCRETE TO ASPHALT)	JAMESTOWN	YES	0.06	0.00	0.06	1		CO	1A
0111A	6	2	99206		STATE HIGHWAY 199 KINGS POINT A	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.76	TO PARK BOUNDARY AT PAVEMENT CHANGE	JAMESTOWN	YES	0.06	0.00	0.06	1		AS	2
0111B	6	2	99207		STATE HIGHWAY 199 KINGS POINT B	FROM PARK BOUNDARY AT PAVEMENT CHANGE	TO ROUTE 0001 (COLONIAL PARKWAY)	JAMESTOWN	YES	0.08	0.00	0.08	1		AS	2
0111C	6	2	99208		STATE HIGHWAY 199 KINGS POINT C	FROM STATE HIGHWAY 199 WESTBOUND	TO ROUTE 0001 (COLONIAL PARKWAY)	JAMESTOWN	YES	0.11	0.00	0.11	1		AS	2
0111D	6	2	99209		STATE HIGHWAY 199 KINGS POINT D	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.93	TO STATE HIGHWAY 199 EASTBOUND	JAMESTOWN	YES	0.12	0.00	0.12	1		AS	2
0112A	6	2	102864		NEWPORT AVENUE ACCESS ROAD A	FROM NEWPORT AVENUE	TO ROUTE 0001 (COLONIAL PARKWAY) (TOWARDS YORKTOWN)	JAMESTOWN	YES	0.06	0.00	0.06	1		CO	2

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
						From	To									
0112B	6	2	102867		NEWPORT AVENUE ACCESS ROAD B	FROM NEWPORT AVENUE	TO ROUTE 0001 (COLONIAL PARKWAY) (TOWARDS JAMESTOWN)	JAMESTOWN	YES	0.09	0.00	0.09	1		CO	2
0113	6	2		■	NORTH ENGLAND STREET ACCESS ROAD	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP (ON RIGHT)	TO PARK BOUNDARY	JAMESTOWN	YES	0.06	0.00	0.06	1		CO	2
0224ZZ	6	2	54848		WASHINGTON'S HEADQUARTERS ROADS	FROM ROUTE 0500 (WEST TOUR ROAD)	TO END OF LOOP	YORKTOWN	YES	0.35	0.00	0.35	1		AS	4
0225	6	2	54836		SURRENDER ROAD	FROM STATE HIGHWAY 704 (COOK ROAD) NORTH END	TO STATE HIGHWAY 704 (COOK ROAD) SOUTH END	YORKTOWN	YES	1.27	0.00	1.27	1		AS	4
0226ZZ	6	2	54849		FRENCH LOOP ROADS	FROM ROUTE 0500 (WEST TOUR ROAD)	TO END OF LOOP	YORKTOWN	YES	2.54	0.00	2.54	1		AS	4
0400ZZ	6	2	99097		YORKTOWN MAINTENANCE UTILITY ROADS	FROM U.S. HIGHWAY 17 AND 238 GOOSLEY	TO ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)	YORKTOWN	NO	0.26	0.00	0.26	6		AS	4
0401	6	2	99102		YORKTOWN MAINTENANCE AREA RESIDENCE ROAD	FROM ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)	TO YORKTOWN COLLECTION STORAGE BUILDING #3	YORKTOWN	NO	0.09	0.00	0.09	6		AS	4
0402ZZ	6	2	102878		PERSERVATION VIRGINIA ACCESS ROADS	FROM ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)	TO END	JAMESTOWN	NO	0.00	0.38	0.38	5		GR	1A
0403ZZ	6	2	99211		JAMESTOWN MAINTENANCE ROADS	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO STATE ROUTE 682 (NECK O LAND ROAD)	JAMESTOWN	NO	0.18	0.00	0.18	5		AS	1
0411	NC		99214		LACKEY FIRE ROAD	FROM STATE HIGHWAY 238	TO ROUTE 0500 (WEST TOUR ROAD)	YORKTOWN	NO	0.00	0.34	0.34	6		NV	4
0412	NC		99215		FIRE ROAD #3	FROM ROUTE 0500 (WEST TOUR ROAD)	TO CRAWFORD ROAD	YORKTOWN	NO	0.00	0.33	0.33	6		GR	4
0414	NC		99216		FIRE ROAD #1	FROM SIEGE LANE	TO PARK BOUNDARY	YORKTOWN	NO	0.00	0.06	0.06	6		GR	4
0416ZZ	NC				GLASSHOUSE ACCESS ROADS	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO END	JAMESTOWN	NO	0.00	0.06	0.06	6		GR	1A

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

ROAD INVENTORY (1100 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
						From	To									
0500	6	2	54852		WEST TOUR ROAD	FROM ROUTE 0102ZZ (SURRENDER FIELD ACCESS ROADS)	TO INTERSECTION OF ROUTE 0100 (UNTOUCHED REDOUBT ROAD) AND STATE HIGHWAY 238 (GOOSLEY ROAD)	YORKTOWN	YES	4.28	0.00	4.28	1		AS	4
0501AZZ	6	2	54573		ISLAND DRIVE WEST LOOP ROADS	FROM INTERSECTION OF ROUTE 0001 (COLONIAL PARKWAY) AND ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING) AT JAMESTOWN	TO END OF LOOP	JAMESTOWN	YES	2.40	0.14	2.54	1		AS	1,1A
0501B	6	2	54579		ISLAND DRIVE EAST LOOP	FROM ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)	TO ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)	JAMESTOWN	YES	2.16	0.12	2.28	1		AS	11
0502	6	2	54922		AFTERMATH ROAD	FROM INTERSECTION OF ROUTE 0102ZZ (SURRENDER FIELD ACCESS ROADS) AND ROUTE 0225 (SURRENDER ROAD)	TO ROUTE 0225 (SURRENDER ROAD)	YORKTOWN	YES	0.55	0.00	0.55	1		AS	4
0503ZZ	6	2	54924		EAST TOUR ROADS	FROM BALLARD STREET	THROUGH EAST TOUR ROADS	YORKTOWN	YES	2.16	0.00	2.16	1		AS	4

NON-NPS ROADS INVENTORY

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)	Surf. Type	Area Map
						From	To									
5000	4	1			CENTERVILLE ROAD	FROM MONTICELLO AVENUE	TO JOHN TYLER MEMORIAL HIGHWAY	JAMESTOWN	NO	0.73	0.00	0.73			AS	KEY

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Description		Maintenance District	FLTP	Access Level	Area (SQ FT)	Surf. Type	Area Map	
					From	To							
0901	6	2	54907		YORKTOWN VISITOR CENTER PARKING	FROM BEGINNING OF ROUTE 0001 (COLONIAL PARKWAY)	TO PARKING	YORKTOWN	YES	PUBLIC	129,807	AS	4
0902ZZ	6	2	54914		REDOUBT 9 & 10 ACCESS ROAD PARKING AREAS	ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) ON LEFT AND RIGHT		YORKTOWN	YES	PUBLIC	2,177	AS	4
0903	6	2	54916		UNTOUCHED REDOUBT LOOP/PARKING	ADJACENT TO ROUTE 0100 (UNTOUCHED REDOUBT ROAD)		YORKTOWN	YES	PUBLIC	1,015	AS	4
0904	6	2	54917		GLASSHOUSE PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 22.03 (ON RIGHT)	TO PARKING	JAMESTOWN	YES	PUBLIC	40,359	AS	1A
0905	6	2	54918		FUSILIER'S PARKING	FROM ROUTE 0106 (FUSILIER'S ROAD) AT MP 0.16 (ON LEFT)	TO ROUTE 0106 (FUSILIER'S ROAD) AT MP 0.20 (ON LEFT)	YORKTOWN	YES	PUBLIC	12,114	AS	3
0906	6	2	54919		NAVAL WEAPONS STATION PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 2.98 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.02 (ON RIGHT)	YORKTOWN	YES	PUBLIC	8,340	CO	3
0907	6	2	54920		YORKTOWN RIVER OVERLOOK	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.43 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.47 (ON RIGHT)	YORKTOWN	YES	PUBLIC	4,648	CO	3
0908	6	2	54921		POWHATAN VILLAGE	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.20 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.24 (ON RIGHT)	YORKTOWN	YES	PUBLIC	9,045	CO	3
0909	6	2	54927		INDIAN FIELD CREEK PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.32 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.35 (ON LEFT)	YORKTOWN	YES	PUBLIC	8,159	CO	3
0910	6	2	54931		CHEATHAM ANNEX PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.68 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.72 (ON RIGHT)	YORKTOWN	YES	PUBLIC	8,472	CO	3
0911	6	2	54932		RINGFIELD PLANTATION PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.93 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.98 (ON RIGHT)	YORKTOWN	YES	PUBLIC	12,212	CO	3
0912	6	2	56258		JONES MILL PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 9.35 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 9.37 (ON LEFT)	JAMESTOWN	YES	PUBLIC	6,557	CO	2
0913	6	2	56259		PALISADES GREAT OAKS PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 13.97 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.01 (ON LEFT)	JAMESTOWN	YES	PUBLIC	9,942	CO	2
0914	6	2	56260		PAPER MILL CREEK PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.17 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.21 (ON LEFT)	JAMESTOWN	YES	PUBLIC	6,513	CO	2

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Name	Route Description		Maintenance District	FLTP	Access Level	Area (SQ FT)	Surf. Type	Area Map
						From	To						
0915	6	2	56261		COLLEGE CREEK PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.56 (ON RIGHT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.65 (ON RIGHT)	JAMESTOWN	YES	PUBLIC	19,640	CO	2
0916	6	2	56262		JAMES RIVER (ORIENTATION MAP) PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.93 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.96 (ON LEFT)	JAMESTOWN	YES	PUBLIC	9,891	CO	2
0917	6	2	56263		ARCHER'S HOPE PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 17.91 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 18.01 (ON LEFT)	JAMESTOWN	YES	PUBLIC	19,300	CO	2
0918	6	2	56264		GLEBE LAND (MILL CREEK) PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.37 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.46 (ON LEFT)	JAMESTOWN	YES	PUBLIC	25,887	CO	1
0919	6	2	56265		REAL ESTATE PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.77 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.80 (ON LEFT)	JAMESTOWN	YES	PUBLIC	9,320	CO	1
0920	6	2	56266		NECK O LAND PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 20.24 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 20.31 (ON LEFT)	JAMESTOWN	YES	PUBLIC	18,557	CO	1
0921	6	2	56267		POWHATAN CREEK PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.81 (ON LEFT)	TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.93 (ON LEFT)	JAMESTOWN	YES	PUBLIC	24,688	CO	1A
0922	6	2	56269		YORKTOWN VISITOR PARKING (CHURCH STREET)	FROM CHURCH STREET	TO READ STREET	YORKTOWN	YES	PUBLIC	18,811	AS	4
0923	6	2	56272		YORKTOWN MONUMENT VICTORY AND ALLIANCE PARKING	FROM BACON STREET	TO ZWEYBRUCKEN ROAD	YORKTOWN	YES	PUBLIC	9,646	AS	4
0924	6	2	56273		YORKTOWN BEACH PICNIC AREA PARKING	FROM WATER STREET	TO PARKING	YORKTOWN	YES	PUBLIC	52,353	AS	4
0925	6	2	56274		CORNWALLIS' CAVE PARKING	ADJACENT TO WATER STREET		YORKTOWN	YES	PUBLIC	1,655	AS	4
0926	6	2	56275		YORKTOWN NATIONAL CEMETERY / SECOND SIEGE PARKING	FROM COOK ROAD	TO COOK ROAD	YORKTOWN	YES	PUBLIC	8,517	AS	4
0927ZZ	6	2	56276		GRAND FRENCH BATTERY PARKING AREAS	ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD)		YORKTOWN	YES	PUBLIC	2,739	AS	4

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

COLO Colonial National Historical Park

PARKING AREA INVENTORY (1300 SERIES FMSS LOCATIONS)

Route No.	Cycle Collected	Iteration Collected	FMSS Number	Concession	Route Description		Maintenance District	FLTP	Access Level	Area (SQ FT)	Surf. Type	Area Map	
					From	To							
0928	6	2	56277		MOORE HOUSE PARKING	FROM END OF ROUTE 0104 (MOORE HOUSE ACCESS ROAD)	TO MOORE HOUSE ROAD (NON NPS)	YORKTOWN	YES	PUBLIC	7,403	AS	4
0929	6	2	56279		SURRENDER FIELD ACCESS PARKING	ADJACENT TO ROUTE 0102ZZ (SURRENDER FIELD ACCESS ROADS)		YORKTOWN	YES	PUBLIC	2,160	AS	4
0930	6	2	56280		WASHINGTON'S HEADQUARTERS PARKING	FROM ROUTE 0224ZZ (WASHINGTON'S HEADQUARTERS ROADS)	TO PARKING	YORKTOWN	YES	PUBLIC	804	AS	4
0931	6	2	56281		FRENCH CEMETERY PARKING	FROM ROUTE 0500 (WEST TOUR ROAD) AT MP 1.90 (ON RIGHT)	TO ROUTE 0500 (WEST TOUR ROAD) AT MP 1.91 (ON RIGHT)	YORKTOWN	YES	PUBLIC	2,281	AS	4
0932	6	2	99128		NECK O LAND VISITOR CONTACT PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.04 (ON LEFT)	TO PARKING	JAMESTOWN	YES	PUBLIC	76,224	AS	1A
0950	6	2	56282		JAMESTOWN VISITOR CENTER PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 22.88 (ON RIGHT)	TO INTERSECTION OF ROUTE 0001 (COLONIAL PARKWAY) AND ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)z	JAMESTOWN	YES	PUBLIC	129,457	AS	1A
0951ZZ	6	2			ISLAND DRIVE SHORT LOOP PARKING AREAS	FROM ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	JAMESTOWN	YES	PUBLIC	33,471	AS	1
0952ZZ	6	2			ISLAND DRIVE OUTER LOOP PARKING AREAS	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	JAMESTOWN	YES	PUBLIC	27,881	AS	1
0953	6	2			BELLFIELD INTERPRETIVE AREA PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO PARKING	YORKTOWN	YES	PUBLIC	12,769	CO	3
0954	6	2			GREAT NECK PICNIC PARKING	FROM ROUTE 0111A (STATE HIGHWAY 199 KINGS POINT A)	TO PARKING	JAMESTOWN	YES	PUBLIC	50,386	AS	2
0955	6	2			ISTHMUS OVERLOOK PARKING	FROM ROUTE 0001 (COLONIAL PARKWAY) ON RIGHT	TO ROUTE 0001 (COLONIAL PARKWAY) ON RIGHT	YORKTOWN	YES	PUBLIC	4,904	AS	1A
0990	6	2	56283		JAMESTOWN MAINTENANCE PARKING	FROM ROUTE 0403ZZ (JAMESTOWN MAINTENANCE ROADS)	TO ROUTE 0403ZZ (JAMESTOWN MAINTENANCE ROADS)	JAMESTOWN	NO	NONPUBLIC	14,195	AS	1
0999	6	2	56284		YORKTOWN MAINTENANCE PARKING	FROM ROUTE 0400ZZ (YORKTOWN MAINTENANCE UTILITY ROADS) AND ROUTE 0401 (YORKTOWN MAINTENANCE AREA RESIDENCE ROAD)	TO ROUTE 0400ZZ (YORKTOWN MAINTENANCE UTILITY ROADS)	YORKTOWN	NO	NONPUBLIC	205,715	AS	4

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

Cycle 6 Summary Totals for Colonial National Historical Park

Cycle 6 Route Totals			
	NPS Maintained	Concessionaire Maintained	Park Totals
Paved Roads, Data Collection Vehicle Rated (Miles)	42.22	0.06	42.28
Paved Roads, Manually Rated Length (Miles)	0.09	0	0.09
Paved Roads, Manually Rated Area (Sq. Ft.)	0	0	0
Unpaved Roads (Miles)	1.43	0	1.43
Paved Parking (Sq. Ft.)	1,048,014	0	1,048,014
Unpaved Parking (Sq. Ft.)	0	0	0

Cycle 6 Lane Miles and Overall Pavement Condition		
	Lanes Miles*	Pavement Condition Rating**
Data Collection Vehicle Routes	85.72	69
Manually Rated Roads	0.10	30
Parking Areas	18.04	79

* Equivalent Lane Miles are calculated by route using the following equations:
 - DCV and MRLs = (PAVE_WIDTH x PAVED_MI) / 11 foot lane
 - MRPs and PKGs = SQ_FEET / 5280 / 11 foot lane

**Parking and Manually Rated Routes are assigned the following PCR values based on the type of observed distresses:
 -Excellent = 97 -Good = 90 -Fair = 73
 -Poor = 53, 30, or 0 -Construction / Not Rated = -1

Cycle 6 NPS / RIP Route ID Report

(Numerical By Summary Route and Subcomponent #)



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

General Park Road Functional Classification (FC) Table

FC	Type	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 Pavement 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.

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

SUMMARY ROUTE INVENTORY FOR ROADS (1100 SERIES FMSS LOCATIONS)

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0102ZZ	102863	6	2		SURRENDER FIELD ACCESS ROADS	FROM INTERSECTION OF ROUTE 0225 (SURRENDER ROAD) AND ROUTE 0502 (AFTERMATH ROAD)	TO END OF LOOP	YES	0.24	0.00	0.24	1	
0224ZZ	54848	6	2		WASHINGTON'S HEADQUARTERS ROADS	FROM ROUTE 0500 (WEST TOUR ROAD)	TO END OF LOOP	YES	0.35	0.00	0.35	1	
0226ZZ	54849	6	2		FRENCH LOOP ROADS	FROM ROUTE 0500 (WEST TOUR ROAD)	TO END OF LOOP	YES	2.54	0.00	2.54	1	
0400ZZ	99097	6	2		YORKTOWN MAINTENANCE UTILITY ROADS	FROM U.S. HIGHWAY 17 AND 238 GOOSLEY	TO ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)	NO	0.26	0.00	0.26	6	
0402ZZ	102878	6	2		PERSERVATION VIRGINIA ACCESS ROADS	FROM ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)	TO END	NO	0.00	0.38	0.38	5	
0403ZZ	99211	6	2		JAMESTOWN MAINTENANCE ROADS	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO STATE ROUTE 682 (NECK O LAND ROAD)	NO	0.18	0.00	0.18	5	
0416ZZ					GLASSHOUSE ACCESS ROADS	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO END	NO	0.00	0.06	0.06	6	
0501AZZ	54573	6	2		ISLAND DRIVE WEST LOOP ROADS	FROM INTERSECTION OF ROUTE 0001 (COLONIAL PARKWAY) AND ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING) AT JAMESTOWN	TO END OF LOOP	YES	2.40	0.14	2.54	1	
0503ZZ	54924	6	2		EAST TOUR ROADS	FROM BALLARD STREET	THROUGH EAST TOUR ROADS	YES	2.16	0.00	2.16	1	

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

SUMMARY ROUTE INVENTORY FOR PARKING AREAS (1300 SERIES FMSS LOCATIONS)

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	User Access	Area (SQ FT)
						From	To			
0902ZZ	54914	6	2		REDOUBT 9 & 10 ACCESS ROAD PARKING AREAS	ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) ON LEFT AND RIGHT		YES	PUBLIC	2,177
0927ZZ	56276	6	2		GRAND FRENCH BATTERY PARKING AREAS	ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD)		YES	PUBLIC	2,739
0951ZZ		6	2		ISLAND DRIVE SHORT LOOP PARKING AREAS	FROM ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	33,471
0952ZZ		6	2		ISLAND DRIVE OUTER LOOP PARKING AREAS	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	27,881

COLO-0102ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0102AZ	102863	6	2		SURRENDER FIELD ACCESS ROAD	FROM INTERSECTION OF ROUTE 0225 (SURRENDER ROAD) AND ROUTE 0502 (AFTERMATH ROAD)	TO END OF LOOP	YES	0.22	0.00	0.22	1	
0102BZ	102863	6	2		SURRENDER FIELD ACCESS SPUR ROAD	FROM ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)	TO ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)	YES	0.03	0.00	0.03	1	

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

COLO-0224ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0224AZ	54848	6	2		WASHINGTON'S HEADQUARTERS ROAD	FROM ROUTE 0500 (WEST TOUR ROAD) AT MP 1.72	TO END OF LOOP	YES	0.32	0.00	0.32	1	
0224BZ	54848	6	2		WASHINGTON'S HEADQUARTERS SPUR ROAD	FROM ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)	TO ROUTE 0500 (WEST TOUR ROAD)	YES	0.03	0.00	0.03	1	

COLO-0226ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0226AZ	54849	6	2		FRENCH LOOP ROAD	FROM ROUTE 0500 (WEST TOUR ROAD)	TO END OF LOOP	YES	2.49	0.00	2.49	1	
0226BZ	54849	6	2		FRENCH LOOP SPUR ROAD	FROM ROUTE 0226AZ (FRENCH LOOP ROAD)	TO ROUTE 0500 (WEST TOUR ROAD)	YES	0.05	0.00	0.05	1	

COLO-0400ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0400AZ	99097	6	2		YORKTOWN MAINTENANCE UTILITY ROAD A	FROM U.S. HIGHWAY 17	TO ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)	NO	0.07	0.00	0.07	6	
0400BZ	99097	6	2		YORKTOWN MAINTENANCE UTILITY ROAD B	FROM 238 GOOSLEY	TO ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)	NO	0.19	0.00	0.19	6	

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

COLO-0402ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0402AZ	102878	6	2		PERSERVATION VIRGINIA ACCESS ROAD	FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 22.81 (ON RIGHT)	TO END	NO	0.00	0.24	0.24	5	
0402BZ	102878	6	2		PERSERVATION VIRGINIA TURN AROUND	FROM ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)	TO ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)	NO	0.00	0.10	0.10	5	
0402CZ	102878	6	2		PERSERVATION VIRGINIA ROAD	FROM ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)	TO END	NO	0.00	0.04	0.04	5	

COLO-0403ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0403AZ	99211	6	2		JAMESTOWN MAINTENANCE ROAD A	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO ROUTE 0990 (JAMESTOWN MAINTENANCE PARKING)	NO	0.07	0.00	0.07	5	
0403BZ	99211	6	2		JAMESTOWN MAINTENANCE ROAD B	FROM STATE ROUTE 682 (NECK O LAND ROAD)	TO ROUTE 0990 (JAMESTOWN MAINTENANCE PARKING)	NO	0.12	0.00	0.12	5	

COLO-0416ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0416AZ					GLASSHOUSE ACCESS ROAD A	FROM ROUTE 0001 (COLONIAL PARKWAY)	TO END	NO	0.00	0.05	0.05	6	
0416BZ					GLASSHOUSE ACCESS ROAD B	FROM ROUTE 0416AZ (GLASSHOUSE ACCESS ROAD A)	TO END	NO	0.00	0.01	0.01	6	

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

COLO-0501AZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0501AAZ	54573	6	2		ISLAND DRIVE WEST LOOP	FROM INTERSECTION OF ROUTE 0001 (COLONIAL PARKWAY) AND ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING) AT JAMESTOWN	TO END OF LOOP	YES	2.34	0.14	2.48	1	
0501ABZ	54573	6	2		ISLAND DRIVE WEST LOOP SPUR	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	0.06	0.00	0.06	1	

COLO-0503ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	Paved Miles	Unpaved Miles	Total Mileage	Functional Class	Area (SQ FT)
						From	To						
0503AZ	54924	6	2		EAST TOUR ROAD A	FROM INTERSECTION OF ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AND BALLARD STREET	TO ROUTE 0225 (SURRENDER ROAD)	YES	1.83	0.00	1.83	1	
0503BZ	54924	6	2		EAST TOUR ROAD B	FROM INTERSECTION OF ROUTE 0104 (MOORE HOUSE ACCESS ROAD)	TO ROUTE 0503AZ (EAST TOUR ROAD A)	YES	0.33	0.00	0.33	1	

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

COLO-0902ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	User Access	Area (SQ FT)
						From	To			
0902AZ	54914	6	2		REDOUBT 9 & 10 ACCESS ROAD PARKING A	ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.15 (ON RIGHT)		YES	PUBLIC	986
0902BZ	54914	6	2		REDOUBT 9 & 10 ACCESS ROAD PARKING B	ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.17 (ON LEFT)		YES	PUBLIC	508
0902CZ	54914	6	2		REDOUBT 9 & 10 ACCESS ROAD PARKING C	ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.17 (ON RIGHT)		YES	PUBLIC	683

COLO-0927ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	User Access	Area (SQ FT)
						From	To			
0927AZ	56276	6	2		GRAND FRENCH BATTERY PARKING A	ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD) AT MP 0.05 (ON RIGHT)		YES	PUBLIC	1,330
0927BZ	56276	6	2		GRAND FRENCH BATTERY PARKING B	ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD) AT MP 0.02 (ON RIGHT)		YES	PUBLIC	1,409

NPS / RIP Subcomponent Details for COLO

(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

COLO Colonial National Historical Park

COLO-0951ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	User Access	Area (SQ FT)
						From	To			
0951AZ		6	2		EARLY AFRICAN RESIDENTS PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	6,822
0951BZ		6	2		JAMESTOWN ISLAND DRIVE PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	5,388
0951CZ		6	2		JAMESTOWN DURING THE CIVIL WAR PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	4,569
0951DZ		6	2		THE CHANGING LAND PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	4,477
0951EZ		6	2		PRECIOUS PLANTS PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	4,774
0951FZ		6	2		SOILE FIT TO PRODUCE PARKING	FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)	YES	PUBLIC	7,441

COLO-0952ZZ Subcomponent Breakdown

Route Number	FMSS Number	Cycle Collected	Iteration Collected	Concession	Route Name	Route Description		FLTP	User Access	Area (SQ FT)
						From	To			
0952AZ		6	2		FOOT TRAIL TO BLACK POINT PARKING	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	6,648
0952BZ		6	2		AN ANCIENT PLANTER PARKING	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	6,353
0952CZ		6	2		THE TRAVIS ESTATE PARKING	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	5,071
0952DZ		6	2		FENCES AND DITCHES PARKING	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	4,280
0952EZ		6	2		THE ISLAND HOUSE / PLANTS FROM THE PAST PARKING	FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)	TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)	YES	PUBLIC	5,529

Route Identification Changes to Routes from Previous Cycle Colonial National Historical Park

ROUTES REMOVED FROM PREVIOUS INVENTORY:

Route No.	Route Name	Type of Change	Comments
0940	CAPE HENRY MEMORIAL PARKING	OTHER	"CAPE HENRY MEMORIAL PARKING" WAS REMOVED SINCE CYCLE 5.

ROUTES ADDED FROM PREVIOUS INVENTORY:

Route No.	Route Name	Type of Change	Comments
0400ZZ	YORKTOWN MAINTENANCE UTILITY ROADS	OTHER	PAVED ROUTE ADDED IN CYCLE 6.
0403ZZ	JAMESTOWN MAINTENANCE ROADS	OTHER	PAVED ROUTE ADDED IN CYCLE 6.
0953	BELLFIELD INTERPRETIVE AREA PARKING	OTHER	PAVED PARKING AREA ADDED IN CYCLE 6.
0954	GREAT NECK PICNIC PARKING	OTHER	PAVED PARKING AREA ADDED IN CYCLE 6.
0955	ISTHMUS OVERLOOK PARKING	OTHER	PAVED PARKING AREA ADDED IN CYCLE 6.

ROUTES MODIFIED FROM PREVIOUS INVENTORY:

Route No.	Route Name	Type of Change	Comments
0103	REDOUBT 9 AND 10 ACCESS ROAD	ROUTE NAME	ROUTE NAME CHANGED FROM "REDOUBT ACCESS ROAD" TO "REDOUBT 9 AND 10 ACCESS ROAD"
0111B	STATE HIGHWAY 199 KINGS POINT B	LENGTH CHANGE	LENGTH UPDATED FROM 0.06 MILES TO 0.08 MILES.
0411	LACKEY FIRE ROAD	LENGTH CHANGE	UNPAVED LENGTH CHANGED FROM 0.17 MILES TO 0.34 MILES IN CYCLE 6.
0414	FIRE ROAD #1	LENGTH CHANGE	UNPAVED LENGTH CHANGED FROM 1.9 MILES TO 0.06 MILES IN CYCLE 6.
0907	YORKTOWN RIVER OVERLOOK	SQ FEET CHANGE	IMPROVED GPS COLLECTED AND SQUARE FOOTAGE UPDATED.
0911	RINGFIELD PLANTATION PARKING	ROUTE NAME	UPDATED ROUTE NAMED FROM "FELGEATS CREEK PLANTATION PARKING" TO "RINGFIELD PLANTATION PARKING".
0914	PAPER MILL CREEK PARKING	SQ FEET CHANGE	IMPROVED GPS COLLECTED AND SQUARE FOOTAGE UPDATED.

Route Identification Changes to Routes from Previous Cycle Colonial National Historical Park

ROUTES MODIFIED FROM PREVIOUS INVENTORY:			
Route No.	Route Name	Type of Change	Comments
0916	JAMES RIVER (ORIENTATION MAP) PARKING	ROUTE NAME	ROUTE NAME UPDATED FROM "ORIENTATION MAP PARKING" TO "JAMES RIVER (ORIENTATION MAP) PARKING".
0918	GLEBE LAND (MILL CREEK) PARKING	ROUTE NAME	ROUTE NAME UPDATED FROM "MILL CREEK PARKING" TO "GLEBE LAND (MILL CREEK) PARKING".
0919	REAL ESTATE PARKING	SQ FEET CHANGE	IMPROVED GPS COLLECTED AND SQUARE FOOTAGE UPDATED.
0922	YORKTOWN VISITOR PARKING (CHURCH STREET)	ROUTE NAME	ROUTE NAME CHANGED FROM "CHURCH STREET PARKING" TO "YORKTOWN VISITOR PARKING (CHURCH STREET)".
0923	YORKTOWN MONUMENT VICTORY AND ALLIANCE PARKING	ROUTE NAME	ROUTE NAME CHANGED FROM "YORKTOWN VICTORY MONUMENT PARKING" TO "YORKTOWN MONUMENT VICTORY AND ALLIANCE PARKING".
0926	YORKTOWN NATIONAL CEMETERY / SECOND SIEGE PARKING	ROUTE NAME	ROUTE NAME CHANGED FROM "NATIONAL CEMETERY/SECOND SIEGE PARKING" TO "YORKTOWN NATIONAL CEMETERY / SECOND SIEGE PARKING".

Section 3 Park Summary Information



Colonial National Historical Park



**Federal Lands Highway
Road Inventory Program**

Parkwide Paved Route Condition Summary

Colonial National Historical Park

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

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

	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	10.60	13.18	4.43	13.45	41.66
2					
3					
4					
5	0.18	0.01			0.18
6	0.09	0.08	0.10	0.08	0.35
7					
8					
Total Mileage by PCR	10.87	13.26	4.53	13.53	42.19
PAVED PARKING					
Access Level	Area (sq. ft.)	Area (sq. ft.)	Area (sq. ft.)	Area (sq. ft.)	Total Area
PUBLIC	110,180	161,362	532,740	1,655	805,937
NONPUBLIC		219,910			219,910
Total Area by PCR	110,180	381,272	532,740	1,655	1,025,847

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

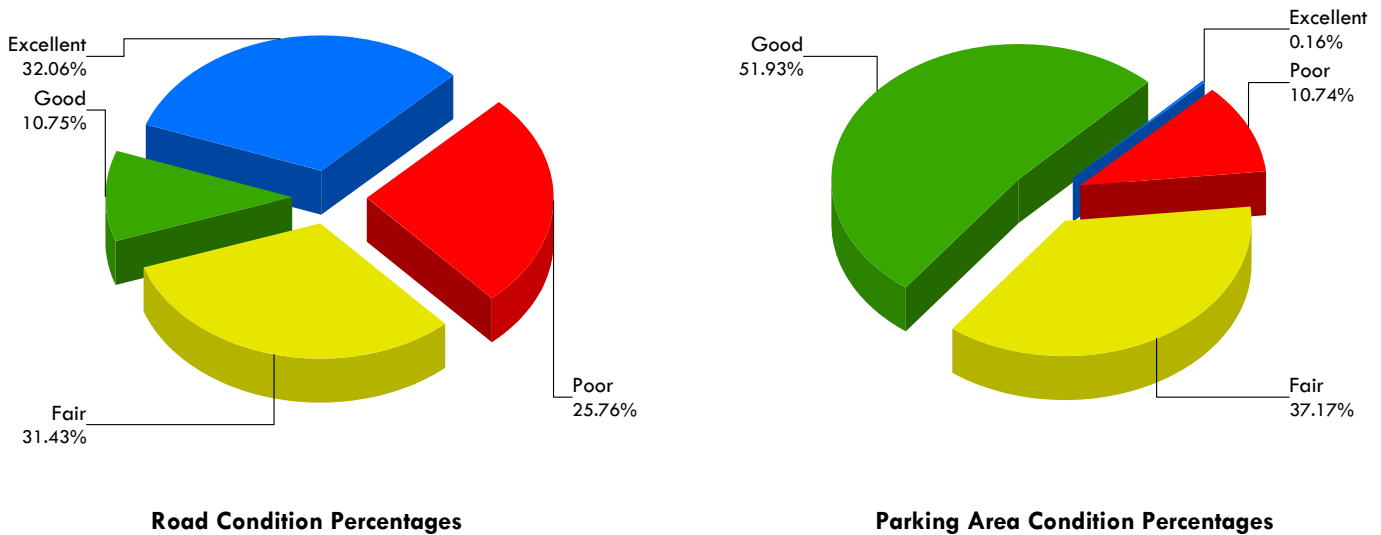
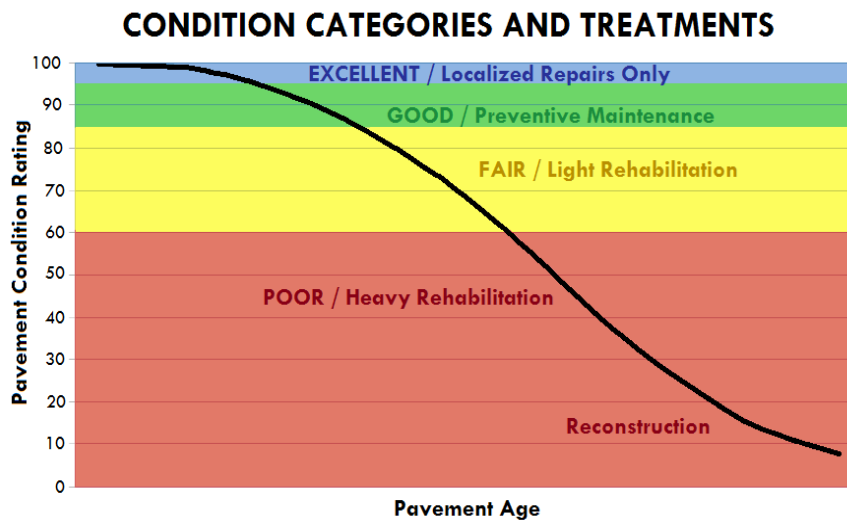


Figure 1: Pavement Condition Rating Breakdown for Paved Roads and Parking Areas

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
 - 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 singlelift overlays up to 2.5 inches in total thickness, milling and overlays.
- Poor: PCR of 0-60
 - Pavements in this range will likely be candidates of Heavy Rehabilitation or Reconstruction (H3R or 4R). Examples include Pulverization, Multiple Lift Overlays, and Reconstruction.



At this time, specific Maintenance and Rehabilitation activities should be evaluated and recommended at the project level. Site-specific conditions that influence treatment type should be determined based on performing a subsurface investigation and/or pavement condition survey, and not be based solely on RIP data. Additionally, RIP produces a snapshot of conditions 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.



Cycle 6 - Road Inventory Program Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads

Colonial National Historical Park

Condition (Rating / Index) Legend

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

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-Level Condition for Roads Rated with the Data Collection Vehicle (DCV)

Route No.	FMSS No.	Route Name	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
COLO-0001	49952	COLONIAL PARKWAY	1	CO	22.87	58	58	94	95	99	96	94	99	98
COLO-0100	54847	UNTOUCHED REDOUBT ROAD	1	AS	0.41	99	NR	99	99	100	99	100	100	99
COLO-0101	54840	GRAND FRENCH BATTERY ROAD	1	AS	0.20	93	NR	93	100	100	100	100	97	93
COLO-0102AZ	102863	SURRENDER FIELD ACCESS ROAD	1	AS	0.22	95	NR	95	100	100	100	99	100	95
COLO-0102BZ	102863	SURRENDER FIELD ACCESS SPUR ROAD	1	AS	0.03	99	NR	99	100	100	100	100	100	99
COLO-0103	54843	REDOUBT 9 AND 10 ACCESS ROAD	1	AS	0.22	97	NR	97	100	100	100	100	100	97
COLO-0104	54845	MOORE HOUSE ACCESS ROAD	1	AS	0.18	90	NR	90	99	100	99	98	100	90
COLO-0105A	99196	U.S. HIGHWAY 17 ACCESS ROAD A	1	CO	0.18	90	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0105B	99197	U.S. HIGHWAY 17 ACCESS ROAD B	1	CO	0.18	90	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0106	99198	FUSILIER'S ROAD	1	AS	0.35	94	NR	94	100	100	100	99	100	94
COLO-0107A	99199	CHEATHAM ANNEX ACCESS ROAD A	1	AS	0.04	73	NR	73	73	100	73	91	100	91
COLO-0107B	99200	CHEATHAM ANNEX ACCESS ROAD B	1	AS	0.12	96	NR	96	96	100	96	99	99	99
COLO-0108A	99201	QUEENS LAKE ACCESS A	1	AS	0.14	87	NR	87	87	100	87	94	100	98
COLO-0108B	99202	QUEENS LAKE ACCESS B	1	AS	0.13	97	NR	97	98	100	98	97	100	98
COLO-0109A	99203	PARKWAY DRIVE ACCESS ROAD A	1	AS	0.10	94	NR	94	97	100	97	94	97	94
COLO-0109B	99204	PARKWAY DRIVE ACCESS ROAD B	1	AS	0.12	87	NR	87	94	100	94	87	100	96
COLO-0110	99205	STATE HIGHWAY 359	1	CO	0.06	90	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0111A	99206	STATE HIGHWAY 199 KINGS POINT A	1	AS	0.06	94	NR	94	94	100	94	99	100	99
COLO-0111B	99207	STATE HIGHWAY 199 KINGS POINT B	1	AS	0.08	70	NR	70	78	100	78	70	100	98
COLO-0111C	99208	STATE HIGHWAY 199 KINGS POINT C	1	AS	0.11	73	NR	73	73	100	73	76	100	98



Cycle 6 - Road Inventory Program Road Condition Summary Report for Data Collection Vehicle (DCV) Rated Roads

Colonial National Historical Park

Condition (Rating / Index) Legend

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

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-Level Condition for Roads Rated with the Data Collection Vehicle (DCV)

Route No.	FMSS No.	Route Name	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
COLO-0111D	99209	STATE HIGHWAY 199 KINGS POINT D	1	AS	0.12	79	NR	79	92	100	92	79	99	99
COLO-0112A	102864	NEWPORT AVENUE ACCESS ROAD A	1	CO	0.06	90	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0112B	102867	NEWPORT AVENUE ACCESS ROAD B	1	CO	0.09	90	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0113	N/A	NORTH ENGLAND STREET ACCESS ROAD	1	CO	0.06	73	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0224AZ	54848	WASHINGTON'S HEADQUARTERS ROAD	1	AS	0.32	93	NR	93	100	100	100	100	100	93
COLO-0224BZ	54848	WASHINGTON'S HEADQUARTERS SPUR ROAD	1	AS	0.03	97	NR	97	100	100	100	100	100	97
COLO-0225	54836	SURRENDER ROAD	1	AS	1.27	94	87	98	100	100	100	100	98	98
COLO-0226AZ	54849	FRENCH LOOP ROAD	1	AS	2.49	89	98	83	99	100	99	100	83	99
COLO-0226BZ	54849	FRENCH LOOP SPUR ROAD	1	AS	0.05	96	NR	96	100	100	100	100	100	96
COLO-0400AZ	99097	YORKTOWN MAINTENANCE UTILITY ROAD A	6	AS	0.07	77	NR	77	93	100	93	77	100	94
COLO-0400BZ	99097	YORKTOWN MAINTENANCE UTILITY ROAD B	6	AS	0.19	92	NR	92	95	99	96	92	100	96
COLO-0403AZ	99211	JAMESTOWN MAINTENANCE ROAD A	5	AS	0.07	0	NR	0	16	97	19	0	100	92
COLO-0403BZ	99211	JAMESTOWN MAINTENANCE ROAD B	5	AS	0.12	0	NR	0	0	91	0	20	98	89
COLO-0500	54852	WEST TOUR ROAD	1	AS	4.28	98	NR	98	100	100	100	100	100	98
COLO-0501AAZ	54573	ISLAND DRIVE WEST LOOP	1	AS	2.34	100	NR	100	100	100	100	100	100	100
COLO-0501ABZ	54573	ISLAND DRIVE WEST LOOP SPUR	1	AS	0.06	73	NR	NR	NR	NR	NR	NR	NR	NR
COLO-0501B	54579	ISLAND DRIVE EAST LOOP	1	AS	2.16	99	NR	99	100	100	100	100	100	99
COLO-0502	54922	AFTERMATH ROAD	1	AS	0.55	86	NR	86	100	100	100	100	86	99
COLO-0503AZ	54924	EAST TOUR ROAD A	1	AS	1.83	98	NR	98	100	100	100	98	100	98
COLO-0503BZ	54924	EAST TOUR ROAD B	1	AS	0.33	98	NR	98	99	100	99	100	100	98



Cycle 6 - Road Inventory Program Road Condition Summary Report for Manually Rated Roads

Colonial National Historical Park

Condition (Rating / Index) Legend

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

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-Level Condition for Manually Rated Line (MRL) Roads

Route No.	FMSS No.	Route Name	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
COLO-0401	99102	YORKTOWN MAINTENANCE AREA RESIDENCE ROAD	6	AS	0.09	30	NR	30	NR	97	90	73	30	53



Cycle 6 - Road Inventory Program Parking Area Condition Summary Report

Colonial National Historical Park

Condition (Rating / Index) Legend

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

- 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 Details for Paved Parking Areas

Route No.	FMSS No.	Route Name	User Access	Surf. Type	Area (Sq. Ft.)	Pavement Condition Rating (PCR)	Asphalt Surface Distresses					Concrete Surface Distresses							
							Alligator Cracking	Longitudinal / Transverse Cracking	Rutting / Distortions	Potholes / Patching	HMA Patching	Surface Raveling / Bleeding	Joint Faulting	Slab Cracking	Joint Distresses	Delamination / Pop-Outs	Potholes / Patching		
COLO-0901	54907	YORKTOWN VISITOR CENTER PARKING	PUBLIC	AS	129,807	90	97	90	90	90	97	90							
COLO-0902AZ	54914	REDOUBT 9 & 10 ACCESS ROAD PARKING A	PUBLIC	AS	986	73	97	97	97	97	97	73							
COLO-0902BZ	54914	REDOUBT 9 & 10 ACCESS ROAD PARKING B	PUBLIC	AS	508	NR													
COLO-0902CZ	54914	REDOUBT 9 & 10 ACCESS ROAD PARKING C	PUBLIC	AS	683	NR													
COLO-0903	54916	UNTOUCHED REDOUBT LOOP/PARKING	PUBLIC	AS	1,015	73	97	97	90	97	97	73							
COLO-0904	54917	GLASSHOUSE PARKING	PUBLIC	AS	40,359	90	97	90	97	97	97	90							
COLO-0905	54918	FUSILIER'S PARKING	PUBLIC	AS	12,114	73	97	90	97	90	97	73							
COLO-0906	54919	NAVAL WEAPONS STATION PARKING	PUBLIC	CO	8,340	90							97	90	97	90	97		
COLO-0907	54920	YORKTOWN RIVER OVERLOOK	PUBLIC	CO	4,648	90							90	97	97	90	97		
COLO-0908	54921	POWHATAN VILLAGE	PUBLIC	CO	9,045	90							97	90	97	90	97		
COLO-0909	54927	INDIAN FIELD CREEK PARKING	PUBLIC	CO	8,159	90							97	97	97	90	97		
COLO-0910	54931	CHEATHAM ANNEX PARKING	PUBLIC	CO	8,472	90							97	90	97	97	97		
COLO-0911	54932	RINGFIELD PLANTATION PARKING	PUBLIC	CO	12,212	73							97	90	90	73	97		
COLO-0912	56258	JONES MILL PARKING	PUBLIC	CO	6,557	90							97	90	97	90	97		
COLO-0913	56259	PALISADES GREAT OAKS PARKING	PUBLIC	CO	9,942	90							97	90	90	97	97		
COLO-0914	56260	PAPER MILL CREEK PARKING	PUBLIC	CO	6,513	90							97	97	97	90	97		
COLO-0915	56261	COLLEGE CREEK PARKING	PUBLIC	CO	19,640	73							73	90	90	90	90		
COLO-0916	56262	JAMES RIVER (ORIENTATION MAP) PARKING	PUBLIC	CO	9,891	90							90	97	97	90	97		
COLO-0917	56263	ARCHER'S HOPE PARKING	PUBLIC	CO	19,300	90							90	90	90	97	97		
COLO-0918	56264	GLEBE LAND (MILL CREEK) PARKING	PUBLIC	CO	25,887	90							97	90	97	90	97		
COLO-0919	56265	REAL ESTATE PARKING	PUBLIC	CO	9,320	90							90	97	97	90	90		
COLO-0920	56266	NECK O LAND PARKING	PUBLIC	CO	18,557	90							90	90	97	97	97		
COLO-0921	56267	POWHATAN CREEK PARKING	PUBLIC	CO	24,688	90							97	97	97	90	97		
COLO-0922	56269	YORKTOWN VISITOR PARKING (CHURCH STREET)	PUBLIC	AS	18,811	73	90	90	90	97	97	73							
COLO-0923	56272	YORKTOWN MONUMENT VICTORY AND ALLIANCE PARKING	PUBLIC	AS	9,646	90	90	97	90	97	97	90							
COLO-0924	56273	YORKTOWN BEACH PICNIC AREA PARKING	PUBLIC	AS	52,353	30	30	53	90	90	97	97							



Cycle 6 - Road Inventory Program Parking Area Condition Summary Report

Colonial National Historical Park

Condition (Rating / Index) Legend

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

- 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 Details for Paved Parking Areas

Route No.	FMSS No.	Route Name	User Access	Surf. Type	Area (Sq. Ft.)	Pavement Condition Rating (PCR)	Asphalt Surface Distresses						Concrete Surface Distresses					
							Alligator Cracking	Longitudinal / Transverse Cracking	Rutting / Distortions	Potholes / Patching	HMA Patching	Surface Raveling / Bleeding	Joint Faulting	Slab Cracking	Joint Distresses	Delamination / Pop-Outs	Potholes / Patching	
COLO-0925	56274	CORNWALLIS' CAVE PARKING	PUBLIC	AS	1,655	97	97	97	97	97	97	97						
COLO-0926	56275	YORKTOWN NATIONAL CEMETERY / SECOND SIEGE PARKING	PUBLIC	AS	8,517	90	97	90	90	90	90	90						
COLO-0927AZ	56276	GRAND FRENCH BATTERY PARKING A	PUBLIC	AS	1,330	90	97	97	90	97	97	90						
COLO-0927BZ	56276	GRAND FRENCH BATTERY PARKING B	PUBLIC	AS	1,409	90	97	97	90	97	97	90						
COLO-0928	56277	MOORE HOUSE PARKING	PUBLIC	AS	7,403	NR												
COLO-0929	56279	SURRENDER FIELD ACCESS PARKING	PUBLIC	AS	2,160	90	97	97	90	97	97	90						
COLO-0930	56280	WASHINGTON'S HEADQUARTERS PARKING	PUBLIC	AS	804	NR												
COLO-0931	56281	FRENCH CEMETERY PARKING	PUBLIC	AS	2,281	73	90	97	97	97	97	73						
COLO-0932	99128	NECK O LAND VISITOR CONTACT PARKING	PUBLIC	AS	76,224	73	90	90	73	97	97	73						
COLO-0950	56282	JAMESTOWN VISITOR CENTER PARKING	PUBLIC	AS	129,457	90	90	90	90	97	97	90						
COLO-0951AZ	N/A	EARLY AFRICAN RESIDENTS PARKING	PUBLIC	AS	6,822	73	90	97	97	97	97	73						
COLO-0951BZ	N/A	JAMESTOWN ISLAND DRIVE PARKING	PUBLIC	AS	5,388	90	97	97	97	97	97	90						
COLO-0951CZ	N/A	JAMESTOWN DURING THE CIVIL WAR PARKING	PUBLIC	AS	4,569	90	97	97	97	97	97	90						
COLO-0951DZ	N/A	THE CHANGING LAND PARKING	PUBLIC	AS	4,477	90	97	97	97	97	97	90						
COLO-0951EZ	N/A	PRECIOUS PLANTS PARKING	PUBLIC	AS	4,774	90	97	90	97	97	97	90						
COLO-0951FZ	N/A	SOILE FIT TO PRODUCE PARKING	PUBLIC	AS	7,441	53	90	53	97	97	97	73						
COLO-0952AZ	N/A	FOOT TRAIL TO BLACK POINT PARKING	PUBLIC	AS	6,648	90	97	97	97	97	97	90						
COLO-0952BZ	N/A	AN ANCIENT PLANTER PARKING	PUBLIC	AS	6,353	73	97	97	97	97	97	73						
COLO-0952CZ	N/A	THE TRAVIS ESTATE PARKING	PUBLIC	AS	5,071	90	97	97	97	97	97	90						
COLO-0952DZ	N/A	FENCES AND DITCHES PARKING	PUBLIC	AS	4,280	90	97	97	97	97	97	90						
COLO-0952EZ	N/A	THE ISLAND HOUSE / PLANTS FROM THE PAST PARKING	PUBLIC	AS	5,529	90	97	97	97	97	97	90						
COLO-0953	N/A	BELFIELD INTERPRETIVE AREA PARKING	PUBLIC	CO	12,769	NR												
COLO-0954	N/A	GREAT NECK PICNIC PARKING	PUBLIC	AS	50,386	53	53	90	90	90	90	73						
COLO-0955	N/A	ISTHMUS OVERLOOK PARKING	PUBLIC	AS	4,904	73	90	90	97	97	97	73						
COLO-0990	56283	JAMESTOWN MAINTENANCE PARKING	NONPUBLIC	AS	14,195	73	90	97	97	97	97	73						
COLO-0999	56284	YORKTOWN MAINTENANCE PARKING	NONPUBLIC	AS	205,715	73	90	90	90	90	97	73						

Section 4 Park Route Location Maps



Colonial National Historical Park

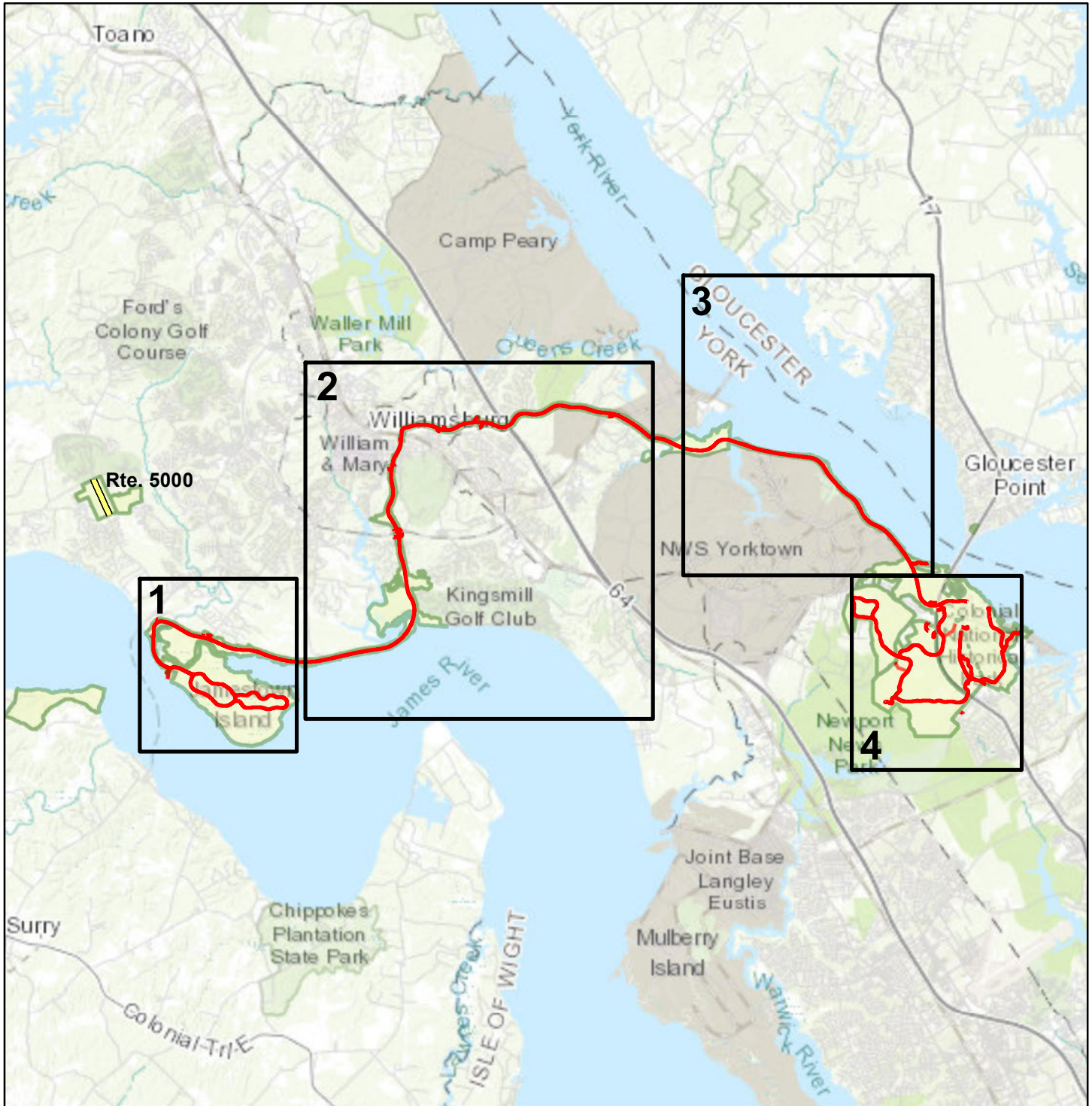


Federal Lands Highway
Road Inventory Program

Colonial National Historical Park

ROUTE LOCATION MAP

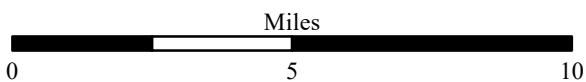
Key Map



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

 NPS Collected Routes

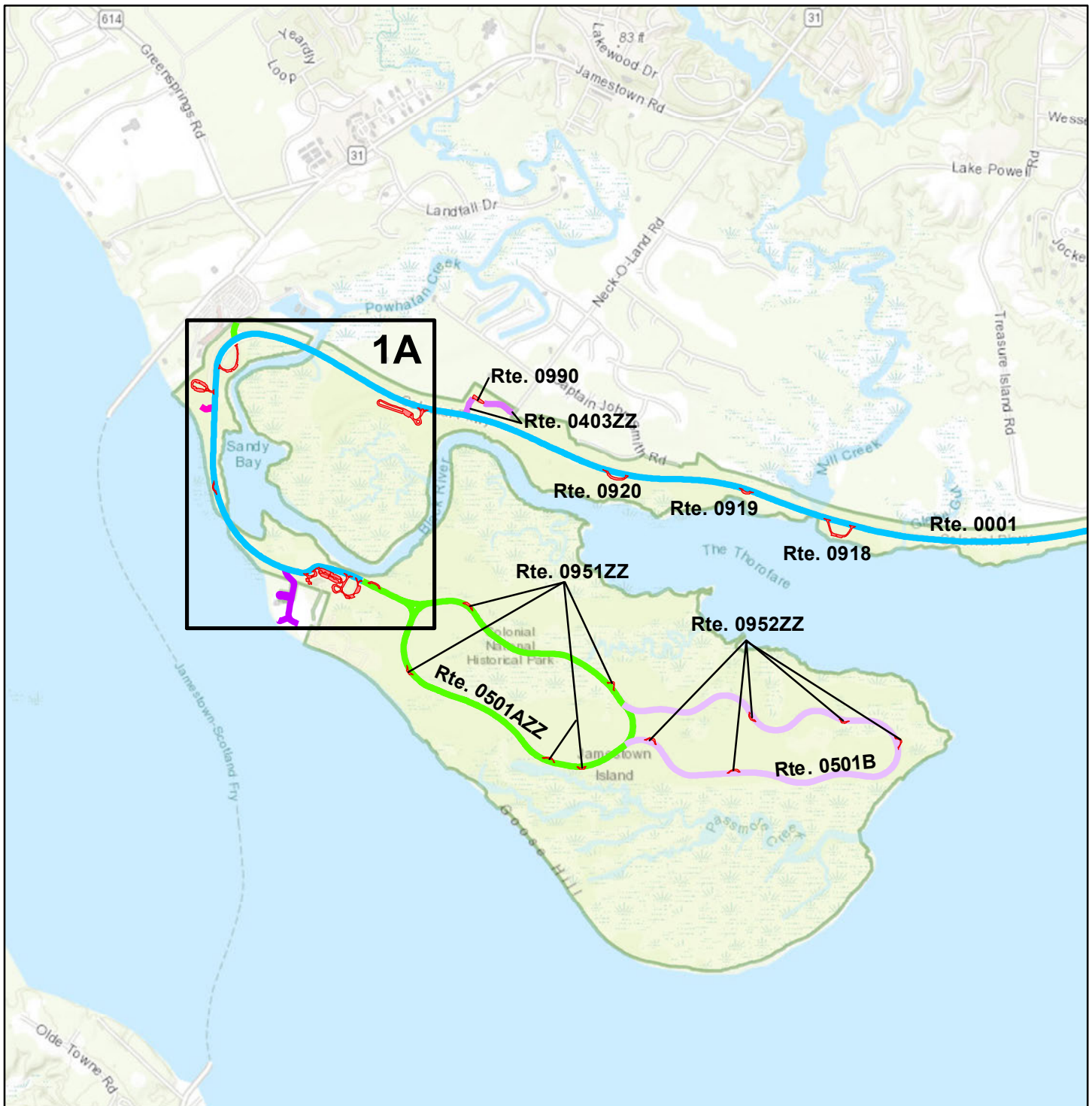
 Non-NPS Collected Routes



Colonial National Historical Park

ROUTE LOCATION MAP

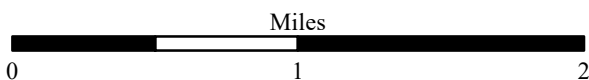
AREA MAP 1



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

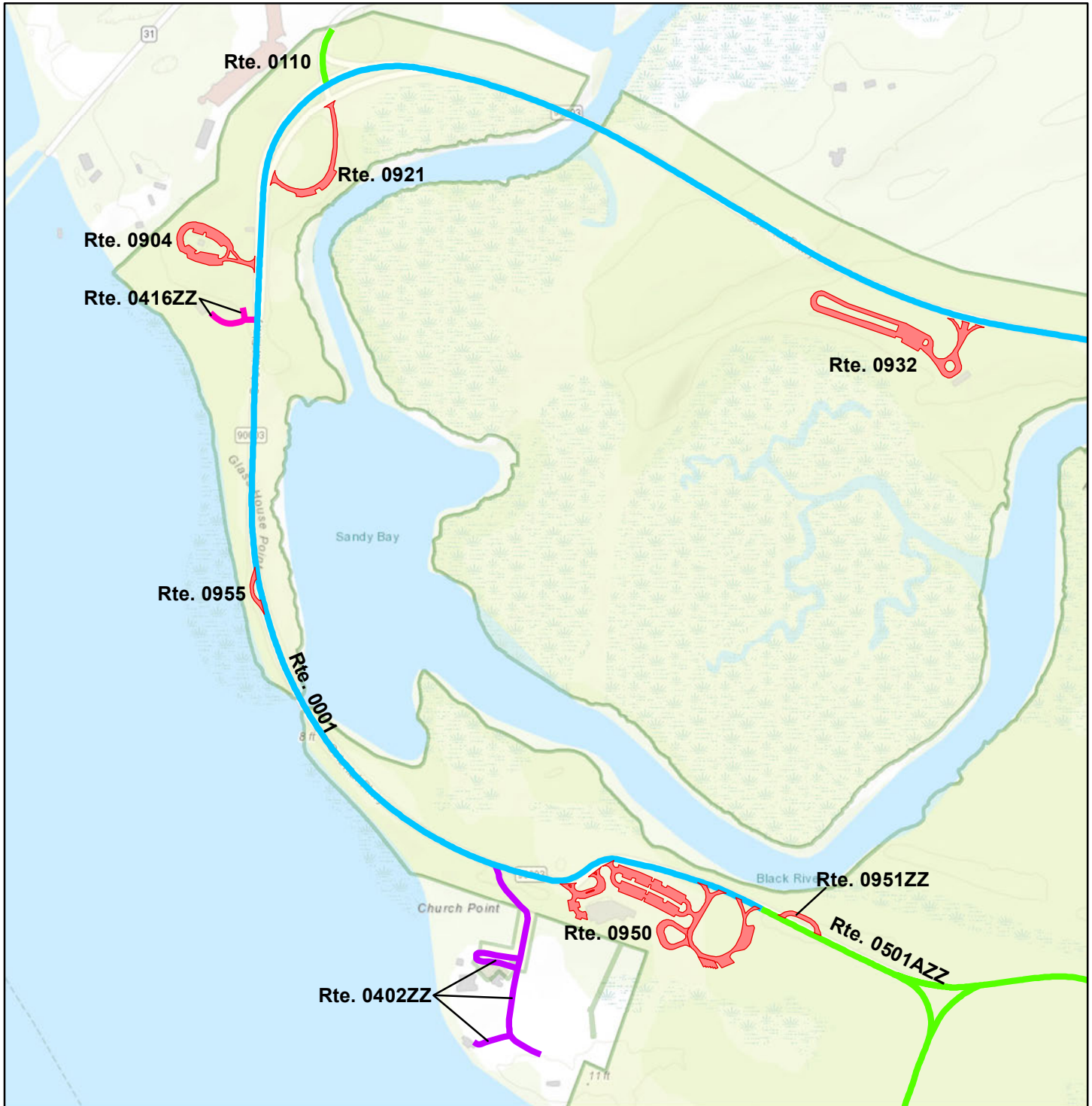
Note: Unique colors are used to differentiate roads

 **Non-NPS Collected Routes**



Colonial National Historical Park

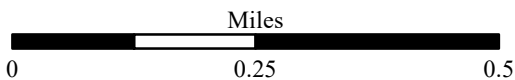
ROUTE LOCATION MAP AREA MAP 1A



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

 **Non-NPS Collected Routes**



Colonial National Historical Park

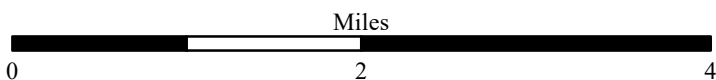
ROUTE LOCATION MAP AREA MAP 2



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

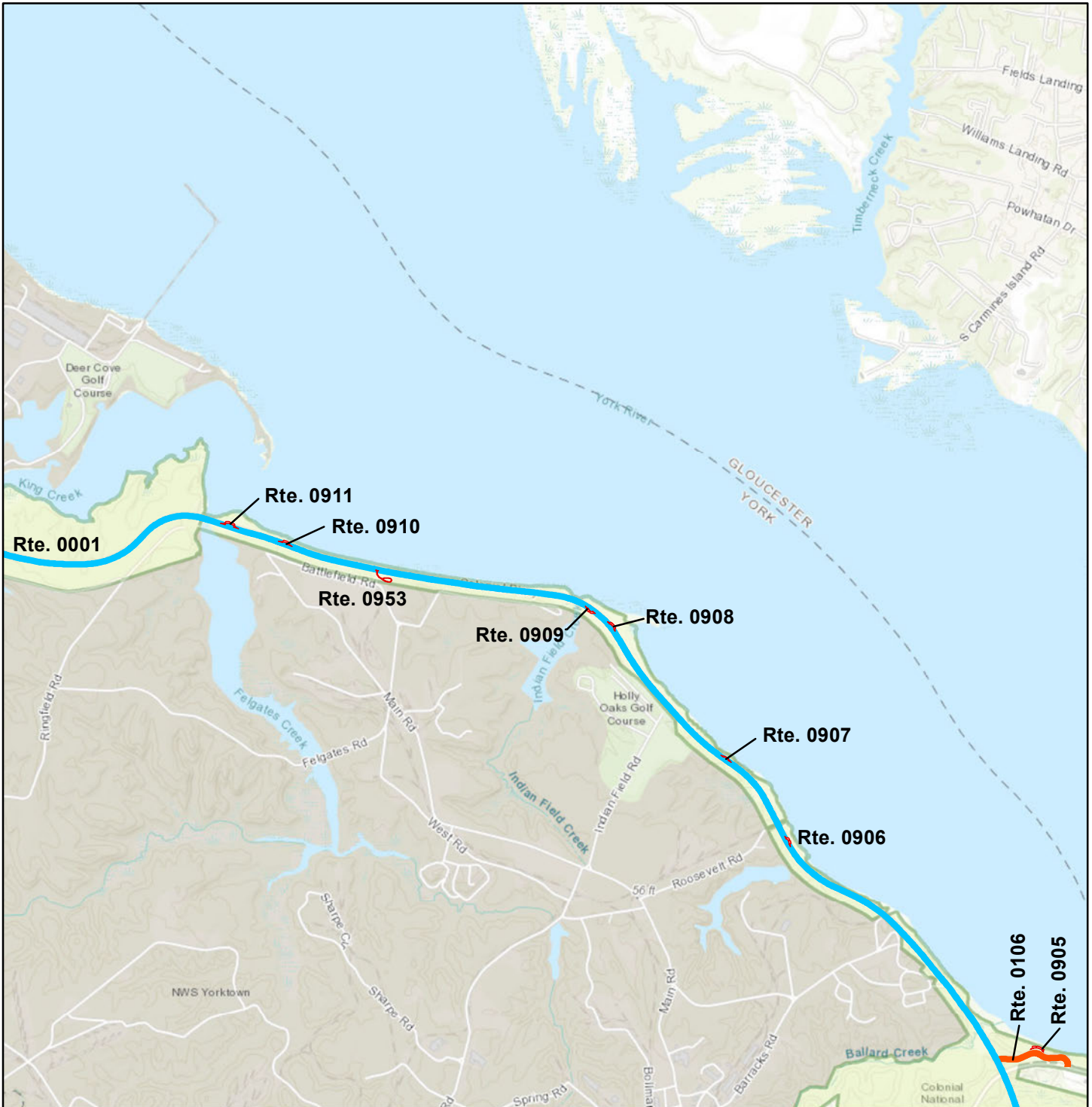
Non-NPS Collected Routes



Colonial National Historical Park

ROUTE LOCATION MAP

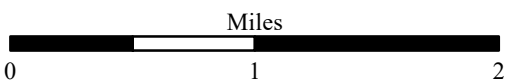
AREA MAP 3



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

Non-NPS Collected Routes

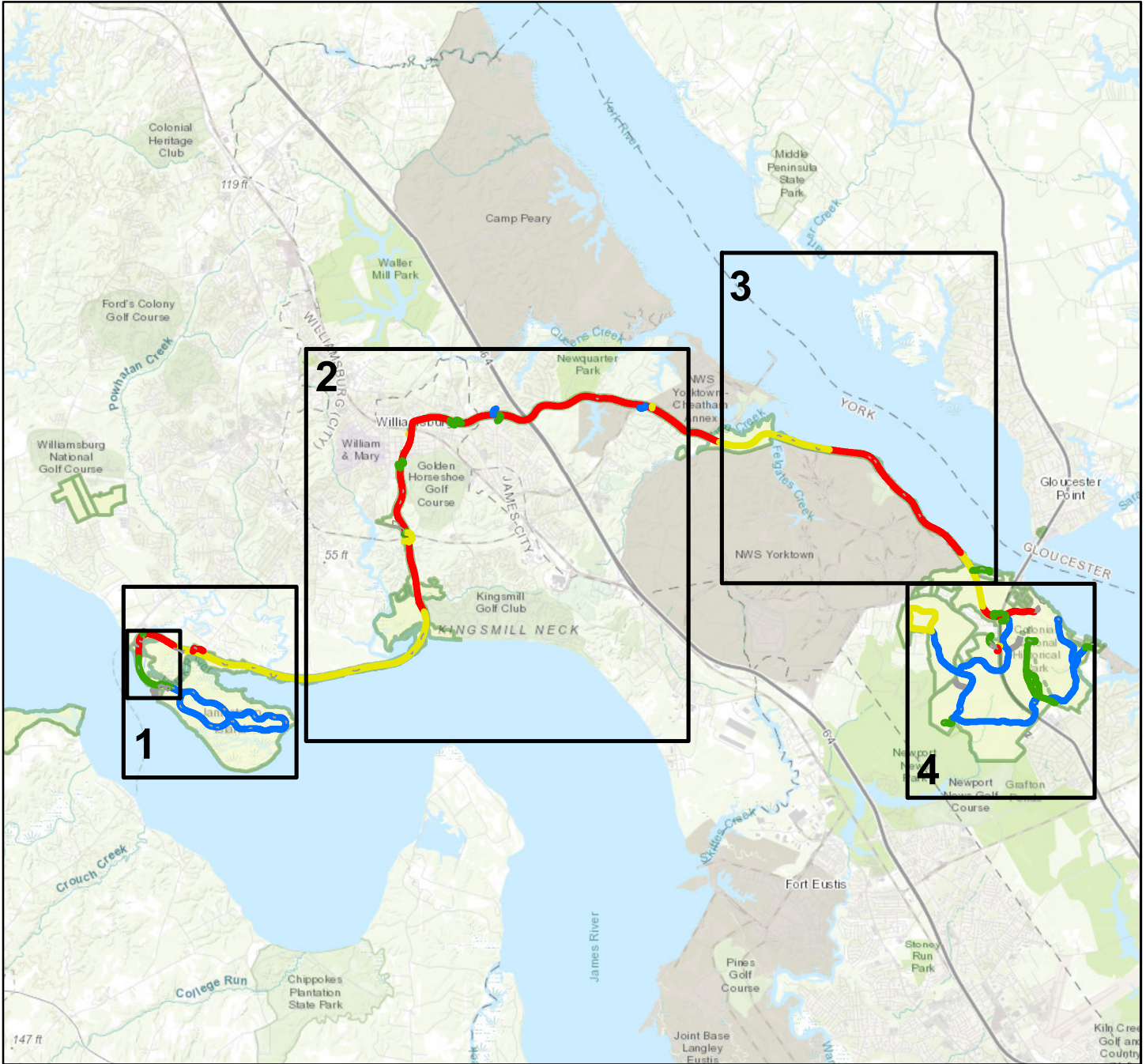


Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Key Map

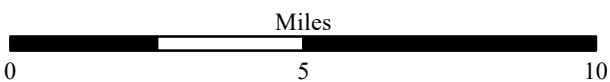


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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 condition scores at 1-mile intervals. See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

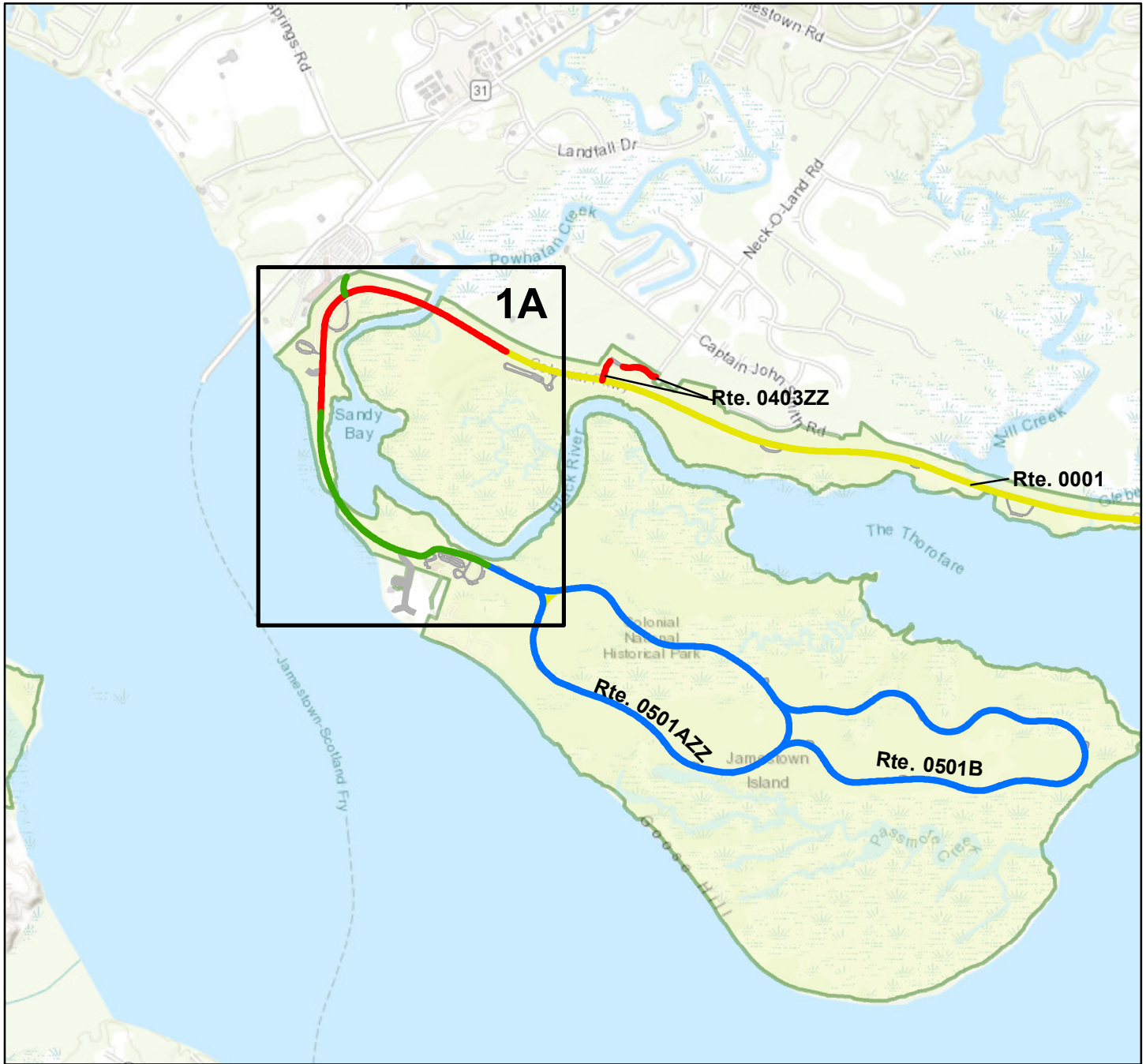


Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Area Map 1

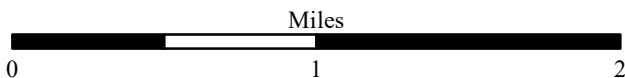


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
---------------	---------------	----------------	----------------------	-----------

Colors on map represent condition scores at 1-mile intervals. See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

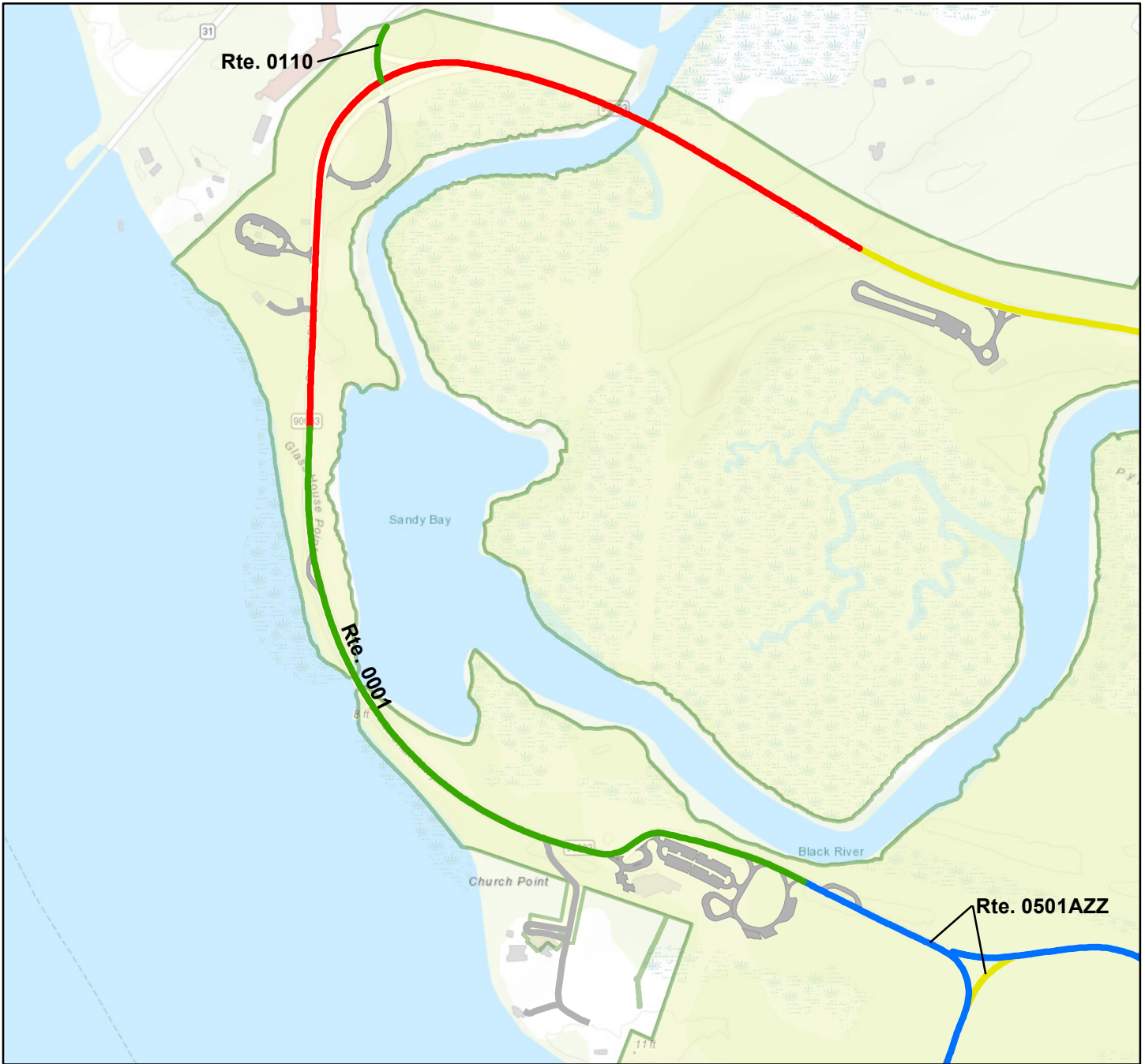


Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Area Map 1A

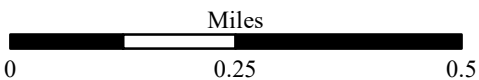


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

Colors on map represent condition scores at 1-mile intervals. See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed

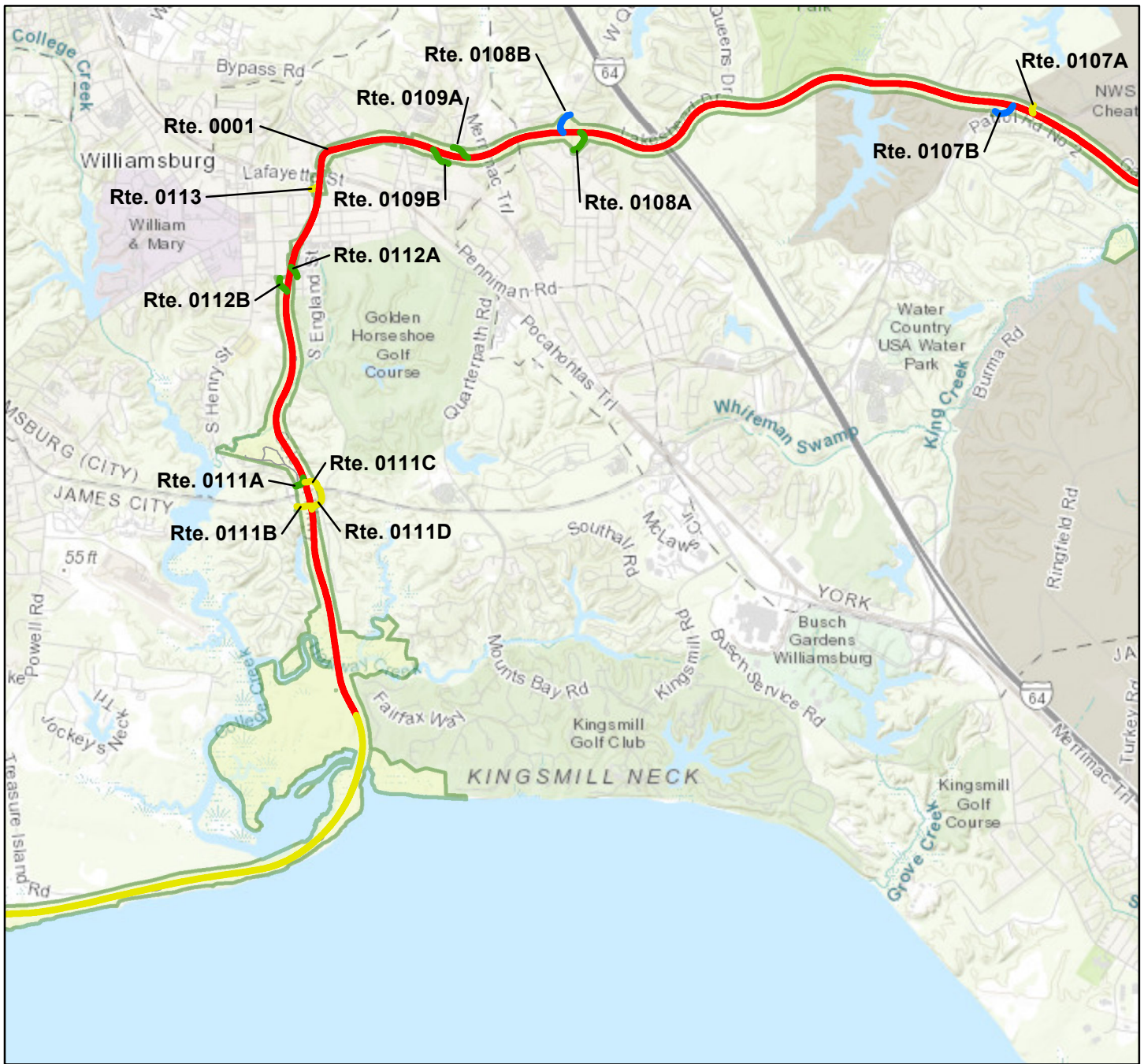


Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Area Map 2

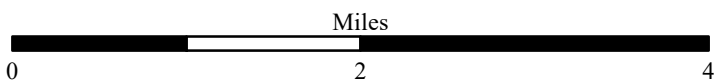


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)



Colors on map represent condition scores at 1-mile intervals. See Appendix for definitions and formulas
 Only Data Collection Vehicle and Manually Rated Roads are displayed



Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Area Map 3

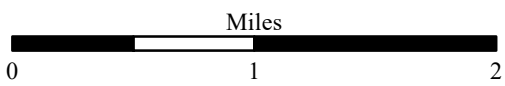


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)



Colors on map represent condition scores at 1-mile intervals. See Appendix for definitions and formulas
 Only Data Collection Vehicle and Manually Rated Roads are displayed

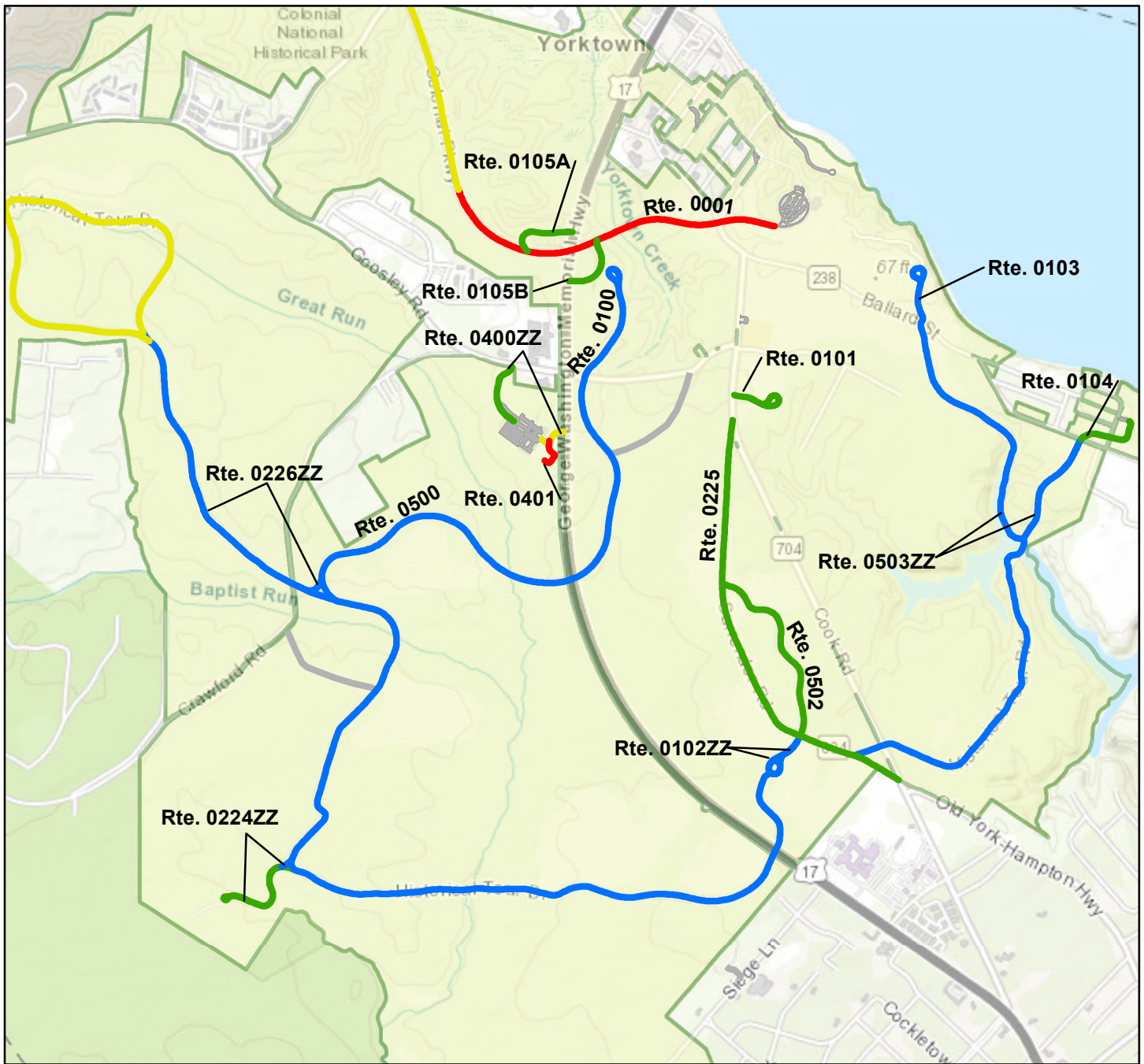


Colonial National Historical Park

ROUTE CONDITION MAP

PCR - MILE BY MILE

Area Map 4

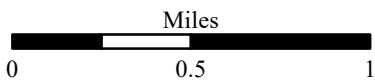


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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 condition scores at 1-mile intervals. See Appendix for definitions and formulas
Only Data Collection Vehicle and Manually Rated Roads are displayed



Section 5 Paved Road Condition Rating Sheets



Colonial National Historical Park

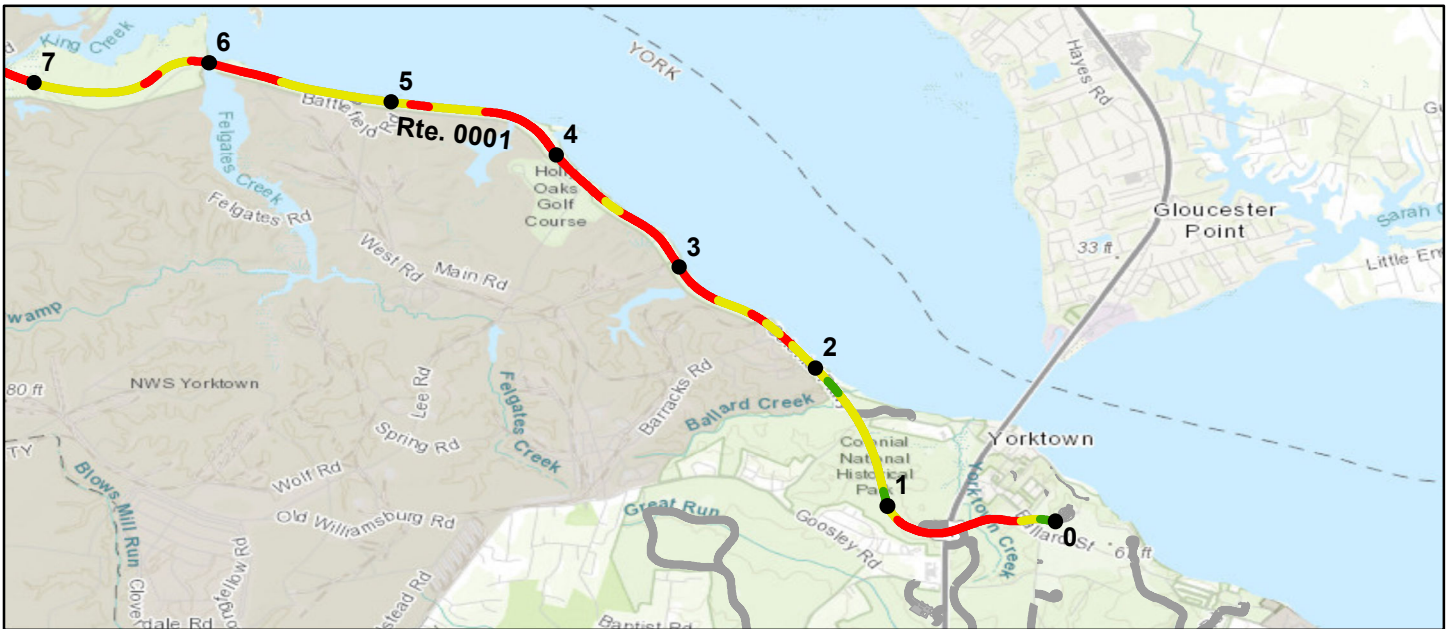


Federal Lands Highway
Road Inventory Program

Colonial National Historical Park

ROUTE 0001: COLONIAL PARKWAY

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

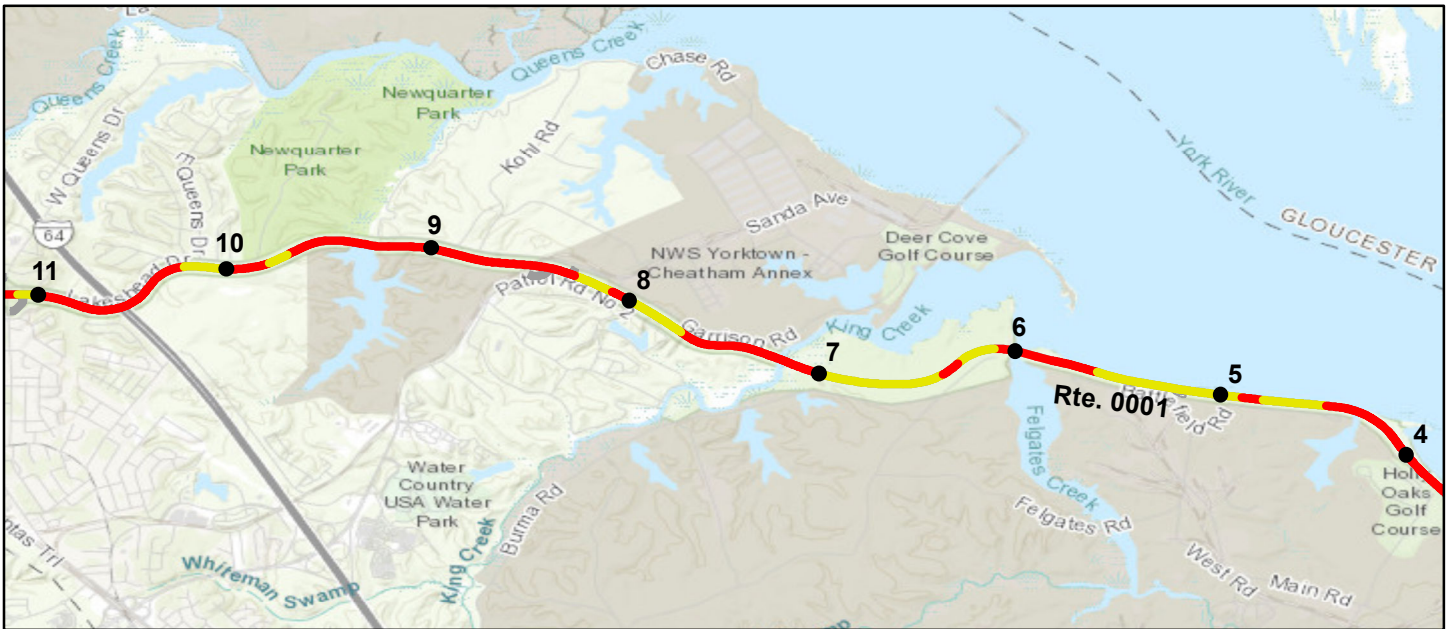
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0	1	2	3	4
Paved Length (Miles): 22.87	Section Length (MI)	1	1	1	1	1
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	58	29	77	54	39	56
Surface Condition Rating (SCR)	N/A	N/A	N/A	N/A	N/A	N/A
Roughness Condition Index (RCI)	58	29	77	54	39	56
Distress Index Values						
Structural Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Alligator Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Longitudinal Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Transverse Cracking Index	N/A	N/A	N/A	N/A	N/A	N/A
Patching Index	N/A	N/A	N/A	N/A	N/A	N/A
Rutting Index	N/A	N/A	N/A	N/A	N/A	N/A
International Roughness Index (IRI)	209	264	160	217	246	212
Lane & Width Information						
Number of Lanes	2	2	2	2	2	2
Paved Width (ft)	28.5	23.8	28.8	30	29.5	28.9
Lane Width (ft)	14.3	11.9	14.4	15	14.7	14.4

ONLY ROUGHNESS RATINGS WERE RECORDED ON THE CONCRETE SECTION OF ROUTE 0001. FIRST 0.16 MILES AND LAST 0.88 MILES OF ROUTE 0001 ARE ASPHALT.

Colonial National Historical Park

ROUTE 0001: COLONIAL PARKWAY

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

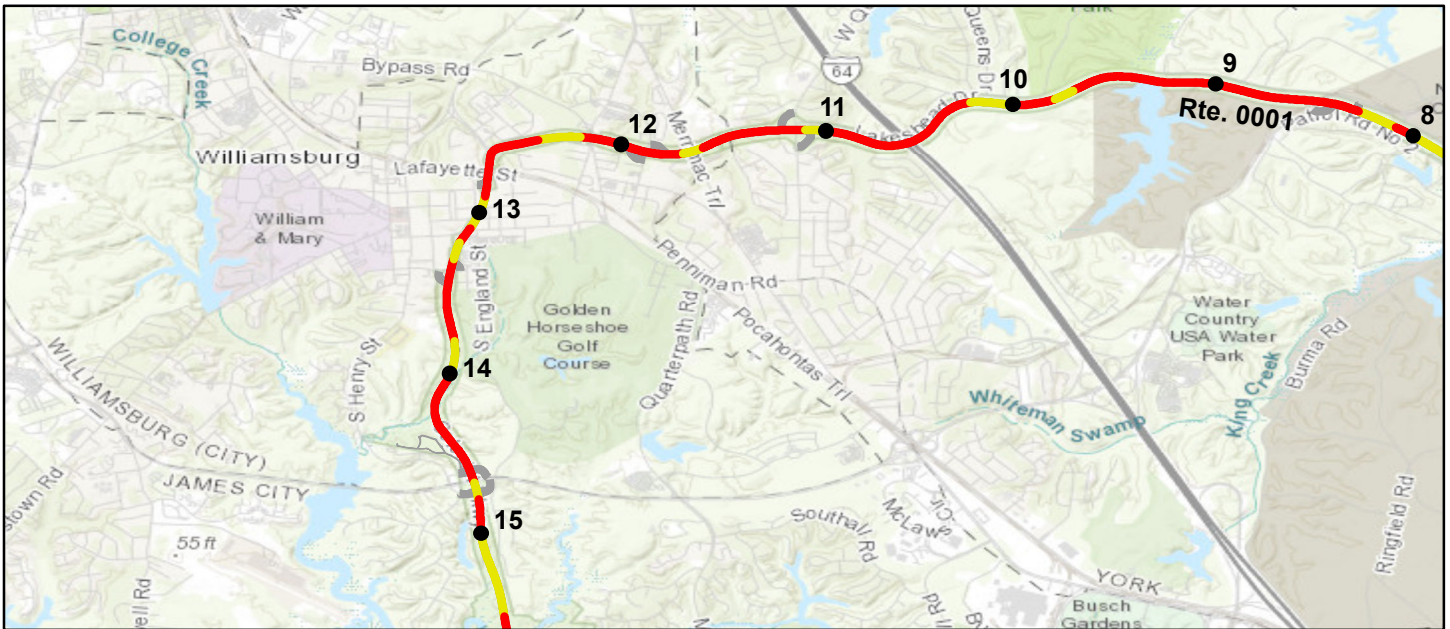
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	5	6	7	8	9
Paved Length (Miles): 22.87	Section Length (MI)	1	1	1	1	1
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	58	62	68	57	50	39
Surface Condition Rating (SCR)	N/A	N/A	N/A	N/A	N/A	N/A
Roughness Condition Index (RCI)	58	62	68	57	50	39
Distress Index Values						
Structural Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Alligator Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Longitudinal Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Transverse Cracking Index	N/A	N/A	N/A	N/A	N/A	N/A
Patching Index	N/A	N/A	N/A	N/A	N/A	N/A
Rutting Index	N/A	N/A	N/A	N/A	N/A	N/A
International Roughness Index (IRI)	209	199	185	210	224	246
Lane & Width Information						
Number of Lanes	2	2	2	2	2	2
Paved Width (ft)	28.5	29.3	28.6	30.9	30.6	28.9
Lane Width (ft)	14.3	14.6	14.3	15.4	15.3	14.4

ONLY ROUGHNESS RATINGS WERE RECORDED ON THE CONCRETE SECTION OF ROUTE 0001. FIRST 0.16 MILES AND LAST 0.88 MILES OF ROUTE 0001 ARE ASPHALT.

Colonial National Historical Park

ROUTE 0001: COLONIAL PARKWAY

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
---------------	---------------	----------------	----------------------	-----------

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

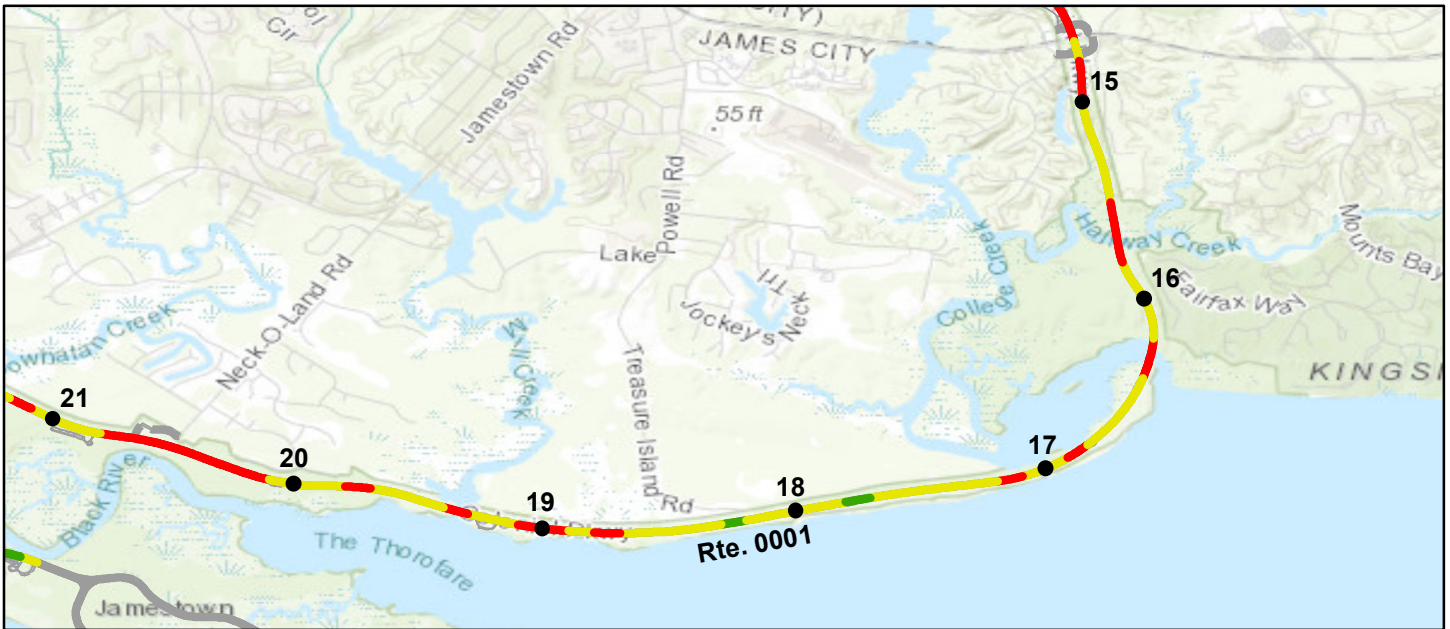
Inspection Date: 4/18/2021	Beginning Section MP	10	11	12	13	14
Paved Length (Miles): 22.87	Section Length (MI)	1	1	1	1	1
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	58	45	38	49	60	44
Surface Condition Rating (SCR)	N/A	N/A	N/A	N/A	N/A	N/A
Roughness Condition Index (RCI)	58	45	38	49	60	44
Distress Index Values						
Structural Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Alligator Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Longitudinal Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Transverse Cracking Index	N/A	N/A	N/A	N/A	N/A	N/A
Patching Index	N/A	N/A	N/A	N/A	N/A	N/A
Rutting Index	N/A	N/A	N/A	N/A	N/A	N/A
International Roughness Index (IRI)	209	234	248	227	204	236
Lane & Width Information						
Number of Lanes	2	2	2	2	2	2
Paved Width (ft)	28.5	29.4	29.5	27.8	26.4	29.3
Lane Width (ft)	14.3	14.7	14.8	13.9	13.1	14.7

ONLY ROUGHNESS RATINGS WERE RECORDED ON THE CONCRETE SECTION OF ROUTE 0001. FIRST 0.16 MILES AND LAST 0.88 MILES OF ROUTE 0001 ARE ASPHALT.

Colonial National Historical Park

ROUTE 0001: COLONIAL PARKWAY

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

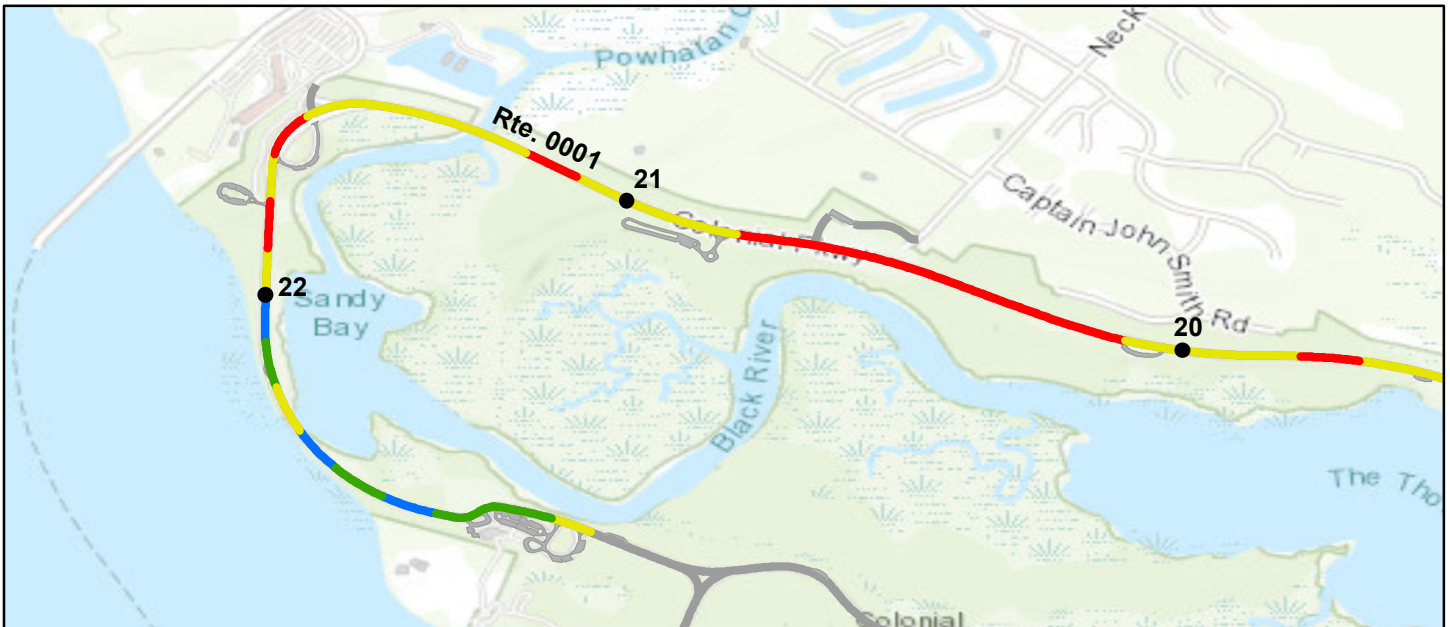
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	15	16	17	18	19
Paved Length (Miles): 22.87	Section Length (MI)	1	1	1	1	1
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	58	60	68	76	70	66
Surface Condition Rating (SCR)	N/A	N/A	N/A	N/A	N/A	N/A
Roughness Condition Index (RCI)	58	60	68	76	70	66
Distress Index Values						
Structural Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Alligator Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Longitudinal Crack Index	N/A	N/A	N/A	N/A	N/A	N/A
Transverse Cracking Index	N/A	N/A	N/A	N/A	N/A	N/A
Patching Index	N/A	N/A	N/A	N/A	N/A	N/A
Rutting Index	N/A	N/A	N/A	N/A	N/A	N/A
International Roughness Index (IRI)	209	205	184	162	178	190
Lane & Width Information						
Number of Lanes	2	2	2	2	2	2
Paved Width (ft)	28.5	29.3	30.7	28.9	29.4	30.1
Lane Width (ft)	14.3	14.7	15.3	14.4	14.7	15.1

ONLY ROUGHNESS RATINGS WERE RECORDED ON THE CONCRETE SECTION OF ROUTE 0001. FIRST 0.16 MILES AND LAST 0.88 MILES OF ROUTE 0001 ARE ASPHALT.

Colonial National Historical Park

ROUTE 0001: COLONIAL PARKWAY

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

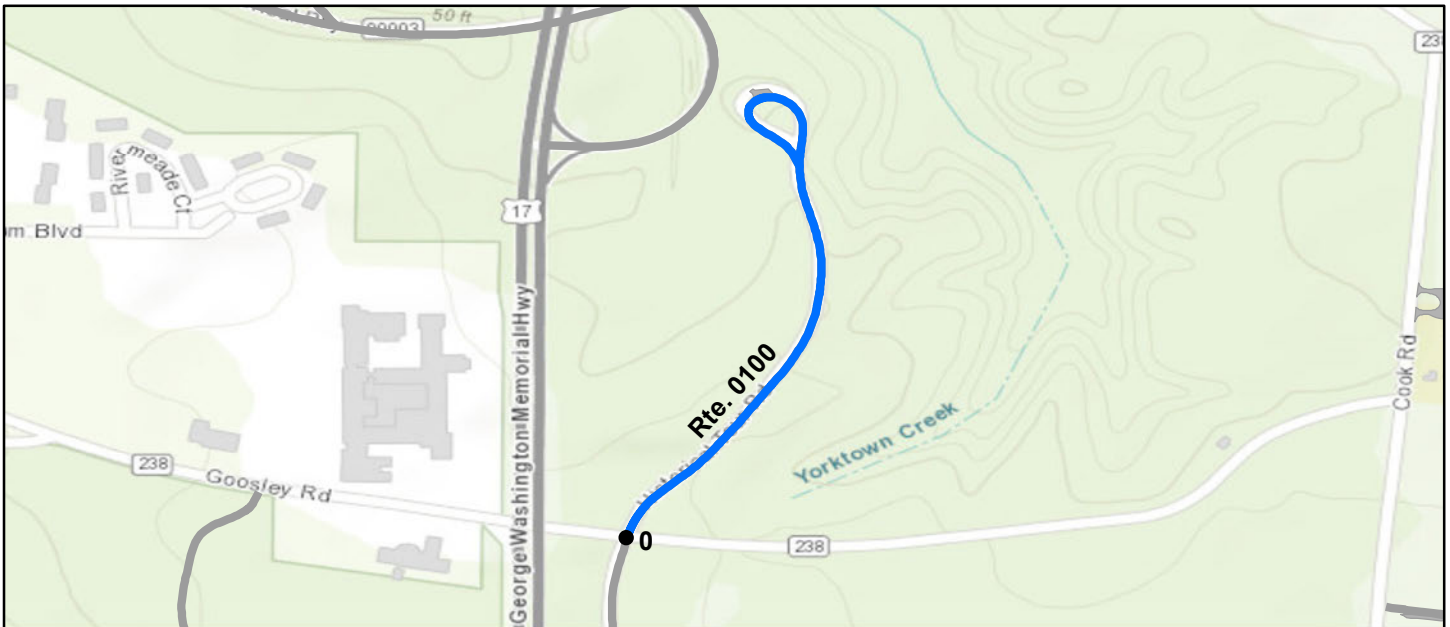
Route Condition Legend – Pavement Condition Rating (PCR)										
Poor (0 - 60)		Fair (61- 84)		Good (85 - 94)		Excellent (95 - 100)		Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.										
Inspection Date:	4/18/2021	Beginning Section MP	20	21	22					
Paved Length (Miles):	22.87	Section Length (MI)	1	1	0.87					
Surface Type:	CONCRETE	Route Summary								
Roadway Condition Information										
Pavement Condition Rating (PCR)	58	67	50	91						
Surface Condition Rating (SCR)	N/A	N/A	N/A	95						
Roughness Condition Index (RCI)	58	67	50	86						
Distress Index Values										
Structural Crack Index	N/A	N/A	N/A	95						
Alligator Crack Index	N/A	N/A	N/A	100						
Longitudinal Crack Index	N/A	N/A	N/A	95						
Transverse Cracking Index	N/A	N/A	N/A	95						
Patching Index	N/A	N/A	N/A	98						
Rutting Index	N/A	N/A	N/A	98						
International Roughness Index (IRI)	209	187	224	151						
Lane & Width Information										
Number of Lanes	2	2	2	2						
Paved Width (ft)	28.5	26.6	26.5	22.4						
Lane Width (ft)	14.3	13.3	13.3	11.2						

ONLY ROUGHNESS RATINGS WERE RECORDED ON THE CONCRETE SECTION OF ROUTE 0001. FIRST 0.16 MILES AND LAST 0.88 MILES OF ROUTE 0001 ARE ASPHALT.

Colonial National Historical Park

ROUTE 0100: UNTOUCHED REDOUBT 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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.41	Section Length (MI)	0.41				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	99	99				
Surface Condition Rating (SCR)	99	99				
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	100	100				
Patching Index	100	100				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	19.1	19.1				
Lane Width (ft)	9.5	9.5				

Colonial National Historical Park

ROUTE 0101: GRAND FRENCH BATTERY 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 (61 - 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

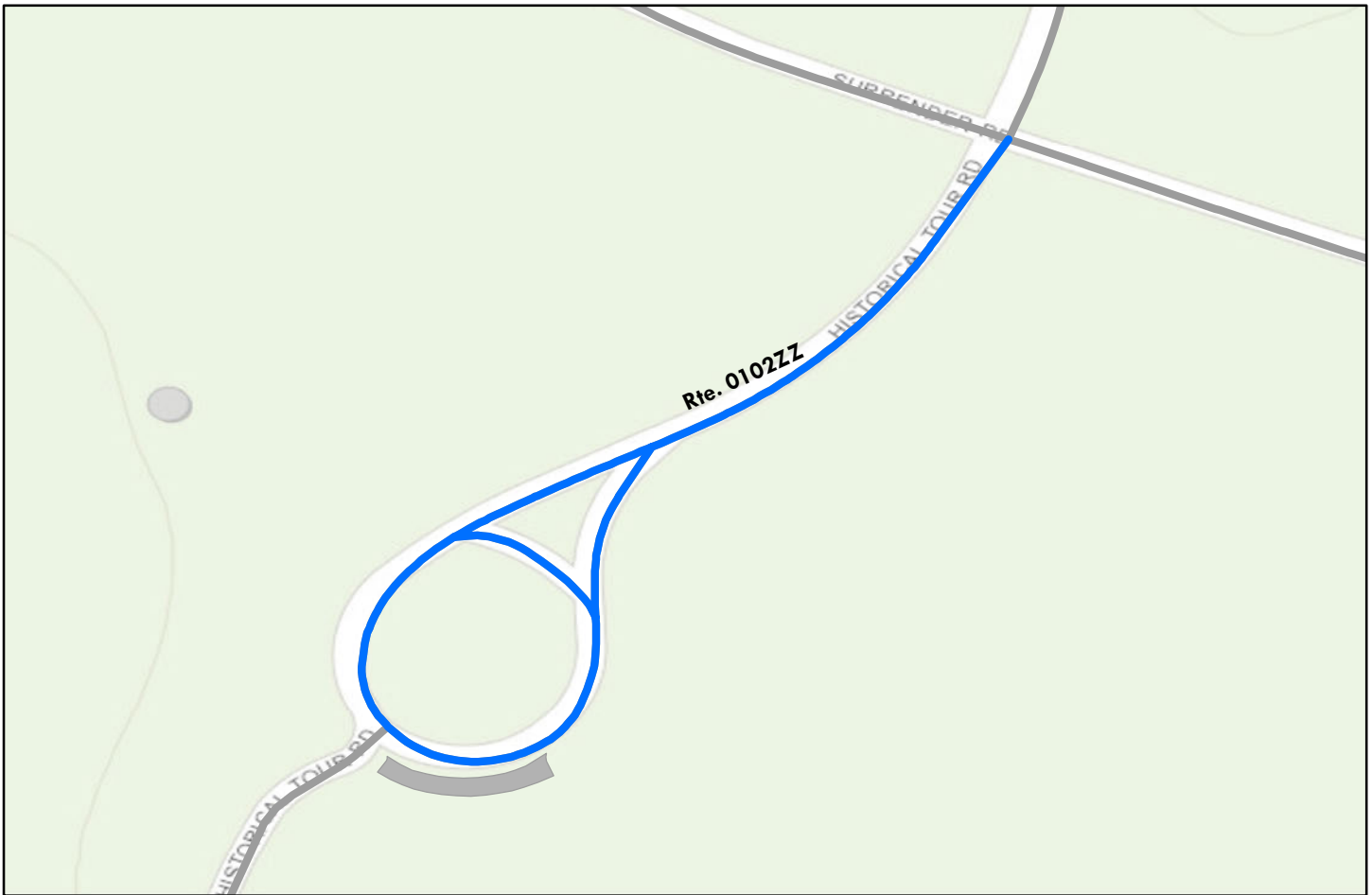
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date:	4/18/2021	Beginning Section MP	0				
Paved Length (Miles):	0.2	Section Length (MI)	0.2				
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	93	93					
Surface Condition Rating (SCR)	93	93					
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	97	97					
Rutting Index	93	93					
International Roughness Index (IRI)	N/A	N/A					
Lane & Width Information							
Number of Lanes	2	2					
Paved Width (ft)	18.7	18.7					
Lane Width (ft)	9.3	9.3					

Colonial National Historical Park

ROUTE 0102ZZ: SURRENDER FIELD 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

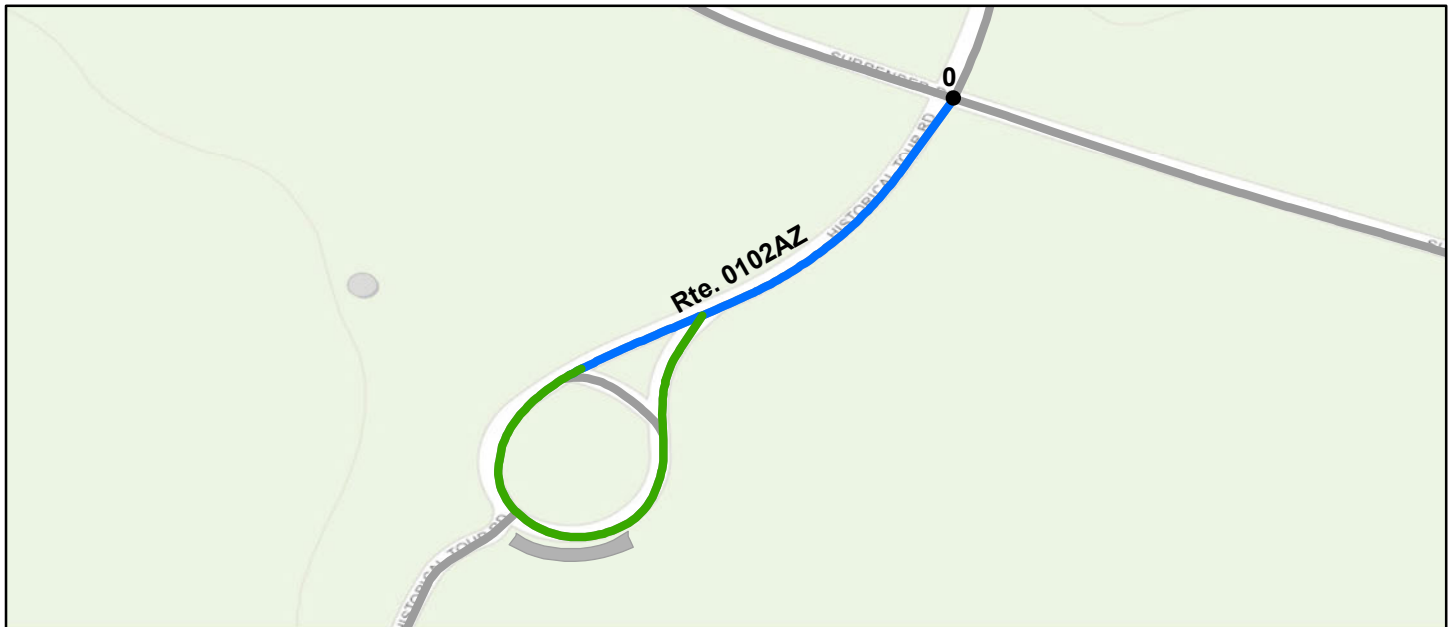
Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date: 4/18/2021						
Paved Length (Miles): 0.24						
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	95					
Lane & Width Information						
Number of Lanes	2					
Paved Width (ft)	18.4					
Lane Width (ft)	10					

Colonial National Historical Park

ROUTE 0102AZ: SURRENDER FIELD ACCESS ROAD

Subcomponent of Route COLO-0102ZZ
Data Collection Vehicle (DCV) Rating



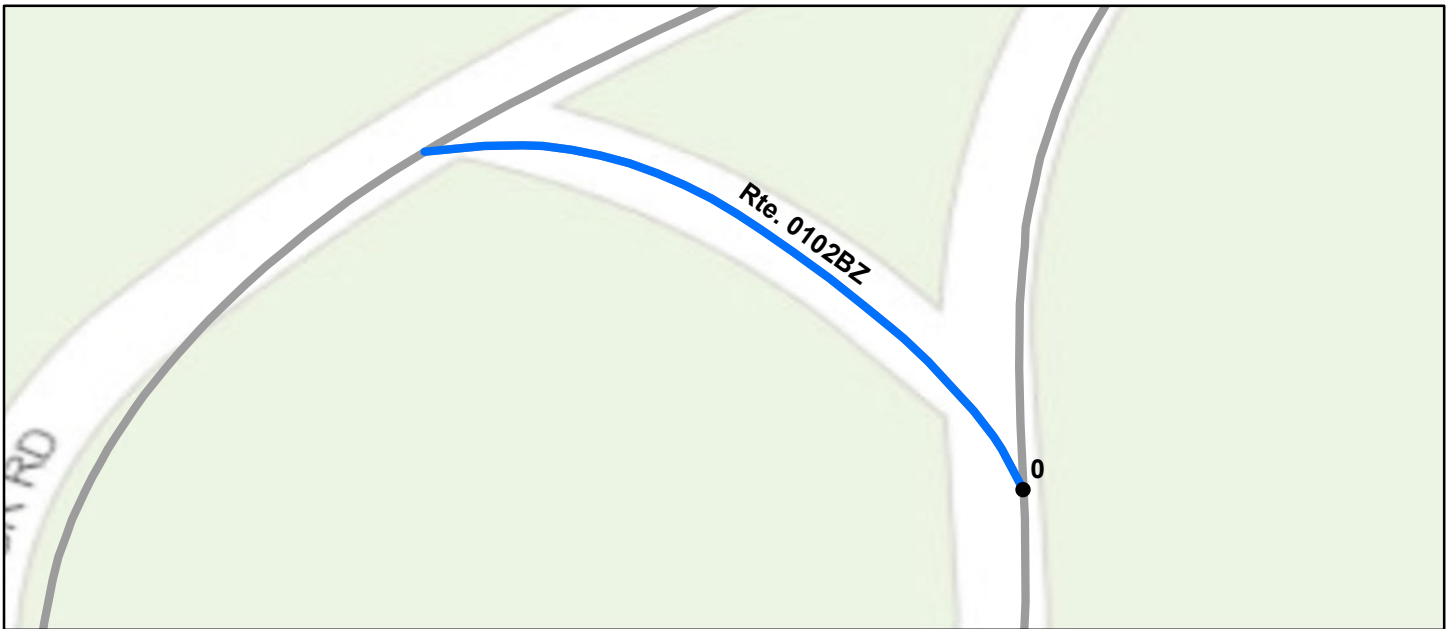
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.21	Section Length (MI)	0.21			
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	100	100				
Alligator Crack Index	100	100				
Longitudinal Crack Index	100	100				
Transverse Cracking Index	99	99				
Patching Index	100	100				
Rutting Index	95	95				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	18.8	18.8				
Lane Width (ft)	9.4	9.4				

Colonial National Historical Park

ROUTE 0102BZ: SURRENDER FIELD ACCESS SPUR ROAD

Subcomponent of Route COLO-0102ZZ
Data Collection Vehicle (DCV) Rating



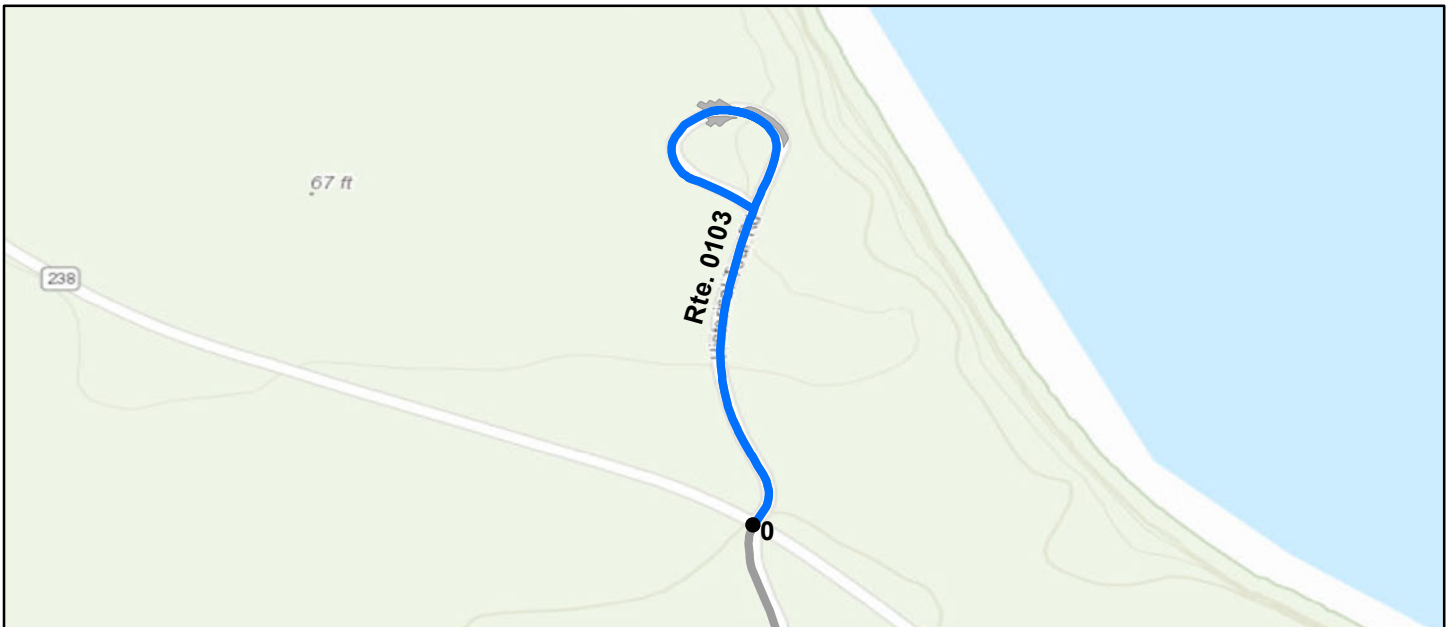
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.03	Section Length (MI)	0.03				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	99	99				
Surface Condition Rating (SCR)	99	99				
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	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	14.8	14.8				
Lane Width (ft)	14.8	14.8				

Colonial National Historical Park

ROUTE 0103: REDOUBT 9 AND 10 ACCESS 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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

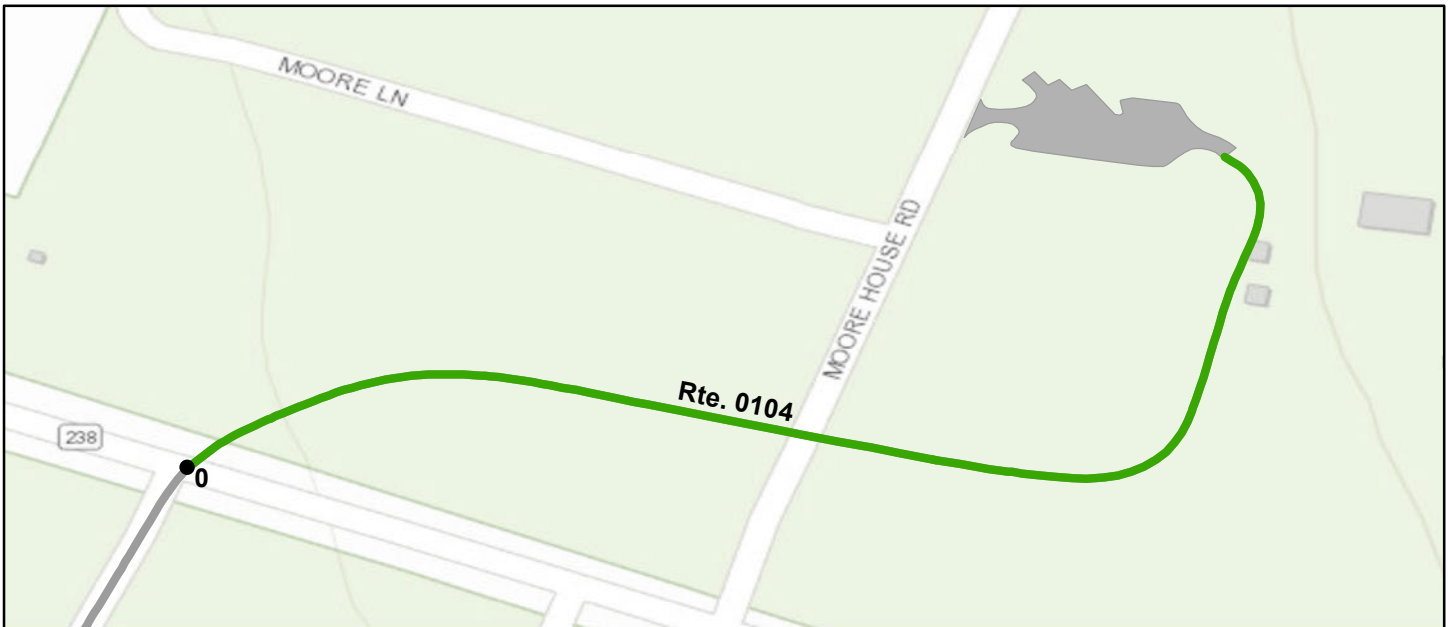
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.22	Section Length (MI)	0.22				
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	100	100				
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)	17.8	17.8				
Lane Width (ft)	12.5	12.5				

Colonial National Historical Park

ROUTE 0104: MOORE HOUSE ACCESS 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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.18	Section Length (MI)	0.18				
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	99	99				
Alligator Crack Index	100	100				
Longitudinal Crack Index	99	99				
Transverse Cracking Index	98	98				
Patching Index	100	100				
Rutting Index	90	90				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	20.7	20.7				
Lane Width (ft)	10.3	10.3				

Colonial National Historical Park

ROUTE 0105A: U.S. HIGHWAY 17 ACCESS ROAD A

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

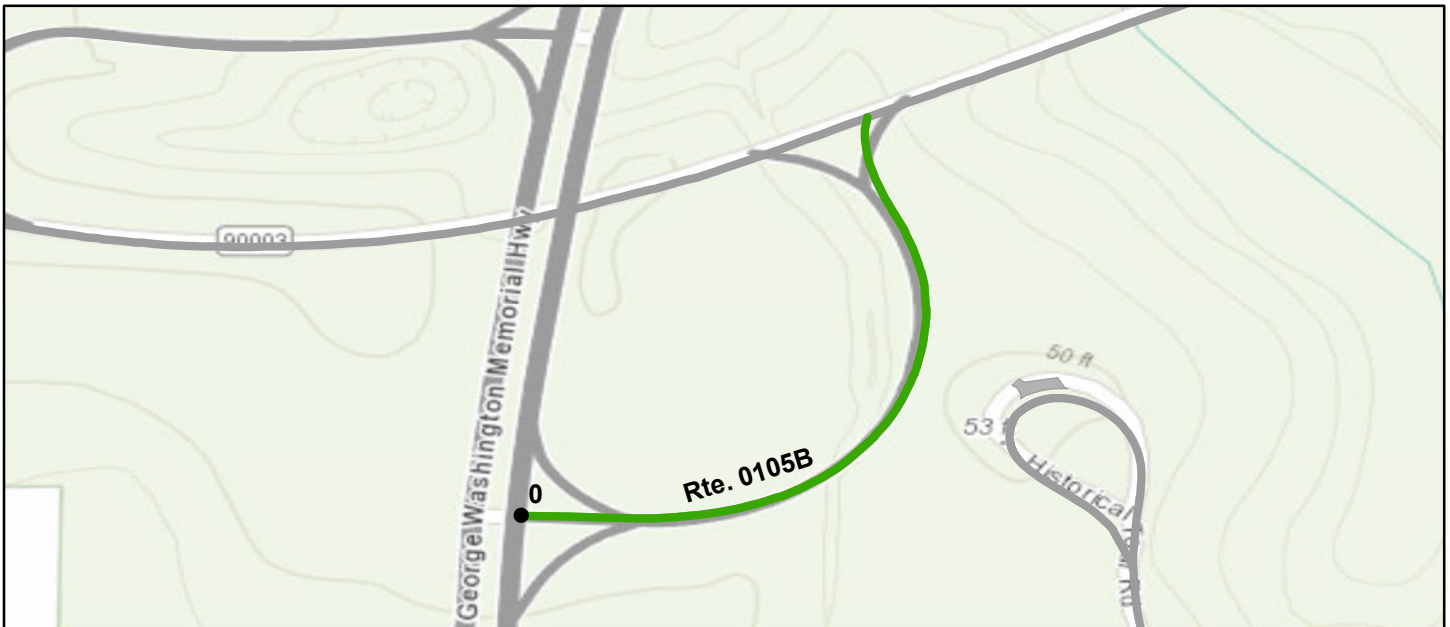
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.18	Section Length (MI)	0.18			
Surface Type:	CONCRETE	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	90	90				
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)	26.2	26.2				
Lane Width (ft)	14.7	14.7				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0105B: U.S. HIGHWAY 17 ACCESS ROAD B

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.18	Section Length (MI)	0.18				
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	90	90				
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)	26.3	26.3				
Lane Width (ft)	12	12				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0106: FUSILIER'S 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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

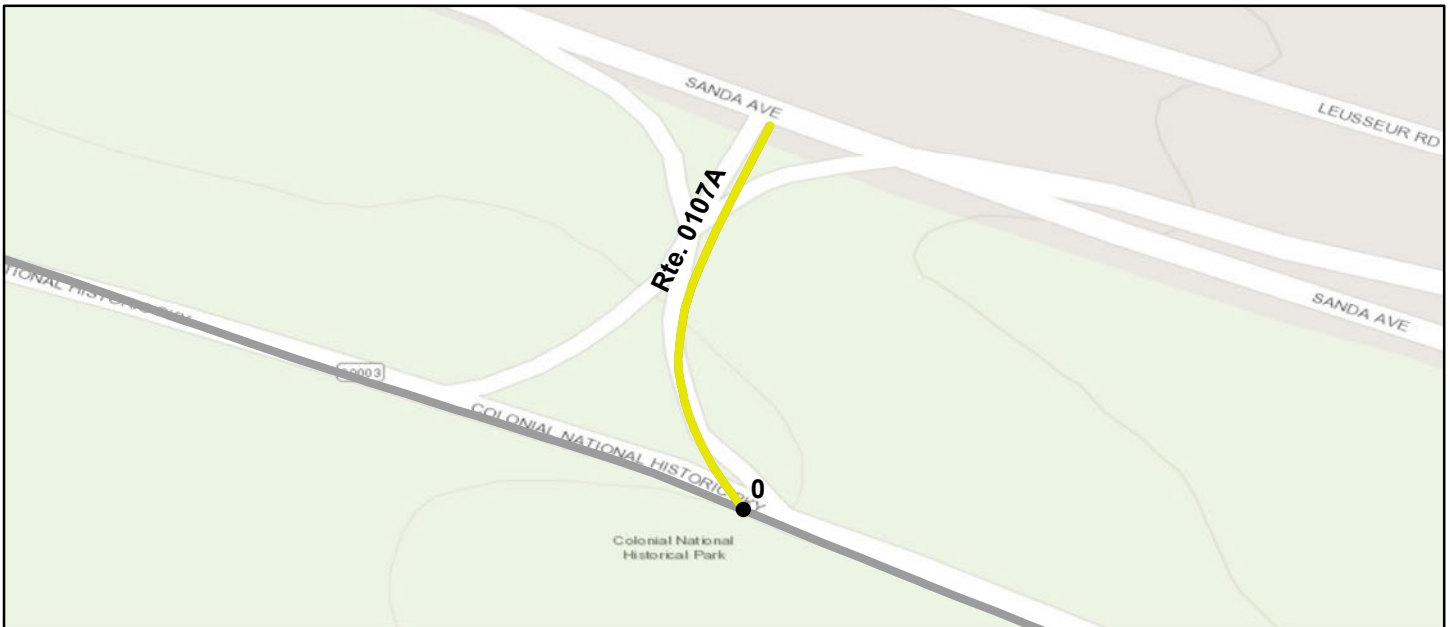
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	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)	94	94				
Surface Condition Rating (SCR)	94	94				
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	94	94				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	22.7	22.7				
Lane Width (ft)	11	11				

Colonial National Historical Park

ROUTE 0107A: CHEATHAM ANNEX ACCESS ROAD A

Data Collection Vehicle (DCV) Rating



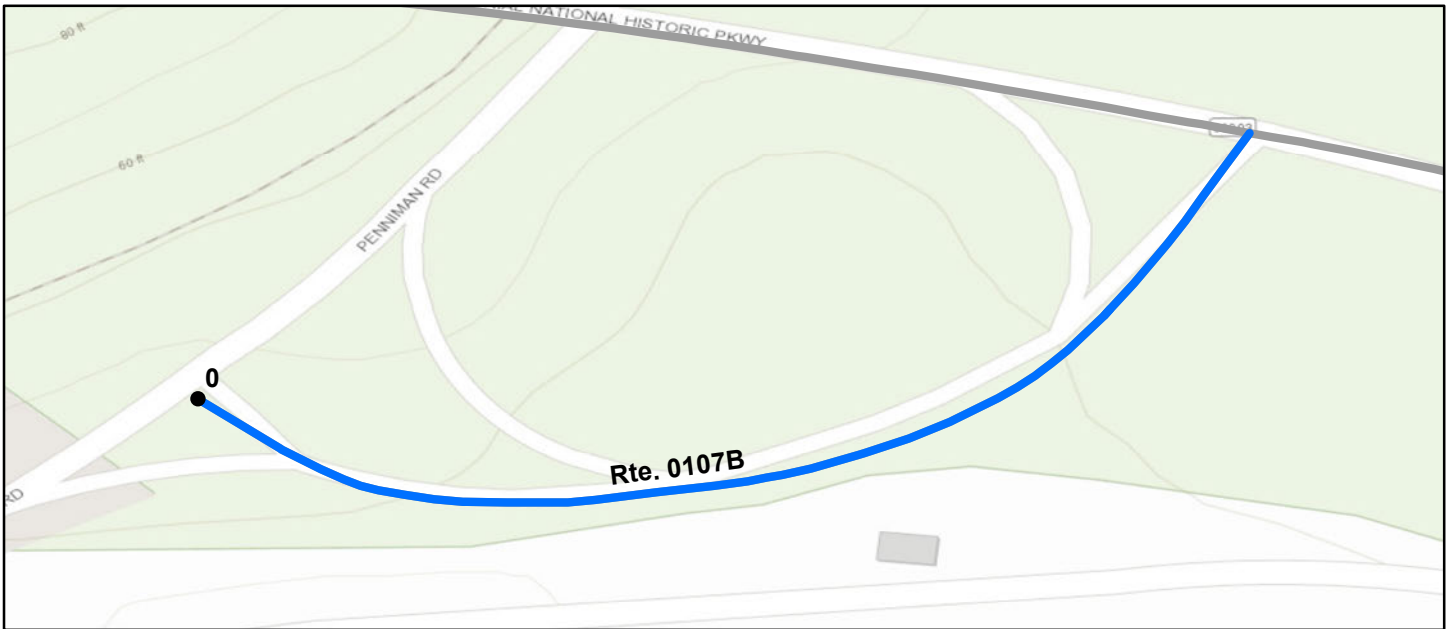
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	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)	73	73				
Surface Condition Rating (SCR)	73	73				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	73	73				
Alligator Crack Index	100	100				
Longitudinal Crack Index	73	73				
Transverse Cracking Index	91	91				
Patching Index	100	100				
Rutting Index	91	91				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	36.3	36.3				
Lane Width (ft)	18.8	18.8				

Colonial National Historical Park

ROUTE 0107B: CHEATHAM ANNEX ACCESS ROAD B

Data Collection Vehicle (DCV) Rating



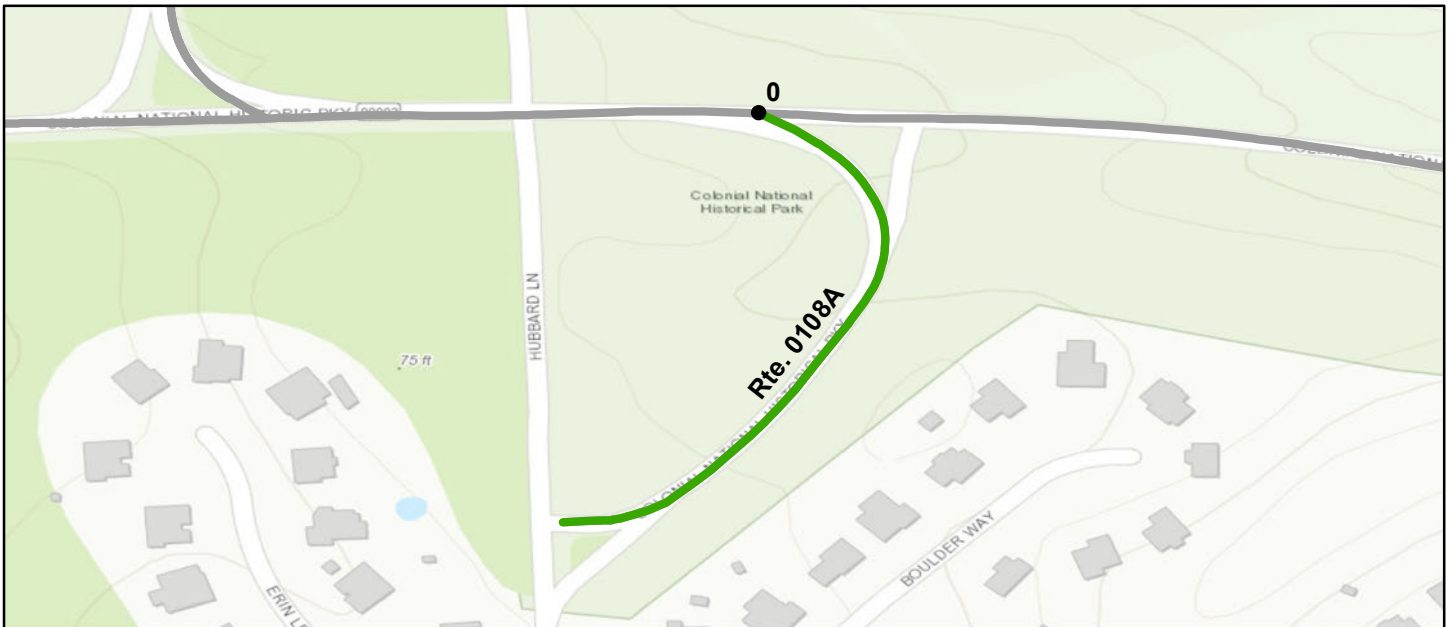
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	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)	96	96				
Surface Condition Rating (SCR)	96	96				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	96	96				
Alligator Crack Index	100	100				
Longitudinal Crack Index	96	96				
Transverse Cracking Index	99	99				
Patching Index	99	99				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	25.9	25.9				
Lane Width (ft)	12.9	12.9				

Colonial National Historical Park

ROUTE 0108A: QUEENS LAKE ACCESS A

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

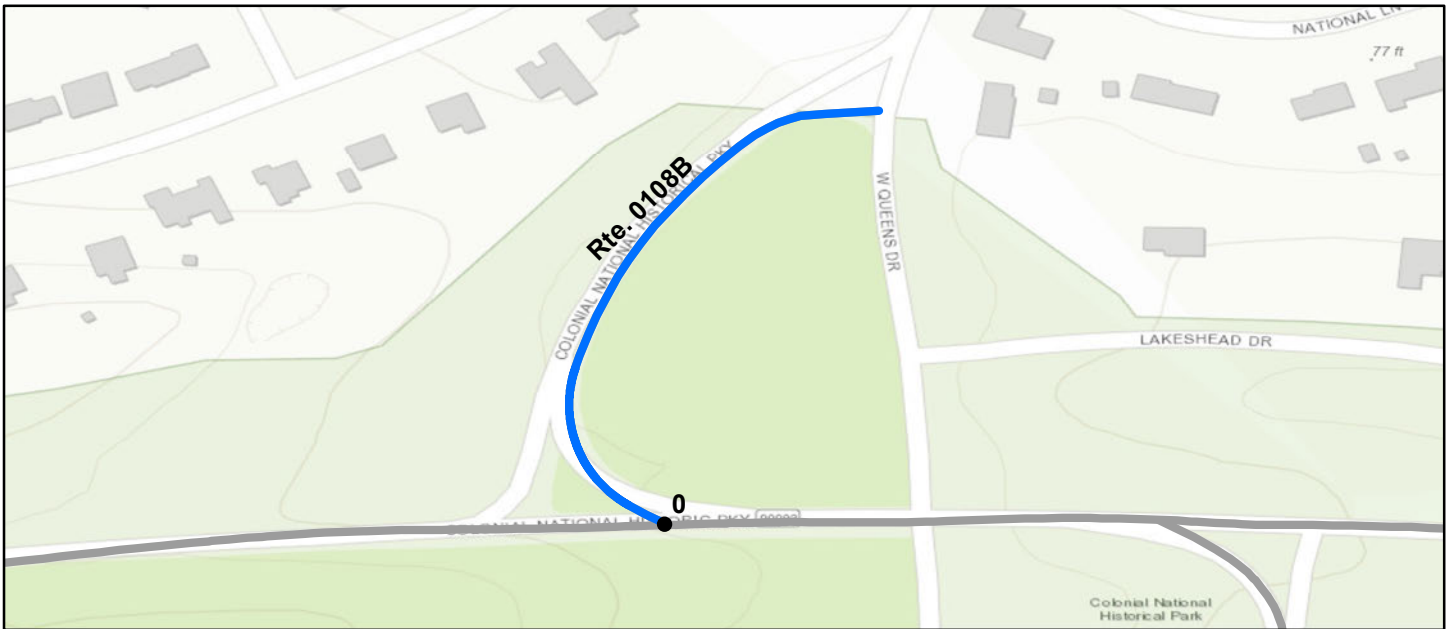
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	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)	87	87				
Surface Condition Rating (SCR)	87	87				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	87	87				
Alligator Crack Index	100	100				
Longitudinal Crack Index	87	87				
Transverse Cracking Index	94	94				
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)	25	25				
Lane Width (ft)	11.8	11.8				

Colonial National Historical Park

ROUTE 0108B: QUEENS LAKE ACCESS B

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

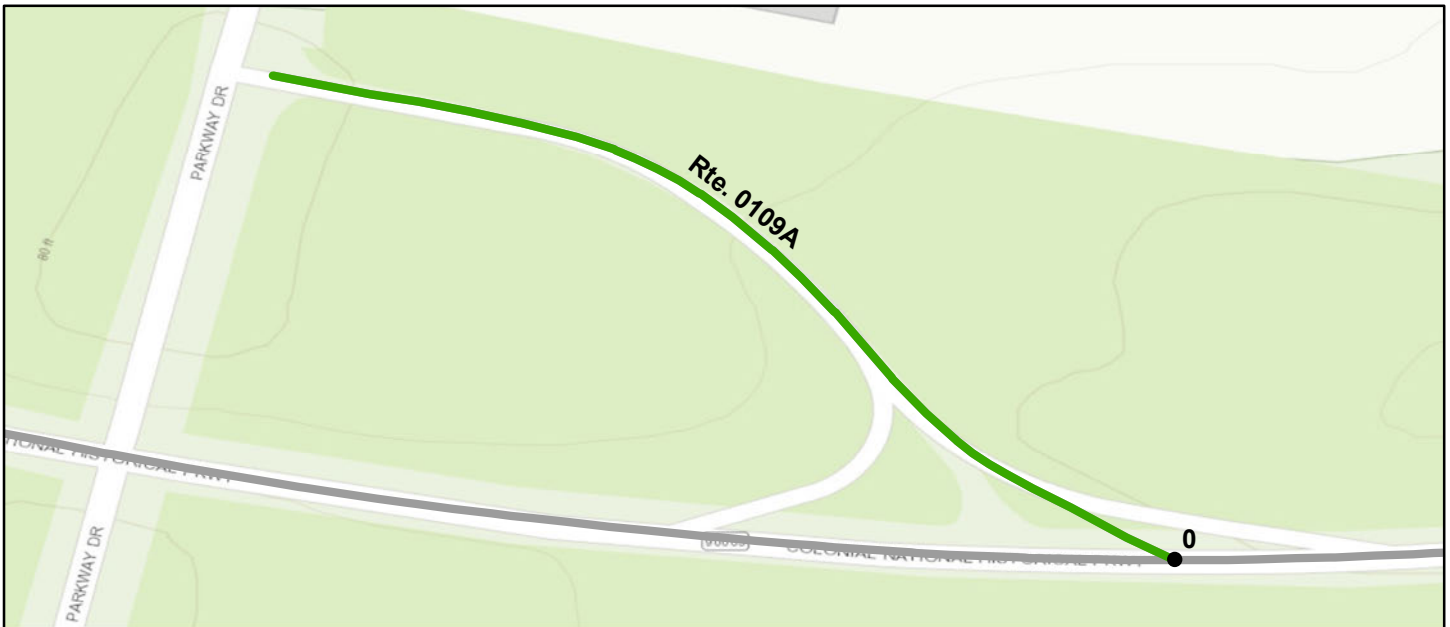
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	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)	97	97				
Surface Condition Rating (SCR)	97	97				
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	97	97				
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)	24.6	24.6				
Lane Width (ft)	12.7	12.7				

Colonial National Historical Park

ROUTE 0109A: PARKWAY DRIVE ACCESS ROAD A

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date:	4/18/2021	Beginning Section MP	0				
Paved Length (Miles):	0.1	Section Length (MI)	0.1				
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	94	94					
Surface Condition Rating (SCR)	94	94					
Roughness Condition Index (RCI)	N/A	N/A					
Distress Index Values							
Structural Crack Index	97	97					
Alligator Crack Index	100	100					
Longitudinal Crack Index	97	97					
Transverse Cracking Index	94	94					
Patching Index	97	97					
Rutting Index	94	94					
International Roughness Index (IRI)	N/A	N/A					
Lane & Width Information							
Number of Lanes	2	2					
Paved Width (ft)	25.2	25.2					
Lane Width (ft)	13.5	13.5					

Colonial National Historical Park

ROUTE 0109B: PARKWAY DRIVE ACCESS ROAD B

Data Collection Vehicle (DCV) Rating



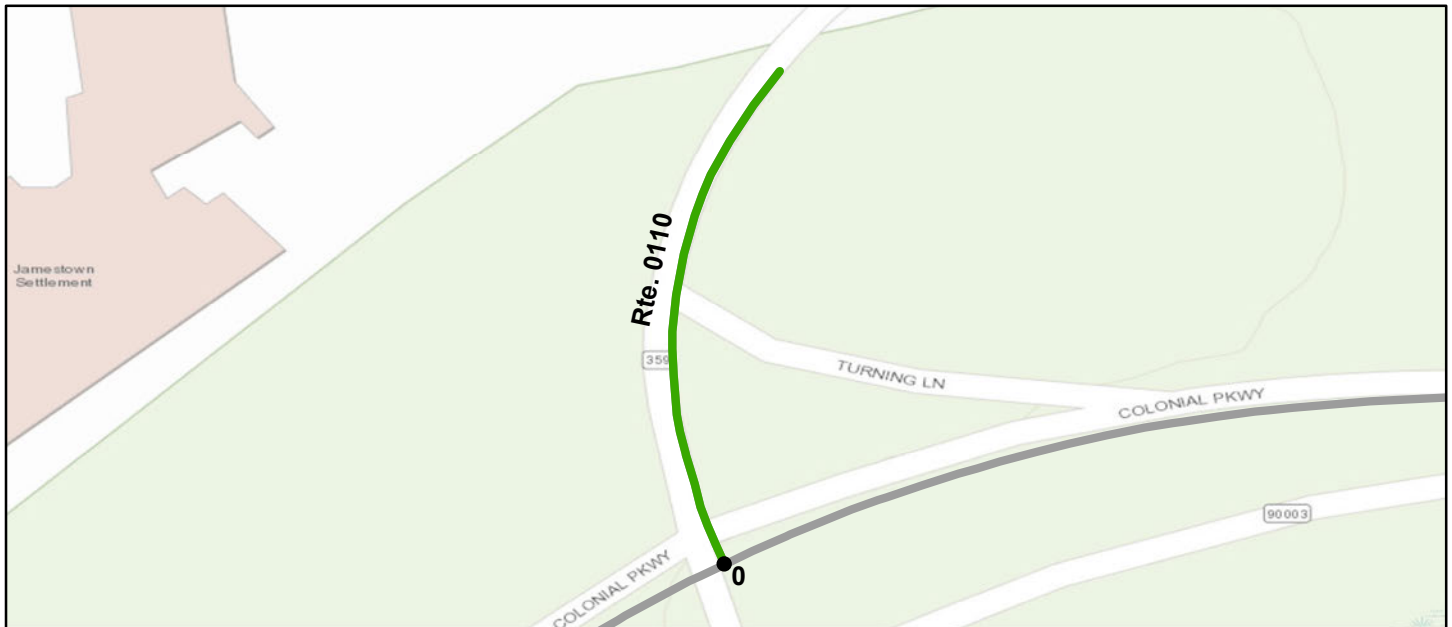
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	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)	87	87				
Surface Condition Rating (SCR)	87	87				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	94	94				
Alligator Crack Index	100	100				
Longitudinal Crack Index	94	94				
Transverse Cracking Index	87	87				
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)	25.4	25.4				
Lane Width (ft)	13.2	13.2				

Colonial National Historical Park

ROUTE 0110: STATE HIGHWAY 359

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.06	Section Length (MI)	0.06				
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	90	90				
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)	28.5	28.5				
Lane Width (ft)	14.2	14.2				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0111A: STATE HIGHWAY 199 KINGS POINT A

Data Collection Vehicle (DCV) Rating



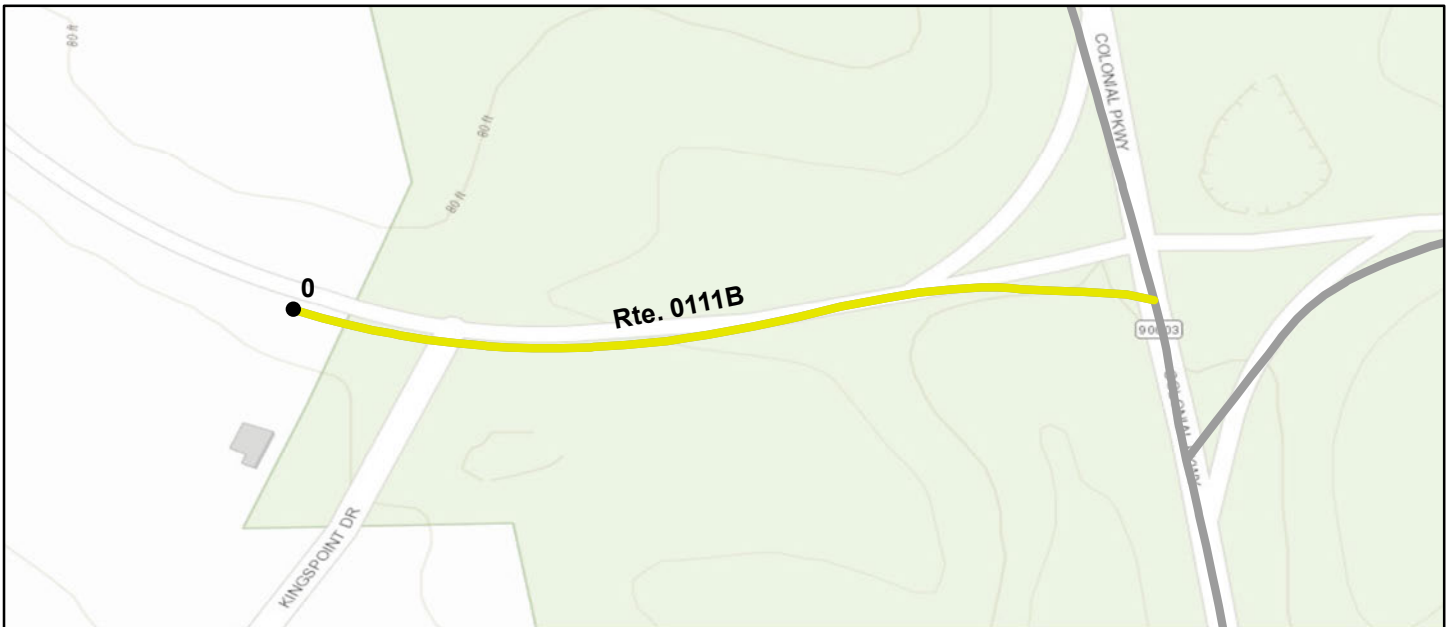
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	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)	94	94				
Surface Condition Rating (SCR)	94	94				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	94	94				
Alligator Crack Index	100	100				
Longitudinal Crack Index	94	94				
Transverse Cracking Index	99	99				
Patching Index	100	100				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	21.2	21.2				
Lane Width (ft)	11.1	11.1				

Colonial National Historical Park

ROUTE 0111B: STATE HIGHWAY 199 KINGS POINT B

Data Collection Vehicle (DCV) Rating



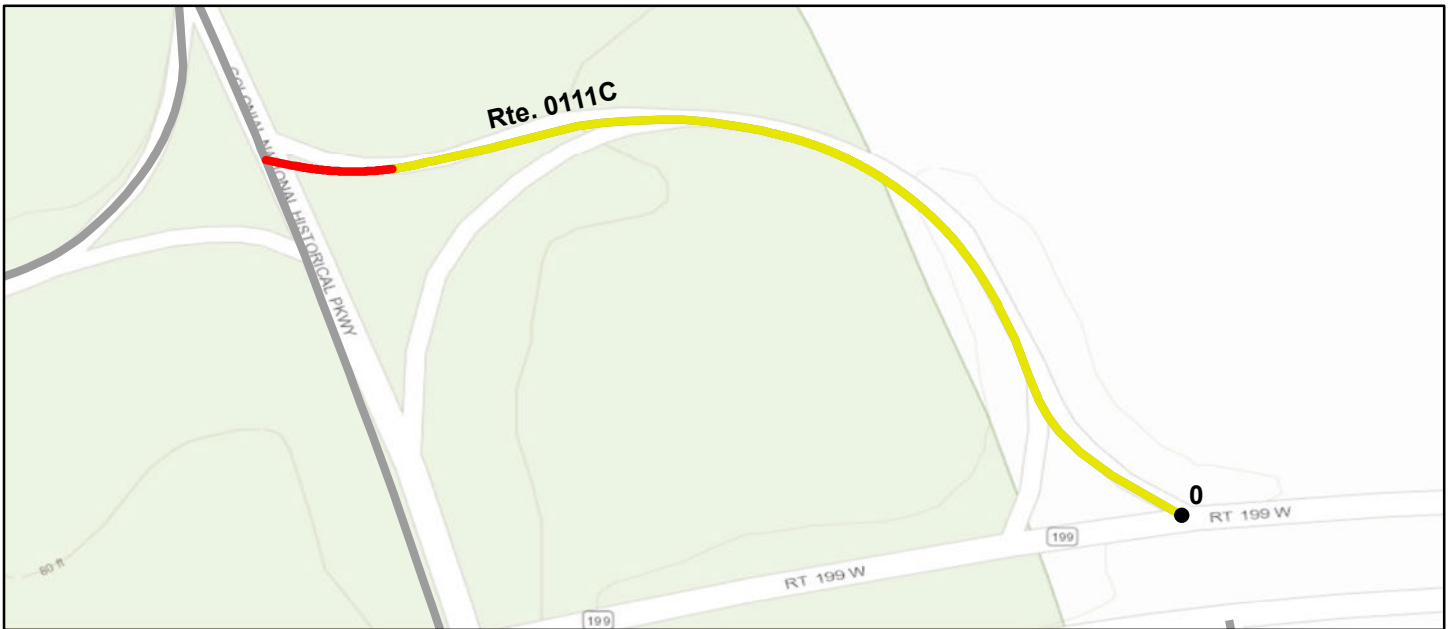
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	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)	70	70				
Surface Condition Rating (SCR)	70	70				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	78	78				
Alligator Crack Index	100	100				
Longitudinal Crack Index	78	78				
Transverse Cracking Index	70	70				
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)	23.2	23.2				
Lane Width (ft)	12.3	12.3				

Colonial National Historical Park

ROUTE 0111C: STATE HIGHWAY 199 KINGS POINT C

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.11	Section Length (MI)	0.11			
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	73	73				
Alligator Crack Index	100	100				
Longitudinal Crack Index	73	73				
Transverse Cracking Index	76	76				
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)	28	28				
Lane Width (ft)	14.2	14.2				

Colonial National Historical Park

ROUTE 0111D: STATE HIGHWAY 199 KINGS POINT D

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	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)	79	79				
Surface Condition Rating (SCR)	79	79				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	92	92				
Alligator Crack Index	100	100				
Longitudinal Crack Index	92	92				
Transverse Cracking Index	79	79				
Patching Index	99	99				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	27.1	27.1				
Lane Width (ft)	12.7	12.7				

Colonial National Historical Park

ROUTE 0112A: NEWPORT AVENUE ACCESS ROAD A

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

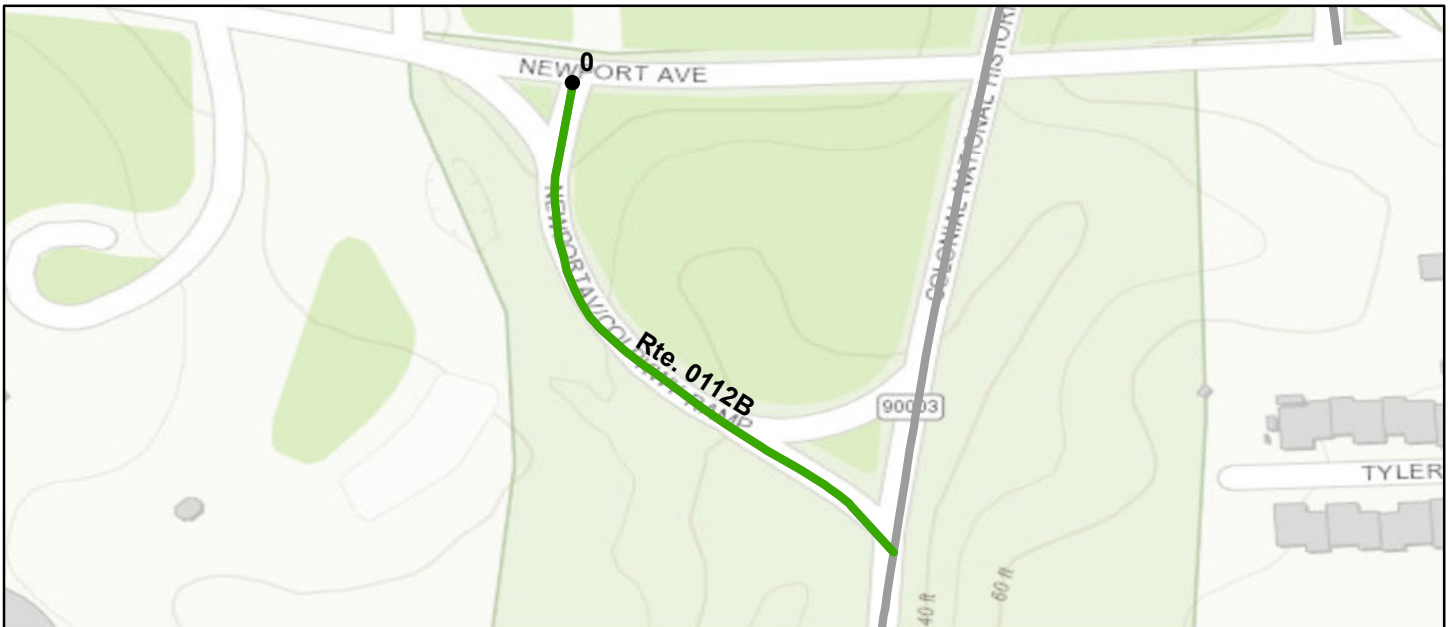
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.06	Section Length (MI)	0.06			
Surface Type:	CONCRETE	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	90	90				
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)	30.5	30.5				
Lane Width (ft)	15.3	15.3				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0112B: NEWPORT AVENUE ACCESS ROAD B

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

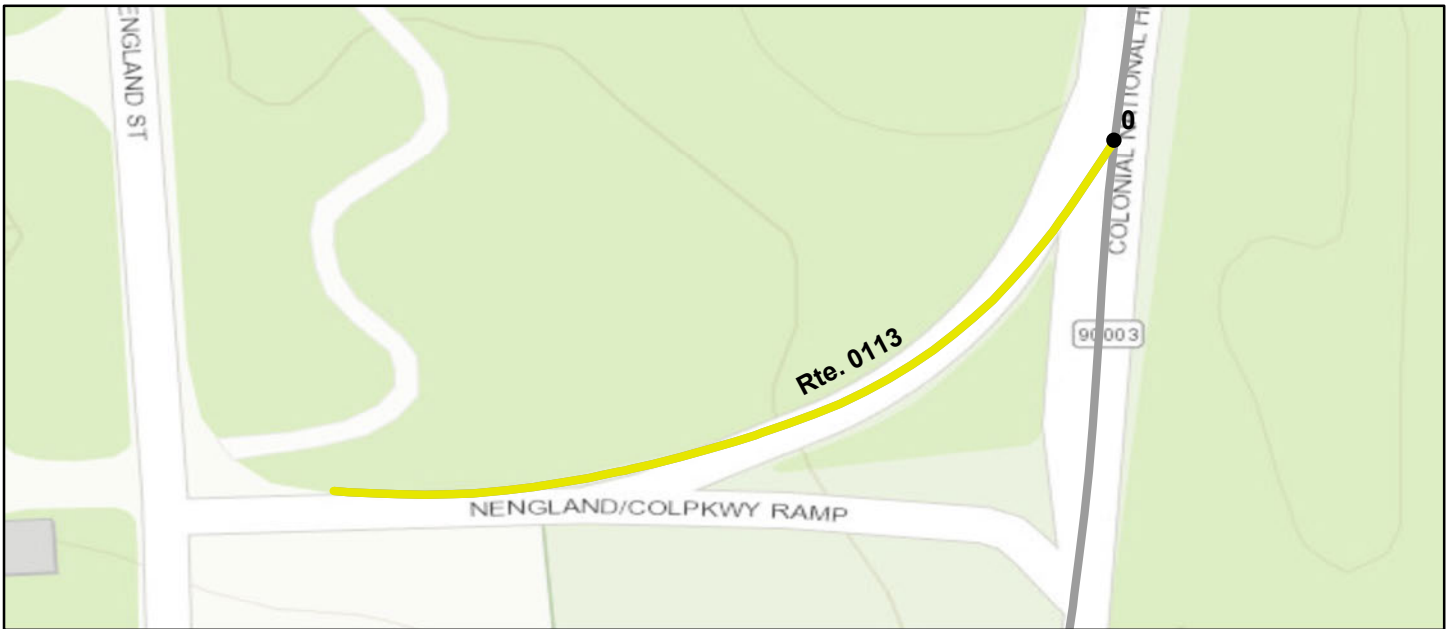
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.09	Section Length (MI)	0.09				
Surface Type: CONCRETE	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	90	90				
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)	31.4	31.4				
Lane Width (ft)	15.7	15.7				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0113: NORTH ENGLAND STREET ACCESS 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

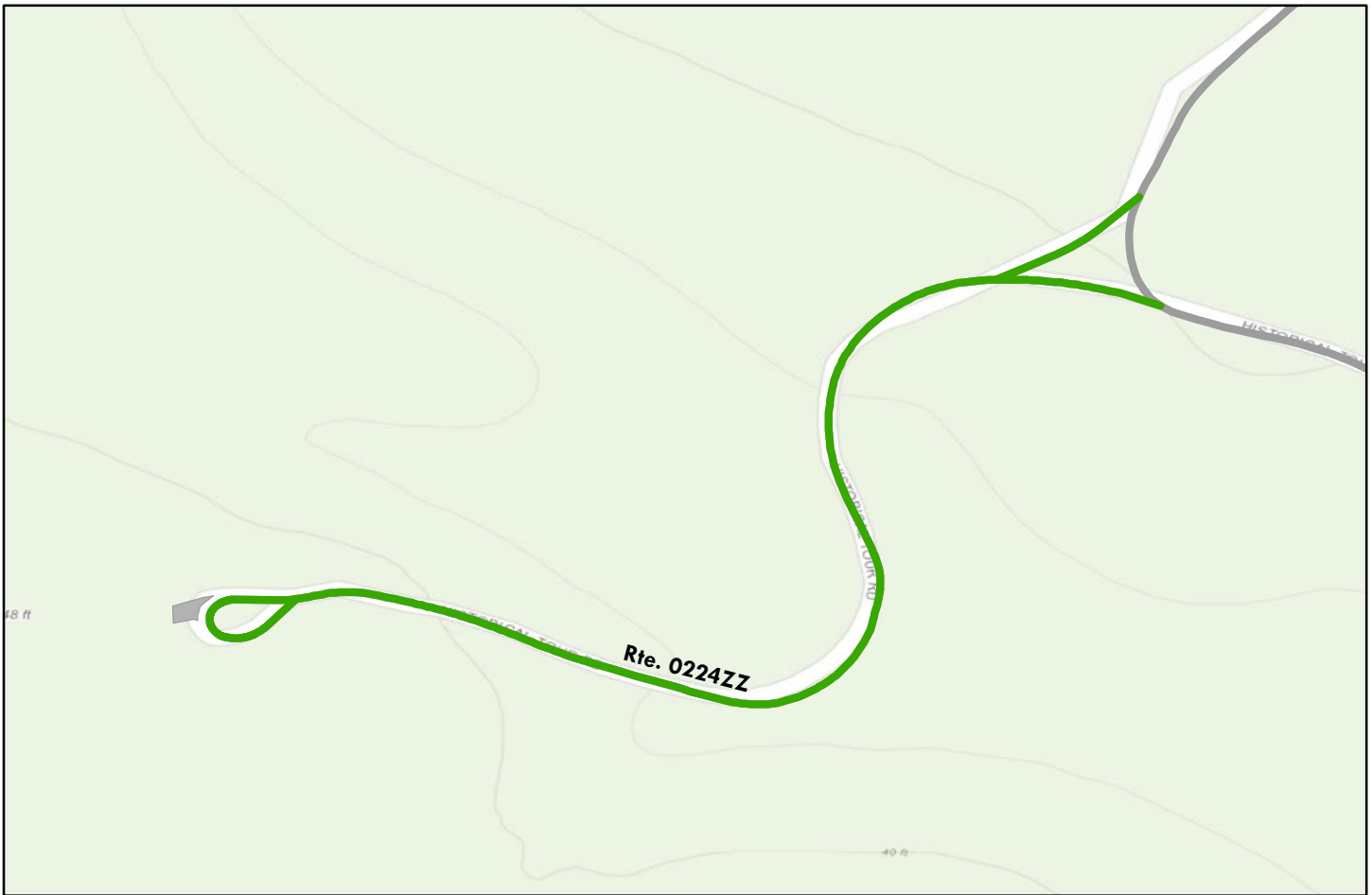
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.06	Section Length (MI)	0.06			
Surface Type:	CONCRETE	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	73	73				
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)	17.5	17.5				
Lane Width (ft)	17.5	17.5				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0224ZZ: WASHINGTON'S HEADQUARTERS 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

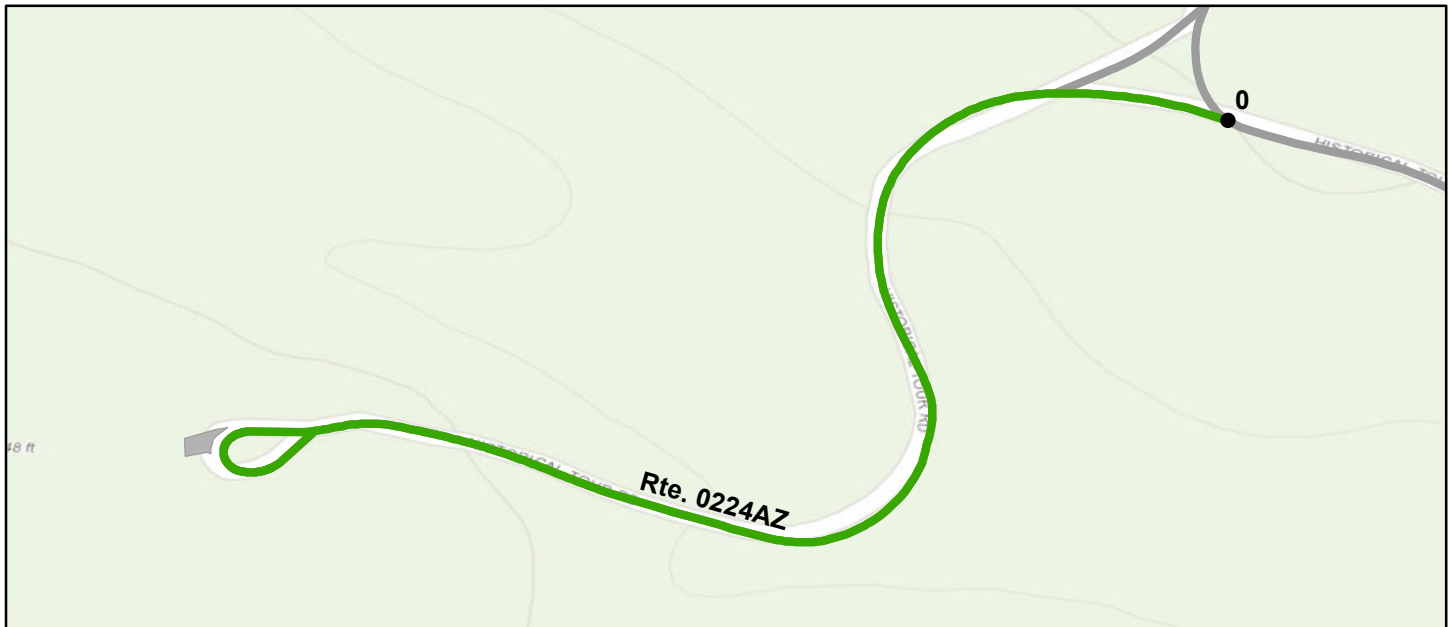
Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date: 4/18/2021						
Paved Length (Miles): 0.35						
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	93					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	16.5					
Lane Width (ft)	10.8					

Colonial National Historical Park

ROUTE 0224AZ: WASHINGTON'S HEADQUARTERS ROAD

Subcomponent of Route COLO-0224ZZ
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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.32	Section Length (MI)	0.32				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	93	93				
Surface Condition Rating (SCR)	93	93				
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	93	93				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	17	17				
Lane Width (ft)	10.8	10.8				

Colonial National Historical Park

ROUTE 0224BZ: WASHINGTON'S HEADQUARTERS SPUR ROAD

Subcomponent of Route COLO-0224ZZ
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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.03	Section Length (MI)	0.03				
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	100	100				
Patching Index	100	100				
Rutting Index	97	97				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	10.2	10.2				
Lane Width (ft)	10.2	10.2				

Colonial National Historical Park

ROUTE 0225: SURRENDER ROAD

Data Collection Vehicle (DCV) Rating



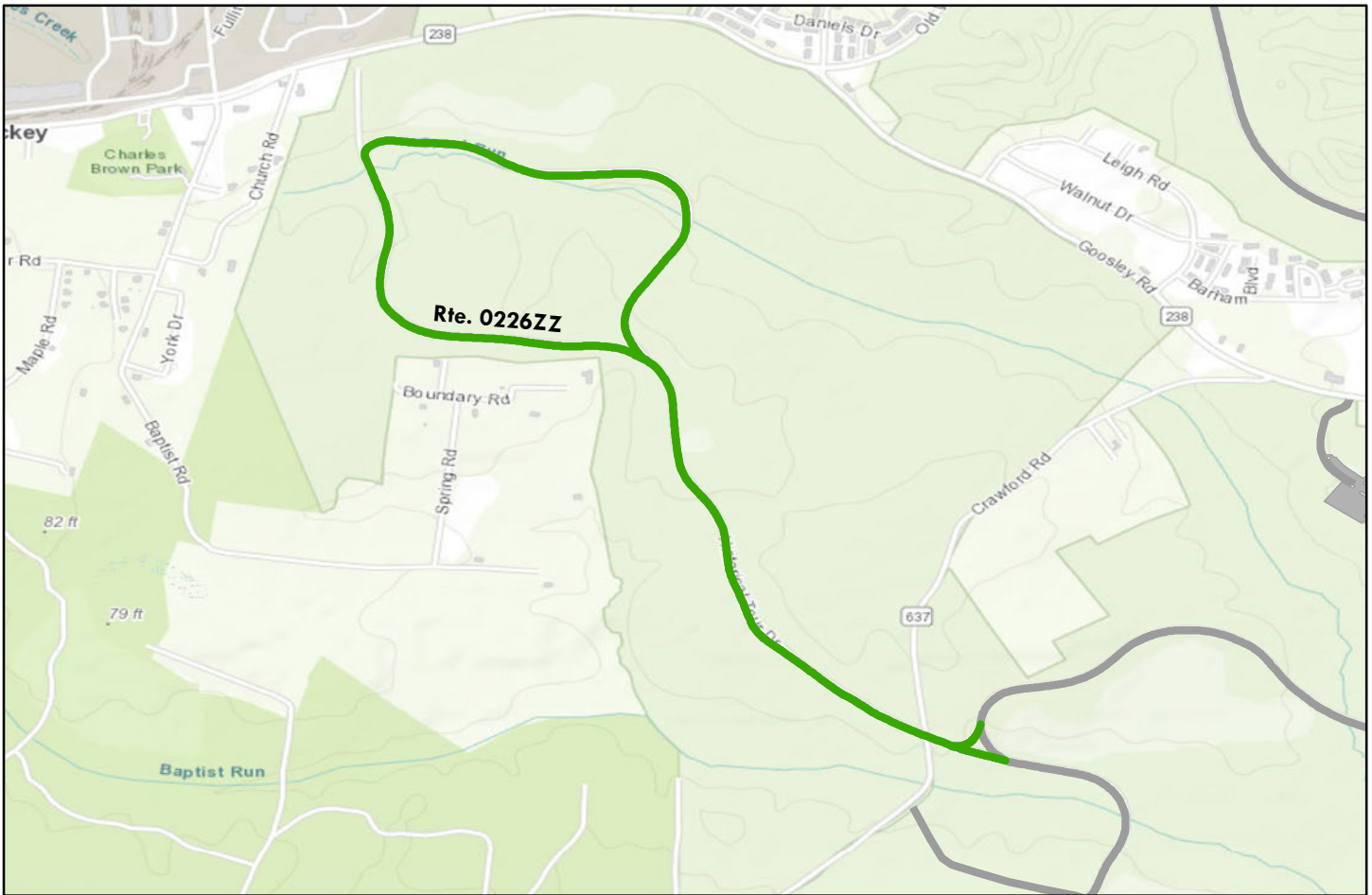
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)									
Poor (0 - 60)		Fair (61- 84)		Good (85 - 94)		Excellent (95 - 100)		Not Rated	
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.									
Inspection Date:	4/18/2021	Beginning Section MP	0	1					
Paved Length (Miles):	1.27	Section Length (MI)	1	0.27					
Surface Type:	ASPHALT	Route Summary							
Roadway Condition Information									
Pavement Condition Rating (PCR)		94	93	93					
Surface Condition Rating (SCR)		98	98	92					
Roughness Condition Index (RCI)		87	85	95					
Distress Index Values									
Structural Crack Index		100	100	100					
Alligator Crack Index		100	100	100					
Longitudinal Crack Index		100	100	100					
Transverse Cracking Index		100	100	100					
Patching Index		98	100	92					
Rutting Index		98	98	98					
International Roughness Index (IRI)		148	154	126					
Lane & Width Information									
Number of Lanes		2	2	2					
Paved Width (ft)		16	16.1	15.6					
Lane Width (ft)		8	8.1	7.8					

Colonial National Historical Park

ROUTE 0226ZZ: FRENCH LOOP 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.

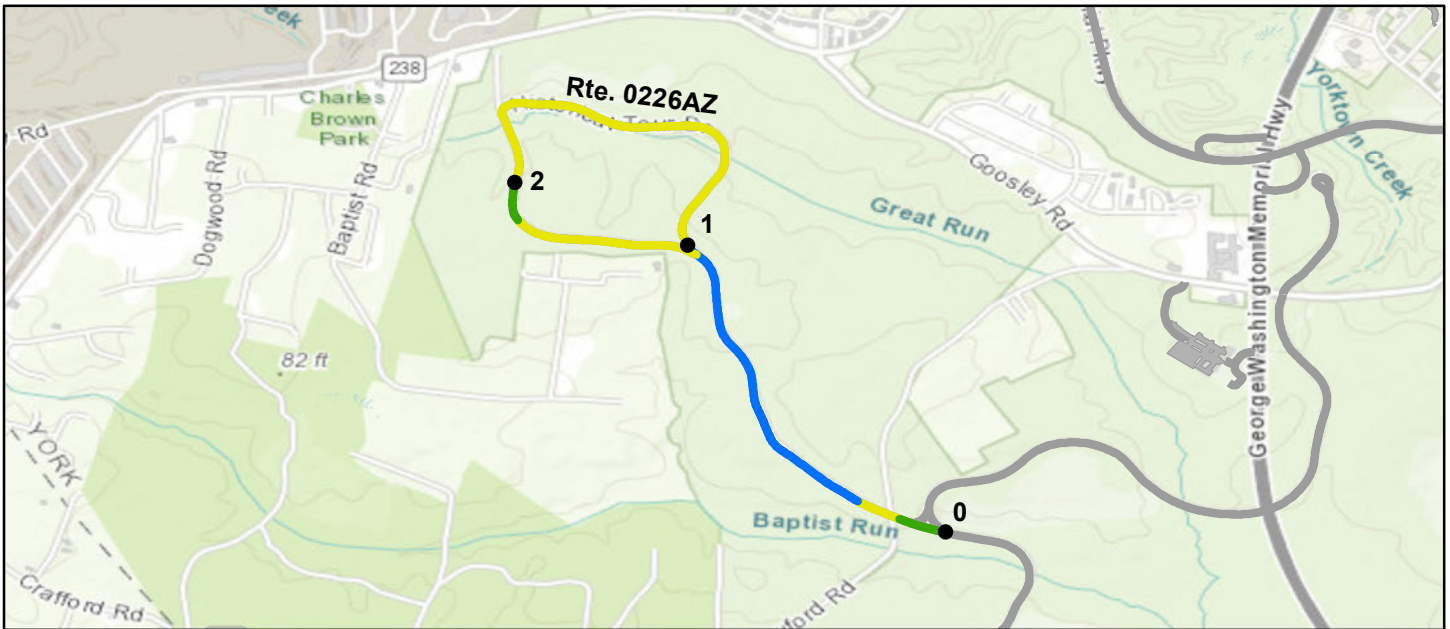
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date:	4/18/2021					
Paved Length (Miles):	2.54					
Surface Type:	ASPHALT	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	89					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	14.4					
Lane Width (ft)	11					

Colonial National Historical Park

ROUTE 0226AZ: FRENCH LOOP ROAD

Subcomponent of Route COLO-0226ZZ

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

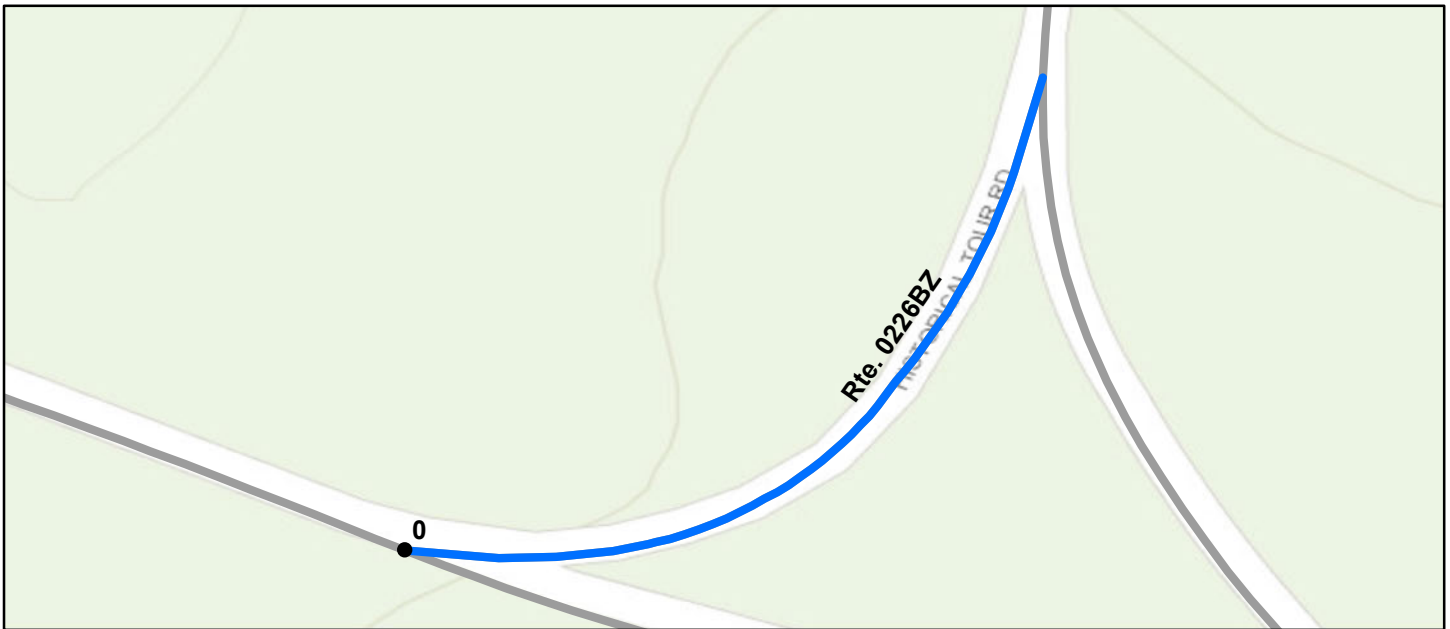
Inspection Date:	4/18/2021	Beginning Section MP	0	1	2		
Paved Length (Miles):	2.49	Section Length (MI)	1	1	0.49		
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	89	97	84	84			
Surface Condition Rating (SCR)	83	99	73	73			
Roughness Condition Index (RCI)	98	94	100	100			
Distress Index Values							
Structural Crack Index	99	99	99	95			
Alligator Crack Index	100	100	100	100			
Longitudinal Crack Index	99	99	99	95			
Transverse Cracking Index	100	100	99	100			
Patching Index	83	99	73	73			
Rutting Index	99	99	99	99			
International Roughness Index (IRI)	120	128	115	114			
Lane & Width Information							
Number of Lanes	1	2	1	1			
Paved Width (ft)	14.4	18.4	11.9	11.4			
Lane Width (ft)	11	9.8	11.9	11.4			

Colonial National Historical Park

ROUTE 0226BZ: FRENCH LOOP SPUR ROAD

Subcomponent of Route COLO-0226ZZ

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date:	4/18/2021	Beginning Section MP	0				
Paved Length (Miles):	0.05	Section Length (MI)	0.05				
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	96	96					
Surface Condition Rating (SCR)	96	96					
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	96	96					
International Roughness Index (IRI)	N/A	N/A					
Lane & Width Information							
Number of Lanes	1	1					
Paved Width (ft)	12.8	12.8					
Lane Width (ft)	12.8	12.8					

Colonial National Historical Park

ROUTE 0400ZZ: YORKTOWN MAINTENANCE UTILITY 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

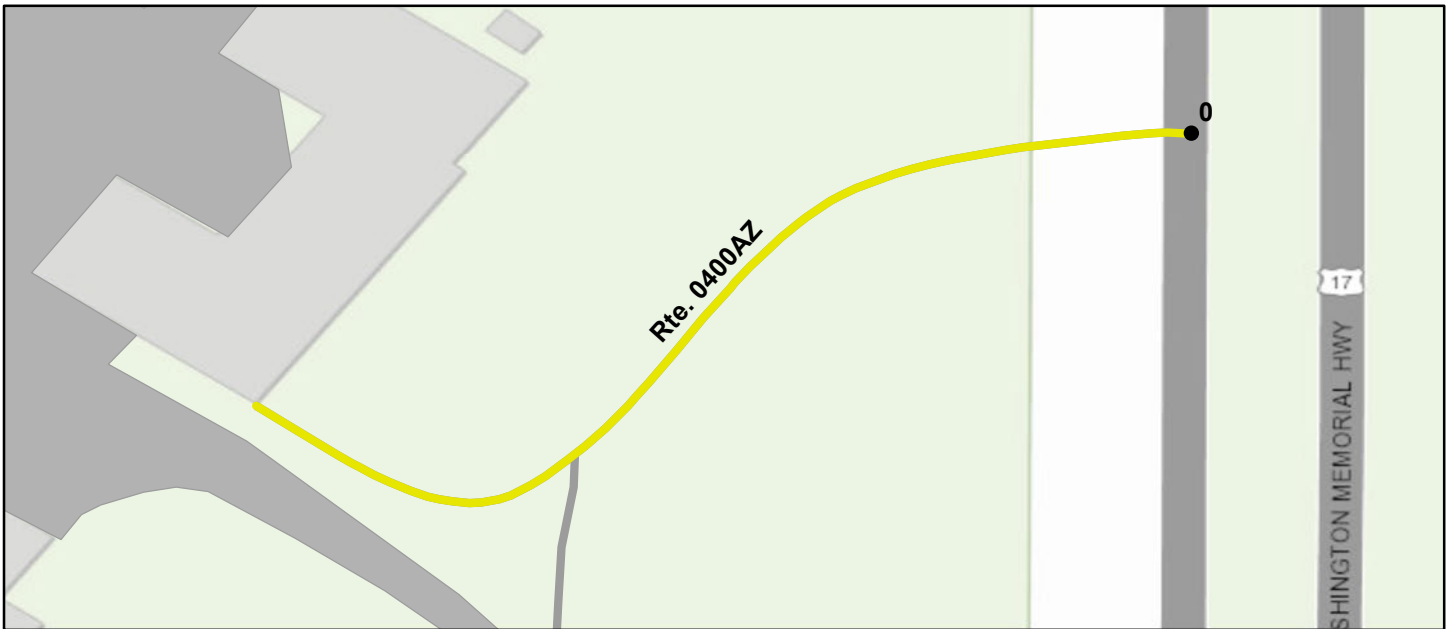
Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date:	4/18/2021					
Paved Length (Miles):	0.26					
Surface Type:	ASPHALT	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	89					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	20.1					
Lane Width (ft)	10.3					

Colonial National Historical Park

ROUTE 0400AZ: YORKTOWN MAINTENANCE UTILITY ROAD A

Subcomponent of Route COLO-0400ZZ
 Data Collection Vehicle (DCV) Rating



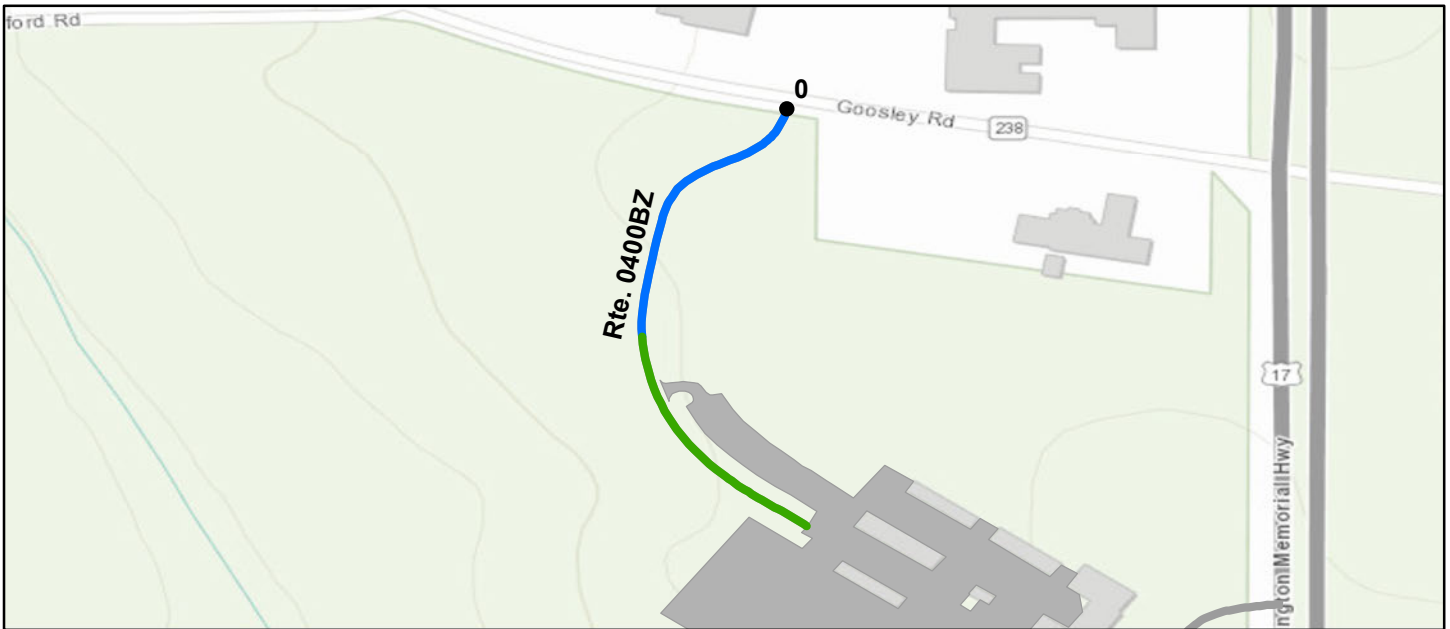
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.07	Section Length (MI)	0.07				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	77	77				
Surface Condition Rating (SCR)	77	77				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	93	93				
Alligator Crack Index	100	100				
Longitudinal Crack Index	93	93				
Transverse Cracking Index	77	77				
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)	17.2	17.2				
Lane Width (ft)	9.2	9.2				

Colonial National Historical Park

ROUTE 0400BZ: YORKTOWN MAINTENANCE UTILITY ROAD B

Subcomponent of Route COLO-0400ZZ
Data Collection Vehicle (DCV) Rating



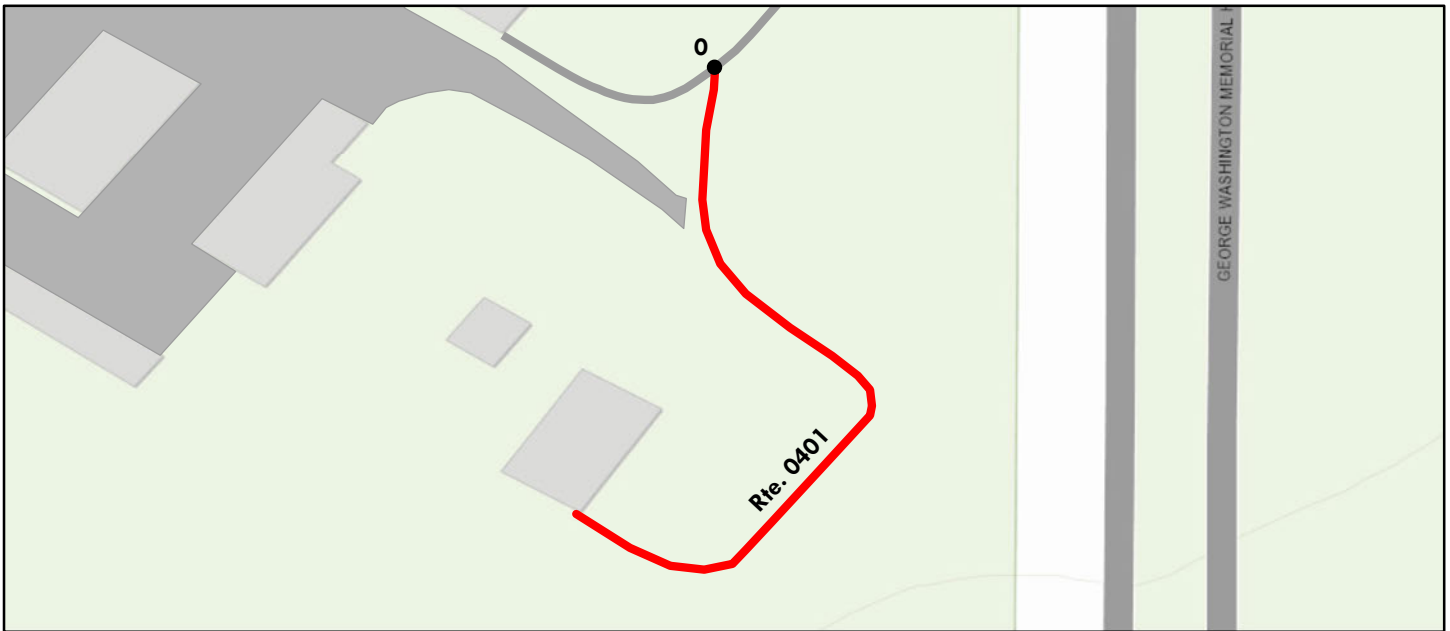
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	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)	92	92				
Surface Condition Rating (SCR)	92	92				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	95	95				
Alligator Crack Index	99	99				
Longitudinal Crack Index	96	96				
Transverse Cracking Index	92	92				
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)	21.2	21.2				
Lane Width (ft)	10.7	10.7				

Colonial National Historical Park

ROUTE 0401: YORKTOWN MAINTENANCE AREA RESIDENCE 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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date: 2/19/2021	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)	30	30				
Surface Condition Rating (SCR)	30	30				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	N/A	N/A				
Alligator Crack Index	97	97				
Longitudinal Crack Index	90	90				
Transverse Cracking Index	73	73				
Patching Index	30	30				
Rutting Index	53	53				
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				

Colonial National Historical Park

ROUTE 0401: YORKTOWN MAINTENANCE AREA RESIDENCE ROAD

Condition Photos

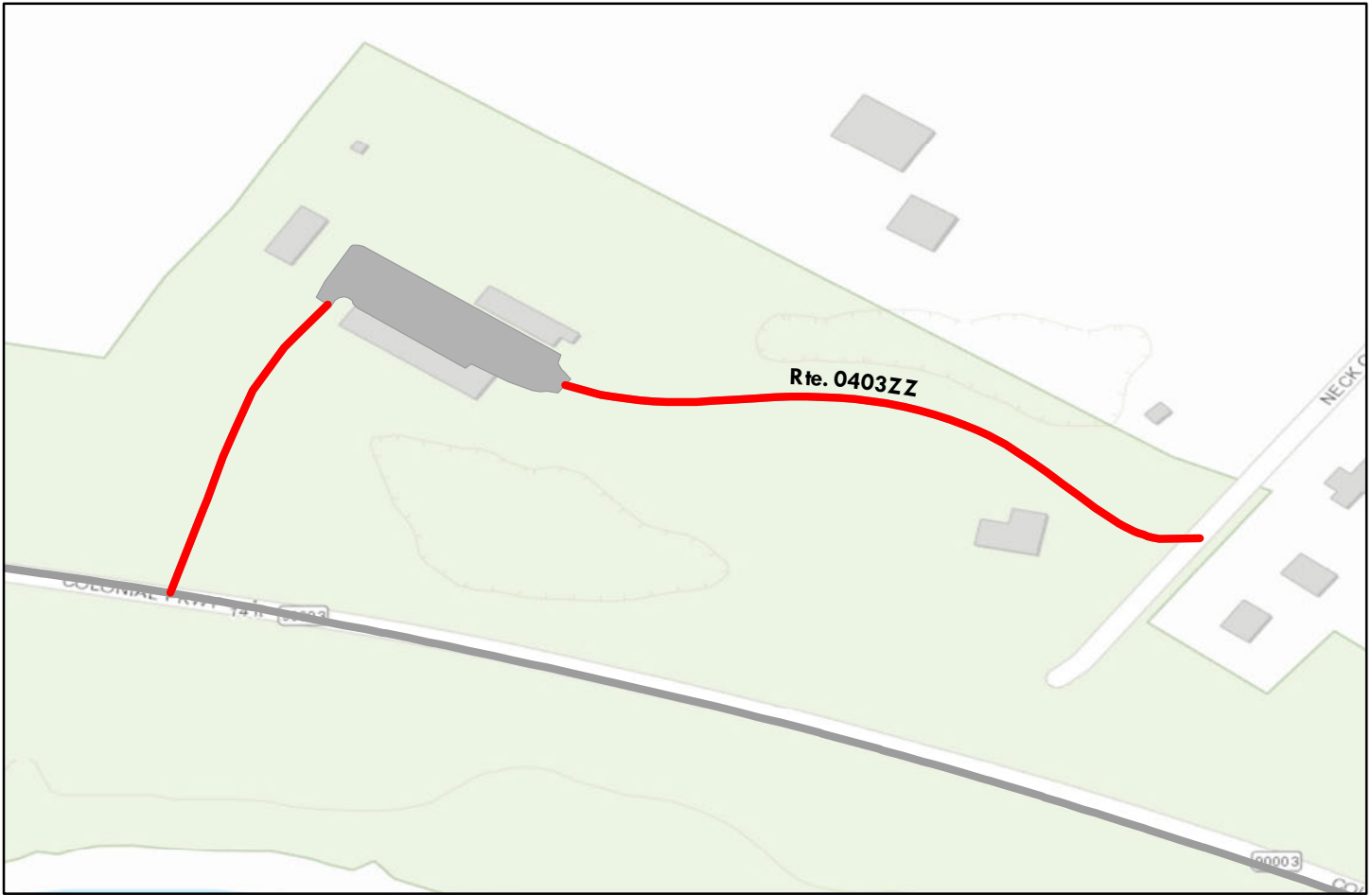
Condition photos are shown only for manually rated roads. Use the PathView program to see images of DCV rated roads.



Colonial National Historical Park

ROUTE 0403ZZ: JAMESTOWN MAINTENANCE 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

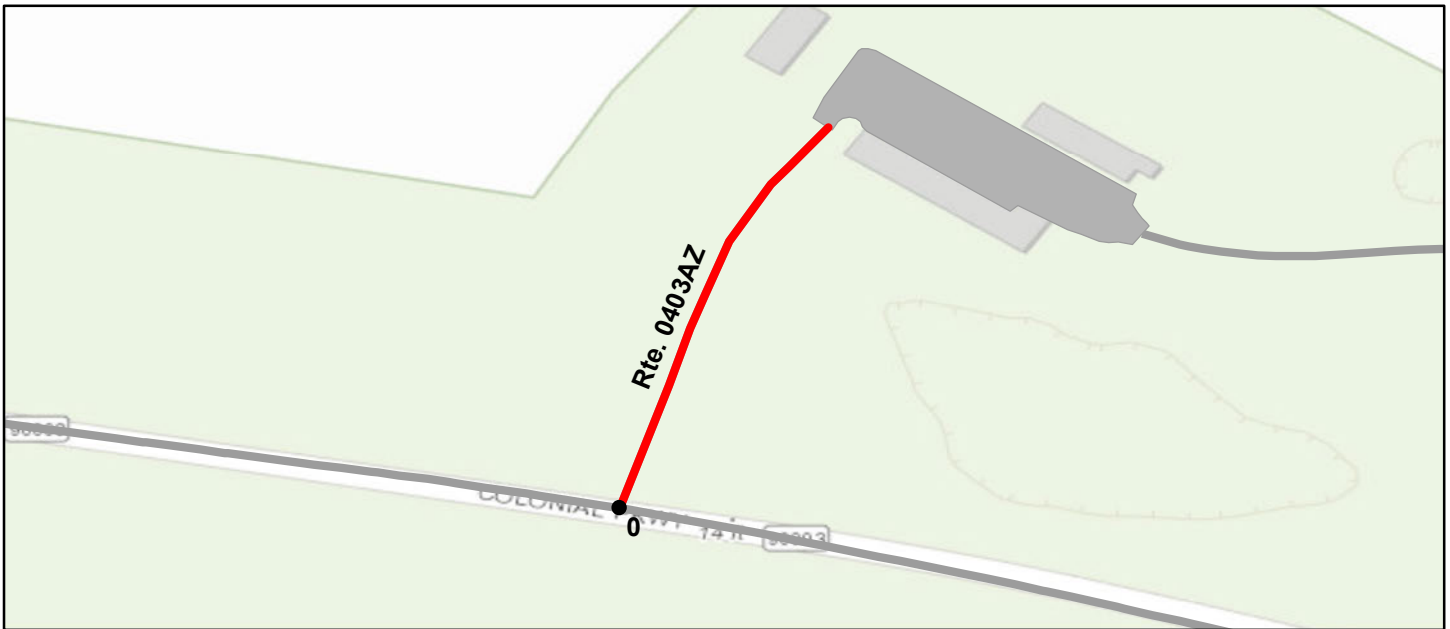
Note: The weighted average summary PCR value is calculated from only the sections of road where the PCR was collected. The overall PCR for the summary route may not reflect individual subcomponent ratings.

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
See Appendix for definitions and formulas						
Inspection Date:	4/18/2021					
Paved Length (Miles):	0.18					
Surface Type:	ASPHALT	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	0					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	16.3					
Lane Width (ft)	8					

Colonial National Historical Park

ROUTE 0403AZ: JAMESTOWN MAINTENANCE ROAD A

Subcomponent of Route COLO-0403ZZ
Data Collection Vehicle (DCV) Rating



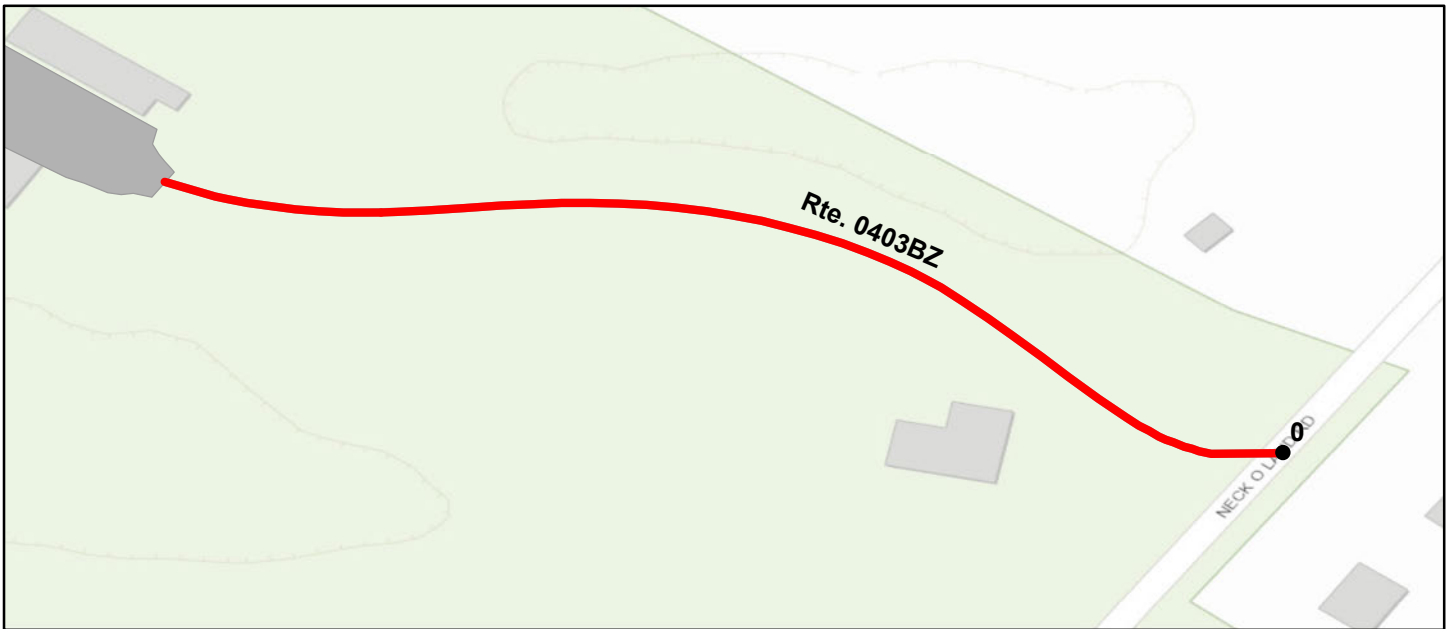
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date:	4/18/2021	Beginning Section MP	0			
Paved Length (Miles):	0.07	Section Length (MI)	0.07			
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	16	16				
Alligator Crack Index	97	97				
Longitudinal Crack Index	19	19				
Transverse Cracking Index	0	0				
Patching Index	100	100				
Rutting Index	92	92				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	16.7	16.7				
Lane Width (ft)	8	8				

Colonial National Historical Park

ROUTE 0403BZ: JAMESTOWN MAINTENANCE ROAD B

Subcomponent of Route COLO-0403ZZ
Data Collection Vehicle (DCV) Rating



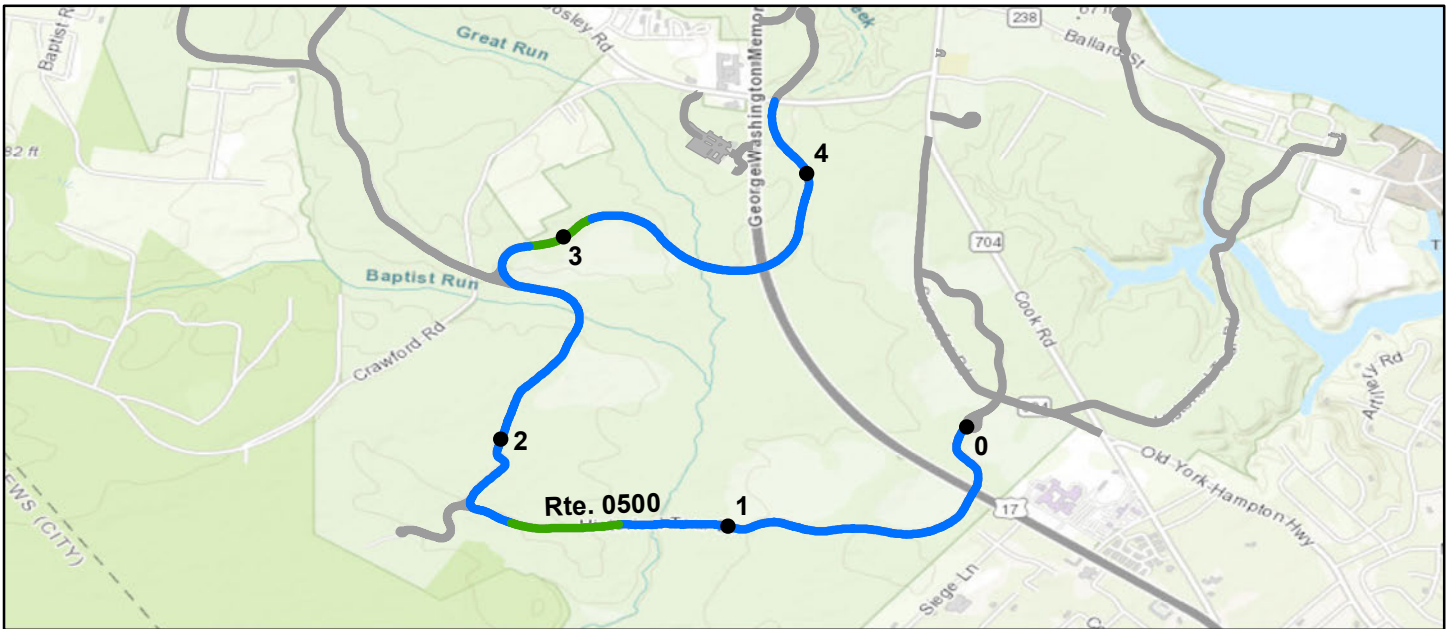
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	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)	0	0				
Surface Condition Rating (SCR)	0	0				
Roughness Condition Index (RCI)	N/A	N/A				
Distress Index Values						
Structural Crack Index	0	0				
Alligator Crack Index	91	91				
Longitudinal Crack Index	0	0				
Transverse Cracking Index	20	20				
Patching Index	98	98				
Rutting Index	89	89				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	2	2				
Paved Width (ft)	16.1	16.1				
Lane Width (ft)	8	8				

Colonial National Historical Park

ROUTE 0500: WEST TOUR 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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

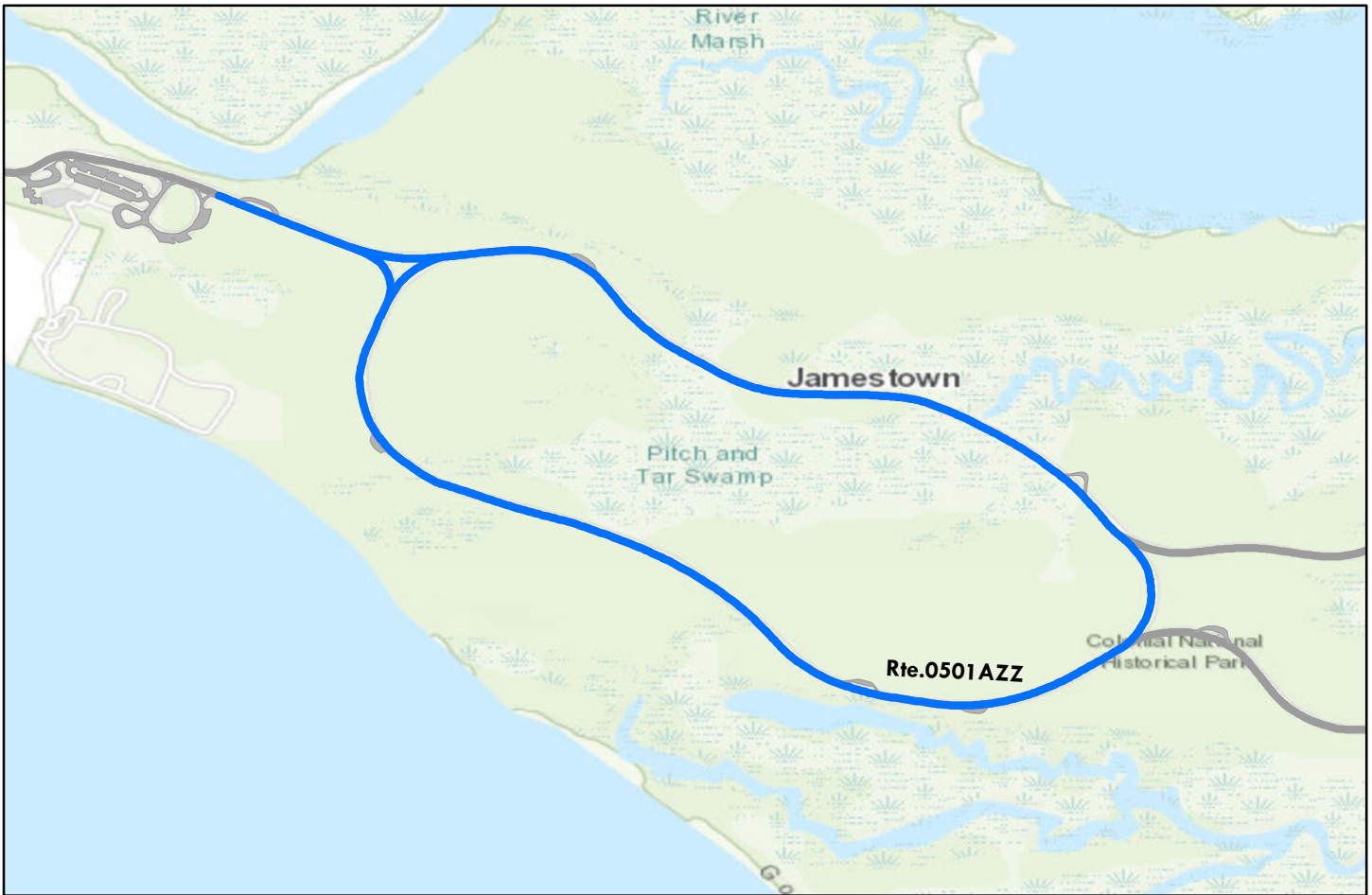
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date:	Beginning Section MP					
	0	1	2	3	4	
Paved Length (Miles): 4.28	Section Length (MI)					
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	99	96	99	99	98
Surface Condition Rating (SCR)	98	99	96	99	99	98
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A	N/A	N/A
Distress Index Values						
Structural Crack Index	100	100	100	99	99	100
Alligator Crack Index	100	100	100	100	100	100
Longitudinal Crack Index	100	100	100	99	99	100
Transverse Cracking Index	100	100	100	100	100	98
Patching Index	100	100	100	100	100	100
Rutting Index	98	99	96	99	100	99
International Roughness Index (IRI)	N/A	N/A	N/A	N/A	N/A	N/A
Lane & Width Information						
Number of Lanes	1	1	1	1	1	1
Paved Width (ft)	12	12	11.9	11.7	12.3	12.1
Lane Width (ft)	12	12	11.9	11.7	12.3	12.1

Colonial National Historical Park

ROUTE 0501AZZ: ISLAND DRIVE WEST LOOP 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 Appendix for definitions and formulas						
Inspection Date: 4/19/2021						
Paved Length (Miles): 2.4						
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	99					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	13.6					
Lane Width (ft)	12.5					

Colonial National Historical Park

ROUTE 0501AAZ: ISLAND DRIVE WEST LOOP

Subcomponent of Route COLO-0501AZZ

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

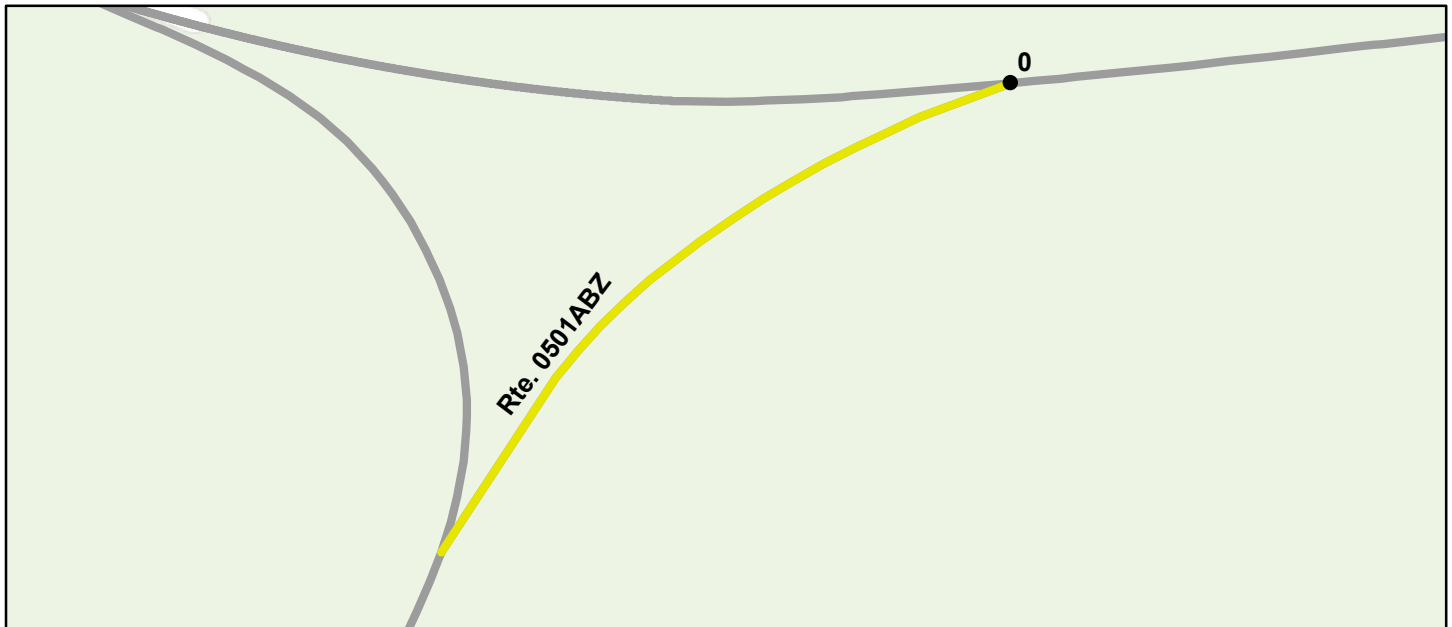
Inspection Date:	4/19/2021	Beginning Section MP	0	1	2		
Paved Length (Miles):	2.34	Section Length (MI)	1	1	0.48		
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	100	100	100	100			
Surface Condition Rating (SCR)	100	100	100	100			
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A			
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	100	100	100	100			
International Roughness Index (IRI)	N/A	N/A	N/A	N/A			
Lane & Width Information							
Number of Lanes	1	1	1	1			
Paved Width (ft)	13.5	14.7	12.7	12.9			
Lane Width (ft)	12.4	11.8	12.7	12.9			

Not rated section is due to the surface type not being asphalt.

Colonial National Historical Park

ROUTE 0501ABZ: ISLAND DRIVE WEST LOOP SPUR

Subcomponent of Route COLO-0501AZZ
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

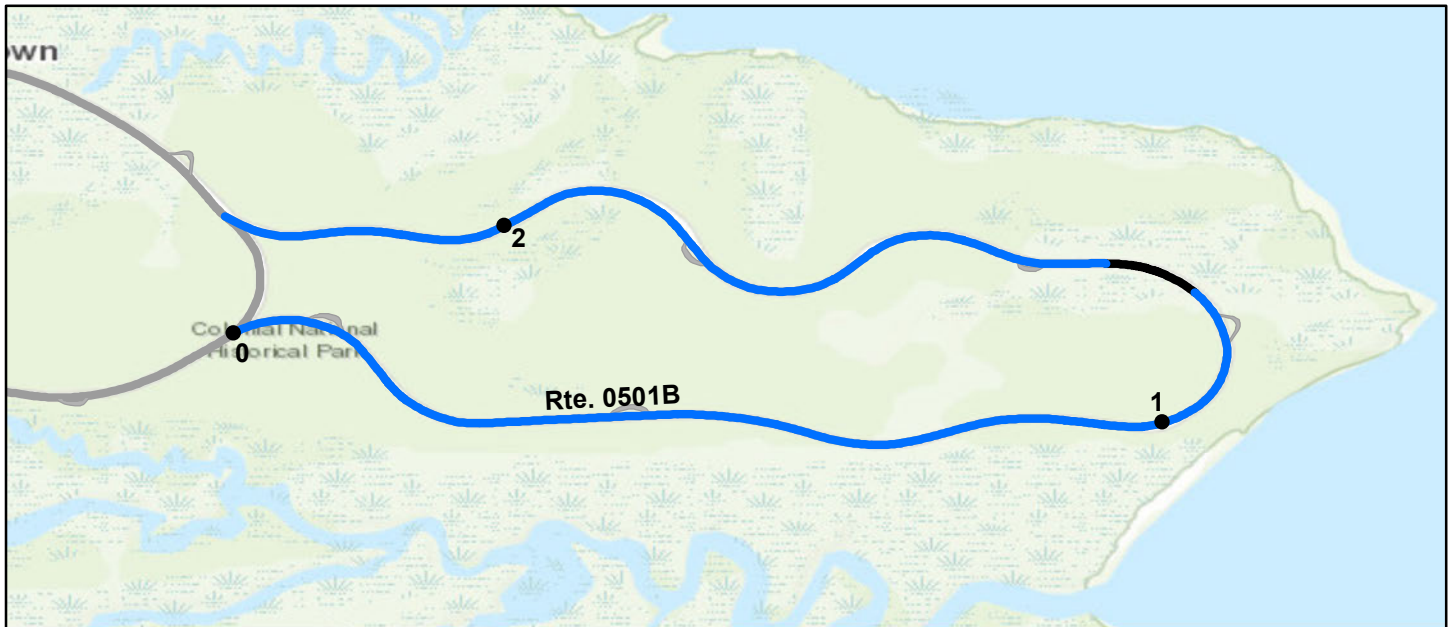
Route Condition Legend – Pavement Condition Rating (PCR)						
Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/19/2021	Beginning Section MP	0				
Paved Length (Miles): 0.06	Section Length (MI)	0.06				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	73	73				
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)	15.7	15.7				
Lane Width (ft)	15.7	15.7				

MANUALLY RATED CONCRETE ROAD

Colonial National Historical Park

ROUTE 0501B: ISLAND DRIVE EAST LOOP

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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/19/2021	Beginning Section MP	0	1	2		
Paved Length (Miles): 2.16	Section Length (MI)	1	1	0.28		
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	99	99	99	100		
Surface Condition Rating (SCR)	99	99	99	100		
Roughness Condition Index (RCI)	N/A	N/A	N/A	N/A		
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	99	100		
International Roughness Index (IRI)	N/A	N/A	N/A	N/A		
Lane & Width Information						
Number of Lanes	1	1	1	1		
Paved Width (ft)	12.4	12.4	12.2	13.3		
Lane Width (ft)	12.4	12.4	12.2	13.3		

Not rated section is due to the surface type not being asphalt.

Colonial National Historical Park

ROUTE 0502: AFTERMATH 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 (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated		
Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.						
Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.55	Section Length (MI)	0.55				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	86	86				
Surface Condition Rating (SCR)	86	86				
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	86	86				
Rutting Index	99	99				
International Roughness Index (IRI)	N/A	N/A				
Lane & Width Information						
Number of Lanes	1	1				
Paved Width (ft)	12.1	12.1				
Lane Width (ft)	12.1	12.1				

Colonial National Historical Park

ROUTE 0503ZZ: EAST TOUR 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 Appendix for definitions and formulas						
Inspection Date:	4/18/2021					
Paved Length (Miles):	2.16					
Surface Type:	ASPHALT	Route Summary				
Roadway Condition Information						
Pavement Condition Rating (PCR)	98					
Lane & Width Information						
Number of Lanes	1					
Paved Width (ft)	13					
Lane Width (ft)	11.5					

Colonial National Historical Park

ROUTE 0503AZ: EAST TOUR ROAD A

Subcomponent of Route COLO-0503ZZ

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

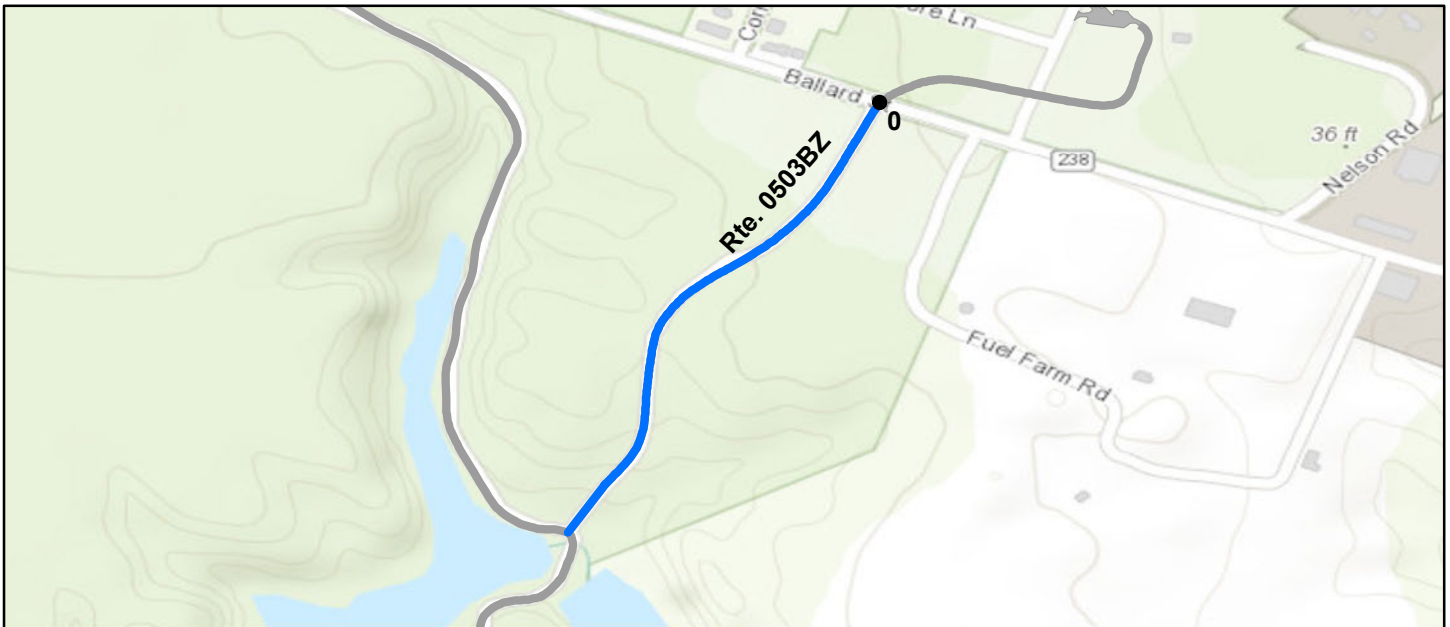
Inspection Date:	4/18/2021	Beginning Section MP	0	1			
Paved Length (Miles):	1.83	Section Length (MI)	1	0.83			
Surface Type:	ASPHALT	Route Summary					
Roadway Condition Information							
Pavement Condition Rating (PCR)	98	97	99				
Surface Condition Rating (SCR)	98	97	99				
Roughness Condition Index (RCI)	N/A	N/A	N/A				
Distress Index Values							
Structural Crack Index	100	99	100				
Alligator Crack Index	100	100	100				
Longitudinal Crack Index	100	99	100				
Transverse Cracking Index	98	98	99				
Patching Index	100	100	100				
Rutting Index	98	97	99				
International Roughness Index (IRI)	N/A	N/A	N/A				
Lane & Width Information							
Number of Lanes	1	1	1				
Paved Width (ft)	11.9	12	11.7				
Lane Width (ft)	11.9	12	11.7				

Colonial National Historical Park

ROUTE 0503BZ: EAST TOUR ROAD B

Subcomponent of Route COLO-0503ZZ

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 (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

Colors on map represent condition scores at 0.10-mile intervals. See Appendix for definitions and formulas.

Inspection Date: 4/18/2021	Beginning Section MP	0				
Paved Length (Miles): 0.33	Section Length (MI)	0.33				
Surface Type: ASPHALT	Route Summary					
Roadway Condition Information						
Pavement Condition Rating (PCR)	98	98				
Surface Condition Rating (SCR)	98	98				
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	100	100				
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)	19.3	19.3				
Lane Width (ft)	9.6	9.6				

Section 6 Paved Parking Area Condition Rating Sheets



Colonial National Historical Park



Federal Lands Highway
Road Inventory Program

Colonial National Historical Park

ROUTE 0901: YORKTOWN VISITOR CENTER PARKING

Manual Rating

FROM BEGINNING OF ROUTE 0001 (COLONIAL PARKWAY)
TO PARKING

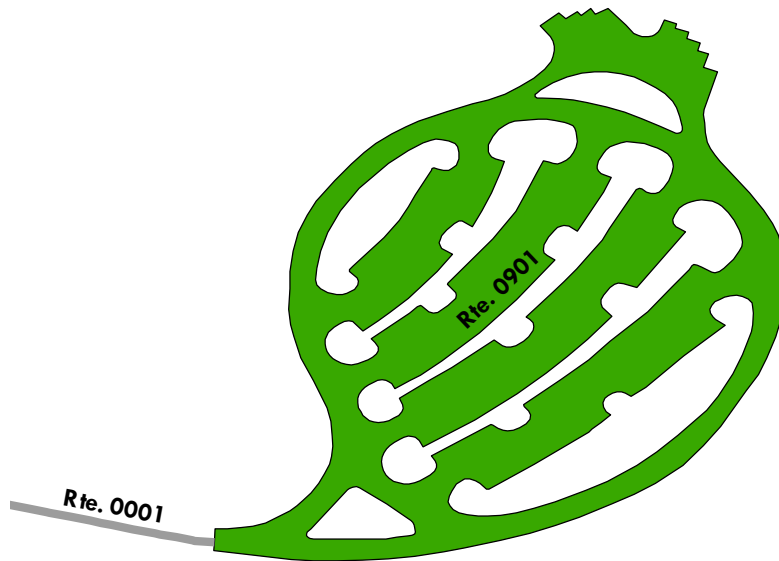
Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54907	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
129,807	2.235	3	MODERATE REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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

Note: Parking area consists of multiple surface types: 1 part Asphalt at 126,981 square feet; 1 part Concrete at 2826 square feet.



Colonial National Historical Park

ROUTE 0902ZZ: REDOUBT 9 & 10 ACCESS ROAD PARKING AREAS

Summary Route
Manual Rating

ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) ON LEFT AND RIGHT

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54914	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR	
2,177	0.038	SUMMARY /	73

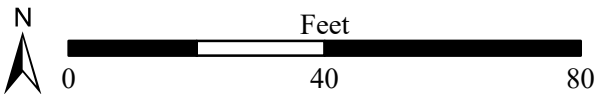
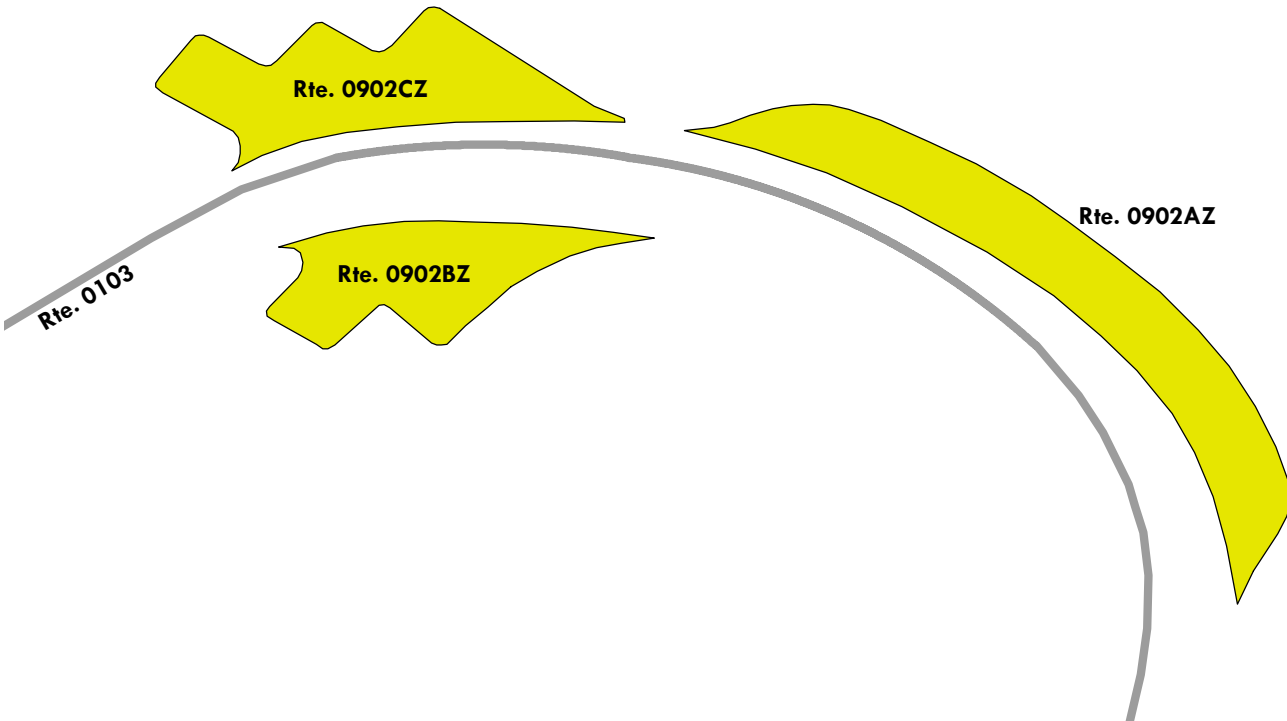
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas

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

Rte. 0902ZZ (3 Subcomponents)



Colonial National Historical Park

ROUTE 0902AZ: REDOUBT 9 & 10 ACCESS ROAD PARKING A

Subcomponent of Route COLO-0902ZZ
Manual Rating

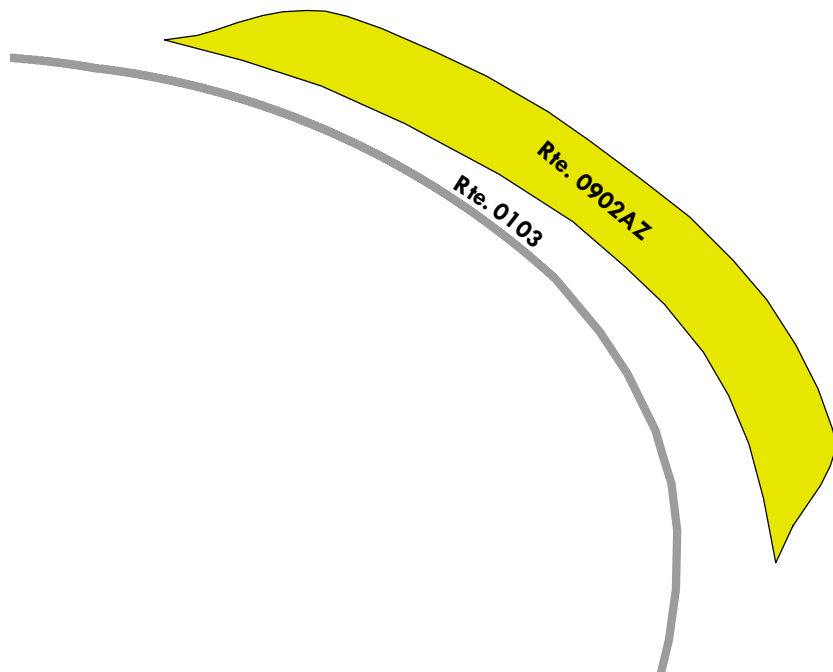
ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.15 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54914	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
986	0.017	2	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0902BZ: REDOUBT 9 & 10 ACCESS ROAD PARKING B

Subcomponent of Route COLO-0902ZZ
Manual Rating

ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.17 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54914	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
508	0.009	2	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
NOT APPLICABLE		NOT RATED	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

Fair (61- 84)

Good (85 - 94)

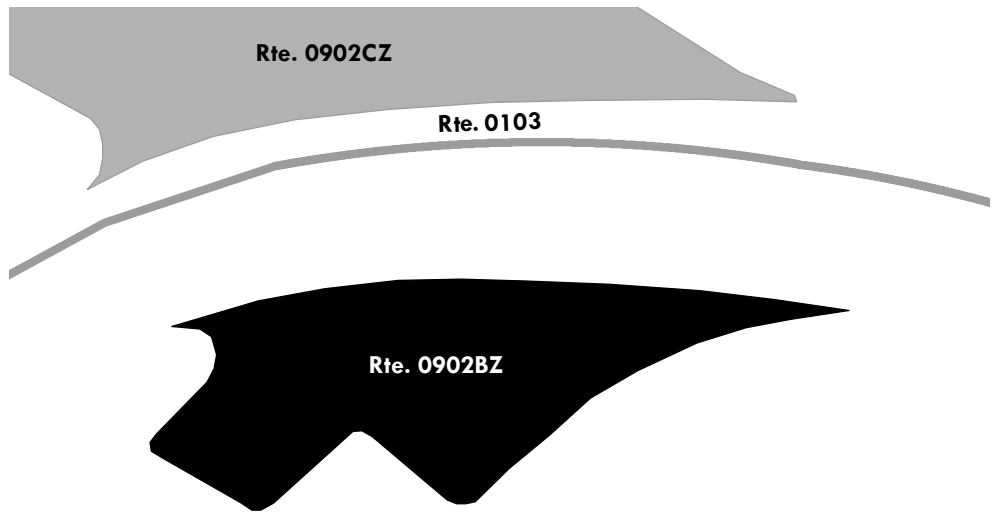
Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Note: Route not rated - pavement covered.



Colonial National Historical Park

ROUTE 0902CZ: REDOUBT 9 & 10 ACCESS ROAD PARKING C

Subcomponent of Route COLO-0902ZZ
Manual Rating

ADJACENT TO ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD) AT MP 0.17 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54914	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
683	0.012	2	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
NOT APPLICABLE		NOT RATED	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

Fair (61- 84)

Good (85 - 94)

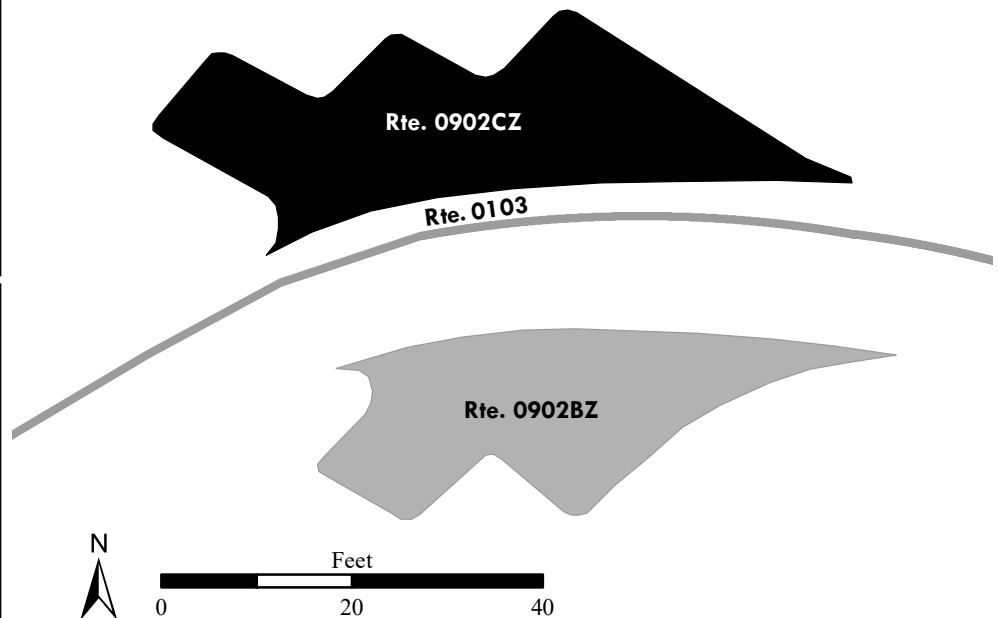
Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Note: Route not rated - pavement covered.



Colonial National Historical Park

ROUTE 0903: UNTOUCHED REDOUBT LOOP/PARKING

Manual Rating

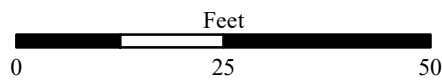
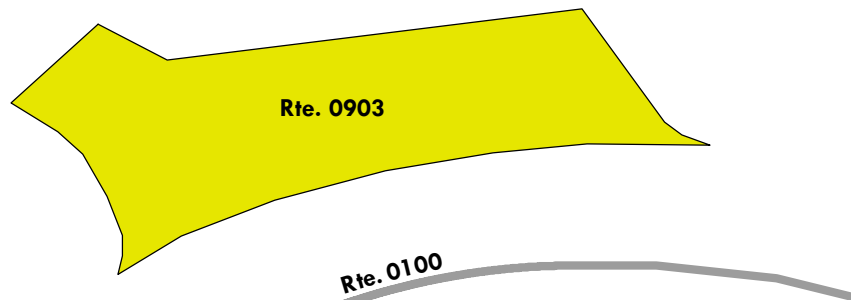
ADJACENT TO ROUTE 0100 (UNTOUCHED REDOUBT ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54916	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
1,015	0.017	4	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0904: GLASSHOUSE PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 22.03 (ON RIGHT)

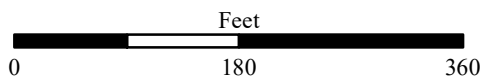
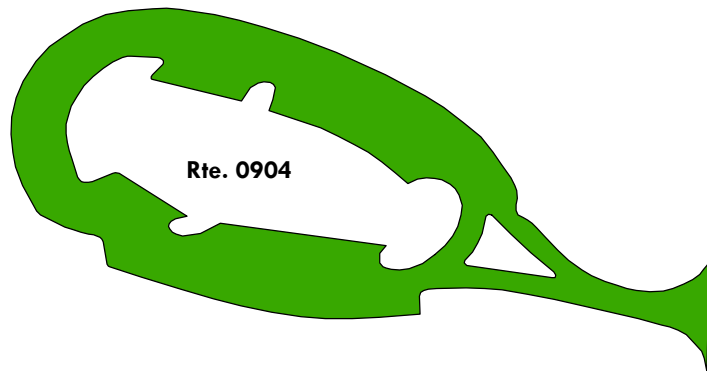
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	54917	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
40,359	0.695	4	REPLACE
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0905: FUSILIER'S PARKING

Manual Rating

FROM ROUTE 0106 (FUSILIER'S ROAD) AT MP 0.16 (ON LEFT)

TO ROUTE 0106 (FUSILIER'S ROAD) AT MP 0.20 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54918	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
12,114	0.209	3	MODERATE REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

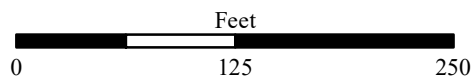
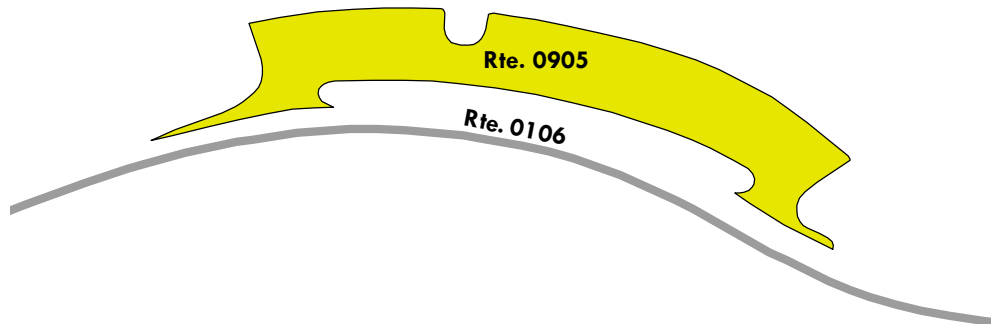
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0906: NAVAL WEAPONS STATION PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 2.98 (ON RIGHT)

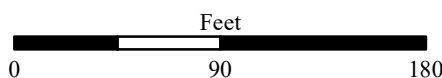
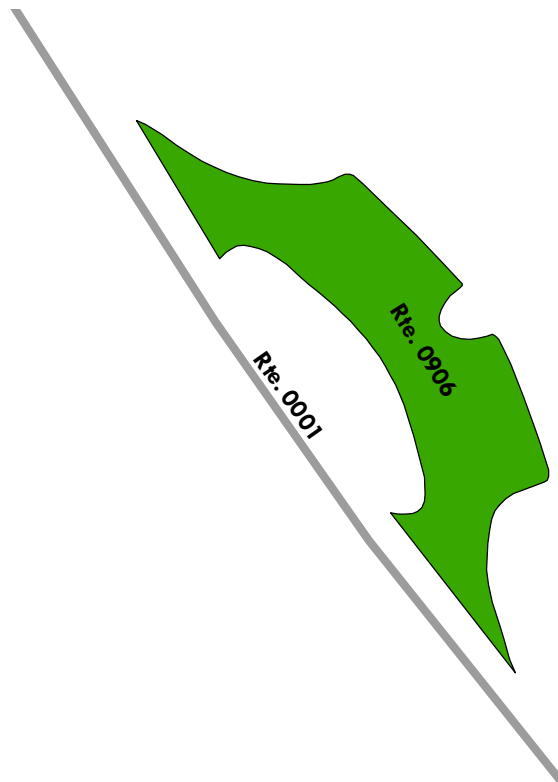
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.02 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54919	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
8,340	0.144	6	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0907: YORKTOWN RIVER OVERLOOK

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.43 (ON RIGHT)

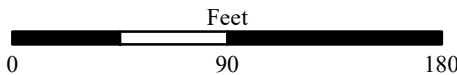
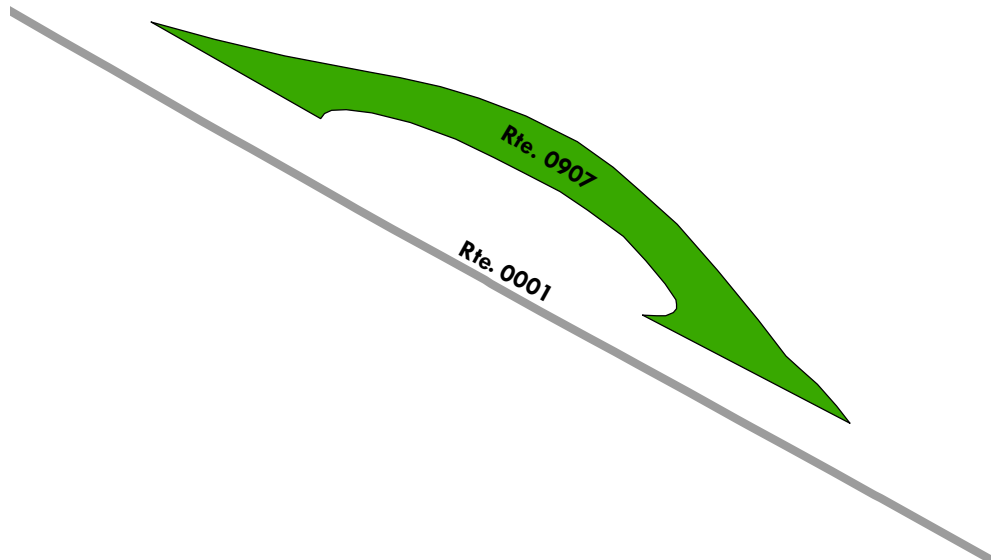
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 3.47 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54920	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,648	0.08	6	REPLACE
Curb Type		Curb & Gutter Type	
CONCRETE		NOT APPLICABLE	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0908: POWHATAN VILLAGE

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.20 (ON RIGHT)

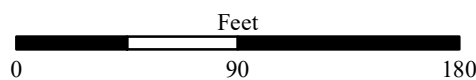
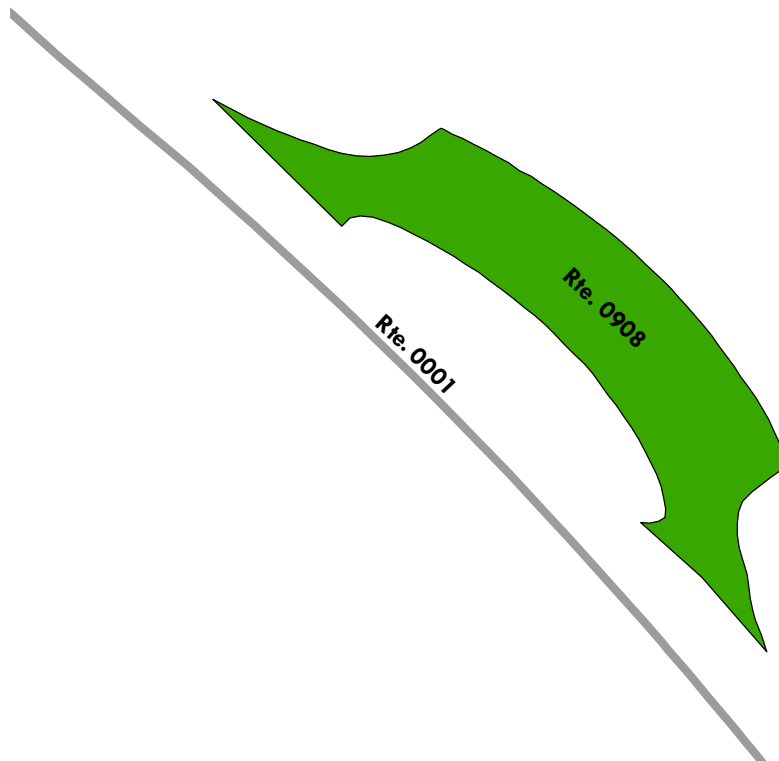
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.24 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54921	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
9,045	0.156	6	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0909: INDIAN FIELD CREEK PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.32 (ON LEFT)

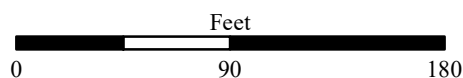
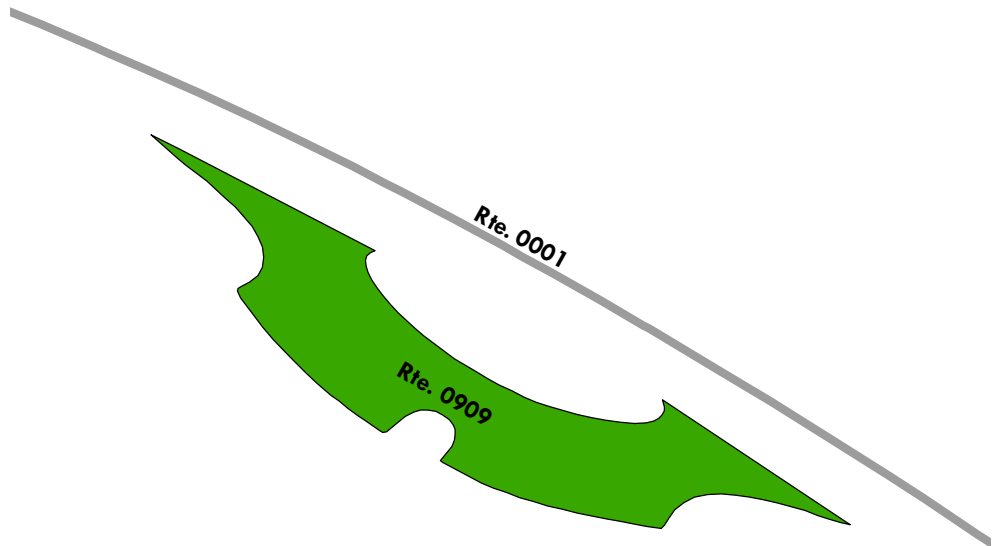
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 4.35 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54927	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
8,159	0.14	6	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0910: CHEATHAM ANNEX PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.68 (ON RIGHT)

TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.72 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54931	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
8,472	0.146	6	REPLACE
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

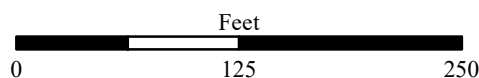
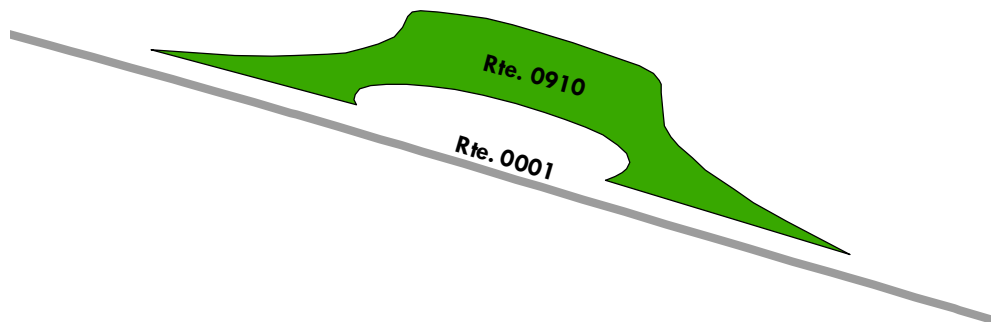
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0911: RINGFIELD PLANTATION PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.93 (ON RIGHT)

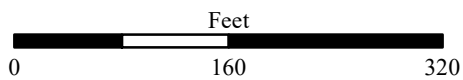
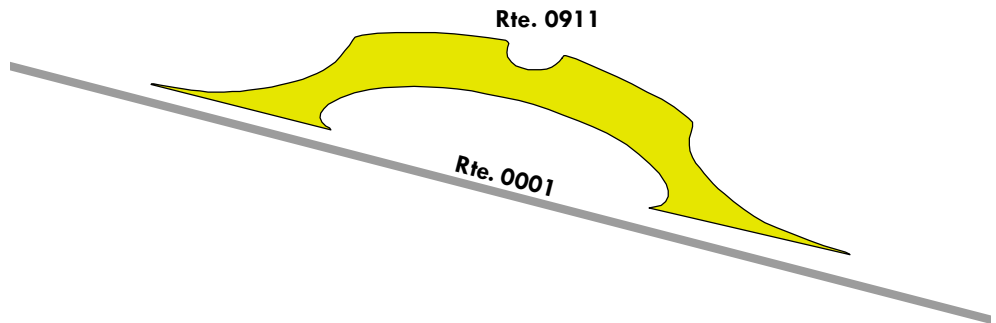
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 5.98 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	54932	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
12,212	0.21	7	MODERATE REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0912: JONES MILL PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 9.35 (ON LEFT)

TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 9.37 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56258	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
6,557	0.113	6	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

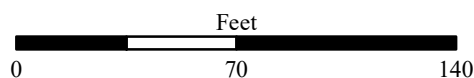
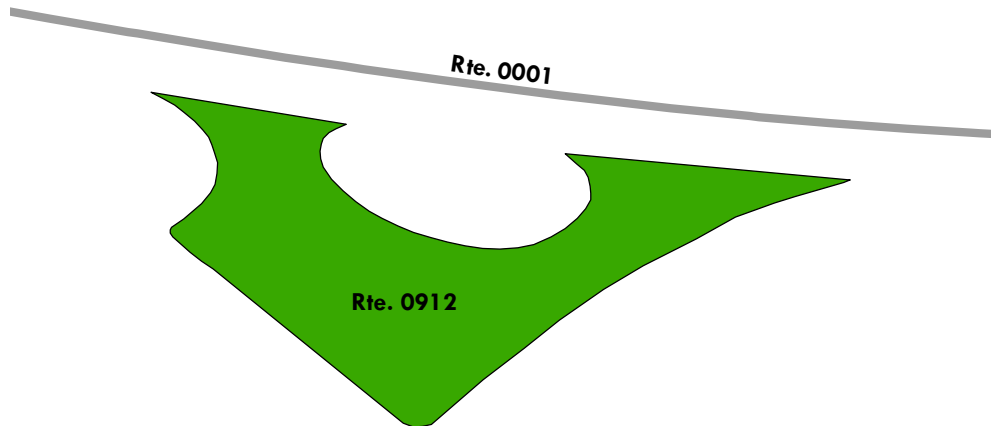
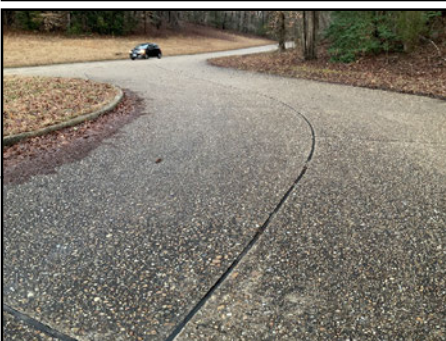
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0913: PALISADES GREAT OAKS PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 13.97 (ON LEFT)

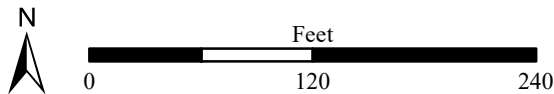
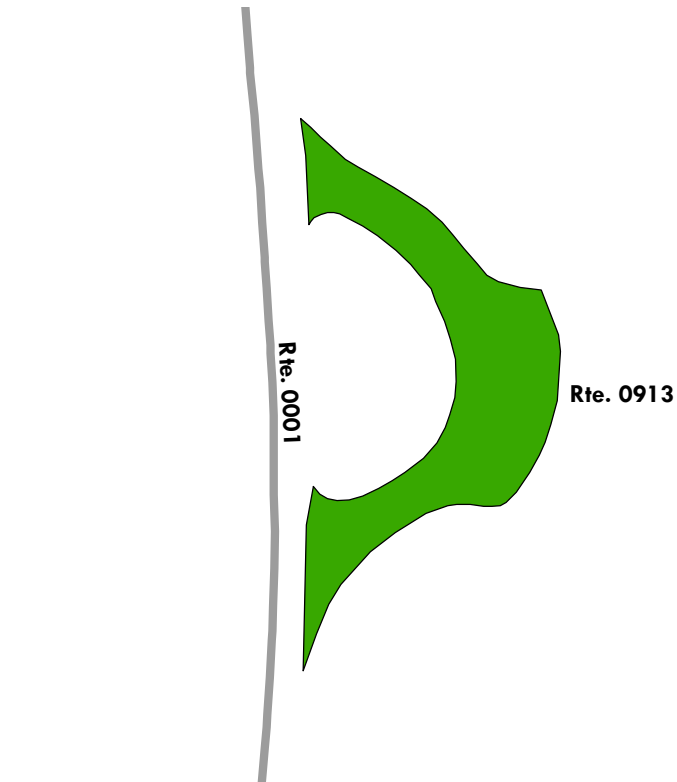
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.01 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	56259	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
9,942	0.171	6	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0914: PAPER MILL CREEK PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.17 (ON LEFT)

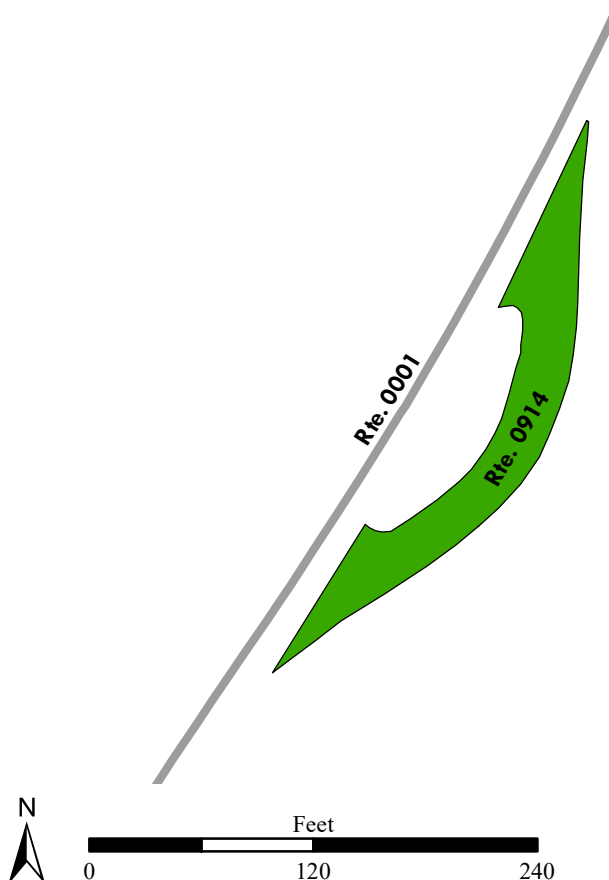
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 14.21 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	56260	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
6,513	0.112	6	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0915: COLLEGE CREEK PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.56 (ON RIGHT)

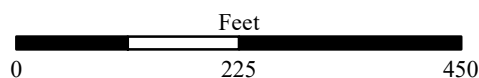
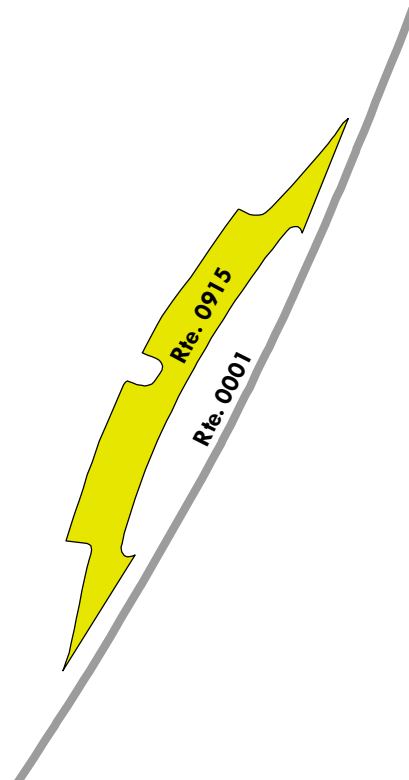
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.65 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56261	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
19,640	0.338	7	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0916: JAMES RIVER (ORIENTATION MAP) PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.93 (ON LEFT)

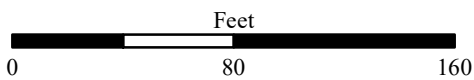
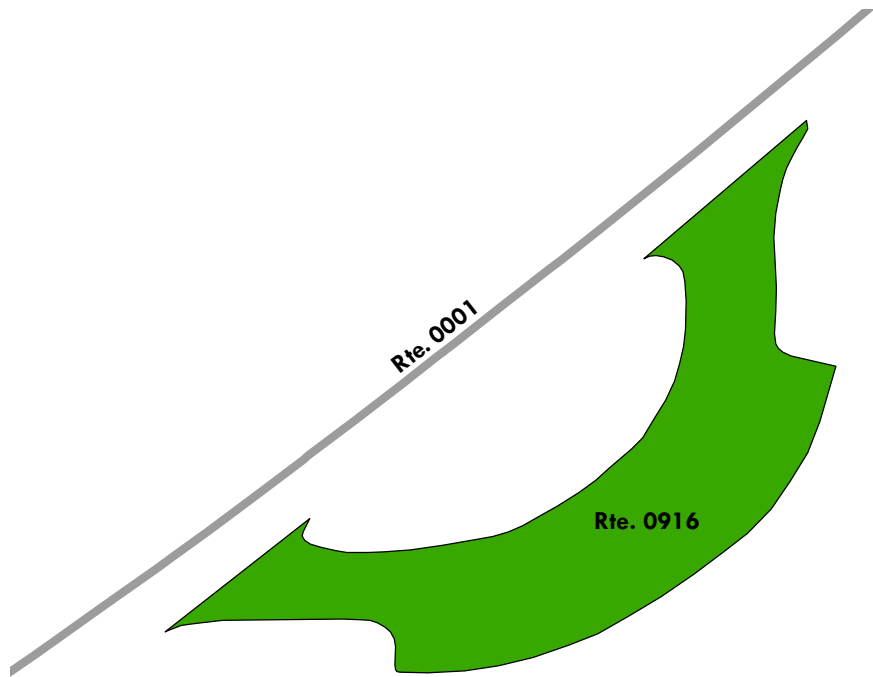
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 16.96 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56262	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
9,891	0.17	7	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0917: ARCHER'S HOPE PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 17.91 (ON LEFT)

TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 18.01 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56263	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
19,300	0.332	7	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

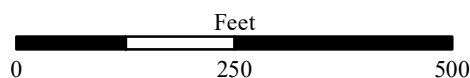
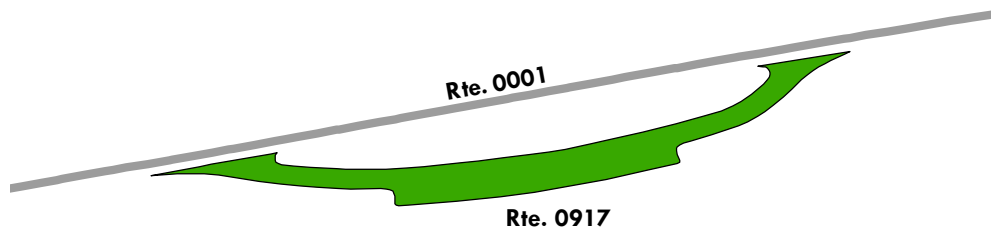
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0918: GLEBE LAND (MILL CREEK) PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.37 (ON LEFT)

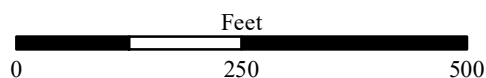
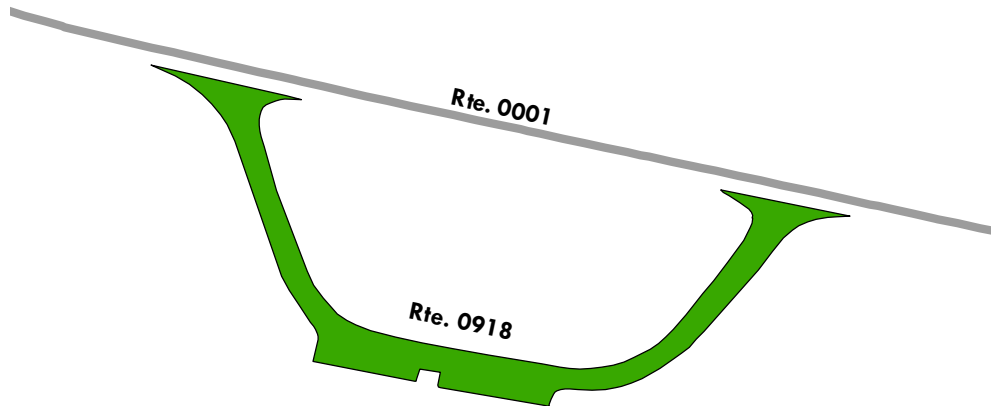
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.46 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56264	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
25,887	0.446	6	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0919: REAL ESTATE PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.77 (ON LEFT)

TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 19.80 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56265	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
9,320	0.16	7	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

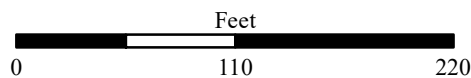
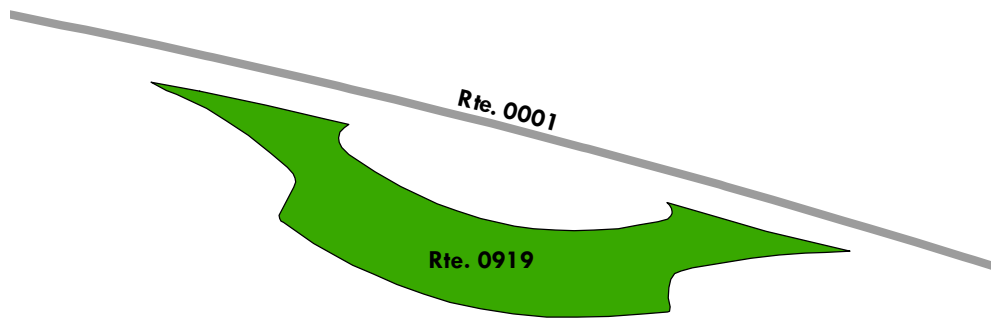
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0920: NECK O LAND PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 20.24 (ON LEFT)

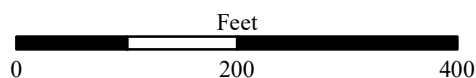
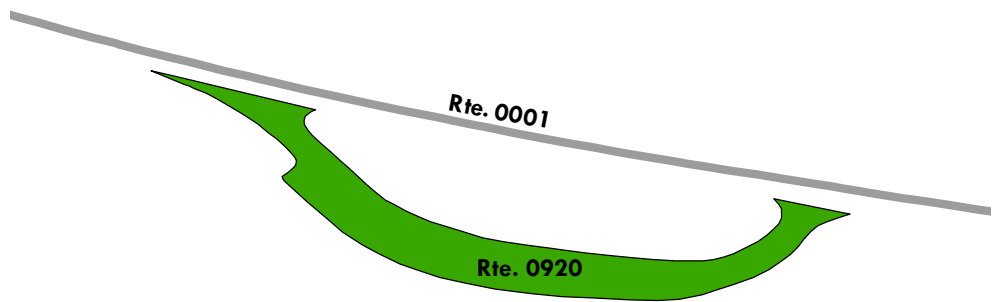
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 20.31 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56266	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
18,557	0.32	7	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0921: POWHATAN CREEK PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.81 (ON LEFT)

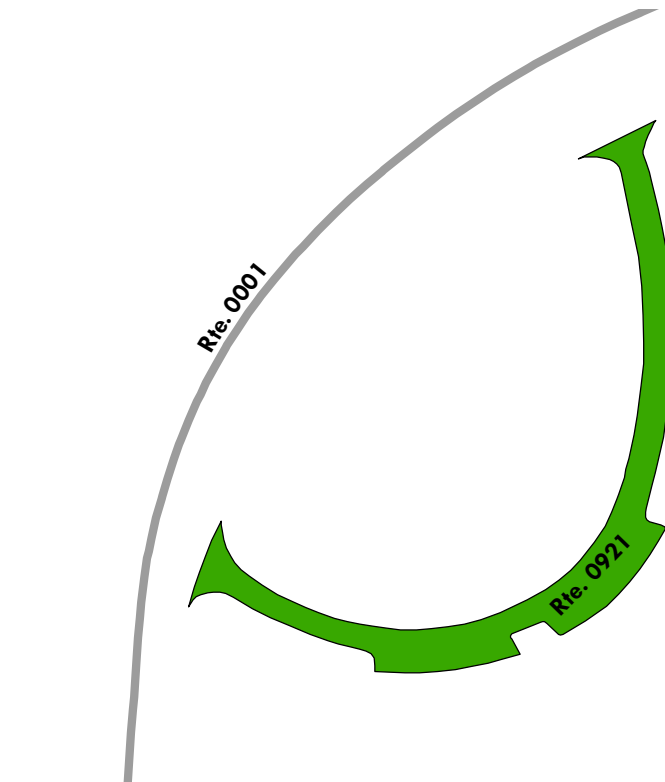
TO ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.93 (ON LEFT)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	56267	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
24,688	0.425	6	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0922: YORKTOWN VISITOR PARKING (CHURCH STREET)

Manual Rating

FROM CHURCH STREET

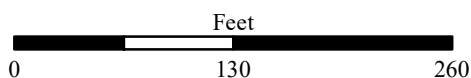
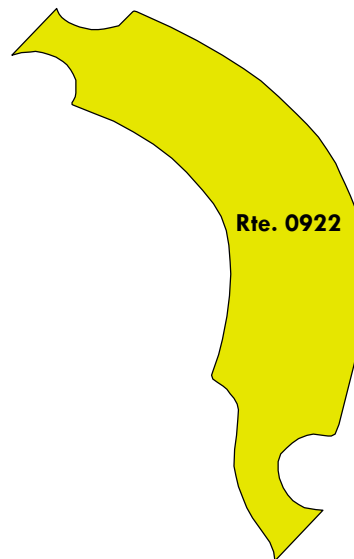
TO READ STREET

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56269	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
18,811	0.324	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0923: YORKTOWN MONUMENT VICTORY AND ALLIANCE PARKING

Manual Rating

FROM BACON STREET

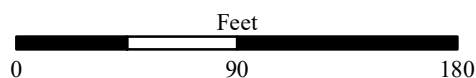
TO ZWEYBRUCKEN ROAD

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56272	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
9,646	0.166	6	MODERATE REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0924: YORKTOWN BEACH PICNIC AREA PARKING

Manual Rating

FROM WATER STREET

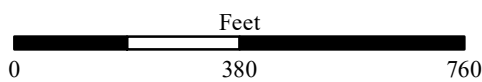
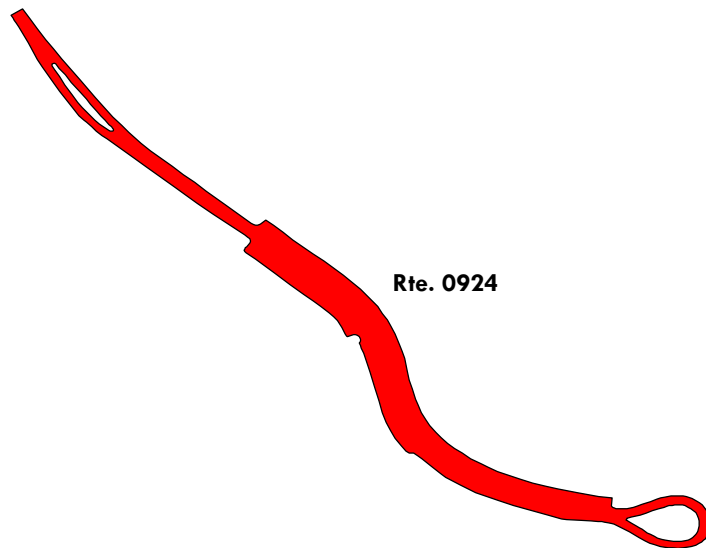
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56273	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
52,353	0.901	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
RECONSTRUCTION		POOR / 30	

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



Colonial National Historical Park

ROUTE 0925: CORNWALLIS' CAVE PARKING

Manual Rating

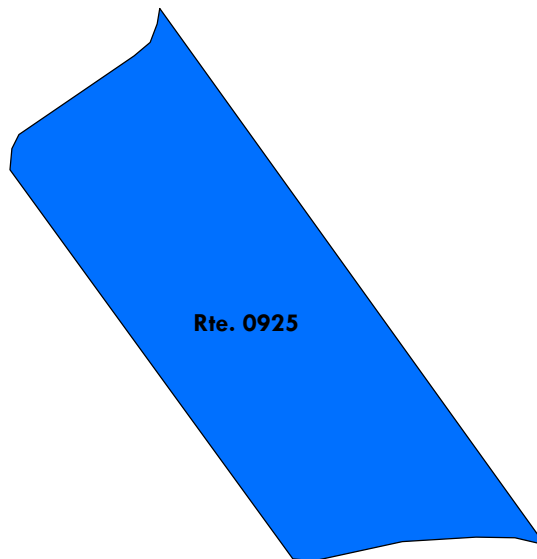
ADJACENT TO WATER STREET

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56274	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
1,655	0.028	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
DO NOTHING		EXCELLENT / 97	

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



Colonial National Historical Park

ROUTE 0926: YORKTOWN NATIONAL CEMETERY / SECOND SIEGE PARKING

Manual Rating

FROM COOK ROAD

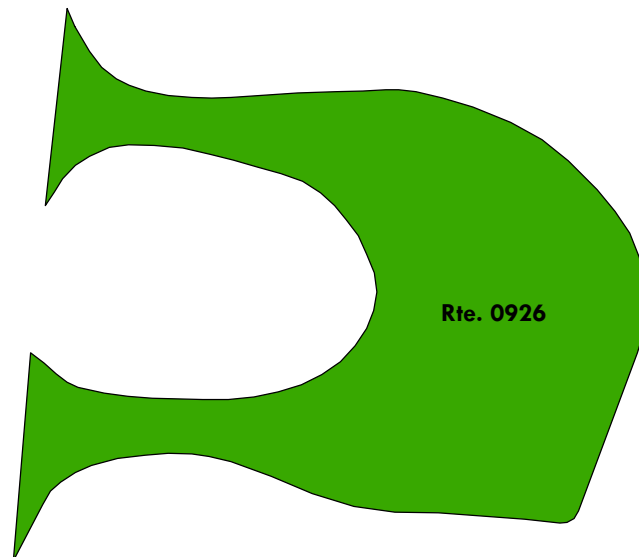
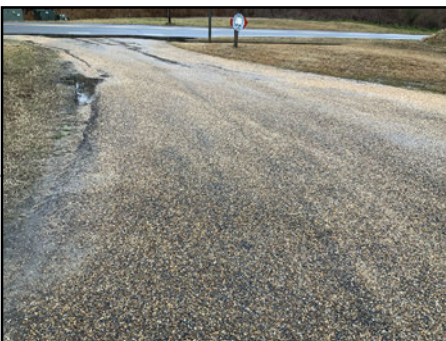
TO COOK ROAD

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56275	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
8,517	0.147	6	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0927ZZ: GRAND FRENCH BATTERY PARKING AREAS

Summary Route
Manual Rating

ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56276	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR	
2,739	0.047	SUMMARY /	90

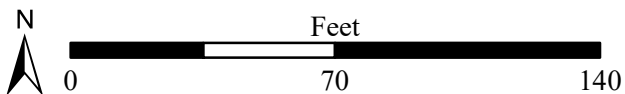
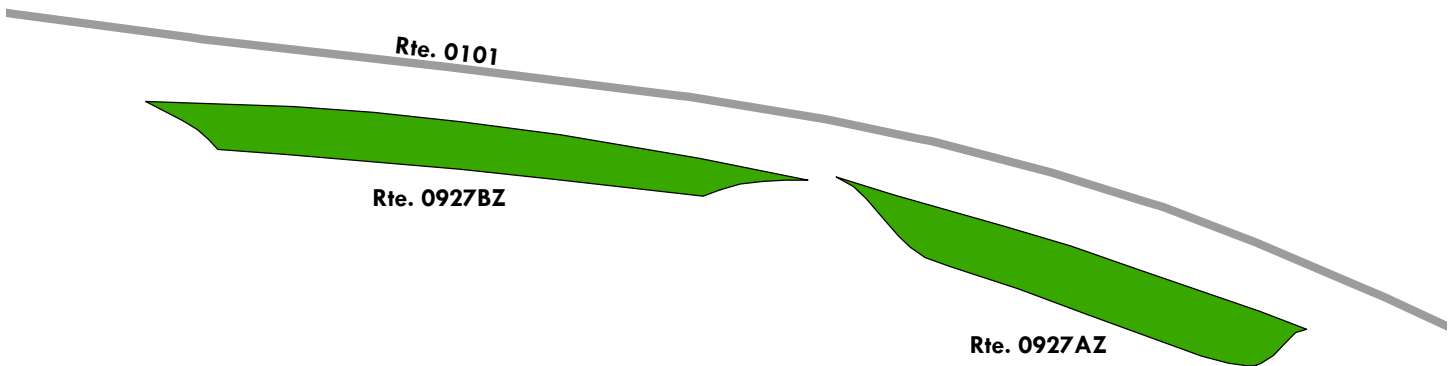
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas

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

Rte. 0927ZZ (2 Subcomponents)



Colonial National Historical Park

ROUTE 0927AZ: GRAND FRENCH BATTERY PARKING A

Subcomponent of Route COLO-0927ZZ
Manual Rating

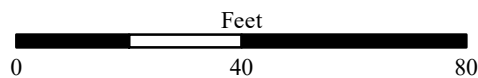
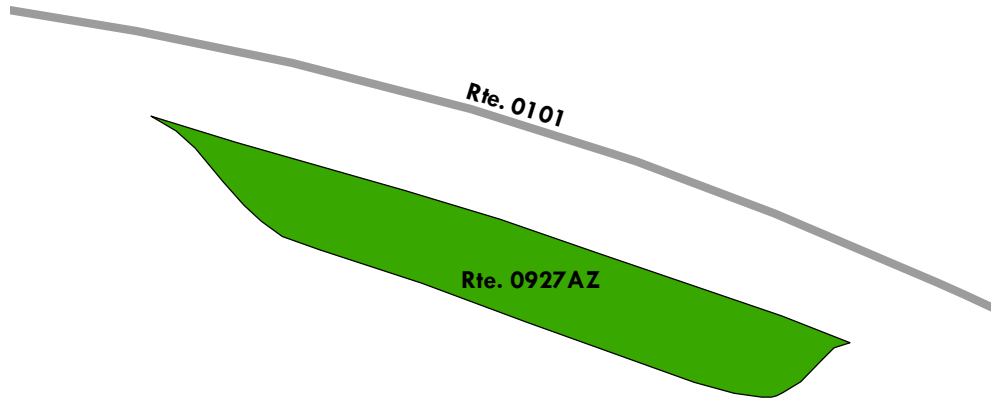
ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD) AT MP 0.05 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56276	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
1,330	0.023	2	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0927BZ: GRAND FRENCH BATTERY PARKING B

Subcomponent of Route COLO-0927ZZ
Manual Rating

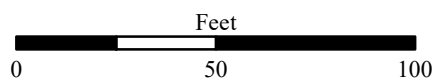
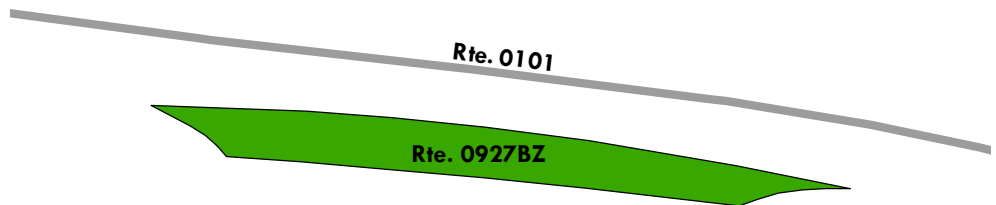
ADJACENT TO ROUTE 0101 (GRAND FRENCH BATTERY ROAD) AT MP 0.02 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56276	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
1,409	0.024	2	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0928: MOORE HOUSE PARKING

Manual Rating

FROM END OF ROUTE 0104 (MOORE HOUSE ACCESS ROAD)

TO MOORE HOUSE ROAD (NON NPS)

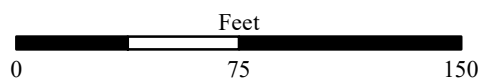
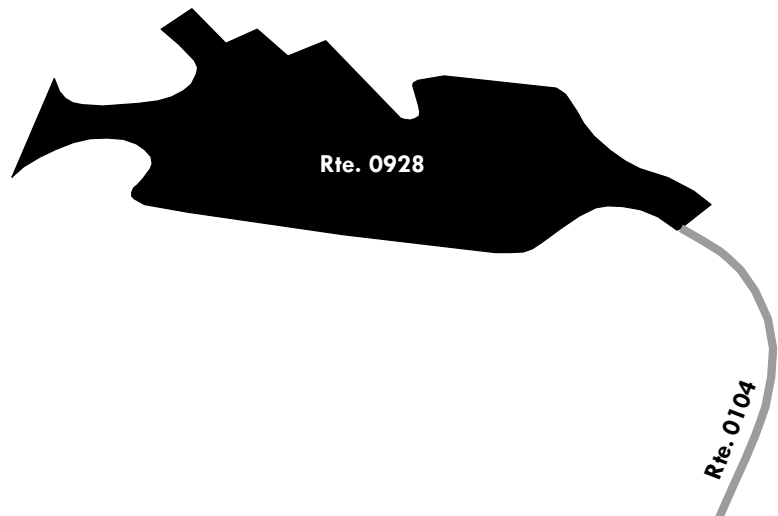
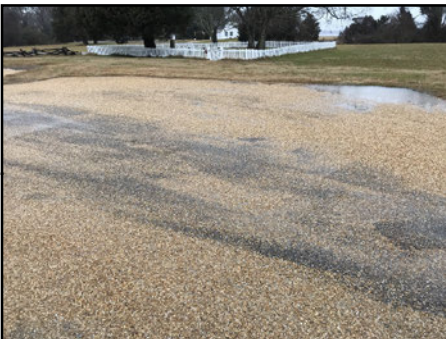
Inspection Date	FMSS Number	User Access	Surface Type
2/18/2021	56277	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
7,403	0.127	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
NOT APPLICABLE		NOT RATED	

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

Note: Route not rated - pavement covered.



Colonial National Historical Park

ROUTE 0929: SURRENDER FIELD ACCESS PARKING

Manual Rating

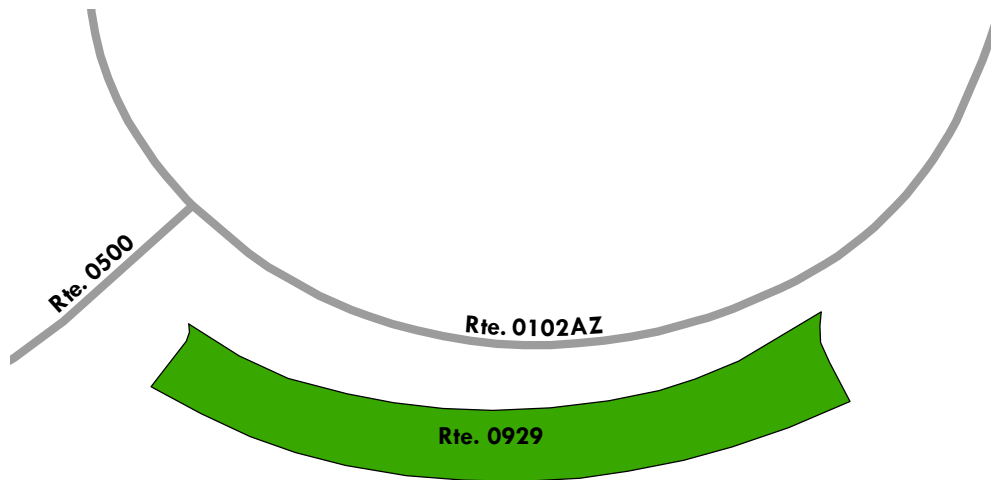
ADJACENT TO ROUTE 0102ZZ (SURRENDER FIELD ACCESS ROADS)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56279	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
2,160	0.037	3	LIGHT REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0930: WASHINGTON'S HEADQUARTERS PARKING

Manual Rating

FROM ROUTE 0224ZZ (WASHINGTON'S HEADQUARTERS ROADS)
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56280	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
804	0.014	2	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE AND WOOD		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
NOT APPLICABLE		NOT RATED	

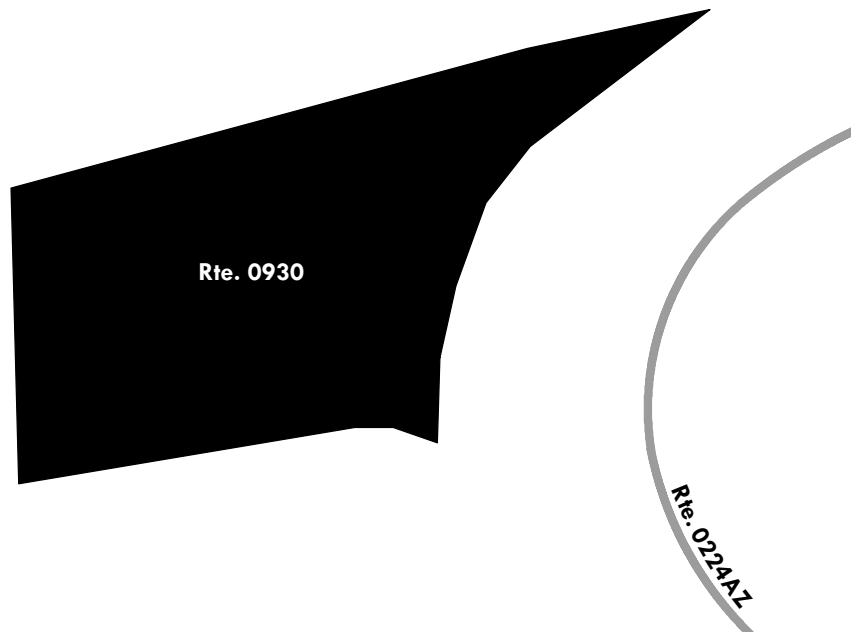
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas



Note: Route not rated - pavement covered.



Colonial National Historical Park

ROUTE 0931: FRENCH CEMETERY PARKING

Manual Rating

FROM ROUTE 0500 (WEST TOUR ROAD) AT MP 1.90 (ON RIGHT)

TO ROUTE 0500 (WEST TOUR ROAD) AT MP 1.91 (ON RIGHT)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56281	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
2,281	0.039	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

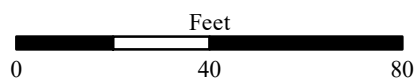
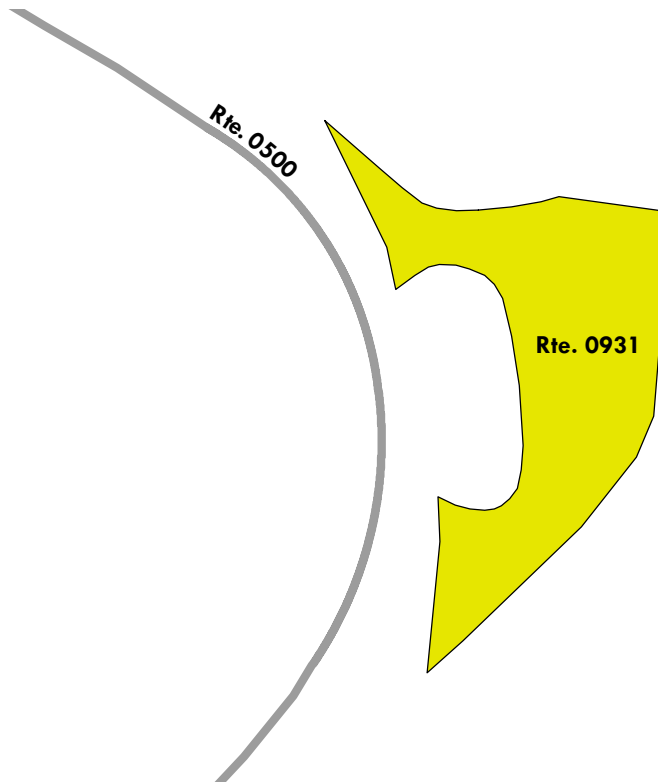
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0932: NECK O LAND VISITOR CONTACT PARKING

Manual Rating

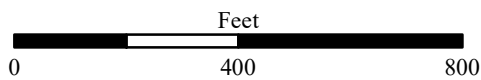
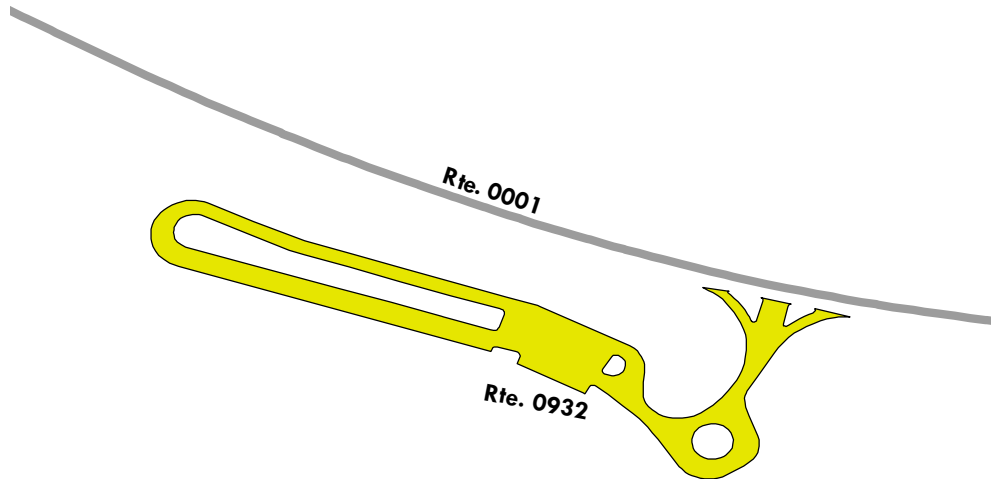
FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 21.04 (ON LEFT)
TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	99128	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
76,224	1.312	5	MODERATE REPAIR
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0950: JAMESTOWN VISITOR CENTER PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) AT MP 22.88 (ON RIGHT)

TO INTERSECTION OF ROUTE 0001 (COLONIAL PARKWAY) AND ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP ROADS)z

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	56282	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
129,457	2.229	2	REPLACE
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

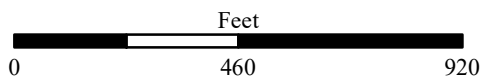
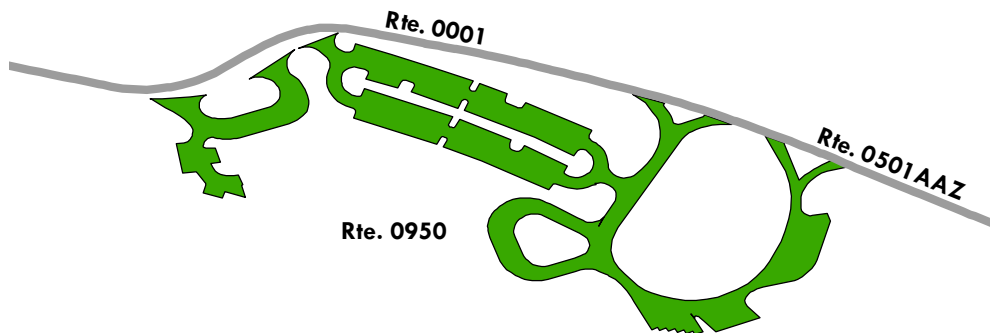
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas



Note: Parking area consists of multiple surface types: 1 part Asphalt at 90,306 square feet; 1 part Concrete at 38,635; 1 part Brick at 516 square feet.



Colonial National Historical Park

ROUTE 0951ZZ: ISLAND DRIVE SHORT LOOP PARKING AREAS

Summary Route
Manual Rating

FROM ROUTE 0501AZZ (ISLAND DRIVE WEST LOOP ROADS)
TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR	
33,471	0.576	SUMMARY / 78	

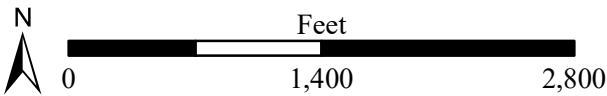
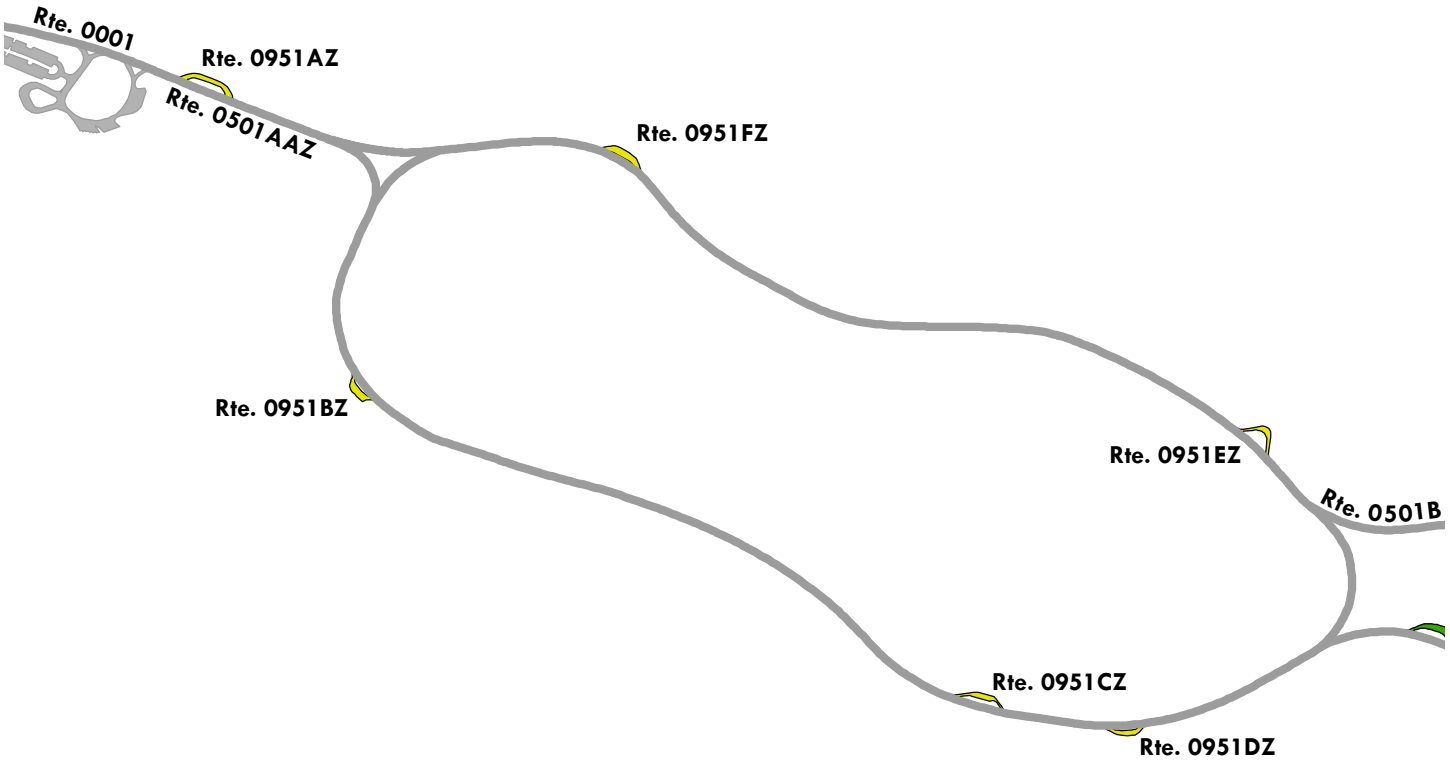
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas

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

Rte. 0951ZZ (6 Subcomponents)



Colonial National Historical Park

ROUTE 0951AZ: EARLY AFRICAN RESIDENTS PARKING

Subcomponent of Route COLO-0951ZZ
Manual Rating

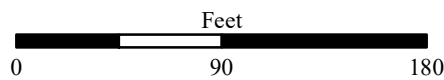
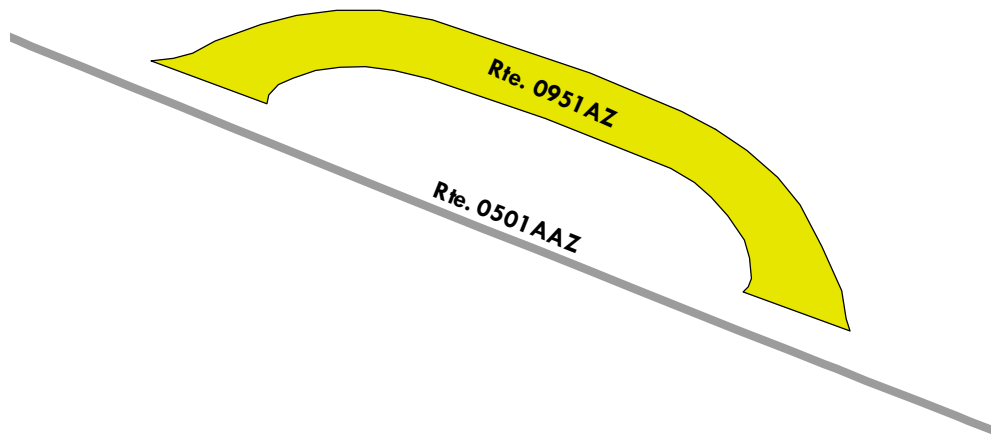
FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
 TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
6,822	0.117	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0951BZ: JAMESTOWN ISLAND DRIVE PARKING

Subcomponent of Route COLO-0951ZZ
Manual Rating

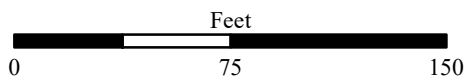
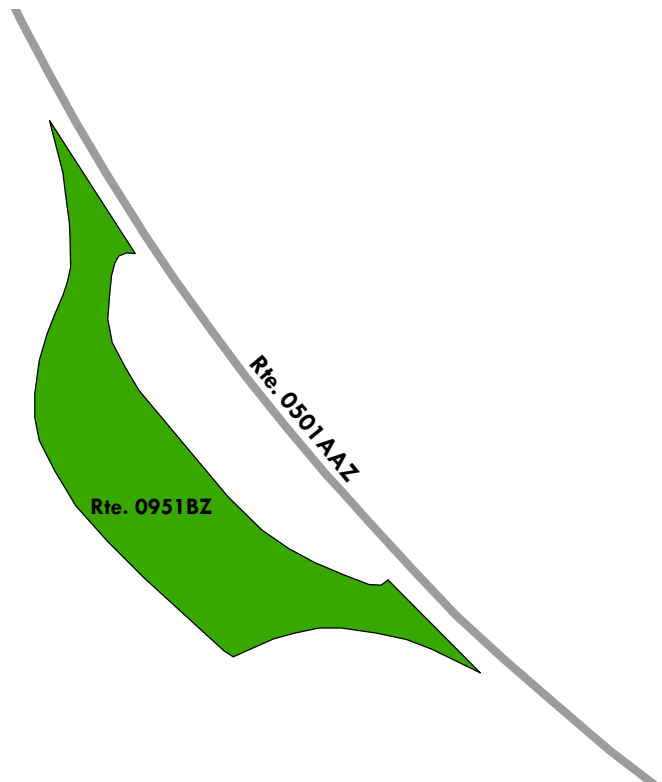
FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
 TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
5,388	0.093	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0951CZ: JAMESTOWN DURING THE CIVIL WAR PARKING

Subcomponent of Route COLO-0951ZZ
Manual Rating

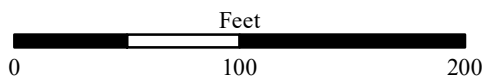
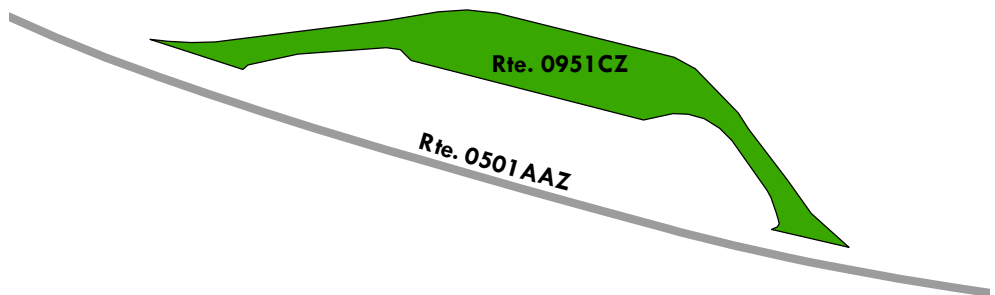
FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
 TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,569	0.079	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0951DZ: THE CHANGING LAND PARKING

Subcomponent of Route COLO-0951ZZ

Manual Rating

FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,477	0.077	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

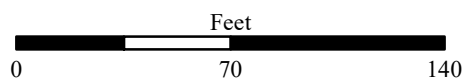
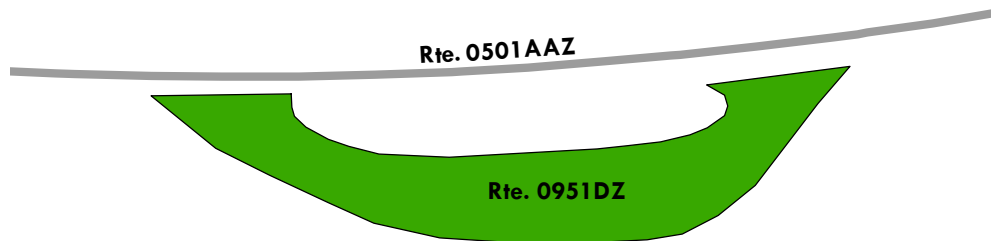
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0951EZ: PRECIOUS PLANTS PARKING

Subcomponent of Route COLO-0951ZZ

Manual Rating

FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,774	0.082	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

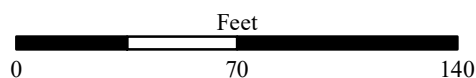
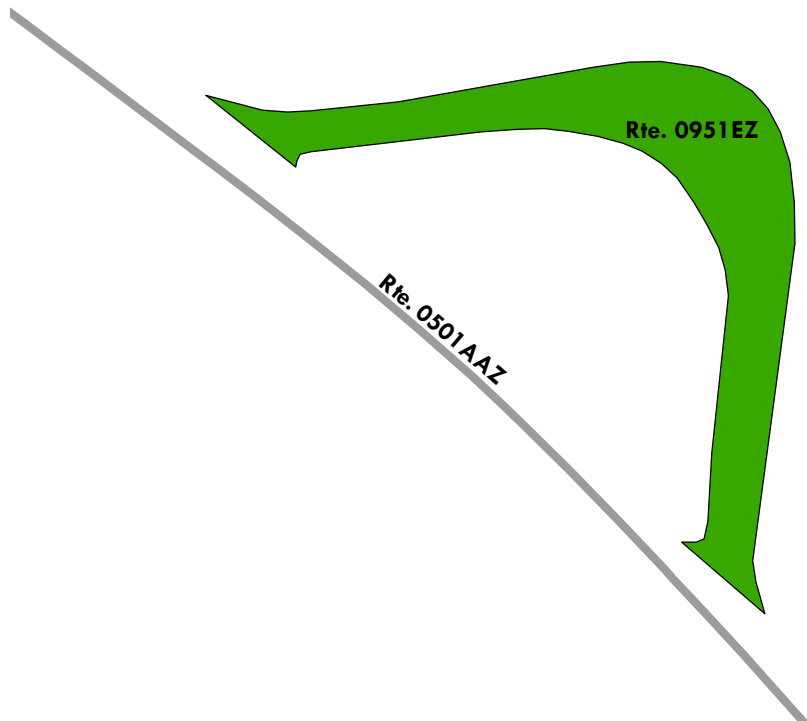
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0951FZ: SOILE FIT TO PRODUCE PARKING

Subcomponent of Route COLO-0951ZZ

Manual Rating

FROM ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

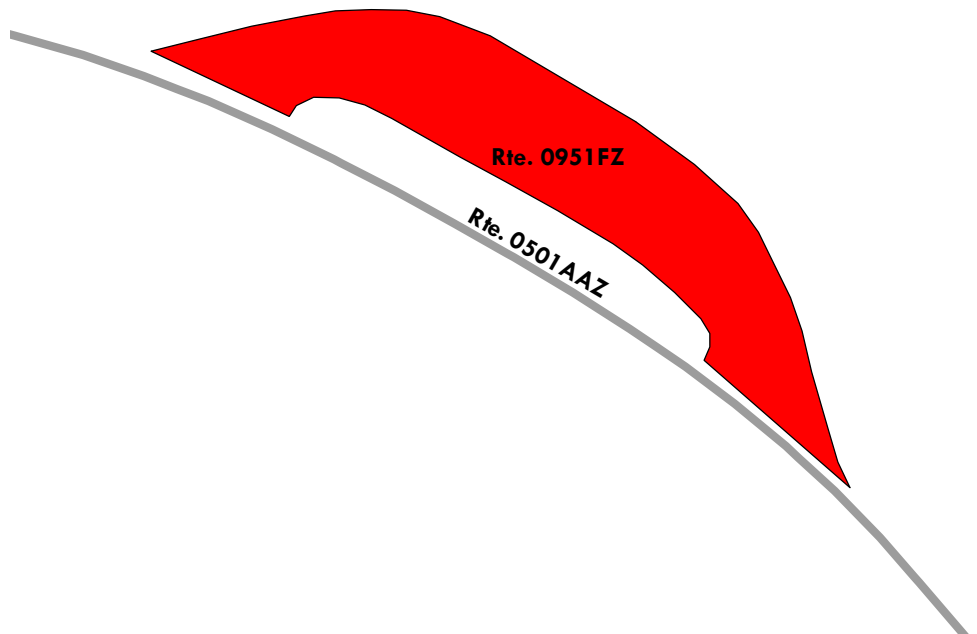
TO ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
7,441	0.128	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
HEAVY 3R TREATMENTS		POOR / 53	

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



Colonial National Historical Park

ROUTE 0952ZZ: ISLAND DRIVE OUTER LOOP PARKING AREAS

Summary Route
Manual Rating

FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)
TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Condition Rating / PCR	
27,881	0.479	SUMMARY / 86	

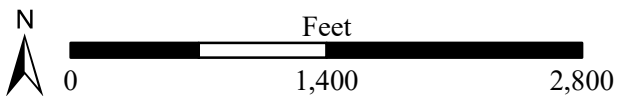
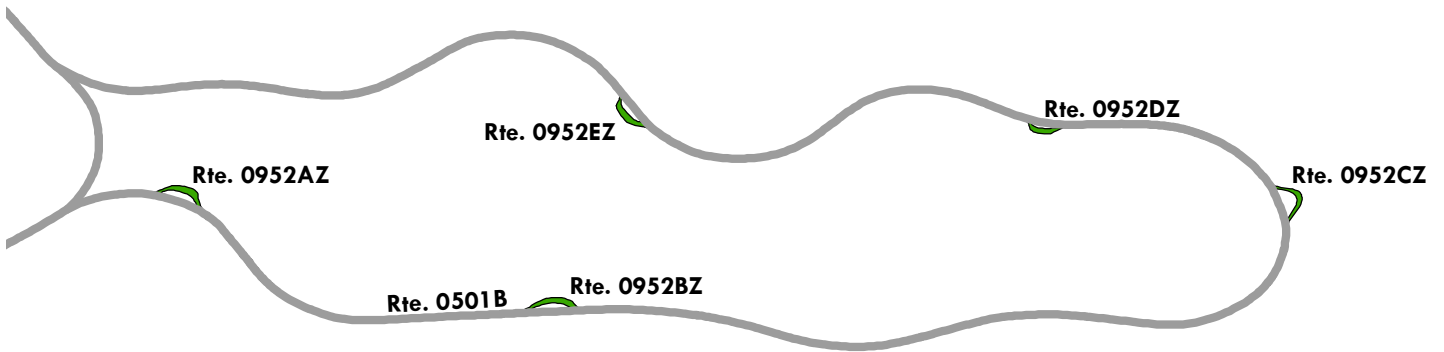
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas

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

Rte. 0952ZZ (5 Subcomponents)



Colonial National Historical Park

ROUTE 0952AZ: FOOT TRAIL TO BLACK POINT PARKING

Subcomponent of Route COLO-0952ZZ
Manual Rating

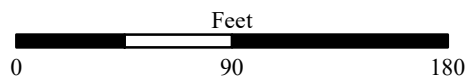
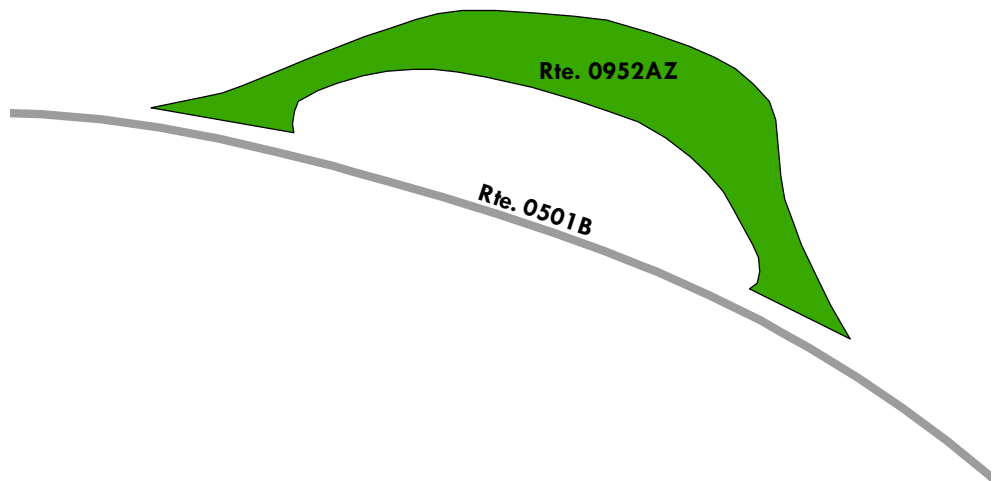
FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)
 TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
6,648	0.114	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

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



Colonial National Historical Park

ROUTE 0952BZ: AN ANCIENT PLANTER PARKING

Subcomponent of Route COLO-0952ZZ
Manual Rating

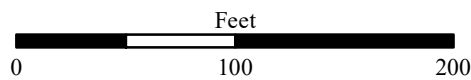
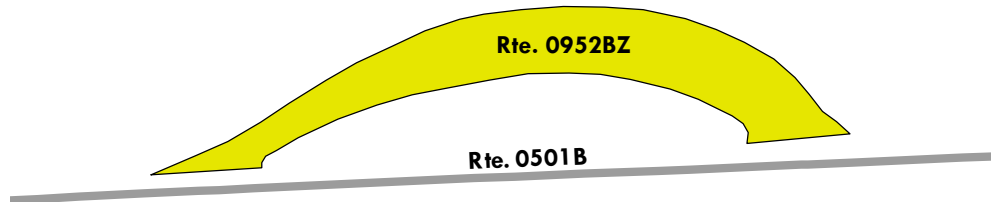
FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)
 TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
6,353	0.109	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0952CZ: THE TRAVIS ESTATE PARKING

Subcomponent of Route COLO-0952ZZ

Manual Rating

FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)

TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
5,071	0.087	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

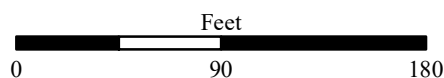
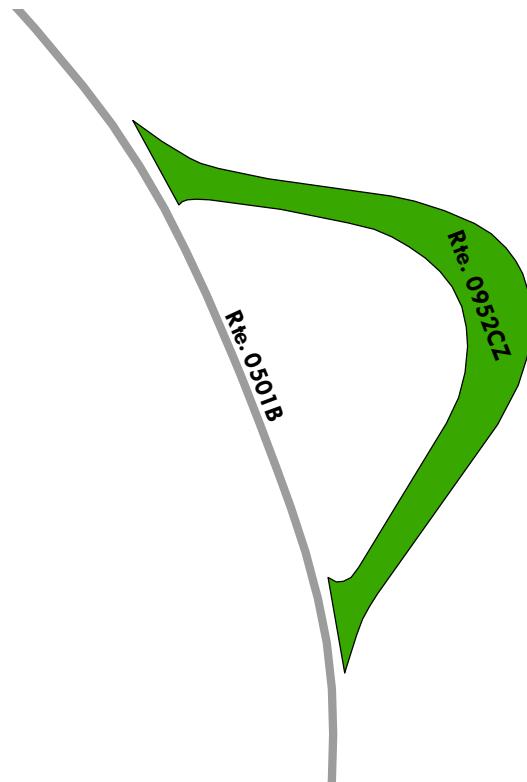
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0952DZ: FENCES AND DITCHES PARKING

Subcomponent of Route COLO-0952ZZ

Manual Rating

FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)

TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,280	0.074	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

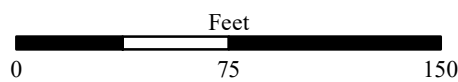
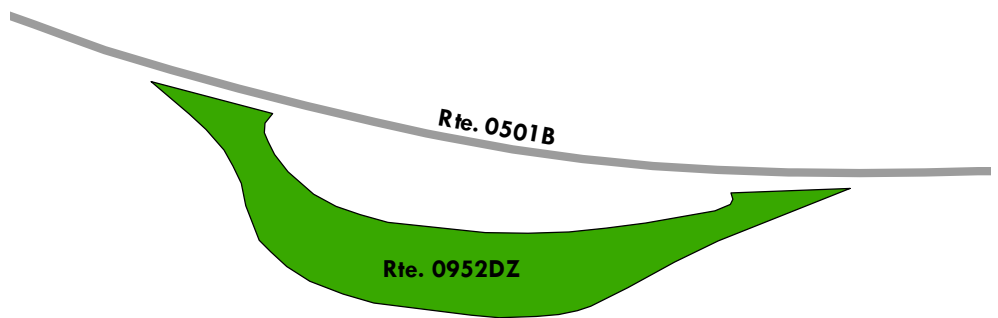
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0952EZ: THE ISLAND HOUSE / PLANTS FROM THE PAST PARKING

Subcomponent of Route COLO-0952ZZ

Manual Rating

FROM ROUTE 0501B (ISLAND DRIVE EAST LOOP)

TO ROUTE 0501B (ISLAND DRIVE EAST LOOP)

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
5,529	0.095	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
PREVENTIVE MAINTENANCE		GOOD / 90	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

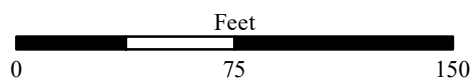
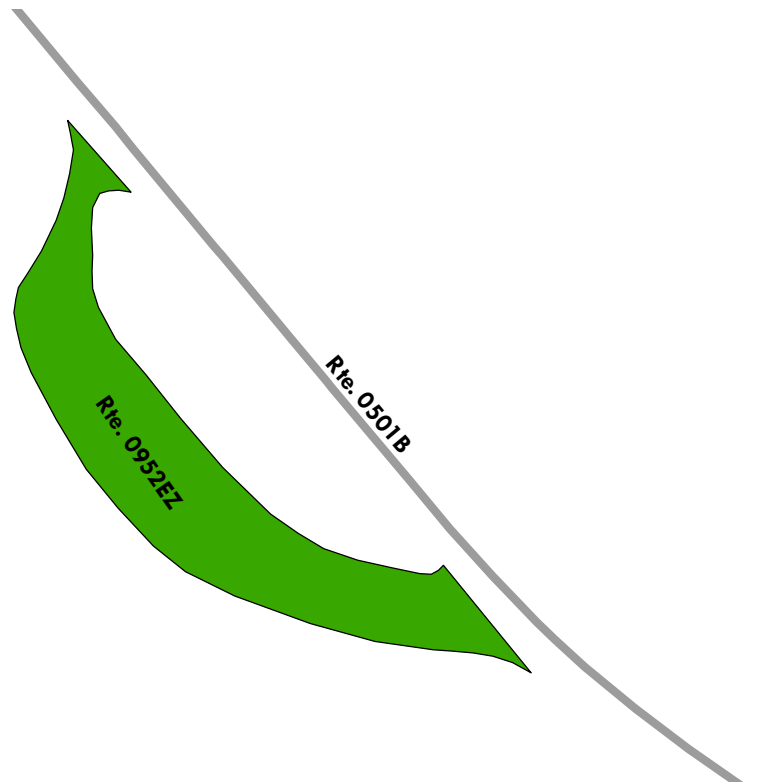
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0953: BELLFIELD INTERPRETIVE AREA PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY)

TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	N/A	PUBLIC	CONCRETE
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
12,769	0.22	4	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
NOT APPLICABLE		NOT RATED	

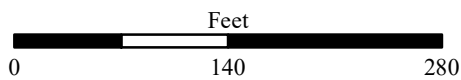
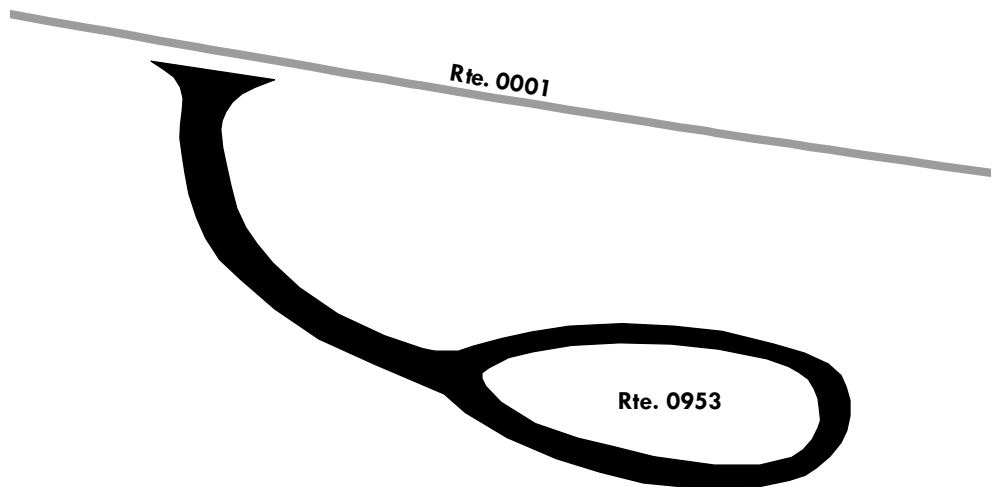
Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)	Fair (61- 84)	Good (85 - 94)	Excellent (95 - 100)	Not Rated
----------------------	----------------------	-----------------------	-----------------------------	------------------

See Appendix for definitions and formulas



Note: Route not rated - pavement covered.



Colonial National Historical Park

ROUTE 0954: GREAT NECK PICNIC PARKING

Manual Rating

FROM ROUTE 0111A (STATE HIGHWAY 199 KINGS POINT A)

TO PARKING

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
50,386	0.868	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
HEAVY 3R TREATMENTS		POOR / 53	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

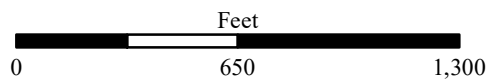
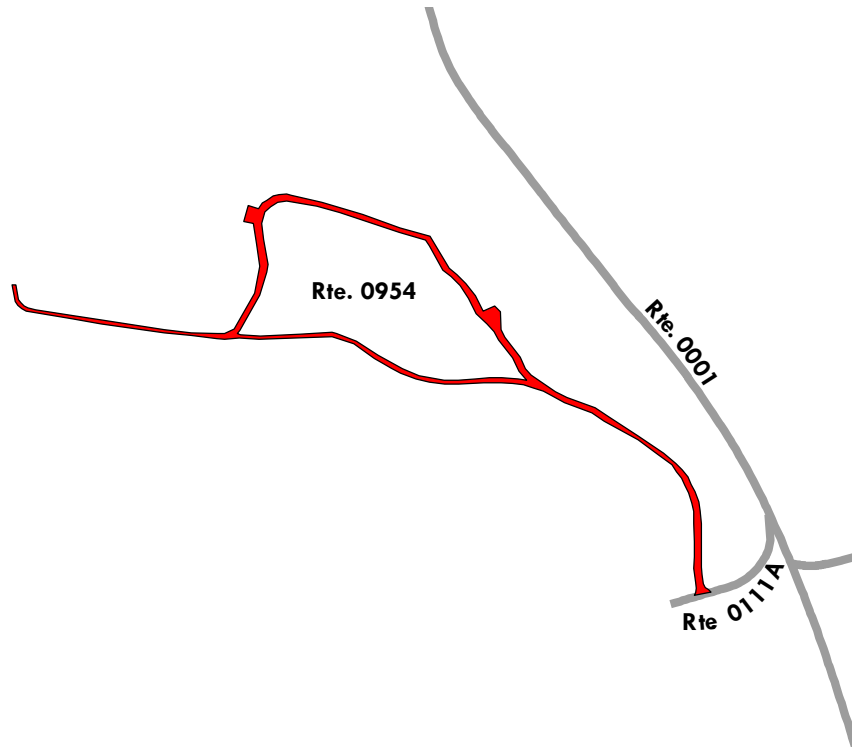
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0955: ISTHMUS OVERLOOK PARKING

Manual Rating

FROM ROUTE 0001 (COLONIAL PARKWAY) ON RIGHT

TO ROUTE 0001 (COLONIAL PARKWAY) ON RIGHT

Inspection Date	FMSS Number	User Access	Surface Type
2/20/2021	N/A	PUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
4,904	0.084	2	DO NOTHING
Curb Type		Curb & Gutter Type	
CONCRETE		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

Route Condition Legend – Pavement Condition Rating (PCR)

Poor (0 - 60)

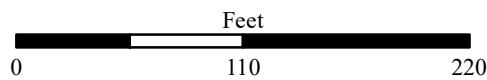
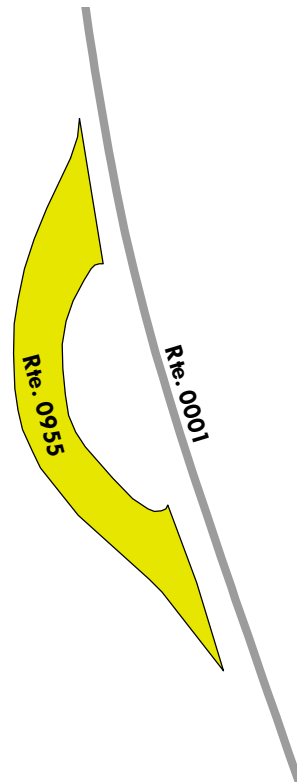
Fair (61- 84)

Good (85 - 94)

Excellent (95 - 100)

Not Rated

See Appendix for definitions and formulas



Colonial National Historical Park

ROUTE 0990: JAMESTOWN MAINTENANCE PARKING

Manual Rating

FROM ROUTE 0403ZZ (JAMESTOWN MAINTENANCE ROADS)

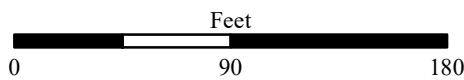
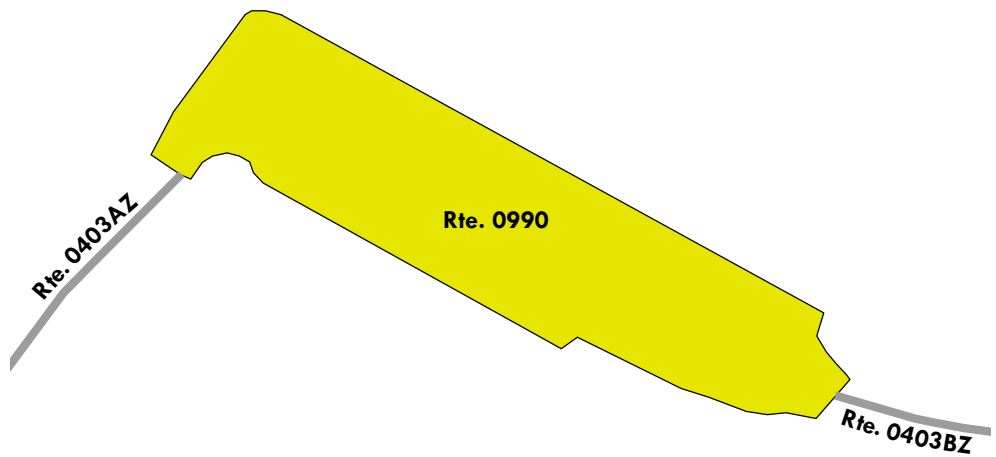
TO ROUTE 0403ZZ (JAMESTOWN MAINTENANCE ROADS)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56283	NONPUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
14,195	0.244	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Colonial National Historical Park

ROUTE 0999: YORKTOWN MAINTENANCE PARKING

Manual Rating

FROM ROUTE 0400ZZ (YORKTOWN MAINTENANCE UTILITY ROADS) AND ROUTE 0401 (YORKTOWN MAINTENANCE AREA RESIDENCE ROAD)

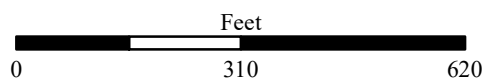
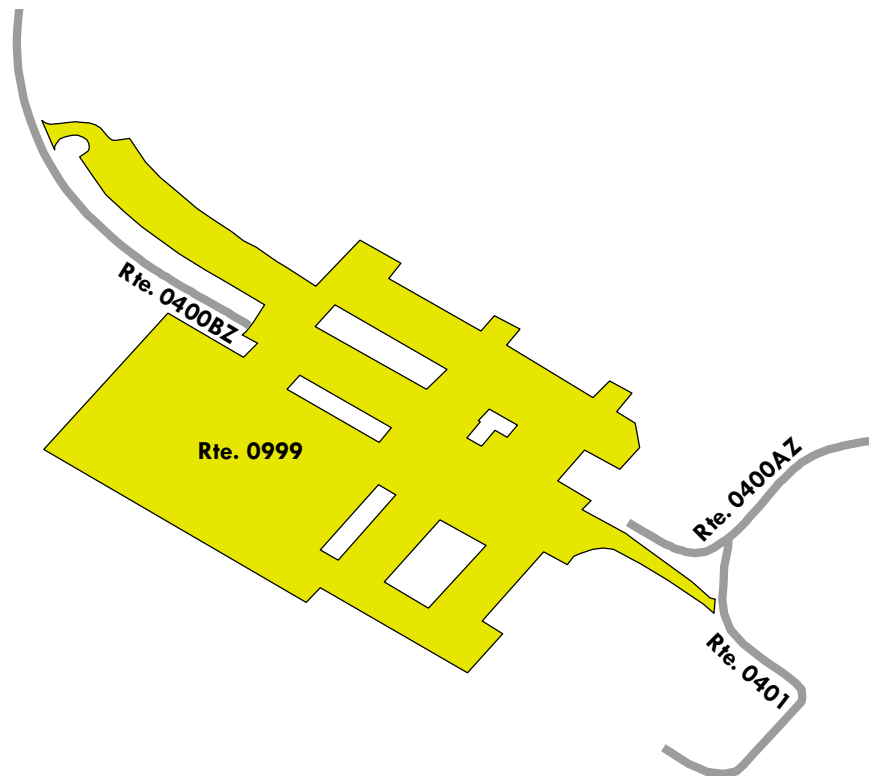
TO ROUTE 0400ZZ (YORKTOWN MAINTENANCE UTILITY ROADS)

Inspection Date	FMSS Number	User Access	Surface Type
2/19/2021	56284	NONPUBLIC	ASPHALT
Area (Sq. Ft.)	Lane Miles (11' Widths)	Curb Reveal (Inches)	Curb Recommendation
205,715	3.542	NOT APPLICABLE	NOT APPLICABLE
Curb Type		Curb & Gutter Type	
NO CURB		NO CURB AND GUTTER	
Pavement Recommendation		Condition Rating / PCR	
LIGHT 3R TREATMENTS		FAIR / 73	

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



Section 7

Road Milepost Information



Colonial National Historical Park



Federal Lands Highway
Road Inventory Program

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.

COLO: Route Milepost Log

ROUTE 0001: COLONIAL PARKWAY

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	R	ROUTE 0901 (YORKTOWN VISITOR CENTER PARKING)
0.00	0.00	INTERSECTION	N/A	ROUTE 0901 (YORKTOWN VISITOR CENTER PARKING)
0.08	0.08	INTERSECTION	R	UNPAVED ROUTE (GATED)
0.12	0.12	INTERSECTION	R	PAVED SPUR (GATED FROM SUNSET TO 6AM)
0.17	0.17	INTERSECTION	L	PAVED ROUTE (STATE ROTUE 238/BALLARD STREET/NON NPS)
0.17	0.17	INTERSECTION	R	PAVED ROUTE (STATE ROTUE 238/BALLARD STREET/NON NPS/ZWEYBRUCKEN ROAD)
0.43	0.48	BRIDGE	N/A	4290-005 (YORKTOWN CREEK BRIDGE)
0.53	0.53	INTERSECTION	L	ROUTE 0105B (U.S. HIGHWAY 17 ACCESS ROAD B)
0.55	0.55	INTERSECTION	L	PAVED SPUR
0.59	0.62	BRIDGE	N/A	4290-006 (U.S. ROUTE 17 PARKWAY BRIDGE)
0.73	0.73	INTERSECTION	R	ROUTE 0105A (U.S. HIGHWAY 17 ACCESS ROAD A)
0.76	0.76	INTERSECTION	R	PAVED SPUR
1.57	1.57	OVERPASS	N/A	4290-007 (OLD WILLIAMSBURG ROAD BRIDGE)
1.64	1.64	INTERSECTION	R	ROUTE 0106 (FUSILIER'S ROAD)
2.03	2.03	INTERSECTION	L	PAVED ROUTE (NON-NPS)
2.42	2.44	BRIDGE	N/A	4290-009 (MINE DEPOT OVERPASS)
2.88	2.89	BRIDGE	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE
2.94	2.94	INTERSECTION	R	ROUTE 0906 (NAVAL WEAPONS STATION PARKING)
2.98	2.98	INTERSECTION	R	ROUTE 0906 (NAVAL WEAPONS STATION PARKING)
3.03	3.06	BRIDGE	N/A	4290-008 (NORTH PIER NAVAL ACCESS ROAD BRIDGE)
3.39	3.39	INTERSECTION	R	ROUTE 0907 (YORKTOWN RIVER OVERLOOK)
3.43	3.43	INTERSECTION	R	ROUTE 0907 (YORKTOWN RIVER OVERLOOK)
4.15	4.15	INTERSECTION	R	ROUTE 0908 (POWHATAN VILLAGE)
4.19	4.19	INTERSECTION	R	ROUTE 0908 (POWHATAN VILLAGE)
4.26	4.26	INTERSECTION	L	ROUTE 0909 (INDIAN FIELD CREEK PARKING)
4.31	4.31	INTERSECTION	L	ROUTE 0909 (INDIAN FIELD CREEK PARKING)
4.35	4.38	BRIDGE	N/A	4290-010 (INDIAN FIELD CREEK BRIDGE)
5.23	5.23	INTERSECTION	L	ROUTE 0953 (BELLFIELD INTERPRETIVE AREA PARKING)

COLO: Route Milepost Log

ROUTE 0001: COLONIAL PARKWAY

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
5.62	5.62	INTERSECTION	R	ROUTE 0910 (CHEATHAM ANNEX PARKING)
5.66	5.66	INTERSECTION	R	ROUTE 0910 (CHEATHAM ANNEX PARKING)
5.86	5.86	INTERSECTION	R	ROUTE 0911 (RINGFIELD PLANTATION PARKING)
5.93	5.93	INTERSECTION	R	ROUTE 0911 (RINGFIELD PLANTATION PARKING)
5.97	6.02	BRIDGE	N/A	4290-011 (FELGATE'S CREEK BRIDGE)
6.17	6.17	INTERSECTION	R	PAVED ROUTE (GATED)
6.80	6.80	INTERSECTION	R	PAVED ROUTE (GATED)
7.09	7.21	BRIDGE	N/A	4290-012 (KINGS CREEK BRIDGE)
8.30	8.30	INTERSECTION	R	ROUTE 0107A (CHEATHAM ANNEX ACCESS ROAD A)
8.33	8.33	INTERSECTION	R	PAVED SPUR
8.43	8.43	INTERSECTION	L	ROUTE 0107B (CHEATHAM ANNEX ACCESS ROAD B)
8.45	8.45	INTERSECTION	L	PAVED SPUR
8.48	8.51	BRIDGE	N/A	4290-013 (PENNIMAN ROAD BRIDGE)
9.25	9.25	INTERSECTION	L	ROUTE 0912 (JONES MILL PARKING)
9.28	9.28	INTERSECTION	L	ROUTE 0912 (JONES MILL PARKING)
10.62	10.62	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (I-64 NORTHBOUND)
10.65	10.65	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (I-64 SOUTHBOUND)
11.06	11.06	INTERSECTION	L	PAVED SPUR
11.10	11.10	INTERSECTION	L	ROUTE 0108A (QUEENS LAKE ACCESS A)
11.13	11.15	BRIDGE	N/A	4290-014 (HUBBARD'S LANE BRIDGE)
11.19	11.19	INTERSECTION	R	ROUTE 0108B (QUEENS LAKE ACCESS B)
11.22	11.22	INTERSECTION	R	PAVED SPUR
11.65	11.65	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (MERIMAC TRAIL STATE ROUTE 143)
11.80	11.80	INTERSECTION	R	ROUTE 0109A (PARKWAY DRIVE ACCESS ROAD A)
11.85	11.85	INTERSECTION	R	PAVED SPUR
11.92	11.92	OVERPASS	N/A	4290-016 (PARKWAY DRIVE BRIDGE)
11.99	11.99	INTERSECTION	L	PAVED SPUR
12.02	12.02	INTERSECTION	L	ROUTE 0109B (PARKWAY DRIVE ACCESS ROAD B)

COLO: Route Milepost Log

ROUTE 0001: COLONIAL PARKWAY

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
12.20	12.20	OVERPASS	N/A	4290-018 (PAGE STREET BRIDGE)
12.54	12.54	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
12.64	12.64	INTERSECTION	R	PAVED ROUTE
12.64	12.64	INTERSECTION	L	PAVED ROUTE
12.69	12.69	INTERSECTION	R	PAVED ROUTE
12.69	12.69	INTERSECTION	L	PAVED ROUTE
12.71	12.71	INTERSECTION	R	PAVED ROUTE
12.75	12.75	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
12.78	12.78	OVERPASS	N/A	4290-034 (C&O RAILROAD BRIDGE)
12.80	12.80	OVERPASS	N/A	4290-019 (LAFAYETTE STREET BRIDGE)
12.84	12.84	INTERSECTION	R	ROUTE 0113 (NORTH ENGLAND STREET ACCESS ROAD)
12.87	12.87	INTERSECTION	R	PAVED SPUR
12.92	13.15	TUNNEL	N/A	4290-033 (WILLIAMSBURG TUNNEL)
13.34	13.34	INTERSECTION	L	ROUTE 0112A (NEWPORT AVENUE ACCESS ROAD A)
13.38	13.38	INTERSECTION	L	PAVED SPUR
13.42	13.42	OVERPASS	N/A	4290-020 (NEWPORT AVENUE BRIDGE)
13.48	13.48	INTERSECTION	R	PAVED SPUR
13.50	13.50	INTERSECTION	R	ROUTE 0112B (NEWPORT AVENUE ACCESS ROAD B)
13.87	13.87	INTERSECTION	L	ROUTE 0913 (PALISADES GREAT OAKS PARKING)
13.90	13.90	INTERSECTION	L	ROUTE 0913 (PALISADES GREAT OAKS PARKING)
14.07	14.07	INTERSECTION	L	ROUTE 0914 (PAPER MILL CREEK PARKING)
14.11	14.11	INTERSECTION	L	ROUTE 0914 (PAPER MILL CREEK PARKING)
14.64	14.64	INTERSECTION	R	ROUTE 0111A (STATE HIGHWAY 199 KINGS POINT A)
14.67	14.67	INTERSECTION	L	ROUTE 0111C (STATE HIGHWAY 199 KINGS POINT C)
14.67	14.67	INTERSECTION	R	PAVED SPUR
14.69	14.69	INTERSECTION	L	PAVED SPUR
14.73	14.73	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (HUMELSINE PARKWAY STATE ROUTE 199)
14.75	14.75	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (HUMELSINE PARKWAY STATE ROUTE 199)

COLO: Route Milepost Log

ROUTE 0001: COLONIAL PARKWAY

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
14.78	14.78	INTERSECTION	R	PAVED SPUR
14.80	14.80	INTERSECTION	L	PAVED SPUR
14.81	14.81	INTERSECTION	R	ROUTE 0111B (STATE HIGHWAY 199 KINGS POINT B)
14.83	14.83	INTERSECTION	L	ROUTE 0111D (STATE HIGHWAY 199 KINGS POINT D)
15.62	15.78	BRIDGE	N/A	4290-022 (HALFWAY CREEK BRIDGE)
15.92	15.92	INTERSECTION	L	PAVED SPUR (GATED)
15.92	15.92	INTERSECTION	R	UNPAVED ROUTE (GATED)
16.31	16.34	BRIDGE	N/A	4290-023 (COLLEGE CREEK BRIDGE)
16.44	16.44	INTERSECTION	R	ROUTE 0915 (COLLEGE CREEK PARKING)
16.54	16.54	INTERSECTION	R	ROUTE 0915 (COLLEGE CREEK PARKING)
16.81	16.81	INTERSECTION	L	ROUTE 0916 (JAMES RIVER (ORIENTATION MAP) PARKING)
16.85	16.85	INTERSECTION	L	ROUTE 0916 (JAMES RIVER (ORIENTATION MAP) PARKING)
17.79	17.79	INTERSECTION	L	ROUTE 0917 (ARCHER'S HOPE PARKING)
17.90	17.90	INTERSECTION	L	ROUTE 0917 (ARCHER'S HOPE PARKING)
18.20	18.20	INTERSECTION	R	UNPAVED ROUTE (GATED)
19.24	19.24	INTERSECTION	L	ROUTE 0918 (GLEBE LAND (MILL CREEK) PARKING)
19.34	19.34	INTERSECTION	L	ROUTE 0918 (GLEBE LAND (MILL CREEK) PARKING)
19.37	19.40	BRIDGE	N/A	4290-024 (MILL CREEK BRIDGE)
19.63	19.63	INTERSECTION	L	ROUTE 0919 (REAL ESTATE PARKING)
19.67	19.67	INTERSECTION	L	ROUTE 0919 (REAL ESTATE PARKING)
20.10	20.10	INTERSECTION	L	ROUTE 0920 (NECK O LAND PARKING)
20.18	20.18	INTERSECTION	L	ROUTE 0920 (NECK O LAND PARKING)
20.74	20.74	INTERSECTION	R	ROUTE 0403AZ (JAMESTOWN MAINTENANCE ROAD A)
20.81	20.81	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
20.90	20.90	INTERSECTION	L	CUT-THROUGH TO ROUTE 0932 (NECK O LAND VISITOR CONTACT PARKING)
21.00	21.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
21.31	21.46	BRIDGE	N/A	4290-025 (POWHATAN CREEK BRIDGE)
21.54	21.54	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
21.62	21.62	INTERSECTION	R	PAVED SPUR

COLO: Route Milepost Log

ROUTE 0001: COLONIAL PARKWAY

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
21.66	21.66	INTERSECTION	L	CUT-THROUGH TO ROUTE 0921 (POWHATAN CREEK PARKING)
21.66	21.66	INTERSECTION	R	ROUTE 0110 (STATE HIGHWAY 359)
21.78	21.78	INTERSECTION	L	ROUTE 0921 (POWHATAN CREEK PARKING)
21.88	21.88	INTERSECTION	R	ROUTE 0904 (GLASSHOUSE PARKING)
21.94	21.94	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
21.94	21.94	INTERSECTION	R	ROUTE 0416AZ (GLASSHOUSE ACCESS ROAD A)
22.21	22.21	INTERSECTION	R	ROUTE 0955 (ISTHMUS OVERLOOK PARKING)
22.25	22.25	INTERSECTION	R	ROUTE 0955 (ISTHMUS OVERLOOK PARKING)
22.35	22.38	BRIDGE	N/A	4290-026 (ISTHMUS BRIDGE)
22.57	22.57	INTERSECTION	R	ROUTE 0402AZ (PERSERVATION VIRGINIA ACCESS ROAD)
22.64	22.64	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.65	22.65	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.67	22.67	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.68	22.68	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.69	22.69	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.80	22.80	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.83	22.83	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
22.87	22.87	INTERSECTION	N/A	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

COLO: Route Milepost Log

ROUTE 0100: UNTOUCHED REDOUBT 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	R	PAVED ROUTE (GOOSLEY ROAD/STATE ROAD 238) (GATED)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (GOOSLEY ROAD/STATE ROAD 238)
0.00	0.00	INTERSECTION	N/A	ROUTE 0500 (WEST TOUR ROAD)
0.29	0.29	CULVERT	N/A	N/A
0.30	0.30	ONE-WAY START	N/A	N/A
0.30	0.30	INTERSECTION	L	ROUTE 0100 (UNTOUCHED REDOUBT ROAD)
0.35	0.35	INTERSECTION	R	ROUTE 0903 (UNTOUCHED REDOUBT LOOP/PARKING)
0.41	0.41	ONE-WAY END	N/A	N/A
0.41	0.41	INTERSECTION	N/A	ROUTE 0100 (UNTOUCHED REDOUBT ROAD)
0.41	0.41	INTERSECTION	L	ROUTE 0100 (UNTOUCHED REDOUBT ROAD)

ROUTE 0101: GRAND FRENCH BATTERY 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	PAVED ROUTE (COOK ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (COOK ROAD / NON NPS)
0.01	0.01	INTERSECTION	L	ROUTE 0101 (GRAND FRENCH BATTERY ROAD) SPUR
0.04	0.04	INTERSECTION	R	ROUTE 0927BZ (GRAND FRENCH BATTERY PARKING B)
0.05	0.05	INTERSECTION	R	ROUTE 0927AZ (GRAND FRENCH BATTERY PARKING A)
0.09	0.09	ONE-WAY START	N/A	N/A
0.09	0.09	INTERSECTION	L	ROUTE 0101 (GRAND FRENCH BATTERY ROAD)
0.13	0.13	CULVERT	N/A	N/A
0.20	0.20	INTERSECTION	N/A	ROUTE 0101 (GRAND FRENCH BATTERY ROAD)
0.20	0.20	ONE-WAY END	N/A	N/A
0.20	0.20	INTERSECTION	L	ROUTE 0101 (GRAND FRENCH BATTERY ROAD)

COLO: Route Milepost Log

ROUTE 0102AZ: SURRENDER FIELD ACCESS 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 0502 (AFTERMATH ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0225 (SURRENDER ROAD)
0.00	0.00	CULVERT	N/A	N/A
0.00	0.00	INTERSECTION	L	ROUTE 0225 (SURRENDER ROAD)
0.08	0.08	INTERSECTION	L	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.08	0.08	ONE-WAY START	N/A	N/A
0.10	0.10	INTERSECTION	L	ROUTE 0102BZ (SURRENDER FIELD ACCESS SPUR ROAD)
0.14	0.14	INTERSECTION	R	ROUTE 0500 (WEST TOUR ROAD)
0.16	0.16	INTERSECTION	R	ROUTE 0929 (SURRENDER FIELD ACCESS PARKING)
0.19	0.19	INTERSECTION	L	ROUTE 0102BZ (SURRENDER FIELD ACCESS SPUR ROAD)
0.22	0.22	INTERSECTION	N/A	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.22	0.22	INTERSECTION	L	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.22	0.22	ONE-WAY END	N/A	N/A

ROUTE 0102BZ: SURRENDER FIELD ACCESS SPUR 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	L	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.00	0.00	ONE-WAY START	N/A	N/A
0.03	0.03	ONE-WAY END	N/A	N/A
0.03	0.03	INTERSECTION	R	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.03	0.03	INTERSECTION	L	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)

COLO: Route Milepost Log

ROUTE 0103: REDOUBT 9 AND 10 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	CULVERT	N/A	N/A
0.00	0.00	INTERSECTION	R	PAVED ROUTE (BALLARD STREET / NON NPS) (GATED)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (BALLARD STREET / NON NPS)
0.00	0.00	INTERSECTION	N/A	ROUTE 0503AZ (EAST TOUR ROAD A)
0.12	0.12	CULVERT	N/A	N/A
0.12	0.12	INTERSECTION	L	ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD)
0.12	0.12	ONE-WAY START	N/A	N/A
0.15	0.15	INTERSECTION	R	ROUTE 0902AZ (REDOUBT 9 & 10 ACCESS ROAD PARKING A)
0.17	0.17	INTERSECTION	L	ROUTE 0902BZ (REDOUBT 9 & 10 ACCESS ROAD PARKING B)
0.17	0.17	INTERSECTION	R	ROUTE 0902CZ (REDOUBT 9 & 10 ACCESS ROAD PARKING C)
0.19	0.19	INTERSECTION	R	UNPAVED PARKING
0.22	0.22	INTERSECTION	R	ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD)
0.22	0.22	INTERSECTION	L	ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD)
0.22	0.22	ONE-WAY END	N/A	N/A

ROUTE 0104: MOORE HOUSE ACCESS 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	L	PAVED ROUTE (BALLARD STREET / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (BALLARD STREET / NON NPS)
0.00	0.00	INTERSECTION	N/A	ROUTE 0503BZ (EAST TOUR ROAD B)
0.08	0.08	INTERSECTION	L	PAVED ROUTE (MOORE HOUSE ROAD / NON NPS)
0.08	0.08	INTERSECTION	R	PAVED ROUTE (MOORE HOUSE ROAD / NON NPS)
0.12	0.12	INTERSECTION	R	UNPAVED ROUTE
0.18	0.18	INTERSECTION	N/A	ROUTE 0928 (MOORE HOUSE PARKING)

COLO: Route Milepost Log

ROUTE 0105A: U.S. HIGHWAY 17 ACCESS 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	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.02	0.02	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
0.04	0.04	CULVERT	N/A	N/A
0.17	0.17	INTERSECTION	L	ROUTE 0105A (U.S. HIGHWAY 17 ACCESS ROAD A) SPUR
0.17	0.17	INTERSECTION	R	PAVED ROUTE (US HIGHWAY 17 / NON NPS) SPUR
0.18	0.18	INTERSECTION	L	PAVED ROUTE (US HIGHWAY 17 / NON NPS)
0.18	0.18	INTERSECTION	R	PAVED ROUTE (US HIGHWAY 17 / NON NPS)

ROUTE 0105B: U.S. HIGHWAY 17 ACCESS ROAD B

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	PAVED ROUTE (US HIGHWAY 17 / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (US HIGHWAY 17 / NON NPS)
0.02	0.02	INTERSECTION	R	PAVED ROUTE (US HIGHWAY 17 / NON NPS) SPUR
0.02	0.02	INTERSECTION	L	ROUTE 0105B (U.S. HIGHWAY 17 ACCESS ROAD B) SPUR
0.07	0.07	CULVERT	N/A	N/A
0.17	0.17	INTERSECTION	L	ROUTE 0105B (U.S. HIGHWAY 17 ACCESS ROAD B) OPPOSITE LANE
0.18	0.18	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.18	0.18	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)

COLO: Route Milepost Log

ROUTE 0106: FUSILIER'S 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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.16	0.16	INTERSECTION	L	ROUTE 0905 (FUSILIER'S PARKING)
0.20	0.20	INTERSECTION	L	ROUTE 0905 (FUSILIER'S PARKING)
0.22	0.22	CULVERT	N/A	N/A
0.33	0.33	INTERSECTION	R	ROUTE 0106 (FUSILIER'S ROAD) SPUR
0.34	0.34	INTERSECTION	L	PAVED ROUTE (WATER STREET / STATE ROUTE 238 / NON NPS) SPUR
0.35	0.35	INTERSECTION	R	PAVED ROUTE (WATER STREET / STATE ROUTE 238 / NON NPS)
0.35	0.35	INTERSECTION	N/A	PAVED PARKING (YORKTOWN VICTORY CENTER / NON NPS)
0.35	0.35	INTERSECTION	L	PAVED ROUTE (WATER STREET / STATE ROUTE 238 / NON NPS)

ROUTE 0107A: CHEATHAM ANNEX ACCESS 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	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.02	0.02	INTERSECTION	L	ROUTE 0107A (CHEATHAM ANNEX ACCESS ROAD A) OPPOSITE LANE
0.03	0.03	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS) SPUR
0.03	0.03	CULVERT	N/A	N/A
0.04	0.04	INTERSECTION	R	ROUTE 0107A (CHEATHAM ANNEX ACCESS ROAD A) SPUR
0.04	0.04	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS)
0.04	0.04	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS)

COLO: Route Milepost Log

ROUTE 0107B: CHEATHAM ANNEX ACCESS ROAD B

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	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS)
0.01	0.01	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 641 / PENNIMAN ROAD / NON NPS) SPUR
0.04	0.04	INTERSECTION	L	ROUTE 0107B (CHEATHAM ANNEX ACCESS ROAD B) SPUR
0.10	0.10	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
0.12	0.12	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)
0.12	0.12	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)

ROUTE 0108A: QUEENS LAKE ACCESS 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	L	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.04	0.04	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
0.13	0.13	INTERSECTION	L	PAVED ROUTE (HUBBARD LANE / NON NPS) SPUR
0.14	0.14	INTERSECTION	L	PAVED ROUTE (HUBBARD LANE / NON NPS)
0.14	0.14	INTERSECTION	R	PAVED ROUTE (HUBBARD LANE / NON NPS)

ROUTE 0108B: QUEENS LAKE ACCESS B

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	INTERSECTION	L	ROUTE 0108B (QUEENS LAKE ACCESS B) OPPOSITE LANE
0.12	0.12	INTERSECTION	L	PAVED ROUTE (HUBBARD LANE / NON NPS) SPUR
0.13	0.13	INTERSECTION	L	PAVED ROUTE (HUBBARD LANE / NON NPS)
0.13	0.13	INTERSECTION	R	PAVED ROUTE (HUBBARD LANE / NON NPS)

COLO: Route Milepost Log

ROUTE 0109A: PARKWAY DRIVE ACCESS 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	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
0.10	0.10	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 163 / PARKWAY DRIVE / NON NPS)
0.10	0.10	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 163 / PARKWAY DRIVE / NON NPS)

ROUTE 0109B: PARKWAY DRIVE ACCESS ROAD B

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY) OPPOSITE LANE
0.12	0.12	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 163 / PARKWAY DRIVE / NON NPS)
0.12	0.12	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 163 / PARKWAY DRIVE / NON NPS)

ROUTE 0110: STATE HIGHWAY 359

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	N/A	CUT-THROUGH TO ROUTE 0921 (POWHATAN CREEK PARKING)
0.00	0.00	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY) SPUR
0.06	0.06	PARK BOUNDARY	N/A	PAVED ROUTE (GREENSPRINGS ROAD / NON NPS)

COLO: Route Milepost Log

ROUTE 0111A: STATE HIGHWAY 199 KINGS POINT A

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	INTERSECTION	L	ROUTE 0111A (STATE HIGHWAY 199 KINGS POINT A) OPPOSITE LANE
0.04	0.04	CULVERT	N/A	N/A
0.05	0.05	INTERSECTION	R	ROUTE 0954 (GREAT NECK PICNIC PARKING)
0.06	0.06	PARK BOUNDARY	N/A	PAVED ROUTE (STATE ROUTE 132 / NON NPS)

ROUTE 0111B: STATE HIGHWAY 199 KINGS POINT B

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	PARK BOUNDARY	N/A	PAVED ROUTE (STATE ROUTE 199 / NON NPS)
0.01	0.01	INTERSECTION	R	PAVED ROUTE (KINGS POINT DRIVE / NON NPS)
0.06	0.06	INTERSECTION	L	ROUTE 0111B (STATE HIGHWAY 199 KINGS POINT B) OPPOSITE LANE
0.08	0.08	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.08	0.08	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)

ROUTE 0111C: STATE HIGHWAY 199 KINGS POINT C

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 199 / NON NPS)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 199 / NON NPS)
0.02	0.02	INTERSECTION	L	ROUTE 0111C (STATE HIGHWAY 199 KINGS POINT C) OPPOSITE LANE
0.09	0.09	INTERSECTION	L	ROUTE 0111C (STATE HIGHWAY 199 KINGS POINT C) OPPOSITE LANE
0.10	0.10	CULVERT	N/A	N/A
0.11	0.11	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.11	0.11	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)

Data Collected on 4/2021

COLO: Route Milepost Log

ROUTE 0111D: STATE HIGHWAY 199 KINGS POINT D

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.02	0.02	INTERSECTION	L	ROUTE 0111D (STATE HIGHWAY 199 KINGS POINT D) OPPOSITE LANE
0.11	0.11	INTERSECTION	L	ROUTE 0111D (STATE HIGHWAY 199 KINGS POINT D) OPPOSITE LANE
0.12	0.12	INTERSECTION	L	PAVED ROUTE (STATE ROUTE 199 / NON NPS)
0.12	0.12	INTERSECTION	R	PAVED ROUTE (STATE ROUTE 199 / NON NPS)

ROUTE 0112A: NEWPORT AVENUE ACCESS 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	L	PAVED ROUTE (NEWPORT AVENUE / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (NEWPORT AVENUE / NON NPS)
0.01	0.01	INTERSECTION	R	PAVED ROUTE (NEWPORT AVENUE / NON NPS) SPUR
0.04	0.04	INTERSECTION	L	ROUTE 0112A (NEWPORT AVENUE ACCESS ROAD A) OPPOSITE LANE
0.06	0.06	INTERSECTION	N/A	ROUTE 0001 (COLONIAL PARKWAY)
0.06	0.06	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)

ROUTE 0112B: NEWPORT AVENUE ACCESS ROAD B

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	PAVED ROUTE (NEWPORT AVENUE / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (NEWPORT AVENUE / NON NPS)
0.01	0.01	INTERSECTION	R	PAVED ROUTE (NEWPORT AVENUE / NON NPS) SPUR
0.07	0.07	CULVERT	N/A	N/A
0.07	0.07	INTERSECTION	L	ROUTE 0112B (NEWPORT AVENUE ACCESS ROAD B) SPUR
0.09	0.09	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.09	0.09	INTERSECTION	N/A	ROUTE 0001 (COLONIAL PARKWAY)

Data Collected on 4/2021

COLO: Route Milepost Log

ROUTE 0113: NORTH ENGLAND STREET ACCESS 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	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	R	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.03	0.03	ONE-WAY END	N/A	N/A
0.06	0.06	PARK BOUNDARY	N/A	PAVED ROUTE (NORTH ENGLAND STREET / NON NPS)
0.06	0.06	INTERSECTION	N/A	PAVED ROUTE (NORTH ENGLAND STREET / NON NPS)

ROUTE 0224AZ: WASHINGTON'S HEADQUARTERS 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	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0500 (WEST TOUR ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0500 (WEST TOUR ROAD)
0.03	0.03	ONE-WAY END	N/A	N/A
0.03	0.03	INTERSECTION	R	ROUTE 0224BZ (WASHINGTON'S HEADQUARTERS SPUR ROAD)
0.14	0.15	LOW WATER CROSSING	N/A	HIGH WATER FLOW AREA
0.28	0.28	ONE-WAY START	N/A	N/A
0.28	0.28	INTERSECTION	L	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)
0.30	0.30	INTERSECTION	R	ROUTE 0930 (WASHINGTON'S HEADQUARTERS PARKING)
0.32	0.32	ONE-WAY END	N/A	N/A
0.32	0.32	INTERSECTION	N/A	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)
0.32	0.32	INTERSECTION	L	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)

COLO: Route Milepost Log

ROUTE 0224BZ: WASHINGTON'S HEADQUARTERS SPUR 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	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)
0.03	0.03	INTERSECTION	R	ROUTE 0500 (WEST TOUR ROAD)
0.03	0.03	INTERSECTION	L	ROUTE 0500 (WEST TOUR ROAD)
0.03	0.03	ONE-WAY END	N/A	N/A

ROUTE 0225: SURRENDER 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 (COOK ROAD / NON NPS)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (COOK ROAD / NON NPS)
0.03	0.03	INTERSECTION	L	ROUTE 0225 (SURRENDER ROAD) CUT-THRU
0.46	0.46	INTERSECTION	L	ROUTE 0502 (AFTERMATH ROAD)
0.66	0.66	INTERSECTION	L	UNPAVED PARKING (HORSE TRAILER PARKING)
0.97	0.97	INTERSECTION	L	ROUTE 0502 (AFTERMATH ROAD)
0.97	0.97	INTERSECTION	R	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
1.05	1.05	INTERSECTION	L	UNPAVED ROUTE (GATED)
1.13	1.13	INTERSECTION	L	ROUTE 0503AZ (EAST TOUR ROAD A)
1.27	1.27	INTERSECTION	R	PAVED ROUTE (COOK ROAD / NON NPS)
1.27	1.27	INTERSECTION	L	PAVED ROUTE (COOK ROAD / NON NPS)

COLO: Route Milepost Log

ROUTE 0226AZ: FRENCH LOOP 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 0500 (WEST TOUR ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0500 (WEST TOUR ROAD)
0.00	0.00	ONE-WAY START	N/A	N/A
0.03	0.03	CULVERT	N/A	N/A
0.07	0.07	INTERSECTION	R	ROUTE 0226BZ (FRENCH LOOP SPUR ROAD)
0.07	0.07	ONE-WAY END	N/A	N/A
0.12	0.13	BRIDGE	N/A	4290-003 (CRAWFORD ROAD BRIDGE)
0.15	0.15	CULVERT	N/A	N/A
0.46	0.46	CULVERT	N/A	N/A
0.61	0.61	CULVERT	N/A	N/A
0.75	0.75	CULVERT	N/A	N/A
0.97	0.97	INTERSECTION	L	ROUTE 0226AZ (FRENCH LOOP ROAD)
0.97	0.97	ONE-WAY START	N/A	N/A
1.26	1.26	CULVERT	N/A	N/A
1.39	1.39	CULVERT	N/A	N/A
1.49	1.49	CULVERT	N/A	N/A
1.54	1.54	CULVERT	N/A	N/A
1.60	1.60	CULVERT	N/A	N/A
1.73	1.73	CULVERT	N/A	N/A
1.83	1.83	CULVERT	N/A	N/A
1.93	1.93	CULVERT	N/A	N/A
1.95	1.95	CULVERT	N/A	N/A
2.06	2.06	CULVERT	N/A	N/A
2.49	2.49	ONE-WAY END	N/A	N/A
2.49	2.49	INTERSECTION	N/A	ROUTE 0226AZ (FRENCH LOOP ROAD)
2.49	2.49	INTERSECTION	L	ROUTE 0226AZ (FRENCH LOOP ROAD)

COLO: Route Milepost Log

ROUTE 0226BZ: FRENCH LOOP SPUR 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 0226AZ (FRENCH LOOP ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0226AZ (FRENCH LOOP ROAD)
0.00	0.00	ONE-WAY START	N/A	N/A
0.02	0.02	CULVERT	N/A	N/A
0.05	0.05	INTERSECTION	N/A	ROUTE 0500 (WEST TOUR ROAD)
0.05	0.05	INTERSECTION	R	ROUTE 0500 (WEST TOUR ROAD)
0.05	0.05	ONE-WAY END	N/A	N/A

ROUTE 0400AZ: YORKTOWN MAINTENANCE UTILITY ROAD A

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	R	PAVED ROUTE (US HIGHWAY 17 / NON NPS)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (US HIGHWAY 17 / NON NPS)
0.05	0.05	INTERSECTION	L	ROUTE 0401 (YORKTOWN MAINTENANCE AREA RESIDENCE ROAD)
0.07	0.07	INTERSECTION	N/A	ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)
0.07	0.07	INTERSECTION	L	ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)

ROUTE 0400BZ: YORKTOWN MAINTENANCE UTILITY ROAD B

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	R	PAVED ROUTE (GOOSLEY ROAD / NON NPS)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (GOOSLEY ROAD / NON NPS)
0.11	0.11	INTERSECTION	L	ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)
0.19	0.19	INTERSECTION	L	ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)
0.19	0.19	INTERSECTION	R	ROUTE 0999 (YORKTOWN MAINTENANCE PARKING)

COLO: Route Milepost Log

ROUTE 0403AZ: JAMESTOWN MAINTENANCE ROAD A

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	R	ROUTE 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	L	ROUTE 0001 (COLONIAL PARKWAY)
0.07	0.07	INTERSECTION	N/A	ROUTE 0990 (JAMESTOWN MAINTENANCE PARKING)

ROUTE 0403BZ: JAMESTOWN MAINTENANCE ROAD B

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	PAVED ROUTE (NECK-O-LAND ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (NECK-O-LAND ROAD / NON NPS)
0.12	0.12	INTERSECTION	N/A	ROUTE 0990 (JAMESTOWN MAINTENANCE PARKING)

ROUTE 0500: WEST TOUR 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 0929 (SURRENDER FIELD ACCESS PARKING)
0.00	0.00	INTERSECTION	N/A	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.10	0.10	CULVERT	N/A	N/A
0.20	0.20	CULVERT	N/A	N/A
0.22	0.22	INTERSECTION	L	PAVED ROUTE (FROM STATE HIGHWAY 17 / NON NPS)
0.23	0.23	CULVERT	N/A	N/A
0.24	0.24	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (STATE HIGHWAY 17 NORTHBOUND / NON NPS)
0.25	0.25	OVERPASS	N/A	A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS BRIDGE (STATE HIGHWAY 17 SOUTHBOUND / NON NPS)
0.26	0.26	CULVERT	N/A	N/A
0.32	0.32	CULVERT	N/A	N/A
0.34	0.34	INTERSECTION	R	PAVED ROUTE (FROM STATE HIGHWAY 17 / NON NPS)

Data Collected on 4/2021

COLO: Route Milepost Log

ROUTE 0500: WEST TOUR 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
0.69	0.69	CULVERT	N/A	N/A
0.71	0.71	INTERSECTION	L	UNPAVED ROUTE (WARWICK ROAD / GATED)
0.73	0.73	CULVERT	N/A	N/A
0.94	0.94	INTERSECTION	L	UNPAVED ROUTE (GATED / FIRE ROAD)
1.03	1.03	CULVERT	N/A	N/A
1.19	1.21	BRIDGE	N/A	4290-002 (BEAVERDAM CREEK BRIDGE)
1.43	1.43	CULVERT	N/A	N/A
1.72	1.72	INTERSECTION	L	ROUTE 0224AZ (WASHINGTON'S HEADQUARTERS ROAD)
1.74	1.74	INTERSECTION	L	ROUTE 0224BZ (WASHINGTON'S HEADQUARTERS SPUR ROAD)
1.81	1.81	CULVERT	N/A	N/A
1.90	1.90	INTERSECTION	R	ROUTE 0931 (FRENCH CEMETERY PARKING)
1.91	1.91	INTERSECTION	R	ROUTE 0931 (FRENCH CEMETERY PARKING)
1.94	1.94	INTERSECTION	L	UNPAVED ROUTE (GATED)
2.33	2.33	INTERSECTION	L	UNPAVED ROUTE (GATED)
2.49	2.49	CULVERT	N/A	N/A
2.71	2.71	INTERSECTION	L	ROUTE 0226AZ (FRENCH LOOP ROAD)
2.73	2.73	CULVERT	N/A	N/A
2.78	2.78	INTERSECTION	L	ROUTE 0226BZ (FRENCH LOOP SPUR ROAD)
2.85	2.85	CULVERT	N/A	N/A
3.01	3.01	CULVERT	N/A	N/A
3.15	3.15	CULVERT	N/A	N/A
3.34	3.34	CULVERT	N/A	N/A
3.45	3.45	CULVERT	N/A	N/A
3.63	3.65	BRIDGE	N/A	4290-004 (U.S. ROUTE 17 TOUR ROAD BRIDGE)
4.02	4.02	INTERSECTION	R	ROUTE 0411 (LACKEY FIRE ROAD)
4.28	4.28	INTERSECTION	R	PAVED ROUTE (GOOSELY ROAD / NON NPS)
4.28	4.28	INTERSECTION	L	PAVED ROUTE (GOOSELY ROAD / NON NPS)
4.28	4.28	INTERSECTION	N/A	ROUTE 0100 (UNTOUCHED REDOUBT ROAD)

COLO: Route Milepost Log

ROUTE 0501AAZ: ISLAND DRIVE WEST LOOP

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 0001 (COLONIAL PARKWAY)
0.00	0.00	INTERSECTION	R	ROUTE 0950 (JAMESTOWN VISITOR CENTER PARKING)
0.03	0.03	INTERSECTION	L	ROUTE 0951AZ (EARLY AFRICAN RESIDENTS PARKING)
0.07	0.07	INTERSECTION	L	ROUTE 0951AZ (EARLY AFRICAN RESIDENTS PARKING)
0.19	0.19	INTERSECTION	L	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
0.19	0.19	ONE-WAY START	N/A	N/A
0.20	0.20	INTERSECTION	L	ROUTE 0501ABZ (ISLAND DRIVE WEST LOOP SPUR)
0.31	0.33	BRIDGE	N/A	4290-028 (PITCH AND TAR BRIDGE)
0.41	0.41	INTERSECTION	R	UNPAVED ROUTE
0.43	0.43	INTERSECTION	R	ROUTE 0951BZ (JAMESTOWN ISLAND DRIVE PARKING)
0.46	0.46	INTERSECTION	R	ROUTE 0951BZ (JAMESTOWN ISLAND DRIVE PARKING)
0.50	0.50	CULVERT	N/A	N/A
1.05	1.05	INTERSECTION	L	ROUTE 0951CZ (JAMESTOWN DURING THE CIVIL WAR PARKING)
1.08	1.08	CULVERT	N/A	N/A
1.09	1.09	INTERSECTION	L	ROUTE 0951CZ (JAMESTOWN DURING THE CIVIL WAR PARKING)
1.18	1.18	INTERSECTION	R	ROUTE 0951DZ (THE CHANGING LAND PARKING)
1.21	1.21	INTERSECTION	R	ROUTE 0951DZ (THE CHANGING LAND PARKING)
1.38	1.38	INTERSECTION	R	ROUTE 0501B (ISLAND DRIVE EAST LOOP)
1.47	1.47	CULVERT	N/A	N/A
1.53	1.53	INTERSECTION	R	ROUTE 0501B (ISLAND DRIVE EAST LOOP)
1.60	1.60	INTERSECTION	R	ROUTE 0951EZ (PRECIOUS PLANTS PARKING)
1.62	1.62	CULVERT	N/A	N/A
1.64	1.64	INTERSECTION	R	ROUTE 0951EZ (PRECIOUS PLANTS PARKING)
1.70	1.83	BRIDGE	N/A	4290-031 (LONG BRIDGE)
2.05	2.05	CULVERT	N/A	N/A
2.24	2.24	INTERSECTION	R	ROUTE 0951FZ (SOILE FIT TO PRODUCE PARKING)
2.27	2.27	INTERSECTION	R	ROUTE 0951FZ (SOILE FIT TO PRODUCE PARKING)
2.41	2.41	INTERSECTION	L	ROUTE 0501ABZ (ISLAND DRIVE WEST LOOP SPUR)

COLO: Route Milepost Log

ROUTE 0501AAZ: ISLAND DRIVE WEST LOOP

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
2.48	2.48	INTERSECTION	N/A	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
2.48	2.48	INTERSECTION	L	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
2.48	2.48	ONE-WAY END	N/A	N/A

ROUTE 0501ABZ: ISLAND DRIVE WEST LOOP SPUR

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 0501AAZ (ISLAND DRIVE WEST LOOP)
0.00	0.00	INTERSECTION	R	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
0.00	0.00	ONE-WAY START	N/A	N/A
0.06	0.06	ONE-WAY END	N/A	N/A
0.06	0.06	INTERSECTION	R	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
0.06	0.06	INTERSECTION	L	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)

COLO: Route Milepost Log

ROUTE 0501B: ISLAND DRIVE EAST LOOP

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	ONE-WAY START	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
0.00	0.00	INTERSECTION	L	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
0.07	0.07	INTERSECTION	L	ROUTE 0952AZ (FOOT TRAIL TO BLACK POINT PARKING)
0.11	0.11	INTERSECTION	L	ROUTE 0952AZ (FOOT TRAIL TO BLACK POINT PARKING)
0.12	0.12	CULVERT	N/A	N/A
0.43	0.43	INTERSECTION	L	ROUTE 0952BZ (AN ANCIENT PLANTER PARKING)
0.47	0.47	INTERSECTION	L	ROUTE 0952BZ (AN ANCIENT PLANTER PARKING)
0.76	0.76	CULVERT	N/A	N/A
1.13	1.13	INTERSECTION	R	ROUTE 0952CZ (THE TRAVIS ESTATE PARKING)
1.13	1.13	CULVERT	N/A	N/A
1.17	1.17	INTERSECTION	R	ROUTE 0952CZ (THE TRAVIS ESTATE PARKING)
1.18	1.26	BRIDGE	N/A	4290-029 (BLACKS POINT BRIDGE)
1.36	1.36	INTERSECTION	L	ROUTE 0952DZ (FENCES AND DITCHES PARKING)
1.40	1.40	INTERSECTION	L	ROUTE 0952DZ (FENCES AND DITCHES PARKING)
1.67	1.67	CULVERT	N/A	N/A
1.75	1.75	INTERSECTION	L	ROUTE 0952EZ (THE ISLAND HOUSE / PLANTS FROM THE PAST PARKING)
1.78	1.78	INTERSECTION	L	ROUTE 0952EZ (THE ISLAND HOUSE / PLANTS FROM THE PAST PARKING)
1.87	1.91	BRIDGE	N/A	4290-030 (TRAVIS GRAVEYARD BRIDGE)
2.28	2.28	INTERSECTION	N/A	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
2.28	2.28	INTERSECTION	L	ROUTE 0501AAZ (ISLAND DRIVE WEST LOOP)
2.28	2.28	ONE-WAY END	N/A	N/A

COLO: Route Milepost Log

ROUTE 0502: AFTERMATH 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	CULVERT	N/A	N/A
0.00	0.00	INTERSECTION	N/A	ROUTE 0102AZ (SURRENDER FIELD ACCESS ROAD)
0.00	0.00	INTERSECTION	L	ROUTE 0225 (SURRENDER ROAD)
0.00	0.00	INTERSECTION	R	ROUTE 0225 (SURRENDER ROAD)
0.36	0.36	CULVERT	N/A	N/A
0.55	0.55	INTERSECTION	R	ROUTE 0225 (SURRENDER ROAD)
0.55	0.55	INTERSECTION	L	ROUTE 0225 (SURRENDER ROAD)
0.55	0.55	CULVERT	N/A	N/A

ROUTE 0503AZ: EAST TOUR 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	N/A	ROUTE 0103 (REDOUBT 9 AND 10 ACCESS ROAD)
0.00	0.00	INTERSECTION	L	PAVED ROUTE (BOLLARD ROAD / NON NPS)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (BOLLARD ROAD / NON NPS)
0.00	0.00	ONE-WAY START	N/A	N/A
0.05	0.05	CULVERT	N/A	N/A
0.43	0.43	CULVERT	N/A	N/A
0.48	0.48	CULVERT	N/A	N/A
0.52	0.52	CULVERT	N/A	N/A
0.57	0.57	CULVERT	N/A	N/A
0.77	0.77	INTERSECTION	L	ROUTE 0503BZ (EAST TOUR ROAD B)
0.77	0.78	BRIDGE	N/A	4290-038 (WORMLEY POND BRIDGE)
1.74	1.74	CULVERT	N/A	N/A
1.75	1.75	INTERSECTION	R	PAVED ROUTE (COOK ROAD / NON NPS)
1.75	1.75	INTERSECTION	L	PAVED ROUTE (COOK ROAD / NON NPS) (GATED)
1.76	1.76	CULVERT	N/A	N/A
1.83	1.83	ONE-WAY END	N/A	N/A
1.83	1.83	INTERSECTION	L	ROUTE 0225 (SURRENDER ROAD)
1.83	1.83	INTERSECTION	R	ROUTE 0225 (SURRENDER ROAD)

Data Collected on 4/2021

COLO: Route Milepost Log

ROUTE 0503BZ: EAST TOUR 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	PAVED ROUTE (BALLARD STREET / NON NPS)
0.00	0.00	INTERSECTION	N/A	ROUTE 0104 (MOORE HOUSE ACCESS ROAD)
0.00	0.00	INTERSECTION	R	PAVED ROUTE (BALLARD STREET / NON NPS)
0.01	0.01	CULVERT	N/A	N/A
0.33	0.33	INTERSECTION	R	ROUTE 0503AZ (EAST TOUR ROAD A)
0.33	0.33	INTERSECTION	N/A	ROUTE 0503AZ (EAST TOUR ROAD A)

Section 8 Appendix



Colonial National Historical Park



Federal Lands Highway
Road Inventory Program

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.

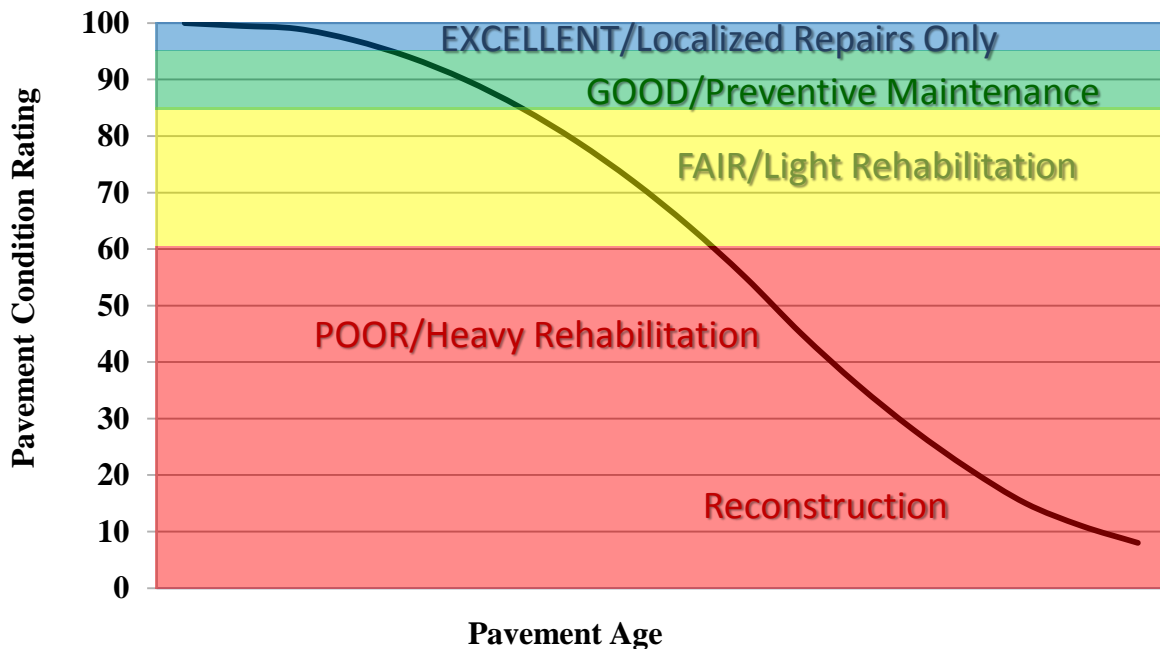
Explanation of the Condition Descriptions

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



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 ultra-thin 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 (4R)** 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:

$$\text{Asphalt PCR} = (0.60 * \text{SCR}) + (0.40 * \text{RCI})$$

$$\text{Concrete PCR} = \text{RCI}$$

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.

Note: *As a result of a unique combination of measured surface distresses and IRI, index values occasionally compute to less than 0 or greater than 100. In this instance, an index value 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 SEVERITY	CRACK PATTERN		
		LOW	MED	HIGH
CRACK WIDTH	LOW	LOW	MED	HIGH
	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:

$$\frac{\text{square foot area of alligator crack severity}}{(0.02 \text{ mile}) * (\text{lane width})}$$

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:

$$\frac{\text{length of respective longitudinal cracking}}{(0.02 \text{ mile}) * (105.6 \text{ ft.})}$$

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:

$$\frac{\text{Total length of transverse cracks}}{\text{Lane width}}$$

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:

$$\frac{\text{square foot area of patching/potholes}}{(0.02 \text{ mile}) * (\text{lane width})}$$

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

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

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:

$$\frac{\text{(total number of ruts within each severity in both wheelpaths)}}{20} \times 100$$

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)

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

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:

$$\frac{(\text{Left wheelpath IRI}) + (\text{Right wheelpath IRI})}{2}$$

There is no applicable threshold for failure for this index.

Roughness Condition Index (Concrete)

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

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
Iris range	Aperture Range F 1.8 – Infinity (P-Iris, Automatic)

Pavement Imaging and Rutting

High resolution rutting data and surface imaging are collected in a single data stream using a three-dimensional (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.

THREE-DIMENSIONAL 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)

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
 - Rating based on percentage of road surface affected
- Longitudinal Cracking
 - Rating based on severity level (crack width) and percentage of road section length of longitudinal cracks
- Transverse Cracking
 - Rating based on crack width, crack spacing, and percentage of surface affected
- Patching
 - Rating based on percentage of road surface affected
- Rutting
 - Rating based on percentage of road section length affected by visible rutting (>1 inch depth) that requires remediation
- 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.

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 it 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 where one transverse crack is equal to the lane width and the crack width \leq 0.25 inches

HIGH = Count of the total number of transverse cracks within the section length where one 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:

$$\text{PATCH_INDEX} = (100 - 40) * (\% \text{PATCHING} / 80)$$

Where:

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

Rutting Index for Manual Rating:

$$\text{RUT_INDEX} = 100 - 40 * (\% \text{RUTTING} / 40)$$

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

Concrete Parking Distress Types

- Slab Faulting at Joints
 - Rating based on height differential between adjacent slabs or pieces of broken slabs
- Slab Cracking and breakup
 - Rating based on quantity of cracks and if slab is acting to able distribute load as designed
- Surface Delamination and Pop-outs
 - Rating based on percentage of road surface affected to include pop-outs, spalls and surface delamination
- Joint Distresses
 - Rating based on sealant condition and concrete distresses at/or adjacent to joints
- Patching
 - 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%:
 - DO NOTHING
- Overall curb damage ranging 5%-20%
 - LIGHT REPAIR
- Overall curb damage ranging 20%-50%
 - MODERATE REPAIR
- Overall curb damage greater than 50%:
 - 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 be 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.
 - GPS will be provided as Shapefiles and KMLs
 - All GPS data related to road collection will 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 programming 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
PATCH	Patching and Potholes
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating
PKG	Parking Area
Poor	Poor rating with an index value of 0 to 60
RCI	Roughness Condition Index
SC	Structural Cracking
SCR	Surface Condition Rating
TC	Transverse Cracking