Federal Lands Highway

# Road Inventory Program

Road Inventory and Condition Assessment

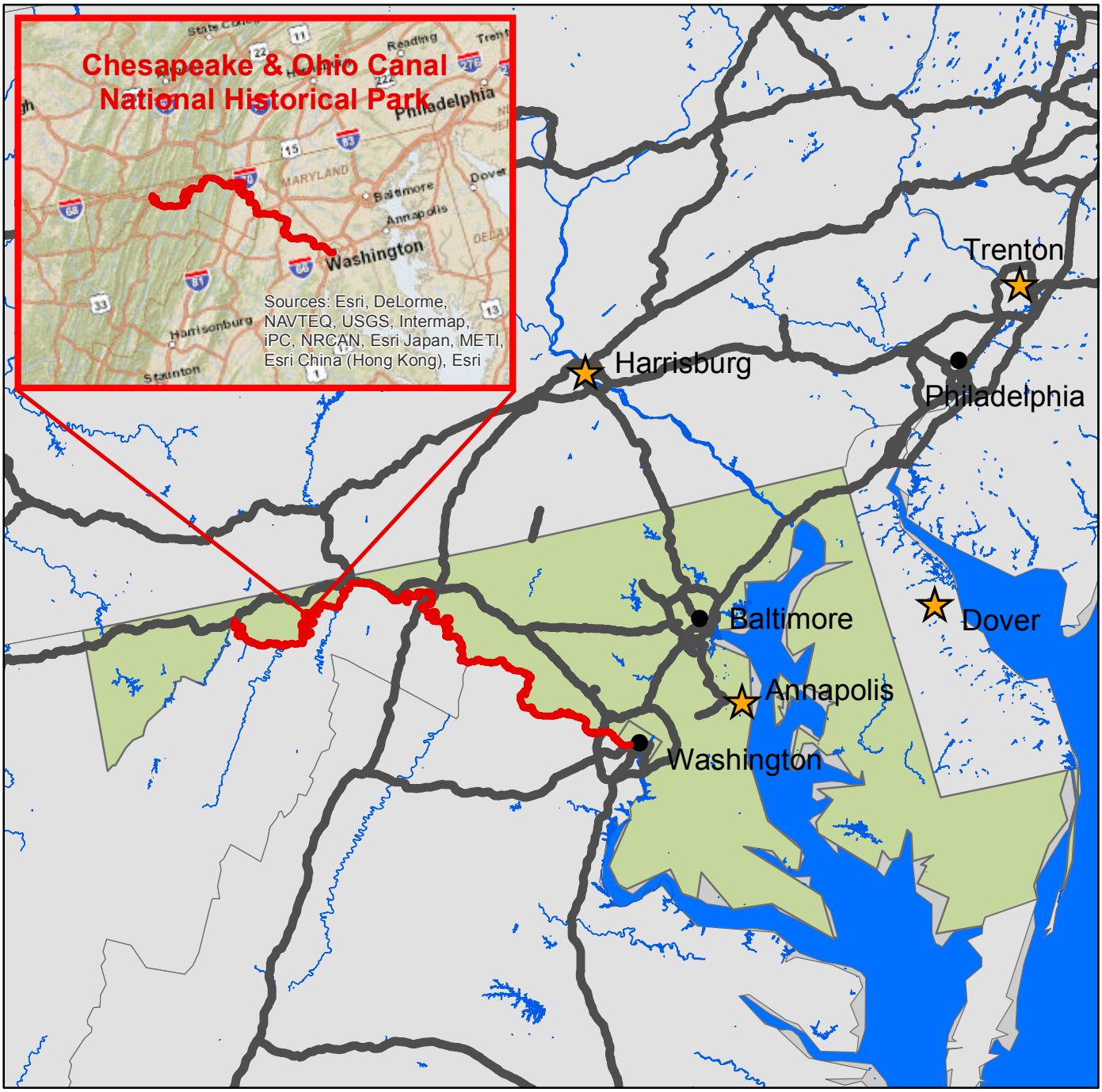

# Chesapeake & Ohio Canal National Historical Park

## CHOH

# Cycle 5 Report

**Prepared By: Federal Highway Administration**
**Road Inventory Program (RIP)**
**Data Collected: 05/2013**
**Report Date: 01/2014**

# Chesapeake & Ohio Canal National Historical Park
# in
# Maryland and District of Columbia



DCV = Data Collection Vehicle

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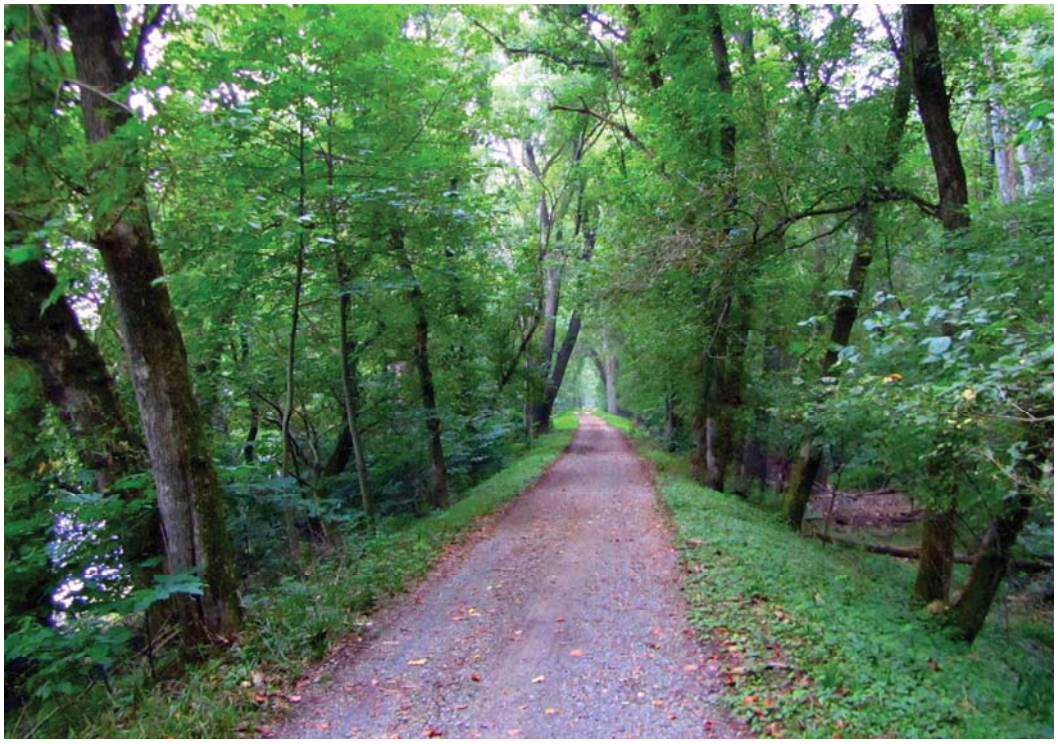
# Introduction



Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

## INTRODUCTION

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

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

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

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

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

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

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

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

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

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

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

Respectfully,

FHWA RIP Team

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21400 Ridgetop Circle
Sterling, VA 20166
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# Section 2
# Park Route Inventory

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# Cycle 5 NPS/RIP Route ID Report



Shading Color Key:
Red text denotes approx. mileage

White = Paved Routes, DCV Driven
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** DCV - Data Collection Vehicle NC - Not Collected

## CHOH

***CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK***

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 5 | 80613 | | GREAT FALLS ENTRANCE ROAD | FROM FALLS ROAD / MARYLAND ROUTE 189 | TO ROUTE 0907 (GREAT FALLS PARKING) | PALISADES | 1.14 | 0.00 | 1.14 | 1 | | AS | 8 |
| 0100 | 5 | 80615 | | MONOCACY BOAT RAMP ACCESS | FROM ROUTE 0226 (MONOCACY ROAD) | TO END OF LOOP | MONOCACY | 0.23 | 0.00 | 0.23 | 2 | | AS | 7 |
| 0101 | NC | 44689 | | DAM #5 UNPAVED ENTRANCE ROAD | FROM DAM #5 ROAD (NON NPS) | TO CANAL TOWPATH | FOUR LOCKS | 0.00 | 0.04 | 0.04 | 2 | | GR | |
| 0102 | NC | 44708 | | MCCOYS FERRY UNPAVED ENTRANCE ROAD | FROM ROUTE 0208 (MCCOYS FERRY ROAD) | TO ROUTE 0945 (MCCOYS FERRY PARKING) AT TUNNEL | FOUR LOCKS | 0.00 | 0.08 | 0.08 | 2 | | GR | |
| 0103 | 5 | 44724 | | DENEEN ROAD | FROM INTERSECTION WITH WILLOW ROAD AND SEAVOLT ROAD | TO ROUTE BEGINNING OF ROUTE 5001 (DENEEN ROAD (NON NPS)) AND ROUTE 0957 (COHILL STATION PARKING) | FOUR LOCKS | 0.11 | 0.00 | 0.11 | 2 | | AS | 2 |
| 0104 | 5 | 44762 | | LITTLE TONOLOWAY ENTRANCE ROAD | FROM END OF ROUTE 0104B (LITTLE TONOLOWAY UNPAVED ENTRANCE ROAD) | TO END OF PAVEMENT | FOUR LOCKS | 0.06 | 0.00 | 0.06 | 2 | | AS | 2 |
| 0104B | NC | 44764 | | LITTLE TONOLOWAY UNPAVED ENTRANCE ROAD | FROM BERM ROAD | TO BEGINNING OF ROUTE 0104 (LITTLE TONOLOWAY ENTRANCE ROAD) | FOUR LOCKS | 0.00 | 0.01 | 0.01 | 2 | | GR | |
| 0105 | 5 | 241121 | | BRUNSWICK BOAT RAMP ACCESS ROAD | FROM BRUNSWICK BOAT RAMP ACCESS ROAD (NON NPS) | TO ROUTE 0925 (BRUNSWICK AREA PARKING) | MONOCACY | 0.10 | 0.00 | 0.10 | 2 | | AS | 6 |
| 0106 | NC | 80903 | | GIFT ROAD | FROM GIFT ROAD (NON NPS) / PARK BOUNDARY | TO CANAL TOWPATH | CONOCOCHEAGUE | 0.00 | 0.05 | 0.05 | 2 | | GR | |
| 0107ZZ | 5 | 91348 | | FERRY HILL PLANTATION ENTRANCE ROADS | FROM MARYLAND ROUTE 34 | TO ROUTE 0402 (FERRY HILL ACCESS ROAD) AND ROUTE 0933 (FERRY HILL NORTH PARKING) | CONOCOCHEAGUE | 0.20 | 0.00 | 0.20 | 2 | | AS | 5 |
| 0202 | NC | 80618 | | SPRING GAP CAMPGROUND ROAD | FROM MARYLAND ROUTE 51 | TO END OF LOOP | PAW PAW | 0.00 | 0.21 | 0.21 | 3 | | GR | |
| 0203 | NC | 80621 | | SPRING GAP PICNIC AREA ROAD | FROM ROUTE 0202 (SPRING GAP CAMPGROUND ROAD) | TO ROUTE 0959 (SPRING GAP PARKING) | PAW PAW | 0.00 | 0.07 | 0.07 | 3 | | GR | |
| 0204 | NC | 80623 | | OLD TOWN PICNIC AREA ROAD | FROM GREENSPRING ROAD | TO END OF LOOP | PAW PAW | 0.00 | 0.09 | 0.09 | 2 | | GR | |

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## CHOH

### *CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK*

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0206 | 5 | 44766 | | FIFTEEN MILE CREEK ROAD | FROM HIGH GERMANY ROAD | TO END OF UNPAVED SECTION AT MP 0.15 | FOUR LOCKS | 0.04 | 0.10 | 0.14 | 2 | | AS | 1 |
| 0208 | NC | 80809 | | MCCOYS FERRY ROAD | FROM PARK BOUNDARY | TO ROUTE 0945 (MCCOYS FERRY PARKING) | FOUR LOCKS | 0.00 | 0.34 | 0.34 | 2 | | GR | |
| 0209 | 5 | 44697 | | FOUR LOCKS ROAD | FROM PARK BOUNDARY / FOUR LOCKS ROAD (NON NPS) | TO BEGINNING OF ROUTE 0209B (FOUR LOCKS ROAD (UNPAVED SECTION)) | FOUR LOCKS | 0.48 | 0.00 | 0.48 | 2 | | AS | 3 |
| 0209B | NC | 102533 | | FOUR LOCKS ROAD (UNPAVED SECTION) | FROM END OF ROUTE 0209 (FOUR LOCKS ROAD) | TO END | FOUR LOCKS | 0.00 | 0.40 | 0.40 | 2 | | GR | |
| 0212 | 5 | 80810 | | BIG SLACKWATER ACCESS ROAD | FROM DAM #4 ROAD (NON NPS) | TO ROUTE 0938 (BIG SLACKWATER PARKING) | CONOCOCHEAGUE | 1.01 | 0.00 | 1.01 | 2 | | AS | 4 |
| 0215 | NC | 80811 | | SHEMPROMPH PROPERTY ROAD | FROM FALLING WATER ROAD | TO CANAL TOWPATH | CONOCOCHEAGUE | 0.00 | 0.46 | 0.46 | 6 | | GR | |
| 0222 | NC | 49691 | | LANDER ROAD | FROM LANDER ROAD (NON NPS) | TO ROUTE 0924 (LANDER BOAT RAMP PARKING) | MONOCACY | 0.00 | 0.24 | 0.24 | 2 | | GR | |
| 0223 | NC | 80866 | | CANAL ROAD (POINT OF ROCKS, MARYLAND) | FROM PARK BOUNDARY (AFTER RAILROAD) | TO ROUTE 0921 (POINT OF ROCKS PARKING) | MONOCACY | 0.00 | 0.03 | 0.03 | 2 | | GR | |
| 0224 | NC | 80813 | | NOLANDS FERRY ACCESS ROAD | FROM NEW DESIGN ROAD / PARK BOUNDARY | TO ROUTE 0919 (NOLANDS FERRY PARKING) | MONOCACY | 0.00 | 0.20 | 0.20 | 2 | | GR | |
| 0225 | NC | 80820 | | BANZHOFF ROAD | FROM BOTTOMS ROAD | TO END | CONOCOCHEAGUE | 0.00 | 0.12 | 0.12 | 6 | | GR | |
| 0226 | 5 | 80823 | | MONOCACY ROAD | FROM PARK BOUNDARY (AFTER RAILROAD) | TO ROUTE 0916 (MONOCACY AQUEDUCT PARKING) | MONOCACY | 0.26 | 0.00 | 0.26 | 2 | | AS | 7 |
| 0231 | 5 | 80825 | | PENNYFIELD LOCK ROAD | FROM PARK BOUNDARY | TO END | PALISADES | 0.36 | 0.00 | 0.36 | 2 | 26,463 | AS | 7 |
| 0235 | 5 | 80800 | | CARDEROCK PICNIC AREA ROAD | FROM PARK BOUNDARY / BEGINNING OF TUNNEL / GWMP ROUTE 0223ZZ (CARDEROCK ACCESS ROAD AND RAMPS) | TO ROUTE 0903B (CARDEROCK PICNIC PARKING B) | PALISADES | 0.47 | 0.00 | 0.47 | 3 | | AS | 8 |
| 0236 | NC | 102534 | | LOCK 5 ACCESS ROAD | FROM CLARA BARTON PARKWAY | TO CANAL TOWPATH | PALISADES | 0.00 | 0.01 | 0.01 | 2 | | GR | |
| 0238 | 5 | 80856 | | FLETCHERS BOATHOUSE ACCESS ROAD | FROM CANAL ROAD (NON NPS) | TO ROUTE 0900 (FLETCHERS BOATHOUSE PARKING) | PALISADES | 0.12 | 0.08 | 0.20 | 2 | 7,793 | AS | 8 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0240 | NC | 80859 | | MCCOYS FERRY CAMPGROUND ROAD | FROM ROUTE 0945 (MCCOYS FERRY PARKING) | TO END OF LOOP | FOUR LOCKS | 0.00 | 0.24 | 0.24 | 3 | | GR | |
| 0241 | NC | 102535 | | CANAL TOWPATH | FROM MAPLE AVENUE | TO BRUNSWICK FAMILY CAMPGROUND | MONOCACY | 0.00 | 1.00 | 1.00 | 2 | | GR | |
| **0242** | **5** | **80863** | | **ANKENEY LANE** | **FROM ROUTE 0209 (FOUR LOCKS ROAD)** | **TO ROUTE 0243 (STARLIPER ROAD) ON LEFT** | **FOUR LOCKS** | **0.25** | **0.00** | **0.25** | **2** | | **AS** | **3** |
| **0243** | **5** | **80865** | | **STARLIPER ROAD** | **FROM ROUTE 0242 (ANKENEY LANE)** | **TO HART ROAD** | **FOUR LOCKS** | **0.44** | **0.00** | **0.44** | **2** | **23,021** | **AS** | **3** |
| **0244** | **5** | **80812** | | **CANAL STREET (HANCOCK, MARYLAND)** | **FROM WESTERN MARYLAND RAIL TRAIL** | **TO INTERSECTION OF BERM ROAD AND PENNSYLVANIA AVENUE** | **FOUR LOCKS** | **0.22** | **0.00** | **0.22** | **2** | | **AS** | **2** |
| 0245 | NC | 44693 | | TWO LOCKS UNPAVED ENTRANCE ROAD | FROM DAM #5 ROAD | TO CANAL TOWPATH | FOUR LOCKS | 0.00 | 0.30 | 0.30 | 4 | | GR | |
| 0246 | NC | 44717 | | LITTLE PROPERTY UNPAVED ROAD | FROM ROUTE 0250 (HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD) | TO END AT VISITOR CENTER | FOUR LOCKS | 0.00 | 0.40 | 0.40 | 3 | | GR | |
| 0247 | NC | 44732 | | WEBER PROPERTY ROAD | FROM ROUTE 0209 (FOUR LOCKS ROAD) | TO WEBER PROPERTY | FOUR LOCKS | 0.00 | 0.09 | 0.09 | 4 | | GR | |
| 0248 | NC | 44758 | | PEARRE / LOCK 56 UNPAVED ENTRANCE ROAD | FROM PEARRE ROAD | TO CANAL TOWPATH | FOUR LOCKS | 0.00 | 0.09 | 0.09 | 4 | | GR | |
| 0249 | NC | 44767 | | FIFTEEN MILE CREEK UNPAVED ENTRANCE ROAD | FROM ROUTE 0206 (FIFTEEN MILE CREEK ROAD) | TO BOAT RAMP | FOUR LOCKS | 0.00 | 0.12 | 0.12 | 3 | | GR | |
| **0250** | **5** | **44710** | | **HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD** | **FROM MARYLAND ROUTE 144 / EAST MAIN STREET** | **TO ROUTE 0948 (HANCOCK MAINTENANCE AREA)** | **FOUR LOCKS** | **0.10** | **0.00** | **0.10** | **3** | | **AS** | **2** |
| 0402 | NC | 102536 | | FERRY HILL ACCESS ROAD | FROM ROUTE 0107ZZ (FERRY HILL PLANTATION ENTRANCE ROADS) | TO ROUTE 0933 (FERRY HILL NORTH PARKING) | CONOCOCHEAGUE | 0.00 | 0.08 | 0.08 | 2 | | GR | |
| 0406 | NC | 80867 | | SORENSON PROPERTY ROAD | FROM MILLER SAW MILL ROAD | TO CANAL ROAD | CONOCOCHEAGUE | 0.00 | 0.09 | 0.09 | 6 | | GR | |
| 0407 | NC | 80868 | | COMPOST ROAD | FROM BACK ROAD | TO END | CONOCOCHEAGUE | 0.00 | 0.51 | 0.51 | 6 | | GR | |
| 0410 | NC | 80869 | | TOWPATH ACCESS ROAD | FROM TSCHIFFELEY MILL ROAD | TO CANAL TOWPATH | MONOCACY | 0.00 | 0.11 | 0.11 | 6 | | GR | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0413 | NC | 80871 | | BURMA ROAD | FROM ROUTE 0904 (LOWER ANGLERS PARKING) | TO END | PALISADES | 0.00 | 1.43 | 1.43 | 6 | | GR | |
| **0414** | **5** | **80872** | | **LOCK 19 ACCESS ROAD** | **FROM ROUTE 0907 (GREAT FALLS PARKING)** | **TO BEGINNING OF ROUTE 0414B (LOCK 19 ACCESS ROAD (UNPAVED SECTION))** | **PALISADES** | **0.11** | **0.00** | **0.11** | **6** | | **CO** | **8** |
| 0414B | NC | 102551 | | LOCK 19 ACCESS ROAD (UNPAVED SECTION) | FROM END OF ROUTE 0414 (LOCK 19 ACCESS ROAD) | TO END | PALISADES | 0.00 | 0.09 | 0.09 | 6 | | GR | |
| 0415 | NC | 44734 | | BAKER PROPERTY UNPAVED ENTRANCE ROAD | FROM ROUTE 0209 (FOUR LOCKS ROAD) | TO BAKER PROPERTY | FOUR LOCKS | 0.00 | 0.18 | 0.18 | 5 | | GR | |
| 0416 | NC | 44736 | | SHOOTING RANGE UNPAVED ROAD | FROM ROUTE 0415 (BAKER PROPERTY UNPAVED ENTRANCE ROAD) | TO SHOOTING RANGE | FOUR LOCKS | 0.00 | 0.20 | 0.20 | 5 | | GR | |
| 0417 | NC | 44759 | | BIG POOL / WELLER PROPERTY UNPAVED ENTRANCE ROAD | FROM BIG POOL ROAD / MARYLAND ROUTE 56 | TO WELLER PROPERTY | FOUR LOCKS | 0.00 | 0.10 | 0.10 | 6 | | GR | |
| 0418 | NC | 241116 | | ELIZABETH STREET | FROM PARK BOUNDARY | TO DEAD END | PAW PAW | 0.00 | 0.03 | 0.03 | 5 | | GR | |
| 0419 | NC | 241119 | | BURNSIDE ROAD | FROM FALLING WATER ROAD | TO CANAL TOWPATH | CONOCOCHEAGUE | 0.00 | 0.03 | 0.03 | 5 | | GR | |
| 0900 | NC | 80873 | | FLETCHERS BOATHOUSE PARKING | FROM END OF ROUTE 0238 (FLETCHERS BOATHOUSE ACCESS ROAD) | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 67,169 | GR | |
| 0901 | NC | 80874 | | ABNER CLOUD HOUSE PARKING | FROM ROUTE 0238 (FLETCHERS BOATHOUSE ACCESS ROAD) | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 9,830 | GR | |
| **0902** | **5** | **102537** | | **LOCK 10 PARKING** | **FROM GWMP ROUTE 0927 (CLARA BARTON PARKWAY LOCK 10 PARKING)** | **TO LOCK 10** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **5,323** | **AS** | **8** |
| **0903A** | **5** | **80804** | | **CARDEROCK PICNIC PARKING A** | **FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **TO PARKING** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **26,345** | **AS** | **8** |
| **0903B** | **5** | **80805** | | **CARDEROCK PICNIC PARKING B** | **FROM END OF ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **TO PARKING** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **31,280** | **AS** | **8** |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0903C** | **5** | **80806** | | **CARDEROCK PICNIC PARKING C** | **FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **TO ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **25,457** | **AS** | **8** |
| **0903D** | **5** | **80807** | | **CARDEROCK PICNIC PARKING D** | **FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **TO ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **23,614** | **AS** | **8** |
| 0904 | NC | 80875 | | LOWER ANGLERS PARKING | FROM MACARTHUR BOULEVARD | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 19,418 | GR | |
| 0905 | NC | 80838 | | LOWER ANGLERS SERVICE PARKING | FROM ROUTE 0904 (LOWER ANGLERS PARKING) | TO CANAL TOWPATH | PALISADES | 0.00 | 0.00 | 0.00 | | 9,850 | GR | |
| 0906 | NC | 80839 | | UPPER ANGLERS PARKING | FROM MCARTHUR BOULEVARD | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 17,526 | GR | |
| **0907** | **5** | **80827** | | **GREAT FALLS PARKING** | **FROM END OF ROUTE 0010 (GREAT FALLS ENTRANCE ROAD)** | **TO PARKING** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **174,768** | **AS** | **8** |
| **0908** | **5** | **80828** | | **GREAT FALLS MAINTENANCE AREA** | **FROM ROUTE 0907 (GREAT FALLS PARKING)** | **TO MAINTENANCE AREA** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **12,797** | **AS** | **8** |
| 0909 | NC | 80840 | | SWAINS LOCK PARKING | FROM PARK BOUNDARY | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 10,710 | GR | |
| 0910 | NC | 80842 | | PENNYFIELD LOCK PARKING | ADJACENT TO ROUTE 0231 (PENNYFIELD LOCK ROAD) | | PALISADES | 0.00 | 0.00 | 0.00 | | 14,053 | GR | |
| 0911 | NC | 80843 | | VIOLETTES LOCK PARKING | FROM VIOLETTES LOCK ROAD | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 17,302 | GR | |
| **0912** | **5** | **80829** | | **SENECA PARKING** | **FROM END OF RILEY LOCK ROAD** | **TO PARKING** | **PALISADES** | **0.00** | **0.00** | **0.00** | | **27,074** | **AS** | **7** |
| **0913** | **5** | **80830** | | **EDWARDS FERRY PARKING** | **FROM EDWARDS FERRY ROAD** | **TO PARKING** | **MONOCACY** | **0.00** | **0.00** | **0.00** | | **21,169** | **AS** | **7** |
| 0915 | NC | 80845 | | WHITES FERRY PARKING | FROM WHITES FERRY ROAD | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 44,200 | GR | |
| 0916 | NC | 80846 | | MONOCACY AQUEDUCT PARKING | FROM ROUTE 0226 (MONOCACY ROAD) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 7,740 | GR | |
| **0917** | **5** | **7752** | | **MONOCACY PARKING** | **FROM ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)** | **TO ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)** | **MONOCACY** | **0.00** | **0.00** | **0.00** | | **11,181** | **AS** | **7** |
| **0918** | **5** | **7751** | | **MONOCACY BOAT RAMP TURNAROUND** | **FROM ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)** | **TO TURNAROUND** | **MONOCACY** | **0.00** | **0.00** | **0.00** | | **1,392** | **AS** | **7** |

# Cycle 5 NPS/RIP Route ID Report



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** DCV - Data Collection Vehicle NC - Not Collected

## CHOH

### *CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK*

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0919 | 5 | 80849 | | NOLANDS FERRY PARKING | FROM END OF ROUTE 0224 (NOLANDS FERRY ACCESS ROAD) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 28,934 | AS | 7 |
| 0920 | 5 | 104935 | | ADMINISTRATIVE AND MAINTENANCE PARKING | FROM ROUTE 0907 (GREAT FALLS PARKING) | TO PARKING | PALISADES | 0.00 | 0.00 | 0.00 | | 16,620 | AS | 8 |
| 0921 | 5 | 49677 | | POINT OF ROCKS PARKING | FROM END OF ROUTE 0223 (CANAL ROAD (POINT OF ROCKS, MARYLAND)) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 65,763 | AS | 6 |
| 0923 | NC | 80853 | | LOCKHOUSE 29 PARKING | FROM ROUTE 0222 (LANDER ROAD) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 2,500 | GR | |
| 0924 | NC | 49689 | | LANDER BOAT RAMP PARKING | FROM END OF ROUTE 0222 (LANDER ROAD) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 1,076 | GR | |
| 0925 | 5 | 8524 | | BRUNSWICK AREA PARKING | FROM END OF ROUTE 0105 (BRUNSWICK BOAT RAMP ACCESS ROAD) | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 19,742 | AS | 6 |
| 0927 | 5 | 80876 | | LOCK 34 PARKING | FROM HARPERS FERRY ROAD | TO PARKING | MONOCACY | 0.00 | 0.00 | 0.00 | | 3,009 | AS | 5 |
| 0928 | 5 | 80877 | | DARGAN BEND PARKING | FROM BACK ROAD | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 35,645 | AS | 5 |
| 0929 | NC | 80878 | | LOCK 37 PARKING | FROM MOUNT LOCK CANAL ROAD | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 2,275 | GR | |
| 0930A | 5 | 80879 | | ANTIETAM CAMPGROUND PARKING A | ADJACENT TO CANAL ROAD | | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 10,475 | AS | 5 |
| 0930B | 5 | 80880 | | ANTIETAM CAMPGROUND PARKING B | ADJACENT TO CANAL ROAD | | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 3,808 | AS | 5 |
| 0930C | 5 | 80881 | | ANTIETAM CAMPGROUND PARKING C | ADJACENT TO CANAL ROAD | | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 2,477 | AS | 5 |
| 0931A | 5 | 80882 | | LOCK 38 PARKING | FROM CANAL ROAD | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 7,837 | AS | 5 |
| 0931B | 5 | 241120 | | LOCK 38 OVERFLOW PARKING | FROM CANAL ROAD | TO CANAL ROAD | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 15,674 | AS | 5 |

# Cycle 5 NPS/RIP Route ID Report



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## CHOH

*CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK*

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0932 | 5 | 80883 | | FERRY HILL SOUTH PARKING | FROM ROUTE 0107ZZ (FERRY HILL PLANTATION ENTRANCE ROADS) | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 15,149 | AS | 5 |
| 0933 | 5 | 80884 | | FERRY HILL NORTH PARKING | FROM ROUTE 0107ZZ (FERRY HILL PLANTATION ENTRANCE ROADS) | TO ROUTE 0402 (FERRY HILL ACCESS ROAD) | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 9,892 | AS | 5 |
| 0934 | 5 | 80885 | | SNYDERS LANDING PARKING | ADJACENT TO SYNDERS LANDING ROAD | | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 7,082 | AS | 4 |
| 0935 | 5 | 8757 | | SNYDERS LANDING BOAT RAMP PARKING LOT | FROM SYNDERS LANDING ROAD | TO BOAT RAMP | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 6,309 | AS | 4 |
| 0936 | 5 | 80886 | | TAYLORS LANDING PARKING | FROM TAYLORS LANDING ROAD | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 18,136 | AS | 4 |
| 0937 | 5 | 80887 | | DAM 4 PARKING | ADJACENT TO ROUTE 0212 (BIG SLACKWATER ACCESS ROAD) | | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 2,153 | AS | 4 |
| 0938 | 5 | 80888 | | BIG SLACKWATER PARKING | FROM END OF ROUTE 0212 (BIG SLACKWATER ACCESS ROAD) | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 63,977 | AS | 4 |
| 0940 | NC | 80889 | | LOCK 44 PARKING | FROM VERMONT STREET | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 13,500 | GR | |
| 0941 | NC | 80890 | | WILLIAMSPORT INTERPRETIVE CENTER PARKING | FROM WEST POTOMAC STREET | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 39,275 | GR | |
| 0942 | NC | 102538 | | DAM #5 PARKING | FROM ROUTE 0101 (DAM #5 UNPAVED ENTRANCE ROAD) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 3,770 | GR | |
| 0943 | NC | 80891 | | TWO LOCKS PARKING | FROM DAM #5 ROAD (NON NPS) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 4,096 | GR | |
| 0944 | 5 | 80892 | | FOUR LOCKS PARKING | FROM ROUTE 0242 (ANKENEY LANE) | TO ROUTE 0242 (ANKENEY LANE) | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 47,469 | AS | 3 |
| 0945 | 5 | 44702 | | MCCOYS FERRY PARKING | FROM ROUTE 0102 (MCCOYS FERRY UNPAVED ENTRANCE ROAD) | TO ROUTE 0240 (MCCOYS FERRY CAMPGROUND ROAD) | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 31,669 | AS | 3 |

# Cycle 5 NPS/RIP Route ID Report



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## CHOH

### *CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK*

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0946** | **5** | **80894** | | **TONOLOWAY PARKING** | **FROM ROUTE 0104 (LITTLE TONOLOWAY ENTRANCE ROAD)** | **TO PARKING** | **FOUR LOCKS** | **0.00** | **0.00** | **0.00** | | **8,832** | **AS** | **2** |
| 0947 | NC | 102546 | | TONOLOWAY PICNIC AREA PARKING | FROM ROUTE 0946 (TONOLOWAY PARKING) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 8,800 | GR | |
| **0948** | **5** | **80895** | | **HANCOCK MAINTENANCE AREA** | **FROM END OF ROUTE 0250 (HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD)** | **TO MAINTENANCE AREA** | **FOUR LOCKS** | **0.00** | **0.00** | **0.00** | | **25,867** | **AS** | **2** |
| 0949 | NC | 102547 | | LITTLE HOUSE PARKING | ADJACENT TO ROUTE 0250 (HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD) | | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 2,052 | GR | |
| 0950 | NC | 80896 | | PAW PAW PARKING | FROM MARYLAND ROUTE 51 | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 15,395 | GR | |
| 0951 | NC | 80897 | | OLD TOWN MAINTENANCE AREA | FROM GREENSPRING ROAD | TO MAINTENANCE AREA | PAW PAW | 0.00 | 0.00 | 0.00 | | 4,089 | GR | |
| 0952 | NC | 102548 | | LOCK 74 PARKING | FROM RIVER ROAD | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 5,500 | GR | |
| 0953 | NC | 80901 | | NORTH BRANCH PARKING | FROM NORTH BRANCH ROAD | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 2,730 | GR | |
| 0954 | NC | 80902 | | MCMAHAN'S MILL PARKING | FROM AVIS MILL ROAD | TO PARKING | CONOCOCHEAGUE | 0.00 | 0.00 | 0.00 | | 4,200 | GR | |
| 0956 | NC | 80904 | | FIFTEEN MILE CREEK PARKING | FROM ROUTE 0249 (FIFTEEN MILE CREEK UNPAVED ENTRANCE ROAD) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 11,000 | GR | |
| 0957 | NC | 104932 | | COHILL STATION PARKING | ADJACENT TO ROUTE 0103 (DENEEN ROAD) | | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 2,100 | GR | |
| 0958 | NC | 80905 | | WILEY FORD | FROM VIRGINIA AVENUE | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 21,875 | GR | |
| 0959 | NC | 80906 | | SPRING GAP PARKING | FROM END OF ROUTE 0203 (SPRING GAP PICNIC AREA ROAD) | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 8,400 | GR | |
| 0960 | NC | 80907 | | OLDTOWN PICNIC PARKING | ADJACENT TO ROUTE 0204 (OLD TOWN PICNIC AREA ROAD) | | PAW PAW | 0.00 | 0.00 | 0.00 | | 11,746 | GR | |
| 0961 | NC | 80908 | | MOORE HOUSE | FROM GREENSPRING ROAD | TO PARKING | PAW PAW | 0.00 | 0.00 | 0.00 | | 2,904 | GR | |

# Cycle 5 NPS/RIP Route ID Report



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## CHOH

### *CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK*

| Rte. No. | Cycle Collected | FMSS No. | Concess Route | Route Name | Route Description From | Route Description To | Maint. District | Paved Miles | Un-Paved Miles | Total Route Length | Func. Class | Manual Rated SQ/FT | Surf. Type | Area Maps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0962 | NC | 80893 | | MCCOYS FERRY GRAVEL PARKING | FROM ROUTE 0208 (MCCOYS FERRY ROAD) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 1,400 | GR | |
| 0963 | NC | 239241 | | FIFTEEN MILE CREEK ADDITIONAL PARKING LOT | FROM ROUTE 0249 (FIFTEEN MILE CREEK UNPAVED ENTRANCE ROAD) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 16,000 | GR | |
| 0964 | NC | 44715 | | HANCOCK MAINTENANCE UNPAVED PARKING LOT | FROM ROUTE 0948 (HANCOCK MAINTENANCE AREA) | TO PARKING | FOUR LOCKS | 0.00 | 0.00 | 0.00 | | 2,800 | GR | |
| **5000** | **5** | | | **SALISBURY STREET** | **FROM CANAL BRIDGE** | **TO BOAT RAMP** | **N/A** | **0.14** | **0.00** | **0.14** | | | **AS** | **4** |
| **5001** | **5** | | | **DENEEN ROAD (NON NPS)** | **FROM END OF ROUTE 0103 (DENEEN ROAD) AND ROUTE 0957 (COHILL STATION PARKING)** | **TO WESTERN MARYLAND RAIL TRAIL** | **N/A** | **0.89** | **0.00** | **0.89** | | | **AS** | **2** |

# Cycle 5 NPS/RIP Route ID Report



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| | | | |
|---|---|---|---|
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## CYCLE 5 SUMMARY TOTALS FOR CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

### CYCLE 5 ROUTE TOTALS

| | |
|---|---|
| DCV Driven Route Miles | 4.78 |
| Manually Rated Route Miles | 0.92 |
| TOTAL PARK ROUTE MILES COLLECTED IN CYCLE 5 | 5.70 |
| Manually Rated Routes (SQFT) | 0.00 |
| TOTAL UNPAVED PARK ROUTE MILES | 7.60 |

### CYCLE 5 CONCESSION TOTALS

| | |
|---|---|
| Concession Paved Route Miles | 0.00 |
| Concession Unpaved Route Miles | 0.00 |
| TOTAL CONCESSION ROUTE MILES | 0.00 |
| Concession Paved Parking Area SQFT | 0 |
| Concession Unpaved Parking Area SQFT | 0 |
| TOTAL CONCESSION PARKING AREA SQFT | 0 |
| Concession Manually Rated Routes SQFT | 0 |

### * CYCLE 5 PARKING AREA TOTALS

| | |
|---|---|
| Paved Parking (SQFT) | 806,919 |
| Unpaved Parking (SQFT) | 405,281 |
| TOTAL PARKING (SQFT) | 1,212,200 |

### CYCLE 5 WEIGHTED AVERAGE PARK VALUES

| | |
|---|---|
| DCV Driven PCR | 87 |
| **Manually Rated Routes PCR | 45 |
| **Parking PCR | 81 |
| ***Total Equivalent Lane Miles | 23.55 |

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

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

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

# Cycle 5 NPS/RIP Route ID Report



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| | | | |
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## General Park Road Functional Classification Table

**Class 1** Principal Park Road/Rural Parkway (Public Roads) Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors. Route Numbers 1 - 99. Note: Rural parkways (e.g. Natchez Trace) are numbered 1 - 9. State Routes Inventoried for Park. Route Numbers 5000-5999

**Class 2** Connector Park Road (Public Roads) - Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc. Route Numbers 100-199.

**Class 3** Special Purpose Park Road (Public Roads) - Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.

**Class 4** Primitive Park Roads (Public Roads) - Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Route Numbers 200-299.
Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.

**Class 5** Administrative Access Road (Administrative Roads) - All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas. Route Numbers 400-499.

**Class 6** Restricted Road (Administrative Roads) - All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Route Numbers 400-499.
Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.

**Class 7** Urban Parkway (Urban Parkways and City Streets) - These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category. Route Numbers 1-9.

**Class 8** City Streets (Urban Parkways and City Streets) - City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

**********

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

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

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

## Surface Type Abbreviations:

**AS - Asphaltic Concrete Pavement**

**CO - Portland Cement Concrete Pavement**

**BR - Brick or Pavers Road Bed**

**CB - Cobble Stone Road Bed**

**GR - Gravel Road Bed**

**SA - Sand Road Bed**

**NV - Native or Dirt Material Road Bed**

**OT - Other Materials Road Bed**

# NPS/RIP Subcomponent Details for CHOH



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## CHOH

***CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK***

| Rte. No. | FMSS No. | Cycle Collected | Route Name | Route Description From | Route Description To | Concess Route | Func. Class | Paved Miles | Un-Paved Miles | Total Route Length | Manual Rated SQ/FT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0107ZZ | 91348 | 5 | FERRY HILL PLANTATION ENTRANCE ROADS | FROM MARYLAND ROUTE 34 | TO ROUTE 0402 (FERRY HILL ACCESS ROAD) AND ROUTE 0933 (FERRY HILL NORTH PARKING) | | 2 | 0.20 | 0.00 | 0.20 | |

## CHOH-0107ZZ Subcomponent Breakdown

| Rte. No. | FMSS No. | Cycle Collected | Route Name | Route Description From | Route Description To | Concess Route | Func. Class | Paved Miles | Un-Paved Miles | Total Route Length | Manual Rated SQ/FT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0107AZ | 91348 | 5 | FERRY HILL PLANTATION ENTRANCE ROAD A | FROM MARYLAND ROUTE 34 | TO ROUTE 0402 (FERRY HILL ACCESS ROAD) | | 2 | 0.14 | 0.00 | 0.14 | |
| 0107BZ | 91348 | 5 | FERRY HILL PLANTATION ENTRANCE ROAD B | FROM MARYLAND ROUTE 34 | TO ROUTE 0933 (FERRY HILL NORTH PARKING) | | 2 | 0.06 | 0.00 | 0.06 | |

## ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - CHOH

| ROUTES ADDED FROM PREVIOUS INVENTORY: | | | |
|---|---|---|---|
| **Route #** | **Route Name** | **Reason for Addition** | **Comments** |
| 0105 | BRUNSWICK BOAT RAMP ACCESS ROAD | OTHER | ROUTE ADDED TO INVENTORY IN CYCLE 5. |
| 0250 | HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD | OTHER | ROUTE ADDED TO INVENTORY IN CYCLE 5. |
| 0931B | LOCK 38 OVERFLOW PARKING | RECENTLY CONSTRUCTED ROUTE | A NEW OVERFLOW PARKING AREA AT LOCK 38 WAS RECENTLY CONSTRUCTED AND ADDED TO THE INVENTORY. |
| 5001 | DENEEN ROAD (NON NPS) | OTHER | NON-NPS ROAD ADDED TO INVENTORY IN CYCLE 5. |

| ROUTES MODIFIED FROM PREVIOUS INVENTORY: | | | |
|---|---|---|---|
| **Route #** | **Route Name** | **Type of Modification** | **Comments** |
| 0414 | LOCK 19 ACCESS ROAD | RECONSTRUCTED | RECONSTRUCTED SINCE CYCLE 3. ROAD WAS LENGTHENED WHEN A PORTION OF PARKING AREA 0907 WAS REMOVED. THE UNPAVED SECTION WAS SEPARATED AS ROUTE 0414B IN CYCLE 5. |
| 0907 | GREAT FALLS PARKING | RECONSTRUCTED | A PORTION OF THE PARKING AREA WAS REMOVED SINCE CYCLE 3 (WHERE THE RESTROOMS ARE CURRENTLY LOCATED). BUS PARKING SPACES WERE ADDED AT THE NORTH END OF THE PARKING AREA. |
| 0921 | POINT OF ROCKS PARKING | RECONSTRUCTED | THE POINT OF ROCKS PARKING AREA WAS UNPAVED IN CYCLE 3. THE PARKING LOT WAS RECENTLY RECONSTRUCTED AND PAVED. |

**ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - CHOH**

| OTHER CHANGES FROM PREVIOUS INVENTORY: | | | |
|---|---|---|---|
| **Route #** | **Route Name** | **Type of Change** | **Comments** |
| 0103 | DENEEN ROAD | OTHER | FORMERLY ROUTE 0704 IN CYCLE 3. ROAD IS NPS OWNED, BUT COUNTY MAINTAINED. ROUTE NAME CHANGED FROM "COHILL STATION UNPAVED ENTRANCE ROAD". CHANGED FROM UNPAVED TO PAVED. COLLECTED WITH THE DATA COLLECTION VEHICLE (DCV) IN CYCLE 5. |
| 0104 | LITTLE TONOLOWAY ENTRANCE ROAD | ROUTE SPLIT | THE ACCESS ROAD WAS SPLIT FROM PARKING AREA 0946 (TONOLOWAY PARKING) IN CYCLE 5. |
| 0107ZZ | FERRY HILL PLANTATION ENTRANCE ROADS | ROUTE SPLIT | THE ACCESS ROADS WERE SPLIT FROM PARKING AREAS 0932 (FERRY HILL SOUTH PARKING) AND 0933 (FERRY HILL NORTH PARKING) IN CYCLE 5. |
| 0206 | FIFTEEN MILE CREEK ROAD | LENGTH CHANGE | ROUTE WAS SHORTENED IN CYCLE 5. THE ROUTE NOW BEGINS AT THE TUNNEL. |
| 0209 | FOUR LOCKS ROAD | OTHER | PAVED SECTION WAS SHORTENED AND ROUTE NOW BEGINS AT THE PARK BOUNDARY MARKER IN THE FIELD. THE UNPAVED SECTION WAS SPLIT INTO A SEPARATE ROUTE (ROUTE 0209B). |
| 0223 | CANAL ROAD (POINT OF ROCKS, MARYLAND) | RECONSTRUCTED | ROUTE 0223 WAS A PAVED ROAD IN CYCLE 3. IN CYCLE 5 IT IS NOW A VERY SHORT UNPAVED ROAD LEADING INTO THE NEWLY CONSTRUCTED POINT OF ROCKS PARKING LOT (ROUTE 0921). |
| 0231 | PENNYFIELD LOCK ROAD | OTHER | ROUTE WAS MANUALLY RATED IN CYCLE 5 DUE TO IT BEING IN VERY POOR CONDITION. IT WAS RATED WITH THE COLLECTION VEHICLE IN CYCLE 3. THE ROUTE LENGTH INCREASED IN CYCLE 5 SO THAT THE ROUTE BEGINS AT THE PARK BOUNDARY. |
| 0235 | CARDEROCK PICNIC AREA ROAD | LENGTH CHANGE | ROUTE WAS SHORTENED IN CYCLE 5. THE PORTION OF ROAD MANAGED BY CHOH BEGINS AT THE TUNNEL ENTRANCE. THE PORTION OF ROAD BEFORE THE TUNNEL IS AN NPS ROAD MANAGED BY THE GEORGE WASHINGTON MEMORIAL PARKWAY (GWMP ROUTE 0223ZZ). |

**ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - CHOH**

| OTHER CHANGES FROM PREVIOUS INVENTORY: | | | |
|---|---|---|---|
| **Route #** | **Route Name** | **Type of Change** | **Comments** |
| 0238 | FLETCHERS BOATHOUSE ACCESS ROAD | OTHER | IN CYCLE 3 THE PORTION OF ROAD BEFORE THE TUNNEL WAS RATED WITH THE COLLECTION VEHICLE AND THE SECTION OF ROAD WITHIN THE TUNNEL WAS MANUALLY RATED. IN CYCLE 5 THE ENTIRE ROAD WAS MANUALLY RATED BECAUSE THE DATA COLLECTION VEHICLE (DCV) CANNOT FIT IN THE TUNNEL WITH 7 FT CLEARANCE. |
| 0902 | LOCK 10 PARKING | SQ FEET CHANGE | PARKING LOT SHAPE EDITED TO REMOVE GWMP ROUTE 0927 FROM SHAPE. CHOH MANAGES ONLY THE ACCESS ROAD TO LOCK 10 AND THE PARKING LOT OFF OF CLARA BARTON PARKWAY BELONGS TO THE GEORGE WASHINGTON MEMORIAL PARKWAY (GWMP). |
| 0908 | GREAT FALLS MAINTENANCE AREA | SQ FEET CHANGE | IMPROVED GPS WAS COLLECTED IN CYCLE 5 TO UPDATE THE PARKING AREA SQUARE FOOTAGE. |
| 0912 | SENECA PARKING | SQ FEET CHANGE | GPS WAS UPDATED TO SHOW THE PARKING LOT GEOMETRY ACCURATELY (THE NON NPS ACCESS ROAD WAS REMOVED FROM THE SHAPE). |
| 0917 | MONOCACY PARKING | SQ FEET CHANGE | IMPROVED GPS WAS COLLECTED IN CYCLE 5 TO UPDATE THE PARKING AREA SQUARE FOOTAGE. |
| 0918 | MONOCACY BOAT RAMP TURNAROUND | SQ FEET CHANGE | THE BOAT RAMP WAS REMOVED FROM THE PARKING LOT SHAPE. ROUTE NAME UPDATED FROM "MONOCACY BOAT RAMP AND TURNAROUND". |
| 0919 | NOLANDS FERRY PARKING | SQ FEET CHANGE | THE BOAT RAMP WAS REMOVED FROM THE PARKING LOT SHAPE. |
| 0924 | LANDER BOAT RAMP PARKING | OTHER | IN CYCLE 3 ROUTE 0924 WAS A CONCRETE BOAT RAMP. BOAT RAMPS ARE NOT INCLUDED IN THE ROAD INVENTORY. IN CYCLE 5 ROUTE 0924 WAS CHANGED TO BE THE UNPAVED PARKING AREA AT THE BOAT RAMP. |
| 0925 | BRUNSWICK AREA PARKING | SQ FEET CHANGE | IMPROVED GPS WAS COLLECTED IN CYCLE 5 TO SHOW CHANGES TO THE PARKING AREA SHAPE |

**ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - CHOH**

| OTHER CHANGES FROM PREVIOUS INVENTORY: | | | |
|---|---|---|---|
| **Route #** | **Route Name** | **Type of Change** | **Comments** |
| 0927 | LOCK 34 PARKING | SURFACE TYPE CHANGE | PARKING AREA WAS UNPAVED IN CYCLE 3. IT WAS CHIP SEALED AND COLLECTED IN CYCLE 5. |
| 0928 | DARGAN BEND PARKING | SQ FEET CHANGE | THE BOAT RAMP AND WOODEN CANAL BRIDGE WERE REMOVED FROM THE PARKING AREA SHAPE. THE SQUARE FOOTAGE WAS UPDATED TO REFLECT THE CHANGES. |
| 0931A | LOCK 38 PARKING | SURFACE TYPE CHANGE | ROUTE NUMBER UPDATED FROM 0931 TO 0931A IN CYCLE 5. THIS PARKING AREA WAS UNPAVED IN CYCLE 3, BUT IT IS NOW PAVED. |
| 0932 | FERRY HILL SOUTH PARKING | ROUTE SPLIT | THE SOUTH ENTRANCE ROAD TO THE FERRY HILL PLANTATION WAS SEPARATED FROM THE PARKING LOT SHAPE IN CYCLE 5 IN ORDER TO MATCH FMSS. IN CYCLE 3, THE SOUTH ENTRANCE ROAD WAS INCLUDED IN ROUTE 0932. THE PARKING LOT SQUARE FOOTAGE WAS UPDATED. |
| 0933 | FERRY HILL NORTH PARKING | ROUTE SPLIT | THE NORTH ENTRANCE ROAD TO THE FERRY HILL PLANTATION WAS SEPARATED FROM THE PARKING LOT SHAPE IN CYCLE 5 IN ORDER TO MATCH FMSS. IN CYCLE 3, THE NORTH ENTRANCE ROAD WAS INCLUDED IN ROUTE 0933. THE PARKING LOT SQUARE FOOTAGE WAS UPDATED. |
| 0934 | SNYDERS LANDING PARKING | SQ FEET CHANGE | A SMALL PORTION OF THE PARKING LOT SHAPE WAS REMOVED DUE TO THE ADDITION OF THE RESTROOM. |
| 0935 | SNYDERS LANDING BOAT RAMP PARKING LOT | SQ FEET CHANGE | THE BOAT RAMP AND WOODEN CANAL BRIDGE WERE REMOVED FROM THE PARKING AREA SHAPE. THE SQUARE FOOTAGE WAS UPDATED TO REFLECT THE CHANGES. |
| 0936 | TAYLORS LANDING PARKING | SQ FEET CHANGE | THE BOAT RAMP AND WOODEN CANAL BRIDGE WERE REMOVED FROM THE PARKING AREA SHAPE. THE SQUARE FOOTAGE WAS UPDATED TO REFLECT THE CHANGES. |
| 0938 | BIG SLACKWATER PARKING | SQ FEET CHANGE | THE BOAT RAMP WAS REMOVED FROM THE PARKING AREA SHAPE. THE SQUARE FOOTAGE WAS UPDATED TO REFLECT THE CHANGE. |

## ROUTE IDENTIFICATION CHANGES TO PAVED ROUTES FROM PREVIOUS CYCLE - CHOH

### OTHER CHANGES FROM PREVIOUS INVENTORY:

| Route # | Route Name | Type of Change | Comments |
|---|---|---|---|
| 0946 | TONOLOWAY PARKING | ROUTE SPLIT | THE ENTRANCE ROAD WAS SEPARATED FROM THE PARKING LOT SHAPE IN CYCLE 5 AS ROUTE 0104. THE PARKING LOT SQUARE FOOTAGE WAS UPDATED. |
| 0948 | HANCOCK MAINTENANCE AREA | OTHER | A DIFFERENT PARKING LOT FOR THE HANCOCK MAINTENANCE AREA WAS COLLECTED IN CYCLE 3 INSTEAD OF THE PARKING LOT BEING USED AT THE PRESENT TIME. |
| 5000 | SALISBURY STREET | OTHER | NOT COLLECTED WITH THE DATA COLLECTION VEHICLE (DCV) IN CYCLE 3 OR CYCLE 5 BECAUSE THE BRIDGE AT THE BEGINNING IS TOO NARROW. PHOTOGRAPHS AND GPS WERE COLLECTED IN CYCLE 5. ROUTE NAME CHANGED FROM "RIVER PARK ROAD / WILLIAMSPORT BRIDGE ACCESS". |

### ROUTES REMOVED FROM PREVIOUS INVENTORY:

| Route # | Route Name | Reason for Removal | Comments |
|---|---|---|---|
| 0922 | POINT OF ROCKS BOAT RAMP | OTHER | ROUTE REMOVED BECAUSE IT WAS A BOAT RAMP (THE BOAT RAMP NO LONGER EXISTS). |

# Section 3
# Park Summary Information

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# CHOH: PAVED ROUTE MILES AND PERCENTAGES BY FUNCTIONAL CLASS AND PCR

| F.C. | Pavement Condition Rating (PCR) | | | | | | | | TOTAL MILES |
|---|---|---|---|---|---|---|---|---|---|
| | Poor (0-60) | | Fair (61-84) | | Good (85-94) | | Excellent (95-100) | | |
| | MILES | % | MILES | % | MILES | % | MILES | % | |
| 1 | | | 0.30 | 6.28% | 0.60 | 12.55% | 0.24 | 5.02% | **1.14** |
| 2 | 0.27 | 5.65% | 0.82 | 17.15% | 0.70 | 14.64% | 1.17 | 24.48% | **2.96** |
| 3 | 0.06 | 1.26% | 0.04 | 0.84% | | | 0.47 | 9.83% | **0.57** |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | 0.11 | 2.30% | | | | | **0.11** |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| **Totals** | **0.33** | **6.90%** | **1.27** | **26.57%** | **1.30** | **27.20%** | **1.88** | **39.33%** | **4.78** |

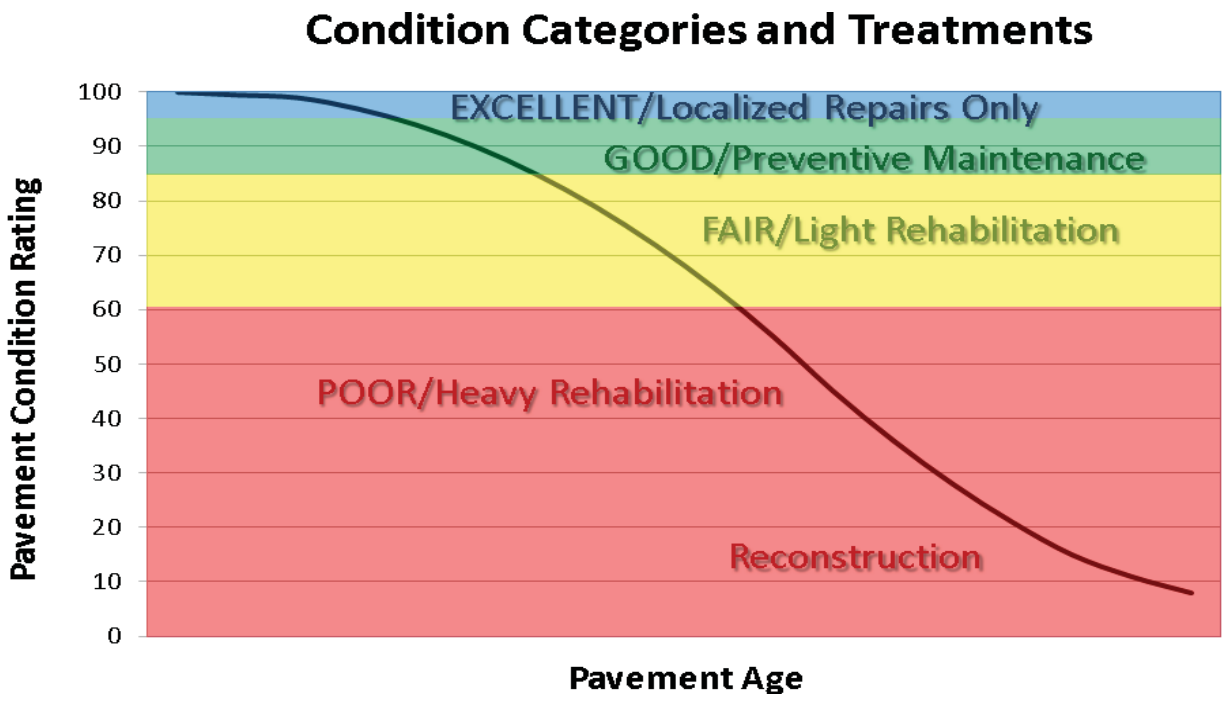
**Note:** **The information in this table is derived from the PMS_20 table in the Park database, which only contains processed data from routes collected with the Data Collection Vehicle (DCV). Information for Manually Rated Routes (MRR) and Parking Areas is not reported in this table. Only Functional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

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

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

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

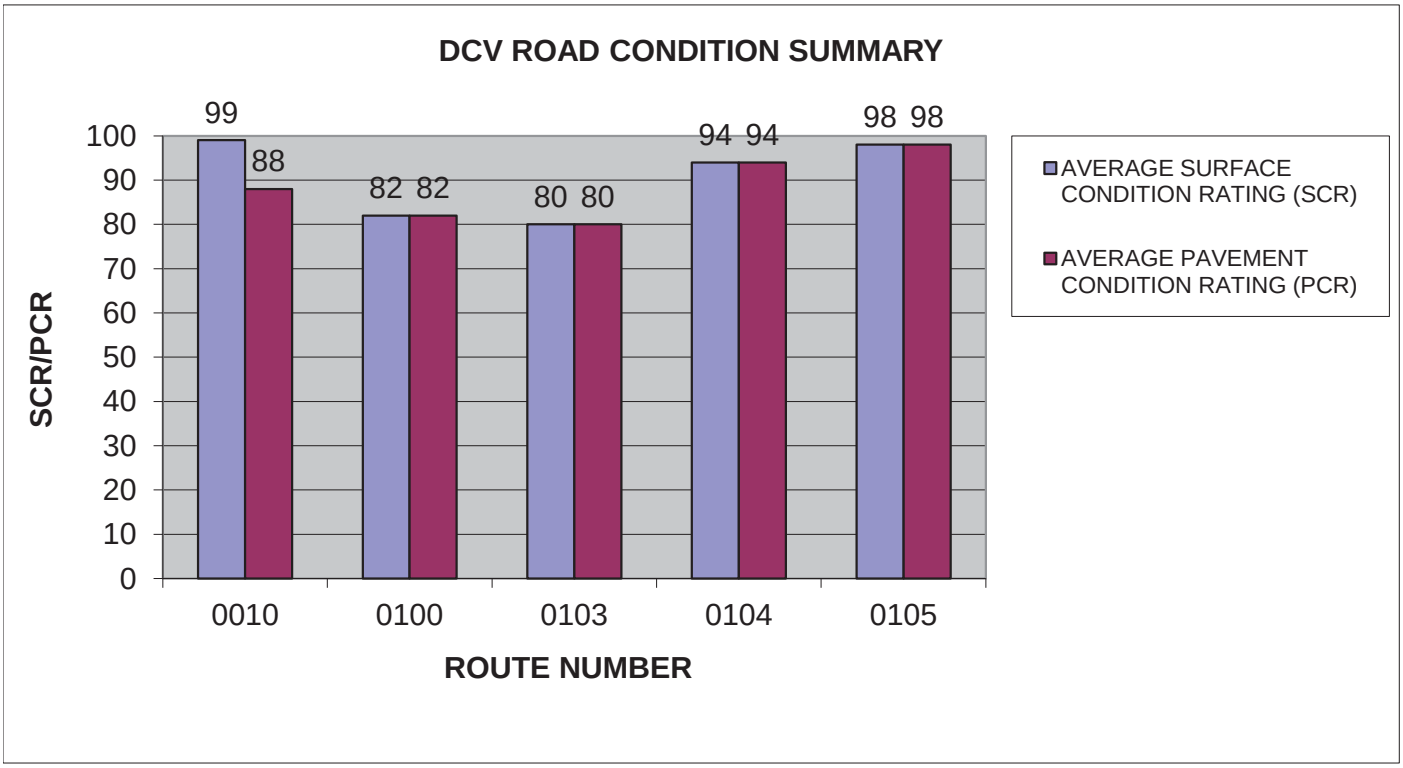
At this time, specific Maintenance and Rehabilitation activities should be evaluated and recommended at the project level. Site-specific conditions that influence treatment type should be determined based on performing a subsurface investigation and/or pavement condition survey, and not be based solely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



# CHOH: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

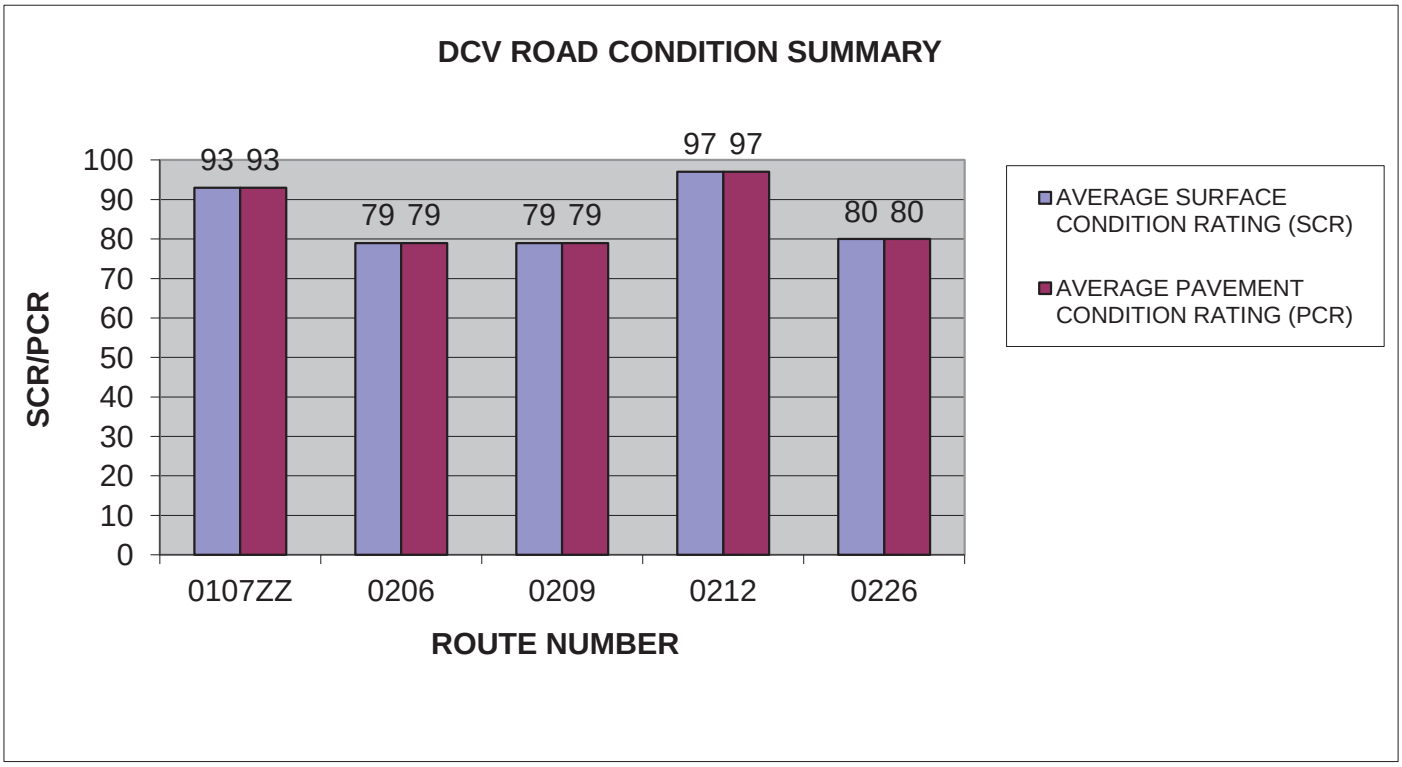
| ROUTE NUMBER | ROUTE NAME | FUNCT CLASS | PAVED LENGTH | SURFACE TYPE | AVERAGE SURFACE CONDITION RATING (SCR) | AVERAGE PAVEMENT CONDITION RATING (PCR) |
|---|---|---|---|---|---|---|
| 0010 | GREAT FALLS ENTRANCE ROAD | 1 | 1.14 | ASPHALT | 99 | 88 |
| 0100 | MONOCACY BOAT RAMP ACCESS | 2 | 0.23 | ASPHALT | 82 | 82 |
| 0103 | DENEEN ROAD | 2 | 0.11 | ASPHALT | 80 | 80 |
| 0104 | LITTLE TONOLOWAY ENTRANCE ROAD | 2 | 0.06 | ASPHALT | 94 | 94 |
| 0105 | BRUNSWICK BOAT RAMP ACCESS ROAD | 2 | 0.10 | ASPHALT | 98 | 98 |



# CHOH: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

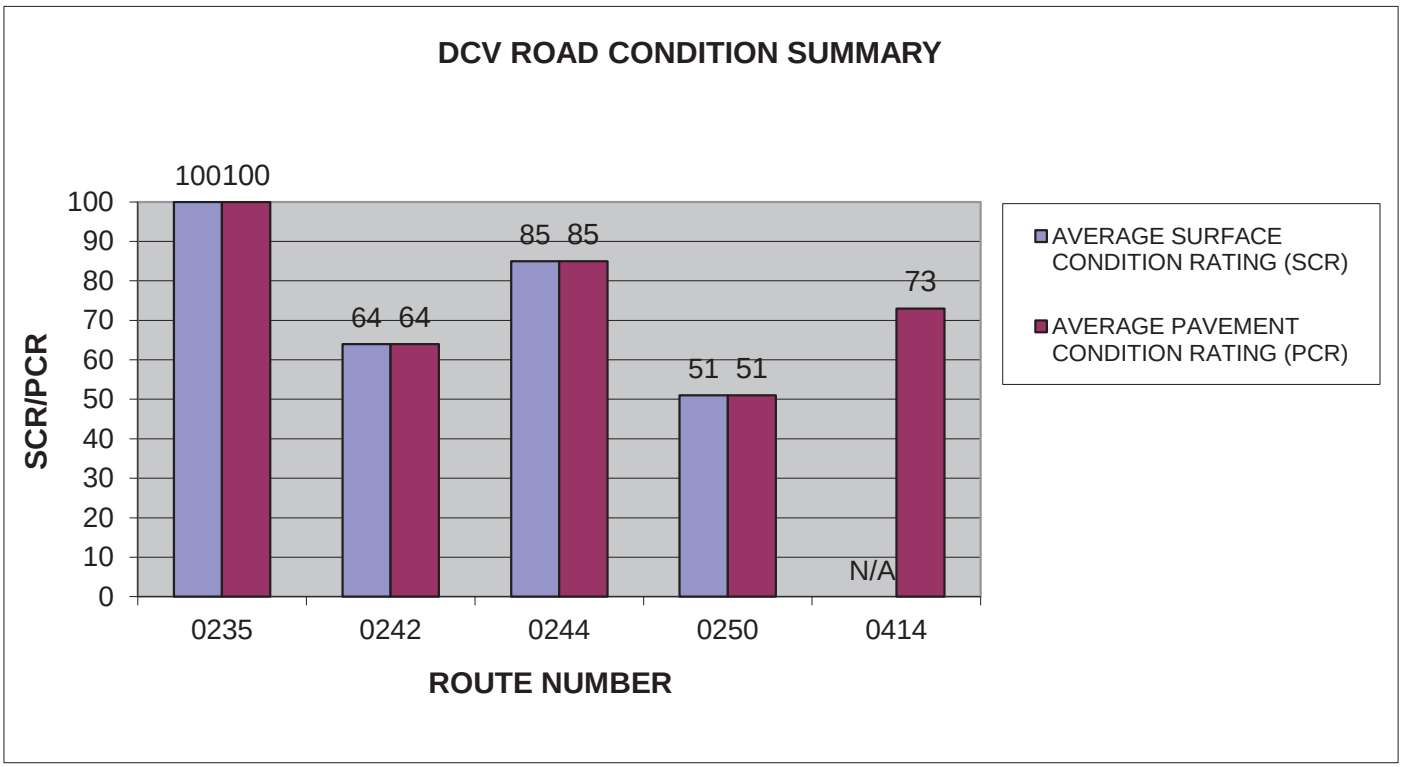
| ROUTE NUMBER | ROUTE NAME | FUNCT CLASS | PAVED LENGTH | SURFACE TYPE | AVERAGE SURFACE CONDITION RATING (SCR) | AVERAGE PAVEMENT CONDITION RATING (PCR) |
|---|---|---|---|---|---|---|
| 0107ZZ | FERRY HILL PLANTATION ENTRANCE ROADS | 2 | 0.20 | ASPHALT | 93 | 93 |
| 0206 | FIFTEEN MILE CREEK ROAD | 2 | 0.04 | ASPHALT | 79 | 79 |
| 0209 | FOUR LOCKS ROAD | 2 | 0.48 | ASPHALT | 79 | 79 |
| 0212 | BIG SLACKWATER ACCESS ROAD | 2 | 1.01 | ASPHALT | 97 | 97 |
| 0226 | MONOCACY ROAD | 2 | 0.26 | ASPHALT | 80 | 80 |



# CHOH: DCV ROAD CONDITION SUMMARY

DCV - Data Collection Vehicle

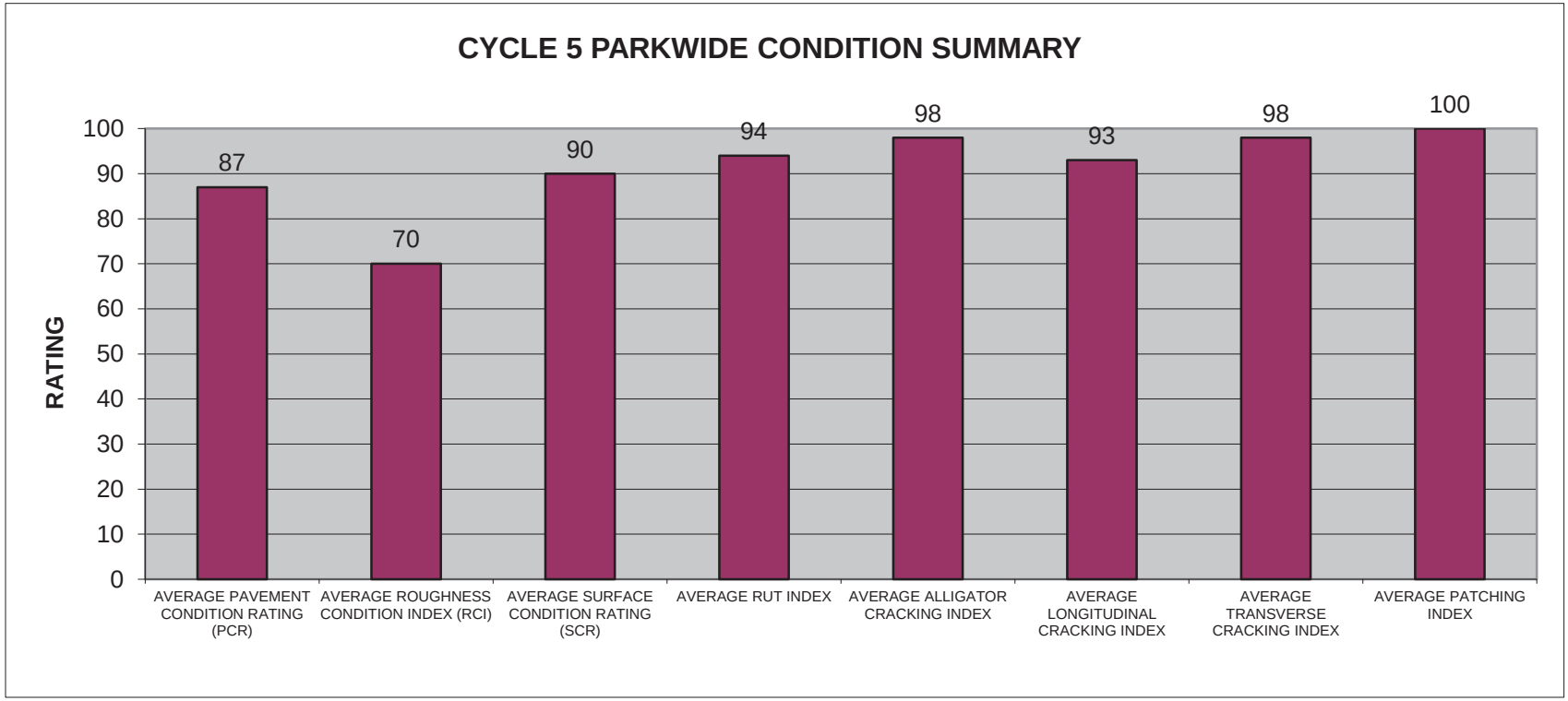
| ROUTE NUMBER | ROUTE NAME | FUNCT CLASS | PAVED LENGTH | SURFACE TYPE | AVERAGE SURFACE CONDITION RATING (SCR) | AVERAGE PAVEMENT CONDITION RATING (PCR) |
|---|---|---|---|---|---|---|
| 0235 | CARDEROCK PICNIC AREA ROAD | 3 | 0.47 | ASPHALT | 100 | 100 |
| 0242 | ANKENEY LANE | 2 | 0.25 | ASPHALT | 64 | 64 |
| 0244 | CANAL STREET (HANCOCK, MARYLAND) | 2 | 0.22 | ASPHALT | 85 | 85 |
| 0250 | HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD | 3 | 0.10 | ASPHALT | 51 | 51 |
| 0414 | LOCK 19 ACCESS ROAD | 6 | 0.11 | CONCRETE | N/A | 73 |



# CHOH: PARKWIDE DCV CONDITION SUMMARY

| AVERAGE PAVEMENT CONDITION RATING (PCR) | AVERAGE ROUGHNESS CONDITION INDEX (RCI) | AVERAGE SURFACE CONDITION RATING (SCR) | AVERAGE RUT INDEX | AVERAGE ALLIGATOR CRACKING INDEX | AVERAGE LONGITUDINAL CRACKING INDEX | AVERAGE TRANSVERSE CRACKING INDEX | AVERAGE PATCHING INDEX |
|---|---|---|---|---|---|---|---|
| 87 | 70 | 90 | 94 | 98 | 93 | 98 | 100 |

*All Index values are based on Data Collection Vehicle (DCV) driven roads that were collected in Cycle-5.*
*Roughness data is only collected on routes with lengths greater than 0.5 miles and a posted speed limit of 25 MPH or greater.*

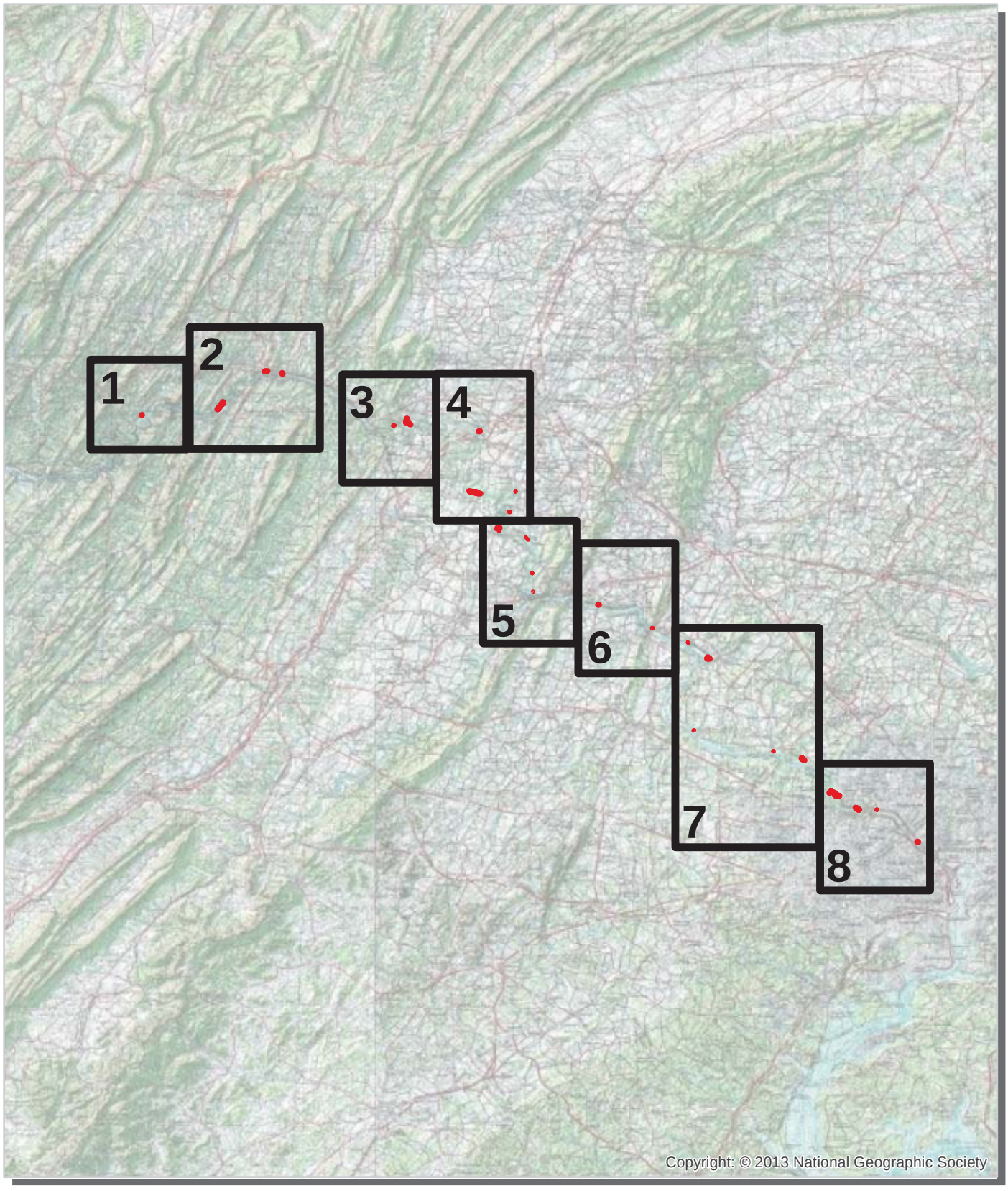


# Section 4
# Park Route Location Maps

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Key Map




Cycle 5 Collected Routes

20 10 0 20
Miles

N

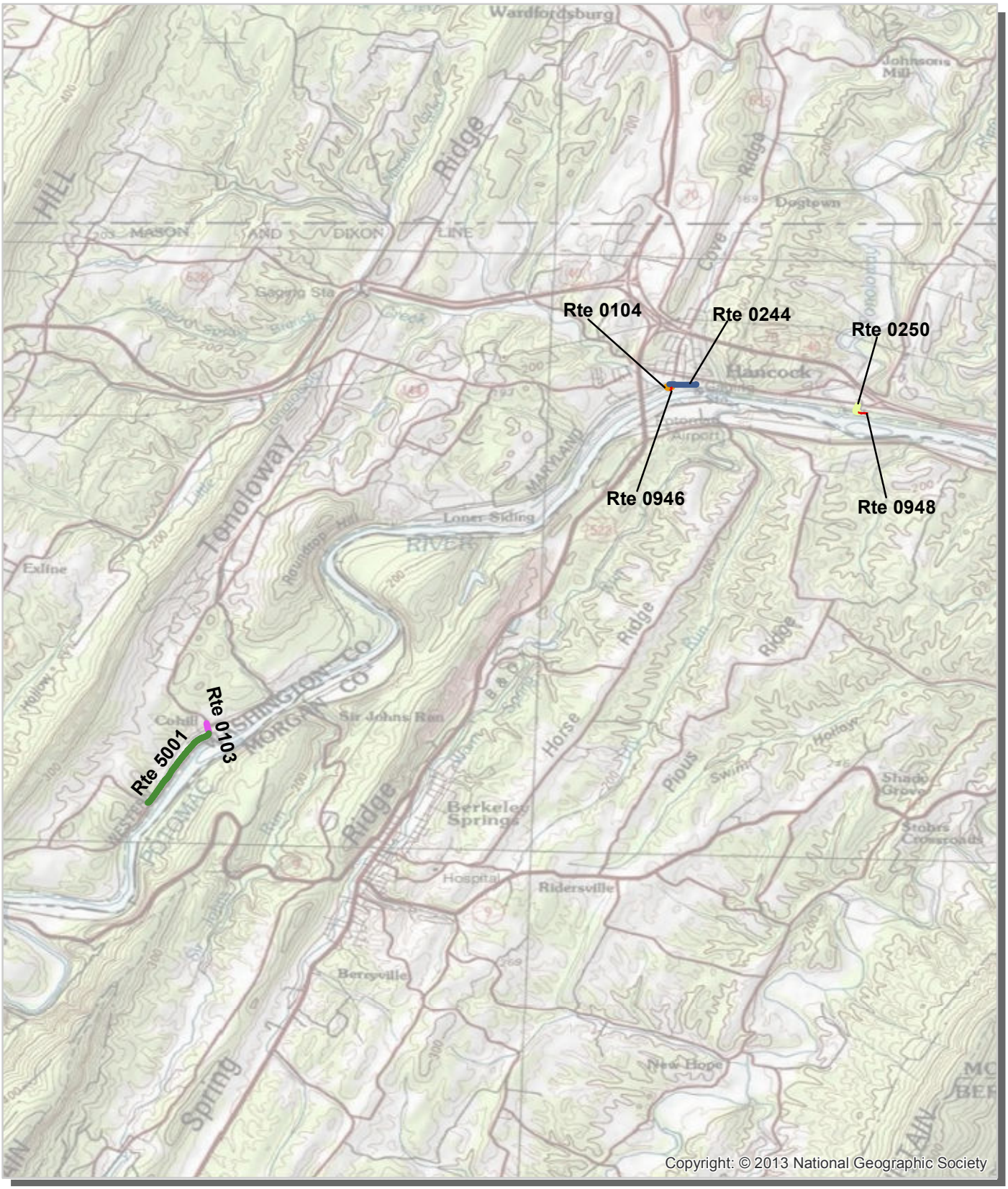
# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 1


Unique colors used to differentiate routes

800 400 0 800 Feet

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 2




Unique colors used to differentiate routes

2 1 0 2 Miles

N

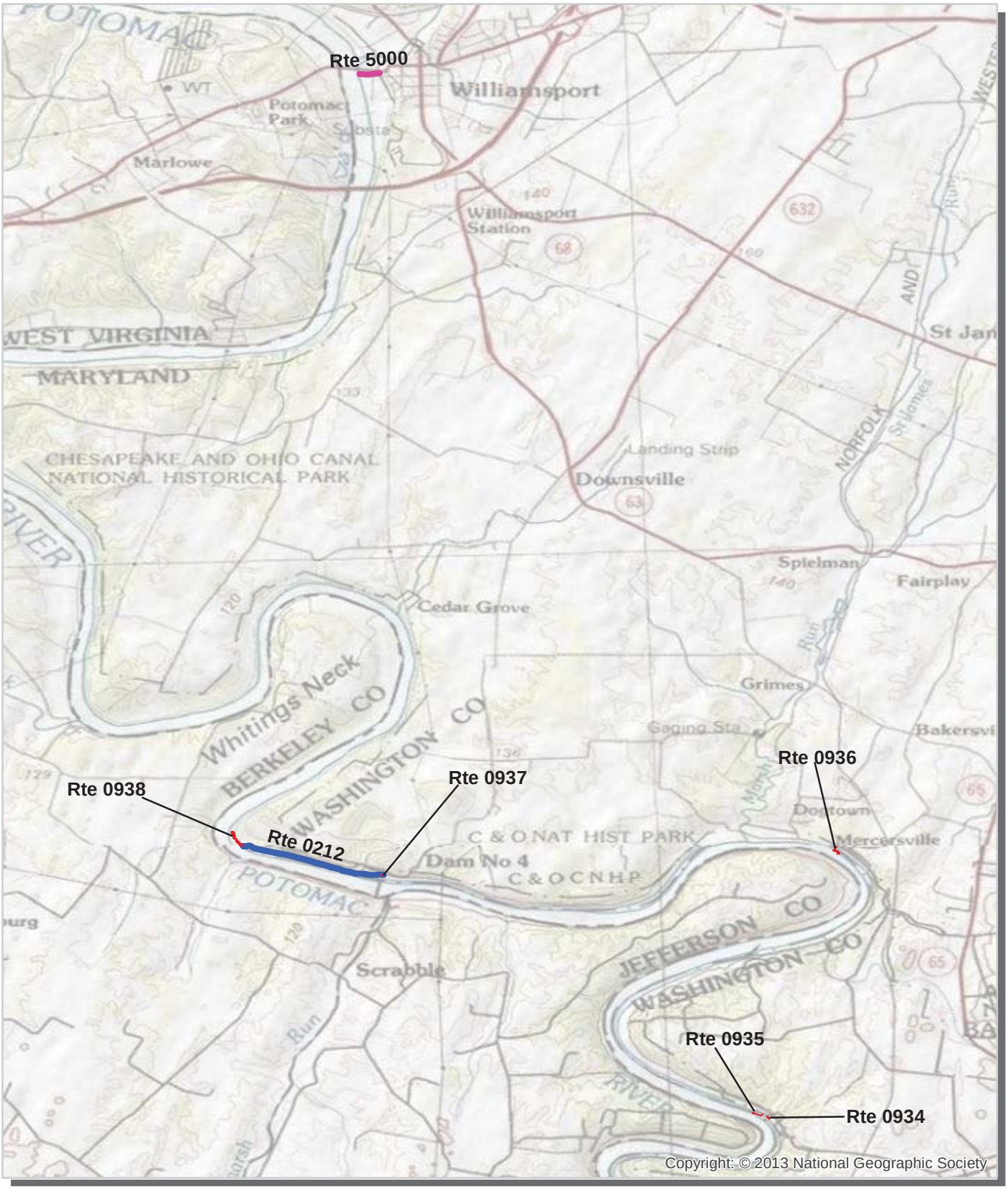
# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 3


Unique colors used to differentiate routes

0.5 0.25 0 0.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 4

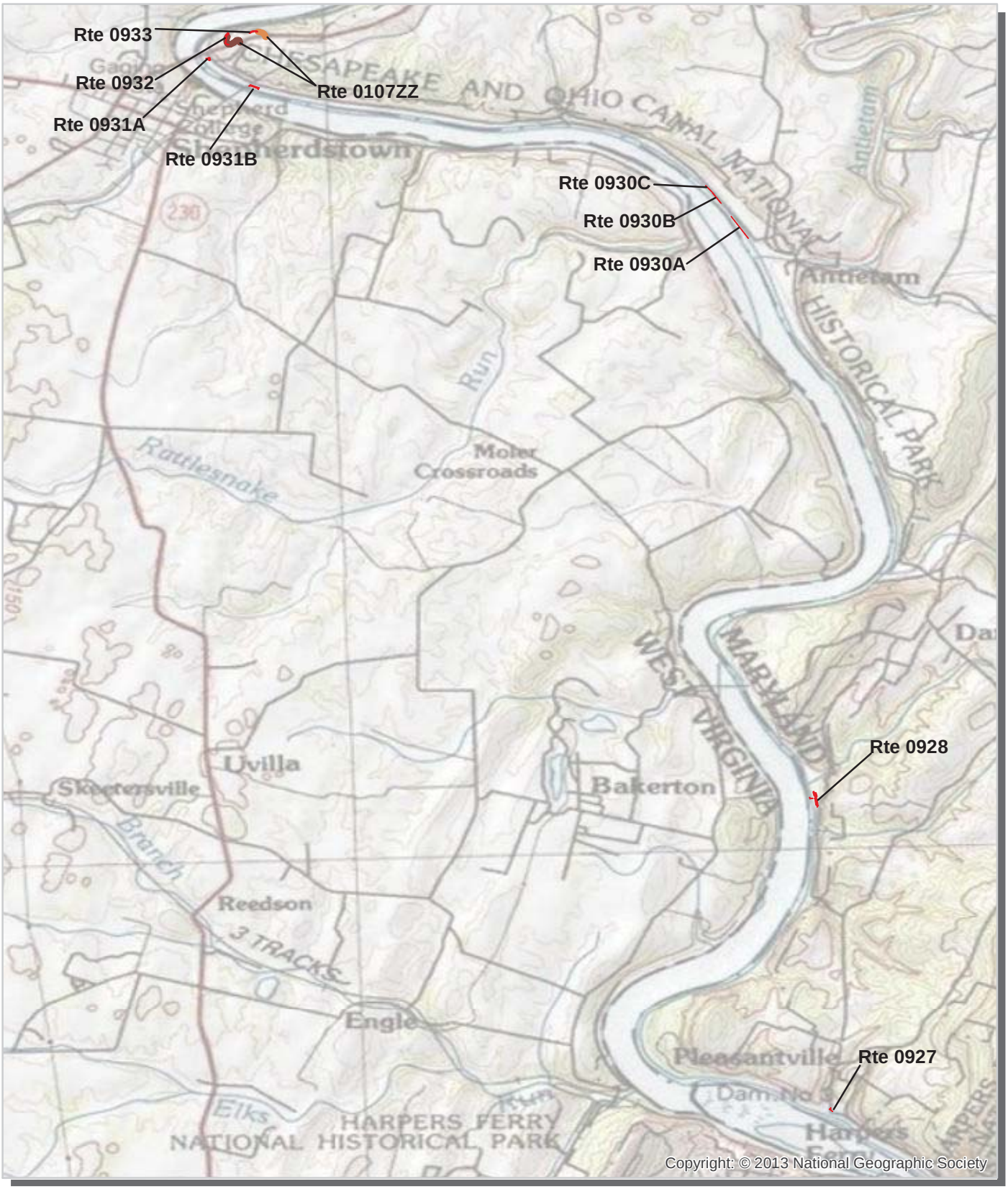



Unique colors used to differentiate routes

1.5 0.75 0 1.5
Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 5

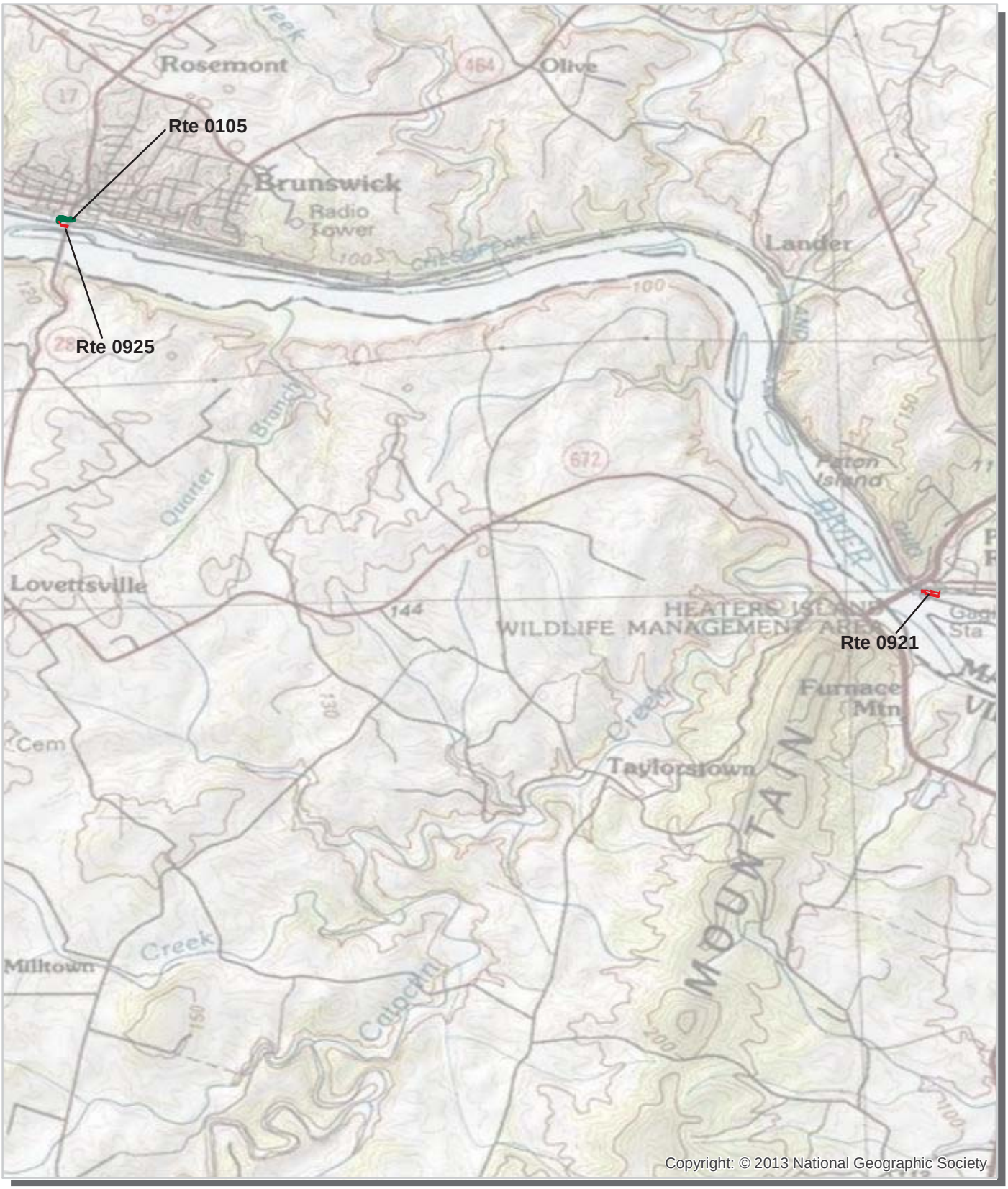



Unique colors used to differentiate routes

1 0.5 0 1 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 6

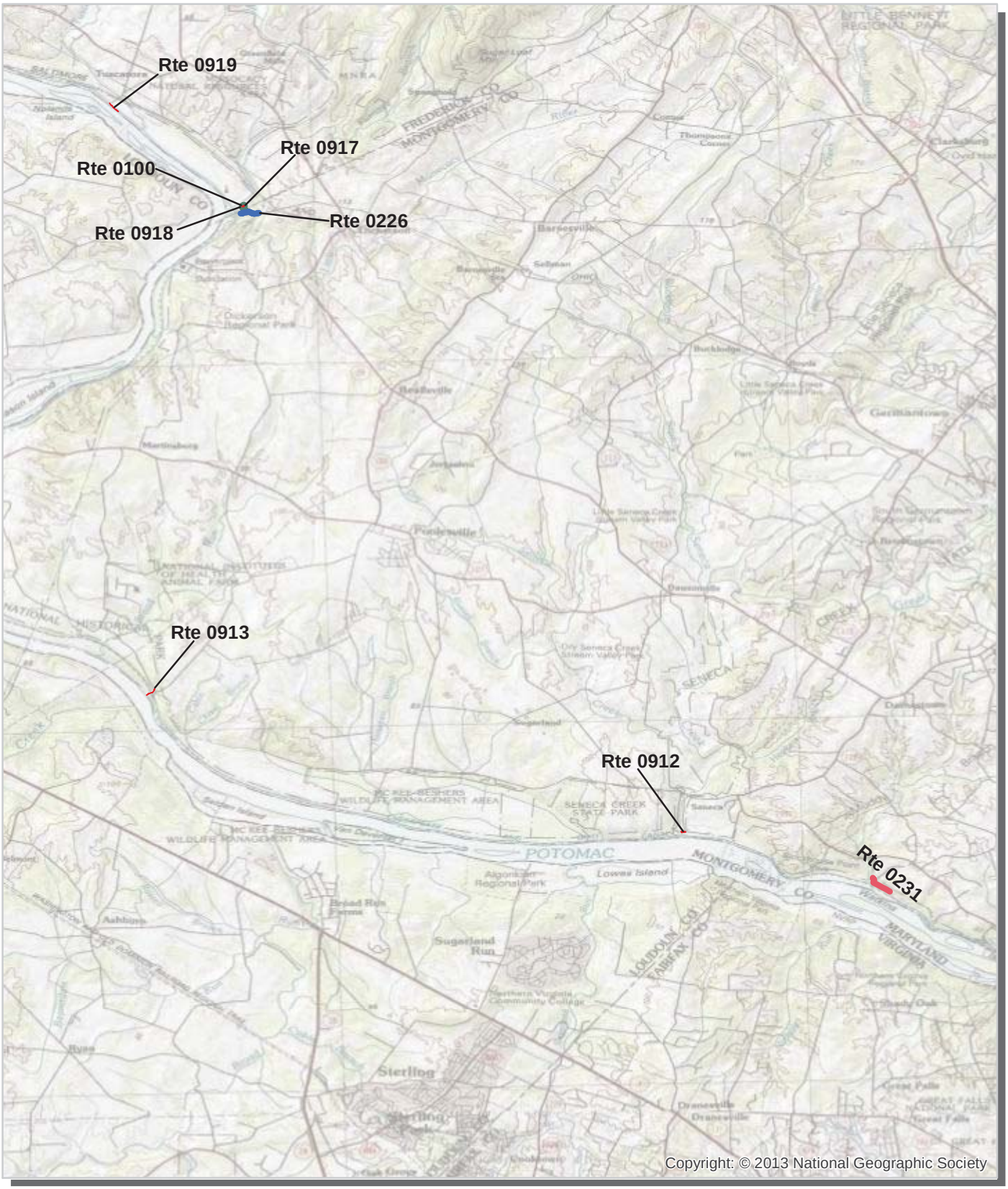



Unique colors used to differentiate routes

1.5 0.75 0 1.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 7

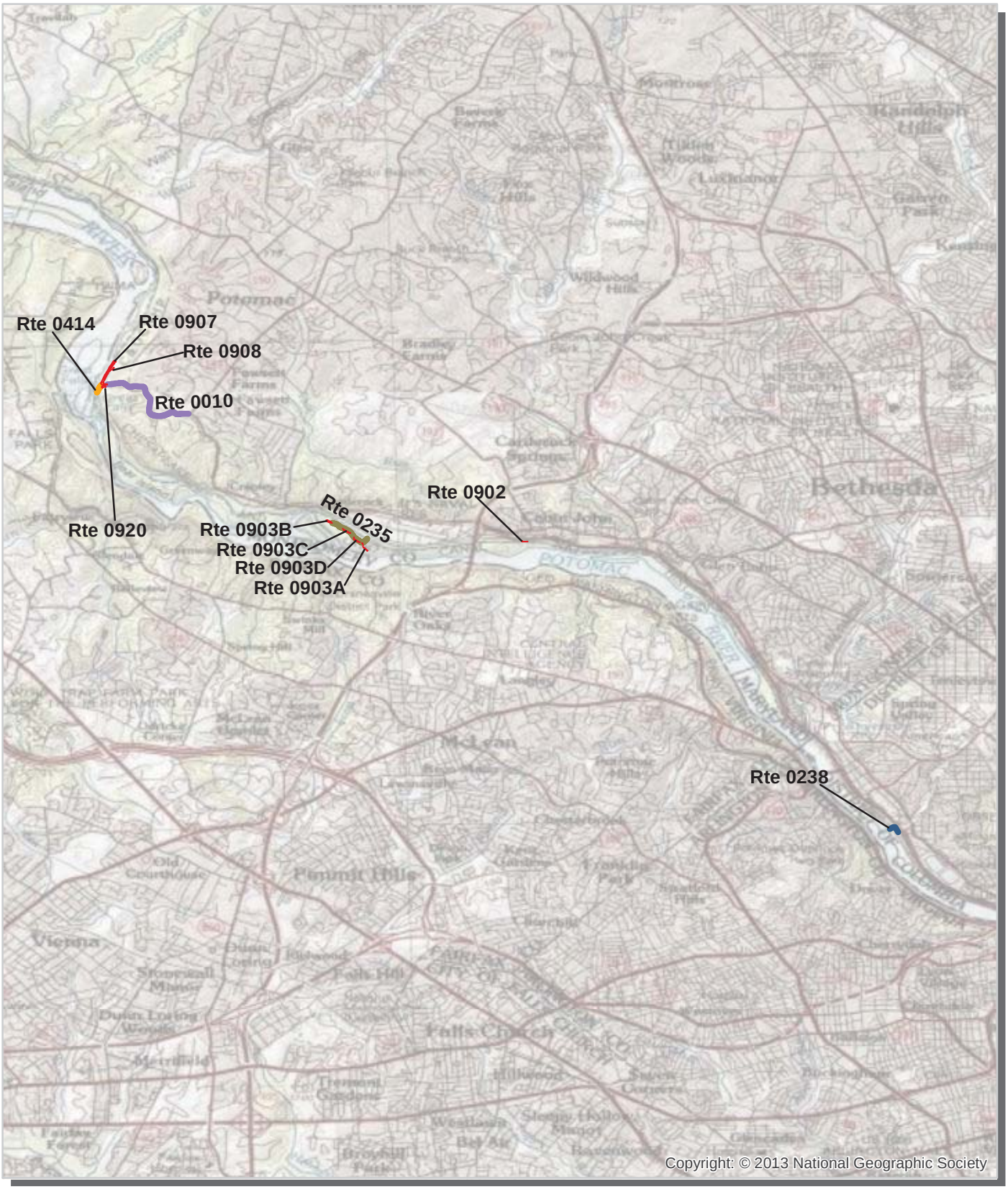



Unique colors used to differentiate routes

3.5 1.75 0 3.5
Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Location Map
## Area 8

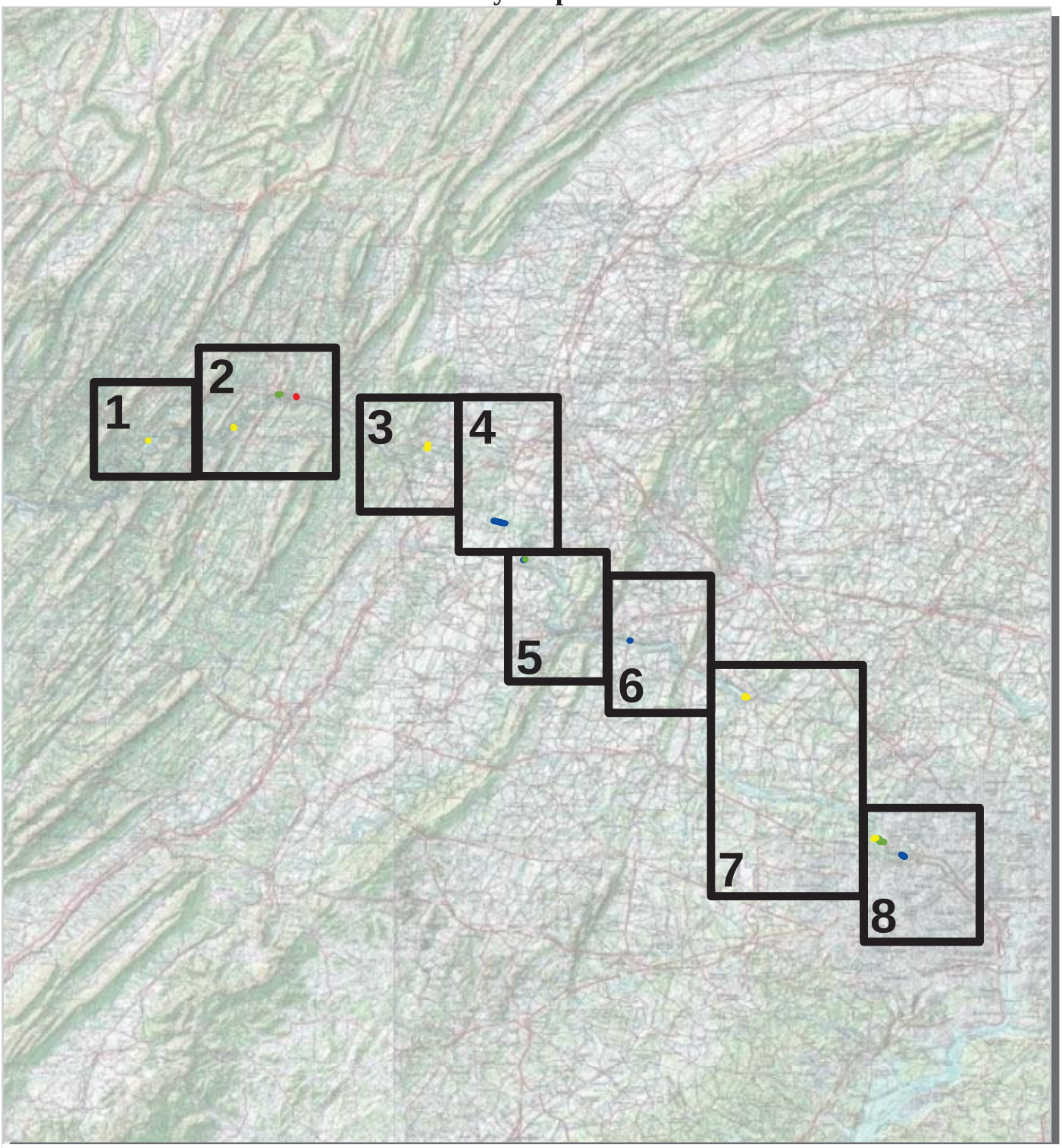



Unique colors used to differentiate routes

2.5 1.25 0 2.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Key Map




PCR — Poor (0 - 60) — Fair (61 - 84) — Good (85 - 94) — Excellent (95 - 100) — No Data

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

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

20 10 0 20 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 1

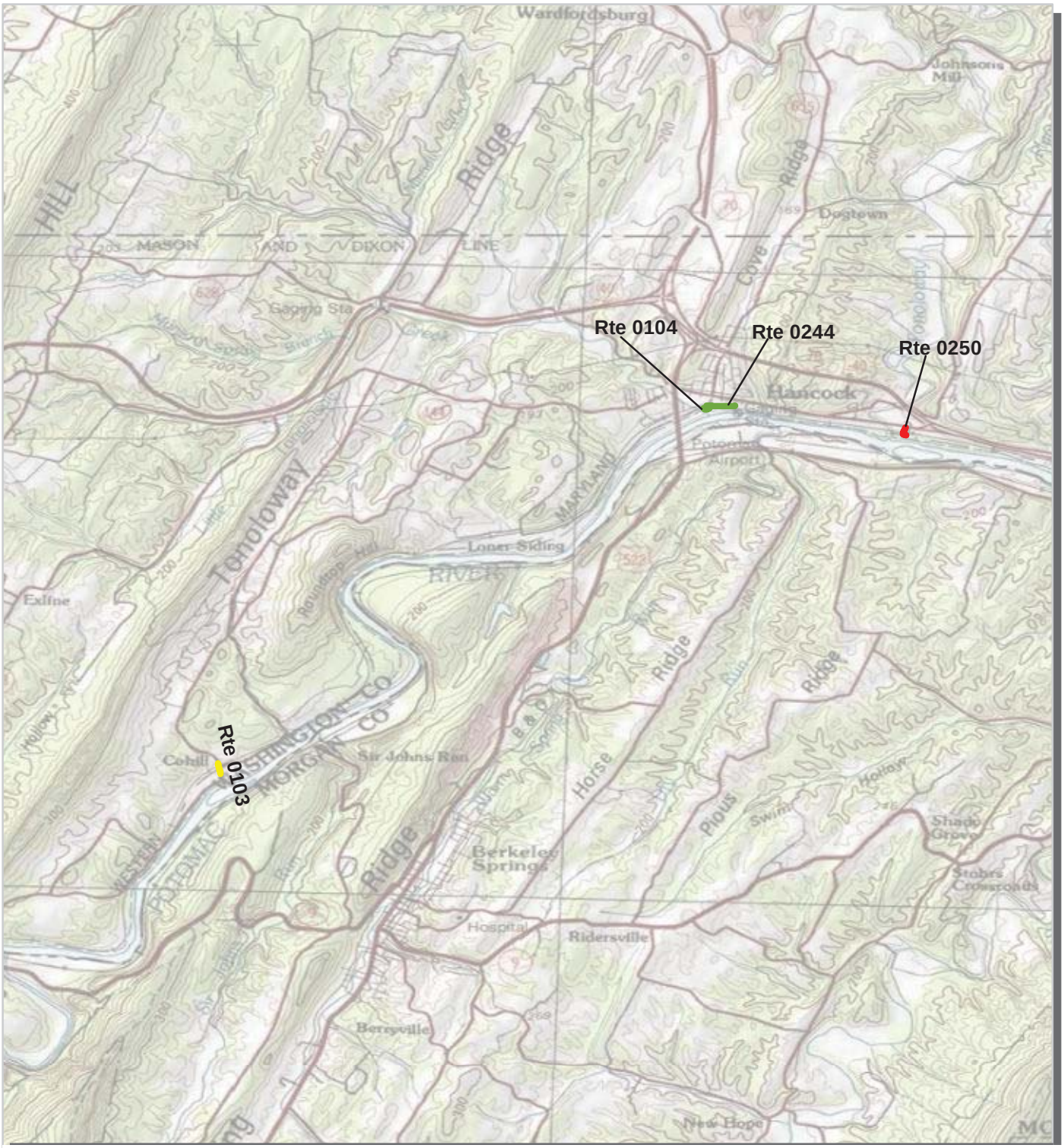

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

800 400 0 800 Feet

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 2



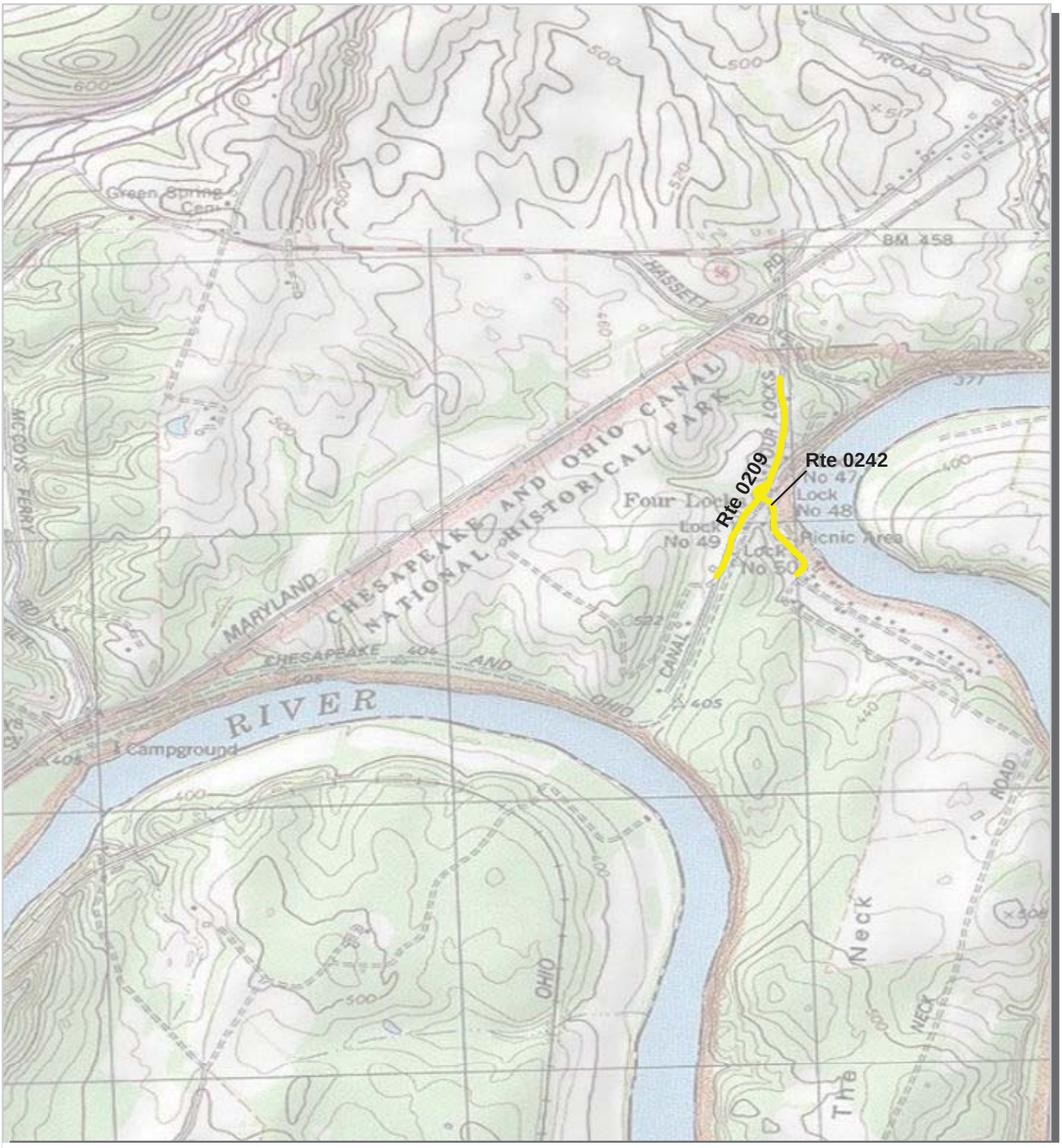

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

2 1 0 2 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 3



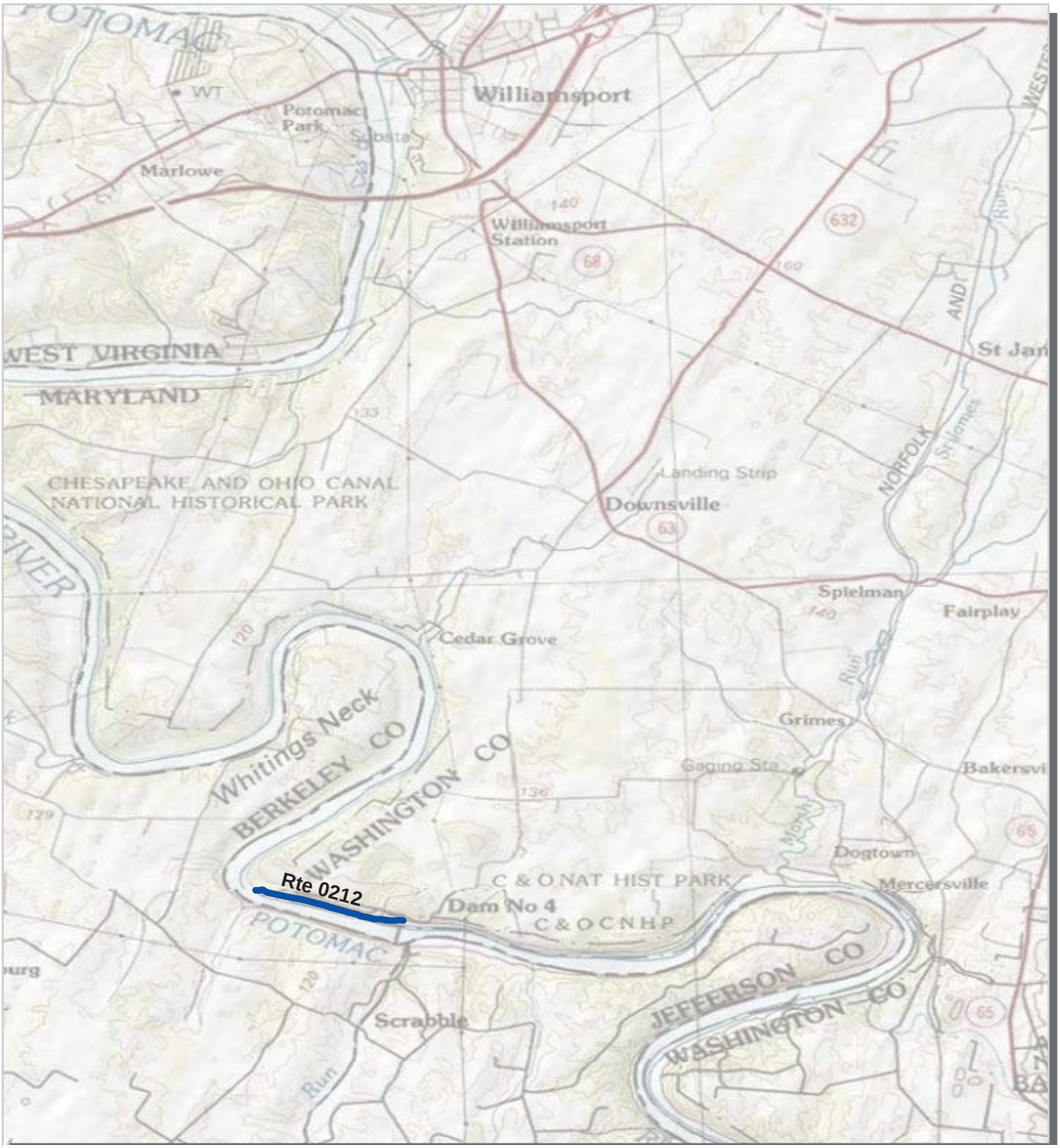

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

0.5 0.25 0 0.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 4



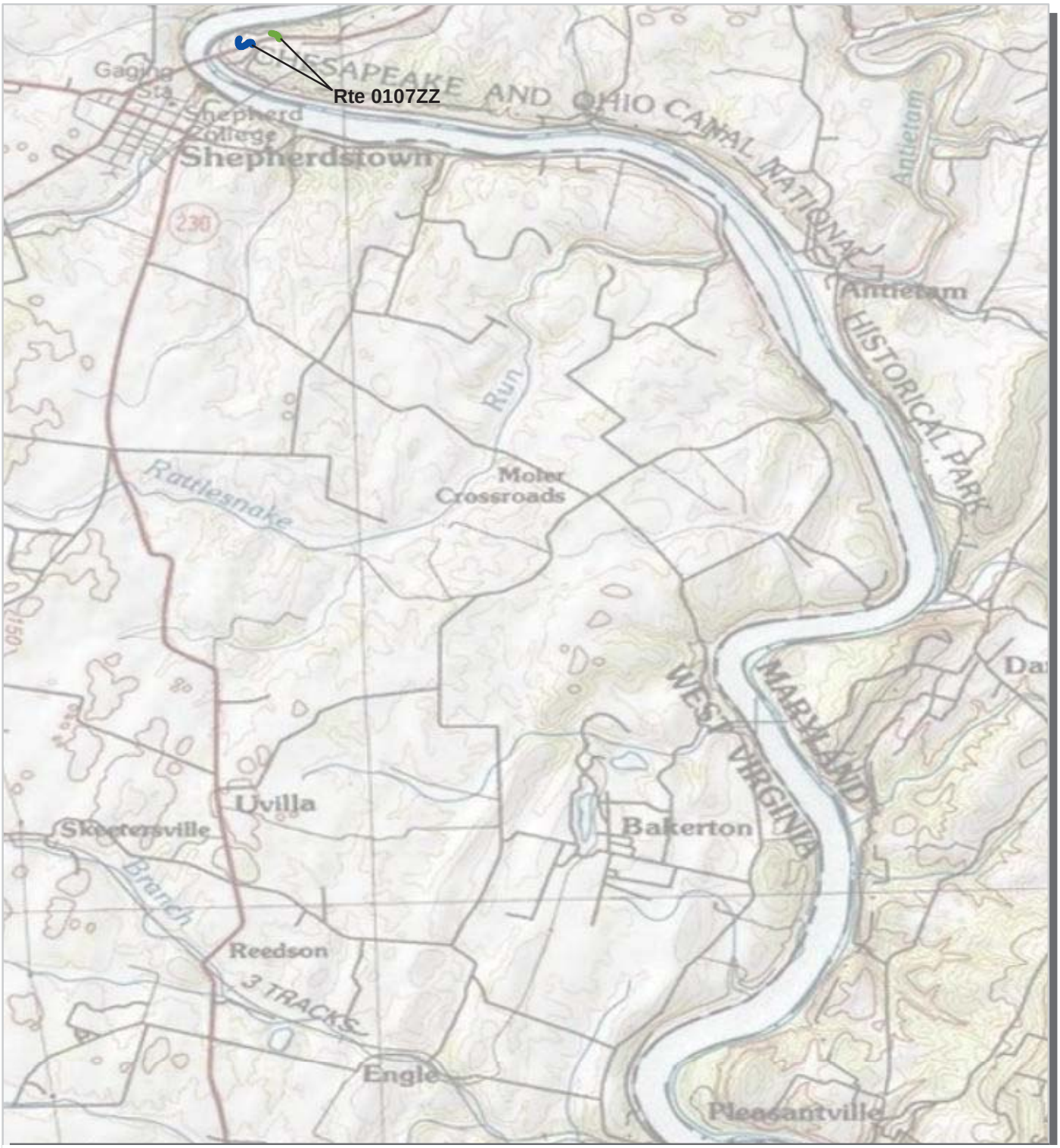

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

1.5 0.75 0 1.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 5



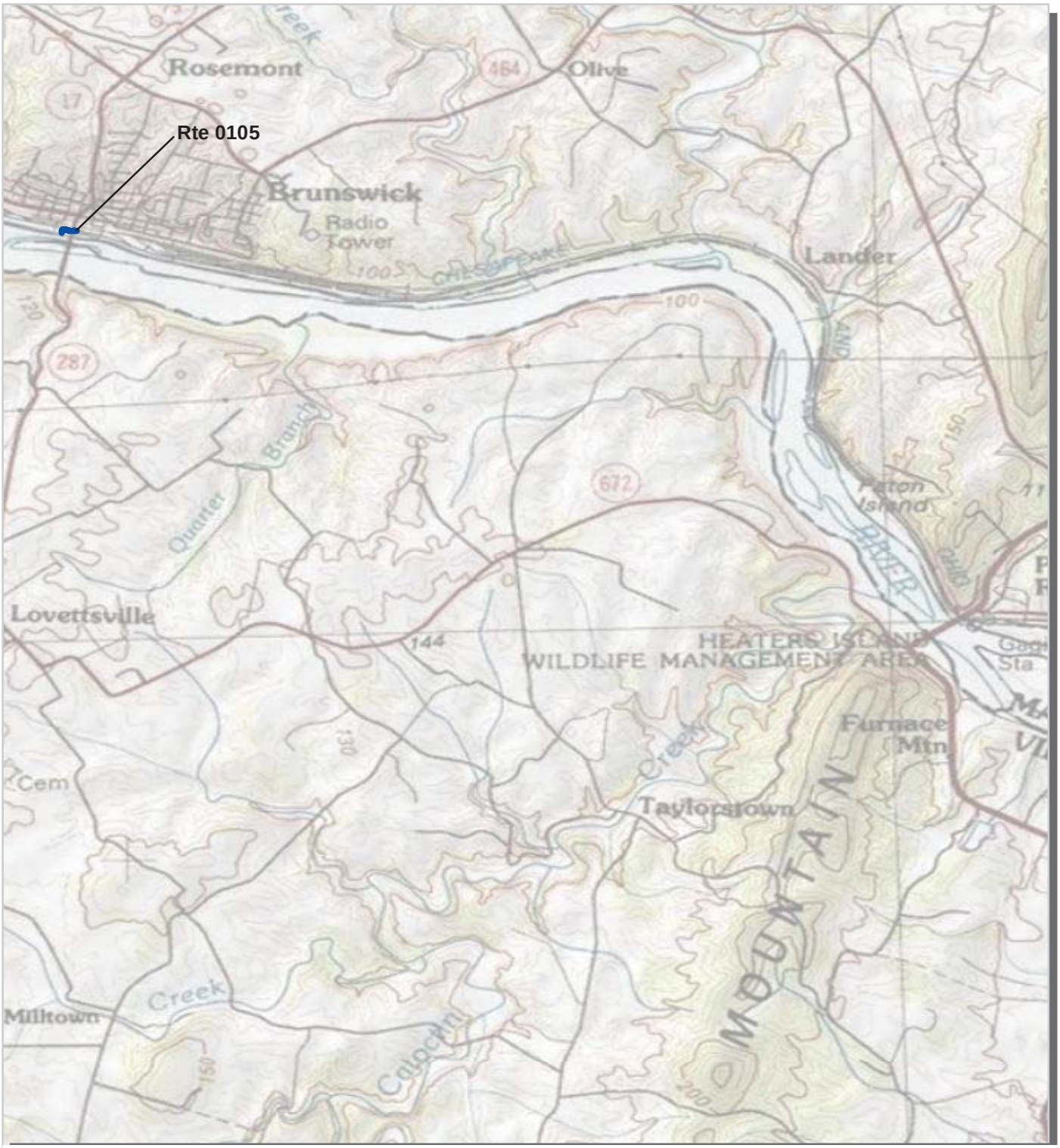

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

1 0.5 0 1 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 6



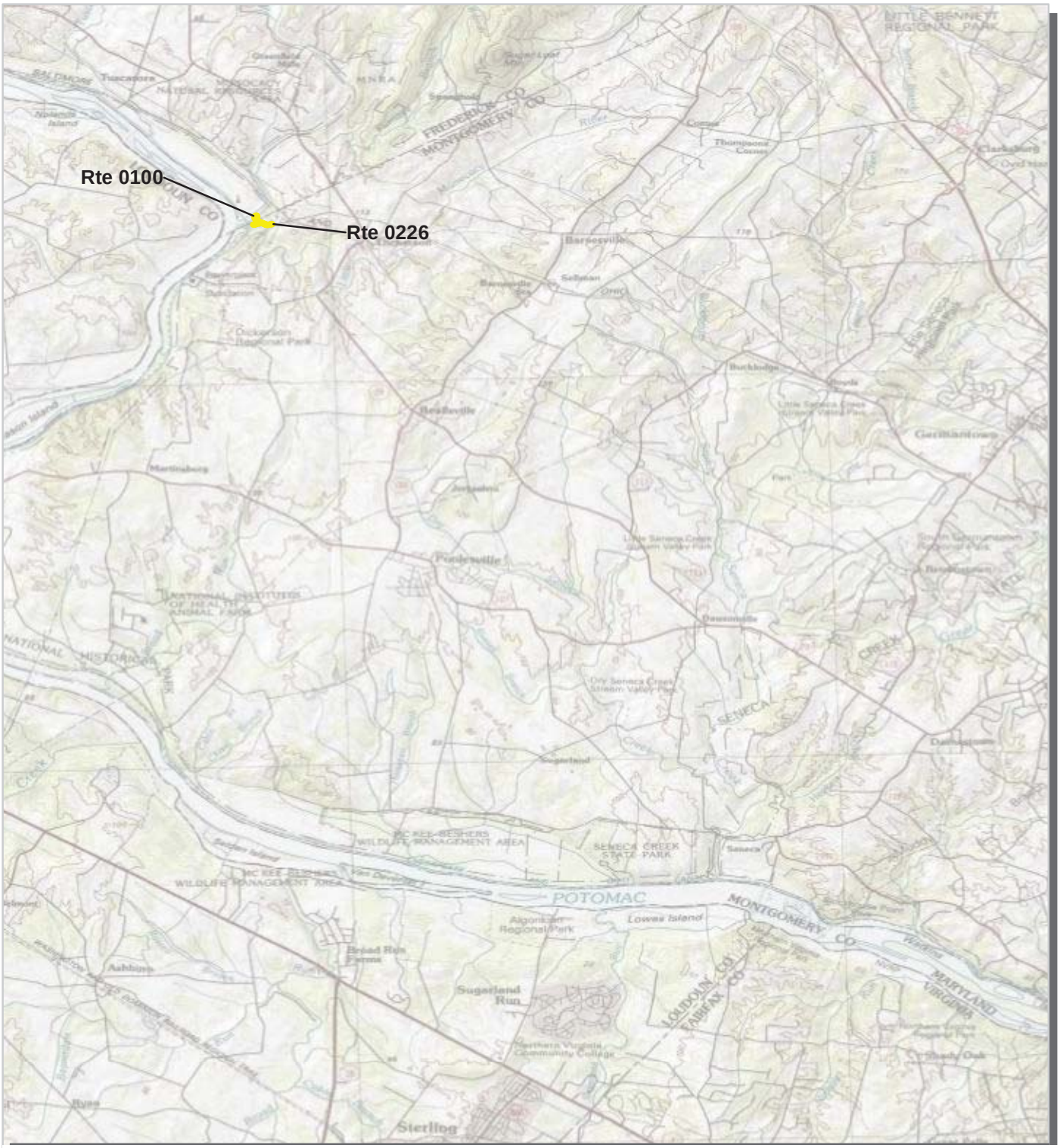

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

1.5 0.75 0 1.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 7



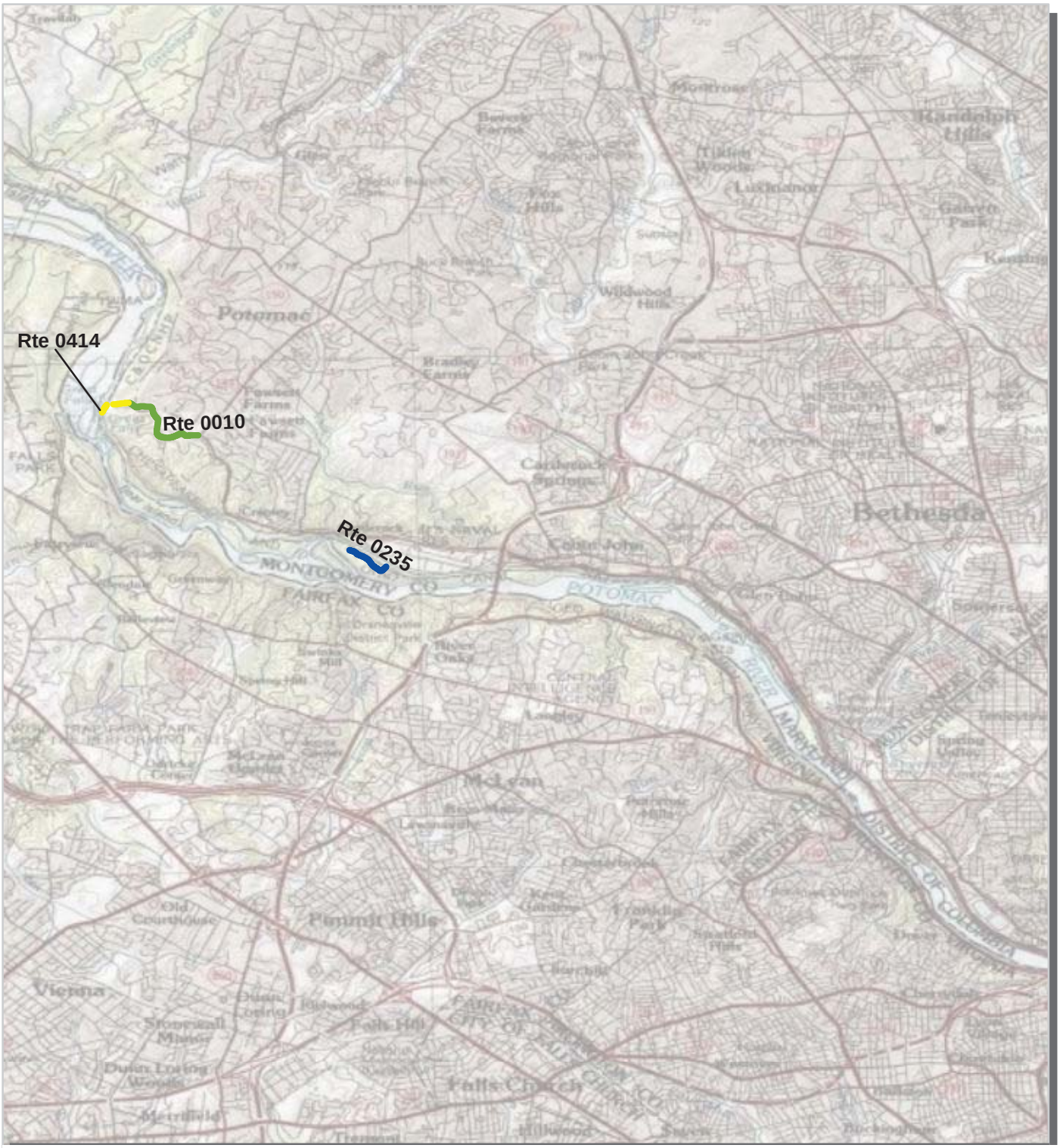

| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

3.5 1.75 0 3.5 Miles

N

# Chesapeake & Ohio Canal National Historical Park
## Route Condition Map
## PCR - Mile by Mile
## Area 8




| PCR | Poor | Fair | Good | Excellent | No Data |
|---|---|---|---|---|---|
| | (0 - 60) | (61 - 84) | (85 - 94) | (95 - 100) | |

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

2.5 1.25 0 2.5 Miles

N

# Section 5
# Paved Route
# Condition Rating Sheets

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0010 GREAT FALLS ENTRANCE ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/3/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 1.14 Miles**

| ***Section Number*** | 0 | 1 | | | |
|---|---|---|---|---|---|
| ***Section Length (mi)*** | 1.00 | 0.14 | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | 2 | | | |
| Paved Width (ft) | 26 | 26 | | | |
| Lane Width (ft) | 10 | 10 | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 99 | 100 | | | |
| PCR (Pavement Condition Rating) | 89 | 81 | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 100 | 100 | | | |
| Transverse Cracking Index | 100 | 100 | | | |
| Patching Index | 100 | 100 | | | |
| Rutting Index | 99 | 100 | | | |
| Roughness Condition Index (RCI) | 73 | 53 | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0100 MONOCACY BOAT RAMP ACCESS**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**
**COLLECTED: 5/3/2013**
**NATIONAL CAPITAL REGION TOTAL LENGTH: 0.23 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.23 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 18 | | | | |
| Lane Width (ft) | 9 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 82 | | | | |
| PCR (Pavement Condition Rating) | 82 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 82 | | | | |
| Transverse Cracking Index | 98 | | | | |
| Patching Index | 98 | | | | |
| Rutting Index | 87 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.
See Section 10 for explanation of SCR, PCR, & all Distress Index Values.
NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0103 DENEEN ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.11 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.11 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 22 | | | | |
| Lane Width (ft) | 10 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 80 | | | | |
| PCR (Pavement Condition Rating) | 80 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 84 | | | | |
| Transverse Cracking Index | 98 | | | | |
| Patching Index | 92 | | | | |
| Rutting Index | 80 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0104 LITTLE TONOLOWAY ENTRANCE ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.06 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.06 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 14 | | | | |
| Lane Width (ft) | 7 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 94 | | | | |
| PCR (Pavement Condition Rating) | 94 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 100 | | | | |
| Transverse Cracking Index | 100 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 94 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0105 BRUNSWICK BOAT RAMP ACCESS ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.10 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.10 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 18 | | | | |
| Lane Width (ft) | 9 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 98 | | | | |
| PCR (Pavement Condition Rating) | 98 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 100 | | | | |
| Transverse Cracking Index | 99 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 98 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0107ZZ FERRY HILL PLANTATION ENTRANCE ROADS**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**Summary Record** **COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.20 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | | | | | |
| ***Section Length (mi)*** | | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | N/A | | | | |
| Paved Width (ft) | N/A | | | | |
| Lane Width (ft) | N/A | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 93 | | | | |
| PCR (Pavement Condition Rating) | 93 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | N/A | | | | |
| Transverse Cracking Index | N/A | | | | |
| Patching Index | N/A | | | | |
| Rutting Index | N/A | | | | |
| Roughness Condition Index (RCI) | N/A | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0107AZ FERRY HILL PLANTATION ENTRANCE ROAD A**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**Subcomponent Record** **COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.14 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.14 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 21 | | | | |
| Lane Width (ft) | 11 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 95 | | | | |
| PCR (Pavement Condition Rating) | 95 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 97 | | | | |
| Transverse Cracking Index | 97 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 95 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0107BZ FERRY HILL PLANTATION ENTRANCE ROAD B**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**Subcomponent Record** **COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.06 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.06 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 15 | | | | |
| Lane Width (ft) | 8 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 88 | | | | |
| PCR (Pavement Condition Rating) | 88 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 92 | | | | |
| Transverse Cracking Index | 98 | | | | |
| Patching Index | 99 | | | | |
| Rutting Index | 88 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0206 FIFTEEN MILE CREEK ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.04 Miles**

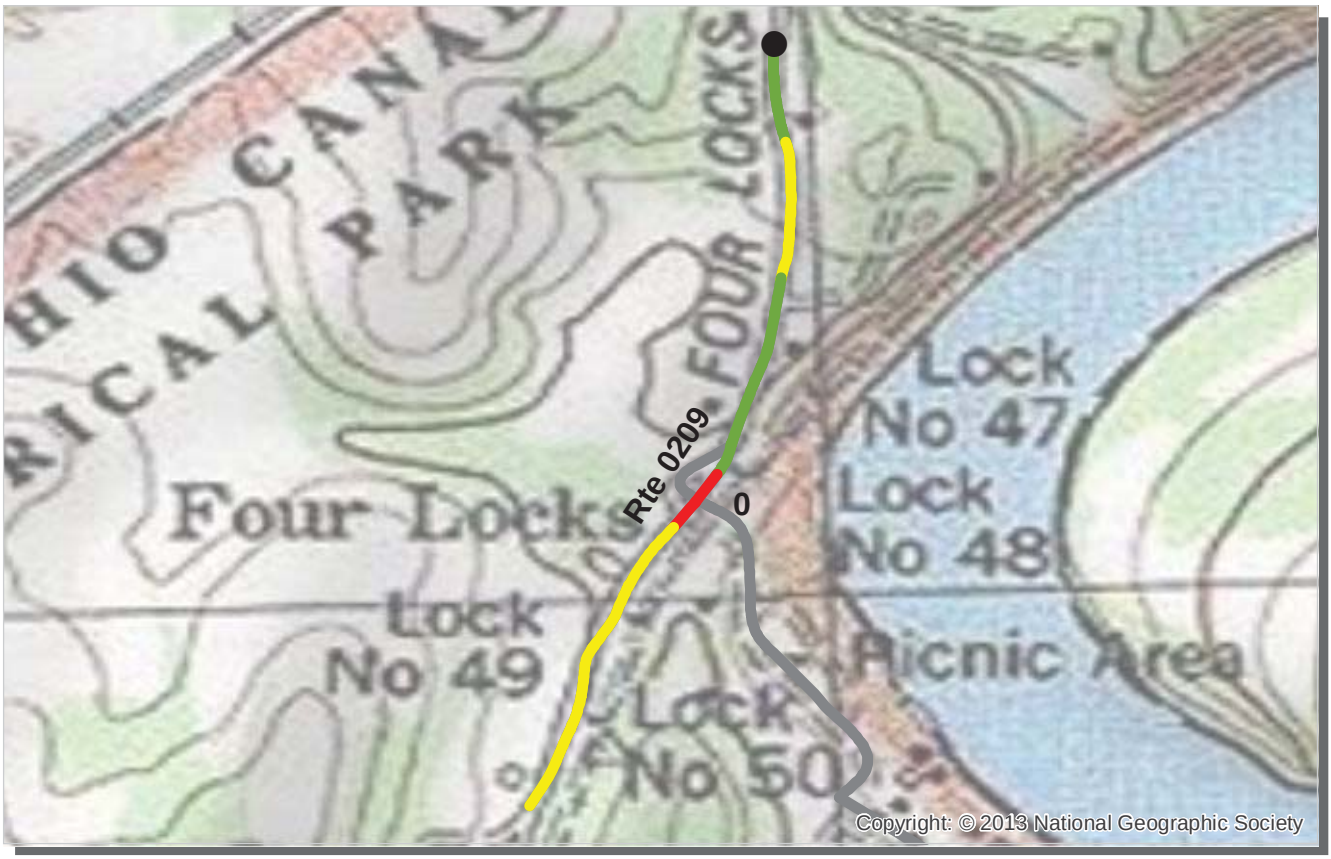
| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.04 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 16 | | | | |
| Lane Width (ft) | 8 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 79 | | | | |
| PCR (Pavement Condition Rating) | 79 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 99 | | | | |
| Transverse Cracking Index | 100 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 79 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable




PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0209 FOUR LOCKS ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.48 Miles**

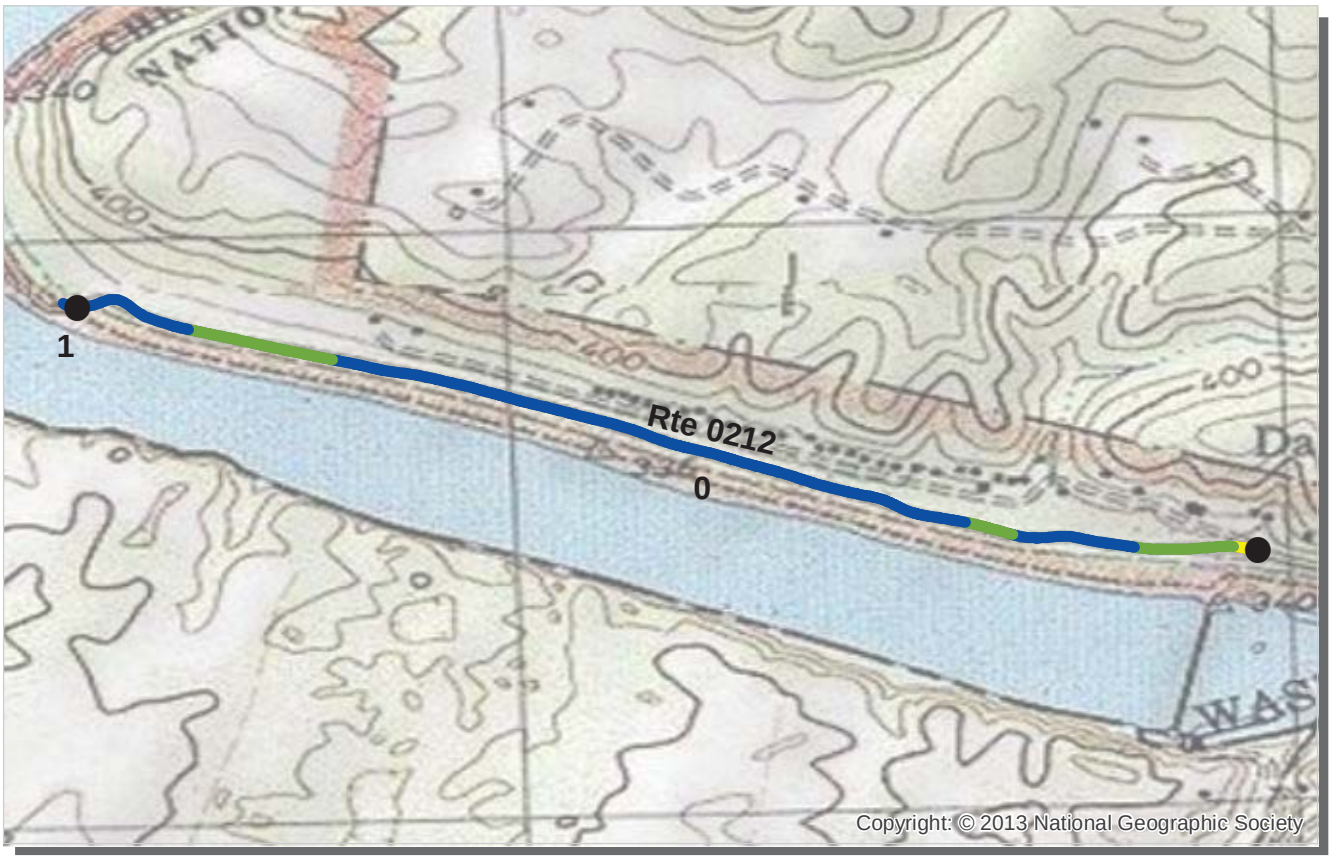
| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.48 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 14 | | | | |
| Lane Width (ft) | 8 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 79 | | | | |
| PCR (Pavement Condition Rating) | 79 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 79 | | | | |
| Transverse Cracking Index | 97 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 83 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable




PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0212 BIG SLACKWATER ACCESS ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**
**COLLECTED: 5/1/2013**
**NATIONAL CAPITAL REGION TOTAL LENGTH: 1.01 Miles**

| ***Section Number*** | 0 | 1 | | | |
|---|---|---|---|---|---|
| ***Section Length (mi)*** | 1.00 | 0.01 | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | 2 | | | |
| Paved Width (ft) | 19 | 20 | | | |
| Lane Width (ft) | 10 | 10 | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 97 | 99 | | | |
| PCR (Pavement Condition Rating) | 97 | 99 | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 97 | 100 | | | |
| Transverse Cracking Index | 99 | 100 | | | |
| Patching Index | 100 | 100 | | | |
| Rutting Index | 99 | 99 | | | |
| Roughness Condition Index (RCI) | NC | NC | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0226 MONOCACY ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/3/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.26 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.26 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 15 | | | | |
| Lane Width (ft) | 7 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 80 | | | | |
| PCR (Pavement Condition Rating) | 80 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 80 | | | | |
| Transverse Cracking Index | 99 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 93 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0235 CARDEROCK PICNIC AREA ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.47 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.47 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 24 | | | | |
| Lane Width (ft) | 12 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 100 | | | | |
| PCR (Pavement Condition Rating) | 100 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 100 | | | | |
| Transverse Cracking Index | 100 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 100 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0242 ANKENEY LANE**

**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.25 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.25 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 20 | | | | |
| Lane Width (ft) | 10 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 64 | | | | |
| PCR (Pavement Condition Rating) | 64 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 64 | | | | |
| Transverse Cracking Index | 94 | | | | |
| Patching Index | 99 | | | | |
| Rutting Index | 85 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0244 CANAL STREET (HANCOCK, MARYLAND)**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.22 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.22 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 2 | | | | |
| Paved Width (ft) | 15 | | | | |
| Lane Width (ft) | 7 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 85 | | | | |
| PCR (Pavement Condition Rating) | 85 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 85 | | | | |
| Transverse Cracking Index | 94 | | | | |
| Patching Index | 99 | | | | |
| Rutting Index | 96 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable


PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0250 HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.10 Miles**

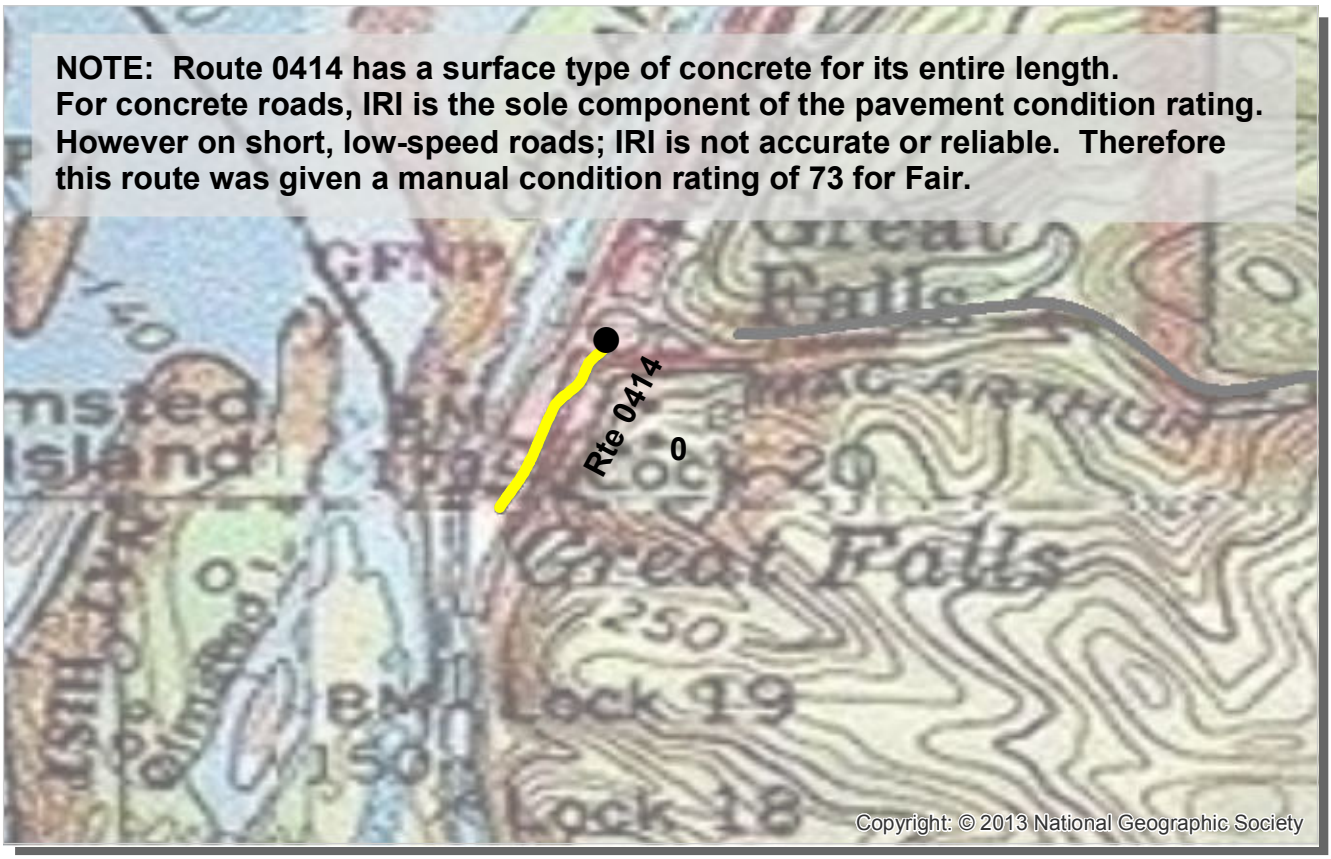
| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.10 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 1 | | | | |
| Paved Width (ft) | 14 | | | | |
| Lane Width (ft) | 14 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | 51 | | | | |
| PCR (Pavement Condition Rating) | 51 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | 51 | | | | |
| Transverse Cracking Index | 98 | | | | |
| Patching Index | 100 | | | | |
| Rutting Index | 62 | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable




PCR Poor (0 - 60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

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

**ROUTE: 0414 LOCK 19 ACCESS ROAD**
**CHOH : CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK**

**COLLECTED: 5/1/2013**

**NATIONAL CAPITAL REGION** **TOTAL LENGTH: 0.11 Miles**

| | | | | | |
|---|---|---|---|---|---|
| ***Section Number*** | 0 | | | | |
| ***Section Length (mi)*** | 0.11 | | | | |
| ***Cross Section Information*** | | | | | |
| Number of Lanes | 1 | | | | |
| Paved Width (ft) | 11 | | | | |
| Lane Width (ft) | 11 | | | | |
| ***Roadway Condition Information*** | | | | | |
| SCR (Surface Condition Rating) | NC | | | | |
| PCR (Pavement Condition Rating) | 73 | | | | |
| ***Distress Index Values*** | | | | | |
| Structural Crack Index | NC | | | | |
| Transverse Cracking Index | NC | | | | |
| Patching Index | NC | | | | |
| Rutting Index | NC | | | | |
| Roughness Condition Index (RCI) | NC | | | | |

NOTES:

Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

See Section 10 for explanation of SCR, PCR, & all Distress Index Values.

NC - Not Collected N/A - Not Applicable

# Section 6
# Manually Rated Paved Route Condition Rating Sheets

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0231

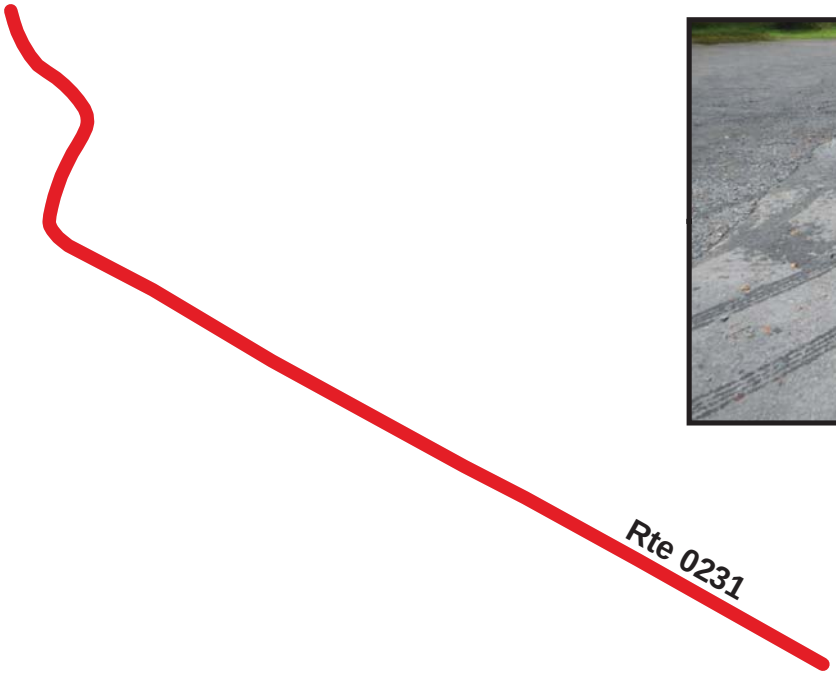
PENNYFIELD LOCK ROAD

FROM PARK BOUNDARY

TO END

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Paved Length (mi) | Paved Width (ft) |
|---|---|---|---|---|---|---|
| 0231 | PUBLIC | 7/24/2012 | 26,463 | 0.46 | 0.36 | 14 |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** | **Surface Type** |
| 0 | 0 | 1 | NO CURB AND GUTTER | NO CURB | POOR/45 | AS |

* Lane miles are based on 11' lane widths




720 360 0 720

Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0238

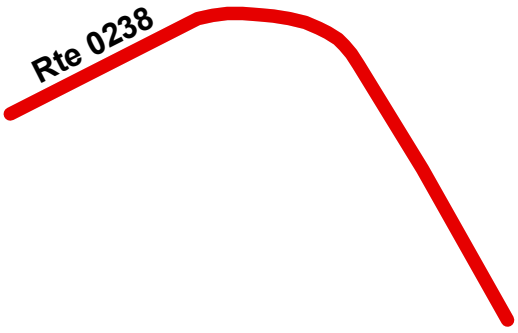
FLETCHERS BOATHOUSE ACCESS ROAD

FROM CANAL ROAD (NON NPS)

TO ROUTE 0900 (FLETCHERS BOATHOUSE PARKING)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Paved Length (mi) | Paved Width (ft) |
|---|---|---|---|---|---|---|
| 0238 | PUBLIC | 7/24/2012 | 7,793 | 0.13 | 0.12 | 12 |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** | **Surface Type** |
| 0 | 3 | 0 | CONCRETE CURB AND GUTTER | CONCRETE AND WOOD CURB | POOR/45 | AS |

* Lane miles are based on 11' lane widths




400 200 0 400 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0243

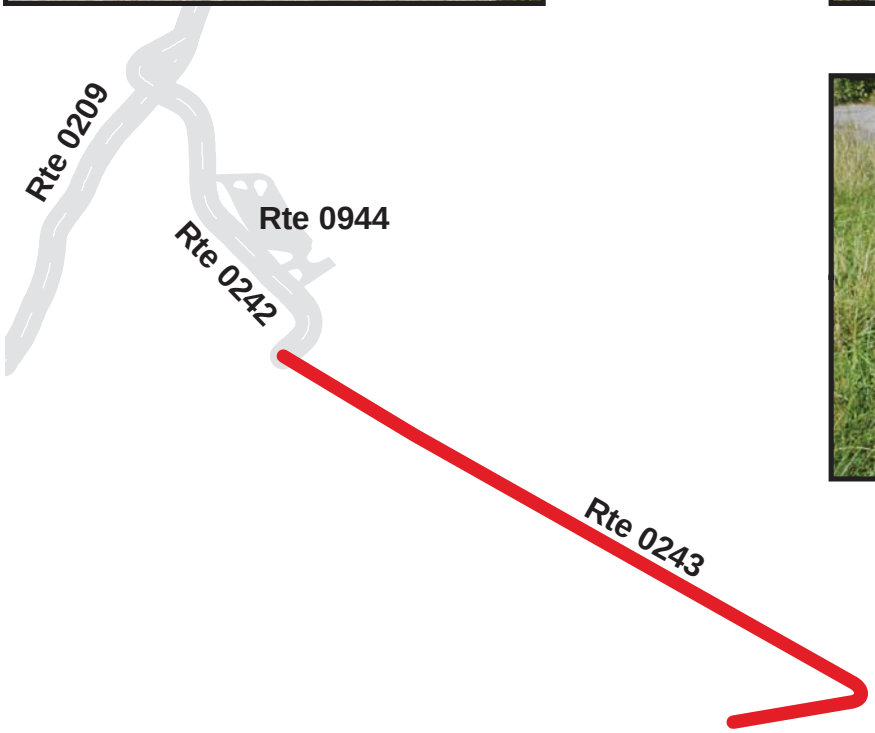
STARLIPER ROAD

FROM ROUTE 0242 (ANKENEY LANE)

TO HART ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Paved Length (mi) | Paved Width (ft) |
|---|---|---|---|---|---|---|
| 0243 | PUBLIC | 7/25/2012 | 23,021 | 0.40 | 0.44 | 10 |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** | **Surface Type** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | POOR/45 | AS |

* Lane miles are based on 11' lane widths




1,250 625 0 1,250 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 5000

SALISBURY STREET

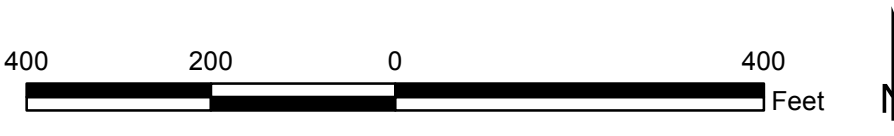
FROM CANAL BRIDGE

TO BOAT RAMP

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Paved Length (mi) | Paved Width (ft) |
|---|---|---|---|---|---|---|
| 5000 | PUBLIC | 7/25/2012 | N/A | 0.00 | 0.14 | 0 |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** | **Surface Type** |
| N/A | N/A | N/A | N/A | N/A | NC | AS |

* Lane miles are based on 11' lane widths

**NOTE: Additional images of Route 5000 have been provided for your use in the subfolder named ROUTE_5000_PHOTOS.**

# Section 7
# Parking Area
# Condition Rating Sheets

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0902

LOCK 10 PARKING

FROM GWMP ROUTE 0927 (CLARA BARTON PARKWAY LOCK 10 PARKING)

TO LOCK 10

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0902 | PUBLIC | 7/24/2012 | 5,323 | 0.09 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 1 | 1 | 1 | NO CURB AND GUTTER | CONCRETE CURB | POOR/45 |

* Lane miles are based on 11' lane widths


200 100 0 200 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0903A

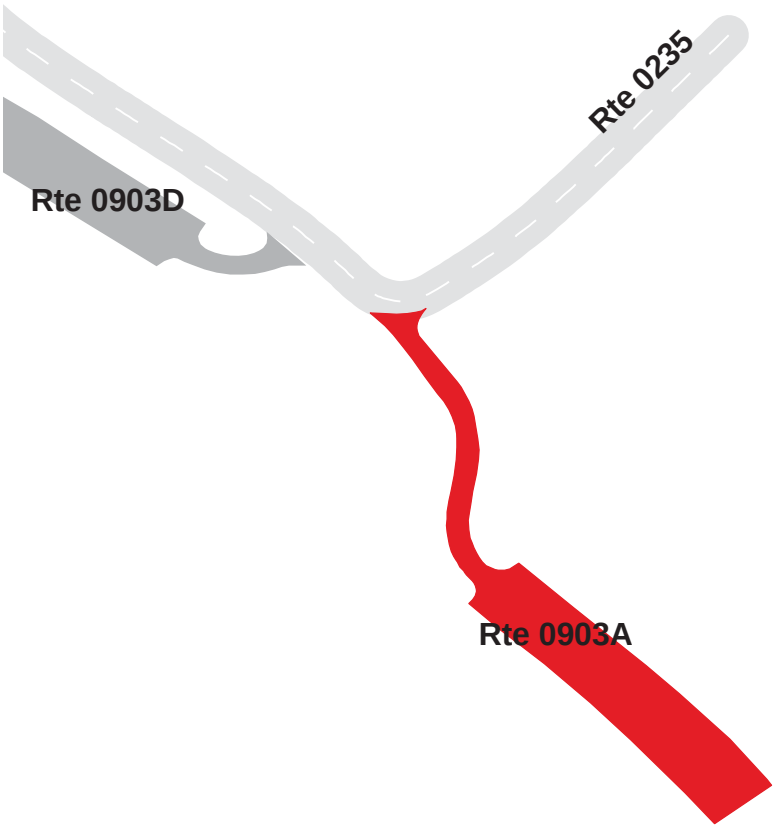
CARDEROCK PICNIC PARKING A

FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0903A | PUBLIC | 7/24/2012 | 26,345 | 0.45 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 2 | 1 | NO CURB AND GUTTER | CONCRETE CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




400 200 0 400 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0903B

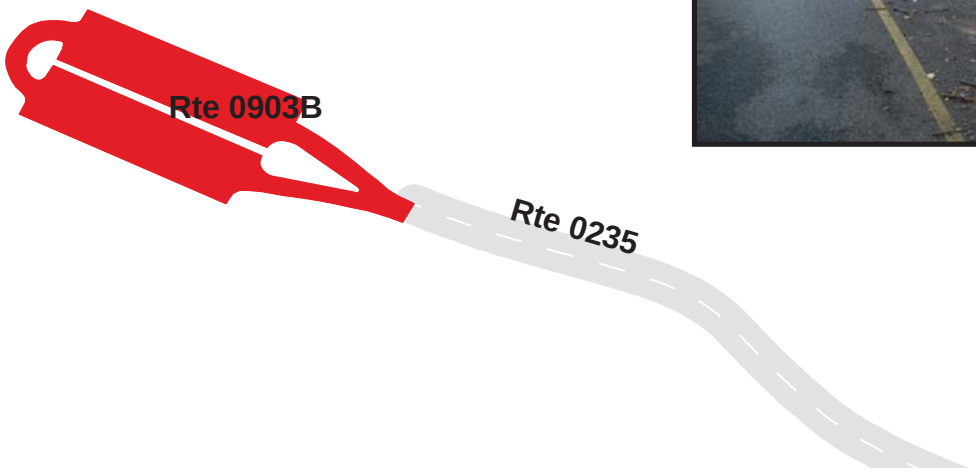
CARDEROCK PICNIC PARKING B

FROM END OF ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0903B | PUBLIC | 7/24/2012 | 31,280 | 0.54 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 1 | 0 | NO CURB AND GUTTER | CONCRETE CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




400 200 0 400 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0903C

CARDEROCK PICNIC PARKING C

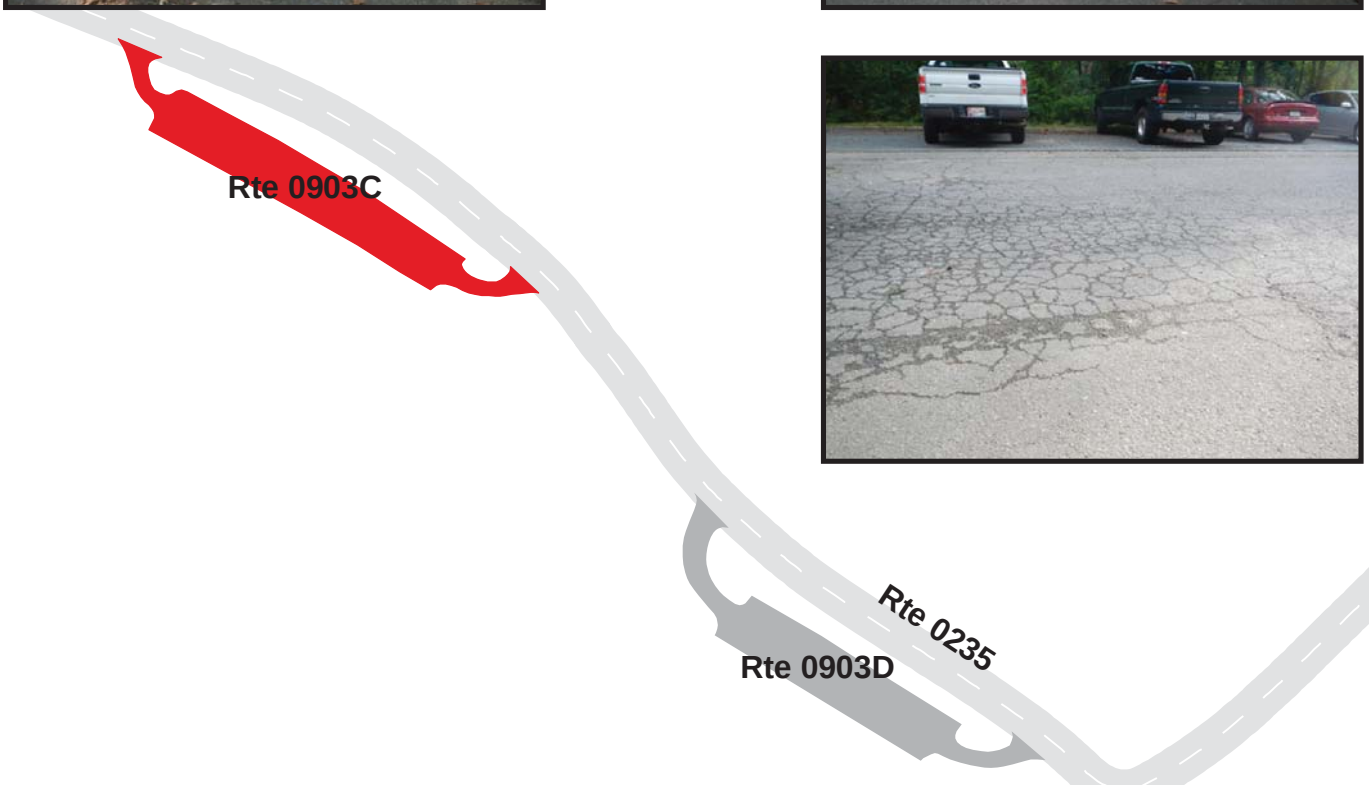
FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

TO ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0903C | PUBLIC | 7/24/2012 | 25,457 | 0.44 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 2 | 0 | 0 | NO CURB AND GUTTER | CONCRETE CURB | POOR/45 |

* Lane miles are based on 11' lane widths






480 240 0 480 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0903D

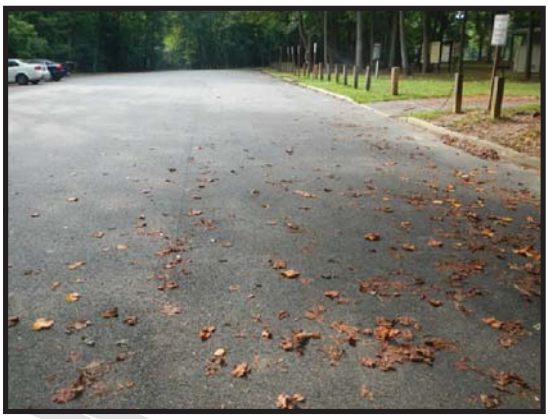
CARDEROCK PICNIC PARKING D

FROM ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

TO ROUTE 0235 (CARDEROCK PICNIC AREA ROAD)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0903D | PUBLIC | 7/24/2012 | 23,614 | 0.41 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 1 | NO CURB AND GUTTER | CONCRETE CURB | GOOD/90 |

* Lane miles are based on 11' lane widths






480 240 0 480 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

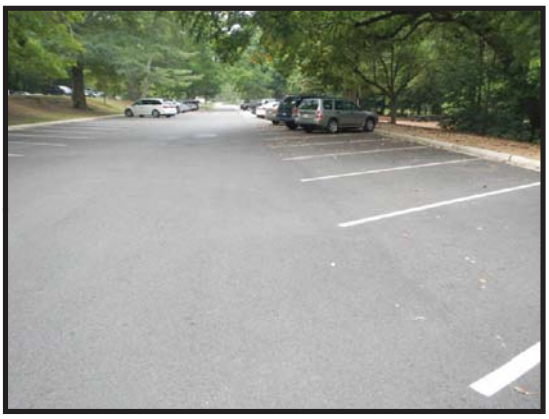
## Route 0907

GREAT FALLS PARKING

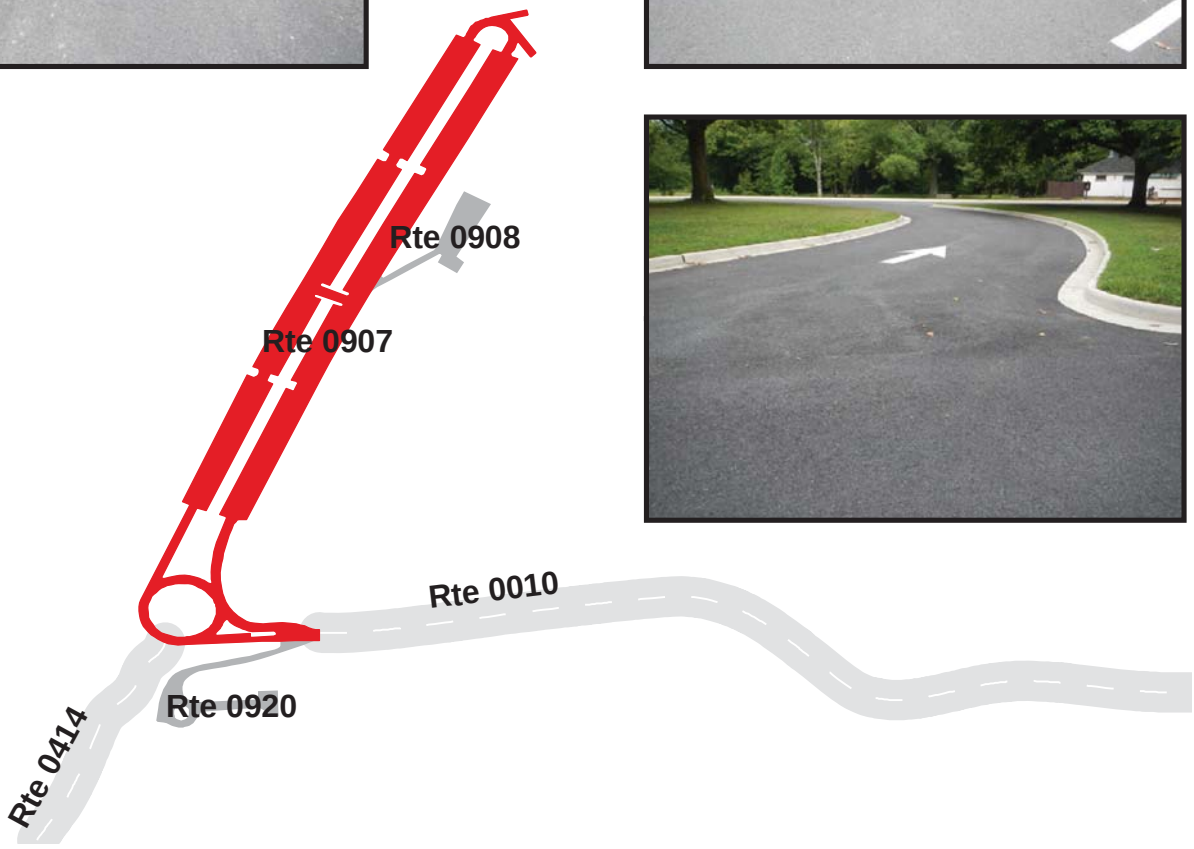
FROM END OF ROUTE 0010 (GREAT FALLS ENTRANCE ROAD)
TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0907 | PUBLIC | 7/24/2012 | 174,768 | 3.01 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 14 | 0 | CONCRETE CURB AND GUTTER | CONCRETE CURB | GOOD/90 |

* Lane miles are based on 11' lane widths







# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0908

GREAT FALLS MAINTENANCE AREA

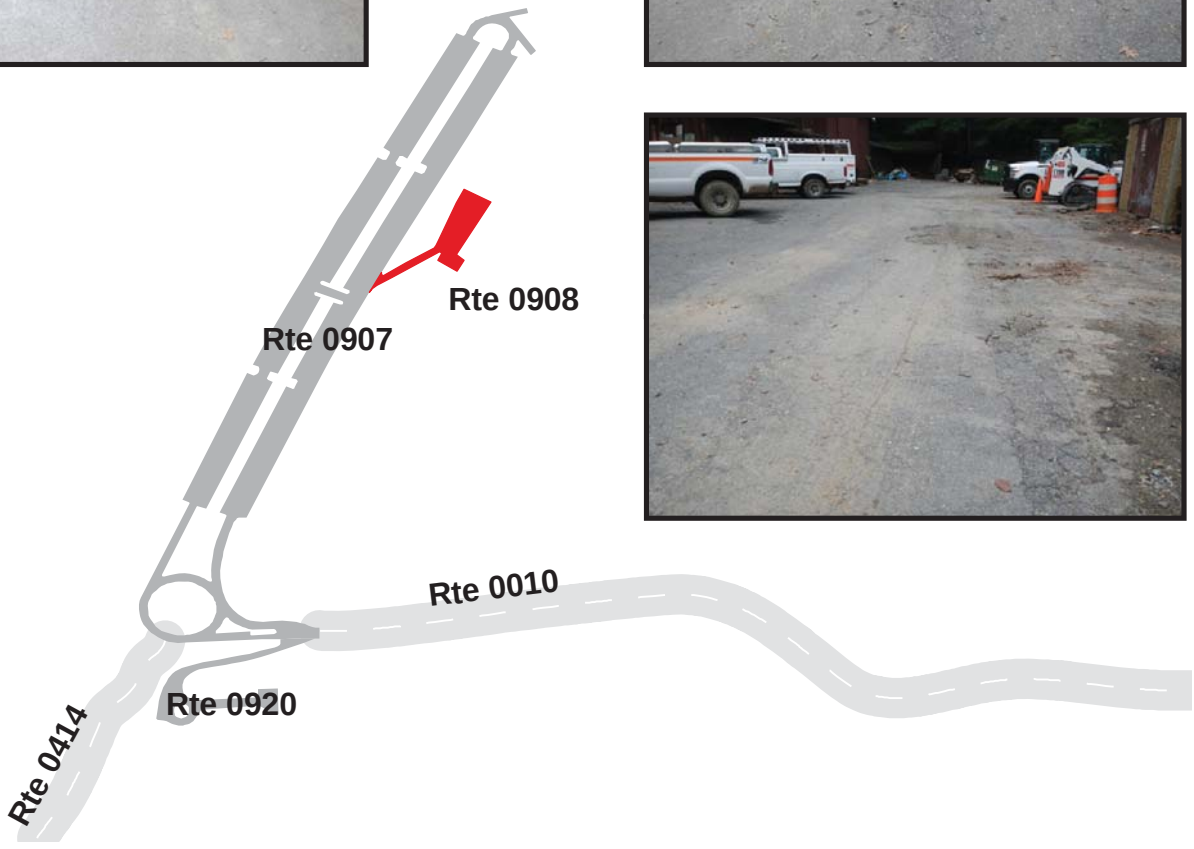
FROM ROUTE 0907 (GREAT FALLS PARKING)

TO MAINTENANCE AREA

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0908 | NONPUBLIC | 7/24/2012 | 12,797 | 0.22 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 1 | NO CURB AND GUTTER | NO CURB | POOR/45 |

* Lane miles are based on 11' lane widths





# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0912

SENECA PARKING

FROM END OF RILEY LOCK ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0912 | PUBLIC | 7/24/2012 | 27,074 | 0.47 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | ASPHALT CURB | POOR/45 |

* Lane miles are based on 11' lane widths


240 120 0 240 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0913

EDWARDS FERRY PARKING

FROM EDWARDS FERRY ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0913 | PUBLIC | 7/24/2012 | 21,169 | 0.36 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 1 | 0 | 3 | NO CURB AND GUTTER | CONCRETE CURB | FAIR/73 |

* Lane miles are based on 11' lane widths


320 160 0 320 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0917

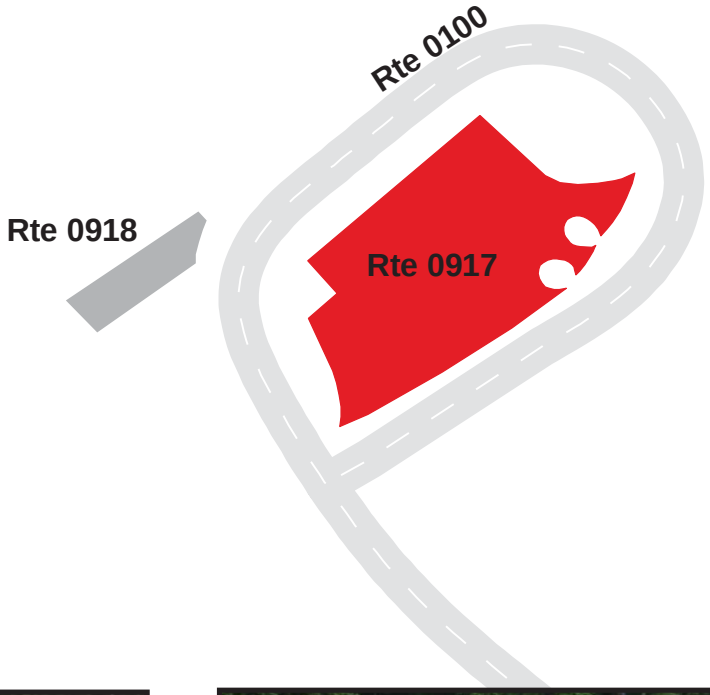
MONOCACY PARKING

FROM ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)

TO ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0917 | PUBLIC | 7/24/2012 | 11,181 | 0.19 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




200 100 0 200 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0918

MONOCACY BOAT RAMP TURNAROUND

FROM ROUTE 0100 (MONOCACY BOAT RAMP ACCESS)

TO TURNAROUND

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0918 | PUBLIC | 7/24/2012 | 1,392 | 0.02 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | POOR/45 |

* Lane miles are based on 11' lane widths


200 100 0 200 Feet

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0919

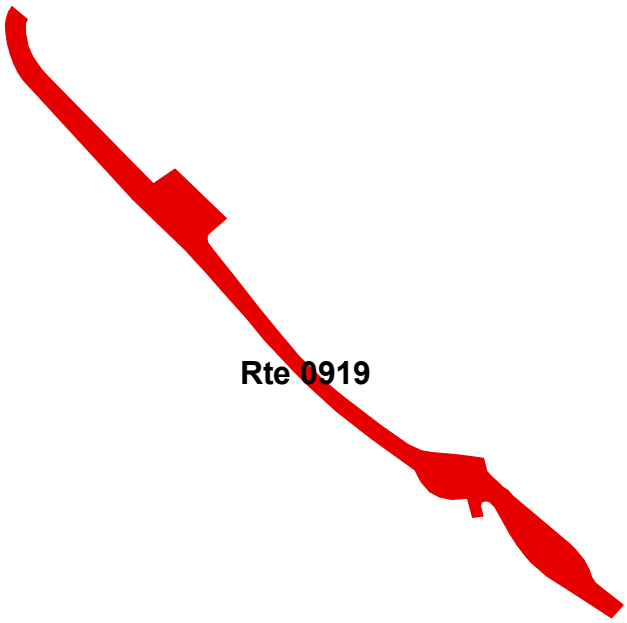
NOLANDS FERRY PARKING

FROM END OF ROUTE 0224 (NOLANDS FERRY ACCESS ROAD)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0919 | PUBLIC | 7/24/2012 | 28,934 | 0.50 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 2 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




480 240 0 480 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0920

ADMINISTRATIVE AND MAINTENANCE PARKING

FROM ROUTE 0907 (GREAT FALLS PARKING)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0920 | NONPUBLIC | 7/24/2012 | 16,620 | 0.29 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | ASPHALT CURB | POOR/45 |

* Lane miles are based on 11' lane widths







# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0921

POINT OF ROCKS PARKING

FROM END OF ROUTE 0223 (CANAL ROAD (POINT OF ROCKS, MARYLAND))

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0921 | PUBLIC | 7/24/2012 | 65,763 | 1.13 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 1 | 2 | NO CURB AND GUTTER | NO CURB | EXCELLENT/97 |

* Lane miles are based on 11' lane widths


400 200 0 400 Feet

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

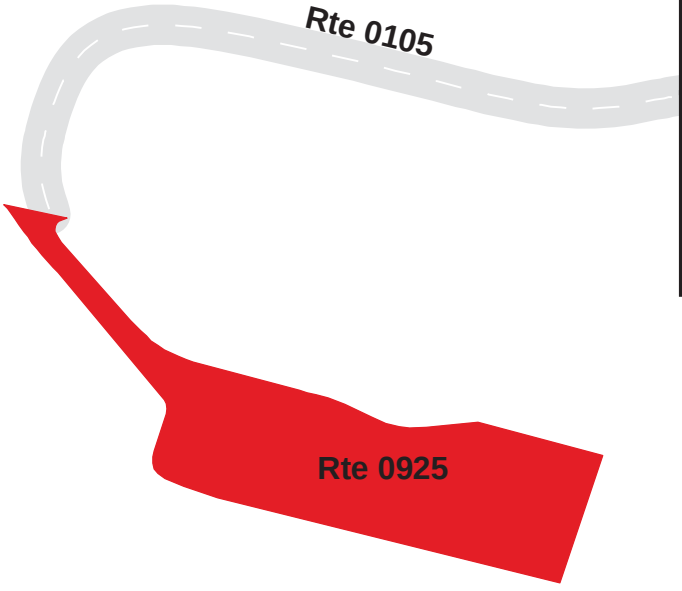
## Route 0925

BRUNSWICK AREA PARKING

FROM END OF ROUTE 0105 (BRUNSWICK BOAT RAMP ACCESS ROAD)
TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0925 | PUBLIC | 7/24/2012 | 19,742 | 0.34 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




240 120 0 240 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0927

LOCK 34 PARKING

FROM HARPERS FERRY ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0927 | PUBLIC | 7/24/2012 | 3,009 | 0.05 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 1 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths


90 45 0 90 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0928

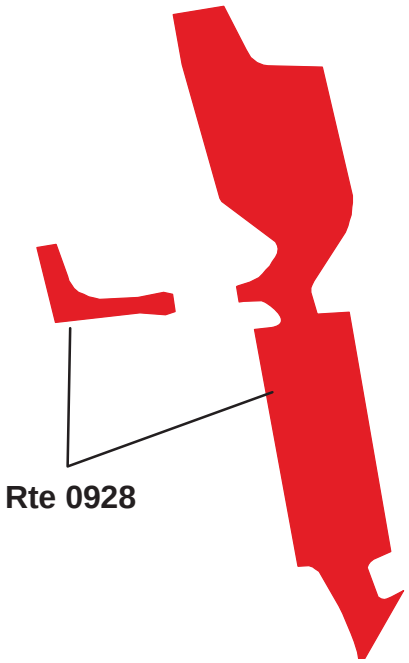
DARGAN BEND PARKING

FROM BACK ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0928 | PUBLIC | 7/24/2012 | 35,645 | 0.61 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 3 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




320 160 0 320

Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

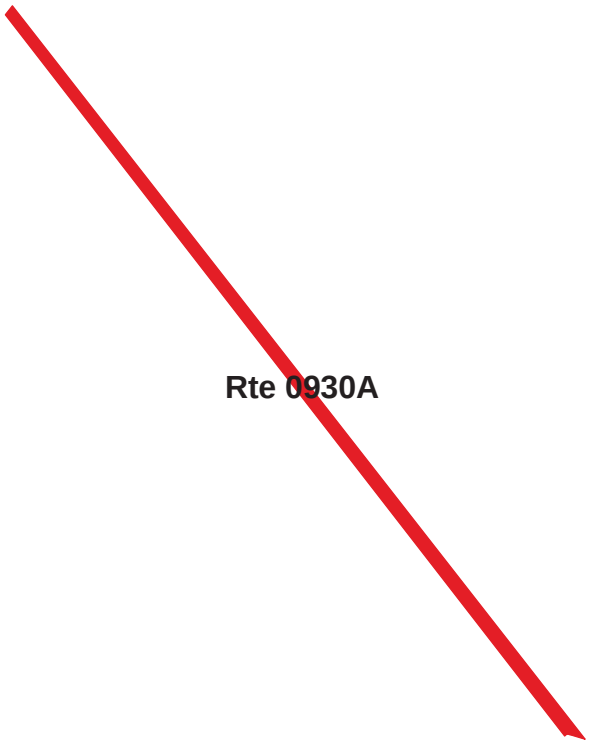
## Route 0930A

ANTIETAM CAMPGROUND PARKING A

ADJACENT TO CANAL ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0930A | PUBLIC | 7/24/2012 | 10,475 | 0.18 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




400 200 0 400

Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

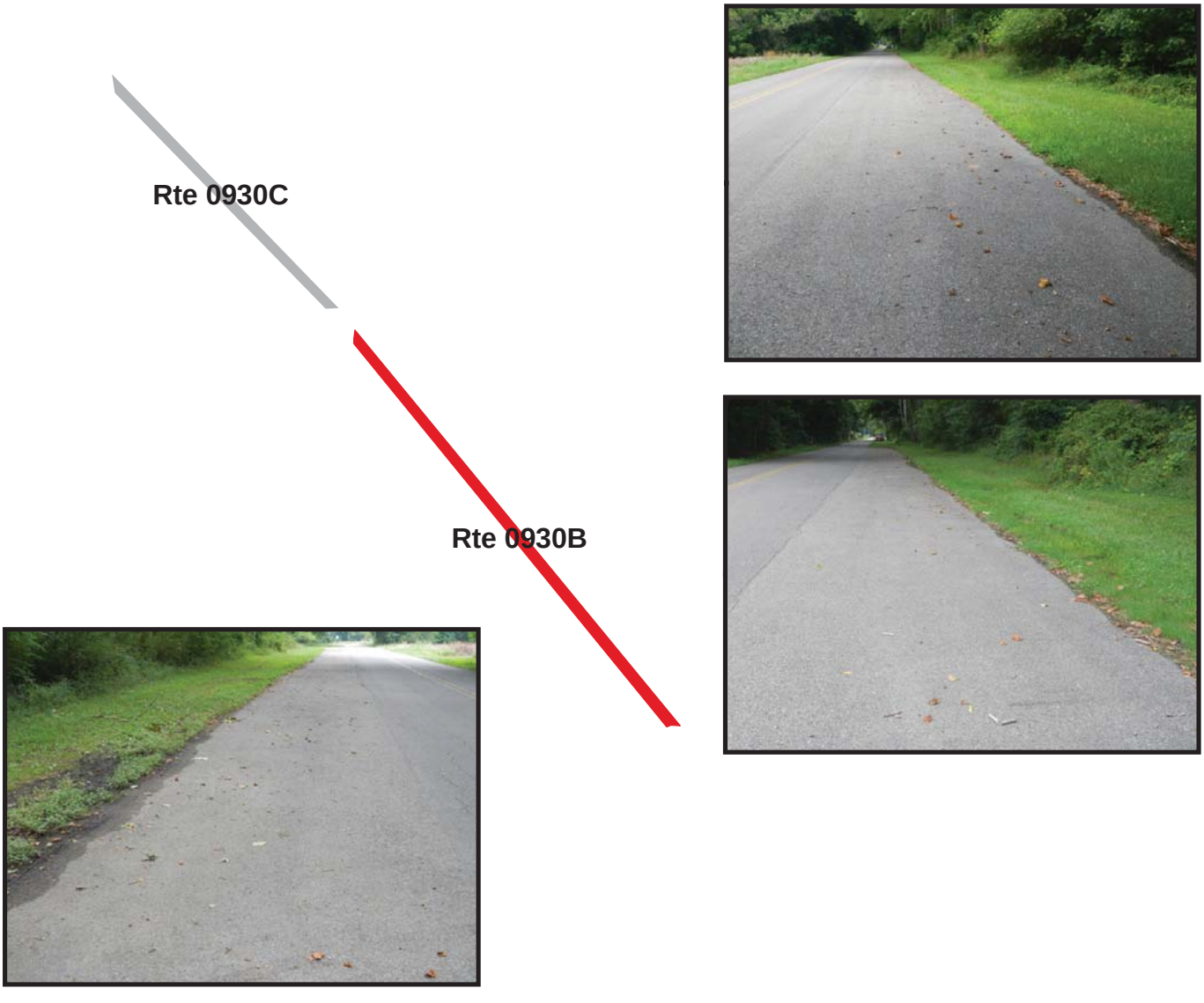
## Route 0930B

ANTIETAM CAMPGROUND PARKING B

ADJACENT TO CANAL ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0930B | PUBLIC | 7/24/2012 | 3,808 | 0.07 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths



# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

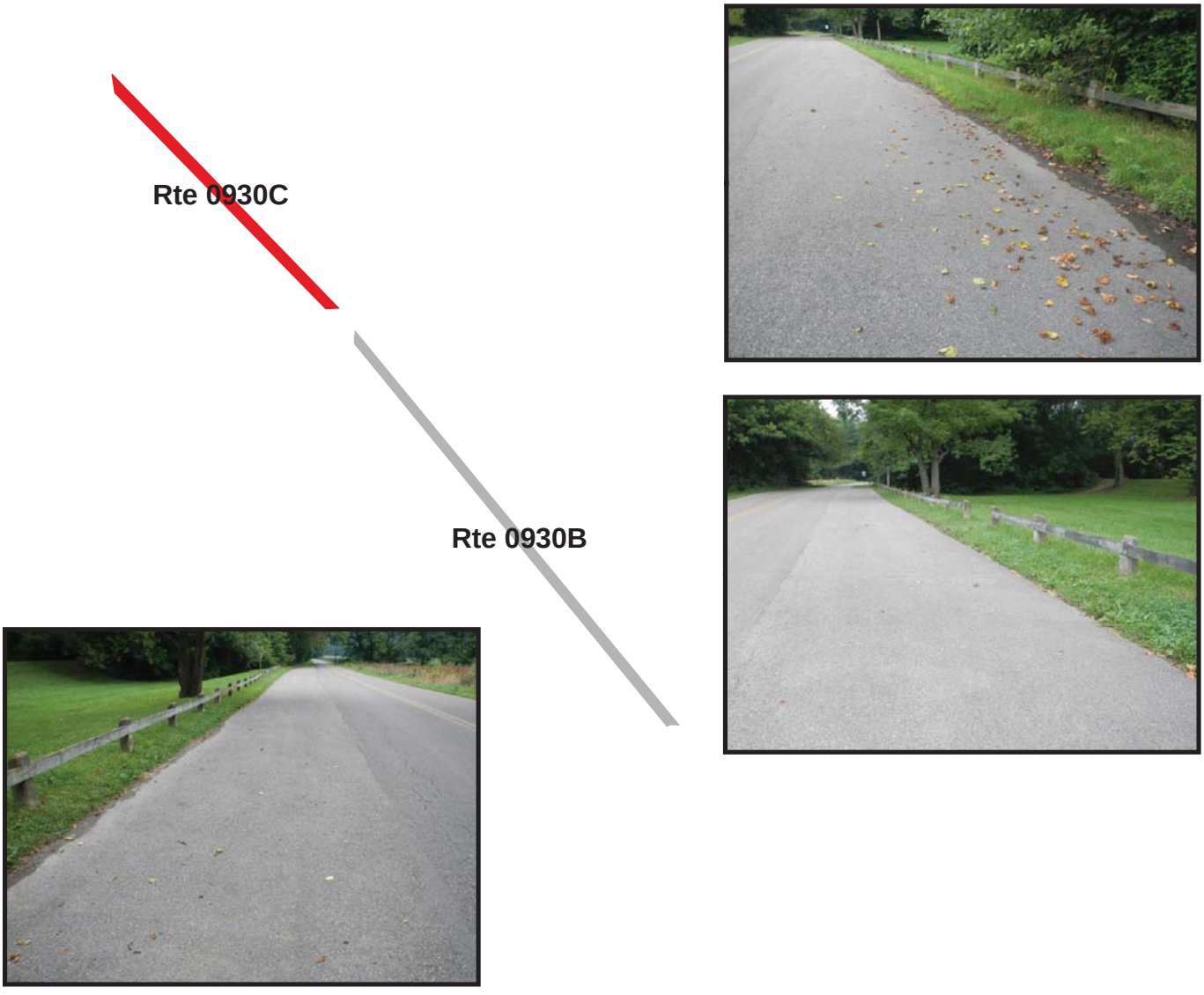
## Route 0930C

ANTIETAM CAMPGROUND PARKING C

ADJACENT TO CANAL ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0930C | PUBLIC | 7/24/2012 | 2,477 | 0.04 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths



# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0931A

LOCK 38 PARKING

FROM CANAL ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0931A | PUBLIC | 7/24/2012 | 7,837 | 0.14 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 2 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths


90 45 0 90 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0931B

LOCK 38 OVERFLOW PARKING

FROM CANAL ROAD

TO CANAL ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0931B | PUBLIC | 7/24/2012 | 15,674 | 0.27 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 1 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths


200 100 0 200 Feet

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0932

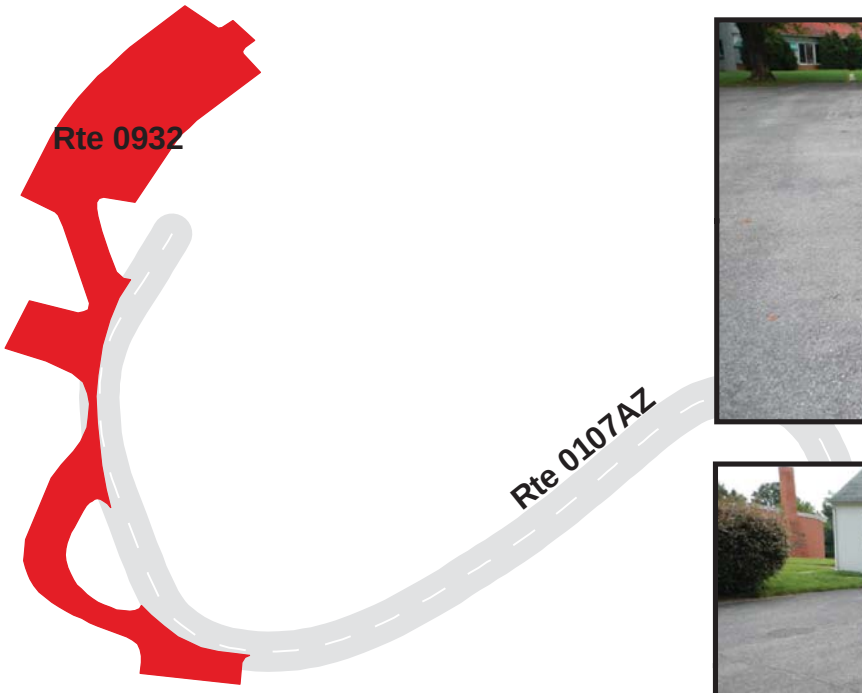
FERRY HILL SOUTH PARKING

FROM ROUTE 0107ZZ (FERRY HILL PLANTATION ENTRANCE ROADS)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0932 | PUBLIC | 7/24/2012 | 15,149 | 0.26 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




240 120 0 240 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0933

FERRY HILL NORTH PARKING

FROM ROUTE 0107ZZ (FERRY HILL PLANTATION ENTRANCE ROADS)
TO ROUTE 0402 (FERRY HILL ACCESS ROAD)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0933 | PUBLIC | 7/24/2012 | 9,892 | 0.17 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | ASPHALT CURB | FAIR/73 |

* Lane miles are based on 11' lane widths


240 120 0 240
Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

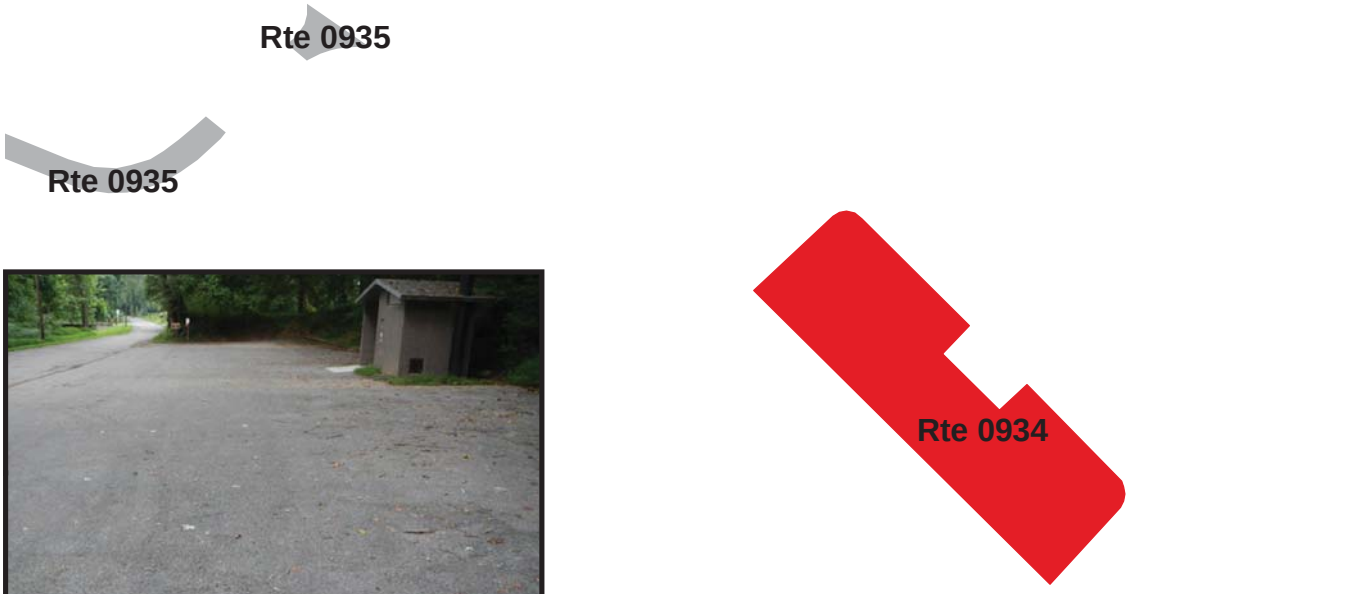
## Route 0934

SNYDERS LANDING PARKING

ADJACENT TO SYNDERS LANDING ROAD

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0934 | PUBLIC | 7/24/2012 | 7,082 | 0.12 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | CONCRETE CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




160 80 0 160 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0935

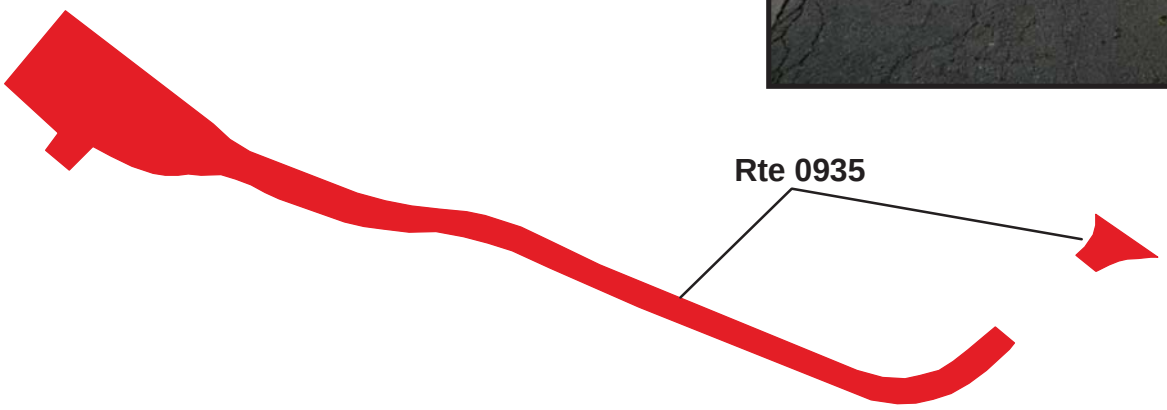
SNYDERS LANDING BOAT RAMP PARKING LOT

FROM SYNDERS LANDING ROAD

TO BOAT RAMP

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0935 | PUBLIC | 7/24/2012 | 6,309 | 0.11 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 3 | NO CURB AND GUTTER | NO CURB | POOR/45 |

* Lane miles are based on 11' lane widths




160 80 0 160 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0936

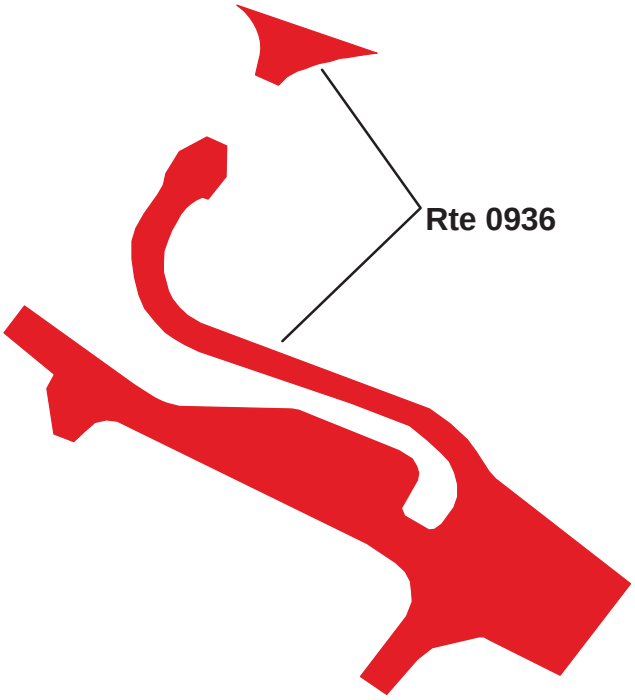
TAYLORS LANDING PARKING

FROM TAYLORS LANDING ROAD

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0936 | PUBLIC | 7/25/2012 | 18,136 | 0.31 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 3 | NO CURB AND GUTTER | CONCRETE CURB | FAIR/73 |

* Lane miles are based on 11' lane widths




200 100 0 200 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0937

DAM 4 PARKING

ADJACENT TO ROUTE 0212 (BIG SLACKWATER ACCESS ROAD)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0937 | PUBLIC | 7/25/2012 | 2,153 | 0.04 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths


90 45 0 90 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0938

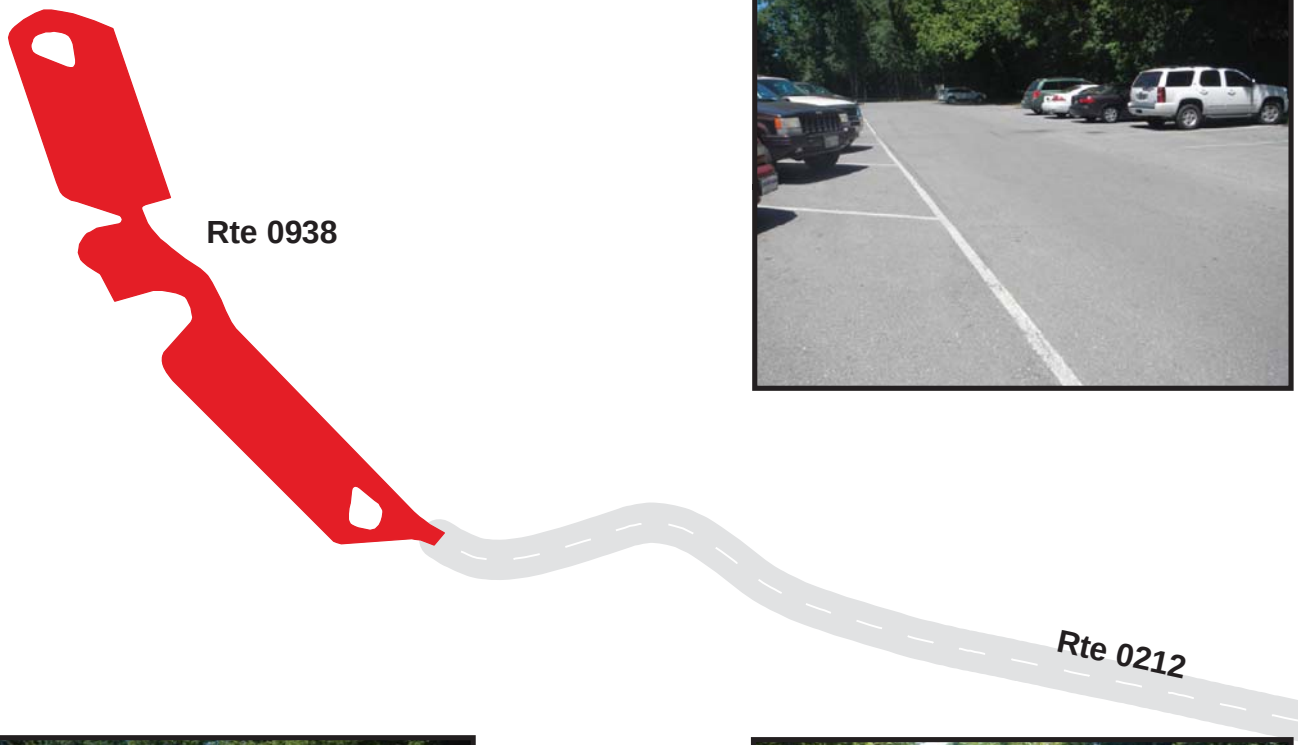
BIG SLACKWATER PARKING

FROM END OF ROUTE 0212 (BIG SLACKWATER ACCESS ROAD)
TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0938 | PUBLIC | 7/25/2012 | 63,977 | 1.10 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 1 | NO CURB AND GUTTER | ASPHALT CURB | GOOD/90 |

* Lane miles are based on 11' lane widths






480 240 0 480
Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0944

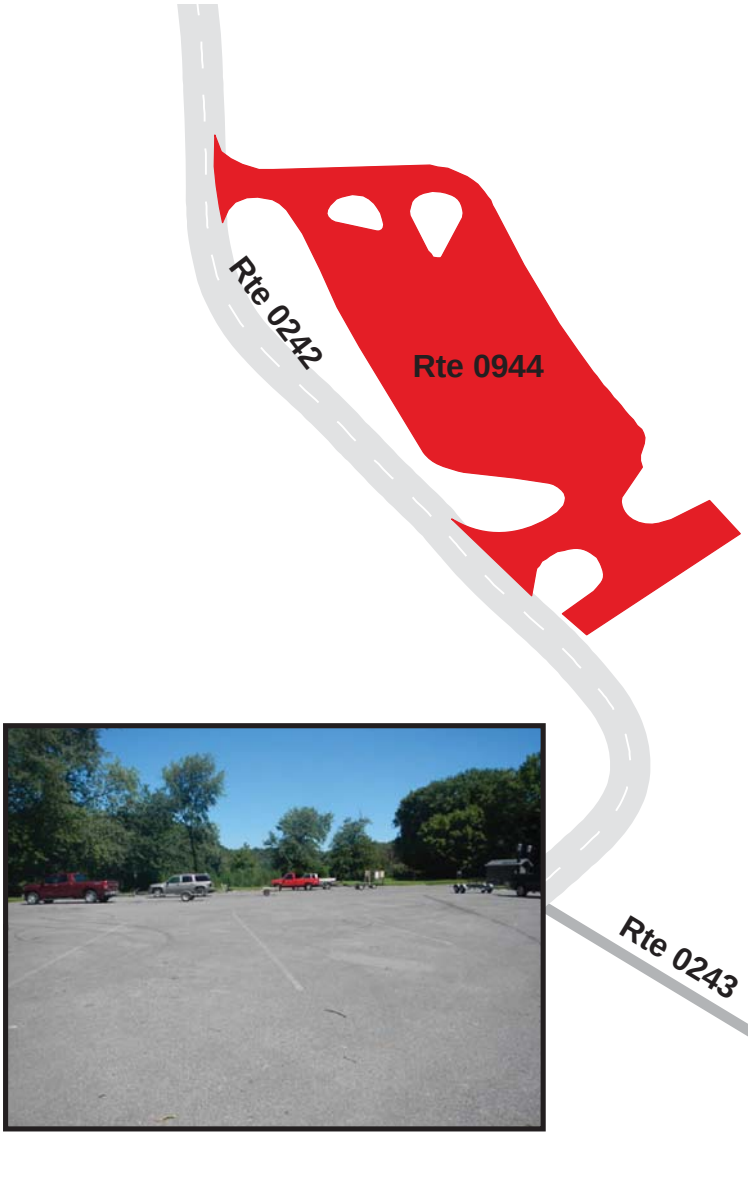
FOUR LOCKS PARKING

FROM ROUTE 0242 (ANKENEY LANE)

TO ROUTE 0242 (ANKENEY LANE)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0944 | PUBLIC | 7/25/2012 | 47,469 | 0.82 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | ASPHALT CURB | FAIR/73 |

* Lane miles are based on 11' lane widths






320 160 0 320 Feet

N

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0945

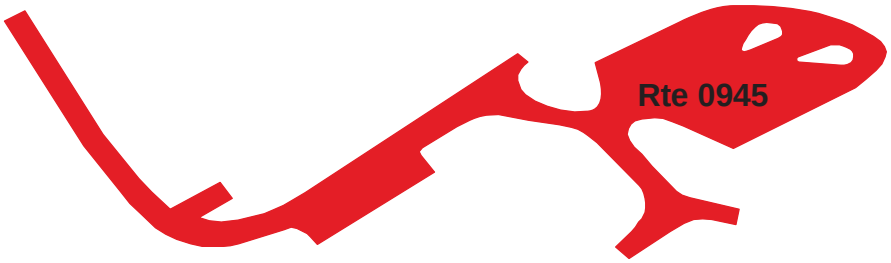
MCCOYS FERRY PARKING

FROM ROUTE 0102 (MCCOYS FERRY UNPAVED ENTRANCE ROAD)

TO ROUTE 0240 (MCCOYS FERRY CAMPGROUND ROAD)

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0945 | PUBLIC | 7/25/2012 | 31,669 | 0.55 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 1 | 0 | 1 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




320 160 0 320

Feet

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0946

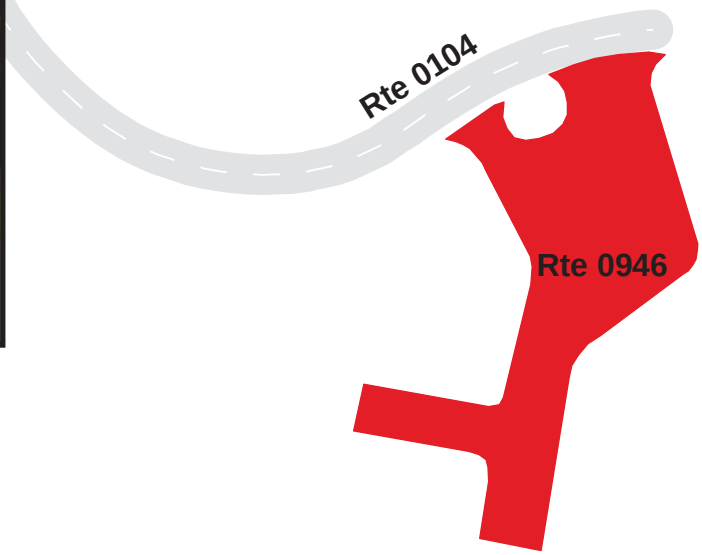
TONOLOWAY PARKING

FROM ROUTE 0104 (LITTLE TONOLOWAY ENTRANCE ROAD)

TO PARKING

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0946 | PUBLIC | 7/26/2012 | 8,832 | 0.15 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 0 | NO CURB AND GUTTER | NO CURB | GOOD/90 |

* Lane miles are based on 11' lane widths




160 80 0 160 Feet

# CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK

## Route 0948

HANCOCK MAINTENANCE AREA

FROM END OF ROUTE 0250 (HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD)
TO MAINTENANCE AREA

| Route Number | Public / NonPublic | Date Visited | Area (sq ft) | Lane Miles * | Surface Type |
|---|---|---|---|---|---|
| 0948 | NONPUBLIC | 7/25/2012 | 25,867 | 0.45 | AS |
| **Culverts** | **Drop Inlets** | **Gates** | **Curb & Gutter** | **Curb** | **PCR** |
| 0 | 0 | 1 | NO CURB AND GUTTER | NO CURB | FAIR/73 |

* Lane miles are based on 11' lane widths


320 160 0 320 Feet

# Section 8
# Parkwide/Route
# Maintenance Features Summaries

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

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

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5 along DCV driven routes, therefore the culvert, drop inlet, and gate counts below reflect only the Manually Rated Routes and Paved Parking areas collected in Cycle 5.

| FEATURE | LINEAR FEET | COUNT |
|---|---|---|
| BRIDGE | -- | 1 |
| CATTLE GUARD | -- | 0 |
| CULVERT | -- | 5 |
| CURB | 4,526 | -- |
| DROP INLET | -- | 25 |
| GATE | -- | 31 |
| GUARD/GUIDE RAIL | 1,964 | -- |
| CABLE | 0 | -- |
| NON-CABLE | 1,964 | -- |
| GUARD/GUIDE WALL | 354 | -- |
| BOLLARD | 233 | -- |
| TEMPORARY BARRIER | 0 | -- |
| NON TEMP/BOLLARD | 121 | -- |
| INTERSECTION | -- | 84 |
| LOW WATER CROSSING | 0 | 0 |
| MILE MARKER | -- | 0 |
| OVERPASS | -- | 1 |
| PARK BOUNDARY | -- | 3 |
| PAVED DITCH | 0 | -- |
| PULLOUT | 106 | 1 |
| RAILROAD CROSSING | -- | 0 |
| RETAINING WALL | 469 | 6 |
| SIGN | -- | 153 |
| STATE BOUNDARY | -- | 0 |
| TRAFFIC LIGHT | -- | 0 |
| TUNNEL | 285 | 3 |

# CHOH: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5. However a culvert could appear below if it has a BIP structure number associated with it.

| FEATURE | ROUTE 0010 GREAT FALLS ENTRANCE ROAD | ROUTE 0100 MONOCACY BOAT RAMP ACCESS | ROUTE 0103 DENEEN ROAD | ROUTE 0104 LITTLE TONOLOWAY ENTRANCE ROAD | ROUTE 0105 BRUNSWICK BOAT RAMP ACCESS ROAD | ROUTE 0107ZZ FERRY HILL PLANTATION ENTRANCE ROADS | UNIT |
|---|---|---|---|---|---|---|---|
| BRIDGE | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| CATTLE GUARD | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| CULVERT | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| CURB | 2,889 | 0 | 0 | 0 | 0 | 32 | LINEAR FEET |
| DROP INLET | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| GATE | 1 | 1 | 0 | 0 | 1 | 1 | EACH |
| GUARD/GUIDE RAIL | 0 | 195 | 0 | 0 | 159 | 0 | LINEAR FEET |
| CABLE | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| NON-CABLE | 0 | 195 | 0 | 0 | 159 | 0 | LINEAR FEET |
| GUARD/GUIDE WALL | 0 | 0 | 0 | 185 | 0 | 0 | LINEAR FEET |
| BOLLARD | 0 | 0 | 0 | 185 | 0 | 0 | LINEAR FEET |
| TEMPORARY BARRIER | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| NON TEMP/BOLLARD | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| INTERSECTION | 5 | 10 | 4 | 4 | 5 | 8 | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| MILE MARKER | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| OVERPASS | 0 | 0 | 0 | 0 | 1 | 0 | EACH |
| PARK BOUNDARY | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| PAVED DITCH | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| PULLOUT | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| PULLOUT | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| RAILROAD CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| RETAINING WALL | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| RETAINING WALL | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| SIGN | 51 | 10 | 5 | 2 | 3 | 0 | EACH |
| STATE BOUNDARY | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| TRAFFIC LIGHT | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| TUNNEL | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| TUNNEL | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |

# CHOH: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5. However a culvert could appear below if it has a BIP structure number associated with it.

| FEATURE | ROUTE 0206 FIFTEEN MILE CREEK ROAD | ROUTE 0209 FOUR LOCKS ROAD | ROUTE 0212 BIG SLACKWATER ACCESS ROAD | ROUTE 0226 MONOCACY ROAD | ROUTE 0235 CARDEROCK PICNIC AREA ROAD | ROUTE 0242 ANKENEY LANE | UNIT |
|---|---|---|---|---|---|---|---|
| BRIDGE | 0 | 0 | 1 | 0 | 0 | 0 | EACH |
| CATTLE GUARD | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| CULVERT | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| CURB | 0 | 0 | 0 | 0 | 523 | 0 | LINEAR FEET |
| DROP INLET | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| GATE | 0 | 0 | 1 | 0 | 0 | 0 | EACH |
| GUARD/GUIDE RAIL | 0 | 570 | 522 | 32 | 0 | 0 | LINEAR FEET |
| CABLE | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| NON-CABLE | 0 | 570 | 522 | 32 | 0 | 0 | LINEAR FEET |
| GUARD/GUIDE WALL | 0 | 95 | 0 | 0 | 48 | 0 | LINEAR FEET |
| BOLLARD | 0 | 0 | 0 | 0 | 48 | 0 | LINEAR FEET |
| TEMPORARY BARRIER | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| NON TEMP/BOLLARD | 0 | 95 | 0 | 0 | 0 | 0 | LINEAR FEET |
| INTERSECTION | 4 | 3 | 5 | 4 | 8 | 7 | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| MILE MARKER | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| OVERPASS | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| PARK BOUNDARY | 0 | 1 | 0 | 1 | 1 | 0 | EACH |
| PAVED DITCH | 0 | 0 | 0 | 0 | 0 | 0 | LINEAR FEET |
| PULLOUT | 0 | 1 | 0 | 0 | 0 | 0 | EACH |
| PULLOUT | 0 | 106 | 0 | 0 | 0 | 0 | LINEAR FEET |
| RAILROAD CROSSING | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| RETAINING WALL | 1 | 3 | 0 | 0 | 0 | 1 | EACH |
| RETAINING WALL | 116 | 258 | 0 | 0 | 0 | 42 | LINEAR FEET |
| SIGN | 2 | 9 | 21 | 8 | 15 | 12 | EACH |
| STATE BOUNDARY | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| TRAFFIC LIGHT | 0 | 0 | 0 | 0 | 0 | 0 | EACH |
| TUNNEL | 1 | 0 | 0 | 0 | 1 | 1 | EACH |
| TUNNEL | 48 | 0 | 0 | 0 | 116 | 121 | LINEAR FEET |

# CHOH: DCV ROUTE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5. However a culvert could appear below if it has a BIP structure number associated with it.

| FEATURE | ROUTE 0244 CANAL STREET (HANCOCK, MARYLAND) | ROUTE 0250 HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD | ROUTE 0414 LOCK 19 ACCESS ROAD | | UNIT |
|---|---|---|---|---|---|
| BRIDGE | 0 | 0 | 0 | | EACH |
| CATTLE GUARD | 0 | 0 | 0 | | EACH |
| CULVERT | 0 | 0 | 0 | | EACH |
| CURB | 0 | 0 | 1,082 | | LINEAR FEET |
| DROP INLET | 0 | 0 | 0 | | EACH |
| GATE | 0 | 1 | 0 | | EACH |
| GUARD/GUIDE RAIL | 0 | 486 | 0 | | LINEAR FEET |
| CABLE | 0 | 0 | 0 | | LINEAR FEET |
| NON-CABLE | 0 | 486 | 0 | | LINEAR FEET |
| GUARD/GUIDE WALL | 26 | 0 | 0 | | LINEAR FEET |
| BOLLARD | 0 | 0 | 0 | | LINEAR FEET |
| TEMPORARY BARRIER | 0 | 0 | 0 | | LINEAR FEET |
| NON TEMP/BOLLARD | 26 | 0 | 0 | | LINEAR FEET |
| INTERSECTION | 9 | 5 | 3 | | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | | EACH |
| LOW WATER CROSSING | 0 | 0 | 0 | | LINEAR FEET |
| MILE MARKER | 0 | 0 | 0 | | EACH |
| OVERPASS | 0 | 0 | 0 | | EACH |
| PARK BOUNDARY | 0 | 0 | 0 | | EACH |
| PAVED DITCH | 0 | 0 | 0 | | LINEAR FEET |
| PULLOUT | 0 | 0 | 0 | | EACH |
| PULLOUT | 0 | 0 | 0 | | LINEAR FEET |
| RAILROAD CROSSING | 0 | 0 | 0 | | EACH |
| RETAINING WALL | 1 | 0 | 0 | | EACH |
| RETAINING WALL | 53 | 0 | 0 | | LINEAR FEET |
| SIGN | 6 | 8 | 1 | | EACH |
| STATE BOUNDARY | 0 | 0 | 0 | | EACH |
| TRAFFIC LIGHT | 0 | 0 | 0 | | EACH |
| TUNNEL | 0 | 0 | 0 | | EACH |
| TUNNEL | 0 | 0 | 0 | | LINEAR FEET |

# CHOH: STRUCTURE LIST

| ROUTE NUMBER | FUNCTIONAL CLASS | MILEPOST START | MILEPOST END | FEATURE | STRUCTURE NUMBER |
|---|---|---|---|---|---|
| 0212 | 2 | 0.978 | 0.988 | BRIDGE | 3100-008 |
| 0235 | 3 | 0.000 | 0.022 | TUNNEL | 3100-052 |
| 0242 | 2 | 0.038 | 0.061 | TUNNEL | 3100-020 |

# Section 9
# Route Maintenance Features
# Road Logs

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0010: GREAT FALLS ENTRANCE ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM FALLS ROAD / MARYLAND ROUTE 189 |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED ROUTE (FALLS ROAD (STATE ROUTE 189) / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (MACARTHUR BOULEVARD / NON NPS) |
| 0.003 | 0.072 | CURB-AND-GUTTER | LEFT | N/A |
| 0.004 | 0.004 | SIGN | LEFT | GUIDE, CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK |
| 0.007 | 0.007 | GATE | N/A | N/A |
| 0.007 | 0.042 | CURB-AND-GUTTER | RIGHT | N/A |
| 0.009 | 0.009 | SIGN | LEFT | REGULATORY, STOP |
| 0.009 | 0.009 | SIGN | RIGHT | REGULATORY, STOP |
| 0.010 | 0.010 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.010 | 0.010 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.013 | 0.013 | SIGN | RIGHT | GUIDE, PARK CLOSED AT DARK |
| 0.013 | 0.013 | SIGN | RIGHT | GUIDE, U.S. FEE AREA |
| 0.013 | 0.013 | SIGN | RIGHT | GUIDE, ENTRANCE FEES $ 5.00 PER VEHICLE $ 3.00 PER PERSON (WITHOUT VEHICLE) PASSES AVAILABLE |
| 0.046 | 0.046 | SIGN | RIGHT | REGULATORY, RADAR ENFORCED |
| 0.046 | 0.046 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 25 |
| 0.088 | 0.088 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.088 | 0.088 | SIGN | RIGHT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.118 | 0.118 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.160 | 0.160 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.233 | 0.233 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 25 |
| 0.241 | 0.241 | SIGN | LEFT | REGULATORY, SPEED LIMIT 25 |
| 0.275 | 0.275 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.289 | 0.336 | CURB-AND-GUTTER | LEFT | N/A |
| 0.344 | 0.344 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.349 | 0.349 | INTERSECTION | RIGHT | UNPAVED PARKING (NON NPS) |
| 0.350 | 0.388 | CURB-AND-GUTTER | RIGHT | N/A |
| 0.355 | 0.355 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.362 | 0.362 | SIGN | LEFT | REGULATORY, NO PARKING |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0010: GREAT FALLS ENTRANCE ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.366 | 0.384 | CURB-AND-GUTTER | LEFT | N/A |
| 0.372 | 0.372 | SIGN | RIGHT | GUIDE, VFW POST 5633 CABIN JOHN MEMORIAL |
| 0.396 | 0.396 | INTERSECTION | RIGHT | UNPAVED PARKING (NON NPS) |
| 0.419 | 0.419 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.502 | 0.502 | SIGN | RIGHT | WARNING, SPEED LIMIT 15 |
| 0.504 | 0.504 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.521 | 0.521 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.521 | 0.521 | SIGN | LEFT | REGULATORY, SPEED LIMIT 25 |
| 0.552 | 0.552 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.569 | 0.569 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.633 | 0.633 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.635 | 0.635 | SIGN | RIGHT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.635 | 0.635 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.639 | 0.639 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 15 |
| 0.668 | 0.668 | SIGN | LEFT | REGULATORY, SPEED LIMIT 15 |
| 0.676 | 0.676 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.710 | 0.859 | CURB-AND-GUTTER | LEFT | N/A |
| 0.758 | 0.758 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 0.799 | 0.930 | CURB-AND-GUTTER | RIGHT | N/A |
| 0.869 | 0.869 | SIGN | RIGHT | WARNING, 15 |
| 0.905 | 0.905 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.911 | 0.911 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.916 | 0.916 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.918 | 0.918 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.921 | 0.921 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.945 | 0.945 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 1.004 | 1.004 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 1.038 | 1.038 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 1.049 | 1.049 | SIGN | LEFT | REGULATORY, NO PARKING |
| 1.061 | 1.061 | SIGN | RIGHT | REGULATORY, NO PARKING |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0010: GREAT FALLS ENTRANCE ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 1.080 | 1.080 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 15 |
| 1.089 | 1.142 | CURB-AND-GUTTER | LEFT | N/A |
| 1.108 | 1.108 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 1.116 | 1.116 | SIGN | LEFT | REGULATORY, NO PARKING |
| 1.126 | 1.126 | SIGN | RIGHT | REGULATORY, NO PARKING |
| 1.136 | 1.143 | CURB-AND-GUTTER | RIGHT | N/A |
| 1.137 | 1.137 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 1.143 | 1.143 | INTERSECTION | N/A | ROUTE 0907 (GREAT FALLS PARKING) |
| 1.143 | 1.143 | ROUTE END | N/A | TO ROUTE 0907 (GREAT FALLS PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0100: MONOCACY BOAT RAMP ACCESS

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM ROUTE 0226 (MONOCACY ROAD) |
| 0.000 | 0.000 | INTERSECTION | LEFT | ROUTE 0226 (MONOCACY ROAD) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | ROUTE 0226 (MONOCACY ROAD) |
| 0.014 | 0.014 | GATE | N/A | N/A |
| 0.015 | 0.015 | SIGN | LEFT | REGULATORY, CLOSED |
| 0.015 | 0.015 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.027 | 0.027 | INTERSECTION | RIGHT | UNPAVED ROAD |
| 0.104 | 0.104 | INTERSECTION | RIGHT | ROUTE 0100 (MONOCACY BOAT RAMP ACCESS) |
| 0.111 | 0.111 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.111 | 0.111 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.111 | 0.111 | SIGN | RIGHT | GUIDE, C & O CANAL NHP REGULATIONS |
| 0.131 | 0.131 | INTERSECTION | LEFT | ROUTE 0918 (MONOCACY BOAT RAMP TURNAROUND) |
| 0.134 | 0.134 | SIGN | LEFT | REGULATORY, MAXIMUM SPEED KNOTS |
| 0.134 | 0.134 | SIGN | LEFT | WARNING, UNABLE TO READ FROM VIDEO |
| 0.134 | 0.171 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.134 | 0.134 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.134 | 0.134 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.137 | 0.137 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.188 | 0.188 | INTERSECTION | RIGHT | ROUTE 0917 (MONOCACY PARKING) |
| 0.194 | 0.194 | INTERSECTION | RIGHT | ROUTE 0917 (MONOCACY PARKING) |
| 0.210 | 0.210 | INTERSECTION | RIGHT | ROUTE 0917 (MONOCACY PARKING) |
| 0.225 | 0.225 | INTERSECTION | LEFT | ROUTE 0100 (MONOCACY BOAT RAMP ACCESS) |
| 0.225 | 0.225 | INTERSECTION | RIGHT | ROUTE 0100 (MONOCACY BOAT RAMP ACCESS) |
| 0.225 | 0.225 | ROUTE END | N/A | TO END OF LOOP |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0103: DENEEN ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM INTERSECTION WITH WILLOW ROAD AND SEAVOLT ROAD |
| 0.000 | 0.000 | INTERSECTION | LEFT | PAVED ROUTE (SEAVOLT ROAD / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (WILLOW ROAD / NON NPS) |
| 0.004 | 0.004 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.004 | 0.004 | SIGN | LEFT | WARNING, 11' - 6" |
| 0.024 | 0.024 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 25 |
| 0.025 | 0.025 | SIGN | LEFT | WARNING, 15 M.P.H. |
| 0.025 | 0.025 | SIGN | LEFT | WARNING, ONE LANE TUNNEL |
| 0.110 | 0.110 | INTERSECTION | LEFT | ROUTE 0957 (COHILL STATION PARKING) |
| 0.110 | 0.110 | INTERSECTION | N/A | ROUTE 5001 (DENEEN ROAD (NON NPS)) |
| 0.110 | 0.110 | ROUTE END | N/A | TO ROUTE BEGINNING OF ROUTE 5001 (DENEEN ROAD (NON NPS)) AND ROUTE 0957 (COHILL STATION PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0104: LITTLE TONOLOWAY ENTRANCE ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM END OF ROUTE 0104B (LITTLE TONOLOWAY UNPAVED ENTRANCE ROAD) |
| 0.000 | 0.000 | INTERSECTION | N/A | ROUTE 0104B (LITTLE TONOLOWAY UNPAVED ENTRANCE ROAD) |
| 0.004 | 0.026 | GUARD/GUIDE WALL | RIGHT | N/A |
| 0.005 | 0.005 | SIGN | LEFT | GUIDE, CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK |
| 0.036 | 0.049 | GUARD/GUIDE WALL | LEFT | N/A |
| 0.041 | 0.041 | INTERSECTION | RIGHT | ROUTE 0946 (TONOLOWAY PARKING) |
| 0.044 | 0.044 | SIGN | RIGHT | GUIDE, C & O CANAL NHP REGULATIONS |
| 0.052 | 0.052 | INTERSECTION | RIGHT | ROUTE 0946 (TONOLOWAY PARKING) |
| 0.055 | 0.055 | INTERSECTION | N/A | END OF PAVEMENT |
| 0.055 | 0.055 | ROUTE END | N/A | TO END OF PAVEMENT |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0105: BRUNSWICK BOAT RAMP ACCESS ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM BRUNSWICK BOAT RAMP ACCESS ROAD (NON NPS) |
| 0.000 | 0.000 | INTERSECTION | LEFT | UNPAVED PARKING (NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (BRUNSWICK BOAT RAMP ACCESS ROAD / NON NPS) |
| 0.013 | 0.013 | SIGN | RIGHT | WARNING, 60_ 40 |
| 0.019 | 0.019 | SIGN | RIGHT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.039 | 0.039 | OVERPASS | N/A | A BIP STRUCTURE NUMBER HAS NOT BEEN ASSIGNED TO THIS OVERPASS (PETERSVILLE ROAD) |
| 0.080 | 0.080 | GATE | N/A | N/A |
| 0.080 | 0.097 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.081 | 0.094 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.100 | 0.100 | INTERSECTION | LEFT | UNPAVED ROUTE (NON NPS) |
| 0.100 | 0.100 | SIGN | N/A | GUIDE, C & O CANAL NHP REGULATIONS |
| 0.100 | 0.100 | INTERSECTION | RIGHT | UNPAVED ROUTE (NON NPS) |
| 0.100 | 0.100 | INTERSECTION | N/A | ROUTE 0925 (BRUNSWICK AREA PARKING) |
| 0.100 | 0.100 | ROUTE END | N/A | TO ROUTE 0925 (BRUNSWICK AREA PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0107AZ: FERRY HILL PLANTATION ENTRANCE ROAD A

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM MARYLAND ROUTE 34 |
| 0.000 | 0.000 | INTERSECTION | LEFT | PAVED ROUTE (MARYLAND ROUTE 34 / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED ROUTE (MARYLAND ROUTE 34 / NON NPS) |
| 0.004 | 0.007 | CURB | LEFT | N/A |
| 0.004 | 0.007 | CURB | RIGHT | N/A |
| 0.007 | 0.007 | GATE | N/A | N/A |
| 0.085 | 0.085 | INTERSECTION | LEFT | ROUTE 0932 (FERRY HILL SOUTH PARKING) |
| 0.124 | 0.124 | INTERSECTION | LEFT | ROUTE 0932 (FERRY HILL SOUTH PARKING) |
| 0.143 | 0.143 | INTERSECTION | N/A | ROUTE 0402 (FERRY HILL ACCESS ROAD) |
| 0.143 | 0.143 | ROUTE END | N/A | TO ROUTE 0402 (FERRY HILL ACCESS ROAD) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0107BZ: FERRY HILL PLANTATION ENTRANCE ROAD B

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM MARYLAND ROUTE 34 |
| 0.000 | 0.000 | INTERSECTION | LEFT | PAVED ROUTE (MARYLAND ROUTE 34 / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED ROUTE (MARYLAND ROUTE 34 / NON NPS) |
| 0.061 | 0.061 | INTERSECTION | N/A | ROUTE 0933 (FERRY HILL NORTH PARKING) |
| 0.061 | 0.061 | ROUTE END | N/A | TO ROUTE 0933 (FERRY HILL NORTH PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0206: FIFTEEN MILE CREEK ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM HIGH GERMANY ROAD |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (HIGH GERMANY ROAD / NON NPS) |
| 0.002 | 0.011 | TUNNEL | N/A | N/A |
| 0.011 | 0.033 | RETAINING WALL | RIGHT | N/A |
| 0.014 | 0.014 | INTERSECTION | LEFT | PAVED ROUTE (NON NPS) |
| 0.033 | 0.033 | INTERSECTION | RIGHT | ROUTE 0206 (FIFTEEN MILE CREEK ROAD) UNPAVED SECTION |
| 0.043 | 0.043 | INTERSECTION | N/A | ROUTE 0249 (FIFTEEN MILE CREEK UNPAVED ENTRANCE ROAD) |
| 0.043 | 0.043 | SIGN | N/A | GUIDE, C & O CANAL NHP REGULATIONS |
| 0.043 | 0.043 | SIGN | N/A | GUIDE, CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK FIFTEEN MILE CREEK |
| 0.043 | 0.043 | ROUTE END | N/A | TO END OF UNPAVED SECTION AT MP 0.15 |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0209: FOUR LOCKS ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM PARK BOUNDARY / FOUR LOCKS ROAD (NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (FOUR LOCKS ROAD / NON NPS) |
| 0.000 | 0.000 | PARK BOUNDARY | N/A | N/A |
| 0.187 | 0.242 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.198 | 0.220 | RETAINING WALL | RIGHT | N/A |
| 0.222 | 0.238 | RETAINING WALL | RIGHT | N/A |
| 0.243 | 0.243 | INTERSECTION | RIGHT | ROUTE 0242 (ANKENEY LANE) |
| 0.248 | 0.248 | SIGN | RIGHT | WARNING, 15 M.P.H. |
| 0.248 | 0.248 | SIGN | RIGHT | WARNING, ONE LANE TUNNEL |
| 0.253 | 0.306 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.254 | 0.254 | SIGN | LEFT | GUIDE, ANKENEY LN |
| 0.254 | 0.254 | SIGN | LEFT | REGULATORY, YIELD |
| 0.254 | 0.254 | SIGN | LEFT | WARNING, UNABLE TO READ FROM VIDEO |
| 0.256 | 0.256 | SIGN | RIGHT | WARNING, UNABLE TO READ FROM VIDEO |
| 0.256 | 0.256 | SIGN | RIGHT | GUIDE, BOAT RAMP |
| 0.261 | 0.261 | SIGN | RIGHT | WARNING, NO OUTLET |
| 0.323 | 0.334 | RETAINING WALL | RIGHT | N/A |
| 0.325 | 0.325 | SIGN | RIGHT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.342 | 0.360 | GUARD/GUIDE WALL | LEFT | N/A |
| 0.458 | 0.478 | PULLOUT | LEFT | N/A |
| 0.479 | 0.479 | INTERSECTION | N/A | ROUTE 0209B (FOUR LOCKS ROAD (UNPAVED SECTION)) |
| 0.479 | 0.479 | ROUTE END | N/A | TO BEGINNING OF ROUTE 0209B (FOUR LOCKS ROAD (UNPAVED SECTION)) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0212: BIG SLACKWATER ACCESS ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM DAM #4 ROAD (NON NPS) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED ROUTE (DAM #4 ROAD / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (DAM #4 ROAD / NON NPS) |
| 0.007 | 0.007 | SIGN | LEFT | GUIDE, DAM FOUR |
| 0.012 | 0.012 | INTERSECTION | LEFT | ROUTE 0937 (DAM 4 PARKING) |
| 0.021 | 0.021 | SIGN | RIGHT | GUIDE, BIG SLACKWATER PARK CLOSED AT DARK |
| 0.023 | 0.023 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.023 | 0.030 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.024 | 0.024 | GATE | N/A | N/A |
| 0.025 | 0.025 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.035 | 0.035 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.088 | 0.088 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.089 | 0.089 | SIGN | LEFT | REGULATORY, SPEED LIMIT 15 |
| 0.129 | 0.129 | SIGN | RIGHT | REGULATORY, NO PARKING ANY TIME |
| 0.274 | 0.274 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.345 | 0.345 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.348 | 0.348 | SIGN | RIGHT | REGULATORY, NO PARKING ANY TIME |
| 0.386 | 0.386 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.421 | 0.421 | SIGN | RIGHT | REGULATORY, SPEED LIMIT 15 |
| 0.457 | 0.457 | SIGN | RIGHT | REGULATORY, NO PARKING ANY TIME |
| 0.536 | 0.536 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.688 | 0.688 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.942 | 0.990 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.947 | 0.991 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.968 | 0.968 | SIGN | RIGHT | REGULATORY, WEIGHT LIMIT 10 TONS |
| 0.978 | 0.988 | BRIDGE | N/A | 3100-008 (BIG SLACKWATER BRIDGE) |
| 1.006 | 1.006 | SIGN | LEFT | REGULATORY, NO PARKING ANY TIME |
| 1.007 | 1.007 | SIGN | RIGHT | REGULATORY, NO PARKING ANY TIME |
| 1.009 | 1.009 | SIGN | LEFT | REGULATORY, NO PARKING ANY TIME |
| 1.012 | 1.012 | SIGN | RIGHT | REGULATORY, NO PARKING ANY TIME |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0212: BIG SLACKWATER ACCESS ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 1.013 | 1.013 | INTERSECTION | N/A | ROUTE 0938 (BIG SLACKWATER PARKING) |
| 1.013 | 1.013 | INTERSECTION | LEFT | UNPAVED ROUTE |
| 1.013 | 1.013 | ROUTE END | N/A | TO ROUTE 0938 (BIG SLACKWATER PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0226: MONOCACY ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM PARK BOUNDARY (AFTER RAILROAD) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (MOUTH OF MONOCACY ROAD / NON NPS) |
| 0.000 | 0.000 | PARK BOUNDARY | N/A | N/A |
| 0.005 | 0.005 | SIGN | LEFT | REGULATORY, YIELD |
| 0.005 | 0.005 | SIGN | LEFT | REGULATORY, RAILROAD CROSSING |
| 0.017 | 0.017 | SIGN | RIGHT | GUIDE, CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK |
| 0.154 | 0.154 | INTERSECTION | RIGHT | ROUTE 0100 (MONOCACY BOAT RAMP ACCESS) |
| 0.157 | 0.157 | SIGN | N/A | GUIDE, MONOCACY AQUEDUCT C & O CANAL MONOCACY BOAT RAMP |
| 0.243 | 0.243 | SIGN | LEFT | GUIDE, MONOCACY AQUEDUCT |
| 0.249 | 0.249 | INTERSECTION | LEFT | ROUTE 0916 (MONOCACY AQUEDUCT PARKING) |
| 0.251 | 0.251 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.252 | 0.252 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.252 | 0.252 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.255 | 0.261 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.261 | 0.261 | INTERSECTION | N/A | DEAD END |
| 0.261 | 0.261 | ROUTE END | N/A | TO ROUTE 0916 (MONOCACY AQUEDUCT PARKING) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0235: CARDEROCK PICNIC AREA ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM PARK BOUNDARY / BEGINNING OF TUNNEL / GWMP ROUTE 0223ZZ (CARDEROCK ACCESS ROAD AND RAMPS) |
| 0.000 | 0.022 | TUNNEL | N/A | 3100-052 (CARDEROCK TUNNEL) |
| 0.000 | 0.000 | PARK BOUNDARY | N/A | N/A |
| 0.000 | 0.000 | INTERSECTION | N/A | GWMP ROUTE 0223AZ (CARDEROCK ACCESS ROAD) |
| 0.005 | 0.005 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.005 | 0.005 | SIGN | RIGHT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.009 | 0.009 | SIGN | RIGHT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.021 | 0.021 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.023 | 0.082 | CURB | RIGHT | N/A |
| 0.024 | 0.034 | CURB | LEFT | N/A |
| 0.036 | 0.036 | INTERSECTION | LEFT | UNPAVED ROUTE (NPS) |
| 0.042 | 0.042 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.044 | 0.074 | CURB | LEFT | N/A |
| 0.049 | 0.049 | SIGN | RIGHT | GUIDE, CARDEROCK CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK |
| 0.073 | 0.073 | SIGN | RIGHT | REGULATORY, STOP |
| 0.078 | 0.078 | INTERSECTION | LEFT | ROUTE 0903A (CARDEROCK PICNIC PARKING A) |
| 0.079 | 0.088 | GUARD/GUIDE WALL | LEFT | N/A |
| 0.080 | 0.080 | SIGN | N/A | GUIDE, PARK CLOSED AT DARK |
| 0.080 | 0.080 | SIGN | N/A | GUIDE, DANGER PELIGRO |
| 0.080 | 0.080 | SIGN | N/A | REGULATORY, PARK IN DESIGNATED AREAS ONLY |
| 0.098 | 0.098 | INTERSECTION | LEFT | ROUTE 0903D (CARDEROCK PICNIC PARKING D) |
| 0.146 | 0.146 | SIGN | RIGHT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.146 | 0.146 | SIGN | RIGHT | GUIDE, GRAPHIC SIGN NO TEXT |
| 0.182 | 0.182 | INTERSECTION | LEFT | ROUTE 0903D (CARDEROCK PICNIC PARKING D) |
| 0.250 | 0.250 | INTERSECTION | LEFT | ROUTE 0903C (CARDEROCK PICNIC PARKING C) |
| 0.267 | 0.267 | SIGN | RIGHT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.346 | 0.346 | INTERSECTION | LEFT | ROUTE 0903C (CARDEROCK PICNIC PARKING C) |
| 0.472 | 0.472 | SIGN | N/A | REGULATORY, GRAPHIC SIGN NO TEXT |
| 0.472 | 0.472 | INTERSECTION | N/A | ROUTE 0903B (CARDEROCK PICNIC PARKING B) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0235: CARDEROCK PICNIC AREA ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.472 | 0.472 | SIGN | N/A | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.472 | 0.472 | ROUTE END | N/A | TO ROUTE 0903B (CARDEROCK PICNIC PARKING B) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0242: ANKENEY LANE

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM ROUTE 0209 (FOUR LOCKS ROAD) |
| 0.000 | 0.000 | SIGN | N/A | GUIDE, FOUR LOCKS RD |
| 0.000 | 0.000 | INTERSECTION | LEFT | ROUTE 0209 (FOUR LOCKS ROAD) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | ROUTE 0209 (FOUR LOCKS ROAD) |
| 0.012 | 0.012 | SIGN | RIGHT | GUIDE, GRAPHIC SIGN NO TEXT |
| 0.012 | 0.012 | SIGN | RIGHT | WARNING, 10' - 0" |
| 0.027 | 0.027 | SIGN | RIGHT | WARNING, CAUTION |
| 0.032 | 0.040 | RETAINING WALL | RIGHT | N/A |
| 0.038 | 0.061 | TUNNEL | N/A | 3100-020 (FOUR LOCKS TUNNEL) |
| 0.087 | 0.087 | INTERSECTION | RIGHT | UNPAVED ROUTE |
| 0.095 | 0.095 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.095 | 0.095 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.096 | 0.096 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.113 | 0.113 | INTERSECTION | LEFT | ROUTE 0944 (FOUR LOCKS PARKING) |
| 0.114 | 0.114 | SIGN | LEFT | GUIDE, UNABLE TO READ FROM VIDEO |
| 0.186 | 0.186 | INTERSECTION | LEFT | ROUTE 0944 (FOUR LOCKS PARKING) |
| 0.200 | 0.200 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.220 | 0.220 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.230 | 0.230 | SIGN | LEFT | REGULATORY, NO PARKING |
| 0.241 | 0.241 | SIGN | LEFT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.248 | 0.248 | INTERSECTION | LEFT | ROUTE 0243 (STARLIPER ROAD) |
| 0.248 | 0.248 | INTERSECTION | N/A | PAVED ROUTE (ANKENNEY LANE / NON-NPS) |
| 0.248 | 0.248 | ROUTE END | N/A | TO ROUTE 0243 (STARLIPER ROAD) ON LEFT |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0244: CANAL STREET (HANCOCK, MARYLAND)

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM WESTERN MARYLAND RAIL TRAIL |
| 0.000 | 0.000 | INTERSECTION | LEFT | PAVED TRAIL (WESTERN MARYLAND BIKE TRAIL / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | N/A | PAVED ROUTE (CHURCH STREET / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED TRAIL (WESTERN MARYLAND BIKE TRAIL / NON NPS) |
| 0.046 | 0.046 | INTERSECTION | RIGHT | PAVED PARKING (NON NPS) |
| 0.084 | 0.084 | SIGN | RIGHT | REGULATORY, UNABLE TO READ FROM VIDEO |
| 0.099 | 0.099 | INTERSECTION | RIGHT | PAVED ROUTE (TANEY STREET / NON NPS) |
| 0.109 | 0.119 | RETAINING WALL | RIGHT | N/A |
| 0.133 | 0.133 | SIGN | RIGHT | REGULATORY, NO PARKING BETWEEN SIGNS |
| 0.133 | 0.133 | SIGN | RIGHT | GUIDE, GRAPHIC SIGN NO TEXT |
| 0.152 | 0.152 | SIGN | RIGHT | REGULATORY, NO PARKING BETWEEN SIGNS |
| 0.161 | 0.161 | INTERSECTION | RIGHT | PAVED ROUTE (WILLIAMS STREET / NON NPS) |
| 0.162 | 0.162 | SIGN | RIGHT | GUIDE, WILLIAMS ST |
| 0.206 | 0.206 | INTERSECTION | RIGHT | UNPAVED PARKING (NON NPS) |
| 0.211 | 0.216 | GUARD/GUIDE WALL | RIGHT | N/A |
| 0.215 | 0.215 | SIGN | RIGHT | REGULATORY, STOP |
| 0.220 | 0.220 | INTERSECTION | RIGHT | PAVED ROUTE (PENNSYLVANIA AVENUE / NON NPS) |
| 0.220 | 0.220 | INTERSECTION | N/A | PAVED ROUTE (BERM ROAD / NON NPS) |
| 0.220 | 0.220 | ROUTE END | N/A | TO INTERSECTION OF BERM ROAD AND PENNSYLVANIA AVENUE |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0250: HANCOCK MAINTENANCE BUILDING ENTRANCE ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM MARYLAND ROUTE 144 / EAST MAIN STREET |
| 0.000 | 0.000 | INTERSECTION | RIGHT | PAVED ROUTE (MARYLAND ROUTE 144 / EAST MAIN STREET / NON NPS) |
| 0.000 | 0.000 | INTERSECTION | LEFT | PAVED ROUTE (MARYLAND ROUTE 144 / EAST MAIN STREET / NON NPS) |
| 0.006 | 0.037 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.013 | 0.036 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.036 | 0.036 | SIGN | RIGHT | REGULATORY, STOP |
| 0.036 | 0.036 | SIGN | RIGHT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.041 | 0.041 | SIGN | LEFT | REGULATORY, STOP |
| 0.041 | 0.041 | SIGN | LEFT | WARNING, GRAPHIC SIGN NO TEXT |
| 0.042 | 0.063 | GUARD/GUIDE RAIL | RIGHT | N/A |
| 0.042 | 0.059 | GUARD/GUIDE RAIL | LEFT | N/A |
| 0.071 | 0.071 | INTERSECTION | RIGHT | ROUTE 0246 (LITTLE PROPERTY UNPAVED ROAD) |
| 0.084 | 0.084 | INTERSECTION | LEFT | ROUTE 0949 (LITTLE HOUSE PARKING) |
| 0.086 | 0.086 | SIGN | N/A | GUIDE, C & O CANAL |
| 0.093 | 0.093 | SIGN | RIGHT | GUIDE, CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK |
| 0.094 | 0.094 | GATE | N/A | N/A |
| 0.094 | 0.094 | SIGN | LEFT | REGULATORY, AUTHORIZED AND EMERGENCY VEHICLES ONLY |
| 0.094 | 0.094 | SIGN | RIGHT | REGULATORY, AUTHORIZED AND EMERGENCY VEHICLES ONLY |
| 0.095 | 0.095 | INTERSECTION | N/A | ROUTE 0948 (HANCOCK MAINTENANCE AREA) |
| 0.095 | 0.095 | ROUTE END | N/A | TO ROUTE 0948 (HANCOCK MAINTENANCE AREA) |

# CHOH: ROUTE MAINTENANCE FEATURES ROAD LOG

## ROUTE 0414: LOCK 19 ACCESS ROAD

**Notice:** Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 5 on the DCV driven routes. Therefore no culverts or drop inlets are reported in Section 9, unless a culvert has a BIP structure number attached to it.

| FROM MILEPOST | TO MILEPOST | FEATURE | SIDE | COMMENT |
|---|---|---|---|---|
| 0.000 | 0.000 | ROUTE BEGIN | N/A | FROM ROUTE 0907 (GREAT FALLS PARKING) |
| 0.000 | 0.000 | INTERSECTION | N/A | ROUTE 0907 (GREAT FALLS PARKING) |
| 0.005 | 0.005 | SIGN | LEFT | REGULATORY, EMERGENCY AND AUTHORIZED VEHICLES ONLY |
| 0.006 | 0.035 | CURB | LEFT | N/A |
| 0.006 | 0.111 | CURB | RIGHT | N/A |
| 0.037 | 0.037 | INTERSECTION | LEFT | PAVED PARKING |
| 0.039 | 0.073 | CURB | LEFT | N/A |
| 0.074 | 0.111 | CURB | LEFT | N/A |
| 0.111 | 0.111 | INTERSECTION | N/A | ROUTE 0414B (LOCK 19 ACCESS ROAD (UNPAVED SECTION)) |
| 0.111 | 0.111 | ROUTE END | N/A | TO BEGINNING OF ROUTE 0414B (LOCK 19 ACCESS ROAD (UNPAVED SECTION)) |

# Section 10
# Appendix

Chesapeake & Ohio Canal
National Historical Park

Federal Lands Highway
Road Inventory Program

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

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

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

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

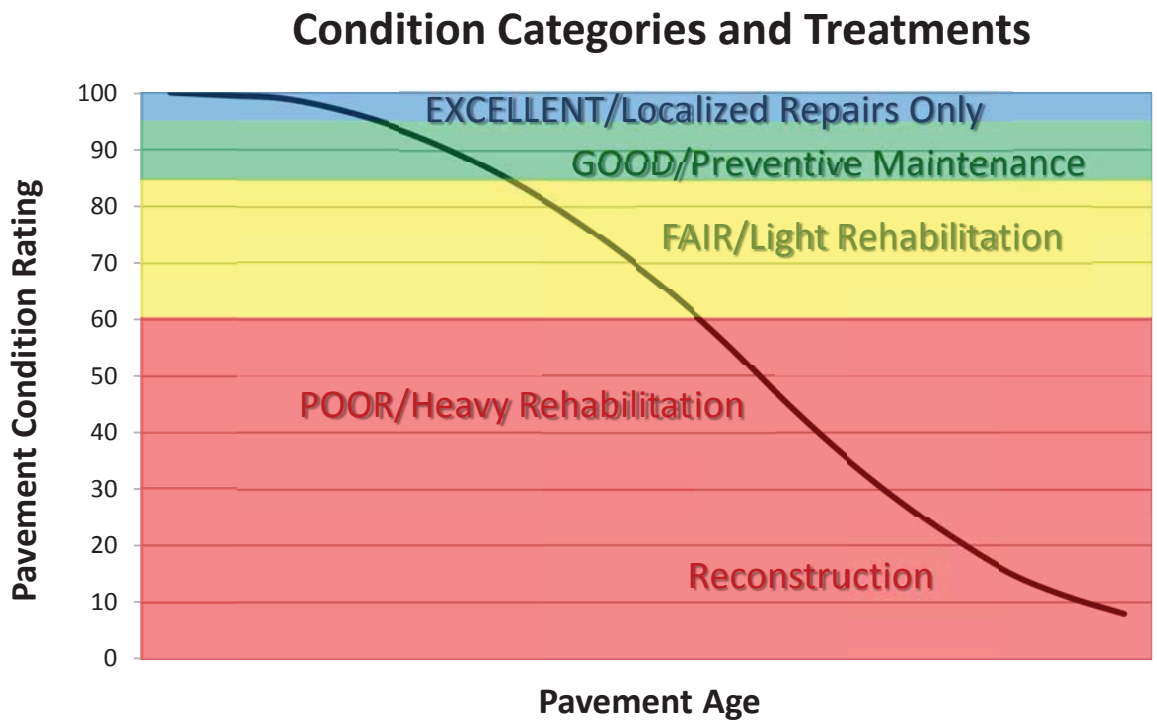
The changes that were implemented were endorsed by management at both the FHWA and NPS. In order to show the effectiveness of these changes, several sites were ground truth tested to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation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

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

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

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

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



# DESCRIPTION OF RATING SYSTEM

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

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

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

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

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

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

# SURFACE DISTRESSES

## Surface Condition Rating - SCR

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

### Surface distresses determined from digital images

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

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

- Rutting

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

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

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

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

## Roughness Condition Index - RCI

### Additional condition data measured by DCV (lasers and accelerometers)

- Roughness (IRI)

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

## Pavement Condition Rating - PCR

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

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

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

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

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

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

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

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

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

**TABLE 1: Distress Summary**

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

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

# ALLIGATOR CRACKING

## Description

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

## Severity Levels

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

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

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

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

**TABLE 2: Alligator Crack Severity Levels**

| ALLIGATOR CRACKING SEVERITY LEVELS | | Crack Pattern | | |
|---|---|---|---|---|
| | | **LOW** | **MED** | **HIGH** |
| **Crack Width** | **LOW** | L | M | H |
| | **MED** | M | M | H |
| | **HI** | H | H | H |

## LONGITUDINAL CRACKING

### Description

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

### Severity Levels

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

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

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

## TRANSVERSE CRACKING

### Description

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

### Severity Levels

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

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

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

## PATCHING AND POTHOLES

### Description

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

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

### Severity Levels

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

## RUTTING

### Description

Rutting is a longitudinal surface depression in the wheelpath.

### Severity Levels

**LOW**
Ruts with a measured depth $\geq$ 0.20" and $\leq$ 0.49"

**MED**
Ruts with a measured depth $\geq$ 0.50" and $\leq$ 0.99"

**HIGH**
Ruts with a measured depth $\geq$ 1.00"

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

# ROUGHNESS

## Description

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

## Severity Levels

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

**TABLE 3: IRI**

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

# INDEX FORMULAS

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

## Alligator Crack Index

**AC_INDEX** = 100 – 40 * [(%LOW / 35) + (%MED / 15) + (%HI / 5)]

Where:

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

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

Percent of total area is computed as:

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

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

## Longitudinal Crack Index

**LC_INDEX** = 100 – 40 * [(%LOW / 175) + (%MED / 75) + (%HI / 25)]

Where:

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

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

Percent of interval length is computed as:

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

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

## Structural Crack Index

**SC_INDEX** = [100 - ((100 - AC_INDEX) + (100 - LC_INDEX))]

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

## Transverse Crack Index

**TC_INDEX** = 100 – 40 * [(LOW / 21.1) + (MED / 4.4) + (HI / 2.6)]

Where:

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

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:

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

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

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

## Rutting Index

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

Where:

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

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

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

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

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

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

## Roughness Condition Index (Asphalt)

**RCI** = 32 * [5 * (2.718282 ^ (-0.0041 * AVG IRI))]

Where:

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

Average IRI is computed as:

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

There is no applicable threshold for failure for this index.

## Roughness Condition Index (Concrete)

**RCI** = $-0.0012(IRI^2) + 0.0499(IRI) + 99.542$

For concrete, PCR = RCI

## Surface Condition Rating Index

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

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

Where:

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

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

# Data Collection Vehicle Subsystems

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

## CAMERAS

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

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

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

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

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

## DMI (Distance Measuring Instrument)

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

## ROUGHNESS (IRI)

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

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

## RUTTING

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

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

## GPS & INERTIAL SYSTEMS

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

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

## GPS on Manually Rated Roads (MRR)

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

## Geodatabase – Background and Metadata

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

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

## GLOSSARY OF TERMS AND ABBREVIATIONS

| TERM OR ABBREVIATION | DESCRIPTION OR DEFINITION |
|---|---|
| AC | Alligator Cracking |
| CRS | Condition Rating Sheets (Section 5) |
| 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 |
| 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 |