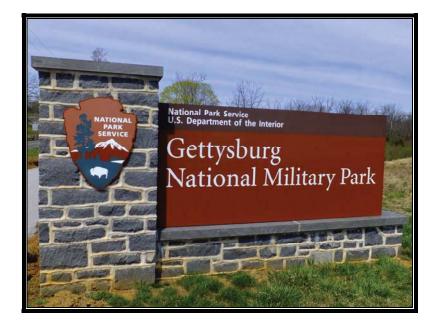


# Road Inventory Program

Road Inventory and Condition Assessment

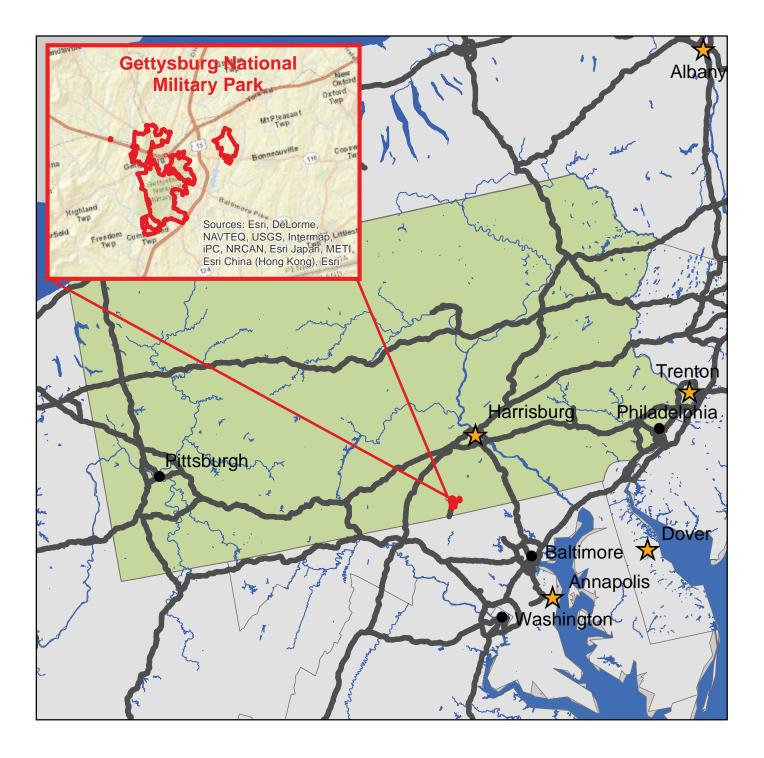


## **Gettysburg National Military Park** GETT

## **Cycle 5 Report**

Prepared By: Federal Highway Administration Road Inventory Program (RIP) Data Collected: 02/2013 Report Date: 08/2013

## Gettysburg National Military Park in Pennsylvania





## **TABLE OF CONTENTS**

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

# Section 1 Introduction



# Gettysburg National Military Park



#### **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 21<sup>st</sup> Century (TEA-21) amended Title 23 U.S.C., and inserted Section 204(a)(6) requiring the FHWA and NPS, to develop by rule, a Pavement Management System (PMS) applied to park roads and parkways serving the National Park System.

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

Respectfully,

FHWA RIP Team

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

# <u>Section 2</u> Park Route Inventory



## Gettysburg National Military Park



# Cycle 5 NPS/RIP Route ID Report Road Inventory Program 08/12/2013 (Numerical By Route #) Page 1 of 11 Shading Color Key: White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes Image = Concession Route Flag ON

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

\*\* DCV - Data Collection Vehicle

**GETT** 

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0010	5	67386		HANCOCK AVENUE	FROM INTERSECTION OF ROUTE 0011 (SEDGWICK AVENUE) AND ROUTE 0014 (UNITED STATES AVENUE)	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	1.15	0.00	1.15	1		AS	1,2
0011	5	69335		SEDGWICK AVENUE	FROM ROUTE 0013 (WHEATFIELD ROAD) ON RIGHT AT MP 0.17	TO INTERSECTION OF ROUTE 0010 (HANCOCK AVENUE) AND ROUTE 0014 (UNITED STATES AVENUE)	N/A	0.53	0.00	0.53	2		AS	2
0012	5	69561		SOUTH CONFEDERATE-SYKE S AVENUE	FROM INTERSECTION OF ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD)) AND ROUTE 0018 (WEST CONFEDERATE AVENUE)	TO INTERSECTION ROUTE 0013 (WHEATFIELD ROAD) AND ROUTE 0011 (SEDGWICK AVENUE)	N/A	1.96	0.00	1.96	1		AS	2
0013	5	69318		WHEATFIELD ROAD	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO INTERSECTION OF ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD)) AND ROUTE 0053 (MILLERSTOWN ROAD)	N/A	1.16	0.00	1.16	1		AS	2
0014	5	67389		UNITED STATES AVENUE	FROM ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	TO INTERSECTION OF ROUTE 0010 (HANCOCK AVENUE) AND ROUTE 0011 (SEDGWICK AVENUE)	N/A	0.79	0.00	0.79	2		AS	2
0015	5	67384		NORTH SICKLES AVENUE	FROM ROUTE 0013 (WHEATFIELD ROAD) ON RIGHT AT MP 1.00	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	0.56	0.00	0.56	1		AS	2
0016	5	69332		WARREN AVENUE	FROM INTERSECTION OF ROUTE 0017 (CRAWFORD AVENUE) AND ROUTE 0042 (SOUTH SICKLES AVENUE)	TO INTERSECTION OF ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) AND ROUTE 0019 (WRIGHT AVENUE)	N/A	0.30	0.00	0.30	2		AS	2
0017	5	69334		CRAWFORD AVENUE	FROM ROUTE 0013 (WHEATFIELD ROAD) ON LEFT AT MP 0.43	TO INTERSECTION OF ROUTE 0016 (WARREN AVENUE) AND ROUTE 0042 (SOUTH SICKLES AVENUE)	N/A	0.35	0.00	0.35	2		AS	2

#### **Cycle 5 NPS/RIP Route ID Report** (Numerical By Route #) Road Inventory Program 08/12/2013 Page 2 of 11 White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Yellow = Unpaved Routes, DCV not Driven Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage \*Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

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**GETT** 

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Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0018	5	67378		WEST CONFEDERATE AVENUE	FROM INTERSECTION OF ROUTE 0040 (SEMINARY RIDGE AVENUE) AND STATE ROUTE 116 (FAIRFIELD ROAD)		N/A	2.83	0.00	2.83	1		AS	1,2
0019	5	69369		WRIGHT AVENUE	FROM INTERSECTION OF ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) AND ROUTE 0016 (WARREN AVENUE)	TO INTERSECTION OF ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD)) AND ROUTE 0054 (HOWE AVENUE)	N/A	0.56	0.00	0.56	2		AS	2
0020	5	69440		BERDAN AVENUE	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) ON RIGHT AT MP 1.72	TO END OF LOOP	N/A	0.12	0.00	0.12	2		AS	2
0021	5	67395		PLEASONTON AVENUE	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO ROUTE 0010 (HANCOCK AVENUE) AT MP 0.45	N/A	0.31	0.00	0.31	1		AS	2
0022	5	67391		HUMPHREYS AVENUE	FROM ROUTE 0021 (PLEASONTON AVENUE) ON LEFT AT MP 0.23	TO ROUTE 0010 (HANCOCK AVENUE) ON RIGHT AT MP 0.31	N/A	0.10	0.00	0.10	2		AS	2
0023	5	66114		REYNOLDS AVENUE	FROM STATE ROUTE 116 (FAIRFIELD ROAD)	TO INTERSECTION OF ROUTE 0025 (BUFORD AVENUE) AND ROUTE 0027 (WADSWORTH AVENUE)	N/A	0.99	0.00	0.99	1		AS	1
0024	5	66129		STONE-MEREDITH AVENUE	FROM ROUTE 5001 (U.S. HIGHWAY 30 (CHAMBERSBURG ROAD AND LINCOLN HIGHWAY))	TO ROUTE 0023 (REYNOLDS AVENUE) AT MP 0.47	N/A	0.51	0.00	0.51	2		AS	1
0025	5	65274		BUFORD AVENUE	FROM INTERSECTION OF ROUTE 0023 (REYNOLDS AVENUE) AND ROUTE 0027 (WADSWORTH AVENUE)	TO INTERSECTION OF ROUTE 0026 (NORTH CONFEDERATE AVENUE) AND ROUTE 5005 (MUMMASBURG ROAD)	N/A	0.64	0.00	0.64	1		AS	1

#### **Cycle 5 NPS/RIP Route ID Report** (Numerical By Route #) Road Inventory Program 08/12/2013 Page 3 of 11 White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Yellow = Unpaved Routes, DCV not Driven Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage \*Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP).

\*\* DCV - Data Collection Vehicle

**GETT** 

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0026	5	63409		NORTH CONFEDERATE AVENUE	FROM INTERSECTION OF ROUTE 0025 (BUFORD AVENUE) AND ROUTE 5005 (MUMMASBURG ROAD)	TO INTERSECTION OF ROUTE 0055 (DOUBLEDAY AVENUE) AND ROUTE 5005 (MUMMASBURG ROAD)	N/A	0.36	0.00	0.36	1		AS	1
0027	5	66063		WADSWORTH AVENUE	FROM ROUTE 0055 (DOUBLEDAY AVENUE)	TO INTERSECTION OF ROUTE 0023 (REYNOLDS AVENUE) AND ROUTE 0025 (BUFORD AVENUE)	N/A	0.16	0.00	0.16	1		AS	1
0028	5	65288		HOWARD AVENUE	FROM ROUTE 5005 (MUMMASBURG ROAD)	TO ROUTE 5002 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD))	N/A	0.96	0.00	0.96	1		AS	1
0029	5	68569		EAST CONFEDERATE AVENUE	FROM EAST MIDDLE AND LIBERTY STREET	TO ROUTE 0030 (SLOCUM AVENUE) AT MP 0.08	N/A	1.38	0.00	1.38	1		AS	1
0030	5	68571		SLOCUM AVENUE	FROM ROUTE 0034 (COLGROVE-CARMAN AVENUE) ON RIGHT AT MP 0.46	TO ROUTE 5003 (BALTIMORE PIKE)	N/A	1.04	0.00	1.04	1		AS	1,2
0032	5	68572		WILLIAMS AVENUE	FROM ROUTE 0030 (SLOCUM AVENUE) ON LEFT AT MP 0.42	TO ROUTE 0030 (SLOCUM AVENUE) ON LEFT AT MP 0.80	N/A	0.31	0.00	0.31	2		AS	1
0033	5	68735		GEARY AVENUE	FROM ROUTE 0030 (SLOCUM AVENUE) ON LEFT AT MP 0.13	TO ROUTE 0030 (SLOCUM AVENUE) ON LEFT AT MP 0.39	N/A	0.38	0.00	0.38	2		AS	1
0034	5	68743		COLGROVE-CARMAN AVENUE	FROM ROUTE 5003 (BALTIMORE PIKE)	TO END OF LOOP	N/A	0.55	0.00	0.55	1		AS	2
0035	5	67398		HUNT AVENUE	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO ROUTE 5003 (BALTIMORE PIKE)	N/A	0.54	0.00	0.54	1		AS	1,2
0036	5	68791		GRANITE SCHOOL HOUSE LANE	FROM ROUTE 5003 (BALTIMORE PIKE)	TO ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	N/A	0.83	0.00	0.83	2		AS	2
0037ZZ	5	69443		NATIONAL MONUMENT DRIVE ROUTES	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO ROUTE 5003 (BALTIMORE PIKE)	N/A	0.61	0.00	0.61	3		AS	1
0038	5	68740		BENNER HILL AVENUE	FROM STATE ROUTE 116 (FAIRFIELD ROAD)	TO END OF LOOP	N/A	0.25	0.00	0.25	2		AS	1

## Cycle 5 NPS/RIP Route ID Report

Road Inventory Pro	ogram 08/12/2013	(Numerical By Route	2 #)	Page	4 of 11
Shading Color Key:	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas	
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	s = Concession Route Flag ON		
	*I Innaved route data was obtained from NE	2S and was not inventoried by the Road Inventor	v Program (RIP)		

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**GETT** 

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Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0039	5	65277		ROBINSON AVENUE	FROM ROUTE 0055 (DOUBLEDAY AVENUE) ON LEFT AT MP 0.08	TO ROUTE 5005 (MUMMASBURG ROAD)	N/A	0.16	0.00	0.16	1		AS	1
0040	5	69553		SEMINARY RIDGE AVENUE	FROM INTERSECTION OF STATE ROUTE 116 (FAIRFIELD ROAD) AND ROUTE 0018 (WEST CONFEDERATE AVENUE)	HIGHWAY 30	N/A	0.34	0.00	0.34	1		AS	1
0041	5	69555		WAINWRIGHT AVENUE	FROM ROUTE 0030 (SLOCUM AVENUE) ON RIGHT AT MP 0.95	TO LEFEVER STREET	N/A	0.43	0.00	0.43	2		AS	1
0042	5	69320		SOUTH SICKLES AVENUE	FROM INTERSECTION OF ROUTES 0016 (WARREN AVENUE) AND ROUTE 0017 (CRAWFORD AVENUE)	TO ROUTE 0013 (WHEATFIELD ROAD) AT MP 0.82	N/A	0.96	0.00	0.96	1		AS	2
0043	5	69326		CROSS-BROOKE- DETROBRIAND AVENUE	FROM INTERSECTION OF ROUTE 0042 (SOUTH SICKLES AVENUE) AND ROUTE 0044 (AYERS AVENUE)	TO ROUTE 0042 (SOUTH SICKLES AVENUE) ON LEFT AT MP 0.61	N/A	0.80	0.00	0.80	2		AS	2
0044	5	69329		AYERS AVENUE	FROM ROUTE 0013 (WHEATFIELD ROAD) ON LEFT AT MP 0.54	TO INTERSECTION OF ROUTE 0042 (SOUTH SICKLES AVENUE) AND ROUTE 0043 (CROSS-BROOKE- DETROBRIAND AVENUE)	N/A	0.30	0.00	0.30	1		AS	2
0052	5	68568		CULPS HILL TOWER ROAD	FROM ROUTE 0030 (SLOCUM AVENUE) ON RIGHT AT MP 0.70	TO END OF LOOP	N/A	0.15	0.00	0.15	1		AS	1
0053	5	69554		MILLERSTOWN ROAD	FROM INTERSECTION OF ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD)) AND ROUTE 0013 (WHEATFIELD ROAD)	TO PARK BOUNDARY AT PAVEMENT CHANGE AND THE BEGINNING OF EISE ROUTE 5000 (MILLERSTOWN ROAD)	N/A	0.37	0.00	0.37	1		AS	2
0054	5	69367		HOWE AVENUE	FROM INTERSECTION OF ROUTE 0019 (WRIGHT AVENUE) AND ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO END OF PAVEMENT	N/A	0.17	0.00	0.17	2		AS	2

#### **Cycle 5 NPS/RIP Route ID Report** (Numerical By Route #) Road Inventory Program 08/12/2013 Page 5 of 11 White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Yellow = Unpaved Routes, DCV not Driven Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage

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

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Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated	Surf. Type	Area Maps
	Col Col		ů.						Filles	Length		SQ/FT		
0055	5	65272		DOUBLEDAY AVENUE	FROM INTERSECTION OF ROUTE 5005 (MUMASBURG ROAD) AND ROUTE 0026 (NORTH CONFEDERATE AVENUE)	TO ROUTE 0027 (WADSWORTH AVENUE) AT PAVEMENT CHANGE	N/A	0.40	0.00	0.40	1		AS	1
0056	5	115823		VISITOR CENTER DRIVE	FROM ROUTE 5003 (BALTIMORE PIKE)	TO ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	N/A	0.84	0.00	0.84	1		AS	2
0057ZZ	5	115826		VISITOR CENTER BUS LOOPS	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.08	THROUGH VISITOR CENTER BUS LOOPS	N/A	0.45	0.00	0.45	1		AS	2
0100	5	115827		JONES BATTALION AVENUE	FROM ROUTE 5002 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD))	TO END OF LOOP	N/A	0.33	0.00	0.33	2		AS	1
0200	5	69379		UNITED STATES CAVALRY AVENUE	FROM STATE ROUTE 116 (HANOVER ROAD)	TO LOW DUTCH ROAD	N/A	0.57	0.00	0.57	2		AS	3
0201	5	69381		CONFEDERATE CAVALRY-GREGG AVENUE	FROM LOW DUTCH ROAD	TO PARK BOUNDARY	N/A	1.76	0.00	1.76	2		AS	3
0202	5	69314		BIRNEY AVENUE	FROM ROUTE 0013 (WHEATFIELD ROAD) ON LEFT AT MP 1.08	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	0.16	0.00	0.16	2		AS	2
0203ZZ	5			NATIONAL CEMETERY ANNEX DRIVE	FROM ROUTE 5003 (BALTIMORE PIKE)	TO END OF LOOP	N/A	0.23	0.06	0.29	3	14,525	AS	1
0401	NC	67299		MCMILLAN WOODS LANE	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) ON RIGHT AT MP 0.61	TO END OF LOOP	N/A	0.00	0.20	0.20	3		GR	
0402	NC	69404		BUSHMAN FARM LANE	FROM ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON LEFT AT MP 0.08	TO END OF LANE	N/A	0.00	0.25	0.25	5		GR	
0403	NC	69417		SLYDER LANE	FROM ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	TO END OF LANE	N/A	0.00	0.50	0.50	5		GR	
0404	NC	69414		ROSE FARM LANE	FROM ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	TO END OF LANE	N/A	0.00	0.25	0.25	5		GR	

# Cycle 5 NPS/RIP Route ID Report Road Inventory Program 08/12/2013 Cycle 5 NPS/RIP Route ID Report Numerical By Route #) Page 6 of 11 Shading Color Key: White = Paved Routes, DCV Driven Yellow = Unpaved Routes, DCV not Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas

Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes

= Concession Route Flag ON

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

\*\* DCV - Data Collection Vehicle

approx. mileage

**GETT** 

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Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0407	NC	69421		WILLS-WINEBRENNER FARM LANE	FROM ROUTE 0025 (BUFORD AVENUE) ON LEFT AT MP 0.18	TO END OF LANE	N/A	0.00	0.25	0.25	5		GR	
0411	NC	69402		AMPHITHEATER ROAD	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) AT MP 1.8	TO ROUTE 0018 (WEST CONFEDERATE AVENUE)	N/A	0.00	0.10	0.10	3		GR	
0412	4	63398		COBEAN FARM LANE	FROM ROUTE 5004 (STATE ROUTE 34 (BIGLERVILLE ROAD AND CARLISLE ROAD))	TO END OF LOOP	N/A	0.40	0.00	0.40	5		AS	1
0413	NC	63405		MCCLEAN FARM LANE	FROM ROUTE 5005 (MUMMASBURG ROAD)	TO END OF LANE	N/A	0.00	0.39	0.39	5		GR	
0414	NC	81991		HENRY SPANGLER FARM LANE	FROM ROUTE 5002 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD))	TO END OF LANE	N/A	0.00	0.60	0.60	5		GR	
0415	NC	81992		ALTHOFF FARM LANE	FROM ROUTE 0013 (WHEATFIELD ROAD)	TO END OF LANE	N/A	0.00	0.11	0.11	5		GR	
0600	4	115828		COSTER AVENUE	FROM STRATTON STREET	TO HAZEL ALLEY	N/A	0.03	0.00	0.03	8	4,900	AS	1
0900ZZ	4	63411		ETERNAL PEACE LIGHT MEMORIAL PARKING AREAS	ADJACENT TO ROUTE 0026 (NORTH CONFEDERATE AVENUE) ON LEFT AND RIGHT AT MP 0.14		N/A	0.00	0.00	0.00		9,109	AS	1
0901	4	69442		OAK RIDGE TOWER PARKING	ADJACENT TO ROUTE 0055 (DOUBLEDAY AVENUE) ON LEFT AT MP 0.06		N/A	0.00	0.00	0.00		2,440	AS	1
0902	4	66140		WEST END GUIDE STATION PARKING	FROM ROUTE 0024 (STONE-MEREDITH AVENUE) ON RIGHT AT MP 0.01	TO ROUTE 5001 (U.S. HIGHWAY 30 (CHAMBERSBURG ROAD AND LINCOLN HIGHWAY))	N/A	0.00	0.00	0.00		6,695	AS	1
0903	4	67407		OLD VISITOR CENTER DRIVE AND PARKING	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	0.00	0.00	0.00		109,238	AS	1
0904	5	67404		NATIONAL CEMETERY PARKING LOT	FROM ROUTE 0010 (HANCOCK AVENUE) ON RIGHT AT MP 1.08	TO ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	N/A	0.00	0.00	0.00		76,442	AS	1
0905	4	68567		CULPS HILL TOWER PARKING	ADJACENT TO ROUTE 0052 (CULPS HILL TOWER ROAD) AT END OF LOOP		N/A	0.00	0.00	0.00		3,385	AS	1

#### **Cycle 5 NPS/RIP Route ID Report** (Numerical By Route #)

Road Inventory Pro	ogram 08/12/2013	(Numerical By Route	e #)	Page 7 of :
• •	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	es = Concession Route Flag ON	
	*Linnoved route date was obtained from N	DS and was not inventoriad by the Boad Invento	n ( Drogrom ( PID)	

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

\*\* DCV - Data Collection Vehicle

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

Rte.	cted	FMSS	Concess Route		Route Des	-	Maint.	Paved	Un- Paved	Total Route	Func.	Manual Rated	Surf.	Area
No.	Cycle Collected	No.	Con Ro	Route Name	From	То	District	Miles	Miles	Length	Class	SQ/FT	Туре	Maps
0906	4	68574		SPANGLER'S SPRING PARKING	ADJACENT TO ROUTE 0030 (SLOCUM AVENUE) ON RIGHT AT MP 0.10		N/A	0.00	0.00	0.00		1,298	AS	1
0908	4	67366		VIRGINIA MEMORIAL LOOP PARKING	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) ON LEFT AT MP 1.13	TO ROUTE 0018 (WEST CONFEDERATE AVENUE) ON LEFT AT MP 1.15	N/A	0.00	0.00	0.00		7,755	AS	1
0909	4	69448		PENNSYLVANIA MONUMENT PARKING	ADJACENT TO ROUTE 0022 (HUMPHREYS AVENUE)		N/A	0.00	0.00	0.00		2,100	AS	2
0910ZZ	5	69571		MAINTENANCE PARKING AREAS	FROM ROUTE 0021 (PLEASONTON AVENUE) AND ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO PARKING	N/A	0.00	0.00	0.00		53,104	AS	2
0911	NC	69427		GETTYSBURG NATIONAL CEMETERY ANNEX PARKING	FROM ROUTE 0203ZZ (NATIONAL CEMETERY ANNEX DRIVE)	TO PARKING	N/A	0.00	0.00	0.00			GR	
0912	4	69543		LONGSTREET TOWER PARKING	ADJACENT TO ROUTE 0018 (WEST CONFEDERATE AVENUE) ON LEFT AT MP 2.25		N/A	0.00	0.00	0.00		7,593	AS	2
0913	4	69215		SOUTH END GUIDE STATION PARKING	FROM ROUTE 5006 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD AND EMMITSBURG ROAD))	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	0.00	0.00	0.00		5,567	AS	2
0914ZZ	4	69309		DEVIL'S DEN PARKING AREAS	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE)		N/A	0.00	0.00	0.00		4,123	AS	2
0915ZZ	4	69300		LITTLE ROUND TOP PARKING AREAS	ADJACENT TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON LEFT AND RIGHT AT MP 1.74		N/A	0.00	0.00	0.00		8,164	AS	2
0916	4	69290		BIG ROUND TOP PARKING	ADJACENT TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON LEFT AT MP 1.33		N/A	0.00	0.00	0.00		4,730	AS	2
0917	4	69435		20TH MAINE MONUMENT PARKING	ADJACENT TO ROUTE 0019 (WRIGHT AVENUE) ON LEFT AT MP 0.02		N/A	0.00	0.00	0.00		1,708	AS	2

#### **Cycle 5 NPS/RIP Route ID Report** (Numerical By Route #) Road Inventory Program 08/12/2013 Page 8 of 11 White = Paved Routes, DCV Driven Blue = All Paved Parking Areas Green = All Unpaved Parking Areas Shading Color Key: Yellow = Unpaved Routes, DCV not Driven Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage

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

\*\* DCV - Data Collection Vehicle

**GETT** 

\*\*\* Only Functional Class 1, 2, & 7 routes, and previously uncollected routes were collected in Cycle 5

Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route De From	scription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
0918	NC	69340		PITZER WOODS AMPHITHEATER PARKING	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) ON RIGHT AT MP 1.77	TO ROUTE 0018 (WEST CONFEDERATE AVENUE) ON RIGHT AT MP 1.86	N/A	0.00	0.00	0.00			GR	
0919	NC	69341		PICNIC PARKING AREA	FROM ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON RIGHT AT MP 0.20	TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON RIGHT AT MP 0.25	N/A	0.00	0.00	0.00			GR	
0920	4	115829		VISITOR CENTER BUS PARKING AREA	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON LEFT AT MP 0.09	TO ROUTE 0056 (VISITOR CENTER DRIVE) ON LEFT AT MP 0.29	N/A	0.00	0.00	0.00		100,997	AS	2
0921	4	115830		VISITOR CENTER PARKING AREA 1	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.17	TO ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.34	N/A	0.00	0.00	0.00		97,889	AS	2
0922	4	115831		VISITOR CENTER PARKING AREA 2	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.40	TO ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.42	N/A	0.00	0.00	0.00		45,004	AS	2
0923	4	115832		VISITOR CENTER PARKING AREA 3	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.65	TO PARKING	N/A	0.00	0.00	0.00		116,348	AS	2
0924	5			NATIONAL CEMETERY ANNEX HANDICAPPED PARKING	FROM ROUTE 0911 (GETTYSBURG NATIONAL CEMETERY ANNEX PARKING)	TO PARKING	N/A	0.00	0.00	0.00		686	AS	1
5000	4			STATE ROUTE 134 (TANEYTOWN ROAD)	FROM BRIDGE OVER U.S. HIGHWAY 15	TO ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD))	N/A	3.13	0.00	3.13			AS	1,2
5001	4			U.S. HIGHWAY 30 (CHAMBERSBURG ROAD AND LINCOLN HIGHWAY)	FROM COUNTRY CLUB LANE	TO INTERSECTION OF ROUTE 0040 (SEMINARY RIDGE AVENUE) AND BUFORD AVENUE	N/A	0.83	0.00	0.83			AS	1
5002	5			BUSINESS ROUTE 15 (OLD HARRISBURG ROAD)	FROM ROUTE 0100 (JONES BATTALION AVENUE) ON RIGHT AT MP 0.00	TO BEGINNING OF ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD)) AT SOUTH EXIT OF THE TRAFFIC CIRCLE	N/A	1.68	0.00	1.68			AS	1
5003	4			BALTIMORE PIKE	FROM ROUTE 5006 (BUSINESS ROUTE 15 (EMMITSBURG ROAD)) AT INTERSECTION OF BALTIMORE STREET AND STEINWEHR AVENUE	TO ROCK CREEK BRIDGE	N/A	1.73	0.00	1.73			AS	1,2

Road In	ventor	y Program	08/		cle 5 NPS/	RIP Rout		ort					Page	9 of 11
	g Color		e = Pa	ved Routes, DCV Driven	Yellow = Unpaved Rout	es, DCV not Driven	Blue = All Paved Parking	Areas	C	Green = All	Unpaved	Parking Area	IS	
	xt denote . mileage	Grov	= Pav	ed Routes, DCV not Drive	n Black = State, Local or	Private non-NPS Routes	= Concessio	n Route F	lag ON					
GE	тт	** DC	CV - Da	oute data was obtained fro ata Collection Vehicle BURG NATIONAL I	om NPS and was not inventorie MILITARY PARK		Program (RIP). Functional Class 1, 2,	& 7 routes	, and prev	<i>r</i> iously unco	ollected ro	outes were co	llected ir	n Cycle 5
Rte. No.	Cycle Collected	FMSS No.	Concess Route	Route Name	Route Des From	cription To	Maint. District	Paved Miles	Un- Paved Miles	Total Route Length	Func. Class	Manual Rated SQ/FT	Surf. Type	Area Maps
5004	4			STATE ROUTE 34 (BIGLERVILLE ROAD AND CARLISLE ROAD)	FROM ROUTE 0412 (COBEAN FARM LANE) ON RIGHT	TO ROUTE 5002 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD)) AT LINCOLN AVENUE	N/A	1.12	0.00	1.12			AS	1
5005	4			MUMMASBURG ROAD	FROM HERR'S RIDGE ROAD	TO WEST LINCOLN AVENUE	N/A	1.59	0.00	1.59			AS	1
5006	5			BUSINESS ROUTE 15 (EMMITSBURG ROAD)	FROM END OF ROUTE 5002 (BUSINESS ROUTE 15 (OLD HARRISBURG ROAD)) AT SOUTH EXIT OF THE TRAFFIC CIRCLE	TO SOUTH PARK BOUNDARY	N/A	3.46	0.00	3.46			AS	1,2

Road Inventory Pro	ogram 08/12/2013	-	P ROU	e #)		Page 10 of 11		
Shading Color Key:	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DC	V not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking	Areas		
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private	non-NPS Rout	es = Concession Route Flag ON				
	*Unpaved route data was obtained from NPS ** DCV - Data Collection Vehicle	and was not inventoried by th		ry Program (RIP). nly Functional Class 1, 2, & 7 routes, and p	previously uncollected routes we	re collected in Cycle 5		
	CYCLE 5 COLLECTED SU	MMARY TOTALS	FOR GE	TTYSBURG NATIONAL	MILITARY PARK			
CYC	LE 5 COLLECTED ROUTE 1	TOTALS		CYCLE 5 COLLECTED C	<b>ONCESSION TOT</b>	ALS		
	DCV Driven Route Mi	les 28.42	Concession Paved Route Miles					
	Manually Rated Route Mi	les 0.23		Concession Paved Parking Area SQFT				
TOTAL PAR	K ROUTE MILES COLLECTED IN CYCL	E 5 28.65		Concession Manu	ally Rated Routes SQFT	0		
	Manually Rated Routes (SQI	FT) 8,885	CYCLE	<b>5 COLLECTED WEIGHT</b>	ED AVERAGE PAI	RK VALUES		
* <u>CYCLE 5</u>	COLLECTED PARKING A	REA TOTALS			DCV Driven PCR	95		
	Paved Parking (SQI	FT) 124,480		**Man	ually Rated Routes PCR	90		
					**Parking PCR	90		
				***Tota	al Equivalent Lane Miles	48.40		
					-			

#### TOTAL PARK SUMMARY FOR GETTYSBURG NATIONAL MILITARY PARK

ROUTE TOTALS	
TOTAL PAVED PARK ROUTE MILES	29.09
TOTAL PAVED PARKING (SQFT)	664,375

\_ \_ \_ \_ \_ \_ \_

\* - 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.

load Inv	entory Pro	ogram 08/12/2013	e 5 NPS/RIP Rou (Numerical By Rout	_	Page 11 of 1
0	Color Key:	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text approx. r		Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Rout	tes = Concession Route F	lag ON
	C C	*Unpaved route data was obtained from N ** DCV - Data Collection Vehicle	PS and was not inventoried by the Road Inventor *** C	, , ,	and previously uncollected routes were collected in Cycle 5
		<u>General Park Re</u>	oad Functional Classification T	able	Surface Type Abbreviations:
<u>Class 1</u>			constitute the main access route, circulatory tour, or th race) are numbered 1 - 9. State Routes Inventoried for I		AS - Asphaltic Concrete Pavement
<u>Class 2</u>		ark Road (Public Roads) - Roads which provide acce ds, etc. Route Numbers 100-199.	ss within a park to areas of scenic, scientific, recreationa	al or cultural interest, such as overlooks,	CO - Portland Cement Concrete Pavement BR - Brick or Pavers Road Bed
<u>Class 3</u>			e circulation within public areas, such as campgrounds, peed traffic and are often designed for one-way circulati		CB - Cobble Stone Road Bed GR - Gravel Road Bed
<u>Class 4</u>	roads freque	ently have no minimum design standards and their	alation through remote areas and/or access to primitive use may be limited to specially equipped vehicles. Rout because, historically, they were numbered similarly.		SA - Sand Road Bed NV - Native or Dirt Material Road Bed
<u>Class 5</u>		ve Access Road (Administrative Roads) - All public r utility areas. Route Numbers 400-499.	roads intended for access to administrative development	ts or structures such as park offices, emplo	oyee OT - Other Materials Road Bed
<u>Class 6</u>	Note: Fund	ctional Classes 5 and 6 have the same route number	sed to the public, including patrol roads, truck trails, and rs because historically they were numbered similarly and housing are often closed to the public, this restriction w	d often there is little distinction between	-499.
<u>Class 7</u>	an urban ar		ties serve high volumes of park and non-park related tra- ne major parkways which serve as gateways to our natio bers 1-9.		
<u>Class 8</u>			e usually extensions of the adjoining street system that m with accepted local engineering practice and local con		Park
* * * * * * * *	*****	*****	****	*****	****
			bark or other unit of the NPS which are administered by road is not based on traffic volumes or design speed, bu		
nationwid	e which are de		es for interpretive roads, and a 500 series for one-way r for these roads will be maintained for reporting consister and 500 series will be discontinued for future use.		
		ers are assigned to Non-NPS Routes that are State, ( Video Log only.	County or City owned which border, traverse, or provide	e access to Park Facilities or Locations. 500	00 Routes

## **NPS/RIP Subcomponent Details for GETT**

Page 1 of 3

Manual Rated SQ/FT

8,885

(Numerical By Subcomponent #)

0 ,	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
Red text denotes approx. mileage	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	s = Concession Route Flag ON	

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

## GETT

Road Inventory Program 08/12/2013

Rte.	FMSS	Cycle Collected		Route De	escription	Concess Route	Func. Class	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	δů	Route Name	From	То	ပ္လီ ဗီ	Fui Cla	Miles	Miles	Length	SQ/FT
0037ZZ	69443	5	NATIONAL MONUMENT DRIVE ROUTES	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO ROUTE 5003 (BALTIMORE PIKE)		3	0.61	0.00	0.61	
0057ZZ	115826	5	VISITOR CENTER BUS LOOPS	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.08	THROUGH VISITOR CENTER BUS LOOPS		1	0.45	0.00	0.45	
0203ZZ	N/A	5	NATIONAL CEMETERY ANNEX DRIVE	FROM ROUTE 5003 (BALTIMORE PIKE)	TO END OF LOOP		3	0.23	0.06	0.29	14,525
0900ZZ	63411	4	ETERNAL PEACE LIGHT MEMORIAL PARKING AREAS	ADJACENT TO ROUTE 0026 (NORTH CONFEDERATE AVENUE) ON LEFT AND RIGHT AT MP 0.14				0.00	0.00	0.00	9,109
0910ZZ	69571	5	MAINTENANCE PARKING AREAS	FROM ROUTE 0021 (PLEASONTON AVENUE) AND ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO PARKING			0.00	0.00	0.00	53,104
0914ZZ	69309	4	DEVIL'S DEN PARKING AREAS	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE)				0.00	0.00	0.00	4,123
0915ZZ	69300	4	LITTLE ROUND TOP PARKING AREAS	ADJACENT TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON LEFT AND RIGHT AT MP 1.74				0.00	0.00	0.00	8,164

GETT-	0037Z	Z S	Subcomponent Breakd	own						
Rte. No.	FMSS No.	Cycle Collected	Route Name	Route De From	scription To	Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length
0037AZ	69443	5	NATIONAL MONUMENT DRIVE	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))	TO END OF LOOP		3	0.61	0.00	0.61
0037BZ	69443	5	NATIONAL MONUMENT DRIVE - BALTIMORE STREET ENTRANCE AREA	FROM ROUTE 5003 (BALTIMORE PIKE)	TO ROUTE 0037AZ (NATIONAL MONUMENT DRIVE)		3	0.00	0.00	0.00

## **NPS/RIP Subcomponent Details for GETT**

Road Inventory Program 08/12/2013

(Numerical By Subcomponent #)

Page 2 of 3

Red text denotes	White = Paved Routes, DCV Driven	Yellow = Unpaved Routes, DCV not Driven	Blue = All Paved Parking Areas	Green = All Unpaved Parking Areas
	Grey = Paved Routes, DCV not Driven	Black = State, Local or Private non-NPS Route	s = Concession Route Flag ON	

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

## GETT

GETTYSBURG NATIONAL MILITARY PARK

#### GETT-0057ZZ Subcomponent Breakdown

Rte.	FMSS	cle llected		Route Description			SS SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycle Colle	Route Name	From	То	Con Rou	Func. Class	Miles	Miles	Length	SQ/FT
0057AZ	115826	5	VISITOR CENTER BUS LOOP A	FROM ROUTE 0056 (VISITOR CENTER DRIVE) ON RIGHT AT MP 0.08	TO ROUTE 0057BZ (VISITOR CENTER BUS LOOP B)		1	0.26	0.00	0.26	
0057BZ	115826	5	VISITOR CENTER BUS LOOP B	FROM ROUTE 0057AZ (VISITOR CENTER BUS LOOP A)	TO END OF LOOP		1	0.19	0.00	0.19	

## GETT-0203ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Description From To			Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
0203AZ	N/A	5	NATIONAL CEMETERY ANNEX DRIVE- APRON	FROM ROUTE 5003 (BALTIMORE PIKE)	TO BEGINNING OF ROUTE 0203BZ (NATIONAL CEMETERY ANNEX DRIVE- UNPAVED)		3	0.01	0.00	0.01	444
0203BZ	N/A	5	NATIONAL CEMETERY ANNEX DRIVE- UNPAVED	FROM END OF ROUTE 0203AZ (NATIONAL CEMETERY ANNEX DRIVE- APRON)	TO BEGINNING OF ROUTE 0203CZ (NATIONAL CEMETERY ANNEX DRIVE- MAIN LOOP)		3	0.00	0.06	0.06	
0203CZ	N/A	5	NATIONAL CEMETERY ANNEX DRIVE- MAIN LOOP	FROM ROUTE 0203BZ (NATIONAL CEMETERY ANNEX DRIVE- UNPAVED)	TO END OF LOOP		3	0.23	0.00	0.23	14,081

## GETT-0900ZZ Subcomponent Breakdown

Rte.	FMSS	cle lectec		Route Description	ı	ncess ute	nc. Iss	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	ŠÖ	Route Name	From	То	Cor Roi	Fun Cla	Miles	Miles	Length	SQ/FT
0900AZ	63411	4	ETERNAL PEACE LIGHT MEMORIAL PARKING A	ADJACENT TO ROUTE 0026 (NORTH CONFEDERATE AVENUE) ON RIGHT AT MP 0.13				0.00	0.00	0.00	3,941
0900BZ	63411	4	ETERNAL PEACE LIGHT MEMORIAL PARKING B	ADJACENT TO ROUTE 0026 (NORTH CONFEDERATE AVENUE) ON LEFT AT MP 0.13				0.00	0.00	0.00	5,168

## **NPS/RIP Subcomponent Details for GETT**

(Numerical By Subcomponent #) Road Inventory Program 08/12/2013 Page 3 of 3 Green = All Unpaved Parking Areas Shading Color Key: White = Paved Routes. DCV Driven Yellow = Unpaved Routes, DCV not Driven lue = All Paved Parking Areas Red text denotes Grey = Paved Routes, DCV not Driven Black = State, Local or Private non-NPS Routes = Concession Route Flag ON approx. mileage \*Unpaved route data was obtained from NPS and was not inventoried by the Road Inventory Program (RIP). GETT GETTYSBURG NATIONAL MILITARY PARK GETT-0910ZZ Subcomponent Breakdown Concess Route Func. Class Total Un-Manual **Route Description** Cycle Collec FMSS Route Rte. Paved Paved Rated No. Length **Route Name** Miles SQ/FT No. From То Miles 0910AZ 69571 **MAINTENANCE PARKING A** FROM ROUTE 0021 **TO PARKING** 0.00 0.00 0.00 47,352 5 (PLEASONTON AVENUE) ON LEFT AT MP 0.07 5,752 0910BZ 69571 4 MAINTENANCE PARKING B FROM ROUTE 5000 (STATE ROUTE TO PARKING 0.00 0.00 0.00 134 (TANEYTOWN ROAD))

#### GETT-0914ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Cycle Collected	Route Name	Route Descrip		Concess Route	Func. Class	Paved Miles	Un- Paved Miles	Total Route Length	Manual Rated SQ/FT
NO.		00	Route Manie	From	То	<b>U K</b>	ĒΟ	Miles	FILES		30/11
0914AZ	69309	4	DEVIL'S DEN PARKING A	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE) ON LEFT AT MP 0.04				0.00	0.00	0.00	1,493
0914BZ	69309	4	DEVIL'S DEN PARKING B	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE) ON LEFT AT MP 0.07				0.00	0.00	0.00	989
0914CZ	69309	4	DEVIL'S DEN PARKING C	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE) ON LEFT AT MP 0.09				0.00	0.00	0.00	813
0914DZ	69309	4	DEVIL'S DEN PARKING D	ADJACENT TO ROUTE 0042 (SOUTH SICKLES AVENUE) ON LEFT AT MP 0.10				0.00	0.00	0.00	828

#### GETT-0915ZZ Subcomponent Breakdown

Rte.	FMSS	cle lecter		Route Description	n	ncess Lte	SS	Paved	Un- Paved	Total Route	Manual Rated
No.	No.	Cycl	Route Name	From	То	Conce Route	Func. Class	Miles	Miles	Length	SQ/FT
0915AZ	69300	4	LITTLE ROUND TOP PARKING A	ADJACENT TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON RIGHT AT MP 1.74				0.00	0.00	0.00	2,940
0915BZ	69300	4	LITTLE ROUND TOP PARKING B	ADJACENT TO ROUTE 0012 (SOUTH CONFEDERATE-SYKES AVENUE) ON LEFT AT MP 1.74				0.00	0.00	0.00	5,224
		-									

	ROUTES ADDED FROM PREVIOUS INVENTORY:							
Route #	Route Name	Reason for Addition	Comments					
0203ZZ	NATIONAL CEMETERY ANNEX DRIVE	OTHER	ADDED TO INVENTORY IN CYCLE 5.					
0924	NATIONAL CEMETERY ANNEX HANDICAPPED PARKING	OTHER	PARKING AREA ADDED TO INVENTORY IN CYCLE 5.					
	ROUTES	MODIFIED FROM PREVIOUS IN	IVENTORY:					
Route #	Route Name	Type of Modification	Comments					
0904	NATIONAL CEMETERY PARKING LOT	RECONSTRUCTED	THE SOUTHERNMOST ROW OF PARKING SPACES WAS RECONSTRUCTED SINCE CYCLE 4. GPS WAS RECOLLECTED IN CYCLE 5. ROUTE NAME CHANGED FROM "ZIEGLER'S GROVE DRIVE AND PARKING" TO "NATIONAL CEMETERY PARKING LOT".					
0910ZZ	MAINTENANCE PARKING AREAS	RECENTLY CONSTRUCTED ROUTE	A PORTION OF THIS ROUTE WAS UNDER CONSTRUCTION DURING CYCLE 4 DATA COLLECTION. FULL DATA COLLECTION AND GPS COLLECTION WAS CONDUCTED IN CYCLE 5.					

	OTHER (	CHANGES FROM PREVIOUS IN	IVENTORY:
Route #	Route Name	Type of Change	Comments
0020	BERDAN AVENUE	COLLECTION METHOD CHANGE	CHANGED FROM A MANUALLY RATED ROAD TO A DATA COLLECTION VEHICLE (DCV) ROUTE IN CYCLE 5.
0022	HUMPHREYS AVENUE	COLLECTION METHOD CHANGE	MANUALLY RATED IN CYCLE 4, COLLECTED WITH THE DATA COLLECTION VEHICLE (DCV) IN CYCLE 5.
0037ZZ	NATIONAL MONUMENT DRIVE ROUTES	COLLECTION METHOD CHANGE	MANUALLY RATED IN CYCLE 4, PARTIALLY COLLECTED WITH THE DATA COLLECTION VEHICLE (DCV) IN CYCLE 5.
0040	SEMINARY RIDGE AVENUE	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS CHANGED FROM 8 TO 1 IN CYCLE 5 BECAUSE THE PARK CONSIDERS THIS TO BE A PRIMARY ROAD.
0041	WAINWRIGHT AVENUE	LENGTH CHANGE	EXTENDED ROAD IN CYCLE 5.
0052	CULPS HILL TOWER ROAD	COLLECTION METHOD CHANGE	MANUALLY RATED IN CYCLE 4, COLLECTED WITH THE DATA COLLECTION VEHICLE (DCV) IN CYCLE 5.
0053	MILLERSTOWN ROAD	LENGTH CHANGE	LONGER IN CYCLE 5, ROUTE CONTINUES UNTIL PARK BOUNDARY AT PAVEMENT CHANGE.
0200	UNITED STATES CAVALRY AVENUE	ROUTE NAME	ROUTE NAME CHANGED FROM "EAST CAVALRY AVENUE" TO "UNITED STATES CAVALRY AVENUE".
0201	CONFEDERATE CAVALRY-GREGG AVENUE	ROUTE NAME	ROUTE NAME CHANGED FROM "EAST CAVALRY FIELD ACCESS" TO "CONFEDERATE CAVALRY-GREGG AVENUE".
0412	COBEAN FARM LANE	FUNCTIONAL CLASS CHANGE	FUNCTIONAL CLASS CHANGED FROM 6 TO 5 IN CYCLE 5.
0901	OAK RIDGE TOWER PARKING	ROUTE NAME	THE WORD "HILL" WAS REPLACED BY "RIDGE" IN ROUTE NAME IN CYCLE 5.

	OTHER CHANGES FROM PREVIOUS INVENTORY:							
Route #	Route Name	Type of Change	Comments					
5002	BUSINESS ROUTE 15 (OLD HARRISBURG ROAD)	ROUTE SPLIT	CYCLE 4 ROUTE 5002 SPLIT IN TWO SECTIONS (5002 AND 5006) IN CYCLE 5.					
5006	BUSINESS ROUTE 15 (EMMITSBURG ROAD)	ROUTE SPLIT	CYCLE 4 ROUTE 5002 SPLIT IN TWO SECTIONS (5002 AND 5006) IN CYCLE 5.					

# <u>Section 3</u> Park Summary Information



# Gettysburg National Military Park



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

		P	avement C	Condition R	ating (PCF	R)			
	Poor (I	0-60)	Fair (6	Fair (61-84)		(85-94)	Excellent	(95-100)	TOTAL
F.C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1	0.52	1.83%	1.44	5.07%	2.42	8.52%	14.18	49.89%	18.56
2	0.07	0.25%	0.86	3.03%	1.66	5.84%	6.66	23.43%	9.25
3					0.02	0.07%	0.59	2.08%	0.61
4									
5									
6									
7									
8									
Totals	0.59	2.08%	2.30	8.09%	4.10	14.43%	21.43	75.40%	28.42

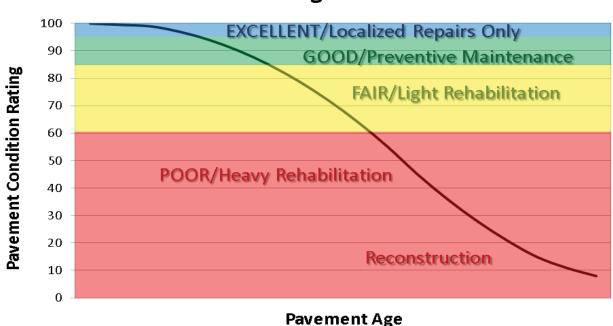
Note: The information in this table is derived from the PMS\_20 table in the Park database, which only contains processed data from routes collected with the Data Collection Vehicle (DCV). Information for Manually Rated Routes (MRR) and Parking Areas is not reported in this table. Only Functional Class 1, 2, & 7 routes, and any new routes not previously collected by RIP, are collected in Large Parks.

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

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

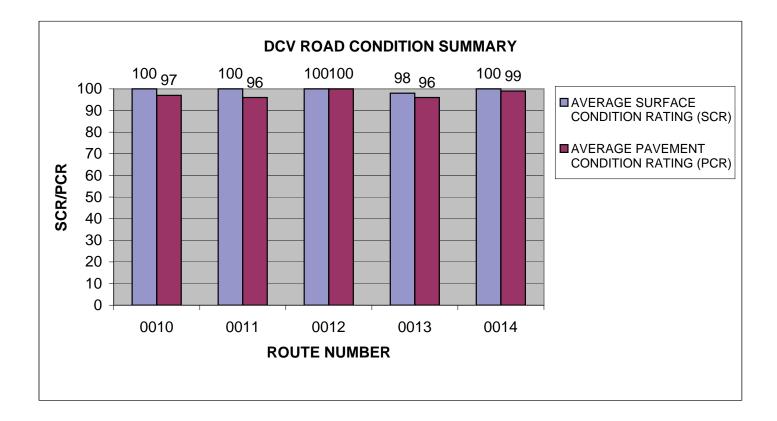
- Excellent/New: PCR of 95-100. Pavements in this range will require only spot repairs
- Good: PCR of 85-94. Pavements in this range will likely be candidates for Preventive Maintenance. Examples include Chip and Slurry Seals, Micro Surfacing and Thin Overlays.
- Fair: PCR of 61-84. Pavements in this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

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

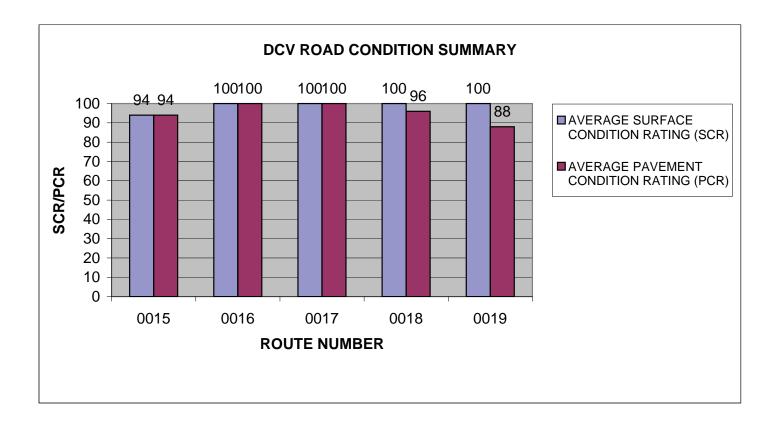


#### **Condition Categories and Treatments**

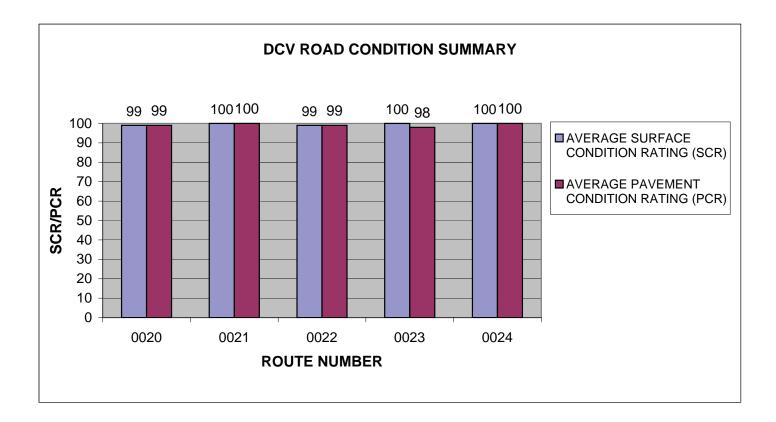
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	HANCOCK AVENUE	1	1.15	ASPHALT	100	97
0011	SEDGWICK AVENUE	2	0.53	ASPHALT	100	96
0012	SOUTH CONFEDERATE-SYKES AVENUE	1	1.96	ASPHALT	100	100
0013	WHEATFIELD ROAD	1	1.16	ASPHALT	98	96
0014	UNITED STATES AVENUE	2	0.79	ASPHALT	100	99



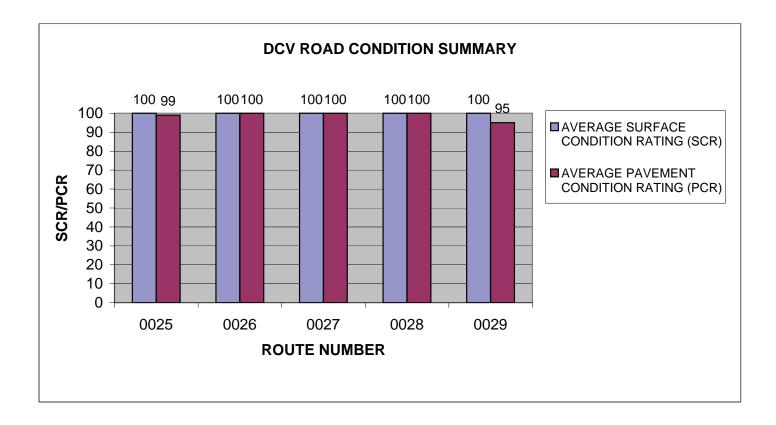
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0015	NORTH SICKLES AVENUE	1	0.56	ASPHALT	94	94
0016	WARREN AVENUE	2	0.30	ASPHALT	100	100
0017	CRAWFORD AVENUE	2	0.35	ASPHALT	100	100
0018	WEST CONFEDERATE AVENUE	1	2.83	ASPHALT	100	96
0019	WRIGHT AVENUE	2	0.56	ASPHALT	100	88



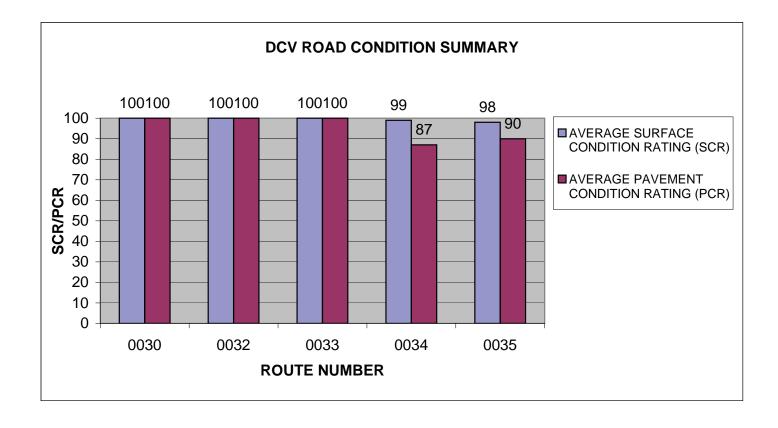
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH	~	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0020	BERDAN AVENUE	2	0.12	ASPHALT	99	99
0021	PLEASONTON AVENUE	1	0.31	ASPHALT	100	100
0022	HUMPHREYS AVENUE	2	0.10	ASPHALT	99	99
0023	REYNOLDS AVENUE	1	0.99	ASPHALT	100	98
0024	STONE-MEREDITH AVENUE	2	0.51	ASPHALT	100	100



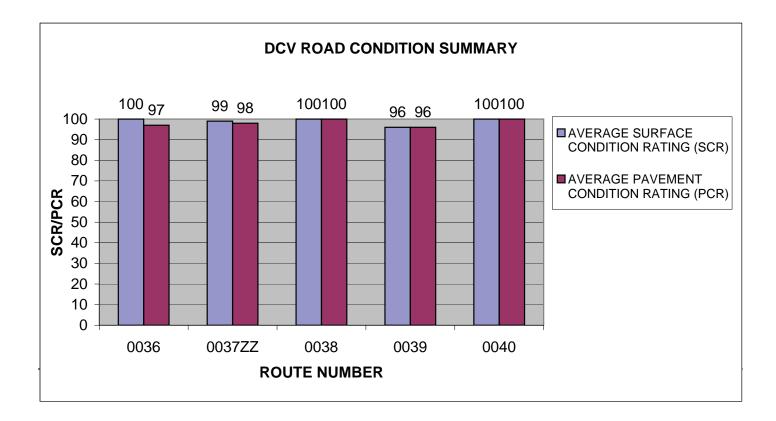
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0025	BUFORD AVENUE	1	0.64	ASPHALT	100	99
0026	NORTH CONFEDERATE AVENUE	1	0.36	ASPHALT	100	100
0027	WADSWORTH AVENUE	1	0.16	ASPHALT	100	100
0028	HOWARD AVENUE	1	0.96	ASPHALT	100	100
0029	EAST CONFEDERATE AVENUE	1	1.38	ASPHALT	100	95



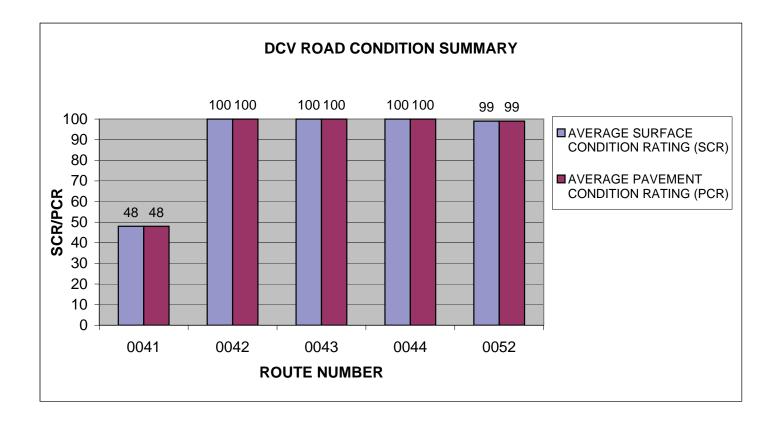
ROUTE		FUNCT	PAVED	SURFACE	AVERAGE SURFACE CONDITION	AVERAGE PAVEMENT CONDITION
NUMBER	ROUTE NAME	CLASS	LENGTH	TYPE	RATING (SCR)	RATING (PCR)
0030	SLOCUM AVENUE	1	1.04	ASPHALT	100	100
0032	WILLIAMS AVENUE	2	0.31	ASPHALT	100	100
0033	GEARY AVENUE	2	0.38	ASPHALT	100	100
0034	COLGROVE-CARMAN AVENUE	1	0.55	ASPHALT	99	87
0035	HUNT AVENUE	1	0.54	ASPHALT	98	90



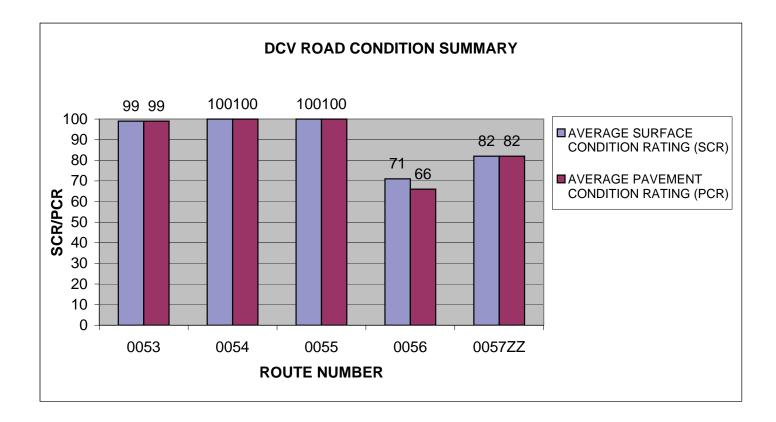
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0036	GRANITE SCHOOL HOUSE LANE	2	0.83	ASPHALT	100	97
0037ZZ	NATIONAL MONUMENT DRIVE ROUTES	3	0.61	ASPHALT	99	98
0038	BENNER HILL AVENUE	2	0.25	ASPHALT	100	100
0039	ROBINSON AVENUE	1	0.16	ASPHALT	96	96
0040	SEMINARY RIDGE AVENUE	1	0.34	ASPHALT	100	100



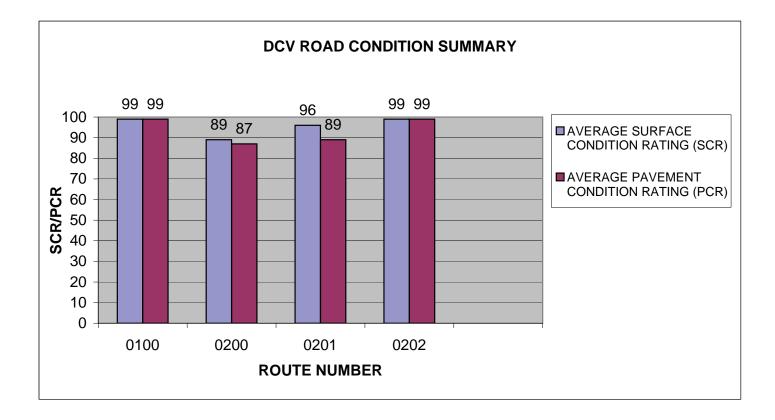
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH		AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0041	WAINWRIGHT AVENUE	2	0.43	ASPHALT	48	48
0042	SOUTH SICKLES AVENUE	1	0.96	ASPHALT	100	100
0043	CROSS-BROOKE- DETROBRIAND AVENUE	2	0.80	ASPHALT	100	100
0044	AYERS AVENUE	1	0.30	ASPHALT	100	100
0052	CULPS HILL TOWER ROAD	1	0.15	ASPHALT	99	99



ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	PAVED LENGTH	~	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0053	MILLERSTOWN ROAD	1	0.37	ASPHALT	99	99
0054	HOWE AVENUE	2	0.17	ASPHALT	100	100
0055	DOUBLEDAY AVENUE	1	0.40	ASPHALT	100	100
0056	VISITOR CENTER DRIVE	1	0.84	ASPHALT	71	66
0057ZZ	VISITOR CENTER BUS LOOPS	1	0.45	ASPHALT	82	82



DOUTE		FINOT				AVERAGE PAVEMENT
ROUTE		FUNCT	PAVED	SURFACE	CONDITION	CONDITION
NUMBER	ROUTE NAME	CLASS	LENGTH	TYPE	RATING (SCR)	RATING (PCR)
0100	JONES BATTALION AVENUE	2	0.33	ASPHALT	99	99
0200	UNITED STATES CAVALRY AVENUE	2	0.57	ASPHALT	89	87
0200 0201	UNITED STATES CAVALRY AVENUE CONFEDERATE CAVALRY-GREGG AVENUE	2 2	0.57 1.76	ASPHALT ASPHALT	89 96	87 89



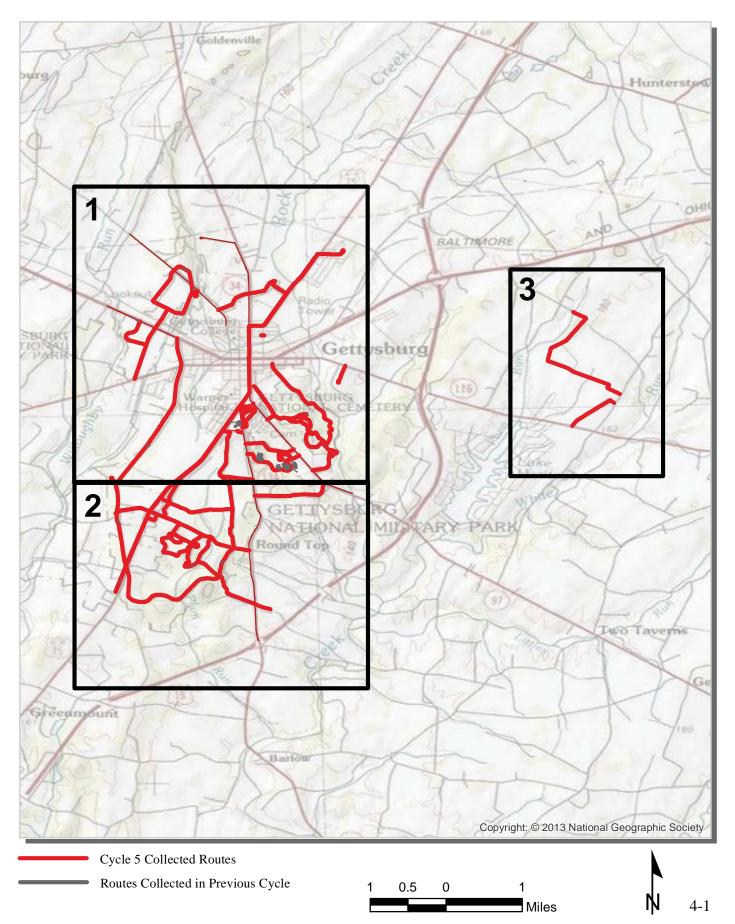
# <u>Section 4</u> Park Route Location Maps



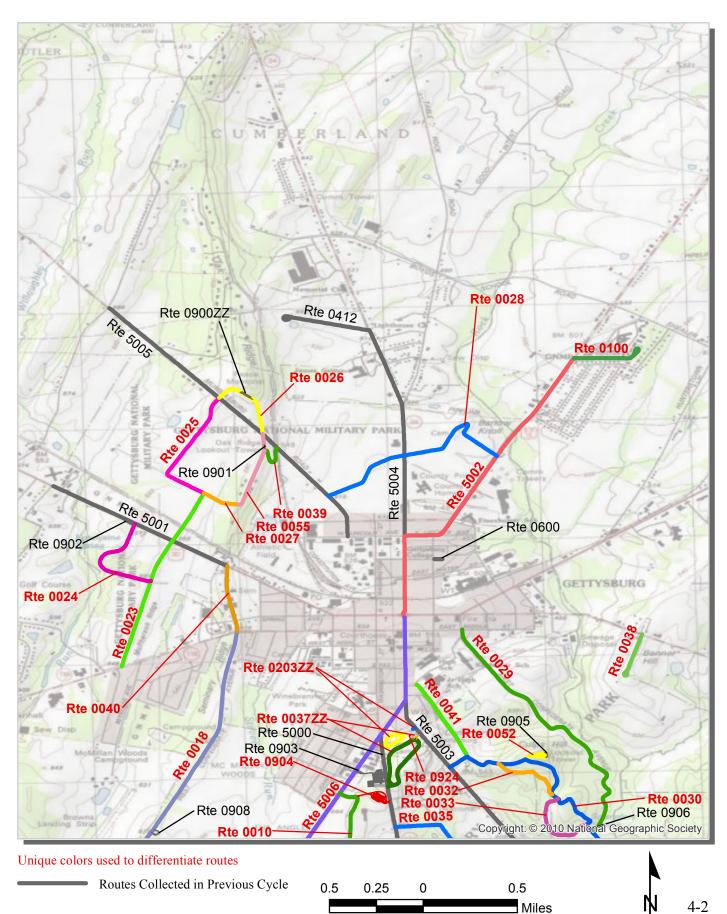
## Gettysburg National Military Park



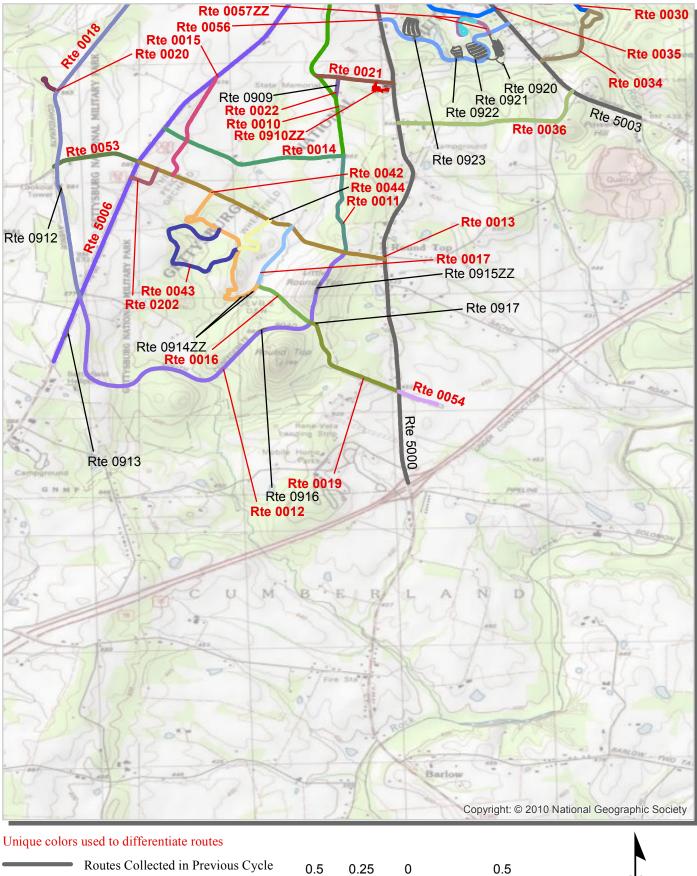
### Gettysburg National Military Park Route Location Map Key Map



#### Gettysburg National Military Park Route Location Map Area 1



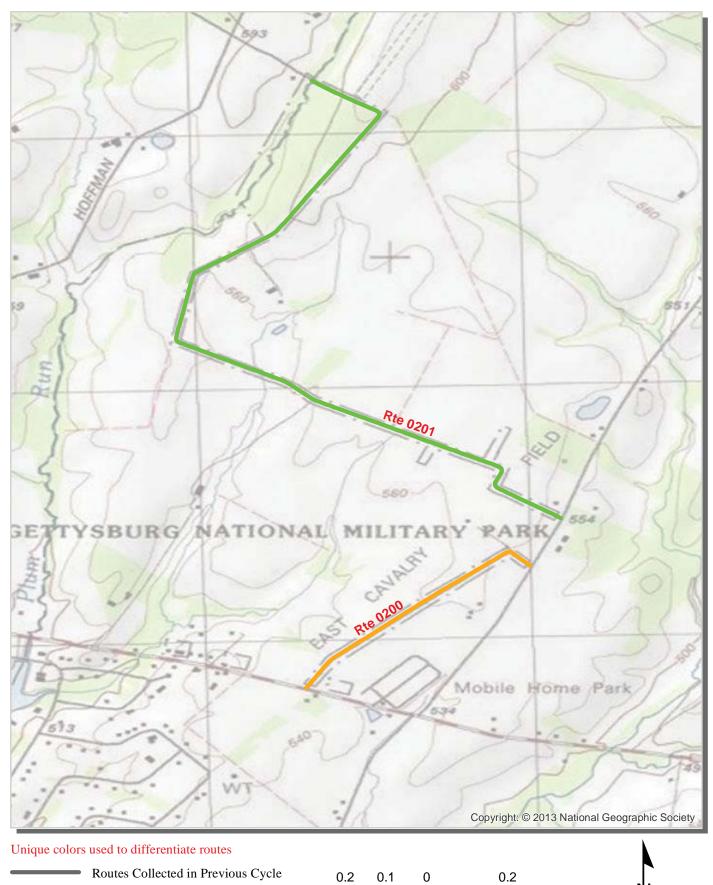
### **Gettysburg National Military Park Route Location Map** Area 2



Routes Collected in Previous Cycle



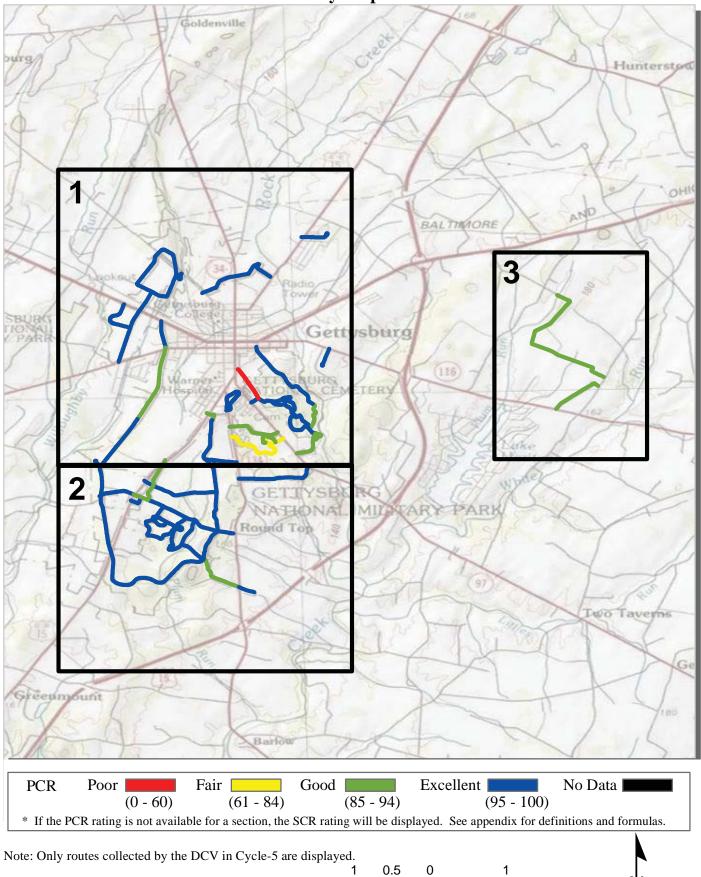
### Gettysburg National Military Park Route Location Map Area 3



4-4

Miles

#### Gettysburg National Military Park Route Condition Map PCR - Mile by Mile Key Map

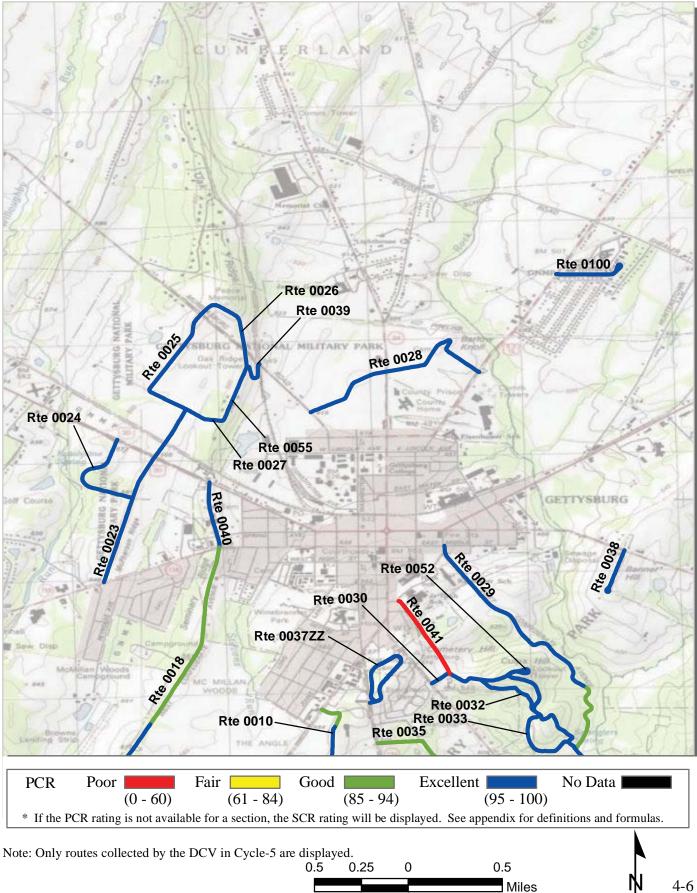


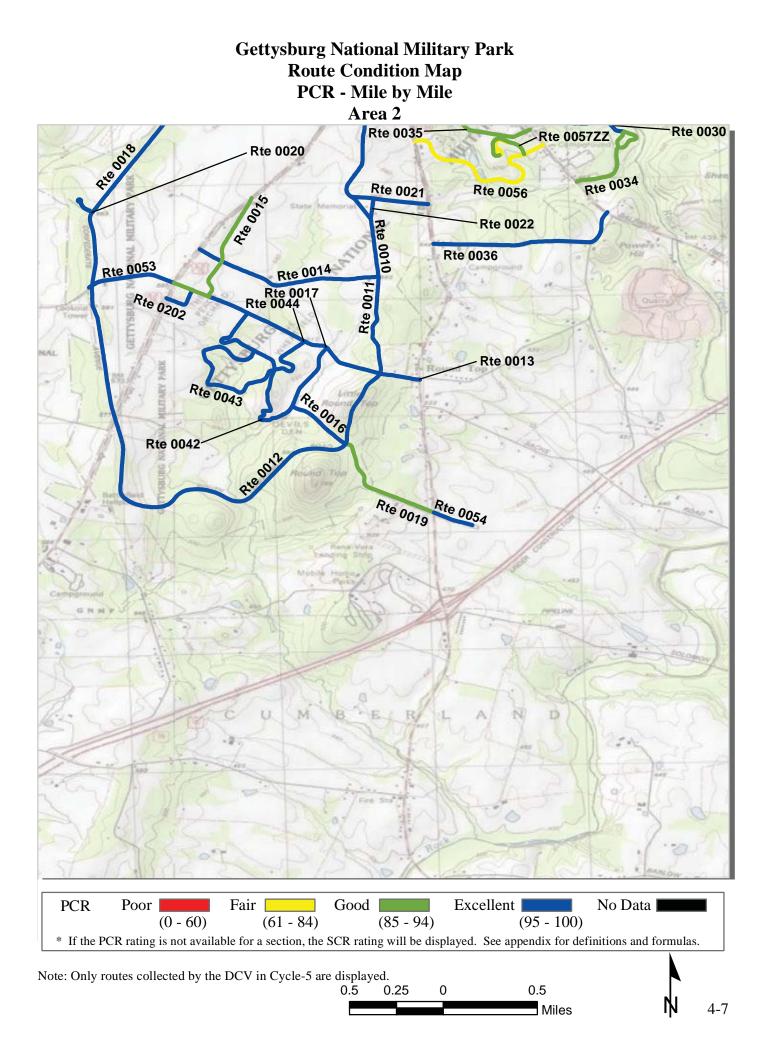


4-5

## Gettysburg National Military Park Route Condition Map PCR - Mile by Mile

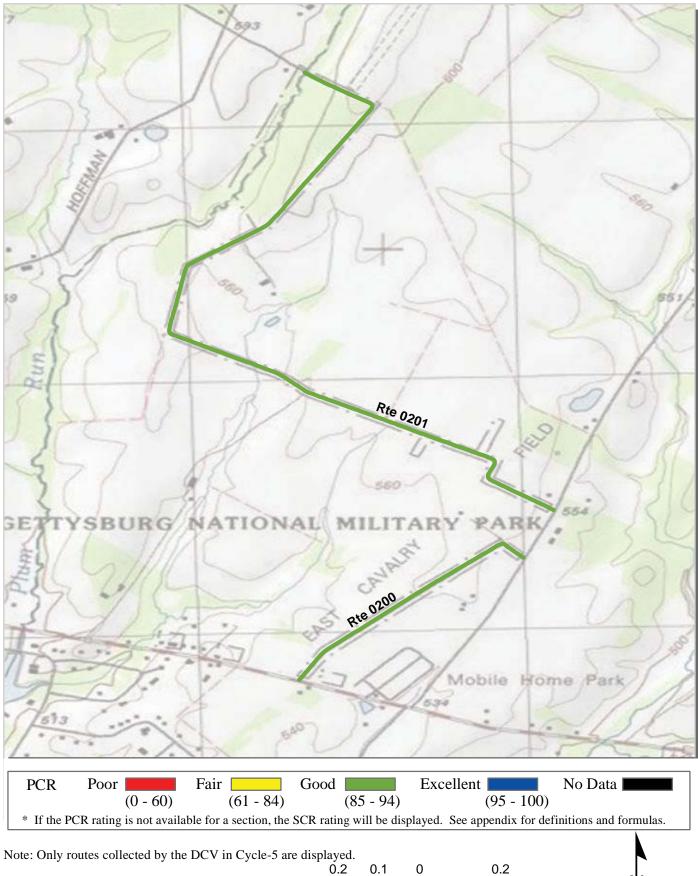
Area 1





## Gettysburg National Military Park Route Condition Map PCR - Mile by Mile





4-8

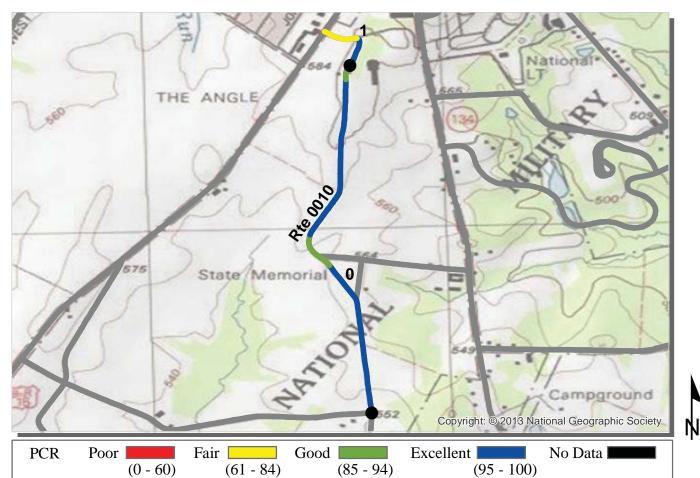
Miles

# <u>Section 5</u> Paved Route Condition Rating Sheets



## Gettysburg National Military Park



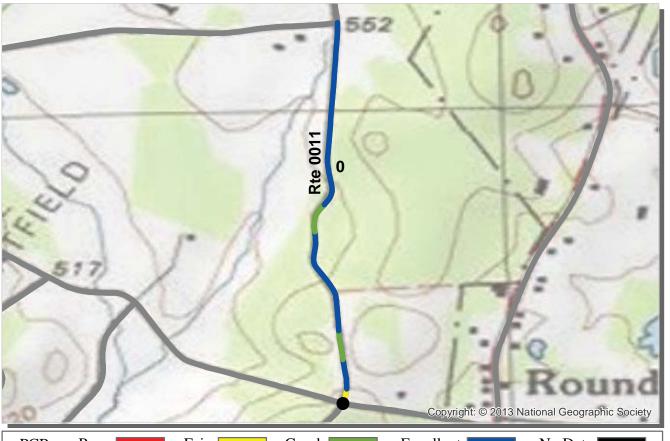


#### ROUTE: 0010 HANCOCK AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/21/2013 NORTHEAST REGION **TOTAL LENGTH:** 1.15 Miles Section Number 0 0.15 Section Length (mi) 1.00 **Cross Section Information** Number of Lanes 1 2 Paved Width (ft) 27 29 Lane Width (ft) 27 18 **Roadway Condition Information** 100 99 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 99 87 **Distress Index Values** Structural Crack Index 100 100 100 99 Transverse Cracking Index 100 Patching Index 100 100 99 **Rutting Index** Roughness Condition Index (RCI) 98 70

NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 6	60) (61 - 84	) (85 - 94)	(95 - 1	00)
* If the PC	R rating is not av	vailable for a section, th	e SCR rating will be di	splayed. See appendix f	or definitions and formulas.

2/21/2012

#### ROUTE: 0011 SEDGWICK AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

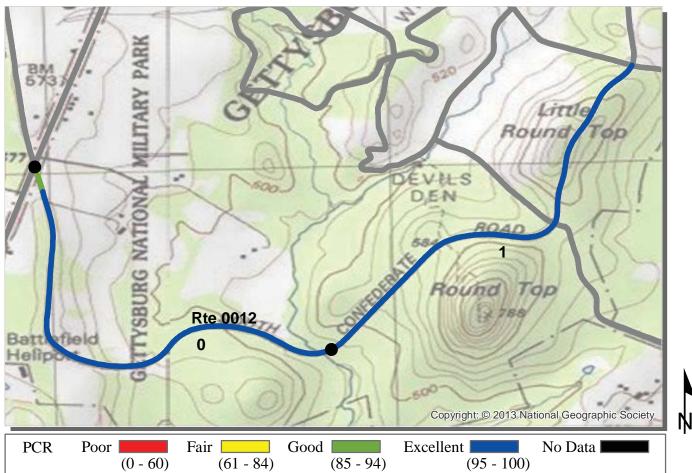
			COLLECTED:	2/21/2013 0.53 Miles	
NORTHEAST REGION		TOTAL LENGTH			
Section Number	0				
Section Length (mi)	0.53				
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	19				
Lane Width (ft)	19				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement Condition Rating)	96				
Distress Index Values					
Structural Crack Index	100				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	90				

**ROUTE: 0011 SEDGWICK AVENUE** 

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#### NOTES:

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



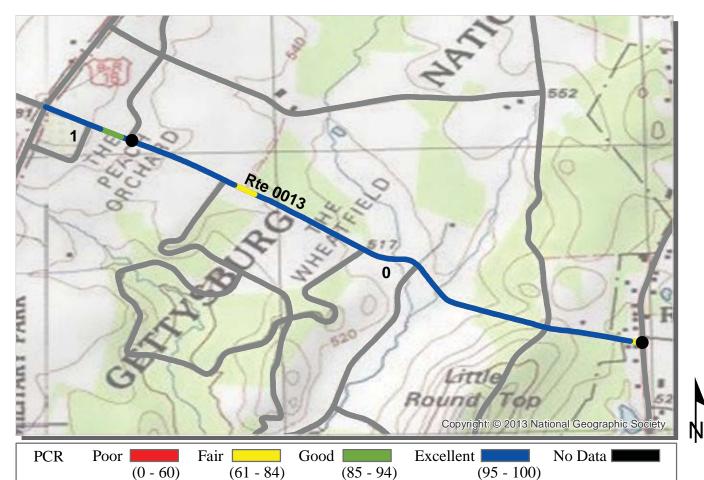
#### ROUTE: 0012 SOUTH CONFEDERATE-SYKES AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/21/2013 NORTHEAST REGION **TOTAL LENGTH:** 1.96 Miles Section Number 0 1 1.00 0.96 Section Length (mi) **Cross Section Information** Number of Lanes 1 1 19 Paved Width (ft) 18 Lane Width (ft) 17 18 **Roadway Condition Information** 100 99 SCR (Surface Condition Rating) 99 PCR (Pavement Condition Rating) 100 **Distress Index Values** Structural Crack Index 100 100 100 100 Transverse Cracking Index Patching Index 100 100 100 99 **Rutting Index** Roughness Condition Index (RCI) 100 100

**ROUTE: 0012 SOUTH CONFEDERATE-SYKES AVENUE** 

#### NOTES:

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



#### ROUTE: 0013 WHEATFIELD ROAD GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/20/2013 NORTHEAST REGION **TOTAL LENGTH:** 1.16 Miles Section Number 0 1 Section Length (mi) 1.00 0.16 **Cross Section Information** Number of Lanes 2 2 19 Paved Width (ft) 20 Lane Width (ft) 10 10 **Roadway Condition Information** 99 95 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 97 92 **Distress Index Values** 99 95 Structural Crack Index 100 100 Transverse Cracking Index Patching Index 100 100 100 100 **Rutting Index** Roughness Condition Index (RCI) 93 88

ROUTE: 0013 WHEATFIELD ROAD

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PCF	R rating is not available	ble for a section, the	SCR rating will be disp	layed. See appendix for	definitions and formulas.

#### ROUTE: 0014 UNITED STATES AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.79 Miles
Section Number	0			
Section Length (mi)	0.79			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	18			
Lane Width (ft)	18			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	97			

**ROUTE: 0014 UNITED STATES AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	)0)
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix for	or definitions and formulas.

#### ROUTE: 0015 NORTH SICKLES AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

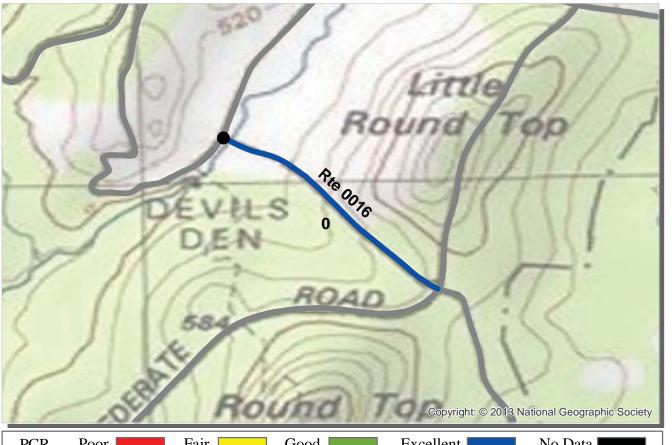
NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.56 Miles
Section Number	0			
Section Length (mi)	0.56			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	17			
Lane Width (ft)	17			
Roadway Condition Information				
SCR (Surface Condition Rating)	94			
PCR (Pavement Condition Rating)	94			
Distress Index Values				
Structural Crack Index	94			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0015 NORTH SICKLES AVENUE** 

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#### NOTES:

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



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PCI	R rating is	not available	e for a section, the	SCR rating will be dis	splayed. See appendix for	r definitions and formulas.

2/20/2012

#### ROUTE: 0016 WARREN AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		CO	LLECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.30 Miles
Section Number	0			
Section Length (mi)	0.30			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	17			
Lane Width (ft)	9			
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

**ROUTE: 0016 WARREN AVENUE** 

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N XXX	AN NON	S WAY	Riegont	Round	a National Geographic Society
PCR	Poor	Fair	Good	Excellent	No Data

(85 - 94)

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

(95 - 100)

#### ROUTE: 0017 CRAWFORD AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

(0 - 60)

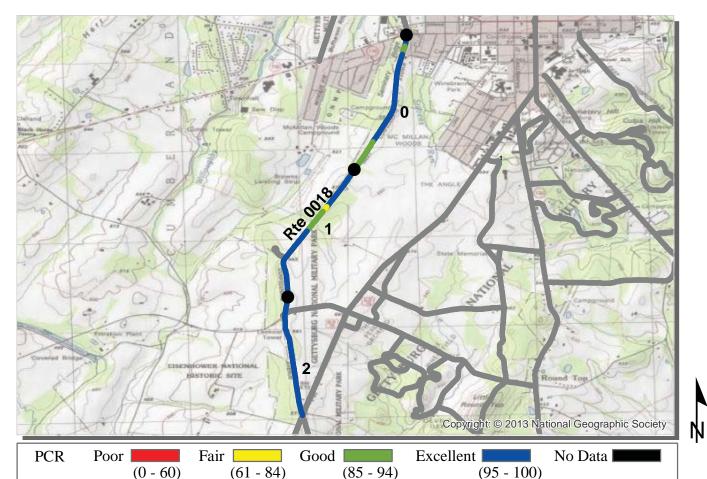
(61 - 84)

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.35 Miles
Section Number	0			
Section Length (mi)	0.35			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	18			
Lane Width (ft)	18			
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			

**ROUTE: 0017 CRAWFORD AVENUE** 

#### NOTES:

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



#### ROUTE: 0018 WEST CONFEDERATE AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			COLLECTED: TOTAL LENGTH:	2/20/2013 2.83 Miles
Section Number	0	1	2	2100 111105
Section Length (mi)	1.00	1.00	0.83	
Cross Section Information				
Number of Lanes	1	1	1	
Paved Width (ft)	19	20	18	
Lane Width (ft)	14	20	18	
Roadway Condition Information				
SCR (Surface Condition Rating)	99	100	100	
PCR (Pavement Condition Rating)	94	96	100	
Distress Index Values				
Structural Crack Index	100	100	100	
Transverse Cracking Index	100	100	100	
Patching Index	100	100	100	
Rutting Index	99	100	100	
Roughness Condition Index (RCI)	86	89	100	

**ROUTE: 0018 WEST CONFEDERATE AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be disp	played. See appendix f	or definitions and formulas.

#### **ROUTE: 0019 WRIGHT AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK**

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.56 Miles
Section Number	0			
Section Length (mi)	0.56			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	14			
Lane Width (ft)	7			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	88			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	70			

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

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PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PC	R rating i	s not availat	ble for a section, the	SCR rating will be di	splayed. See appendix fo	or definitions and formulas.

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#### ROUTE: 0020 BERDAN AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		COLLECT		2/21/2013
NORTHEAST REGION		TOTAL LENG	TH:	0.12 Miles
Section Number	0			
Section Length (mi)	0.12			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	10			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	99			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

NOTES:

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

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

NC - Not Collected N/A - Not Applicable

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PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	ble for a section. the	SCR rating will be dist	played. See appendix for	definitions and formulas.

#### ROUTE: 0021 PLEASONTON AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

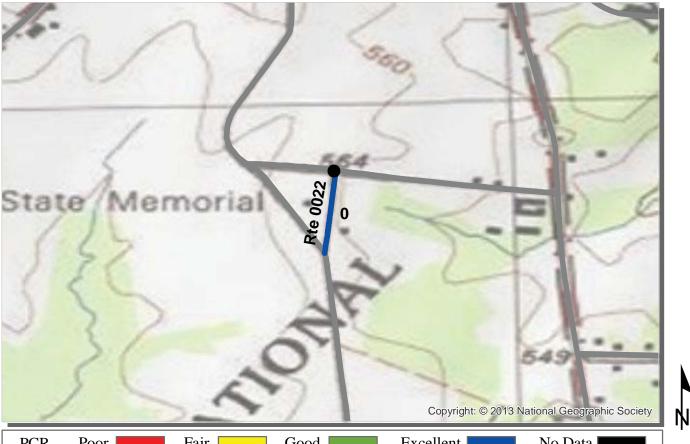
			•••	LLECTED:	2/20/2013
NORTHEAST REGION		-	ΤΟΤΑΙ	LENGTH:	0.31 Miles
Section Number	0				
Section Length (mi)	0.31				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	17				
Lane Width (ft)	8				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement 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				

**ROUTE: 0021 PLEASONTON AVENUE** 

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#### NOTES:

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



PCR	Poor	Fair Fair	Good	Excellent	No Data
	(0 - 0	60) (61 - 84)	) (85 - 94)	(95 - 10	0)
* If the PC	R rating is not a	vailable for a section, th	e SCR rating will be dis	splayed. See appendix for	definitions and formulas.

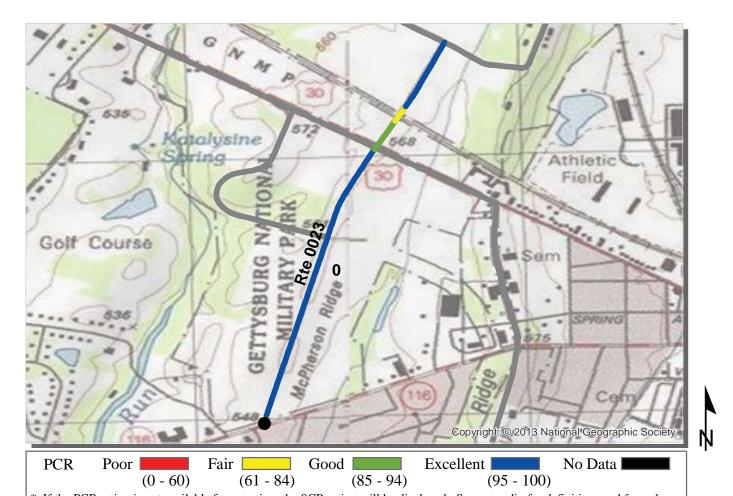
#### ROUTE: 0022 HUMPHREYS AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.10 Miles
Section Number	0			
Section Length (mi)	0.10			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	19			
Lane Width (ft)	9			
Roadway Condition Information				
SCR (Surface Condition Rating)	99			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	99			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0022 HUMPHREYS AVENUE** 

#### NOTES:

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



#### ROUTE: 0023 REYNOLDS AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.99 Miles
Section Number	0			
Section Length (mi)	0.99			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	19			
Lane Width (ft)	16			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	98			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	95			

**ROUTE: 0023 REYNOLDS AVENUE** 

#### NOTES:

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



L	PCR	Poor	Fair	Good E	Excellent	No Data
l		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	)
	* If the PCF	R rating is not avail	able for a section, the	SCR rating will be display	yed. See appendix for	definitions and formulas.

#### ROUTE: 0024 STONE-MEREDITH AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.51 Miles
Section Number	0			
Section Length (mi)	0.51			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	19			
Lane Width (ft)	19			
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)	99			

**ROUTE: 0024 STONE-MEREDITH AVENUE** 

#### NOTES:

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



L						
l		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100)	
l	* If the PCR ratio	ng is not available	for a section, the SC	R rating will be displayed	ed. See appendix for definitions and for	rmulas.

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#### ROUTE: 0025 BUFORD AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		CO	LLECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.64 Miles
Section Number	0			
Section Length (mi)	0.64			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	16			
Lane Width (ft)	16			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	97			

NOTES:

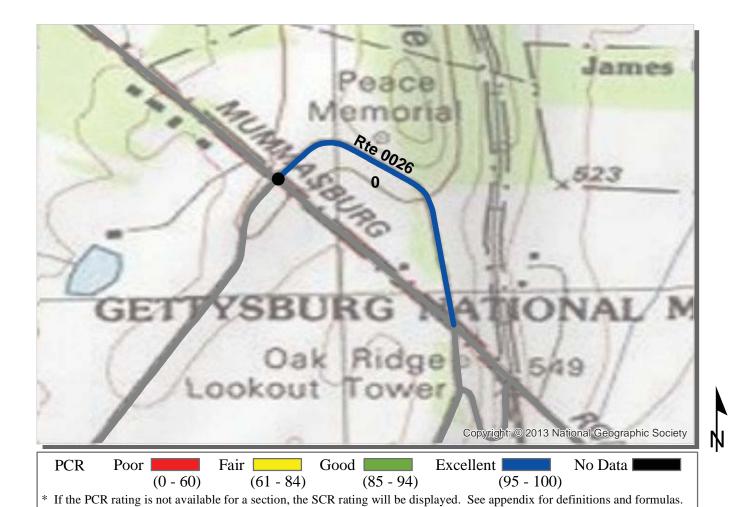
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

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

NC - Not Collected N/A - Not Applicable

**ROUTE: 0025 BUFORD AVENUE** 

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2/20/2012

#### ROUTE: 0026 NORTH CONFEDERATE AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		COLLE	ECTED:	2/20/2013
NORTHEAST REGION		TOTAL LE	NGTH:	0.36 Miles
Section Number	0			
Section Length (mi)	0.36			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	18			
Lane Width (ft)	18			
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			

**ROUTE: 0026 NORTH CONFEDERATE AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

#### ROUTE: 0027 WADSWORTH AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

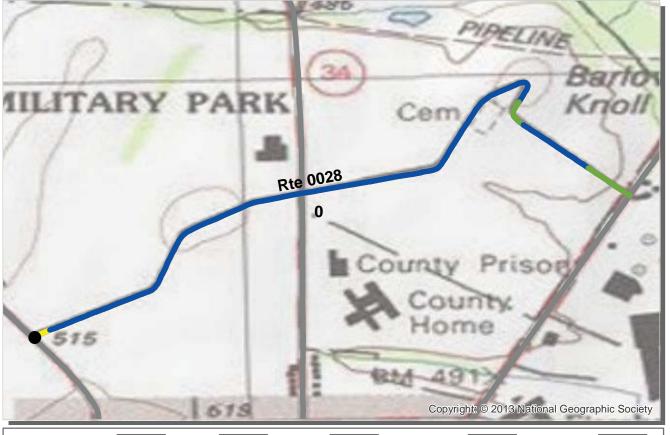
NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.16 Miles
Section Number	0			
Section Length (mi)	0.16			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	19			
Lane Width (ft)	9			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	100			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0027 WADSWORTH AVENUE** 

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#### NOTES:

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



PCR	Poor	Fair		Good	Excellent	No Data
	(0	) - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is no	ot available for a	section, the S	CR rating will be di	splayed. See appendix for	definitions and formulas.

2/20/2012

#### ROUTE: 0028 HOWARD AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

			LECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.96 Miles
Section Number	0			
Section Length (mi)	0.96			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	20			
Lane Width (ft)	16			
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)	100			

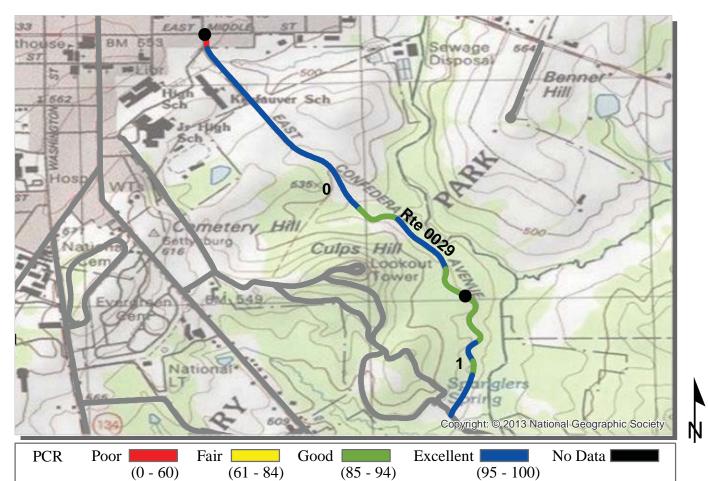
#### NOTES:

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

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

**ROUTE: 0028 HOWARD AVENUE** 

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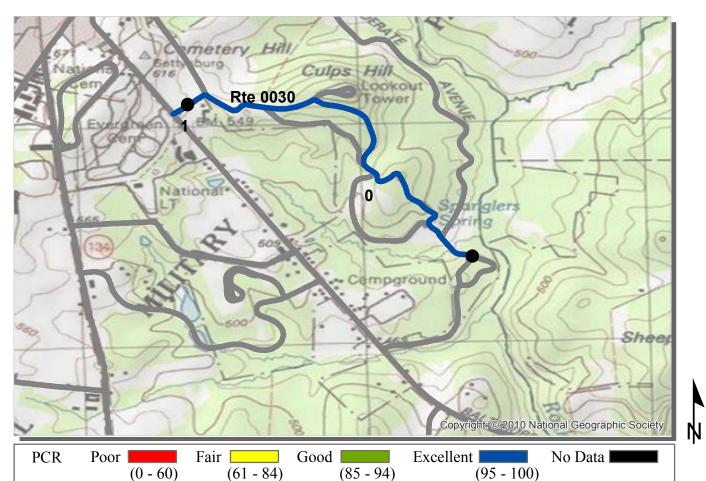
#### ROUTE: 0029 EAST CONFEDERATE AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/20/2013 NORTHEAST REGION **TOTAL LENGTH: 1.38 Miles** Section Number 0 Section Length (mi) 1.00 0.38 **Cross Section Information** Number of Lanes 1 1 19 Paved Width (ft) 18 Lane Width (ft) 19 18 Roadway Condition Information 100 100 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 96 94 **Distress Index Values** 100 100 Structural Crack Index 100 100 Transverse Cracking Index Patching Index 100 100 100 100 **Rutting Index** Roughness Condition Index (RCI) 91 85

**ROUTE: 0029 EAST CONFEDERATE AVENUE** 

#### NOTES:

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



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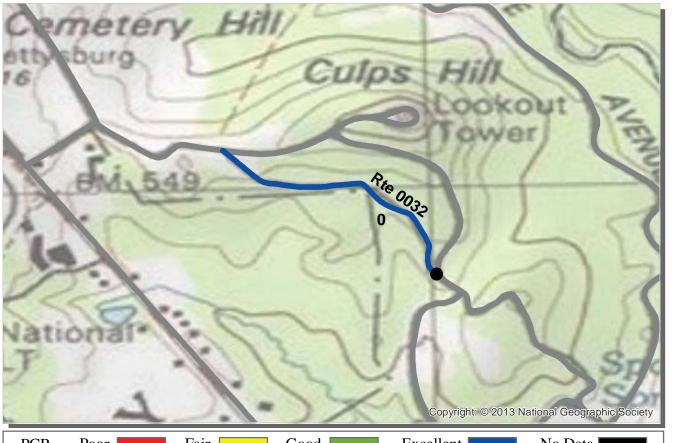
#### ROUTE: 0030 SLOCUM AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

## NORTHEAST REGION

NORTHEAST REGION			TOTAL	LENGTH:	1.04 Miles
Section Number	0	1			
Section Length (mi)	1.00	0.04			
Cross Section Information					
Number of Lanes	1	1			
Paved Width (ft)	17	17			
Lane Width (ft)	17	17			
Roadway Condition Information					
SCR (Surface Condition Rating)	100	98			
PCR (Pavement Condition Rating)	100	98			
Distress Index Values					
Structural Crack Index	100	100			
Transverse Cracking Index	100	98			
Patching Index	100	100			
Rutting Index	100	100			
Roughness Condition Index (RCI)	NC	NC			

#### NOTES:

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



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	0)
* If the PC	R rating is	s not availab	le for a section, the	SCR rating will be di	splayed. See appendix for	r definitions and formulas.

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#### ROUTE: 0032 WILLIAMS AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

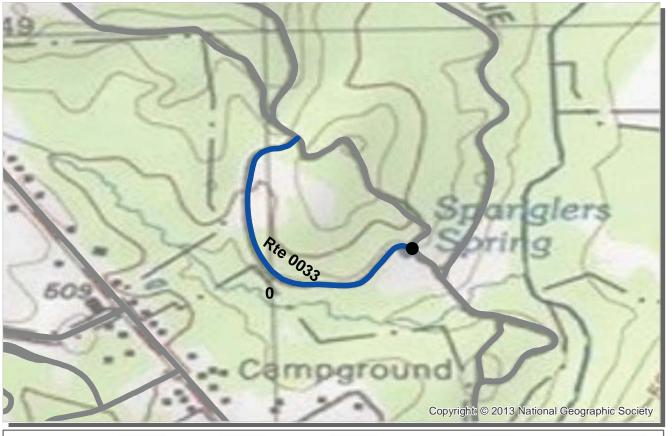
		COL	LECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.31 Miles
Section Number	0			
Section Length (mi)	0.31			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	10			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	100			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0032 WILLIAMS AVENUE** 

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#### NOTES:

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

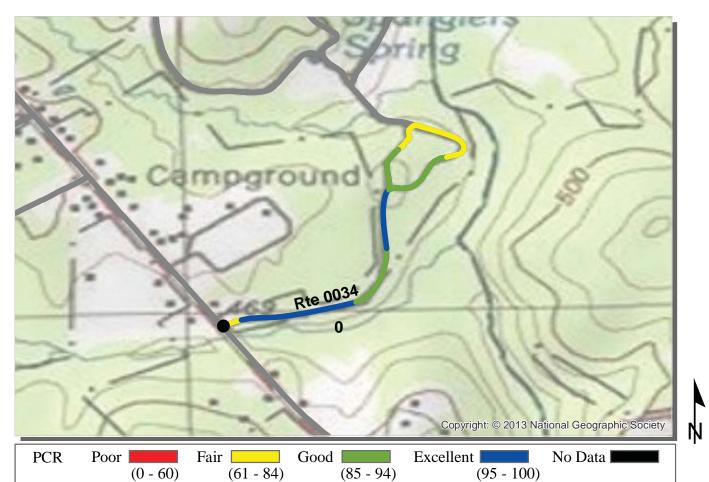


PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

#### ROUTE: 0033 GEARY AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/20/2013 NORTHEAST REGION **TOTAL LENGTH:** 0.38 Miles Section Number 0 Section Length (mi) 0.38 **Cross Section Information** Number of Lanes 1 16 Paved Width (ft) Lane Width (ft) 16 **Roadway Condition Information** SCR (Surface Condition Rating) 100 PCR (Pavement Condition Rating) 100 **Distress Index Values** 100 Structural Crack Index 100 Transverse Cracking Index 100 Patching Index 100 **Rutting Index** NC Roughness Condition Index (RCI)

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



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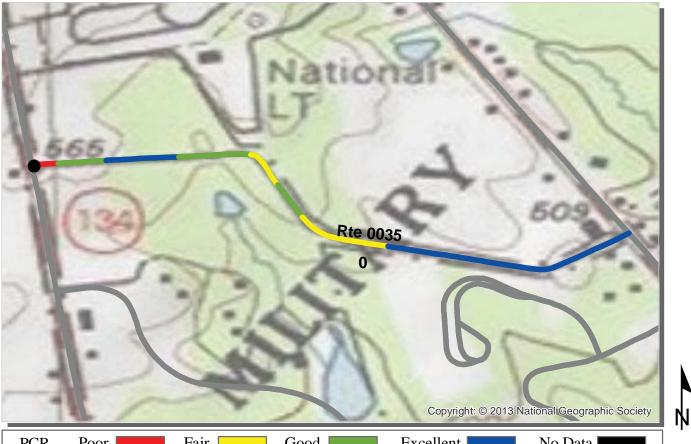
#### ROUTE: 0034 COLGROVE-CARMAN AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		COLLECI	
NORTHEAST REGION		TOTAL LENG	TH: 0.55 Miles
Section Number	0		
Section Length (mi)	0.55		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	16		
Lane Width (ft)	16		
Roadway Condition Information			
SCR (Surface Condition Rating)	99		
PCR (Pavement Condition Rating)	87		
Distress Index Values			
Structural Crack Index	100		
Transverse Cracking Index	100		
Patching Index	100		
Rutting Index	99		
Roughness Condition Index (RCI)	68		

**ROUTE: 0034 COLGROVE-CARMAN AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PCI	R rating is not availa	ble for a section, the	SCR rating will be disp	played. See appendix for	definitions and formulas.

#### **ROUTE: 0035 HUNT AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK**

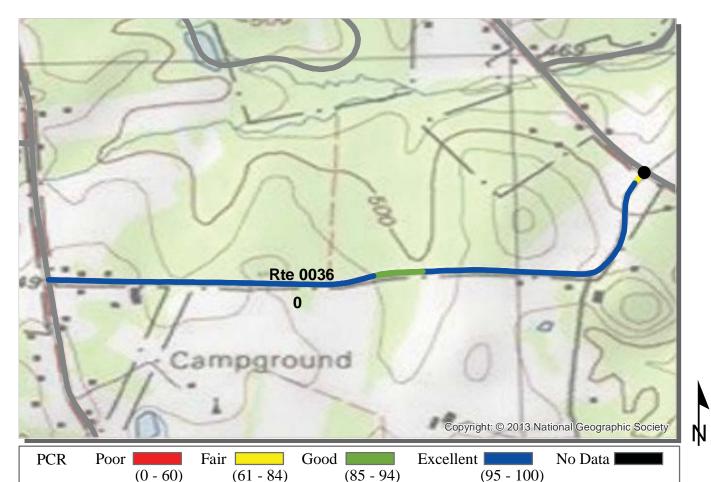
NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.54 Miles
Section Number	0			
Section Length (mi)	0.54			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	16			
Lane Width (ft)	8			
Roadway Condition Information				
SCR (Surface Condition Rating)	98			
PCR (Pavement Condition Rating)	90			
Distress Index Values				
Structural Crack Index	98			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	79			

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



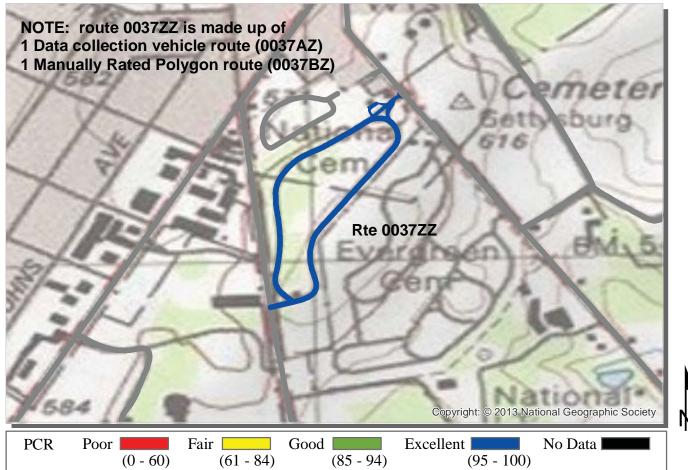
#### ROUTE: 0036 GRANITE SCHOOL HOUSE LANE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.83 Miles
Section Number	0			
Section Length (mi)	0.83			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	17			
Lane Width (ft)	8			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	97			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	92			

**ROUTE: 0036 GRANITE SCHOOL HOUSE LANE** 

#### NOTES:

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



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

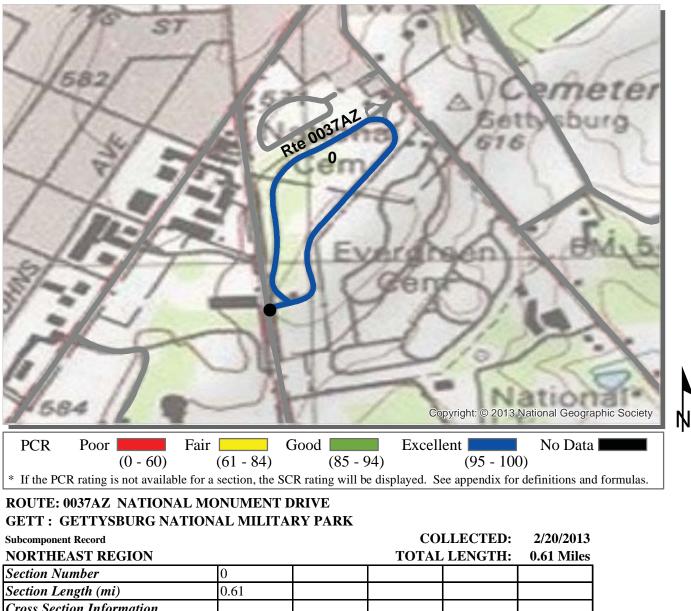
#### ROUTE: 0037ZZ NATIONAL MONUMENT DRIVE ROUTES GETT : GETTYSBURG NATIONAL MILITARY PARK

**COLLECTED:** 2/20/2013 Summary Record NORTHEAST REGION **TOTAL LENGTH:** 0.61 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** 99 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 98 **Distress Index Values** N/A Structural Crack Index N/A Transverse Cracking Index Patching Index N/A **Rutting Index** N/A Roughness Condition Index (RCI) N/A

**ROUTE: 0037ZZ NATIONAL MONUMENT DRIVE ROUTES** 

#### NOTES:

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



	-		
Section Length (mi)	0.61		
Cross Section Information			
Number of Lanes	1		
Paved Width (ft)	18		
Lane Width (ft)	18		
Roadway Condition Information			
SCR (Surface Condition Rating)	99		
PCR (Pavement Condition Rating)	99		
Distress Index Values			
Structural Crack Index	100		
Transverse Cracking Index	100		
Patching Index	100		
Rutting Index	99		
Roughness Condition Index (RCI)	NC		

**ROUTE: 0037AZ NATIONAL MONUMENT DRIVE** 

#### NOTES:

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



	PCR	Poor	Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
*	<sup>t</sup> If the PCI	R rating is not availab	ble for a section, the	SCR rating will be dist	played. See appendix f	for definitions and formulas.

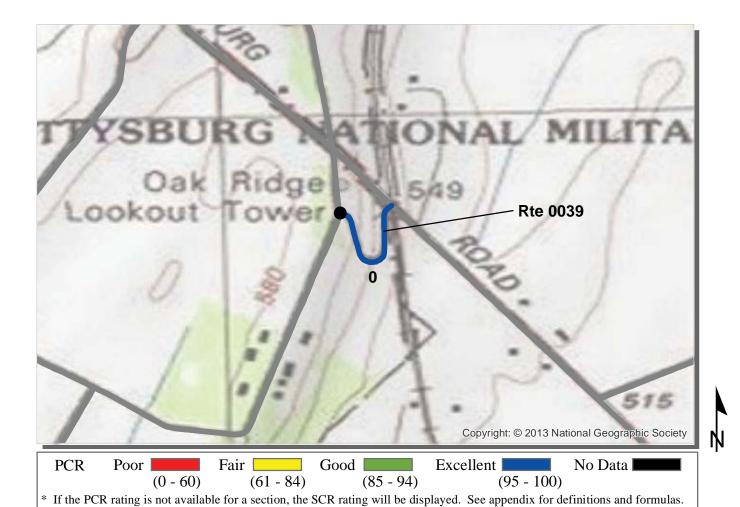
### ROUTE: 0038 BENNER HILL AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		CO	LLECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.25 Miles
Section Number	0			
Section Length (mi)	0.25			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
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			

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.

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ROUTE: 0039 ROBINSON AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

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		CO	LLECTED:
NORTHEAST REGION		TOTAI	LENGTH:
Section Number	0		

Section Number	0		
Section Length (mi)	0.16		
Cross Section Information			
Number of Lanes	2		
Paved Width (ft)	15		
Lane Width (ft)	7		
Roadway Condition Information			
SCR (Surface Condition Rating)	96		
PCR (Pavement Condition Rating)	96		
Distress Index Values			
Structural Crack Index	100		
Transverse Cracking Index	100		
Patching Index	100		
Rutting Index	96		
Roughness Condition Index (RCI)	NC		

**ROUTE: 0039 ROBINSON AVENUE** 

2/20/2013

0.16 Miles

#### NOTES:

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



 PCR
 Poor
 Fair
 Good
 Excellent
 No Data

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

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#### ROUTE: 0040 SEMINARY RIDGE AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

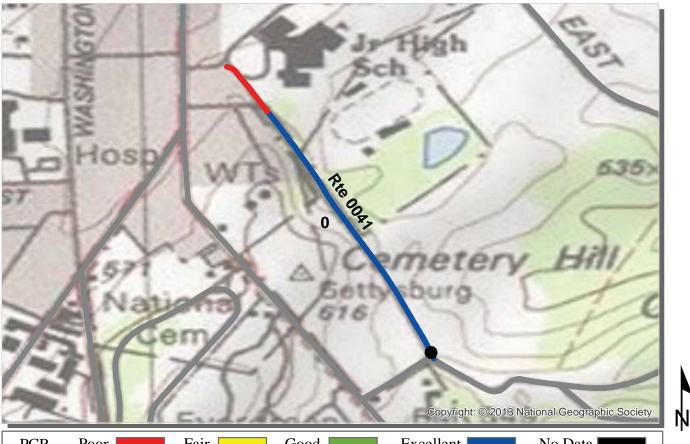
		COL	LECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.34 Miles
Section Number	0			
Section Length (mi)	0.34			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	24			
Lane Width (ft)	12			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	100			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0040 SEMINARY RIDGE AVENUE** 

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#### NOTES:

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



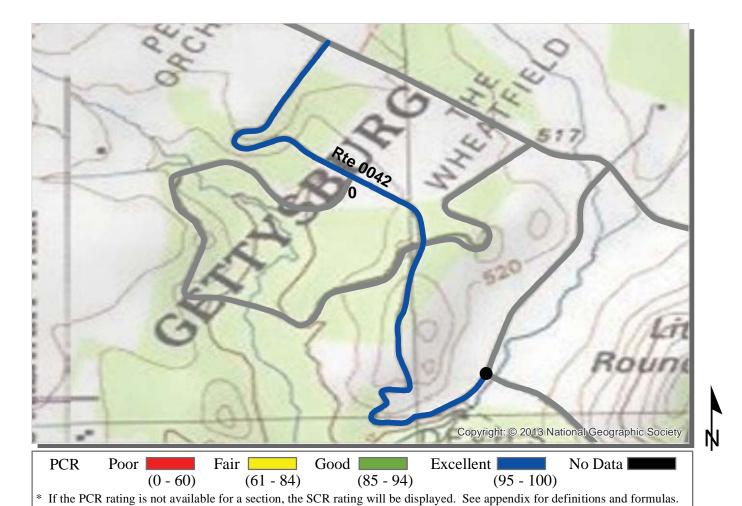
Fair Good Excellent No Data PCR Poor (85 - 94) (61 - 84) (0 - 60)(95 - 100)\* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

### **ROUTE: 0041 WAINWRIGHT AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK**

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.43 Miles
Section Number	0			
Section Length (mi)	0.43			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	12			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	48			
PCR (Pavement Condition Rating)	48			
Distress Index Values				
Structural Crack Index	48			
Transverse Cracking Index	100			
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.



ROUTE: 0042 SOUTH SICKLES AVENUE

#### **GETT : GETTYSBURG NATIONAL MILITARY PARK**

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.96 Miles
Section Number	0			
Section Length (mi)	0.96			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	18			
Lane Width (ft)	18			
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

**ROUTE: 0042 SOUTH SICKLES AVENUE** 



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
* If the PC	R rating is not availal	ble for a section, the	SCR rating will be disp	played. See appendix f	for definitions and formulas.

#### **ROUTE: 0043 CROSS-BROOKE- DETROBRIAND AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK**

#### **COLLECTED:** 2/20/2013 NORTHEAST REGION **TOTAL LENGTH:** 0.80 Miles Section Number n Section Length (mi) 0.80 **Cross Section Information** Number of Lanes 1 12 Paved Width (ft) Lane Width (ft) 12 **Roadway Condition Information** 100 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 100 **Distress Index Values** Structural Crack Index 100 100 Transverse Cracking Index 100 Patching Index 100 **Rutting Index** Roughness Condition Index (RCI) NC

**ROUTE: 0043 CROSS-BROOKE- DETROBRIAND AVENUE** 

#### NOTES:

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



	PCR	Poor		Fair	Good	Excellent	No Data
			(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
I	* If the PCI	R rating i	s not availab	le for a section, the	SCR rating will be dis	splayed. See appendix f	for definitions and formulas.

**COLLECTED:** 

2/20/2013

### **ROUTE: 0044 AYERS AVENUE GETT: GETTYSBURG NATIONAL MILITARY PARK**

## NORTHEAST REGION

#### **TOTAL LENGTH:** 0.30 Miles Section Number n Section Length (mi) 0.30 **Cross Section Information** Number of Lanes 1 14 Paved Width (ft) Lane Width (ft) 14 **Roadway Condition Information** SCR (Surface Condition Rating) 100 PCR (Pavement Condition Rating) 100 **Distress Index Values** 100 Structural Crack Index 100 Transverse Cracking Index 100 Patching Index 100 **Rutting Index** NC Roughness Condition Index (RCI)

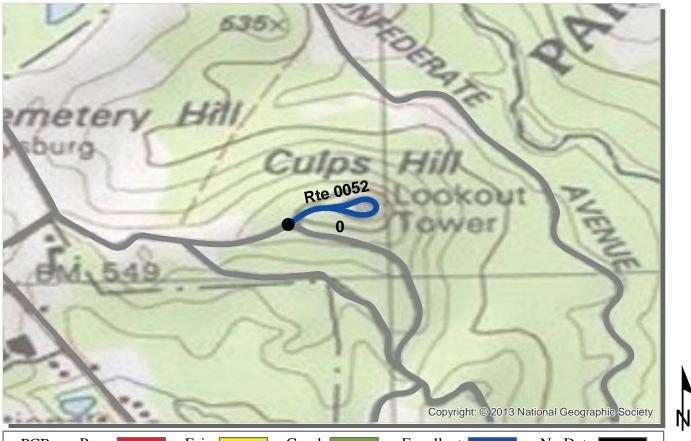
NOTES:

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

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

**ROUTE: 0044 AYERS AVENUE** 

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PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 1	00)
* If the PC	R rating is not availal	ble for a section, the	SCR rating will be dis	played. See appendix	for definitions and formulas.

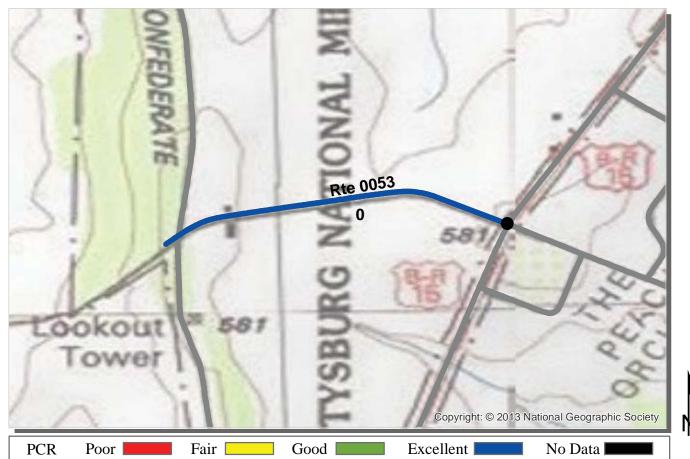
### ROUTE: 0052 CULPS HILL TOWER ROAD GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.15 Miles
Section Number	0			0.15 Milles
Section Length (mi)	0.15			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	19			
Lane Width (ft)	14			
Roadway Condition Information				
SCR (Surface Condition Rating)	99			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0052 CULPS HILL TOWER ROAD** 

#### NOTES:

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



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

### ROUTE: 0053 MILLERSTOWN ROAD GETT : GETTYSBURG NATIONAL MILITARY PARK

#### **COLLECTED:** 2/20/2013 NORTHEAST REGION **TOTAL LENGTH:** 0.37 Miles Section Number n 0.37 Section Length (mi) **Cross Section Information** Number of Lanes 2 23 Paved Width (ft) Lane Width (ft) 11 **Roadway Condition Information** 99 SCR (Surface Condition Rating) PCR (Pavement Condition Rating) 99 **Distress Index Values** 99 Structural Crack Index 100 Transverse Cracking Index Patching Index 100 99 **Rutting Index** NC Roughness Condition Index (RCI)

NOTES:

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

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

**ROUTE: 0053 MILLERSTOWN ROAD** 



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dist	played. See appendix for	definitions and formulas.

### ROUTE: 0054 HOWE AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.17 Miles
Section Number	0			
Section Length (mi)	0.17			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	16			
Lane Width (ft)	8			
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			

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



PCR	Poor		Fair	Good	Excellent	No Data
		(0 - 60)	(61 - 84)	(85 - 94)	(95 - 10	)0)
* If the PCI	R rating is	s not availab	le for a section, the	SCR rating will be dis	played. See appendix for	or definitions and formulas.

### ROUTE: 0055 DOUBLEDAY AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

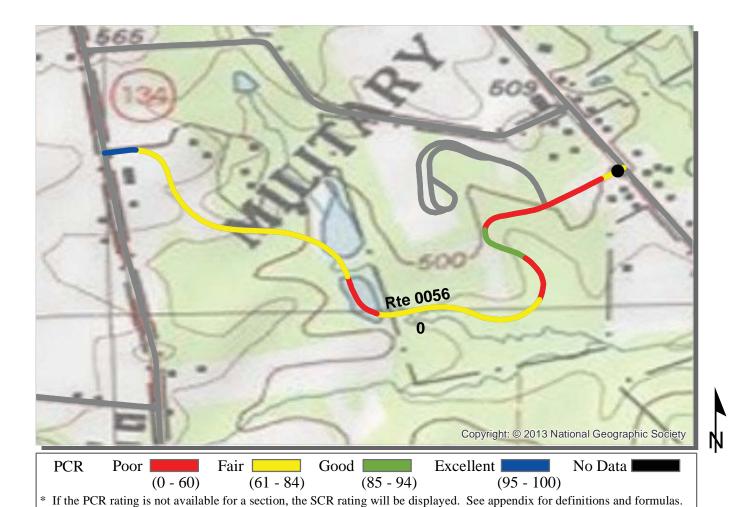
NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.40 Miles
Section Number	0			
Section Length (mi)	0.40			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	19			
Lane Width (ft)	9			
Roadway Condition Information				
SCR (Surface Condition Rating)	100			
PCR (Pavement Condition Rating)	100			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	100			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0055 DOUBLEDAY AVENUE** 

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#### NOTES:

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



ROUTE: 0056 VISITOR CENTER DRIVE GETT : GETTYSBURG NATIONAL MILITARY PARK

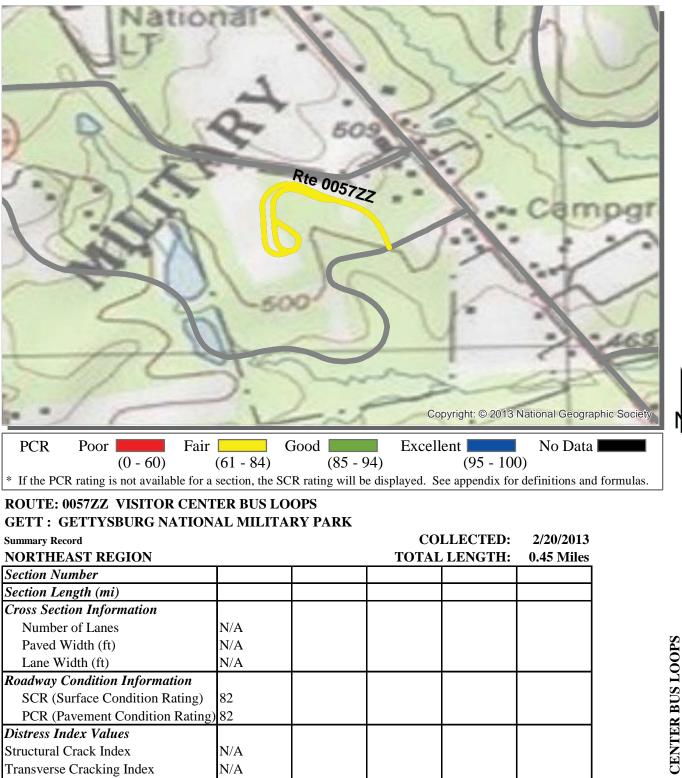
		CO	LLECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.84 Miles
Section Number	0			
Section Length (mi)	0.84			
Cross Section Information				
Number of Lanes	2			
Paved Width (ft)	28			
Lane Width (ft)	13			
Roadway Condition Information				
SCR (Surface Condition Rating)	71			
PCR (Pavement Condition Rating)	66			
Distress Index Values				
Structural Crack Index	71			
Transverse Cracking Index	99			
Patching Index	99			
Rutting Index	93			
Roughness Condition Index (RCI)	59			

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



#### NOTES:

Patching Index

**Rutting Index** 

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

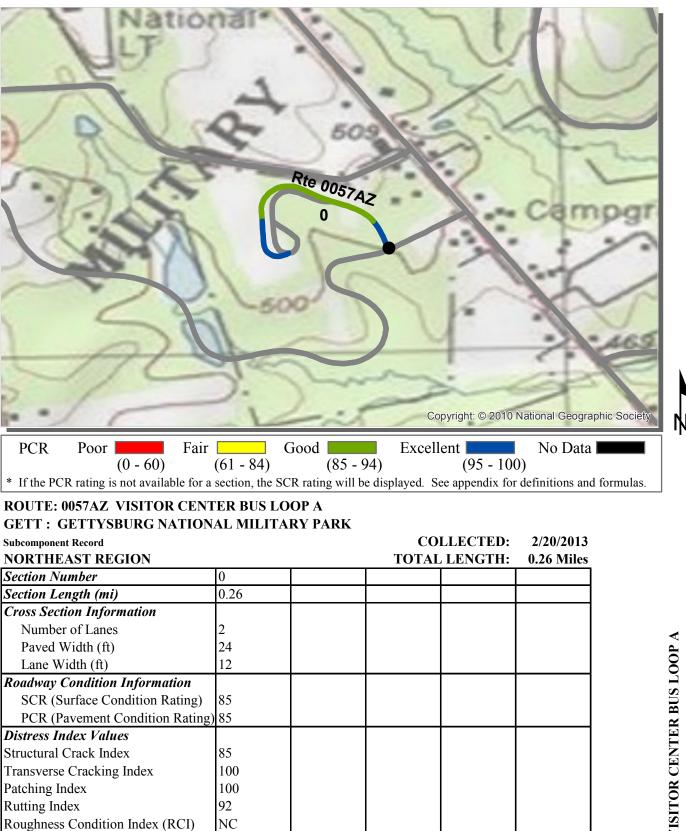
N/A N/A

N/A

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

NC - Not Collected N/A - Not Applicable

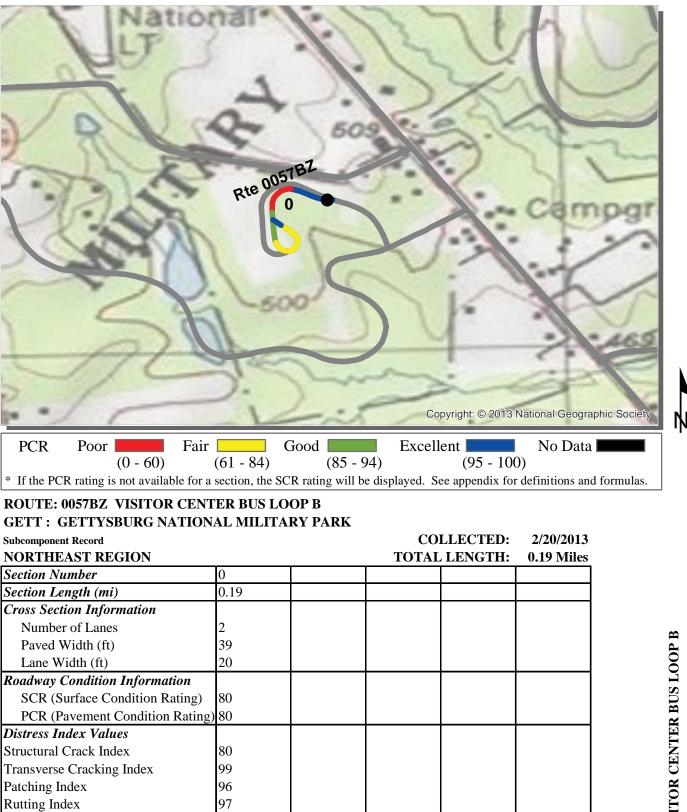
Roughness Condition Index (RCI)



**ROUTE: 0057AZ VISITOR CENTER BUS LOOP A** 

#### NOTES:

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



#### NOTES:

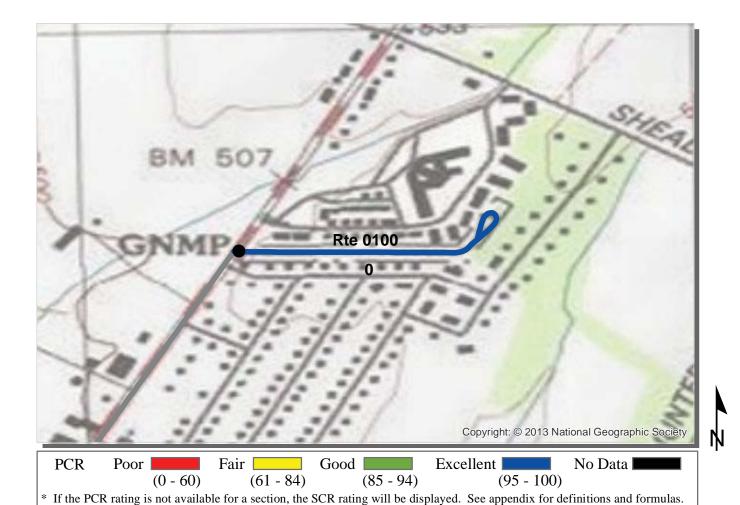
Structural Crack Index is a combination of the Longitudinal Cracking Index and Alligator Cracking Index.

NC

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

NC - Not Collected N/A - Not Applicable

Roughness Condition Index (RCI)



ECTED.

2/20/2012

### ROUTE: 0100 JONES BATTALION AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

		CO	LLECTED:	2/20/2013
NORTHEAST REGION		TOTAL	LENGTH:	0.33 Miles
Section Number	0			
Section Length (mi)	0.33			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	9			
Lane Width (ft)	9			
Roadway Condition Information				
SCR (Surface Condition Rating)	99			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

**ROUTE: 0100 JONES BATTALION AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	able for a section, the	SCR rating will be disp	played. See appendix for	definitions and formulas.

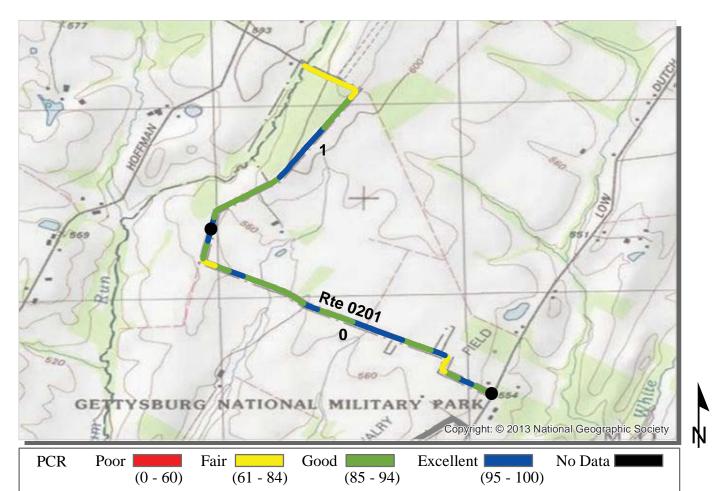
#### ROUTE: 0200 UNITED STATES CAVALRY AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.57 Miles
Section Number	0			
Section Length (mi)	0.57			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	10			
Lane Width (ft)	10			
Roadway Condition Information				
SCR (Surface Condition Rating)	89			
PCR (Pavement Condition Rating)	87			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	89			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	83			

**ROUTE: 0200 UNITED STATES CAVALRY AVENUE** 

#### NOTES:

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



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

### ROUTE: 0201 CONFEDERATE CAVALRY-GREGG AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK

NODELLEAGE DECLON			COLLECTED:	2/20/2013
NORTHEAST REGION	0	1	TOTAL LENGTH:	1.76 Miles
Section Number	0	1		
Section Length (mi)	1.00	0.76		
<b>Cross Section Information</b>				
Number of Lanes	1	1		
Paved Width (ft)	12	12		
Lane Width (ft)	12	12		
Roadway Condition Information				
SCR (Surface Condition Rating)	95	97		
PCR (Pavement Condition Rating)	89	90		
Distress Index Values				
Structural Crack Index	98	98		
Transverse Cracking Index	95	97		
Patching Index	100	100		
Rutting Index	100	99		
Roughness Condition Index (RCI)	81	79		

**ROUTE: 0201 CONFEDERATE CAVALRY-GREGG AVENUE** 

#### NOTES:

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



PCR	Poor	Fair	Good	Excellent	No Data
	(0 - 60)	(61 - 84)	(85 - 94)	(95 - 100	))
* If the PC	R rating is not availa	ble for a section, the	SCR rating will be dis	played. See appendix for	definitions and formulas.

#### **ROUTE: 0202 BIRNEY AVENUE GETT : GETTYSBURG NATIONAL MILITARY PARK**

NORTHEAST REGION			LLECTED: LENGTH:	2/20/2013 0.16 Miles
Section Number	0			
Section Length (mi)	0.16			
Cross Section Information				
Number of Lanes	1			
Paved Width (ft)	11			
Lane Width (ft)	11			
Roadway Condition Information				
SCR (Surface Condition Rating)	99			
PCR (Pavement Condition Rating)	99			
Distress Index Values				
Structural Crack Index	100			
Transverse Cracking Index	100			
Patching Index	100			
Rutting Index	99			
Roughness Condition Index (RCI)	NC			

NOTES:

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

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

NC - Not Collected N/A - Not Applicable

# Section 6 Manually Rated Paved Route Condition Rating Sheets



## Gettysburg National Military Park

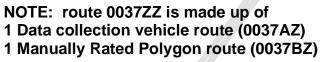


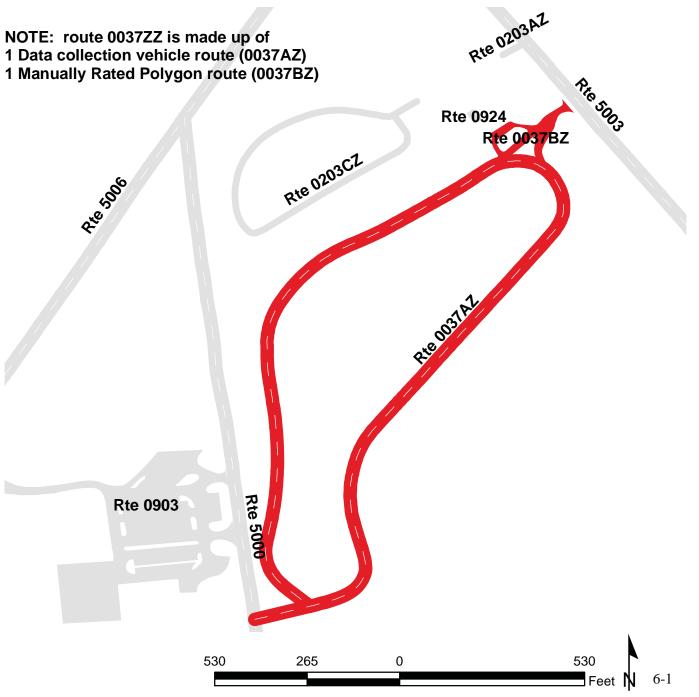
## **GETTYSBURG NATIONAL MILITARY PARK Route 0037ZZ**

NATIONAL MONUMENT DRIVE ROUTES FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD)) TO ROUTE 5003 (BALTIMORE PIKE)

Summary Record Route Public / **Surface Type** Number NonPublic **Date Visited** Area (sq ft) Lane Miles \* 0037ZZ PUBLIC 2/20/2013 N/A 1.16 AS **Drop Inlets** Culverts Gates **Curb & Gutter** Curb PCR N/A N/A SUMMARY/98 0 4 2

\* Lane miles are based on 11' lane widths





## GETTYSBURG NATIONAL MILITARY PARK Route 0037BZ

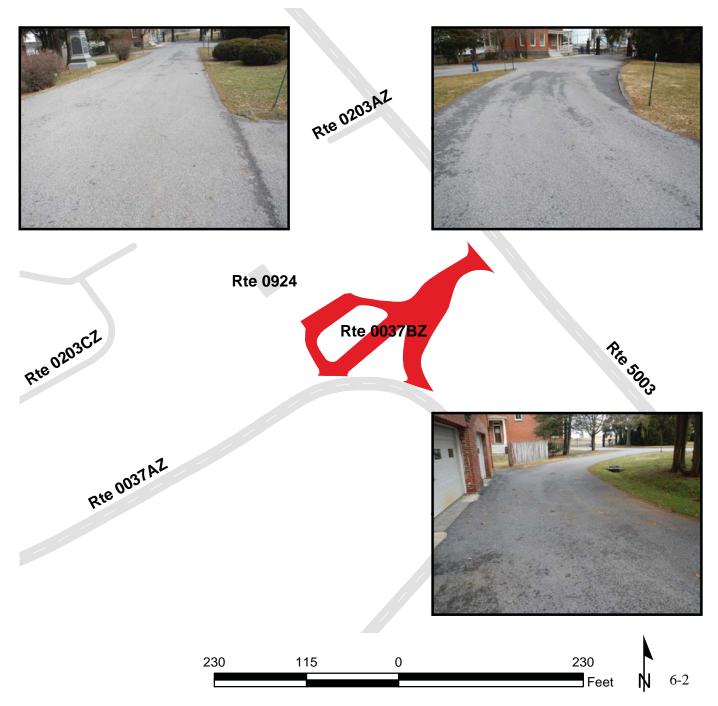
NATIONAL MONUMENT DRIVE - BALTIMORE STREET ENTRANCE AREA FROM ROUTE 5003 (BALTIMORE PIKE) TO ROUTE 0037AZ (NATIONAL MONUMENT DRIVE)

IE 005/AZ (NATIONAL MONUMENT

|--|

Route	Public /				
Number	NonPublic	<b>Date Visited</b>	Area (sq ft)	Lane Miles *	Surface Type
0037BZ	PUBLIC	2/20/2013	8,885	0.15	AS
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	4	1	GUTTER	STONE CURB	GOOD/90

\* Lane miles are based on 11' lane widths



## GETTYSBURG NATIONAL MILITARY PARK Route 0203ZZ

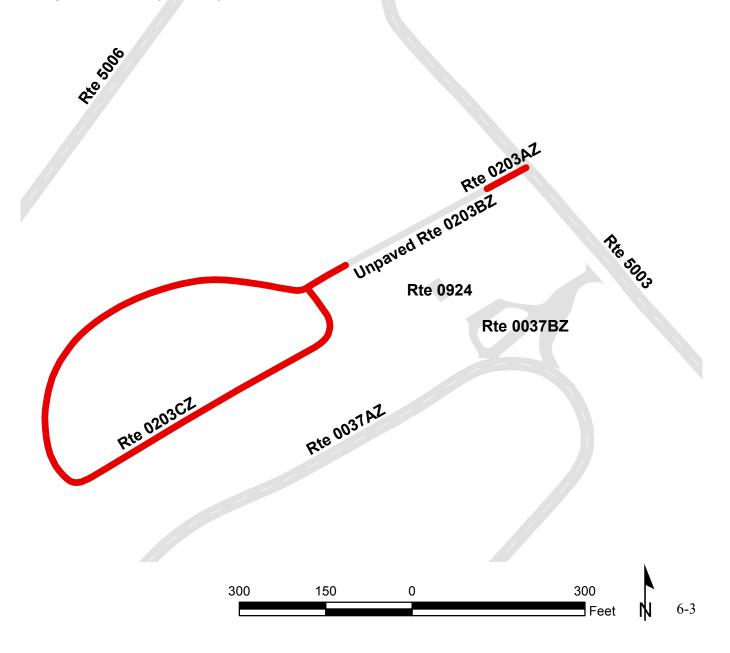
NATIONAL CEMETERY ANNEX DRIVE FROM ROUTE 5003 (BALTIMORE PIKE) TO END OF LOOP

Summary Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0203ZZ	PUBLIC	2/20/2013	14,525	0.25	0.23	11.8
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR	Surface Type
0	0	1	N/A	N/A	SUMMARY/90	AS

\* Lane miles are based on 11' lane widths

NOTE: Route 0203ZZ is made up of 2 Manual Rated Routes (0203AZ and 0203CZ) 1 Unpaved Route (0203BZ)



## GETTYSBURG NATIONAL MILITARY PARK Route 0203AZ

NATIONAL CEMETERY ANNEX DRIVE- APRON FROM ROUTE 5003 (BALTIMORE PIKE)

TO BEGINNING OF ROUTE 0203BZ (NATIONAL CEMETERY ANNEX DRIVE- UNPAVED)

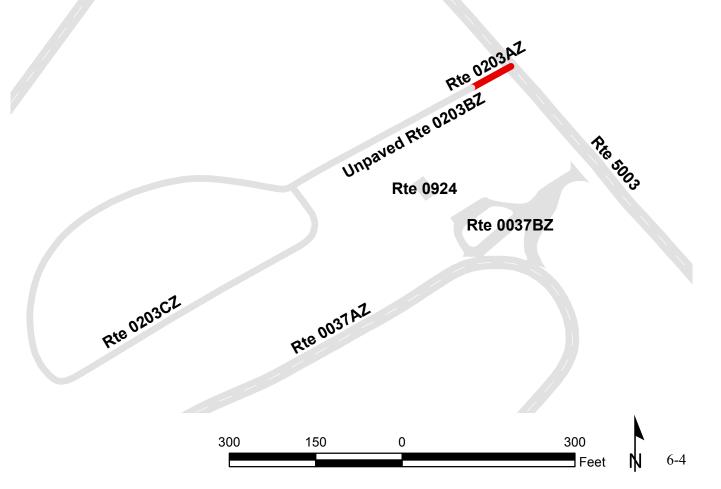
Subcomponent Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0203AZ	PUBLIC	2/20/2013	444	0.01	0.01	12
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	0	GUTTER	NO CURB	GOOD/90	AS

\* Lane miles are based on 11' lane widths







## GETTYSBURG NATIONAL MILITARY PARK Route 0203CZ

NATIONAL CEMETERY ANNEX DRIVE- MAIN LOOP FROM ROUTE 0203BZ (NATIONAL CEMETERY ANNEX DRIVE- UNPAVED) TO END OF LOOP

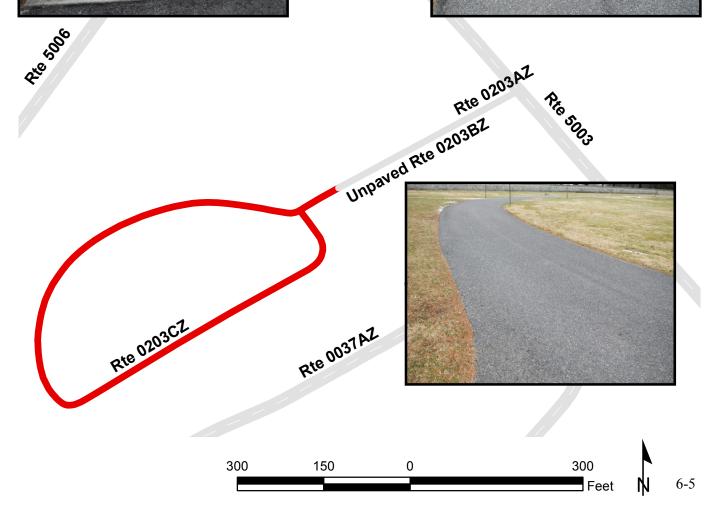
Subcomponent Record

Route	Public /			Lane	Paved Length	Paved Width
Number	NonPublic	Date Visited	Area (sq ft)	Miles *	(mi)	(ft)
0203CZ	PUBLIC	2/20/2013	14,081	0.24	0.23	11.8
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR	Surface Type
			NO CURB AND			
0	0	1	GUTTER	NO CURB	GOOD/90	AS

\* Lane miles are based on 11' lane widths







# <u>Section 7</u> Parking Area Condition Rating Sheets



## Gettysburg National Military Park

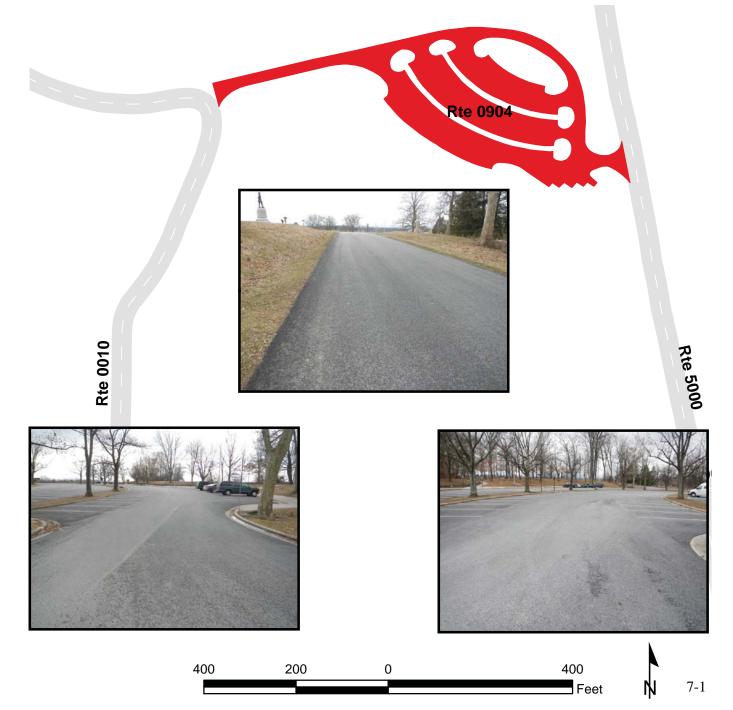


### GETTYSBURG NATIONAL MILITARY PARK Route 0904

NATIONAL CEMETERY PARKING LOT FROM ROUTE 0010 (HANCOCK AVENUE) ON RIGHT AT MP 1.08 TO ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))

Route	Public /				
Number	NonPublic	<b>Date Visited</b>	Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	2/20/2013	76,442	1.32	AS
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR
			CONCRETE CURB		
0	7	0	AND GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths



## GETTYSBURG NATIONAL MILITARY PARK Route 0910ZZ

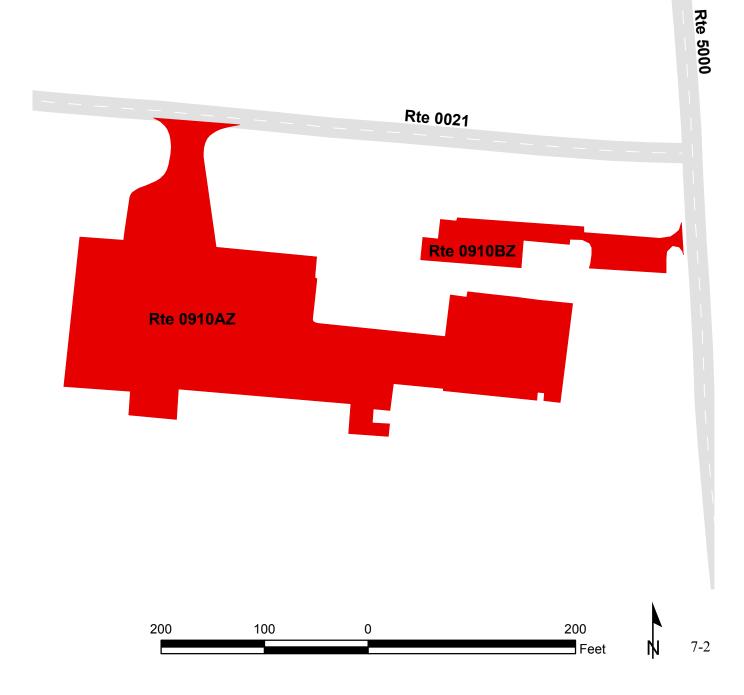
MAINTENANCE PARKING AREAS

FROM ROUTE 0021 (PLEASONTON AVENUE) AND ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))

TO PARKING Summary Record

Summary Record						
Route	Public /					
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type	
0910ZZ	PUBLIC	2/20/2013	53,104	0.91	AS	
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR	
-1	-1	-1	N/A	N/A	SUMMARY/90	

\* Lane miles are based on 11' lane widths



## GETTYSBURG NATIONAL MILITARY PARK Route 0910AZ

MAINTENANCE PARKING A

FROM ROUTE 0021 (PLEASONTON AVENUE) ON LEFT AT MP 0.07

TO PARKING

Subcomponent Record

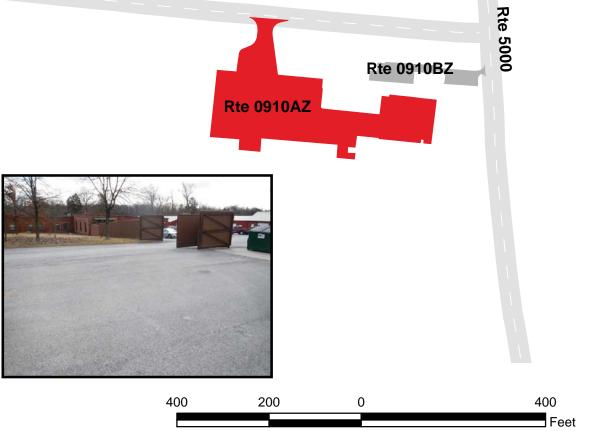
Route	Public /				
Number	NonPublic	Date Visited	Area (sq ft)	Lane Miles *	Surface Type
0910AZ	PUBLIC	2/20/2013	47,352	0.82	AS
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND	CONCRETE	
1	4	6	GUTTER	CURB	GOOD/90

\* Lane miles are based on 11' lane widths





Rte 0021



## GETTYSBURG NATIONAL MILITARY PARK Route 0924

NATIONAL CEMETERY ANNEX HANDICAPPED PARKING FROM ROUTE 0911 (GETTYSBURG NATIONAL CEMETERY ANNEX PARKING) TO PARKING

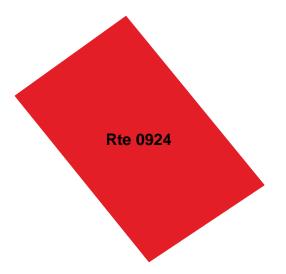
Route	Public /				
Number	NonPublic	<b>Date Visited</b>	Area (sq ft)	Lane Miles *	Surface Type
0924	PUBLIC	2/20/2013	686	0.01	AS
Culverts	<b>Drop Inlets</b>	Gates	Curb & Gutter	Curb	PCR
			NO CURB AND		
0	0	0	GUTTER	NO CURB	GOOD/90

\* Lane miles are based on 11' lane widths











# <u>Section 8</u> Route Maintenance Features Summaries



## Gettysburg National Military Park



## **GETT: DCV ROUTE MAINTENANCE FEATURES SUMMARY**

Notice: Culverts and drop inlets were NOT marked by NPS in Cycle 5 along new or re-aligned DCV driven routes.

FEATURE	ROUTE 0020 BERDAN AVENUE	ROUTE 0022 HUMPHREYS AVENUE	ROUTE 0037ZZ NATIONAL MONUMENT DRIVE ROUTES	ROUTE 0041 WAINWRIGHT AVENUE	ROUTE 0052 CULPS HILL TOWER ROAD	UNIT
BRIDGE	0	0	0	0	0	EACH
CATTLE GUARD	0	0	0	0	0	EACH
CULVERT	0	0	0	0	0	EACH
CURB	0	0	212	300	0	LINEAR FEET
DROP INLET	0	0	4	0	0	EACH
GATE	1	0	2	0	0	EACH
GUARD/GUIDE RAIL	0	0	0	370	0	LINEAR FEET
CABLE	0	0	0	0	0	LINEAR FEET
NON-CABLE	0	0	0	370	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	755	0	LINEAR FEET
BOLLARD	0	0	0	0	0	LINEAR FEET
TEMPORARY BARRIER	0	0	0	0	0	LINEAR FEET
NON TEMP/BOLLARD	0	0	0	755	0	LINEAR FEET
INTERSECTION	7	5	7	9	9	EACH
LOW WATER CROSSING	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	1	0	EACH
PAVED DITCH	0	475	0	0	0	LINEAR FEET
PULLOUT	0	0	1	0	0	EACH
PULLOUT	0	0	58	0	0	LINEAR FEET
RAILROAD CROSSING	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	1	0	EACH
RETAINING WALL	0	0	0	84	0	LINEAR FEET
SIGN	1	5	4	8	2	EACH
STATE BOUNDARY	0	0	0	0	0	EACH
TRAFFIC LIGHT	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	LINEAR FEET

## **STRUCTURE LIST**

This park is classified as a large park. Therefore, in Cycle 5, BIP-Structures were inventoried only if they were located along routes that were modified or previously uncollected by RIP, so this report does not provide an all-inclusive listing of all BIP-Structures in the park.

# <u>Section 9</u> Route Maintenance Features Road Logs



## Gettysburg National Military Park



#### **ROUTE 0020: BERDAN AVENUE**

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0018 (WEST CONFEDERATE AVENUE) ON RIGHT AT MP 1.72
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0018 (WEST CONFEDERATE AVENUE)
0.000	0.000	SIGN	N/A	REGULATORY, ONE WAY
0.000	0.000	INTERSECTION	LEFT	ROUTE 0018 (WEST CONFEDERATE AVENUE)
0.007	0.007	GATE	N/A	N/A
0.026	0.026	INTERSECTION	LEFT	UNPAVED ROUTE
0.039	0.039	INTERSECTION	LEFT	UNPAVED ROUTE
0.073	0.073	INTERSECTION	LEFT	ROUTE 0020 (BERDAN AVENUE)
0.073	0.115	ONE-WAY	N/A	N/A
0.115	0.115	INTERSECTION	LEFT	ROUTE 0020 (BERDAN AVENUE)
0.115	0.115	INTERSECTION	RIGHT	ROUTE 0020 (BERDAN AVENUE)
0.115	0.115	ROUTE END	N/A	TO END OF LOOP

#### **ROUTE 0022: HUMPHREYS AVENUE**

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0021 (PLEASONTON AVENUE) ON LEFT AT MP 0.23
0.000	0.104	ONE-WAY	N/A	N/A
0.000	0.000	SIGN	N/A	GUIDE, AUTO TOUR STOPS 13 & 14
0.000	0.000	INTERSECTION	LEFT	ROUTE 0021 (PLEASONTON AVENUE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0021 (PLEASONTON AVENUE)
0.007	0.007	SIGN	LEFT	REGULATORY, ONE WAY
0.037	0.037	INTERSECTION	LEFT	ROUTE 0909 (PENNSYLVANIA MONUMENT PARKING)
0.049	0.096	PAVED DITCH	RIGHT	N/A
0.061	0.104	PAVED DITCH	LEFT	N/A
0.097	0.097	SIGN	RIGHT	REGULATORY, STOP
0.104	0.104	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.104	0.104	SIGN	N/A	REGULATORY, ONE WAY
0.104	0.104	INTERSECTION	RIGHT	ROUTE 0010 (HANCOCK AVENUE)
0.104	0.104	INTERSECTION	LEFT	ROUTE 0010 (HANCOCK AVENUE)
0.104	0.104	ROUTE END	N/A	TO ROUTE 0010 (HANCOCK AVENUE) ON RIGHT AT MP 0.31

#### **ROUTE 0037AZ: NATIONAL MONUMENT DRIVE**

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))
0.000	0.000	INTERSECTION	LEFT	ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))
0.000	0.000	INTERSECTION	RIGHT	ROUTE 5000 (STATE ROUTE 134 (TANEYTOWN ROAD))
0.005	0.005	GATE	N/A	N/A
0.007	0.007	SIGN	RIGHT	GUIDE, NO PICNICKING
0.007	0.007	SIGN	RIGHT	REGULATORY, CLOSED AT DUSK
0.007	0.007	SIGN	RIGHT	GUIDE, NO PETS
0.007	0.007	SIGN	RIGHT	GUIDE, GRAPHIC SIGN NO TEXT
0.023	0.608	ONE-WAY	N/A	N/A
0.023	0.023	INTERSECTION	LEFT	ROUTE 0037AZ (NATIONAL MONUMENT DRIVE)
0.025	0.028	CURB	RIGHT	N/A
0.025	0.036	PULLOUT	RIGHT	N/A
0.030	0.036	CURB	RIGHT	N/A
0.303	0.303	INTERSECTION	RIGHT	ROUTE 0037BZ (NATIONAL MONUMENT DRIVE - BALTIMORE STREET ENTRANCE AREA)
0.321	0.321	INTERSECTION	RIGHT	ROUTE 0037BZ (NATIONAL MONUMENT DRIVE - BALTIMORE STREET ENTRANCE AREA)
0.402	0.433	CURB	RIGHT	N/A
0.608	0.608	INTERSECTION	LEFT	ROUTE 0037AZ (NATIONAL MONUMENT DRIVE)
0.608	0.608	INTERSECTION	RIGHT	ROUTE 0037AZ (NATIONAL MONUMENT DRIVE)
0.608	0.608	ROUTE END	N/A	TO END OF LOOP
				× ×

#### **ROUTE 0041: WAINWRIGHT AVENUE**

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0030 (SLOCUM AVENUE) ON RIGHT AT MP 0.95
0.000	0.000	INTERSECTION	LEFT	ROUTE 0030 (SLOCUM AVENUE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0030 (SLOCUM AVENUE)
0.000	0.044	GUARD/GUIDE WALL	RIGHT	N/A
0.050	0.079	GUARD/GUIDE WALL	RIGHT	N/A
0.078	0.148	GUARD/GUIDE WALL	RIGHT	N/A
0.159	0.229	GUARD/GUIDE RAIL	RIGHT	N/A
0.233	0.233	SIGN	LEFT	GUIDE, PARK CLOSED 7PM-6AM
0.235	0.235	PARK BOUNDARY	N/A	N/A
0.320	0.336	RETAINING WALL	LEFT	N/A
0.365	0.365	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.373	0.373	INTERSECTION	LEFT	PAVED ROUTE (LOCUST AVE / NON NPS)
0.374	0.374	SIGN	LEFT	GUIDE, LOCUST AVE
0.375	0.391	CURB	LEFT	N/A
0.385	0.385	INTERSECTION	RIGHT	PAVED PARKING / NON NPS
0.395	0.425	CURB	LEFT	N/A
0.398	0.398	INTERSECTION	RIGHT	PAVED PARKING / NON NPS
0.398	0.398	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.398	0.398	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.398	0.399	CURB	RIGHT	N/A
0.402	0.402	SIGN	RIGHT	REGULATORY, ONLY
0.413	0.413	INTERSECTION	RIGHT	PAVED PARKING / NON NPS
0.415	0.424	CURB	RIGHT	N/A
0.424	0.424	SIGN	LEFT	GUIDE, LEFEVER ST
0.428	0.428	SIGN	RIGHT	REGULATORY, STOP
0.430	0.431	CURB	RIGHT	N/A
0.431	0.431	INTERSECTION	RIGHT	PAVED PARKING / NON NPS
0.432	0.432	INTERSECTION	N/A	PAVED ROUTE (WAINWRIGHT AVENUE / NON NPS)
0.432	0.432	INTERSECTION	RIGHT	PAVED ROUTE (WAINWRIGHT AVENUE / NON NPS)
0.432	0.432	ROUTE END	N/A	TO LEFEVER STREET

## **GETT: ROUTE MAINTENANCE FEATURES ROAD LOG ROUTE 0052: CULPS HILL TOWER ROAD**

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0030 (SLOCUM AVENUE) ON RIGHT AT MP 0.70
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0030 (SLOCUM AVENUE)
0.000	0.000	INTERSECTION	N/A	ROUTE 0030 (SLOCUM AVENUE)
0.013	0.013	INTERSECTION	RIGHT	PAVED SPUR
0.055	0.055	INTERSECTION	LEFT	ROUTE 0052 (CULPS HILL TOWER ROAD)
0.060	0.060	SIGN	N/A	REGULATORY, ONE WAY
0.062	0.062	INTERSECTION	LEFT	PAVED SPUR
0.062	0.152	ONE-WAY	N/A	N/A
0.069	0.069	SIGN	LEFT	GUIDE, CULP'S HILL
0.111	0.111	INTERSECTION	RIGHT	ROUTE 0905 (CULPS HILL TOWER PARKING)
0.145	0.145	INTERSECTION	LEFT	PAVED SPUR
0.152	0.152	INTERSECTION	LEFT	ROUTE 0030 (SLOCUM AVENUE)
0.152	0.152	INTERSECTION	RIGHT	ROUTE 0030 (SLOCUM AVENUE)
0.152	0.152	ROUTE END	N/A	TO END OF LOOP

## Section 10 Appendix



## Gettysburg National Military Park



# 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.

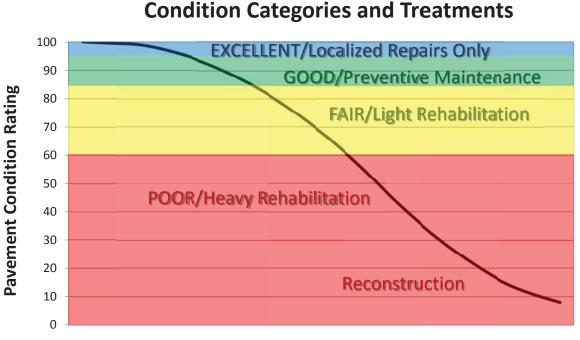
The changes that were implemented were endorsed by management at both the FHWA and NPS. In order to show the effectiveness of these changes, several sites were ground truth tested to ensure that an improvement was achieved between the relationship of PCR and the actual Maintenance and Rehabilitation 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.



#### **Pavement Age**

## **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 been 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-ofreference for distress types on NPS pavement. The FHWA RIP distress types are similar to those described in the LTPP manual with some modifications. The document, "Distress Identification Manual for the NPS Road Inventory Program, Cycle 5, 2010-2013" was developed using the "Distress Identification Manual for the Long-Term Pavement Performance Program" as a guideline. Definitions of severity levels based on crack width contained in this document adhere to the LTPP Distress ID Manual. Modifications have been made to the definition of Alligator and Longitudinal Cracking and determination of Alligator Cracking severity. This manual also addresses Rutting and Roughness and its application to NPS-RIP.

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

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

## SURFACE DISTRESSES

#### **Surface Condition Rating - SCR**

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

#### Surface distresses determined from digital images

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

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

• Rutting

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

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

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

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

#### **Roughness Condition Index - RCI**

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

• Roughness (IRI)

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

### Pavement Condition Rating - PCR

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

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

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

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

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

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

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

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

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

Г

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

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

### ALLIGATOR CRACKING

#### **Description**

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

#### Severity Levels

#### LOW

An area of cracks with no or very few interconnecting cracks and the cracks are not spalled. Cracks are  $\leq 0.25$  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  $\leq 0.75$  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.

	Crack Pattern			
ALLIGATOR CRACKING SE LEVELS	LOW	MED	HIGH	
	LOW	L	М	Н
ack idth	MED	М	М	Н
Cra Wi	HI	Н	Н	Н

#### **TABLE 2:** Alligator Crack Severity Levels

### LONGITUDINAL CRACKING

#### **Description**

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

#### **Severity Levels**

#### LOW

Cracks with a mean width 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  $\ge 0.20$ " and  $\le 0.49$ "

**MED** Ruts with a measured depth  $\ge 0.50$ " and  $\le 0.99$ "

#### 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:

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

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

#### **Longitudinal Crack Index**

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

Where:

The values %LOW, %MED, and %HI report the length of longitudinal cracking within each severity as a percent of the section length (0.02 mile, primary lane). These values are  $\geq 0$  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: <u>length of respective longitudinal cracking</u> 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: <u>Total length of transverse cracks</u> Lane width

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

#### **Patching Index**

#### **PATCH\_INDEX** = 100 - 40 \* (% PATCHING / 80)

Where:

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

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

Percent of total area is computed as:

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

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

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

#### **Rutting Index**

**RUT INDEX** = 100 - 40 \* [(% LOW / 535) + (% MED / 205) + (% HI / 40)]

Where:

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

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

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

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

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

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

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

#### **Roughness Condition Index (Asphalt)**

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

Where:

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

Average IRI is computed as:

Left wheelpath IRI + Right wheelpath IRI 2

There is no applicable threshold for failure for this index.

#### **Roughness Condition Index (Concrete)**

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

For concrete, PCR = RCI

#### **Surface Condition Rating Index**

**SCR** = *Lowest* Index Value Of: [SC\_INDEX, TC\_INDEX, PATCH\_INDEX, RUT\_INDEX]

*Note:* The modified SCR equation above combines AC\_INDEX and LC\_INDEX, and considers that a single AC/LC index value of the Structural Crack Index (SC\_INDEX). The lowest of the four computed index values (SC\_INDEX, TC\_INDEX, PATCH\_INDEX, or RUT\_INDEX) becomes the SCR.

Where:

See above for determinations of SC\_INDEX, TC\_INDEX, PATCH\_INDEX and RUT\_INDEX.

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

## **Data Collection Vehicle Subsystems**

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

#### **CAMERAS**

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

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

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

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

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

#### **DMI (Distance Measuring Instrument)**

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

#### **ROUGHNESS (IRI)**

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

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

#### **RUTTING**

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

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

#### **GPS & INERTIAL SYSTEMS**

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

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

#### GPS on Manually Rated Roads (MRR)

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

## **Geodatabase - Background and Metadata**

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

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

#### **GLOSSARY OF TERMS AND ABBREVIATIONS**

## TERM ORABBREVIATIONDESCRIPTION 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
РАТСН	Patching and Potholes
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating
PKG	Parking Area
Poor	Poor rating with an index value of 0 to 60
RCI	Roughness Condition Index
SC	Structural Cracking
SCR	Surface Condition Rating
TC	Transverse Cracking