

# US Bike Route 76

2014 New River Valley Report



# US Bike Route 76 - 2014 New River Valley Report

<b>OVERVIEW</b> -----	<b>1</b>
<b>CYCLING IN VIRGINIA</b> -----	<b>2</b>
<b>ROUTE ANALYSIS</b> -----	<b>3</b>
<b>RECOMMENDATIONS</b> -----	<b>20</b>
WAYFINDING -----	20
SAFETY-----	20
ALIGNMENT -----	21
KEY TAKEAWAYS -----	21
<b>PLAN CONTRIBUTORS</b> -----	<b>22</b>
<b>DISCLAIMER</b> -----	<b>23</b>

## TABLES

TABLE 1: GOALS & OBJECTIVES -----	8
TABLE 2: CORRIDOR CLASSIFICATION MATRIX -----	24
TABLE 3: HOW TO CHOOSE DESIGN STANDARDS -----	25
TABLE 4: DESIGN STANDARDS BY TRAVEL MODE -----	26
TABLE 5: POTENTIAL AVENUE, PEDESTRIAN MODAL EMPHASIS EXAMPLE -----	26

## FIGURES

FIGURE 1: ROUTE CONDITIONS 1 OF 7 -----	5
FIGURE 2: ROUTE CONDITIONS 2 OF 7 -----	7
FIGURE 3: ROUTE CONDITIONS 3 OF 7 -----	9
FIGURE 4: ROUTE CONDITIONS 4 OF 7 -----	11
FIGURE 5: ROUTE CONDITIONS 5 OF 7 -----	13
FIGURE 6: ROUTE CONDITIONS 6 OF 7 -----	15
FIGURE 7: ROUTE CONDITIONS 7 OF 7 -----	17
FIGURE 8: ROUTE VARIATIONS -----	19

## PROJECT WEBSITE

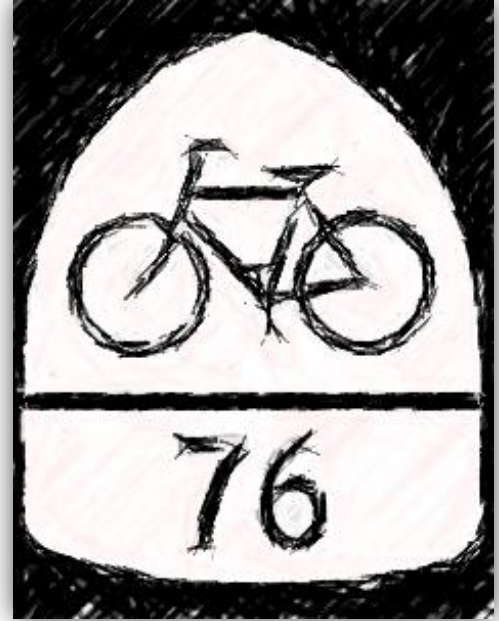
<http://www.nrvpdc.org/InteractiveMaps/BR76Report/2014/>

NOTE: ACCESS THE PROJECT WEBSITE TO EXPERIENCE THE 2014 RIDE REPORT ONLINE.

## Overview

June 2014, the Virginia Bicycling Federation requested assistance from the New River Valley Planning District Commission to prepare a regional report on US Bicycle Route 76. A team of local cyclists volunteered to assist with developing report content and data collection. The primary goals of the report are three-fold: 1) verify signage exists to guide cyclists, 2) determine if the existing signed route aligns with the latest Adventure Cycling map, and 3) review the existing roadway conditions and route selection.

Cyclists passing through the NRV utilize a variety of navigation resources to complete their trip. Adventure Cycling currently serves as a central information source for cyclists interested in touring the US on two wheels. Turn-by-turn instructions, GPS points, and other resources are provided for the existing 6,790 miles of US Bike Routes that passes through 15 states. Adventure Cycling's trail guides are used by thousands of cyclists each year for bicycle touring.



Virginia is currently home to 838 miles of US Bicycle Routes that interconnect with multiple local, regional, and statewide trail systems. Two of Virginia's State agencies have developed an official statewide bicycling map, the Department of Transportation and the Department of Conservation and Recreation. The map presents setting, terrain, elevation, and surface conditions. Inset enlargements also provide select details for parking and other relevant facilities.

Both Adventure Cycling and Virginia State Agencies have developed information geared towards cyclists using US Bike Route 76. This report identifies how the New River Valley compliments existing cyclist information with on-the-ground resources.



## Cycling in Virginia

US Bike Route 76 is one of fourteen officially designated parent routes. The US Bike Route System was established in 1978 by AASHTO. The initial purpose of the system was to identify the most suitable roads for cycling, interconnecting the states. In 1982, the first two routes of the system were established (USBR 1 & USBR 76), and remained the only two until 2011.<sup>1</sup>



According to a 2014 report, Virginia currently ranks 44<sup>th</sup> in the US on per capita spending for bicycle and pedestrian related projects at \$1.89 per capita. Alaska spends the most per capita (\$12.05) while Maryland spends the least (\$1.18).<sup>2</sup> Despite how Virginia compares to other states on alternative transportation investments, bicycling continues to grow in popularity.

Each year Bike Virginia, a 27 year old organization, hosts an annual bicycling tour. The event draws nearly 2,000 cyclists for a 6 day cycling festival that travels around the Commonwealth. In 2015, Virginia will host the UCI World Cycling Championships. Virginia will be the only state in the US to host the event since 1986.

<sup>1</sup> Wikipedia 2014, Retrieved from: [http://en.wikipedia.org/wiki/United\\_States\\_Bicycle\\_Route\\_System](http://en.wikipedia.org/wiki/United_States_Bicycle_Route_System)

<sup>2</sup> FHWA FMIS 2009-2012, Retrieved from: Alliance for Biking & Walking (2014). Benchmarking Report, Bicycling and Walking in the United States.

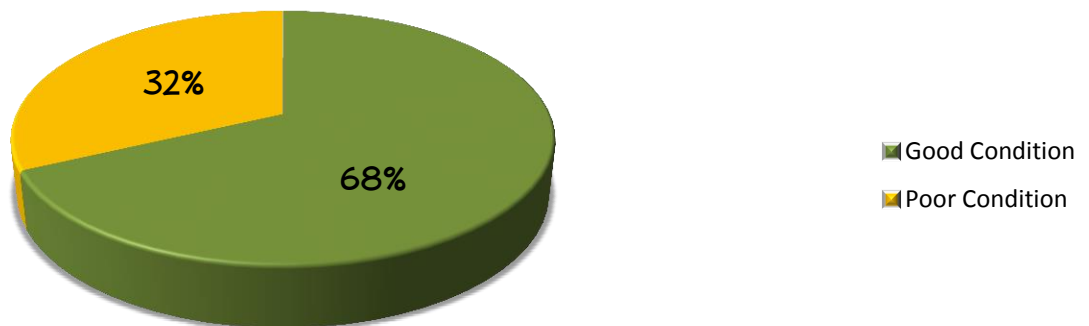
## Route Analysis

This section provides an overview of Bicycle Route 76 existing conditions. Three local volunteers rode their bicycles, in both eastbound and westbound directions, and documented their observations regarding the presence of signage, discrepancies between mapping, roadway conditions, and sight distance. Report cards (below) provide a quick snapshot of the overall route through the New River Valley. Mapping illustrates the observations made along segments and at intersections.

WEST BOUND REPORT CARD <sup>3</sup>			
ASSET	GRADE (%)	GRADE (LETTER)	TARGET
TURN SIGN	81	B-	100% 1-3 YRS
REINFORCE SIGN	74	C	100% 1-3 YRS
ROAD CONDITION	77	C+	5+ YRS
SIGHT DISTANCE	78	C+	5+ YRS
OVERALL	78	C+	B+ 1-3 YRS

EAST BOUND REPORT CARD			
ASSET	GRADE (%)	GRADE (LETTER)	TARGET
TURN SIGN	77	C+	100% 1-3 YRS
REINFORCE SIGN	58	F	100% 1-3 YRS
ROAD CONDITION	45	F	5+ YRS
SIGHT DISTANCE	47	F	5+ YRS
OVERALL	57	F	C 1-3 YRS

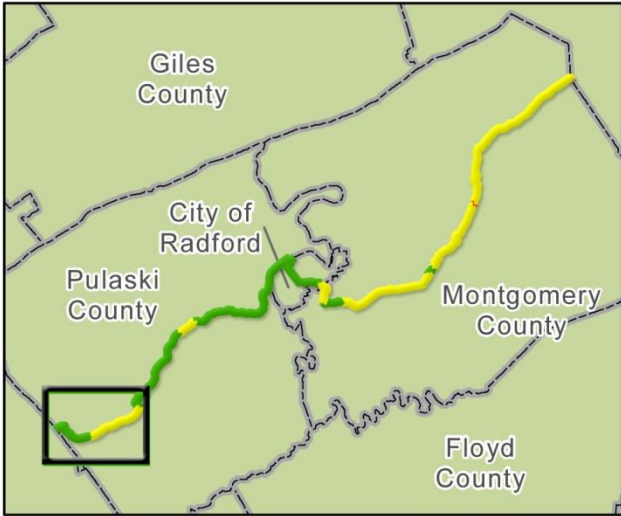
## 2014 NRV SUMMARY



<sup>3</sup> Intersection Turn Signage features the BR 76 logo with a directional arrow beneath; Reinforcing Signage features the BR 76 logo and affirms the riders turning maneuver; Roadway Condition refers to the segment conditions of asphalt, shoulders, and slopes; Sight Distance refers to the segments that have poor intersection, and vertical/horizontal curvature sight distance as experienced by the rider.



# US Bike Route 76 New River Valley Regional Report 2014



Map 1 of 7

### Trail Road Condition



Segment Start/End\*



Road Center Line

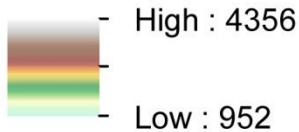


Hydrology

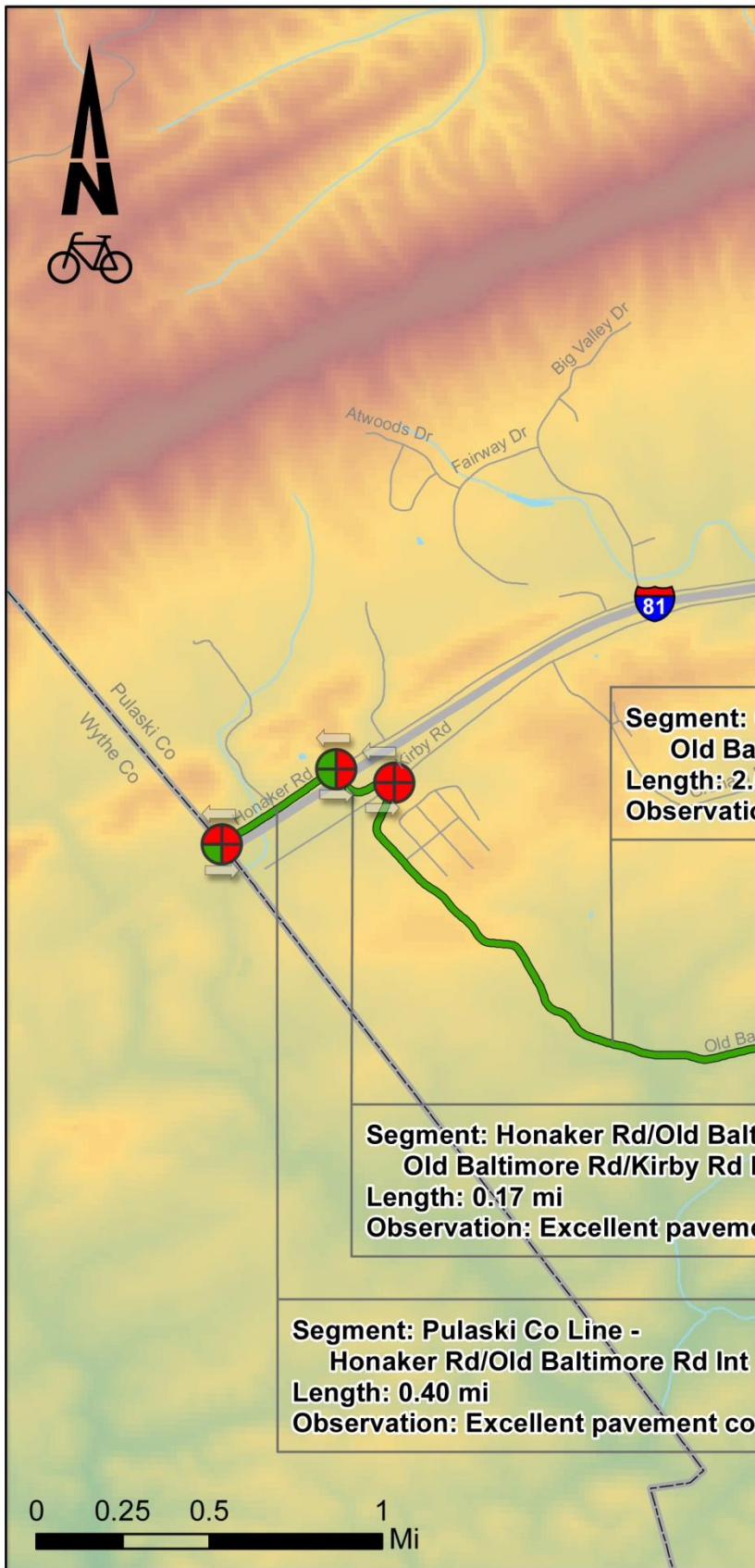
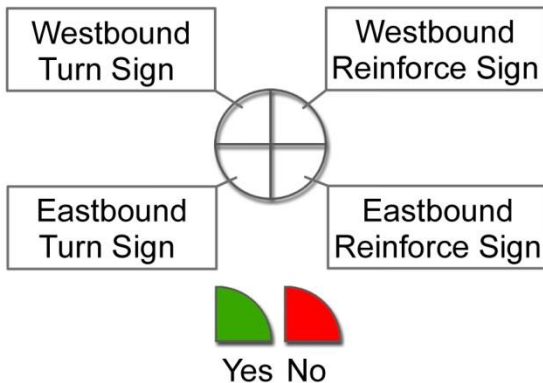


Direction

### Elevation (Ft)



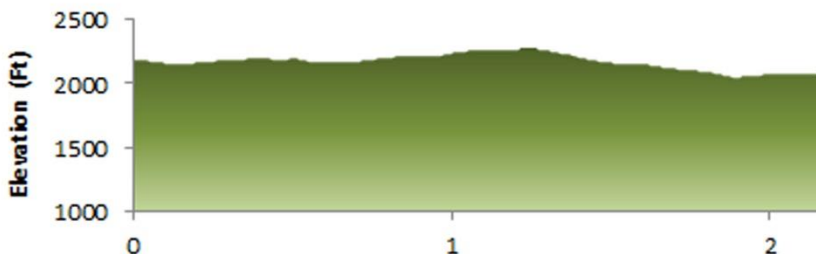
### \*Segment Start/End Color Code

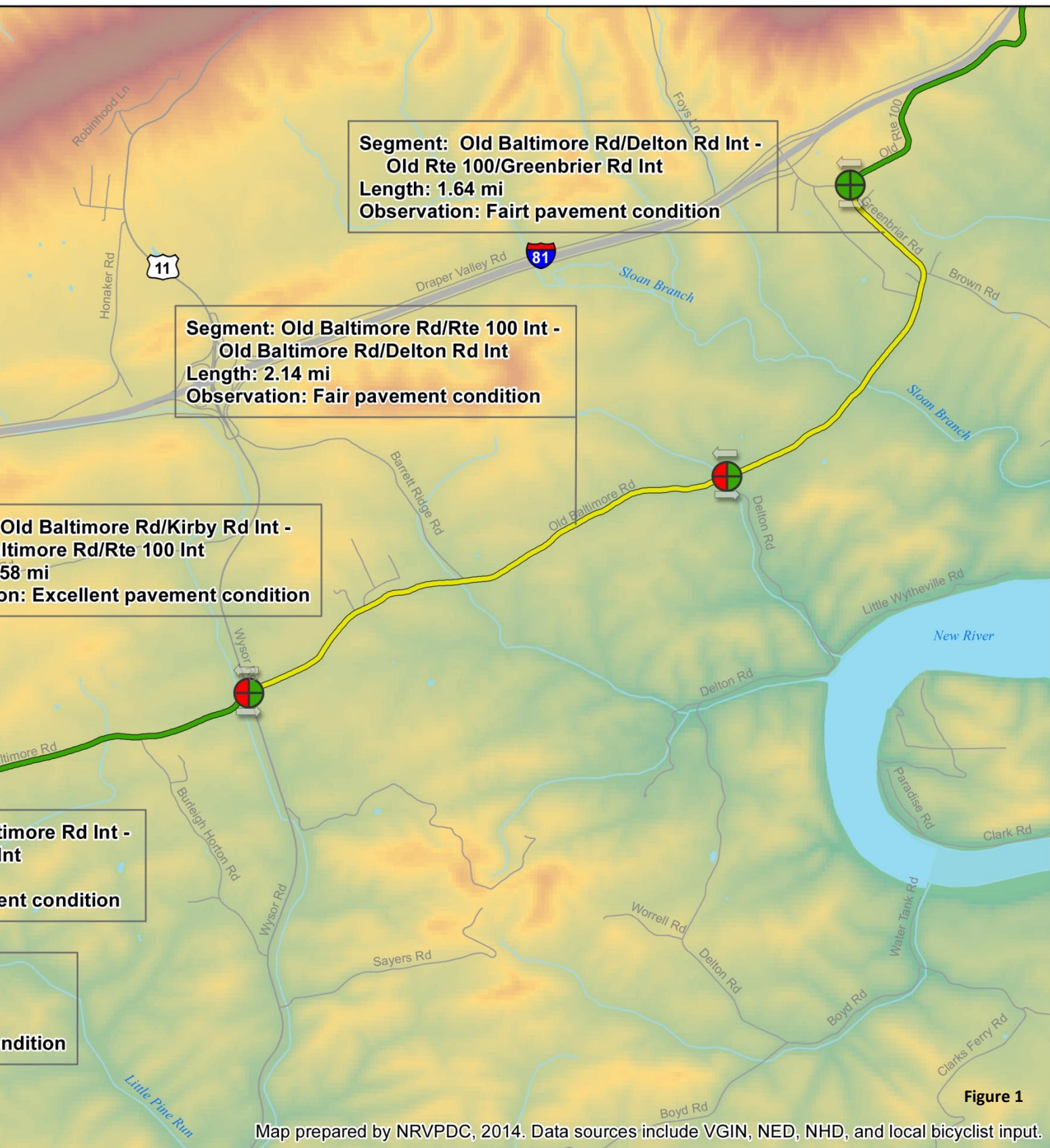


Segment: Old Baltimore Rd/Kirby Rd  
Length: 2.1 mi  
Observation: Excellent pavement

Segment: Honaker Rd/Old Baltimore Rd  
Old Baltimore Rd/Kirby Rd Int  
Length: 0.17 mi  
Observation: Excellent pavement

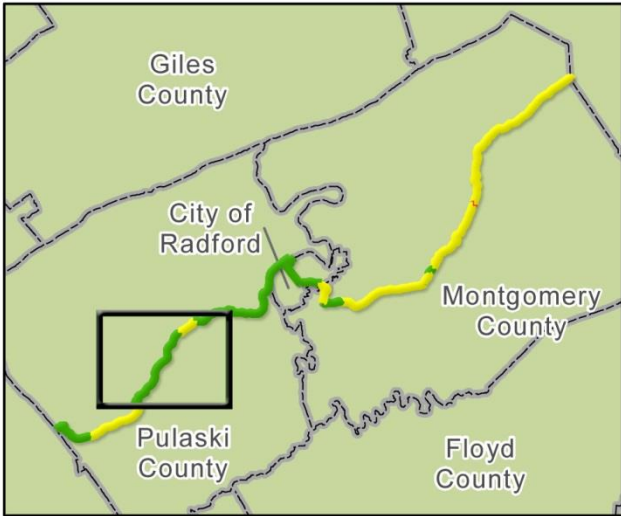
Segment: Pulaski Co Line -  
Honaker Rd/Old Baltimore Rd Int  
Length: 0.40 mi  
Observation: Excellent pavement







# US Bike Route 76 New River Valley Regional Report 2014

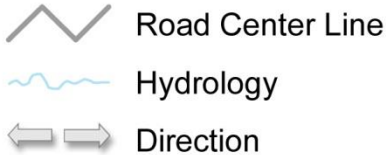


Map 2 of 7

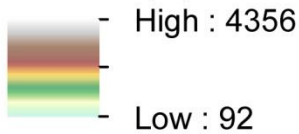
### Trail Road Condition



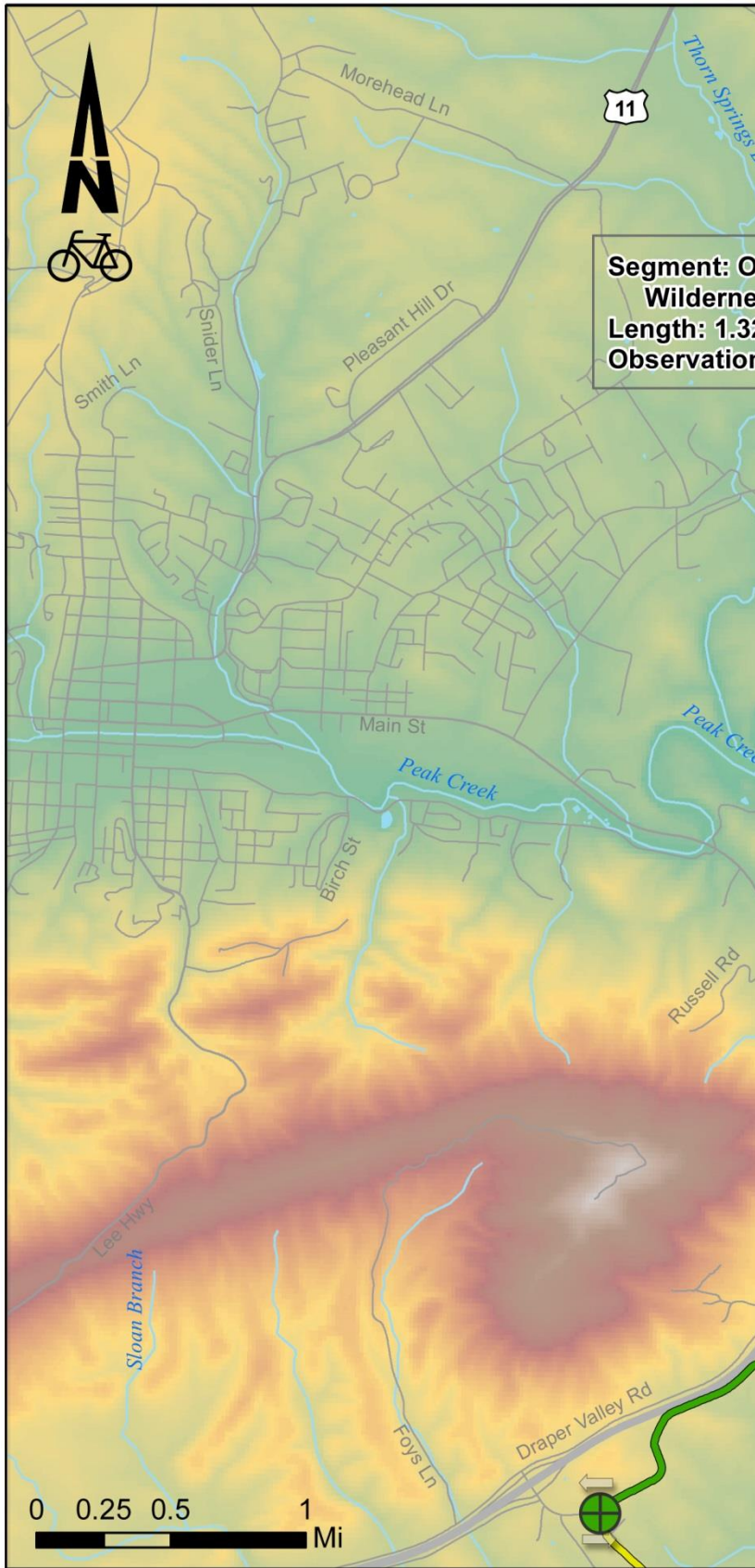
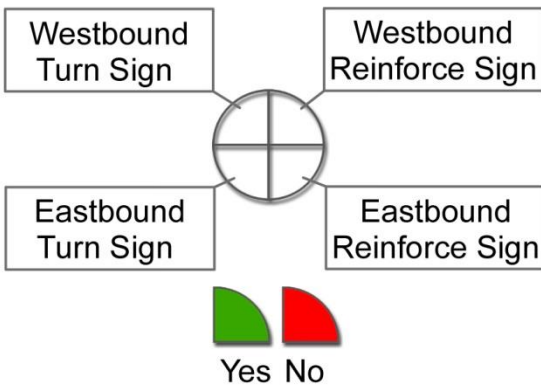
Segment Start/End\*



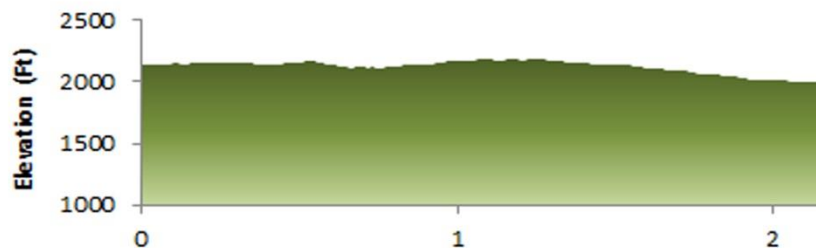
### Elevation (Ft)



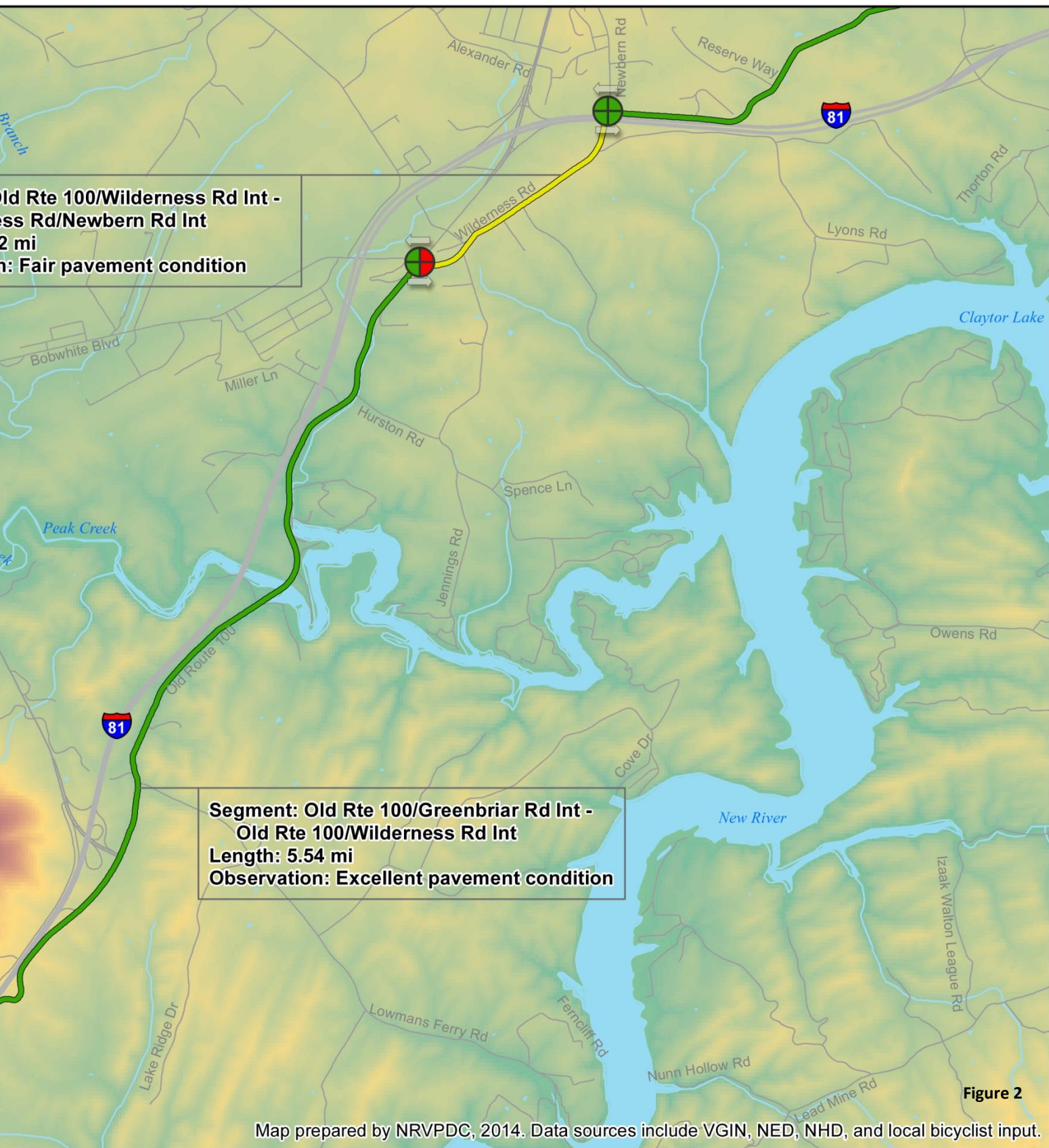
### \*Segment Start/End Color Code



Segment: O  
Wilderne  
Length: 1.33  
Observation









# US Bike Route 76 New River Valley Regional Report 2014



Map 3 of 7

### Trail Road Condition

- Excellent
- Fair
- Poor



Segment Start/End\*



Road Center Line

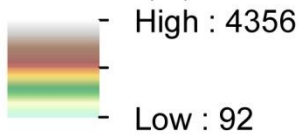


Hydrology

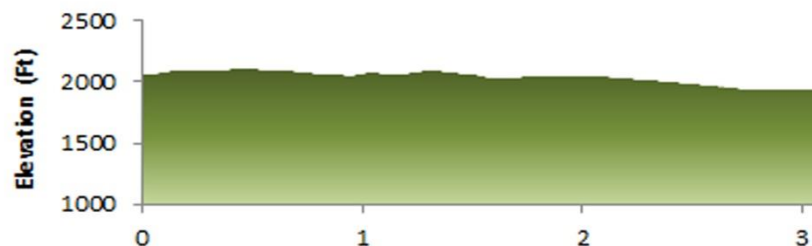
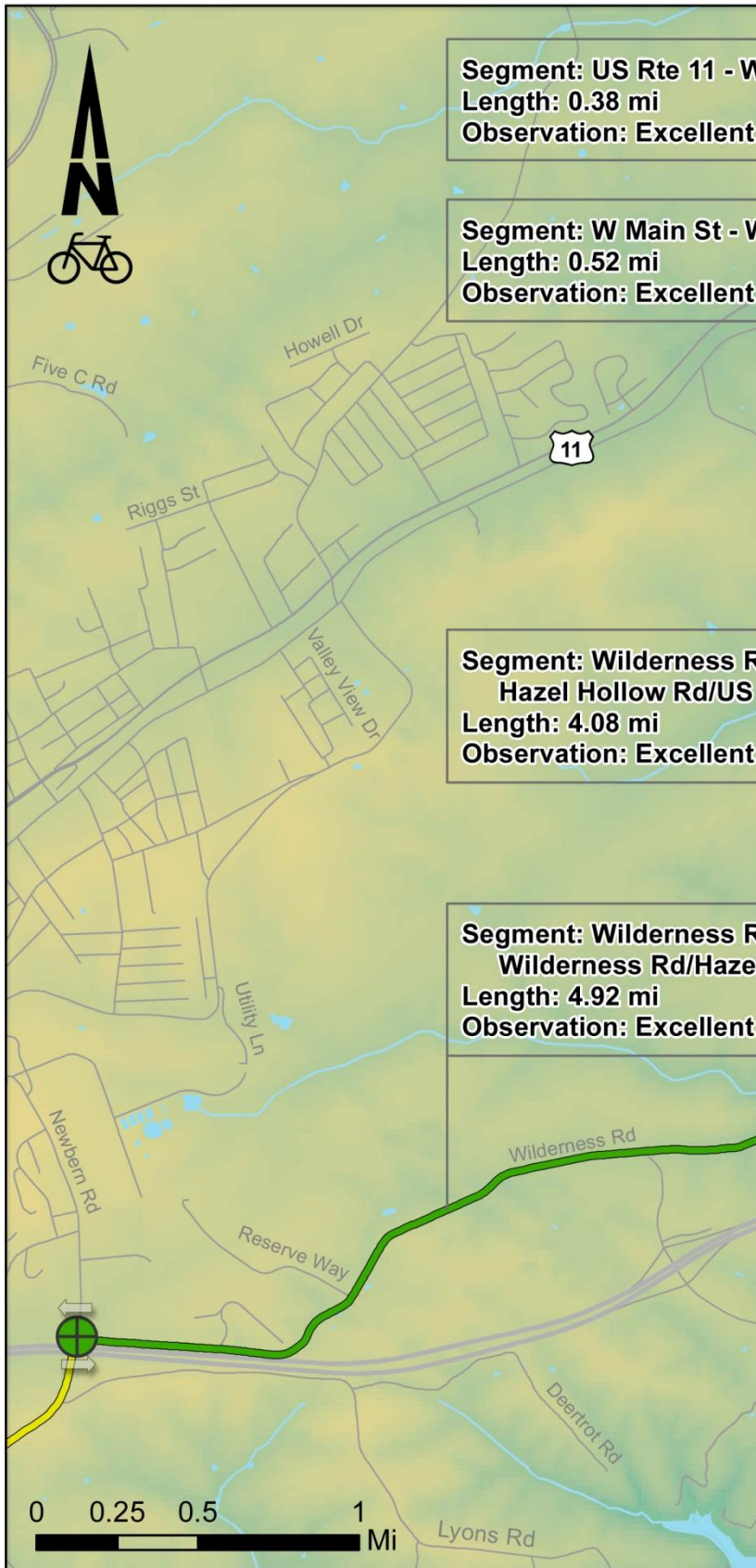
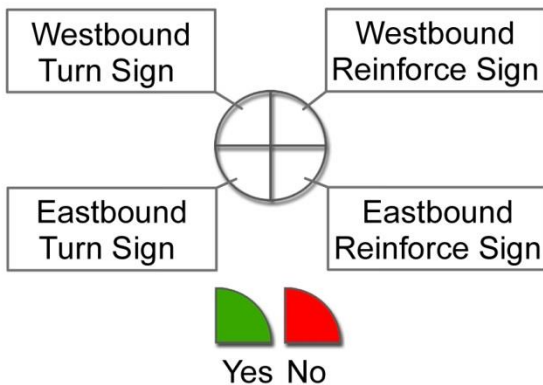


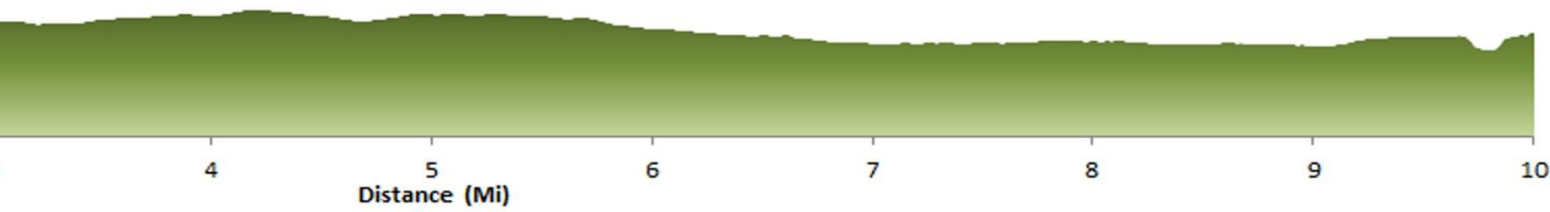
Direction

### Elevation (Ft)



### \*Segment Start/End Color Code







# US Bike Route 76 New River Valley Regional Report 2014



Map 4 of 7

### Trail Road Condition

- Excellent
- Fair
- Poor



Segment Start/End\*



Road Center Line

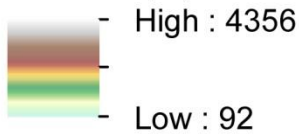


Hydrology

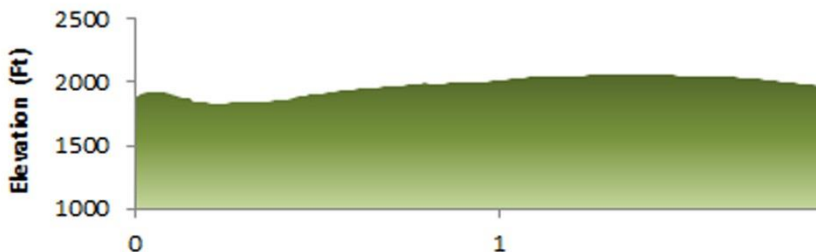
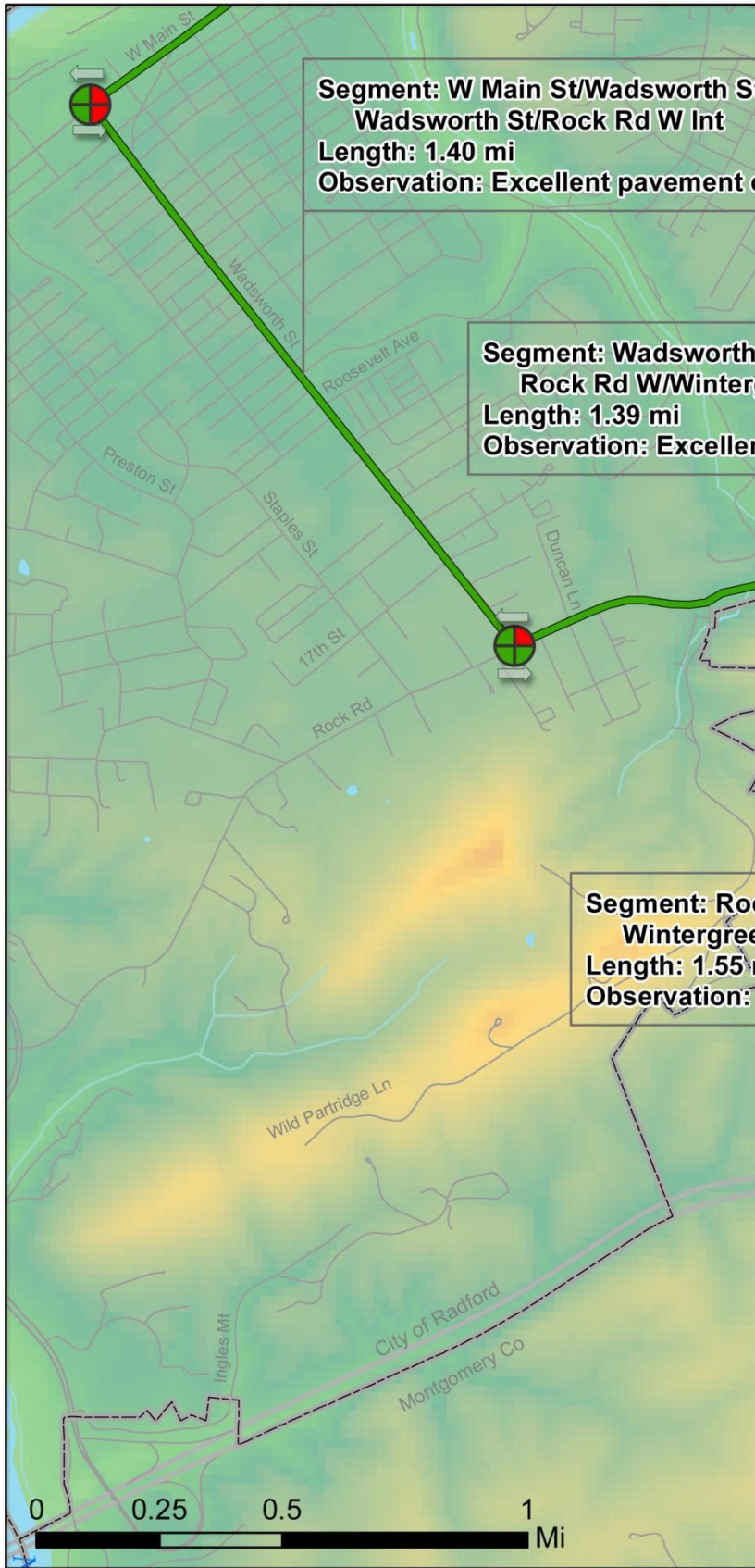
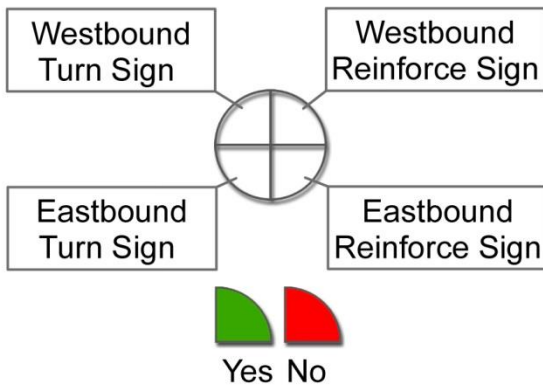


Direction

### Elevation (Ft)



### \*Segment Start/End Color Code



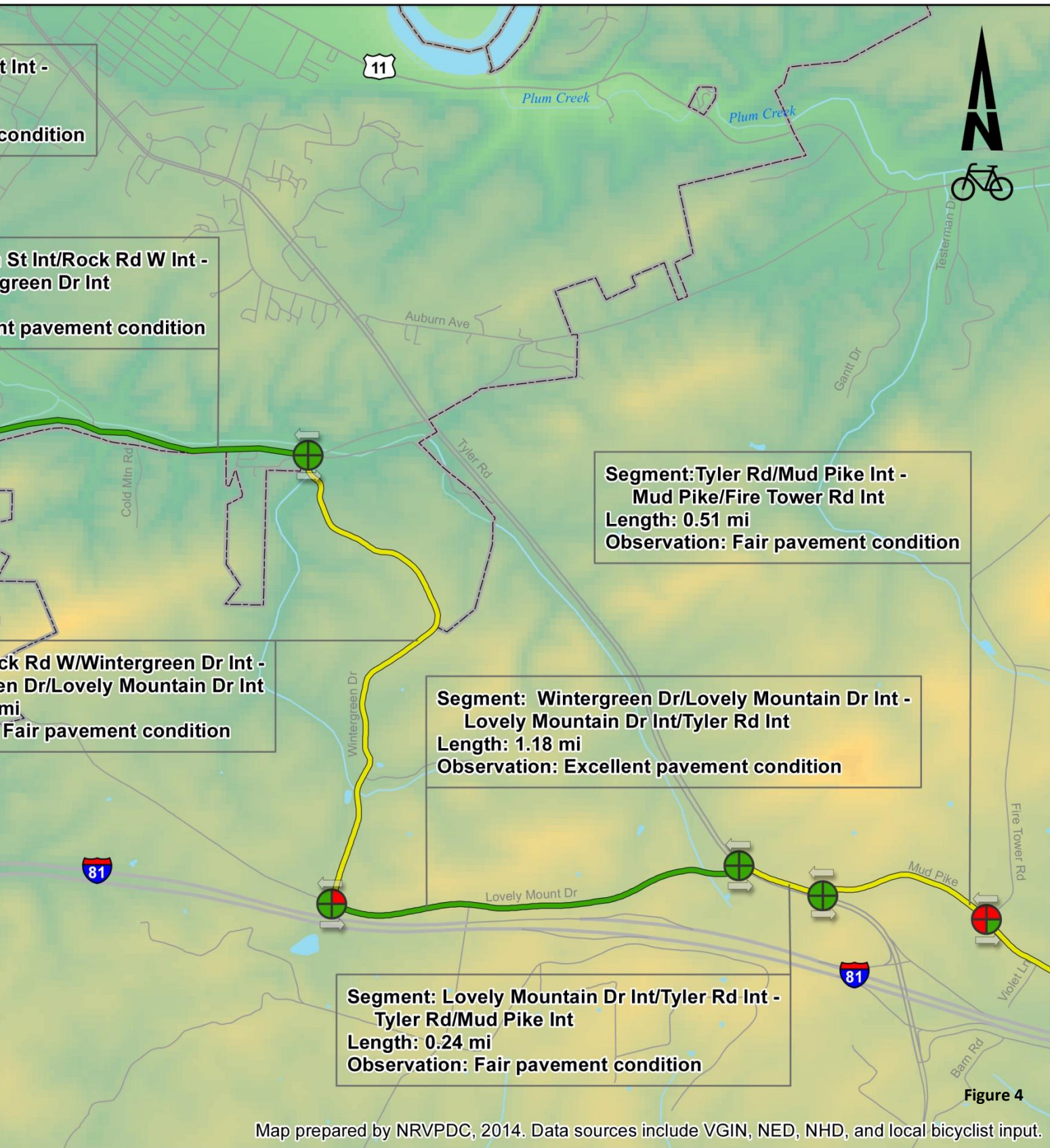
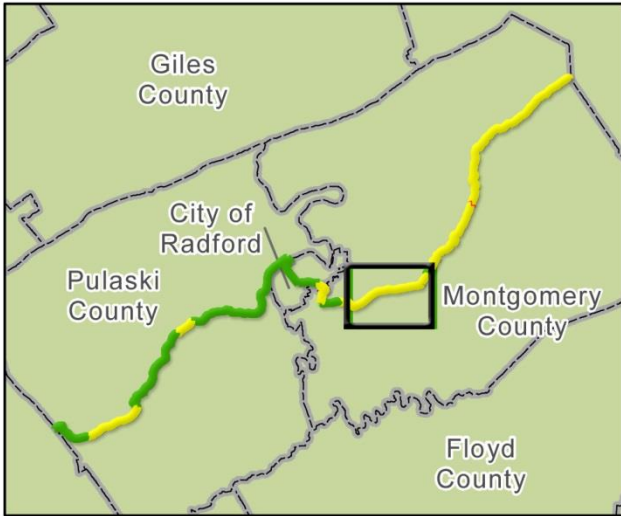


Figure 4



# US Bike Route 76 New River Valley Regional Report 2014



Map 5 of 7

### Trail Road Condition

- Excellent
- Fair
- Poor



Segment Start/End\*



Road Center Line

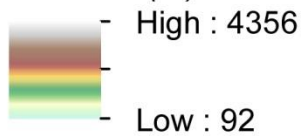


Hydrology

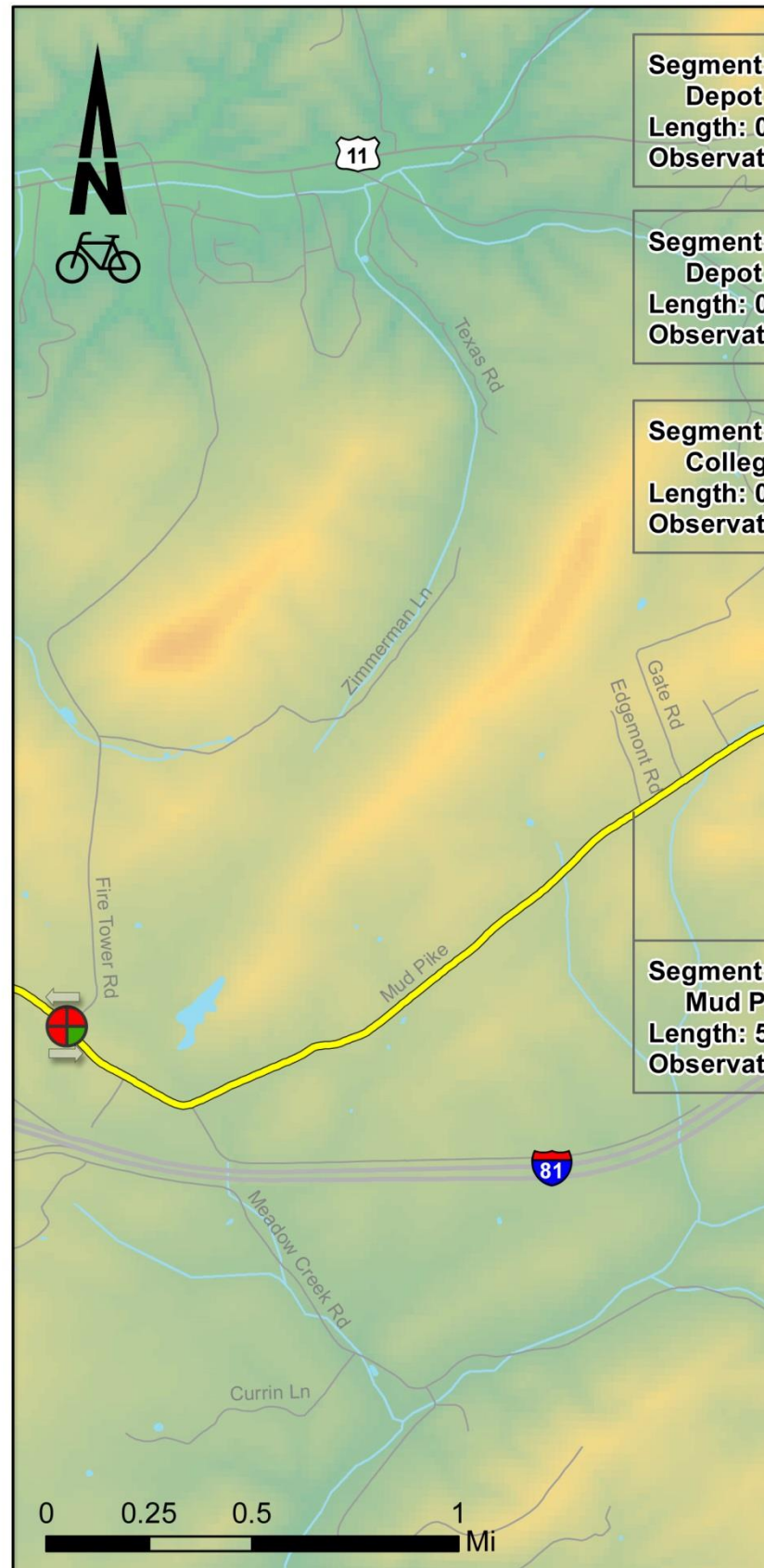
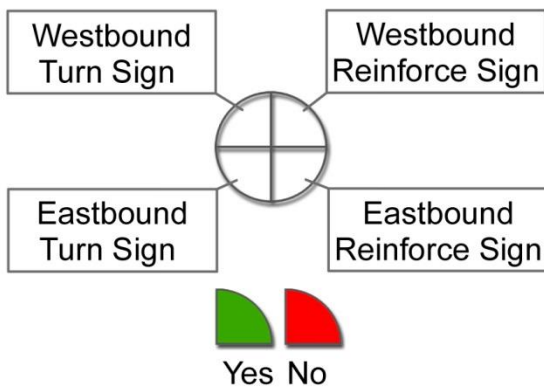


Direction

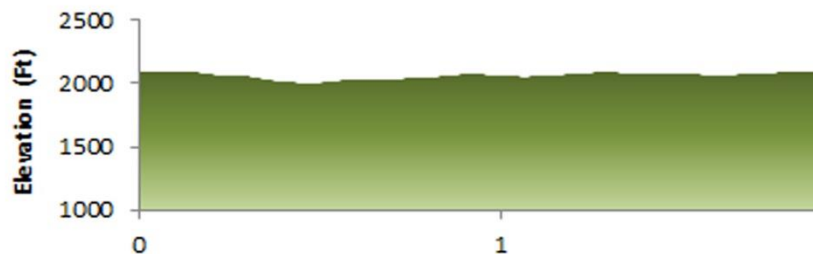
### Elevation (Ft)

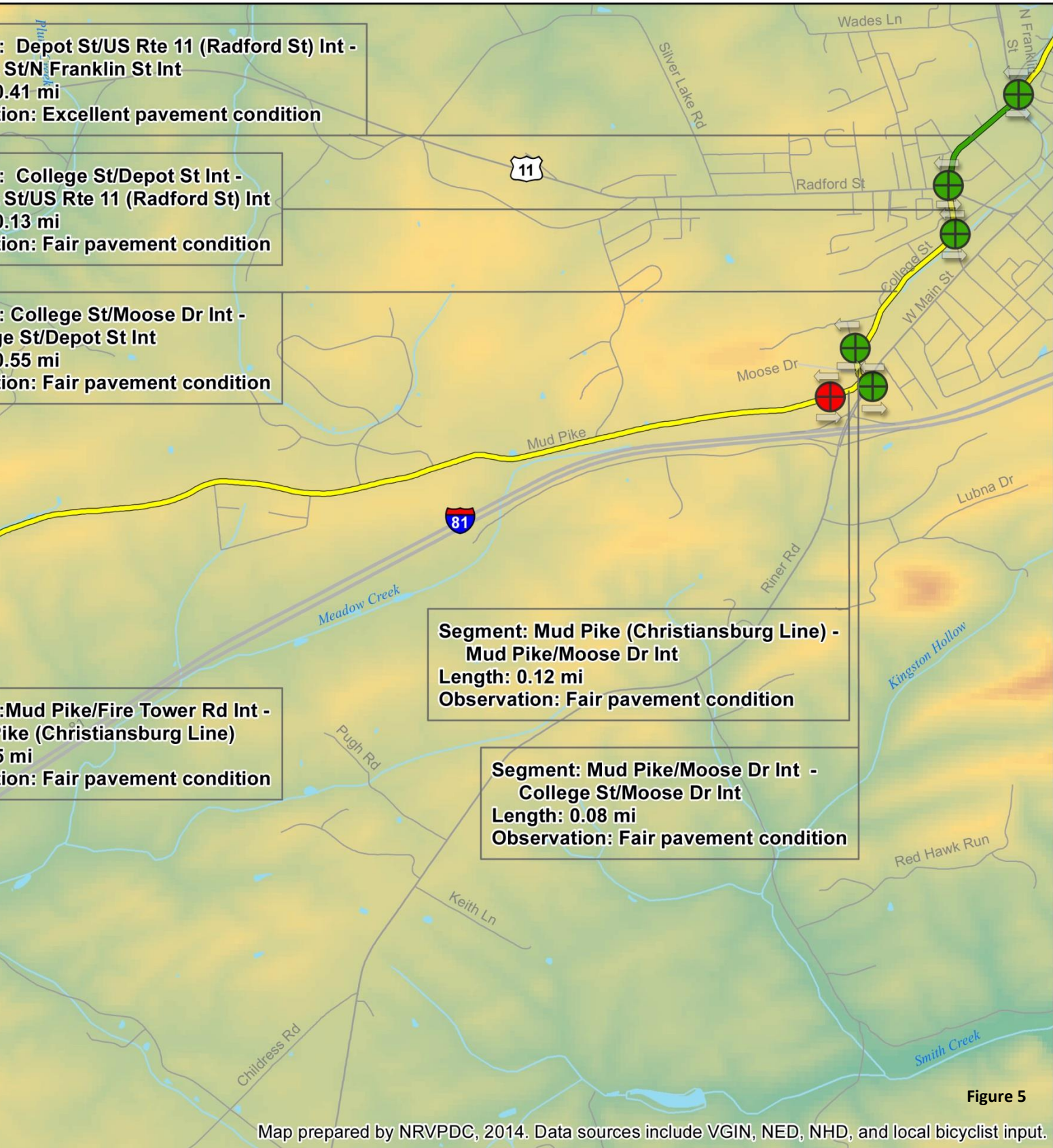


### \*Segment Start/End Color Code



- Segment Depot Length: 0 Observat
- Segment Depot Length: 0 Observat
- Segment Colleg Length: 0 Observat
- Segment Mud P Length: 5 Observat





**Figure 5**

Map prepared by NRVPCD, 2014. Data sources include VGIN, NED, NHD, and local bicyclist input.



# US Bike Route 76 New River Valley Regional Report 2014



Map 6 of 7

### Trail Road Condition

- Excellent
- Fair
- Poor



Segment Start/End\*



Road Center Line

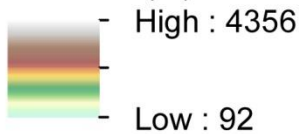


Hydrology

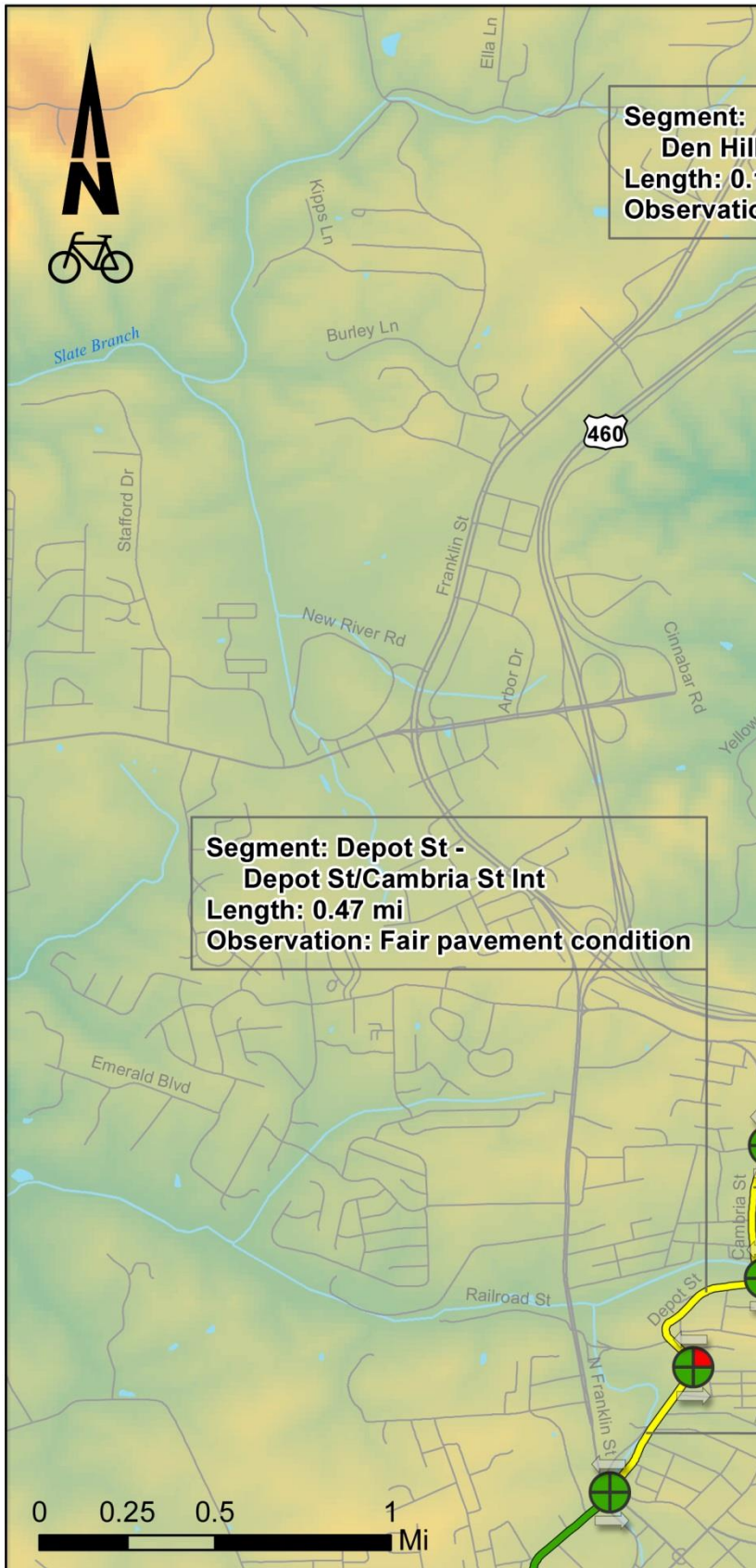
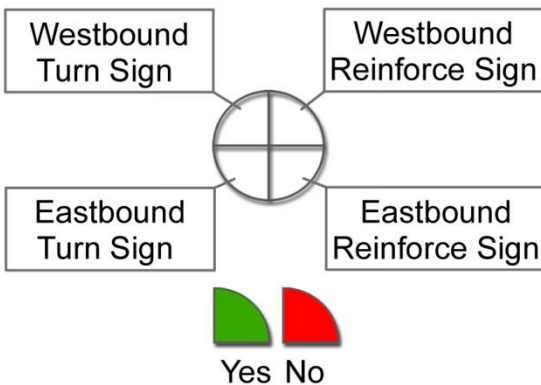


Direction

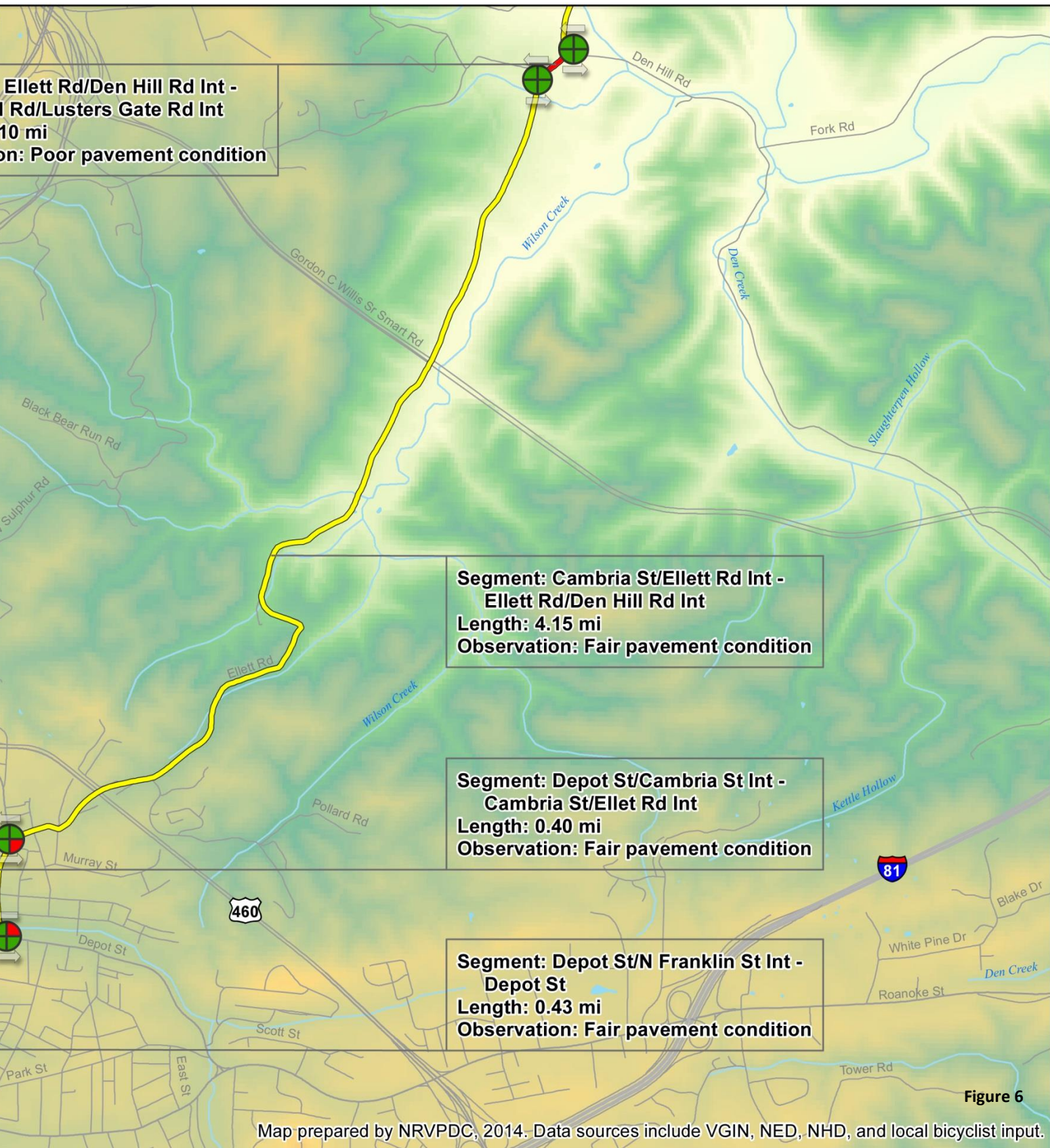
### Elevation (Ft)



### \*Segment Start/End Color Code



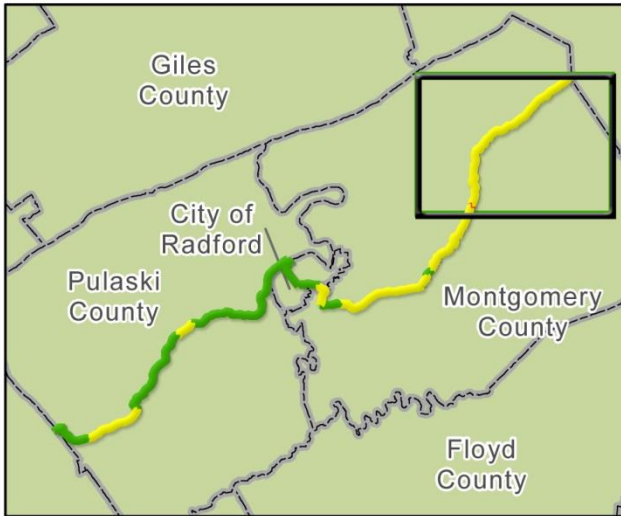




2 3 4 5  
Distance (Mi)



# US Bike Route 76 New River Valley Regional Report 2014



Map 7 of 7

### Trail Road Condition

- Excellent
- Fair
- Poor



Segment Start/End\*



Road Center Line

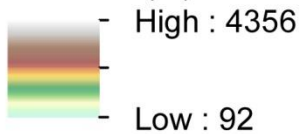


Hydrology

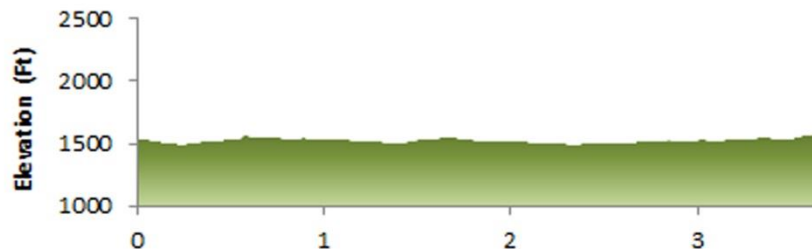
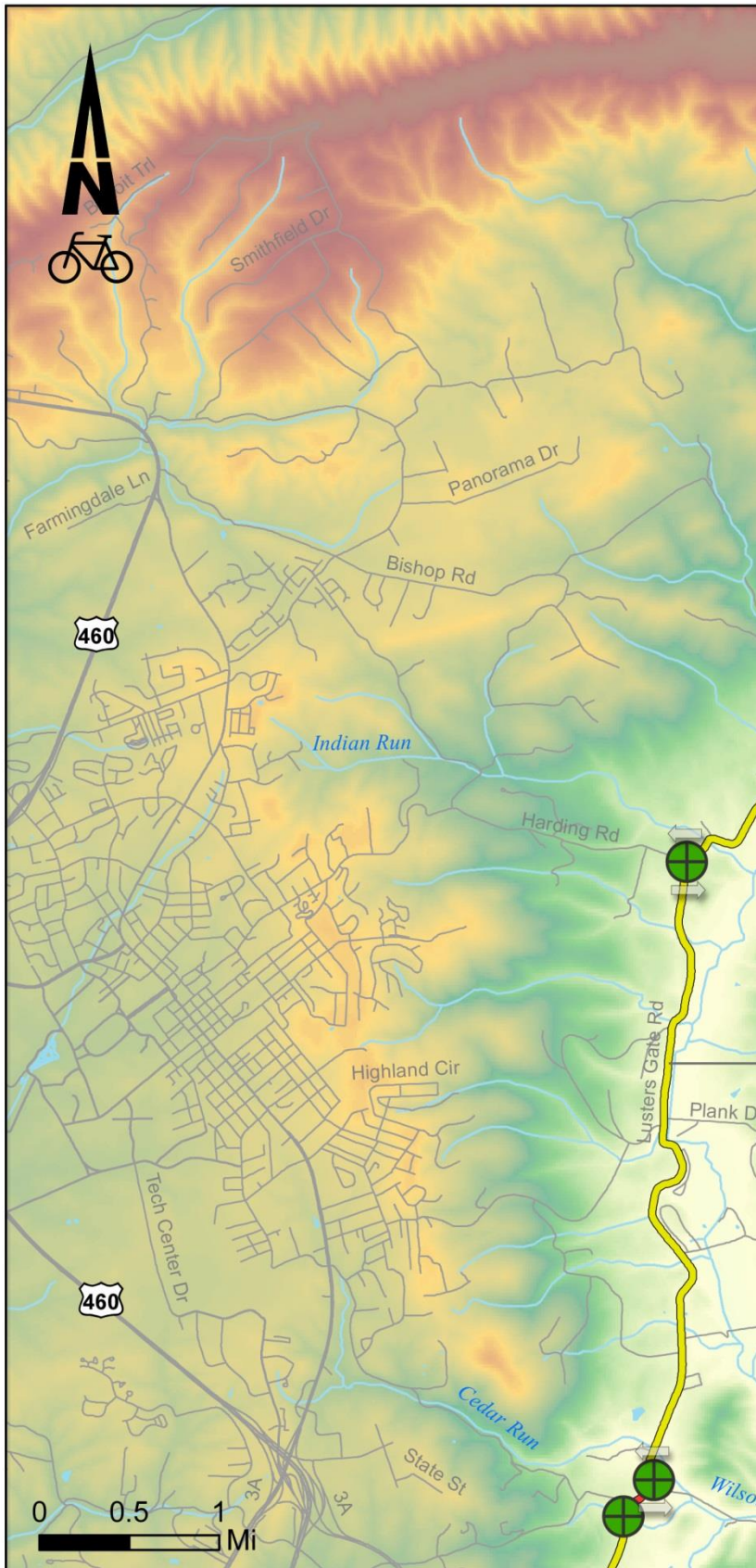
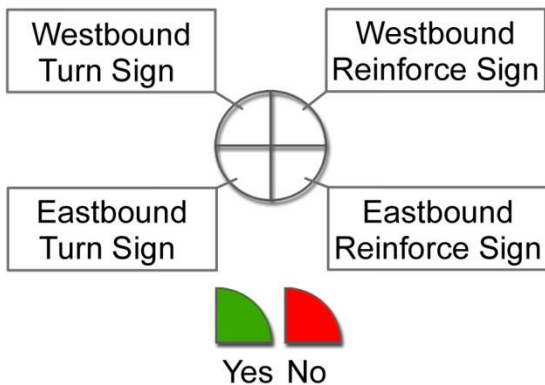


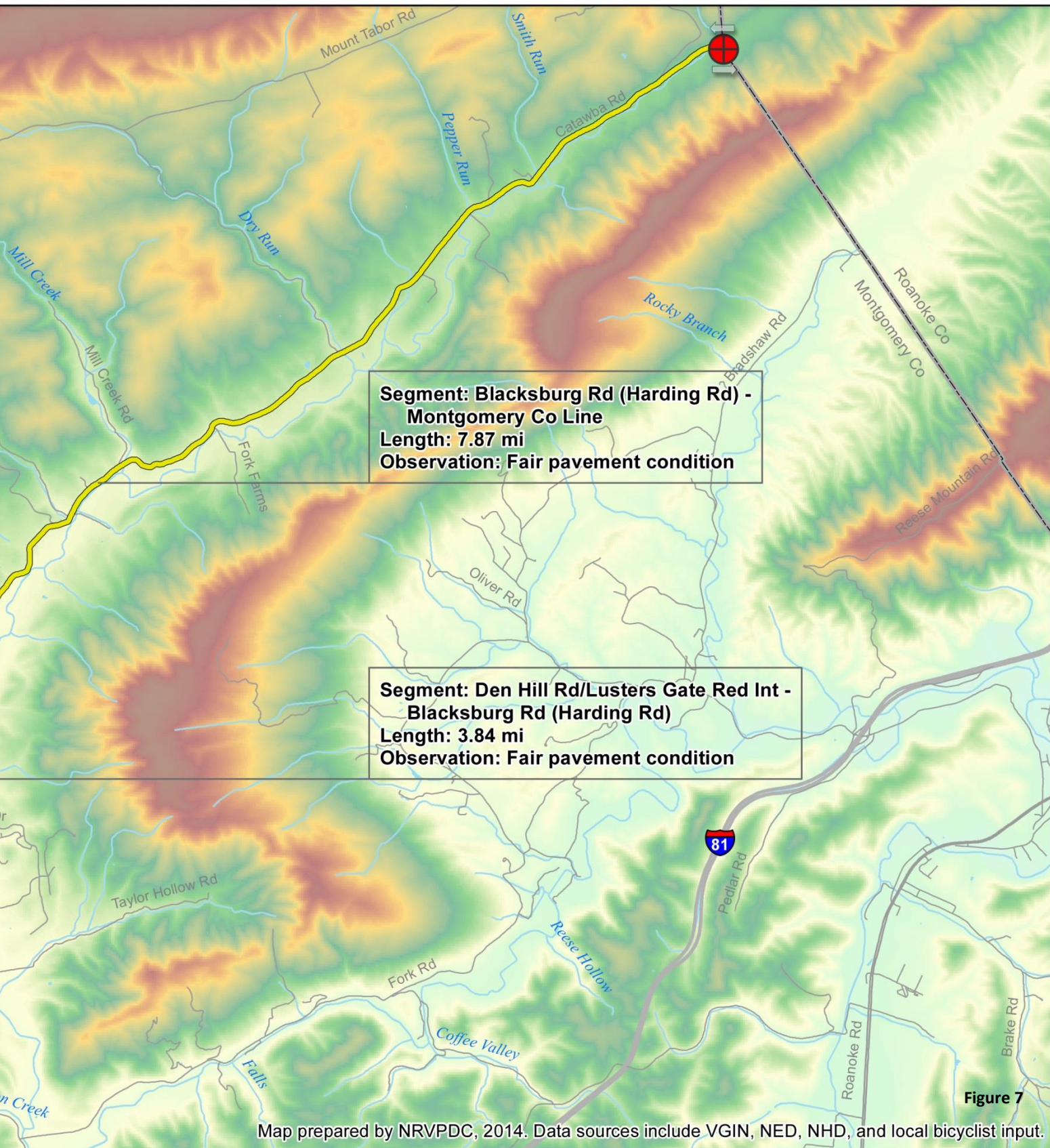
Direction

### Elevation (Ft)

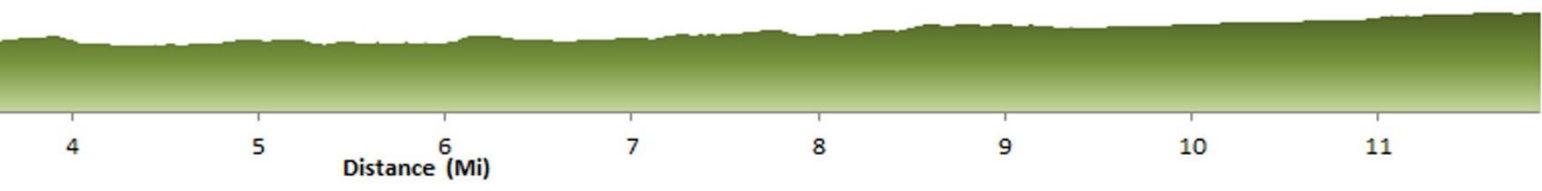


### \*Segment Start/End Color Code





**Figure 7**













# US Bike Route 76 New River Valley Regional Report 2014



## Route Variations

-  Current Signed Route
-  Current Adventure Cycling Route
-  Potential Route Recommendation
-  Road Center Line
-  Hydrology
-  Direction
- Elevation (Ft)**
  -  High : 4356
  -  Low : 92



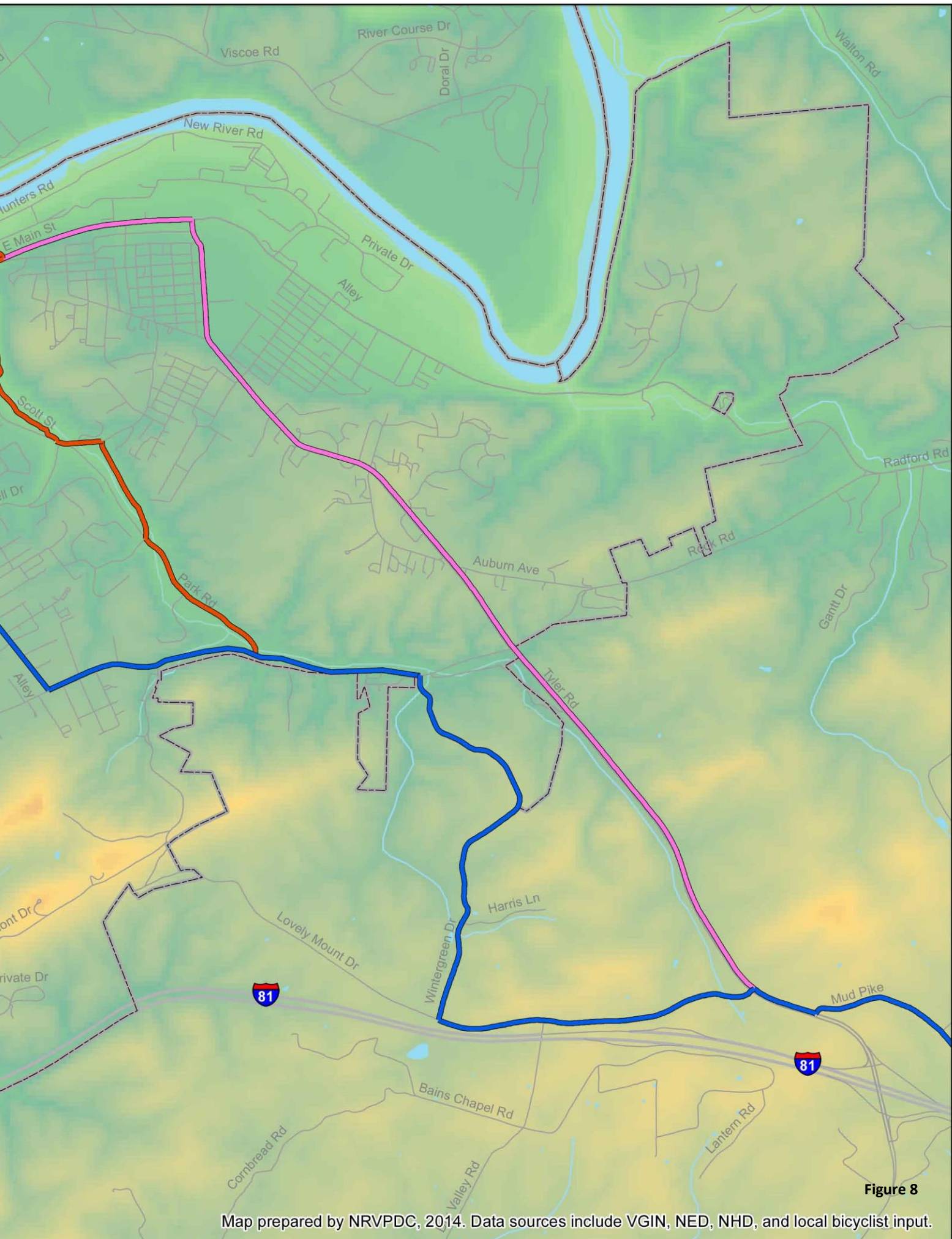


Figure 8

Map prepared by NRVPCD, 2014. Data sources include VGIN, NED, NHD, and local bicyclist input.



## Recommendations

### *Wayfinding*

In general, the New River Valley segments of BR76 are characterized as challenging. The level of difficulty is greatly increased due to the mountainous terrain that traverses through the region. Wayfinding signage is a critical component that ensures cyclists that they're on the right path.

Signage is seen as a lower cost enhancement that greatly improves a cyclist's experience in the region. The New River Valley Bikeway, Walkway, Blueway Committee identified targets to enhance signage over the next 1-3 years. In addition to increasing the amount of signage, existing signs should be checked bi-annually for natural obstructions.

### *Safety*

Improving decision making sight distance so that cyclists and motorist have ample reaction time would be expensive. This report indicates an overall safety score for each segment of BR 76 in the New River Valley. Although it should be noted, the ratings were established by advanced cyclists familiar with biking on rural roadways.

In general, localities should encourage VDOT to make shoulders as wide as possible during new construction or regular maintenance. The additional pavement will increase the amount of space for cyclists to escape potential collisions with motor vehicles. The Commission will continue to work with local cyclists to pin-point locations that have the highest concern.

### *Alignment*

Figure 8 highlights existing route variations between information sources and on the ground signage. The alignment through the New River Valley predominantly avoids downtown areas – which could be a missed opportunity to attract long-distance cyclists to local restaurants, hotels, etc. Regional partners should evaluate options to attract long-distance cyclists into their communities.

### *Key Takeaways*

Key takeaways from the 2014 Ride Report are based on the goals outlined in the Overview. Below is a list of suggestions and/or observations made for each goal:

- 1) Verify signage exists to guide cyclists:
  - a. Turn signs are currently located at nearly 80% of the intersections. Achieving turn signage at 100% at each intersection is a short-term goal.
  - b. Reinforcing signage is currently located at slightly more than 65% of turn locations. Achieving 100% reinforcing signage is also a short-term goal.
- 2) Determine if the existing signed route aligns with the latest mapping:
  - a. Route discrepancies were found in the Radford Area. Route adjustments should be communicated with existing partners and signage adjusted accordingly. Communicating route/mapping discrepancies between existing stakeholders is a short-term goal.
  - b. Analyzing alternative routes might be warranted in the Radford Area.
- 3) Review the existing roadway conditions and route selection:
  - a. The Commission should continue to work with cyclists to identify specific locations that have the most significant safety concerns.
  - b. Local cyclists enjoy the Luster's Gate Road portion of BR 76. The typical section could be used as a model for other segments of the route in the New River Valley.





## Plan Contributors

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The New River Valley Bikeway, Walkway, Blueway Committee



## Disclaimer

This report was prepared by the staff of the New River Valley Planning District Commission through funding assistance received from the Federal Highway Administration (FHA), United States Department of Transportation (USDOT), and the Virginia Department of Transportation (VDOT) through VDOT's Rural Transportation Planning Assistance Program.

The contents of the document reflect the views of the authors and do not necessarily reflect the official views or policy of the Federal Highway Association or the Virginia Department of Transportation. This document does not constitute standard, specification, or regulation. Federal Highway Association and Virginia Department of Transportation acceptance of this document as partial fulfillment of work program obligations does not constitute endorsement/approval of the need for any recommended improvements, nor does it constitute commitment to fund any such improvements. Additional project level assessments and/or studies of alternatives may be necessary.

