



William Byrd Middle School

Safe Routes to School Travel Plan

December 1, 2008

Acknowledgements

This Plan was completed with the direct assistance of the Roanoke Valley Area Metropolitan Planning Organization in cooperation with the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), and the Virginia Department of Transportation (VDOT). Additional assistance was provided by the staff of Roanoke County and the Town of Vinton.

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1. Introduction

William Byrd Middle School is committed to encouraging our students to utilize physically active transportation, such as walking and bicycling, for both leisure and school activities. The School Travel Plan aims to address issues that impede or discourage active transportation and seeks to strategically solve these problems by implementing a Safe Routes to School Program.

The primary goals of the program will be to initiate programming to support successful and safe walking and biking through safety education programs at William Byrd Middle School (WBMS), and to encourage use of the Wolf Creek Greenway for physical activity and safe bike/pedestrian access to WBMS from surrounding neighborhoods.



2. Safe Routes to School Team

A Safe Routes to School Team is a core group of people that commit to preparing, writing and following through with the School Travel Plan and its strategies. We believe that a diverse Safe Routes to School Team develops successful School Travel Plans. Our Team is comprised of a variety of stakeholders, each lending their own unique perspective and expertise in order to make walking and bicycling in and around William Byrd Middle more safe, accessible, and fun for our students. The members of our team include:

Name	Title	Organization
Barry Trent	Coordinator for Health and PE	Roanoke County Public Schools
Todd Kegals	Assistant Principal	William Byrd Middle School
Sara Boxler	Health & PE Teacher	William Byrd Middle School
Amy Sparks	Health & PE Teacher	William Byrd Middle School
Woody Nixon	Health & PE Teacher	William Byrd Middle School
Shane Sawyer	Regional Planner III	Roanoke Valley-Alleghany Regional Commission
Matthew Rehnborg	Regional Planner	Roanoke Valley-Alleghany Regional Commission
Jake Gilmer	Regional Planner III	Roanoke Valley-Alleghany Regional Commission
Anita McMillan	Director	Vinton Planning & Zoning Department
Janet Scheid	Greenway Planner	Roanoke County Dept. of Parks & Recreation
Liz Belcher	Greenway Coordinator	Roanoke Valley Greenway Commission

Primary Contact for Safe Routes to School Travel Plan:

Barry Trent
Coordinator for Health and PE
Roanoke County Public Schools
5937 Cove Road NW
Roanoke, VA 24019
540-562-3900 ext. 10255
btrent@rcs.k12.va.us

3. The Public Input Process

Parent Surveys

During the week of October 27, 2008 approximately 899 parent surveys were sent home with the students of William Byrd Middle School. The surveys were distributed during health education class to ensure that all families received a copy of the survey to complete. If a family had more than one child attending the school and, consequently, received more than one survey, they were instructed to return only one completed form. The students were given one week to return the surveys to the school. Five-hundred and forty-four surveys were returned, which is 60% of the student body. The surveys were then given to the Roanoke-Valley Alleghany Regional Commission to record and tabulate the results.

School Health Education Standards of Learning (SOL)

The planning process to develop this plan and a bicycle safety curriculum of WBMS incorporates the following components of the Virginia Health SOL's:

- Role of personal choice on health and well-being.
- Injury prevention and management skills to promote personal and family health.
- Describe and exhibit the behaviors associated with a physically active and healthy lifestyle.
- Describe how family and community priorities influence an individual's ability to reduce diseases and other health problems.
- Work cooperatively with others to support and promote healthy schools, families, and communities.
- Investigate and evaluate ways in which peers, families, and other community groups can work together to build a safe and healthy community.

Existing Plans

Bikeway Plan for the Roanoke Valley Area MPO

The Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization was completed in 2005 and encourages the development of a regional transportation network that accommodates and encourages bicycling as an alternative mode of travel. It also provides a coordinated and strategic approach to the development of a regional bicycling network that provides greater connectivity between activity centers and cultural resources such as greenways, public areas, downtown areas, commercial centers, employment concentrations, educational institutions, transit facilities, scenic corridors. The plan included recommendations to provide bicycle accommodations on Washington Ave. (Route 24), Hardy Road, and Mountain View Road. Since the completion of the plan, dedicated bicycle lanes have been added to sections of both Hardy and Mountain View Roads. These lanes connect to both

the northern and southern termini of the Wolf Creek Greenway and provide convenient access for students that choose to bike to school.

Roanoke Valley Conceptual Greenway Plan

The Roanoke Valley Conceptual Greenway Plan was completed in 2007 and was an update to a 1995 Conceptual Plan. The primary focus on the plan was to update and prioritize the routes included in the 1995 Plan and provide an organizational assessment of the roles and responsibilities of the various partners involved in greenway development. The plan included the history and a description of the Wolf Creek Greenway as well as recommendations to extend it south approximately one mile to connect with the Vinton Business Center and ultimately the Roanoke River. This extension would make the greenway more accessible to even more households within the William Byrd School District.

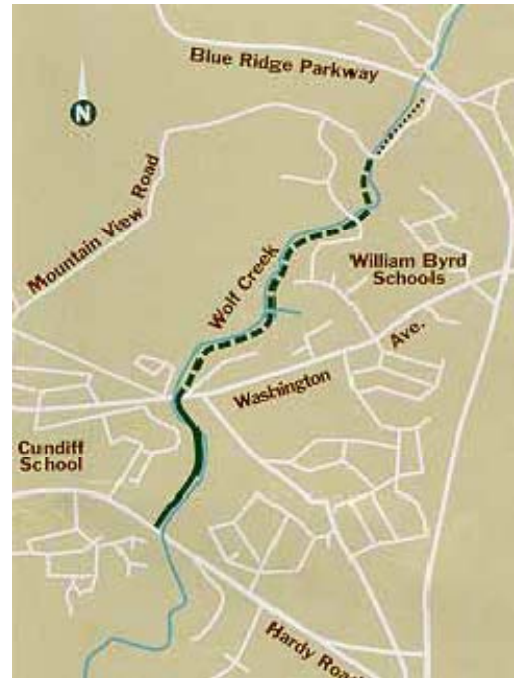


Figure 1. Map of Wolf Creek Greenway included in the 2007 Conceptual Greenway Plan.

Roanoke County Comprehensive Master Plan for Parks and Facilities

In 2007, Roanoke County approved a Comprehensive Master Plan for Parks and Facilities that was intended to direct the development of park facilities in the county. For the purpose of identifying the needs and desires of citizens, the county conducted citizen surveys as a part of the Plan. The results indicated a strong level of support from the community for the greenway system. Thirty-six percent of respondents identified greenways as one of the four most important types of facilities provided by Roanoke County Parks—more than any other type of facility. Fifty-seven percent of respondents were very supportive of actions to renovate and develop greenways for biking and walking. Using a combination of identified unmet community needs and the community priorities identified by these surveys, the county attempted to identify the facilities and amenities that merited the highest priority for spending and effort. Greenways were included as one of the top three facilities in this list. All these results indicate that maintaining and expanding greenways will remain a top priority for Roanoke County citizens.

4. Description of School Program

This Travel Plan is being developed for William Byrd Middle School (WBMS), which is located at 2910 Washington Avenue, Vinton, VA. It has an enrolment of 899 students in grades 6-8 and shares a campus with William Byrd High School. Both schools operate on the same schedule, share bus transportation and use one common entrance for school traffic off Washington Ave (Route 24). They draw students from eastern Roanoke County including the Town of Vinton, and the communities of Bonsack and Mount Pleasant. The housing density of these communities continues to grow and many of the neighborhoods near campus have direct access to the Wolf Creek Greenway, which runs adjacent to the school property. However, other neighborhoods, while in close proximity to the Wolf Creek Greenway, have no direct access. The primary focus of the William Byrd Travel Plan will be to make safety improvements to the Greenway and a formal connection with it and the school campus. The Plan will document existing and new school programming to support successful and safe walking and biking through safety education programs.

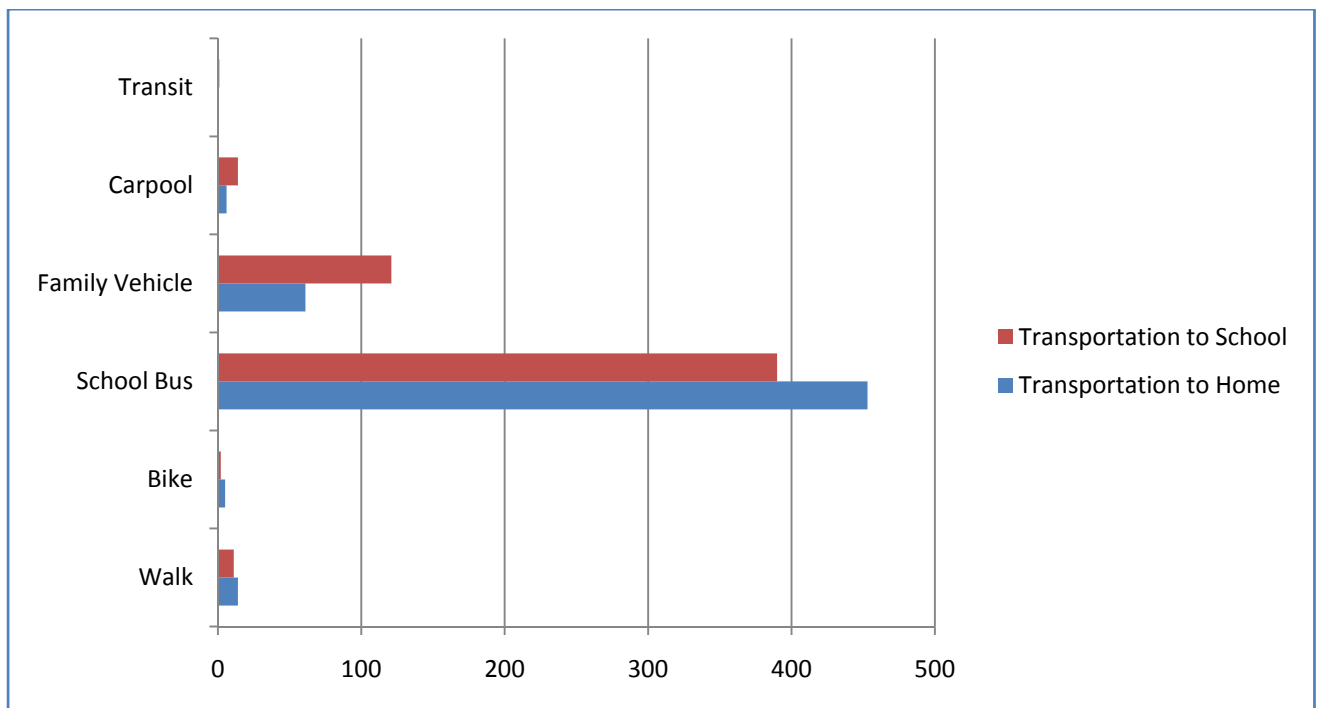


5. Current School Travel Environment

Student Travel Modes

The parents of students at William Byrd Middle School were asked to complete a survey that asked questions about biking and walking to school. More than one-half of the surveys that were distributed (544) were completed and returned to the school. In this survey, parents were asked what form of transportation their children used to get to and from school. The most common form of transportation used by students was the school bus. Almost 72% (391) of the students use the bus to get to school, and over 83% (453) rode the bus home. The next most common form of transportation was the family vehicle. 22% (121) of students use it to get to school, while 11% (61) use it to return home. The remaining forms of transportation, presented in descending order of use, were walking (2% to school, 2.5% to home), carpooling (2.5% to school, 1% to home), and biking (0.3% to school, 1% to home).

Figure 1: School Travel Mode

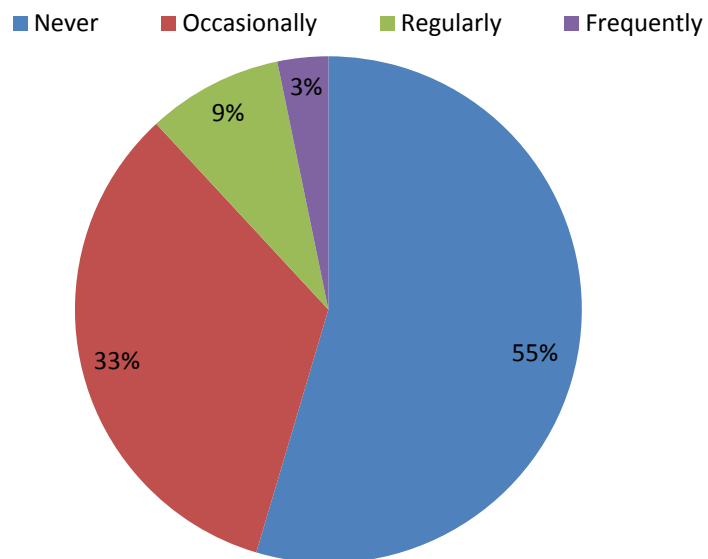


Transportation System

Currently there is no Safe Routes Plan in place at William Byrd Middle School (WBMS). William Byrd Middle and High Schools share a common campus with one vehicular entrance on Washington Ave., a busy four-lane roadway. In the mornings and afternoons a crossing guard is positioned at this entrance in order to direct traffic and help students crossing the road. There are a number of neighborhoods within a two-mile radius of the school but none have sidewalks or other pedestrian accommodations.

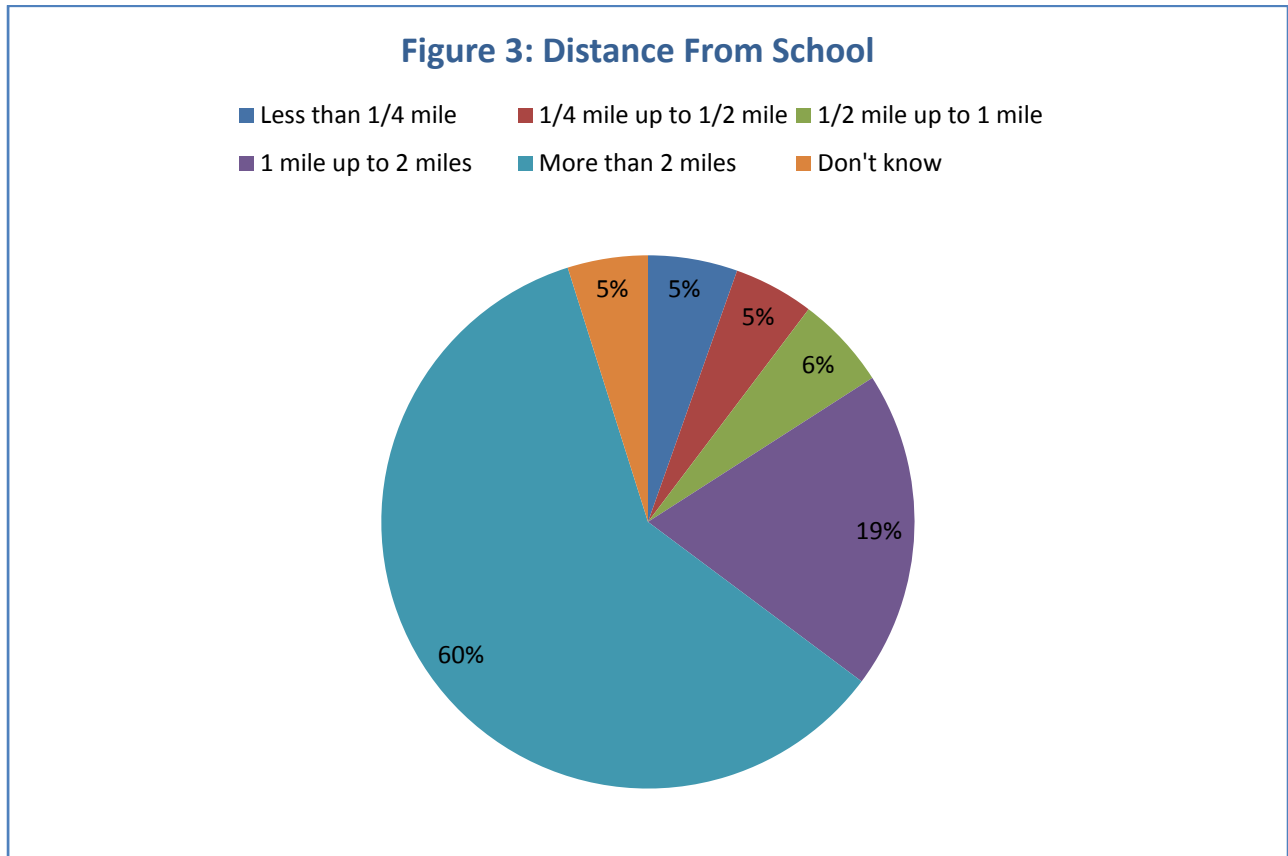
The Wolf Creek Greenway, a 2.2 mile greenway developed cooperatively by the Town of Vinton and Roanoke County, actually runs through school property but there is no formal connection to the school site. The greenway currently lacks appropriate signage and roadway crossing accommodations. Students at WBMS and WBHS currently use the trail for access to outdoor classrooms and athletic fields, for bicycle education and for recreation.

**Figure 2: Greenway Use-
Students Living 0-2 Miles From School**



Household Distance from School

The parent survey also gathered information regarding the distances that families live from the school. Approximately 10% (54) live within 1/2 of a mile from the school. About 5.5% (30) of the respondents live between 1/2 a mile to 1 mile from the school. Nineteen percent (103) of the students live between 1 and 2 miles from William Byrd Middle School. Collectively, 36% the students that attend WBMS live within 2 miles of the school.



School Travel Policy

There are 899 students enrolled in grades 6-8 at WBMS and 1250 students enrolled in grades 9-12 at WBHS. Bus transportation is provided to all students enrolled, regardless of their proximity to the campus. There are no policies that discourage students from walking or bicycling to school.

Student Bicycling Ability

In general, the students at WBMS lack the experience, skills and knowledge to bike safely and the community lacks the experience and knowledge to interact safely with bicycle traffic. Additionally, safety concerns, real or perceived, on behalf of parents represent a major barrier to using the Wolf Creek Greenway as a route to reach the William Byrd campus.

RCPS students reported in the 2006 *Youth Risk Behavior Survey* that 72% of high school students and 64% of middle school students that rode a bike within the past 12 months never or rarely wore a bicycle helmet.

Existing School Programs

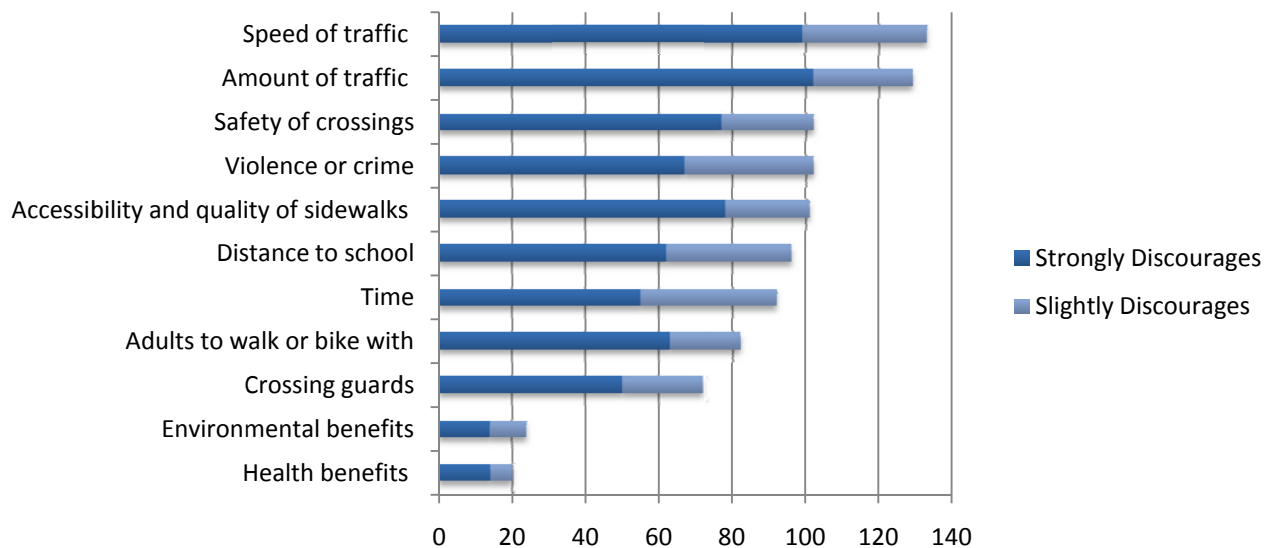
- Teach health, environmental, and sustainability benefits of an active, healthy lifestyle.
- Safe driving procedures class for parents at 6th grade orientation.
- Walking Mileage Club/Wednesday Walk on the Greenway



6. Hazards and Barriers to Active Transportation

Based on the results of the parent surveys and the knowledge of the Safe Routes Team, the following barriers to walking and bicycling to school were identified. The impact of each hazard or barrier is rated as “High”, “Medium”, or “Low”. Figure 4 shows the actual survey results of factor that discouraged parents from allowing their children to walk or bicycle to WBMS.

**Figure 4: Discouraging Factors
Students Living 0-2 Miles from School**



Travel Distance to School (High)

Sixty percent of the parents that responded to the Safe Routes Survey indicated that they lived more than two miles from William Byrd Middle School and many of those identified distance as a reason that their child does not walk or bike to school. However, families that lived less than two miles from the school did not rate distance as such a strong barrier. Distance appears to be a particular issue for students at WBMS due to mountainous topography, the general lack of sidewalks, and a circuitous road network.

Safety Concerns (High)

Based on survey data, safety concerns were noted as a major barrier to walking or bicycling. Parents completing the survey frequently stated that they would not allow their children to use walk or bicycle alone to school due to the speed of traffic or fear of personal safety from crime or violence. There were particular concerns that the Wolf Creek Greenway does not have adequate lighting or safety monitoring.

Walkway and Crosswalk Deficiencies (Medium)

Roanoke County does not construct or maintain sidewalks in the public right-of-way; therefore there are very few pedestrian accommodations anywhere in the County. However, the County does have ever expanding greenway system that many residents use for recreation and exercise. The Wolf Creek Greenway is located adjacent to William Byrd Middle School and travels through many surrounding residential areas. This greenway is presently used by a small number of students to walk or bike to school, however it has a variety of issues that deter its use for transportation, including:

- Insufficient crosswalks and curb cuts at trail/road intersections
- Greenway trail erosion or damage
- Inadequate signage, kiosks, and maps
- No formal connection with school campus
- Limited access between neighborhoods and greenway
- Not completely accessible to users with disabilities
- Inadequate bridges that are not in compliance with the ADA

Roadway Divides School from Residential Areas (Medium)

Washington Avenue (Route 24) separates the William Byrd campus from a large residential area to the south. Route 24 is a four-lane divided highway that does not have sidewalks or a crosswalk at the entrance to the school. Even though none of the neighborhoods on the south side of the highway have sidewalks, some students presently attempt to cross Route 24 on foot or bicycle, in order to get to or from school. There are also apartments located on Route 24 near the campus from which students attempt to walk along the shoulder of Route 24 to and from school. There is a crossing guard at this school entrance to direct traffic and help students crossing the road; however there is no crosswalk or signage to warn drivers of potential pedestrians.

Bicycle Parking at School (Low)

Bicycle parking is not currently available for students at William Byrd Middle School.



Figure 5: Aerial photo showing Washington Avenue separating William Byrd Middle School from nearby neighborhoods

7. Creating Solutions

Goals

The goals of the WBMS Safe Routes to School Travel Plan are to:

- Increase the number of students walking and bicycling to school.
- Increase students bicycle safety skills and knowledge.
- Improve the accessibility and safety of the Wolf Creek Greenway.
- Encourage wellness and an active, healthy lifestyle.

Strategies

Based on the results of the parent surveys, the Safe Routes Team identified strategies involving the 5 “E’s” of Safe Routes to School to address the barriers to walking and bicycling in our school community and to achieve our state goals.

Education

- Use the Bike Smart Virginia Curriculum in all physical education (PE) classes.
- Certify all PE instructors in the Bike Smart Virginia Curriculum
- Partner with the Roanoke Police Department to hold an annual Bicycle Rodeo for students.
- Send greenway and bike/pedestrian educational brochure to households within 1 mile of the school.

Encouragement

- Promote the formation of Walking School Bus Program and/or a Bike Train Program within neighborhoods adjacent to the Greenway through school newsletter and direct mailings.
- Promote active living by mailing bike/pedestrian brochure to households within 1 mile of the school.
- Partner with existing Neighborhood Watch Programs to establish a Greenway Watch Program.

Enforcement

- Request that VDOT lower speed limits in on secondary road near school campus
- Request that the Roanoke Police Department periodically place speed trailers or signs near main entrance to school to discouraging speeding.

Evaluation

- Complete a follow-up parent survey to determine the number of students who walk and bicycle to and from school.

- Include questions regarding parental perceptions of safety
- Measure student bicycle skills under the Bike Smart Virginia program.

Engineering

- Construct 500 ft. multiuse path to connect WBMS with Wolf Creek Greenway.
- Install lighting at greenway road crossings and other key locations.
- Install greenway informational signage and kiosk at Goode Park, Stonebridge Park, and all other greenway access locations.
- Install curb cuts and ramps at where the greenway crosses Hardy Road, Spring Grove Drive, and Tulip Lane.
- Install crosswalks and/or traffic control devices on Hardy Road, Washington Ave., Spring Grove Drive, and Tulip Lane.



Figure 6: Possible Improvement Projects: (Top Left) Install greenway information kiosks. (Top Right) Curb cuts at greenway street crossings. (Bottom Left) Create crosswalks on Washington Ave. and other nearby roads. (Bottom Right) Create a formal connection from greenway to school.

8. Mapping

The following maps are included in Appendix I:

- Map 1. School location, two-mile radius around school, and attendance zone.
- Map 2. Bicycle and pedestrian accommodations within 1-mile of school.
- Map 3. Recommended infrastructure improvements.

9. The Action Plan

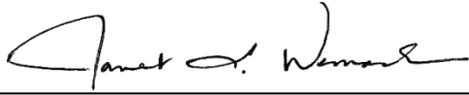
The Safe Routes to School Team is committed to realizing our vision for a safe, enjoyable, and accessible walking and bicycling environment for our students. We will utilize the following Action Plan to keep our efforts focused and on track:

Strategy Name	Strategy Type	Strategy Detail	Time-frame	Responsible Party	Status	Funding Source
Bike Smart VA Curriculum	Education	Use Bike Smart VA Curriculum in WBMS PE classes	3-6 months	WBMS	Under development	VA SRTS Program – current program cycle
Bike Smart Teacher Certification	Education	Certify all PE Instructors in Bike Smart Curriculum	3-6 months	WBMS	Under development	VA SRTS Program – current program cycle
Bicycle Rodeo	Education	Hold annual bicycle rodeo for WBMS students	6-12 months	RCPS & WBMS	Not yet begun	VA SRTS Program – current program cycle
Greenway & Bike/Pedestrian Brochures	Education	Send brochures to households within 1 mi of WBMS	3-6 months	RCPS & RVARC	Under development	VA SRTS Program – current program cycle
Walking School Bus/Bike Train Programs	Encouragement	Start Walking School Bus and/or Bike Train Program	12-24 months	WBMS	Not yet begun	Volunteers
International Walk to School Day	Encouragement	Recognize and promote Walk to School Day	12-24 months	WBMS	Not yet begun	Volunteers
Greenway Watch Program	Encouragement	Develop greenway watch program to address safety issues	12-24 months	RCPS & WBMS	Not yet begun	Volunteers
Lower Speed Limits	Enforcement	Request VDOT to lower speed limits on secondary roads	6-12 months	RC and Vinton	Not yet begun	None Needed
Speed Trailers & Signs	Enforcement	Request speed trailers	6-12 months	RCPS	Not yet begun	None Needed
Follow-Up Parent Survey	Evaluation	Circulate follow-up SRTS Parent Survey to all WBMS students	12-24 months	RCPS & WBMS	Under development	None Needed
Measure Student Bicycle Skills	Evaluation	Measure student bicycling skills using Bike Smart criteria	6-12 months	WBMS	Under development	None Needed

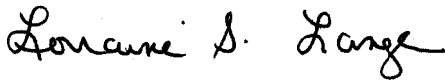
Strategy Name	Strategy Type	Strategy Detail	Time-frame	Responsible Party	Status	Funding Source
Multiuse Path	Engineering	Construct 500' multiuse path to connect Greenway with WBMS	24-36 months	Roanoke County	Not yet begun	VA SRTS Program – future program cycle
Lighting	Engineering	Add lighting to greenway road crossings and other locations	12-24 months	Roanoke County	Not yet begun	VA SRTS Program – future program cycle
Informational Signage and Kiosk	Engineering	Add signage at parks and all greenway access locations	12-24 months	Roanoke County	Under Development	VA SRTS Program – future program cycle
Curb Cuts and Ramps	Engineering	Install curb cuts and ramps on Hardy, Spring Grove, & Tulip Ln.	12-24 months	Roanoke County & VDOT	Not yet begun	VA SRTS Program – future program cycle
Crosswalks and Traffic Control	Engineering	Install crosswalks on Hardy, Spring G. , Tulip, and Wash.	24-36 months	Roanoke County & VDOT	Not yet begun	VA SRTS Program – future program cycle

10. Plan Adoption & Endorsements

We believe that building a strong partnership between schools and local government is fundamental to the success of the William Byrd Middle Safe Routes to School Travel Plan. The following representatives have approved the Plan:



Janet Womack
Principal
William Byrd Middle School



Lorraine S. Lange
Superintendent
Roanoke County Public Schools

The following organizations have endorsed the Travel Plan (see supporting documents):

Roanoke County
Town of Vinton

II. Supporting Documents

Letters of endorsement from Roanoke County and the Town of Vinton are included in Appendix II. Below are links to plans highlighted in Section 3.

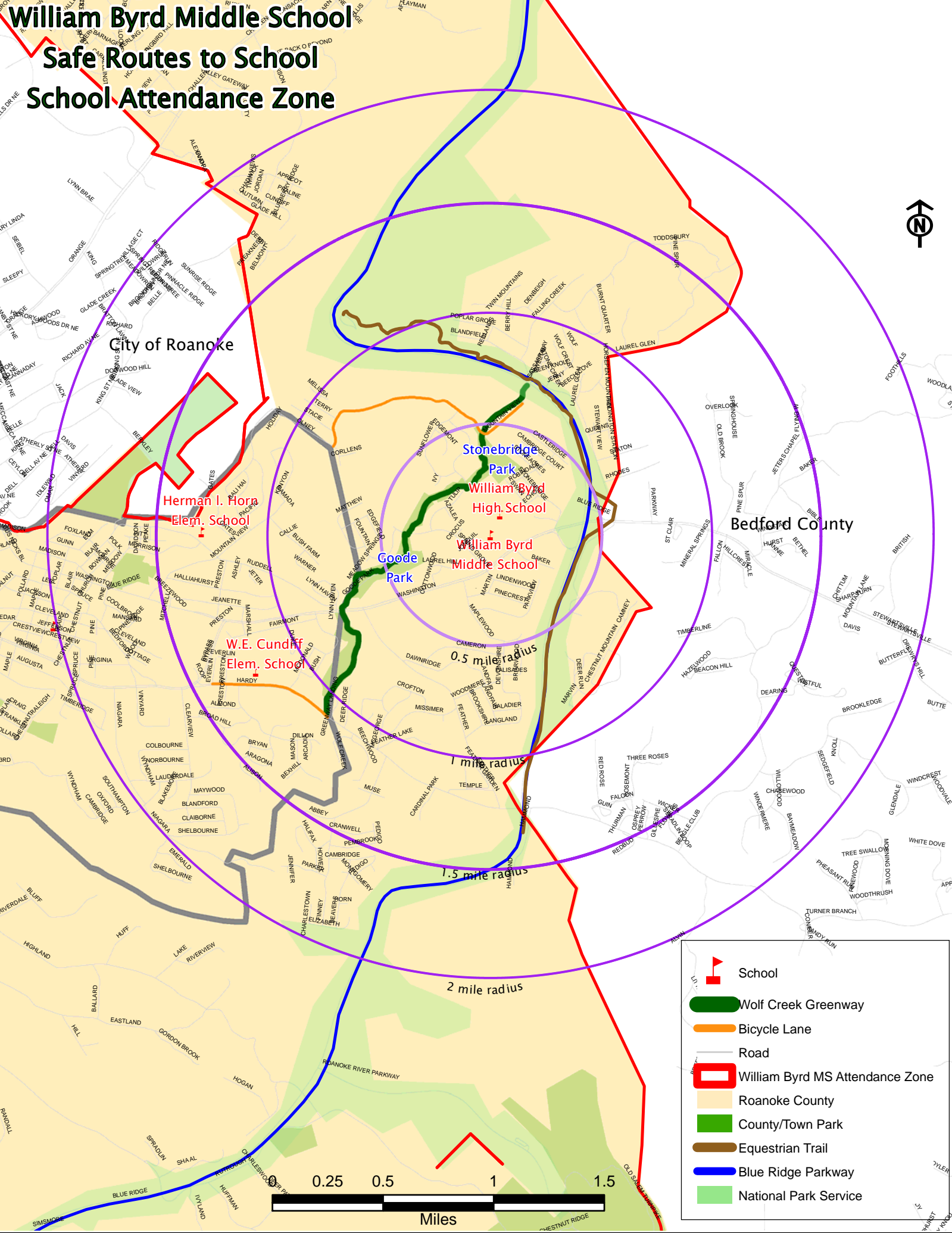
- Roanoke Valley Conceptual Greenway Plan - <http://rvarc.org/greenways/home.htm>
- Bikeway Plan for the Roanoke Valley Area MPO - <http://rvarc.org/bike/home.htm>
- Roanoke County Comprehensive Master Plan for Parks and Facilities - <http://www.roanokecountyva.gov/Departments/ParksRecreationAndTourism/Default.htm>

Appendix A: Mapping

William Byrd Middle School

Safe Routes to School

School Attendance Zone



City of Roanoke

Bedford County

Herman I. Horra
Elem. School

Stonebridge
Park
William Byrd
High School
William Byrd
Middle School

W.E. Cundiff
Elem. School











Goode
Park

0.5 mile radius

1 mile radius

1.5 mile radius

2 mile radius

-  School
-  Wolf Creek Greenway
-  Bicycle Lane
-  Road
-  William Byrd MS Attendance Zone
-  Roanoke County
-  County/Town Park
-  Equestrian Trail
-  Blue Ridge Parkway
-  National Park Service



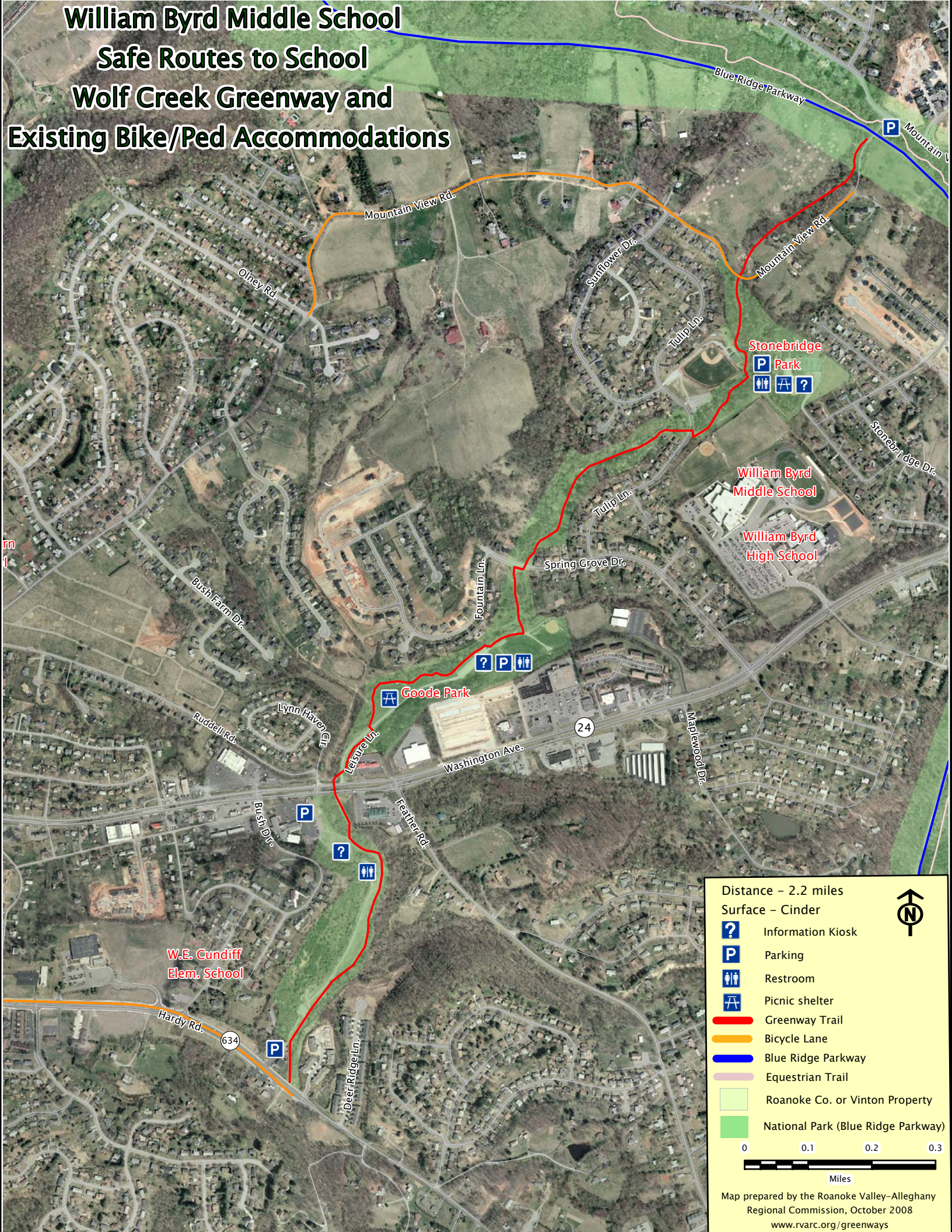
Miles

William Byrd Middle School

Safe Routes to School

Wolf Creek Greenway and

Existing Bike/Ped Accommodations



Distance - 2.2 miles
Surface - Cinder

- Information Kiosk
- Parking
- Restroom
- Picnic shelter
- Greenway Trail
- Bicycle Lane
- Blue Ridge Parkway
- Equestrian Trail
- Roanoke Co. or Vinton Property
- National Park (Blue Ridge Parkway)

0 0.1 0.2 0.3
Miles

William Byrd Middle School Safe Routes to School Wolf Creek Greenway Potential Improvements and Accommodations



Appendix B: Letters of Support



County of Roanoke

OFFICE OF THE COUNTY ADMINISTRATOR

5204 BERNARD DRIVE, P.O. BOX 29800
ROANOKE, VIRGINIA 24018-0798

TEL: (540) 772-2004
FAX: (540) 772-2193
jchambliss@roanokecountyva.gov

November 21, 2008

Sarah Weisiger
Safe Routes to School Coordinator
Transportation & Mobility Division
Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219

Dear Ms. Weisiger:

I am writing this letter in support of the William Byrd Middle School Safe Routes to School Travel Plan submitted by the Roanoke County Public Schools.

Roanoke County is committed to building, and supporting others to build, a connected greenway system throughout the entire Roanoke Valley. Almost ten years ago we built the Wolf Creek Greenway in eastern Roanoke County and just last year completed the last remaining section on this 2.2 mile trail. We recognize that greenways are not only important for recreation, physical activity and economic development but are also important transportation links in our communities between the places where we live and public facilities such as schools, parks and libraries.

The William Byrd Middle School Safe Routes to School Travel Plan intends to address those issues that impede or discourage active transportation on the Wolf Creek Greenway and seeks to strategically solve these problems by implementing a Safe Routes to School Program. They are off to a good start with bicycle education programs in the Roanoke County public schools.

I support this Travel Plan and believe that a strong partnership between our public schools and our local government is fundamental to the success of this Plan.

Thank you.

Sincerely,

John Chambliss
County Administrator

Cc: Barry Trent, Coordinator for Health & PE
Roanoke County Public Schools
5937 Cove Road, NW Roanoke VA 24019



TOWN OF VINTON

311 S. POLLARD STREET
VINTON, VIRGINIA 24179

PHONE (540) 983-0607
FAX (540) 983-0626

CHRISTOPHER LAWRENCE
TOWN MANAGER

November 21, 2008

Ms. Sarah Weisiger, AICP
Safe Routes to School Coordinator
Transportation and Mobility Planning Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Dear Ms. Weisiger:

This letter serves as an endorsement for the William Byrd Middle School Safe Routes to School (SRTS) Travel Plan. The SRTS Plan was developed by a team of personnel from Roanoke County Public Schools; William Byrd Middle School; Roanoke Valley-Alleghany Regional Commission; Vinton Planning and Zoning Department; Roanoke County Department of Parks, Recreation, and Tourism; and Roanoke Valley Greenway Commission.

Students from eastern Roanoke County, including the Town of Vinton, attend William Byrd Middle and High Schools and two elementary schools which are located in the Town Limits. Wolf Creek Greenway, a 2.2 mile greenway developed cooperatively by the Town and Roanoke County, runs adjacent to William Byrd Schools' campuses. The greenway can be accessed directly from many surrounding neighborhoods.

The Town endorses the SRTS Plan strategies to address the barriers to walking and bicycling in the community. The Town also supports the identified improvements to Wolf Creek Greenway and infrastructure projects to connect the school campuses to the greenway.

A resolution of support will be adopted by the Vinton Town Council in December in support of Roanoke County's grant application for the 2008 SRTS funding to help finance projects that could encourage and facilitate increased use of the greenway to reach William Byrd Middle and High, W.E. Cundiff Elementary, and Herman L. Horn Elementary schools' campuses.

Sincerely,

Christopher Lawrence
Town Manager