

James River Branch Rail-Trail Concept Plan
A Vision for Southside Richmond

Compiled by
Southside Richmond Rail-Trail Project Team
and
James River Branch Rail-Trail Citizens Advisory Committee

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Southside Richmond Project Team

Doug Conner, Councilman, City of Richmond, Chair
Jon Baliles, City of Richmond, Department of Planning
Champe Burnley, Richmond Area Bicycling Association
Nathan Burrell, City of Richmond, Department of Parks and Recreation
Shane Cusick, BikeWalk Virginia
Anne Darby, Richmond Area Metropolitan Planning Organization/RRPDC
Thomas Flynn, City of Richmond, Department of Public Works
Larry Miller, City of Richmond, Department of Parks and Recreation
Steve Sadler, City of Richmond, Department of Public Works
Sheila Sheppard, Partnership for Smarter Growth
John Taylor, City of Richmond, Department of Planning
Steven Taylor, Richmond City Council staff
Jennifer Wampler, Virginia Department of Conservation and Recreation
Eli (Yueh) H. Wong, Richmond City Council staff
Katherine Wright, Richmond Regional Planning District Commission
John Zeugner, Richmond Parks and Recreation Foundation and Sierra Club

Project Team Advisors

Lynn Crump, Virginia Department of Conservation and Recreation
Amber Ellis, American Society of Landscape Architects
Lynda Frost, Trust for Public Lands
Jakob Helmboldt, Virginia Department of Transportation (resigned)
Ursula Lemanski, National Park Service, Rivers and Trails Program
Jessica Mauzy, American Society of Landscape Architects
Stephen Miller, Rails-to-Trails Conservancy
Kelly Pack, Rails-to-Trails Conservancy

James River Branch Rail-Trail Citizens Advisory Committee

Amelia Lightner
Brian Ezzelle
Will Sanford

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Executive Summary

Throughout America, communities are taking steps to restore neglected parks, waterfronts, and public infrastructure, build trail systems, and revitalize neighborhoods. Many of these efforts focus on improving conditions for walking and bicycling, as a way to encourage physical activity and promote health. Richmond is in a position to take advantage of this growing trend with an exemplary park system, a growing interest in walking and bicycling, and a nationally significant river – the James.

In 2009, Doug Conner, 9th District Councilman convened a committee to assess options and opportunities for converting an inactive railroad right-of-way to an urban greenway and trail in Southside Richmond. The following plan provides an overview of the committee's work. It will serve as a case study for urban trail development in Richmond, and could be viewed as a demonstration project for the broader network of trails and greenways under development throughout the region.

Part I includes a project history and planning goals, as well as a description of the plan development and community engagement process. Part II includes an overview of the benefits of urban trails and greenways systems. The material is classified into five categories: Health and Wellness; Economic Vitality; Transportation; Urban Open Space; and Civic Engagement.

Part III provides a summary of trail features both in the corridor and potential connections to the larger region. This section also includes a summary of planning and policy documents at the state, region, and local level that provide a framework for project development.

Part IV summarizes the trail development challenges and offers recommended solutions and guidelines. Specific issues addressed include crime and safety, trail dimensions and surfacing, road crossings, and trail amenities. Also discussed, are opportunities for trail partnerships to serve as a vehicle for implementation.

Part V provides a photo assessment or virtual tour that highlights key aspects and features of the right-of-way. Also contained in this section is a set of four conceptual plans that graphically illustrates the trail vision.

Part VI, the last section, discusses the steps needed to move the trail vision from concept to reality. Topics addressed include: Corridor Acquisition, Funding and Trail Development Strategy, Project Construction, Trail Operations and City-wide Planning and Coordination.

The project team is hopeful that conversion of the CSX property to a rail-trail could serve as a catalyst for revitalization, community health, and youth involvement in Southside Richmond. This conceptual plan will serve as a tool and foundation for future outreach and fundraising efforts and discussions by elected leaders, city staff, and citizens to advance the trail vision. The plan will also serve as a case study on the benefits and values of trails to Richmond, especially those in underserved areas of the City.

This plan represents a compilation of the work completed to-date, but it is only a first step. Further action will be needed to advance the vision of the James River Branch Rail-Trail and realize the benefits of an on-the-ground trail in Southside Richmond.

I. Introduction

“The purpose of the James River Branch Rail-Trail is to preserve a linear open space corridor in Southside Richmond that provides a safe place for non-motorized trail activities, and promotes wellness and physical activity. The trail will connect to regional trails and greenways, and also provide local connections to employment sites, shopping areas, schools, and other key neighborhood facilities.”

A. Project History

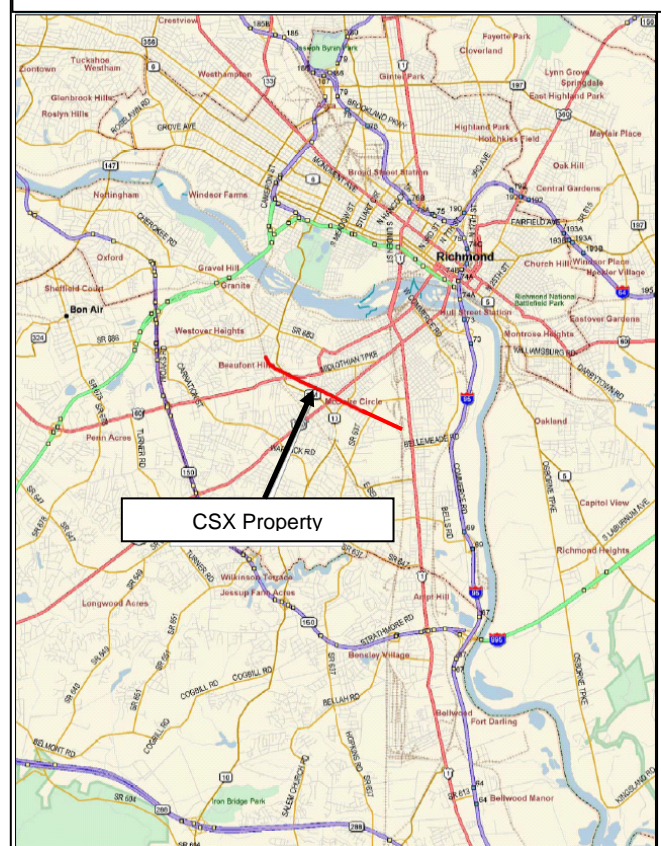
For several years, Richmond City Councilman Doug Conner has been advocating for the conversion of an abandoned rail-line in Southside Richmond, to serve as a pilot project, demonstrating how trails could benefit Richmond neighborhoods. In 2008, the Richmond City Council passed a “Resolution in Support of Trails and Greenways” to advance the vision of an interconnected trail network in the Richmond region. In January 2009, with the assistance of the National Park Service, Rivers and Trail Program, the Southside Richmond Rail-Trail project team was formed. Coordinated by Doug Conner, the purpose of the team was to assess the feasibility of trail development and identify next steps.

On March 31, 2009, Mr. Conner hosted an initial team meeting and a tour of the right-of-way. On April 30, 2009, a meeting was held with CSX representatives to determine interest in transfer of the property to the city for trail use. It was determined that a trail was technically feasible, and that both parties were interested in pursuing discussions. Tasks were assigned to explore next steps for negotiations.

The project team was expanded to include landscape architecture and design expertise, utilizing an agreement between the American Society of Landscape Architects and the National Park Service. Rails-to-Trails Conservancy and Trust for Public Land were also enlisted to provide pro bono consultation to the project. In September 2009, the project was renamed James River Branch Rail-Trail by local residents, in recognition of the historic name of the rail line.

It is intended that this conceptual plan graphically illustrate the vision of a multi-use trail on the CSX right-of-way in Southside Richmond, and the opportunity to connect neighborhoods, schools, businesses, parks, and community facilities. The conceptual trail plan also highlights

Figure 1. CSX Property in Southside Richmond



challenges and provides recommendations on next steps and resources available to resolve trail development issues.

B. James River Branch Rail-Trail Planning Goals

Goal 1: *Neighborhood Connections*: Develop the James River Branch Rail-Trail as a walkway, bikeway, and greenway corridor that links residential neighborhoods, workplaces, shopping centers, schools, churches, parks, transit stops, and other destinations.

Goal 2: *Regional Connections and Economic Vitality*: Support local businesses and regional economic revitalization efforts by creating a network of interconnected pathways and bike routes that link the James River Branch Rail-Trail, Reedy Creek, Forest Hill Park, the James River Park System, downtown Richmond, and destinations throughout the greater Richmond region.

Goal 3: *Preservation of Urban Open Space*: Preserve the unique character of the open space corridor, maximize opportunities to manage stormwater, and protect mature tree stands that afford a shaded pathway for recreation and appreciating nature.

Goal 4: *Community Health*: Provide opportunities and encouragement for the area's residents to walk, bicycle, run, and gain the health benefits of incorporating physical activity into their daily lives.

Goal 5: *Safe, Cost-Efficient Transportation*: Provide safe and accessible pedestrian and bicycling facilities that support non-motorized modes of travel, while minimizing the number of pedestrian and bicycle injuries.

Goal 6: *Celebration of Local Heritage*: Utilize the trail corridor as a means to tell the stories of the history, heritage, and growth of commerce and transportation in Southside Richmond.

Goal 7: *Social Welfare and Community-Building*: Utilize the trail corridor as a vehicle for community building, civic pride, social interactions, youth service projects and outdoor learning for all ages and members of the community.

C. Trail Planning Process

1. Project Start-Up

An inter-disciplinary project team was established with expertise in various aspects of trail development. Chaired by Doug Conner, 9th District Councilman for the City of Richmond, the goal of the group was to assess existing conditions, evaluate the feasibility of trail development, and if found to be feasible, develop a conceptual plan for the rail right-of-way. The plan was to be developed in collaboration with public and non-profit interests, key community leaders, agency staff, and technical advisors.

2. Data Collection and Field Analysis

On March 31, 2009, a kick off meeting and tour of the CSX rail right of-way was convened to assess the potential for trail development including access, right-of-way integrity, and potential connections to neighborhood destinations and regional networks. On June 9, 2009, a second,

more intensive site visit was organized accompanied by staff from Rails-to-Trails Conservancy. After further discussion, consensus was reached that at a minimum a conceptual plan should be developed that compiled existing information, and discussed barriers and opportunities for trail development.

Two additional site visits were held to gain a better understanding of corridor features. The site visits were scheduled at differing times of the day (late afternoon/evening, and morning) to assess current usage, transportation patterns, and needs by local residents.



Project Team Site Visit - June 2009

- July 1, 2009: Design team conducted a walk through with landscape architects, recorded and photographed features, and spoke informally with local residents currently using the route.
- September 9, 2009: Design team coordinated a site visit to assess safety and design of road crossings. Participants included the City of Richmond traffic engineer, VDOT Bike-Pedestrian Coordinator, and city and regional trail planners.

Team discussions were supplemented by meetings with local planners, regional, and state agency staff and non-profits and other individuals with trail planning expertise. The Richmond Regional Metropolitan Planning Organization (MPO) provided base maps for the analysis.

3. Community Engagement Workshop and Formation of Citizens Committee

On July 28, 2009 Doug Conner convened a community workshop to generate ideas on trail and greenway priorities. The workshop included a presentation by Rails-to-Trails Conservancy on the value and benefits of urban trails, and highlighted success stories and lessons learned from other urban trail projects. An interactive mapping exercise and discussion was conducted to document issues and opportunities, potential trail users, and key destinations and linkages. Outreach, logistics, and facilitation for the workshop was provided by the Partnership for Smarter Growth (PSG).

Following the District Meeting, interested citizens from the trail corridor met to discuss formation of a local citizen committee or “friends group.” With facilitation assistance from PSG, the local group organized an interim leadership team, and decided on the name “James River Branch Rail-Trail Citizens Committee,” in recognition of the corridor's railroad history. The group was especially interested in researching and highlighting historic information on the railway and its role in the development of Southside Richmond.

4. Development, Review, and Refinement of Draft Concept Plan

October 3, 2009: The project team met to develop a sketch plan of the corridor that took into account, both technical analysis and citizen comments. Various trail design options were identified and discussed. Consideration was given to greenway and open space linkages, regional bikeway connections, and connections to local pedestrian travel corridors.

October 20, 2009: Representatives from the newly formed James River Branch Rail-Trail Citizens Committee reviewed the trail purpose statement, trail design elements, and sketch plans. Comments were provided to the landscape architects, and a draft conceptual plan for the trail was developed.

October 27, 2009: The draft conceptual plan was presented to the community at Councilman Conner's October 2009 district meeting. The session served as a forum to receive additional input from citizens regarding community needs and priorities. The meeting also included a more in-depth discussion of issues such as safety, clarified project tasks and timelines, and discussed next steps for organizing the JRB Rail-Trail Citizens Committee.

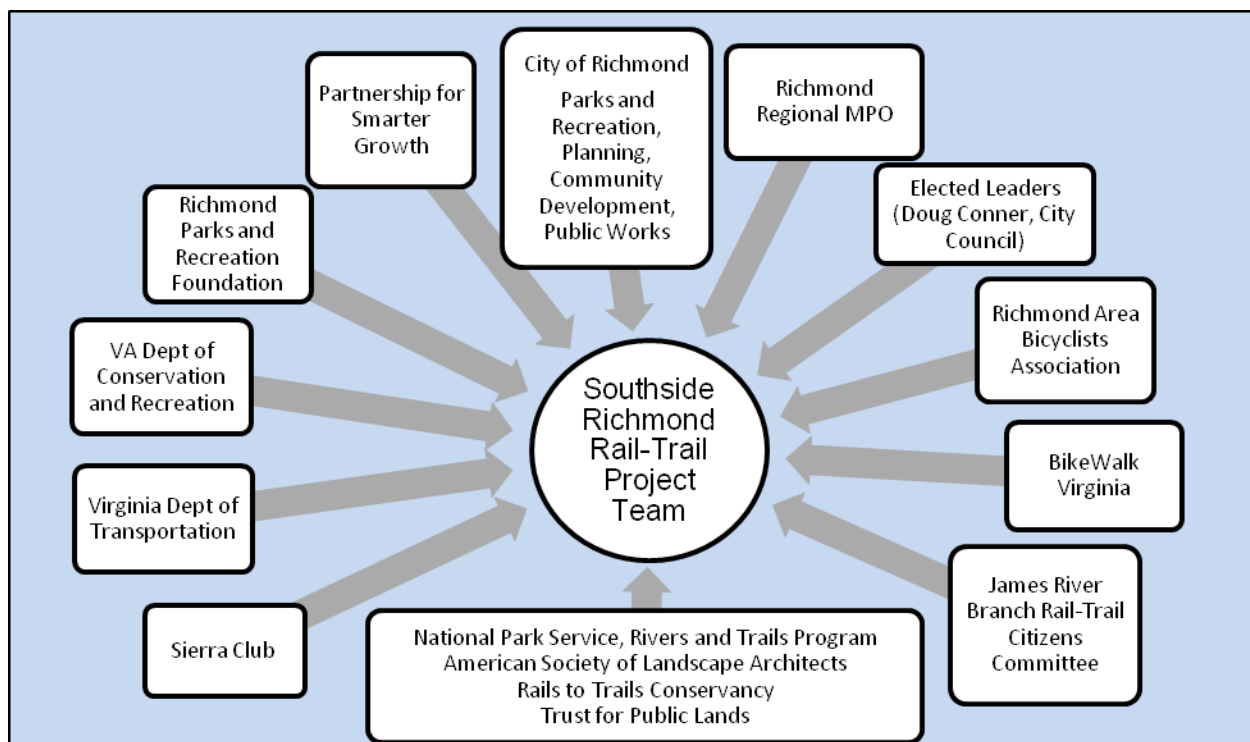
December 15, 2009: A staff work session was held with city planning and parks and recreation staff as well as other technical reviewers to assess consistency with local plans and policies, economic development initiatives, and discuss funding strategies and implementation options. The draft concept plan was then sent out to the project team for review.

5. Project Close Out

In January 2010, the Conceptual Plan for the James River Branch Rail-Trail was completed, providing a graphic vision for the right-of-way. The plan included the 2.5 mile corridor from 49th Street to Cofer Road, showing a connection on the west to Reedy Creek Greenway and on the east to the 26-acre parcel at Cofer Road. The plan was digitally drafted and rendered, and accompanied by this summary report that includes recommended next steps. A brochure/fact sheet was also developed, to assist in future outreach efforts.

Although the work of the project team is complete, it is anticipated that the City of Richmond will continue to work with the James River Branch Rail-Trail Citizens Committee, Richmond Parks and Recreation Foundation, Partnership for Smarter Growth, and other area businesses and non-profits to pursue implementation. Based on the recommendations in this report, a prioritized schedule of actions will need to be developed that is endorsed by the City Administrator, Mayor, and City Council.

D. Partners



II. Benefits of Trail Development

A. Health and Wellness

Rail-trails, like the proposed James River Branch, have a positive impact on individuals and community wellness, by providing safe environments to be physically active. Research conducted as early as 1996 by the Centers for Disease Control (CDC) found a direct relationship between inactivity, and heart disease, obesity, and diabetes. The report stated that one reason for Americans' sedentary lifestyle is that "walking and cycling have been replaced by automobile travel for all but the shortest distances."¹

Today, 67 percent of American adults are overweight or obese, a figure that has doubled since 1980. In addition, 19 percent of all teenagers and 17 percent of all children between ages 6 and 11 are overweight. The childhood obesity rate has almost tripled since 1980 and the adolescent rate has more than quadrupled.² The annual medical cost attributed to physical inactivity has been estimated at \$76 billion, nearly 10% of all medical expenses.³ In addition, more than 2,600 Americans die from cardiovascular disease each day – an average of 1 death every 33 seconds. While heart disease is caused by more than just inactivity, 43 separate studies by the CDC showed that regular exercise can reduce your chances of heart disease.⁴

According to a 2005 Report of the Virginia Department of Health, cardiovascular disease is the number one killer in Virginia, accounting for 35% of all deaths. The report also reported that people who are overweight have a higher risk of heart disease, and that people who are not physically active have twice the risk of heart problems than those who are physically active.⁵ Residents of the Richmond region need opportunities to meet the Surgeon General's recommendation of 30 minutes of physical activity per day in order to help reduce the risk of cardiovascular disease and obesity. Developing trails and other bike and pedestrian facilities is a critical component in a broader strategy to address the health risks associated with inactivity.

B. Economic Vitality and Tourism

Numerous studies of urban revitalization have found that the development of urban parks, greenway, and trail systems are important factors in attracting new investment. Chattanooga, Boulder, Nashville, Austin, and Portland, are just some of the many cities throughout the United States where millions of dollars of corporate investment resulted from the rebirth of their downtown riverfronts and greenway systems.

Urban open space and trail systems boost a city's competitiveness in regards to corporate relocation decisions. Corporate CEOs report that quality of life for employees is the third-most important factor in locating a business, behind access to domestic markets and availability of

¹U.S. Department of Health and Human Services, *Physical Activity and Health: A Report of the Surgeon General*, 1996. <http://www.cdc.gov/nccdphp/sgr/index.htm>

² National Center for Health Statistics, *Prevalence of Overweight Among Children and Adolescents: United States, 2003–2004*, <http://www.cdc.gov/nchs/fastats/overwt.htm>, <http://www.cdc.gov/obesity/index.html>

³ Centers for Disease Control and Prevention, *Overweight and Obesity: Economic Consequences*, 2007.

⁴ Edward Burke, PhD, *Benefits of Bicycling and Walking to Health*, published by the Federal Highway Administration, Washington DC, 1992.

⁵ Virginia Department of Health, *Cardiovascular Disease in Virginia: A Report of the Cardiovascular Health Project*, June 2005

skilled labor.⁶ Likewise, home buyers are more likely to seek out and purchase homes that are near trails and greenway systems. Research conducted by American Lives, Inc. for the real estate industry, found 77.7% of home buyers rated natural open space as either "essential" or "very important." Walking and bicycling paths ranked third. A community design that offers quiet and low traffic was the top ranked feature.⁷

In some instances, trails alone have served as a tourist destination, increasing visitation to an area, or extending the length of the visit. Benefits include increased visitor expenditures on goods and services such as food, lodging, guides and outfitters. A 2003 study of the Virginia Creeper Trail found that trail users (including locals and non-locals) spent about \$2.5 million on recreation visits. Of this amount, nonlocal visitors spent about \$1.2 million directly in the Washington and Grayson County economies, supporting close to 30 jobs.⁸

C. Multi-Modal Transportation

Trails and bike-ped facilities provide communities with an equitable cost-efficient way to commute to work or school. When trails, sidewalks, bike lanes and mass transit options are built into an interconnected system, residents can leave their car at home, and walk or bike as a mode of transportation. This is even more important in areas where car ownership is low. Studies by Rails-To-Trails Conservancy and others have found that creating these active transportation networks, not only provide healthy transportation alternatives, but also reduce congestion, mitigate air pollution, and improve community health.

Transportation is the largest single source of air pollution in the US, causing, 2/3 of carbon monoxide and 1/3 of nitrogen oxides in our atmosphere. Air pollution is a serious health threat, contributing to the deaths of 60,000 people nationwide each year.⁹ In urban and suburbanizing areas, trails and bikeways provide an important non-polluting alternative to driving.

In addition, automobiles are the fastest growing major source of greenhouse gases, responsible for about 20 percent of United States' carbon dioxide (CO₂) emissions. Each gallon of gas burned produces 19.4 pounds of CO₂, nearly a pound per mile driven. There is growing concern that the increase in CO₂ and other gases in the earth's atmosphere is impacting the earth's climate, leading to associated economic and social problems such as extreme weather events, loss of harvests, and spread of disease.¹⁰

D. Urban Open Space and Ecological Integrity

Urban greenway systems provide a vital role in protecting and maintaining natural area values and functions such as managing stormwater, providing wildlife habitat, and recycling nutrients. Urban open space assists with flood mitigation, providing a storage zone during periods of heavy rain, increasing infiltration, reducing run-off, and filtering sediment before it enters the

⁶ Economic Impact of Protecting Rivers, Trails, and Greenway Corridors, National Park Service, Rivers and Trails Program, 4th edition, 1995.

⁷ San Francisco Chronicle, "Nation's Housing – Quiet Communities, Open Natural Spaces Top Housing Draws," January 8, 1995.

⁸ Bowker, J.M., John C. Bergstrom and Joshua K. Gill, *The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics*, USDA Forest Service, Southern Forest Research Station, University of Georgia, December, 2004.

⁹ American Lung Association Fact Sheet, *Outdoor Air Pollution*, 2000.

¹⁰ U.S. Environmental Protection Agency, *Greenhouse Gas Emissions from the U.S. Transportation Sector, 1990–2003*. 2006

waterway. Open space corridors that link larger natural area “hubs,” allow plant and animal species to migrate between hubs, reducing the impacts of urban development.

Much research has been undertaken by AmericanForests and others to quantify the benefits of trees in urban areas. Results of the Chicago Urban Forest Climate Project, in 1991, found that trees removed an estimated 17 tons of carbon monoxide, 93 tons of sulfur dioxide, 98 tons of nitrogen dioxide, and 210 tons of ozone. The value of this pollution removal was estimated at \$1 million annually¹¹

In addition, forested stream buffers can provide a cooling affect on adjacent streams and absorb extra nutrients that can be harmful to aquatic species. According to the Dept of Agriculture, NRCS, agricultural buffers can remove up to 50% of nutrients and pesticides, and up to 70% of sediment, that would otherwise be washed into waterways.¹² These natural processes do not take place if storm water is collected in pipes and discharged directly into rivers and streams.

E. Civic Engagement, Social Benefits, and Community-Building

For many cities and towns, greenway and trail networks have become a cultural asset for community activities, serving as new “main streets”, where neighbors meet, children play, and community groups gather to celebrate. For the past several years the Town of Chester has utilized the Chester Linear Park for its annual Chesterfest 5k run. The James River Park System hosts a myriad of competitive races, recreational events, programs and festivals throughout the year. Numerous cities and towns throughout the U.S have utilized greenway and trail systems as venues for charity walks, races, festivals, parades, or other community activities.

Greenways and trails can also provide a different type of connectivity - the connection between people and their local history. The interpretation of important historic and archeological sites along the James River Branch could serve to increase awareness and appreciation of the corridor’s rich history. Access to natural settings can provide educational opportunities as outdoor classrooms. Finally, civic groups and neighborhood associations could adopt segments of the trail corridor for clean-up, litter removal, stewardship programs, and community gardens.

¹¹ Nowak, David J. “Air Pollution Removal by Chicago’s Urban Forest,” Chicago Urban Forest Ecosystem: Results of the Chicago Urban Forest Climate Project, USFS, 1994.

¹² “Buffer Strips: Common Sense Conservation,” National Conservation Buffer Initiative, NRCS, US Department of Agriculture, www.nhq.nrcs.usda.gov/CCS/Buffers.html.

III. Trail Setting - Southside Richmond

The project study area is an inactive CSX rail right-of-way, located in an underserved area of the City, south of the James River. The right of way extends approximately 2.5 miles from 49th Street to Cofer Road. A trailhead facility could be developed at the corridor's western terminus at the intersection of Midlothian Turnpike and Westover Hills Boulevard, near the George Wythe High School. A second trailhead facility could be developed at the east end off Cofer Road where the rail merges with an active rail corridor. The eastern terminus includes a 26-acre wooded parcel accessible from Cofer Road.

There are three at-grade road crossings in this segment of the corridor -- Midlothian Turnpike, Hull Street, and Broad Rock Road. Future phases will need to address an additional road crossing at Westover Hills to extend to Reedy Creek Greenway (west) and Crutchfield Road to extend the trail north to Forest Hill Park via Ravine Park.

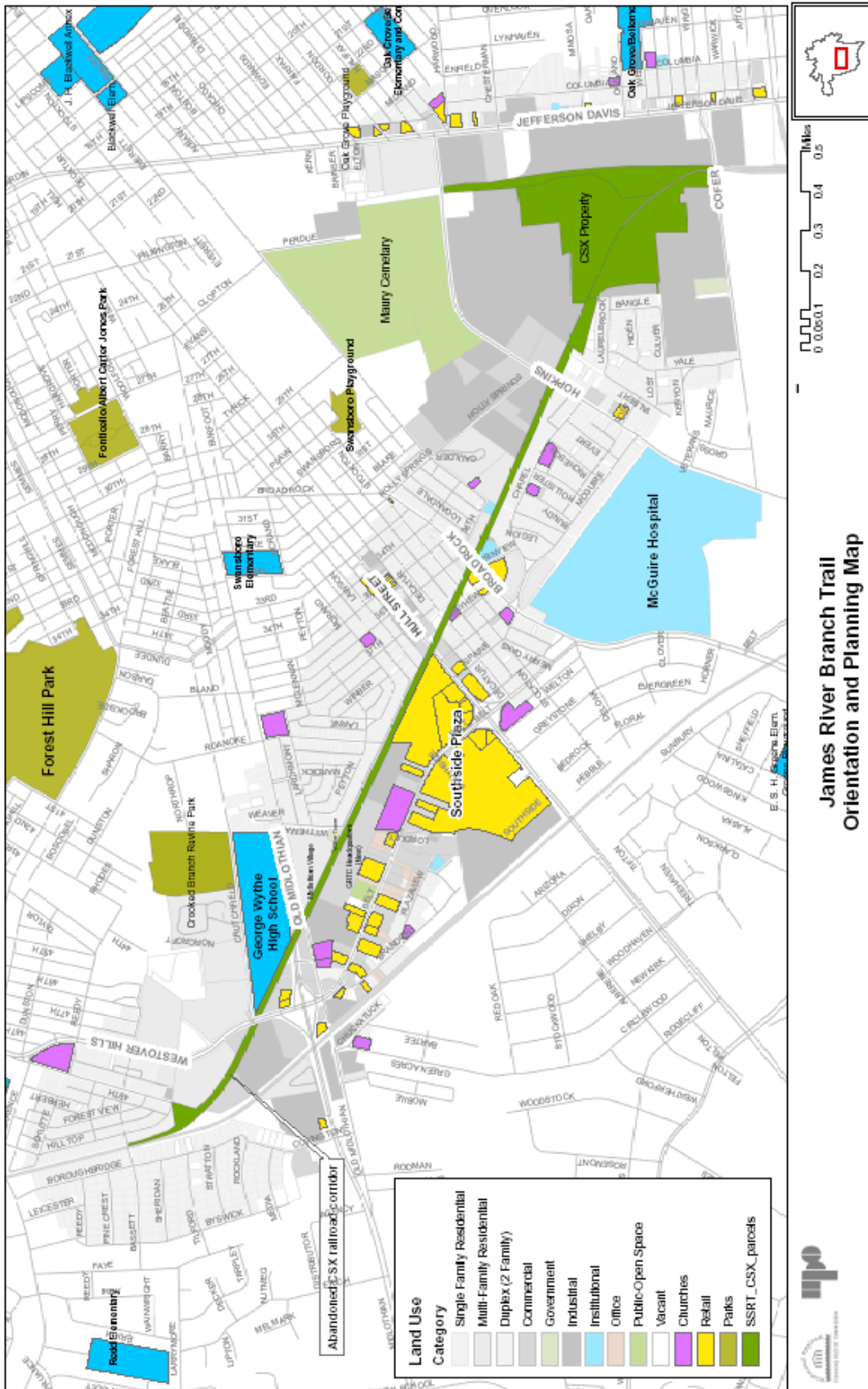
A. Railroad History

The CSX property under study was historically know as the James River Branch and served as a critical link in Richmond's early railroad infrastructure. Its origins can be traced to the Richmond and Petersburg Railroad which incorporated in 1836 to provide rail service that linked the two cities of Richmond and Petersburg. In 1838 construction on the mainline between the two cities began. The James River Branch of the Richmond and Petersburg Railroad was built in 1891 to provide a cut off link between the businesses located along Richmond's riverfront and the mainline to Petersburg.

In March of 1898, the Richmond and Petersburg Railroad merged with the Petersburg Railroad, to form the Atlantic Coast Line Railroad of Virginia, with rail service from Richmond, Virginia to Garysburg, North Carolina. The James River Branch continued to see traffic between the mainline to Petersburg and the industrial areas of downtown Richmond but this volume ultimately began to decline beginning in the 1950s. The James River Branch was eventually abandoned in the mid 1980s. Through subsequent mergers the remnants of the Atlantic Coast Line Railroad are today part of CSX Transportation.



(Photograph and information on railway history provided by Brian Ezzelle, James River Branch Rail-Trail Citizen Committee)



B. Site Analysis

Land Use

Adjacent land use in the corridor is a mix of residential, commercial and industrial sites (*refer to Figure 2. James River Branch Rail-Trail Orientation and Planning Map*). George Wythe High School is located adjacent to the trail at its western terminus, at Westover Hills and Midlothian Turnpike. From Midlothian to Hull Street, the right-of-way passes by residential neighborhoods to the north, and several large commercial and industrial properties to the south, including the Greater Richmond Transit Corporation property and Southside Plaza Shopping Center. The corridor continues east from Hull Street to Broad Rock through residential neighborhoods. Land use along the eastern portion from Hopkins Road to Cofer Road is primarily industrial with undeveloped forestlands located adjacent to the right-of-way.

Site analysis teams observed that some people are already using the corridor as evidenced by the social trails, and that the proposed rail-trail could provide connections to work, school, and transit stops. There are several churches located adjacent to or near the rail corridor. The McGuire Veterans Hospital is located a few blocks south of the property between Broad Rock and Hopkins. Opportunities for healthy recreation including: walking, bird watching, nature study, and outdoor classrooms.

Description of Rail Right-of-Way

A major portion of the right-of-way is shaded by mature tree canopy. Site analysis teams commented on the beauty and scenic nature of the rail right-of-way, which in most sections is screened from adjacent development. The property adjacent to George Wythe High School is heavily overgrown, with no pathway visible. The right-of-way is separated from the school property by a chain-link fence. The western section from Midlothian to Hull Street is heavily overgrown, but passable. An adjacent gravel alleyway parallels the rail right-of-way from Wythamar to Lawson (2 blocks west of Hull St).

The eastern section from Hull Street to Cofer Road is passable with an existing four to six foot wide natural surface pathway running through the corridor. Tracks and ties are still on the right-of-way from just east of Hopkins to the intersection with the active line (double track running north-south at Cofer Road). The eastern section traverses a 26 acre parcel of mature hardwoods, one of the few natural open space areas remaining in the area. The parcel, if acquired by the city, could provide multiple opportunities as an urban park and a trailhead/anchor for the eastern end of the trail corridor.



Project team conducts fieldwork during Summer 2009 to document corridor conditions

A stable compacted surface exists throughout the corridor, due in part to its historic use as a railway. The tread way is slightly elevated from natural drainage channels running along both sides the rail right-of-way. Additional design/engineering will be needed to address drainage issues throughout the corridor which is lower in elevation than surrounding property. Some trash was visible in the corridor, but could be easily addressed though organizing a community clean-up. Less trash and debris was visible toward the eastern end (recently cleaned-up by CSX).

Figure 3. Potential Trails and Greenways – Richmond Region



There are three major at-grade road crossings (Midlothian, Hull, and Broad Rock). The trail also runs under the Hopkins Road Bridge. All four roads are heavily traveled; poor sight lines were noted at Hull looking north from the trail intersection. A bus stop is located just west of the Midlothian trail intersection, and north of the Broad Rock trail intersection, providing opportunities to connect to transit.

C. Potential Connections to Regional Trails and Greenways

The James River Branch provides an opportunity to connect neighborhoods in Southside Richmond to an evolving system of trails and greenways in the greater Richmond region (*Refer to Figure 3. Potential Trails and Greenways in the Richmond Region*). The west end of the JRB rail right-of-way intersects the Reedy Creek Greenway which travels north via Forest Hill Park to the James River Park System. A connection is planned from Reedy Creek west to the Pocosham Creek Greenway, which will extend south into Chesterfield County.

On the City's east side, the James River Park System connects to the Virginia Capital Trail, a 50-mile trail under development which will connect Richmond to Williamsburg. Other trails under development, such as the Cannon Creek Greenway and Mid-Town Greenway are shown in Figure 3. In addition to local and regional trails, the East Coast Greenway is a proposed long distance trail that will extend from Maine to Florida, and will traverse the Richmond area, roughly following the Route 1 corridor.

D. Planning and Policy Framework

Virginia Outdoors Plan, 2007

Published by the Virginia Department of Conservation and Recreation (DCR), the 2007 Virginia Outdoors Plan (VOP), provides overall guidance in the development of trails and greenways as well as other recreational facilities throughout the Commonwealth. The plan assesses needs and trends, and provides policy recommendations at both the statewide and regional level. In particular, the plan promotes the concept of livable and walkable communities based on the desire by citizens to reduce automobile use, improve health, and address the economic burden of rising fuel costs and roadway congestions. The James River Branch could serve as a spur to the East Coast Greenway, one of Virginia's six primary long-distance trails recognized in the VOP. The VOP is available on DCR's website at:

http://www.dcr.virginia.gov/recreational_planning/vop.shtml

In May 1999, DCR produced a manual or "*Trail Toolbox*" to serve as a resource guide for the development of trails and greenways. The *Toolbox* provides information on organization, planning, development and operations as well as appendices with model agreements and other instruments to support local trail development efforts. The *Toolbox* is available on-line at the DCR website: http://www.dcr.virginia.gov/recreational_planning/documents/toolbox.pdf

Virginia Statewide Policy for Bicycle-Pedestrian Accommodations

Development of a regional bicycle and pedestrian network is fully supported by state transportation policy goals. On March 18, 2004, the Commonwealth Transportation Board adopted a new state policy for integrating bicycle and pedestrian accommodations into roadway projects (often termed "incidental" improvements – bikeways and sidewalks that are built as part of new roadway construction or roadway reconstruction). This policy essentially reverses

previous VDOT policies which required substantial public investment to make the case for bike-ped accommodations in transportation projects.

The new policy states that, “VDOT will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking,” and essentially requires bicycle and/or pedestrian accommodations whenever a roadway project occurs in an urban or suburban area. The policy provides some exemptions under which facilities would not be required. For projects occurring along corridors that have been planned to receive bike-ped improvements, VDOT’s implementation guidance allows for using up to 20% of the total project cost for the bicycle and/or pedestrian accommodation. For projects not taking place along planned bike-ped corridors, the ceiling is 10% of total project cost.

The complete version of VDOT’s Policy for Integrating Bicycle and Pedestrian Accommodations can be found on the VDOT website. (www.virginiadot.org/bikepedpolicy)

Richmond Regional Bike-Pedestrian Plans

In 2004, the Virginia Department of Transportation (VDOT), in association with the Richmond Regional MPO, commissioned a study of bicycle and pedestrian needs in the Richmond region. The findings, published as the “*Richmond Regional Bicycle and Pedestrian Plan*,” evaluated the status of bicycle and pedestrian accommodations based on level of service, and provided goals, recommendations, and implementation strategies to be applied at both the local and regional level. The plan built upon the “*Richmond Area 2023 Long Range Transportation Plan (LRTP)*” adopted in March 2001. The James River Branch Rail Trail helps address the needs identified in the 2004 Bike and Pedestrian Plan and supports the overall goal articulated in the 2023 LRTP -- “to ensure adequate access and multiple choices for the residents of the region.”

Figure 4. Survey Responses from Richmond Facility and Program Needs Assessment, 2008

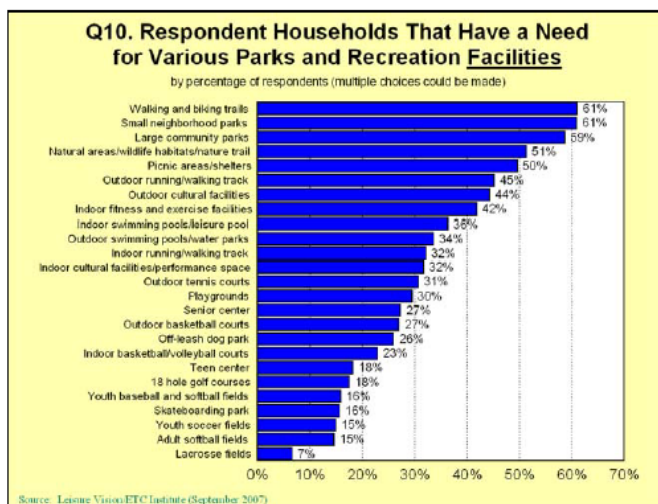


Figure 30 - Need for Parks and Recreation Facilities

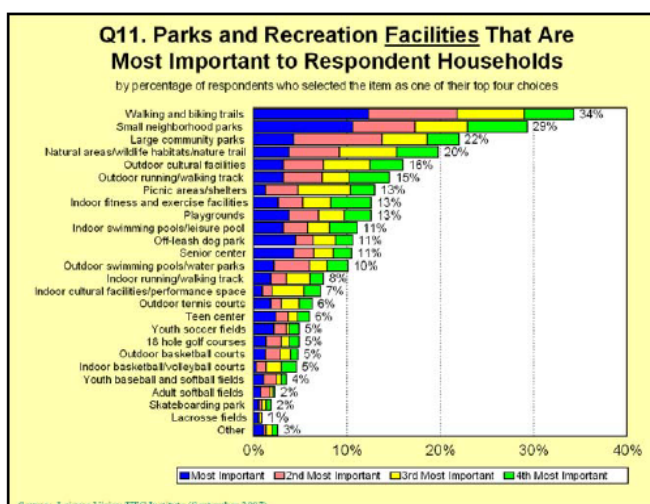


Figure 33 - Most Important Parks and Recreation Facilities

City of Richmond, Parks, Recreation, and Community Facilities Master Plan

The City of Richmond Parks Master Plan was completed in August 2008. A Facility and Program Needs Assessment was conducted as part of the planning effort, which evaluated

quantitative and qualitative data to identify and prioritize recreation needs for the City's residents. The Needs Assessment found that walking and biking trails ranked as one of the highest unmet need for residents of Richmond. Development of the James River Branch Rail-Trail would support and implement the recommendations in the Master Plan, especially "Goal 2.1.1. *Acquire, develop and maintain quality parks and trails that support equity of access by users, connectivity, and create a positive sense of place for all residents in the City.*"(p.7) The plan further states that "*development of park trails and greenways is needed throughout the City to allow people to use them for transportation, fitness and recreation purposes.*" (p. 12)

City of Richmond, Master Plan, 2000-2020

Although Richmond does not have a city-wide trail plan or specific recommendations related to trail design and development, there are general references in support of bike and pedestrian mobility, open space protection, recreation, and community character in the current master plan. The JRB rail-trail concept supports and advances the following goals found in the plan.

Transportation: "*The City of Richmond will support bicycle travel with a safe and effective system of designated bikeways. The City will be a community where pedestrians and bicycle movements are protected as an integral part of the transportation system.*" (p.19)

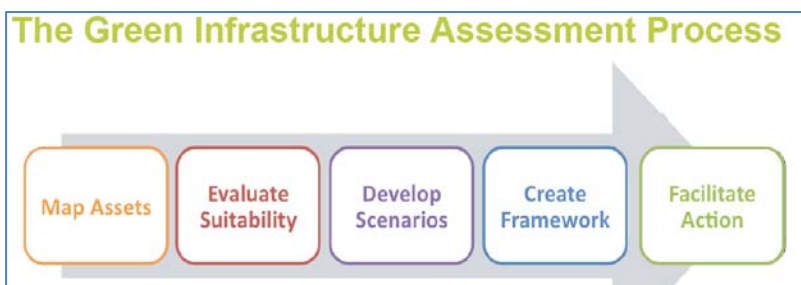
Natural Resource: "*As the City of Richmond continues to grow and change, the natural environment will be protected and enhanced, and Richmond's citizens will have a greater appreciation for, and better access to, the natural environment.*" (p.20)

Public Facilities and Service: "*Richmond's citizens will be served by modern, convenient, attractive, and accessible educational and recreational facilities.*" (p. 20)

Community Character: "*Richmond's historic and contemporary cultural resources will be maintained and preserved to improve the quality of life, provide a sense of cultural identity, enhance opportunities for economic development, ensure resident retention, and help attract new residents, businesses, and visitors.*" (p. 21)

City of Richmond, Green Infrastructure Initiative

During Fall 2009, the City of Richmond initiated a Green Infrastructure Assessment to map green assets, including vacant and underutilized lands, and develop strategies for their re-use. The goal of the project was to advance redevelopment, conservation and recreation goals, by converting underutilized properties to parks, redevelopment sites, and urban open space. The City of Richmond is providing guidance and oversight throughout the assessment process. Other partners include: Department of Forestry (mapping the existing tree canopy), Richmond Regional PDC (conducting the green infrastructure analysis), and The Green Infrastructure Center (GIC) and E² Inc. (working together to map and characterize Richmond's vacant and underutilized lands, and develop reuse scenarios and strategies).



(For more information contact John Taylor, City of Richmond, Planning Department, John.W.Taylor@richmondgov.com)

Mayor's "Build a Better Richmond" Initiative

The James River Branch Rail-Trail proposal is consistent with Mayor Dwight C. Jones's "Build a Better Richmond" initiative. The trail will help support the mayor's multi-dimensional goals of environmental health, economic development, and the creation of safe and secure neighborhoods.

In 2009, the City of Richmond initiated its Green Government Challenge, in an effort to become a greener city and reduce the City's carbon footprint. In 2009, the City also kicked off its Urban Blight Reduction Program, aimed at addressing the maintenance needs of vacant properties, reducing urban blight and maintaining the aesthetics and integrity of the City. The proposed James River Branch Rail-Trail would help advance these efforts by protecting natural resources, restoring neglected infrastructure, and providing "green" non-motorized transportation options.

Another component of the Mayor's "Build a Better Richmond" Initiative is to combat violence, drugs and crime in the city. Renowned film producer, Craig Santy, worked with the Richmond Police Department to produce a documentary called 'Stop the Pain 804' which will be shown at all Richmond high schools in the 2009-2010 academic year. The James River Branch Rail-Trail supports the Mayor's crime prevention efforts, by engaging youth in positive trail-based community service projects. Trail programs and activities could also strengthen partnerships between schools, youth service groups, law enforcement officials, and neighborhood residents.

Finally, the Mayor is working to improve community health by encouraging citizens to take steps toward a healthier lifestyle. In September 2009, the 50 Million Pound Challenge Walk Off was held at Chimborazo Park, where the Mayor challenged residents to take control of their health by getting fit. The Mayor was joined by Dr. Ian Smith, founder of the "50 Million Pound Challenge" national health initiative, sponsored by State Farm Insurance. Sponsors of the Richmond event included the Department of Parks and Recreation and the Richmond City Health District. The James River Branch Rail-Trail supports the Mayor's community health and wellness goals by providing a safe and convenient place for physical activity and healthy family recreation in Southside Richmond.

"It is very important that we take the time to maintain our health and live healthier lifestyles. Obesity is a major concern for Americans and if the City of Richmond can help engage residents to get involved, then why not start now." -- Mayor Dwight C. Jones

IV. Trail Development Issues and Design Considerations

On July 28, 2009, 9th District Councilman, Doug Conner convened a community workshop to generate ideas on trail and greenway needs and priorities. The workshop included a presentation by Rails-to-Trails Conservancy on the value and benefits of urban trails, and highlighted success stories and lessons learned from other urban areas. Participants were then organized into smaller discussion circles to discuss, map, and document potential trail users and key destinations and linkages along the JRB right-of-way.

Participants were asked for their advice and suggestions on three specific topics:

- What are the benefits and opportunities that a rail-trail could provide to the community?
- What challenges and barriers exist to development of the trail?
- Who else should be involved in the process?

The following section highlights the responses of workshop participants to the above questions. This section also provides trail design guidelines based on issues raised by workshop participants.

A. Summary of Trail Development Issues

Trail Benefits and Opportunities

Workshop participants identified four broad categories of benefits or opportunities that the rail-trail would provide Southside residents. They include:

1. Quality of Life: Benefits include the opportunity for development of community gardens, viewing nature, historic interpretation, and exercise.
2. Mobility: The trail could provide a way to get to school, work, transit, and shopping that is inexpensive, healthy and available to all.
3. Youth Engagement: Benefits include scout and service-learning projects, outdoor classrooms (science and history classes), and place for children and families to enjoy time outdoors.
4. Economic Revitalization: The trail could support efforts to encourage investment in Southside communities, restoring blighted areas, and positively impact real estate values.

Trail Development Challenges

Workshop participants identified four broad categories of barriers or challenges to development of the rail-trail

1. Funding: What is the long term cost for trail development and management? How will the project be funded?
2. Coordination/Leadership: Who will lead the initiative? Who will serve as principle negotiator with CSX and oversee project implementation?
3. Crime and Safety: People must feel safe to use the trail. What mechanisms are available to prevent crime? Will the trail be patrolled? Will lighting, call boxes or other features be included? What impacts will the trail have on adjacent properties?
4. Trail Design: Issues to be addressed include street crossings, access points, long term maintenance, location of park benches, water fountains, etc

The table below (Figure 5) highlights the key concepts and ideas that were generated by the discussion circles.

Figure 5. James River Branch Rail-Trail Community Workshop, July 28, 2009 <i>Compiled by Sheila Sheppard, Partnership for Smarter Growth</i>	
Opportunities/Benefits of Trail Development	Barriers to Trail Development
Access to exercise Alternative to driving Bike and pedestrian friendly Attract new homeowners Positive impact on real estate values Healthy activity Eliminate blighted areas, community art A safe place for children to ride bikes/play A place to enjoy nature, get people outside Connections to shopping, transit, school, church Improve quality of life, standard of living Gardening opportunities; flowerbeds Birding A place for student athletes to train Races, walks, community events Eco-friendly alternative transportation Bring life to the area Education value, preserve local history/heritage	Safety and Crime Lighting Road Crossings – perhaps signals to cross Parking and trail head facilities Connections – challenge of linking together trails Money Who will build/ maintain? Opposition from neighbors/landowners along trail Getting all city departments on board Leadership: City commitment Cost of infrastructure and trail amenities (i.e. restrooms, water fountains) Challenge in preserving right-of-way Resources/effort needed to document and preserve railroad history Who will patrol/monitor? How will trespass be prevented?

B. Guidelines for Designing Multi-Use Trails

This section provides guidance to address the trail design issues that were raised through the workshop and other venues including: safety and crime prevention, trail width, trail surfacing, road crossings, and amenities. *(Issues related to trail funding and coordination will be addressed in Chapter VI. Implementation)*

1. Safety and Crime Prevention

Planning, design, and management of the James River Branch Rail-Trail should be done in a manner that reduces or eliminates the incidents of crime. One strategy to address crime and safety concerns is the application of Crime Prevention Through Environmental Design (CPTED) principles. CPTED methods have been utilized in the design of public spaces since the early 1970's and more recently have been applied to parks, trails, and natural settings.

The three CPTED design principles -- physical access, visual access and defined ownership, are described below. These core principles along with two additional management principles,

(programming and maintenance) work together to form vibrant and safe environments. The following information was adapted from the *2007 Virginia Outdoor Plan, Chapter III, p. 192*.¹³

CPTED Design Principle 1: Physical Access

Physical Access provides control onto or off a site by directing people to and from the site in a specific direction. Clearly delineated walks and trails protect the environment, as well as provide a sense of direction and security. Direct access needs to be limited in dangerous, problem or environmentally sensitive areas. Cut-throughs should either be closed off or opened up and hardened to create a more safe and sustainable environment. Part of access control is “wayfinding.” For safety, trail users need to have clear signage that indicates location, nearby places of interest, and emergency contact and support information.

CPTED Design Principle 2: Visual Access

Visual access provides a secure sense of place for trail users and refers to the ability to see into, out of, and through a site. The determination for desired visibility is based on an assessment of risk and user expectations, as well as overall public safety. Strategically placed viewing opportunities, which maintain an awareness of what others are doing, are key to creating a safe environment. The strategic placement of trees and lighting can support a sense that the environment is safe and comfortable. Excessive trees and shrubs should not be planted in areas where visibility is needed. Vegetation should be appropriately pruned to provide adequate visibility, and appropriately spaced next to facilities, paths, walkways, entranceways and parking spaces, so as not to create hiding places.

Lighting protects facilities and users; however, lighting in the absence of witnesses should never be equated with safety. Lighting should always reflect the intended hours of operation. For example, lighting of an area when not in use may actually encourage criminal activities. Motion-sensing lights can perform the double duty of providing light when needed and letting trespassers know that they have been seen.

CPTED Design Principle 3: Defined Ownership

Creating a sense of ownership maintains a safer outdoor site. Clearly delineated property boundaries with signage, logos, fencing and gateway treatments are ways to express ownership. Ownership is also expressed by adequate management of the site. Spaces that receive appropriate and timely maintenance demonstrate the presence of an owner, and often deter the occurrence of crime and vandalism. Appropriate maintenance includes timely trash and graffiti removal, quick repairs of broken facilities, up-to-date painting and regularly pruned vegetation.

CPTED Management Principle 1: Programming

Programming is the organization and sponsorship of activities at a site. Thoughtful programming will attract legitimate users, thus decreasing the opportunity for criminal activity. This is especially true for sites that have traditionally been vacant or abandoned. Programs targeting specific groups, like scouts and school children, encourage users to take ownership of the site. The Trust for Public Land notes that safe parks and

¹³ For additional information on CPTED: <http://www.dcjs.virginia.gov/cple/documents/cpted.pdf> or www.CPTED.net. Information can also be obtained through the Crime Prevention Center (CPC), which maintains the Crime Prevention Specialist (CPS) program and the Certified Crime Prevention Community Program (CCPCP). For assistance, contact Rick Arrington, 804-371-0863 or Richard.Arrington@dcjs.virginia.gov.

recreation centers topped the list for what teens want when school is not in session. In addition, studies have found that after-school programs for teens are cost effective way to reduce many minor crimes of convenience.

CPTED Management Principle 2: Maintenance

Proper maintenance is essential for safe public spaces. Clean, well-maintained sites and trails create a sense of community ownership and pride, as well as reduce criminal activity. If site problems are not repaired or maintained adequately and in a timely fashion, the sites are perceived as abandoned and quickly become a magnet for additional damage. By performing regular security and safety assessments, immediate actions can be taken to address graffiti, vandalism, or other landscape maintenance needs.

Prior to opening the JRB trail for public use, a strategic plan for crime prevention, management, and problem resolution should be created. The plan should familiarize crime prevention and emergency personnel with site layouts to facilitate quicker, more effective response. The plan should also establish a process for maintaining up-to-date crime data. Liability and security experts should be included in the development and execution of the plan.

In addition, partnerships with business and community organizations promote an anti-crime culture and create safer outdoor environments. Crime watch groups composed of community volunteer organizations could help contribute to the maintenance of the site, reducing litter and preventing vandalism.

2. Trail Width

It is intended that the James River Branch Rail-Trail serve a wide variety of users, including pedestrians, bicyclists, wheelchairs, and strollers. The following is the recommended trail dimension for urban multi-use trails, as specified in the *Guide for the Development of Bicycle Facilities*, produced by the American Association of State Highway Transportation Officials (AASHTO). The Guide takes into consideration the volumes, various speeds and space requirements of different user groups.

- a) Shared use paths should be designed with a minimum cross section of 10 feet with 2 foot shoulders. This will enable the trail to operate as a two way facility.
- b) In areas with high volumes of trail users, 12-14 foot widths are recommended.
- c) In extremely constrained conditions, or for neighborhood trail connectors, trail width can be reduced to 8', however this is generally only appropriate for short sections of trails, and according to the AAHSTO Guide, the following conditions should prevail:
 - bicycle traffic is expected to be low, even on peak days or during peak hours,
 - pedestrian use of the facility is not expected to be more than occasional,
 - there will be good horizontal and vertical alignment providing safe and frequent passing opportunities, and
 - during normal maintenance activities the path will not be subjected to maintenance vehicle loading conditions that would cause pavement edge damage.

3. Trail Surface

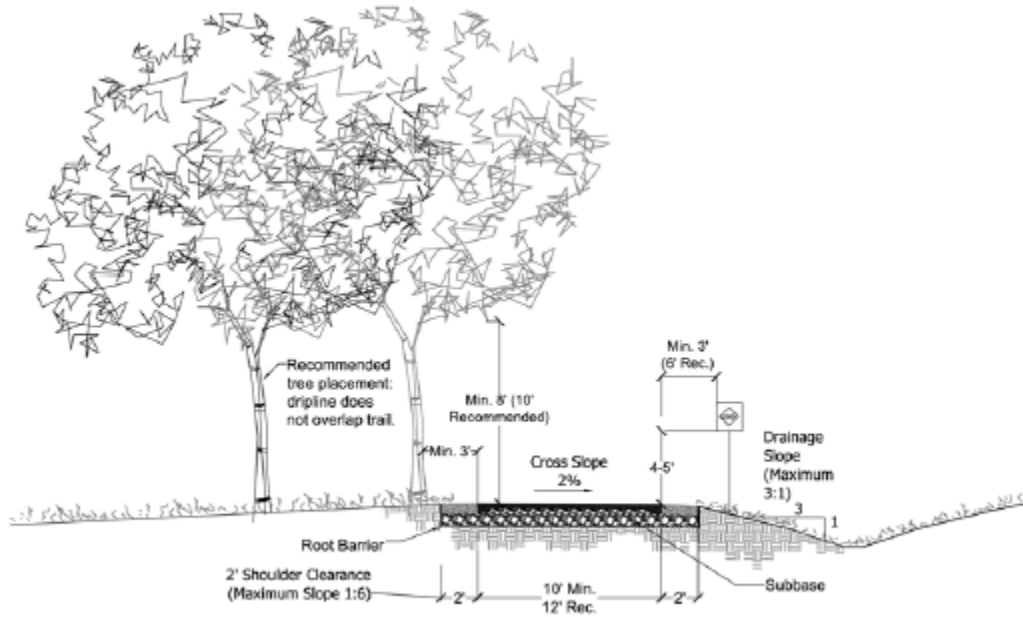
There are various surface materials available for construction of the trail tread. When selecting a surface material, it is important to consider the corridor setting, physical features, constraints, needs of the intended user groups, and the desired final appearance. Hard or semi-hard surface materials (asphalt, concrete, or crushed stone) are more practical and preferred for multiple use

trails, especially in urban areas, where a high volume of use is expected. The hard surface materials tend to be more expensive to purchase and install but require less maintenance and can withstand frequent use. Hard surfaces also accommodate the widest range of trail users.

The goal for the James River Branch should be to provide a firm stable surface to allow use by walkers, bike riders, wheelchair users and strollers. As with other rail-trails, the historic use as a railway provides a stable sub-base. However, it is advisable that a qualified inspector or structural engineer evaluate the condition and load bearing ability of the corridor's sub-grade, sub-base, and any culverts or drainage structures. If sections of the right-of-way need improvements, and a new sub-base is installed, it should be 4 to 8 inches thick, and compacted to a smooth and level surface.

The sub-base is capped by a trail surface material. A final decision of trail surface is typically made during the master planning phase. Factors such as product availability, cost, life expectancy, anticipated usage, ease of maintenance, and user acceptance contribute to the choice of surface type. At this stage in concept development, the design team suggests that consideration be given to a granular stone or "crusher run" surface, which would provide a firm, stable surface and accommodate a wide variety of users including walkers, joggers, bikers, and strollers. Granular stone, if kept to a minimum of 3/8 inch diameter stone, also works well for wheelchairs.

Limestone, sandstone and crushed rock are types of granular stone. If crushed to a very fine material and densely compacted, they hold up well under heavy use and seem less intrusive to the natural environment than asphalt or concrete. Ideally, stone should be at least 4 inches thick, spread over the prepared sub-grade, and compacted. Crushed stone should last 7 to 10 years, although spot repairs or grading will occur within that period. Additional information on trail surfaces can be found in "*Trails for the 21st Century: Planning, Design, and Management Manual for Multi-Use Trails*," produced by Rails-to-Trails Conservancy.



Typical shared-use path cross-section

Figure 6. Typical Shared Use Trail Cross-Section

4. Road Crossings

Project team members conducted a site visit with the City traffic engineer, and state and regional trail planners to assess conditions and options for the three road crossing within the rail-trail corridor. All trail-road intersections will be designed to AASHTO standards. Improvements to the road crossings may qualify for Highway Safety Funds available through VDOT as a 10% set-aside for the purpose of addressing pedestrian/driver safety concerns. The City is experienced in securing these funds however further study will be needed to determine if the project qualifies based on program criteria. Suggested improvements to address safety and pedestrian flow are as follows:

Midlothian Turnpike /US Route 60 (in front of George Wythe High School)

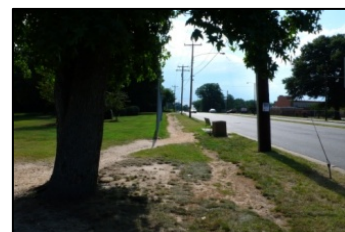
The City is responsible for roadway design and engineering, in consultation with VDOT. As a general rule, the city does not endorse mid-block crossings due to safety concerns, especially for roads with traffic volumes over 1600 vehicles/day. This is a general rule, and can be modified based on site-specific considerations.

Possible option include a mid-block crossing at the school, a mid-block crossing at the rail right-of-way, or routing the trail west to the existing intersection where the transit stop is located. The design team observed people trying to cross the 4-lane highway to access the bus stop and businesses on either side of the road. The trail crossing is complicated by off ramps from Westover Hills Blvd and vehicle speeds.

A road crossing with crosswalk, adequate signage, and potentially a count-down timer if pedestrian traffic



Sidewalk on north side of Midlothian, at CSX right-of-way



No sidewalk on south side of Midlothian Turnpike

warrants, could improve pedestrian flow, safety for both drivers and walkers/bikers, and ease of crossing for potential trail users. In addition, the trail should be realigned so that it approaches the roadway at a 90-degree angle.

Hull Street (near Southside Plaza shopping center)

The Southside Plaza is located immediately to the south of the CSX right-of-way on the west side of Hull; a residential neighborhood is located immediately to the north. A median strip is located on Hull from the Belt Street intersection to a point near the trail/shopping center entrance where it necks down. There is no median strip on Hull north of the trail crossing. Traffic on Hull Street travels at a high speed (greater than 35 mph). Additional work is needed to verify posted speed and traffic counts.

A transit stop is located on Hull, just to the south of the trail crossing. Pedestrians were observed traveling from the shopping center across the JRB right-of-way towards the residential neighborhood to the north. Numerous pedestrians were also observed attempting to cross Hull at multiple points from the trail crossing/McGuire Street to Belt St. to go to/from the shopping center, bus stop, and residential neighborhoods on the east side of Hull Street.



Hull Street intersection
(looking south)



Hull Street intersection
(looking north)

A redesign of the entrance to the shopping center with a more “tightened up,” formalized intersection would improve pedestrian flow and lessen exposure. Sightlines for drivers approaching the intersection from the north are limited due to a slight hill which blocks the view of the JRB right-of-way. Sidewalks are located on both sides of Hull Street, currently establishing a pedestrian way. A pedestrian crossing with appropriate design treatment (i.e. crosswalk, sign, etc) could be located just to the south of the current shopping center entrance, and tied into McGuire Road. The trail crossings provides an opportunity to improve Hull Street cross movements, improving safety for both walkers/bikers and drivers.

Broad Rock Road (near Pine Hall Street intersection)

Broad Rock carries less traffic than Hull or Midlothian, and speeds seem to be somewhat slower (additional work is needed to verify posted speed and traffic counts). Sidewalks are located on both sides of the road, and a transit stop is located on Broad Rock immediately to the north of the trail crossing. There is an opportunity to tie the trail crossing into a pedestrian crosswalk at the Pine Hall Street intersection (immediately to the south of the trail crossing). Establishing a crosswalk at this location would be less complex and less costly than at Midlothian and Hull.



Broad Rock intersection



Broad Rock (looking north)

Additional data collection of bike and pedestrian usage patterns will be required. Detailed design and analysis of road crossing will also be needed to evaluate design options, determine project costs, and evaluate potential funding sources. Although the City has had preliminary discussions with CSX, a final decision on acquisition of the right-of-way and timeline for trail development has not yet been established. The City Traffic Engineer will not be able to undertake further analysis and design until the right-of-way is secured for public use.

For additional information on trail design refer to “*Virginia Bicycle Facility Resource Guide*,” produced by the Virginia Department of Transportation, 2002.

5. Trail Amenities

During the trail master planning stage, a trail amenities plan will need to be developed for the entire corridor that identifies specific types and locations of facilities such as park benches, trash cans, signage, trailhead/parking, etc. The trail amenities plan will help establish an identity and uniform character for the trail, and should be integrated with potential safety features such as trail lighting and call boxes. Trail fixtures should complement the site’s historic use and railway history. The amenities plan should also address interpretive elements, such as kiosks and educational waysides that could be installed at strategic locations to increase awareness of the site’s historical significance and role in the development of Southside Richmond.

A trailhead access is planned for the western end of the terminus at the Westover Hills and Midlothian Turnpike intersection. An enhancement grant submitted jointly by the Department of Parks and Recreation and Department of Public Works has been secured to develop a small entrance drive and parking area, with kiosk, landscaping and other amenities. The trail head will provide access to both the James River Branch Rail-Trail and Reedy Creek Greenway.

The large parcel at the east end provides an opportunity to preserve a large forested tract for park and open space uses, in an area of the City that is underserved in terms of park acreage. It could also serve as a trailhead for the east end of the trail corridor with parking, picnic area, benches and/or other park amenities. Based on aerial photos, property maps, and on-site review, it appears that an access drive into the property is feasible, off Cofer Road west of the active rail line. However, there is limited space between the property boundary and the active rail line, and further study will be needed to determine design requirements to address railway safety and operational needs. Further discussion is also needed to assess potential park uses and activities for the site.

C. Opportunities for Local Partnerships

In addition to trail benefits and challenges, workshop participants provided idea on various interest groups and stakeholders that should be included in future planning efforts (*see Figure 7 below*). As trail development advances, project coordinators should follow-up with these groups and organizations to identify specific needs and ways to collaborate on trail development tasks.

Figure 7. James River Branch Rail-Trail Community Workshop, July 28, 2009

Compiled by Sheila Sheppard, Partnership for Smarter Growth

Who needs to be involved in trail development?

Altria	City Manager	Sheriff
Dominion Power	City Council	GRTC
Dupont	Boy Scouts	Community developers
Richmond Outreach Center (ROC)	PTA / Schools	Sierra Club
McGuire Medical Center	School boards	Gardeners
Southside Plaza	Athletic League	Backyard Farmer
Churches, Southside Ministries	Richmond MORE	VA Master Naturalist Program
Virginia Commonwealth Univ	Local business, bike shop	Neighborhoods along the trail
CSX	Home Owner Associations	Friends of the trail
State Agencies (VDOT, DCR)		

The design team identified the following local partners that will be critical in implementing the trail concept, due to their location adjacent to or near the right-of-way. Additional work will be needed to discuss options for trail alignment, facility development, and ways to collaborate on trail corridor enhancements.

1. George Wythe High School: Opportunity to incorporate educational activities and youth service project; need to confer with school administration on trail design options adjacent to the school property.
2. Southside Plaza Shopping Center: Opportunity to discuss options for realignment of entrance drive; need to confer with plaza owners on opportunity for trail connection at back of property, including development of a community art wall and joint safety and security measures related to lighting and security cameras.
3. Maquire Medical Center: Opportunity to explore future partnership to promote health and wellness and support patient rehabilitation; topics include potential outreach events, funding options, and promotional materials related to wellness.
4. Greater Richmond Transit Corporation: Opportunity to discuss potential transit connection at road crossings and at the headquarters site, and security options for back of the headquarters building adjacent to the trail (i.e. lighting or security camera).

V. James River Branch Rail-Trail Concept – A Vision for Southside

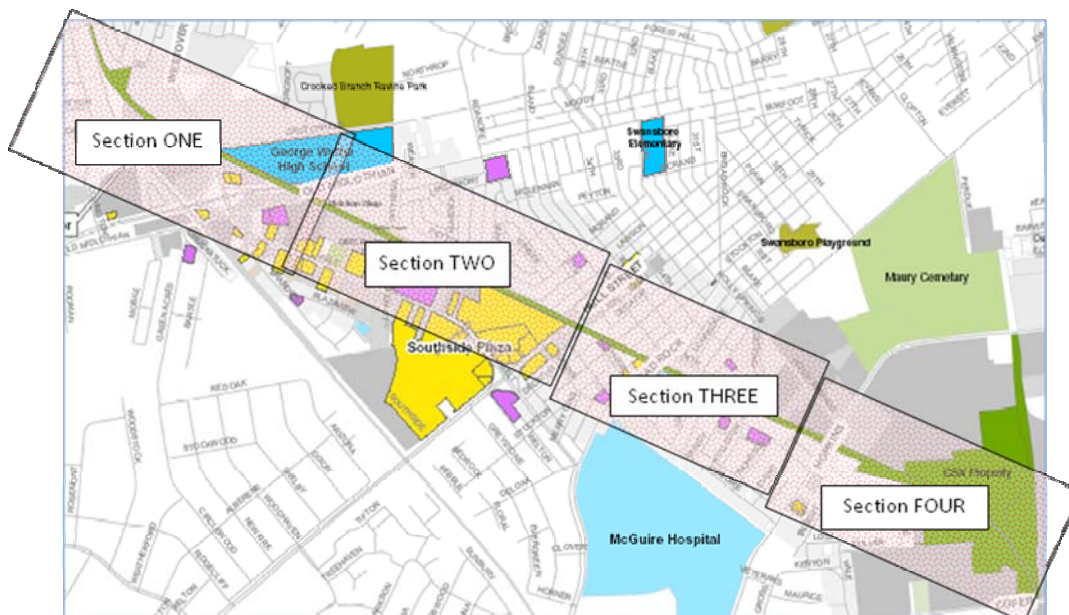
The following section was compiled to provide a better understanding of the existing conditions found on the corridor, as well as the opportunities the corridor provides for trail development. Included is a photo series of current corridor features, followed by a trail conceptual plan that illustrates the vision of a rail-trail along the James River Branch right-of-way.

The concepts were developed to illustrate potential uses for the trail corridor, and highlight areas of strength and areas of conflict which will need to be addressed in later stages of design. It is intended that the concepts serve as a starting point for future conversations and inspire community members and local government officials to work collaboratively to advance the trail design process.

A. Existing Conditions: Photo Assessment

This section includes a series of photos that highlight important features and conditions of the corridor, providing a virtual tour of the right-of-way. The photo tour has been organized into four segments or zones as shown below:

- Section 1: Reedy Creek/Westover Hills Blvd (western terminus) to GRTC Property
- Section 2: GRTC Property to Hull Street
- Section 3: Hull Street to Hopkins Road Bridge
- Section 4: Hopkins Road Bridge to Cofer Street (eastern terminus)



Section 1: Reedy Creek/Westover Hills Blvd (western terminus) to GRTC Property



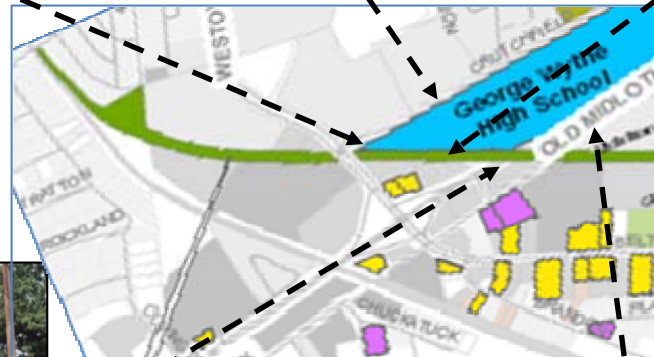
Site of JRB-Reedy Creek Trailhead
(western terminus)



George Wythe High School



JRB right-of-way adjacent to the
High School



Section 1



Typical corridor condition, west of
Midlothian Turnpike



Midlothian Turnpike at JRB crossing
(looking west)



Apartments adjacent to JRB right-of-way

Section 2: GRTC Property to Hull Street



Hull Street (looking north)



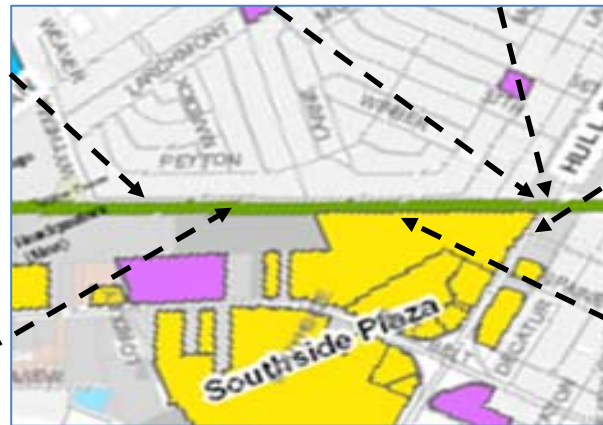
JRB right-of-way at Hull Street



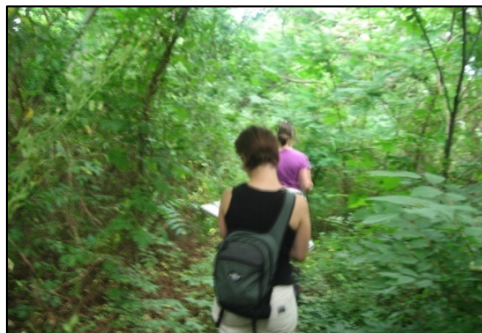
Southside Plaza entrance and Hull Street (looking south)



Gravel alley parallels the right-of-way, Wythemar to Lawson



Section 2



Typical corridor condition, between Midlothian Tnpk and Hull Street



Back of Southside Plaza, adjacent to JRB right-of-way

Section 3: Hull Street to Hopkins Road Overpass



Transit stop on Broad Rock, adjacent to the JRB right-of-way



Apartments adjacent to the JRB right-of-way, east of Broad Rock



JRB right-of-way crossing at Broad Rock (looking east)



Section 3



Forested section of JRB right-of-way, just east of Broad Rock



JRB right-of-way, west of Broad Rock



Forested section of JRB right-of-way between Broad Rock and Hopkins

Section 4: Hopkins Road Overpass to Cofer Street (eastern terminus)



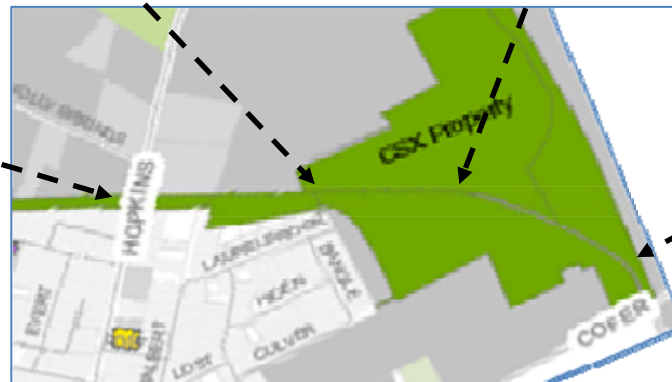
Rail siding to industrial site, east of Hopkins Road Overpass



JRB right-of-way, single track through 26 acres forested parcel



Hopkins Road overpass



Section 4



JRB right-of-way merges with active double track rail line at Cofer Road

B. James River Branch Rail-Trail Concept Plan

In order to more clearly articulate the vision of the JRB rail-trail, a conceptual plan was developed, utilizing pro bono landscape architect design services. The conceptual drawings are a compilation of the comments and ideas received from community members, local officials, and trail design experts. The following trail design elements served as a foundation for development of the concepts.

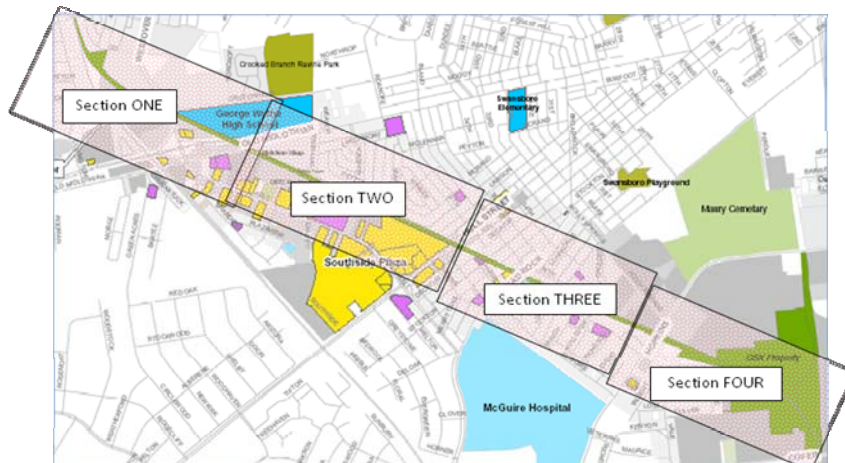
The trail will...

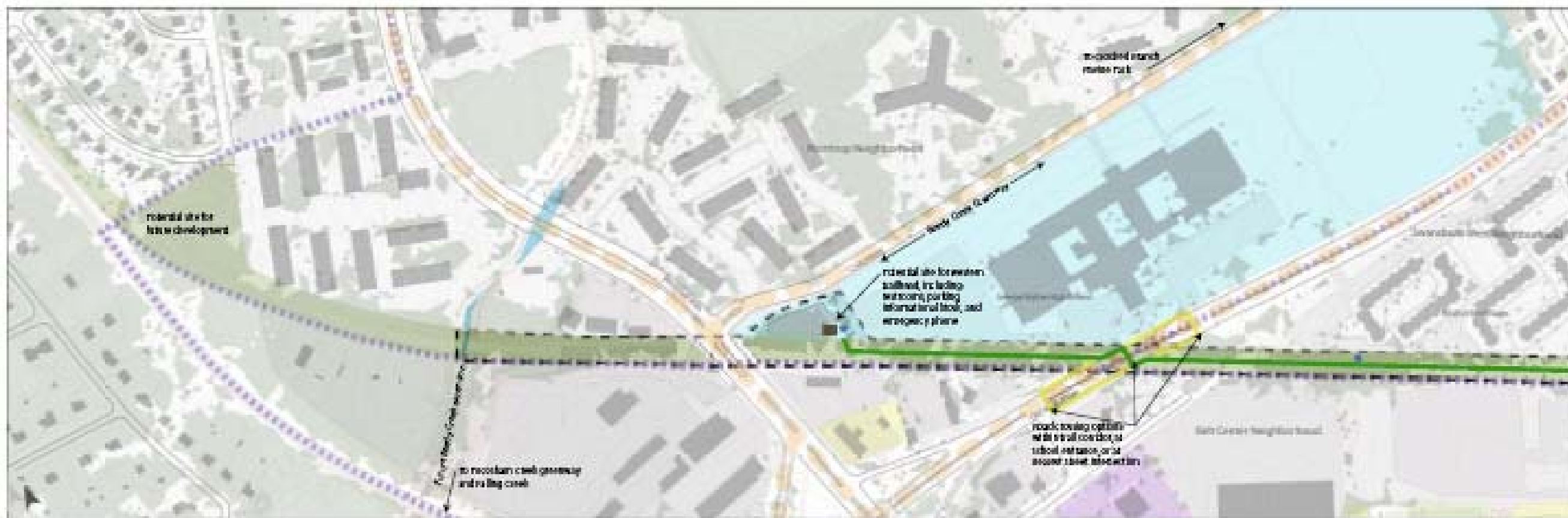
1. be designed as a non-motorized, multi-use facility, 10' wide with 2' shoulders
2. utilize a crusher run trail surface (limestone or other) that is ADA-compliant, providing a compacted, stable, surface for use by strollers and wheelchairs
3. incorporate design elements to address safety, such as trimming back vegetation to improve sight lines, use of lighting at strategic locations, and emergency call boxes
4. allow for improved connections to existing or potential transit stops
5. facilitate movement for trail users as well as local residents moving across the trail and/or roadways between adjacent parcels.
6. incorporate opportunities for community gardens and mural/art wall
7. be designed in a manner that improves safety at road crossings for both pedestrians/bikers and motorists
8. highlight local railroad history and the role of the James River Branch in commerce and the growth of Southside
9. allow for partnerships with George Wythe HS and other local schools to support outdoor classroom activities and service-learning projects

The following concept plan shows a trail head at each end of the right-of-way, with rest facilities, benches, parking areas, water fountains, and informational kiosks. Along the trail corridor, the plan indicates recommended locations for emergency phones, community gardens, intentional trail access points, and road crossings.

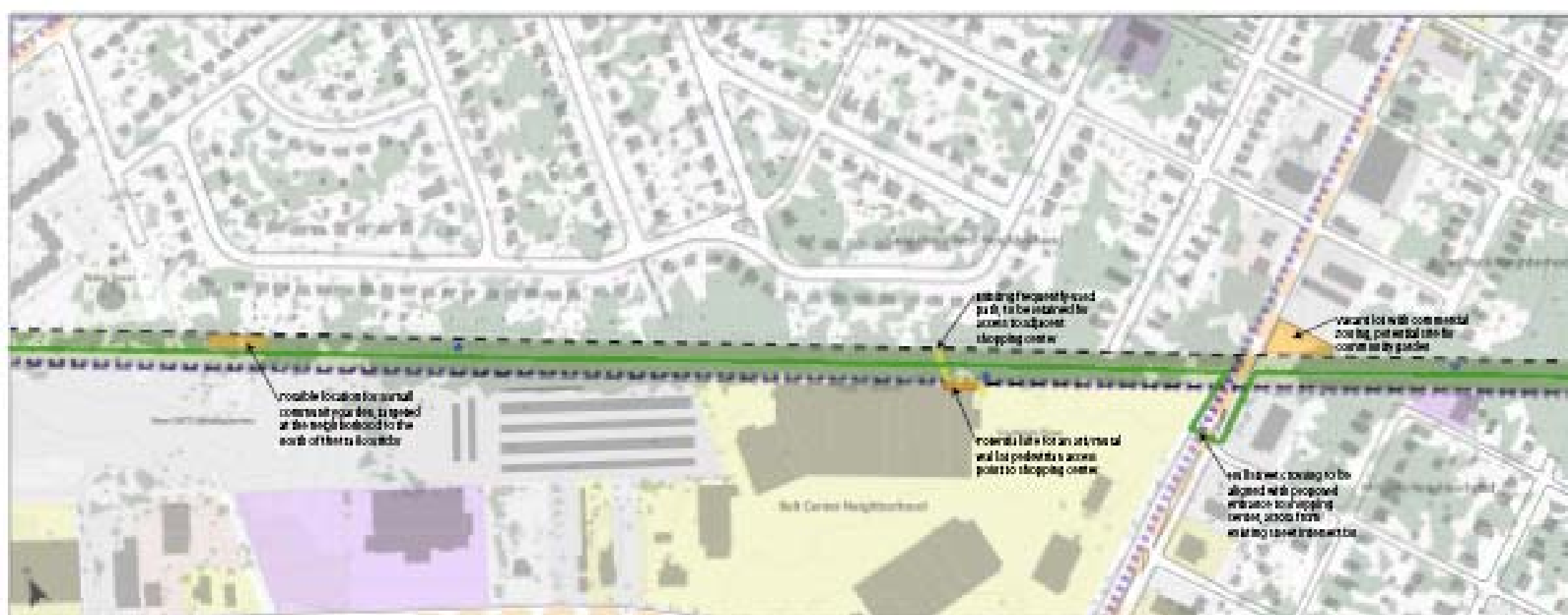
Lighting features are not shown on the trail. Based on feedback from city staff, it is recommended that trail operating hours be dawn to dusk, although it is recognized that commuters may need to use the trail after hours. Potential exceptions to the current park policy will be resolved during the trail master planning stage.

The trail concepts are arranged on the following pages, using the same format as the photo tour:





Section ONE of FOUR



James River Branch Rail Trail
Concept Plan
City of Richmond, Virginia
December 2009

Section TWO of FOUR



Section THREE of FOUR



Section FOUR of FOUR

VI. Implementation – From Concept to Reality

The following section provides information on how to move the vision of the James River Branch Rail-Trail from concept to reality. Five topics will be covered:

- Corridor Acquisition
- Trail Funding and Development Strategy
- Project Implementation: Design, Engineering, Construction
- Trail Operations, Neighborhood Outreach, and Programming
- City-wide Planning and Coordination

A. Corridor Acquisition

Although the City has initiated talks with CSX, and there has been progress in securing funds for a trailhead facility at the Reedy Creek Greenway and James River Branch trail intersection, the JRB right-of-way has not yet been secured for public use. This is one of the critical first tasks to trail development. There are several legal instruments that may be used to transfer ownership or interest in property. The legal instrument may be temporary and have specific termination clauses, as with a lease or access agreement, or permanent rights to the land may be conveyed through a conservation easements or fee simple title.

Evaluation of options and conditions of transfer will involve negotiation between CSX, their attorneys, City leaders and their attorneys, and other officials in City government such as the departments of finance, real estate, and parks and recreation. Below is a summary of the seven recommended steps in the acquisition process. Should the City decide to pursue acquisition, the Trust for Public Land, which has extensive experience in negotiating land purchases, has offered to provide consultation assistance.

Phase A. Project Start-Up.

1. Define the Real Estate to be Purchased.

A legal description of property under consideration needs to be prepared. What rights in the trail corridor does CSX own? Are there any encroachments that will impact the vision for the project? Does the project just include the rail corridor, or should it include the small triangle on the northwest end of corridor? Should it also include the 26-acre forested tract at the southeast end that CSX has suggested could be included? TPL has offered to gather information from CSX and then consult with appropriate city staff and together inspect on the ground.

2. Elected Leaders Agree to Endorse the Project.

City Councilman, Doug Connor, requests formal support from Mayor, provides concept and summary of key benefits. Mayor and Councilman Conner agree to work together to seek funding in future budgets years and to seek outside funding, donations, and in-kind contributions to supplement city resources.

Phase B. Project Development

3. Mayor Directs his Staff to Proceed with the Project.

The Mayor assigns a project manager and determines the appropriate City staff that should be on the "project team," which may include the departments of real estate, parks and recreation, public works, planning, and possibly economic development.

4. Team Meets to Determine the Total Scope of the Project.

A project scope is prepared that includes a phasing plan, roles and responsibilities, and cost estimates for each phase. Basic trail development and management issues will be resolved

such as: Who will serve as chief negotiator for acquisition? Who will design and construct the trail and improvements? Who will own and manage the corridor?

5. Brainstorm Possible Sources of Funding Using Cost Figures.

The City's project team will then sketch out a likely funding package and get support of elected officials to include funding in future budget years, and to support future requests for outside funding (such as foundation grants, federal/state program funds, corporate donations, etc.).

Phase C. Securing Site Control

6. Proceed with securing site control from CSX. TPL has offered to negotiate an option or purchase agreement with CSX that includes a long-term timeline with a process for determining the purchase price. TPL would then work with the city real estate department and CSX to choose an appraiser and TPL would fund the appraisal and provide it to the City.

7. Make an Offer Based on the Appraisal.

The City makes an offer, and if accepted by CSX, would proceed with securing the funding, completing property due diligence requirements, close on the transaction, and design and build the trail.

Information on acquisition process provided by: Lynda Frost, Project Manager, Chesapeake & Central Appalachians Field Office, Trust for Public Land, 660 Pennsylvania, S.E., Suite 401, Washington, DC 20003. Lynda.Frost@tpl.org

B. Trail Funding and Development Strategy

Securing the funds needed for each phase of trail development from acquisition, planning and design, through engineering and construction, to long term maintenance and operation is an on-going and time consuming task. A diversified funding approach is needed that matches up various types of public and private funding sources as well as technical resources and volunteers to accomplish the various project tasks. Researchers and grant writers are needed to apply for federal and state grant programs. Trail development ambassadors are needed to conduct outreach to corporate funders, community foundations, civic organizations and other potential sponsors that could provide money, donated materials, or in-kind services to assist with project implementation.

A detailed funding strategy or business plan should be developed by the City's project team that outlines the specific approach to be taken to secure the funds needed for each phase of trail development. The strategy should be a dynamic document that evolves and grows as new relationships are forged and networks expand. The following section was compiled to help the City and JRB trail advocates get started in the development of a trail funding strategy.

1. Public Sources of Funding

Beginning in 1991, the federal government began to provide funds for bike and pedestrian facilities through a series of transportation appropriation bills. The initial bill referred to as the Intermodal Surface Transportation Efficiency Act (ISTEA) was enacted in 1991. The bill was reauthorized twice: in 1998 as the Transportation Equity Act for the Twenty First Century (TEA-21), and again in 2005, as the Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). These bills have funded programs such as Transportation Enhancements, the Recreational Trails Program, and Safe Routes to School. *(Additional information on federal and state sources of funding can be found in Appendix A.)*

It is important to note that the SAFETEA-LU authorization expired on December 18, 2009. Both the House and Senate have passed extensions of SAFETEA-LU, but the situation is still very fluid, and Congress will have to reauthorize this law to ensure a continued source of transportation funds for bike-ped facility development. Trail advocates and the City will want to follow Congressional action carefully to remain up-to-date on potential funding in 2010 and future years.

The National Transportation Enhancement Clearinghouse (www.enhancements.org) has an extensive website, with information and links to national funding sources for bicycling, walking, and trail facilities. Additional information on funding can be found in the Virginia Outdoors Plan (http://www.dcr.virginia.gov/recreational_planning/vop.shtml), and the Federal Government Grants website (www.grants.gov).

2. Private Sector Sources and Foundations

In recent years, the private sector has shown a growing interest in trail projects, as employers recognize that creating places to bike and walk is one way to build community and attract a quality work force. The City should work with local trail advocates to identify potential Richmond-based corporations that may be interested in supporting the James River Branch project. The next step would be to become familiar with their corporate mission and philosophy, and determine the feasibility of financial or in-kind support for the trail. This has been a successful strategy in raising funds for the Virginia Capital Trail.

In addition, a wide range of foundations have provided funding for bicycling and walking. Some are national organizations, but most are regional or local foundations, with an emphasis in supporting close-by community-based projects. The best way to find such foundations is through the research and information services provided by the Foundation Center (www.foundationcenter.org). The Center maintains an extensive store of information including the guidelines and application procedures for most foundations, and their past funding records. *(also refer to Appendix B, Corporate and Foundation Grants, compiled with the assistance of Virginia DCR).*

3. Non-Profit Resources and Technical Assistance

Several national non-profits provide assistance in trail and greenway development. Services include technical assistance, research, advocacy tools, grants, and other resources to assist local trail and greenway development. The list below identifies national non-profit organizations that may be able to assist with development of the James River Branch Rail-Trail.

Rails-to-Trails Conservancy (RTC) www.railstotrails.org

The Trust for Public Land (TPL) www.tpl.org

The Conservation Fund (TCF) www.conservationfund.org

American Hiking Society (AHS) www.americanhiking.org

(Additional information on these organizations and the services they provide, can be found in Appendix C.)

4. Volunteers

Friends Groups /James River Branch Rail Trail Citizen Committee

Volunteers can provide valuable services, assisting trail managers with trail maintenance and operation tasks. "Adopt-a-Trail Programs" and/or "Friends Groups" could conduct trail clean-ups, routine maintenance, landscaping, and development of trail amenities. Trail patrols can be organized to serve as ambassadors to the trail, providing information and support to trail visitors, as well as keeping an eye on the trail to support security efforts. Volunteers can also be utilized in outreach and fundraising events and activities to build partnerships and community support.

The JRB trail could utilize and build upon the volunteer programs already established by the City Parks and Recreation Department to maintain and enhance park facilities. In addition, groups like the Richmond Parks and Recreation Foundation, Sierra Club, and the Partnership for Smarter Growth have expressed interest in collaborating on trail development tasks.

The newly formed James River Branch Rail-Trail Citizens Committee could also play a central role, especially in community outreach and advocacy activities. Scouts, church groups, civic organizations, and corporations are often looking for a community service project. The JRB Citizens Committee could serve as a forum for distributing information and leveraging resources to support these efforts.

Service and Conservation Corps

Like the original Civilian Conservation Corps established more than 75 years ago by President Roosevelt, Service and Conservation Corps engage young men and women today in community service projects. Corp members earn a small stipend for living expenses, and learn important high-quality job skills to improve marketability once they enter the work force.

The National Association of Service and Conservation Corps (NASCC), also known as *The Corps Network*, is an association of Service and Conservation Corps located in the United States. Formed in 1985, the Corp Network serves as a clearinghouse for information on Corps services and activities. Currently operating in 44 states and Washington D.C., Corps annually enroll more than 29,000 young men and women, who mobilize approximately 227,000 community volunteers, generating 21.3 million hours of service every year. *(Additional information provided in Appendix C. or on-line at www.corpsnetwork.org.)*

Virginia Master Naturalist Program is sponsored by the VA Department of Forestry in partnership with other state agencies and VA Tech Extension, the program "... is a statewide

Ways to Reduce Trail Construction Costs

1. Seek donated materials from suppliers in exchange for recognition.
2. Use recycled or surplus materials from contractors in the area.
3. Use waste materials, such as wood chips, fly ash, and demolition debris.
4. Well organized volunteers can provide labor for some tasks.
5. Involve scout and other youth groups.
6. Community service ordered by the courts may be applicable to a trail project.
7. Contractors may donate equipment and expertise.
8. Inmate labor from area correctional units.
9. Youth Conservation Corps.

From: 1999 Virginia Trail Toolbox, Virginia Department of Conservation and Recreation, page 4-5.

corps of volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities." After the right-of-way has been secured, further discussions should be undertaken with VMNP to explore options for research projects. Potential projects could include: conducting a tree canopy survey, compiling an inventory of plant species, and/or water quality testing of small streams along the corridor and on the forested tract. Partnerships with educators should also be explored, as well as the possible use of the large forested parcel for an outdoor classroom. (Addition information provided in Appendix C. or visit: www.virginiamasternaturalist.org)

C. Project Implementation: Design, Engineering, Construction

Once the right-of-way has been acquired and funding secured, the process of designing and constructing the trail can proceed. The following section highlights the four primary stages: updating of the city's comprehensive plan; development of the trail master plan; completion of trail construction drawings and specs; and actual construction of the trail.

1. Inclusion of James River Branch Rail-Trail in City of Richmond Master Plan

The Code of Virginia, § 15.2-2223, requires that each jurisdiction in Virginia adopt a local comprehensive plan for the purpose of guiding future development in a manner that *"best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants."* Section 15 of the Code further states that comprehensive plans for urban areas shall incorporate principles of new urbanism and traditional neighborhood development, which may include *"pedestrian-friendly road design, connectivity of road and pedestrian networks, and preservation of natural areas."*

The City of Richmond Master Plan is the instrument that ensures compliance with this Code. It is important that the James River Branch Rail-Trail be officially recognized in the City's master plan so that trail development is coordinated with the various city plans and policies (i.e. land use, transportation, public facilities, parks and recreation), and considered in the city's future land use and public facility development decisions.

2. Development of Trail Master Plan

A detailed trail master plan is needed to identify site-specific conditions and outline needed improvements. The trail master plan will build upon the information compiled for the concept plan, as well as property research conducted during the acquisition phase. Site-specific conditions included in the trail master plan include: physical features, historical, cultural and scenic resources, and the environmental conditions of the corridor including an assessment of any hazardous and/or residual waste on the property. The trail master plan also identifies all physical improvements and amenities for each segment of the trail, as well as cost estimates, an implementation timetable (phasing plan), and the entity responsible for each tasks.

3. Completion of Construction Plans and Specifications

Based on the trail master plan's list of recommended improvements and accompanying cost estimates, drawings can be prepared that show the length, width, and elevations of the trail and the specific locations, sizes, and type of materials needed for construction. These detailed drawings and specifications are distributed to interested general contractors for competitive bidding. Construction permits will be required before building significant elements such as parking area, entrance driveways, drainage structures, and possibly signs and the trail itself. The property owner is responsible for securing any needed permit, managing the bid process, hiring the contractor, and overseeing the work.

4. Trail Construction, Oversight, and Inspection

Once the construction documents are approved and permits have been secured, the actual trail construction can begin. Tasks include clearing of trees, brush, and rocks, establishing the trail foundation and basic trail tread, and installing any culverts and/or surface water control structures. An individual familiar with the intent and specifics of the project should provide quality control over the final product. Tasks include observing the work of contractors on a frequent and regular schedule. Deviations from the plans and specifications should be brought to the attention of the general contractor.

D. Trail Operations, Neighborhood Outreach and Programming

Prior to opening the trail for public use, a management and operations plan should be developed that outlines how the trail will be maintained and operated. Topics should include: trail and facility maintenance, emergency response protocols, security patrols, refuse removal, promotional activities, educational programs, volunteer management, and administrative tasks. The management plan should be detailed enough to prepare an annual operating budget.

Cooperative agreements could be established with friends groups or other volunteer organizations to assist with activities such as clean-ups, landscape maintenance, trail patrols, and upkeep of trail amenities such as benches and signage. The agreements should include a description of work to be accomplished, frequency of tasks, entities responsible, and reporting procedures. In addition, friends groups like the James River Branch Rail-Trail Citizen Committee could assist with neighborhood outreach and programming.

E. Citywide Trail and Greenway Planning and Coordination

The James River Branch project provides an excellent case study in trail development, but in order to realize the benefits of an interconnected system of trails and greenways throughout the city, a broader, more comprehensive approach is needed. Four specific actions are recommended that would complement existing work:

1. Appoint a Trail Program Manager

Create a full-time City of Richmond Trails Program Manager position. The Trail Program Manager would be the point of contact for development of a trail and greenway system throughout Richmond and responsible for all aspects of project planning and administration including: corridor right-of-way acquisition, funding, coordination with private, public, and non-profit partners, planning, design, construction and operations, and organizing friends groups.

In spite of the extensive policy guidance provided through state, region, and local plans and policy, successful implementation of trail projects requires strong local coordination, and a focused and consistent management approach. The Trail Program Manager would perform the local coordination and oversight function, necessary to ensure bicycle and pedestrian accommodations are included in road projects, and that off-road trail systems are incorporated into city recreation and land use plans. A local coordinator is also needed to ensure adequate maintenance and operation of existing segments, and assist in the development and management of volunteers and trail stewardship organizations.

2. Develop a Trail and Greenway Master Plan

A citywide trail and greenway master plan should be completed, in order to ensure a cohesive and inter-connected system that is effective and efficient in linking people and places throughout the Richmond region. The Trail Manager could oversee plan development in collaboration with local stakeholder groups, citizens, and adjacent jurisdictions.

The Trails and Greenway Master Plan could complement land use, transportation, economic development and sustainability plans and initiatives. The process could include: research, compilation, and analyzes of base line data; mapping of existing trail and greenway segments; and identification of potential new connections within the context of the larger environment. The master plan would build on existing plans and policies and focus on prioritizing current and future needs. This task would be an important follow-up step to support implementation of the City Council's Resolution of Support for Trails and Greenways.

The Richmond Greenways and Trails Master Plan should be developed utilizing an interdisciplinary approach that utilizes the various professions involved in greenway and trail planning. There are resources within the City to accomplish this task. The Department of Parks and Recreation and the Department of Planning could work jointly to lead the effort. A technical advisory team could be established with representatives from various City agencies. Consultation with planning staff from adjacent counties would foster regional connections and ensure cohesiveness in plan design.

3. Develop a Tracking System to Monitor Progress

A GIS-based Trail and Greenway Network Map and Analysis System should be developed to allow for the comprehensive assessment of network segments and their relationship to other City features and programs, and to serve as a tracking system to monitor progress. The City Planning Department already utilizes a GIS-based system during the land development review process to track potential park and open space opportunities. In addition, a vacant lands inventory is being conducted as a component of the City's Green Infrastructure Assessment. These efforts could be expanded and integrated to more comprehensively address future trail and greenway development needs.

In addition, a GIS-based mapping and support system could serve as an analytical tool to assess and rank greenway alternatives, assist with trail routing, and prioritize project opportunities as the trail network develops. As projects are completed and segments of the system are opened, the City should showcase successes and share information with surrounding counties to serve as a catalyst for additional regional planning and implementation. The Richmond Regional PDC may be able to provide GIS mapping support, data, and/or expertise, to supplement City staff resources.

4. Establish a Mechanism for On-going Community Involvement

The Trail Program Manager should be tasked with providing adequate and reliable communication between city government and all private, public and non-profit stakeholders and interested citizens to keep them apprised of trail and greenway projects and activities. The Trail Program Manager should be responsible for developing a comprehensive outreach strategy, coordinating the development of local "friends groups," and maintaining and administering tools such as e-news, webinars, list serves, or other mechanisms to support communication, fundraising, and capacity building.

To assist the Trail Program Manager in accomplishing the above tasks, consideration should be given to the establishment of a Citizens Advisory Committee or Trails Council. The committee would serve as a vehicle for the city to work collaboratively with citizens and organizations already involved in trail projects. The city could serve as leader, providing a venue for information sharing across borders, education, and citizen involvement, linking local project needs with available volunteers.

VII. Conclusion

At Councilman Conner's community meetings held in July and October 2009, citizens of Southside Richmond were asked what they viewed as primary benefits of developing the James River Branch Rail-Trail. The most commonly stated interest was the development of a system of connected routes that would allow users to move more easily throughout the larger community by foot, bike, and wheelchair, and accommodate use of strollers. The James River Branch Rail-Trail serves as a demonstration project towards meeting that need.

The James River Branch Rail-Trail Concept Plan provides a vision for the development of a trail facility in Southside Richmond that advances the goals of connectivity, healthy recreation, and cost-effective transportation options. Conversion of the CSX property to a rail-trail could also serve as a catalyst for revitalization, community pride, and youth involvement. The concept plan documents community needs, highlights challenges to trail development, and provides suggestions, resources, and contacts to resolve trail development issues.

In addition, the JRB could serve as a link in a broader regional trails and greenways system that extends the benefits of trail and greenways to sites throughout the City, connecting activity hubs such as neighborhoods, shopping centers, schools, community parks, transit stops, and community common areas. Smaller parks and trail segments like the JRB could be connected with major City corridors such as Reedy Creek-Forest Hill Park-James River Park System, and regional facilities like the Richmond waterfront and Virginia Capital Trail. At the inter-state scale, the Richmond trails network could become a component in the East Coast Greenway, hosting cyclists travelling the 2000 mile route under development between Maine and Florida.

The project team is hopeful that this conceptual plan will provide a foundation for future planning, outreach, and fundraising efforts, and serve as a useful tool for elected leaders, staff, citizens, and their numerous public and private partners. This plan represents a compilation of the work completed to-date, but it is only a first step. Further action will be needed to advance the vision of the James River Branch Rail-Trail and realize the benefits of an on-the-ground trail in Southside Richmond.

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