

**BOARD OF SUPERVISORS
BUSINESS MEETING
BOARD MEMBER INITIATIVE**

SUBJECT: Creation of Countywide Linear Parks and Trails System

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the Pleasure of the Board

STAFF CONTACTS: Bo Machayo, Chief of Staff, Chair At-Large
Randall
Dorri O'Brien, Chief of Staff, Vice Chairman
Buona

PURPOSE: To direct the Parks, Recreation and Open Space Board to develop a detailed implementation plan for a Countywide network of public trails and linear parks.

RECOMMENDATION: Chair Randall and Vice Chair Buona recommend approval of this item.

BACKGROUND: Loudoun County residents, in various surveys and other forms of public input have indicated a very strong desire for more passive parks, trails and recreational facilities. However, capital constraints and high land prices have made fulfillment of this goal difficult. The County's inventory of public parkland and accessible trails falls far short of County standards the levels achieved by other communities.

Loudoun is rich in natural and historic features including attractive stream and other natural and historic corridors that reach most parts of the County. These stream corridors are important natural habitats and provide important water management services. Those corridors, especially the stream flood plains, which are generally not developable land, could be the foundation for an affordable, interconnected and widely accessible system of linear parks and trails reaching all parts of Loudoun County.

Building this network over time through the proffer of new trails and protected natural corridors as part of development projects and collaborating with private landowners of existing private trails and appropriate corridor areas, all guided by an overall plan, can create a major asset of enormous benefit to the entire community. A large scale system of

trails and parks will, according to the experience of other communities, raise property values, improve health and quality of life, attract business investment, improve security, increase regard and protection for natural areas and preserve critical natural drinking water and storm management systems. And, designed properly, it can even provide alternative transportation access for many residents traveling to work or for other purposes. It is anticipated that the Parks, Recreation, and Open Space Board would participate in an extensive community engagement process that would be the start of the public/private partnership to see this initiative become reality in the form of an interconnected network of accessible linear parks and trails.

ISSUES: Development of such a complex and extensive network will require:

- Exploring and building consensus on the desirability, features and details of the network in each local community
- Integrating the local concepts into a unified Countywide system
- Developing approaches to collaborate with existing private landowners and HOA land and trails.
- Addressing an array of environmental and other regulations covering projects in floodplains and stream corridors
- Ensuring that wildlife habitat, water quality, flood control, wetlands and other natural benefits of the stream corridors are preserved and enhanced
- Developing a financing plan for building and maintaining the large network
- Addressing the liability and ongoing maintenance issues, especially for private and HOA owned sections
- Phasing the program over time to ease financing, construction and access impacts
- Developing a management approach for overseeing such a large and complex undertaking

It is proposed that the Parks, Recreation and Open Space Board work with County staff and external groups to organize and work out the details of this undertaking:

1. Carry out public and community discussions on the proposed network leading to widespread agreement on its design and characteristics
2. Build a coalition of private and public interests in support of the network design and prepared to provide tangible support in its implementation
3. Show how such a network of shared linear parks can build a true countywide community that brings the county's diverse residents together and feel proud of what they have built and use.

4. Develop a detailed plan describing the features of the desired network, the program and techniques for building it, the management approach to the project, the timetable and the financing plan for implementation - for potential Board of Supervisors action.

FISCAL IMPACT: There is no anticipated fiscal impact of this request for the Parks, Recreation, and Open Space Board to include this effort in their work program, existing staff resources will assist with the effort. The implementation recommendations will be evaluated for future fiscal cost once the findings of the Parks, Recreation, and Open Space Board are developed.

DRAFT MOTION:

1. I move the Board of Supervisors direct the Parks, Recreation, and Open Space Board to conduct the tasks needed to develop a detailed implementation plan for an interconnected, countywide linear park and trail system and to report back their findings and plan of action no later than June 4, 2019.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. Emerald Ribbons Countywide Parks and Trails Network – White Paper Draft 11.2018
2. Loudoun’s Emerald Ribbons FAQs

EMERALD RIBBONS

OVERVIEW

Loudoun County residents have indicated a very strong desire for more passive linear parks and trails as evidenced in various surveys, forums and other forms of public input. However, capital constraints, high land prices and other priorities have made fulfillment of this goal difficult. The County's inventory of public parkland and accessible trails falls far short of County standards and far short of the levels achieved by other communities.

Loudoun is rich in natural landscapes, stream corridors, agricultural land and historic features that reach most parts of the County. Stream corridors, including floodplains, provide important ecosystem services such as natural habitats, flood management and drinking water protection. They are generally not developable land and could be the foundation of an affordable, interconnected and widely accessible system of linear parks and trails throughout Loudoun County.

WHAT

- A county-wide, multi-use, natural surface trail system located along stream and other nature corridors encompassing currently existing parks, trails, bike routes and mass transportation nodes.
- Natural areas for residents to exercise, walk, jog, hike, cycle, mountain bike, nature-watch, and horseback ride
- Safe, alternative, non-motorized transportation routes to destinations such as places of employment, education facilities, commercial establishments, and recreation locations
- Protected natural areas that are not suitable for development and contribute to the County's water and air quality, wildlife habitat, and natural scenery.

WHERE

A shared network of greenways throughout Loudoun County. (See Map on page 8:)

WHY

1. **Loudoun County residents expressed strong desire for more trails and natural areas to use for recreational activities, school and work trips and improving health and well-being.**
 - Open spaces and nature corridors are rapidly disappearing in Loudoun due to increased and rapid development.
 - The wonder of nature and trees can produce mental, emotional, and physical health benefits. Research has shown that time in natural environments lowers blood pressure, pulse rate, and cortisol level, improves mood and may even boost our immunity to cancer and other diseases.
 - The creation and development of this county-wide Emerald Ribbons network would bring the County together as one community. Various groups (HOA's, Non-profits, and County Government) would work together to define the type of routes and facilities that would be needed in each Supervisor's District to allow more social interaction and build out a social infrastructure, as opposed to just more roads and more housing.
 - The first Envision Loudoun public input session on rewriting the County's Comprehensive Plan had 962 comments mentioning the environment. The most mentioned of these comments called for more trails, bike paths and parks. Our residents want to bike, hike, watch nature, dog walk, run, jog,

train, share the environment with their children, and otherwise just get out in the outdoors and destress from their daily lives.

- Loudoun comprises 521 square miles, yet only 1.6% of this is public parkland. Loudoun has only 87 miles of hiking trails, which does not meet County standard of 0.65 miles/1000 population or ~226 miles for our current population of 400,000. Loudoun has tremendous assets, but little or no access to these assets.

2. Parks and Trails come with a multitude of community benefits:

- Increased economic development:

- o Large companies seek areas with parks and trails:
 - Ruby Tuesday CEO located their corporate headquarters along the Maryville-Alcoa Greenway in Tennessee in part because it, “...*provided a sense of community to this area, as well as the many benefits it provides to our more than 300 employees.*”
 - “The greenways are increasingly recognized as an important regional amenity, supporting redevelopment opportunities, attracting new businesses, aiding in employee and student recruitment, while encouraging housing construction, festivals, outfitters and tourism growth.” (Source: 2018 Roanoke Valley Greenway Plan)

- Increased property value

- o Properties within ¼ mile of the Radnor Trail in PA were valued at almost \$70,000 more than properties farther away. Listings in this community frequently mention trail access as an amenity. (Source: *The Economic Benefits of Land Conservation*, TPL, 2007)

- Increased safety on corridors

- o Chief Charles Tennant on Youghiogheny River Trail in PA: “...*the trail has not caused any increase in the amount of crimes reported...We have found that the trail brings in so many people that it has actually led to a decrease in problems we formally encountered such as underage drinking...*”

- Improved physical and mental health and wellness

- o Rates of obesity and diabetes are significantly lower in highly walkable neighborhoods. (Source: May, 2016 *JAMA* Vol 315, Number 20)

- Increased tourism economic impact

- o Three Rivers Heritage Trail 2014 User Survey and Economic Impact Analysis found that in 2014 this Pittsburgh trail received roughly 622,873 visits resulting in an economic impact of \$8,286,026. 75.5% of users were city residents, 15.5% lived in the county outside of Pittsburgh and 9% came from further away. (Source: <https://conservationtools.org/guides/97-economic-benefits-of-trails>)

- Protection of natural and historical resources

- o “Protecting environmental corridors through establishing and managing greenways represents one method (to be used in conjunction with other approaches) to safeguard vital ecological processes.” – Jonathan M. Labaree, Author of *How Greenways Work, A Handbook on Ecology*

- Connection to the natural world and an support for conservation

- o “Appalachian Trail visionary, Benton MacKaye, had the desire that Trail would offer an experience that joined humans and nature. Today, the A.T. connects rural communities and working farms and forest; squeezes through rapidly developing regions; and provides the

foundation for world-class outdoor recreation and tourism opportunities.” (Source: <https://appalachiantrail.org/home/conservation/landscape-protection>)

WHO

Community members, local government, private, and non-profit support and partnerships are all critical to the long-term success of Emerald Ribbons. A private-public partnership approach would ensure County financial support as well as private funding for the development of a long term plan (20 years) to implement these Ribbons throughout the County.

It is envisioned that a core team of designated county staff and grant-funded, non-profit organization staff would shepherd the process forward. This core team would then work with various county public and private organizations to build strong community support for the concept. Such organizations may include:

- **Park authority staff** from the various jurisdictions within county borders including the National Park Service (NPS), State Parks of VA (DCR), Northern Virginia Regional Park Authority (NOVA Parks) and Loudoun County Parks, Recreation and Community Services (PRCS).
- **Trails Organizations:** Bike Loudoun, Potomac Heritage Trail Association, Loudoun Equine Alliance
- **Non-profits that are focused on the natural environments:** Piedmont Environmental Council (PEC), Loudoun Wildlife Conservancy, Friends of Banshee Reeks, Banshee Reeks Chapter of the Archeological Society of Virginia, Blue Ridge Center for Environmental Stewardship, Blue Ridge Mountain Civic Association, Friends of Bluemont, Friends of Claude Moore Park, Friends of the Blue Ridge Mountains, Goose Creek Association, Loudoun Watershed Watch, Piedmont Chapter, Virginia Native Plant Society, Sustainable Loudoun, Catoclin Creek Scenic River Advisory Committee, Goose Creek Scenic River Advisory Committee, Land Trust of Virginia, 350 Loudoun, Leesburg Garden Club, Loudoun Committee for a Sustainable Society, Catoclin Coalition
- **National, Regional, State and Community Foundations and Corporations.** Various funding sources that could help us move this project forward include: State and Federal Grants via DOT and DCR, Nature Conservancy, Loudoun Community Foundation, National Park Service (FLAP Grants), etc.
- **Organizations focused on heritage and historical assets:** Aldie Heritage Association, George C. Marshall Center at Dodona Manor, Goose Creek Historic District, Lincoln Community League, Lincoln Preservation Foundation, Loudoun Archaeological Foundation, Friends of the Mt. Zion Cemetery, Loudoun County Civil War Round Table, Loudoun Heritage Consortium, Loudoun Heritage Farm Museum, Loudoun Preservation Society, Lovettsville Historical Society, Mosby Heritage Area Association, Oatlands Historic House & Gardens, Citizens Committee for the Cavalry Battles of Aldie, Middleburg, and Upperville, Save Old Sterling, Save Rural Loudoun, Short Hill Historical Society, Snickersville Turnpike Association,

Sterling Historical and Heritage Preservation Committee, Unison Preservation Society, Waterford Citizens Association, Waterford Foundation, Save Rural Loudoun, Short Hill Historical Society, Snickersville Turnpike Association, Sterling Historical and Heritage Preservation Committee, Unison Preservation Society, Waterford Citizens Association, Waterford Foundation, Purcellville Historical Society, Journey Through Hallowed Ground

- **Individual volunteers and residents.**

WHEN

This multi-year effort, consistent with the County's 2040 Comprehensive Plan would be driven by an overall strategic and implementation plan as described below. The plan would be developed in the first 2 years (2019-2020) and then implementation would occur over the 20-year plan duration. Early focus would start in the more densely populated eastern side of the County.

HOW

Developing a County wide system of linear parks and trails in Loudoun will require access to existing trails and suitable land on numerous private properties, HOA land and commercial areas. The experience in Loudoun, as in many other locations, is that gaining such access requires patient, flexible and creative approaches that build confidence and accommodate to individual circumstances. The objective is a system created through a combination of willing landowners, a coalition of public and private organizations and a supportive community.

In doing our exploration of other's experience we have looked into numerous relevant programs, including those in Charlottesville, Va, in Concord Township, Pa, in neighboring Counties of Fairfax and Prince William, and even more locally with the Sugarland Run HOA and with the Journey Through Hallowed Ground. And, we have had good conversations with NOVA Parks and with the Loudoun PROS Board.

The main lessons from all this is that there are a very wide variety of clever and creative techniques and instruments used to gain access to and work with private land and landowners - short- and long-term leases, acquisitions, easements, maintenance agreements, small area plans, purchases, proffers, indemnification programs and others. A flexible tool box is critical, but not sufficient. ***(See References Section on pages 7 & 8 for links to many descriptions of these tools and examples of other jurisdictions' success)***

The heart of the matter seems to be the process used to develop the plan - that is - to mount a focused and funded program to build widespread enthusiasm for the overall idea, work closely with the community to design the system and develop the plan, join public and private sector organizations together into a coalition in support of the overall idea, recognize that there are a wide variety of sometimes competing objectives, regulations and alternatives to consider, so allow lots of flexibility and custom design for individual segments, landowners and communities and, most of all, be very clear that the whole process involves collaboration with individual private owners and their voluntary decisions to join with others.

It is very much a patient, bottoms-up and outside-in approach. Each township, HOA or private landowner may want to be an early adopter and join or may want to wait and see. This is a long game -

but having an overall architecture in mind allows us to add individual pieces as various stakeholders and citizen groups are ready to join.

The process we prefer is the one adopted by Charlottesville for their in-town park and trail program. It includes community outreach and interaction to get the design that the community wants by building a coalition of public and private organizational supporters. A core team (including both privately funded staff and a publicly funded county staff member) would lead the whole design and planning effort. The Charlotte core team has brought the entire community together as they work to create this new asset and has helped heal the wounds from the disputes over public monuments.

The following sections describe the steps and organization we see as appropriate in Loudoun to build the needed community support and manage the complex process of planning and designing our Emerald Ribbons system.

Key Deliverables:

Phase 1: Inventory of all parks and trails

Map the 87 miles of county trails, along with all shared-use paths, sidewalks, parks, community centers, and other points of interests that people frequent.

Phase 2: Ensure Emerald Ribbons is included in Comprehensive Plan and other ordinances, rules, and zoning.

Including the Countywide Park and Trail Plan in the Comprehensive Plan recognizes its importance and provides the needed authority to execute the planning and implementation of the trail network.

- Location of a trail route in the plan becomes the guidance and / or enforcement tool when a land parcel is proposed for development along that trail route
- Land developers can be required to design and build the trails and parks that appear on the Emerald Ribbons Plan when they prepare Site Plans for development and gain their site development permits
- Developers with land parcels proposed for new land uses through the rezoning process will have more motivation to offer to build park trails if a trail route is shown in the vicinity of a project.

Phase 3: Needs Assessment Survey

The Envision Loudoun public input session revealed that residents want more parks and trails. An additional detailed Needs Assessment Survey will dive deeper into residents' opinions on: location, types of trails, types of parks, support (volunteering, donating), safety, concerns, etc.

Phase 4: Community Outreach

Insight from community is integral to determining how parks and trails are planned, developed, and managed.

- Input from a variety of park and trail users (ie. trail running, equestrian, multi-use, biking)
- Consider impacts and relationships to adjoining properties and facilities
- Coordinate with HOA boards

- Create and send survey/voting ballot to all members of HOA communities to determine the true view of the majority of residents
- Work with champion board members who support public parks and trails
- Connect HOAs with those who support public parks and trails
- Address concerns, questions, and needs of community
- Create a vision and plan based on public input

Phase 5: Linear Park and Trail Development Strategic Plans

Created by each district with the intent of coinciding with the Emerald Ribbons Countywide Parks and Trails Plan. Internal document that will examine the issues surrounding park development, collect and analyze the relevant data concerning park and trail projects, and devise the best process for objectively evaluating and prioritizing projects.

- Determining Costs: Determine a rough estimate of the cost of the project by averaging the cost of Loudoun County park and trail projects within a specified timeframe and determine per mile or per 100' costs. Project costs should include design, permitting, construction, administration, and auxiliary park items. Include additional costs, such as bridges, if applicable.
- Funding: A variety of funding venues exist
 - Bond referenda – The County presents a bond referendum for park acquisition and improvement to the citizens for their consideration.
 - Grants – To supplement bond funds; opportunities exist with private, non-profit, and government agencies
 - Donations – Land, monetary donations, and volunteer time
 - Proffers – During rezoning process, proffers may be offered by individual developers to provide amenities in parks nearby or within new development. Parks may be built with proffered funds designated for trails or with funds that are only specified for a park or area.
- Prioritization: Select projects that hold the greatest potential with the least development impact and least maintenance requirements
- Sustainability: Design considers ease of maintenance

Phase 6: Implementation

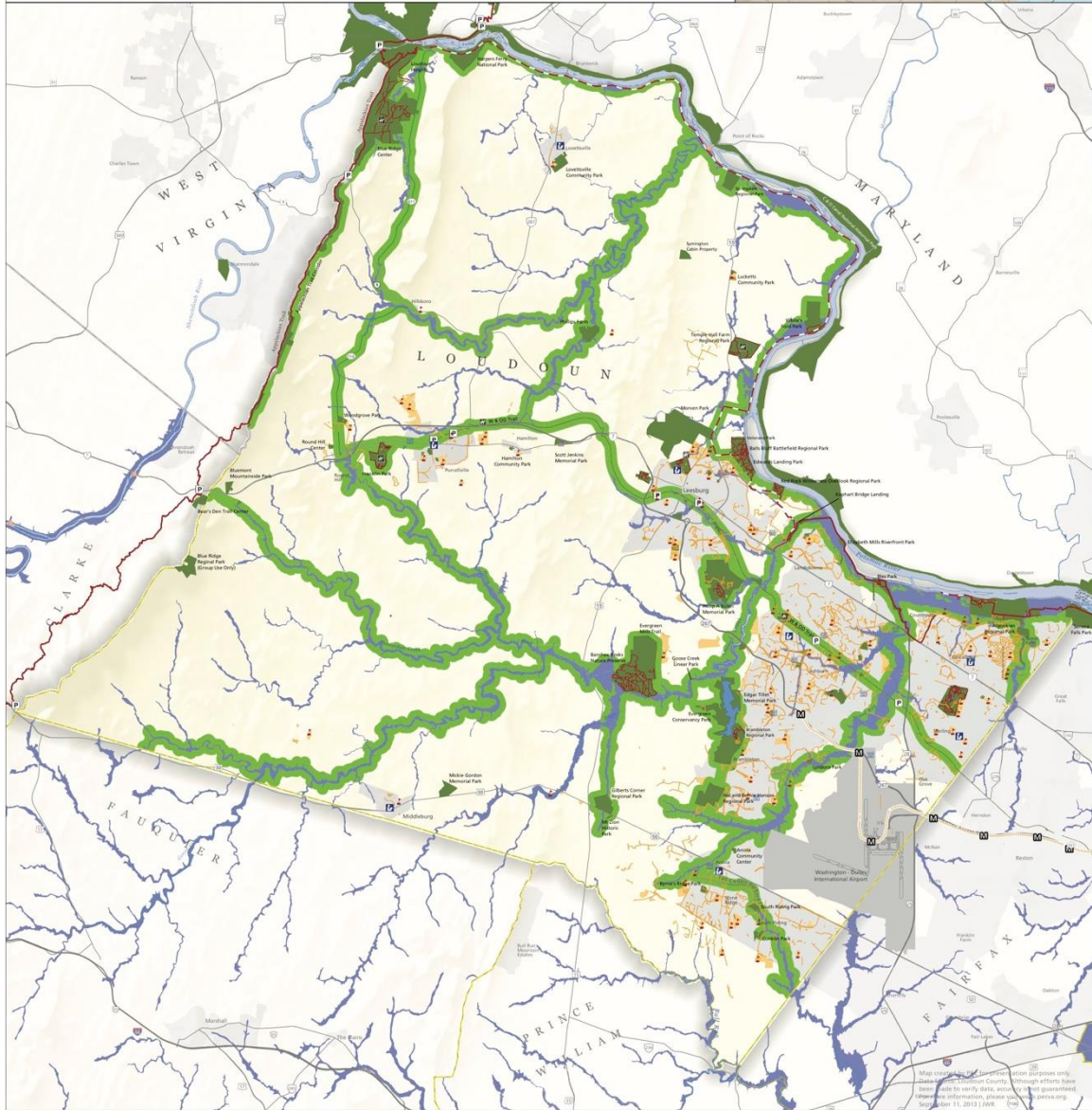
Implemented by each district with the intent of coinciding with the Emerald Ribbons Countywide Plan. An overseeing agency, such as NOVA parks, can ensure alignment with the Plan.

REFERENCES

Issue	Reference Document(s)	Website Links
<p>Other jurisdictions that have embraced community and streambed greenway parks</p>	<p>Fairfax County VA Comprehensive Plan, Parks Section; Fairfax County VA Stream Valley Policy Summary; Fairfax County VA Parks Master Plan;</p> <p>Rivanna River Corridor Plan, Albemarle County, VA Charlottesville Tomorrow Article on local Trails Plan effort</p> <p>Prince George’s MD Trails Master Plan</p> <p>Concord PA Open Space and Recreation Plan</p> <p>Ulster County NY Open Space Plan;</p> <p>Portland OR Greenway Trail</p> <p>Charleston Rail Line Linear Park</p> <p>City of Boulder's 2011 Greenways Master Plan</p>	<p>Fairfax VA County Parks Dept.</p> <p>Thomas Jefferson Planning District Commission Pages</p> <p>Greenways Project Overview, PEC</p> <p>Prince George’s County Trails Page</p> <p>Concord Open Space Map Page</p> <p>Ulster County Pages</p> <p>Portland Oregon Planning and Sustainability Dept. Pages</p> <p>Low Country Low Line</p>
<p>Transferring private land (ie in floodplains) to public park land, including incentives and regulatory approaches, and trail easements</p>	<p>Matthew Olhausen, Conservation Easements for Green Urban Spaces, from Hastings Environmental Law Journal.</p> <p>Guidance for Local Floodplain Ordinances in VA; VA Dept. of Conservation and Recreation Dam Safety and Floodplain Program; October, 2011</p> <p>Public Access Policies and Practices for Land Trusts</p> <p>Reducing Liability Associated with Public Access</p>	<p>Hastings Environmental Law Journal</p> <p>“Scaling Up: Integrating Green Infrastructure into Existing Processes” Green Infrastructure Tool Kit from Georgetown Law</p> <p>American Trails Association Funding and Planning Resources</p>

	Trail Easement Guide PA Land Trust Multi-Municipal Partnerships for Parks from PA Land Trust	Conservationtools.org. Website
Proven Safety within Trails and Parks	Rail-Trails and Safe Communities: The Experience on 372 Trails	Rails to Trails
Increased Property Values	Measuring Trails Benefits: Property Values The Relative Impacts of Trails and Greenbelts on Home Price	
Improved Employee Productivity		How Having Fun Can Boost Employee Productivity Get Outside! How Nature Enhances Work Productivity
Natural Environment and Drinking Water Protection	“Best practices for balancing the needs for clean drinking water, recreation, and economic development in municipal watersheds.”	Headwaters Economics.org website
Health Benefits for County Residents	“Hiking Trails in America: Pathways to Health” “Nature Play Nurturing Children and Strengthening Conservation Through Connections to the Land” PA Land Trust Association Improving Public Health through Public Parks and Trails - Eight Common Measures Measuring Trails Benefits: Public Health	Nurturing Healthy Neighborhoods Article in National Institute for Health Newsletter National Trails Health Benefits from NPS American Trails Page on DHS,
Detailed Zoning and Ordinance References in support of Greenways and linear parks	Portland OR Greenway Zoning Document	Portland Oregon Planning and Sustainability Dept. Pages

Loudoun County Emerald Ribbons



Outdoor Recreation

- Emerald Ribbons
- Public Boat Access
- Trail Parking
- Horseback Riding Allowed
- Sidewalks
- Shared Use Bike Paths
- Dirt Trails
- Gravel Trails
- Existing Trails
- Planned Trails
- Parks

Community / Commuting

- Libraries
- Schools
- Churches
- Park and Rides
- Dulles Rail Stations
- Future Silver Line
- County Owned Land
- Election Districts

Agrotourism

- Historic Sites National Register
- Breweries
- Wineries
- Farmers' Markets
- Conservation Easements
- Historic Districts
- Flood Zones FEMA





FREQUENTLY ASKED QUESTIONS

(1) Where does the name Emerald Ribbons come from?

In many communities these systems of trails are called “Greenways” but that name has already been appropriated here in Loudoun. So we are calling them Emerald Ribbons as a sort of remembrance of the well known system of parks in Boston called The Emerald Necklace. We may decide to keep it—or all agree to a new name later that we like better, perhaps via a naming contest.

(2) Will the proposed trails be accessible to bicycles and horses?

The basic trail we are suggesting for the entire system would be a good quality unpaved hiking and walking trail. Individual neighborhoods or the entire County may want to add bicycle trails and equestrian trails as well.

(3) Will there be other facilities besides just trails?

Communities can design the amenities along the park system as they see fit. Picnic areas, benches, kiosks, signage and other amenities could be added as neighborhoods desire them.

(4) Will property owners or HOAs be forced to provide access for trails?

No! All sections of the system will come via voluntary proffers, donations and easements from willing HOAs and landowners when and as they see fit to join.

(5) How firm is the current map of Loudoun’s Emerald Ribbons?

The map follows existing trail segments and stream corridors, but the specific location and character of the system and the extent of it is entirely up to individual communities (so long as it all fits together).

(6) Will residents and property owners have a say in how the trails are designed?

Absolutely! The current proposal is a concept and the idea is for the first few years to include significant local community discussions about the details of trail and park design.

(7) Who will maintain the trails?

The County will oversee care of the system with the assistance of volunteers and organizations.

(8) Will these proposed trails endanger the habitat and wildlife in these natural areas?

Trails and other features will be specifically designed to protect and enhance the natural features and wildlife in those areas. In fact, certain sections of the trails may be closed for certain periods to protect habitat and wildlife.

(9) How will Emerald Ribbons connect to regular Loudoun parkland?

The map we have proposed interconnects most existing Loudoun parks into the overall Emerald Ribbons system to create one large and fully accessible park and trail resource for the County.

(10) How will this system be paid for?

We envision a combination of proffers, grants, donations and bond issues to cover the cost of building and maintaining the system.

(11) How long will it take to complete this system?

We expect major elements to be completed within five years, but the entire system may take as long as twenty years to be realized.

(12) Will my security be endangered by these trails near my home?

Some worry about strangers on the trails near their homes, but actual experience from other communities indicates that opening natural areas to the public via designated trails improves security and reduces danger. Of course, where desired and appropriate, fencing will be provided to separate trail and parkland from private property.

For additional information, go to <https://loudouncoalition.org/events/categories/emerald-ribbons/>.