

A ULI VIRTUAL ADVISORY SERVICES PANEL EXECUTIVE SUMMARY REPORT

NORFOLK, VIRGINIA

Active Transportation, Coastal Resilience,
and Community Connections of the
Elizabeth River Trail

July 26–29, 2021



ULI Program Staff

Mary Beth Corrigan

Executive Vice President
Global Leadership

Thomas W. Eitler

Senior Vice President
Advisory Services

Deborah Kerson Bilek

Vice President
Advisory Services

Lauren McKim Callaghan

Director
Advisory Services

Jaqueline Canales

Director
Advisory Services

Kelsey Steffen

Director
Advisory Services

Georgia Gempler

Senior Associate
Advisory Services

David Zehr

Senior Associate
Advisory Services

Leah Sheppard

Senior Manager
Urban Resilience

James A. Mulligan

Senior Editor

Sara Proehl

Publications Professionals LLC
Manuscript Editor

Brandon Weil

Art Director

Tom Cameron

Graphic Designer

Craig Chapman

Senior Director
Publishing Operations

Cover photos: Elizabeth River Foundation

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2001 L Street, NW | Suite 200
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About the Urban Land Institute

THE URBAN LAND INSTITUTE is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics.

Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries. The extraordinary impact that ULI makes on land use decision-making is based on its members sharing expertise on a variety of factors affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Peer-to-peer learning is achieved through the knowledge shared by members at thousands of convenings each year that reinforce ULI's position as a global authority on land use and real estate. In 2020 alone, more than 2,600 events were held in cities around the world.

Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at uli.org. Follow ULI on Twitter, Facebook, LinkedIn, and Instagram.

About ULI Advisory Services

The goal of the [ULI ADVISORY SERVICES](#) program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 700 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfield redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's advisory services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and are screened to ensure their objectivity. ULI's interdisciplinary panel teams provide a holistic look at development problems. A respected ULI member who has previous panel experience chairs each panel.

The agenda for a three-and-a-half-day virtual Advisory Services panel (vASP) offering is tailored to meet a sponsor's needs. For a virtual panel, ULI members are briefed by the sponsor, engage with stakeholders through in-depth interviews, deliberate on their recommendations, and make a final presentation of those recommendations. A written executive summary report is prepared as a final deliverable.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, participants in ULI's vASP assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academics, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this vASP executive summary report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

Acknowledgments

On behalf of the Urban Land Institute, the panel would like to thank the Elizabeth River Trail Foundation (ERTF), which sponsored this effort. Special appreciation goes to Cheryl White and the rest of the sponsor committee for their work in preparation, support, and coordination leading up to and during the virtual panel.

The panel also would like to thank the more than 50 community leaders, city staff, and residents and business owners who shared their perspectives, experiences, and insights with the panel. ULI would also like to thank the ULI Virginia members who provided additional local knowledge and insights. ULI is also grateful for the support of The JPB Foundation.

Sponsor Committee

Elizabeth River Trail ULI Subcommittee Members

Kevin Murphy
ERTF Board Chair

Mel Price
ERTF Vice Chair

Liz Scheessele

Brian Townsend

City of Norfolk

Pete Buryk
Carl Larsen
Andria McClellan

Contributors

Peter Johnston
Work Program Architects

Steve Lambert
Hampton Roads Transportation
Planning Organization

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About the Panel

ULI Panel and Project Staff

Panel Chair

Fernando Costa
Assistant City Manager
City of Fort Worth
Fort Worth, Texas

Panel Members

Rogelio Pardo
Program Director
Urban Movement Labs
Los Angeles, California

Rachael Griffith
Senior Trails and Open
Space Planner
Chester County Planning
Commission
West Chester, Pennsylvania

Ryan Bouma
Principal
AECOM
Washington, D.C.

Paul Moyer

Principal
Jacobs
Arlington, Virginia

Caleb Stratton

Panel Adviser
Assistant Business Administrator
and Chief Resiliency Officer
City of Hoboken
Hoboken, New Jersey

ULI Project Staff

Lauren McKim Callaghan

Director
Advisory Services

Leah Sheppard

Senior Manager
Urban Resilience

William Luke Hamel

Graduate Student/Writer
Advisory Services

Summary

At the request of the Elizabeth River Trail Foundation, a panel of volunteer experts assembled by ULI visited Norfolk and the Elizabeth River Trail virtually June 26 to 29, 2021. During the virtual visit, the panel met with local stakeholders and the sponsor and provided strategic recommendations on organizational and funding approaches, climate resilience, and ways the foundation and trail can become more diverse, equitable, and inclusive.



Cyclists along the Elizabeth River Trail near the USS Wisconsin.

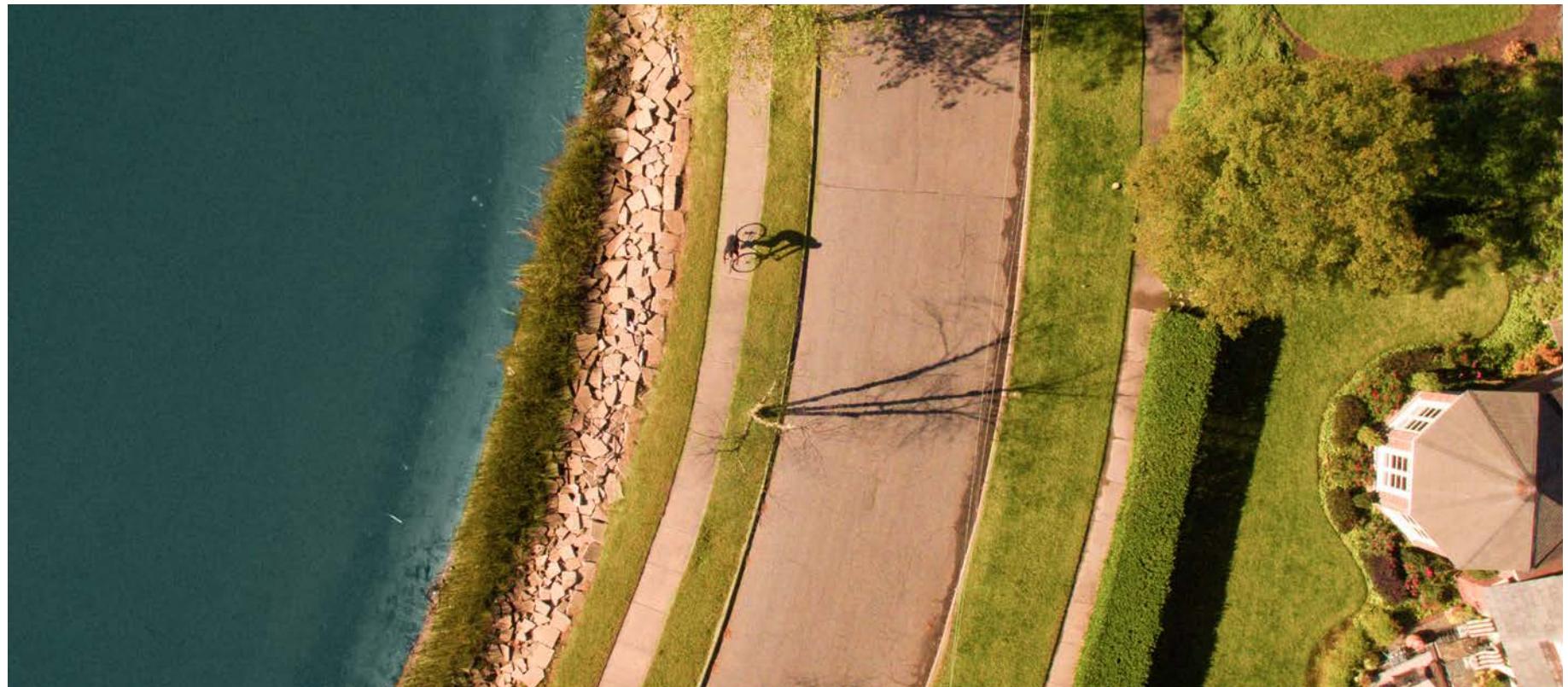
As part of its deliberations, the panel identified the trail's distinctive attributes, the trail's challenges that need to be addressed, and the opportunities to maximize the trail's potential. The panel's primary recommendations focused on the following:

- The establishment of a business improvement district (BID) and other financial programs to help the foundation raise operating funds;

- The renegotiation of the memorandum of understanding (MOU) between the foundation and the city of Norfolk to assign responsibility for various aspects of trail maintenance and operation;
- The retrofitting of existing trail segments and the development of new trail areas with coastal resilience strategies for sea-level rise and flood mitigation;
- The diversification of trail usership and stakeholders through new committees on the board of the foundation; and
- The expansion of the trail into underserved neighborhoods and minority communities and throughout Norfolk.

One Trail, Many Roles

The panel found the Elizabeth River Trail to be much more than a pathway for walking and cycling. The trail travels through a variety of settings including parks, railyards, gathering spaces, university campuses, and historic neighborhoods. Along the way, it crosses below highways, over tunnels, across bridges, along piers, and through “the Pines,” connecting events and memorable experiences. The panel determined that the trail and the spaces it connects offer an “up-close” view of Norfolk’s storied working waterfront. The trail introduces visitors to the naval fleet, the Port of Virginia, the Lamberts Point Railyard, and the supporting maritime commerce along the entire riverfront.



ELIZABETH RIVER TRAIL FOUNDATION

More than any one street or other civic infrastructure, the Elizabeth River Trail connects residents and visitors to Norfolk's history; to its past, present, and future economy; and to its relationship with the water. The panel found that the trail offers the entire city integrated co-benefits that will become more and more critical for urban resilience and community vitality in the 21st century.

The trail also provides first- and last-mile connectivity with the ferry system and light rail, assisting in regional commuting. It links riverfront neighborhoods with the central business district, with Sentara Hospital, and with the Port of Virginia and the naval station (once it is extended). This amenity also connects to the adjacent blueway, with kayak and canoe launches for recreation on the water.

Regarding economic development, the panel found that the trail brings direct revenue to adjacent businesses by increasing foot traffic. In addition, the trail attracts talent for businesses throughout the city by providing recreational and cultural opportunities, and health benefits sought by new graduates and prospective employees of target industries.

Certain segments of the trail and surrounding spaces can potentially intercept rising river levels, rainfall, or both, and various areas of the trail can act as sponges, bridges, or new elevated shorelines to mitigate flooding. In addition, the trail can be shaped as an "ambassador of the city" to educate residents and visitors about the city's climate resilience leadership and flood mitigation measures.

The trail's potential to connect a variety of neighborhoods with social infrastructure is also notable. Universities, parks, schools, businesses, health care organizations, cultural institutions, and the Elizabeth River all flank the trail, providing excellent services to residents, employers, and visitors alike. While the trail's impact on its context is strong today, the panel believes that this effect must be amplified in the near future by strategic enhancement, expansion, and connection of the trail to more of the city; in doing so, the trail will reach its full potential as a citywide asset and source of local pride.

Existing Conditions and Assignment

Situated on a mix of waterfront, urban land, and roadway in Norfolk, the Elizabeth River Trail offers a multifaceted amenity to runners, walkers, bikers, and commuters in the city. The corridor stretches from the edge of Norfolk State University in the east, through downtown, to the communities south of Naval Station Norfolk. In the downtown waterfront areas, the trail shares space with tourist attractions and events spaces and is in a state of good repair. However, in other areas its paving has suffered damage and is in need of maintenance.



ELIZABETH RIVER TRAIL FOUNDATION

Study Area

Norfolk is situated at the southeastern edge of the commonwealth of Virginia and at the center of the Hampton Roads region, which includes the surrounding cities of Portsmouth, Newport News, Hampton, Suffolk, Chesapeake, and Virginia Beach, among others. The region is characterized by many military installations, particularly coastal bases, and supporting infrastructure. Norfolk is home to the Port of Virginia, which is one of the largest container shipping ports in the country.

Numerous shipbuilding facilities, such as Norfolk Naval Shipyard, have long existed in the region. Newport News Shipbuilding in neighboring Newport News produces nuclear-powered aircraft carriers for the U.S. military. The region also plays an outsized role in national security despite its relatively small size. Nearly 1.7 million people live in the Hampton Roads region. Naval Station Norfolk, which is located to the north of the study area and northwest of the city on the Elizabeth River, is the largest naval installation in the world—it supports the U.S. Atlantic Fleet and hosts the headquarters of the North Atlantic Treaty Organization's Joint Force Command Norfolk.



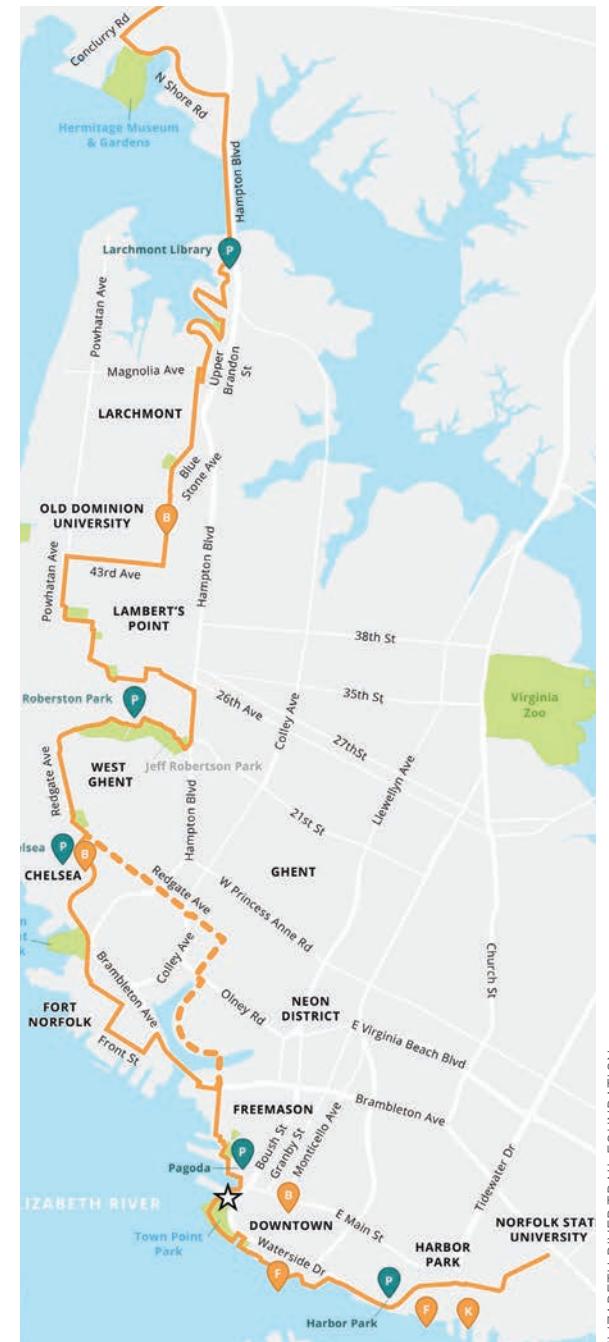
The Hampton Roads conurbation at the mouth of the Chesapeake Bay. Norfolk is highlighted in the yellow box.

The Elizabeth River Trail is a relatively recent addition to the urban landscape of Norfolk. The campaign to create the trail began in 1999 with Norfolk Southern's donation of the old Atlantic City rail spur. In 2003, the first segment of the trail opened after being funded by a

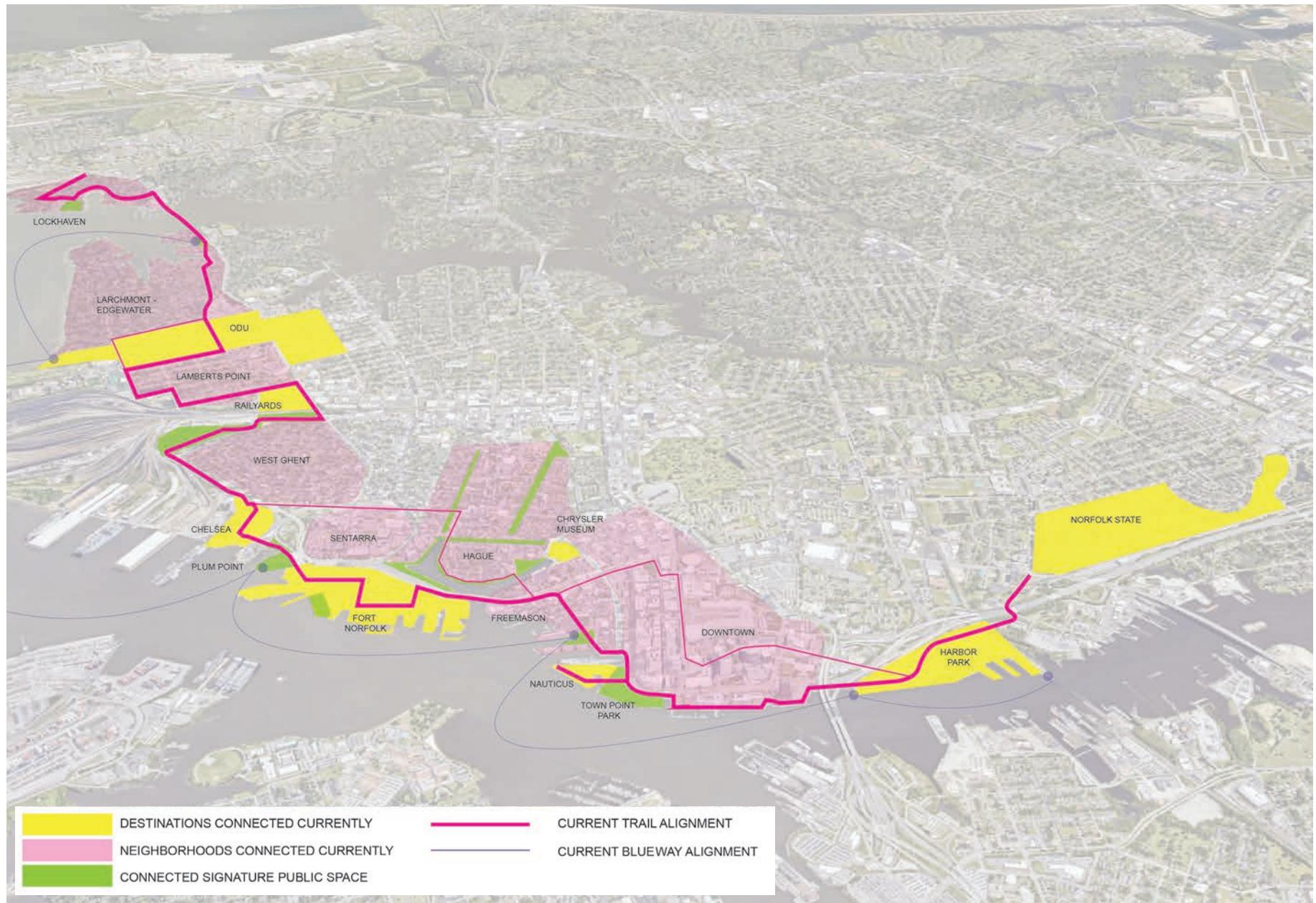
grant from the Virginia Department of Transportation. That trail segment connected the neighborhoods of Fort Norfolk and Chelsea. The trail has continued to expand: in 2012, the Sentara Loop, located by the Sentara Hospital, was added.

The now 10.5-mile trail offers connections to multimodal transportation systems such as light rail, Amtrak, and parking lot trailheads for those visiting from the region and beyond. In 2020, the trail completed a major capital improvements program that included better signage, counters for tracking trail users, bike racks, public art, and play sculptures, among other amenities. Prominent destinations along the trail include downtown Norfolk, historic Fort Norfolk, Harbor Park Stadium, Old Dominion University, and several waterfront parks. The trail currently terminates near Norfolk State University and as discussed later in this report, the panel recommends that this institution be networked in through further expansions.

The study area of this panel focused on the trail and the areas adjacent to it. This combination of land, water, and right-of-way lies to the south of Naval Station Norfolk, stretching south and then to the east along roadways, paths, and waterfront areas. The trail passes through business districts, residential neighborhoods, and institutional properties. Future development in the St. Paul–Tidewater Gardens region and the casino next to Harbor Park on the Elizabeth River have the potential to affect the trail in terms of accessibility and user base.



The current course of the trail, with amenities in orange and public parking in blue.



Norfolk neighborhoods and destinations in the vicinity of the trail, and the connection of the trail to the blueway (a kayak trail).

Existing Conditions

The waterfront of the city of Norfolk is heavily developed owing to the city's maritime culture and economy, which has contributed greatly to the trail's character. According to U.S. Census data, in 2019, the city's population was almost 243,000 residents: 47 percent of residents identified as being white, 41.1 percent as Black or African American, 4.7 percent as two or more races, and 3.7 percent as Asian. One half of 1 percent of residents identified as Pacific Islander, Native Hawaiian, Native American, or Alaska Native and 8 percent of all residents identified as Hispanic or Latino. As of 2019, 26,900 veterans—over 10 percent of total residents—lived in the city. And, at that time, the city's median household income was \$51,000, and the poverty rate was 19 percent.

The Elizabeth River Trail is an extraordinary asset for the city of Norfolk; it provides a variety of public benefits pertaining to recreation, education, environmental protection, transportation, economic development, and the quality of life in neighborhoods along its 10.5-mile route. The trail's future is bright as the foundation explores opportunities to leverage this asset for multiple purposes while expanding and diversifying the population that it serves.

Nevertheless, the trail faces significant challenges that the community must address if the trail is to enjoy full public support and if the trail is to realize the foundation's vision of creating the most iconic urban riverfront trail in the country. Accordingly, the panel assessed existing conditions and trends and it identified distinctive attributes, challenges, and opportunities that warrant strategic attention.

What Attributes Make the Elizabeth River Trail Distinctive?

The panel found that one element that makes the Elizabeth River Trail unique is its role as a connector. Locals and visitors use it for recreation and to commute to work. And events on the trail help funnel foot traffic to shops, breweries, and restaurants, providing an economic benefit to the trail's immediate vicinity.

The panel learned from stakeholder interviews that the trail enjoys strong support from its many users, public officials and civic leaders, and the many businesses and institutions located along its path. In the interviews, stakeholders offered support toward the trail and its future. Stakeholders spoke favorably about the foundation as well, praising it for its dedication to planning, fundraising, marketing, and volunteer recruitment. In addition, the panel identified that the foundation has an active board, whose members work productively with their small but resourceful staff.

What Challenges Does the Community Seek to Address?

The panel learned from the interviews that some areas of the trail, such as those in downtown Norfolk, are in relatively good condition, while several areas of the trail adjacent to underserved neighborhoods are in subpar, neglected, or even dangerous condition. The panel recommends that better maintenance and safety-oriented improvements be implemented to reduce these disparities, which include pavement breaks, flooding, narrow widths, limited sight distance, conflicts with vehicular traffic, inconsistent lighting, and limited availability of water for drinking and irrigation.

The foundation's relationship with the city is governed by a 2016 MOU that outlines the mutual responsibilities of both parties. On the basis of stakeholder interviews, the panel determined that the MOU lacks sufficient specificity and clarity on key aspects of the relationship, such as the responsibility for trail upkeep and maintenance, for it to be functional. The panel strongly contends that an update of the document is necessary.

The panel found through the interviews a disparity between the socioeconomic characteristics of trail users and beneficiaries—who are predominantly affluent and white—and those of Norfolk's general population, which in large part consists of lower-income people of color. The panel heard a strong desire to promote greater diversity, equity,

and inclusion by increasing outreach to communities of color and by assigning priority to underserved neighborhoods in future trail extensions. These efforts will more broadly distribute the trail's benefits across the city and they can broaden public support for the foundation's activities.

What Opportunities Are Available to Maximize the Trail's Potential?

Many owners of commercial property along the trail appreciate the trail's potential to attract customers and employees, and its potential to make Norfolk more appealing to young professionals and their families. These commercial property owners have plenty of reason, therefore, to invest in the trail's operation and maintenance. Because of this, an opportunity exists to create a BID under Virginia state law to raise much-needed funding for trail operations and maintenance. Although tax-exempt anchor institutions own a significant amount of property along the trail, these entities may wish to participate voluntarily through a payment-in-lieu-of-taxes (PILOT) agreement.

During the panel engagement, the ULI panel learned that the city manager has authorized and directed the director of CivicLab Norfolk, a unit of the city manager's office, to coordinate and facilitate the activities of all city departments associated with the trail's operation and maintenance. Although it appears that this role has not been well understood by all parties, the CivicLab director

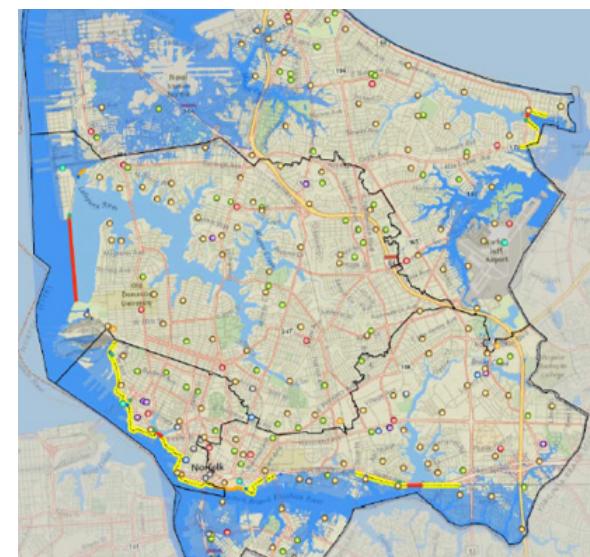
is a decision-maker empowered to solve problems and expedite projects, and the authorization of this role can go a long way toward improving the efficiency of many trail-related activities.

City officials and foundation leaders agree that the city should own and maintain the trail right-of-way as an element of public infrastructure, while the foundation should be responsible for maintaining amenities along the trail that enhance the user experience. Both parties have an opportunity to build on this mutual understanding in negotiating an update of their MOU.

The trail can play a significant role in addressing flooding issues associated with sea-level rise, land subsidence, and stormwater runoff. The trail can serve as an embankment, as a sponge to absorb water, and as a bridge between areas of inundation. The trail can also serve as a resource for educating the public about flooding issues, thereby showcasing Norfolk as a resilient city. Various state and federal grant programs are available to advance these opportunities.

The foundation and city staff are working now to improve the safety of pedestrian and bicycle access across Brambleton Avenue from the Norfolk State campus to Harbor Park. Planners have also begun exploring the feasibility of extending the trail from Norfolk State eastward to serve historically Black neighborhoods such as Berkeley, Broad Creek, Chesterfield Heights, Ingleside, and many others.

Norfolk has been developing resilience measures on its own for years, including through internationally recognized events like the Dutch Dialogues in 2015. The city joined the 100 Resilient Cities program orchestrated by the Rockefeller Foundation in 2013; it produced a resilience strategy in 2015 and a land use strategy, "Norfolk Vision 2100," in 2016. These measures address sea-level rise, changes in future development practices, economic resilience, and other urban resilience concerns. Numerous other plans, reports, and studies on sea-level rise in the region have emerged from civic organizations like the Hampton Roads Planning District Commission and the Hampton Roads Transportation Planning Organization.



U.S. ARMY CORPS OF ENGINEERS

The impact of a 1.4 percent flood, or 70-year flood, in Norfolk. The inundation is most pronounced on the naval station in the northwest, where much of the land mass is underwater.

The Panel's Assignment

The Elizabeth River Trail Foundation invited the ULI Advisory Services panel to virtually visit Norfolk and the trail and to interview dozens of stakeholders to formulate responses to the following questions:

- What sustainable funding models are possible for trail operating and maintenance expenses?
- How can coordination with the city be improved for future trail projects and maintenance, additions of programming or amenities, and planning for future trail extensions/connections?
- How can the trail best be leveraged for coastal resilience and flood protection in its current or future alignment?
- How can the trail become a diverse, equitable, and inclusive community asset to enhance neighborhood and economic resilience?

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Guiding Themes

In reviewing stakeholder perspectives and material from the sponsor, the panel came to view the trail through the lens of three guiding themes:

- The trail is more than a trail. It acts in the following roles:
 - a component of transportation infrastructure;
 - a potential element of flood control;
 - a tool of economic development; and
 - an amenity for neighborhood vitality and connections.
- The trail's success depends on strong partnerships, such as those:
 - with the city;
 - with businesses;
 - with institutions; and
 - with communities.
- The trail can be a catalyst for diversity, equity, and inclusion in the following ways:
 - by effectively serving users of all ages, backgrounds, and identities;
 - by inviting new users to the trail; and
 - by expanding into underserved communities.

Funding and Partnerships for Trail Maintenance and Expansion

The panel applauds the foundation's past work and ongoing commitment to establishing partnerships across the city in a variety of sectors including other nonprofits, small businesses, large corporations, economic development agencies, the U.S. Navy, and the city itself. The panel believes that targeted work to strengthen key partnerships and to convey a clearer understanding of the benefits of partnering will ultimately result in a more financially sustainable model for trail development and maintenance and in an amenity that is inviting and valuable to everyone.



ELIZABETH RIVER TRAIL FOUNDATION

Funding for Trail Maintenance

When assessing the current funding mechanisms for the trail and options for long-term maintenance, the panel identified a number of early action recommendations that can produce results in the short term, while setting the stage for medium- and long-term recommendations for ongoing maintenance and capital improvement projects.

The Elizabeth River Trail Foundation recently completed a capital campaign, raising \$4 million, \$1 million of which came from Sentara Hospital and the city of Norfolk. These contributions highlight the trail's importance to the community and its strong relationships with the city and the anchor institutions located along the trail. The panel recommends that the foundation develop and maintain strong physical and programmatic connections between the trail and Old Dominion University, Eastern Virginia Medical School (EVMS), Sentara Healthcare, and especially Norfolk State University to encourage those organizations and institutions to view the trail as a valuable resource for their own programming and mission.

Requirements for Basic Operations and Maintenance

During stakeholder interviews, the panel learned that the current yearly operating budget for the trail and the foundation's internal resource needs is \$775,000. The budget breaks down as follows:

- \$500,000 for trail operations and maintenance;
- \$100,000 for capital expenditures for emergency repairs; and
- \$175,000 for administration of the Elizabeth River Trail Foundation.

Current operating costs are funded through a combination of individual donations (one-time, annual, and recurring); special events (which have the potential to generate more revenue in future nonpandemic years); portions of grants for capital projects that can be allocated for project administration; and many other small sources. The panel understands that the city of Norfolk budgeted about \$10,000 for the maintenance of the trail in 2021. The MOU between the foundation and the city of Norfolk assigns responsibilities for regular trail maintenance to the city, so the budgeted allocation for maintenance falls significantly short of the \$500,000 the foundation believes is necessary to maintain the trail.

MOU with Norfolk, Fiscal Year Budget, and Foundation Size

The MOU with the city of Norfolk must be updated to reflect the responsibilities and capabilities of the city and the trail. The panel recommends that the foundation audit its budget to determine if the \$775,000 figure is an accurate assessment of its fiscal needs. The panel also recommends the foundation consider hiring another staff person, to work either part time or full time, to support the existing employees and to gain capacity in areas such as grant writing.

The panel believes that strengthening the partnership between the foundation and the city is the most important element of the trail's ongoing health because the city is the ultimate owner and maintainer of the trail. The success of the trail depends on the continued and stable support of the city. The panel recommends a master planning process, discussed further in this report, that identifies design standards and a publicly vetted path forward for the trail, coupled with a clear and transparent understanding of each entity's role in actualizing the improvements. This master plan will be central to an effective relationship with the city and the ongoing stewardship of the trail.

The panel also recommends that nearby businesses be advised of the current and potential economic benefits the trail provides to their businesses. The panel found that restaurants and breweries along the trail already acknowledge its value, but industries and large corporations do not feel as connected. Offering the trail as a resource to businesses for employee retention and attraction, and as a venue for their own events, will bolster the perceived value of the trail, thereby fostering more support for its maintenance and operation, the panel said.

Short-, Medium-, and Long-Term Actions

To address the ongoing costs of trail maintenance and operations, and future capital improvement investments, the panel outlines the following short-, medium-, and long-term actions to secure much-needed funding. Short term is considered within one year, medium term is within two years to four years, and long term is five years and beyond.

Short Term: Friends of the Elizabeth River Trail Program

The panel found that the trail has many supporters in its user base and area stakeholders in business, government, and the nonprofit world. Creating a “Friends of the Elizabeth River Trail” program with a low-cost, yearly payment to the foundation

would further assist with operating expenses. The panel recommends that, if possible, a program that solicits repeated donations of \$100 or more from a smaller subset of stakeholders would be preferable to a traditional grass-roots campaign soliciting small amounts from a greater variety of users. In addition, the foundation must be creative about providing perks to donors without making extra work for staff in the areas of events or other benefits.

Short Term: Economic Impact Study

The panel heard no evidence that the city views the trail as an engine of economic development. To address this issue, the panel recommends the foundation commission an economic impact study for the trail that quantifies the current economic benefits the trail generates for property owners in the form of increased property values, the economic benefits the trail generates for businesses in the form of additional revenue, its role in attracting talent, and the impact of these elements on city tax revenue.

Short Term: Survey Nontrail Users

Covered in more detail in the “Diversity, Equity, and Inclusion” section of this report, the value of the trail to the city will increase as more of the city uses it. A disconnect exists between the trail and lower-income populations and people of color, and the first step to addressing this incongruity is understanding the barriers to trail use.

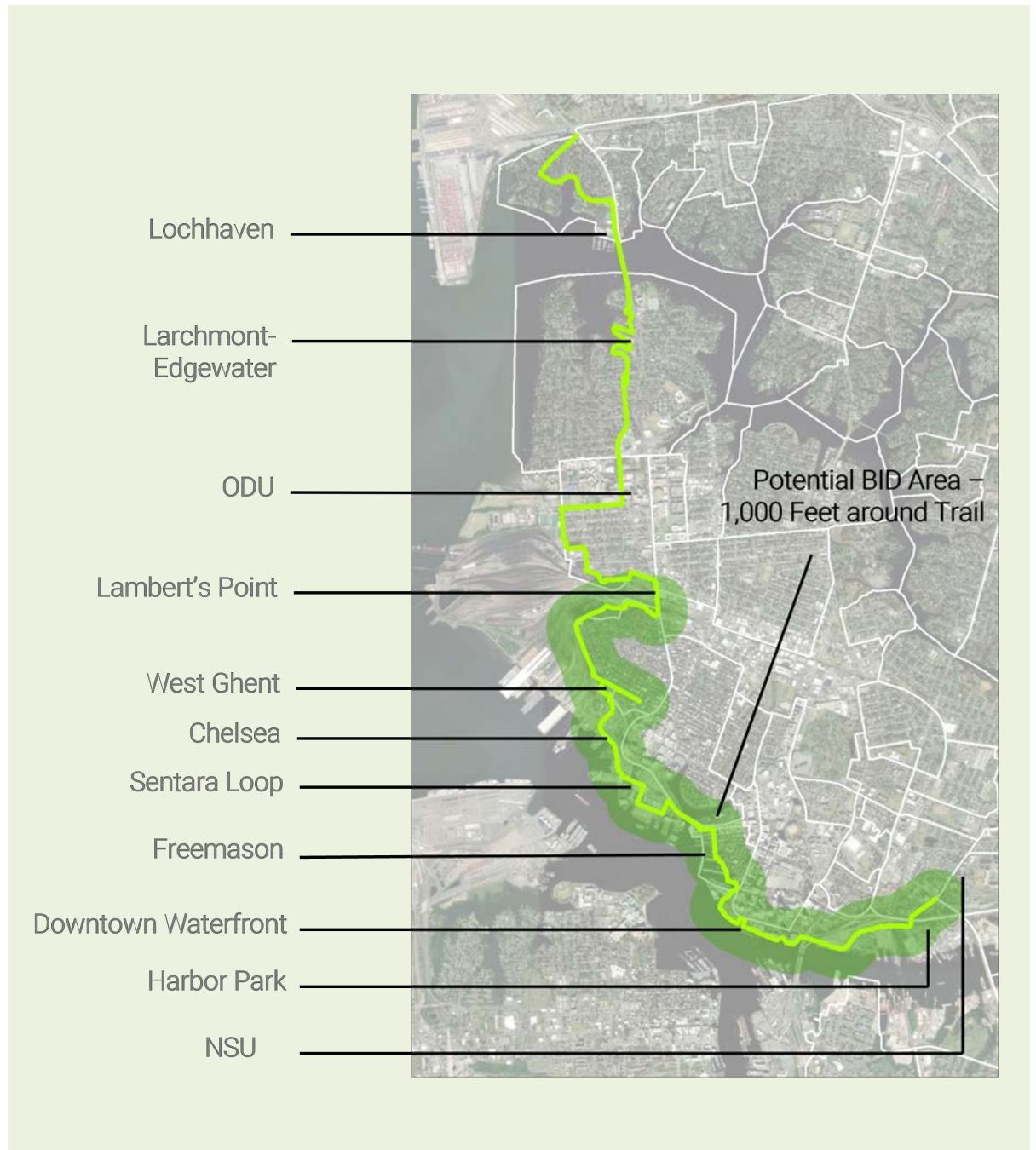
The Elizabeth River Trail Foundation (ERTF) should conduct market research of residents across the city to understand and begin to address these issues. Ultimately, this research is the first step in increasing widespread support and buy-in for the trail on a grass-roots level.

Medium Term: Establishing a Business Improvement District

For the foundation to meet operations and maintenance costs, the panel recommends it solicit for the creation of a BID to add a small percentage to area taxes on commercial enterprises that would then go to the trail. Typically, BIDs are geographically related to the asset they support. Accordingly, the panel recommends studying the potential of establishing a BID that encompasses the area within 1,000 feet of the trail, which reflects the residential and commercial areas most likely to benefit from the trail.

The panel recommends securing an additional real estate tax on top of the city's current \$1.25 per \$100 of assessed value for all tax-paying businesses within 1,000 feet of the trail.

According to the city of Norfolk's Special Service District Policy, which conforms to the Virginia State Code, 30 percent of property owners in the proposed district must petition the city to establish the district, and then at least 75 percent of property owners (comprising at least 50 percent of the land area in the district) must vote in favor of the district.



Current real estate tax millage is \$1.25 per \$100 in assessed value. The existing downtown improvement district, which will expire in 2026, has an additional levy of \$0.16 for a total real estate tax rate of \$1.41 per \$100. Using a simple 1,000-foot buffer of the trail, there is a small amount of overlap between the two districts. It should be determined whether this overlap is permissible, or if any properties in the downtown BID should be excluded from the Elizabeth River Trail improvement district (at least until the downtown improvement district expires).

To establish a cursory understanding of whether a BID might be a feasible model for raising operating revenue for the trail, the panel set the limits of the BID at the eastern terminus of the trail at Norfolk State University and extended it to the Norfolk Southern railroad tracks in Lambert's Point to capture the majority of commercial uses along the trail. This area also corresponds with the trail's sections that are predominantly off-road and therefore would have higher maintenance costs than on-road sections.

Illustration of the potential business improvement district.

Properties within Potential BID		
Type	Acres	Assessed value
Commercial	122	\$845,795,700
Industrial	197	\$117,851,800
Apartments	35	\$341,436,700
Residential	115	\$675,974,500
Institutional	367	\$2,074,965,200
Vacant	21	\$14,213,100
Total	856	\$4,070,237,000

A preliminary analysis of parcel data from the city indicates that the potential Elizabeth River Trail improvement district contains about \$1.3 billion in assessed commercial value with an overall assessed value of about \$4 billion, excluding city-owned property. The following assessment values could produce enough—or nearly enough—annual revenue to operate the trail:

- \$0.05/\$100 assessed value = \$650,000
- \$0.06/\$100 assessed value = \$780,000
- \$0.10/\$100 assessed value = \$1,300,000

Thus, the panel emphasizes that a BID would address much of the foundation's fiscal need on a yearly basis. Establishing good relationships with neighboring businesses will assist the foundation and the city to work together toward the formation of this source of funding. The panel notes that the

existing downtown Norfolk BID, as well as the Norfolk Innovation Corridor (NIC), could provide support in starting this process or provide in-kind services such as trail maintenance or the donation of amenities like water fountains.

Medium Term: Soliciting Payments in Lieu of Taxes from Nontaxable Neighbors

Major neighbors to the trail include hospitals, military installations, and universities, and these organizations do not pay taxes. The panel recommends that another funding avenue for the foundation could come from the solicitation of PILOTs from these organizations because the trail provides them a service that benefits their students and employees.

Within the potential Elizabeth River Trail BID, these properties comprise about 43 percent of the land area and 51 percent of the assessed value totaling about \$2 billion. The primary tax-exempt landowners within the area, aside from the city and the Housing and Redevelopment Authority, which are excluded from these figures, include Sentara Healthcare, with an assessed value of \$1.4 billion; the commonwealth of Virginia, with an assessed value of \$68 million; Eastern Virginia Medical School, with an assessed value of \$325 million; and U.S. government properties, with an assessed value of \$104 million.

Medium Term: Pursuing Grants for Capital Investment

Although the trail's primary concern is sustainable operating funds, the panel heard that there is interest in expanding the foundation's capacity to apply for grants. Because of the trail's diverse uses, improvements could be eligible for several funding streams, including resilience funds, such as the Virginia Community Flood Preparedness Fund; transportation funds, including Rebuilding American Infrastructure with Sustainability and Equity (RAISE), the Transportation Alternatives Set-Aside Program, and other transportation grants; brownfield remediation funds, including the Department of Environmental Quality's Brownfield Remediation Fund; and funds related to public health, wellness, and public art.

The panel understands that foundation staff capacity to write grants is currently limited given their other responsibilities. The panel thus recommends that the foundation determine if resources are best spent on grant writing by staff, contracting with a grant writing professional, or asking if the city or metropolitan planning organization has a staff person or contractor who can assist.

The Norfolk Innovation Corridor

Launched in 2020, the Norfolk Innovation Corridor (NIC) runs along the Elizabeth River Trail. It includes dozens of businesses and institutions in the city's growing technology sector. The purpose of the corridor is to attract technology businesses to Norfolk with incentives and to retain talented graduates from local universities. Incentives include the abatement of business, professional, and occupational license taxes by 100 percent for two years and then the abatement of those taxes by 50 percent for three years, as well as a reduction in planning, zoning, and building permit fees. NIC is home to startups and firms in numerous fields including 3-D printing, virtual reality, biotechnology, and robotics. More information about NIC is available at norfolkinnovation.com/.

Long Term: Sustainable Funding and Growth

Although anecdotal evidence suggests that the trail currently struggles to attract a diversity of users from across the city, the foundation intends it to be a cherished amenity and a source of pride for the entire city. The panel recommends that the foundation's long-term funding strategy reflect this intention. Thus, the costs of its maintenance and improvement must be spread more broadly than the immediate area through which the trail passes. Once the trail's user base is expanded and diversified and it becomes less of a "hidden gem" and more of a valued centerpiece of Norfolk, then the city and the foundation can pursue a voter referendum that would result in municipal funds being devoted to the trail's maintenance and improvement on an annual basis.

The panel does not believe that the trail currently has enough support for such a ballot measure but maintains that it could be an option in the future. In addition, working toward achieving widespread support for such a funding proposition will help advance the foundation's intent of making the trail more inclusive and welcoming.

Also, the panel notes that the trail's value could be improved by connecting it to other regional trails. Trails more than 100 miles long have the potential to be "destination

trails" that attract recreation-based tourism. The panel recommends that the foundation engage with the Tidewater Trail Alliance, the East Coast Greenway, the South Hampton Roads Trail, and the Birthplace of America Trail initiative. The Tidewater Trail Alliance, in particular, can advocate for additional funding at the state and federal level, and it has the potential to serve as a convener of municipal trail groups in Hampton Roads and beyond.

Foundation and City Partnership Coordination

The Elizabeth River Trail Foundation has played a critical role in identifying champions for the Elizabeth River Trail among the business community, community institutions, neighboring jurisdictions, and Norfolk community members. However, ERTF has limited bandwidth and authority for actualizing the vision of the trail with future trail projects, ongoing maintenance, and planning for continued development of the trail. While ERTF should continue to serve as an entity that can help champion a vision, bring together partners, and lead coalition building to build political support for continued investment in the trail, to realize this vision the city must leverage its authority to convene stakeholders and provide direction to its agencies for implementing a community vision for the trail.

Reinforce the City Staff Champion

In many municipalities, agencies are focused on their specific tasks and scope of responsibilities. Although effective for meeting essential needs, this focus often results in operational silos that limit the coordination between agencies. To bring dynamic and cross-cutting projects such as the vision for the Elizabeth River Trail to life, it is critical to have city staff facilitators leverage their authority to bring together key agencies and to communicate with external organizations such as ERTF.

The key objectives of these facilitators should involve the following:

- Provide direction and permit the allocation of resources in key city departments to process projects associated with the Elizabeth River Trail.
- Validate the role of the city in the MOU agreed upon with ERTF by allocating funds and directing staff to accomplish necessary duties.
- Foster data sharing between complementary departments to coordinate construction, utility upgrades, maintenance schedules, etc. to streamline overlapping projects and use resources efficiently. This coordination can be bolstered by regular meetings across departments, or by a project database that is shared among city employees.

Pertinent departments may include but are

not limited to budget and strategic planning; communications; cultural facilities, arts, and entertainment; development; housing and community development; resilience; public health; public works; recreation and parks; transit; and utilities.

- Maintain regular communication with ERTF, community institutions, and other regional and/or neighboring jurisdictions to provide trail project updates and to ensure coordination as appropriate.

The facilitator coordinating city resources with public desires is key to ushering in progress on the Elizabeth River Trail completion in the absence of a comprehensive plan for the trail in the short and medium term.

Revise the Memorandum of Understanding

In November 2016, ERTF and the city of Norfolk entered an MOU outlining the key responsibilities of each party to advance the vision of the Elizabeth River Trail. Although the original MOU identifies key areas of focus such as public safety and maintenance, the lack of specificity has led to contention and an inability for the city to dedicate resources. Updating the MOU with details would provide additional justification for the allocation of city resources as directed by the city staff facilitator noted previously.

Key revisions that should be made to the MOU include the following:

- Define the scope of public safety responsibilities for the city to specify concerns including, but not limited to, the maintenance of adequate infrastructure and the enforcement of traffic safety violations on vehicular right of ways.
- Define the scope of maintenance, likely limited to public spaces within the trail's right of way, and associated landscaping. Care of ancillary amenities such as restrooms and water fountains may be best contracted by ERTF.
- Define the role of ERTF in providing input to developments along the trail.
- Establish a process for jointly pursuing grant funding opportunities to advance progress that considers limited capacity both by the city and ERTF to consistently research and lead such efforts. This revision may result in language that recommends ERTF to contract with specialized grant writers as appropriate.
- Clearly define the roles that the city and ERTF should play in programming efforts along the trail. It may be beneficial to list other community-based partners and/or general types of partner organizations that host events on the river. Because of limited capacity in the city, this revision may be an opportunity for ERTF to provide additional bandwidth by supporting

program partners in preparing permit processes along the river. Both partners may consider developing a streamlined permitting process for efforts along the Elizabeth River Trail.

- Provide the administrative authority to establish a budget and administer city funds to address improvements along the trail.
- Set guidelines for ERTF to follow when contracting vendors for facilities and features that will be maintained by the city to ensure that ongoing maintenance of these improvements is feasible.

Establishing a Designated Trail Corridor

The panel advises that an established, official trail corridor may be desirable to provide jurisdictional authority by the city. The panel recommends that this ordinance identify an official trail route and up to 1,000 feet of land adjacent to the route as a corridor of special public interest via the ordinance. Within this corridor, the city should use appropriate capital improvements, economic incentives, and land use regulations to promote compatible development along the trail.

This effort will require engagement with existing parcel owners and community members to agree on the details of the ordinance and the level of authority provided to the city to drive change along different segments of the trail. This official ordinance will also assist in justifying the allocation of city staff resources to advance work along the trail. A public process with support from the foundation will be necessary to inform community members of the proposed ordinance and to foster the buy-in essential to its adoption.

The ordinance will provide an official tool to guide negotiations with developers to ensure new development adds to the experience along the trail, collaboratively enhancing goals of recreation and economic development in the region. In addition, the panel recommends that the foundation outline specific requests to be made of developers when needed. Those requests can include, but are not limited, to

- the installation of lights on trail sections adjacent to their property;
- the maintenance of property/trail adjacent landscaping;
- building design standards for orientation and frontage; and
- contributions of funds for trail maintenance and development.



A buffer that includes residential, institutional, and commercial areas on both sides of the trail.

Potential Champions

Partnerships are an important part of the success of the trail. This list is not intended to be exhaustive and represents only some of the potential champions for the future vision of the study area.

- Sentara Hospital
- Old Dominion University
- Norfolk State University
- Naval Station Norfolk
- Port of Virginia
- Norfolk Tides/Harbor Park
- City of Norfolk
- Norfolk Innovation Corridor
- Downtown Norfolk BID
- Elizabeth River Project
- HeadWaters Resort and Casino

Developing a Master Plan

The panel found that the city of Norfolk and the Elizabeth River Trail Foundation will need to develop a coordinated approach to realizing the trail's potential as opposed to pursuing a patchwork of measures. Adopting an Elizabeth River Trail Master Plan that is accepted by the city will provide a tool to guide the allocation of resources and prioritize projects along the trail. Such a planning effort will include design specifications or standards for different trail segments, codified land use changes along the route, analysis of key mobility network connections to enhance access to the trail, and the identification of funding sources for implementation.

The panel recommends that the development of this master plan be paired with a robust public engagement effort to co-create a long-term vision for the trail in partnership with the city, the foundation, key stakeholders, and a diverse group of residents representing all of Norfolk's neighborhoods. Considerations for leading such an engagement process are provided in the "Changing Public Perception" section of this report.

For the level of detail that such a plan would require, cost estimates start in the \$250,000 to \$400,000 range, depending on the scope. The panel believes that this plan presents an opportunity for the foundation to support the city in identifying federal and state grants and other opportunities to fund this effort. Grass-roots fundraising from trail stakeholders and users will also help in making this plan a reality.

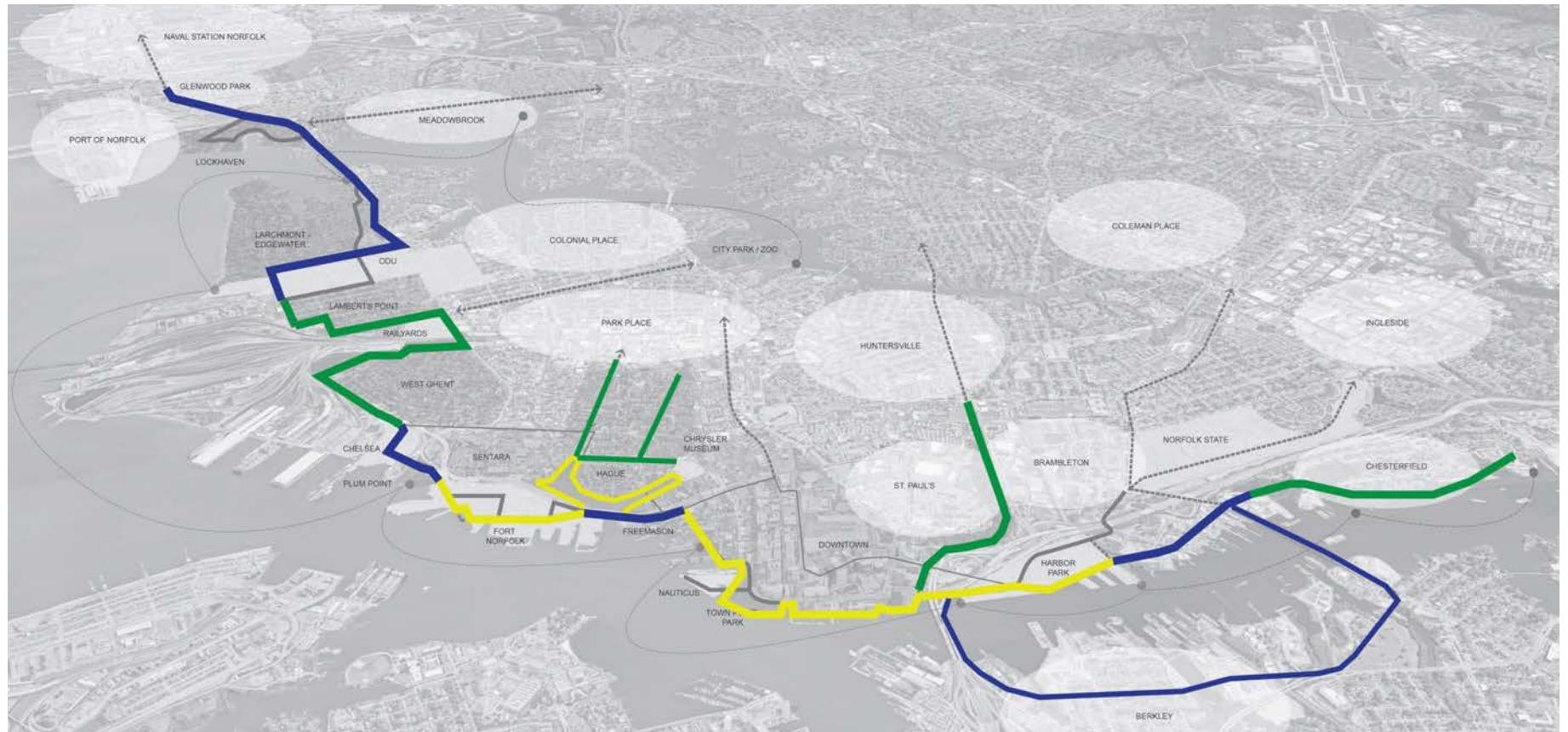
Strategies for Sea-Level Rise Mitigation and Resilience

The Hampton Roads region has experienced increased tidal flooding events and has significant vulnerabilities to sea-level rise as documented by several studies by the Hampton Roads Planning District Commission and the U.S. Army Corps of Engineers. In response, regional municipalities agreed to define a common understanding of sea-level rise projections for planning purposes. In 2018, the Hampton Roads Planning District Commission adopted a resolution that identified and set the sea-level rise projections for use in planning throughout the Hampton Roads region. The commission sets forth the following scenarios:

- One and a half feet of relative sea-level above current mean higher high water (MHHW) for planning from 2018 to 2050;
- Three feet of relative sea-level rise above current MHHW for planning from 2050 to 2080; and
- Four and a half feet of relative sea-level above current MHHW for planning from 2080 to 2100.



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Potential flood infrastructure on the trail and its locations. The panel recommends that blue areas be bridges, that yellow areas be elevated shorelines, and that green areas be water-absorbing "sponges."

The anticipated sea-level rise will significantly affect the city of Norfolk and the neighborhoods and destinations along the Elizabeth River Trail. The U.S. Army Corps of Engineers has identified opportune locations where new flood barriers could reduce flood risk in highly vulnerable areas. Many of these locations, such as those in downtown Norfolk, coincide with the alignment of the trail.

Segments of the trail and surrounding spaces are located well to intercept rising river levels or rainfall and can act as sponges, bridges, and new elevated shorelines. In addition, the trail can be an "ambassador," educating residents and visitors about the city's adaptation and hazard mitigation techniques. The trail can act as a first line of defense for existing and proposed waterfront development while continuing to provide integrated active mobility, recreation, and health benefits.

The topographic attributes and development characteristics of individual portions of the trail make some segments of the trail better suited to address certain issues. But all of these individual segments can combine to reduce flood risk. The following sections describe how the panel believes the trail segments can contribute to broader resilience strategies.

The Trail as a Barrier

Many examples exist of trails or paths that run along elevated earthworks, concrete barriers, or bulkheads that act as shields against tidal flooding or storm surge.

Protecting people and property from flood risk can be accomplished with one-dimensional floodwalls and bulkheads, but those defensive measures can also have side effects such as cutting off access to the water and potentially decrease people's appreciation of the riverfront, as well as harming ecosystems. The panel believes that the trail can be integrated into landscape transformations that not only act like a wall or barrier for

flood protection but also provide services and facilitate other activities and community benefits. In this creative way, the trail can help the city adapt to a changing climate future while mitigating the climate impacts that affect the city today.

The panel recommends that certain segments of the trail corridor be elevated to create a new barrier protecting residents and properties farther inland. Likewise, the panel notes that the trail itself should be integrated into the new elevated landscape and the resulting embankments can be designed to provide seating and viewing opportunities as well as access to the water. This technique can include several combinations of elevated

berms, low walls, amphitheater-like stair features, and elevated linear park spaces. Breaks in the new elevated landscape can be created where needed for riverfront access. These locations can be secured during flood events using temporary or permanent flood barriers that move into place when needed. The panel believes that locations where this approach may work best include the Hague, the downtown edge, and along Harbor Park.

The Trail as a Sponge

The panel recommends that segments of the trail with available shoreline host wetlands and other plantings to help slow or retain the flow of water across the site. These portions of the trail and adjoining properties will act as enormous sponges, soaking up rainfall and creating a shoreline buffer for wave action. This approach lets the water advance in a predictable way, storing overflow safely. This landscape can take the form of a living shoreline with marshes and planted littoral terraces, or it can take the form of an inland wetland that intercepts, stores, and filters runoff. This approach works well in locations where there is more area for conversion at the shoreline. The panel found such areas to run along Elizabeth River tributaries in sites within the Larchmont and Edgewater neighborhoods, in spaces like Jeff Robertson Park, on the east side of the St. Paul's redevelopment, and in the Ohio Creek project.



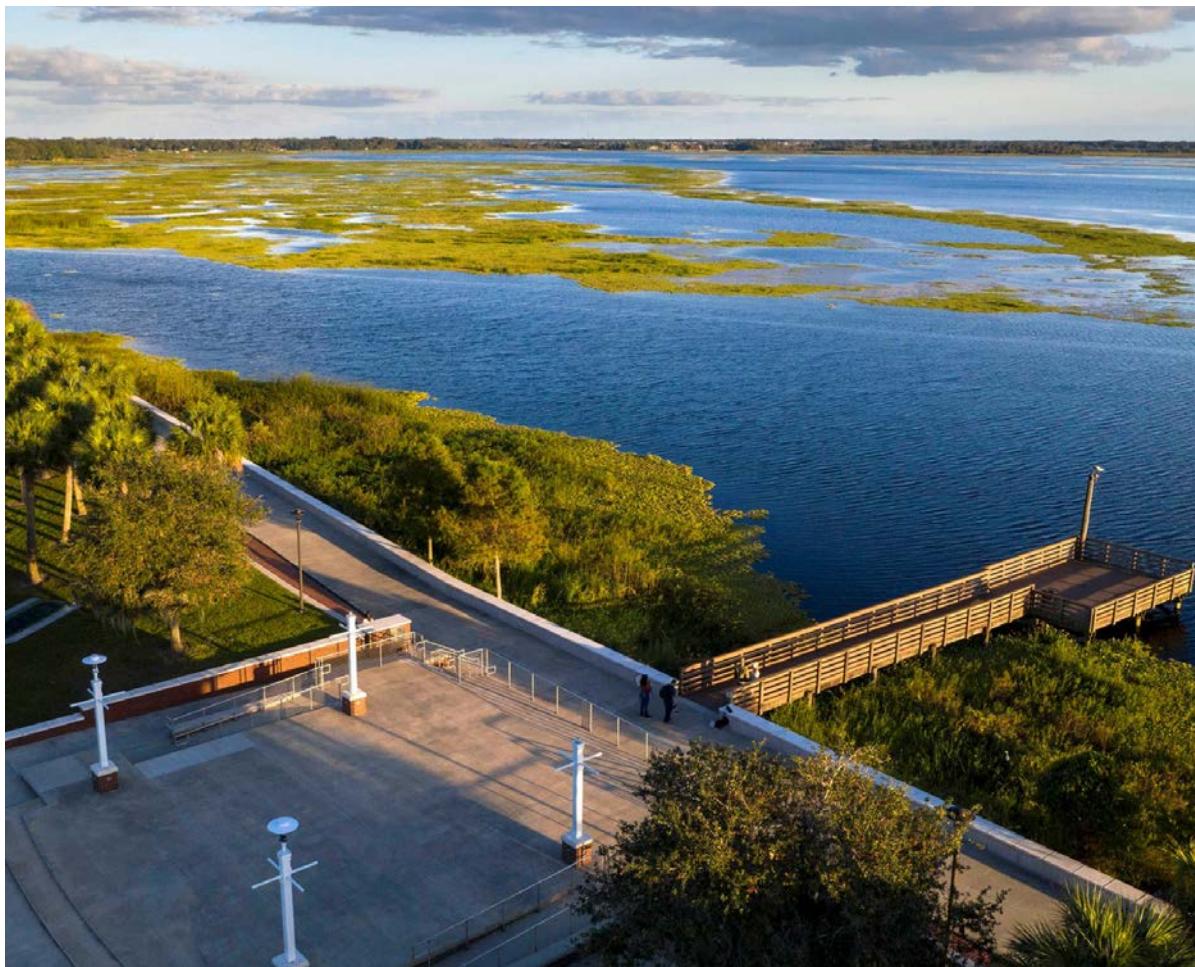
A shoreline is elevated to support a trail, but it is also stepped to provide amphitheater-style seating.

The Trail as a Bridge

In addition, the panel believes that the trail can become a safe route for travel during nuisance floods and during major floods, helping connect neighborhoods with emergency services and critical destinations like Sentara Hospital, the Port of Virginia,

and Naval Station Norfolk. This safe connection can be accomplished by elevating the trail within its right-of-way, setting the new elevation above anticipated inundation levels. Another approach would be to take advantage of any larger street elevation projects to raise the trail along with the roadway. The panel believes that this will work best

along the portions of the Hague and Hampton Boulevard corridor near Larchmont and Edgewater. These critical areas flood even today. It may not be practical to elevate the trail in its present alignment here, but the panel notes that the trail could be integrated into a more robust Hampton Boulevard elevation effort in the future.



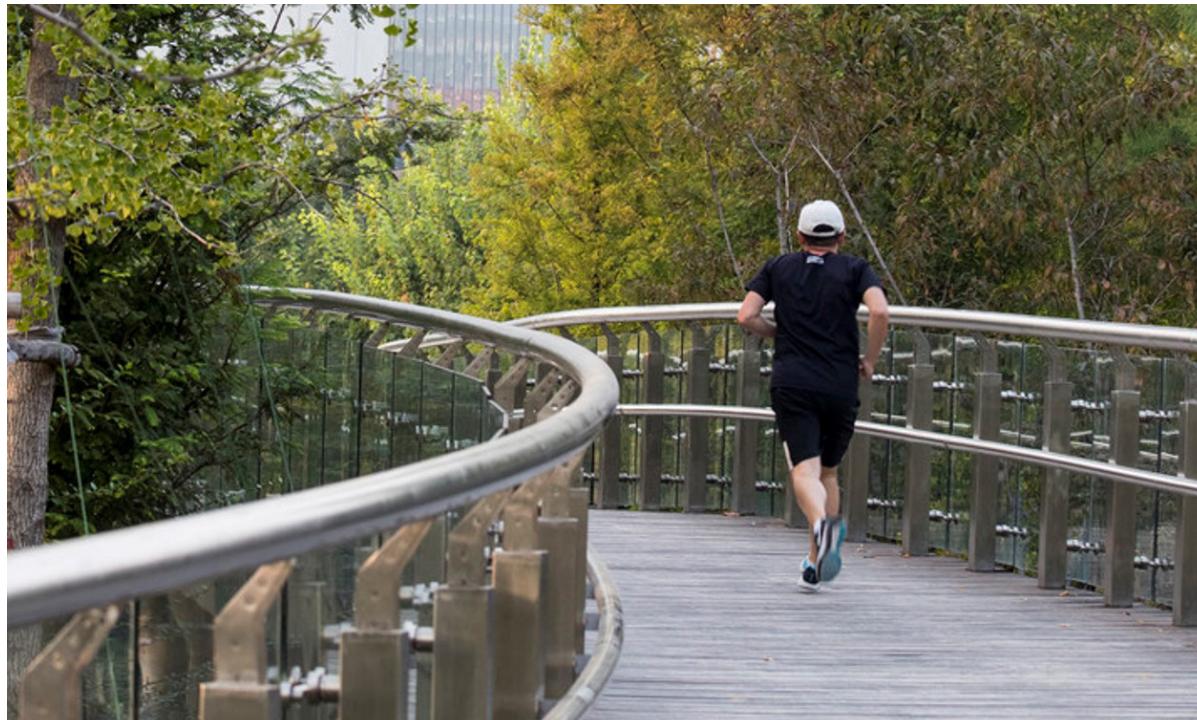
An elevated trail next to a shoreline that has been planted with vegetation that can slow and detain floodwaters.

The Ohio Creek Watershed Project

The Ohio Creek Watershed project in Norfolk is an example of coastal resilience in action. The project seeks to remediate tidal flooding and rainfall flooding in the Chesterfield Heights and Grandy neighborhoods, both of which are predominantly African American. These communities only have two major roads in and out, so they are especially vulnerable when waters rise and cover the roadways. The panel believes that the project's focus on flood mitigation and equity in the urban landscape has many parallels to the resilience work on the Elizabeth River Trail. More information about the Ohio Creek Watershed project is available at www.norfolk.gov/3867/Ohio-Creek-Watershed-Project.

The Trail as a Storyteller

The panel found that the trail also provides a vital physical, emotional, and educational link between the city and its storied riverfront. As a result, it recommends that the trail experience include signage, placards, interactive art, high-water marks, and interpretive elements that raise awareness of the ways Norfolk is adapting to a changing climate future and mitigating the climate impacts that affect the city today. The trail can build support for its maintenance, enhancement, and expansion by explaining its role in the reduction of citywide flood risk.



A trail as bridge in Qingdao, China, shows the ability of recreational infrastructure to serve as a path over high waters.



This marsh and observation platform with placard in Richmond, British Columbia, illustrate the ability of trails and recreational infrastructure to connect users to nature and to educate them about resilience.

Three-by-Three-by-Three Studies

The U.S. Army Corps of Engineers (USACE) has jurisdiction over all U.S. waterways, so any major coastline interventions on the part of the foundation or the city would need to go through USACE. Since 2021, USACE has turned to creating studies that go by a metric of "3x3x3," or "three-by-three-by-three." This metric mandates that the study will not take more than three years, will not require more than \$3 million in federal funding, and will involve the three levels of USACE review, namely district, division, and headquarters.

The panel recommends this type of study for planning the trail's resilient infrastructure in greater depth. More information about the 3x3x3 metric is available at <https://www.usace.army.mil/Media/News-Archive/Story-Article-View/Article/643197/the-corps-feasibility-study-finding-a-balanced-solution/>.

Strategic Outlook for Trail Resilience Measures

The panel's concepts for how the trail can be leveraged to reduce flood risk provide a strong starting point for envisioning the trail's future; however, a detailed cost/benefit analysis of the vulnerabilities and potential solutions is needed to develop the partnerships necessary for funding and implementation. The panel believes that this process can be completed as part of a future master planning exercise for the trail that integrates flood resilience with economic development; mobility; diversity, equity, and inclusion; and neighborhood connectivity co-benefits. The following principles can be used to inform this detailed planning and to provide insights that can aid implementation.

The panel recommends that the foundation pursue a baseline assessment of trail conditions by linear foot, characterizing segments by typology based on adjacencies and right-of-way width. The assessment will include an overlay of the inundation vulnerability at key years and topographic features. The goal of this assessment will be the identification of the amount of elevation needed for the

trail to function in several beneficial ways in each segment. The overlays will inform master planning and help create a more detailed and defensible concept for what role each part of the trail can play. The panel recommends that this content be combined with hydrology and storm drain system data from city staff to inform a trail-based flood risk strategy. In addition, the panel believes that coordination with the city's Public Works and other pertinent city departments on a resilience study will facilitate engagement with the issue of flooding.

The panel stresses that the foundation must make it clear to the city, the U.S. Army Corps of Engineers (USACE), and the community that the trail is a critical location for flood risk reduction interventions. The foundation must likewise be clear about its intent to use trail right-of-way for investments that address the interrelated risks of river flooding and rainfall flooding. The panel recommends that the foundation leverage partnerships to create on-site, subsurface storage or conveyance, as well as surface storage or conveyance. The trail can also respond to sea-level rise by elevating areas exposed to sunny-day flood conditions and storm surge, potentially with the inclusion of pumping capacity to address inland drainage conveyance.

To begin this process, the panel recommends that the foundation direct the first investments to areas where there is a combination of highest benefit, highest visibility, and lowest cost so that residents and decision-makers understand the trail's resilience value. The panel recommends that the foundation keep all projects simple, with an emphasis on new and expanded trail connectivity. In addition, the foundation should bundle issues and look for critical intersections in which several challenges can be addressed simultaneously by one project. Projects with multiple co-benefits can attract more funding and implementation partners. For example, a location that currently has poor surface conditions, gaps in connectivity, and clear flood risk should be prioritized for an intervention, with all vulnerabilities addressed by a single intervention.

Diversity, Equity, and Inclusion on the Elizabeth River Trail

The panel was asked to address how the trail can become a community asset embracing diversity, equity, and inclusion (DEI) as well as enhance neighborhood resilience. During the stakeholder interviews and review of the background documents, it was noted that the trail is seen as an asset for the more affluent and whiter parts of Norfolk. The neighborhoods of color are less engaged and although a few are in proximity to the trail, most of them are not directly connected. Therefore, the panel has provided a set of recommendations to help the trail become the diverse, equitable, and inclusive asset that stakeholders desire.



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Establish a DEI Committee

To show the commitment and focus on ensuring the trail is a community asset embracing diversity, equity, and inclusion, the foundation's board should establish a DEI chair and committee. This topic should be addressed during the foundation's upcoming strategic planning process. The foundation also needs to identify a DEI champion from its board who will engage with the local underserved communities and help identify the neighborhoods of color that can become partners with the trail and the foundation. Ultimately, the goal will be to build awareness and buy-in within these neighborhoods so that they support and advocate for these communities to be connected to the trail. A first step and near-term action that the panel recommends is to conduct a survey of the parts of Norfolk that are currently underserved by the trail—particularly the communities of color. The survey will help to gauge interest and areas of future focus for the board and for trail development.

New Trail “Tributaries”

The panel observed that in its current configuration, the trail primarily serves some of the wealthier neighborhoods in Norfolk. Some local stakeholders have expressed their belief that this has contributed to the racial divide of Norfolk and to a common perception that the trail is an amenity for the white, wealthier areas of the city. To help address this issue, the panel recommends the following actions:

- **Prioritize a safe connection to Norfolk State University:** The panel learned that the Norfolk State University connection is difficult to access because of the crossing at Brambleton Road. Creating a safe connection (either at grade or grade separated) across Brambleton and onto the campus would encourage students and faculty of the university to use the trail and would demonstrate the foundation's commitment to connecting the trail to communities of color.

- **Prioritize key/achievable connections between nearby communities of color and the trail:** The panel recommends that the foundation focus on the key connections that were previously determined through a survey process and connections that will be identified through additional study and discussions.

- **Proactively work with the communities:** The panel recommends the foundation work in a proactive manner with communities of color, particularly those communities that will be connected to the trail, by building awareness, interest, and buy-in for the trail extensions to those neighborhoods.



The existing trail spine and potential spurs into communities that are farther away from the waterfront.

Partnerships, Programming, and Events

The foundation can further its work to ensure the trail is a community asset embracing diversity, equity, and inclusion through partnerships, programming, and events.

Healthy Communities

To grow interest in the concept of healthy communities, the panel recommends that the trail be used for programs or events that connect health professionals with local communities of color. These activities could be sponsored by the foundation, the city, and Sentara Healthcare and could involve health professionals leading walks or other activities on the trail as they discuss the benefits of staying active.

The panel also recommends that the foundation encourage the mayor of Norfolk to join the 10 Minute Walk movement that focuses on improving access to parks and greenspace. The goal of this program is to ensure that by 2050, everyone in the city has safe, easy access to a quality park within a 10-minute walk of home. The trail could contribute to the city of Norfolk achieving this goal.

Trail Activities and Education Opportunities

The panel recommends the foundation pursue activities and programming that are oriented toward communities of color. The programming could include historical tours of those neighborhoods or a bike mentorship program that connects local bike enthusiasts with youth within the community.

Partnerships with Local Houses of Worship

In many communities, houses of worship provide an opportunity to connect with residents. The panel believes that by reaching out to houses of worship, the foundation could expand its reach, identify new potential trail users, and encourage members of these communities to use the trail or to participate in upcoming events or other volunteer opportunities.

Partnerships with Local Schools

Local schools provide another opportunity to connect with the community, particularly with the younger community. The panel recommends the foundation partner with local schools to hold events, tours, or other educational activities related to classes the students are taking. This partnership could increase interest in the trail and allow the foundation to connect with communities that might not otherwise be engaged.

10 Minute Walk

Parks are essential to the physical, environmental, and economic health of people and communities. Parks help expand the economy by attracting homebuyers, tourists, and highly talented workers. They protect the environment, provide space for the enjoyment of arts and nature, and make people healthier, happier, and more connected with their community.

Despite these known benefits, research shows that one in three Americans—more than 100 million people—do not have a park within a 10-minute walk of their home. The 10 Minute Walk movement is dedicated to improving access to safe, high-quality parks and green spaces in cities—large and small—throughout the United States. Led by the Trust for Public Land (TPL), in partnership with the National Recreation and Park Association (NRPA) and ULI, and with support from The JPB Foundation, 10 Minute Walk is working to ensure that by 2050, all people have access to a park or green space within a 10-minute walk of home. These partnerships drive commitments from city leaders who are working to achieve this vision and transform their communities.

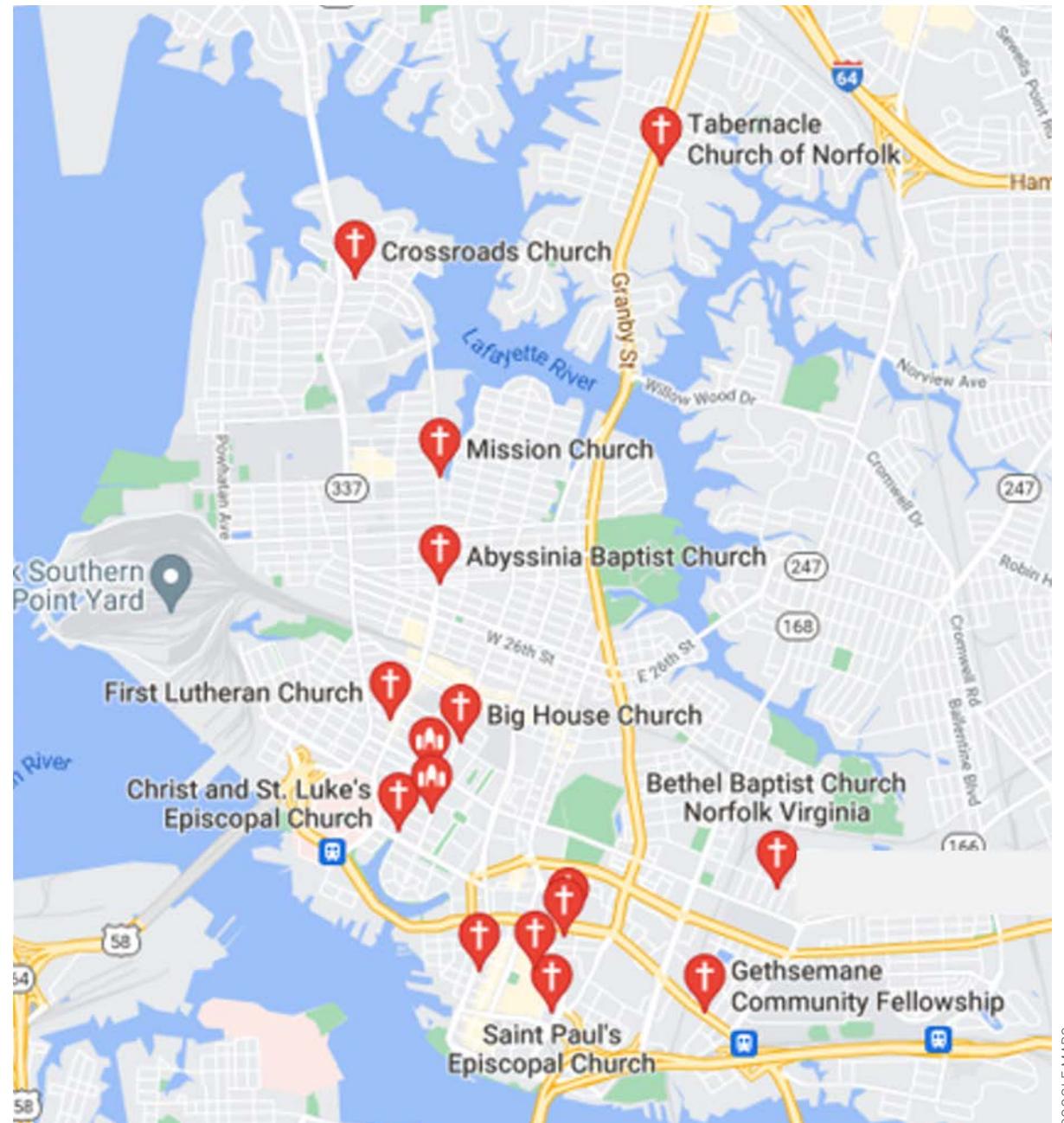
ULI, TPL, and NRPA are working with partners in select cities on measurable policies and strategies to advance the 10 Minute Walk vision. Success in this work will require the expertise, creativity, and close collaboration of public- and private-sector leaders. Learn more and connect with 10 Minute Walk at 10minutewalk.org and uli.org/parks.



Partnerships with Local Minority Businesses

Partnering with local minority businesses also could provide benefits to underserved communities in Norfolk. The panel believes that the trail could offer opportunities for economic development for local businesses in these neighborhoods by literally connecting consumers with the neighborhood businesses.

In addition, there may be opportunities to financially support people that use the trail to commute to work through some type of payment or other incentive.



There is a high concentration of church communities in the vicinity of the trail. The panel believes that these institutions could help connect the trail and the foundation to communities currently underserved by the trail.

Case Study: Phoenix Bikes

Phoenix Bikes is a program in Arlington, Virginia, that teaches life skills to underserved youth while providing them with a connection to the outdoors. By learning how to repair damaged bikes, young people can gain confidence and earn their own bike. The program provides people who might not ordinarily be able to use a trail amenity with this option and connects them with outdoor fitness activities in their community. In addition, the program allows people to learn a trade that can lead to employment in the future. More information about Phoenix Bikes is available at phoenixbikes.org.



CRISTIANA RALUCA, PEXELS

Changing Public Perception

The panel observed that the foundation's hard work has generated ample love and respect for the trail, developing it into an amenity that is beloved by community members and regular users. However, the panel found that the trail lacks strong connections to communities that have historically been underserved and/or excluded from planning and policy decisions. This divide or disconnect

may be creating hesitation among elected officials and city staff to fully commit to supporting the trail.

As the foundation updates its mission and vision, the panel recommends that the foundation consider how it engages with each neighborhood and that it tailors its community engagement approach with regard to each neighborhood's concerns and desires. Above all, the results of these conversations must be considered and

incorporated in the foundation's continuing actions and in any master plans. In addition, the careful creation and dissemination of branding materials, marketing materials, signage, and wayfinding will help the trail establish itself as a truly inclusive and diverse amenity for the entire city. The panel believes that these interactions and outreach measures should also open the door to bringing greater diversity, equity, and inclusion to the foundation's board and its DEI committee.

Community Engagement

The foundation has done a fantastic job of making champions out of existing users, partnering with businesses, and generating excitement for redevelopment. But getting buy-in from the communities that historically have been omitted from the planning process has been challenging. How can the sponsor bridge this gap? The panel believes the solution is intentional community engagement that goes beyond formal processes—to not merely share the vision, but to collaborate in formulating the vision.

To change community members' perception of the trail, the panel stresses that community engagement must go beyond generic processes that "check the box." The foundation and other stakeholders must be intentional in their desire to collaborate and develop a vision in unison. Strategies that may be helpful for engaging community members in a master planning effort are outlined in the following section. These strategies may also be incorporated into the foundation's strategic planning process and they may bolster the foundation's efforts toward diversity, equity, and inclusion. The panel

believes foundation staff must work with the city and stakeholders to develop questions that will guide conversations with community members, such as:

- What are the current perceptions of the trail?
- How can the trail support your community?
- How can the trail meet mobility, recreational, and other needs?
- Have any concerns been expressed about the impacts of development along the trail in neighboring communities?

Community surveys would provide a straightforward introduction to engagement with stakeholders and users. Surveys can be distributed online, in-person, at events, on buses, at community events, and at local churches. However, surveys are only one piece of the strategy. The panel notes that community engagement will benefit from the foundation reaching out to youth, the elderly, lower-income areas, and communities of color. Prioritizing in-person engagement will help reach the broadest swath of Norfolk residents.

The panel believes that foundation staff and volunteers can progress in their relationships with trail neighbors by meeting community members where they are, sharing information, and engaging individuals at events including farmers markets, youth sports events, and other community spaces. Critical to successful community engagement are the identification and compensation of community ambassadors who can champion the trail and help elevate residents' concerns and ideas. These ambassadors are especially necessary to the process when the trail and the foundation interact and intersect with underserved areas. The panel also recommends identifying ambassadors who are trusted within their communities; this step is key for establishing relationships and open communication channels for development efforts on the trail.

An Authentic Trail Vision

The foundation's current mission is to provide planning, fundraising, marketing, and volunteer recruitment and coordination to activate and enhance the Elizabeth River Trail. Its goal is to generate public support to create a world-class asset that is a source of local pride. The organization's vision is to create the most iconic, urban riverfront trail in the United States. While this vision places the trail in competition with waterfront amenities around the nation, the panel believes that reimagining the trail's vision will narrow the focus of the foundation and lead to increased success.

Throughout the stakeholder interview process, the panel found that, to generate public support and local pride, the ultimate goal for the trail need not be that it become the most iconic riverfront trail in the nation. The panel believes this vision may be doing a disservice to the organization by overcomplicating the trail and its planned improvements. Trail users are overwhelmingly positive about the trail and they enjoy its industrial atmosphere and the variety of environs through which it passes. The panel believes that a vision more aligned with this unique sense of place may help lead to improvements that are more authentic and achievable.



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Implementation and Next Steps

Turning ideas and plans into action can take time and coordination. Following is a matrix summarizing the panel's recommendations with guidelines for the timing of implementation.



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FUNDING AND PARTNERSHIPS FOR TRAIL MAINTENANCE AND EXPANSION

Time frame	Recommendations
Short term	Establish a "Friends of the Elizabeth River Trail" fundraising program to help foster and retain support for the trail.
	Audit the operating costs of the foundation and the trail to determine if the given \$775,000 figure for expenses is accurate.
	Work with relevant property owners to prepare and adopt an ordinance to designate an official trail corridor in the city of Norfolk, establishing appropriate standards for developing property within 1,000 feet of the trail.
	Update the MOU with the city of Norfolk to clarify the roles and responsibilities of each partner.
	Commission an economic impact study for the trail that quantifies the current economic benefits the trail generates for property owners in the form of increased property values, the economic benefits the trail generates for businesses in the form of additional revenue, its role in attracting talent to the community, and the impact of these elements on city tax revenue.
	Formulate a strategy by which to develop and maintain strong physical and programmatic connections between the trail and Old Dominion University, Eastern Virginia Medical School, Sentara Healthcare, and especially Norfolk State University.
	Conduct market research of residents across the city to understand and begin to address barriers to trail use.
	Begin to prepare and eventually adopt an Elizabeth River Trail Master Plan that is accepted by the city; doing so will provide a tool to guide the allocation of resources and prioritize projects along the trail and ensure that the vision for the foundation aligns with the unique sense of place that the trail creates.
	Pair the development of the master plan with a robust public engagement effort to co-create a long-term vision for the trail in partnership with the city, the foundation, key stakeholders, and a diverse group of residents representing all of Norfolk's neighborhoods.
Medium term	Create the business improvement district in concert with the city and begin using it to fund improved maintenance on the trail. The panel recommends securing an additional real estate tax on top of the city's current \$1.25 per \$100 of assessed value for all tax-paying businesses within 1,000 feet of the trail.
	Solicit additional funding through payments in lieu of taxes from nontaxable entities within the boundaries of the proposed business improvement district.
	Determine if resources are best spent on grant writing by staff, contracting with a grant writing professional, or asking if the city or metropolitan planning organization has a staff person or contractor who can assist.
Long term	Consider trail extensions north to Naval Station Norfolk and east to Virginia Beach, eventually linking with other regional communities along the South Hampton Roads Trail, the Birthplace of America Trail, and the East Coast Greenway.
	Once the trail's user base is expanded and diversified and it becomes less of a "hidden gem" and more of a valued centerpiece of Norfolk, pursue a voter referendum to allocate municipal funds to the trail's maintenance and improvement on an annual basis.

STRATEGIES FOR SEA-LEVEL RISE MITIGATION AND RESILIENCE

Time frame	Recommendations
Short term	Collaborate with stormwater engineers in the city's Public Works department to analyze existing conditions and prepare a more detailed assessment of how the trail corridor could contribute to the flood risk strategy.
	Pursue a baseline assessment of trail conditions by linear foot, characterizing segments by typology based on adjacencies and right-of-way width.
	Focus initial investments for flood mitigation on areas where there is a combination of highest benefit, highest visibility, and lowest cost so that residents and decision-makers understand the trail's resilience value. The foundation should keep all projects simple, with an emphasis on new and expanded trail connectivity.
	Identify areas of the trail that can become a safe route for travel during nuisance floods and during major floods, helping connect neighborhoods with emergency services and with critical destinations like Sentara Hospital, the Port of Virginia, and Naval Station Norfolk.
	Include signage, placards, interactive art, high-water marks, and interpretive elements along the trail that raise awareness of the ways Norfolk is adapting to a changing climate future and mitigating the climate impacts that affect the city today.
Medium term	Elevate certain segments of the trail corridor to create a new barrier protecting residents and properties farther inland.
	Leverage partnerships with the city and USACE to create on-site, subsurface storage or conveyance, as well as surface storage or conveyance.
Long term	Continue to coordinate with the city of Norfolk and other stakeholders to develop the trail as a part of the city's broader resilience strategies including barriers, water detention areas, bridge segments over flood-prone areas, and narrative elements describing climate change and resilience.

DIVERSITY, EQUITY, AND INCLUSION ON THE ELIZABETH RIVER TRAIL

Time frame	Recommendations
Short term	Within the foundation's board, establish a diversity, equity, and inclusion chair and committee that includes community leaders from underserved neighborhoods.
	Begin to formulate and eventually adopt a broader long-range master plan of the trail that includes outreach and collaboration with underserved neighborhoods that might be served by trail extensions.
	Conduct a survey of the parts of Norfolk that are currently underserved by the trail—particularly the communities of color—to help to gauge interest and areas of future focus for the board and for trail development.
	Prioritize a safe connection to Norfolk State University.
	Proactively work with communities of color to build awareness, interest, and buy-in in the trail.
	Use the trail for programs or events that connect health professionals with local communities of color.
	Encourage the mayor of Norfolk to join the city's 10 Minute Walk movement that highlights the need to focus on improving access to parks and greenspace.
	Partner with local schools to hold events, tours, or other educational activities related to classes the students are taking.
	Identify and work with community ambassadors who can champion the trail and help elevate residents' concerns and ideas.
Medium term	Prioritize key connections between nearby communities of color and the trail when investing in trail extension efforts.
Ongoing	Focus on an active and intentional community engagement effort with all communities in Norfolk. Be intentional in the desire to collaborate and to develop a vision in unison. Conduct community surveys, initiate in-person engagement, and meet community members where they are through community-focused events such as farmers markets and youth sports events.

Conclusion

The Elizabeth River Trail is blessed with a large group of supporters, 10.5 miles of connected corridor, and excellent waterfront access. The trail and its foundation have potential to reach more users, increase diversity, facilitate access to the water, and become a source of local pride for all of Norfolk. Careful stewardship of resources and the development of new reservoirs of support will allow the trail to expand into new areas, connecting numerous neighborhoods and bringing people to places they normally would not visit. The panel believes that the trail has the potential to catalyze change across Norfolk by standing as an example of considered and meaningful outdoor space for all users.



ELIZABETH RIVER TRAIL FOUNDATION

About the Panel

Fernando Costa

Panel Chair

Fort Worth, Texas

Costa is an assistant city manager for the city of Fort Worth, overseeing a group of six departments. He also serves as a part-time faculty member at the University of Oklahoma. Before accepting both jobs in 2008, Fernando worked for 10 years as Fort Worth's planning director, 11 years as planning director for Atlanta, and 11 years as a planner for the Middle Georgia Area Planning and Development Commission. He studied civil engineering and city planning at Georgia Tech and served as an officer in the U.S. Army Corps of Engineers.

Costa enjoys serving on the boards of many professional and community organizations. With ULI, he has participated in many Advisory Services panel assignments, played various roles in ULI Dallas-Fort Worth, chaired the award-winning Vision North Texas project, and recently took part on the jury for the Gerald D. Hines Student Urban Design Competition. He is a ULI governing trustee and a member of the ULI Americas executive committee.

Ryan Bouma

Washington, D.C.

Bouma leads the AECOM Urbanism + Planning practice along the east coast and, as a landscape architect and urban designer, guides public realm design efforts around the globe. His multidisciplinary waterfront design work ranges from resilient riverfront park design in Ningbo, China, to West Philadelphia's newest Schuylkill River access, to the high-performance green infrastructure of The Yards in Washington D.C., which was recently ranked one of the "12 coolest neighborhoods on the planet" by *Forbes*. These projects seek to simultaneously interpret history, enhance ecology, promote equitable access, and support community recreation and resilience.

Bouma holds a bachelor of science in landscape architecture from West Virginia University and a master of design studies in urbanism, landscape, and ecology from the Harvard University Graduate School of Design.

Rachael Griffith

West Chester, Pennsylvania

Griffith is senior trails and open space planner at the Chester County Planning Commission in Chester County, Pennsylvania, a suburban/

rural county in the Philadelphia area. Griffith has led multiple complex feasibility studies for regional trails, which are all part of Greater Philadelphia's more than 800-mile network of multiuse trails. Her work emphasizes solutions that are visionary enough to generate excitement yet realistic enough to be feasible, and her work often includes identifying creative funding solutions and partnerships.

Griffith is an expert in public engagement and believes a byproduct of every planning process should be increased civic capacity within communities. Griffith regularly interfaces with state government agencies, municipal governments, and local nonprofit organizations to advance the development of local projects and coordinate activities within the region related to land preservation and active transportation. She is active in the Circuit Coalition and a founding member of the coalition's Justice, Equity, Diversity, and Inclusion Task Force.

Prior to her current role, Griffith helped a startup environmental profit get off the ground in Philadelphia, which aimed to bring about greater awareness of and appreciation for urban wilds through engaging communities in ecological restoration projects with triple bottom-line benefits. She has also worked in

the private sector as a landscape architect on a wide variety of project types ranging from residential estates to inner city playgrounds to industrial complexes.

Griffith is a registered landscape architect in Pennsylvania and a certified planner. She holds a bachelor's degree in landscape architecture from Temple University and a master's in public administration from the University of Pennsylvania. She currently serves as a co-chair of ULI Philadelphia's Technical Assistance Panels Committee and serves on her local Planning Commission.

Paul Moyer

Arlington, Virginia

Moyer brings 34 years of experience directing dozens of planning projects in the Washington, D.C., metro region, as well as across the country and globe. Projects have included master planning, waterfront and watershed planning, transportation and transit planning, campus planning, and site-specific planning and design. As principal of the Jacobs Advance Planning Group, Moyer maintains the long-term vision for projects while establishing the practical, near-term steps, decisions, and milestones necessary to create project momentum. He facilitates this by communicating a clear understanding of the planning process, allowing for appropriate stakeholder buy-in, and defining ways that the client and other relevant parties can contribute and ultimately take ownership of the project's successful implementation.

Moyer collaborates with clients and provides planning leadership to proactively solve complex problems, establish implementable plans, and facilitate processes to gain support for a wide range of projects. His expertise in helping clients of all scales to understand and address technical project issues in environmental, economic, transportation, and urban design helps him drive projects toward the best solution for each project, client, and set of stakeholders.

Moyer's work spans private, local, municipal, and federal clients and has been recognized both locally and nationally by the American Planning Association and the American Society of Landscape Architecture. Moyer has a degree in urban planning from the University of Cincinnati. He is certified by the American Institute of Certified Planners and is an Envision Sustainability professional.

Rogelio Pardo

Los Angeles, California

Pardo brings a commitment to serving communities and a diverse transportation planning background with experience in the nonprofit, public, and private sectors. He currently serves as program director of Urban Movement Labs in Los Angeles, an organization that seeks to bring collaboration between community members, public agencies, and mobility technology companies to guide new mobility services. In his role, he works to guide pilot projects and identify metrics to ensure the lessons

learned inform refinements to operations models, policy that facilitates the adoption of mobility services, and benefits to community members. As a lifelong Angeleno, he is excited about the opportunity to foster partnerships between community members, public agencies, and private partners to bring meaningful mobility solutions to Los Angeles.

Before joining Urban Movement Labs, Pardo worked in the private sector where he focused on multimodal transportation policy and design, long-range transportation planning efforts, and strategic planning work. His approach ensured that community improvements were driven by community goals and informed by data analysis and community engagement. Pardo served as project planner and deputy project manager in the development of citywide transportation plans, specific area plans, and active transportation plans nationwide including Columbus, Ohio; Kansas City, Missouri; Lomita, California; and Maui, Hawaii. Pardo also has experience in ensuring street design complements local context, having played key roles in the development of the Institute of Transportation Engineers' report "Implementing Context Sensitive Design on Multimodal Corridors," Pasadena's street design guide, and a bicycle facility design guide for the province of Alberta, Canada.



Urban Land Institute
2001 L Street, NW
Suite 200
Washington, DC 20036-4948
uli.org