

# James River Association (JRA)

## *James A. Buzzard River Education Center*

### *Multimodal Connectivity Plan Scope of Work*

*Prepared by the U.S. Department of Transportation Volpe National Transportation Systems Center on behalf of the James River Association*



View of the River Education Center (Left) and the Kanawha Canal, with the James River Beyond the Locks (Right)

Source: U.S. DOT Volpe Center, March 2024



The James River Association (JRA), founded in 1976, is the oldest and largest river conservation group in Virginia, and the only organization solely dedicated to protecting and restoring America's Founding River, the James River. JRA's mission is to be the guardian of the James River – to provide a voice for the river and take action to promote conservation and responsible stewardship of its natural resources. To accomplish its mission, JRA's two strategic goals include: 1) Achieving a fully healthy James River; and 2) Helping communities within the watershed realize the benefits from a healthy James River and support protecting it.



*Financial and technical assistance for this study was provided by the National Park Service Chesapeake Gateways Office, Chesapeake Gateways Program.*

Through Chesapeake Gateways, the NPS Chesapeake Gateways Office inspires and helps people discover, experience, and connect with the natural and cultural heritage and recreational opportunities of the Chesapeake Bay and the rivers, landscapes, and communities across its watershed. NPS Chesapeake Gateways works with people and partners to conserve and steward special places important to communities, visitors, and the nation, for this and future generations. Support through this program is typically in the form of collaborative partnerships, technical assistance, and grants. NPS Chesapeake Gateways provides technical assistance through staff expertise to aid the managers and partners of Chesapeake places and programmatic partners in conserving, restoring, interpreting, and providing access to cultural, natural, and recreational resources within the watershed.



The U.S. DOT Volpe Center was established within U.S. DOT in 1970 to bring technical capability and a future-oriented outlook to pressing national transportation issues. The DOT Volpe Center provides technical expertise and develops solutions to complex transportation challenges in support of U.S. DOT, other Federal, State, and local agencies, non-profit organizations, private entities, and others. NPS Chesapeake Gateways funds an interagency agreement with the DOT Volpe Center to bring transportation and access expertise and technical assistance to aid Chesapeake places and partners.

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## Introduction and Background

This James River Association's (JRA) James A. Buzzard River Education Center (REC) Multimodal Connectivity Plan Scope of Work (SoW) outlines a comprehensive strategy, and tasks involved in improving transportation connectivity across different modes (e.g., roadways, public transit, cycling, walking) within the City of Richmond via Dock Street and the Virginia Capital Trail.

The JRA River Education Center (REC) is situated adjacent to the James River and Richmond's James River Park System sites. The REC will act as a hub for environmental education and river access to students, diverse communities, and visitors from across the Richmond region.

JRA has partnered with the National Park Service (NPS) Chesapeake Gateways Office (Chesapeake Gateways) and the United States Department of Transportation's (U.S. DOT) Volpe Center to develop a scope of work to diversify transportation accessibility to the REC and the James River from other parts of the city.

Chesapeake Gateways inspires and helps people discover, experience, and connect with the natural and cultural heritage and recreational opportunities of the Chesapeake Bay and the rivers, landscapes, and communities across its watershed. Chesapeake Gateways works with people and partners to conserve and steward special places important to communities, visitors, and the nation, for this and future generations. Support through this program is typically in the form of collaborative partnerships, technical assistance, and grants. Chesapeake Gateways provides technical assistance through staff expertise to aid the managers and partners of Chesapeake places and programmatic partners in conserving, restoring, interpreting, and providing access to cultural, natural, and recreational resources within the watershed.

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The project team reviewed existing planning and project documents as relevant to the project (as identified on page 4) and organized a site visit in March 2024 that included an on-the-ground analysis and a partner kickoff meeting, including several identified stakeholders that represented different governmental entities. In addition, the project team hosted a virtual partner kickoff meeting for those partners who were unable to make the in-person meeting during the site visit. Those who attended the site visit and organizations represented at the partner kickoff events are listed below for reference.

The Volpe Center then developed a site visit summary report (*Appendix A: JRA Site Visit Summary*) discussing the respective activities in depth. The group, led by Justin Doyle, Director of Community Conservation and Richmond resident, toured the REC and the surrounding areas, which included the Virginia Capital Trail, several James River Park System sites, and a section of the Gillies Creek

Park System near Williamsburg Road. The inclusion of time for the team to directly observe and understand the geospatial nature of the community through a transportation lens was crucial to begin envisioning alternative tools and techniques.

**The following documents were reviewed to inform this scope of work:**

- Richmond Riverfront Plan
- Richmond Connects Final Action Plan
- James River Park System Master Plan
- REC construction documents
- BikePed RVA 2045 Richmond Regional Bicycle and Pedestrian Plan
- Richmond 300: A Guide for Growth Master Plan
- Dock Street Park Interim Public Access Strategy
- Shockoe Small Area Plan and the Shockoe Project
- Greater Richmond Transit Company (GRTC) Regional Transportation Plan
- Virginia Capital Trail Foundation Trail Plans
- Richmond Maps

**Project Team**

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**Organizations Represented**

- Capital Trees
- James River Park System
- Venture Richmond
- Virginia Capital Trail Foundation
- Greater Richmond Transit Company (GRTC)
- City of Richmond Department of Public Utilities
- City of Richmond Office of Equitable Transit and Mobility (OETM)
- Plan RVA
- City of Richmond Department of Public Works
- City of Richmond Planning Department

# Existing Conditions

## Overview of Study Area

For this scope, the REC Study Area requires multiple scales of contextual analysis to understand how multimodal planning will operate in the future, including:

- **Scale 1:** the 0.85-acre James River Association’s Education Center site and immediate surrounding features.
- **Scale 2:** the City of Richmond as a whole.
- **Scale 3:** a regional lens within Central Virginia and the James River Region.
- **Scale 4:** the inter-regional and statewide context.

### *Scale 1: River Education Center (Site Level)*

The James River Association is a nonprofit organization that seeks to provide a voice to the river and take action to promote conservation and responsible stewardship of its natural resources. JRA was founded in 1976, a time of crisis for the river. Back then, national headlines were covering the toxic contamination from [the Kepone Environmental Disaster](#) that shut the entire river down to all fishing. Today, JRA monitors the river, responds to problems, and implements on-the-ground projects to restore the river’s health. JRA releases the annual State of the James report, and helps communities benefit from the river by increasing access, supporting river-related events, and implementing volunteer projects.

JRA’s 0.85-acre River Education Center site (Figure 1), is situated on the southern bank of the James River completely within the city limits of Richmond, Virginia. The River Education Center site is part of a larger, preserved five-acre parcel along Dock Street. It is bounded by Dock Street to the north, Dock Street Park to the east, and Great Shiplock Park to the west. Both parks surrounding the REC are part of the James River Park System. A Virginia Capital Trail trailhead is located at Great Shiplock Park, and the trail runs through the River Education Center site. The “Echo Harbor” site adjacent to Great Shiplock Park has an extensive history as a dock and marine terminal. REC is proximate to the Shockoe Bottom and Church Hill communities.

There is a conservation easement granted by the Capital Region Land Conservancy which restricts the types of development, and activities permitted on the REC site. The easement requires public access to the river through the River Education Center Site. It also only permits certain activities on the site, to include agricultural and forestall activities; commercial activities compatible with limitations on buildings and impervious surfaces; management of wildlife, natural resource based educational and scientific activities; development of ecosystem functions on the land with prior written approval of the Grantees; and indoor and outdoor recreational activities requiring little or no surface alteration of the land. All proposed projects should be viewed through the lens of this conservation easement.

Stormwater management is critical to this site due to its location in the floodplain. As such, the building sits on stilts to elevate the center from the ground, and an ADA accessible ramp was constructed instead of an elevator to provide access to the main entrance. Limited parking is

available on-site, with seven parking spaces for employee parking and a bus turnaround area. Chapel Island is accessible from the site via a pedestrian bridge located west of the site, just off the Great Shiplock Park parking lot. Lastly, there is an existing dock providing access to and from the river at the site. JRA is considering retrofitting the dock to be ADA accessible. Once improved, JRA envisions using the dock as a water access point to and from the River Education Center site – this could include both motorized and non-motorized water access.



Figure 1: James A. Buzzard River Education Center from two perspectives. The site is bounded by Dock Street to the north, Great Shiplock Park and the James River to the south, the Great Shiplock Park Parking lot to the west, and the new Dock Street Park to the east. Source: JRA.

Dock Street is a two-lane (one in either direction), relatively straight, high traffic road with few traffic signals and limited existing pedestrian infrastructure (Figure 2). The posted speed limit on Dock Street is 30 miles per hour (mph), though drivers often travel along Dock Street at speeds closer to 45 – 50 mph. Many drivers utilize Dock Street as a feeder road to U.S. Route 360 (Three Sixty Highway / South 14<sup>th</sup> Street), Interstate Highway 95 (Richmond-Petersburg Turnpike), and Interstate Highway 195 (Downtown Expressway East). Pear Street is a two-lane (one in either direction), relatively straight (up a hill) road connecting Dock Street to U.S. Route 60 / Virginia State Route 5 (East Main Street). Pear Street does not currently have sidewalks, except for a half a block closer to East Main Street. The posted speed limit on Pear Street is a residential street, so though no speed limit is posted, typical residential street speed limits are 25 mph. The vehicular entrance to the River Education Center is



Figure 2: Existing Conditions at the Dock & Pear Streets Intersection  
View traveling on Pear St. Crossing Dock St. (Top & Bottom Left).  
View traveling on Dock St. Crossing Pear St. (Top & Bottom Right).  
Source: U.S. DOT Volpe Center



located at the Dock Street and Pear Street intersection, which features two railroad crossings, one above and another at grade. Any improvements to the Dock Street and Pear Street intersection would require significant coordination with Norfolk Southern. The Virginia Capital Trail protected bike lane runs along Dock Street directly in front of the REC. The Richmond Riverfront Master Plan (Figure 3) envisions improved bike and pedestrian connections along the Dock Street corridor. JRA plans to use its dock as a launch pad for educational excursions on the river (Figure 4). Adjacent to JRA's dock is the new Dock Street Park, a recreational resource owned by the city and part of the James River Park system that enhances the general environment surrounding the River Education Center (Figure 5). Construction of the REC was recently completed, and the center is now open to the public (Figure 6). JRA is currently providing environmental education programs at the REC and will conduct water quality monitoring activities there in the future. Additional programs and events are anticipated in the future.

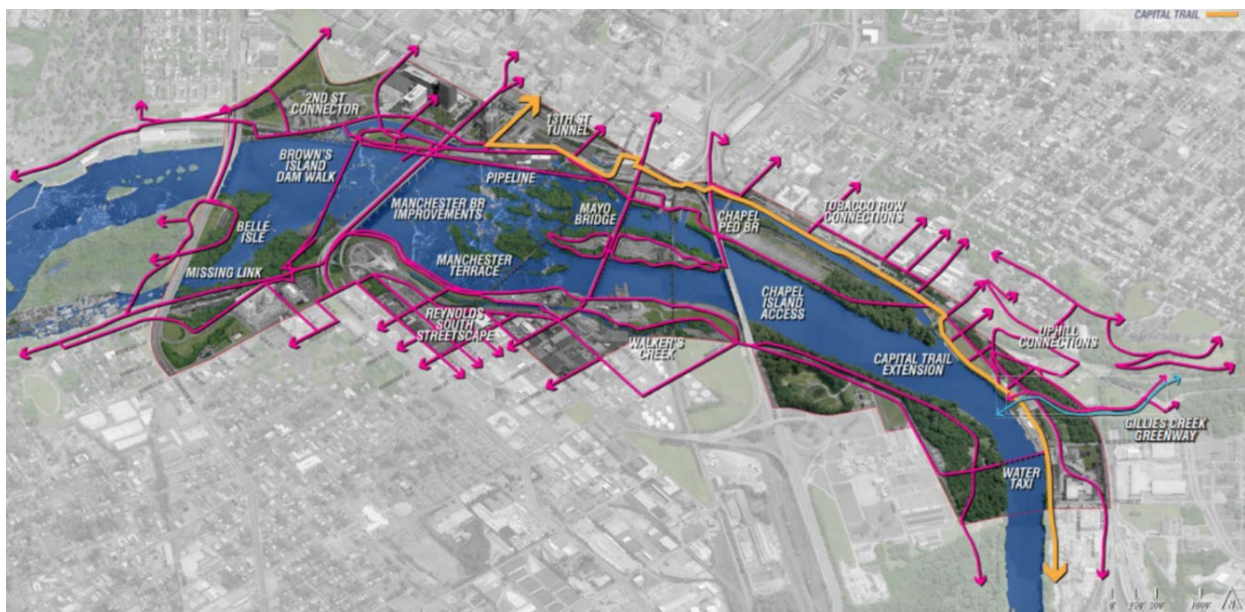


Figure 3: The Richmond Riverfront master plan envisions improved bike and pedestrian access throughout the area. The Virginia Capital Trail is illustrated in yellow. Source: [Richmond Riverfront Plan](#).



Figure 4: View of the Existing Dock from the River Education Center Site. Source: Volpe Center, March 2024.



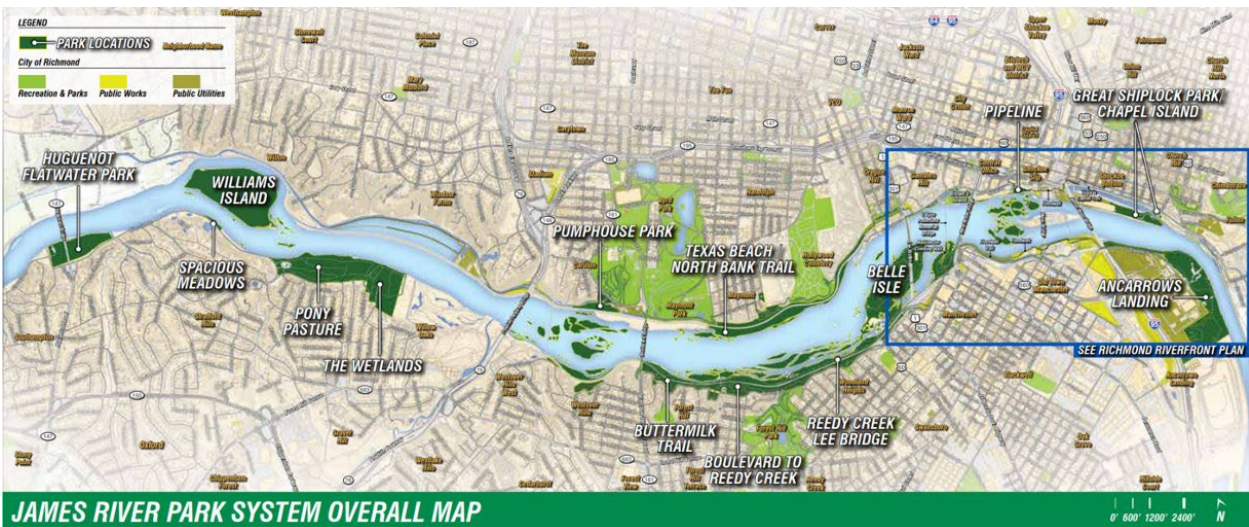


Figure 5: Dock Street Park illustrated in context of the James River Park System.  
Source: James River Park System Master Plan (2019).



Figure 6: James River Association - River Education Center.  
Source: JRA, August 2024.

## Scale 2: City of Richmond

The River Education Center will exist in the context of the City of Richmond, and its proximity to downtown businesses and recreational sites. This positions the REC to attract visitors from these high traffic destinations, and act as a key stakeholder (in addition to JRA's present mission) during discussions pertaining to pedestrian safety, bike safety, and transit access in the area.

Downtown Richmond (Figure 7) is bounded by the I-64/I-95 interchange to the north, by Church Hill and Gillie Creek to the east, and by Belvidere Street to the west. The eastern boundary is



interrupted by I-95, which separates the Capitol District and its government offices from the Shockoe Bottom neighborhood, where the Richmond Main Street Station, the James River Association Administrative Offices, and the River Education Center are located. The James River, Virginia Capital Trail, and Kanawha Canal form Downtown Richmond's southern boundary.

Richmond's James River Corridor features a full range of mixed land uses, including commercial, residential, and recreational. Shockoe Slip (Figure 8) is a prime example of these uses, as the street features restaurants, hotels, apartments and small offices with convenient access to Canal Walk. Farther east on East Cary Street, Tobacco Row hosts former tobacco factories with much of the same activities as seen on the Shockoe Slip. Canal Walk is a public recreational facility connected to the Capital Trail that provides access to local businesses, art installations, and Brown's Island Park. In the summer, Brown's Island Park hosts Friday Cheers, which is an outdoor concert series hosted by Venture Richmond, and the Richmond Folk Festival. Brown's Island is a one and a half mile walk from the River Education Center site, and the two are directly connected by the existing trail network.

Major employers in the vicinity include the Federal Reserve Bank, the Commonwealth of Virginia, Truist Financial, Dominion Energy, CoStar, the City of Richmond, and Virginia Commonwealth University Medical Center. All these employers are located within half a mile of the Greater Richmond Transit Company's (GRTC) Bus Rapid Transit (BRT) System, The Pulse (Figure 10). Overall, the REC is in an area that is well served by transit and close to jobs and amenities, that could translate into increased visibility and visitation.

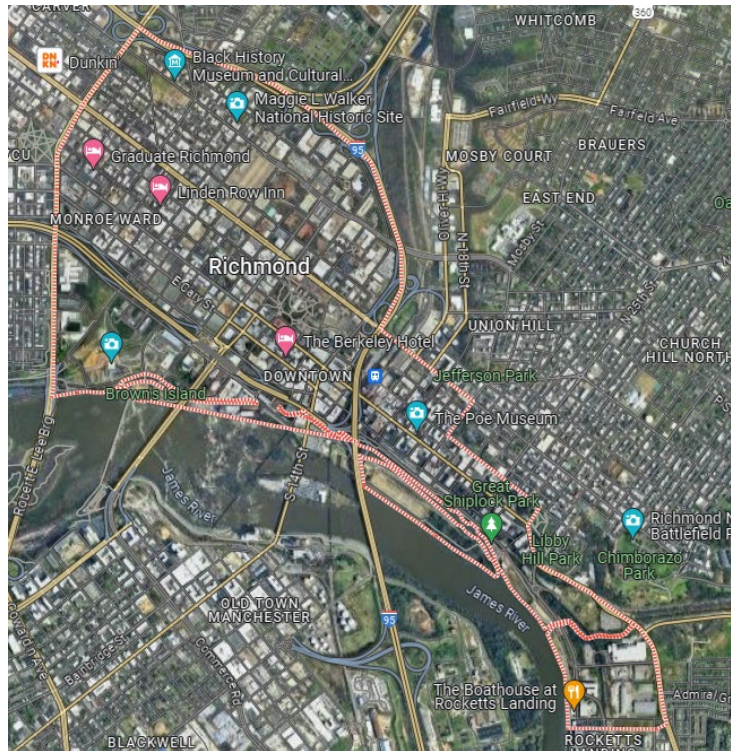


Figure 7: Red outline indicates the boundaries of "Downtown Richmond". The green tree icon indicates Great Shiplock Park, directly adjacent to the River Education Center.  
Source: Google Maps.



Figure 8: Shockoe Slip.  
Source: Venture Richmond.

### Greater Richmond Transit Corporation (GRTC)

GRTC operates fixed route transit services in the City of Richmond and parts of Chesterfield and Henrico counties. GRTC services include local routes, express routes, high frequency routes (15-minute headways on weekdays and Saturdays), paratransit, and BRT via The Pulse (Figure 9 and Figure 10). In 2023, [GRTC opened its first off-street transfer hub](#) on East Leigh Street between 8<sup>th</sup> and 9<sup>th</sup> Streets, which supports 20 routes and 5,000 connections a day. The transfer station is approximately two miles east of the River Education Center but could be relocated as GRTC seeks a more permanent location.

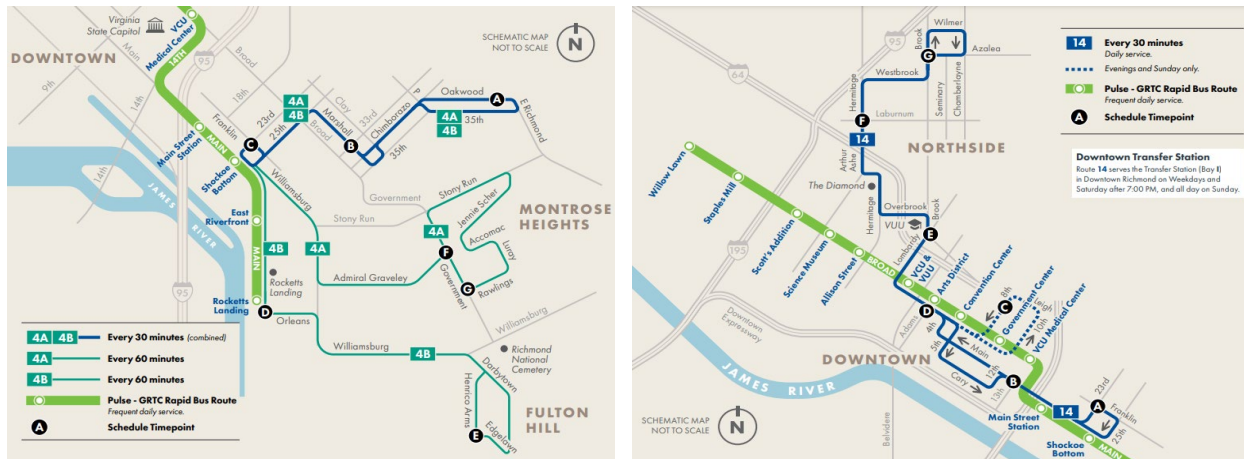


Figure 9: GRTC Service near the James River Proximate to the REC site.  
Source: Greater Richmond Transit Corporation.

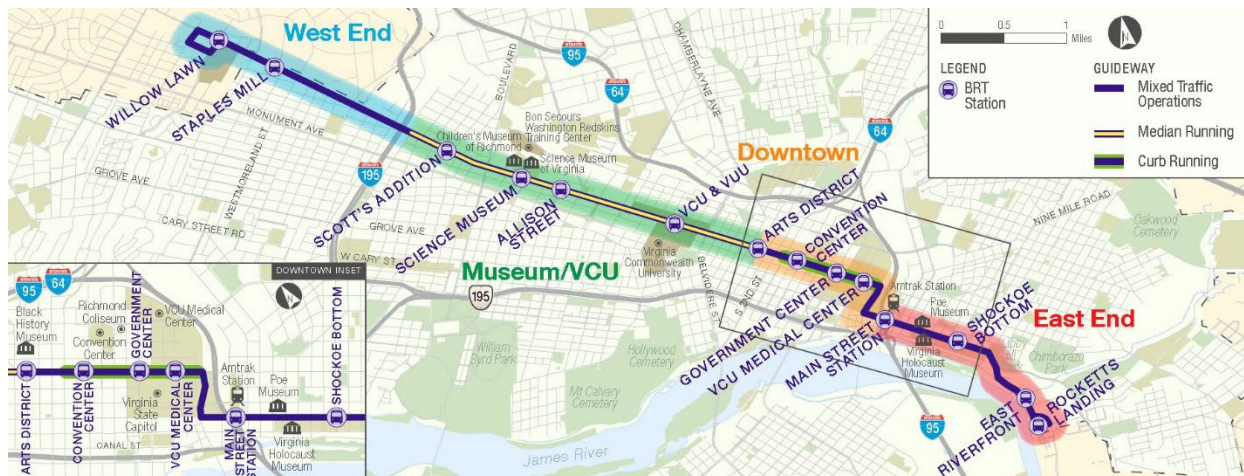


Figure 10: Map of the GRTC Pulse Bus Rapid Transit System. The zoomed in section illustrates the multiple stops in Downtown Richmond. Source: Greater Richmond Transit Company.



Presently, there is no fixed route service available on Dock Street. The nearest bus stops to the REC are the East Riverfront Pulse Station (BRT) on East Main Street or the bus stop at East Main Street and 26<sup>th</sup> Street serving routes 4A, 4B, and 14. East Riverfront Station is just under half a mile away from the REC (an approximate seven-minute walk). The 4A, 4B, and 14 stop on East Main Street is 0.3 miles from the REC (an approximate six-minute walk). The Pulse operates daily on a 15-minute headway, with peak morning and evening commute service offered every 10 minutes. The 4A and 4B routes serve as feeders to the Pulse in the Shockoe Bottom neighborhood and communities on the east side of Richmond. Routes 4A and 4B each operate on 60-minute headways but combine in one segment to provide 30-minute service. The 14 route serves Richmond's northside with 30-minute headways and stops at the Downtown Transfer Center. The [Richmond Connects 2024 Action Plan](#) envisions increased service for the route 14 bus with high-frequency headways every 15-minutes. However, there are other opportunities for GRTC to improve fixed route and bus rapid transit service in the River Education Center vicinity. For example, the dedicated bus lanes for the Pulse terminate west of the I-95 overpass and could be extended to the end of the route in Rockett's Landing, which would result in faster, more reliable service for riders in the area. Further, in the future, there could be a dedicated stop near the Great Shiplock Park and River Education Center parking lot to better serve tourists and visitors.

Transportation in Richmond's East End is ripe for innovation. GRTC is in the midst of several projects, such as the [Permanent Downtown Transfer Hub](#) which will create a permanent 10-bay transfer facility with mixed-use housing and commercial opportunities, and [the Pulse extension](#) to include the North-South Pulse project which will add 12 new miles of high-capacity modern rapid transit service, connecting county to county via Downtown Richmond.<sup>1</sup> These projects are likely to increase accessibility to the Downtown and the James River area.

### **Existing Street Network Conditions**

The street network north of the James River in Richmond is on a grid system (Figure 11). East Broad Street is the major bidirectional thoroughfare, supported by smaller one-way streets such as East Cary Street, East Main Street, East Canal Street, and East Franklin Street. Dock Street is a smaller bidirectional thoroughfare that follows the riverfront beginning at South 14<sup>th</sup> Street. Sidewalks and streetlights are common, and some segments of East Cary Street feature urban tree canopies. I-95 also sits at

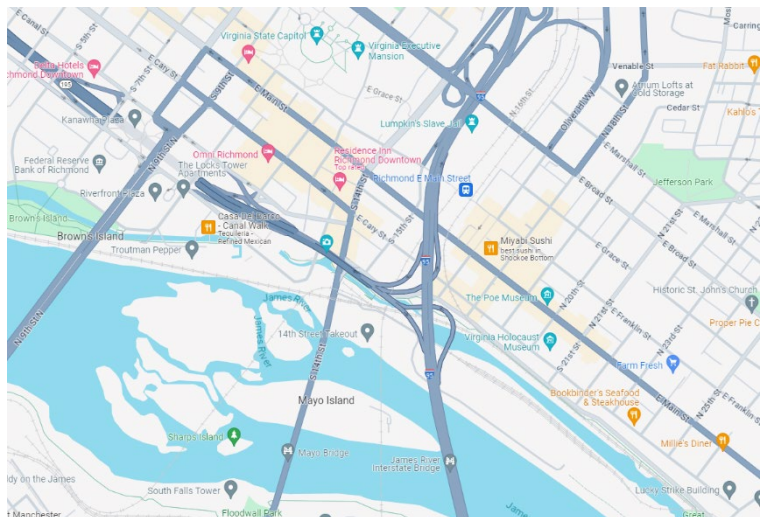


Figure 11: Downtown Richmond Street Grid.  
Source: Google Maps.

<sup>1</sup> GRTC provides a 5-year outlook on GRTC and Regional Transit Growth and Expansion here: [GRTC Growth and Expansion \(arcgis.com\)](#).

the fall line in the city, meaning that eastbound pedestrians and cyclists must climb a gentle hill on East Cary and Main Streets, or a steep hill on East Broad Street.

Franklin Street forms the backbone of the bike infrastructure in Downtown Richmond, beginning at Belvidere Street in the west and terminating at North 9<sup>th</sup> Street in the east. This protected bike lane connects Monroe Park at the Virginia Commonwealth University to Virginia Capitol Square, two important employment and residential centers in the city. There are plans to [extend the Franklin Street bike lanes further west to Lombardy Street](#) to better serve the Fan District, but the eastward extension would also benefit the River Education Center. The Richmond Connects Plan does not call for this expansion, but a future iteration may.

[Walk Score](#) is a service that measures walkability, bike-ability, and transit service in a given neighborhood using a [methodology](#) that measures trail quality, distance to amenities, and quality of service. Walk Score's mission is to promote walkable neighborhoods. Shockoe Bottom, where the REC is located, is the seventh most walkable neighborhood in Richmond. The neighborhood has a high walk score of 91 out of 100, which is a "Walker's Paradise" meaning that daily errands do not require a car, and a bike score of 56, which is "somewhat bikeable".<sup>2</sup> This is considerably higher than the City's overall walk and bike scores of 51, which is "somewhat walkable" and "somewhat bikeable".<sup>3</sup> The street grid in the immediate neighborhood is simple to navigate and features sidewalks throughout, but further improvements to safety and aesthetics would make walking to the River Education Center a more viable option.

### Multi-Use Trails Development

The Virginia Capital Trail (Figure 12) passes through the River Education Center site and presents an opportunity to better connect tourists with JRA's programming. This existing resource could be improved through new signage, such as wayfinding indicating travel distances to REC, and through new trail connections.

The Richmond Riverfront plan (Figure 13) calls for enhanced connections to uphill neighborhoods and local businesses (e.g., Stone Brewing Tap Room) via Williamsburg Road. Specifically, the plan hopes to create new northbound routes originating at Dock Street and Wharf Street and



Figure 12: Detailed Map of James River Trail System through Downtown Richmond. Note: Brown's Island Underneath the Manchester Bridge. Source: James River Park System Master Plan.

<sup>2</sup> Source: [Shockoe Bottom Richmond Apartments for Rent and Rentals - Walk Score](#).

<sup>3</sup> Source: [Richmond Apartments for Rent and Richmond Rentals - Walk Score](#).

crossing perpendicularly with East Main Street. One of these routes involves constructing an ADA-accessible connection to the [Gillies Creek Greenway Project](#), which is currently in progress.

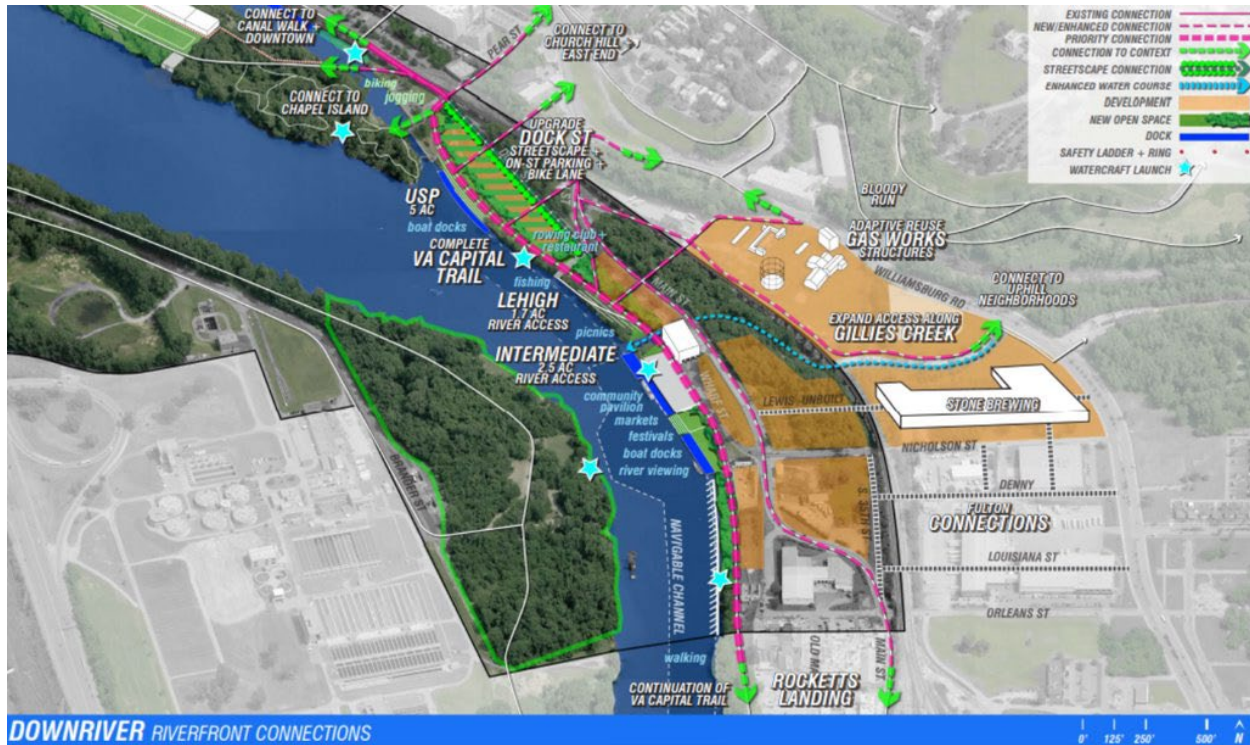


Figure 13: Riverfront Connections Identified in the Richmond Riverfront Plan.  
Source: Richmond Riverfront Plan (2017 Amendment).

The trail should support active transportation modes such as bicycles, scooters, and walking through new features like e-scooter pick-up / drop-off zones, bicycle racks and shared docking stations, adequate lighting along the trail, water fountains, and rest stops. Many, if not all, of these new features could be added to the REC site within the allowances of the conservation easement.

### Water-Based Connections

Richmond's location on the James River positions the city for water-based transportation connections. The Port of Richmond offers access to the Chesapeake Bay, Hampton Roads, and the Atlantic Ocean. The Richmond Marine Terminal is part of the Port of Virginia. Located within city limits, the terminal provides jobs and access to commerce from points downriver in Hampton Roads and beyond.

The historic Kanawha Canal operates tours in authentic canal vessels along parts of downtown. While not currently possible due to an old lock near Great Shiplock Park, the River Education Center's dock could one day coordinate with canal tour services to provide a stop. Alternatively, JRA could also launch its own canal boat service to offer an ecological perspective of the Kanawha Canal to complement existing historic programming.



JRA plans to use the River Education Center’s dock for water quality testing and educational excursions, but it could also serve as an important method of bringing in new tourists. In the future, the city could re-activate the portion of the Kanawha Canal proximate to the REC and feature the dock as a landing site or as a rest stop along its route. The dock could also ferry tourists across to points east and south on the James River such as Ancarrow’s Landing Park or Presquile National Wildlife Refuge.

### ***James River Planned and Future Development Projects***

The City of Richmond has seen new developments rise along the river in recent years. The Richmond Economic Development Authority (EDA) has been exploring ways to revitalize a former marine terminal directly adjacent to the River Education Center and Dock Street Park, including one plan to expand Stone Brewing’s presence in the neighborhood. Apartment buildings and townhomes are also planned or under construction along Dock Street and East Main Street, bringing in new residents. New construction projects, such as apartment complexes in Rockett’s Landing, are bringing more commerce within reach of the REC. East End communities in Richmond are also seeing increased development, which provide new opportunities for JRA to grow its visitation. The city also recently announced a new amphitheater that will be constructed at Brown’s Island, which will draw in tourists from around the region. This amphitheater will be connected to the River Education Center via a shared use path. New developments along the river offer JRA the opportunity to reach new audiences and position itself at the center of Richmond’s era of growth.

Further, Richmond is invested in the future of the Shockoe Bottom neighborhood. Richmond’s [Shockoe Bottom Area Plan](#) identifies an opportunity to create high quality places, expand equitable transportation, and sustain a thriving environment and highlights the need for a safe, clean, walkable neighborhood. The Plan also aims to boost active transportation infrastructure and provide universal access to all road users. Furthermore, the Shockoe Plan seeks to address the heat island effect through increased tree canopy. Given the River Education Center’s location proximate to Shockoe Bottom, there is a prime opportunity to work with the city to advance projects for future improvements that enhance multimodal options and better connect areas of the neighborhood to the River Education Center and the James River.

### ***Scale 3: Greater Richmond / James River Region***

The River Education Center is located at the center of the broader Greater Richmond / James River Region. Regional growth trends affect more than just the number of visitors it may receive, but also the demographics of those visitors, the strength of the community, and the future of the broader context it inhabits. The region includes Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, and the City of Richmond.

As the current state capital and former capital of the Confederacy, Richmond is culturally significant to regional and national history. Richmond is proximate to the Petersburg National Battlefield to the south, and Jamestown and Henricus to the east. Neighborhoods such as the Fan, Shockoe Bottom, and Carytown contain numerous buildings of architectural significance,

especially along Monument Avenue in the Fan. Notably, Monument Avenue was the site of protests in the summer of 2020 that lead to the removal of confederate statues throughout the city. All of these elements contribute to Richmond’s appeal as a sightseeing and tourist destination, which is beneficial to the River Education Center.

As part of the James River Waterway System, Greater Richmond sits at the fall line, marking the head of navigability for vessels travelling west from the Chesapeake Bay. This geography makes the area a popular destination for outdoors enthusiasts, including white water rafters, hikers, and campers. This also contributes to the economy, as Richmond is the site of the Richmond Marine Terminal, which is part of the Port of Virginia and is served by the James River Barge Service. The REC serves as an important venue to connect visitors with the natural ecosystem that is the James River and encourage regional tourists to do their part in protecting it.

[The Fall Line Trail](#), a Central Virginia Transportation Authority Project, aims to connect Richmond with a 40-mile network spanning from Ashland in the north and Petersburg to the south. This project broke ground in 2024. Taken together with the existing trail system that goes east towards Colonial Williamsburg, the REC is at the center of a vast network that will bring in visitors from across the region and beyond.

Broad Street in Richmond also serves as US-60, an important travel corridor that connects Richmond with key destinations beyond its borders such as Short Pump, a busy commercial center in neighboring Henrico County. I-95 and I-64 also serve as invaluable commercial corridors bringing people from the surrounding suburbs and rural areas into the city. Dock Street, East Main Street, and Williamsburg Road all provide connections for commuters in East Henrico and the New Kent exurbs. The River Education Center benefits from all the regional travel that occurs beyond Richmond’s city limits.

Greater Richmond (Figure 14) forms one of the three pillars of Virginia’s “urban crescent”, which also includes Northern Virginia and Hampton Roads. Most Virginians live within the urban crescent. According to [Plan RVA](#), the Richmond Region is expected to gain 136,000 jobs and 300,000 people by 2045. [Old Dominion University’s State of the Commonwealth Report](#) shows Richmond’s real median household income grew 3.7 percent between 2019-2022, better than Virginia (decreased 2.2 percent) and the U.S. (decreased 0.9 percent). Greater Richmond is home to 15.2 percent of Virginia’s population, about 1.3 million people, and represents 15 percent of Virginia’s GDP. Central Virginia’s GDP grew nearly 2 percent between 2010 and 2021, 0.7 percent more than the State. Lastly, Greater Richmond’s employment grew 3.5 percent between 2020 and 2022, 0.5 percent more than the State and on par with the U.S. Overall, economic trends place the River Education Center in a region that is seeing steady growth, and can expect to see more development, jobs, and people in the surrounding area going forward.



Figure 14: Greater Richmond Region. Source: Virginia Economic Development Partnership.

### Scale 4: Inter-Regional / Statewide

The River Education Center also exists in context beyond its immediate region, with transportation systems connecting it far and wide. It is important to place the REC in this context so it can maximize its reach and spread its mission to other communities within the Chesapeake Bay Watershed, which is much larger than Greater Richmond and encompasses six states.

The City of Richmond is the State capital, and therefore holds political salience throughout the Commonwealth. As previously described, Richmond is at the crossroads of two major interstates, I-64 and I-95. The east/west I-64 extends from I-81 in Shenandoah Valley in the west coastal Hampton Roads in the east. The north/south I-95 extends north to Washington, DC and south towards Raleigh, NC. Both interstates bring commerce into and through Richmond in the form of tourism, goods, and services. I-195 provides a short spur from I-64 / I-95 to the interchange with Virginia State Route 76 (Powhite Parkway) and Virginia State Route 195 (Downtown Expressway), providing an alternate route to the west side of Downtown Richmond.

The I-64 corridor connects Richmond to major jobs centers such as Hampton Roads and Charlottesville. It also connects to several universities including The College of William and Mary, Old Dominion University, the University of Virginia, and historically Black universities such as Hampton University and Norfolk State University.

The I-95 corridor is more significant than I-64 given that its reach spans much of the East Coast.<sup>4</sup> I-95 connects Richmond with other large population and employment centers like the North Carolina Research Triangle and Washington, D.C. It also connects to universities including George Mason University, Mary Washington University, George Washington University, Georgetown University, and historically black universities such as Virginia State University and Howard University.

The Richmond Marine Terminal and James River Waterway also provide access beyond the Greater Richmond region. Historically, the James River could carry passengers as far west as Lynchburg.

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<sup>4</sup> I-95 is one of the most heavily traveled corridors in the country, spanning more states than any other Interstate highway and connecting the Northeast with the Mid Atlantic and Deep South. Source: [Richmond-Petersburg - AARoads](#).



In addition, the Richmond area is home to two Amtrak stations, one at Main Street Station and one at Staples Mill Road. Richmond is a rail crossroads (Figure 15), with the routes parallel to the interstates with planned improvements over the next decade through the [Transforming Rail in Virginia](#) initiative. This initiative is expected to deliver [near-hourly service](#) to Washington, DC, with many trips stopping at Main Street Station, less than one mile from the REC (an approximate 19-minute walk). The rail corridor connects Richmond with points north and east, including the wealthy Northern Virginia region, Washington, D.C., Norfolk, and Virginia Beach.



Lastly, the Richmond International Airport connects the REC to destinations far beyond Virginia and presents opportunities to build tourism nationally and globally. Further, Richmond is within a two-hour drive of three more airports, including the Charlottesville-Albemarle Airport, the Newport News – Williamsburg International Airport, and the Norfolk International Airport.

As discussed in detail in this scope of work, transportation issues that JRA and the City of Richmond should continue to examine and address as the River Education Center develops include the following:

- Safety, Accessibility, and Visibility Concerns:** The lack of bicycle and pedestrian infrastructure along Dock Street creates an unsafe environment for pedestrians and cyclists crossing between the Capital Trail and the Shockoe Bottom neighborhood. At times, users must cross through multimodal traffic to access the site with no dedicated, safe crosswalks, or signals. In addition, there are few striped crosswalks or signals and fewer speed bumps on the ride down Dock Street to the River Education Center. In addition, there are two railroad crossings at the Dock and Pear Street

intersection, one at-grade and one above grade. There is minimal safety infrastructure in place to prevent an accident on the at-grade railroad, which creates a barrier to pedestrians traveling from East Main Street and Church Hill.

Dock Street experiences high volumes of traffic during rush hour, and local stakeholders emphasized the safety concerns about speeding vehicles. In 2016, WWBT NBC12 covered an [accident](#) at the intersection of Pear

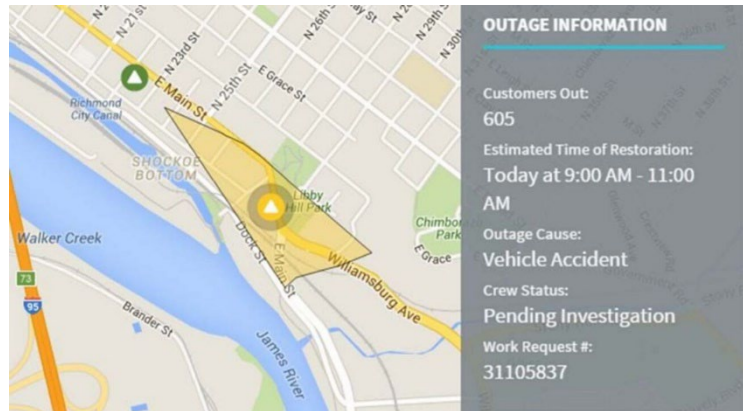


Figure 16: Incident Report from the 2016 Accident at the Dock Street and Pear Street Intersection. Source: WWBT News.

and Dock Street that left hundreds of neighborhood residents without power (Figure 16), underscoring the dangerous road conditions near the River Education Center. Dock Street also needs more ADA infrastructure to facilitate the movement of all pedestrians. The core problem is the tension between Dock Street's function as a motorized commuter thoroughfare and the reality of Dock Street's location in an urban setting with nonmotorized commuters, trail tourists, and river visitors. The 2024 Richmond Connects plan calls for raised intersections and curb ramp improvements to slow vehicle speeds on Dock Street from 18<sup>th</sup> street to Pear Street, providing for safer and more frequent pedestrian crossings.

There are also visibility concerns for residents and visitors, as streetlights along the Capital Trail and Dock Street are minimal. A lack of lighting can deter people from traveling at night for safety reasons. East Main Street shares many of the same challenges as Dock Street. Its lack of crossings and safety infrastructure creates a hazardous environment for pedestrians. JRA is limited by the conservation easement, which restricts the addition of lighting and signage on the REC site itself.

**Inadequate Parking:** The primary purpose of the River Education Center is to host educational programming and increase awareness of the health and vitality of the river. However, the site will also be open to the public and JRA intends to host other events during non-school hours at the site, which will require either parking for visitors on-site or parking off-site and safe multimodal access to and from the site. The River Education Center site has on-site parking for seven (7) vehicles, which will mostly be for staff, and a bus loop that can accommodate up to two (2) buses. The limited parking available at the site will make it hard to accommodate visitors (aside from school groups) on-site. JRA is also limited by the conservation easement, which restricts the amount of impervious surface that could be used for parking throughout the site. Therefore, multimodal access to the site will be crucial. JRA is coordinating with the City of Richmond's Public Works and Economic Development Authority on parking needs.

Great Shiplock Park's adjacent parking lot has 22 standard parking spaces and one (1) accessible parking space, all of which is currently unrestricted. However, this lot fills up throughout most of the day with park and trail users, and therefore will not be viable for River Education Center visitors. In addition, there is limited parking at an unofficial lot located on the corner of Dock Street and Pear Street directly across from Great Shiplock Park and the River Education Center site and at the Park

Chevere / University of Richmond Fishing Dock parking lot located right off of Water Street along the Virginia Capital Trail a few blocks from the River Education Center site, as well as on-street parking along Pear Street and Dock Street and adjacent to the East Riverfront Pulse BRT Station (unrestricted). However, pedestrian safety is a major concern on Dock Street, especially at the Dock Street and Pear Street intersection.

Given the parking challenges, JRA identified a few potential opportunities for shared parking at larger nearby lots. These lots included the parking lots at the Virginia Holocaust Museum and the Stone Brewing Tap Room (Figure 17). During the site visit, these lots appeared to have plenty of vacant parking. The Virginia Holocaust Museum operates from 9:00 am – 5:00 pm on weekdays and from 11:00 am – 5:00 pm on weekends, which means after hours events for JRA should not conflict with museum parking. Stone Brewing Operates from 2:00 pm – 9:00 pm on weekdays and 12:00 pm – 9:00 pm on weekends which could potentially allow for JRA to utilize their lot for weekend morning events.



Figure 17: Stone Brewing Taproom Parking Lot (Left); Virginia Holocaust Museum Parking Lot (Right).  
Source: U.S. DOT Volpe Center, March 2024 (Left); Google Maps (Right).

**Bicycle and Pedestrian Connection Limitations:** Shockoe Bottom is a walkable neighborhood, and the Virginia Capital Trail and Canal Walk provide a means of traveling along the James River without interference from traffic. However, the streetscape is limited in its capability to move pedestrians to potential destinations. An example of this is the relatively few crossings at Dock Street and East Cary Street that could help pedestrians travel from East Main Street to the trail and riverfront, restricting mobility. Roadside tree canopies are underdeveloped in the neighborhood, exposing pedestrians and cyclists to higher temperatures and precipitation. In many areas, the sidewalks are uneven and under-maintained, making it uncomfortable for pedestrians and wheelchair bound individuals to travel long distances. Many of the sidewalks are too narrow for pedestrians to pass one another, with utility poles often in the way. Bike lanes are uncommon beyond Dock Street and the 17<sup>th</sup> Street Market near Main Street Station, making travel inconvenient and occasionally dangerous. A lack of secure bicycle parking also makes it difficult for people to travel by bike, though the REC does have several bike parking spaces at the site. Further, restrooms and drinking water facilities are sparse for users along existing trails. Wayfinding in Shockoe Bottom is somewhat present, but generally underdeveloped. East Main Street can at times be difficult to cross, with fewer signalized intersections in the eastern sections of Shockoe Bottom. The

unsignalized intersections lack painted crosswalks or curb bump outs, effectively creating a second barrier for pedestrians traveling from Church Hill and Union Hill toward the James River.

## Summary of Key Transportation Opportunities

The River Education Center is well positioned to seize new opportunities to increase access to the site. Multimodal transit networks offer people options for arriving to the same destination and should guide planning for future transportation initiatives in and around the site. Based on the site-visit and discussions with stakeholders, the following key transportation opportunities have been identified:

- Streetscape Improvements
- Multi-Use Trails
- Micromobility and Microtransit
- Water-Based Connections
- Shared Parking

**Streetscape Improvements:** The area surrounding the REC would benefit from safety and pedestrian experience improvements. Brighter lights and level-widened sidewalks create a safer environment for pedestrians. Raised crosswalks and speedbumps could help usher pedestrians across Dock Street and contribute to lower speed, pedestrian first conditions. These same improvements would make it easier for pedestrians to travel from Church Hill and Old Main Street on foot. Coordination with the local authorities on speed monitoring could help reduce high speed accidents along Dock Street. Improved wayfinding through directional signage throughout the neighborhood and local trail system could help pedestrians arrive at the REC. In addition, given that the REC site is located on part of a larger trail system, it is likely that many people passing through the area may be traveling longer distances. As such, rest facilities like public restrooms and water fountains could also be installed. That said, JRA is limited by the conservation easement, which may restrict the addition of any amenities on the REC site itself but could potentially be added to adjacent public properties.

**Multi-Use Trails:** Newly constructed trails should support active transportation modes such as bicycles, scooters, and walking through features like e-scooter pick-up / drop-off zones, bicycle racks and shared docking stations, adequate lighting along the trails, water fountains, and rest stops. There is an opportunity for JRA take advantage of the REC's existing connection to the Virginia Capital Trail and Canal Walk by working with officials to improve wayfinding, such as adding signage that indicates distance to the site and travel times by foot or bike. REC is conveniently connected to new development activity along the James River Corridor, including apartments, Browns Island, and an under-construction amphitheater. By enhancing the trails running through or near these destinations, JRA can boost visibility and attract more visitors to the REC.

**Micromobility and Microtransit:** Micromobility refers to a range of small, lightweight vehicles driven by users such as bicycles, scooters, and skateboards including shared systems. Microtransit is an on-demand service that uses app-enabled trip request and fare payment functions such as



rideshare services, on-demand transit, and paratransit services. Both micromobility and microtransit provide first mile / last mile travel options and improve equity and accessibility. First mile / last mile travel is essential to get visitors to the REC. As the use of these transit options becomes increasingly more common, so does the need for infrastructure to accommodate the services. The REC's location on the James River and proximate to Downtown Richmond, the James River Park System, and the Capital Trail make it a prime location for installing intentional, designated pick up and drop off locations for microtransit, as well as bike share and scooter share docking stations, increasing secure bike parking and storage, and setting up corals or a geofence in the vicinity to ensure scooter services function properly.

**Water-Based Connections:** The REC has a dock at the entrance to the Kanawha Canal and is located just south of the James River Fall line, which could allow for ferry travel to points east down-river. These features allow for educational experiences on the river and provide an opportunity to bring in visitors from other educational sites such as Jamestown. Should the Kanawha Canal be reopened for recreational or functional transit purposes, the REC is well suited to capture new activity stemming from this reopening.

**Shared Parking:** As mentioned, the REC will have limited parking on-site, which will mostly be reserved for JRA employee parking, and the nearby James River Park System parking lots are already at capacity much of the day. However, there are nearby sites with ample parking – the Virginia Holocaust Museum and the Stone Brewing Tap Room – both of which could provide an opportunity for shared parking. Through a shared parking agreement and either a weekend shuttle system or enhanced pedestrian infrastructure to move people between the parking lot and the REC, these sites could help JRA meet peak demand at the River Education Center during large events.

Any of these proposals should be considered within the confines of the conservation easement.

## Tasks

A Multimodal Connectivity Plan can help prioritize effective transportation investments that serve a multimodal riverfront city while maintaining the character and “hometown” feel, with an emphasis of environmental stewardship, of the City of Richmond. The JRA REC Multimodal Connectivity Plan should aim to comprehensively improve safety, increase multimodal connectivity, reduce congestion, and foster economic vibrancy, while addressing environmental concerns and sustainability, to create an integrated multimodal network. The Plan will build upon the work previously completed by the City and JRA's local partners while utilizing new opportunities for public input to complete a blueprint for the James Riverfront Multimodal Network.

Connecting JRA's REC and the Riverfront with the Downtown will require a multifaceted approach, including community involvement from a wide range of stakeholders and a proper mix of technical analysis and policy discussions. The plan will consider geographic equity and quality of life issues for all segments of the population. The Plan, when completed, will provide detailed goals, performance metrics, and a financially feasible short, medium and long-term implementation strategy to provide a safe, convenient, connected, and efficient multimodal network for all residents and visitors to JRA's REC and the James Riverfront.

Development of the JRA REC Multimodal Connectivity Plan is expected to involve the following tasks, which are aligned with the proposed sections of the Plan. These tasks are intended to be general guidelines and may be adjusted by any entities supporting the development of the Plan. The tasks below are framed as if a contractor is leading development of the plan; however, JRA or another organization could alternatively lead development.

## Task 1. Project Management

Under this task, the contractor will be responsible for project and stakeholder management throughout the life of the project. This will include monthly project coordination calls, status reports, and tracking the project schedule and milestones. Subtasks to be performed by the contractor will include:

- i. **Project Coordination Meetings:** Meet with JRA and City staff as needed throughout the life of the project. It is anticipated meetings will occur on a regular basis (either bi-weekly or monthly) throughout the life of the project. These meetings will include progress updates, miscellaneous review, and other plan development coordination activities with JRA and the City. Additional meetings may be required as necessary to discuss deliverable review, resolve any issues, and make decisions.
- ii. **Project Status Reporting:** Conduct regular (at least monthly) progress status meetings with JRA to address completion of scope tasks relative to project schedule and budget resources. (May be conducted together with coordination meetings in Task 1.i).
- iii. **Schedule:** Within a reasonable time after finalizing the project agreement, the lead shall submit a detailed project activity schedule to JRA. The schedule must indicate all required submittals, critical path activities, and key project milestones. JRA staff shall be allowed a review period of at least two (2) weeks for each draft deliverable submitted for JRA review in the schedule.

### Deliverables will include:

1. Draft and final project agreement (could include the project schedule).
2. Monthly status reports.
3. Draft and final schedule for plan development.
4. Bi-weekly or monthly project calls with JRA staff, as well as the City and other partners (as applicable), as well as additional meetings as necessary to discuss deliverable review, resolve any issues, and make decisions.

## Task 2. Existing Conditions Analysis

Under this task, the contractor will be responsible for combining information from this scope of work, as well as other relevant planning and project documents, to summarize the existing conditions. JRA staff and the stakeholders (primarily the city) will review and comment on the technical memorandum, which will also be incorporated into a section as part of the Multimodal Connectivity Plan. The existing conditions will serve as a baseline for the multimodal network scenarios developed as part of subsequent tasks. This analysis should include a needs assessment of existing multimodal options in the area, including transit, bike share, and walking/biking access.

Subtasks to be performed by the contractor should be informed by the Existing Conditions section of this Scope of Work (SOW) and will:

- i. Document background data and the overall purpose of the plan.
- ii. Provide an overview of the current transportation system, challenges and opportunities.

**Deliverables will include:**

1. Draft and final technical memorandum summarizing context to inform plan development including existing conditions, emerging trends, and stakeholder goals and objectives. The memo will be incorporated into a section of the Multimodal Connectivity Plan.

### Task 3. Goals and Objectives

Under this task, the contractor will be responsible for combining information from this scope of work, as well as other relevant planning and project documents and discussions, to summarize the goals and objectives of JRA, the city, and stakeholders. These goals and objectives will be included in the plan and will be used to establish the performance measures and ranking criteria for the plan to assist with building out a multimodal network that safely and equitably connects to the REC and the James Riverfront. This task should include goals and objectives for JRA, the city, and the local stakeholders. Subtasks to be performed by the contractor should be informed by this Scope of Work (SOW) and will include:

- i. Clearly defined goals (e.g., enhance accessibility, reduce congestion, promote sustainability).
- ii. Specific objectives (e.g., increase public transit ridership by X%, improve bike lane coverage, reduce average commute times).
- iii. A Policy Needs Assessment to review existing policy documents, such as the Richmond Riverfront Plan, other relevant comprehensive planning documents, and Land Development Code, and may propose new and revised policies to support the overall Multimodal Connectivity Plan. Best practices from other comparable cities may also be used, as well as research from National Association of City Transportation Officials (NACTO), American Association of State Highway and Transportation Officials (AASHTO), and other professional transportation organizations.

**Deliverables will include:**

1. Draft and final summary of goals and objectives section of the plan to assist with building out a multimodal network that safely and equitably connects to the REC and the James Riverfront.

### Task 4. Data Collection, Analysis, and Assessment

Under this task, the contractor will determine what data and datasets are available and what additional data is needed to assess the feasibility of developing an equitable and accessible multimodal network to connect to the REC and the Riverfront. Subtasks to be performed by the contractor should inform Task 5. Strategies and Recommendations and will include:

- i. Compiling and reviewing existing available data and datasets; anticipated data and datasets include:
  - a. Population and employment data to include regional commuting trend data.
  - b. Visitation data and previous studies relevant to the plan development from JRA and the City.
  - c. Any relevant traffic volumes (vehicular, bike, and pedestrian as available), survey results, crash data, and related analysis from the Virginia Department of Transportation (VDOT) or the Greater Richmond Transit Company (GRTC) including any upcoming corridor planning processes and projects.
  - d. Ridership data by route from GRTC.
  - e. Recently completed long-range plans from the City of Richmond and Plan RVA.
  - f. GIS datasets and maps, as available, for city boundaries, neighborhood boundaries, right-of-way boundaries / parcel data, roadway jurisdiction, crash data, school locations, bicycle lane facilities, pedestrian facilities, greenways and blueways network data, GRTC transit routes and bus stops, natural and protected areas, flood zones, parks, waterways, city projects, VDOT projects, Plan RVA projects, Plan RVA long-range transportation projects and transportation improvement program projects, Virginia Capital Trail Foundation projects, major local traffic generators, future land use and proposed major development projects, level of service, traffic impact reports (past and current developments), and development orders (past and current developments).
  - g. Other data and datasets that may be uncovered and shared from initial stakeholder conversations.
- ii. High-level analysis of existing transportation networks data to include assessing gaps in the available data and recommending additional data sources, including potential data collection related to existing transportation networks and planned network connections to support the analysis; identifying key transportation corridors and hubs; conducting a multimodal network needs assessment; and identifying short-, mid-, and long-term projects and improvements to inform Task 5. Strategies and Recommendations.
- iii. **Stakeholder engagement (e.g., stakeholder meetings, survey):** Since a multimodal network would connect city roadways and serve stops at non-JRA facilities, stakeholder engagement is important for this plan development. The lead will work with JRA staff to identify and engage with relevant stakeholders. The stakeholder engagement should include identifying relevant partners to assist with building out the multimodal options in the area, including transit, bike share, and walking/biking access; conducting stakeholder meetings and surveys; developing questions to prompt discussion with stakeholders about their relationship to JRA and the Riverfront, their transportation goals and objectives related to a connected multimodal network to access the REC and the James River, and upcoming or planned projects that could impact the study area; and comparing JRA goals to those of the stakeholders to identify potential inconsistencies.

**Deliverables will include:**

1. Draft and final technical memorandum summarizing available data, additional data needs, and any analysis either conducted as part of the plan development or needed for plan



implementation. The memo will be incorporated into a section of the Multimodal Connectivity Plan.

## Task 5. Strategies and Recommendations

Under this task, the contractor will identify strategies and recommendations for plan implementation. The strategies, recommendations, and priorities of the Plan will come from a combination of existing transportation plans, existing projects, community feedback, the Richmond Regional Transportation Planning Organization's (RTPO) – Plan RVA – Transportation Improvement Program (TIP) and the Connect RVA 2045 Long-Range Transportation Plan, as well as other local / regional, State, and Federal projects. New policies and projects will be proposed to meet the future needs of the City. Subtasks to be performed by the contractor will include:

- i. Development of multimodal strategies (e.g., integrated transit networks, bike-sharing programs, pedestrian-friendly infrastructure).
- ii. Recommendations for infrastructure improvements (e.g., new bike lanes, bus rapid transit routes, pedestrian crossings).
- iii. Policy recommendations to support multimodal transportation (e.g., zoning changes, parking policies, incentives for public transit use).

### **Deliverables will include:**

1. Draft and final summary of strategies and recommendations section of the plan to assist with building out a multimodal network that safely and equitably connects to the REC and the James Riverfront.

## Task 6. Project Ranking and Prioritization

The development of a ranked project list provides an objective foundation for project prioritization. Under this task, the contractor will facilitate the review of the ranked project list to develop a prioritized project list for the final Plan. The prioritized project list will reflect the combined efforts of the objective ranking process and JRA, stakeholder, and community feedback. The contractor will present and collect feedback on the ranked project list during the outreach efforts from previous tasks (e.g. public workshops, outreach meetings, the Plan, JRA's or the City's website, and social media). Subtasks to be performed by the contractor will include:

- i. Development of multimodal strategies (e.g., integrated transit networks, bike-sharing programs, pedestrian-friendly infrastructure).
- ii. Recommendations for infrastructure improvements (e.g., new bike lanes, bus rapid transit routes, pedestrian crossings).
- iii. Policy recommendations to support multimodal transportation (e.g., zoning changes, parking policies, incentives for public transit use).

### **Deliverables will include:**

1. Draft and final matrix summarizing the project ranking and prioritization process and identified projects to be included in the plan.

## Task 7. Implementation Plan

Under this task, the contractor will develop an implementation plan to undertake the strategies, recommendations, and projects identified as part of the Multimodal Connectivity Plan. Subtasks to be performed by the contractor should be informed by previous tasks and will include:

- i. Phased approach to implementation
- ii. Timeline for each phase
- iii. Resource allocation (budget, labor, materials)
- iv. Coordination with relevant stakeholders (e.g., city departments, transportation agencies, private sector)
- v. High-level cost estimates for projects identified in the needs assessment. More detailed cost estimates will be developed in conjunction with other City departments and funding partners as projects move through the programming and funding phases.
- vi. Identify and evaluate the available revenue resources to fund the plan informed by the Funding Opportunities Technical Memorandum developed as part of this SOW.

### **Deliverables will include:**

1. Draft and final summary of implementation plan section of the strategies, recommendations, and projects included in the Multimodal Connectivity Plan to assist with building out a multimodal network that safely and equitably connects to the REC and the James Riverfront.

## Task 8. Monitoring and Evaluation

Under this task, the contractor will work with JRA, the city, and stakeholders to develop a plan to monitor and evaluate the outcomes of the REC Multimodal Connectivity Plan. Subtasks to be performed by the contractor will include:

- i. Recommend performance metrics (e.g., reduction in greenhouse gas emissions, increased mode share of sustainable transportation).
- ii. Monitoring mechanisms (e.g., regular progress reports).

### **Deliverables will include:**

1. Draft and final summary of monitoring and evaluation section of the plan.

## Task 9. Public Engagement and Communication

Under this task, the contractor will use a multitude of approaches to solicit public input and feedback through JRA's and the City's existing public involvement process to ensure residents can provide feedback during the development process of this task. The contractor will lead up to two (2) meetings during the development of the plan. Subtasks to be performed by the contractor will include:

- i. Education and outreach strategy to inform and involve the community.
- ii. Communications plan for stakeholders and the public.
- iii. Feedback mechanisms to incorporate public input into the plan.

**Deliverables will include:**

1. Up to two meetings to solicit public input and feedback (may be virtual).
2. Draft and final summary of public engagement and communications section of the plan.

## Task 10. Risk Management

Under this task, the contractor will establish a procedure for risk management covering the completion of all work through the development of this plan. Subtasks to be performed by the contractor will include:

- i. Identification of potential risks and challenges.
- ii. Mitigation strategies.
- iii. Contingency plans for unexpected issues.

**Deliverables will include:**

1. Draft and final summary of risk management section of the plan.

## Task 11. Draft and Final REC Multimodal Connectivity Plan

Under this task, the contractor will prepare a draft and final REC Multimodal Connectivity Plan which includes all the elements and processes noted in previous tasks. The plan will be distributed to JRA and City staff, as well as relevant stakeholders for review and comment. Following the review of the draft plan, the contractor will prepare the final plan addressing all comments and revisions received. The final plan document will be delivered in digital format to JRA. The Plan will consolidate and summarize the study process including purpose, goals, objectives, measures, public involvement, evaluation methods and results, maps, and recommendations. The Plan will contain three main elements: an Executive Summary, a main Plan report, and Plan Appendices. The Executive Summary will also serve as a brochure for the public. The final report will be visually appealing, intuitive, and easy-to-read for the public, with attention paid to graphics and presentation.

**Deliverables will include:**

1. Draft and final REC Multimodal Connectivity Plan to include deliverables from previous tasks identified in this Scope of Work.

## Next Steps

This document should be utilized as a guide and reference for developing a comprehensive plan for multimodal connections in Richmond and the surrounding region.

The project team has developed a ‘Funding Opportunities Memorandum’ as a guide to identifying funding sources for planning and implementing projects. The findings and content presented in this document can be utilized as appropriate to develop applications for the funding opportunities identified in that memorandum to move these ideas forward and implement this scope of work.