

# Strategies for Conserving the Green Infrastructure of Hampton, Virginia

Prepared by Students in the Green Lands Class at the University of Virginia



Printed December 14, 2016

This is a report prepared by students in the University of Virginia's School of Architecture.



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Cover image: Shorelines at the Mouth of Indian River

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## INTRODUCTION

Green infrastructure is the interconnected network of waterways, wetlands, woodlands, wildlife habitats, and other natural areas that support native species, clean water and contribute to community health and quality of life. Just as localities plan for grey infrastructure, they also need to take care of their green infrastructure to create healthful places for residents and businesses. For example, forests help to filter and absorb rainfall thereby reducing flooding frequency while also protecting streams and facilitating the recharge of groundwater supplies. Green infrastructure planning is a framework for assessing and valuing these environmental assets.

This report was prepared by students in an applied planning class titled Green Lands at the University of Virginia (UVA). This project is a collaborative partnership between the Green Infrastructure Center and UVA. It was funded by the Virginia Department of Forestry. Students proposed strategies for protecting environmental assets and landscape-influenced cultural resources for a study area selected by the City of Hampton, Virginia.

Students worked in teams to evaluate the green infrastructure of two subwatersheds in Hampton Virginia's downtown district comprised of the Hampton Roads Wythe and Hampton Roads Southhampton Watersheds (see study area map on next page). Student teams conducted research, utilized natural resource data and the city data. Each section contains an overview, strategies and maps. Following each topic there is a Resources section and Appendix that provide content related to case studies, partner organizations, volunteer organizations, and other analytical tools that support each goal. The themes for focus are the Urban Forest, Water, Recreation and Heritage.

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Material in this report may be used as guidance to support a future vision and direction for the City of Hampton. Thank you to Andrew Walker for technical support related to GIS. We wish to thank the funders of this report who provided staffing and travel support.





## RECREATION

Written by Cody Simms, Kristian Zimmerman, Peter Krebs and Susan Ryu

### INTRODUCTION

The City of Hampton possesses many recreational assets: rich history, abundant green spaces and world-class water. The city's estuarine location at the juncture of land and sea poses challenges, but it is also a tremendous advantage that can be better exploited.

Hampton has many green spaces and excellent opportunities for active recreation, learning and relaxation. They need to be made more available, connected and appealing. This will help attract visitors and make it easier for residents to live healthier lives.

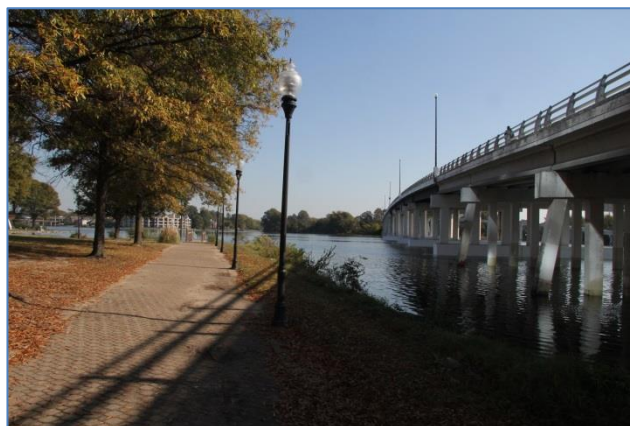


Figure 1: Waterfront walkway

Hampton aspires to be the healthiest city in Virginia (*Hampton Community Plan*), which is an appropriately ambitious goal, but there is work to be done. The University of Wisconsin and Robert Wood Johnson Foundation's *County Health Rankings* lists Hampton as 84th out of 134 Virginia localities (*County Health Rankings*). The most troubling statistic is the obesity rate of 32%, which, though improving, still lags behind much of Virginia.

The link between chronic health problems and both sedentary and car-centric lifestyles is well established. For example, an Active Living Research literature review out earlier this year cites 30-40% reductions in type-two diabetes, 20-35% for cardiovascular disease and 30% for colon cancer (Active Living Research, 2). Paradoxically, the *County Health Rankings* report indicates that Hampton residents enjoy very good access to recreational facilities, with a high rate of 92%.

There is a difference, however, between having facilities and people being likely to use them. Hampton can do a much better job of making its existing recreational facilities truly available by making them safer, better connected, easier to locate and more welcoming.

The City of Hampton is aware of all this and is actively working toward a solution. Two Master Planning processes (Downtown and Kecoughtan) are already underway and they cover the majority of the study area. Those plans call for major enhancements: new parks and greenways, more bike-and-pedestrian-friendly streets and better connectivity. The city is addressing the

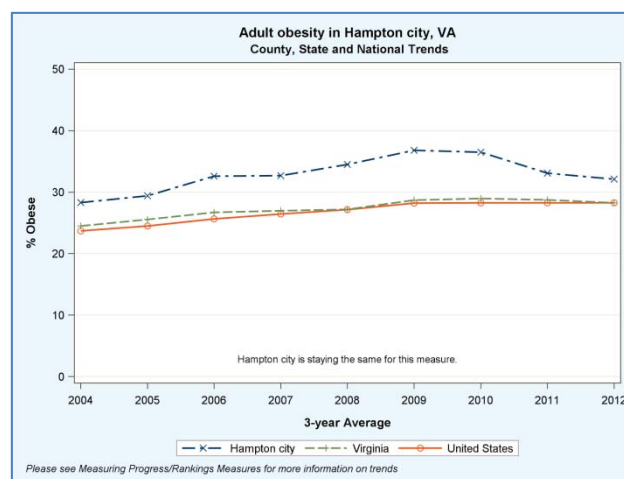


Figure 2: Obesity Rates in Hampton 2004-2012. (County Health Rankings.)

connectivity through a brand new bicycle-pedestrian plan. With its flat terrain, fairly compact design and appealing destinations, Hampton is well positioned to benefit from improvements to its existing infrastructure.

The city should capitalize on this forward momentum to mobilize the community to become physically active and take ownership of the public space. A populace that moves and exercises is empowered. Hampton can help inspire its citizens with events ranging from Walk or Bike to School Days (national programs coordinated through Safe Routes to School), Walk/Bike/Play celebrations, bike/pedestrian counts and sidewalk surveys.

Not all improvements require engineering. In fact, the network can become more user-friendly through simple, affordable signage that orients residents and visitors, tells them about nearby businesses, parks, celebrations and opportunities and makes distances seem less daunting. As an older city, Hampton is actually relatively compact and the study area is very walkable--but it does not always seem that way. Along with the street trees mentioned in the earlier section, wayfinding signage will make walking and biking more appealing.

The Waterfront Walkway is at the heart of the network--and of the city. It is already on its way to becoming a hub for learning and recreation. It should be extended to Settlers Landing and the History Museum (Downtown Master Plan) and to points south when the Bridge Street bridge is replaced. This new bridge is an opportunity to include recreation amenities, such as perches for fishing the stream channel.

The walkway nominally extends north to Lincoln Street but in reality, the portion north of Mill Point Park is not welcoming. The gate at the north of the park, presumably intended to be closed during festivals is used in reality to privatize the public space beyond. It should be redesigned so its default position is open--or removed entirely.

The Lincoln Street terminus is presently a city parking lot, but its location in close proximity to City Hall, the downtown area (and other spaces discussed in this report) makes it a prime location for a small park that is truly welcoming, invites trail users and is a space of repose unto itself for downtown residents, workers and visitors. As elsewhere, there are exciting plans for this space, but some simple planting, seating and signage would help a great deal. It can be much better with a reasonable--and attainable--effort.



Figure 3: Gate at Millpoint

The walkway itself can be more appealing with a softened, vegetated shoreline where there is currently riprap, providing an opportunity to get close to the water. Furthermore, educational signage will help kids and families understand the Hampton River and make a tremendous asset more accessible.

Hampton does not stop at the shoreline and the magical interface between land and sea need not only be experienced from dry land. The rivers, bays and inland waterways provide abundant – and

as yet mostly unrealized – recreational opportunities. The waterfront greenway can be matched with a more inviting and utilized waterborne blueway along the shore.

Along the waterfront walkway, there is a floating dock near Mill Point Park: a great opportunity for waterborne recreation. The dock provides an easy launch for kayakers, canoers, rowers, and stand-up-paddleboarders to explore Hampton River. Yet, this amenity is underutilized by the public. To entice more people to use the floating dock, there should be signage that explains potential kayak routes in addition to fishing charts. Users would learn about new ways to enjoy the river.



Figure 4: Indiana River

Mill Point is a good start, but for all the slips, piers and docking facilities Hampton offers for motorcraft, there are very few places to put in a canoe or kayak, which provide more intimate connection to the water. More launch locations are needed and they need not be elaborate. There are more inland (though tidal) waterways to be explored. The team recommends a primitive tidal launch site in the Kecoughtan area. One site to be considered for this launch is the northern end of Manteo Avenue. In an effort to get more people paddling the river, there should be incentive to use the water, such as extending Hampton's land-based geocaching into its waterways.

Hampton already has many recreational assets. The challenge is not one of building more parks (although they are needed) but to make the existing resources better connected and more available. In some cases, (sidewalks, signage and park amenities) that means making the public spaces more friendly. In the case of waterborne recreation it means better activating the enormous blue portion of the domain. In all cases, the potential exists--Hampton can capitalize on what it has. The following goals and strategies provide the methods to showcase the city's recreation assets.

### **Goals:**

**Goal 1:** Improve connectivity between parks, recreation facilities and green spaces.

**Goal 2:** Enhance accessibility of existing green/blue recreational open public spaces

## RECOMMENDED POLICIES AND STRATEGIES

### GOAL 1: IMPROVE CONNECTIVITY BETWEEN PARKS, RECREATION FACILITIES AND GREEN SPACES

**Rationale:** Connections between recreational areas such as parks, open space, and plazas will help to ease automobile congestion, improve health, promote an active lifestyle, and increase the use of existing spaces. Connecting the park system and popular sites will allow residents and visitors to spend more time, not only at one particular place but promote the ease of movement between different areas of the city.

The benefits of improved connectivity are not only about the destination: there is benefit *in the trip itself*. Experts recommend 150 minutes of physical activity per week, yet only 50% of adults accomplish that (Active Living Research). Walking or biking to transit produces 10-15 minutes of exercise per day – a substantial down payment toward the total goal. Walking or biking to work has been linked with an 11% reduction of cardiovascular disease (ibid)--without adding any new activity (one has to get there somehow).

It is important to complete the sidewalk network. People who live in neighborhoods with quality sidewalks are 50% more likely to meet their physical activity guidelines (ibid). Hampton has begun working with the community on this goal through its bicycle/pedestrian plan, but it should go further. City officials should empower residents to take full ownership of their streets through citizen science--recruiting volunteers and students to conduct a sidewalk / crosswalk inventory. This will get people out into the community engaging with their neighbors, building awareness and ownership of mobility issues, gathering data needed for better decisions and getting exercise and fresh air along the way.

Not all barriers to connectivity are physical--some destinations are more accessible than they seem and others may be available without someone even knowing about them. Simple, affordable signage can improve that. Wayfinding allows people to orient themselves, learn about opportunities (or events or businesses) and move from destination to destination in a linked itinerary with multiple stops. Consistently branded signs build place-identity and spatial logic. Travel on foot or bike becomes less intimidating if distances are expressed temporally rather than spatially; for example, use “It is an eight-minute walk” rather than “half mile” or “2,600 feet.”

The team recommends signage that is affordable and can be used on a temporary or trial basis. This affordable approach is also best to promote time-specific events such as fairs, festivals or markets.

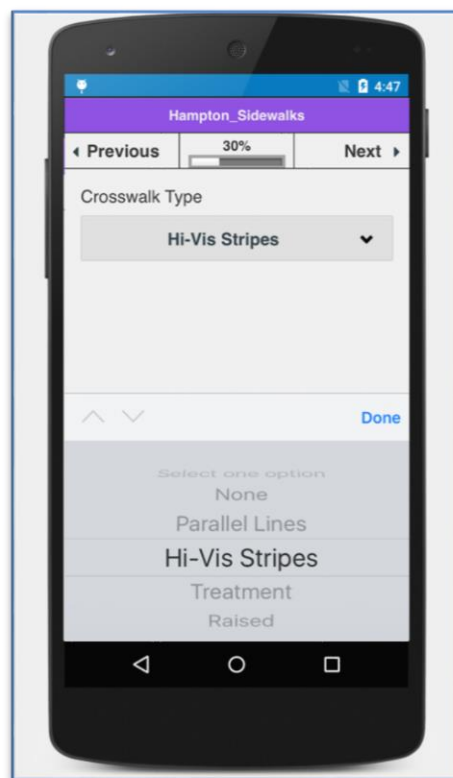


Figure 5: EpiCollect+ Mobile App



Figure 6: Example of wayfinding signage



Hampton's Waterfront Walkway is the nexus of many strategies recommended in this report. It is a zone of celebration, learning, quiet walks and should be the first stop on a visitor's itinerary. It is where land and sea come together, but it is also an important piece of connective infrastructure. There are exciting ideas to activate the space with amenities such as urban beaches. The team recommends several some smaller, more feasible changes to make the walkway more friendly.

The current condition does not invite circulation--particularly the portion from Mill Point Park to Lincoln Street, which looks like private space. A landscape that is better vegetated (particularly at the Lincoln Street entrance) will be more inviting and present a better face for the city. More people spending more time in a pleasant environment will not only mean healthier citizens--it will also bring a healthier downtown economy.



Figure 7: Proposed beautification of Lincoln Street Terminal

There is abundant parking at City Hall, a great place for visitors to begin their walk toward the waterfront. The Lincoln Street terminus, however, must be reactivated for a successful entrance to the waterfront walkway. This would involve a beautification of the street, with a walkable strip down the center. This path would invite people to the trailhead, with native vegetation. The plantings would not only be aesthetically pleasing, but would also provide shade and a more natural threshold to the trail.



Figure 8: Proposed increase in vegetation and seating

The gate at the north side of Mill Point Park implies the mistaken impression that the northern section of the waterfront walkway is privately owned by the Mill Point condominiums. This barrier deters circulation and disorients walkers who think that the walkway ends at this gate. The apparent confusion disrupts the potential for greater connections to Lincoln Street.

The gate has the understandable purpose of limiting overflow use of the condominiums' land during park events. One way to soften the boundary would be to remove the gate entirely, and develop a system of controlling access through the walkway during park events. This could be a temporary blockage of the pathway, one that would only be in operation during the duration of festivities.

To lessen the severity of the opposing conditions, vegetation could marry the two parts. Having a similar planting pattern that continues along the waterfront walkway, and continues in character along the northern end will provide a harmonious and inviting feeling to the walking experience.

**Objective 1A:** Inventory and prioritize sidewalk and crosswalk improvements using Citizen Science.

**Action 1)** Develop a sidewalk/crosswalk survey for paper (if desired) and mobile app. We have created a survey tool for the Planning Department. For basic instructions to create one (coordinates (if desired) and comments; crosswalk typologies, features and ADA compliance (see resources).

**Action 2)** Itemize sidewalks and crosswalks to be surveyed. Give each a unique identifier.

**Action 3)** Divide the Study Area into sectors.

**Action 4)** Recruit and train volunteers.

**Action 5)** Conduct volunteer walking survey with kids and residents. Volunteers will walk from segment to segment recording sidewalk widths, typologies, condition, photos, GPSs.

**Action 6)** Ingest and review the data. It will be uploaded to EpiCollect's site and can be reviewed online or downloaded as a spreadsheet. Merge dataset with GIS (if desired)

**Action 7)** Set desired typologies and repair states based on the Bicycle and Pedestrian Plan. Begin with priority locations listed in plan. Both variables are numerical in the survey so a simple data query can indicate where desired standards are met.

**Action 8)** Compare standards to field data. Flag sites that do not meet standard, are in disrepair or have top priority for ADA compliance. This is another opportunity to connect with the community, share the data and allow them to participate in the decision-making.

**Action 9)** Schedule upgrades and repairs.

**Timeframe:** Weeks – Exact timeframe depends on workflow and number of volunteers. Conduct the sidewalk survey in Spring to assure maximum turn-out; budget about 40 minutes to an hour for each linear mile.

**Budget Resources Needed:** Free EpiCollect+ Mobile App; Smart Phones (though data plans are not required); Paper form if needed/desired (see Appendix A); Snacks, water for volunteers.

**Objective 1B:** Create wayfinding methods to increase pedestrian and bicycle connectivity.

**Action 1)** Inventory resources, including pedestrian, bicycle, and transit routes and plans, as well as any existing wayfinding systems. Include bicycle organizations, trail, and recreation-based organizations.

**Action 2)** Use the results of the “Bike & Pedestrian Plan Survey Summary Results” to design wayfinding projects (Walk [Hampton], online maps and electronic apps, marketing materials).

**Action 3)** Apply for grants to assist in funding through foundations or national organizations (list provided in funding opportunities).

**Action 4)** Provide marketing support for wayfinding projects and related initiatives. Consider sponsorship and partnerships with local business, tourism, and/or health agencies to offset the cost of producing materials.

**Action 5)** Track user data and resident satisfaction with existing pedestrian, trail and transit resources through user surveys (Walk [Hampton] data are automatically uploaded to walkyourcity.org when users scan the QR code on the signs).

**Timeframe:** Walk [Hampton] program can be initiated through a pilot program for a six month period and then proposed for permanent adoption to city council.

**Budget Resources Needed:** Walk [Your City] provides 12”x12” coroplast signage for \$20. There are two alternative options that provide a permanent approach, 12”x12” aluminum/diebond for \$65 and 9”x12” aluminum/diebond for \$55. For an additional \$5 per sign, a logo can be printed on the sign and will appear when the QR code is scanned and on the campaign’s website via walkyourcity.org. Zip ties are included in all orders to hang the signage.

**Objective 1C:** Extend the waterfront walkway by creating a more inviting connection between Mill Point Park and Lincoln Street.

**Action 1)** Transform the Lincoln Street terminus into an inviting entrance to the waterfront walkway.

**Action 2)** Soften the boundary where the gate divides Mill Point Park and the northern section of the waterfront walkway.

**Action 3)** Increase vegetation along the waterfront walkway.

**Action 4)** Provide more seating along the waterfront walkway.

**Action 5)** Install more signage at the beginning, end, and throughout the waterfront walkway to better orient visitors.

**Timeframe:** It would take approximately 6-8 weeks to transform the Lincoln Street terminus and about 2 weeks to install new plants, benches, and signs.



**Budget Resources Needed:** Labor costs (\$11-\$15 per hour), plant costs (\$35-\$115 per plant), signage costs (\$25-\$45 per sign), bench costs (\$300-\$600 per bench)

## GOAL 2: ENHANCE ACCESSIBILITY OF EXISTING GREEN/BLUE RECREATIONAL OPEN PUBLIC SPACES

**Rationale:** Parks and recreational places can provide a public open space for city residents to engage an active lifestyles that promote healthy neighborhoods. Living close to parks and other recreation facilities is also consistently related to higher physical activity levels for both adults and youth. Institute of Medicine has stated that improving the walkability of neighborhoods and increasing access to recreation facilities are essential strategies for preventing childhood obesity. (Gordon-Larsen, 2006). Increasing the visibility and accessibility of parks can help maximize their value to the surrounding community.

Being physically active is more than a personal decision; community design and the availability of open spaces and recreation areas strongly influence how active people are. A cost-benefit analysis of physical activity using bike/pedestrian trails in Nebraska shows that for every \$1 spent on trails, there were \$3 of savings in direct medical costs (Wang, 2005). A second study shows that youths in neighborhoods with seven recreational facilities were 26% more likely to be active (Gordon-Larsen, 2006). In addition to providing opportunities for physical activity, recreation areas and parks located in metropolitan areas provide economic benefits to residents, municipal governments and private real estate developers. Parks tend to increase the value and sale price of homes and property located nearby.

Hampton has a beautiful waterfront walkway setting that can be advertised and enjoyed as a top attraction for both residents and visitors. Along the waterfront walkway, there is a floating dock near Mill Point Park- a great resource for actualizing waterborne recreation. The dock provides an easy launch for kayakers, canoers, rowers, and stand-up-paddleboarders to explore the Hampton River. Yet, this amenity is underutilized by the public.



Figure 9: Floating dock by Mill Point Park

One way to improve utilization would be to install a map of the Hampton River at the floating dock. This map could display the wide breadth of available paddling routes and offer suggestions. Arranged by average paddling time, people would be able to better plan their expedition, and feel more oriented with the river. There could be pocket-sized maps as well, so that paddlers can reference the information throughout their journey.

To further increase utilization of the floating dock, there should be an incentive to paddle and keep paddling along Hampton River. Adding to its existing land-based geocache network, the city could extend this treasure hunt to its waterways. This would provide a sense of adventure, a mission to accomplish. Locals and visitors alike would benefit from exploring the river in a new light. People

would be excited to find treasure along the river, and would feel more connected to the area's pirate history. Thus, Hampton would be paying homage to its unique, and romantic, history by modernizing the treasure hunt and making it accessible by water.

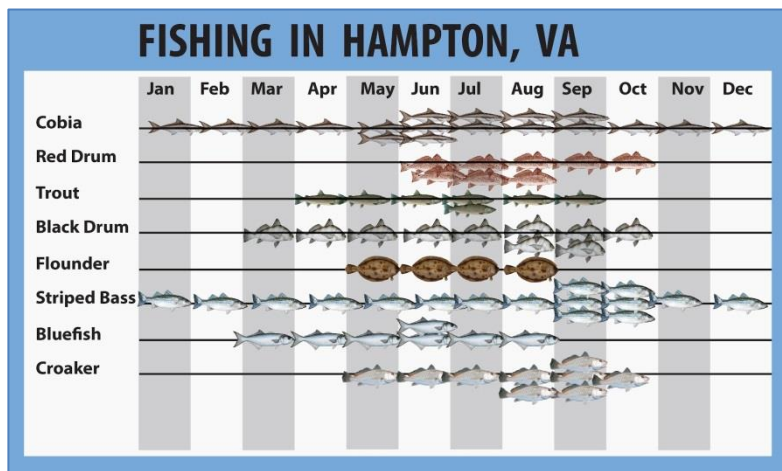


Figure 10: Proposed fishing chart

Fishing could be more fun and educational along Hampton River if the floating dock provided a chart highlighting the most popular fish, arranging them according to which month they are most prevalent. By having images of the fish, the public would be better equipped to identify species.

With all of the existing great green/blue recreational open spaces in Hampton, it is important to enhance the accessibility of recreational spaces. Without

accessibility, all the existing assets will not be utilized to their maximum values. Improving the accessibility of Hampton's recreational open space will provide opportunities for the Hampton residents to fully take charge of their own assets. Increasing accessibility will provide a more inviting and tourist-friendly nature to the city's world-class waterfront setting. By strengthening the utilization of its resources, economic benefits will arise from having more foot traffic downtown. Therefore, it is important to take the issue of enhancing accessibility of both green/blue open spaces of Hampton into account, for not only recreational purposes, but for health and economic ones as well.

**Objective 2A:** Improve signage on Mill Point Park's floating dock and enhance kayaking and fishing along Hampton River.

**Action 1)** Determine the best paddling routes along Hampton River using the water trail in A5 as a starting point.

**Action 2)** Install a large map of paddling routes along Hampton River on the floating dock with a dispenser for pocket-sized maps.

**Action 3)** Extend Hampton's existing geocaching network into its waterways, using Mississippi River's geocaching as a prototype (See Resources--National Park Service).

**Action 4)** Host a pirate-themed launch party to inaugurate Hampton's waterborne geocaching.

**Action 5)** Equip the dock with a chart of the most popular fish caught, arranging them pictorially according to which months they are most abundant.

**Timeframe:** 3-4 weeks

**Budget Resources Needed:** Free Geocaching mobile app signage costs (\$25-\$45 per sign), launch party costs (\$1200-\$1800)

**Objective 2B:** Enhance accessibility of public recreational green space by improving public amenities.

**Action 1)** Locate strategic sites for green recreational land in Hampton.

**Action 2)** Conduct a survey to find out which amenities city residents need the most such as public meetings, social media, mailing list, news, etc.

**Action 3)** Identify all of the public amenities that can be put in public recreational open space.

**Action 4)** Develop a budget for the list of amenities

**Action 5)** Equip the public green spaces with the list of necessary amenities

**Timeframe:** 6 months in total including citizen participation survey and purchase of all necessary amenities. It would take another 2 weeks for installation of all of the necessary amenities in the green space.

**Budget Resources needed:**

Estimated average cost of amenities

Bench - \$300-\$600 per park bench

Picnic table : \$600- \$1500 per table

Umbrella shade structure: \$2100- \$2500 per each

Trash bin : \$300- \$1000

Smokers cigarette receptacles : \$70- \$300

Commercial bike racks : \$300-\$500

## RESOURCES

### **ADA Best Practices ToolKit for State and Local Governments**

The Toolkit is designed to teach state and local government officials how to identify and fix problems that prevent people with disabilities from gaining equal access to state and local government programs, services, and activities. It will also teach state and local officials how to conduct accessibility surveys of their buildings and facilities to identify and remove architectural barriers to access.

<https://www.ada.gov/pcatoolkit/toolkitmain.htm>

### **ADA Best Practices Tool Kit: Curb Ramps and Pedestrian Crossings**

A clear description of requirements for ADA compliance on curb ramps.

<https://www.ada.gov/pcatoolkit/chap6toolkit.htm>

### **EpiCollect+**

EpiCollect+ is a free web-based application for complex mobile data gathering projects via smartphone. Create a form or use the one provided, see Appendix A for paper survey/questions. Volunteers download the mobile ap (available for iphone or Android). Users walk the study area and record one entry for each segment or crosswalk. Data can be uploaded on the fly or saved in the smartphone and uploaded in a batch via wifi (therefore no data plan is required). Data can be viewed online or downloaded as a spreadsheet, which can easily be linked to GIS data.

[http://www.epicollect.net/plus\\_instructions/default.html](http://www.epicollect.net/plus_instructions/default.html)

### **Geocaching**

Geocaching is the recreational activity of hunting for and finding a hidden object by means of GPS coordinates posted on a website or mobile ap (available for iphone or Android).

<https://www.geocaching.com>

### **Mississippi River Geocaches**

The Mississippi River Geocache program is a series of caches placed at partner parks within the Mississippi National River and Recreation Area. The purpose of the geocache series is to provide geocachers with an opportunity to explore and enjoy the many sites and features along Mississippi River.

<https://www.nps.gov/miss/geocache.htm>

### **Virginia Safe Routes to School**

Safe Routes to School is a federal program that is administered at the state-level. Virginia SRTS provides informational,, best practices, data collection, guides and toolkits for programs and plans, and funding for infrastructure, mini-programs, walkabouts and coordinators.

[http://www.vdot.virginia.gov/programs/srsm\\_starter\\_kit.asp](http://www.vdot.virginia.gov/programs/srsm_starter_kit.asp)

### **Walk Friendly Communities**

Walk Friendly Communities is a national recognition program developed to encourage towns and cities across the U.S. to establish or recommit to a high priority for supporting safer walking environments. The WFC program will recognize communities that are working to improve a wide range of conditions related to walking, including safety, mobility, access, and comfort. They provide a wealth of resources, tips, best practices, guidelines and case studies. You will find everything you need to know about walkability there.

<http://walkfriendly.org/index.cfm>

## **VOLUNTEER ORGANIZATIONS**

### **Boy Scouts of America**

Youth development organization that often partners with cities and other organizations to offer free services on a multitude of projects.

<http://www.scouting.org>

### **Hampton Youth Association**

Non-profit, voluntary organization which provides recreational athletic programs for the youth of the community.

[www.hyasports.org](http://www.hyasports.org)

### **Tidewater Appalachian Trail Club**

Centered in Norfolk, VA, maintains 10+ miles of the Appalachian Trail and 23 miles of trails in the Blue Ridge Mountains. Also offers a wide range of outdoor recreational activities.

<http://www.tidewateratc.com>

### **REI co-op**

National outdoor retail company which offers services and promotional outdoor recreational activities.

<https://www.rei.com>

## **PARTNER ORGANIZATIONS FOR LAND CONSERVATION & MANAGEMENT**

### **Hampton University**

Local asset to the community that can provide research, data, expertise, and volunteers.

<http://www.hamptonu.edu>

### **National Park Service**

The National Park Service Rivers, Trails, and Conservation Assistance program supports community-led natural resource conservation and outdoor recreation projects across the nation.

<https://www.nps.gov/orgs/rtca/index.htm>

**The Nature Conservancy**

Partners with a multitude of organizations and municipalities to preserve, conserve, and connect people with nature.

<http://www.nature.org>

**Virginia Department of Conservation and Recreation**

Serves to protect open space, clean water, natural habitats, safe infrastructure and access to the outdoors.

<http://www.dcr.virginia.gov>

**Virginia Outdoors Foundation**

Virginia's leader in land conservation, protecting more than 750,000 acres in 106 county's and independent cities.

<http://www.virginiaoutdoorsfoundation.org>



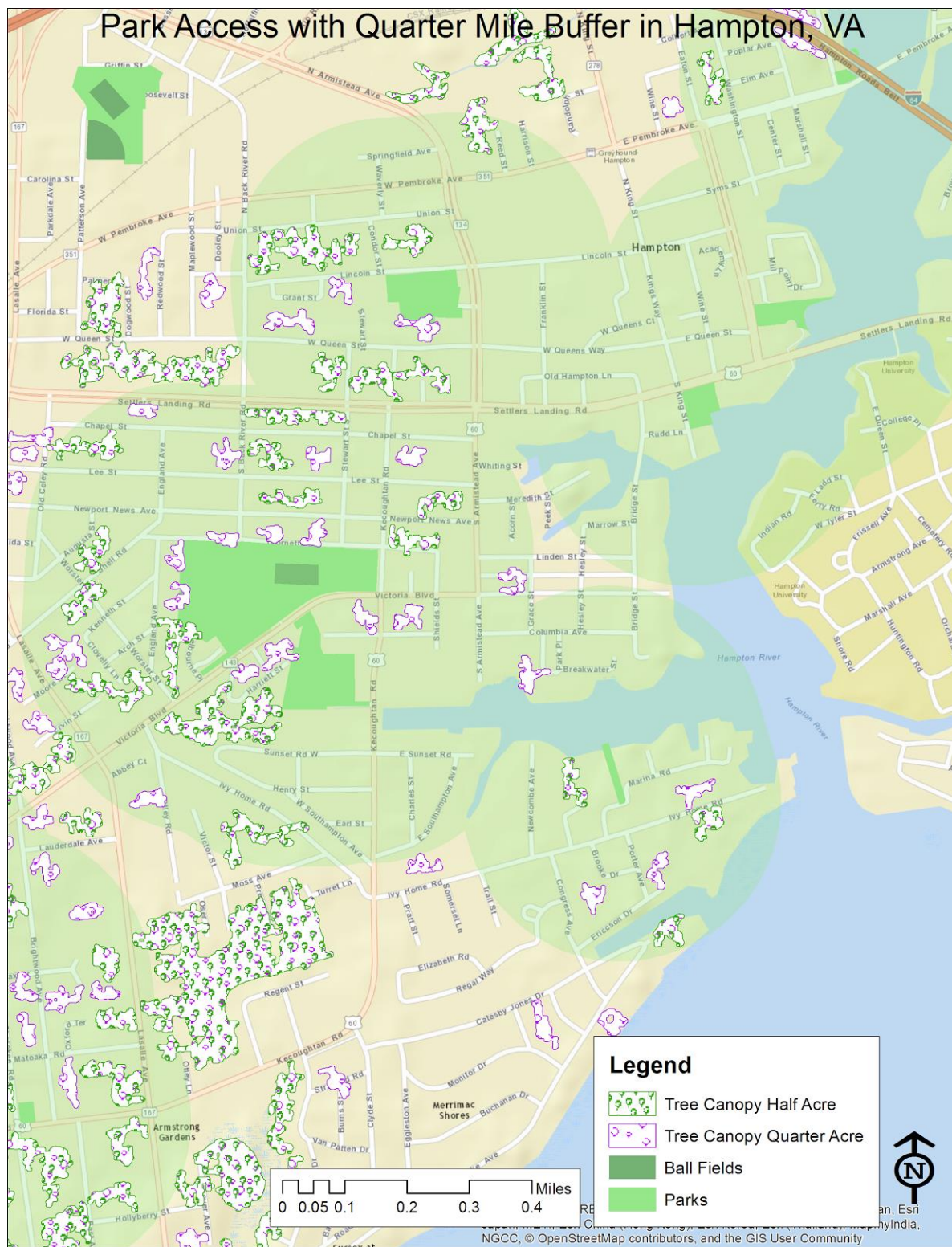
MAPS

A1) BICYCLE AND WALKING PLAN

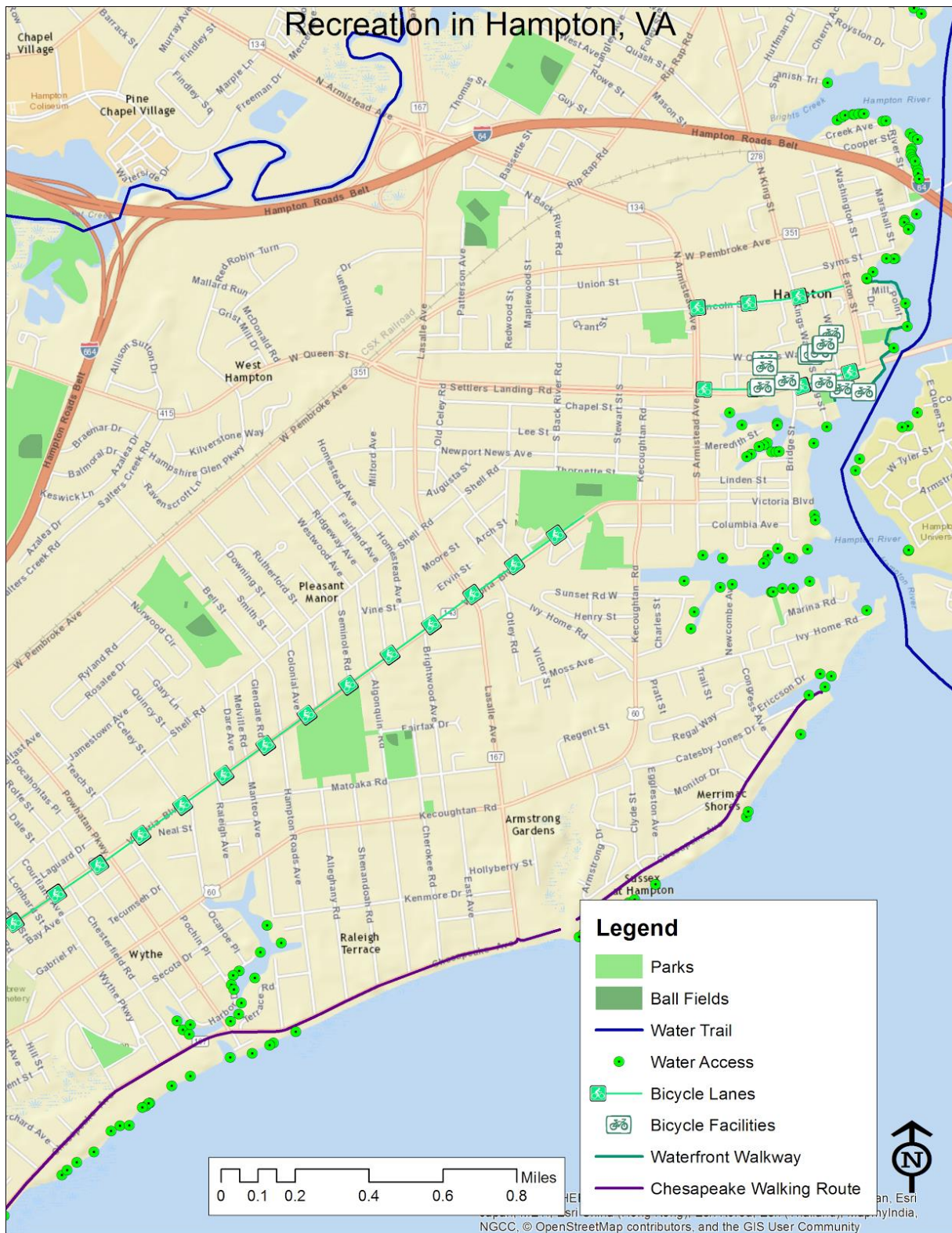




## A2) RECREATION

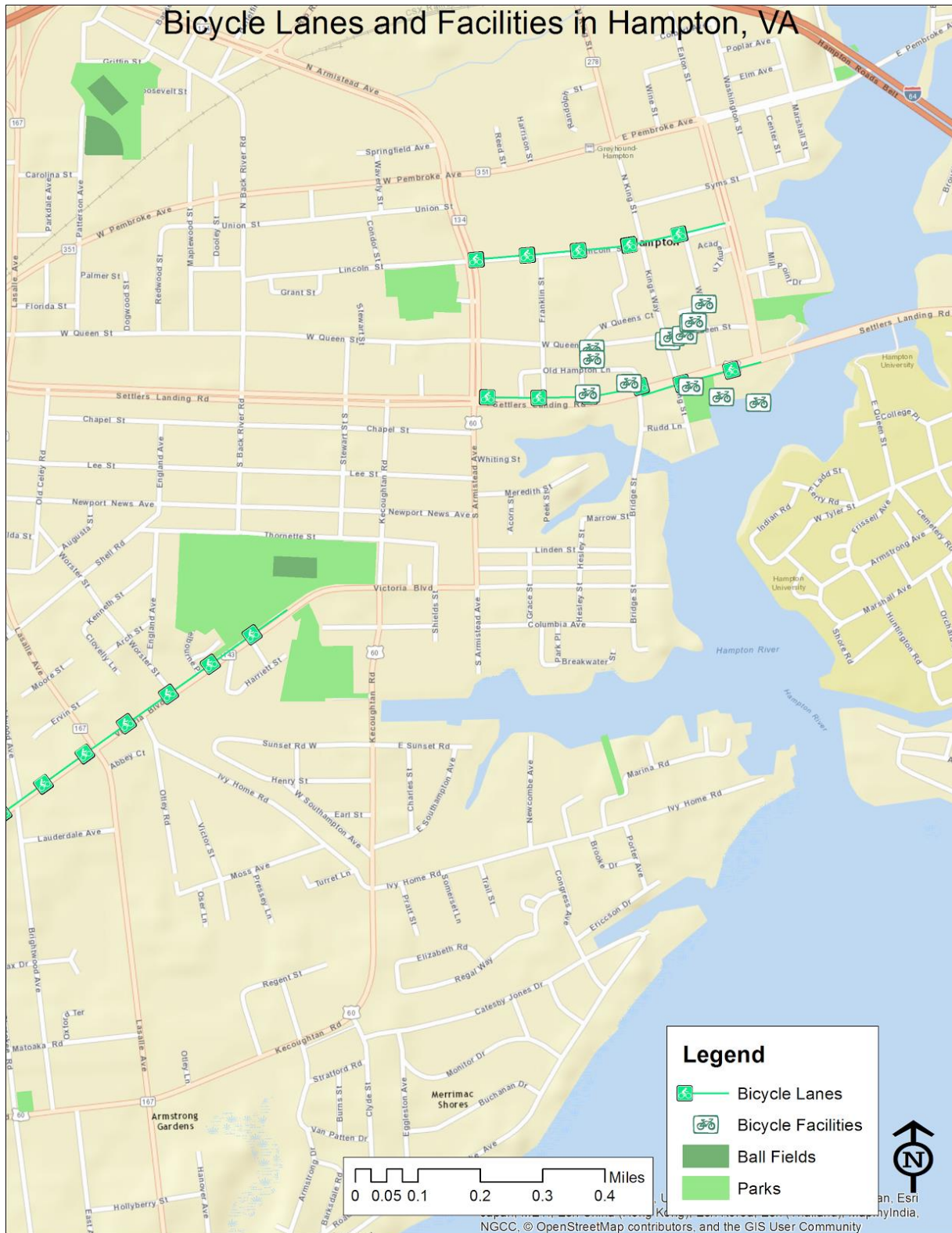


### A3) PARKS WITH A QUARTER MILE BUFFER

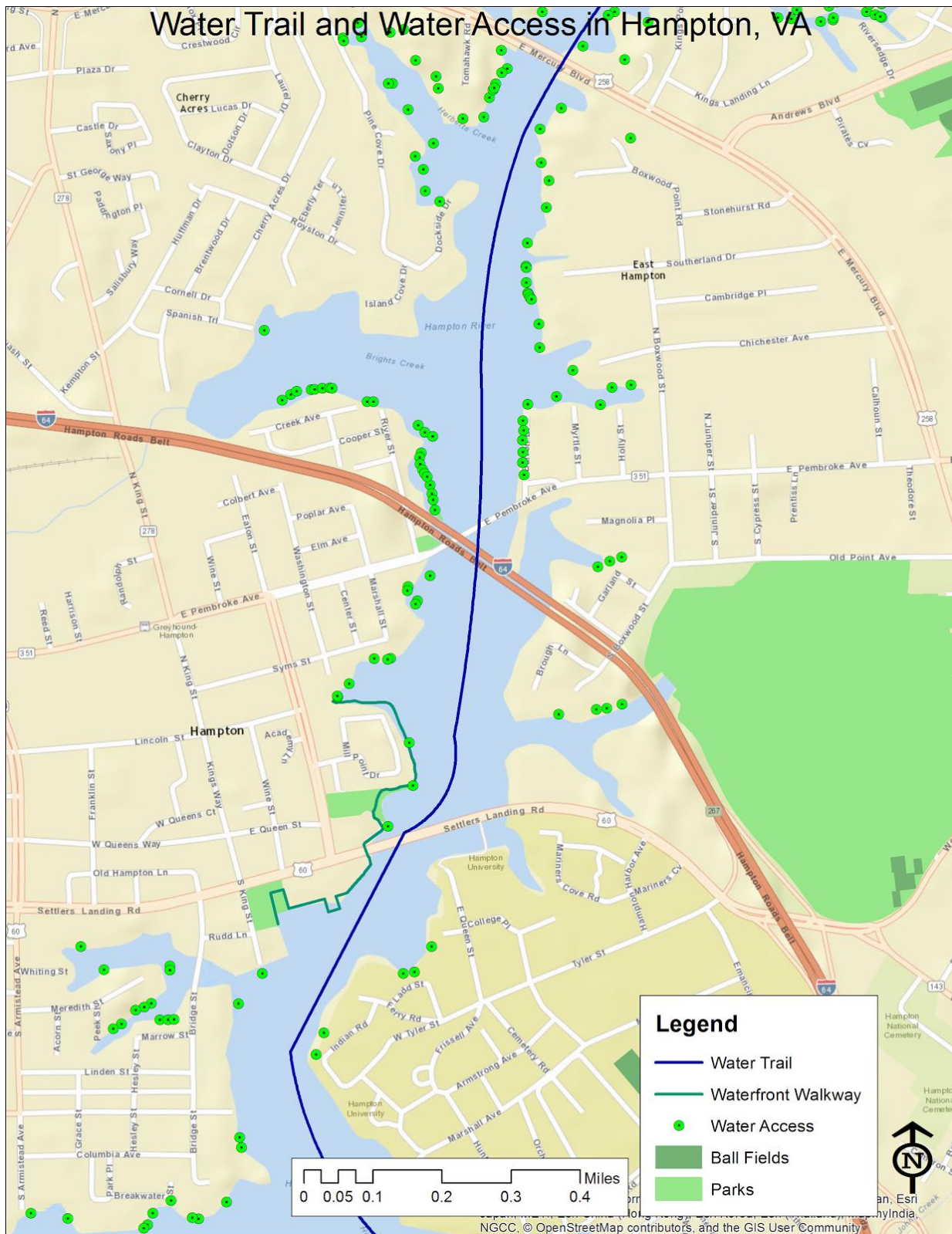




## A4) BICYCLE INFRASTRUCTURE



## A5) WATER RECREATION AND ACCESS





## A6) WATERFRONT WALKWAY



## FUNDING

### **American Planning Association**

A variety of awards and grants are available through different divisions of the APA.

<https://www.planning.org/search/?keyword=grants>

### **Centers for Disease Control**

Administers grants and cooperative agreements to state and local governments in exchange for contributions to federal public health goals and objectives.

<https://www.cdc.gov/grants/aboutcdcgrants/index.html#>

### **Endowment Fund**

The creation of an endowment fund allows for private donations to the city and can be earmarked for specific projects or used as general funds.

Ex: Hampton Unity Commission

<http://www.hampton.gov/924/Citizens-Unity-Commission>

### **Federal Grant Opportunities**

Funding is available for a variety of uses, including community planning, affordable housing finance, technical assistance, research, and capital infrastructure investments. To help you navigate the complex maze of opportunities, Reconnecting America has compiled a list of all upcoming programs and deadlines.

<http://reconnectingamerica.org/resource-center/federal-grant-opportunities/>

### **Matching Funds Grant Program**

Government matches public or private venture funds for parks and recreation projects or improvements.

Ex: The Federal Highway System (Virginia Recreational Trails)

<http://www.dcr.virginia.gov/recreational-planning/trailfund>

### **VDOT / Virginia Safe Routes to School**

VDOT provides Safe Routes funding for infrastructure, mini-programs, walkabouts and coordinators.

[http://www.virginiadot.org/programs/srsm\\_srts\\_all\\_website\\_resources.asp](http://www.virginiadot.org/programs/srsm_srts_all_website_resources.asp)

### **Virginia Land Conservation Foundation**

Helps to fund permanent conservation easements and to purchase open spaces and parklands, lands of historic or cultural significance, farmlands and forests, and natural areas.

<http://www.dcr.virginia.gov/virginia-land-conservation-foundation/>

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## APPENDIX 1

### **SIDEWALK/CROSSWALK SURVEY**

**Segment / Crosswalk Unique Identifier:** \_\_\_\_

**Sidewalk** \_\_ | **Crosswalk** \_\_ (check one)

**Sidewalk Width :** (check one)

- ☐ None
- ☐ Less than 4' (substandard)
- ☐ 4' Residential or 5' Commercial (Hampton Standard)
- ☐ 8' (5' + 3' buffer – VDOT standard)
- ☐ Shared Use Under 8'
- ☐ Shared Use 8'+

**Crosswalk Type:** (check one)

- ☐ None
- ☐ Parallel Lines
- ☐ High Visibility Stripes
- ☐ Treatment
- ☐ Raised

**Features** (check all that apply)

- ☐ Bump-out
- ☐ Pedestrian Refuge
- ☐ Beacon
- ☐ Warning Strip
- ☐ Sign

**Condition** (check one)

- ☐ (0) Absent
- ☐ (1) Terrible
- ☐ (2) Poor
- ☐ (3) Fair
- ☐ (4) Good
- ☐ (5) Excellent

**Curb ramp** (default=no) \_\_\_\_

**Comments:**

**Photo:**

**Coordinates:**