Greenway Network Plan

2016 UPDATE

Athens-Clarke County Leisure Services Department
Office of Park Planning
In collaboration with the Oconee Rivers Greenway Commission

Prepared January 9, 2017

Athens-Clarke County Leisure Services Department
Park Services Division
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Executive Summary

The Oconee Rivers Greenway is a network of natural areas within the 100-year floodplains of the North Oconee River, Middle Oconee River, and Oconee River and their major tributaries as its core. The network includes a system of river-oriented trails that connect the river corridors with adjacent parks and green spaces, as well as neighborhoods and other community sites in Athens-Clarke County. The greenway trail system currently has 3.5 miles of multi-use trail, 2.3 miles of street-based trail, 12.1 miles of foot trail, and 3 miles of multi-use trail on UGA's campus. An additional 3.5 miles of multi-use trail have been approved and funded for construction over the next 2 years.

The purpose of this document – the Oconee Rivers Greenway Network Plan – is to establish a comprehensive vision for the Oconee Rivers Greenway and its constituent parks, trails, waterways, exceptional resources, and green spaces as well as to provide planning, design, and management guidance for the greenway trail system. The plan's goals and the strategic actions to meet these goals are listed below.

The ordinance creating the Oconee Rivers Greenway Commission (ORGC) provides that the primary purpose of the greenway "shall be the protection of the natural resources of the North Oconee and Middle Oconee rivers, their major tributaries and their 100-year floodplains for the benefit and enjoyment of the citizens of Athens-Clarke County." The greenway's "boundary" therefore rests on two important regulations: the FEMA 100-year floodplain of the rivers and their major tributaries and the areas protected by the ACCUG Environmental Areas Ordinance. In addition, the plan and greenway map refer to two designations – Conservation Areas and Exceptional Resource Areas – that warrant increased management attention. The 100-year floodplain and adjacent greenspaces and areas with cultural and natural resources are included in the Conservation Area. Properties adjacent to the greenway that are protected by conservation easements as well as those privately owned properties adjacent to the greenway that have conservation value are also included. An Exceptional Resource Areas (ERA) is a management unit on public lands which contains outstanding, particularly sensitive, or officially protected natural or cultural resources requiring special management consideration and actions to sustain them.

The greenway trail system provides connectivity between schools, neighborhoods, recreational and educational facilities, and other county amenities. The greenway trail system supports non-motorized transportation through a system of multi-use trails. This helps alleviate traffic and pollution throughout Athens-Clarke County. Use of the trails promotes health and wellbeing.

Importantly, this plan is conceptual in nature, designed to provide a framework for greenway management, budgeting, fundraising, priority setting, and trail development. As projects are approved and funded, more detailed and site-specific planning will be necessary.

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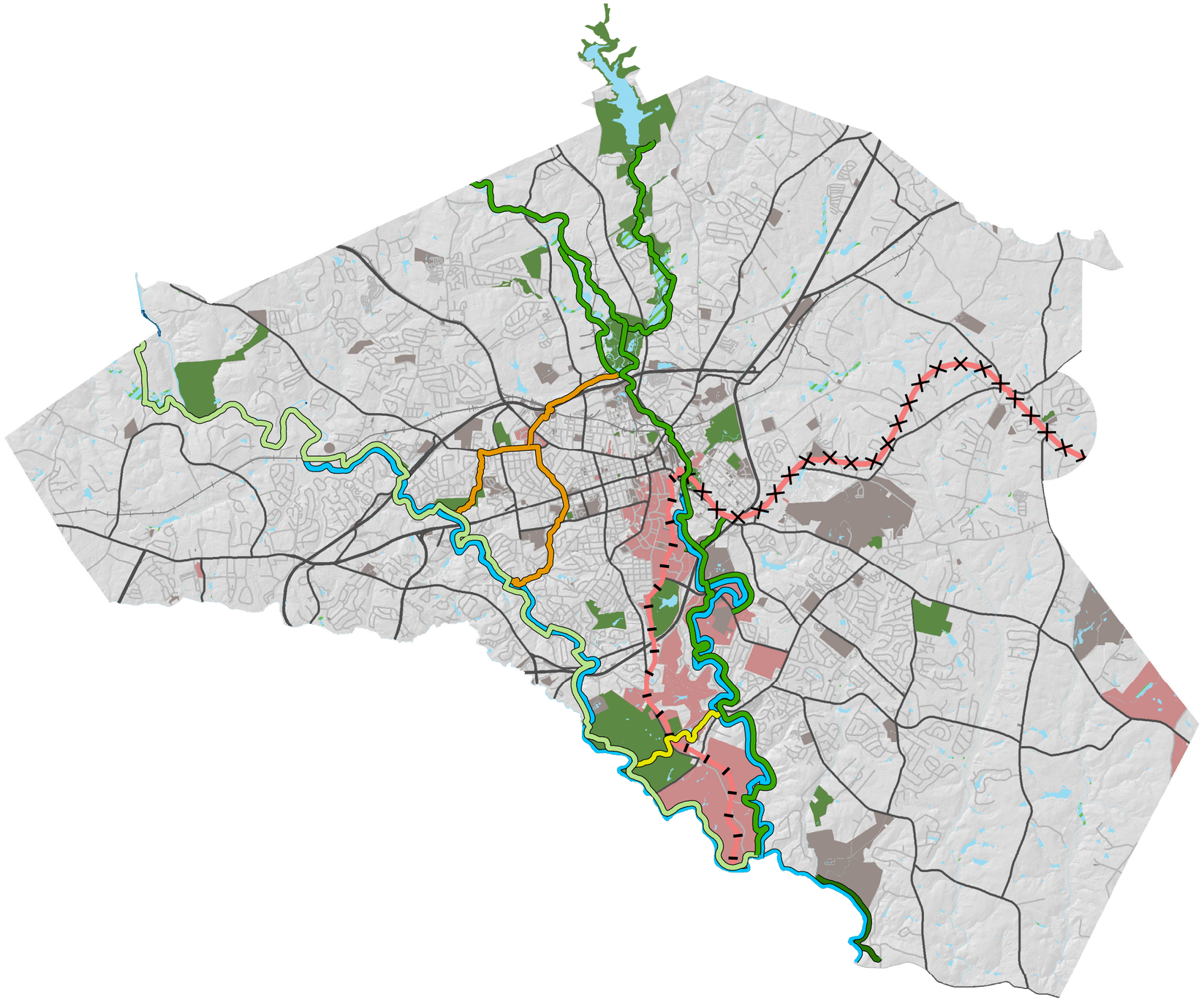

LEGEND

Trail Networks

- Oconee River Greenway
- North Oconee River Greenway
- Middle Oconee River Greenway
- Normaltown Connector
- Botanical Garden Connector
- Rail with Trail
- Rail to Trail
- Water Trail

Infastructure

- Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

NETWORK CONNECTIVITY

Greenway Network Plan

Athens, Georgia

November 2016

Figure 0.1: Network Connectivity

Prepared by
ACC Leisure Services
Office of Park Planning

for Athens -
Clarke County
Leisure Services

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The plan identifies the following three high priority corridors to reflect the goal of connectivity.

1. **North Oconee River Greenway:** The North Oconee River corridor priority will focus on improving trails and connections and filling gaps in connectivity along the existing portions of the greenway. In addition to this, connections to neighborhoods and downtown areas will be strengthened.

2. **Middle Oconee River Greenway:** The Middle Oconee River corridor priority will focus on connecting Ben Burton Park to Beech Haven, an Exceptional Resource Area. Further development of this corridor will follow in future updates.

3. **Normaltown Connector:** Normaltown is rich with residential and commercial areas and the proposed trail would provide a very much-needed connection between the North and Middle Oconee rivers, passing through the center of Athens. The current focus of this corridor will include linking neighborhoods to each other and to the greenway paths that are also listed as high priority.

Trails listed below are all considered high priority. Tiers represent the recommendations for funding and completion.

Table 1: High Priority Trails

Trail Name	**Priority**
Cook's Trail	Tier 1
Oak/Oconee Bridge Underpass	Tier 1
Riverside Trail – MLK Parkway	Tier 1
Riverside Trail – North Oconee River Park	Tier 1
Tallassee Road Connector	Tier 1
Pulaski Creek Connector – South	Tier 2
Pulaski Creek Connector – North	Tier 2
Nature Center Loop – West	Tier 2
Nature Center Loop – East	Tier 2
Ben Burton to Beech Haven	Tier 3
Firefly Connector at 78/10 Interchange	Tier 3
Normaltown Connector – Ben Burton to Bishop	Tier 3
Normaltown Connector – Bishop to Boulevard	Tier 3
Normaltown Connector – Boulevard to North Oconee River Greenway	Tier 3

This plan also recommends the following immediate actions to guide the development of the greenway and trail network.

1. *ACCUG Mayor and Commission Adopt this Plan*
   Once this plan is approved by the Mayor and ACC Commission, it will be integrated in other related government planning efforts (Comprehensive Plan, Bike/Pedestrian Plan, etc).

2. *Increase full time Greenway Staff*
   Develop a position that is responsible for championing greenway projects, partnering to develop programs including educational and volunteer efforts, and serving as a liaison with members of the public, the ORGC, and partner agencies.

3. *Market the Greenway Network*
   Providing print and online materials that describe the greenway network will help ensure that its purpose is understood as well as increase public awareness about the greenway. This marketing will include creating a specific greenway and trail website connected to the ACCUG website, which provides up-to-date information about greenway facilities, development, programming and operations.

4. *Secure and Commit Funding*
   Immediately pursuing priority projects is vital in order to expand the greenway trail network and management programs. Elected officials, appointed committees, and private entities must come together to fund these projects. TSPLOST and SPLOST are key programs for implementation of greenway proposals and other funding sources will also be pursued.

5. *Begin working on the Tier 1 priority projects*
   Tier 1 trails are logical extensions of the existing and currently funded greenway trail system. Completing greenway trail that are already funded through SPLOST referendums will build momentum and focus attention on high priority areas.

The plan includes goals and actions that are complex in nature and will take years to complete. The table below provides a complete list of the Greenway Network Plan's Goals and Actions:

RESOURCE PROTECTION
The greenway is designed to provide a natural environment that enhances quality of life through the conservation and preservation of natural resources.

Goal: Improve water quality and restore natural hydrological processes in the North Oconee River, Middle Oconee River, and Oconee River and their tributaries

Actions

1. Improve monitoring and enforcement of water quality standards; work with state and federal agencies to address EPA's "impaired waters" in the basin
2. Continue efforts to improve the ACCUG sewerage system to avoid accidental discharges and leakage; Explore alternatives to gravity flow sewer lines in Sandy Creek and Shoal Creek watersheds and when repairing and improving all systems
3. Improve control of stormwater runoff from developed areas to reduce erosion and pollution and to increase ground water recharge
4. To the extent practical, remove man-made obstacles to flows on the greenway rivers and tributaries; Collaborate with dam operators and other water managers to create more ecologically sustainable flows in the basin
5. Improve monitoring and enforcement of the ACCUG Environmental Areas Ordinance; work with landowners to meet stream and river buffer requirements and restore eroded or damaged sites within the greenway corridor
6. Promote public awareness of water resource issues and programs and encourage volunteer efforts to protect and improve water ways; partner with non-government organizations in these efforts
7. Promote low-impact and safe river-based recreation; provide public launch sites and fishing and observation points along the rivers
8. Support and advocate for implementation of the ACCUG Sustainability Plan that is currently under development that relates to water quality

Goal: Conserve native species, habitats, and ecological processes on public land and encourage private land owners to conserve resources

Actions

1. Facilitate natural resource inventory and monitoring efforts in the greenway by working with the GDNR and academic and non-profit organizations; collaborate to inventory and map:

Georgia DNR High Priority Habitats	Unique species and communities
Georgia DNR High Priority Species	Other habitats and communities
Significant Natural Areas	ACCUG Legacy Forests

Table continues on next page...

2. Establish greenway "Exceptional Resource Areas" where appropriate

3. Apply lessons learned from the Sandy Creek Nature Center Managed Forest Project to other sites on the greenway

4. Improve and maintain natural corridor connections among high quality habitats within the greenway network

5. Prevent wildfires and, where appropriate, conduct prescribed burning to restore more natural fire regimes for native vegetation

6. Support programs and volunteer efforts to remove and control invasive plant and animal species within the greenway; promote public awareness of invasive issues

7. Control types and levels of recreation on public lands in the corridor to avoid unacceptable impacts to resources and to provide quality experiences for greenway users

8. Determine if additional properties or easements within the greenway are appropriate for acquisition through the ACCUG Land Conservation Program

9. Develop master plans and ecological stewardship plans for Tallassee Forest and Beech Haven. Partner with Georgia DNR to develop such plans for Rock and Shoals Outcrop Natural Area

Goal: Conserve cultural resources

Actions

1. Conduct reconnaissance archeological surveys prior to construction of trails and other greenway amenities to avoid or mitigate adverse impacts on cultural resources

2. Survey other greenway public lands for archeological and historic resources to establish a cultural resources data inventory, as funding is available

3. Review archeological resources and historic structures on greenway public lands to determine if additional sites are eligible for nomination to the National Register of Historic Places

4. Collaborate with Georgia DNR, UGA, and non-profit organizations in managing cultural resources in the greenway network

5. Collaborate with ACCUG Cultural Affairs Commission in identifying appropriate locations for public art works along the greenway network

6. Compile and archive written, visual, and oral histories of the greenway

EDUCATION

The greenway provides educational opportunities for citizens to participate in both self-directed and interpretative programs that contribute to an understanding of the natural environment, cultural heritage, and conservation efforts.

Goal: Provide opportunities for greenway users to learn and serve in volunteer capacities while experiencing our community's natural and cultural resources

Action

1. Assist ACCUG departments and community organizations by providing educational opportunities related to the value of greenspace, natural resources, clean water, recycling and waste management

Goal: Create comprehensive education programming that provides both self-directed and group-led learning opportunities in natural and cultural resources

Action

1. Encourage programming staff of ACCUG to integrate the greenway into their calendar of activities and educational programming

Goal: Enhance and create links between environmental and natural science education and educational institutions such as pre-schools, schools, technical schools, colleges, and the University of Georgia

Action

1. Provide a forum for creating links among environmental and cultural education efforts and support such efforts

Goal: Educate the community about the importance of environmental stewardship and sustainability

Actions

1. Collaborate with ACCUG to document the long history of greenway planning in the community, as well as the history of the ORGC

2. Continue to partner with ACCUG staff, ACCUG Boards and Commissions, and partner organizations, such as Sandy Creek Nature Center, to support their educational programming through sponsoring workshops, conferences, etc.

HEALTH AND WELLBEING

Healthy communities have safe and accessible places for their citizens to enjoy the outdoors and exercise. Designed to provide our citizens with health and wellbeing opportunities, the greenway connects people to the natural environment while also encouraging them to be physically active.

Goal: Promote the crucial role that nature plays in contributing to physical, spiritual, and mental health

Action

1. Partner with local civic organizations and healthcare providers, such as the Athens Area Chamber of Commerce, Athens Downtown Development Authority, Piedmont Athens Medical Center, St. Mary's Hospital, the Athens Nurses Clinic, Mercy Clinic and the Athens Neighborhood Health Centers to develop programs and resources on the greenway

Goal: Provide ways to empower people to take positive actions to support a healthy life

Action

1. Encourage programming staff of ACCUG to integrate the greenway into their calendar of activities for health and wellbeing

2. Work with K-12 and college educators to integrate the principles of outdoor recreation into their curriculums

RECREATION

In addition to its health benefits, outdoor recreation contributes to a community's social cohesion and quality of life. The greenway provides our community with the opportunity to experience and enjoy the outdoors in a natural environment.

Goal: Provide walking, jogging, hiking, cycling, paddling, fishing, and other outdoor recreational opportunities

Actions

1. Create both self-directed and group-led recreational opportunities such as geocaching, nature walks, full moon walks, 5K races, bicycle safety courses and paddle excursions
2. Increase public awareness about the greenway by promotion through maps, signage, and other paper and electronic media materials

Goal: Provide for observation, study, and enjoyment of the natural environment and cultural history

Actions

1. Provide opportunities for recreational and art programming

Goal: Provide an aesthetically pleasing, safe, and enjoyable environment

Actions

1. Greenway design will enhance community interaction and provide opportunities for gathering spaces
2. Create an ACCUG trail patrol team to maintain a safe environment
3. Encourage volunteer groups to assist greenway users and monitor trail conditions
4. Provide adequate restroom facilities along the greenway

Goal: Integrate accessibility while protecting natural resources so that all people have the opportunity to enjoy the outdoors

Actions

1. Determine risk management at greenway locations, prepare and install appropriate safety signage and warning systems
2. Partner with ACCUG Police Department, Fire Department and the Swift Water Rescue team to prepare a water trail safety procedure. Assure greenway facilities and programs comply with the Americans with Disabilities Act

TRANSPORTATION

Active transportation corridors that support walking and bicycling provide much-needed options to driving. The greenway provides corridors and facilities that promote the use of non-motorized transportation, thus alleviating traffic congestion and pollution, while giving our citizens more transportation options.

Goal: Provide for the design and construction of transportation facilities that connect existing and/or future modes of transportation such as trails, complete streets, sidewalk systems, transit systems, and water trails.

Actions

1. Where appropriate, develop trail surfaces in phases and allow for aggregate surface to be utilized first in order to expedite trail length
2. Build trails to facilitate convenient access between neighborhoods and nearby destinations
3. Foster collaboration among the Georgia Department of Transportation, ACC Leisure Services, ACC Transportation and Public Works, ACC Public Utilities, and the ORGC
4. Incorporate the connection, maintenance, and enhancement of greenspace in new development adjacent to the greenway
5. Pursue private partners in order to leverage funds to construct additional sections of the greenway trails and facilities
6. Evaluate and use alternative means of reserving lands required for green space
7. Apply for grants and other state and federal funding resources to leverage available funds

Goal: Educate the community about transportation choices, needs, and benefits

Action

1. Provide opportunities for programming about transportation choices

Goal: Provide connectivity to major community facilities and assets such as parks, neighborhoods, points of interest, schools, recreational facilities, and community centers using a phased development strategy to complete the greenway trail network

Actions

1. Connect Sandy Creek Park to the Georgia State Botanical Garden
2. Develop the Middle Oconee River Greenway
3. Develop the Normaltown Connector

Acknowledgments

This plan was prepared by ACCUG Leisure Services in collaboration with the Oconee Rivers Greenway Commission.

Leisure Services and the ORGC would like to extend a special thanks to the ACCUG Mayor and Commission for supporting the development of this plan.

We would also like to thank Carl Vinson Institute for their assistance in compiling and editing this document.

Many hours of meetings, interviews, and discussions are reflected in this document. The planning team is also grateful to the many government and non-governmental organizations throughout Athens-Clarke County that work hard to protect our natural resources as well as make our community a beautiful, clean, and safe place to live. This plan is more robust because of your efforts.

Special thanks are extended to:

- ACCUG Departments and Programs – Environmental Coordinator, Transportation and Public Works Department, Public Utilities Department, Planning Department, and SPLOST Management.
- ACCUG Citizen Advisory Commissions – Cultural Affairs Commission, Historic Preservation Commission, Rails-to-Trails Committee, and the Community Tree Council.
- The Georgia Department of Natural Resources (GDNR).
- The Georgia Department of Transportation (GDOT).
- The Athens Downtown Development Authority (ADDA).
- The Northeast Georgia Regional Commission (NEGRC).
- The University of Georgia (UGA) – Carl Vinson Institute of Government, College of Environment and Design, Odum School of Ecology, Office of Sustainability, River Basin Center, State Botanical Garden, University Architects for Facility Planning, and the Willson Center.
- Madison-Athens-Clarke-Oconee Regional Transportation Study (MACORTS).
- Non-governmental Organizations – Athens Land Trust, Georgia Rivers Network, Oconee River Audubon Society, Oconee River Land Trust, Upper Oconee Watershed Network, Athens Clarke Heritage Foundation, Bike Athens, Firefly Trail, Inc., and the Southern Off-Road Bicycle Association-Athens.
- Riverview Foundation Inc.

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Oconee Rivers Greenway Commission Current Membership

ACCUG Appointments

- Mack Duncan, PhD, ORGC Treasurer, Retired Geologist
- Susie Haggard, CEcD, Senior Project Manager, Georgia Department of Economic Development
- Nat Kuykendall, ORGC Vice Chair, Retired National Park Service Senior Planner
- Derek Little, Environmental Engineer, US Environmental Protection Agency
- Jacob Maas, UGA Proposal Enhancement Officer
- Alex Patterson, JD, Retired Attorney
- Karen Porter, PhD, UGA Professor Emerita, Odum School of Ecology, ESA Certified Senior Ecologist
- Bob Sleppy, Executive Director, Nuçi's Space
- Nancy Stangle, Director Emerita, Athens Land Trust
- Madeline Van Dyck RN, Family Nurse Practitioner

UGA Appointments

- Ron Thomas, FAICP, ORGC Chair, College of Environment and Design
- Steve Harris, ORGC Secretary, Director of the Office of Security & Emergency Preparedness
- Shana Jones, JD, Carl Vinson Institute of Government, Planning & Environmental Services
- Lara Mathes, AICP, Director of Campus Planning
- Alison McCullick, Director of Community Relations

Ex Officio Members

- Bike Athens, Tyler Dewey
- Northeast Georgia Regional Commission, John Devine, AICP
- Upper Oconee Watershed Network, Bruno Giri
- Athens Downtown Development Authority, Pamela Thompson
- ACCUG Leisure Services, Mel Cochran Davis
- ACCUG Environmental Coordinator, Andrew Saunders
- ACCUG Planning, Vicki Buschbom
- ACCUG Transportation and Public Works
- ACCUG Public Utilities

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- Mack Duncan
- Susie Haggard
- Shana Jones
- Nat Kuykendall
- Lara Mathes
- Alex Patterson
- Karen Porter
- Ron Thomas
- Pamela Thompson
- Madeline Van Dyck

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Chapter 1: Introduction

The Oconee Rivers Greenway is a network of natural areas within the 100-year floodplains of the North Oconee River, Middle Oconee River, and Oconee River and their major tributaries as its core. The network includes a system of river-oriented trails that connect the river corridors with adjacent parks and green spaces and natural and cultural resources in Athens-Clarke County. The greenway trail system has 3.5 miles of multi-use trail, 2.3 miles of street-based trail, 12.1 miles of foot trail, and 3 miles of multi-use trail on UGA's campus.

The purpose of this document – the Oconee Rivers Greenway Network Plan – is to establish a comprehensive vision for the Oconee Rivers Greenway and its constituent parks, trails, waterways, exceptional resources, and green spaces as well as to provide planning, design, and management guidance for the greenway trail system. The plan also provides clear strategic actions and priorities for development of the greenway, including the many trails that are included within the network. This ambitious project requires the coordination of Athens-Clarke County Unified Government (ACCUG), elected officials, stakeholder groups, and citizens.

The Oconee Rivers Greenway is a network of natural areas within the 100-year floodplains of the North Oconee River, Middle Oconee River, and Oconee River and their major tributaries as its core. The network includes a system of river-oriented trails that connect the river corridors with adjacent parks and green spaces and neighborhoods and community sites in Athens and Clarke County.

COMMUNITY VISION AND MISSION FOR THE OCONEE RIVERS GREENWAY

The greenway encompasses a long-standing community vision of interconnected green spaces that provide quality habitat, reflect conservation values by preserving exceptional and sensitive areas, and include a trail system that provides transportation choices, education, and recreation opportunities for our community. Out of this vision arises the mission to provide opportunities for non-motorized transportation connections, recreation, and education while boosting the community's health and wellbeing. Careful stewardship and conservation of the natural and cultural resources within the greenway network are integral to this mission. Protecting this network of preserved and planned space requires local commitment to implementing the appropriate regulatory measures that will safeguard natural resources, preserve historic features, and further the scenic character that is vital to the greenway's continued growth and success.

A crucial part of the greenway's origin was the formation of the Oconee Rivers Greenway Commission (ORGC), a citizen advisory group to the ACCUG Mayor and Commission. The ORGC, created by ordinance in 1992, is a critical partner in the planning, development, and implementation of the greenway network.[1] The late Charles Aguar, UGA professor of Landscape Architecture, is often credited as the "father" of the greenway, raising awareness and support for developing the greenway and the ORGC. In 2003, a Greenway Network Plan, developed by the Department of Leisure Services, was officially

1 Athens-Clarke County, Code of Ordinances, Section 1-11-1 (2016). It also provides that a primary responsibility of the commission is the development of a "plan for a river-oriented greenway system." The commission may also recommend parcels of land to be purchased or acquired for inclusion in the greenway.

adopted by the ACCUG Mayor and Commission. In the 2003 plan, the conservation and preservation goal of the greenway was supplemented with goals related to transportation, education, and recreation. These goals are updated in this plan.

FOUNDATION FOR GREENWAY MANAGEMENT

The ordinance creating ORGC provides that "the primary purpose" of the greenway "shall be the protection of the natural resources of the North Oconee and Middle Oconee rivers, their major tributaries and their 100-year floodplains for the benefit and enjoyment of the citizens of Athens-Clarke County." The greenway's "boundary" therefore rests on two important regulations: the 100-year floodplain[2] and the areas protected by the ACCUG Environmental Areas Ordinance,[3] which are represented on the 2014 ACCUG Environmental Areas Map.[4]

This greenway "spine" or "greenway corridor" is augmented by properties adjacent to the greenway protected by conservation easements as well as areas adjacent to the greenway that have conservation value. This plan refers to these areas as "Conservation Areas." This plan also designates specific areas of the greenway corridor that warrant increased management attention as Exceptional Resource Areas (ERA). The purpose of highlighting these areas is to provide a higher level of awareness about the natural resources throughout our community – and how managing these resources well benefits the greenway. A primary goal of this plan is to encourage conservation and bring to light best management practices that can further enhance the protection and conservation of these sensitive resources at the time of development.

Importantly, this plan is conceptual in nature, designed to provide a framework for greenway management, budgeting, fundraising, priority setting, and trail development. As projects are approved and funded, more detailed and site-specific planning will be necessary. This plan also will compliment and inform several important plans currently in existence, such as the Downtown Athens Master Plan, and those in development, including ACCUG's sustainability plan, master plan for pedestrian and bicycle infrastructure, and the comprehensive plan.

Conservation Areas include the 100-year floodplain of the Oconee Rivers and their major tributaries and adjacent areas of conservation value.

Exceptional Resource Areas have outstanding, particularly sensitive, or officially protected natural or cultural resources. These terms are described in detail in Chapter 3.

BENEFITS OF GREENWAY NETWORKS

Greenway networks and their associated trails offer tremendous benefits to local communities. Greenways contribute to community health and quality of life. They can also foster more collaborative communities, alternative transportation options, civic pride, preservation of the community's history and culture, and appreciation for the natural environment. Establishing greenways is a movement in the United States. From Chattanooga to Columbus, from Philadelphia to Atlanta, greenways have become primary ways in which communities have drawn their citizens into the local landscape while preserving exceptional natural resources.

Greenways also provide economic benefits to the community. By bringing valuable quality of life improvements to the community, greenways can attract high-tech industries looking to locate their

2 FEMA's National Flood Insurance Program identifies flood hazard areas on flood insurance rate maps as "Special Flood Hazard Areas," which are defined "as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year." The Special Flood Hazard Area is often referred to as the "100-year floodplain."

3 ACCUG's Environmental Areas Ordinance serves to protect the water and natural resources associated with the greenway. It utilizes FEMA's classification of the 100-year floodplain to establish environmental areas. Other areas the ordinance protects include jurisdictional wetlands, riparian buffer areas, significant groundwater recharge areas, and water supply watersheds and water supply intake areas.

4 This map is provided in Appendix E.

core operations in a community with attractive environmental amenities. Greenways also have been shown to drive downtown business occupancy rates. For example, an in-depth study conducted by Furman University of the impact of a trail in the Greenville area found that, since the trail was completed, most businesses in close proximity to the trail reported increases in sales ranging from 30% to as high as 85%; one business opened because the trail was built; and one business relocated closer to the trail, which resulted in a 30% increase in sales.

Greenways also increase property values and encourage tourism and civic improvements. According to the National Association of Homebuilders, "trails consistently remain the number one community amenity sought by prospective homeowners." Tourism creates jobs and puts money into local economies. "Trail tourism" is driving many states, cities, and local communities to invest in greenways as a way to create vacation opportunities that allow visitors to see diverse environments and communities across America. Retirees are attracted by the quality of green amenities and active lifestyle opportunities. A quality greenway network can make the difference in a retiree's decision to relocate.

Moreover, greenways often generate an increase in recreation-related spending on items such as in line skates, bicycles, running shoes, lodging, kayaks, paddling gear, and fishing gear. In addition to being a valued recreational activity, fishing provides many families with a source of protein and may alleviate food insecurity. Greenway networks also provide a range of environmental and civic benefits. Primary environmental benefits include increased floodplain capacity, habitat protection, and improved air and water quality. Greenways can be a source of civic pride by providing access to historic places and helping to preserve them. Greenway trails also provide a safe, inexpensive way for people to get regular exercise.

GOALS FOR THE OCONEE RIVERS GREENWAY

Greenway goals reflect the following primary areas of focus: conservation and preservation, education, health and wellbeing, recreation, and transportation. Specific actions to achieve these goals are outlined in Chapter 5: Implementation.

Resource Protection

The greenway is designed to provide a natural environment that enhances quality of life through the conservation and preservation of natural resources. Within the greenway corridors, the plan's goals in this area include:

- Improve water quality and restore natural hydrological processes in the North Oconee River, Middle Oconee River, and Oconee River and their tributaries
- Conserve native species and ecological processes on public land and encourage private land owners to conserve resources
- Conserve archeological and historic resources

Education

Another purpose of the greenway is to provide educational opportunities for individuals and families to participate in both self-directed and interpretative programs that contribute to an understanding of the natural environment, cultural heritage, and conservation efforts. Specifically, the plan's goals in this area are to:

- Provide opportunities for individuals and families to learn and serve in volunteer capacities while experiencing our community's resources
- Create comprehensive educational programming that provides both self-directed and group-led learning opportunities in natural and cultural resources
- Enhance and create links between environmental and natural science education and educational institutions such as pre-schools, schools, technical schools, colleges, the University of Georgia, etc.
- Educate the community about the importance of environmental stewardship and sustainability

Health and Wellbeing

Healthy communities have safe and accessible places for their citizens to enjoy the outdoors and exercise. Designed to provide our citizens with health and wellbeing opportunities, the greenway connects people to the natural environment while also encouraging them to be physically active. The plan's specific health and wellbeing goals in this area are to:

- Promote the crucial role that nature plays in contributing to physical, spiritual, and mental health
- Provide ways to empower people to take positive actions to support a healthy life

Recreation

In addition to its health benefits, outdoor recreation contributes to a community's social cohesion and quality of life. The greenway provides our community with the opportunity to experience and enjoy the outdoors in a natural environment. The plan's recreational goals for the greenway are to:

- Provide walking, jogging, hiking, cycling, paddling, fishing, and other outdoor recreational opportunities
- Provide for observation, study, and enjoyment of the natural environment and cultural history
- Provide an aesthetically pleasing and comfortable environment
- Integrate and maximize accessibility while protecting natural resources so that all people have the opportunity to enjoy the outdoors

Transportation

Active transportation corridors that support walking and bicycling provide much-needed options to driving. The greenway provides corridors and facilities that promote the use of non-motorized transportation, thus alleviating traffic congestion and giving our citizens more transportation options. The plan's transportation goals for the greenway are to:

- Provide for the design and construction of transportation facilities that connect existing and future modes of transportation such as trails, complete streets, sidewalk systems, transit systems, water trails, etc.
- Educate the community about transportation choices, needs, and benefits
- Provide connectivity to major community facilities and assets such as parks, neighborhoods, points of interest, schools, recreational facilities, and community centers using a phased development strategy to complete the greenway trail network

Plan Goals: Tasks for this Update

- Present a comprehensive vision for the Oconee Rivers Greenway and its constituent corridors and sites
- Provide a cohesive framework and vocabulary for future greenway planning and development
- Establish standards for planning, development, and management of greenway corridors
- Provide measurable goals, actions, and priorities for plan implementation, and define responsibilities for their implementation
- Document plan revisions in a logical and transparent manner
- Create a robust and comprehensive plan by incorporating expertise from federal, state, local, and university resources in transportation, public health, education, cultural resource interpretation, and natural resource management

THE STRUCTURE OF THE DOCUMENT AND FUTURE UPDATES

Developing the Greenway Network Plan reflects a highly collaborative effort that required a high level of engagement from the ORGC, stakeholders, and the community as a whole. This plan is organized as follows:

Chapter 1: Introduction

Establishes the community vision, mission, and goals of the greenway. Sets the framework for the document.

Chapter 2: Where are We? How Do We Compare?

Summarizes findings from public input. Compares and analyzes ACCUG's miles of multi-use trail with 14 U.S. cities. Surveys trail, greenway, and green space efforts in surrounding counties to provide regional context. Provides an overview of the existing Oconee Rivers Greenway, potential destinations, and existing trail network and funded projects.

Chapter 3: Natural and Cultural Resources: Ours to Protect and Enjoy

Provides an overview of the natural and cultural resources within and contiguous to the greenway, why they are valuable, and proposed actions to protect them. Explains the greenway boundary and conservation areas, providing the overall context for the recommendations later in the document related to maintaining and extending the network of trails that run throughout the greenway.

Chapter 4: Existing & Proposed Greenway Trail Network

Describes, prioritizes, and maps proposed greenway trails.

Chapter 5: Implementation

Describes actions steps, estimates, program, and policy recommendations for extending and maintaining the existing trail network.

Chapter 6: Design Guidelines

Provides design guidelines for trailheads, trails and trail types, trail surface types, crossings, architectural features, amenities, river access, and signage.

Chapter 7: Operations and Maintenance

Provides guidelines for effective operations and maintenance of the greenway.

Appendices

A. Glossary

B. Public Input and Review

C. Benchmark Analysis

D. 10-Year Work Plan

E. Supplemental Tables and Maps

- Georgia DNR High Priority Habitats Present in the Oconee River Greenway Network
- ACCUG FY2015 Report on Projects Funded with SPLOST Revenues
- ACCUG Watersheds Map
- 2014 ACCUG Environmental Areas Map

The Oconee Rivers Greenway Commission

The Oconee Rivers Greenway Commission (ORGC) is a chartered citizen committee that advises the Athens-Clarke County Mayor & Commission on matters related to the Oconee Rivers Greenway network. ORGC is charged to develop a plan for a river-oriented greenway system in Athens-Clarke County and to recommend measures to protect the resources of the Oconee Rivers, their tributaries, and their 100-year floodplains. ORGC was established by county ordinance in 1992, formalizing a grassroots movement that began in the early 1970s that established the North Oconee River Greenway and Heritage Trail.

In order to maintain relevance and incorporate changes over time, this plan is a "living document." Three update intervals have been established to revise the plan as follows:

Every two years: Update the maps used within the Greenway Network Plan. Base map data will be updated as it becomes available, and information that relates to updates to routes, priorities, environmental changes, and other information also will be incorporated into the two-year update cycle.

Every five years: Update the text within the Greenway Network Plan. This update will allow for revisiting the goals and objectives outlined in the document and will allow for the updating of project priorities as well as the addition of new priorities.

Every ten years: Conduct a comprehensive evaluation of the text document and maps. The ten-year effort will incorporate robust public input and careful evaluation of the elements contained in the plan.

Chapter 2: Where Are We? How Do We Compare?

This Greenway Network Plan builds upon the investments and actions taken to develop the current network in order to create additional green space areas, trails, and opportunities for our community to enjoy the greenway for many years to come. It is critical to understand where our current Greenway System stands in the eyes of the public as well as in comparison to other cities. To that end, this chapter includes:

An assessment of community priorities through public input.

- A comparative, benchmark analysis of greenway trail networks of fourteen representative cities similar to Athens
- An overview of the greenway's regional context by identifying the major points of connectivity between the surrounding counties – Barrow, Jackson, Elbert, Newton, Jasper, Madison, Oglethorpe, Greene, Oconee, Morgan, and Walton – in relation to parks, greenways, and water trails
- Descriptions of the destinations within a quarter mile of the existing and funded greenway

Establishing a comprehensive vision for the greenway and its constituent parks, trails, waterways, exceptional resources, and green spaces is a primary purpose of this plan. The current greenway remains fragmented with several trails lacking connections to the main greenway corridor. Numerous opportunities exist, as this plan is implemented, to take steps to increase connectivity to the greenway as well as to develop greater cohesiveness and integration into the community for the greenway trail network as a whole.

PUBLIC INPUT AND COMMUNITY ASSESSMENT: FINDINGS

Public input is essential to ensure that the greenway both protects local natural resources and provides a functional and attractive space for education, health and wellbeing, recreation, and transportation. As part of this plan development process, public input was solicited through community surveys, community leader interviews, and stakeholder meetings.[1] The findings from this process are summarized below.

Greenway Users. The majority of respondents that reported using the greenway are residents of Athens-Clarke County. Overall, most people found the greenway to be easy to navigate, in good condition, and usually safe, although at least one stakeholder identified the need for the addition of police patrol or a citizen/volunteer walking patrol to increase safety.

Transportation Methods to Greenway. The majority of field and online survey respondents reached the greenway by car. A large portion of respondents also reached the greenway by walking. A significant number of users reach the greenway by biking. Very few respondents rode a bus to the trail system. The majority of respondents also stated that they do not regularly use the greenway to commute from one place to another.

Trail Usage. The most common reported greenway use categories within both surveys included exercise and recreation. An overwhelming majority of greenway users participate in walking, running or jogging, while the next most popular activities include nature viewing, relaxation, hiking, and dog walking.

Frequency. Slightly more than a third of the field survey respondents interviewed use the parks and trails weekly while about a quarter used them daily. Within the online survey, a larger proportion – roughly half – of respondents

1 Appendix B provides additional information about the public input process and more details about the findings.

use the trails weekly. Approximately one-fourth of online respondents use the trails monthly.

Desired Improvements and Expansions. The most popular amenities that users want to see added or improved are restrooms, hiking trails, paved trails, mountain bike trails, dog parks, and canoe/kayak launches. Respondents stated that they are most likely to use the paved trails, followed closely by the natural trails. Water trails, riding trails, and mountain bike trails appealed to a more limited set of respondents.

Primary Objectives of the Greenway. The majority of users were most concerned with protecting sensitive environmental areas and habitats, providing green space for interacting with the natural world, and connecting the community with new walking and biking routes. Interviews with community leaders revealed that a vibrant, interconnected, off-road transportation network that connects neighborhoods, commercial centers, and employment centers is an important greenway goal. At least one stakeholder said that a property tax advantage for an owner granting easement across their property for the greenway should be available.

Greenway Connections. When given a map of Athens-Clarke County, users identified four neighborhoods as being the most important neighborhoods to connect to the greenway: Downtown, East Athens, Five Points, and Normaltown. Interviews with community leaders showed agreement on expansions around Lexington Road and Barnett Shoals Road, but a great deal of heterogeneity was revealed with respect to preferred geographic locations for future greenway investments. Stakeholders identified several connectivity areas of interest, including concern about street based connections and the need for more comfortable crossings; a desire for increased connectivity on the bridges on College Street and Oconee Street; a need for the addition of more water trail access points above Dudley Park to Sandy Creek and the removal of the dam from Ben Burton Park; and the need for the relocation of the Firefly Trail in close proximity to Spring Valley Road and Moore's Grove road to connect with W.R. Coile Middle School and Nakanishi Manufacturing.

COMPARATIVE ANALYSIS: MILES OF MULTI-USE TRAIL AND OBSERVATIONS

ACCUG staff surveyed fourteen U.S. cities that are similar to Athens-Clarke County in scale, function, or regional context. Specifically, in examining these peer cities, staff focused on miles of multi-use trail, miles of multi-use trail planned, percent funded, construction budget, surface types, amenities provided, and population. Other trail types were not analyzed because comparable data was difficult to obtain. This section concludes with broader observations drawn from conducting this review.

The comparative analysis involved the following categories of cities:

1. **Georgia cities –** Albany, Columbus, Macon, Rome, Savannah, and Valdosta. These cities were chosen based on comparable population size to Athens and also were independent of the Atlanta area

2. **College Towns –** Clemson, Chapel Hill, Charlottesville, and Blacksburg. These cities were chosen based on similarly-sized universities located within their city

3. **Aspirational Cities –** Greenville, Raleigh, Chattanooga, and Austin. These cities have ideal trail systems

The table below lists these benchmark cities and the miles of multi-use trails they provide. Appendix C includes a more detailed table covering population, miles of multi-use trail planned, percent funded, construction budget, surface types, and amenities provided.

Table 1: Benchmark Cities[2]

City	State	Miles of Multi-Use Trail
Athens-Clarke County	GA	3.6
Georgia		
Rome	GA	6.5
Macon	GA	11
Columbus	GA	26
Savannah	GA	0.6
Albany	GA	3.2
Valdosta	GA	3.6
College Towns		
Clemson	SC	0.5
Chapel Hill	NC	14.8
Charlottesville	VA	6
Blacksburg	VA	11
Aspirational		
Greenville	SC	18.5
Raleigh	NC	117
Chattanooga	TN	13
Austin	TX	36.3

While the benchmark analysis focused specifically on miles of multi-use trail, reviewing greenways in these benchmark cities resulted in the following, broad observations:

- Greenways providing an alternative transportation network tying community resources together into a cohesive urban plan stood out as strong examples
- Integrating natural resources, historical and cultural sites, and commercial development resulted in dynamic and popular greenways
- Multi-use trails are an important part of trail development because they allow for a wide variety of use, including walking, jogging, pushing strollers, bicycling, etc.
- Water features such as riparian or creek environments make for a more popular greenway
- Trails should have interesting destinations to avoid the "trail to nowhere" syndrome
- Restroom facilities located strategically and frequently throughout a trail network encourage maximum use of a trail system, especially for communities with a larger retired population
- Features enhancing safety, such as emergency call boxes, strategic lighting and police or community patrols are important to increase greenway use
- Good signage, including mileage to amenities or greenway destinations, promotes user satisfaction
- Public art contributes to promoting the greenway and increasing community engagement

2 (Building Our Trail. Connecting Our Communities, n.d.; Broad River Water Trail, n.d.; Chattahoochee-Oconee National Forest History, n.d.; Forest Information, n.d.; Hard Labor Creek State Park, n.d.; Histories, n.d.; Fort Yargo State Park, n.d.; Watson Mill Bridge State Park, n.d.)

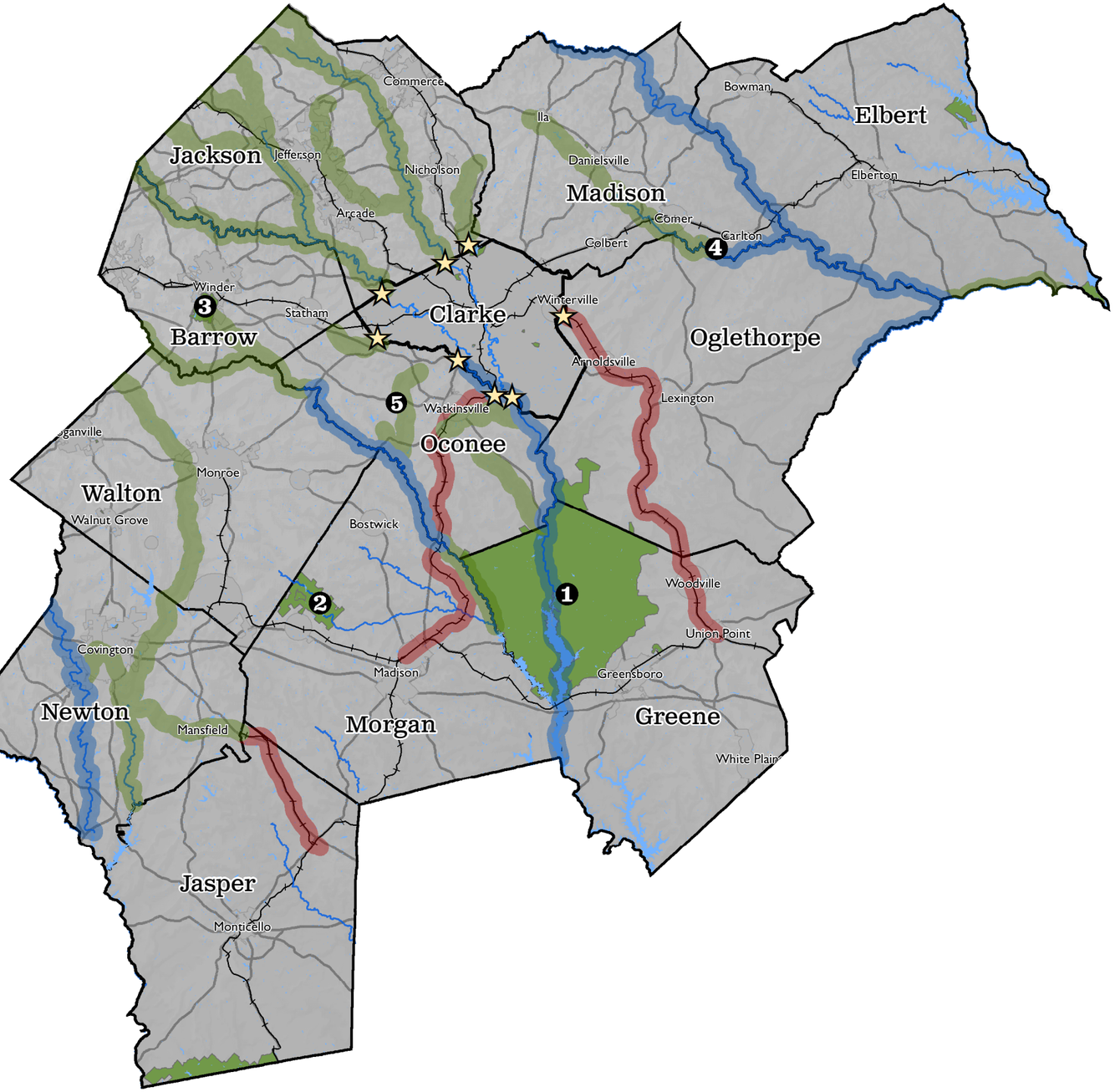
REGIONAL CONTEXT

ACCUG staff also studied eleven of the counties surrounding Athens-Clarke County, namely Barrow, Elbert, Newton, Jasper, Jackson, Madison, Oglethorpe, Greene, Oconee, Morgan and Walton. The study highlighted greenways, water trails, rails/trails projects, national forests, and regional parks within these counties. The table below provides additional information about these regional assets and proposed assets.

Table 2: Regional Assets and Proposed Assets[3]

Trail Name	Trail type	Location	Opened	Size	Amenities
Firefly Trail	Rail to Trail	Between Athens and Union Point	In Progress	39 Miles	Biking, mountain biking, hiking
Athens Line	Rail with Trail	Between Athens and Madison	In Progress	27 Miles	Biking, mountain biking, hiking
Jackson County	Greenway	Jackson County	Proposed	137 Miles	Connections to parks, schools, historic sites, employment centers, civic centers, and natural spaces
Oconee County	Greenway	Oconee County	Proposed	71 Miles	Connections to historical sites
Broad River Water Trail	Water Trail	Franklin, Elbert, Madison, Oglethorpe, Lincoln, and Wilkes County	Opened 1995	75 Miles	Ten access points, eight highway bridge crossings, three outfitters
Upper Oconee Water Trail	Water Trail	Jackson, Clarke, Oconee, Putnam and Greene County	In Progress	98 Miles	Six public access points, beginner Class I and II shoals, rocky bluffs, historic textile mill ruins
Yellow River Water Trail	Water Trail	Gwinnett, Dekalb, Rockdale and Newton County	Opened 2013	53 Miles	3 established access points (17 potential access points). Flatwater to Class II, depending on the section and water level.
Appalachee River Water Trail	Water Trail	Gwinnet, Walton, Oconee, and Morgan County	Proposed	23 Miles	2 paddelable sections characterized by lowland swamp, piedmont streams, Class I-II rapids/ shoals and 4 portages around dams.
Oconee National Forest	National Forest	Between Greensboro and Madison	Opened 1959	114,641 Acres	Hiking, camping, RV camping, horseback riding, swimming, boating, fishing, water skiing
Hard Labor Creek State Park	State Park	Rutledge, GA	Opened 1946	5,805 Acres	Cottages, campsites, group shelters and campgrounds, horse camping sites, equestrian riding ring, swimming, beach, two lakes, golf course
Fort Yargo State Park	State Park	Winder	Opened 1954	1,816 Acres	A historic log fort, hiking trails, a disc golf course, camping amenities, a 260-acre lake with beach, fishing piers, boat ramps, pavilions and shelters, and a gift shop
Watson Mill Bridge State Park	State Park	Comer	Opened 1969	1,118 Acres	An historic covered bridge, camping amenities, horse stables, pavilions and picnic shelters

3 (Building Our Trail. Connecting Our Communities, n.d.; Broad River Water Trail, n.d.; Chattahoochee-Oconee National Forest History, n.d.; Forest Information, n.d.; Hard Labor Creek State Park, n.d.; Histories, n.d.; Fort Yargo State Park, n.d.; Watson Mill Bridge State Park, n.d.)



Location Map

LEGEND

Greenway Trail Network

- Proposed Greenway
- Proposed Rails/Trails
- Proposed & Existing Water Trails
- ☆ Point of Contact to Neighboring Counties
- 1 Oconee National Forest
- 2 Hard Labor Creek State Park
- 3 Fort Yargo State Park
- 4 Watson Mill Bridge State Park
- 5 Oconee Veterans Park

Infrastructure

- Railroads
- Major Roads

Hydrology

- Streams

Areas of Interest

- Parks

0 10 20 Miles

REGIONAL CONTEXT

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.1: Regional Context

Prepared by ACC Leisure Services Office of Park Planning

for Athens - Clarke County Leisure Services

OCONEE RIVERS GREENWAY: EXISTING AND POTENTIAL DESTINATIONS

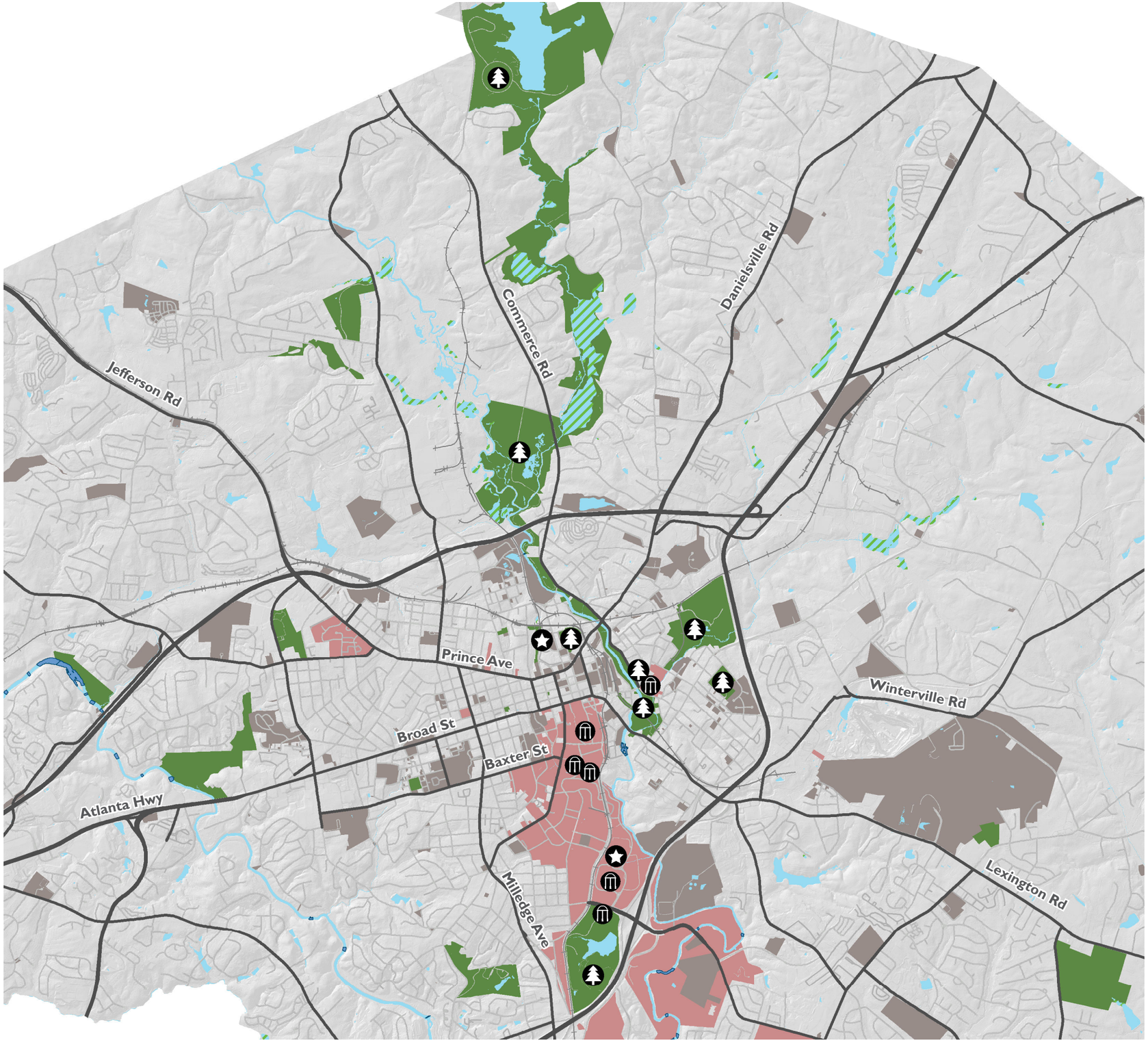
Because the greenway is envisioned to interconnect with the community in a cohesive and deliberate way, this section provides an inventory of existing and potential greenway destinations. Ultimately, the greenway network will integrate with the community in a way that connects the built environment with the natural environment, creating a relationship that strengthens both.

Existing Destinations

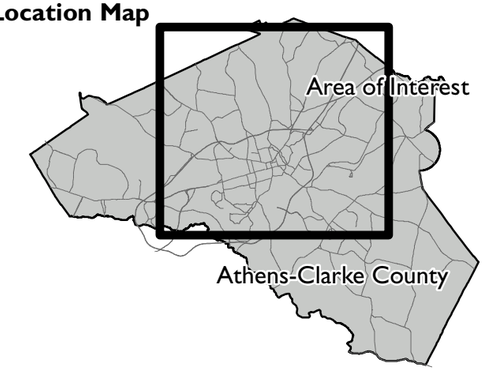
Listed below are all of the destinations within a quarter mile of the existing and funded greenway.

Table 3: Existing Destinations

Parks and Open Spaces	Schools	Features	UGA Facilities
Ben Burton Park	–	Oconee Hill Cemetery	Sanford Stadium
East Athens Community Center	–	Garden Club of Georgia	Dean William Tate Student Center
Memorial Park	–	Georgia Museum of Art	Intramural Fields
Pittard Park	–	Springfield Cemetery	Lake Herrick
Dudley Park	–	Bear Hollow Zoo	Chicopee Complex
Thomas Lay Park	–	Ware-Lyndon House	North Campus
Trail Creek Park	–	Classic Center	Ramsey Center
Sandy Creek Park	–	Sandy Creek Nature Center	–



Location Map



LEGEND

- Existing Park Destinations
- Existing Feature Destinations
- Existing UGA Destinations

Infrastructure

- Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 0.5 1 Miles

EXISTING DESTINATIONS

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.2: Existing Destinations

Prepared by
ACC Leisure Services
Office of Park Planning

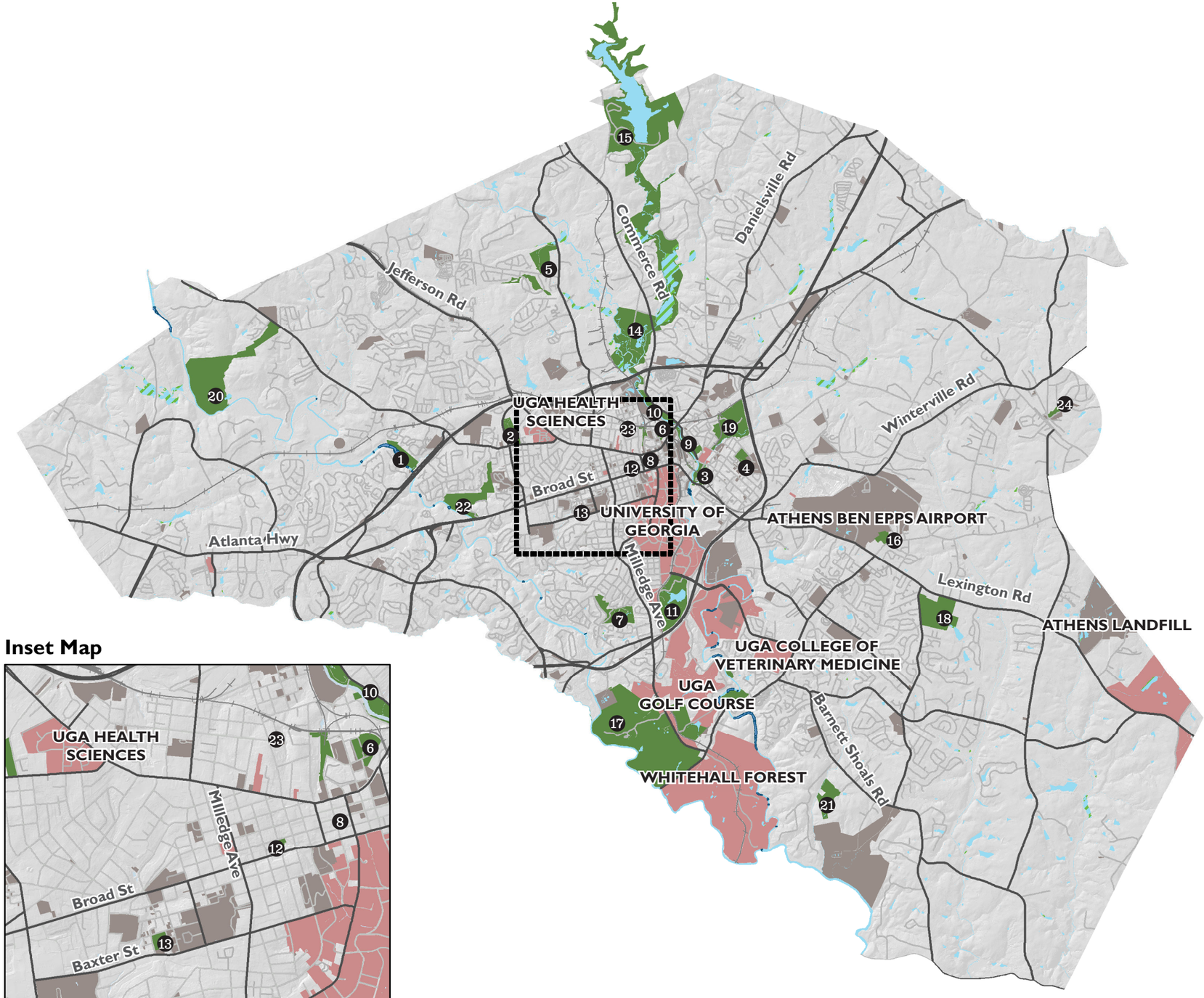
for Athens - Clarke County Leisure Services

Recreation Analysis & Community Facilities

To inform possible potential destinations on the greenway, different maps were produced to highlight the major destinations within the county. Recreation destinations were identified first, and then community facilities.

Table 4: Recreational Resources

	Active Recreation	Picnic Shelters	Restrooms	Playgrounds	Swimming Pools	Splashpads	Beaches	Fishing Piers	Boat Launches	Nature Viewing	Hiking Trails	Paved Trails	Dog Parks	Equestrian Trails	Mountain Bike Trails	Not Yet Open to Public
Ben Burton Park 1								●	●	●	●					
Bishop Park 2	●	●	●	●	●							●				
Dudley Park 3								●	●		●	●				
East Athens Community Center & Educational Dance Center 4	●	●	●	●	●											
Holland Youth Sports Complex 5	●		●	●												
Lay Park & Lyndon House Arts Center 6	●	●	●	●	●											
Memorial Park & Bear Hollow Zoo 7		●	●	●	●			●		●	●	●	●			
Morton Theatre 8			●													
North Oconee River Park 9								●	●		●					
North Oconee River Greenway 10								●	●	●	●	●				
Oconee Forest Park 11	●		●				●	●	●	●	●		●			
Reese and Pope Park 12		●		●												
Rocksprings Park 13	●	●	●	●	●	●										
Sandy Creek Nature Center 14		●	●							●	●					
Sandy Creek Park 15	●	●	●	●			●	●	●	●	●		●	●		
Satterfield Park 16	●		●	●												
State Botanical Gardens of Georgia 17			●							●	●	●				
Southeast Clarke Park & Tennis Center 18	●	●	●	●							●	●	●			
Trail Creek Park 19	●	●	●	●			●				●	●				
Tallassee Forest 20																●
Rock & Shoals 21																●
Beech Haven 22																●
Boulevard Woods 23												●				
Pittard Park 24	●	●	●	●								●				



Inset Map

0 0.5 1 Miles

LEGEND

- # Point of Interest

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

RECREATION ANALYSIS

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.3: Recreation Analysis

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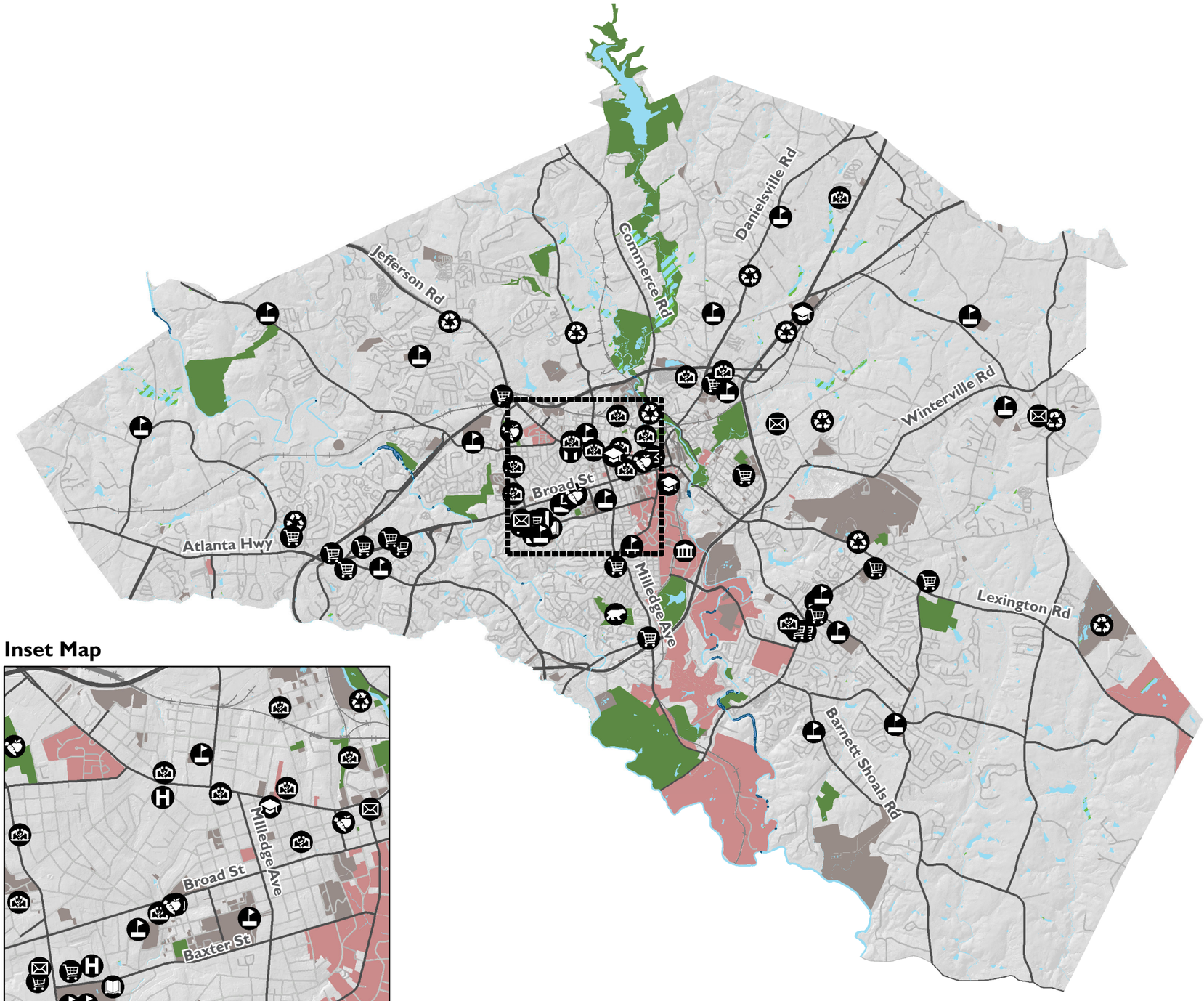

Inset Map

LEGEND

- Museum
- Post Office
- School
- University
- Zoo
- Farmers Market
- Shopping Center
- Community Garden
- Hospital
- Recycle Drop
- Library

Infrastructure

- Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

COMMUNITY FACILITIES

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.4: Community Facilities

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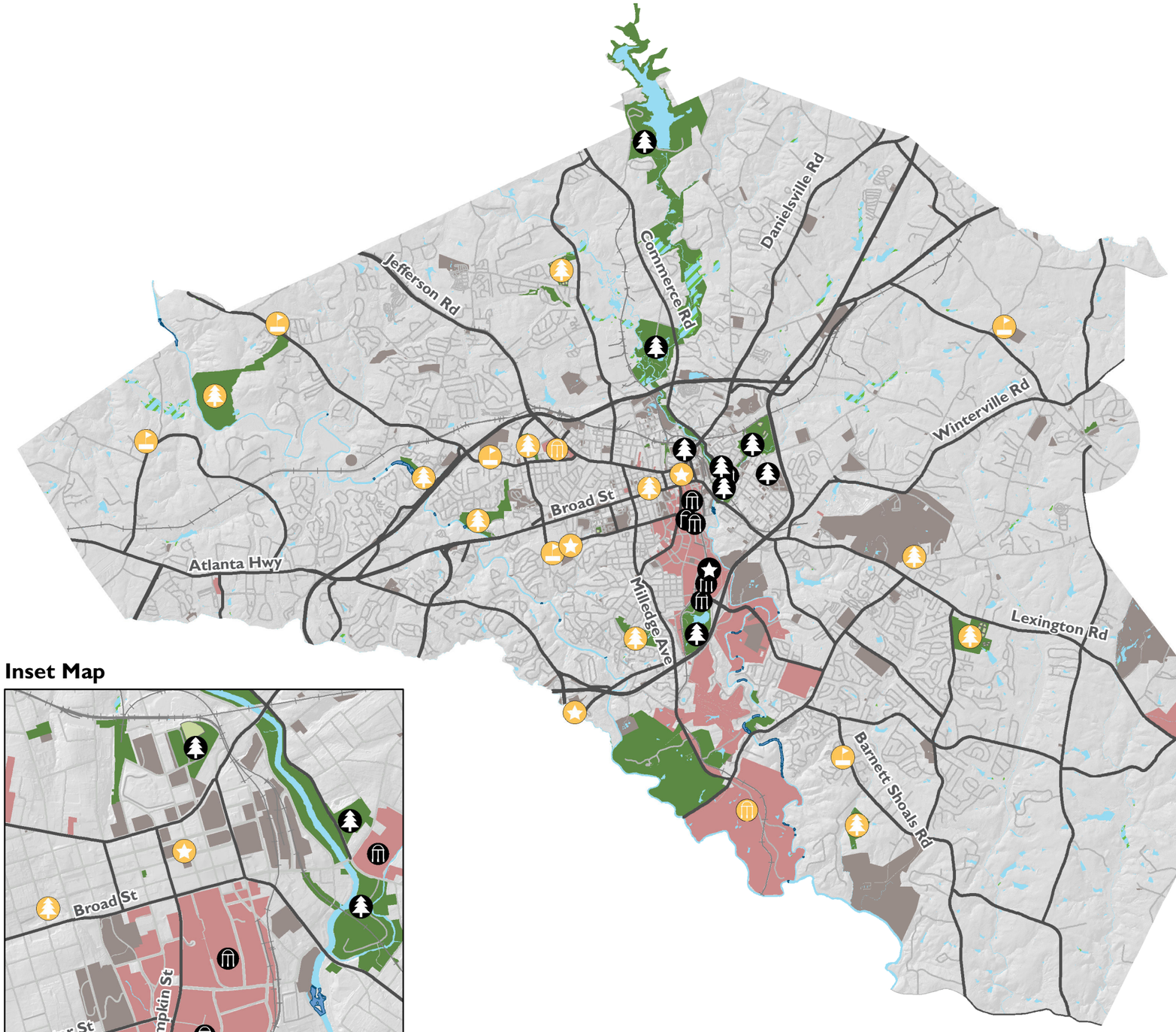
Potential Destinations

As the greenway expands, opportunities exist to connect with additional public resources critical to our community. Below are some of the destinations within Athens-Clarke County that have the potential to connect with a greenway network.

Table 5: Potential Destinations

Parks and Open Spaces	Schools	Features	UGA Facilities
Holland Youth Sports Complex	Alps Road Elementary School	State Botanical Garden of Georgia	Health Sciences Campus
Satterfield Park	Athens Montessori School	Athens City Hall	Whitehall Forest
Southeast Clarke Park	Barnett Shoals Elementary School	Athens Regional Library	–
Reese and Pope Park	Burney-Harris-Lyons Middle School	–	–
Boulevard Woods Park	Clarke Middle School	–	–
Bishop Park	Cleveland Road Elementary School	–	–
Tallassee Forest	Oglethorpe Avenue Elementary School	–	–
Beech Haven	W.R. Coile Middle School	–	–
Rock Springs	Waseca Montessori School	–	–



Inset Map

LEGEND

- Existing Park Destinations
- Potential Park Destinations
- Existing Feature Destinations
- Potential Feature Destinations
- Existing UGA Destinations
- Potential UGA Destinations
- Potential School Destinations

Infrastructure

- Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

POTENTIAL DESTINATIONS

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.5: Potential Destinations

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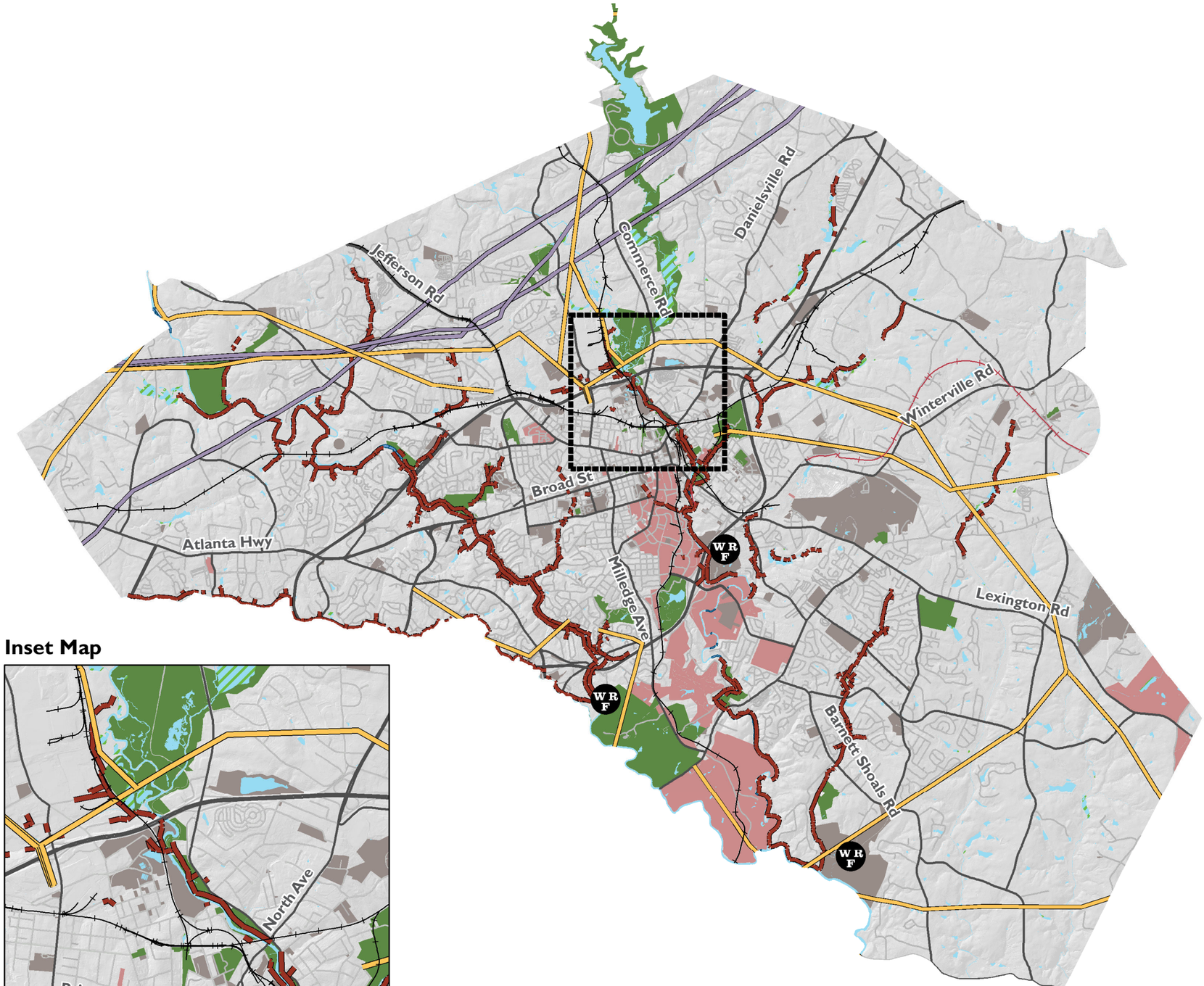
Clarke County
Leisure Services

ADDITIONAL ANALYSIS MAPS

The maps used for additional analysis and priority setting include the following:

- Utility Easements
- Bicycle Circulation
- Existing and Proposed Sidewalks
- Public Transit



Inset Map

LEGEND

- Major Power Easements
- Major Gas Easements
- Major Sewer Easements
- WRF Water Reclamation Facility

Infrastructure

- Active Railroads
- Inactive Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

UTILITY EASEMENTS

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.6: Utility Easements

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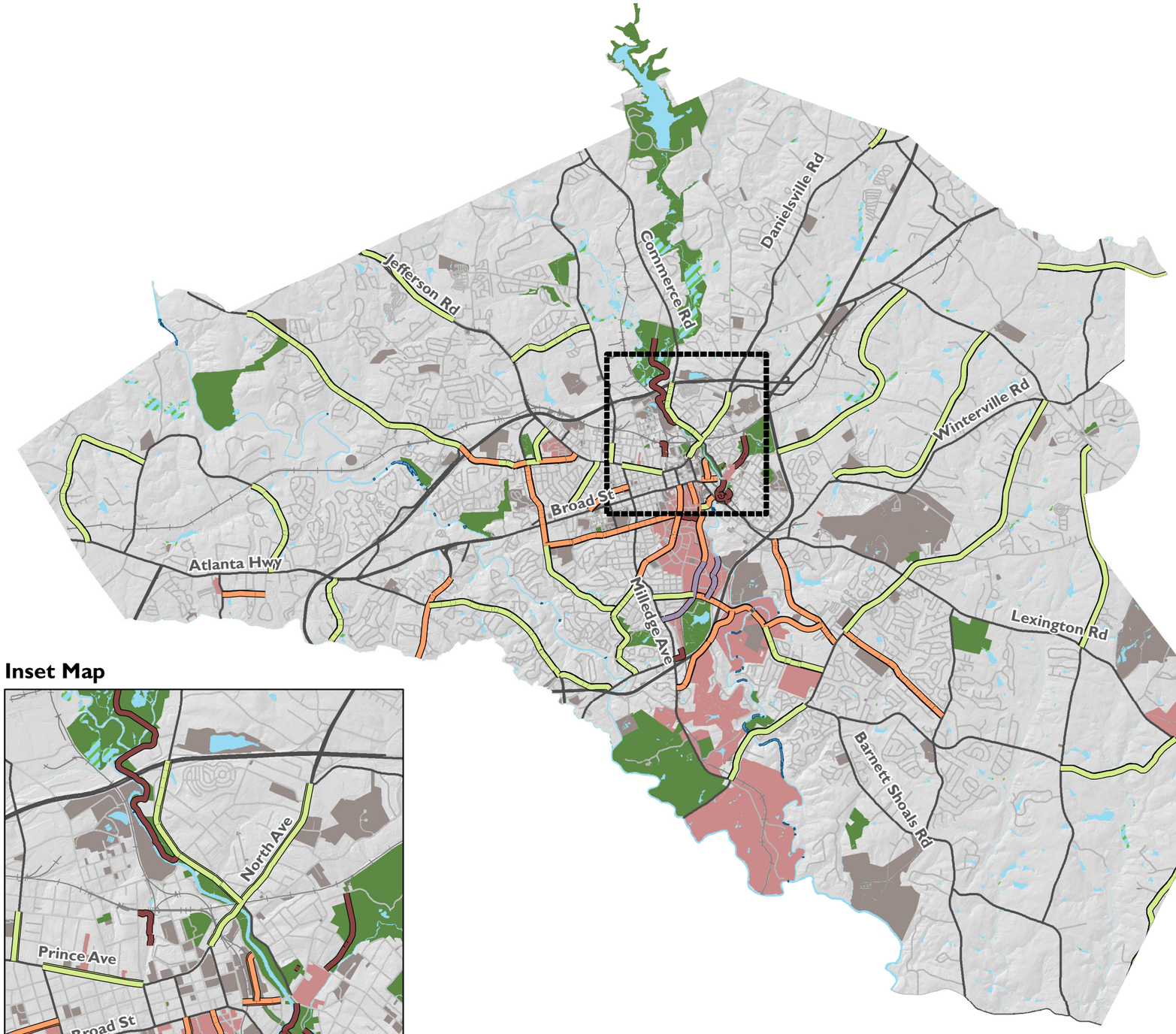

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LEGEND

- Bike Lane
- Off Road Biking Facility
- Sharrows (Share the Road)
- Multi-Use

Infrastructure

- Active Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

BICYCLE CIRCULATION

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.7: Bicycle Circulation

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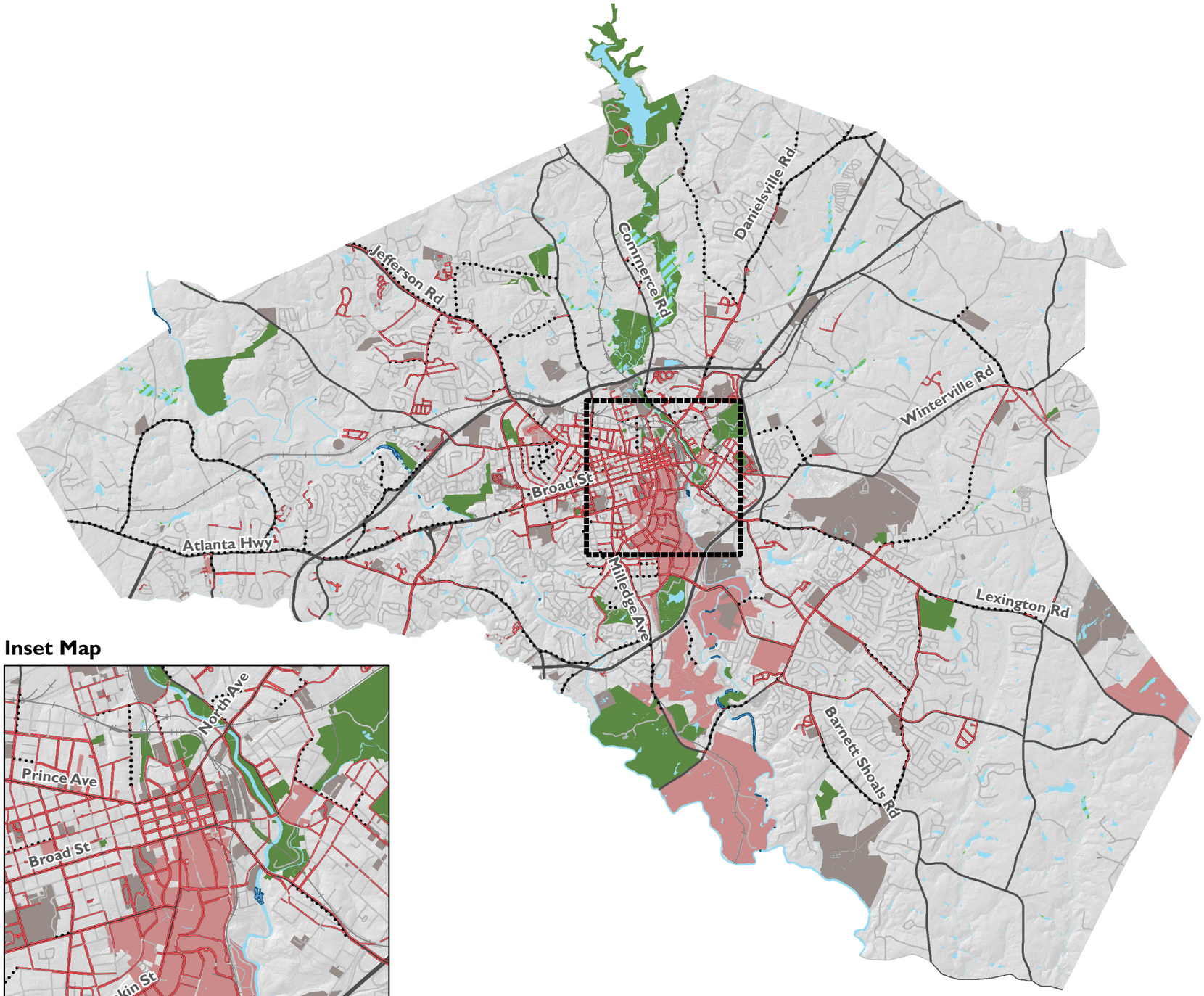

Inset Map

LEGEND

- ACC Sidewalks
- Sidewalk Requests

Infrastructure

- Active Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

EXISTING AND PROPOSED SIDEWALKS

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.8: Existing & Proposed Sidewalks

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for Athens -
Clarke County
Leisure Services

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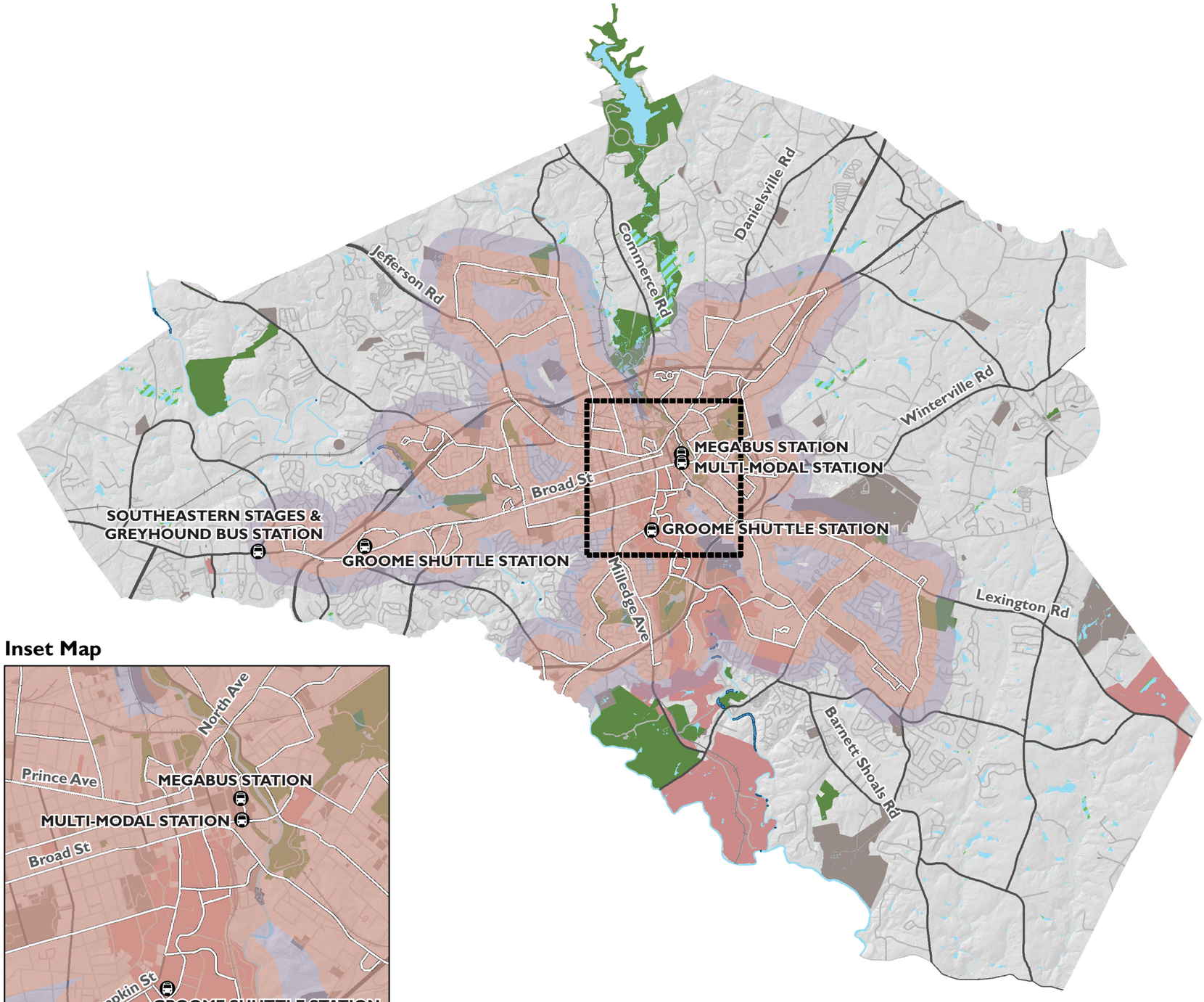

Inset Map

0 0.5 1 Miles

LEGEND

- Athens Transit Bus Routes
- 1/4 Mile Accessability to Bus Route
- 1/2 Mile Accessability to Bus Route
- Other Transit

Infrastructure

- Active Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

PUBLIC TRANSIT

Greenway Network Plan

Athens, Georgia

November 2016

Figure 2.9: Public Transit

Prepared by
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Office of Park Planning

for Athens -
Clarke County
Leisure Services

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Chapter 3: Natural and Cultural Resources: Ours to Protect and Enjoy

Free-flowing streams, lush vegetation, unique rock outcrops, and native plants line the Oconee Rivers Greenway, bringing natural features of the Piedmont into the very fabric of our county. In addition, many of our natural resources are closely intertwined with some of our community's most valuable cultural resources. Athens grew up around its rivers. Easley's Mill at the foot of Oak Street was one of the first structures in what would become the city. The University of Georgia sits on land that was chosen in part because of its many flowing springs. Conserving rivers and springs contributes to our community's character and furthers important social, ecological, aesthetic, and cultural values.

This chapter first explains the use of the terms "Conservation Area" and "Exceptional Resource Area" to designate areas of the greenway that necessitate special management considerations. It then provides an overview of the greenway's natural and cultural resources and includes descriptions of how these resources are protected through law, policy, and other criteria. After providing this overview, five Exceptional Resource Areas within the greenway are described. Knowing what we have is essential for protection and future planning. A strategy for an inventory of these resources is proposed at the end of the chapter.

Upon viewing the North Oconee River in 1773 William Bertram wrote "...we came to the banks of that beautiful river. The cane swamps, of immense extent, and the oak forests, on the level lands, are incredibly fertile ...."

GREENWAY RESOURCE MANAGEMENT UNITS: CONSERVATION AREA AND EXCEPTIONAL RESOURCE AREA

In this plan, and on the Greenway Network Map, two terms are used to describe areas relevant to the natural and cultural resources of the greenway: Conservation Area and Exceptional Resource Area.

Conservation Area

The 100-year floodplain and adjacent greenspaces and areas with cultural and natural resources are included in the Conservation Area. Properties adjacent to the greenway that are protected by conservation easements as well as those privately owned properties adjacent to the greenway that have conservation value are also included. Conservation easements provide a higher level of protection to some of these areas. The goal is to meet the obligation to protect the natural and cultural resources of the county's river and tributary floodplains, to create a higher level of awareness about these crucial elements of the greenway network, and to generate conversations about best management practices with landowners.

Conservation Areas include the 100-year floodplain of the Oconee Rivers and their major tributaries and adjacent areas of conservation value. These cultural and natural resources give our community its character. Conservation efforts focus on protection of these resources for the benefit of our citizens through planning and management of county-owned properties and encouragement of private property owners to exercise similar best management practices.

Exceptional Resource Area

This network plan includes designated areas of the greenway corridor that warrant increased management attention as Exceptional Resource Areas (ERA). An ERA is a management unit on public lands which contains outstanding, particularly sensitive, or officially protected natural or cultural resources requiring special management consideration and actions to sustain them. An ERA in the greenway corridor may be established to maintain diversity of habitat types, maintain meaningful connections between habitat areas, and/or protect a specific species or cultural feature or an assemblage of ecologically or culturally related resources. Examples include habitat for state and federally protected species, state-listed natural areas, and properties listed or eligible for listing under state or federal historic designation. An ERA may also be established for the purpose of preserving other natural or cultural features of significant scientific, educational, geologic, ecological, or scenic value. ERAs are designed to encompass focal resources and may include a buffer as deemed necessary for protection.

In ERAs, the primary management objective is to protect and sustain the target resources for future generations. This will often require active rather than passive management (e.g., removal of invasive species, prescribed fire, stabilization or restoration of historic structures). Public use will be allowed in ERAs to the extent that it is compatible with sustainable resource management. Depending on the sensitivity of the resource, human use in ERAs may range from highly restricted administrative and research activities to public access controlled by physical structures (e.g., boardwalks, designated trails) or programs limited in extent, season, and timing (e.g., guided walks, periodic closures). Preservation efforts focus on protecting natural resources and thus may require some restrictions on use. Conservation efforts also focus on the systematic protection of natural resources but allow controlled use and access.

Exceptional Resource Areas have outstanding, particularly sensitive, or officially protected natural or cultural resources. They can be areas with a diversity of habitat types, connections between habitat areas, specific species, cultural features or an assemblage of related resources that make them significant and of special value to our community. Protection may require special planning and management that includes restricted access and use.

GREENWAY NATURAL AND CULTURAL RESOURCES: OVERVIEW

Water Resources

Two rivers – the North Oconee River and the Middle Oconee River – flow through Athens-Clarke County. These rivers converge south of Athens at UGA's Whitehall Forest, combining to form the Oconee River. Wholly located in the Piedmont region of Georgia, the North Oconee River, Middle Oconee River, and Oconee River in Athens-Clarke County tend to be relatively wide, shallow, and punctuated by occasional shoals. The 100-year floodplains of the rivers and their 14 major tributaries are the core of the greenway. The tributaries are shown on the ACCUG Watersheds Map, which is provided in Appendix E.

Major tributaries of the Oconee Rivers:

Bear Creek	McNutt Creek
Big Creek	Sandy Creek
Brooklyn Creek	Shoal Creek
Carr Creek	Turkey Creek
Cedar Creek	Walton Creek
Hunnicutt Creek	Tanyard Branch
Malcolm Branch	Trail Creek

Not only do our rivers make our community more beautiful, but they also serve as important sources of drinking water. ACCUG Public Utilities Department (PUD) supplies treated drinking water for the county from the North Oconee River and the Middle Oconee River. A third source of our drinking water, Bear Creek Reservoir in Jackson County, is filled by water from the Middle Oconee River. While this drinking water meets or exceeds state and federal standards, the U.S. Environmental Protection Agency has listed the North Oconee, Middle Oconee, and some tributaries in Clarke County as "impaired waters" due to unacceptable levels of fecal coliform, as well as elevated copper and mercury pollution and low dissolved oxygen in some segments. High fecal coliform contamination may come from non-point sources such as faulty sewer lines or septic systems as well as wildlife, poultry or livestock operations. PUD is currently conducting a study to identify specific coliform sources in order to mitigate this pollution. Organizations and institutions such as the Upper Oconee Watershed Network and groups at UGA also monitor water quality in local streams.

In addition to supplying drinking water, recreation is an important function of the waterways. Fishing is permitted on the Middle Oconee, the North Oconee, and Sandy Creek (except within Sandy Creek Nature Center property). Only sport fishing (catch and release) is permitted on Lake Chapman in Sandy Creek Park. Demand is growing for recreational canoeing and kayaking on the North Oconee and Middle Oconee in the greenway corridor. In 2014, the ACCUG Mayor and Commission passed a resolution supporting the development of water trails in the county. In June 2016, the first public launch ramp suitable for kayaks and canoes as well as fishing opened in Ben Burton Park, and additional water trail facilities are proposed in this plan.

ACCUG protects these water resources and their buffers with the Environmental Areas Ordinance. The ordinance identifies and describes the types of development that may occur in floodplains. These areas are represented on the 2014 ACC Environmental Areas Map and include the following:

- The 100-year floodplain designated by the FEMA National Flood Insurance Program
- The National Wetlands Inventory and jurisdictional wetlands (NWI)
- State and county designated buffers, which include:
  - 100 feet around the Middle Oconee, the North Oconee, the Oconee River, and Sandy Creek
  - 150 feet on intermittent and perennial protected streams in industrial zones
  - 75 feet on other protected streams
  - 25 feet around other "state waters," including wetlands, creeks, ponds, lakes, springs, seeps, and wells

While all of these laws and regulations are important to the greenway, the 100-year floodplain is especially pertinent, as the 1992 ACCUG ordinance establishing the Oconee Rivers Greenway Commission identifies the 100-year floodplains of the rivers and major tributaries as the basis of the greenway network.[1] As noted earlier in this chapter, areas found within the 100-year floodplain as well as contiguous areas with significant natural and cultural resources are designated in this plan as the "Conservation Area."

Ecological Resources

Areas within the Oconee Rivers Greenway support a thriving and diverse set of species and natural communities. The floodplains of the rivers and tributaries, and adjacent natural areas, are the largest contiguous habitats in the county. The size and connectivity of these habitats is essential to conserve wildlife and plants that require large areas of habitat to survive. They constitute a "river corridor" essential for migrating birds, movement of seeds and pollinators, fish migration, and species with life-cycles that require both riverine and upland habitat. The greenway protects habitats that are experiencing rapid loss and fragmentation due to development in the county and in the region. Tallassee Forest, for example, has the largest areas of old-growth forest, canebrakes, and intact river levees on county-owned land. ACCUG recognizes the conservation value of these resources and manages them as county-owned properties so they will be protected for future generations. Greenway resources to be conserved and protected are determined based on a variety of factors, including their location within the 100-year floodplain and in adjacent natural areas, green spaces, slopes and uplands. Other criteria for protection include the presence of species and habitats that are rare, threatened or in decline; areas that perform ecosystem services such as flood control and water filtration; and large, unfragmented habitats that can support resilient plant and animal populations. In this section, we describe the importance of considering these criteria.

Undeveloped floodplains provide a variety of benefits for property owners and the public at large. When rivers rise, protected floodplains give the river "space" to expand, without threatening homes and reducing pressure on floodplain protection structures. Vegetated floodplains reduce shoreline erosion and slow rising waters when flooding occurs. Often containing wetlands and fertile soils, floodplains also act as natural filters and thus help maintain higher water quality. Large and diverse populations of plants and animals live in floodplains. Birds, in particular, rely heavily on habitats located within floodplains for nesting and feeding. Wetlands in floodplains provide many of the nutrients for nearby aquatic environment, and some species spend their entire life cycles in these very distinct areas where the water meets the land. By designating the river corridors and adjacent areas as Conservation Areas and identifying Exceptional Resource Areas, the county recognizes their conservation value and manages county-owned properties in a way that protects their resource value while making them available to the public.

Many of Georgia's "High Priority Habitats" are located in floodplains and wetlands. The Georgia Department of Natural Resources identifies High Priority Habitats in the State Wildlife Action Plan (SWAP). These habitats are threatened and rapidly disappearing from the state due to habitat destruction and fragmentation by development, invasive species, and climate change. The Georgia DNR relies on a technical team of experts to analyze statewide assessments and surveys. These criteria can be applied to Athens-Clarke County as part of a natural resources inventory and mapping, described later in the chapter. SWAP also includes plans for management. ACCUG shares Georgia DNR's goals of protecting, restoring, and maintaining these high priority habitats.

Of the sixteen High Priority Habitat types in the Piedmont region, the following 12 occur in the greenway Conservation Area:

- Beaver Ponds; Freshwater Marshes

1 FEMA's National Flood Insurance Program identifies flood hazard areas on flood insurance rate maps as "Special Flood Hazard Areas," which are defined "as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year." The Special Flood Hazard Area is often referred to as the "100-year floodplain."

- Bottomland Hardwood Forests
- Canebrakes
- Granite Outcrops
- Medium to Large Rivers
- Mesic Hardwood Forests
- Oak-Hickory-Pine Forest
- Rocky or Cobbly River Shoals
- Rock/Sandy River Bluffs
- Springs and Spring Runs
- Streams
- Xeric Pine Woodlands

These are described in Appendix E.

Additional unusual landscape features within the greenway Conservation Area include rare American holly forests, intact natural riverine levees, legacy forests (i.e., forest stands over 80 years old), north-facing slopes that abound in wildflowers, banks of mountain laurel, and piedmont prairies. These are special resources for Clarke County and are worthy of protection.

Many species found within the greenway are identified in the 2015 State Wildlife Action Plan as High Priority Species. These are listed in the Georgia Rare Elements Database, which is maintained by the Georgia DNR.[2] As of August 2016, 7 rare animal species and 11 rare plant species can be found within the greenway Conservation Area. The 3 granite outcrop communities at Rock and Shoal Outcrop Natural Area (RSONA), an Exceptional Resource Area described below, are also listed as threatened communities.

2 This database is a GIS inventory of rare species that are protected at the state and federal level. It also includes threatened communities and habitats that are not currently legally protected. The species list is continually updated.

Athens-Clarke County has an exceptional concentration of institutions such as the Georgia Museum of Natural History, State Botanical Garden of Georgia, UGA, and individual experts and organizations that study the environment. Because of this, we are rich in natural history information. However, there is no comprehensive inventory or map of natural resources for the Conservation Area. Inventories of select species have been made at some locations. Of the county-owned properties in the greenway, Rock and Shoals Outcrop Natural Area and Tallassee Forest are the only ones that have extensive species lists and habitat maps. In addition, inventories are included as baseline data in conservation easements, which have been an important tool in ensuring the long-term protection of land included within the Oconee Rivers Greenway. ACCUG is collaborating with UGA to locate locally important resources such as heritage trees and legacy forests. However, only a few habitats have been mapped to date, and this plan proposes additional inventory compilation and GIS work as detailed in the Natural and Cultural Resources Inventory section below.

Cultural Resources

The greenway not only helps our community protect our environmental resources, but it also can promote the preservation of cultural resources that contribute to local pride and give our community a stronger sense of shared identity. Cultural resources such as archeological and historic sites help our citizens interpret and value Georgia's heritage. They also foster academic study and tourism, creating destinations for both residents and visitors alike.

This section addresses three components of cultural resources within the greenway network:

- Archeological resources – both prehistoric and historic
- Historic properties – structures and landscapes listed or eligible for listing on the National Register of Historic Places
- Public Art – contemporary artistic expressions on the greenway

Archeological resources and historic properties on public lands are subject to protective federal and state laws and regulations. ACCUG ordinances also recognize these resources as valuable community assets. The ACC Historic Preservation Commission, a citizen advisory board, is charged with promoting public understanding of archeological and historic resources and advising the mayor and ACC commission regarding preservation and management of such resources.

Similarly, the ACCUG Cultural Affairs Commission (CAC) advocates for public art and advises the mayor and commission on art in public spaces. ACC ordinances include a "1% for art" provision for major public construction projects in the county, including expansion of greenway trails.

Archeological Resources

Lands within the greenway corridors are largely private property and have not been systematically surveyed for prehistoric or historic archeological resources. The ACCUG Comprehensive Plan Community Assessment cites a 1991 county-wide archeological resource survey that totaled 101 sites and related that many sites were located close to waterways and ridge lines. Stone and ceramic prehistoric artifacts are commonly found in the region, and at least one projectile point collected within the greenway network appears to date from the Paleo-Indian cultural period, 10,000 to 8,000 years ago. Artifacts from subsequent prehistoric cultures have been collected in the county, but there have been few professionally conducted surveys to give a more holistic picture of prehistoric occupation in the river corridors and adjacent lands.

Historic archeological resources related to agricultural and industrial development are common and often visible along the greenway. These include remnants of field terraces, bridges, dams, raceways, mills, and utility structures. Water power was an essential resource in the history of the county, and, by the turn of the 20th century, there were about 40 water-powered mills and factories on the rivers and tributaries in Clarke County. These ranged from rural grist and saw mills to major industrial plants that produced textiles and other products for regional and national markets. By the end of the 20th century, every mill in the county had closed due to economic shifts in manufacturing and technical advances that reduced dependency on water power. In most cases, mill sites were abandoned and are being reclaimed by nature. The Heritage Trail section of the North Oconee River Greenway at Dudley Park focuses on telling this story.

The greenway corridor also includes Civil War archeological sites. Two on public land are highlighted in this plan as "Exceptional Resources Areas" – the Cook and Brother Battery on East Broad Street at Trail Creek, and the Battle of Barber Creek site near Macon Highway in the southern part of Clarke County.

Historic Properties

Athens Clarke County includes 58 properties listed on the National Register of Historic Places. Of these, three are within the greenway corridor:

Table 6: Historic Resources within the Greenway Corridor

Listed Property	Address	Owner	Acres	Notes
Oconee Hill Cemetery	297 Cemetery St.	OHC Board of Trustees	82	The North Oconee River Greenway Trail will traverse the cemetery within the 100-year river floodplain.
Athens Factory	279 Williams St.	UGA Board of Regents	2.3	The site includes the historic mill building now housing the UGA School of Social Work (formerly O'Malley's Tavern).
Athens Manufacturing Company	585 White Circle	Private individuals	9.4	The historic structures have been incorporated into the Whitehall Mill Lofts.

In addition, Dr. Carey Goetcheous, professor of Landscape Architecture at the University of Georgia, is currently preparing a national register nomination form for the Beech Haven property along the Middle Oconee River.

Public Art

A metal sculpture by local Athens artist Herold Rittenberry along the Heritage Trail in Dudley Park is the only existing public art piece on the greenway. The ACCUG Cultural Affairs Commission is currently seeking artists' proposals for a future installation in Dudley Park in connection to the Firefly Rails/Trails project. The Cultural Affairs Commission will also be developing a proposal for a new art piece as part of the upcoming construction of the North Oconee River Greenway trail segment from Oconee Street to College Station Road.

With the 1% requirement, SPLOST and other funding for construction of future trail segments will include support of additional artwork.[3]

3 SPLOST is an optional one percent county sales tax used to fund capital outlay projects proposed by the county government and participating qualified municipal governments. It is described in more detail in Chapter 5.

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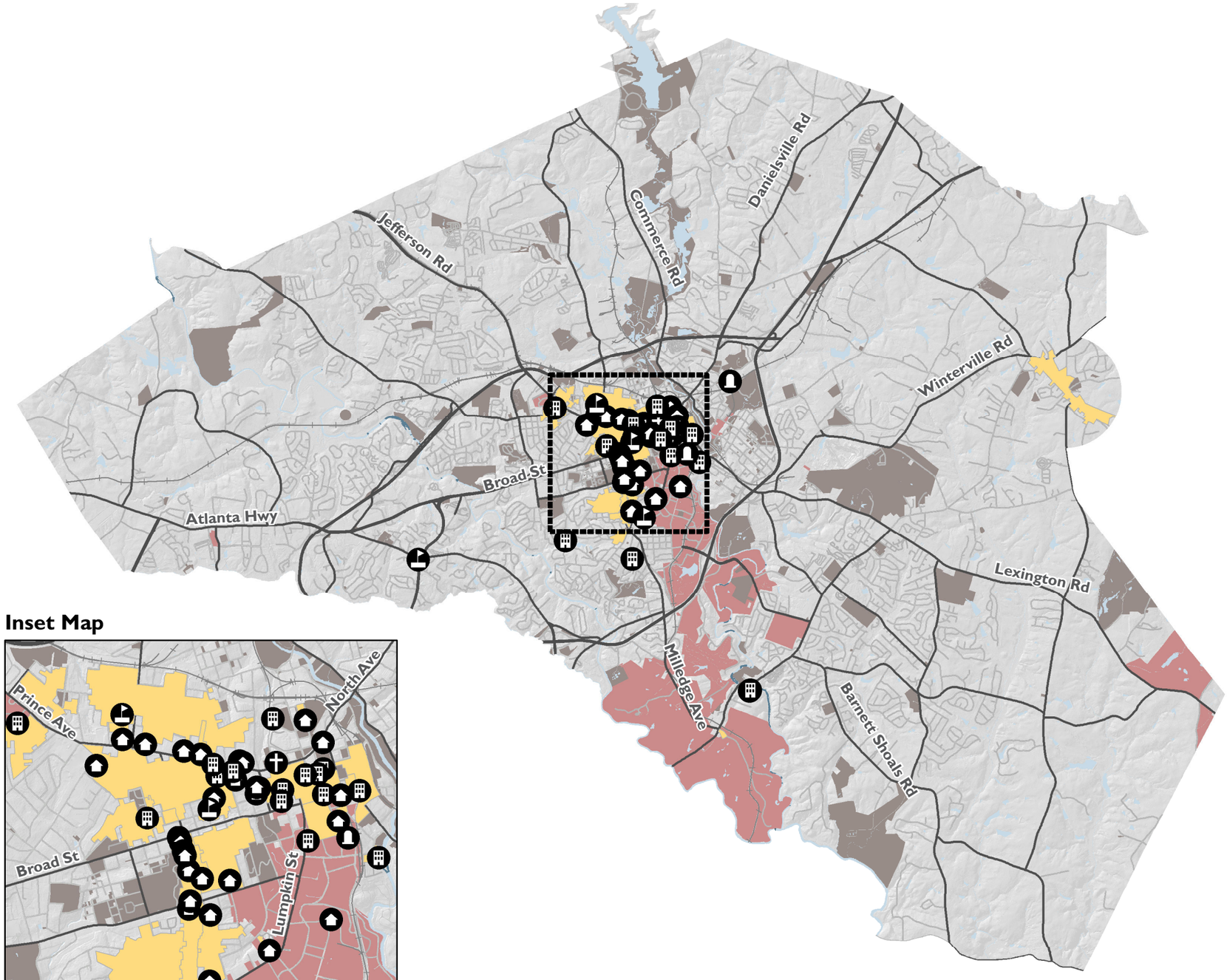

Inset Map

LEGEND

- Historic Structure
- Historic Church
- Historic House
- Historic Cemetery
- Historic School
- NRHP Historic Districts

Infrastructure

- Active Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

NATIONAL REGISTER OF HISTORIC PLACES

Greenway Network Plan

Athens, Georgia

November 2016

Figure 3.1: Historic Places

Prepared by
ACC Leisure Services
Office of Park Planning

for Athens -
Clarke County
Leisure Services

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EXCEPTIONAL RESOURCE AREAS: NATURAL AND CULTURAL

Exceptional Resource Areas have outstanding, particularly sensitive, or officially protected natural or cultural resources. The following Exceptional Resource Areas have been identified in the greenway corridors: Beech Haven, Cook and Brother Battery, Barber Creek Battle Site, Tallassee Forest, and Rock and Shoals Outcrop Natural Area. These sites are described more fully below.

Beech Haven

An extraordinary example of Arts and Crafts style of both buildings and grounds, Beech Haven was the Rowland family's bucolic retreat along the Middle Oconee River. Purchased by the family in 1910, Beech Haven is now surrounded by suburban and commercial development, but remains a secluded forested sanctuary, essentially unchanged since the 1930s. To date, ACCUG has acquired approximately 100 acres along Boulder Creek and the Middle Oconee. The acreage includes a half-mile gravel driveway with a stone vehicle bridge; beds of three landscaped ponds; artisan-made stone pagoda lanterns, benches, tables, barbecue pits, and a spring; the two story, three-bedroom Summer House; and the elaborate "Camelback Bridge," a stone footbridge modeled on Asian moon bridges. The Summer House and Camelback Bridge have recently been stabilized, through a collaborative effort with the Athens-Clarke Heritage Foundation, and most of the decorative stone features are in good condition. Segments of walking and horse trails are still evident in the forested uplands and along the creeks, and some may be redeveloped. The Oconee River Land Trust acquired an additional 14 acres of forest land that will be donated to the county. Six High Priority Habitats, as designated by the Georgia Department of Natural Resources, are present on the property. Beech Haven is not currently open to the public because land acquisition is underway and management capacity is limited.

Cook and Brother Battery

This circular earthen fortification was constructed during the Civil War on high ground above the Cook and Brother Armory (now the University of Georgia Chicopee Complex on East Broad Street). Sitting just off of First Street at Vine, the battery was designed to support field guns to protect the armory and the northern approach to the city. The battery never saw action during the war, but was part of a system of earthworks thrown up around the county by volunteer home-guard units. Although over-grown, the earthwork is largely intact, and the county has long-standing plans to manage the site for interpretation and education.

Barber Creek Battle Site

"The Battle of Barber Creek" was a skirmish that occurred on August 2, 1864, when Union Army cavalrymen approached Athens from Watkinsville. The soldiers were part of the scattered remnants of General Stoneman's unsuccessful raid east of Atlanta. Athens' Confederate home-guard volunteers had dug in on the high ground above the bridge over McNutt Creek just downstream of the confluence with Barber Creek, and they had removed the bridge's planking to hamper any attempt to cross. As the Union troops paused to assess the situation, the Confederates opened fire with two field howitzers mounted in an earthen fortification at the top of the high ground. In short order, the Union troops were dissuaded from attacking Athens and retreated toward Atlanta. Today, ACCUG owns 11.4 acres encompassing the Confederate trenches and the fortification. The stone abutments for the former McNutt Creek Bridge are still in place on adjacent private property. The battle site is not currently open to the public.

Tallassee Forest

Tallassee Forest was acquired by ACCUG with public funds and a grant from the Riverview Foundation. Oconee River Land Trust holds the conservation easement to Tallassee Forest that restricts use to low-impact, nature-based recreation and education. Remarkable for its biological diversity, Tallassee Forest's 310 acres are relatively undisturbed compared with the rest of the county. Indeed, legacy forest over 80 years

old are found throughout the property. Tallassee Forest holds nine high priority habitats, as designated by the Georgia Department of Natural Resources. 65% of the forest consists of these high-priority habitats. At least 65 bird species and 58 butterflies and skippers (including three rare and three that are entirely dependent on native river cane) make their home in Tallassee Forest. In addition, 137 spring wildflowers and herbaceous plant species have been found, including 11 wetland plant species and 43 trees, vines, and shrubs. Additionally, 22 species of reptiles and amphibians and 13 families of aquatic invertebrates are also in this area. Other significant natural areas make up Tallassee Forest, including a rare American holly forest, extensive canebrakes, open bottomland forest that has not been overgrown by privet, and an intact levee. ACCUG is currently developing a management plan for Tallassee Forest. The property is not yet open to the public.

Rock and Shoals Outcrop Natural Area

Rock outcrops, such as those occurring at Rock and Shoals Outcrop Natural Area, are among the few habitats that have remained unchanged for two millennia. ACCUG and the Georgia DNR each own one of the two parcels comprising the 60-acre area. Rock and Shoals Outcrop Natural Area is home to four rare plant species. Three of these rare species are found in the ecotone, the transition area between two biomes and, in this case, between rock surface communities and the surrounding forest. The outcrop communities at the Rock and Shoals Outcrop Natural Area include rock surface/lichen, moss, herbs and temporary seeps. These transition into herbaceous plants, shrub/scrub vegetation and marginal outcrop forest. The surrounding oak-pine-hickory forest serves as a buffer. Rock outcrop communities are immediately threatened by Chinese Privet. The property is not yet open to the public.

NATURAL AND CULTURAL RESOURCES INVENTORY AND GREENWAY MAP OVERLAY

In order to ensure that the greenway provides a natural environment that enhances quality of life through the conservation and preservation of natural resources, periodically assessing the status, condition, and trends is necessary. As the National Park Service explains, natural resource inventories are “extensive, point-in-time efforts to determine the location or condition of resources.” Developing such inventories allows for assessment, documentation, and mapping of a resource’s current condition and location, “providing a solid baseline for long-term monitoring and management.” They can also inform proposed projects and planning, design, and management decisions.

A Natural Resources Inventory and Natural Resources Overlay Map for the river corridor and its adjacent areas are projects proposed for the five-year Greenway Network Plan cycle. Experts at the State Botanical Garden of Georgia, the Georgia Museum of Natural History, the University of Georgia and the Georgia DNR and individual experts and organizations can be engaged in support of ACCUG staff in developing a natural resources inventory and a natural resources overlay map for the greenway.

A Cultural Resources Inventory and map is also proposed for the five-year Greenway Network Plan cycle. It will be made in collaboration with UGA, local historical preservation and research groups, statewide surveys and the State Archeological Survey.

A strategy for completing the inventories and overlay maps is outlined in Table 7. Table 8 lists resources for the data necessary to conduct the inventory.

Table 7: Natural Resource Inventory

TYPE OF INFORMATION	SOURCES	FORMAT
GEOGRAPHICAL/ PHYSICAL		
Topography/Lidar/Satellite	ACCUG databases, Google Earth, U.S. Geological Survey (USGS)	GNP basemap
100-year floodplain and major tributaries	Federal Emergency Management Agency (FEMA) Special Flood Hazard Areas, ACCUG 2014 Environmental Areas Map	GNP basemap
Wetlands, lakes, ponds, streams	ACCUG 2014 Environmental Areas Map, National Wetlands Inventory (NWI), U.S. Fish & Wildlife Service (USFWS), FEMA	GNP basemap
Other hydrologic resources (watersheds, recharge areas, springs)	ACCUG 2014 Environmental Areas Map, ACCUG Watersheds Map, USGS Hydrologic Cataloging Unit (HUC)	GNP basemap
Geology	USGS, ACCUG, UGA, expert individuals and organizations	Needed
Soils	ACCUG, U.S. Natural Resources Conservation Service (USNRCS), UGA, expert individuals and organizations	Obtained
NATURAL HISTORY		
Exceptional Resource Areas/ Natural	GA DNR, The State Botanical Garden of Georgia (SBG), Georgia Museum of Natural History (GMNH), ACCUG, ORGC, expert individuals and organizations	GNP basemap, Future sites
Legacy Forest	ACCUG Environmental Coordinator	GIS ongoing
High Priority Habitats	GA DNR State Wildlife Action Plan 2015 (SWAP)	GIS needed
GA DNR High Priority Species (Fed/State Protected, Species of Concern, GA DNR Watch list)	GA DNR SWAP2015, GA DNR Wildlife Research Division Rare Species and Natural Community Data, expert individuals and organizations	Identifications/ GIS needed
Other Species Threatened/In Decline/Locally Rare	GA DNR, Oconee Rivers Audubon Society (ORAS), SBG, National Biological Survey (NBS), GMNH, GA Botanical Society, UGA, expert individuals and organizations	Identifications/ GIS needed
Communities/Habitats	GA DNR, UGA, SBG, GMNH, NBS, GA Botanical Society, ORAS, ACCUG, expert individuals and organizations	Identifications/ GIS needed
ACC Land Cover Classifications	ACCUG Wharton draft	Draft
Important Bird Areas IBAs	National Audubon Society	GIS available
Significant Natural Areas/Areas of Interest/Communities of Concern	GA DNR, ACCUG, expert individuals and organizations	Identifications/ GIS needed
Plant/Animal Species Inventories	GA DNR, Oconee Rivers Audubon Society, State Botanical Garden, National Biological Survey, Georgia Museum of Natural History, GA Botanical Society, UGA, ACCUG, expert individuals and organizations	Identifications needed

Table 8: Cultural Resource Inventory

Administrative and Cultural Resources Inventory		
Administrative		
Parcels, River/Stream/Lake Buffers, Impaired Waterways, Utilities Corridors	ACC, Planning Department	GNP basemap
Conservation Easements (CE), Conservation Use Valuation Assessments (CUVA)	Tax Assessor's Office, ORLT, ALT	CEs needed
Other Conservation Designations	GNARGIS, Carl Vinson Institute of Government, GA DNR, UGA Natural Resources Spatial Analysis Lab, ACCUG	Identifications/ GIS needed
Cultural		
Exceptional Resource Areas/ Cultural: Historic, Archeological, Architectural	Athens Clarke Heritage Foundation, ACC Historic Preservation Commission, Planning Department, LS Greenway Analysis Maps, National Register for Historic Places, UGA, Georgia Department of Natural Resources (includes cultural resource programs)	Locations/ definitions needed

NATURAL AND CULTURAL RESOURCE GOALS AND ACTIONS

Setting goals and proposing actions that will protect and improve the natural and cultural resources of the greenway is an essential part of short and long-term planning. Listed below are the goals and actions designed to ensure that the greenway provides a natural environment that enhances quality of life through the conservation and preservation of natural resources.

Goal: Improve water quality and restore natural hydrological processes in the North Oconee River, Middle Oconee River, and Oconee River and their tributaries

Actions

1. Improve monitoring and enforcement of water quality standards; work with state and federal agencies to address EPA's "impaired waters" in the basin
2. Continue efforts to improve the ACCUG sewerage system to avoid accidental discharges and leakage; Explore alternatives to gravity flow sewer lines in Sandy Creek and Shoal Creek watersheds and when repairing and improving all systems
3. Improve control of stormwater runoff from developed areas to reduce erosion and pollution and to increase ground water recharge
4. To the extent practical, remove man-made obstacles to flows on the greenway rivers and tributaries; Collaborate with dam operators and other water managers to create more ecologically sustainable flows in the basin
5. Improve monitoring and enforcement of the ACCUG Environmental Areas Ordinance; work with landowners to meet stream and river buffer requirements and restore eroded or damaged sites within the greenway corridor
6. Promote public awareness of water resource issues and programs and encourage volunteer efforts to protect and improve water ways; partner with non-government organizations in these efforts
7. Promote low-impact and safe river-based recreation; provide public launch sites and fishing and observation points along the rivers
8. Support and advocate for implementation of the ACCUG Sustainability Plan that is currently under development that relates to water quality

Goal: Conserve native species, habitats, and ecological processes on public land and encourage private land owners to conserve resources

Actions

1. Facilitate natural resource inventory and monitoring efforts in the greenway by working with the GDNR and academic and non-profit organizations; collaborate to inventory and map:

Georgia DNR High Priority Habitats	Unique species and communities
Georgia DNR High Priority Species	Other habitats and communities
Significant Natural Areas	ACCUG Legacy Forests

Table continues on next page...

2. Establish greenway "Exceptional Resource Areas" where appropriate

3. Apply lessons learned from the Sandy Creek Nature Center Managed Forest Project to other sites on the greenway

4. Improve and maintain natural corridor connections among high quality habitats within the greenway network

5. Prevent wildfires and, where appropriate, conduct prescribed burning to restore more natural fire regimes for native vegetation

6. Support programs and volunteer efforts to remove and control invasive plant and animal species within the greenway; promote public awareness of invasive issues

7. Control types and levels of recreation on public lands in the corridor to avoid unacceptable impacts to resources and to provide quality experiences for greenway users

8. Determine if additional properties or easements within the greenway are appropriate for acquisition through the ACCUG Land Conservation Program

9. Develop master plans and ecological stewardship plans for Tallassee Forest and Beech Haven. Partner with Georgia DNR to develop such plans for Rock and Shoals Outcrop Natural Area

Goal: Conserve cultural resources

Actions

1. Conduct reconnaissance archeological surveys prior to construction of trails and other greenway amenities to avoid or mitigate adverse impacts on cultural resources

2. Survey other greenway public lands for archeological and historic resources to establish a cultural resources data inventory, as funding is available

3. Review archeological resources and historic structures on greenway public lands to determine if additional sites are eligible for nomination to the National Register of Historic Places

4. Collaborate with Georgia DNR, UGA, and non-profit organizations in managing cultural resources in the greenway network

5. Collaborate with ACCUG Cultural Affairs Commission in identifying appropriate locations for public art works along the greenway network

6. Compile and archive written, visual, and oral histories of the greenway

Chapter 4: Existing & Proposed Greenway Trail Network

The Oconee Rivers Greenway – a network of trails, water trails, and green space – has many different components. Maps are a valuable way to illustrate these many elements as well provide a framework for current and future planning. The maps included in this chapter illustrate the Greenway Network Plan for Athens-Clarke County – they include both existing and planned trails, conservation areas, exceptional resource areas, and greenspace. These maps update previously approved 2009 and 2011 Greenway Network Plan maps as well as include additional information that is more current and accurate.

The network of trails proposed is a vision that is long-term in nature. Buildout will take place over decades. This chapter outlines the network concept and identifies the highest priorities to be considered for the current planning cycle. The alignment of these trails were determined with the use of the following maps and data sources which appear throughout the document

- Cultural and historic resources
- Neighborhoods
- Commercial nodes
- Community resources
- Transportation infrastructure including bike lanes, sidewalks, bus stops, and roads
- ACCUG Environmental Areas 2014 Map
- ACCUG Environmental Areas Ordinance
- Federal and state environmental designations
- Previously approved greenway network data

The chapter then provides an overview of the types of trails that make up the greenway trail network – greenway trails, water trails, and rails/trails. It then explains how the trail map classifies the trails identified. It concludes by identifying high priority project areas for trail development, ranking each of the trails, connections, and improvements listed.

THE GREENWAY TRAIL NETWORK: ITS TRAILS AND CONTEXT

While many in the community understand the greenway as a network of trails, these trails reside within the overall greenway boundary that includes the 100-year floodplain and other protected areas such as jurisdictional wetlands, riparian buffer areas, significant groundwater recharge areas, water supply watersheds, and water supply intake areas. Conservation Areas and Exceptional Resource Areas adjacent to the greenway are also critical components of the greenway. This section focuses on the types of trails that make up the greenway trail network. The proposed trails take into consideration the fundamental conservation and preservation concepts that drove the establishment of the greenway.

TRAIL CATEGORIES: GREENWAY TRAILS, WATER TRAILS, AND RAILS/TRAILS

Three types of trails weave their way through Athens-Clarke County:

Greenway Trails

These primary greenway trails and connecting trail networks within Athens-Clarke County are not currently connected, but a goal of this plan is that they will be as contiguous as possible, focusing on creating multi-use trails with limited street-based connections. In addition to these primary multi-use trails, neighborhood connections are crucial for encouraging connectivity and providing opportunities for non-motorized transportation choices. Connectivity is a key factor in a successful well-used greenway trail system. Some sensitive areas may require foot trails rather than multiuse trails. This will be decided on a project by project basis.

Water Trails

Water trails on rivers and lakes provide recreational opportunities for the public to explore, enjoy, and protect their local rivers. The Middle Oconee, North Oconee and Oconee River provide opportunities for the creation of a water trail system that folds into the larger Upper Oconee Water Trail (UOWT). This water trail will include 98 river miles on the North Oconee and Middle Oconee rivers which converge to create the Oconee river, and then continue into Lake Oconee, formed by Wallace Dam. There are currently six existing public access points on the UOWT and a portion of the trail flows alongside the Oconee River Greenway and the Oconee National Forest. The scenic UOWT passes along beginner Class I and II shoals, beautiful rocky bluffs, historic textile mill ruins, wide sandbars perfect for a picnic, and miles of secluded forest. A plethora of wildlife reside here, such as kingfisher, river otter, osprey, blue heron, bald eagle, and soft shell turtle. The UOWT is in the development phase spearheaded by the Georgia River Network, Upper Oconee Watershed Network, UGA Office of Sustainability, and other community partners.

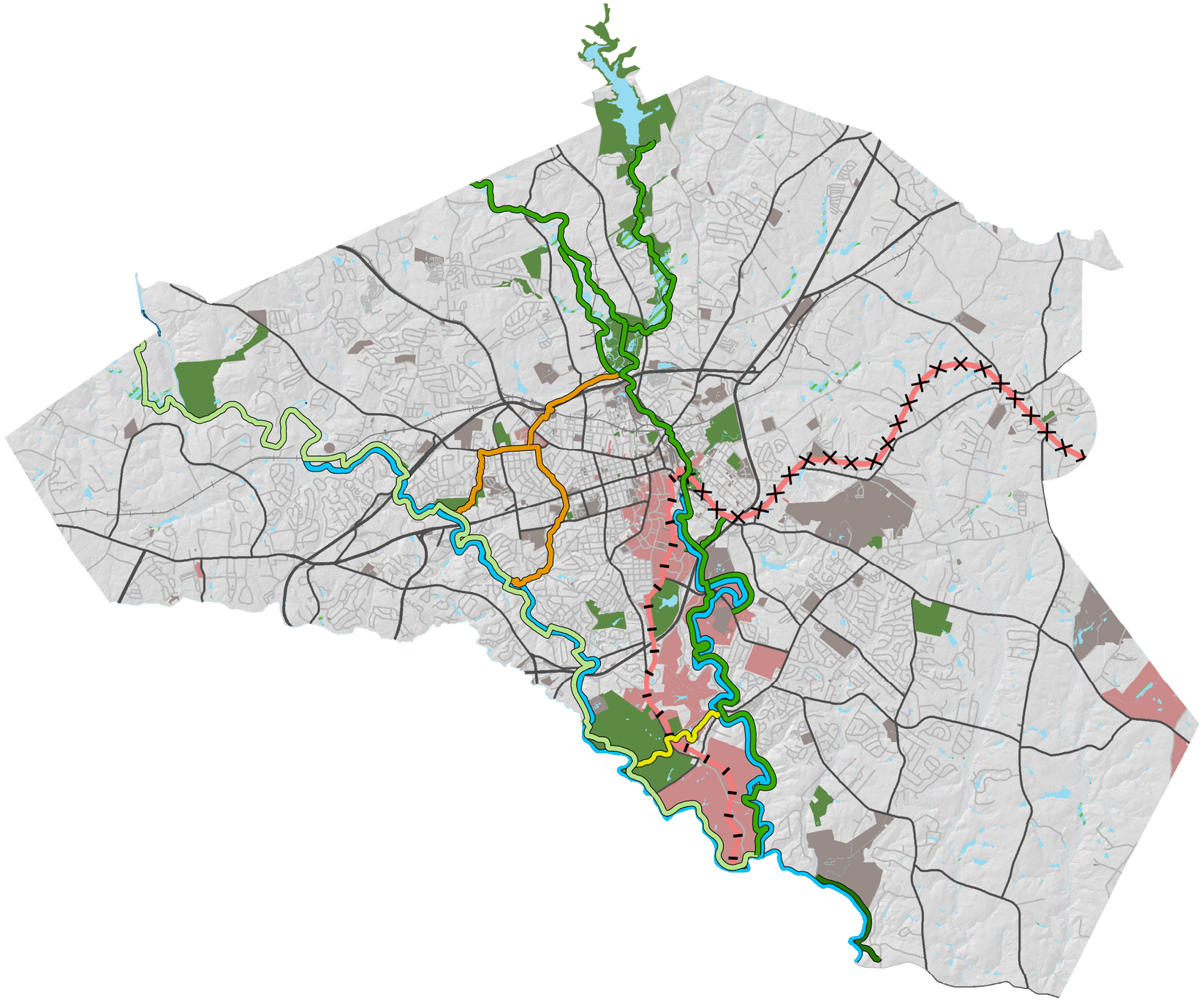
A river access point constructed in Ben Burton Park serves as the initial launch point for the Middle Oconee portion of the Upper Oconee Water Trail. The Greenway Network Plan identifies additional river access points that will allow for the eventual completion of a user-friendly water trail system in Athens-Clarke County and other counties within the watershed.

Rails/Trails

Rails/trails is a nationwide effort to transform unused rail corridors into trails. Rails/trails similarly accommodate trails, though within and adjacent to the right-of-way of active rail corridors. Two railway corridors within Athens-Clarke County – the Firefly Trail and the Athens Line – are projects that provide the opportunity for viable multi-use trail connections with the greenway trail network. The Firefly Trail is a 39-mile rails/trails project that will connect Athens with Union Point via the old Georgia Railroad Corridor. Along with federal grants, SPLOST 2005 and 2011 dollars have been dedicated to the construction of the portion of the Firefly Trail located in Athens-Clarke county. It will provide a vital east-west, multi-use trail connection between downtown Athens and the city of Winterville, creating increased connectivity in the eastern portion of the county. The Athens Line is a 38-mile railroad - potential rails/trails corridor - that runs from Athens to Madison, part of a longer route between Macon and Lula owned by Norfolk & Southern and leased to short-line operator Great Walton Railroad. As regular rail use along this segment ceased in 2015 with the decommissioning of the UGA coal plant, the corridor has the potential to provide a minimally sloped north-south linkage from Downtown Athens to the Georgia State Botanical Garden and beyond.

The Network Connectivity Map

This map shows the basic circulation and connectivity of the greenway trails,water trails, and rails/trails that are part of the greenway system as well as connecting multi-use trail systems. It is much like a subway map in that it is an illustration of the basic functionality of the overall trail network.



LEGEND

Trail Networks

- Oconee River Greenway
- North Oconee River Greenway
- Middle Oconee River Greenway
- Normaltown Connector
- Botanical Garden Connector
- Rail with Trail
- Rail to Trail
- Water Trail

Infrastructure

- Railroads
- Major Roads
- Minor Roads

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest

- Greenspace
- UGA Property
- Government

0 1.25 2.5 Miles

NETWORK CONNECTIVITY

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.1: Network Connectivity

Prepared by
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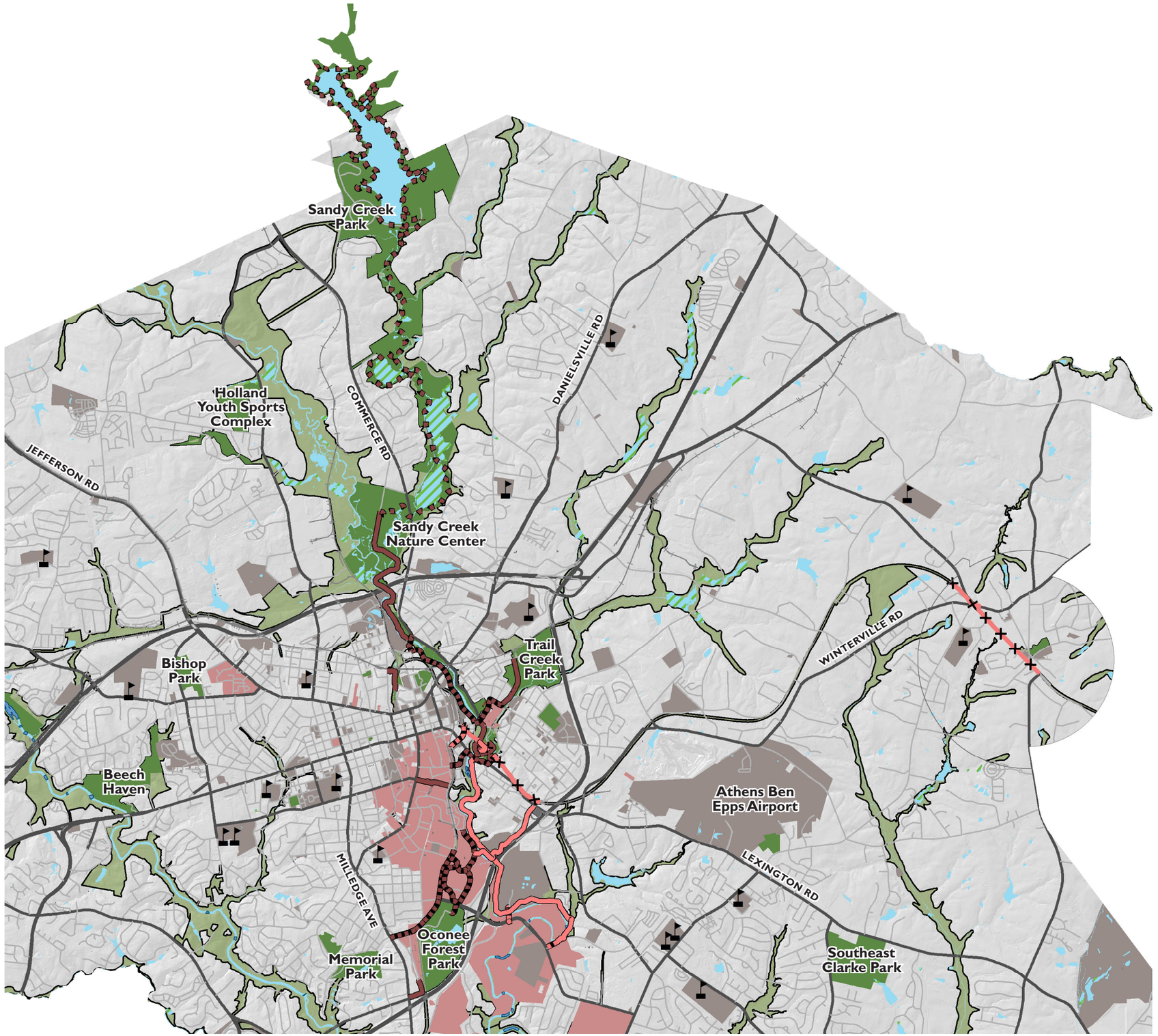
for Athens -
Clarke County
Leisure Services

EXISTING TRAIL NETWORK AND FUNDED PROJECTS

The Oconee Rivers Greenway is currently comprised of many trails, connections, parks, and open spaces. Taking an inventory of these existing connections is an important step to developing future corridors and connections. The current greenway trail network has 3.5 miles of multi-use trail, 2.3 miles of street-based trail, 12.1 miles of foot trail, and 3 miles of multi-use trail on UGA's campus.

The current greenway trail is fairly fragmented, transitioning from a foot trail to a multi-use trail and then back to street-based trails before returning to a multi-use trail. Additionally, three separate trails – Milledge Extension Trail, Trail Creek Trail, and Pulaski Creek Trail – lack safe connections to the main greenway corridor. Existing amenities include hiking trails, mountain bike trails, open space/ multi-purpose fields, picnic shelters, restrooms, canoe and kayak launches, and educational signage.

Funded trail projects within the greenway corridor will connect new neighborhoods to the larger greenway trail network. These funded sections will connect Oak/Oconee Street Bridge to Research Drive with four miles of new multi-use trail. These projects will connect students to campus, neighborhoods to new recreation opportunities, and allow for people using alternative transportation choices to have a safer and more pleasant experience when commuting downtown or to campus.



Location Map

LEGEND

Greenway Trail Network

Existing
- Street Based
- Multi-Use
- Foot Trail

Funded
- Street Based
- Multi-Use
- Rail to Trail

Conservation Area

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government
- School

0 0.75 1.5 Miles

EXISTING & FUNDED TRAIL NETWORK

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.2: Existing & Funded Trail Network

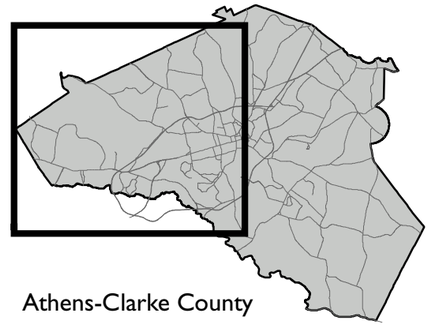
Prepared by ACC Leisure Services Office of Park Planning

for Athens - Clarke County Leisure Services

PROPOSED TRAIL MAP CLASSIFICATIONS

The trail's design also provides connections to important commercial, educational, and recreational nodes in the community. The map classifies the trail as existing, funded, and proposed. The proposed trails are conceptual in nature and serve as a general guide to the likely area of location for the potential trail. Specific trail locations will be determined as segments recieve funding. Further investigation also will be required prior to design and construction. Chapter 6 provides information about trail design standards and the different types of trails that may be proposed.

Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Street Based
- Multi-Use
- Rail with Trail

Existing
- Street Based
- Multi-Use
- Foot Trail

- Trail Pending Master Plan
- Proposed Trailheads
- Existing Trailheads
- Proposed Water Trail Access
- Point of Contact to Neighboring County

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government
- Conservation Area
- School

0 0.75 1.5 Miles

PROPOSED TRAIL NETWORK – WEST

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.3: Proposed Trail Network – West

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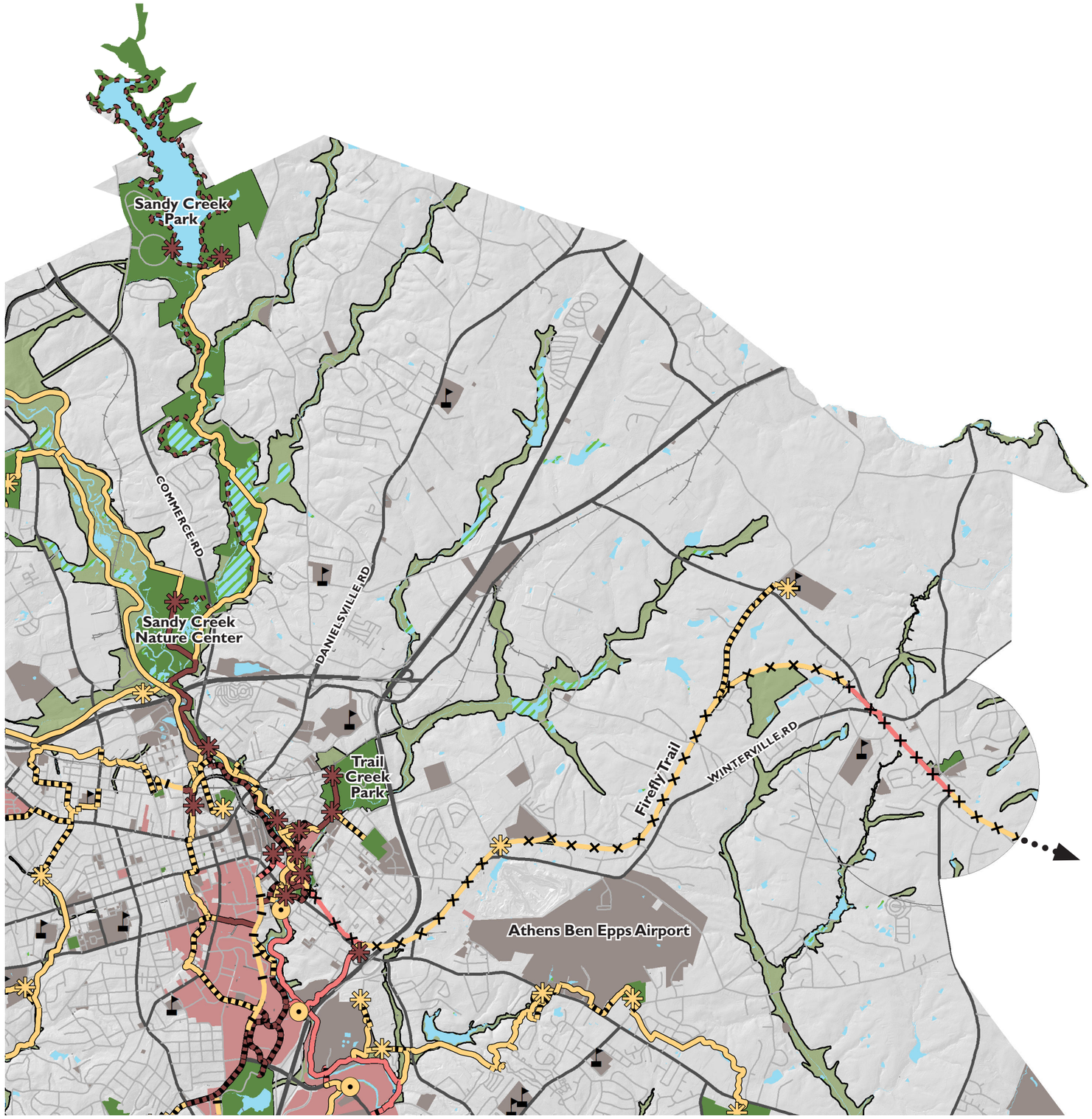
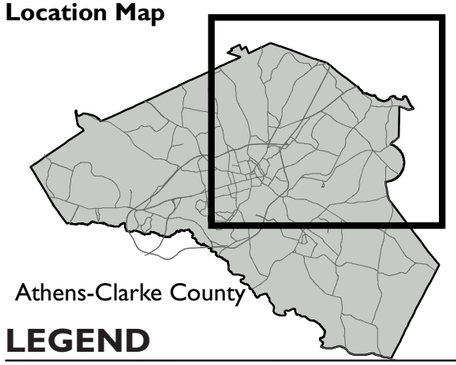


Location Map



LEGEND

Greenway Trail Network

Proposed
- Street Based
- Multi-Use
- Rail to Trail
- Rail with Trail

Existing
- Street Based
- Multi-Use
- Foot Trail

Funded
- Street Based
- Multi-Use
- Rail to Trail

Proposed Trailheads

Existing Trailheads

Proposed Water Trail Access

Point of Contact to Neighboring County

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government
- Conservation Area
- School

0 0.75 1.5 Miles

PROPOSED TRAIL NETWORK – NORTHEAST

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.4: Proposed Trail Network – Northeast

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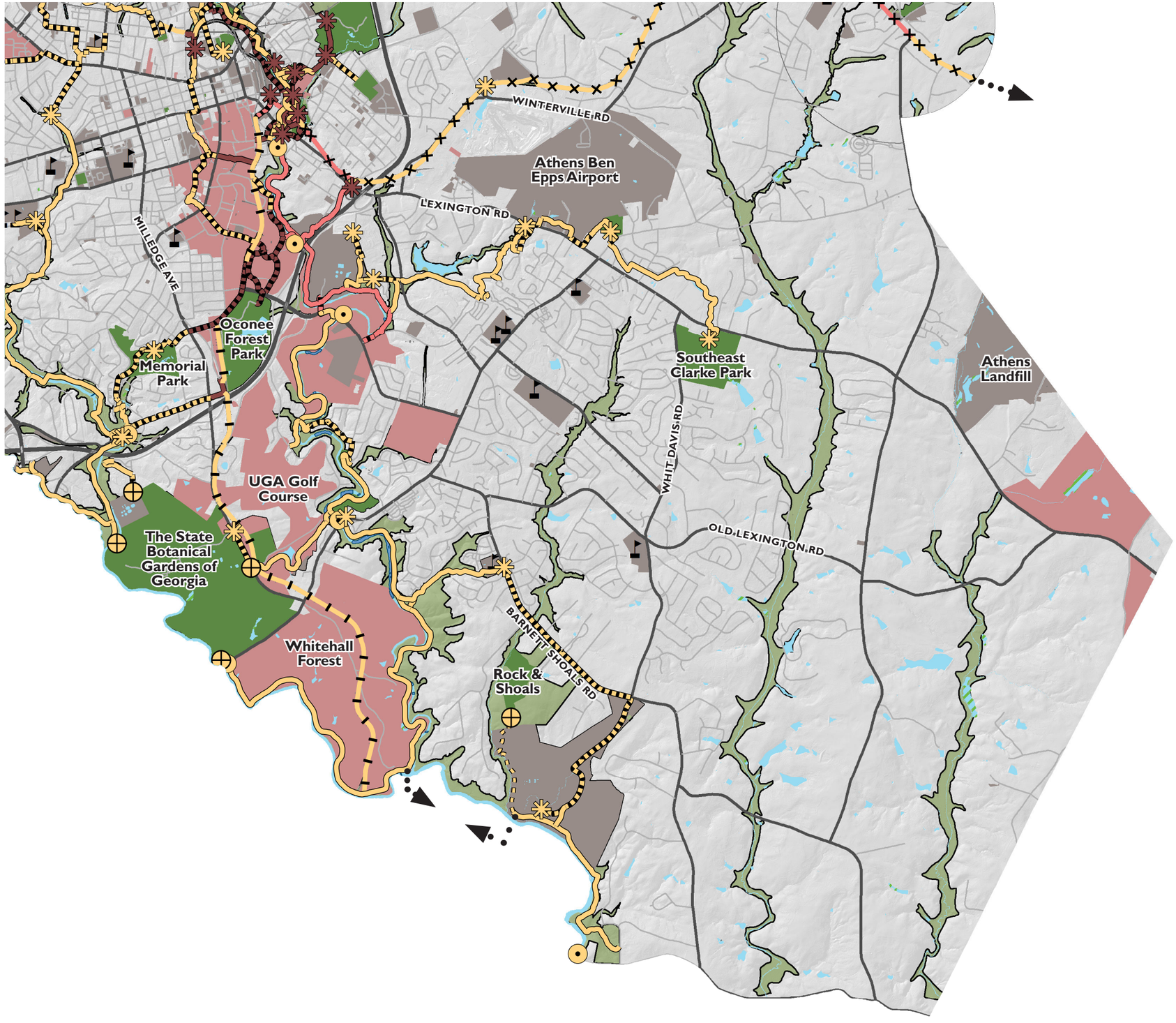
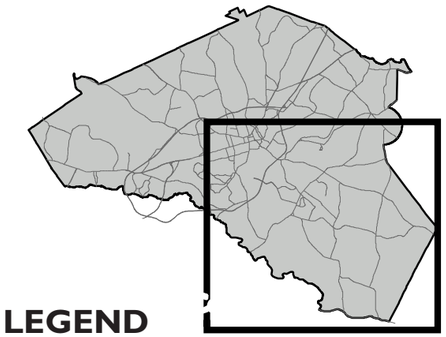


Location Map



LEGEND

Greenway Trail Network

Proposed
- Street Based
- Multi-Use
- Rail to Trail
- Rail with Trail

Existing
- Street Based
- Multi-Use

Funded
- Street Based
- Multi-Use
- Rail to Trail

- Trail Pending Master Plan
- Proposed Trailheads
- Existing Trailheads
- Proposed Water Trail Access
- Point of Contact to Neighboring County

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government
- Conservation Area
- School

0 0.75 1.5 Miles

PROPOSED TRAIL NETWORK – SOUTHEAST

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.5: Proposed Trail Network – Southeast

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for Athens - Clarke County Leisure Services

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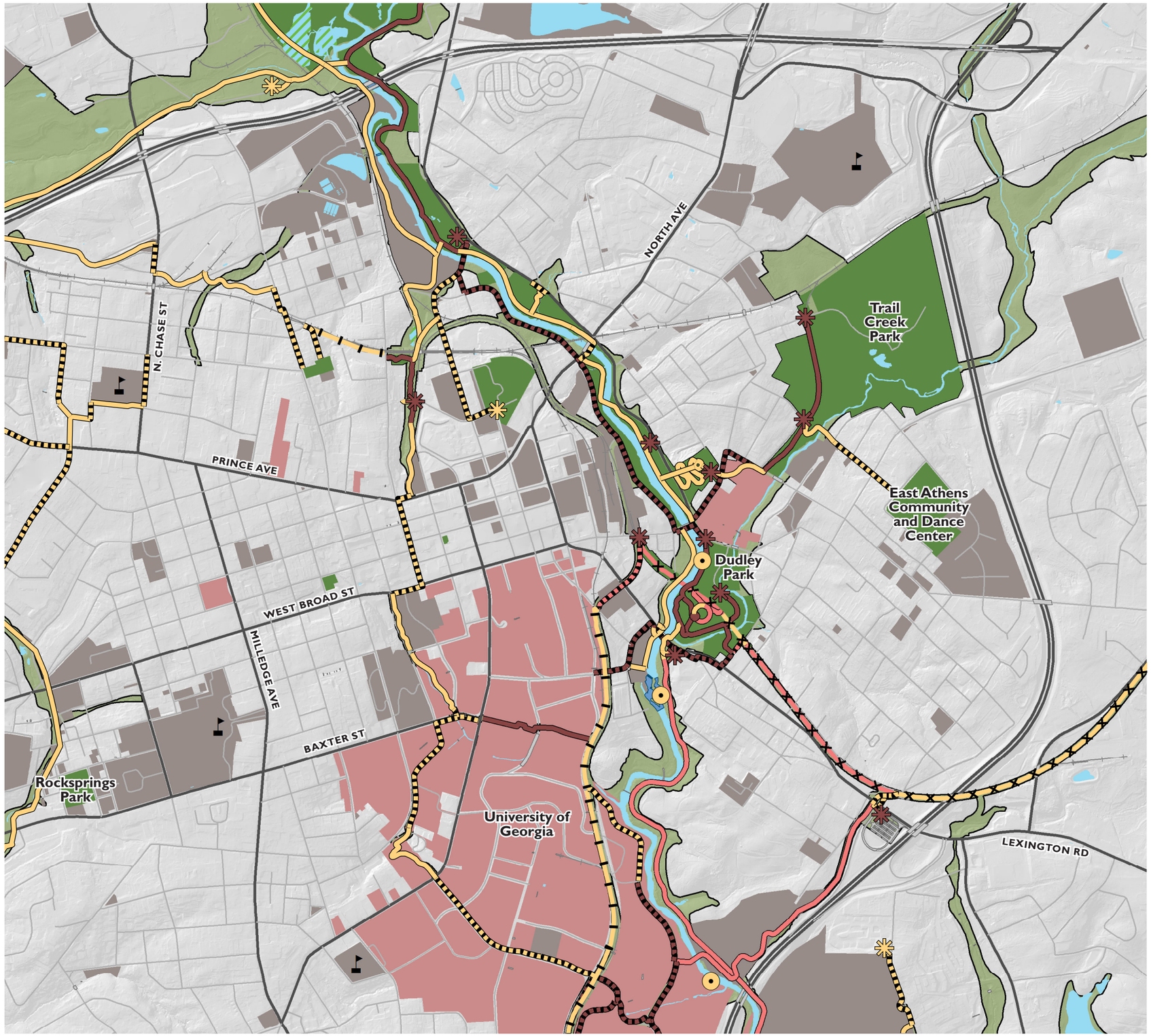
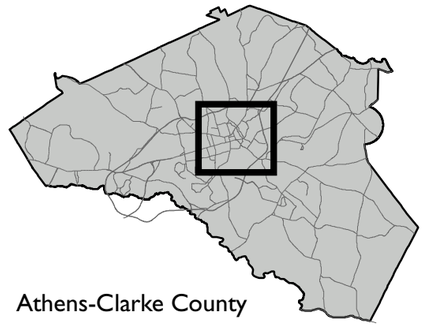


Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Street Based
- Multi-Use
- Rail to Trail
- Rail with Trail

Existing
- Street Based
- Multi-Use

Funded
- Street Based
- Multi-Use
- Rail to Trail

- Proposed Trailheads
- Existing Trailheads
- Proposed Water Trail Access

Infrastructure
- Railroads
- Major Roads
- Minor Roads

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland

Areas of Interest
- Greenspace
- UGA Property
- Government
- Conservation Area
- School

0 0.25 0.5 Miles

PROPOSED TRAIL NETWORK – INSET

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.6: Proposed Trail Network – Inset

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NEXT STEPS: HIGH PRIORITY PROJECT AREAS

Increasing public access to an unbroken network of trails is a primary goal of this update of the Greenway Network Plan. We identified the following three high priority corridors to reflect the goal of connectivity and identified 14 high priority projects within these areas.

1. **North Oconee River Greenway:** The North Oconee River corridor priority will focus on improving trails and connections and filling gaps in connectivity along the existing portions of the greenway. In addition to this, connections to neighborhoods and downtown areas will be strengthened.

2. **Middle Oconee River Greenway:** The Middle Oconee River corridor priority will focus on connecting Ben Burton Park to Beech Haven, an Exceptional Resource Area. Further development of this corridor will follow in future updates.

3. **Normaltown Connector:** Normaltown is rich with residential and commercial areas and the proposed trail would provide a very much-needed connection between the North and Middle Oconee rivers, passing through the center of Athens. The current focus of this corridor will include linking neighborhoods to each other and to the greenway paths that are also listed as high priority.

Every two years, with the graphic update, Leisure Services staff, in concert with ORGC, will re-evaluate these corridors, assess new and existing priorities, and refine our priority recommendations for M&C consideration.

In Table 9, the specific trails that create connectivity in the major corridors are listed. They are then ranked in three tiers according to priority. The overarching rationale for categorizing proposed trails is whether they result in extending, improving, or creating infill for the current greenway. This doesn't mean Tier 1 is more important than Tier 2.

- First Tier trail projects focus on improving trails and connections while also improving or filling gaps in connectivity along the existing portions of the greenway

- Second Tier projects continue to improve connections while extending the network to other greenspaces and neighborhoods

- Third Tier projects focus on connecting with new corridors beyond the established North Oconee River Greenway

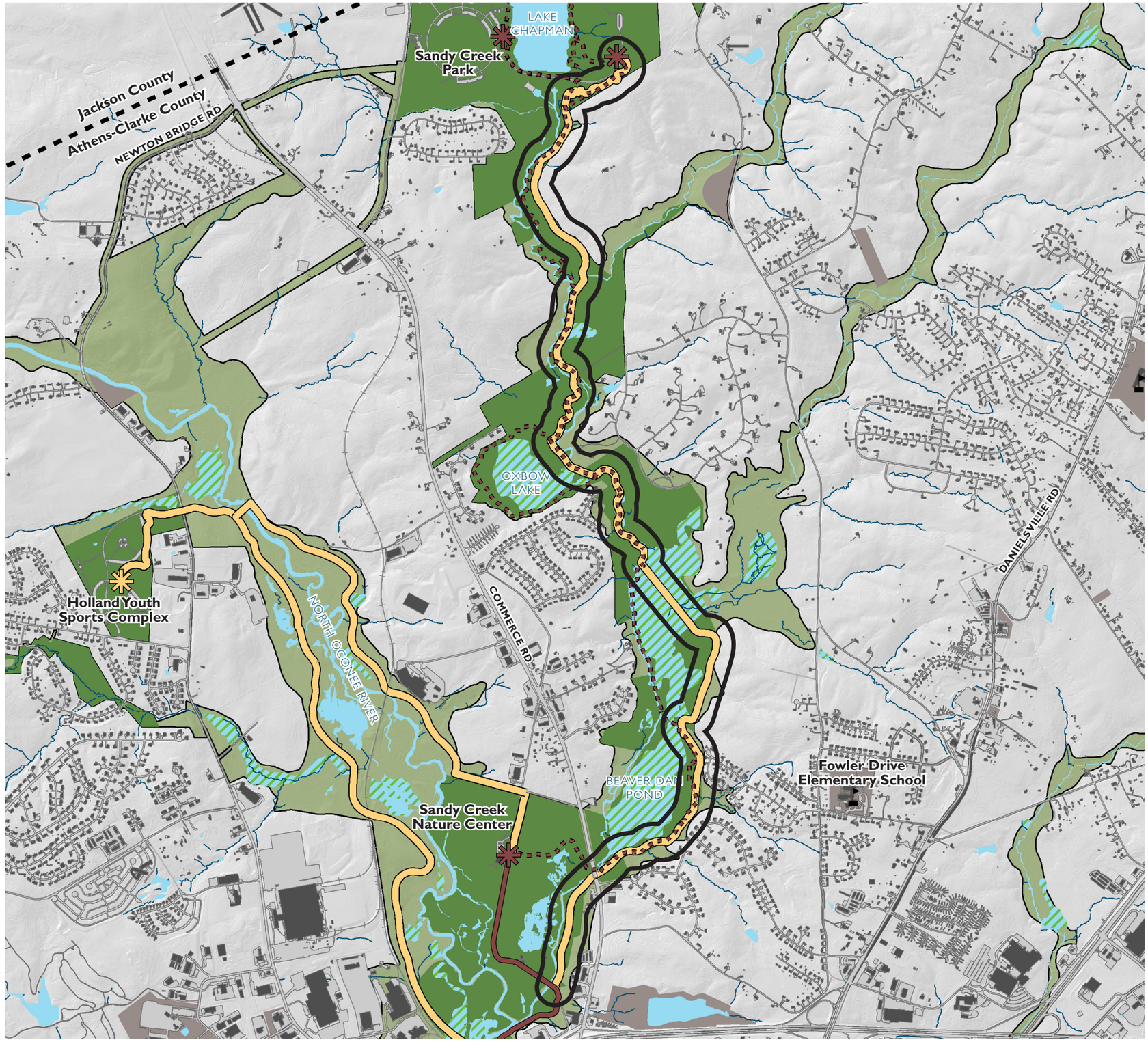
Table 9: Priority Trails

Trail Name	Priority	Corridor	Distance	Current Estimated Cost	Number of Bridges
Cook's Trail	Tier 1	North Oconee River	4.16 miles	> $8 million	Multiple
Oak/Oconee Bridge Underpass	Tier 1	North Oconee River	.15 miles	$1 million	1
Riverside Trail – MLK Parkway	Tier 1	North Oconee River	.66 miles	$4 million	2
Riverside Trail – North Oconee River Park	Tier 1	North Oconee River	.58 miles	$4 million	2
Tallassee Road Connector	Tier 1	Middle Oconee River	3.31 miles	$5 million	0
Pulaski Creek Connector – South	Tier 2	North Oconee River	.21 miles	$1 million	Boardwalk
Pulaski Creek Connector – North	Tier 2	North Oconee River	.41 miles	$2.5 million	1
Nature Center Loop – West	Tier 2	North Oconee River	2.93 miles	> $7 million	Multiple
Nature Center Loop – East	Tier 2	North Oconee River	1.8 miles	> $7 million	Multiple
Ben Burton to Beech Haven	Tier 3	Middle Oconee River	1.37 miles	$6 million	2
Firefly Connector at 78/10 interchange	Tier 3	Firefly Trail	.17 miles	$3 million	1
Normaltown Connector – Ben Burton to Bishop	Tier 3	Normaltown Connector	2.23 miles	$2 million	0
Normaltown Connector – Bishop to Boulevard	Tier 3	Normaltown Connector	2.05 miles	$2 million	0
Normaltown Connector – Boulevard to North Oconee River Greenway	Tier 3	Normaltown Connector	1.95 miles	$6 million	2

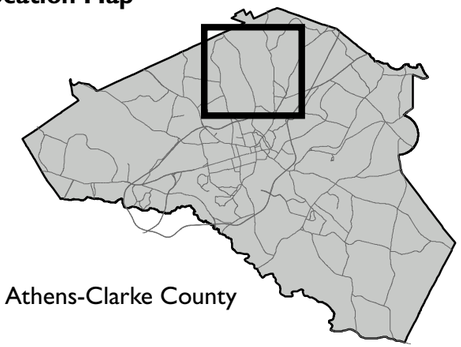
A description and map of each proposed trail listed in the table above follows.

Cook's Trail

Cook's Trail, envisioned by ORGC's first chairman, forestry professor Walt Cook, is the foundation trail of the greenway multi-use trail system. The 4.1 mile natural surface trail traverses a great deal of wetlands as it connects Sandy Creek Nature Center to Sandy Creek Park. The trail and associated boardwalks have consistently deteriorated over the years, in part due to lack of maintenance. This deterioration, combined with the desire to have a safe bicycle route between Sandy Creek Park and Sandy Creek Nature Center have compelled consideration of providing a multi-use trail in the Cook's Trail corridor. In order to preserve the intimate natural experience of the original Cook's Trail, foot trails or natural surface spurs would be maintained off the main trail. A connected multi-use trail in the Cook's Trail corridor is therefore proposed.



Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use
- Foot Trail

- Conservation Area
- Existing Trailheads
- Proposed Trailheads
- ACC Boundary
- Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government
- Schools

0 0.25 0.5 Miles

COOK'S TRAIL

Greenway Network Plan

Athens, Georgia
December 2016

Figure 4.7: Cook's Trail

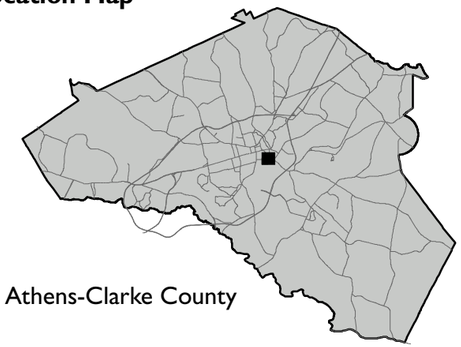
Prepared by
ACC Leisure Services
Office of Park Planning

for Athens - Clarke County Leisure Services

Oak / Oconee Bridge Underpass

This planned infill connection is a crucial trail segment for improving greenway safety and user experience. The Georgia Department of Transportation and ACCUG staff are working together to improve the connection between Heritage Trail and Easley's Mill Trail. This will provide a safe, direct linkage for pedestrians and cyclists, and eliminate pedestrian road crossings along Oak Street and Oconee Street.

Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use
- Street Based

Funded
- Multi-Use

- Conservation Area
- Existing Trailheads
- Proposed Water Trail Access
- Existing Observation Point
- Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government

0 115 230 Feet

OAK / OCONEE BRIDGE UNDERPASS

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.8: Oak / Oconee Bridge Underpass

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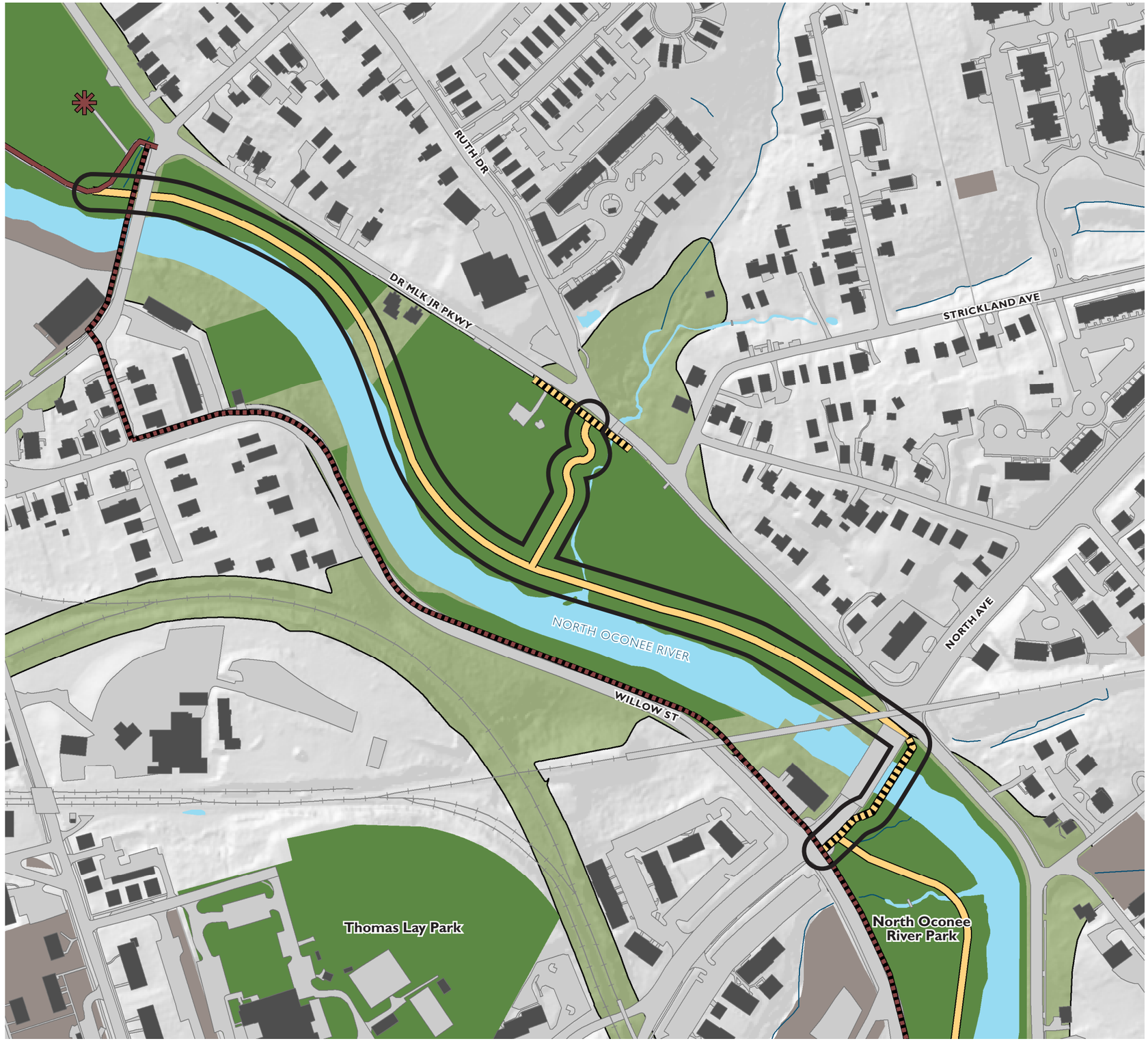
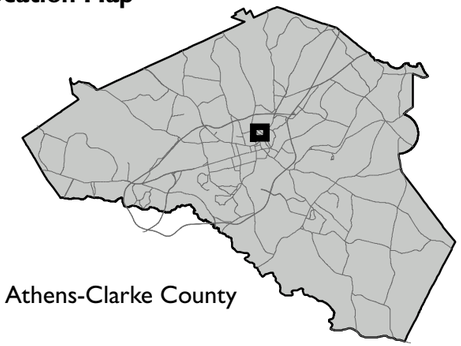
for Athens - Clarke County Leisure Services

Riverside Trail – MLK Parkway

This trail proposal adds an alternative route to the North Oconee River's Willow Street greenway segment between College Avenue and North Avenue. The new route will take advantage of the county-owned properties on the east bank of the North Oconee River. This trail will extend from the MLK Trailhead parking lot and pass under College Avenue's bridge, follow along the riverbank, and then connect to the North Avenue Bridge. This project will require either the reconfiguration of the North Avenue Bridge or the addition of a pedestrian bridge, similar to Heritage Trail's bridge at E. Broad St. This will allow safer passage for greenway users across the North Oconee River.



Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Existing
- Multi-Use
- Street Based

- Conservation Area
- Existing Trailheads
- Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government

0 235 470 Feet

RIVERSIDE TRAIL – MLK PARKWAY

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.9: Riverside Trail – MLK

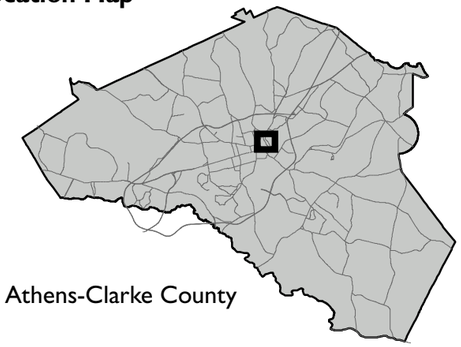
Prepared by
ACC Leisure Services
Office of Park Planning

for Athens - Clarke County Leisure Services

Riverside Trail – North Oconee River Park

North Oconee River Park is one of the hidden jewels of the downtown portion of the North Oconee River Greenway. The North Oconee River currently bisects this park, but this greenway proposal of a dedicated pedestrian bridge presents a wonderful opportunity for this forgotten park to become the signature riverfront park for Athens. The proposed bridge will unify North Oconee River Park East and West so that they become a cohesive public space adjacent to downtown.

Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Existing
- Multi-Use
- Street Based
- Foot Trail

Funded
- Street Based
- Multi-Use
- Rail to Trail

Conservation Area

Existing Trailheads

Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- UGA Property
- Government

0 305 610 Feet

RIVERSIDE TRAIL – NORTH OCONEE RIVER PARK

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.10: Riverside Trail – NORP

Prepared by ACC Leisure Services Office of Park Planning

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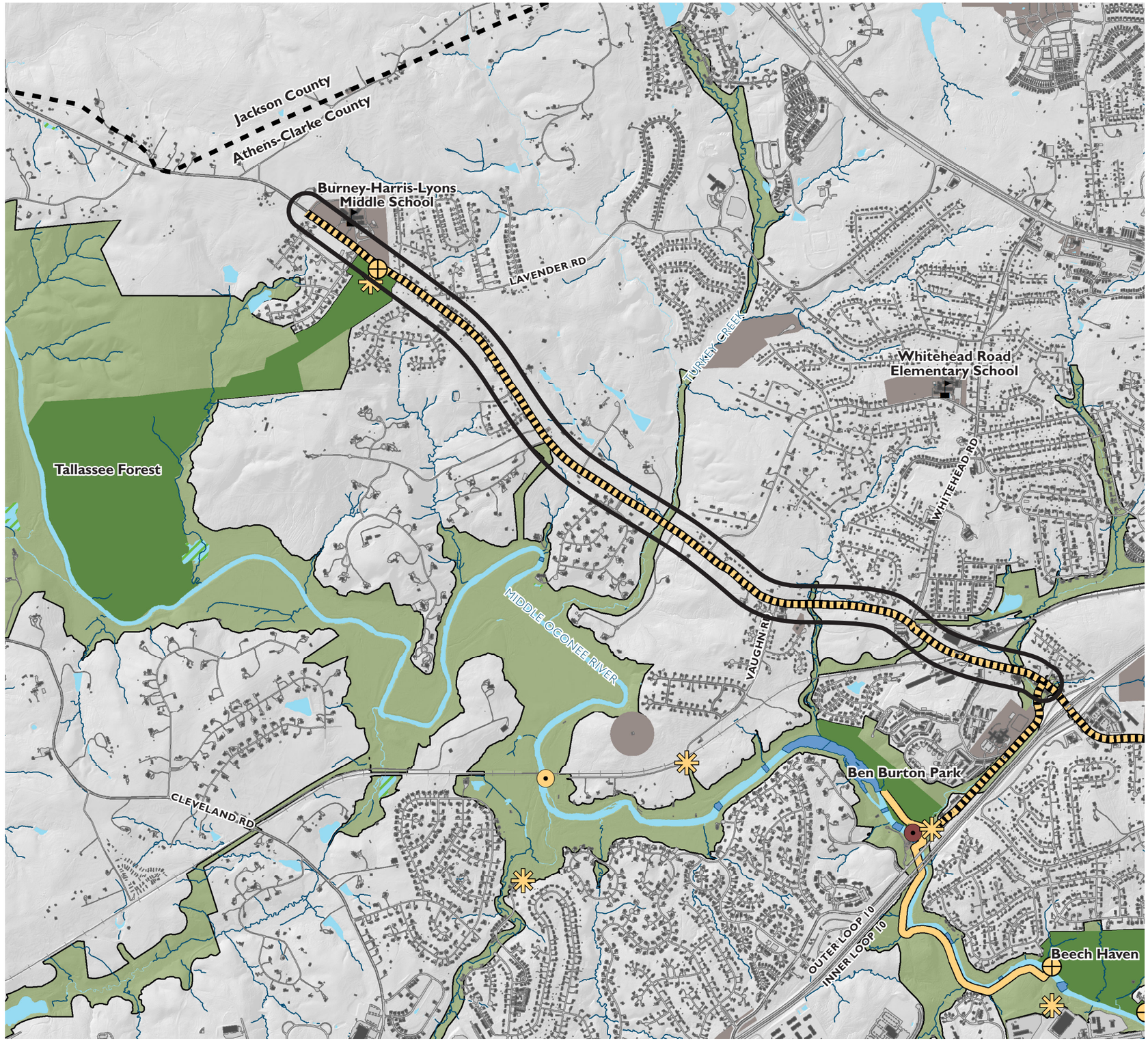
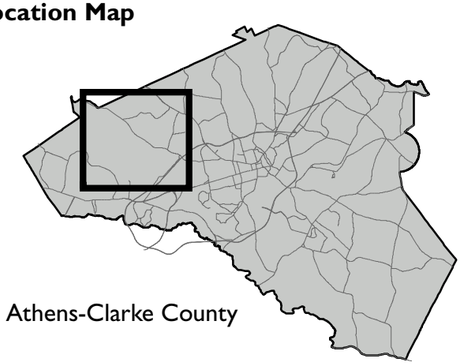
Tallassee Road Connector

The Tallassee Road Connector is a planned street-based connection that will run the length of Tallassee Road from the intersection of Mitchell Bridge to Burney-Harris Lyons Middle School. While this section of trail will not provide the typical riverine experience associated with the greenway, the Tallassee Road Connector will establish pedestrian and cyclist connectivity between Tallassee Forest and Ben Burton Park.



Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Conservation Area

Existing Water Trail Access

Proposed Water Trail Access

Proposed Trailheads

Trail Pending Master Plan

ACC Boundary

Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government

0 0.25 0.5 Miles

TALLASSEE ROAD CONNECTOR

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.11: Tallassee Road Connector

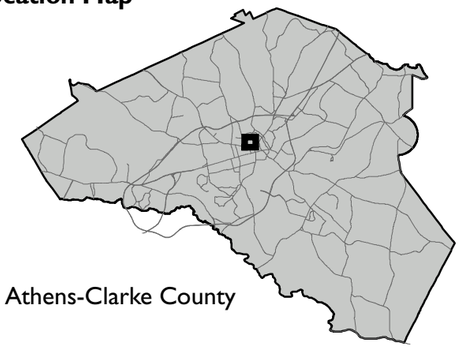
Prepared by ACC Leisure Services Office of Park Planning

for Athens - Clarke County Leisure Services

Pulaski Creek Connector – South

This proposed connection will link the Pulaski Creek Trail with downtown Athens via a short trail segment that follows alongside Denny Towers. When combined with the Northern Pulaski Creek connector, this project will create a dedicated greenway experience from the North Oconee River Greenway to downtown Athens.

Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use

- Conservation Area
- Existing Trailheads
- Project Area

Infrastructure

- Railroads
- Buildings
- Paved Surfaces

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest

- Greenspace
- Government

0 150 300 Feet

PULASKI CREEK TRAIL – SOUTH

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.12: Pulaski Creek Trail – South

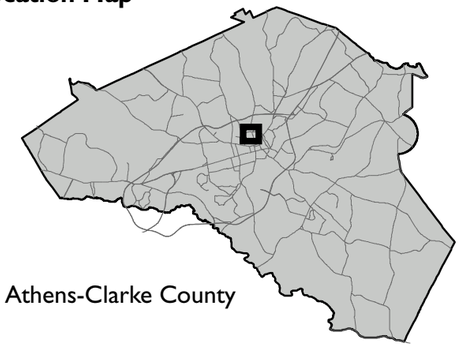
Prepared by ACC Leisure Services Office of Park Planning

for Athens - Clarke County Leisure Services

Pulaski Creek Trail – North

The proposed Pulaski Creek Connector intends to provide a vital connection between the existing Pulaski Creek Trail and the North Oconee River Greenway. The route passes under Norfolk Southern Railroad's bridge, crosses Cleveland Avenue, passes behind ACCUG's recycling center, CHARM, and crosses the North Oconee River, connecting to the existing North Oconee River Greenway. This connection hearkens back to the SPLOST 2005 Pulaski Creek Trail project that did not fully come to fruition.

Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use
- Foot Trail

- Conservation Area
- Existing Trailheads
- Proposed Trailheads
- Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government

0 200 400 Feet

PULASKI CREEK TRAIL – NORTH

Greenway Network Plan

Athens, Georgia

December 2016

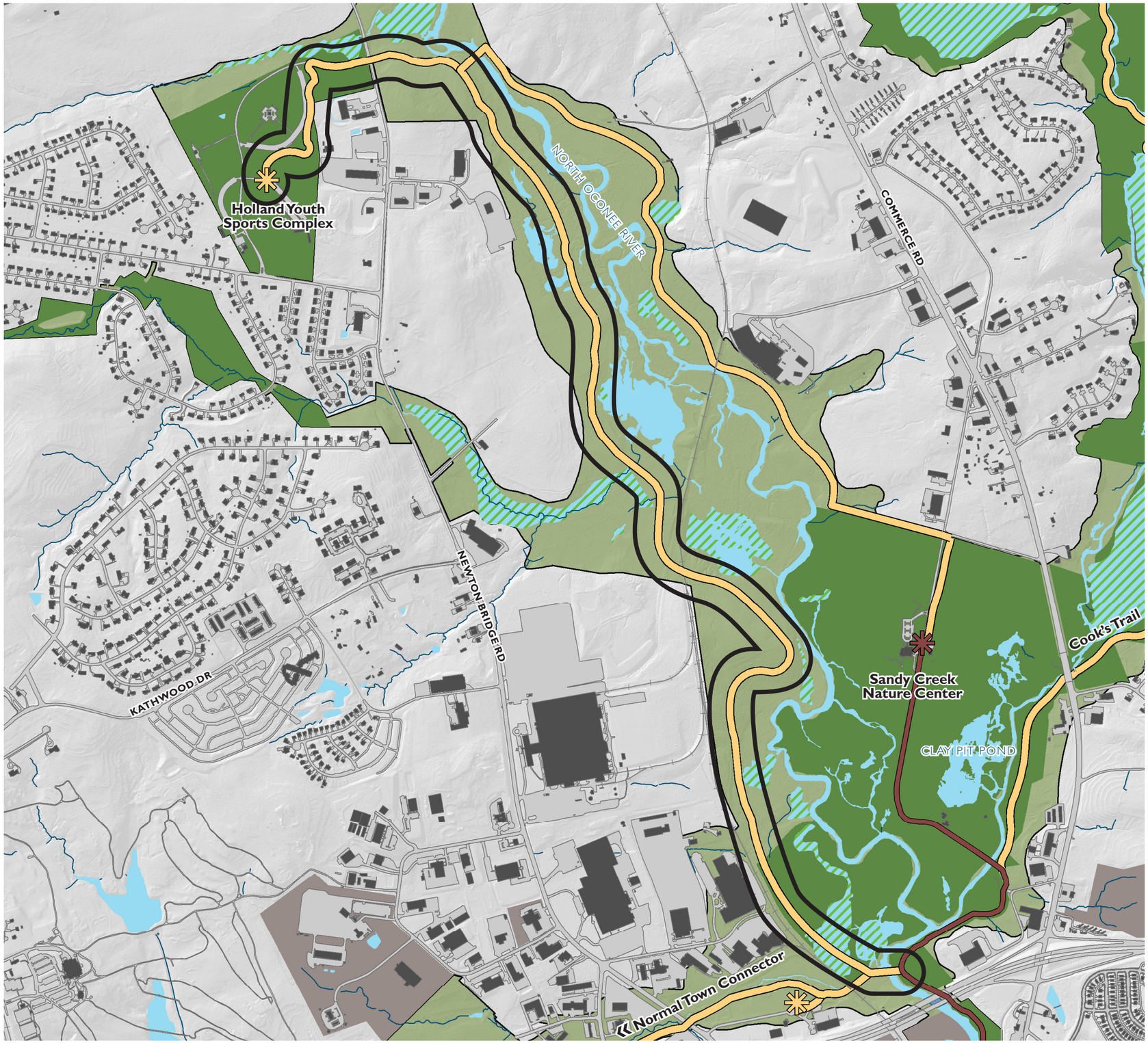
Figure 4.13: Pulaski Creek Trail – North

Prepared by
ACC Leisure Services
Office of Park Planning

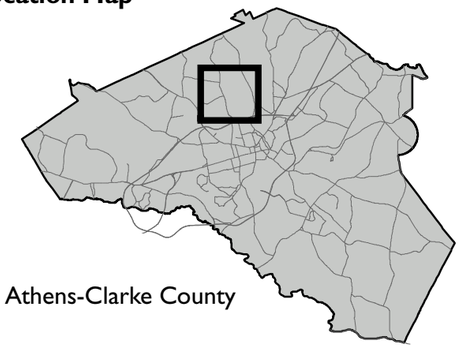
for Athens - Clarke County Leisure Services

Nature Center Loop – West

This trail segment addition will take advantage of connecting to the North Oconee River Greenway just south of Sandy Creek Nature Center and provides a vital connection between the North Oconee River Greenway and Holland Youth Sports Complex. Additionally, it provides beneficial connections to new and proposed development along Newton Bridge Road.



Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use

- Conservation Area
- Existing Trailheads
- Proposed Trailheads
- Project Area

Infrastructure

- Railroads
- Buildings
- Paved Surfaces

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest

- Greenspace
- Government

0 0.125 0.25 Miles

NATURE CENTER LOOP – WEST

Greenway Network Plan

Athens, Georgia

December 2016

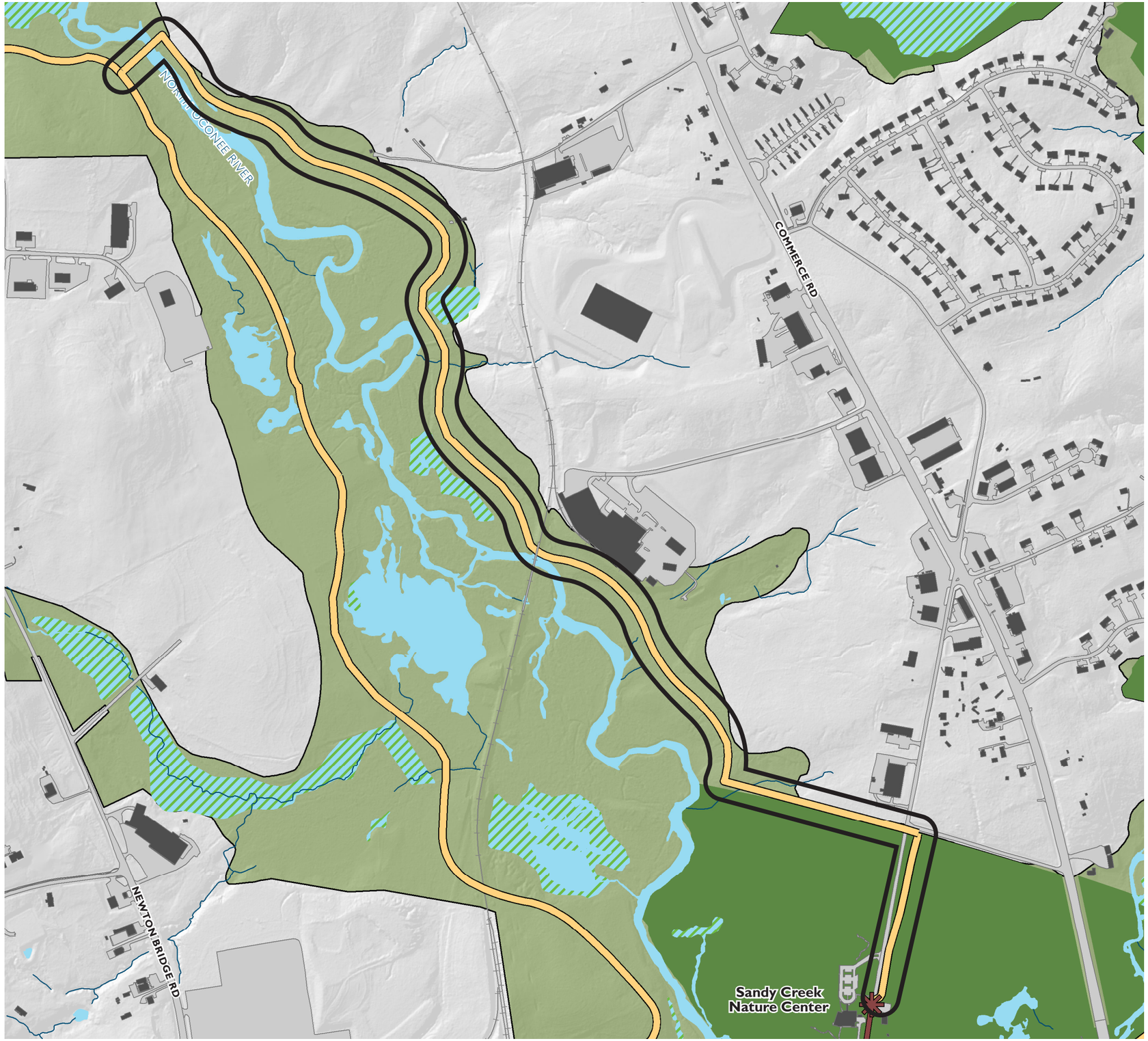
Figure 4.14: Nature Center Loop – West

Prepared by
ACC Leisure Services
Office of Park Planning

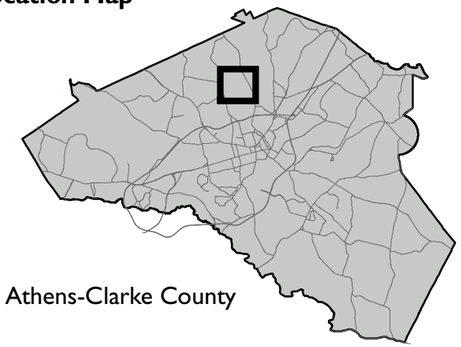
for Athens - Clarke County Leisure Services

Nature Center Loop – East

This trail segment addition will take advantage of connecting from the parking lot at Sandy Creek Nature Center, running along the border of the managed forest project, to the northern segment of the Nature Center Loop – West. Once both segments of the Nature Center Loop have been constructed, a nearly 5-mile loop experience of greenway trail will be a real gem. The Nature Center Loop provides a great opportunity to combine educational, scenic, aerobic, and recreational interests.



Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use

Existing
- Multi-Use

- Conservation Area
- Existing Trailheads
- Project Area

Infrastructure

- Railroads
- Buildings
- Paved Surfaces

Hydrology

- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest

- Greenspace
- Government

0 500 1,000 Feet

NATURE CENTER LOOP – EAST

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.15: Nature Center Loop – East

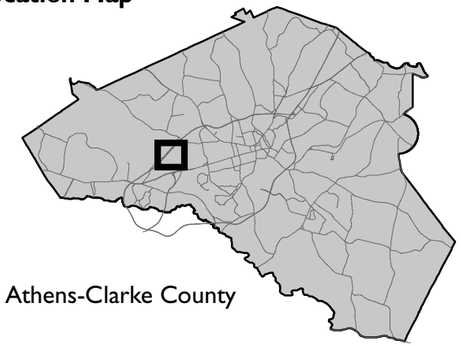
Prepared by ACC Leisure Services Office of Park Planning

for Athens - Clarke County Leisure Services

Ben Burton to Beech Haven

This planned segment of multi-use trail will serve as the catalyst for the Middle Oconee Greenway. Ben Burton Park is a popular destination for paddlers, dog walkers, picnickers, and families seeking outdoor recreation. Beech Haven, currently in acquisition by ACCUG, is a beautiful property with an historic Arts and Crafts home, gardens, and unique stonework throughout the site. As Beech Haven opens for public access, the greenway trail will provide opportunities for park users to travel between these two treasures bordering on the Middle Oconee.

Location Map



Athens-Clarke County

LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Conservation Area
Existing Water Trail Access
Trail Pending Master Plan
Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- UGA Property
- Government

0 400 800 Feet

BEN BURTON TO BEECH HAVEN

Greenway Network Plan

Athens, Georgia
December 2016

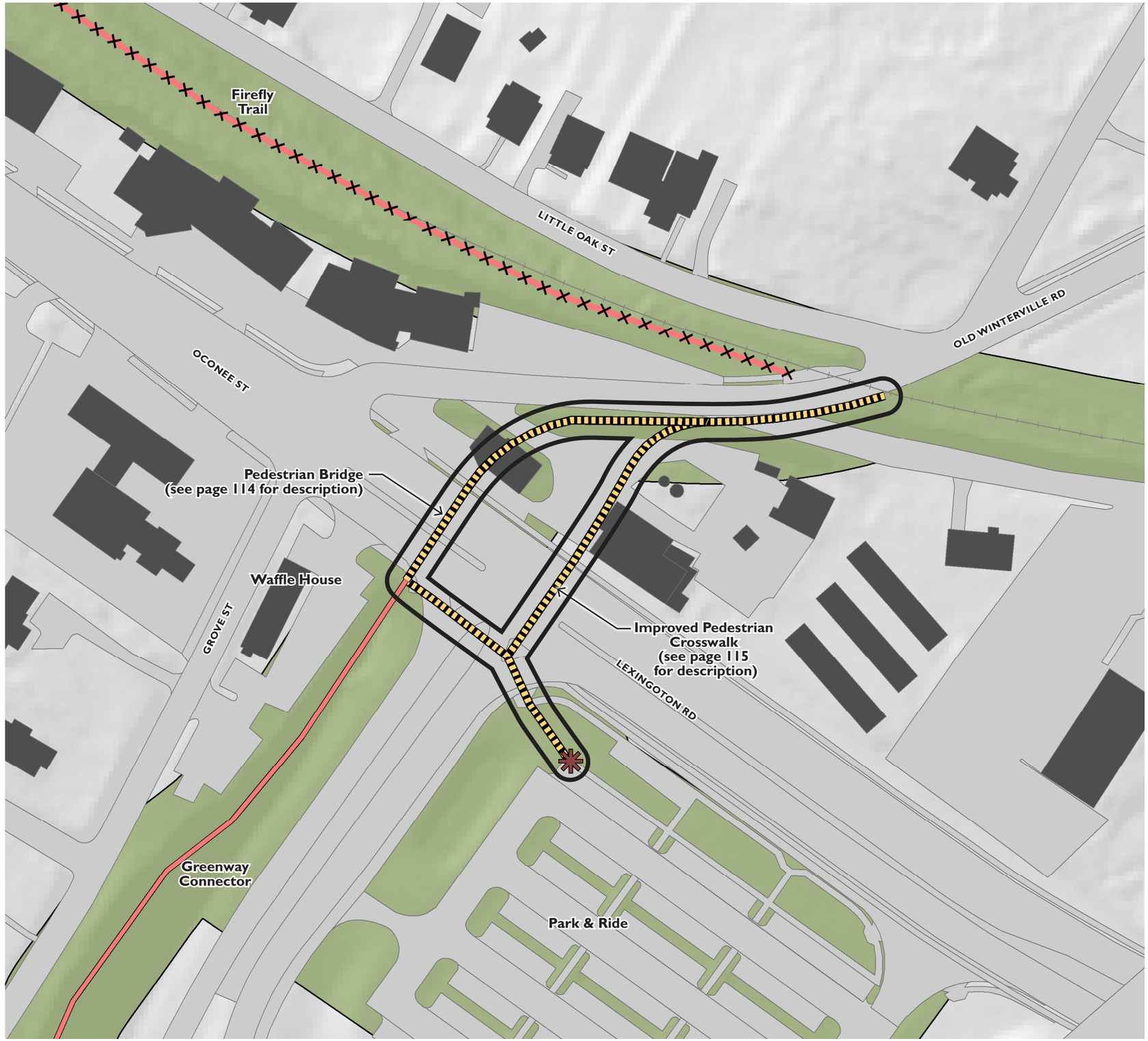
Figure 4.16: Ben Burton to Beech Haven

Prepared by
ACC Leisure Services
Office of Park Planning

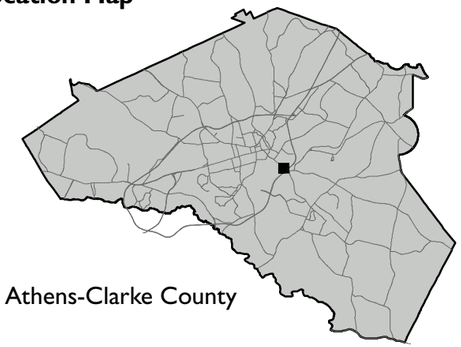
for Athens - Clarke County Leisure Services

Firefly Connector at 78/10 Interchange

This connection provides an important link at the nexus of the Firefly Trail, North Oconee River Greenway Trail and the Park and Ride projects. The project is challenging because it crosses Lexington Road and it may require a pedestrian bridge that crosses over this section of highway.



Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Funded
- Multi-Use
- Rail to Trail

- Conservation Area
- Existing Trailheads
- Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- UGA Property
- Government

0 75 150 Feet

FIREFLY CONNECTOR AT 78/10 INTERCHANGE

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.17: Firefly Connector

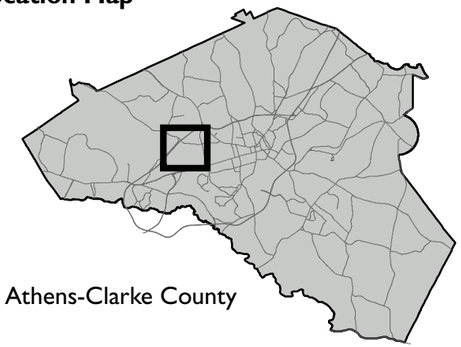
Prepared by
ACC Leisure Services
Office of Park Planning

for Athens - Clarke County Leisure Services

Normaltown Connector – Ben Burton Park to Bishop Park

This proposed cross-county connection will provide a vital link between the North and Middle Oconee River Greenways and connect the Normaltown community with the Greenway Network. This section of the connector begins with greenway improvements connecting Ben Burton Park to the existing sidewalk along Mitchell Bridge Road. This section of sidewalk, which connects to Oglethorpe Avenue. would then be adopted as Greenway. From here, a connection will be made to Bishop Park and Beech Haven through a variety of street connections and multi-use trails wherever possible.

Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Conservation Area

Proposed Trailheads

Existing Water Trail Access

Trail Pending Master Plan

Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- UGA Property
- Government

0 400 800 Feet

NORMALTOWN CONNECTOR – BEN BURTON TO BISHOP

Greenway Network Plan

Athens, Georgia

December 2016

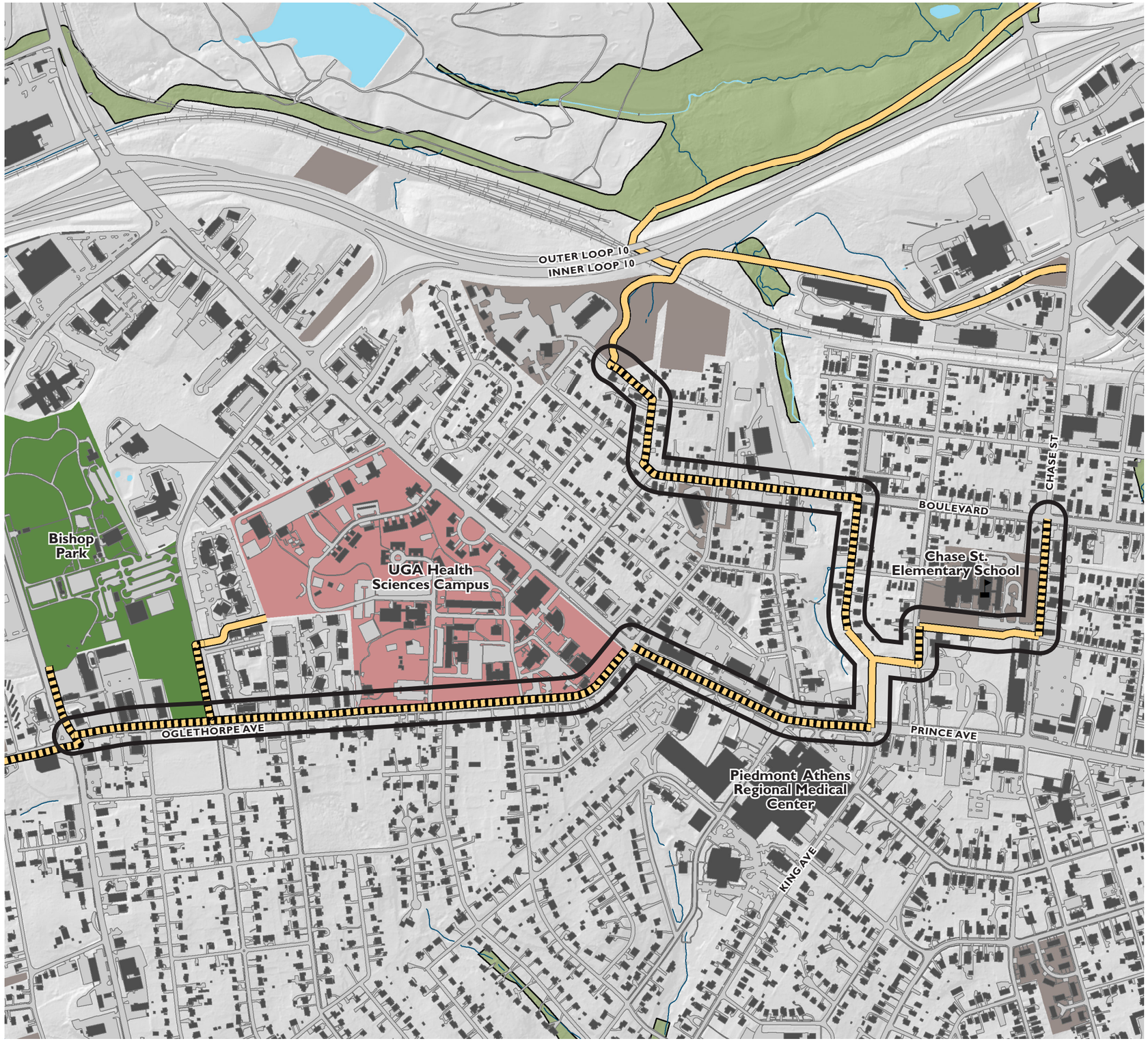
Figure 4.18: Normaltown – Ben Burton to Bishop

Prepared by
ACC Leisure Services
Office of Park Planning

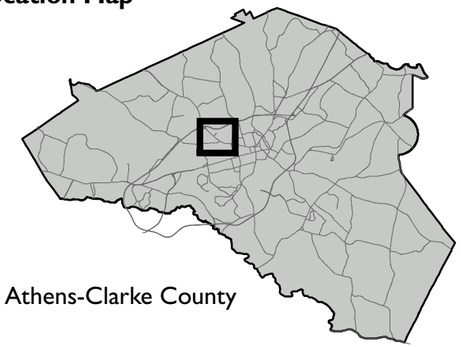
for Athens - Clarke County Leisure Services

Normaltown Connector – Bishop Park to Boulevard

This section of the Normaltown Connector runs as a street-based connection and a multiuse path whenever possible. It connects on Oglethorpe Avenue. past the health science campus. Passing through Normaltown, on street parking along the corridor could be replaced with a street-based greenway path, reducing the number of cars backing into traffic and creating safer traffic conditions through this corridor. This trail flows north across from King Avenue. and splits in two directions from there. One connection heads east and connects Chase Street Elementary to Boulevard with a street-based connection. The other trail heads up Hiwassee and connects over to the wooded area behind the Pound Street Complex. This area has some social mountain bike trails passing through it, and those could be incorporated into a greenway design. This section of the Normaltown Connector is also prime for stream restoration projects.



Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Conservation Area

Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government
- School

0 400 800 Feet

NORMALTOWN CONNECTOR – BISHOP TO BOULEVARD

Greenway Network Plan

Athens, Georgia

December 2016

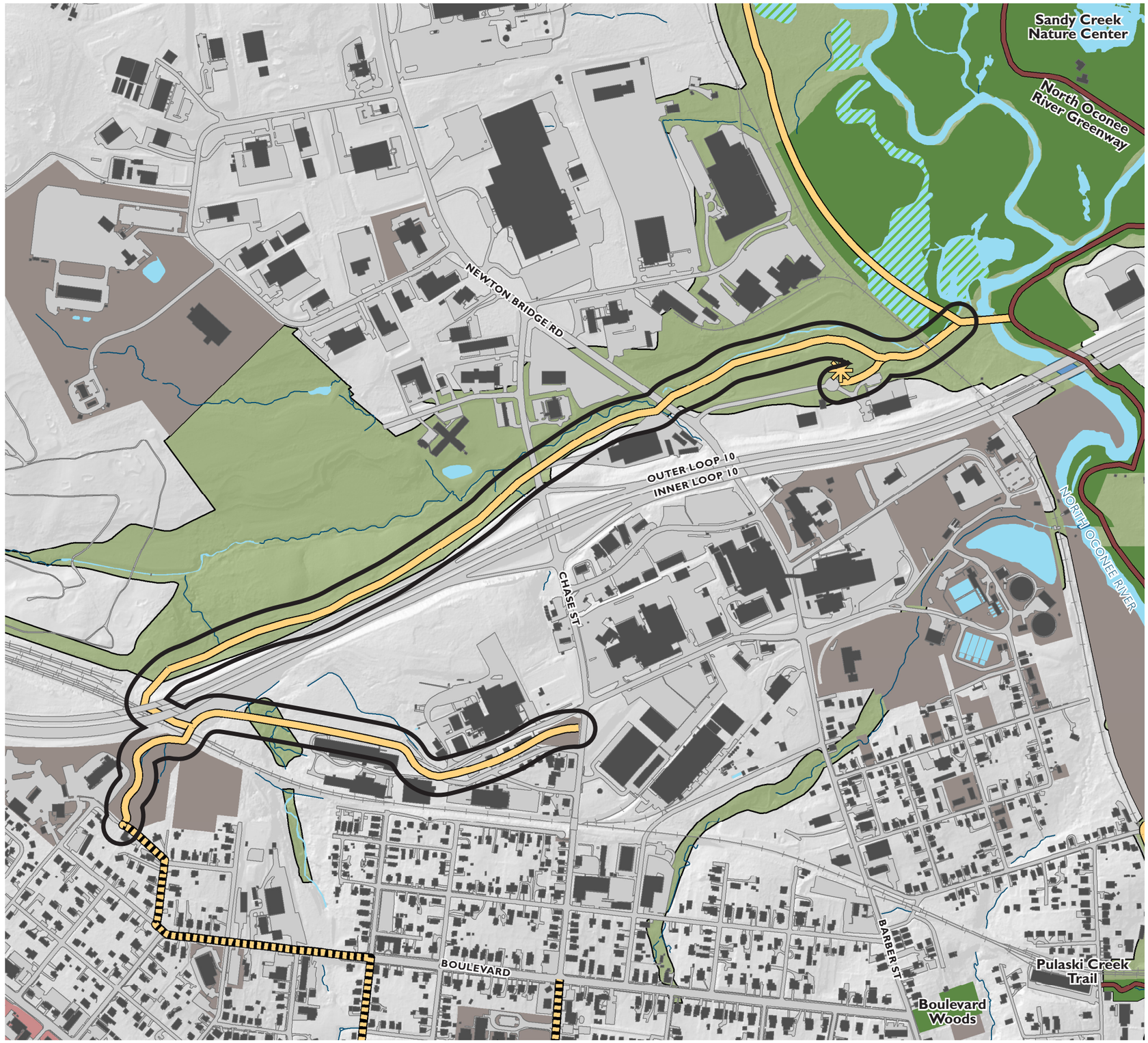
Figure 4.19: Normaltown – Bishop to Boulevard

Prepared by ACC Leisure Services Office of Park Planning

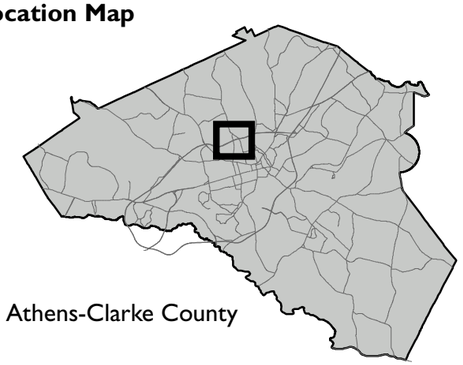
for Athens - Clarke County Leisure Services

Normaltown Connector – Boulevard to North Oconee River Greenway

This last section of the Normaltown Connector completes the connection between Ben Burton Park and the North Oconee River Greenway. Tying in to the Boulevard Greenway, this section starts at the Pound Street Complex and crosses over the railroad with a pedestrian bridge. It then splits east and west. Heading east, greenway users can connect over to Chase Street for future greenway expansion, while west, users head under the GA State Route 10 Loop before heading northeast parallel to the Loop along the existing dirt mountain bike trails. From here, the trail crosses Barber Street, follows the stream corridor under the railroad, and connects over the North Oconee River to the existing greenway.



Location Map



LEGEND

Greenway Trail Network

Proposed
- Multi-Use
- Street Based

Existing
- Multi-Use

Conservation Area

Proposed Trailheads

Project Area

Infrastructure
- Railroads
- Buildings
- Paved Surfaces

Hydrology
- Surface Water
- Shoals
- Dams
- Wetland
- Tributaries

Areas of Interest
- Greenspace
- Government
- School

0 400 800 Feet

NORMALTOWN CONNECTOR – BOULEVARD TO NORTH OCONEE RIVER GREENWAY

Greenway Network Plan

Athens, Georgia

December 2016

Figure 4.20: Normaltown – Boulevard to NORG

for Athens - Clarke County Leisure Services

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Chapter 5: Implementation

The Greenway Network Plan provides an opportunity to demonstrate the community's commitment to the greenway's overall goals. In this chapter, the action steps necessary to implement this plan are established. Specifically, this chapter contains action steps, project prioritization and phasing, cost estimates, funding support considerations, and methods for greenway acquisition.

ACTION STEPS – IMMEDIATE

This plan of action is designed to guide the development of the greenway and trail network. Some immediate actions will be taken to quickly and efficiently begin the implementation. Immediate action steps include:

1. *ACCUG Mayor and Commission Adopt this Plan*
   Once this plan is approved by the mayor and ACC Commission, it will be integrated in other related government planning efforts (Comprehensive Plan, Bike/Pedestrian Plan, etc).

2. *Increase full time Greenway Staff*
   Develop a position that is responsible for championing greenway projects, partnering to develop programs including educational and volunteer efforts, and serving as a liaison with members of the public, the ORGC, and partner agencies.

3. *Market the Greenway Network*
   Providing print and online materials that describe the greenway network will help ensure that its purpose is understood as well as increase public awareness about the greenway. This marketing will include creating a specific greenway and trail website connected to the ACCUG website, which provides up-to-date information about greenway facilities, development, programming and operations.

4. *Secure and Commit Funding*
   Immediately pursuing priority projects is vital in order to expand the greenway trail network and management programs. Elected officials, appointed committees, and private entities must come together to fund these projects. TSPLOST and SPLOST are key programs for implementation of greenway proposals and other funding sources will also be pursued.

5. *Begin working on the Tier 1 priority projects*
   Tier 1 trails are logical extensions of the existing and currently funded greenway trail system. Completing greenway trail that are already funded through SPLOST referendums will build momentum and focus attention on high priority areas.

ACTION STEPS – LONG TERM

The plan includes goals and actions that are complex in nature and will take years to complete. The table below provides a complete list of the Greenway Network Plan's Goals and Actions:

RESOURCE PROTECTION
The greenway is designed to provide a natural environment that enhances quality of life through the conservation and preservation of natural resources.

Goal: Improve water quality and restore natural hydrological processes in the North Oconee River, Middle Oconee River, and Oconee River and their tributaries

Actions

1. Improve monitoring and enforcement of water quality standards; work with state and federal agencies to address EPA's "impaired waters" in the basin
2. Continue efforts to improve the ACCUG sewerage system to avoid accidental discharges and leakage; Explore alternatives to gravity flow sewer lines in Sandy Creek and Shoal Creek watersheds and when repairing and improving all systems
3. Improve control of stormwater runoff from developed areas to reduce erosion and pollution and to increase ground water recharge
4. To the extent practical, remove man-made obstacles to flows on the greenway rivers and tributaries; Collaborate with dam operators and other water managers to create more ecologically sustainable flows in the basin
5. Improve monitoring and enforcement of the ACCUG Environmental Areas Ordinance; work with landowners to meet stream and river buffer requirements and restore eroded or damaged sites within the greenway corridor
6. Promote public awareness of water resource issues and programs and encourage volunteer efforts to protect and improve water ways; partner with non-government organizations in these efforts
7. Promote low-impact and safe river-based recreation; provide public launch sites and fishing and observation points along the rivers
8. Support and advocate for implementation of the ACCUG Sustainability Plan that is currently under development that relates to water quality

Goal: Conserve native species, habitats, and ecological processes on public land and encourage private land owners to conserve resources

Actions

1. Facilitate natural resource inventory and monitoring efforts in the greenway by working with the GDNR and academic and non-profit organizations; collaborate to inventory and map:

Georgia DNR High Priority Habitats	Unique species and communities
Georgia DNR High Priority Species	Other habitats and communities
Significant Natural Areas	ACCUG Legacy Forests

Table continues on next page...

2. Establish greenway "Exceptional Resource Areas" where appropriate

3. Apply lessons learned from the Sandy Creek Nature Center Managed Forest Project to other sites on the greenway

4. Improve and maintain natural corridor connections among high quality habitats within the greenway network

5. Prevent wildfires and, where appropriate, conduct prescribed burning to restore more natural fire regimes for native vegetation

6. Support programs and volunteer efforts to remove and control invasive plant and animal species within the greenway; promote public awareness of invasive issues

7. Control types and levels of recreation on public lands in the corridor to avoid unacceptable impacts to resources and to provide quality experiences for greenway users

8. Determine if additional properties or easements within the greenway are appropriate for acquisition through the ACCUG Land Conservation Program

9. Develop master plans and ecological stewardship plans for Tallassee Forest and Beech Haven. Partner with Georgia DNR to develop such plans for Rock and Shoals Outcrop Natural Area

Goal: Conserve cultural resources

Actions

1. Conduct reconnaissance archeological surveys prior to construction of trails and other greenway amenities to avoid or mitigate adverse impacts on cultural resources

2. Survey other greenway public lands for archeological and historic resources to establish a cultural resources data inventory, as funding is available

3. Review archeological resources and historic structures on greenway public lands to determine if additional sites are eligible for nomination to the National Register of Historic Places

4. Collaborate with Georgia DNR, UGA, and non-profit organizations in managing cultural resources in the greenway network

5. Collaborate with ACCUG Cultural Affairs Commission in identifying appropriate locations for public art works along the greenway network

6. Compile and archive written, visual, and oral histories of the greenway

EDUCATION

The greenway provides educational opportunities for citizens to participate in both self-directed and interpretative programs that contribute to an understanding of the natural environment, cultural heritage, and conservation efforts.

Goal: Provide opportunities for greenway users to learn and serve in volunteer capacities while experiencing our community's natural and cultural resources

Action

1. Assist ACCUG departments and community organizations by providing educational opportunities related to the value of greenspace, natural resources, clean water, recycling and waste management

Goal: Create comprehensive education programming that provides both self-directed and group-led learning opportunities in natural and cultural resources

Action

1. Encourage programming staff of ACCUG to integrate the greenway into their calendar of activities and educational programming

Goal: Enhance and create links between environmental and natural science education and educational institutions such as pre-schools, schools, technical schools, colleges, and the University of Georgia

Action

1. Provide a forum for creating links among environmental and cultural education efforts and support such efforts

Goal: Educate the community about the importance of environmental stewardship and sustainability

Actions

1. Collaborate with ACCUG to document the long history of greenway planning in the community, as well as the history of the ORGC

2. Continue to partner with ACCUG staff, ACCUG Boards and Commissions, and partner organizations, such as Sandy Creek Nature Center, to support their educational programming through sponsoring workshops, conferences, etc.

HEALTH AND WELLBEING

Healthy communities have safe and accessible places for their citizens to enjoy the outdoors and exercise. Designed to provide our citizens with health and wellbeing opportunities, the greenway connects people to the natural environment while also encouraging them to be physically active.

Goal: Promote the crucial role that nature plays in contributing to physical, spiritual, and mental health

Action

1. Partner with local civic organizations and healthcare providers, such as the Athens Area Chamber of Commerce, Athens Downtown Development Authority, Piedmont Athens Medical Center, St. Mary's Hospital, the Athens Nurses Clinic, Mercy Clinic and the Athens Neighborhood Health Centers to develop programs and resources on the greenway

Goal: Provide ways to empower people to take positive actions to support a healthy life

Action

1. Encourage programming staff of ACCUG to integrate the greenway into their calendar of activities for health and wellbeing

2. Work with K-12 and college educators to integrate the principles of outdoor recreation into their curriculums

RECREATION

In addition to its health benefits, outdoor recreation contributes to a community's social cohesion and quality of life. The greenway provides our community with the opportunity to experience and enjoy the outdoors in a natural environment.

Goal: Provide walking, jogging, hiking, cycling, paddling, fishing, and other outdoor recreational opportunities

Actions

1. Create both self-directed and group-led recreational opportunities such as geocaching, nature walks, full moon walks, 5K races, bicycle safety courses and paddle excursions
2. Increase public awareness about the greenway by promotion through maps, signage, and other paper and electronic media materials

Goal: Provide for observation, study, and enjoyment of the natural environment and cultural history

Actions

1. Provide opportunities for recreational and art programming

Goal: Provide an aesthetically pleasing, safe, and enjoyable environment

Actions

1. Greenway design will enhance community interaction and provide opportunities for gathering spaces
2. Create an ACCUG trail patrol team to maintain a safe environment
3. Encourage volunteer groups to assist greenway users and monitor trail conditions
4. Provide adequate restroom facilities along the greenway

Goal: Integrate accessibility while protecting natural resources so that all people have the opportunity to enjoy the outdoors

Actions

1. Determine risk management at greenway locations, prepare and install appropriate safety signage and warning systems
2. Partner with ACCUG Police Department, Fire Department and the Swift Water Rescue team to prepare a water trail safety procedure. Assure greenway facilities and programs comply with the Americans with Disabilities Act

TRANSPORTATION

Active transportation corridors that support walking and bicycling provide much-needed options to driving. The greenway provides corridors and facilities that promote the use of non-motorized transportation, thus alleviating traffic congestion and pollution, while giving our citizens more transportation options.

Goal: Provide for the design and construction of transportation facilities that connect existing and/or future modes of transportation such as trails, complete streets, sidewalk systems, transit systems, and water trails.

Actions

1. Where appropriate, develop trail surfaces in phases and allow for aggregate surface to be utilized first in order to expedite trail length
2. Build trails to facilitate convenient access between neighborhoods and nearby destinations
3. Foster collaboration among the Georgia Department of Transportation, ACC Leisure Services, ACC Transportation and Public Works, ACC Public Utilities, and the ORGC
4. Incorporate the connection, maintenance, and enhancement of greenspace in new development adjacent to the greenway
5. Pursue private partners in order to leverage funds to construct additional sections of the greenway trails and facilities
6. Evaluate and use alternative means of reserving lands required for green space
7. Apply for grants and other state and federal funding resources to leverage available funds

Goal: Educate the community about transportation choices, needs, and benefits

Action

1. Provide opportunities for programming about transportation choices

Goal: Provide connectivity to major community facilities and assets such as parks, neighborhoods, points of interest, schools, recreational facilities, and community centers using a phased development strategy to complete the greenway trail network

Actions

1. Connect Sandy Creek Park to the Georgia State Botanical Garden
2. Develop the Middle Oconee River Greenway
3. Develop the Normaltown Connector

PRIORITIZATION OF PHASING OF TRAIL PROJECTS

Priority Trails were discussed in Chapter 4 and should be completed according to the tiered system. The Priority Trails are as follows:

Trail Name	Priority
Cook's Trail	Tier 1
Oak/Oconee Bridge Underpass	Tier 1
Riverside Trail – MLK Parkway	Tier 1
Riverside Trail – North Oconee River Park	Tier 1
Tallassee Road Connector	Tier 1
Pulaski Creek Connector – South	Tier 2
Pulaski Creek Connector – North	Tier 2
Nature Center Loop – West	Tier 2
Nature Center Loop – East	Tier 2
Ben Burton to Beech Haven	Tier 3
Firefly Connector at 78/10 Interchange	Tier 3
Normaltown Connector – Ben Burton to Bishop	Tier 3
Normaltown Connector – Bishop to Boulevard	Tier 3
Normaltown Connector – Boulevard to North Oconee River Greenway	Tier 3

Projects that are currently funded through the SPLOST program should be prioritized and accelerated toward completion. Please see the ACCUG FY15 Report on Projects Funded with SPLOST Revenues in Appendix E.

TRAIL FACILITY COST ESTIMATES

The cost of greenway trail construction can fluctuate a great deal from year to year, but a general rule for estimating the cost of constructing the greenway trail is one million dollars per mile. For any

bridge that crosses a river, costs are estimated at approximately two million dollars. Bridges crossing smaller creeks may cost anywhere from $75,000 to $500,000, depending on the span and the engineering required. Boardwalks typically cost $600 per linear foot. All of these estimated costs include project design and engineering fees.

PROGRAM RECOMMENDATIONS

Special Events

The Greenway Network Plan has three goals – recreation, health and wellbeing, and education – that can be accomplished through public events on the greenway and programming related to it. Public events can serve several purposes:

1. Educate the public as to the existence of a greenway and share future goals and objectives for its development and operation
2. Encourage local residents to exercise and use alternative forms of transportation
3. Promote goodwill and community spirit through events, bringing people together
4. Generate revenue from greenway events that could help offset costs associated with facility development and operation

ACCUG should work with its local partners from both private and public sectors to sponsor, host, and/or operate events within the greenway environment.

Marketing and Promotion

Another way to provide community outreach related to the greenway is through marketing and promotion. The Greenway Network Coordinator will be tasked with producing information flyers, kiosk information, trail guides, pamphlets, etc., that promote and educate citizens about the greenway. All signage and kiosks in the greenway network will be kept up-to-date and relevant. The coordinator should also take advantage of social networking, print media, and radio to promote the greenway network and related programming and events.

Community Stewardship

The greenway network is too large and far-reaching to be maintained, managed, and cared for by staff alone. In order for the greenway to be successful, community buy-in is essential. The community must perceive the greenway network as a resource worth caring for and protecting for future generations. In short, the community must become stewards of the greenway.

The first step in creating a community stewardship program is engaging the community with the greenway. Keeping the greenway well-maintained and safe makes the greenway attractive and draws users. Programming efforts and events also attract users.

A well-run volunteer program is a cornerstone of retaining community involvement in the greenway. The Greenway Network Coordinator should be tasked with operating a comprehensive volunteer program that includes beautification, education and programming, habitat restoration, and trail maintenance activities. A volunteer program would also create opportunities for the community to be involved in the greenway, and doubles as a labor force to provide extra manpower for operations and maintenance.

FUNDING SUPPORT CONSIDERATIONS[1]

Identify Sources of Funding

Funding a greenway project is a complex effort, with resources coming from different organizations and supporters. Traditional fundraising methods include the establishment of annual membership campaigns and Buy-a-Foot (or Mile) Campaigns. Project merchandising can also be a continuous source of income, as can programs that offer trail tours for a small fee. Greenway projects can also solicit foundation and advocacy group donations and money from government programs at the earlier stages of construction. A number of grant programs and alternative funding sources are described below.

Georgia Recreational Trails Program

Funding for establishing greenways can be acquired in the form of grants from the Georgia Recreational Trails Program (RTP). The RTP is federally authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The United States Congress appropriates funding and the Federal Highway Administration manages the RTP, but it is administered at the state level. In Georgia, staff of the Department of Natural Resources, Division of Parks, Recreation and Historic Sites administers the program. The purpose of the RTP "is to provide and maintain recreational trails and trail-related facilities identified in, or that further a specific goal of, the Statewide Comprehensive Outdoor Recreation Plan (SCORP)."

RTP grants are generally awarded on an annual basis after the following process is complete:

1. Parties submit applications
2. RTP staff rank the applications
3. The Trails and Greenways Advisory Committee reviews them
4. The Director of the Division of Parks, Recreation and Historic Sites reviews them
5. The Federal Highway Administration approves them

There are several important restrictions to keep in mind when applying for an RTP grant. The program generally awards a minimum grant of $25,000, and a maximum award of $100,000. Additionally, the program is a reimbursement program, which requires the greenway organizers to pay 100% of the cost of an item or service before submitting a request for reimbursement for 80% of eligible costs. Donations of private funds and services at fair market value can be counted toward the remaining 20% match. If the project sponsor is a federal agency, the agency may provide its funding as the match; however, the sum of the grant plus the federal agency's funds is not permitted to exceed 95% of total cost. The partial reimbursement scheme is intended to ensure that state, local, and community sponsors are committed to the project. Additional guidelines for reimbursement procedures and restrictions are updated on an annual basis, and can be found within the program manual and application available for download from the Georgia DNR's website.

Any greenway project that receives grant funding from the RTP must comply with State and federal laws and executive orders.

Special Purpose Local Option Sales Tax (SPLOST)

SPLOST is an optional one percent county sales tax used to fund capital outlay projects proposed by the county government and participating qualified municipal governments. The tax is imposed when the county board of commissioners calls a local referendum which is then passed by the voters within that county. The tax is collected on items subject to the state sales and use tax within the county, including the sale of motor fuels. The SPLOST is also imposed on the sale of food and beverages, which are not subject to the state sales tax. Counties and municipalities may fund any capital project if it is owned or operated by a county, qualified municipality or a local authority.

1 This section is greatly referenced from 2010 The Georgia Greenway Guidebook: A Tool for Governments, Communities, and Individuals, a guidebook created by law students in the UGA Land Use Clinic. See Clay, Christine; Nelson, Kathleen; and Biszko, Katie, "The Georgia Greenway Guidebook: A Tool for Governments, Communities, and Individuals" (2010). Land Use Clinic. Paper 22. http://digitalcommons.law.uga.edu/landuse/22.

SPLOST funding is often applied to greenway project. For example, the SPLOST Greenway Fund in Chatham County provided a match for a state grant of $400,000 for the Coastal Georgia Greenway project, a 141-mile trail through six coastal Georgia counties.

Transportation Special Purpose Local Option Sales Tax (TSPLOST)

Georgia law allows local communities to use Transportation Special Purpose Local Option Sales Tax (TSPLOST) proceeds for transportation purposes if approved by voters in a referendum. General guidelines for projects are below, see Official Code of Georgia (O.C.G.A) 48-8-260(5) for more details.

- 'Transportation purposes' includes roads, bridges, public transit, rails, airports, buses, and all accompanying infrastructure and services necessary to provide access to these facilities.
- Roads, streets, sidewalks, bicycle paths, and bridge purposes such as:
  - acquisition of rights of way
  - construction
  - renovation and improvement, including resurfacing
  - relocation of utilities
  - improvement of surface-water drainage
  - patching, leveling, milling, widening, shoulder preparation, culvert repair, and other repairs necessary for their preservation
- Stormwater and drainage capital outlay projects, in conjunction with transportation projects

These transportation projects would otherwise be paid for with General Fund and property tax revenues. Governments cannot use TSPLOST funds to pay for operating expenses such as personnel salaries or ongoing expenses.

MillionMile Greenway Program

The MillionMile Greenway is an Atlanta-based nonprofit organization that offers Community Starter Grants, Community Marketing Grants, and Community Technical Grants to assist communities in identifying, building and conserving greenways. Community Starter Grants include a cash award as well as donated marketing and geospatial consulting services, for a combined total of $11,100.

The Community Marketing Grant includes a cash award as well as donated marketing consulting services, with a combined total of $7,100 of value. The Community Technical Grant includes donated geospatial consulting services, with a total of $4,000 of value.

The MillionMile Greenway program requires grant applicants to be part of a formally organized effort that is "committed to creating greenways that connect neighborhoods and larger communities to each other, to nearby natural areas, to recreation, and eventually to greenspace everywhere." After reviewing an application, the program will schedule an in-depth interview with each applicant.

Applicants must also obtain $1500 in matching funds from individuals, local community businesses or other community organizations in order to be eligible for the Community Starter Grant or the Community Marketing Grant.

Georgia Department of Transportation Enhancement (TE) Grants

The Georgia Department of Transportation administers a number of local funding programs to fund projects that ease pressure on roadways, minimize emissions, and enhance Georgia's roadsides. The "TE Program" awards federal funding grants to local and state public agencies and universities for "community-oriented projects that provide connectivity, beautify neighborhoods and highlight culture and heritage."

The TE Program was established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), and enhanced by the

Transportation Equity Act for the 21st Century (TEA-21) in 1998. The program was "established as a means to enrich the traveling experience of motorists, bicyclists, and pedestrians through enhancements to our transportation system." Projects receive federal funding in order to provide beautification and transportation improvements to "historical, natural, and scenic areas." The Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that each project receiving a grant must improve transportation and fall into one of 12 "eligible categories," several of which could be applied to greenway development. Eligible categories that could be particularly fitting for a greenway project include:

- Provision of facilities for pedestrians and bicycles;
- Acquisition of scenic easements and scenic or historic sites including historic battle fields;
- Landscaping and other scenic beautification; and,
- Preservation of abandoned railway corridors including the conversion and use for pedestrian or bicycle trails.

Alliance for Biking and Walking – Advocacy Advance Grants

For greenway projects that incorporate walking and biking trails, Advocacy Advance Grants from the Alliance for Biking and Walking are another great resource. The Alliance is an advocacy group dedicated to "improving and increasing biking and walking in local communities, states, and provinces." Advocacy Advance Grants are awarded to state and local bicycle and pedestrian advocacy organizations to "develop, transform, and provide innovative strategies in their communities."

The Alliance for Biking & Walking provided approximately $225,000 in grants to member organizations in 2010. The grants are for one year, and are awarded twice a year. Through a partnership with the League of American Bicyclists, the Alliance also provides technical assistance, coaching, and training to supplement the grants.

Alliance grants come in two types: Startup/ Capacity Building Grants and Innovation Grants. Startup Grants award $5,000 to $30,000 of matching funds to leverage private and public investment and launch campaigns for biking and walking projects. Startup Grants are for organizational development, staff hiring, and organization needs. Innovation Grants help existing organizations increase biking and walking and improve safety.

The Conservation Alliance

The Conservation Alliance is an organization dedicated to protecting "threatened wild places throughout North America for their habitat and recreational values." The Conservation Alliance is a group of outdoor industry companies that makes grants to registered 501(c)(3) organizations. Grants are awarded to grassroots citizen projects, rather than general education or government-sponsored efforts. Before applying for funding, an organization must first be nominated by a Conservation Alliance member company. As of right now, there are no Georgia based members.

Develop Government Partnerships

After trail organizers have developed a vision statement and identified potential resources, developing partnerships in both the public and private sectors that can help get the project underway will be necessary. Some governmental agencies have a regulatory function and will need to be consulted, while other agencies may be involved only peripherally. Some may provide support and funding. In most cases, trail organizers will meet with local officials at the municipal and county levels first and involve state and federal agencies as the project progresses. When approaching local governments, representatives of the greenway organization should be ready to explain how greenways have been an asset to communities that have embraced them. A good strategy may be to present a successful greenway and show the benefits of the greenway to that community.

Evaluation and Monitoring

ACCUG, in collaboration with the ORGC, should work with local advocacy organizations to establish performance measures to benchmark progress towards achieving the goals of this plan. These measures should be included in future plan updates.

Baseline data should be collected as soon as the performance measures are established. When establishing performance measures, ACCUG should consider utilizing data that can be collected cost-effectively and be reported at regular intervals. Data collected over time will increase the quality of the information.

GREENWAY ACQUISITION STRATEGIES

A number of methods should be pursued for the overall implementation of the greenway and trail network. Because the majority of greenways and trails exist in an off-road environment, the acquisition of land or easements becomes a critical part of the implementation process. The recommended alignment of greenways in this plan follows publicly-owned land where possible, but in most cases, an acquisition strategy will have to be implemented in areas of privately-owned land.

Working with Landowners

The most important aspect of the land acquisition process is fostering a successful relationship with landowners and the community as a whole. The key to this relationship is communicating effectively, and working with the landowners. Open communication between trail proponents and landowners about the trail building plan, potential effects, and prospective benefits is essential. As discussed above, a mission statement or letter, informing the community of the project's goals, should be provided to landowners. This letter should be followed up by individual contact or meetings with landowners to provide information. Being clear and straightforward with this information and being available to answer questions and concerns from the beginning are key to building a successful relationship with the community. For landowners to feel comfortable and willing to participate in a trail building project, they should be informed about the legal effects of any easement or other property interest taken in the corridor. Additionally, property owners will likely have concerns about future property values, trespass and damage to their property, crime, landowner liability, and privacy, which should also be discussed.

For example, many landowners may initially have concerns that greenways attract crime, vandalism, and other disturbances. In fact, there is very little evidence to support the fear that greenways cause crime or will produce disturbances affecting private landowners. Another fear is that the greenway will negatively affect property values. In fact, greenways tend to positively affect property

values, making properties nearby easier to market.

To adequately address landowner anxiety and build a positive foundation for the trail building project, these concerns should be addressed early in the process. Some helpful information dissemination tools include providing a booklet and website explaining owner options and incentives. The more informed and aware the community is of the trail building project and its goals, the more support the project is likely to garner.

Once trail proponents have met individually with private landowners an open community meeting is a useful tool for introducing the greenway to the entire community, as well as to measure public response and rally support. At that meeting maps and vision documents representing the proposed trail maybe introduced to the community.

Tax Incentives for Landowners

In Georgia, landowners may donate the portion of their property that forms a greenway corridor to the municipality, relieving them of their tax obligations, and qualifying them for tax deductions. The landowner could also qualify for a Conservation Use Assessment. Should the real property be devoted to a bona fide conservation use, it will be assessed at forty percent of its current value, reducing the property tax burden of to the landowner.

Alternatively, landowners could negotiate a bargain sale with the municipality for the portion of the corridor running through their land. A bargain sale is the sale of property at less than its fair market value (FMV). The landowner would be eligible for tax benefits for the difference between the FMV and the bargain price sale.

Finally, landowners could place a conservation easement on the corridor preserving conservation values and the Right-of-Way (ROW) for the greenway. A conservation easement is a legally binding agreement in which the landowner agrees to permanent restrictions on the way the property is used. Unlike some temporary conservation covenants, conservation easements never need renewal. A conservation easement may provide the landowner with federal and state tax benefits, as well as property tax revaluation. Landowners can claim the value of their donation on their federal tax returns. Georgia state tax credits must be certified by DNR, which requires submittal of a completed application form with the recorded easement along with evidence of clear title. If approved the landowner may attach the Certification Letter to their Georgia state tax return. Additionally, landowners would be entitled to a property tax revaluation after completing a conservation easement.

Rails/Trails

The Rails/Trails system was enacted on March 28, 1983 as part of the National Trails System Act ("NTS Act") Amendments of 1983. The purpose of the NTS Act is "to provide for the ever-increasing outdoor recreation needs of an expanding population and . . . to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the nation." The NTS Act authorizes the use of discontinued railroad ROW as recreational trails until such a time when railroad transportation is reactivated.

If a local government or private organization agrees to maintain the ROW for possible future railroad use, including assuming liability and paying taxes, it may use the corridor on an interim basis as a trail. The NTS Act expressly provides that the interim use shall not be treated as an abandonment of the use of the ROW for railroad purposes. Rather, when a railroad ROW is converted to a public trail a new easement is created. Therefore, the NTS Act retains the property as a possible future rail line, i.e. "railbanking," while allowing it to be used in the interim as a recreational trail. To date, every court that has reviewed the NTS Act has considered it to be constitutional and has found that the preemption of state law reversionary rights are a valid exercise of the Congress' power under the commerce clause, and not an impermissible impairment of contracts.

In order for a railroad to discontinue service over an out-of-service track, the trail proponent must

file for one of several forms of "abandonment" proceedings provided by the Surface Transportation Board (STB). The STB regulates the construction, operation, and abandonment of most railroad lines in the United States. The STB is also responsible for railroad applications for abandonment.

Great opportunity exists to demonstrate our community's commitment to the greenway's overall goals. While greenway trail development has been slow, it has been so because of limited funding. Funding sources outside of SPLOST and federal grants must be explored for this reason. The plan's ultimate goal is to support ACCUG's continuing commitment to develop and maintain the greenway. To do so, we must pursue new partnerships, meaningfully engage with stakeholders, consider creative funding sources, and work together to fully implement this plan for both current users and generations to come.

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Chapter 6: Design Guidelines

Trail design requires taking into account a variety of factors, including safety, connectivity, and environmental sensitivity. The design guidelines included in this chapter establish a range of criteria for the different trail types found on and planned for the greenway. Trail design criteria vary according to the expected volume of users, type of users, type of trail, and location of the trail. In some instances, for example, trail design should accommodate a wide range of user activities – from walking to bicycling, pushing a baby stroller or a wheelchair. In other cases, foot trails designed exclusively for hiking may be the most appropriate design choice. Trail design may also reflect areas representing varying degrees of physical challenge. For these reasons, the guidelines contained in this chapter have been developed to provide a standardized guide for greenway development while allowing for flexibility and diversity of trail use.

In addition to the recommended design standards described in the following section, this plan also supports ACCUG efforts to establish and review design guidelines on a regular basis. Much of this section references standards developed by ACCUG that are not exclusive to the greenway such as outdoor furnishings, signage, and landscape materials. This plan recognizes the importance of incorporating ACCUG standards in this way in order to streamline maintenance and minimize operational costs.

TRAILHEADS

A trailhead is where a trail begins. Amenities such as restrooms, informational guides, and parking associated with a trailhead often depends upon where a trail begins. The following designates the different kinds of trailheads that should be associated with the greenway.

Table 10: Trailhead Types

Park Trailhead	A trailhead that is located at a park will provide parking spaces, restrooms, structures, picnicking, and areas for play.
Major Trailhead	A major trailhead provides parking spaces, restrooms, and a picnic area.
Minor Trailhead	A minor trailhead provides parking spaces.
Neighborhood Trailhead	A neighborhood trailhead will have two granite columns to indicate the start of the trail.

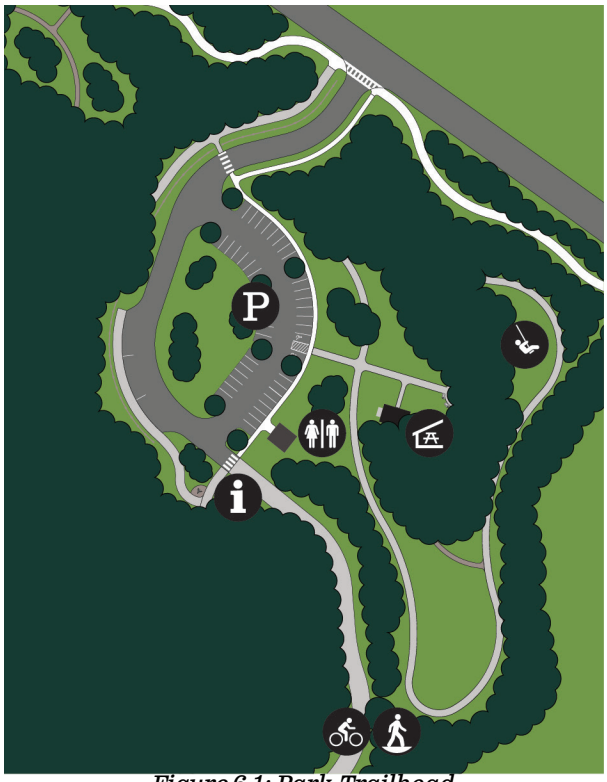


Figure 6.1: Park Trailhead

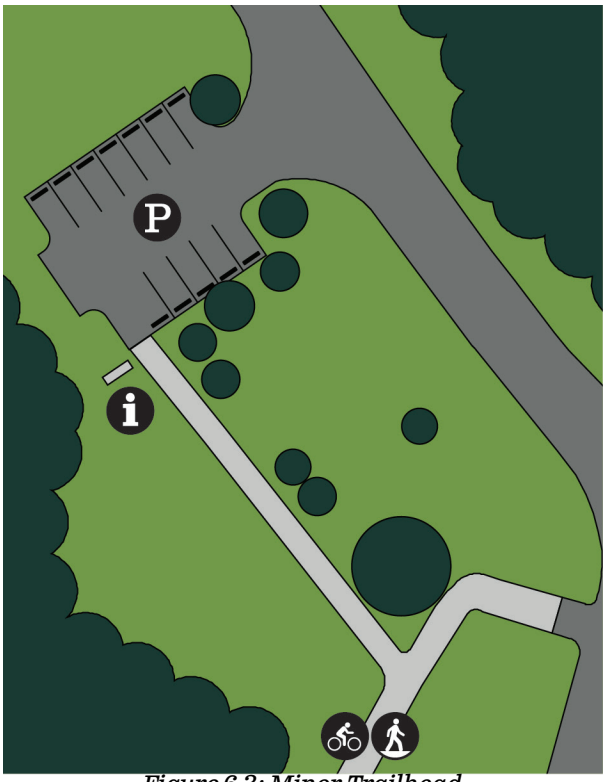


Figure 6.3: Minor Trailhead

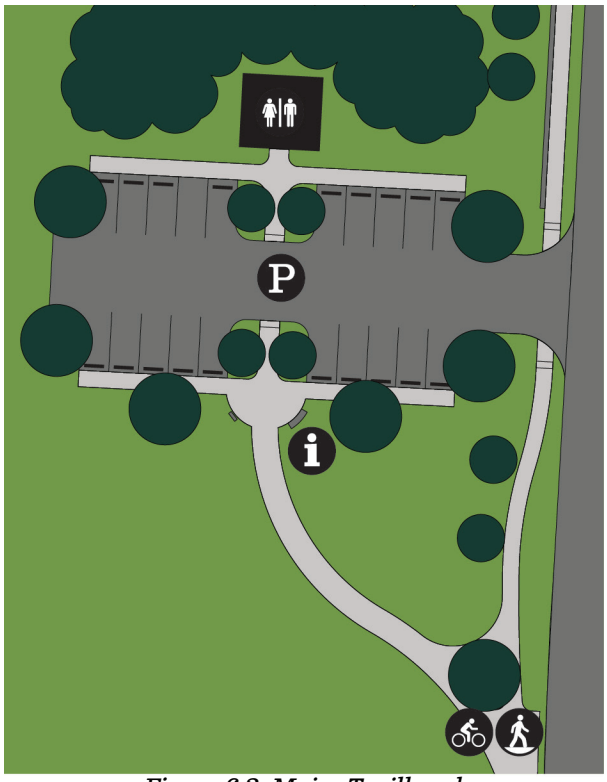


Figure 6.2: Major Trailhead

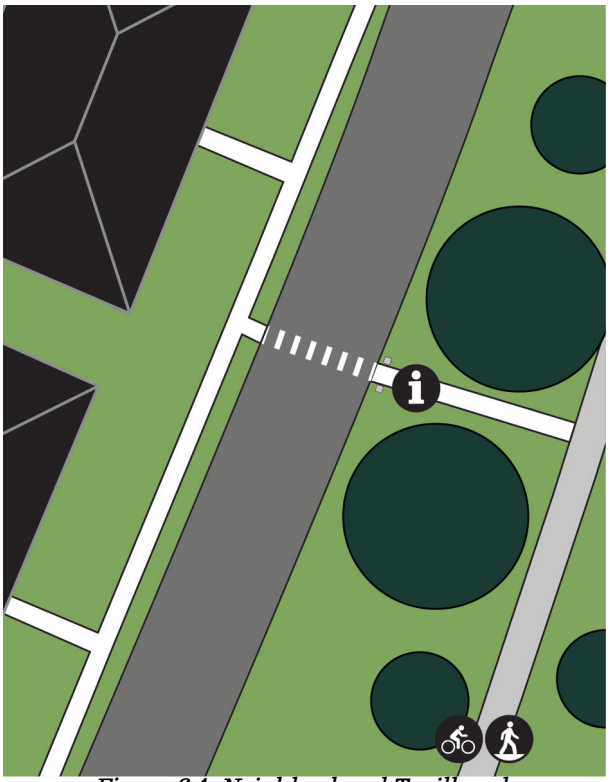


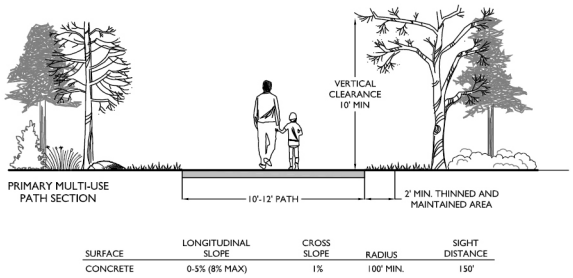
Figure 6.4: Neighborhood Trailhead

Paved Walking Trail Bike Trail Restrooms Parking Information Picnic Shelter Playground

TRAIL AND TRAIL TYPES

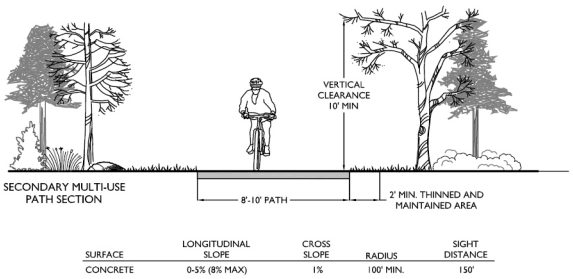
Increasing public access to an unbroken network of trails is a primary goal of this plan, with the ultimate goal of developing a comprehensive greenway network for our community. Trail design and construction should not only connect trail segments, but it should also create connectivity to major community facilities and assets such as parks, neighborhoods, points of interest, and activity centers. The trail system should also provide viable alternatives to motorized forms of transportation as well as provide recreational opportunities. As noted above, trail design choices may vary depending on location, user needs, and feasibility. The plan recommends several trail types, serving a variety of users, and allowing for differing levels of activity. On a broader level, as noted in Chapter 4, three kinds of trails thread their way through the greenway: greenway trails, water trails, and rails/trails. The designations below refer to the types of trails that may be found within these broader descriptions.

Multi-Use Trail	A trail that permits more than one user group at a time (pedestrians such as joggers, hikers, or dog walkers, and non-motorized vehicles, such as cyclists, mountain bicyclists, and scooters).
Street-Based Connection	A shared-use trail that is either an expanded sidewalk or a separate trail that runs along the right-of-way.
Rail-to-Trail	A multi-use public trail created on or along an inactive rail corridor.
Rail-with-Trail	A multi-use trail that is located directly adjacent or near an active railroad or fixed route transit corridor.
Foot-trail	A trail over which the public has a right-of-way on foot only. Wheelchairs are also permitted, although this may not be practical due to surface or slope.



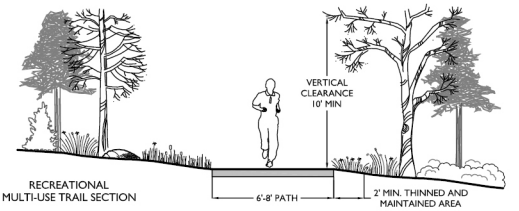
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.5: Multi-Use – Primary



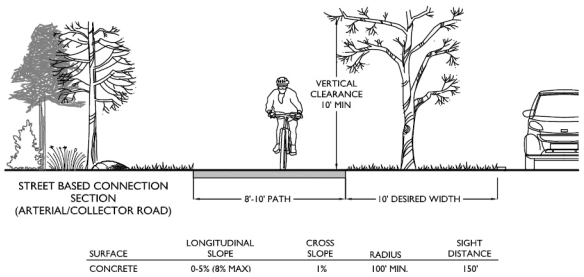
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.6: Multi-Use – Secondary



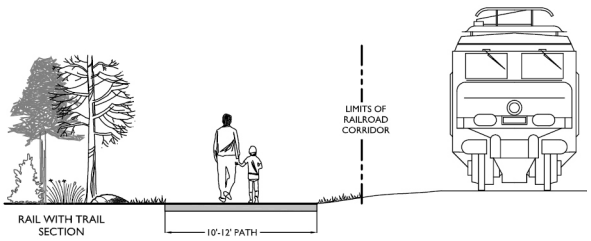
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE, ASPHALT, RESIN.	0-5% MAX	2%	10' MIN.	50'-100'

Figure 6.7: Multi-Use – Recreational



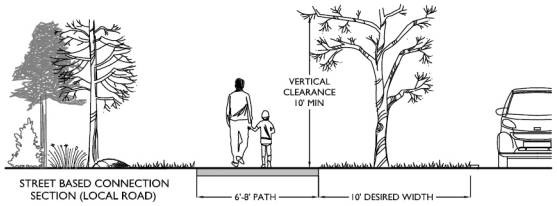
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.8: Street Based Connection – Arterial/Collector



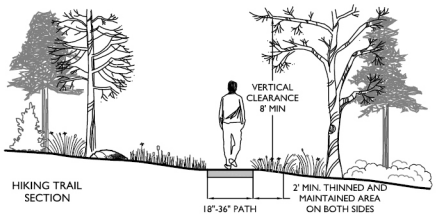
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.11: Rail with Trail



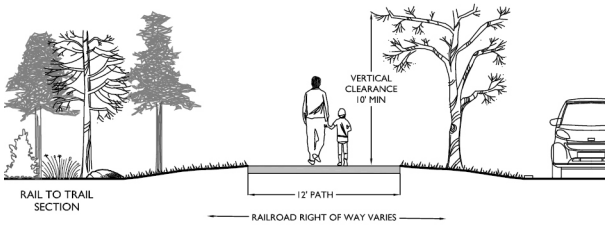
SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.9: Street Based Connection – Local



SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
NATURAL SURFACE	10% AVG.	2-5%	20' MIN	N/A

Figure 6.12: Foot Trail



SURFACE	LONGITUDINAL SLOPE	CROSS SLOPE	RADIUS	SIGHT DISTANCE
CONCRETE	0-5% (8% MAX)	1%	100' MIN.	150'

Figure 6.10: Rail to Trail

SURFACE TYPES

Several surface options are available for trail use. Factors such as terrain, proximity to the 100-year floodplain, climate, expected usage, cost, availability, and maintenance determine trail surface choices. For example, aggregate materials are low cost, but require more ongoing maintenance, while hard surface materials have higher upfront costs, with lower maintenance costs over the lifespan of the trail.

Concrete

Concrete trails are impervious surfaces that last longer than other surface types, require less maintenance, and have less erodibility than other surfaces. Connector trails and street-based trails are typically 8 to 10 feet wide while primary corridors are typically 10 to 12 feet.

Pervious Concrete

Pervious concrete trails allow water to pass through the surface and absorb into the earth. They have less erodibility than other pervious surfaces, but require more maintenance than impervious concrete trails. An equal thickness of pervious concrete is not as strong as the same thickness of impervious concrete; therefore, pervious concrete must be thicker to achieve the same strength as impervious concrete. Additionally, the techniques required to pour pervious concrete differ from those used for impervious concrete, and this limits the pool of contractors experienced in this work.

Pervious paving requires monthly visual inspections and regular maintenance to ensure that it is free of debris, continues to drain during storms, and is free of sediment. The use of pervious paving in the 100-year floodplain is impractical because sedimentation during flood events eliminates any permeability and can damage the trail unless it is intensively maintained. Pervious concrete also may be used in parking stalls to reduce the amount of impervious surface created by additional parking, although the requirements and challenges noted above also apply to this application. Additionally, because pervious pavement has not been extensively used in this region, its long-term life-cycle costs (30-50 year) are not fully known.

Roller-Compacted Concrete

Roller-Compacted Concrete (RCC) is an economical, fast construction candidate for many pavement applications, including multiuse trails. It is made of the same ingredients as typical concrete but has different mixture proportions. RCC has a higher percentage of fine aggregates, which allows for tight packing and consolidation. It is also mixed to be a drier consistency. This dry consistency makes it stiff enough to be compacted by vibratory rollers, while still being wet enough to permit adequate mixing and distribution. Therefore, RCC is constructed without joins, forms, finishing, dowels, or steel reinforcing. This makes RCC simple, fast, and economical. Wet sawn expansion joints should be cut every 20' to minimize cracking.

Boardwalk

Boardwalks should be installed in ecologically sensitive locations, areas with unstable soils, or areas where environmental factors make other construction methods unfeasible. These areas can include soft (alluvial) soils, wetlands, areas with rare plants, granite outcrops, and areas with extensive or excessive terrain changes where accessibility has been determined to be a critical factor. Generally, boardwalks should be used minimally due to their ongoing life-cycle cost and the impact of maintenance closures on trail use.

For paved trails, boardwalks should match the width of the trail that they connect to, and for natural surface trails, they should be 4 to 6 feet wide. Trails with multiple access points may have boardwalks as narrow as 4 feet, but where access is limited for maintenance and emergency response purposes, boardwalks and bridges must be at least six feet wide.

Aggregate

Aggregate trails consist of pervious surfaces that are inexpensive to install and wear better than natural surfacing under heavy trail use, but can have higher maintenance costs. One major downside of aggregate surfacing is the likelihood of erosion. For this reason, the slope (grade) of the trail should be considered carefully to promote tread stability. When aggregate is used as a trail surface, longitudinal slopes should be less than 5%. Cross slopes should be less than 2%.[1] Surface water runoff can be managed by using swales, drainage basins, and culverts, and should be sized accurately to ensure reduced cross flow.

Natural Surface[2]

Natural trail surfacing is the least expensive and most environmentally friendly trail solution, but can have issues of erosion and require extensive and ongoing maintenance, especially if use by cyclists or other non-foot traffic is planned. Because the trail is built with native, on-site materials, there is very little material cost. The top layer of organic material is removed from the trail tread and dispersed. A backslope is then dug to facilitate "sheet flow" – or surface water diversion – across the tread surface and off the trail when it rains. Then, the tread is dug, outsloped, and compacted.[3] Drainage features such as rolling grade dips are constructed to further drain water off the tread. When built sustainably, natural surface trails are more resistant to erosion and heavy use.

1 According to the National Park Service, Cross slope is a consideration when constructing trail across the face of a hill (sidehill trail). Some degree of cross slope, or out slope, is desirable so that water moving down the face of the hill continues across the trail. A cupped trail or a trail that slopes back into the hill collects water and is undesirable. However, the cross slope should not exceed the percentages shown in Figure 1. Cross slopes greater than those shown make walking on the trail uncomfortable and serve as an impediment to mobility-impaired individuals. A 5% cross slope on a 24-inch tread amounts to a drop of 1.2 inches. See https://www.nps.gov/noco/learn/management/upload/NCT_CH4.pdf.

2 (Kennesaw Mountain 24 Gun Trail: The hike, 2009)

3 An "outsloped tread is one that is lower on the outside or downhill side of the trail than it is on the inside or bankside. Outsloping lets water sheet across the trail naturally. The tread should be outsloped at least 5 percent. Loss of outslope is the first maintenance problem that develops on all trails." See http://www.fs.fed.us/t-d/pubs/htmlpubs/htm07232806/index.htm.

Pavers

Pavers are either impervious or pervious surfacing material that offer increased aesthetic value. Pavers, however, have high installation and maintenance costs. Pavers can be unseated by earth movement as well as plant growth. On the other hand, pavers can also provide a removable surface in locations where accessing a utility or other buried item may be necessary. This surfacing should be limited to areas of greenway that are either adjacent to commercial development, creating a riverfront aesthetic, or near areas of high traffic in urbanized areas.

Asphalt[4]

Asphalt trails are impervious surfaces constructed of aggregate fused with a waste product from the oil refining process. Asphalt surfaces have a lower upfront installation costs than concrete, but their anticipated lifespan is approximately 33% lower than concrete. Asphalt requires more maintenance than concrete, but less maintenance than aggregate surfaces. Asphalt works well in areas with higher running traffic due to the softer impact on runners' legs. Asphalt trails also have less erodibility than aggregate and natural surface trails.

In terms of increasing the lifespan of asphalt trails, proper drainage is one of the most relevant factors. Efficient removal of excess water from the trail is imperative because standing water can cause trail closures, maintenance issues, and heaving during the freeze/thaw cycle in winter months. Surface water runoff is managed on asphalt trails by properly outsloping the trail and using swales, drainage basins, and culverts. Because of the impact of freeze/thaw cycles and subsequent necessity for good drainage, use of asphalt within the 100-year floodplain is not recommended.

4 ("Biking: Henry Hudson Trail – Marlboro to Freehold", 2012)

CROSSINGS

Crossings are often one of the most important elements of trail design. In most cases they are trail meeting points involving a wide variety of users. Both water and street crossings occur throughout the greenway – and both present challenges for planners. Bridges, for example, may increase access for users but are expensive. In the meantime, some users may desire a more naturalistic experience. Street crossings inevitably result in a junction involving trail users and motorized traffic. Safety for the wide variety of trail users needing to utilize the crossing is a primary concern. This section discusses water and street crossings.

Water Crossings

River and Stream[5]

Single-span bridges should serve as crossings for rivers or streams more than 10 feet wide. Such bridges ordinarily require the construction of cribs or fills on each bank, two to three solid timber or laminated support beams, a board deck, etc. When a river or stream is too wide for a single-span bridge, crossing design becomes more complicated – a multi-span bridge with at least one support structure in the middle of the stream, or a suspension bridge, may be necessary. Bridge design requires that each location is carefully evaluated. Bridge clearance must provide for passage of high water, ice, and debris. A location that is narrow and has a high bank or ledge to anchor the ends of the bridge is best. A major investment, bridges often require engineering consultation, especially those greater than 25 feet in length or greater than 5 feet in height (above the water level or the bottom of the dry ravine).

5 ("Gouverneur Riverwalk Pedestrian Bridge", n.d.)

Elevated Boardwalk

Elevated boardwalks are used in locations where the trail crosses a cattail area, deep marsh, or other water body that has little fluctuation in its level and flow.

Street Crossings

Trails crossing public streets require careful consideration in order to protect public safety and seperate users from busy traffic. The following types of design choices are recommended for the greenway's street crossings.

Pedestrian Bridge[6]

Pedestrian bridges work best when the topography allows for a structure without ramps, such as an overpass over a sunken highway.

Underpasses[7]

Underpasses allow for the uninterrupted flow of bicycle and pedestrian movement separate from vehicle traffic. Underpasses work best when designed to feel open and accessible. Overpasses and underpasses must accommodate all persons,

6 ("The pedestrian/bike bridge at Chatsworth Street over I-94", 2014)

7 ("Biking the Cape Cod Rail Trail!", 2012)

as required by the Americans with Disabilities Act. Extensive ramping accommodates wheelchairs and bicyclists, but results in long crossing distances and steep slopes that discourage use.

Signalized Intersection[8]

Traffic signals are an important way to make intersections safer. For both three and four legged signalized intersections, markings should be installed on all approaches as shown with the exception of intersections with dual left turns. In these cases, if possible, the marked crosswalk should be eliminated from the main street in the pathway of the left turns. All new signalized crosswalk locations should have Light Emitting Diode (LED) pedestrian signal indications and pedestrian activation buttons. Countdown pedestrian signal indications should be installed at intersections that experience at least 20 pedestrians per hour for eight hours of the average day or at locations where the crossing distance is greater than 65 feet. When a construction activity requires any crosswalk to be reinstalled, all crosswalk markings should be remarked according to the current marking standard at the time of the reinstallation.

Midblock Crossing

Midblock crosswalks are often used to provide safe crossings to places not located at signalized intersections. For multi-lane roads with four or more travel lanes, these crosswalk locations should have physical improvements such as a center raised median to allow pedestrians to stand and wait for gaps in traffic before crossing the second half of the street. On multi-lane roads with three or fewer lanes, pedestrian crossing signs and additional yield and markings, as necessary, should be mounted only on the side of the road adjacent to the marked crosswalk.

Marked midblock crosswalks should not be installed at a midblock location if it is within 300 feet of a signalized location. Midblock roadway crosswalk locations should be posted with fluorescent yellow-green pedestrian crossing signs. Fluorescent yellow-green advance pedestrian crossing signs should be installed approximately 200 feet prior to the mid-block crosswalk on roads with rural cross sections.

There should be a minimum of 10 pedestrian crossings observed during the morning or evening peak hour, or during the peak hour of the adjacent land use to warrant a marked crosswalk. All observed crossings in the general area of the proposed crosswalk will satisfy this condition. Overuse of marked crosswalks without significant pedestrian use breed contempt of this pavement marking. ACCUG Traffic Engineering should be responsible for conducting the morning and evening observation studies to determine if the pedestrian volume warrant is satisfied.

8 ("Example of a HAWK treatment in Tucson, AZ.", 2010)

Greenway Trail Crossing

Greenway crosswalks are used to provide safe crossings across Greenway trails. These crossings are typically foot trails or mountain bike trails. They provide a visual cue for runners, walkers, and cyclists, to make sure they are alerted to cross traffic. These crosswalk locations should have thermoplastic paint and signage that depicts crossing information.

ARCHITECTURAL FEATURES[9]

The greenway's architecture and landscape materials reflect the vernacular character of historic Athens architecture through the use of clapboard and board and batten siding, and fieldstone rustication at the base of structures and columns. This fieldstone motif also is used in piers and retaining walls throughout the greenway.

9 ("Commercial Standing Seam Metal Roofs", 2015; "Tru-Wood Beveled Lap Siding", n.d.; "Vinyl Siding", n.d.)

SITE AMENITIES

Greenway Network Plan

Athens, Georgia

November 2016

Figure 6.13: Site Amenities

Prepared by
ACC Leisure Services
Office of Park Planning

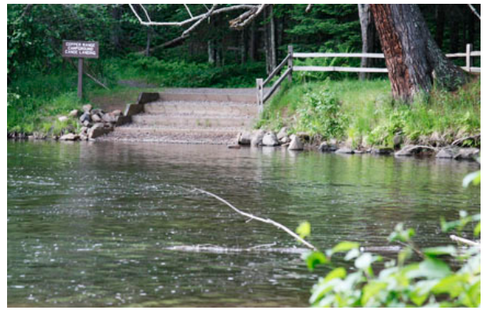
for Athens -
Clarke County
Leisure Services

BOLLARD | BIKE RACK | TRASH & RECYCLING RECEPTACLE | RESTROOM FACILITY | WATER FOUNTAIN | DOG WASTE RECEPTACLE | BENCHES | PICNIC PAVILION | PICNIC TABLE | GRILL

AMENITIES

ACCUG maintains a library of design standards and installation details for structures such as restrooms and picnic pavilions and for furnishings such as waste receptacles, benches and picnic tables, grills, bollards, and bike racks. Materials typically used in these products include black powder coated steel, wood, and granite. If amenities are necessary for the greenway that are not covered by the department's standards, long-lasting products that utilize the materials above should be chosen.

RIVER ACCESS



When designing a river access point, the goal should be to make it accessible, suited to the surrounding environment, cost-effective, durable, and environmentally friendly. Making river access accessible to all paddlers requires considering ADA Accessibility Guidelines on height, width, length, slope, and support. A design suited to the environment provides safe access and a firm surface – one that can withstand different flow levels and water depths, and is a design that is not easily damaged and will not, itself, cause damage. A cost-effective and durable design uses construction only when necessary, chooses sites with minimal exposure to winds and currents, attempts to re-use or recycle existing boat docks, and constructs a river access point that can serve multiple purposes, such as mitigating erosion or restoring wetland vegetation. Low-impact design is key to making a river access point environmentally friendly. For this reason, during the planning process, a local natural resource specialist should be consulted. The design should merge the needs of natural functions with the recreational uses of the river access point.

SIGNAGE

Signage for the greenway, including entry signs, wayfinding signs, and rules postings should follow the standards developed by ACCUG. Uniform signs covered by these standards include wayfinding signs throughout the greenway and rules signs posted at particular features. These sign types are modeled on the National Park Service's Visitor Information Sign System (VIS).

Pedestrian and vehicular entry signs should reflect some flexibility in their design. While the text panels of the signs are consistent across ACCUG for leisure programming, sign foundation materials should be adapted to suit their context. Stonework details for retaining walls and architectural veneers illustrated elsewhere in this plan call for a fieldstone-style of masonry with an overhanging cap. The park's recommended pedestrian entry piers and vehicular signs also include this detail.

Kiosks

Clusters of wayside panels, rules and safety information, bulletin cases, brochure boxes, trash cans, and recycling bins are often grouped in a kiosk arrangement with or without a roof. Some kiosks have lighting to make them useful after dark.

- Bulletin Case
- Major Informational
- Minor Informational

Interpretive Signs

Interpretive signs are communication tools that are often designed to change behavior, educate, or evoke an emotion in the reader. "Lectern Series" direct a visitor's attention to a specific landscape feature within a view. "Upright Series" provide orientation, safety information, and site significance.

- Lectern Series
- Upright Series

Trailhead Identification

Trailhead types vary from large to small, but all are indentified in some manner. Existing trailheads have large monuments to alert vehicles that a greenway trailhead is located nearby. New major traiheads will be constructed with the new monumnent standard for our parks, while neighborhood connentions will have one or two columns delineating where the trail starts.

- Stone Monuments *Phase Out*
- New Trailhead Monuments
- Neighborhood Connector Monuments

Wayfinding

Wayfinding ensures that visitors can navigate to their destination easily. Locating present location, delineating routes, and communicative signage contributes to successful wayfinding design.

- Vehicular
- Community
- Confidence Marker
- Foot Path Wayfinding
- Blaze
- In-ground Medallion (Street Based)
- Mile Marker
- Water Trail
    - Mile Marker
    - Warning
    - Location signage at access points, stop overs, and bridges.

Traffic Control Devices

Traffic control devices are markers, signs and signal devices used to inform, guide and control traffic, including pedestrians, motor vehicle drivers and bicyclists. These devices are usually placed adjacent, over or along the highways, roads, traffic facilities and other public areas that require traffic control.

- Markings
- Centerline
- Crosswalks
- Intersection
- Mid-Block
- Trail Crossing
- Regulatory Signs
- MUTCD Signs

SIGN SYSTEM

Greenway Network Plan

Athens, Georgia

November 2016

Figure 6.14: Sign System

Prepared by
ACC Leisure Services
Office of Park Planning

for Athens -
Clarke County
Leisure Services

NEW TRAILHEAD MONUMENT | MAJOR INFORMATIONAL | MINOR INFORMATIONAL | VEHICULAR | COMMUNITY | REGULATORY | LECTURN INTERPRETIVE | FOOT PATH WAYFINDING | MILE MARKER

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Chapter 7: Operations and Maintenance

OVERVIEW

A comprehensive and practical management plan is essential to the greenway's longevity. A good management plan begins with sound design standards and sustainable components, which are then stewarded through proper operations and maintenance. Operations and maintenance refers to specific day-to-day tasks and programs performed to ensure resources and facilities are kept in good, usable condition. All entities responsible for operating and maintaining the greenway network, including ACCUG departments, elected officials, citizens, and stakeholders, should embrace and act in accordance with the management plan as discussed in this chapter.

GUIDING PRINCIPLES FOR EFFECTIVE OPERATIONS AND MAINTENANCE

The greenway's importance in the community is multi-faceted. The greenway protects the natural environment, waterways, and exceptional resource areas. Greenway trails serve as recreational and educational opportunities, allowing citizens to exercise and experience nature. The greenway also serves as a transportation corridor, providing non-motorized connectivity throughout the county. A management plan must effectively address all of the greenway's uses and purposes. The following guiding principles will help assure the preservation of a dynamic greenway network:

- Proper maintenance begins with sound design standards
- Protect and conserve the community's resources
- Promote and maintain a quality outdoor recreation and transportation experience
- Develop a management plan that is reviewed and updated regularly
- Maintain an effective, responsive public feedback system and promote public participation
- Be a good neighbor to adjacent properties
- Operate a cost effective program with sustainable funding sources

RESOURCE STEWARDSHIP AND MANAGEMENT

A well-managed greenway network is critical to the implementation and success of the Greenway Network Plan. This includes both the management of facilities – trails, parks, and amenities – as well as the management of cultural and environmental resources. This chapter aims to address resource stewardship by framing the greenway network itself as a valuable community resource to be operating, maintained, and cared for by citizens and staff alike. Specific stewardship efforts that are addressed in this chapter include community programming, user education, volunteerism, public feedback, and active citizen patrols and task forces.

OPERATIONS

The following sections describe the greenway's operations.

Routine Operations

Routine operations refer to the daily activities required to oversee the greenway network. Routine operations include tasks such as routine inspections, record keeping, risk management, and custodial services.

Inspections

Operating the greenway network as a safe community resource requires routine and meaningful inspections. Inspections must occur on a regularly scheduled basis, as determined by trail use, preexisting safety and maintenance issues, and level of development. Inspections should cover all greenway facilities and amenities including trails, water trails, parks, open spaces, trailheads, parking lots, river accesses, buildings, pavilions, signage, benches, bridges, and boardwalks.

Two types of inspections are needed: informal inspections performed on a routine basis, and formal inspections performed on an annual or biannual basis. A chart at the end of this section includes specific inspection guidelines. Inspection frequency should fluctuate based on use patterns and safety and maintenance issues. Inspections should cover the following items:

- Condition assessments of facilities and amenities including but not limited to: benches, bike racks, bottle fillers, bridges and boardwalks, pavilions, kiosks, parking lots, boat launches, pet waste stations, picnic tables, playgrounds, restrooms, signs, and trash receptacles
- Condition assessments of all trails
- Landscape hazards such as dead trees, limbs, erosion, flooding, sinkholes and other environmental issues
- Inspection of river levels
- Observed use patterns of facilities and trails
- Inspections for illicit activities such as camping, dumping, drug and alcohol use, smoking, trespassing, and vandalism
- Any other maintenance or safety issue

Record Keeping and Reporting

Proper record keeping and reporting makes inspections meaningful and facilitates timely response to safety and maintenance issues. All inspections should be documented using proper forms, processed by staff in a timely manner, and filed in a central location (i.e. on a department server).

Any maintenance issue reported during an inspection should be submitted to ACCUG Parks Maintenance through the Work Order System. The Work Order System tracks labor and associated costs of all work performed in the greenway network. The Work Order System can also be used to generate reports that help analyze maintenance issues and associated costs.

Any crime or illicit activity observed during an inspection should be submitted to the Police Department and tracked through their software. The software should track specific locations and circumstances of all incidents. Again, reports can be generated that may reveal patterns and assist in allocating resources to specific locations or for specific issues. A comprehensive record-keeping system that is integrated with the Work Order System and Crime Tracking System should be created to track the following:

- Daily activities including programming and events
- Schedule of routine and remedial maintenance tasks
- Hazards, incidents, safety issues, and crime reports, as well as actions taken
- Inspection reports (both informal and formal)
- Annual maintenance budgets and labor tallies
- Funding sources and schedules
- Projected costs for subsequent years

- Database for existing, planned, and proposed projects for the greenway network

User Safety and Risk Management

Ensuring that citizens feel safe and comfortable while using the greenway trail network is essential to the success and continued implementation of the Greenway Network Plan. Safety is the single most important issue in guaranteeing the greenway remains a valuable community resource. Risk assessment, crime reporting, diligent patrol, and inter-departmental cooperation are each critical to safeguarding user safety.

Risk Assessment

Risk assessment is a systematic process for determining and addressing risks associated with the greenway network such as maintenance, crime, environmental hazards, and others. A successful risk assessment program must be a collaborative effort among ACCUG departments, citizens, and stakeholders. The following steps outline an effective risk assessment program:

- Conduct and document regular inspections, as detailed above
- Maintain an effective public feedback system in which citizens and stakeholders can submit issues
- Direct issues to the appropriate entity and file all inspection data in appropriate database management systems (Work Order Systems, Crime Tracking System, etc.)
- Track and review data regularly to identify risk patterns
- Follow-up with appropriate corrective measures in a timely manner

Risk Management

Effective risk assessment allows for long-term risk management, leading to increased user safety. Maintenance, environmental, and safety issues revealed through inspections and public feedback should be reviewed regularly. A task force should be set up with representatives from all entities. Duties of the task force should include:

- Reviewing all collected data included inspections, public feedback, crime reports, work orders, etc.
- Identifying risk patterns and persistent issues
- Using the collected data to anticipate future issues
- Monitoring operations and maintenance functions
- Setting short and long-term goals for operations and maintenance
- Creating work plans to address persistent and anticipated issues

The foremost goal of the risk management task force is ensuring that greenway use does not suffer due to real or perceived safety concerns.

Patrol Units

Another way to manage risk is through greenway network patrol units. Volunteer and professional trail patrols help improve both real and perceived trail safety. The primary function of these patrols is to educate trail users and to provide assistance when necessary.

Volunteer groups can range from litter pick-up and beautification crews to citizen patrol units. All volunteer groups should assist trail users, explain trail rules, and communicate users' suggestions and comments. They can also report maintenance issues such as damaged facilities or vandalism.

The ACC Police Department should provide professional trail patrol units to cover the territory of the entire greenway network. While volunteer groups are effective for maintaining a sense of community and user engagement along the

greenway, these groups lack authority to intervene in dangerous or criminal situations.

The police patrol units should be responsible for both enforcing laws and regulations, and interacting with users. The patrol's main tasks should include:

- Patrolling, on foot, bicycle, or by vehicle, all greenway trails and parks
- Enforcing rules and regulations
- Writing citations and making arrests
- Conducting criminal and non-criminal investigations for cases relating to the greenway network
- Community outreach programming including bike safety classes
- Interacting with users

The goal of the police patrol units is ultimately to create a presence in the greenway network that deters crime and improves users' enjoyment of the network. Although the specific tasks of the police patrol units are enforcement oriented, the day-to-day operations of the units should focus on user education, risk reduction, and building a positive police image. Having the officers visible, friendly, and engaging with the community creates trust between officers and citizens and makes the user experience of the greenway system safer and more enjoyable.

Help Locator Program

The Help Locator Program is an existing component of ACCUG emergency response protocol that increases response times in the greenway network, and it should be continued. The program consists of the following features:

- Signage placed every ¼ mile, which includes five digit numbers that correspond to unique GPS waypoints, which are mapped in a GIS layer. The GIS layer is available to emergency personnel on in-vehicle computers
- Mapping of access points and maintenance trails for all greenway trails and parks in the GIS layer
- Access and maintenance road load ratings and vehicle accommodations that are indexed in the layer GIS
- User education on how to utilize the Help Locator Program through information signage at trailheads, media streams, and other methods

In short, the Help Locator Program increases emergency response efficiency by providing GPS coordinates and directions to trained personnel.

Custodial Services

Maintaining a desirable image of the greenway network is a top priority. To keep facilities clean, routine custodial servicing is necessary. The greenway network includes a number of developed trailheads and linear parks, which include facilities such as buildings, pavilions, and picnic areas, and all of these facilities must be serviced on a regular basis. These areas include trash cans and dog waste stations that also require routine trash collection. Another routine custodial task is litter pick-up both within parks and along greenway trails.

Like inspections, the frequency of custodial servicing is determined by use patterns, location, and level of development. A chart at the end of this section provides servicing guidelines.

Table 11: Operational Guidelines

Facility Type	Informal Inspections	Formal Inspections*	Custodial Servicing	Trash Collection	Litter Pickup
Trails and Trails					
Aggregate	1/ week	1/ year	N/A	N/A	1/ week
Asphalt	1/ week	1/ year	N/A	N/A	2/ week
Impervious Concrete	1/ week	1/ year	N/A	N/A	2/ week
Pervious Concrete	1/ week	2/ year	N/A	N/A	2/ week
Impervious Pavers	1/ month	1/ year	N/A	N/A	1/ week
Pervious Pavers	1/ month	2/ year	N/A	N/A	1/ week
Natural Surface	1/ month	2/ year	N/A	N/A	1/ month
Soil Stabilized	1/ month	2/ year	N/A	N/A	1/ week
Multi-Use Trail	2/ week	1/ year	N/A	N/A	2/ week
Street Based Connections	1/ week	1/ year	N/A	N/A	2/ week
Rail with Trail	1/ week	1/ year	N/A	N/A	2/ week
Rail to Trail	1/ week	1/ year	N/A	N/A	2/ week
Hiking Trail	1/ month	2/ year	N/A	N/A	1/ month
Mountain Biking Trail	1/ month	2/ year	N/A	N/A	1/ month
Water Trail	1/ month	2/ year	N/A	N/A	1/ month
Trailheads and Parks					
Open Space Park	2/ week	2/ year	Daily	Daily	Daily
Major Trailhead	2/ week	2/ year	Daily	Daily	Daily
Minor Trailhead	1/ week	2/ year	2/ week	2/ week	2/ week
Neighborhood Connection	1/ month	1/ year	1/ week	1/ week	1/ week
Facilities and Amenities					
Bridge/ Boardwalk	1/ month	1/ year	N/A	N/A	N/A
Dog Parks	1/ month	1/ year	N/A	Daily	Daily
Pavilion	1/ week	1/ year	Daily	Daily	Daily
Playground	1/ week	1/ month	N/A	Daily	Daily
Restroom	1/ week	2/ year	Daily	Daily	Daily
River Facilities and Amenities					
Boat Launch	1/ week	2/ year	N/A	2/ week	2/ week
River Stop Offs	1/ month	1/ year	N/A	N/A	1/ month
Overlooks	1/ month	1 / year	N/A	N/A	1/ month
Signage					
Kiosk	2/ week	1/ year	N/A	N/A	N/A
Interpretive	1/ week	1/ year	N/A	N/A	N/A
Trailhead Identification	1/ week	1/ year	N/A	N/A	N/A
Traffic Control	1/ week	1/ year	N/A	N/A	N/A
Wayfinding	1/ week	1/ year	N/A	N/A	N/A

* More frequent formal inspections may be called for depending on condition of facility.

ROUTINE AND REMEDIAL MAINTENANCE

The following items describe the kinds of maintenance required to keep the greenway safe and in good condition. All maintenance items are detailed in the chart at the end of the section.

Routine Maintenance

Routine Maintenance refers to the day-to-day regimen of facility maintenance, minor repairs and replacements, landscaping activities, habitat management, and other regularly scheduled maintenance activities. These tasks must be performed on a regular basis to keep the greenway network and associated facilities in good, usable condition.

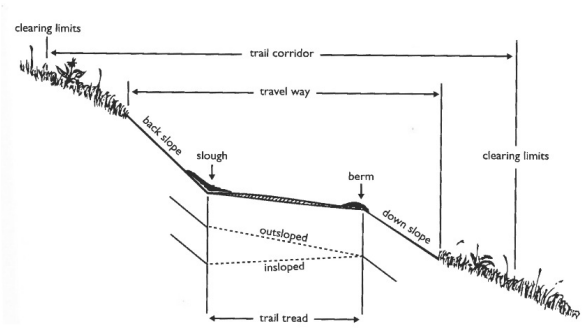
Maintenance tasks should be prioritized based on use patterns, level of impact, and age of facilities. Areas with the heaviest use patterns should be given highest priority. Areas where the trail could be closed due to lack of maintenance should be given priority over areas with bypass routes. Older facilities may need more attention than newer facilities due to deteriorating conditions. Maintenance priorities should be updated on an annual basis, as well as when new facilities are added to the network.

The four main categories of routine maintenance activities include: trail maintenance, facility maintenance, landscape maintenance, and habitat management.

Trail Maintenance

Trail maintenance varies depending on the trail surface, designed use, and trail environment. Trail maintenance encompasses tread maintenance, corridor maintenance, and feature maintenance. All corridor maintenance guidelines are details in Chapter 6 – Design Guidelines.

Paved and hard surface trails require the least amount of maintenance. These trails should be kept free of debris, leaf litter, and mud. Routine maintenance activities include blowing/sweeping the trail, pressure-washing the trail, and mowing vegetation. Pervious pavement requires extra maintenance as the surface must be vacuumed to facilitate proper flooding patterns.



Credit: http://www.lebanonhills.com/sustainable-trails/

Figure 7.1: Trail Section

Aggregate trails require more maintenance than paved trails. The aggregate material sits on top of hard-packed dirt and is susceptible to erosion. Even with effective drainage features, the aggregate surfacing will wash and erode away. It therefore is essential that drains and stormwater features including swales and culverts be kept clear to slow the movement of aggregate trails. Routine maintenance tasks include refreshing the aggregate, raking/ grading the aggregate smooth, and drain maintenance.

Natural surface trails vary widely in their maintenance needs. Proper design is the most important factor in the level of maintenance required for natural surface trails. Properly outsloped trails that include sidehill construction and drainage features may require little routine maintenance. Use patterns also determine maintenance needs for natural surface trails. Higher impact uses such as running and biking will cause trail tread to erode quicker than hiking. Maintaining trail outslope and drainage features are the top priorities. Routine maintenance tasks include removing berms and sloughs, repacking trail tread, root removal, drain maintenance, grade reversal maintenance, and debris removal.

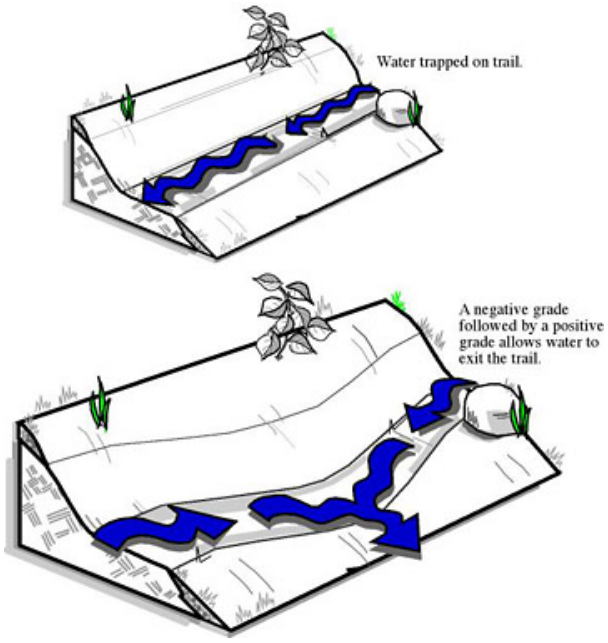


Figure 7.2: Grade Reversal

Credit: imba.com

Natural surface trails occurring in undeveloped areas will require more routine corridor maintenance than other types of trails. Please refer to the diagrams below for maintenance guidelines.

Water trails are in their own maintenance class. Because the "tread" of a water trail is simply the river, there is no trail surface to maintain. Keeping the water trail free of debris, however, is crucial. Downed trees, limbs, and other debris in the river obstructs access. Special care should be paid to monitoring water trails and removing debris and hazards as soon as possible.

Trail types and designed use will also inform maintenance routines. Primary and secondary multi-use trails, street-based connectors, rails/trails should be serviced more frequently than hiking and mountain biking trails, as they serve as main transportation corridors. Use patterns should also be taken into account when determining service plans. Finally, multi-use designed trails should be serviced more frequently than single-use trails as they serve a greater cross section of the population.

Facility Maintenance

Facility maintenance refers to the routine maintenance of all constructed features of the greenway network. This includes:

- **Bridge, Boardwalk, Overlook Maintenance:** Bridges, boardwalks, and overlooks must also be kept free of all debris, especially leaf litter and mud. Standing leaf litter and mud contribute to accelerated rot of wooden structures, so it is even more important that this debris be removed regularly from wooden structures
- **Dog Park Maintenance:** Routine maintenance of dog parks includes servicing fencing, maintaining water supply lines and drains, as well as landscaping tasks
- **Playground Maintenance:** Playgrounds are to be inspected and maintained pursuant to ACCUG's Playground Safety Policy, which is based on national standards. Routine tasks include cleaning surfaces, removing vandalism, tightening bolts, and maintaining mulch
- **Boat Launch Maintenance:** Boat launches are susceptible to seasonal maintenance due to high water events. Routine maintenance tasks include maintenance of gravel and riprap and removal of debris from launch surface, as well as landscaping tasks
- **Minor Repairs and Maintenance:** Minor repairs and maintenance are considered routine. This includes but is not limited to tasks such as repairing handrails, removing graffiti, removing debris and hazards, repairing signage, repairing fencing, and addressing vandalism

Landscape Maintenance

Landscape maintenance refers to all regular activities, such as tree and shrub trimming and pruning, mowing of vegetation, mulching and edging, and maintenance of plantings, required to maintain the developed areas of the greenway network. As outlined in the ACCUG Landscape Service Delivery Plan, all developed areas are maintained based on zoning, with zones 1 to 4 defining the level of service. The zones and corresponding maintenance activity are defined as follows:

- **Zone 1 – Weekly Service:** Mow and trim weekly; control weeds in beds, sidewalks, and fence lines; detail maintenance such as flower/ bed maintenance, pest management, ornamental maintenance, curb cleanings, etc; fertilize lawns, trees, shrubs, ground covers, and perennials; remove fall leaves 2 to 3 times.

- **Zone 2 – Biweekly Service:** Mow and trim biweekly; control weeds in beds, sidewalks, and fence lines.

- **Zone 3 – Monthly Service:** Mow monthly.

- **Zone 4 – Annual Service:** Mow Annually. These are typically intended as meadow areas with natural features supportive of a desired level of wildlife; overseed with flowering meadow plants to enhance appearance and attract suitable wildlife.

System-wide routine landscape tasks include: treating fire ant mounds; treating yellow jackets and wasps; aerating and overseeding bare ground areas; replacing existing landscape plantings or adding new ones; replacing and repairing irrigation systems; irrigating new plantings; removing dead or damaged plants; removing silt from parking lots and storm drains; replacing hardscapes; and grinding tree stumps.

Landscape zones are updated annually and should be determined whenever new sections of the network are built. By determining service levels ahead of time, landscape staff will be able to plan for additional staff needed for the increase in service.

The corridor of all trails and trails must be maintained to standards defined in Chapter 6 – Design Guidelines. This involves keeping all limbs and shrubs trimmed back out of the corridor, as well as mowing ground cover to prevent encroachment onto the trail tread.

Non-paved trails and trails occurring in undeveloped open spaces are not covered by the Landscape Service Delivery Plan. Their maintenance schedule is covered in the chart at the end of this section. Maintenance of undeveloped open spaces in the greenway network is covered in the following section.

Habitat Management

Routine facility and landscape tasks ensure the greenway network is maintained for transportation, recreation, stormwater conveyance, flood control, and safety. The Oconee Rivers Greenway is unique in that its mission is not only to provide recreational and education opportunities, but to also create conservation areas. As stated in the ordinance creating the greenway, the preeminent conservation goal is the controlled use and systematic protection of natural resources. Habitat management must be a critical piece of the greenway management plan.

Habitats should be managed in a variety of ways, and exceptional resource areas should carry their own site- specific management plans. An environmental task force should be formed to create management plans, create and prioritize work plans, monitor progress, and set long-term goals. General habitat management guidelines are recommended as follows:

- Control and remove invasive species

- Plant native species

- Mow level 4 landscape areas at the proper time and to the correct height

- Preserve an unmowed vegetative buffer along all trails, parks, and waterways

- Improve tree care and target blights, diseases, and harmful insects

- Manage and close social trails in a timely fashion

- Fence and buffer sensitive areas
- Keep interpretive signage up to date
- Host volunteer cleanup events and work days
- Revegetate trampled banks and social trails
- Improve ground cover and structure of buffer vegetation
- Divert wash water away from creek
- Maintain water quality with BMPs and proper stormwater management
- Leave non-hazardous dead and down trees in their natural state

Habitat management should be integrated into community stewardship efforts. Involving the community not only protects natural resources in and surrounding the greenway, but increases the community's enjoyment of those resources and promotes future generations of conservationists.

Table 12:Maintenance

Facility Type	Facility Maintenance		Landscape Maintenance						
	General Maintenance	Leaf/ Debris Removal	Zone	Pruning/ Trimming	Mowing	Mulching and Edging	Weed Control	Detail Maintenance	Tread Maintenance
Multi-Use Trail	As needed or 1/ month	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	1/ month
Street Based Connections	As needed or 1/ month	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	1/ month
Rail with Trail	As needed or 1/ month	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	1/ month
Rail to Trail	As needed or 1/ month	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	1/ month
Hiking Trail	As needed or 1/ month	N/A	N/A	1/ month	1/ month	N/A	N/A	N/A	1/ month
Mountain Biking Trail	As needed or 1/ month	N/A	N/A	1/ month	1/ month	N/A	N/A	N/A	1/ month
Water Trail	As needed or 1/ month	N/A	N/A	1/ month	N/A	N/A	N/A	N/A	N/A
Open Space Park	1/ week	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	N/A
Major Trailhead	As needed or 1/ month	2/ week	1	1/ week	1/ week	2/ month	1/ month	1/ month	N/A
Minor Trailhead	As needed or 1/ month	1/ week	2	1/ month	1/ week	2/ month	1/ month	1/ month	N/A
Neighborhood Connection	As needed	1/ week	2	1/ month	1/ week	1/ month	1/ month	1/ month	N/A
Bridge/ Boardwalk	As needed or 1/ month	2/ week	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dog Parks	As needed or 1/ month	As needed	1	1/ week	1/ week	N/A	1/ month	1/ month	N/A
Pavilion	As needed or 1/ month	1/ week	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Playground	As needed or 1/ month	1/ week	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Restroom	As needed or 1/ month	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boat Launch	1/ month	1/ week	1	1/ week	N/A	1/ month	1/ month	1/ month	N/A
Overlooks	1/ month	1/ week	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Signage	1/ month	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Remedial Maintenance

Remedial maintenance refers to correcting significant defects in the network, as well as repairing, replacing, or restoring major components that have been destroyed, damaged, or significantly deteriorated from normal usage and old age. Some tasks may occur on routine five to ten year cycles such as crack sealing, painting, or replacing signage. Remedial maintenance also covers long-term reconstruction projects.

Facility Repair or Replacement

All facilities require repair or replacement at some point. Planning ahead to conduct necessary repairs and replacement therefore is crucial to ensuring that the greenway network remains operational. Life-cycle plans with associated funding should be developed for all facility types. Life-cycle planning helps allocate resources evenly so that large replacement projects do not burden the network or staff.

Current life-cycle plans exist for the following facilities:

- Asphalt (Asphalt Life-cycle Plan)
- Amenities and Playgrounds (Capital Improvement Program Life-cycle Plan)
- Bridges, boardwalks, observation decks, overlooks, stairs (Bridge and Boardwalk Life-cycle Plan)
- Signage
- Even with proper planning, remedial maintenance issues will arise due to damage from vandalism, environmental factors, and other factors. The time between observation of unexpected damage and the repair or replacement will depend on whether the damage is deemed a hazard, to what degree the needed repair will affect the safety of the user, to what degree the damage impedes connectivity of the greenway network, and whether or not the repair can be performed in-house

The chart below details common greenway facilities, associated longevities, and common remedial maintenance issues.

Table 12: Remedial Maintenance Expectations

Facility Type	Longevity	Common Issues
Trails and Trails		
Aggregate	5-10 years	Erosion, rutting, washing of aggregate
Asphalt	7-15 years	Erosion, cracking, crumbling
Impervious Concrete	20-30 years	Erosion, undercut, cracking
Pervious Concrete	20-30 years	Erosion, undercut, debris, cracking
Impervious Pavers	15-20 years	Erosion, earth movement
Pervious Pavers	15-20 years	Erosion, earth movement
Natural Surface	50-75 years*	Erosion, rutting, berming, tread degradation
Soil Stabilized	10 years	Tread degradation, erosion, freeze/ thaw
Facilities		
Boardwalk (Wooden)	20-25 years	Rotting decking, rotting structure, embankment erosion
Bridge – Metal	40-60 years*	Rotting decking, hardware issues, rust, embankment erosion
Bridge – Fiberglass	40-60 years*	Rotting decking, hardware issues, embankment erosion
Bridge – Wooden	20-25 years	Rotting decking, rotting structure, embankment erosion
Street Overpass	100+ years*	Hardware issues, ruts, embankment erosion
Street Based Bridges	100+ years*	Hardware issues, ruts, embankment erosion
Tunnel	100+ years*	Erosion, earth movement, seepage
Amenities		
Bench	30-40 years	Erosion, vandalism, storm damage
Bike Rack	30-40 years	Erosion, rust, wear
Boat Launch	50-75 years*	Erosion, embankment collapse, flood damage
Bottle Filter	10 years	Water line damage, erosion, wear, fixture failure
Dog Park	20 years	Erosion, overuse
Pavilion	50-75 years*	Storm damage, appearance
Pet Waste Station	20 years	Rot, wear
Picnic Table	30-40 years	Erosion, storm damage, vandalism
Playground	20 years	Wear of components, vandalism
Restroom	50-75 years*	Fixture failure, appearance, wear
Signage – Stone	30-40 years	Collapse, fading
Signage – Other	10-15 years	Fading, obsolete content or design
Trash Receptacles	30-40 years	Rust, wear

* Major maintenance required every 20 years.

Seasonal Maintenance

Seasonal maintenance should be performed as needed. Fall leaf litter is considered a routine maintenance task and is covered in that section. Heavy rains in the winter and spring can cause flooding and damage of greenway facilities. Flooding can be mitigated by restoring drainage channels, if possible. In the case that seasonal conditions cannot be improved to provide for safe use, affected greenway facilities should be closed to prevent risk of injury.

Maintenance of the Greenway is key to keeping a safe and usable trail system that spans multiple generations. Currently, the ACCUG Leisure Services Department partners with the ACCUG Central Services Department to accomplish daily landscaping operations. The rest of the maintenance falls on Leisure Services. As the multi-use trail systems of the Greenway and the Firefly Trail continue to develop, there will be a need to add additional resources for both departments. This is a recognized need and the operating budgets need to reflect those additions.

Survey Findings

Both surveys provided valuable conclusions with respect to the location of residence of known greenway users, transportation methods to reach the greenway, types of trail usage, the frequency of greenway use, and desired improvements and expansions.

Greenway Users: The majority of respondents that reported using the greenway are residents of Athens-Clarke County.

Transportation Methods to Greenway: Some divergence exists between the field survey and online survey results with respect to the transportation mode used to reach the greenway. Within both surveys, the majority of respondents reached the greenway by car. Within the field survey specifically, a large portion of respondents also reached the greenway by walking. This data correlates well with the quarter of field survey respondents who reported living within a half mile of the greenway. A significant number of users within both surveys also reached the greenway by biking – more within the online survey than the field survey. While the range is slightly larger, users from the online survey also lived relatively close to the greenway. About a third of online respondents reported living one to three miles from the greenway. Within both surveys, very few respondents rode a bus to the trail system. The majority of respondents also stated that they do not regularly use the greenway to commute from one place to another.

Trail Usage: The most common reported greenway use categories within both surveys included exercise and recreation. An overwhelming majority of greenway users participate in walking, running or jogging, while the next most popular activities include nature viewing, relaxation, hiking, and dog walking.

Frequency: The respondents within the field survey reported more frequent use of greenway facilities than online survey respondents. Within the field survey, slightly more than a third of the respondents interviewed use the parks and trails weekly while about a quarter used them daily. Within the online survey, a larger proportion – roughly half – of respondents use the trails weekly. However, only a small number of online respondents use the parks and trails daily. Approximately one-fourth of online respondents only use the trails monthly. Overall, most people found the greenway to be easy to navigate, in good condition, and usually safe.

Desired Improvements and Expansions: According to the two surveys, the most popular amenities that users want to see added or improved are restrooms, hiking trails, paved trails, mountain bike trails, dog parks, and kayak launches. Respondents stated that they are most likely to use the paved trails, followed closely by the natural trails. Water trails, riding trails, and mountain bike trails appealed to a more limited set of respondents. With respect to the primary objectives of the greenway, the majority of users were most concerned with protecting sensitive environmental areas and habitats, providing open space for interacting with the natural world, and connecting the communities with new walking and biking routes. When given a map of Athens-Clarke County, users identified four neighborhoods as being the most important neighborhoods to connect to the greenway: Downtown, East Athens, Five Points, and Normaltown.

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Oconee Rivers Greenway Network

APPENDICES

December, 2017

Athens-Clarke County Leisure Services Department
Office of Park Planning

Appendix A: Glossary

Access Points: Designated areas and passageways that allow the public to reach a trail from adjacent streets or community facilities.

Amenities: Any element used to enhance the user's experience and comfort along a trail.

Asphalt (Macadam, Asphaltic Concrete): Petroleum-based flexible surface material that provides a smoothly paved surface suitable for bicycles and in-line skates. It is preferred in urban areas where trails are often used for commuting to and from work or school.

Bike Lane: A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

Bike Trail (Shared Use Trail, Bicycle Trail, Bike Trail, Multi-use Trail/Trail): Any corridor that is physically separated from motorized vehicular traffic by an open space or barrier, and that is either within the highway right-of-way or within an independent right-of-way. Besides bicycles, pedestrians, skaters, wheelchair users, joggers, and other non-motorized users may also share these trails. The term bicycle trail is becoming less common, since such facilities are rarely used exclusively by bicyclists.

Biome(s): A large community of plants and animals that occupies a distinct region. Terrestrial biomes, typically defined by their climate and dominant vegetation, include grassland, tundra, desert, tropical rainforest, and deciduous and coniferous forests.

Blueway(s): River and stream corridors of protected open space used for conservation and recreation purposes. They protect natural, historical, cultural, and recreational resources and preserve scenic landscapes.

Bluff: A steep headland, riverbank, or cliff.

Boardwalk: A fixed planked structure, usually built on pilings in areas of wet soil or water to provide dry crossings.

Bridge: A structure, including supports, erected over a depression (stream, river, chasm, canyon, or road) and having a deck for carrying trail traffic. If the bridge is over two feet above the surface, it should have railings.

Concrete: A composition of coarse and fine aggregates, Portland cement, and water, blended to give a hard, unyielding, nearly white pavement, which can be finished to any degree of smoothness. Concrete is most often used in urban areas with anticipated heavy trail use, or in areas susceptible to flooding.

Connectivity: The ability to create functionally contiguous blocks of land or water through linkage of similar native landscapes; the linking of trails, greenways, and communities.

Connectors: Trails or on-road routes in heavily built environments that provide key connections between or within trail or greenway corridors; these have little, if any, ecological benefits.

Conservation: Controlled use and protection of natural resources.

Crosswalk: Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Cultural Resource(s): The physical remains of human activity (such as artifacts, ruins, burial mounds, petroglyphs, etc.) having scientific, prehistoric, or social value.

Easement: Grants the right to use a specific portion of land for a specific purpose(s).

Easements may be limited to a specific period of time or may be granted in perpetuity; or the termination of the easement may be predicated upon the occurrence of a specific event. An easement agreement survives transfer of landownership and is generally binding upon future owners until it expires on its own terms.

Easement, Conservation: Places restrictions that are typically binding for both current and future landowners on property in order to protect natural resources. Each easement can be tailored to meet the conservation objectives and interests of the landowners. The power to establish a conservation easement is typically vested in either a qualified private land conservation organization or government.

Economic Impact (Benefit, Value): The extent to which an event or ongoing activity contributes to the economy of a specified area. Economic impacts from the greenway spending directly associated with trail users (ongoing economic activity)and development induced by expansion and repair of trails (indirect economic impact). Over time, as the economic benefits of locating businesses or residences in close proximity to the greenway system are realized, private investment in expansion of the greenway system may grow.

Ecotone(s): A transition area between two biomes. It is where two communities meet and integrate. It may be narrow or wide, and it may be local (the zone between a field and forest) or regional (the transition between forest and grassland ecosystems).

Environment: The aggregate of external conditions (physical, biological, economic, and social) that may act upon an organism to influence its development.

Environment, Natural: Those parts of the landscape with features more closely resembling what they otherwise would presumably be like if they were left undisturbed by human activities.

Equestrian: Of horses, horseback riding, riders, and horsemanship.

Flood Plain(s): Flat, occasionally flooded areas, bordering streams, rivers, or other bodies of water that are susceptible to changes in the surface level of the water. Floodplains are formed of fluvial sediments and are periodically flooded and modified when streams overflow. Stream channels meander within unconfined floodplains, alternately creating and isolating habitats.

Foot-trail: A trail over which the public has a right-of-way on foot only. Wheelchairs are also permitted, although this may not be practical due to surface or slope.

Geographic Information System (GIS): A spatial database mapping system (computer and software) that contains location data for trails and other important features.

Grade: The amount of elevation change between two points over a given distance expressed as a percentage (feet change in elevation for every 100 horizontal feet, commonly known as “rise over run”). A trail that rises eight vertical feet in 100 horizontal feet has an 8% grade. Grade is different from angle. Angle is measured with a straight vertical as 90¼ and a straight horizontal as 0¼. A grade of 100% would have an angle of 45¼.

Green Space: Natural areas, open spaces, trails, and greenways that function for both wildlife and people.

Greenway: A linear open space established along a natural corridor, such as a river, stream, ridgeline, rail-trail, canal, or other route for conservation, recreation, or alternative transportation purposes. Greenways can connect parks, nature preserves, cultural facilities, and historic sites with business and residential areas.

Habitat: A place that supports a plant or animal population because it supplies that organism’s basic requirements of food, water, shelter, living space, and security.

Infrastructure: The facilities, utilities, and transportation systems (road or trail) needed to meet public and maintenance needs.

Interpretive Display: An educational display usually in an interpretive center or at a trailhead that describes and explains a natural or cultural point of interest on or along the trail.

Land Trust: A private, nonprofit conservation organization formed to protect natural resources such as forestland, natural areas, and recreational areas. Land trusts purchase and accept donations of conservation easements.

Maintenance: Work that is carried out to keep a trail in its originally-constructed, serviceable condition. Usually limited to minor repair or improvements that do not significantly change the trail location, width, surface, or structures.

Master Plan: A comprehensive long-range plan intended to guide greenway and trail development of a community or region;includes analysis, recommendation, and proposals of action.

Multiple-Use (Multi-Use, Diversified Use) Trail: A trail that permits the activities of more than one user group simultaneously (equestrian, hiker, mountain bicyclist, etc.).

Natural Resource(s): Areas of land, bodies of water, forests, swamps, and other natural features which are in demand for outdoor recreation or are likely to become so.

Open Space: Areas of natural quality, either publicly or privately owned, designated for protection of natural resources, nature-oriented outdoor recreation, or trail-related activities. In urban settings, areas of land not covered by structures, driveways, or parking lots.

Rail Corridor: The trail of a railroad right-of-way, including the tracks and a specified tract of land on either side of the tracks (generally one hundred feet wide).

Rail-Trail (Rail-to-Trail): A multi-purpose public trail (paved or natural) created along an inactive rail corridor.

Rail-with-Trail: Any shared-use trail that is located on or directly adjacent to an active railroad or fixed route transit corridor.

Sign (Signage): A board, post, or placard that displays written, symbolic, tactile, or pictorial information about the trail or surrounding area. Signage increases safety and comfort on trails. There are five basic types of signs: Cautionary, Directional, Interpretive, Objective, and Regulatory.

Standards, Design: Values selected and documented from the design criteria that become the standards for a given trail or greenway project.

Trail: Route on land or water with protected status and public access for recreation or transportation purposes such as walking, jogging, hiking, bicycling, horseback riding, mountain biking, canoeing, kayaking, and backpacking.

Trailhead: An access point to a trail or trail system often accompanied by various public facilities, such as a horse unloading dock, parking areas, restrooms, water, and directional and informational signs.

Tributary: A river or stream feeding into a larger waterway or lake.

Water Trail (River Trail, Canoe Trail): A recreational waterway on lake, river, or ocean between specific points, containing access points and day use and/or camping sites for the non-motorized boating and fishing public.

Zoning (Laws): Specifying use or restrictions on land. Zoning can effectively protect trail corridors from development adjacent to the trail that might block views, destroy sensitive habitat, create traffic problems, and generally diminish a trail experience.

Appendix B: Public Input and Review

Public input is essential to ensure that the Oconee Rivers Greenway is both protecting local natural resources and providing a functional and attractive space for recreation and transportation. The continued vitality of the greenway relies upon local commitment to conservation and upkeep of the trail network infrastructure. Assessing the community's priorities for future greenway planning through public input opportunities will result in a network that is enjoyed and used to its fullest. As the greenway continues to develop, public input provides valuable information about the current satisfaction of greenway users as well as potential future steps in greenway planning, design, and implementation. In this chapter, the various ways public input was solicited are described: community surveys, community leader interviews, and stakeholder meetings. Public review of a draft version of this document will also be solicited.

COMMUNITY SURVEYS

Survey Design

In preparing for the most recent revision of the Oconee Rivers Greenway Network Plan, park planning staff developed and conducted two surveys – a field survey (193 responses) and an online survey (332 responses) – with the objective of better understanding the public's future expectations for the greenway. Park planning staff designed the surveys to obtain information on the following indicators of greenway functionality:

- Frequency of greenway usage
- Transportation mode used to reach the greenway
- Valuation of programs, activities, amenities, and spaces
- Desired additions to greenway programming
- Locations of concern or in need of improvement
- Ease of navigation, comfort, and safety while using the greenway
- Desired connections between areas of Athens-Clarke County

The surveys also collected information on users' location of residence to better understand the geographic scope of greenway users. The full text of both surveys, including all of the submitted responses, is available at the end of this appendix. With respect to the surveys, one question was altered in the online survey to make it more clear, as staff learned that the question was confusing after conducting the in-person surveys.

Conducting a field survey allowed park planning staff to obtain input from known greenway users. Park planning staff distributed the field survey to greenway users along existing greenway trails and adjacent parks, namely Dudley Park, North Oconee River Park, North Oconee River Greenway, Sandy Creek Nature Center, Ben Burton Park, Trail Creek Park, Milledge Extension Trail, Pulaski Trail, and Sandy Creek Park. During the month of June, staff traveled between each park at various times during the day and several times during the weekend. The field survey resulted in 193 responses.

By also administering an online survey, park planning staff obtained feedback from a broader set of users or potential users. Park planning staff distributed surveys online through various platforms and media. The survey was posted on the park planning website[1] in the Leisure Services Department E-Newsletter on October 28th, 2015, a news release on November 2nd, Twitter on October 20th and November 17th, the Oconee Rivers Greenway Facebook page, the Leisure

1 https://www.athensclarkecounty.com/6202/Park-Planning

Services Facebook page, and the email listserv within the county government on November 11th.

Survey Findings

Both surveys provided valuable conclusions with respect to the location of residence of known greenway users, transportation methods to reach the greenway, types of trail usage, the frequency of greenway use, and desired improvements and expansions.

Greenway Users: The majority of respondents that reported using the greenway are residents of Athens-Clarke County.

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Figure AP.1: Field Survey – Question 1

Are you a resident of Athens-Clarke County?

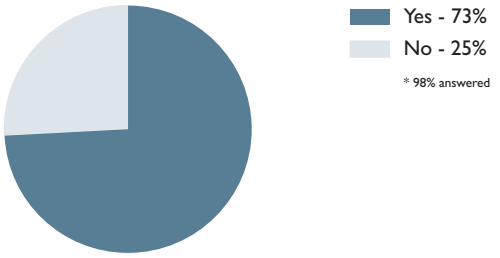


Figure AP.3: Field Survey – Question 3

How long have you lived in Athens-Clarke County?

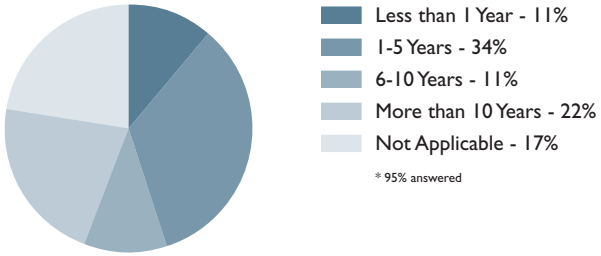


Figure AP.2: Field Survey – Question 2 What is your Zip Code?

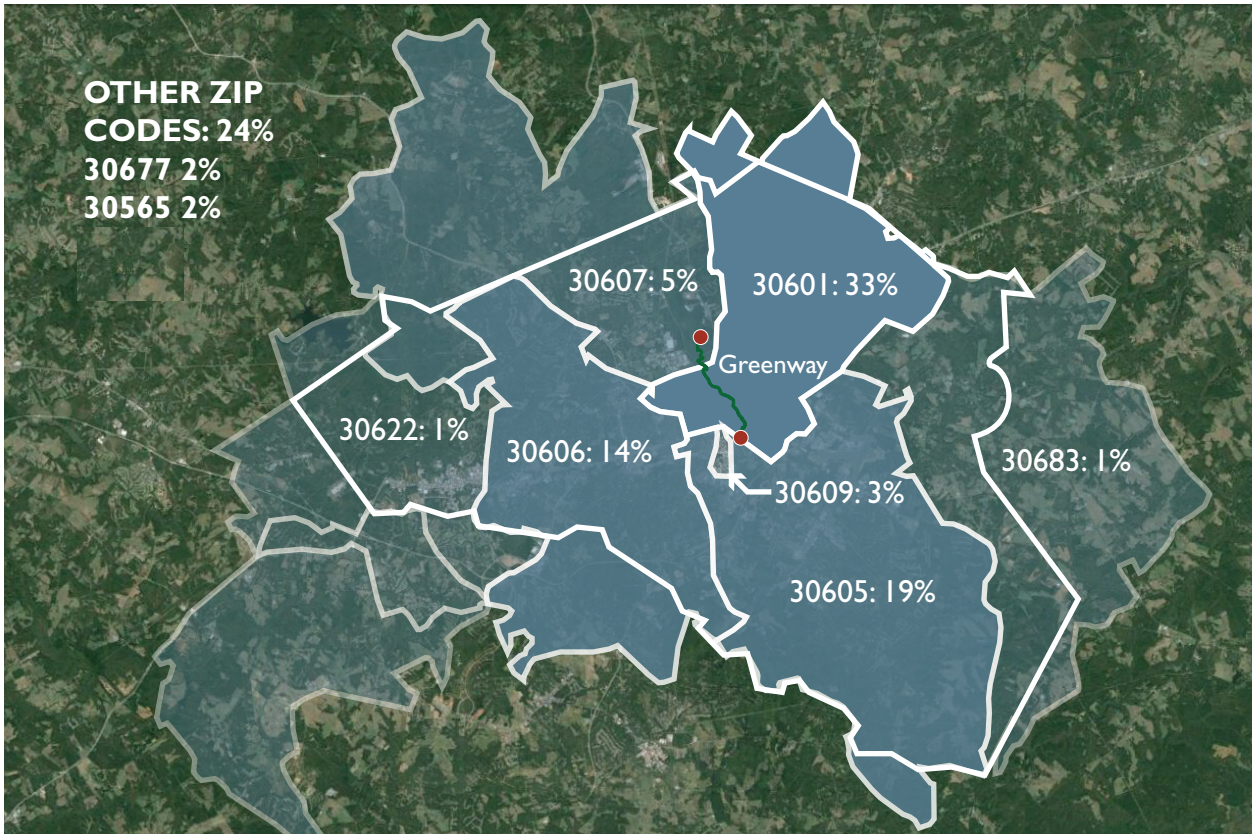


Figure AP.4: Field Survey – Question 4

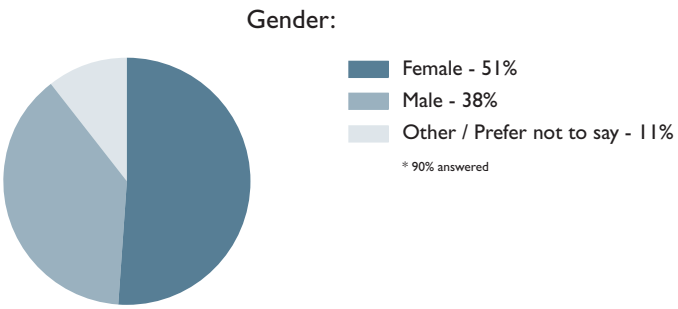
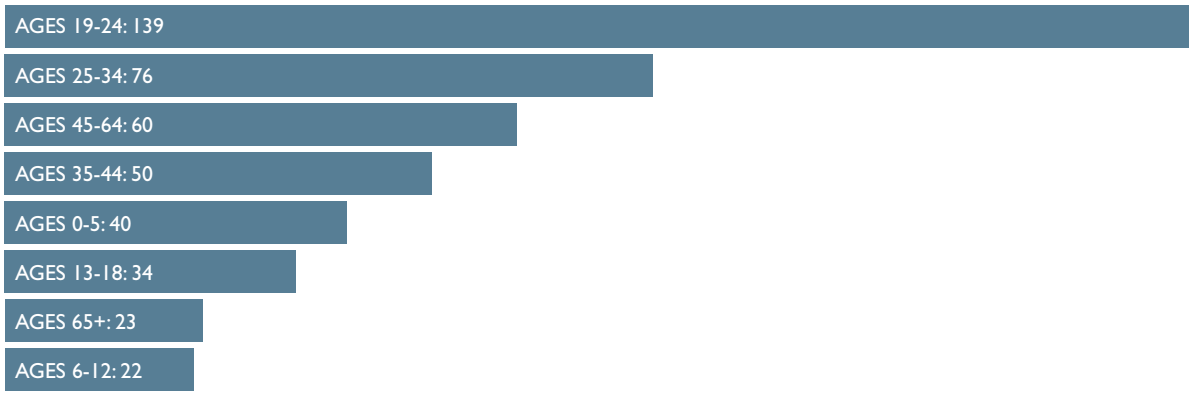


Figure AP.5: Field Survey – Question 5

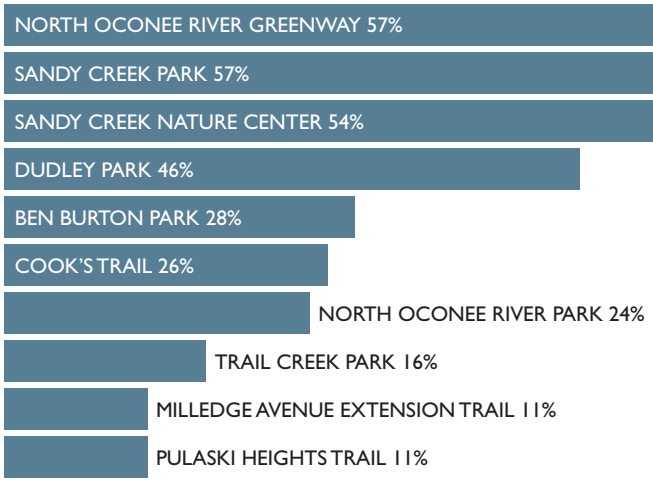
Including yourself, please indicate the number of people in your household in each of the following age categories:



*TOTAL

Figure AP.6: Field Survey – Question 6

Which of the following greenway-related parks and trails do you visit?



* PERCENT USAGE

Figure AP.7: Field Survey – Question 7

Which of the following activities do you participate in while visiting these parks and trails?

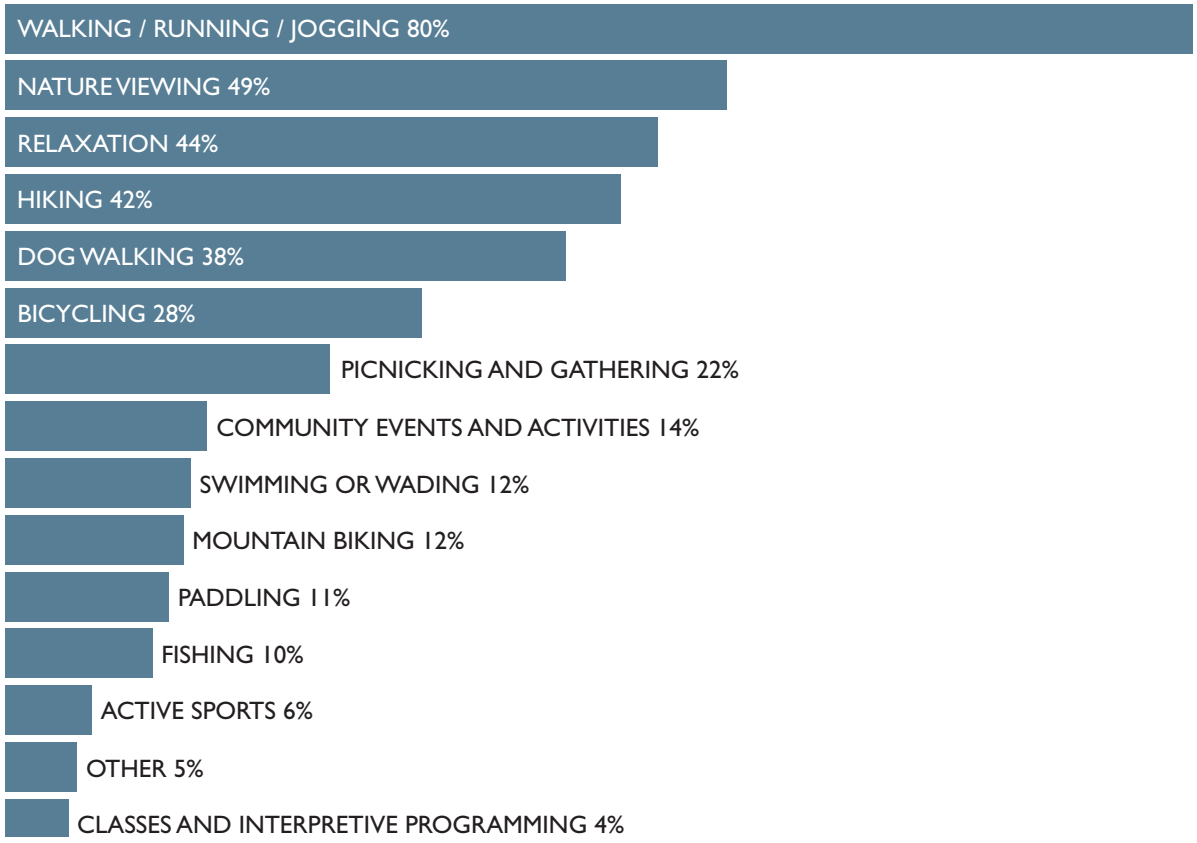


Figure AP.8: Field Survey – Question 8

How often do you or members of your household use these parks and trails?

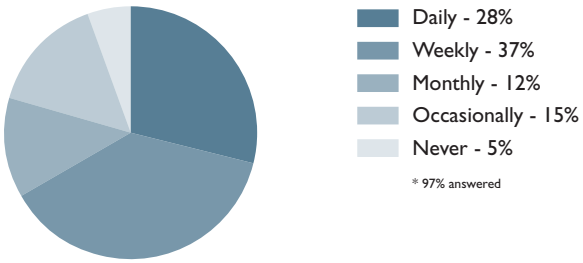


Figure AP.9: Field Survey – Question 9

How do you travel to these parks and trails?

* PERCENT USAGE

Figure AP.10: Field Survey – Question 10

How far do you live from the nearest Greenway park or trail?

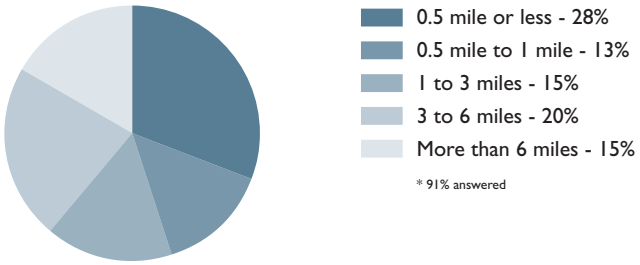
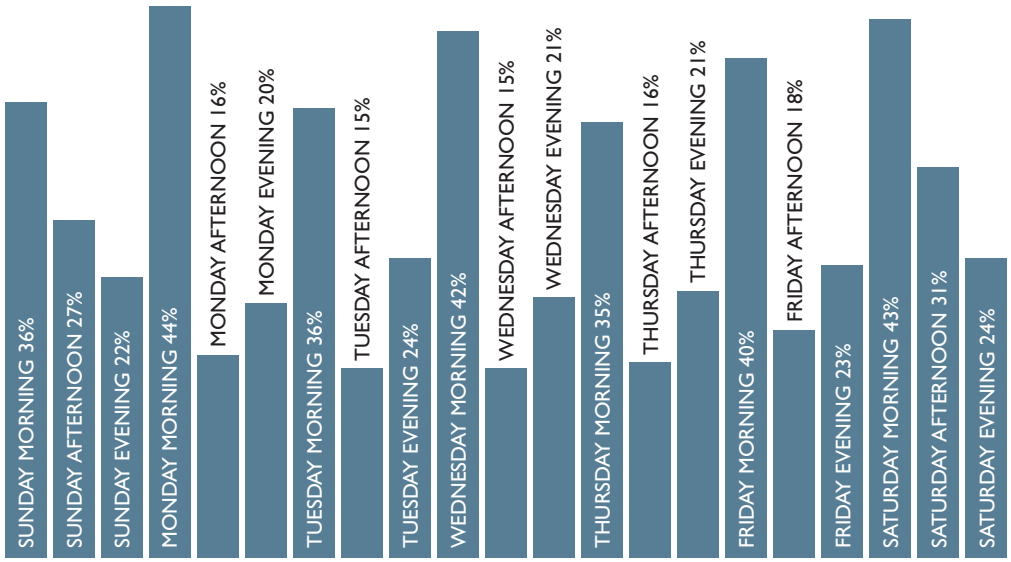


Figure AP.11: Field Survey – Question 11

When do you typically visit Greenway parks and trails?



* PERCENT USAGE

Figure AP.12: Field Survey – Question 12

Do you regularly incorporate greenway trails and paths into your commute or to get from one place to another?

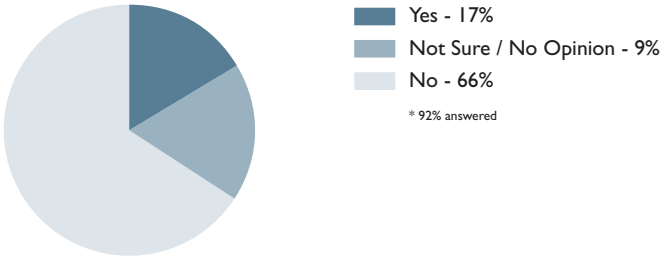
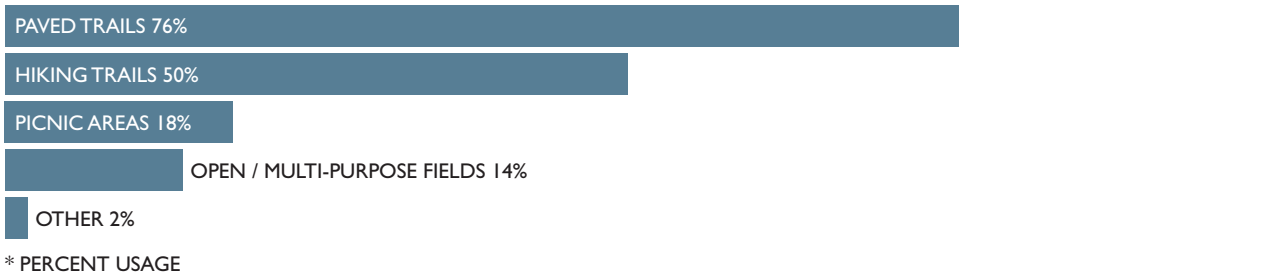


Figure AP.13: Field Survey – Question 13

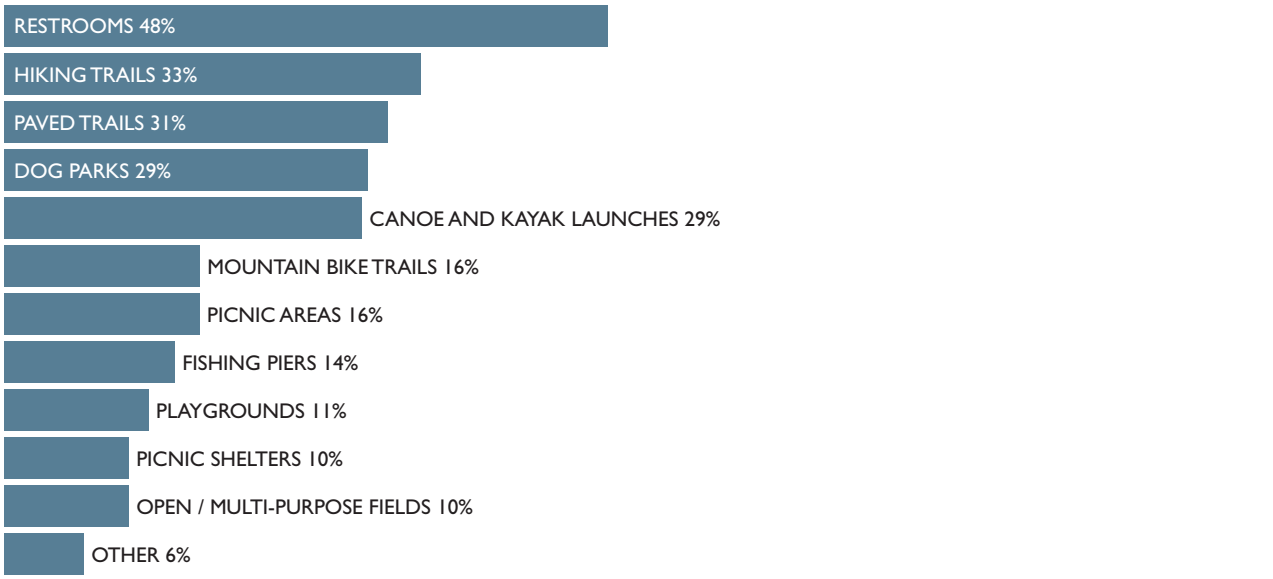
Which Greenway features do you use most often?



* PERCENT USAGE

Figure AP.14: Field Survey – Question 14

Which Greenway features would you like to see improved or added?



* PERCENT HIGH PRIORITY

Figure AP.15: Field Survey – Question 15

Rate how likely you are to use the following trails, from 1 (Very Unlikely/ No Opinion) to 4 (Very Likely):

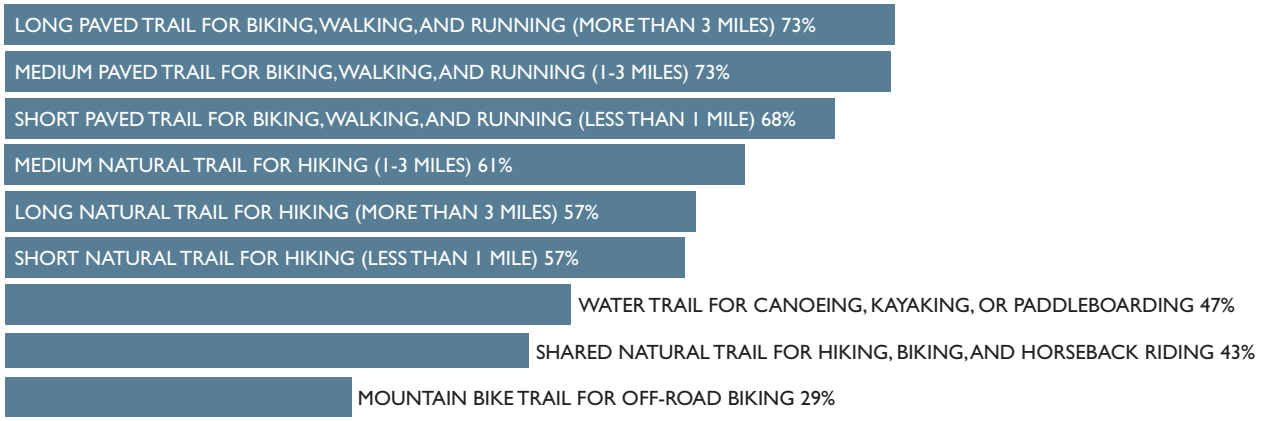


Figure AP.16: Field Survey – Question 16

Please rate the condition of the Greenway:

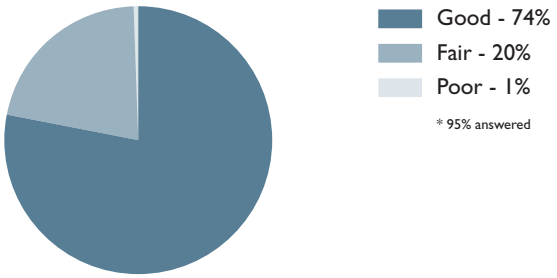


Figure AP.17: Field Survey – Question 17

Finding your way on the North Oconee River Greenway is:

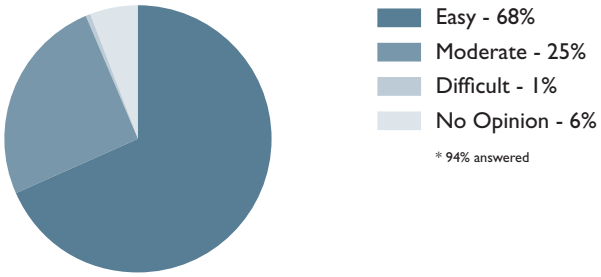


Figure AP.18: Field Survey – Question 18

Prioritize the following Greenway goals on a scale from 1 (Low/No Opinion) to 4 (High):

* PERCENT HIGH PRIORITY

Figure AP.19: Field Survey – Question 19

Do you feel safe at these parks and trails?

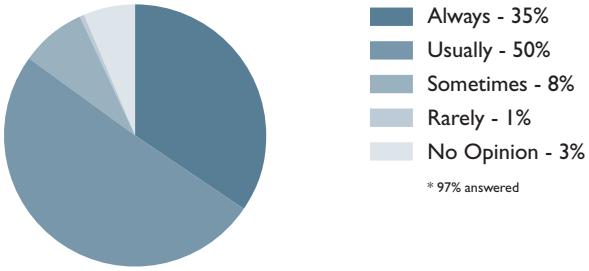
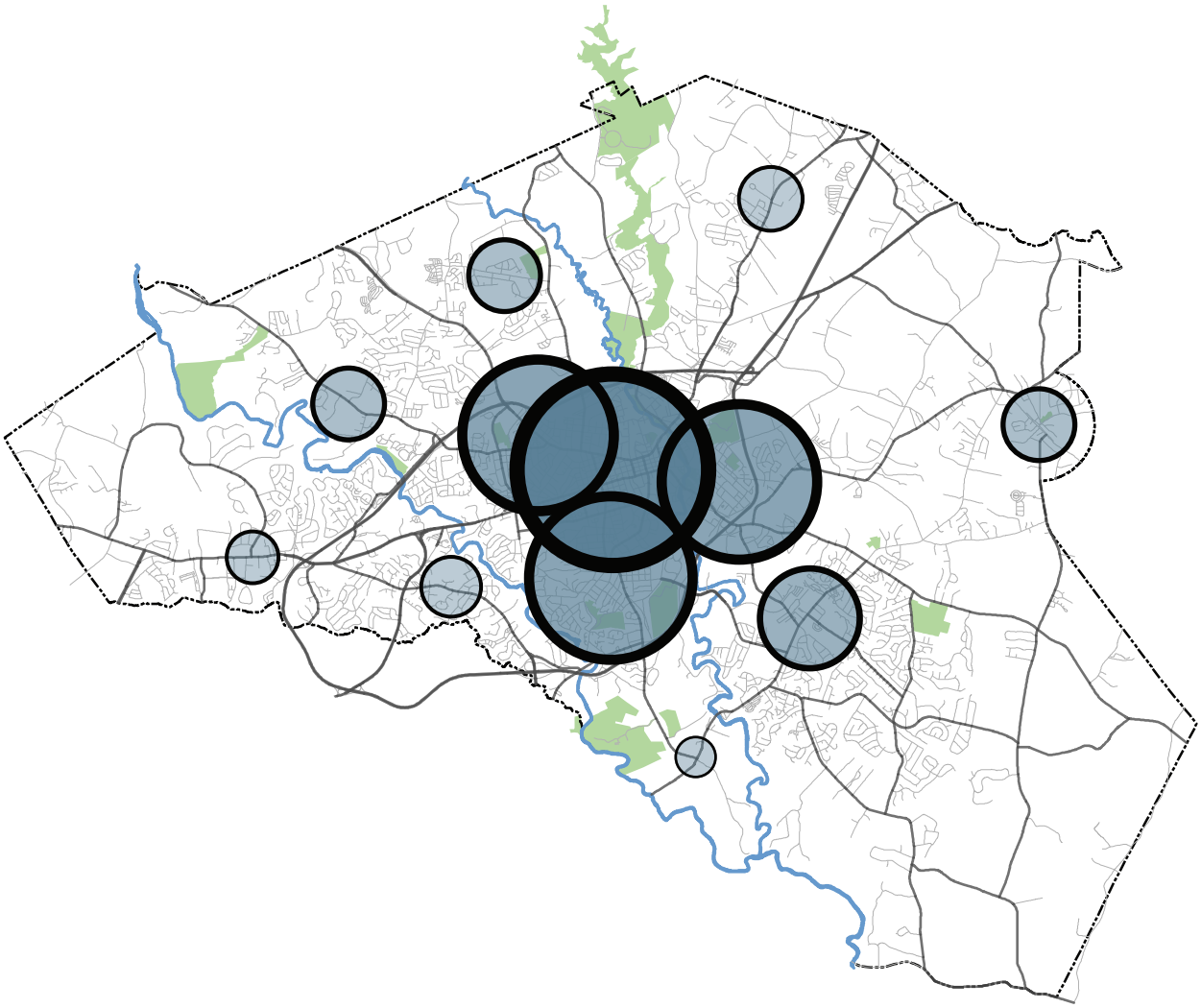


Figure AP.20: Field Survey – Question 20 What neighborhoods would you like to see the Greenway serve?



Other Comments

Are there any other comments that you have to help improve the Oconee Rivers Greenway?

- Phone boxes should stay and need a place for dogs to sleep
- 5 Points to Whitehall! Bike Path. Boat Ramp at Botanical Garden – Ben Burton
- Add the Middle Oconee River
- Alternative transportation to Sandy Creek Park. More mountain bike trails.
- Bike trail (Winterville to Downtown) Want more access to river and Ben Burton-Creek heavily polluted-running directly into river
- Boat ramp at botanical gardens or downstream of Ben Burton. North Oconee boat ramps.
- Check out Carrolton Greenbelt.
- Check out the Northwest Arkansas Greenway Trail, South Fayetteville - thru Beautoville all to Missori, and Yellow Springs, OH - Trail
- Connections between areas and downtown.

- Creepy guy under the bridge and dogs off leash!
- Dog friendly
- Dog park at Dudley park would be nice!
- Free yoga/fitness programs
- Greene County
- Have been impressed w/ trails, greenways, fan of split biking/hiking trails, seems good now on ACC trails, UGA IM Fields can get sketchy with bikes and ped shared use.
- Haven't lived here long enough.
- I enjoy the trails, greenways, & parks that Athens has to offer! Keep it up! Encourage more children's activities in the summer so they don't just in front of the TV & get fat (lazy parents).
- I live off Barnett Shoals/Lexington Rd. Connecting trails to over there would be nice. Also, bike races would be awesome.
- I love the Swamp Rabbit Trail in Greenville, SC. something like that with lanes for bike and walk/running.
- It would be really cool if you could use the old railroad tracks system to expand the Greenway. It would utilize already existing infrastructure to expand the greenway to areas such as S. Milledge.
- Keep motorized vehicles off the bike trails.
- Love it. Bring my grandkids whenever the weather is nice
- Love the Greenway! It is the so great to have a space to come and jog in nature.
- Love this place
- Many trails need maintenance and upkeep. Not as clean or well kept as they used to be - potholes, gullies, uneven boardwalks, debris on trail, so not as safe for runners and joggers. Don't ever seem to see anyone out taking care of things.
- More picnic tables. Restrooms.
- Need canoe launch @ ben burton park
- Need restroom in NOR Park
- Pick up more trash. Especially in creeks. I pick up at least a grocery bag of cans, food trash, and glass every time I visit.
- Prevent people from lettings dogs pooping on the paved areas. Have an area strictly for letting their dogs use restroom. Need more emergency poles.
- Restrroms - more conv. concentrate on dog park
- Thank you!
- Thanks
- Thanks awesome MTB trail!
- Thanks for a great space! Loved interpretive panels
- The Greenway is awesome.
- The North Oconee River is a very nice park
- Updates to Ben Burton Park
- Sidewalk/Trails from ATL Hwy to Ben Burton
- Very beautiful and calming atmosphere
- Very pleasant visit to Dudley Park (English tourist)
- water fountains
- Water fountains please!
- We live on the Middle Oconee and would love to see expansion (Wood Valley) in our neighborhood!
- We need restrooms! Better signs. One can get a little lost!
- Would like a "Lost and Found"
- Would love to see longer trails!
- Yeah Man!

Figure AP.21: Online Survey – Question 1

Are you a resident of Athens-Clarke County?

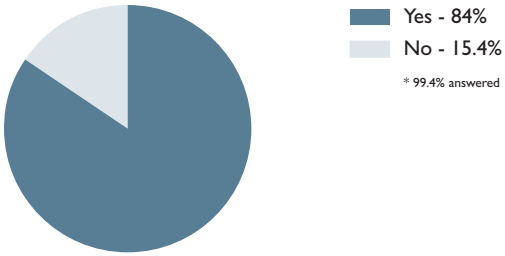


Figure AP.23: Online Survey – Question 3

How long have you lived in Athens-Clarke County?

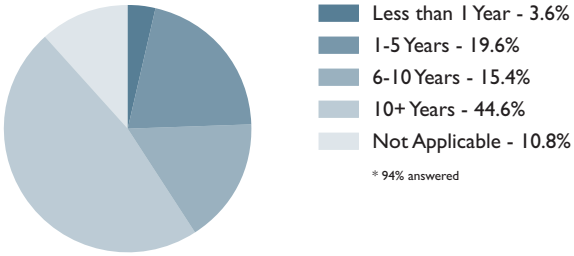


Figure AP.22: Online Survey – Question 2 What is your ZIP Code?

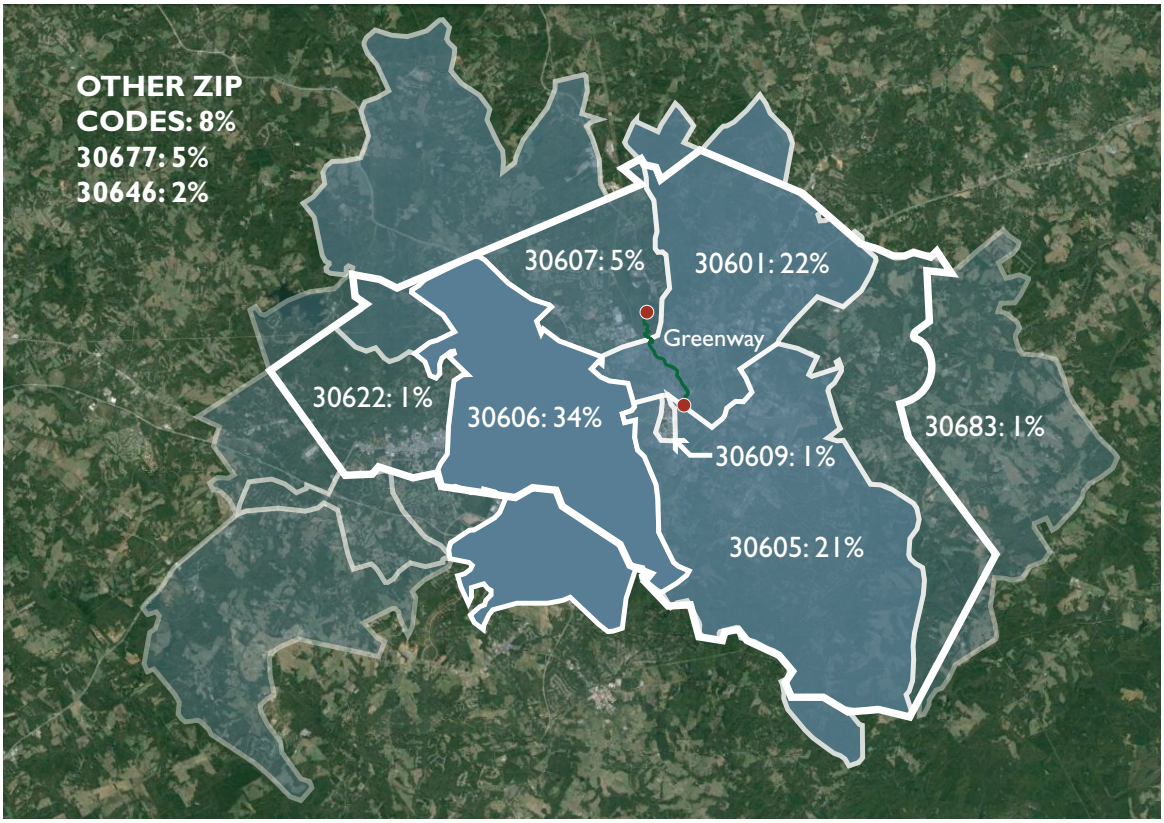


Figure AP.24: Online Survey – Question 4

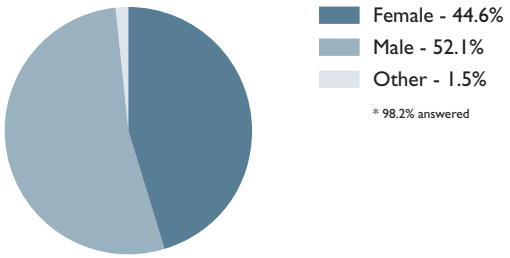
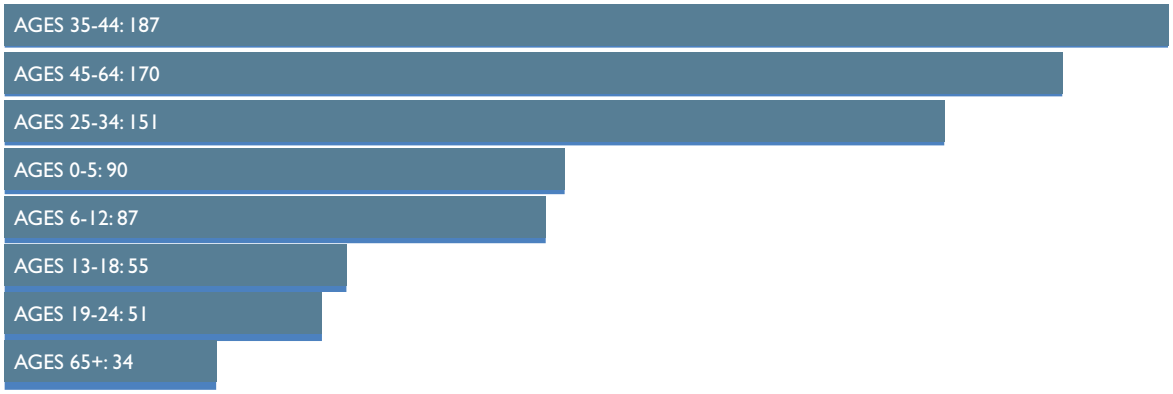


Figure AP.25: Online Survey – Question 5

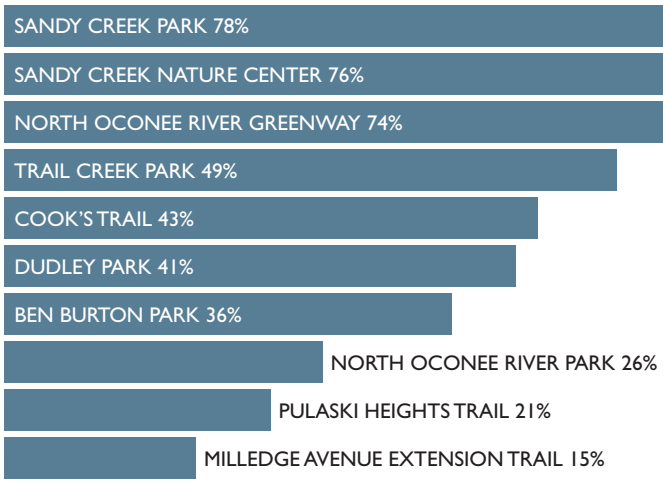
Including yourself, please indicate the number of people in your household in each of the following age categories:



*TOTAL

Figure AP.26: Online Survey – Question 6

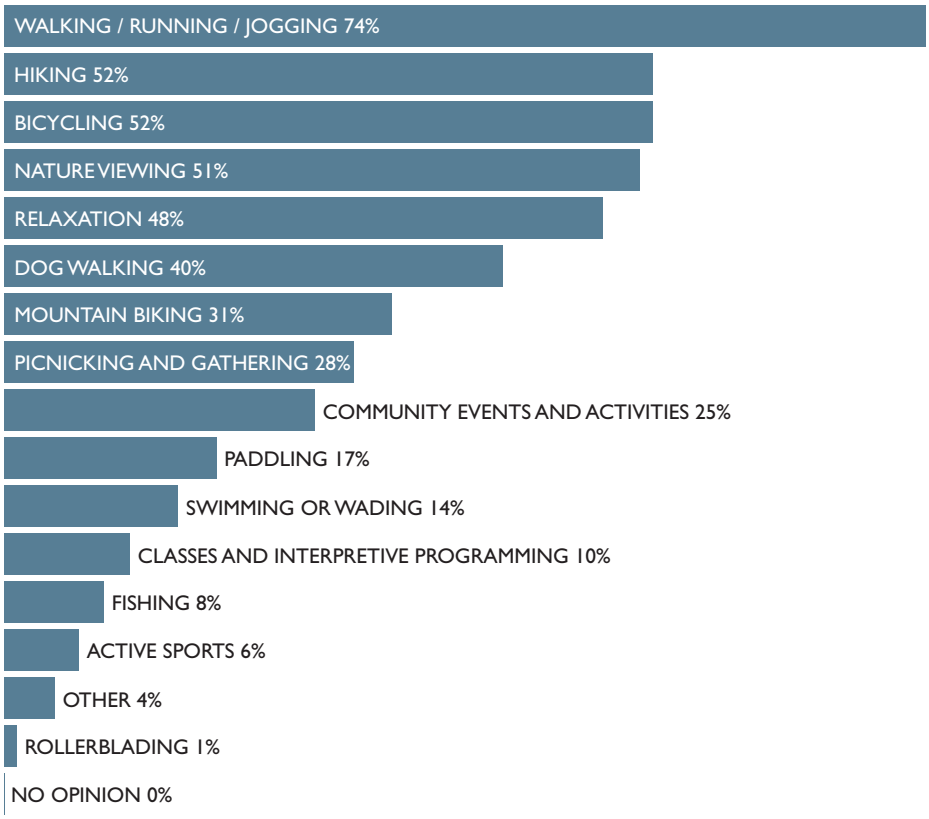
Which of the following greenway-related parks and trails do you visit?



* PERCENT USAGE

Figure AP.27: Online Survey – Question 7

Which of the following activities do you participate in while visiting these parks and trails?



* PERCENT USAGE

Figure AP.28: Online Survey – Question 8

How often do you or members of your household use these parks and trails?

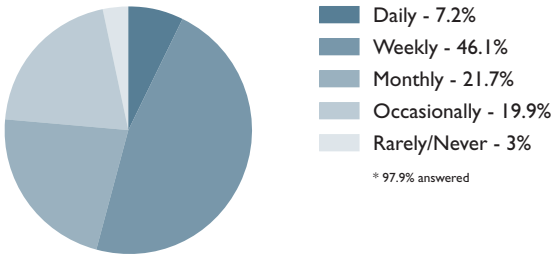
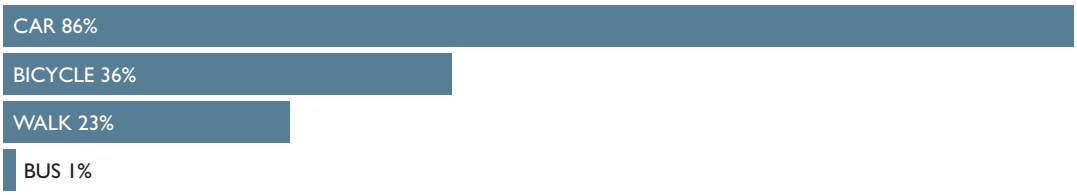


Figure AP.29: Online Survey – Question 9

How do you travel to these parks and trails?



* PERCENT USAGE

Figure AP.30: Online Survey – Question 10

How far do you live from the nearest Greenway park or trail?

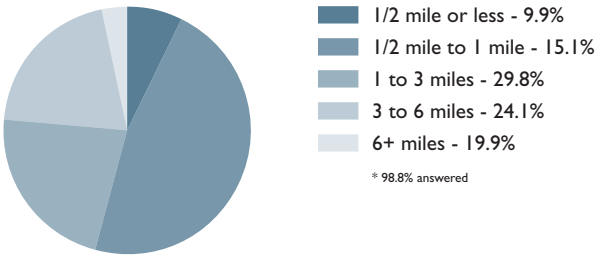


Figure AP.31: Online Survey – Question 11

When do you typically visit Greenway parks and trails?

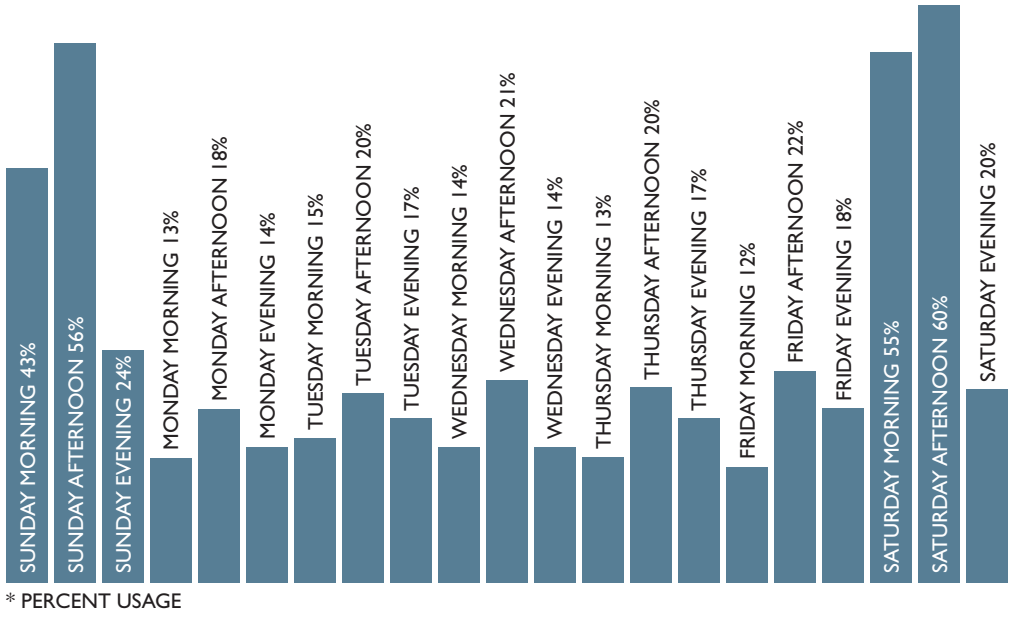


Figure AP.32: Online Survey – Question 12

Do you regularly incorporate greenway trails and paths into your commute or to get from one place to another?

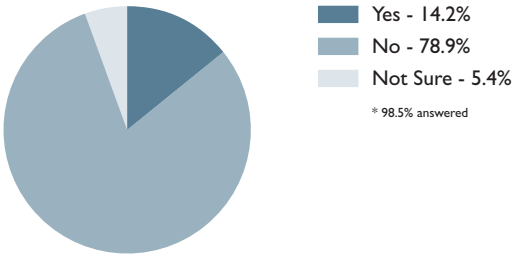
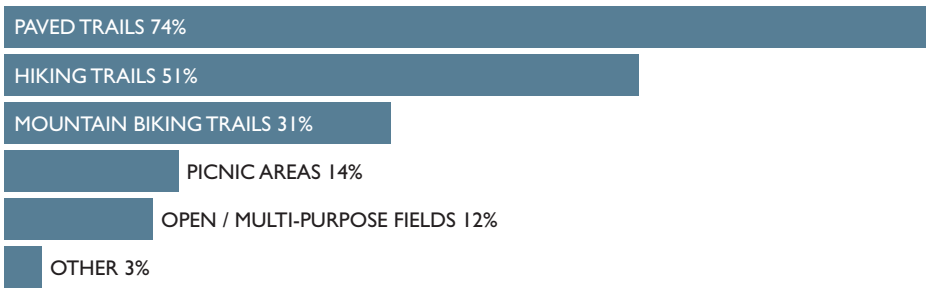


Figure AP.33: Online Survey – Question 13

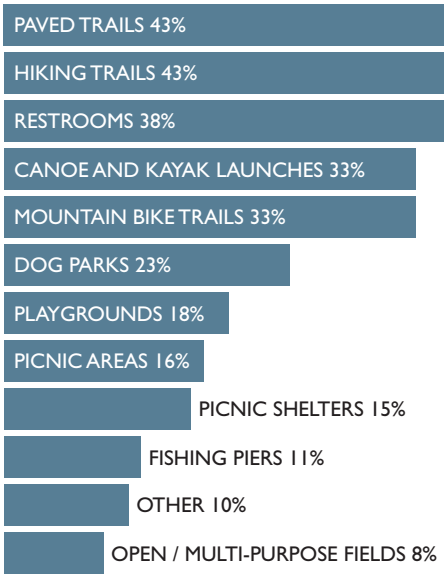
Which Greenway features do you use most often?



* PERCENT USAGE

Figure AP.34: Online Survey – Question 14

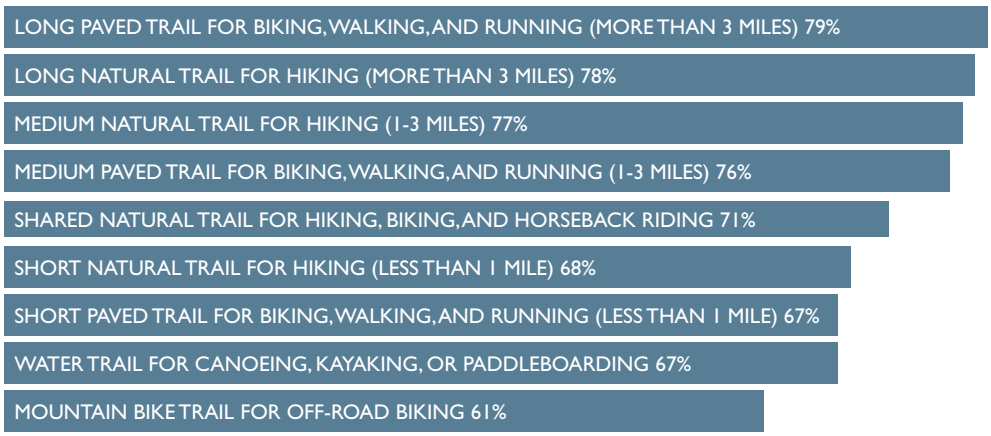
Which Greenway features would you like to see improved or added?



* PERCENT HIGH PRIORITY

Figure AP.35: Online Survey – Question 15

Rate how likely you are to use the following trails, from 1 (Very Unlikely/ No Opinion) to 4 (Very Likely):



* PERCENT HIGH PRIORITY

Figure AP.36: Online Survey – Question 16

Please rate the condition of the Greenway:

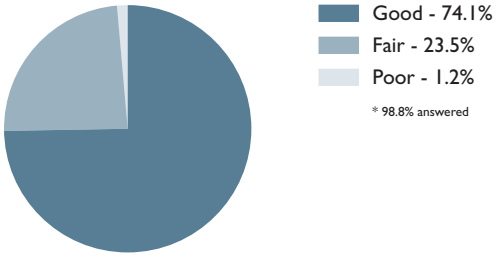


Figure AP.37: Online Survey – Question 17

Finding your way on the North Oconee River Greenway is:

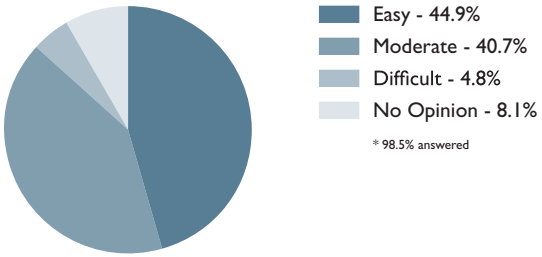


Figure AP.38: Online Survey – Question 18

Prioritize the following Greenway goals on a scale from 1 (Low/No Opinion) to 4 (High):

* PERCENT HIGH PRIORITY

Figure AP.39: Online Survey – Question 19

Do you feel safe at these parks and trails?

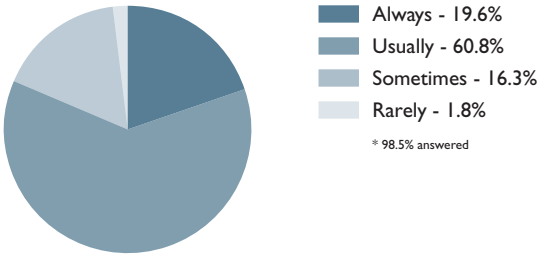
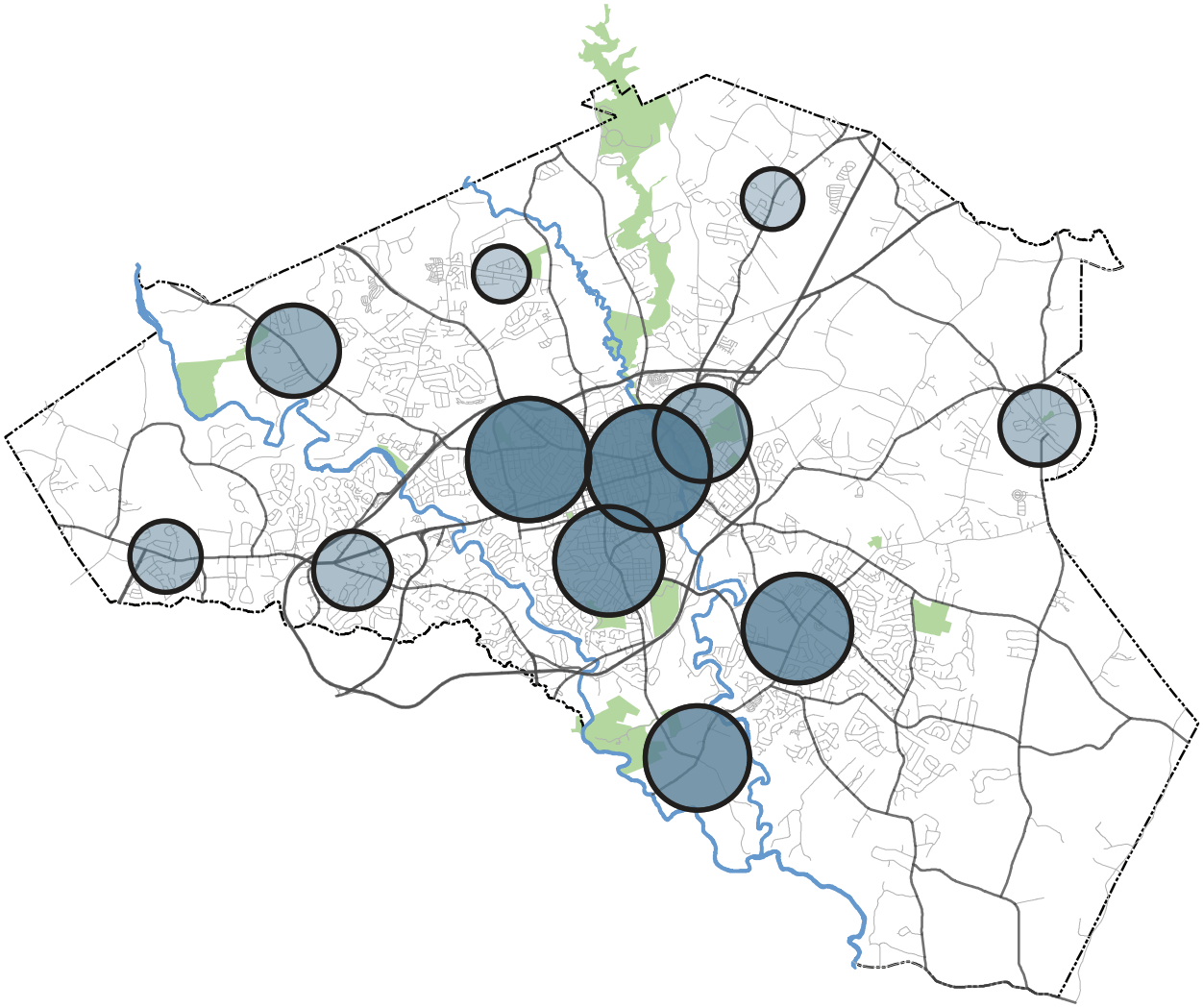


Figure AP40: Online Survey – Question 20

Which neighborhoods would you like to see the Greenway serve?



Other Comments

Are there any other comments that you have to help improve the Oconee Rivers Greenway?

- Are there any other comments that you have to help improve the Oconee Rivers Greenway?
- I would like to see events held here such as the Xterra games or other things that highlight the areas and make people aware of them.
- I would love to see more biking and hiking access all over Athens. The more the better! Thanks for asking.
- It is difficult to find a map of current greenway trails online. I have not looked in a while, but in the past have always ended up confused. Love the parts I use, just wish it was all connected in a way that made it a viable transportation choice.
- First of all, I love what the city has done so far. The Greenways are awesome! And the new mountain biking trails at trail creek park are a dream come true, really. I think the continued expansion and upkeep is extremely important in keeping Athens awesome and healthy. Keep up the good work!
- Please continue expanding the greenway. It is a wonderful asset to our community and our health!
- I would love to have longer bike trails. I biked so much more when I lived in Chicago and could bike 50 miles on paved trails.
- Improve signage. Provide signage to help people safely get to the Greenway by signing preferred cycle routes (i.e. Boulevard and Meigs, not Prince)
- Open restrooms
- There needs to be more staff to keep the areas safe, open and clean. This is a true treasure in Athens, why aren't we supporting this more?! The Greenway provides a quick and easy access to nature just off of downtown. What an amazing thing to have and be able to frequent, only many times as a female I do not feel safe here, WHEN ALONE. I sometimes go jogging with my boyfriend but he has a faster pace so I'm trailing behind and alone by myself for a good amount of time. I have even felt unsafe in this situation because frankly anyone could jump out and grab me at any time. We need to work to find a way to make this path safer for everyone to use at all times. I like to visit after work in the late afternoon to early evening. This is a particularly scary time as it is getting dark.
- Would like to see public restrooms on North Oconee Greenway open during park hours. May not be possible because of safety issues but would be helpful. Specifically, the restrooms in the Boy Scout hut which used to be open but are not now and the restrooms at Sandy Creek Nature Center that I think are open only when the offices are open. Parking at the MLK parking area is difficult. Maybe residents in the houses across the street use it as overflow parking. Thanks
- Would be nice to have more of the greenway as a jogging trail that is away from cars and not subject to stopping at intersections (like the stretch from the parking lot off MLK to Sandy Creek Nature Center).
- Open on Mondays!
- Please consider improving the pedestrian access to the greenway! If I live close to the greenway and still have to drive there, it kind of defeats the point right?I live in normal town and love to bike. I bike my kid to school when the weather is feasible, and would use bikes for transportation and recreation more often if the infrastructure was in place to make traveling safer. On Oglethorpe for instance, the bike lanes disappear and reappear in several places and the sidewalk isn't much better for pulling a child in a bike trailer. There are several spots on Oglethorpe where the sidewalk has a small wall on one side and a phone pole right in the middle of the sidewalk, so there are no reliable options to traverse Oglethorpe safely with a kid trailer being pulled behind my bike. Without good connectivity to the Greenway, I am less likely to spend more time on it. We love going to Ben Burton Park, but there aren't bike lanes or sidewalks to get us to that park, so even though it is a beautiful park with residential areas in all directions, there is no good way for pedestrians to access that park, you have to drive there... Please keep up the great work of developing our greenways, but please remember to consider pedestrian access... The last time I drove to the North Oconee Greenway, my car was broken into. That won't keep me from using the greenway, but it makes me think twice about driving to the greenway.
- A bathroom might be good but if it became an enabler for more homeless people to congregate in these areas

then I would prefer not to have bathrooms. I think the green way should also find a way to highlight shoals and other views of interest. We should look to Columbus for ways to draw people to the water.

- More safety call boxes. Occasional police or security guards presence (even if it's just bike cops riding the trails). As a woman, I don't feel comfortable going to the trails alone anymore, which is sad.

- Sponsor events to increase use. For example, North Oconee Greenway walking east toward Chicopee rarely has other users on it. I don't use it when walking by myself, no matter the time of day. Would prefer pathways that were paved with materials other than concert which is hard on joints.

- The insistence on thick concrete slab construction for the paved sections of greenway is, in my opinion, making the perfect the enemy of the good. The new concrete path in Trail Creek Park is actually fairly bumpy for a new surface if you ride it at "commuter speed". I can't imagine riding a road bike for pleasure on a surface like that between Athens and Winterville and beyond on the Firefly Trail. Concrete is durable, yes, but runners hate it, it's expensive, and like biking on the sidewalk, it's not a comfortable biking surface for longer distances. Why not establish right-of-way and, at least short term, install crushed cinder trails? The Erie Canal Towpath has miles and miles of this surface and despite heavy use and New York weather it holds up quite well. I recently made use of the Joseph B. Clarke Rail-Trail on a recent visit to Orangeburg, NY, and despite being asphalt in a freeze-thaw zone, it was in great condition. It joined up with unimproved fire roads and made for an excellent recreation AND transportation network. I am frankly quite concerned that Leisure personnel are developing our next generation of Transportation networks. Linear parks are great, but what people here really want and need is a comprehensive, convenient, and efficient way of getting between neighborhoods, workplaces, and amenities without using a car. Meandering pathways to nowhere are fun to take the kids or dogs for a stroll on, but almost useless for transportation.

- Do all you can to prevent the implementation of a free-standing, above-ground sewage line over Sandy Creek and in the Sandy Creek Watershed as well as protecting the same from happening at Shoal Creek. These are healthy ecosystems that will inevitably become compromised if the sewage lines are put in.

- Bike bridges over intersections and longer trails would help make it more usable for bikers. A lot more people would use it and it would become "safer"

- Keep up the great work!

- Concrete is hard on the knees it would be nice if there was dirt paths alongside them

- Better bike connectivity to/through downtown from in-town neighborhoods.

- Better shelters. And a bathroom at ben Burton.

- We need a greenway to connect with the water treatment facility on Barnett Shoals Rd. to access the trails that could be made there for mountain biking and hiking. There should be bike mountain bike access to Sandy Creek Park.

- We need more mountain biking and bicycle trails in general. This town is so well known for cycling but does nothing to promote or help generate more access. Cycling is a huge economic driver and would not only make life better for those here in Athens but would bring more tourists to Athens.

- The Milledge Avenue extension is very strange, and I can't figure out what that short paved pathway is supposed to connect to. I use Lake Herrick's trails regularly, and it would be nice if that bike path continued along Milledge (or something...)

- If I remember correctly, there is a large property adjacent to Whit Davis & Barnett Shoals that has been promised as green space. Politicians need to keep their promises and this would benefit everyone, if recreational trails were built and connected to the Greenway!

- We need safer pathways when on a road with clear markings as to where to go to stay on the greenway. We also need to have it interconnect multiple areas and create a network of paths across town to promote utilitarian use as well as recreational.

- Maintenance seems to have become much less of a priority over the past several years. Programming doesn't exist on the greenway anymore?

- I live next to Sandy Creek Park, and yet, I have to drive to the Nature Center to get on the Greenway. Why isn't

there a way for the general population to get to SCP without having to drive? 441 is way too dangerous to ride a bicycle.

- I don't use the greenway enough, but I'd like to think I would if it connected up better. I like the idea of a "sliver comet" type trail that even connected small towns here in the Athens area for longer bike rides (or runs) with lunch stops in the middle! Just got a mountain bike to trail creek is new to me but may become more important in the future.

- Greenway is really great. The point where the greenway crosses North Avenue is always a toss-up if you are going to get harassed by the people from the shelter and that may keep some people from utilizing the greenway.

- Paved cycling paths not only improve public health and the safety of cyclists and pedestrians, but it also improves roadway congestion caused by cyclists on roadways that do not have defined bike lanes.

- More mountain bike trails that are fairly natural single-track. While EACP has a pretty neat little complex with trail creek that SORBA has built, there is nowhere to ride in an actual natural environment closer than Heritage Park, also Trail Creek is near a undesirable community full of gang members, and it is not safe to be there alone or after dark, a problem many of Athens parks face. Perhaps more policing in those areas? Equestrian use should be severely limited due to the dangerous, uncontrollable, and unpredictable nature of the animals. Natural soft surfaced hiking trails should be plentiful, not huge paved freeways through some trees.

- Make a path from besides the Botanical Gardens to the Oconee County line behind the Equine facility.

- I think that more mountain bike trails should be built with paved trails possibly leading to parks where the trails could be accessed. Over the past few years mountain biking has definitely increased in popularity and more females have started to take interest in the sport. I feel that a reason for this growth is having safer places such as the trails at trail creek where people can ride together and know that they are safe. Therefore, I think mountain bike trails built by the city that provide a safe way to ride will only continue to grow the sport of mountain biking.

- More restoration plantings along river trails Sustainable built hiking trails like IMBA

- Thanks and Keep it up!

- Connect the North Oconee River Greenway 2 barber Street where the water treatment plant is.

- Mountain bike trail would be great

- Incorporate Prince Ave with green roadways (bike lane, walk lane and tree/bioswales)

- Mountain bike trails!!

- The mountain biking trails at Trail Creek have made an amazing connection with the biking and hiking communities and this neighborhood in Athens! We need more of these opportunities to connect. The park feels much safer now with all the traffic on the trails! What a treasure to have in Athens!

- The Greenway is one of the most underutilized pieces of public infrastructure Athens has going for it. I think one of the reasons for this is lack safe access points. I realize that geography and lack of feasible access points accounts for a fair amount of this, but if the city could figure out a way to make the Greenway a major driver of city development (similar to the way the Beltline is driving development for Atlanta), we would probably see use of these facilities go up and improve access going in (i.e. more bike lanes and sidewalks on city streets that connect with the Greenway). Which could also improve the overall lack of pedestrian and bicycle in general.

- Some of the entrance points are unclear, like the one by Willow Street. And safety is an issue. There have been numerous attacks on women. Lighting or blue police boxes, something to make people feel safe if they're alone.

- I mentioned it before, but more security. I have never seen any security/police officers patrolling the area despite the fact that there have been violent crimes on the Greenway. My family would use it a lot more often given more security.

- I would like to see the green way extended to connect all of Athens together and create a Walking/Biking pathway that will help to eliminate the need for cars within the old Athens city limits

- The overall ability to connect greenway paths to be able to commute by bike on biking/walking trails should be a greenway priority!
- Thank you!
- As a recent graduate of UGA, those trails helped keep me sane during my coursework. Seeing more of them would make me even more excited to come back.
- I would like to see bathrooms and/or water fountains along the path running from Dudley Park to Sandy Creek.
- Please find a way to work with Oconee on rails to trails to connect Watkinsville and Athens with non-autocentric transportation infrastructure!
- I would use the greenway to commute to work on a daily basis, if it connected Whitehall Forest to the Eastside. Biking on Barnet Shoals/Whitehall is not safe.
- Signs are needed (from both directions) as a warning not to hike on certain sections of mountain bike trail at Trail Creek.
- We love the greenway trail, but wish it was 20 miles of limited access instead of 2. We never go the full length of the route because it is not fun to manage kids and negotiate sidewalks and multiple crossings on the road parts of the trail. We would use this trail far more often if it was longer. First priority to me would be extending the river side trail to the edge of the county and beyond (Firefly trail?). Second priority would be developing the Tallassee property in a way that preserves the natural state it is in and uses it to provide environmental education and long unpaved trails for people to hike and enjoy the beautiful land there and possibly creating a trail along that branch of the Oconee river to join it to Ben Burton and beyond.
- Please keep them safe. Attention should be given to the areas around the greenway where homeless camp.
- Parks and community spaces are very important to draw people to the trails! Also, if you want people to walk/bike, please add more sidewalks in Athens! I live in East Athens, and there are not sidewalks in my neighborhood. We still walk to the trail, but it's dangerous to walk on the road in certain parts!
- Sidewalks to Ben Burton Park from the neighborhoods towards the Atlanta Hwy area would be well used and appreciated; I'd also like to see the incorporation of edibles instead of shrubbery in these park areas.
- ACC needs to visit Orlando's bike trail system (see Winter Garden)! We need to secure rights to logical future pathways before it's too late. Also work to connect the Firefly trail.
- I remember voting for the SPLOST that was supposed to connect Whitehall to downtown over 20 years ago. I know there are some land right-of-way issues through there, but I think it would be an amazing community amenity that would ultimately prove an added value for the same property owners that are currently blocking the project. Just look to Boulder, Colorado for an excellent example of an interconnected and extensive multi-use trail system- the benefits are obvious.
- I live in Bogart and was disappointed that I have to travel so far to find a trail to walk. Could there be a park up this way besides Ben Burton? The trails there are very short and it is not necessarily a location for walking. There have got to be more people up here than I who would use a facility and not have to travel so far.
- Improve the drainage when it rains, especially on the section from College Ave. to sandy creek nature center.
- The trail at bear hollow been down for about a year seems like
- I can volunteer.
- Thanks for all of your hard work!
- In order to build more miles of trails with whatever money is available, alternative surfaces and/or narrower trails should be implemented instead of all wide concrete trail sections.
- I have child in wheelchair that cannot access a lot of areas. The stone pavers at Sandy Creek are extremely difficult to push a wheelchair over & has discouraged is from attending. She used to love going to see animals but stone pavers are hell & horrendous idea. We have been unable to go for several years now b/c getting into building very hard. Looks very pretty but horrible for accessibility.

- The trail creek greenway should really be properly connected to the north Oconee greenway. The sidewalk down First Street is really unacceptable.

- Don't try to turn it into a program for active recreation and don't try to pave the whole thing.

- The Greenway is a treasure. Please keep it pure and simple as it expands, much like it is now.

- I'd like to see more maps on the trail. On First St there are areas where signs indicate the Greenway trail, but the trail is not apparent. I think a map would help in these areas.

- I appreciate the ORGC's vision and committed follow-through to continue to preserve our natural heritage and provide valued community amenities. Additional river access points and well-developed water trails will provide unique opportunities for engaging the North and Middle Oconee Rivers, enhancing Athens as a mecca for outdoor activities as well as art, music, sports and culture.

- I work in Downtown Athens and it would be ideal to create a network of paved greenway to use for commuting to work. I would like to bike to work, but do not feel safe on several roads in this town.

- I think it would be a great idea to incorporate lighting into new trails on the Greenway. Some paved trails have light, why not all of it??

- I don't commute on the trails so the last question does not matter to me, although I think it is a good thing for the community and I would support it

- There is a huge cycling community in the Athens area and would like to have better cycling routes that do not have to compete with traffic. I also feel that it would take some pressure off of drivers that get behind a cyclist and are afraid to pass the cyclist.

- You're doing a great job; just keep building on to what is there now. If I had an option, to safely commute to work on a bike to downtown Athens, I would do it every day.

- Please do something about the water

- I enjoy certain areas of the Greenway, such as Sandy Creek Nature Center and Sandy Creek Park. I am a police officer and am always armed, but at these locations I feel safe enough to bring my children. However, there are areas of the Greenway that I would not bring my children. These areas are frequented by the homeless, drug addicts, and sexual deviants. Because of this, I would not want the Greenway connected to the neighborhood I live in. I believe it would only serve as a pathway for criminals to travel into the area in which I live.

- would be nice to find a way to be able to use the parking that my taxes pay for...both the site off poplar and college ave are being used privately and there is several times there is no parking available to use these parking lots.

- Once the easements have been acquired, we could implement mulched trails to start and then create a priority list on the most used.

- My neighborhood is older, and not everyone knows about the greenway(s) in the county. It would be a wonderful alternative to commute downtown vs. Prince/ MLK/ Oconee, etc. Perhaps more wellness activities and educational (plants,etc) events would help show that our greenways are a wonderful benefit and create more interest.

- Paving the current gravel parking lots

- Clean the banks so we can enjoy the river, we can't see it. Crime and homeless are a major problem, my wife and kids don't feel safe without me

- Safety is a HUGE issue for me on the Greenway. I do not usually use as much as I would like due to feeling unsafe. I also do not encourage my family because of the same reason. I would like to see safety improved.

- I don't use the greenway to commute, but if it were easier or connected more to where I needed to go I would. I am very in favor of watertrails and river access. I also want to see more and better recreational activities and hiking – but not at the expense of environmental quality.

- It would be nice to have some sort of system where updates were provided on the condition of the trails after severe weather. Maybe a twitter, instagram, or facebook account where people can add updates and pictures to let others know if the trails and/or facilities are safe for use.

- Improved connectivity would definitely increase my use of the greenway. In particular, I am very interested in the extension from Dudley Park to College Station Road, which would inspire me to commute to work via bicycle on a regular basis.

- It's a valuable resource and would be more valuable as a commuting corridor if connected to many more places!

- Get more people on it. The more integrated the safer and better it will be.

- Great work. The Greenway rules!

- I would love to be able to get to the greenway without my car.

Translating Feedback into Planning

Based on the results of the surveys, the following primary considerations were incorporated into the greenway planning process:

Modifications to Existing Facilities:

- Improve networking of trails and parks to increase usability of the greenway for commuting to work or destinations
- Add more hiking trails and way-finding elements, while also improving existing hiking trails
- Prioritize longer paved trails, over shorter paved trails, and natural-surfaced hiking trails

Future Greenway Expansions:

- Add restrooms in additional locations throughout the greenway and parks adjacent to the greenway
- Add more hiking trails
- Increase the number of dog parks
- Provide additional canoe and kayak launches
- Protect sensitive environmental areas and habitats
- Connect the community with new walking and biking routes
- Provide open space for interacting with the natural world

Community Leader Interviews

Park planning staff also obtained input from a diverse set of community leaders that either serve in an elected leadership capacity or have prior experience with greenway planning or certain areas of expertise relevant to the greenway's mission. Members of the current Oconee Rivers Greenway Commission interviewed the mayor, several county commissioners, the former and current city manager, the president of the Athens Area Chamber of Commerce, the Director of Sustainability at UGA, the planning director for ACCUG, the former Director of Grounds of UGA, several former greenway commissioners, a senior planner with Northeast Georgia Regional Commission, the director of the River Basin Center, and a retired UGA forestry professor who is also the namesake for Cook's Trail.

Many common themes regarding the current degree of functionality of the greenway emerged from community leader interviews. A common thread underlying all of these themes is that the greenway should be a vibrant, inter-connected, off-road transportation network that connects neighborhoods, commercial centers, and employment centers.

Most of the interviewees agreed that the original priority of the greenway is recreation, but a greater emphasis on transportation is emerging. Most of the interviewees agreed that the greenway is safe overall. Interviewees generally thought that the community is supportive of the greenway, but believe many community members remain uninformed of the greenway or hesitant to see development near their neighborhoods. This lack of knowledge and the "not in my backyard" mentality could serve as major roadblocks to increasing the connectivity of the greenway and fulfilling the joint objectives of conservation, recreation, and transportation. Interviewees also consistently observed that funding shortages regularly pose a challenge in maintaining and expanding the greenway. Interviewees also agreed that while the greenway currently serves as an economic driver, it has not fulfilled its full potential.

The primary point of disagreement within the interviews was prioritization of location for future expansion of the greenway. While a few interviewees agreed on expansions around Lexington Road and Barnett Shoals Road, a great deal of heterogeneity revealed itself with respect to preferred geographic locations for future greenway investments. Interviewees also diverged when considering the greenway's long-term vision.

Stakeholder Engagement

In an effort to obtain a broader set of perspectives on the greenway for incorporation in the planning

process, park planning staff also held two stakeholder meetings – one in late March of 2016 and one in early April of 2016 – open to the general public. Not including ACCUG employees, the first meeting had nine attendees and the second had eight. The meetings consisted of open discussion, where maps of the prospective expansions of the greenway were pinned to the conference room wall for review and comment. A summary of the comments received follows:

- Concern about on-street connections, with the addition of more comfortable crossings suggested as a solution
- Increased connectivity on the bridges on College Street and Oconee Stree
- Addition of more water trail access points above Dudley Park to Sandy Creek and removal of the dam from Ben Burton Park
- Relocation of the Firefly Trail in close proximity to Spring Valley Road and Moore's Grove road to connect with Coile Middle School and Nakanishi Manufacturing
- Addition of a police patrol or a citizen/volunteer walking patrol to increase safety
- Offering a property tax advantage for an owner granting easement across their property

Public Review

A draft of the network plan was made available for public review in November-December 2016. This included two landowner meetings, three general public meetings, an online survey, and several meetings with different community groups who reached out to staff.

For the landowner review, 1700 postcards were sent out to every landowner whose property lies within 100 feet of the proposed trail corridors. These meetings were only advertised through postcards so that landowners would be able to voice their concerns prior to the plan being available to the general public. 63 landowners attended these meetings.

General public meetings were advertised by sending a news release to 49 media contacts on Nov 16, 2016, participating in an interview on "Classic City Today" with Tim Bryant, newspaper coverage through the Athens Banner Herald/Online Athens, multiple Facebook posts and events, conducting a Facebook Q&A, the Leisure Services Department E-Newsletter, and Twitter. 71 people came to the general public review meetings.

A new online survey was developed to gauge the public responses to the draft greenway network plan. Each question asked was a form of ranked question where the results were calculated using a weighting system to determine which answer choice was the most preferred overall. The answer choice with the largest weighted result is the most preferred choice. The weights are calculated by assigning a percentage value based on the total amount of answer choices.

The weighted results are calculated as follows, where:

x = the total amount of answer choices y = response count for answer choice

$y_1(x/x) + y_2(x-1/x) + y_3(x-2/x) + \ldots y_x((x-(x-1))/x)$

For example, question two has three answer choices: most important, somewhat important, and least important. Let's say that for option 1, there are 5 votes for most important, 4 votes for somewhat important, and 8 votes for least important. The weighted result would be calculated as follows:

$5(3/3) + 4(2/3) + 8(1/3) = 10.33$

Let's say that for option 2, there are 10 votes for most important, 6 for somewhat important, and 1 votes for least important. The weighted result would be calculated as follows:

$10(3/3) + 6(2/3) + 1(1/3) = 14$

Therefore, the preferred choice would be option 2.

Another method that could have been implemented would be to divide the weighted result by the total amount of responses to achieve an average result. This method was not used because the average would not be reflective of the public's votes if there was a large difference of total responses between options. For example if for option 1 only two people voted & voted it most important but 20 people voted option 2 as somewhat important, the average result would show option 1 as the preferred choice even though only two people voted for it.

Another way we could have calculated our answers would be to multiply the weighted result by the total amount of responses. This could also skew the results if there were large differences of total responses between options. If we consider the previous example, where option 1 had two votes for most important

and option 2 had twenty votes for somewhat important, the results using this method would have option 2 be the preferred choice by a difference of 260 in its favor. These results are just as problematic as using the average result method becuase it creates such extreme outliers.

There wasn't a large difference of total responses between options, which is why the weighted result calculations were used without including them as a factor.

Figure AP.41: Public Review – Question 1

The core values of the Oconee Rivers Greenway Network Plan will guide the goals, actions, and work plans for the greenway system in the coming years. Please rank the following values from 1 to 5 (1 being highest and 5 being lowest).

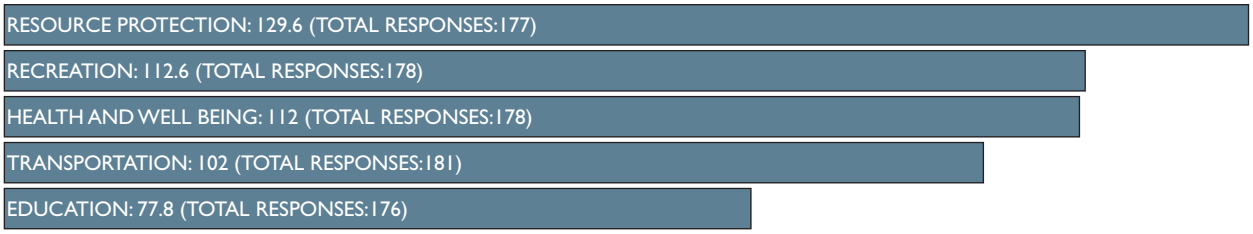


Figure AP.42: Public Review – Question 2

Please review the following greenway goals and indicate their importance (most important, somewhat important, not important) to you as a citizen.

Figure AP43: Public Review – Question 3

The greenway trail network incorporates general connectivity concepts for various portions of Athens-Clarke County. Please rank the concepts below in priority order from 1 to 7 (1 being highest and 7 lowest).

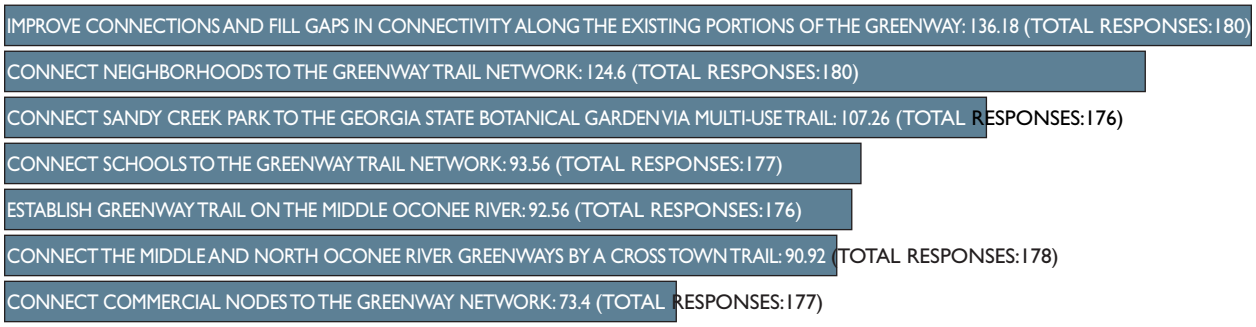
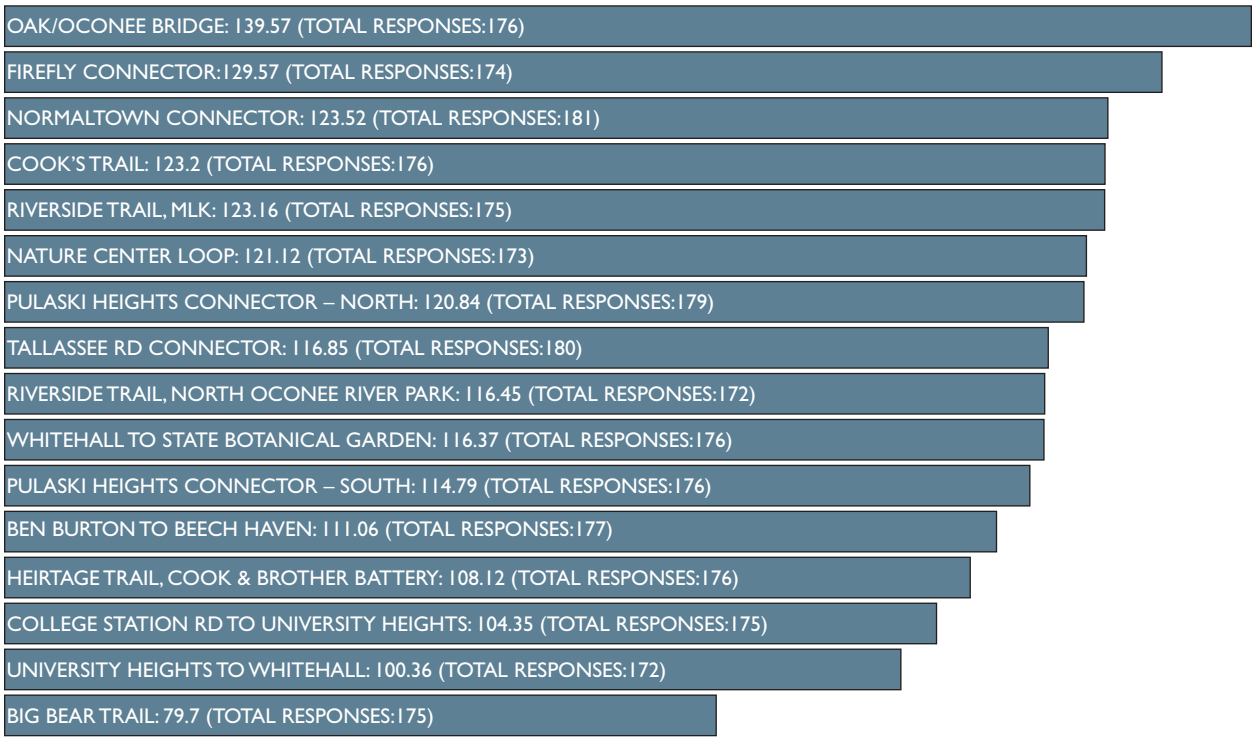


Figure AP44: Public Review – Question 4

The following trail projects have been identified as priority projects. Please indicate your priority preference for each project. Refer to chapter 4 of the Oconee Rivers Greenway Network Plan document for more information on these projects.



Other Comments

Please provide any other comments you have on the Oconee Rivers Greenway Network Plan

- Important to complete Heritage Trail portion from Cook & Bros. to Oconee Hills Cemetery – Especially focusing on preserving Easley's Mill & Cedar Shoals w/ appropriate interpretive signage consistent with that already existing on Heritage Trial – Add activities @ N. Oconee River in this area and as for boating access opportunities, bike, and canoe rental, festivals, etc – Engage public in funding restoration of Easley's Mill, Cedar Shoals & Water drive power generation in old O'Malley's site (w. coop. of UGA & funding assistance.

- My personal highest priority is connection from downtown Athens to Sandy Creek Nature Center.

- [Question 1] THE wording above is vague. I'm assuming you're asking the values that I would like to see achieved (?) [Other comments] I LOVE and FULLY SUPPORT the O.R.G.N.P.! I would like us to catch up, since we are way behind the trails connectivity of so many other amazing communities Truely I would prefer the see fun exercise stations (pull up, crunch, + yoga style stretch stations) like I see all over Atlanta (Simple, EDUCATIONAL + EFFECTIVE WORKOUT STATIONS)

- [Resource Protection] We are facing the consequences of decades of pollution and degradation which threatens all life on earth. [Education] Through more education and awareness people can take more control of their agency in society and personal potential. [Health and Well Being] Biking and Walking is incredible for your health and well being and also the health of our environment. [Recreation] Having fun and enjoying walking/biking/nature with your family and friends is the BEST! [Transportation] Biking/walking instead of driving is the most cost effective and immediate ways for the most people to make lifestyle changes to positively address the crisis of our environment and create more resilient communities. [Other Comments] The construction of bike and pedestrian infrastructure is imperative to our community our state and our world. The burning of fossil fuels for transportation has been the driving impetus for decades of wars for oil and increasingly, the destruction of our communities and natural resources here in America. Placing bikers and pedestrians in direct competition with motor vehicles is not only, all too often, a fatal consequence of poor community planning – but also creates a population captive in their vehicles and disconnected from the world around them. If Athens Georgia is to be a community of resilient engaged health citizens – able to participate in a quality of life – to work, play raise our children – our community leader must prioritize the creation of a thoroughly connected greenway/bike/pedestrian transportation system. Bikes and pedestrians cause much less wear and tear to infrastructure, enjoy increased health and well being – in discourages materialism and increased personal awareness of our place is our community and our world, and creates zero emissions while doing it. To address the issue of perceived crime – I use the greenway daily to commute from my home on Danielsville Road, and I have NEVER experience any form of harassment or even the feeling of vulnerability. The homeless population who use the greenway are nearly always engaged in a completely vital public service – picking up trash that would otherwise end up in the river. Thank you

- I've already filled out the survey, but I just noticed a gap between the nexus of the N/M Oconee River Greenways and the Oconee River Greenway. If this plan is truly a long-range statement of our goals for greenways as a community, then this gap needs to be eradicated, either by means of filling it with a proposed trail or by removing the Oconee River Greenway segment. We already have enough non-connective greenways in Athens; we don't require any more.

- The Cook's Trail corridor is a very important natural area for breeding, migratory and wintering birds. I'm concerned about the impact of habitat destruction and level of human disturbance if part of the floodplain is converted and paved to facilitate bike access. I think it would be better to repair the existing boardwalk trail for hikers and nature-lovers and would be strongly opposed to a concrete trail. I think it's an excellent idea to connect town to the SBG via bike trails (although would prefer a rails to trails connection along S Milledge – why must all the trails be located along our green lung riparian habitats?). I would strongly encourage any paved extension of the greenway from SCNC to SCP to avoid the floodplain of Cook's Trail and to leave as walker-only access. Any way the trail could be cut to parallel 441 and away from the stream?

- PLEASE DO NOT PAVE COOK'S TRAIL!!! I appreciate the desire to provide a multi-use connection between Sandy Creek Nature Center and Sandy Creek Park, but paving the existing Cook's Trail (or just portions of it) is the wrong way to do it. Cook's Trail runs through some of the most sensitive natural areas and important wetlands in Athens-Clarke County, and in many places is immediately adjacent to the creek. Protecting those resources should be the County's highest priority, and a paved trail – both in its construction and addition of impervious surface, would instead be harmful to them. Second, current users of Cook's Trail appreciate the quiet, natural setting. There aren't enough natural trails where people can walk, especially for those who like to take their time, want quiet contemplation, want to observe nature. Paving Cook's Trail would remove one of the best such places in the entire county. I understand the desire to have a safe multi-use connection between SCNC an SCNP for cyclists, but don't destroy one of the County's jewels to achieve it. Find a different route that won't impact wetlands and waterways and that won't privilege a future group of users over those who already use the trail. If the trail suffers from lack of maintenance, maintain it.

- Please don't pave Cook's Trail

- If my understanding is correct, you have proposed to pave Cook's Trail. I think this action would be a significant mistake. Cook's Trail is a valuable resource to explore and enjoy our environment in a natural state. Paving the trail would detract immensely from the natural character of the landscape and environment. Clearly improvements are needed – particularly to restore the boardwalk that deteriorated beyond usability – but I disagree with the proposal to pave the trail, as that change would harm Cook's Trail and the appeal it currently offers to enjoy the natural environment.

- Do not pave cooks trail. Open it to bikes

- I am really disappointed in the proposal to re-route and convert Cook's Trail to a multi-use path. I've been hiking this trail for years, mainly to observe wildlife. The appeal of Cook'd Trail is its peacefulness & the sense of getting out into nature and "away from it all." These changes will completely change the experience of using the trail. Very sad loss for our community.

- I'm an Athens resident and I hope to be a part of our community for a long time! I love our greenways and greenspaces. I bike daily for both transportation and recreation, and I am an avid runner and use both our street and trails to run on. I am also a biologist and someone who loves to be outdoors. I have run the entirety of Cook's trail more or less weekly for the last many years. Just today I ran the part that is available to me still; fortunately I have the resources to pay to enter Sandy Creek Park. Cook's trail is such a great resource for runners and walkers, which includes families and people of all ages. It would not be same if paved. Not only is it a biologically sensitive riparian area and paving it would damage this aspect about it, but it is also one of the freely available trails in town where one can truly be a part of nature. Paving it would change that and decrease its value to our community. The current trail is relatively flat and wide and thus accessible to nearly people. I prefer to run on trails and I also minimize the amount of time I spend running on concrete, and thus if Cook's were to be paved using concrete I would likely no longer use it.

- Paving Cook's Trail should not be the highest priority. The value of Cook's Trail is it being a natural area with a natural hiking trail, not a hard, multi-use surface. Yes, the boardwalk/bridge problems caused by Leisure Services neglect need to be addressed, but paving the entire stretch to Sandy Creek Park is unnecessary. Those funds could be used on creating connectivity where none exists now, like working on some of those Tier 2 projects. The lack of riverside trail at MLK and North Oconee River Park has been a major problem for the Greenway since it opened and has artificially limited Greenway use to the north of College Avenue/ MLK. If the Greenway would focus on making real connectivity to the south, I think one would see the use of the rest of the Greenway as it extends to the State Botanical Garden grow, thus diminishing the need to pave Cook's Trail.

- Cook's Trail needs improvement but I would hate to see it changed to a multi use trail. Having a separate foot path for hikers would allow them the peace of being on the trail without bikes flying past the whole time. I think it would lose its aesthetic as a multi use trail.

- I love the Greenway and look forward to extended routes and more connectivity. However, I am saddened to see that paving is the plan for Cook's Trail. The forest-trail feeling and the woodsy connection a

natural footpath gives are some of Cook's most appealing characteristics. Please consider not paving Cook's Trail. You

- Please do not pave Cook's trail.

- Cooks Trail improvement needs to be very well thought out. Natural surface trail, not pavement. The flood plain is a serious problem where the trail exists. Any major rain event will have it underwater, much like the section parallel to MLK. However, connecting the Park to the Nature Center by bicycle is an absolute must, as there is not a bus line that goes out that way, access to the park is limited to only those who have automobiles. Also, if there is going to be multi-use on the Cook's Trail, then there should be serious consideration of opening up some of the trails, Buckeye for example, to off road cycling. Tallassee Road Connector should be a priority only if the trails there will be multi use, and include bicycles, in particular off road cycling. There would be very little point to ride all the way out there, for a majority of ACC residents, if you cannot continue to ride bicycles on the trails.

- Please dont pave the cooks trail. Pavementhas more ecological affects and changes bothe the character and type of recreation possible.

- Please do not pave Cook's Trail! If you must have a multi use, accessible path to connect the Nature Center to the lake, please find an alternate route. Taking away this mostly natural surface trail would be a travesty. Not every trail needs to be 14' wide concrete.

- Allowing the large cyclist community that lives in the Whitehead/Homewood Hills to safely commute to town is a high priority and would service a large population out near Whitehead that would love to get our cars and congestion off the road by commuting into town by bike.

- I have no general objection to rerouting Cook's Trail, but strongly disagree with turning it into a multi-use (read: paved) trail. One of the appealing characteristics of Cook's Trail is its natural feel and changing the material of the trail surface would substantially alter that aesthetic.

- This is a great plan with many exciting opportunities to connect people with nature and protect our natural resources. Thanks for all the hard work!

- Bridge needs to be redone allowing for bike/walking path. Very dangerous section for many walkers and cyclists.

- I would not like to see Cook's trail turned into a paved walkway – I prefer to walk on a dirt trail. I would like to see the wooden walkways repaired, though!

- I STRONGLY oppose the paving of any portion of Cook's Trail. The document suggests: "In order to preserve the intimate natural experience of the original Cook's Trail, foot trails or natural surface spurs would be maintained off the main trail." This is completely inadequate. Paving any significant portion of Cook's would completely change the feel and character of the trail. It is precisely the long, uninterrupted nature of this footpath that make it so special. Spurs and footpaths that run in close proximity to pavement will not salvage the "intimate natural experience." I am a runner / jogger, and I value this stretch of natural surface for exercising, as it's one of the only close and long-enough dirt trails around, but more importantly, it is unparalleled as a place to take my child. Because it is unpaved and relatively narrow, it has a completely different feel from the portions of the Greenway that are paved and gives the impression of being much closer to nature. In comparison, the Greenway with its concrete (asphalt would be the same) and large side clearances feels very sterile and urban. On Cook's you actually walk through spiderwebs and see deer and owl and snakes in way that I don't think you will if it's cleared back and paved. I'm also concerned about what effect the additional clearing would have on the "high priority habitat" elements present here. Finally, it's just really nice to have a place to walk and run without having bikes constantly bearing down on you. I understand the boardwalk is expensive to maintain, but I really hope there can be some creative thinking here that might allow us to keep this very special place special.

- Neighborhoods surrounding Whitehead road and Homewood Hills are some of the last affordable and diverse, in-town, working-middle class neighborhoods which are largely distanced from the whole gentrified "Athens" vibe. Being some of the last affordable housing and an area that homes many diehard Athens artists and musicians, it seems this area could be more connected to actual "Athens," as it is promoted, yet it is at the very BOTTOM of the priority list here. We lack basic sewer, trash and bus service, yet we pay the

same property tax as other homeowners. We have great neighborhood schools but are disconnected from the Athens-proper culture. Homewood Hills shopping center is slowly dying thanks to its Jackson County owner who does not support local business. We need something to bring business, development, and personality to this part of town. Athens Country Club isn't exactly welcoming to all of us over here. Transmet ran off Hendershots, the seppuku-d itself in the process. Throw us a bone over here y'all!

- Go!

- I am pro Greenway. My comments are in regards to Pulaski South connector: 1) I think you should consider using Hull St from the Council for Aging up to Dougherty St. This would save a large amount of money over the difficult access of going up along Pulaski creek to Dougherty. Hull St is approx 35' wide. On line I found that 29' is the minimum for a neighborhood street with parking on BOTH sides. Hull is above average in width. I feel you should look at eliminating parking on one side of Hull and then putting in a curb approx 8' from the existing curb to create a protected greenway space for pedestrians and bike traffic. This would be inexpensive, still tie into the Pulaski St connection through downtown and minimize erosion and environmental damage through the Pulaski Creek Valley (the creek supports salamanders, crawfish, raccoons, possums, coyote and deer). While staying along creeks is desirable in general, along this challenging section, money would be better spent in other areas. 2) There exists an erosion problem on Hull St right now the Street Dept is looking into. The bank to the west of Hull is very steep and collapsing. The ground is settling and starting to slide up to within 4' of Hull St. Something needs to be done soon to prevent damage to Hull St. I propose working with the Street Dept to incorporate a bank stabilization and a ramp that slopes up to Hull St from the existing Greenway. This would entail a 180 degree reversal (heading back north) of the Greenway for a short distance, but would allow for both the stabilization of the bank and a bypass of the entrance to the Council for Aging (safer for both pedestrians and bikes).

- I believe that spending time and money to create the trails will ultimately provide the education about them. As more sections are built, it will become more user friendly by connecting the places people want to go. They will promote themselves. I also support a Tallassee Road street based connection to the Tallassee Forest. ACC has an underground pipe easement along Tallassee Rd that connects to the reservoir. If a surface easement could be procured, a path there would be away from high speed traffic. I DO NOT support any biking trails in the backcountry section of the Tallassee Forest. This is a unique wilderness area that would be destroyed by bicycle use. As a 70-year-old female bike rider, there are many places I do not feel safe biking. The only street based bike trails I feel safe on have a physical barrier between traffic and the bike area. Please consider this when constructing street based paths. I know i'm asking for something expensive but perhaps there is an intermittent barrier that would keep cars off the bike area.

- Prioritize trails on the river, not on the street.

- ** I didn't respond to #3 for a couple of reasons: First, it's not a good "ranking" question as worded; it would be better to have done low/med/high priority for such vague concepts. Second, paving over Cook's Trail should not be an option (more on that below). Generally speaking, the biggest priority of greenway construction should be improving on the quality and connectivity of the trail experience that has been established to date. Spending as much money as we have on non-connective projects like the Trail Creek and Pulask projects is mystifying. ** If dedicating millions of dollars to short greenway segments that don't link into other paved trails is mystifying, the prospect of paving over Cook's Trail is appalling. As someone who rides a bicycle nearly every single day, I recognize the importance of connecting Sandy Creek Park to the Nature Center and the rest of the paved trail system and I think it is a wonderful idea in concept. However, Cook's Trail must not be sacrificed to this end. It is a jewel for our community: possibly the only connective, linear natural-surfaced trail in Athens. The only reasonable approach to paving a trail along Sandy Creek is to leave Cook's Trail in tact in its present state and install a concrete trail either across the creek or uphill from Cook's. Please engage in conversations with the running, hiking, and naturalist communities, as well as families, seniors, and others who value the solitude provided by this truly unique resource – they will help to inform a more complete understanding of the facility. ** I have heard about the potential for a connector through Boulevard and Cobbham; this appears to be a wonderful concept and I would expect that any approved plan would

include it forthright. ** The proposed plan is far, far too long. Expecting the general public to digest and comment on a 180-page document is a lot to ask. For that reason, I am forced to provide general comments rather than an item-by-item analysis of the text and maps. A long-range plan like this should be no more than 30-40 pages. ** Ending on a positive, the maps and layout are mostly well done – attractive and clear. A big improvement on the style of most government documents.

- Please fund this plan!

- This is most important to me. The current sidewalk solution is not good at all. 14 – Heritage Trail, Cook and Brother Battery Connects the Trail Creek greenway trail with the North Oconee River Trail through the Cook and Brother Battery property and bypasses the current route that uses the sidewalk on First Street.

- Needs to prioritize investment into those areas that are currently underserved and socially vulnerable

- I live on Whitehead Road. I would like a safer way to travel on foot/bike towards town. The overpass at the rail road track is too narrow and I am uncomfortable on busy Jefferson Highway. Ideally, I would like to see a path through Homewood Hills along the creek bed. We have lots of foot traffic and I know it would be well utilized! Best of luck and thank you!

- I'm not entirely sure that this is the correct place to voice this opinion, but I believe that the Greenway plan would benefit greatly from a safe bike route that connected the hospital/ Normaltown area to downtown. There are many people who likely benefit from the connected greenway, but most people in Normaltown would only benefit from it as is as a leisure service. A safe cycling route down prince avenue would allow people to utilize its proposed connectivity as a viable mode of transportation to and from downtown and the University.

- Increase river access by establishing launch sites for boaters and fishermen along the Middle Oconee, North Oconee, and Oconee River past the confluence. Insure protection for recreational users of all trails. Increase public involvement in water monitoring and clean-up of river corridors.

- Create more access site locations for the Water Trail on the North and Middle Oconee rivers. Add College Ave as a future access point for the Water Trail. Create an ACC Safety Patrol position to ensure protection for recreational users on the Greenway and Water Trail.

- Please include a connection between Normaltown/ Brooklyn Creek and Blvd Woods Park to include Chase St. Elementary. Residents of these neighborhoods already value walking & biking & many, many Chase St. students currently walk & bike to school from Normaltown. The large privately owned lots near the Prince & Nacoochee intersection could accommodate off-road Greenway trail while existing low-traffic neighborhood side streets & sidewalks could complete the connection & eventually plug these neighborhoods into the full network via the existing Pulaski trail. A portion of this connection would also provide a parallel alternative to biking on Prince Ave for at least a few blocks.

- 1. The bridge on Tallassee Rd. should be the top priority on the West side. The bridge is already high-traffic for vehicles, pedestrians, and bicyclists. However, the bridge is extremely narrow and allows no space for pedestrians. Pedestrians are forced to walk up on the side of the bridge, which can't be more than 2 feet wide. This is terribly dangerous, not only for the people on foot, but also for the people driving by and having to swerve around them on this narrow bridge. Bicyclists are in danger as well, as the lay of the land and the lack of lighting makes it impossible to see them until you are right on top of them. People walk on this bridge daily, some with children, some even pushing strollers, and this is necessary for many people since city transit busses only run closer to the loop. Also, there are no stores on the other side of the bridge, therefore people must cross the bridge to get to a store. This needs to be handled before any Greenway path along any rivers. According to the Greenway Plan, Tallassee Rd. will be a roadway trail to Tallassee Forest, which will cause even more traffic and more danger to pedestrians and bicyclists on Tallassee. I suggest adding bike and pedestrian lanes along Tallassee, all the way to Hwy. 330. This will benefit everyone on Tallassee Rd, especially children walking to school at Burney Harris and people who must walk or bike to their destinations. 2. All planners involved in Greenway planning need to consider the invasion of privacy the wish to inflict on property owners along the rivers. While the idea of the Greenway is a good one, no

property owners should be forced to have strangers walking/biking/hiking in their yards. The Greenway connections should be made in public areas such as existing roads. Yes, the rivers are beautiful resources. But just because they exist does not mean the public needs to or has a right to be able to walk along them. There are already plenty of parks and trails along local rivers already, and a riverside connection between all of them is simply not necessary, especially not through residential areas. Utilize this opportunity to improve bike and pedestrian paths along roads that everyone uses instead of trying to take people's land to create paths that far fewer people will use.

- There are many people (adults and children) who have to walk or bike over the bridge over the train tracks on Tallasse Rd. near Hogan Lumber to get to the bus or the nearest store. This bridge is very old and very narrow and extremely dangerous for pedestrians. I would love to see the Tallassee Rd. Connector put in place so that these people have a safe way to traverse that section of Tallassee Rd, as well as the section of road out to Burney Harris Middle School. Many people are almost hit by cars along Tallasse Rd. and on that bridge. Thank you

- Very interested in the Oak Oconee Street connection. It's a large road with cars coming fast down the hill so I'd like to see safety as a priority.

- I think it makes the most sense to first make the existing trails uninterrupted and then expand out from the center of town. This will help make the trails a destination – both for enjoying it recreationally and for bringing business to the center of town (downtown/ Normaltown, etc). Trails lead to people, people lead to economic growth. Athens best foot forward would be to make these trails accessible (uninterrupted) and in parts of the city that offer amenities – restaurants, housing, shopping, etc.

- I am so supportive of this project that it is hard to decide on what is high priority as opposed to medium priority: all of the trails will support a lot more biking, walking and community affiliation

- I think the focus on a "Greenway Network" plan is too narrow. Why are we not looking at a "Multi-Use Trail Network Plan" instead? Could be a bit of semantics, but if "transportation" was a higher (highest?) priority of the network, additional state and federal funding would be available. It has honestly baffled me why a multi-use trail separated from and parallel to Prince Avenue from downtown to the UGA medical campus and beyond to Jefferson Road is not top of the list. There is plenty of existing ROW and available room along the vast majority of that corridor for a physically separated 10-foot wide multi-use trail. You could go full Amsterdam along that corridor with infrastructure for autos, bicycles, and pedestrians all separated with physically separated roadway, paved trail, and sidewalk to eliminate conflicts in those different modes if we really want to accomplish something here. Obviously a non-bus connection between the main campus and the medical campus would be appealing to the university and they would certainly be expected to assist with planning, construction, and making space available on the property they control. David Adair 145 Ashton Drive Athens, GA 30606

- There is an entry point north of Oglethorpe Elem. & Bishop Park, but no trail in that nearby greenway. Wouldn't that be a good place for a trail?

- Serve the low income areas and schools first!

- I would like to see the trail at Boulevard Park completed, so that we could hike all the way down to the Senior center.

- High priority is anything that gives walkers and bikers safe, green access from neighborhoods to places they actually need/want to go (schools, work, retail, etc.) While nice, having an isolated green trail is not a priority as it only benefits the people that can access it by other means and does not provide any opportunities for "betterment" (education by providing means to access schools, income by providing low to no cost, safe routes to work)

- I am very interested in this plan! I have lived in bikeable, walkable, connected communities before. Athens is not that yet. I live in Buena Vista Heights and work past the country club. Only 2.5 miles from work but there is no safe path to bike every day, which would be my preference. The possibility of having bike paths and trails to connect as much of ACC and surrounding areas as possible would be amazing!!

- I have lived in other towns and states with greenways. They changed communities for the better. Would be excited to see all these proposals come to fruition in

athens clarke county.

- Tallasee Road Connector would be a big benefit to the area. Too many pedestrians in roadways, bikes are crammed in. Open space on this side of town is needed.

- As a dog walker & bike commuter I can't wait for this greenway network to expand, especially towards college station Rd. & UGA. The plan looks great & is very exciting.

- Excited at the commuting (walking & biking) opportunities this will offer as a homeowner in Athens. Can't wait for it to get started.

- I for one, am very excited to see progress on this much needed expansion

- Very excited to see development of the middle Oconee trail–particularly interested in having access to the trail at Beechwood from the Forest Heights neighborhood. Our is a big, young and vibrant neighborhood that would be thrilled to have trail access and non-motorized connection to other parts of the city, as well as Ben Burton and Tallahassee Forest.

- A collection of comments, not in any particular order, some of which probably go without saying: –In general, prioritize completing longest stretches of greenway. –Use landscaping, planting to make greenway as attractive as possible and provide lots of seating, observation areas. –Consider establishing a connection to Boulevard Woods from Hendrix Ave. –Consider banning the wearing of spandex bicycle outfits and racing helmets on the greenway. :)

- I would like to be able to safely bike from the east side of town the west side of town to important commercial locations like downtown and grocery areas. Please look up Fayetteville Ar for bike trail ideas as I believe hey are doing a great job making the entire city safely accessible by bike and foot.

- I was impressed with how professional the maps and plans are compared with the old one. Updates in two and five years are reassuring. Exactly how the trails go through areas is hard to tell. Without a map I can't tell where there are houses or natural and historic locations. Exceptional areas are a good idea. They need extra protection. Are more being identified? I use the greenway to see nature and enjoy outdoor activity. Beats the gym. I go on guided tours with groups like the Audubon Society and the Botanical Garden. I would like to see more guided tours by experts especially in exceptional areas. Homeless camps detract and feel dangerous.

- There are so many potential, complementary benefits from expanding/connecting greenways in Athens: enhancing conservation, providing opportunities for the public to experience natural resources, creating amazing recreation opportunities, and improving commuter safety. I support the Department of Leisure Services' efforts toward achieving these goals, conducting a transparent planning process that engages with Athens stakeholders, and finding solutions that improve Athens and its communities.

- (Input from paper version indicated question one had vague wording and labeled every option as 1/ top priority. Also said "I'm assuming asking the values that I would like to see achieved?") Starred 12-Pulaski Heights Connector South 13-Pulaski Heights Connector North I LOVE and FULLY SUPPORT the ORGNP! I would like us to catch up since we are way behind the trails connectivity of so many other amazing communities. Truly I would prefer to see fun, simple exercise, stations (pull up crunch and yoga style stretch stations) like I see all over ATL parks. (Simple, educational AND Effective, workout stations).

- My personal highest priority is connection from downtown Athens to Sandy Creek Nature Center

- Important to complete Heritage Trail portion from cook to Bros. to Oconee Hills Cemetery. Especially focusing on preserving Easley's Mill and Cedar Shoals with appropriate in ten private signage consistent with that already existing on Heritage Trail. Add activities on N Oconee River in this could serve as fun boating access opportunities, bike and canoe rental, festivals, etc. Engage public in funding restoration of Easley's Mill, Cedar Shoals and water driven power generation in old O'Malley's site. with coop of UGA and funding assistance)

- Please investigate using CSX easement between Hull & Pulaski for the trail (Pulaski Heights Connector South) which mirrors the current proposed trail.

- Great job so far. Keep it up. The loop and multi use trail is a great idea. Ability to cross the river is a must.

- Great job so far. Keep it up. The loop and multi use trail is a great idea. Ability to cross the river is a must.

- This is an ambitious project and I applaud the city for taking it on. Just a couple points. 1. Safety and connectivity are going to be key for getting buy-in from the entire community: If the final product is anywhere close to what's proposed here, we could end up with a world-class cycling and pedestrian network that doesn't require getting in a car to access it, one which will enable users to get from one side of the county to the other. That's amazing. But if the connecting nodes to neighborhoods don't make users feel safe, then large portions of new trails are likely to go under- or unused (which I personally feel like is a major shortcoming of the current network). 2. Integration with complete streets network: I hope the city can implement this plan while also keeping a sharp eye on – and coordinate building schedules with – other complete streets projects. If we build them in tandem they will benefit each other, creating a positive feedback loop where public excitement drives the rest of the project to completion. 3. Plan and build wisely: Put energy and resources into completing some important but symbolic segments that can be completed quickly early so the public will see the benefits immediately. The Atlanta Beltline is a good example of this because the short section that was completed first has been so successful it has completely transformed the city and has reprioritized and reoriented development in Atlanta (see comment above about a positive feedback loop). Let's not get bogged down trying to do it all at once. Pick some big, important sections to complete first with a few key accessible neighborhood connections so the public will get behind it enthusiastically. My family and I are downright giddy about the possibilities. Let's do this!

- My name is Martha Allen and my family and I live at 564 Pulaski Street. We have lived on Pulaski for 11 years now and we love our eclectic neighborhood and our wonderful neighbors. The proposed Pulaski Heights connector south Greenway extension runs directly along our property line and along Moores Branch Creek. Our primary concerns with this plan are safety, erosion, and noise. We believe that putting the public so close to the backyards of homeowners jeopardizes safety and undermines public support of the greenway. We all love the Greenway but few homeowners relish the idea of it running through their back yards. We currently enjoy relative quiet, privacy and safety in our backyard. We spend most weekends outside gardening and our 8 year old daughter, Ella loves to play with her friends in and around the creek which is a few feet away from the proposed trail. We are primarily concerned about her safety. We are aware that the studies suggest otherwise, but we feel that having the public so close poses a definite risk. In her 8 years of life we have never had a safety issue in our yard. Another concern we have is noise. Most homeowners along the creek have dogs who would undoubtedly bark at passersby creating disruptive noise for the surrounding neighbors. Additional noise from increased foot traffic would affect home owners as well. Finally, We are concerned that the Greenway construction process may exacerbate erosion of the hillside adjacent to the creek. This hillside is currently anchored in place by shrubs and large trees. Due to limited space behind our property line, these trees may need to be cut down to make way for the trail, which would encourage further erosion. If the Community's goal is connectivity to downtown, there is already a sidewalk running from the Council on Aging along North Hull to Dougherty. If the goal is to provide access to "natural areas" the cost of this very short extension may indicate that funds could be better spent elsewhere, where the money could be used to provide a longer trail that was less disruptive to property owners. Perhaps the alternate existing plan might still be considered that links the dead end of the trail with a switch-backed path up the steep Council on Aging hillside to the Hull St sidewalk. This would accomplish multiple goals. It would provide landscaping for erosion control to preserve the hill and the road above, be an appealing and unique greenway element, and provide a less expensive alternative to coming through the rail bed. Our family thanks you for your consideration!

- Have you informed anyone who lives along the river about how the Greenway will impact their homes and privacy??? There are several houses along Vaughn Road on the Oconee River, that have been there and occupied for over 40 years, and the last time I saw a map of the network plan at a public comment session, I was informed that my driveway was going to be an access road to a visitor center. When I told the presenter that there was a house there (since at least 1973) and that I knew that because I lived in it, the

presenter seemed completely unaware, and blithely UNCONCERNED, that someone lived there. While I rent my house, most of the others in that area are owned by their residents, and the ones that I know are very upset that the city is assuming that they will be fine with their yards being torn up to install a walkway that will make it much harder for them to get to the river itself (I am a kayaker and paddle on the river frequently) and result in people rambling along through their yards (and the argument that a wall will keep people from leaving the walkway and trespassing simply reinforces my concern about being able to get to the river and use it for recreation and getting in touch with nature). I am also concerned that it will disrupt the local wildlife and its behavior patters. I have already seen the negative results of increased human activity along the river. A family of beavers used to den in the bank across from my house, coming into my yard to eat the saplings, undergrowth, and bamboo shoots that grow up along the bank, and clearing out riverside trees that fell because of bank undercutting by the river. They never attempted to dam the river, instead digging out a den in the bank itself. Over the years, the residents on the other side of the river have done a lot of undergrowth clearing along the bank and have allowed visitors (I think their grandchildren) to ride four-wheelers between their house and the river. I have also noticed over the years a decrease in beaver activity, to the point where I have neither seen nor heard beavers in the area for at least five years. So, I am skeptical about airy claims that the greenway won't have a long-term negative impact on local wildlife. This makes me very sad, as one of the things I love about my home is the wildlife that shares the area; this, along with the peaceful surroundings (except for Sunday mornings, when the neighbor across the river runs his weed-eater), is why I have lived in my tiny house for the past twenty-five years, rather than in a newer, bigger house more convenient to my work. I much prefer having owls, hawks, herons, foxes, turkeys, and even skunks and deer, to people as neighbors. Having people inflicted on me because the city thinks it would be a nice idea, saddens me because of the loss of privacy and peace, and angers me because of the presumption that I would welcome this. I MOST EMPHATICALLY DO NOT!!! And neither do the other people near me who know about the plan. I am also ironically amused (translation: NOT AT ALL amused) that none of the plans show access to the Greenway, or even any construction of the Greenway, on the OTHER side of the river, where the multi-hundred-thousand-dollar homes are located in the posh subdivisions. I guess the greenway planners, in their infinite wisdom and intuitive understanding of human psychology, figured that the people on my side of the river – who perhaps don't practice a lifestyle of grooming the wilderness into your House Beautiful vision of what it should be, but instead try to live a low-impact life that allows the original (animal) residents to live fairly undisturbed – will be happy to lose part of their property to a project imposed on them without their knowledge. I have received NO direct communication from anyone in the ACC government about this, not even when the expansion was first proposed. Neither has anyone else in the area that I have asked. The only way I knew anything about this was a post in one of my Facebook groups, today. Way to be transparent, ACC! I do have to applaud the subtlety of the 'publicity' effort. By waiting to announce the 'public' input session until three days before it happens, the planners guarantee that those of us who work on weekends or in the evenings won't be able to attend and provide input, but they can crow that they did their due diligence by 'informing' the public. Rest assured that I will let my neighbors know about this plan and its possible effects on their homes and homelife, and encourage them to go to these sessions to find out more and give their input. And no, I am not one of those people who attends government meetings and rabble-rouses just to get attention. I am a peace-loving worker at a non-profit who values privacy and peace to escape the stresses of her job and stands to lose both, and as a result is mad as hell and doesn't want to take it any more.

- I am a landowner in University Heights on the street connector, the first house on the left after crossing over the proposed bridge. I am totally in favor of the proposed Greenway, especially the part connecting College Station to Whitehall, the area where we live.

- Strongly support these projects!

- Please clearly mark ends of trails.

- Not in our backyard...! 250 Carney Lake Rd, Winterville, GA

- Paving Cook's, or make it a mix of paved & gravel, would be great.

- N/A –> Rural areas/ people are fine with the way it is!

Tks Firefly Connector at 78/10 Interchange –> Not wanted – Negative Please do not utilize areas in front, behind, or rear pirvate occupied property Please pass these messages to the Fire Fly Trail planners!! Thank you Economic buildup proposed – NOT necessary or desired...

- Nimby Corney Lake Rd Winterville

- Please continue your hard work. I cannot overstate how valuable a comprehensive foot/bike path network is to the community in the long run – it will allow the city to remain pleasantly navigable without catastrophic traffic growth. I have had very positive experiences with the footpaths of Peachtree City, and encourage you to focus on similar multi-use, dedicated paths as the gold standard for future development.

- We live in south-eastern Clarke county. Currently we have to drive to get access to the greenway. I know only part of the routes are funded, but I hope there is a day when we can get to greenway directly from our house. On a selfish note, I hope that the connection of Barnett Shoals Elementary School to the greenway will eventually be funded. Thanks for all of your hard work!

- Is there a better way to connect the Tallassee Forest natural area than an on street connection. Why not make the connection along the river the priority instead?

- My name is Abe Abouhamdan, PE, the Legal Agent for the Owner of properties located at 1600 Cleveland Rd and 815 Fowler Mill Rd, Athens (Tax Parcel Numbers 033-023, 007, 017, & 019J). I am requesting that Item No. 15, Big Bear Trail be removed from our property since there no County right-of-way where the said trail is shown on the draft Greenway Network Plan. Old Big Bear Road bed is a private drive on our private land with no public access for over 20 years. Our property is a vested subdivision development with a binding site plans which will be developed in the near future. Big Bear Trail, as drafted on the Greenway Network, would be going thru our planned lots and conservation development. Therefore, we request that this Item (No. 15 Big Bear Trail) be removed from the plan where it bisects our property since we will not be in a position to provide any easements nor any access R/W for proposed trail or greenway. We appreciate your understanding and your assistance in removing this segment of trail from our property. I may be reached at 706-613-8900 or by e-mail at abe@ABEconsultinginc.com. Thanks, Abe

- Thanks for all of the work that has and will go into these projects!

- I would love to see more access to Ben Burton Park. I believe extending the trail with a pedestrian bridge across the river and utilizing existing right-of-way and easement property would be cost effective and would make the most sense. This would also further plans to create a park at Beech Haven, which would also be a valuable addition to the community.

- This is absolutely wonderful and I am so glad to see this moving forward. I think that connecting schools to the trails is of utmost importance! Our kids need to have access to nature at school. Thank you for everything you do!

- Please add sidewalks and bike lanes to Timothy Road. Prioritize planning of a greenway from Atlanta Hwy to Macon Hwy. Accelerate trail building by NOT using concrete. Instead build trails using the natural mineral soil layer as a base. Add crushed stone if necessary. This way you save money that can be applied to bridges and amenities.

- I support any improvements to our Greenway system and allow for more walkable trails throughout town, particularly trails that connect disparate neighborhoods and commercial districts with parks. I think this is a valuable and worthwhile plan.

- Need to have a spur trail from Firefly Trail near the Vigoro property and follow the outside perimeter of the Airport property between jail and other ACC property and connect to Saterfield Park. Most of this is already ACC property.

- Please be mindful of homeowners who live along proposed trail routes. While we support the Greenway we would also like the County to take into account the fact that this essentially puts the public in our backyard, possibly at all hours, and we appreciate fences to discourage trespassing by off leash dogs and those who may have bad intent as well as sensitive lighting options (if there are lights). I hope and expect there will be no negative effects and support further expansion in light of the benefit to the community as a whole, but to gain the support of neighbors it is

important to take into account that all Greenway users may not be exercise or nature motivated and may instead see trails in close proximity to homes as an opportunity to access someone else's property. Thank you for your work on this project and we're looking forward to making use of expanded trails.

- I was horrified to see that the Greenway was going through Oconee Hill Cemetery. When I met there with people in charge, I saw that it was only a sliver of Trail-land. Nothing like the wide white sidewalks I have seen on the regular Greenway, which I, even walking distance from it, never use. To me, it's too large, glaringly white, and without shade. Plus, most access to the water is a drop-off. I'm 74 years old. The Greenway is a desolate and uninspiring hike. Ben Burton and Lake Herrick and their woods and trails are far superior. Who wants to walk on sidewalks miles to reach the woods? I think what you call the "street-based connector" is much more realistic. I live on the high side of Pulaski Creek. We up here aren't affected by the White-way. Our neighbors on the creek side are greatly affected. Talk with them; I know they have problems with it. I believe it is unrealistic to think that many people will use this walk-way from beginning to end. Most would use their cars to get to where they want to begin, then walk a few miles and back. The parks and neighborhoods will bear the brunt of the parked cars, just as we in lower Pulaski Heights do during all the home football games.

- Before producing a map of future plans of sites such as nature center and schools, you all should talk to the people who run those areas to address concerns. It is always a good idea to communicate!

- I wish they would get moving on this before I am too old to enjoy it.

- First off what a great report. Everybody who has worked on this has performed a tremendous public service. Thank you. Love that Cook's Trail is #1. Giving people a way to ride their bike through nature (away from cars) all the way up to the lake is fantastic. Pulaski projects seem VERY IMPORTANT as it will allow a lot of intown neighborhood and downtown residents easy and nearby access to the Greenway without having to get on a busy street. Side note Pulaski North seems more critical than (and a prerequisite to) Pulaski South. Perhaps they could be treated as 1 Tier 2 project. Is there any way to go straight health science campus to Bishop Park without having to go back to Oglethorpe Ave (busy street)? Nature Center loop looks great, but it honestly feels a little redundant with Cook's Trail, as both are north of town paths through nature. I would love to see it get done (esp as it connects Holland) but I think I would put it towards the bottom of tier 2 rather than the top. I would prefer to see both Pulaski Creek connectors and both riverside trails completed prior to that. Pretty important given the price tag. On p. 57 it looks like there is a proposed trail along the railroad about 2 blocks north of Boulevard; however the Normaltown connector seems to mostly be a path out by the Loop. Anything that connects Bishop Park to the Greenway is good, but the path along the railroad would be much better as it would allow Normaltown residents (especially those on the eastside) much easier access. If railroad path is possible, can you connect Boulevard to that path through Boulevard Woods Park so one would not need to dismount bike through the park?

- The county spent a lot of money to buy the Tallassee Tract for use in the Greenway network. Don't let a few well-connected neighbors turn it into their personal woodland retreat. It should be open to all – by bike.

- I hope that restoring the boardwalk trail between scnc and sandy creek park is prioritized over beginning the construction of new trails.

- I think connectivity to neighborhoods and trails should be the top priority. If we focus on creating a unified network, more people will get excited about the greenway system and then push for it's completion. Tie all of the existing trails together into a unified network, extend trails into nearby neighborhoods, and then start looking at ways we can extend the network into certain areas. Mileage is important, but so is connectivity!

Translating Feedback into Planning

Based on the results of the public review, the following primary considerations were incorporated into the greenway planning process.

Routes

The landowner review of the proposed trail maps brought some areas to light that were in need of change. Staff worked with landowners to propose adjustments to areas with issues and followed up with the GNP planning team to review and approve the route changes. The following corridor areas were adjusted as a result of landowner review:

- Big Bear Trail
- Pulaski Creek South
- Vaughn Road
- Sandy Creek Nature Center
- Rambling Road
- Whitehall Mill
- Normaltown Connector
- Boulevard Woods

Priorities

The online survey highlighted connectivity concepts and projects that reflected different priorities than what was originally proposed for public review. That information was taken into consideration along with conversations with landowners and the public at review meetings. The planning team adjusted the priority list to better reflect not only public desires, but feasibility and partnership possibilites as well.

Process

Comments from the public as well as project stakholders reinforced the importance of inclusion when priority projects become funded and begin the process of implementation. As a result, staff will engage with property owners as well as stakeholders as projects begin to come online so that more information can be shared about each specific project as more details become available.

Work Plan

The survey provided valuable input on what the community finds most important for the core values and goals of the greenway system. A work plan that reflects those values and goals has been developed. The concept of the work plan is to guide Leisure Services staff and community partners in meeting those goals.

The work plan can be found in Appendix D.

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Appendix C: Benchmark Analysis

Population

Interviews with park and greenway planners from benchmark cities were asked how many parks they have along their greenway, how many miles of multi-use trail they have, how many miles of multi-use trail they have planned, their projected construction budget, and what percentage of funding do they have. The following chart lists the benchmark cities examined in this analysis and their 2010 population according to the U.S. Census.

Table 13: Benchmark Analysis – Population

City	State	Population
Athens-Clarke County	GA	119,980
Georgia Cities		
Rome	GA	35,973
Macon	GA	89,981
Columbus	GA	202,824
Savannah	GA	142,772
Albany	GA	76,185
Valdosta	GA	56,481
College Towns		
Clemson	SC	14,276
Chapel Hill	NC	59,635
Charlottesville	VA	44,349
Blacksburg	VA	43,609
Aspirational Cities		
Greenville	SC	61,397
Raleigh	NC	431,746
Chattanooga	TN	173,366
Austin	TX	885,400

(Trail System, n.d.; GHS Swamp Rabbit Trail, n.d.; Capital Area Greenway Trail System, n.d.; City of Clemson Master Plan, n.d.; Greenway Master Plan, n.d.; Bicycle & Pedestrian Master Plan, n.d.; Huckleberry Trail, n.d.; Ocmulgee Heritage Trail, n.d.; The 20 Year Comprehensive Master Plan, n.d.; Truman Greenway, n.d.) (Greenways Trail, n.d.; Azalea City Trail, n.d.; Tennessee Riverpark, n.d.; GIS/Map Downloads, n.d.)

Greenway Stats

Athens–Clarke County has less miles of multi-use trails then most of the benchmark cities, but more total planned miles than many. Athens-Clarke County has a large projected construction budget, and has as much or more funding than the other cities.

Table 14: Benchmark Analysis – Greenway Stats

City	State	Parks Along Existing Greenway	Miles of Multi-use Trails	Total Planned Miles	Projected Construction Budget	Funded
Athens-Clarke County	GA	5	3.6	24.4	130 M	100%
Georgia Cities						
Rome	GA	6	6.5	9	–	–
Macon	GA	9	11	15	15 M	90%
Columbus	GA	6	26	26	16 M	100%
Savannah	GA	5	0.6	6	4 M	100%
Albany	GA	4	3.2	≈7	–	50%
Valdosta	GA	5	3.6	4.4	1.9 M	80%
College Towns						
Clemson	SC	5	0.5	≈21	2.46 M	–
Chapel Hill	NC	6	14.8	28	20 M	75%
Charlottesville	VA	20	6	20	≈8 M	25%
Blacksburg	VA	6	11	11	≈7 M	100%
Aspirational Cities						
Greenville	SC	6	18.5	23+	10.5 M	92%
Raleigh	NC	30	117	134	–	–
Chattanooga	TN	5	13	16.5	22.5 M	100%
Austin	TX	27	36.3	83.7	160 M	43%

(Trail System, n.d.; GHS Swamp Rabbit Trail, n.d.; Capital Area Greenway Trail System, n.d.; City of Clemson Master Plan, n.d.; Greenway Master Plan, n.d.; Bicycle & Pedestrian Master Plan, n.d.; Huckleberry Trail, n.d.; Ocmulgee Heritage Trail, n.d.; The 20 Year Comprehensive Master Plan, n.d.; Truman Greenway, n.d.) (Greenways Trail, n.d.; Azalea City Trail, n.d.; Tennessee Riverpark, n.d.; GIS/Map Downloads, n.d.)

Surface Types

Interviews with park and greenway planners from benchmark cities were asked about the surface materials of their greenway trails. Athens-Clarke County uses concrete for the majority of the paved multi-use trails, while other benchmark cities mostly use asphalt.

Table 15: Benchmark Analysis – Surface Types

City	State	Concrete	Brick	Asphalt	Natural
2016 Proposed Athens-Clarke County	GA	87%	–	13%	–
Georgia Cities					
Rome	GA	35%	–	65%	–
Macon	GA	85%	–	–	15%
Columbus	GA	6%	3%	91%	–
Savannah	GA	–	–	100%	–
Albany	GA	100%	–	–	–
Valdosta	GA	100%	–	–	–
College Towns					
Clemson	SC	–	–	100%	–
Chapel Hill	NC	14%	–	53%	33%
Charlottesville	VA	10%	–	25%	65%
Blacksburg	VA	–	–	100%	–
Aspirational Cities					
Greenville	SC	5%	–	95%	–
Raleigh	NC	5%	–	80%	15%
Chattanooga	TN	100%	–	–	–
Austin	TX	100%	–	–	–

(Trail System, n.d.; GHS Swamp Rabbit Trail, n.d.; Capital Area Greenway Trail System, n.d.; City of Clemson Master Plan, n.d.; Greenway Master Plan, n.d.; Bicycle & Pedestrian Master Plan, n.d.; Huckleberry Trail, n.d.; Ocmulgee Heritage Trail, n.d.; The 20 Year Comprehensive Master Plan, n.d.; Truman Greenway, n.d.) (Greenways Trail, n.d.; Azalea City Trail, n.d.; Tennessee Riverpark, n.d.; GIS/Map Downloads, n.d.)

Amenities

Interviews with park and greenway planners from benchmark cities were asked if they provided these amenities along their greenways. Athens-Clarke County does not provide more amenities than the benchmark cities do.

Table 16: Benchmark Analysis – Amenities

City	State	Conservation Corridor	Hiking Trails	Mountain Bike Trails	Open and Multi-purpose Fields	Picnic Shelters	Restrooms	Canoe and Kayak Launches	Playgrounds	Dog Parks	Fishing Piers	Art
2016 Proposed Athens-Clarke County	GA	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
Georgia												
Rome	GA	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y
Macon	GA	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y
Columbus	GA	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N
Savannah	GA	Y	N	N	Y	Y	Y	Y	Y	Y	N	N
Albany	GA	Y	Y	Y	Y	N	N	Y	Y	N	Y	N
Valdosta	GA	Y	N	N	Y	Y	Y	N	Y	N	N	N
College Towns												
Clemson	SC	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N
Chapel Hill	NC	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
Charlottesville	VA	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Blacksburg	VA	Y	Y	Y	Y	N	Y	N	N	N	N	N
Aspirational												
Greenville	SC	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
Raleigh	NC	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y
Chattanooga	TN	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y
Austin	TX	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y

(Trail System, n.d.; GHS Swamp Rabbit Trail, n.d.; Capital Area Greenway Trail System, n.d.; City of Clemson Master Plan, n.d.; Greenway Master Plan, n.d.; Bicycle & Pedestrian Master Plan, n.d.; Huckleberry Trail, n.d.; Ocmulgee Heritage Trail, n.d.; The 20 Year Comprehensive Master Plan, n.d.; Truman Greenway, n.d.) (Greenways Trail, n.d.; Azalea City Trail, n.d.; Tennessee Riverpark, n.d.; GIS/Map Downloads, n.d.)

Appendix D: Work Plan

WORK PLAN

The work plan for the 2016 GNP update includes measurable targets for achievement during the life cycle of the plan. Successful completion of the work plan items will depend on partnerships and collaboration with staff, the ORGC, stakeholders, and private entities.

Table 17: Work Plan

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Resource Protection										
Conduct full natural and cultural resource inventories for county owned open spaces starting with exceptional resources areas										
Beech Haven	X	X								
Rock and Shoals			X	X						
Cook and Brother Battery					X	X				
Develop Ecological and Cultural Mangement Plans for Exceptional Resource Areas										
Beech Haven		X	X							
Rock and Shoals				X	X					
Cook and Brother Battery						X	X			
Conduct 12 volunteer work days per year for habitat restoration										
Beech Haven			X	X	X	X	X	X	X	X
Rock and Shoals					X	X	X	X	X	X
Tallassee Forest							X	X	X	X
Develop a BMP guide for homeowners with property in conservation areas	X	X								
Transportation										
Conduct quarterly meetings with Transit and Public Works staff	X	X	X	X	X	X	X	X	X	X
Investigate and recommend construction methods for increasing cost effectiveness and efficiency	X			X			X			X
Install counters on all key trail locations	X	X	X	X	X	X	X	X	X	X
Enhance efforts and projects outlined in the Bicycle and Pedestrain Master Plan		X	X	X	X	X	X	X	X	X
Recreation										
Conduct family programming once a quarter			X	X	X	X	X	X	X	X
Host one adventure race annually				X	X	X	X	X	X	X

Conduct monthly natural resource based programs				X	X	X	X	X	X	X
Engage with summer camps for field trips					X	X	X	X	X	X
Engage with schools for field trips					X	X	X	X	X	X
Parter with local recreation companies for hosting events			X	X	X	X	X	X	X	X
Health and Well Being										
Enhance public safety efforts and explore park ranger program		X	X	X	X	X	X	X	X	X
Develop trail safety outreach program				X	X	X	X	X	X	X
Develop monthly walk/run/cycling group activities				X	X	X	X	X	X	X
Develop healthy lifestyle actions related to the greenway for weekly social media posts			X	X	X	X	X	X	X	X
Conduct quarterly wellness workshops	X	X	X	X	X	X	X	X	X	X
Develop pamphlets and e-newsletters for distribution to local hospitals and health care providers			X	X	X	X	X	X	X	X
Education										
Enhance the greenway website	X	X	X	X	X	X	X	X	X	X
Develop electronic field guides for the greenway		X	X	X	X	X	X	X	X	X
Integrate the greenway into the park locator app program			X	X	X	X	X	X	X	X
Develop an app with augmented reality capabilitiy for guided walks					X	X	X	X	X	X
Develop monthly educational tours of exceptional resource areas				X	X	X	X	X	X	X

Appendix E: Supplemental Tables and Maps

GEORGIA DNR HIGH PRIORITY HABITATS PRESENT IN THE OCONEE RIVERS GREENWAY NETWORK

Table 18: DNR High Priority Habitats

High Priority Habitats	Brief Description	Representative Locations along the ORG
Beaver Ponds/ Freshwater Marsh (BPFM)	These are transitory impoundments made by beavers or other still water ponding on small to medium sized streams. Such sites are dominated by sedges, rushes, grasses, and forbs, often with scattered buttonbush, red maple, swamp dogwood, and alder.	Tallassee Forest Cook's Trail Holland Youth Sports Complex
Bottomland Hardwood Forest (BLH)	Riparian deciduous forests are subject to occasional flooding. Canopy may include water oak, willow oak, green ash, sweet gum, river birch, and pignut hickory. Shrubs include hop hornbeam, musclewood, and papaw. Understory frequently occupied by Chinese privet and other invasives.	Tallassee Forest Sandy Creek Nature Center North Oconee River Park
Canebrakes (C)	Native river cane thickets occupy alluvial soils under sparse BLH canopies. Canebrakes are subject to frequent flooding and are dependent on fire or other periodic disturbance. Once common in the Southeast, past land use practices, particularly cattle grazing, row cropping, and fire suppression, have greatly reduce canebrake presence in the region and in Clarke County.	Tallassee Forest State Botanical Garden Ben Burton Park
Granite Outcrops (GO)	Fragile herb and shrub patches and wetland microhabitats occupy flat, granitic rock expanses. Outcrops are challenging environments for plants and animals due limited soils, high solar and wind exposure, and high temperature and moisture fluctuations. Consequently, the biota on outcrops often has limited distribution and special adaptations for such harsh conditions.	Rock and Shoals Outcrop
Medium to Large Rivers (MLR)	This type includes low to moderate gradient rivers, often with heavy sediment loads. Substrate is predominately sand in runs and pools and bedrock at shoals. Rivers show some meanders, and channels and sand bars frequently change with high water events. Fish include catfish, bass, bluegill, and crappie. Wildlife includes river turtles, beaver, and river otter.	North Oconee River Middle Oconee River Oconee River Major tributaries
Rocky or Cobbly River Shoals (RCS)	Shoals are relatively short, rocky, shallow reaches in rivers with high gradients and fast water. They serve as spawning areas for darters, shiners, suckers, and other fish. Wading birds frequently forage in shoals. Because of their high gradient, shoals were historically targeted for mill dam construction and many have been degraded by sedimentation from impoundments.	North Oconee River Middle Oconee River Oconee River Major tributaries

Mesic Hardwood Forests (MHF)	These are deciduous forests on fairly moist, protected sites such as north-facing slopes, ravines, and upper floodplains. Canopies are typically mixed and may include American beech, tulip tree, northern red oak, white oak, hickories, basswood, and others. Common sub-canopy trees and shrubs are bigleaf magnolia, papaw, silverbell, azalea, sweetshrub, and dogwood.	Tallassee Forest Beech Haven Sandy Creek Park State Botanical Garden
Oak-Hickory-Pine Forests (OHPF)	This type is found on intermediately moist sites and is the most common forest type in the Oconee River corridors. It is estimated that prior to European settlement this forest covered 50% to 75% of the Piedmont. Common canopy hardwoods include white, black, and southern red oaks; pignut, mockernut, and shagbark hickories; blackgum; red maple; and loblolly and shortleaf pine.	Tallassee Forest Beech Haven Sandy Creek Park
Rocky/Sandy River Bluffs (RSRB)	Rocky and sandy bluffs are limited within the greenway corridors. This habitat is exposed, dry, and supports mixed pine-oak stands that may include shortleaf and loblolly pines; eastern red cedar; and post, blackjack, southern red, and white oaks. Understory species include mountain laurel, hop hornbeam, winged elm, sparkleberry, and yucca.	N. Oconee R. – Horseshoe Bend M. Oconee R. – Turkey Creek area
Springs and Spring Runs (SSR)	Springs and their runs within the county watersheds are typically constrained in area but critical in their hydrological and ecological roles. Springs are highly variable in their volume, seasonality, and water chemistry. Many springs in the county have been adversely affected or eliminated by increased stormwater erosion, pollution, and by groundwater withdrawal.	Tallassee Forest Beach Haven Sandy Creek Nature Center
Streams (S)	Most streams within the greenway corridors are typical of the upper Piedmont with low to moderate gradients and gravel to silt substrates. A few streams have steeper gradients and exposed bedrock and boulder substrate.	Trail Creek Sandy Creek Nature Center Beech Haven
Xeric Pine Woodlands (XPW)	Dry, rocky ridges and other areas with shallow, exposed soils often support an open canopy of pines including loblolly, shortleaf, and Virginia pine. Bare mineral soils, low soil moisture, and occasional fire keep hardwoods from successfully occupying such sites.	Tallassee Forest Sandy Creek Park

Adapted from Georgia Department of Natural Resources website at http://www1.gadnr.org/cwcs/PDF/11_Piedmont.pdf

ATHENS-CLARKE COUNTY FY15 REPORT ON PROJECTS FUNDED WITH S.P.L.O.S.T. REVENUES

Table 19: Projects Funded by S.P.L.O.S.T.

ATHENS-CLARKE COUNTY
FY15 REPORT ON PROJECTS FUNDED WITH S.P.L.O.S.T. REVENUES

Project Description	Original Estimated Cost	Latest Estimated Cost	Prior Years Cumulative Expenditures	Total FY15 Expenditures	Total Cumulative Expenditures	Project Completed Prior to FY15	Project Completed In FY15	Estimated Completion Date (Fiscal Year)	Project Excess Proceeds
Special Purpose Local Sales Tax IV (SPLOST IV)									
Road Projects	18,458,000	31,959,636	31,751,625	328	31,751,953	YES		(1)	-
Other Projects (Listed Below)									
Environmental Science & Appropriate Tech Center	1,500,000	1,757,713	1,756,320	-	1,756,320	YES			-
Jail Infirmary Improvements	1,200,000	1,200,000	1,200,000	-	1,200,000	YES			-
Park Facilities Improvements	2,378,200	2,569,308	2,569,217	-	2,569,217	YES			-
Library Resource Centers	1,000,000	1,000,000	1,000,057	-	1,000,057	YES			-
East Clarke County Community Park	3,130,000	6,102,888	6,102,887	-	6,102,887	YES			-
Building & Partial Radio System	6,851,290	9,000,027	9,003,796	-	9,003,796	YES			-
Fire Training Center	780,000	780,000	818,705	-	818,705	YES			-
Oconee Greenway-Heritage Trail	1,800,000	2,438,000	2,438,000	-	2,438,000	YES			-
Oconee River Greenway, Phase 1-N	1,977,000	2,037,000	2,036,856	-	2,036,856	YES			-
Neighborhood Park Development	930,000	917,938	919,636	-	919,636	YES			-
Renovate & Expand Lyndon House Arts Center	6,000,000	6,000,000	6,049,167	-	6,049,167	YES			-
Streets & Roads Building Facilities	250,000	250,000	250,001	-	250,001	YES			-
Hull Street Complex	4,400,000	4,387,754	4,383,459	-	4,383,459	YES			-
Bishop Park Tennis Court	300,000	377,579	377,579	-	377,579	YES			-
South Clarke County Community Park	3,130,000	4,362,500	4,362,833	-	4,362,833	YES			-
Landfill Closure	6,000,000	7,582,542	7,583,406	-	7,583,406	YES			-
Reduce Debt Service	-	640,150	640,150	-	640,150	YES			-
Program Management - SPLOST IV	-	1,153,083	1,153,016	-	1,153,016	YES			-
TOTAL SPLOST IV	$ 60,084,490	$ 84,516,118	$ 84,396,710	$ 328	$ 84,397,038				
Special Purpose Local Sales Tax 2000 (SPLOST 2000)									
Road Projects	37,869,239	33,565,828	33,282,191	248,196	33,530,387	NO		2016 (1)	-
Other Projects (Listed Below)									
Police Assigned Vehicle Program	2,510,000	1,976,083	1,976,082	-	1,976,082	YES			-
Police East & West Sub-Stations	2,611,870	3,299,027	3,299,027	-	3,299,027	YES			-
Fire Stations # 3, 4, 8 & 9	11,772,000	9,150,805	9,150,804	-	9,150,804	YES			-
Fire Apparatus & Equipment	1,407,100	1,021,116	1,021,337	-	1,021,337	YES			-
Public Utilities - Water Enhancements	7,000,000	6,616,865	6,244,670	372,196	6,616,866	NO		2016	-
Diversion Center & Other Criminal Justice Programs	1,414,500	157,555	157,555	-	157,555	YES			-
Corrections Center Food Preparation Facility	3,611,714	3,667,683	3,667,615	-	3,667,615	YES			-
Environmental Compliance & Remediation Programs	4,760,000	2,626,392	2,626,392	-	2,626,392	YES			-
Airport Water Main Construction	776,010	508,121	508,121	-	508,121	YES			-
Airport Sanitary Sewer Line	882,340	1,114,213	1,114,213	-	1,114,213	YES			-
Airport Land Acquisition Program	1,067,822	1,029,527	1,029,528	-	1,029,528	YES			-
East Athens / Lay Park Community Centers	3,918,000	3,836,879	3,836,859	-	3,836,859	YES			-
Memorial Park Operations Center	1,622,000	1,756,232	1,756,216	-	1,756,216	YES			-
Athens Welcome Center Improvements	276,100	264,701	264,675	-	264,675	YES			-
East Athens Community Park	542,000	1,713,388	1,713,389	-	1,713,389	YES			-
Southeast Clarke Community Park	542,000	603,940	602,212	-	602,212	YES			-
Greenway Land Acquisition	1,418,795	1,342,214	1,342,214	-	1,342,214	YES			-
Winterville Park & Other Improvements	567,350	548,129	548,128	-	548,128	YES			-
East Athens Dance Center	3,000,000	3,430,636	3,430,636	-	3,430,636	YES			-
Library Resource Centers	608,606	496,674	496,675	-	496,675	YES			-
Classic Center Parking Deck & Plaza	5,000,000	6,059,119	6,059,120	-	6,059,120	YES			-
Classic Center Energy Mgmt Improvements	691,900	665,314	665,314	-	665,314	YES			-
Classic Center Surface Parking Lot Construction	1,844,400	958,826	958,825		958,825	YES			-
Taylor Grady House Renovations	1,477,000	1,731,069	1,731,067	-	1,731,067	YES			-
Family Protection Center	1,328,729	1,294,916	1,294,916	-	1,294,916	YES			-
Sandy Creek Greenway / Buffer Expansion	359,264	351,146	351,124	-	351,124	YES			-
Lyndon House Arts Center Improvements	121,261	116,483	116,483	-	116,483	YES			-
Program Management - SPLOST 2000	-	2,240,469	2,240,760	-	2,240,760	YES			-
TOTAL SPLOST 2000	$ 99,000,000	$ 92,143,350	$ 91,486,148	$ 620,392	$ 92,106,540				
Special Purpose Local Sales Tax 2005 (SPLOST 2005)									
Road Projects	43,282,800	43,958,470	34,000,820	1,540,061	35,540,881	NO		2016	-
Other Projects (Listed Below)									
East Athens Community Park	4,996,530	4,967,776	4,949,116	18,585	4,967,701	NO	YES		-
Public Water/Fire Prevention Systems	11,170,000	10,490,953	5,083,450	1,263,141	6,346,591	NO		2016	-
Police Assigned Vehicle Program	649,000	471,980	471,980	-	471,980	YES			-
Fire Station #9	2,867,000	2,807,048	2,807,047	-	2,807,047	YES			-
Classic Center-Theater Package	1,740,420	1,788,466	1,788,466	-	1,788,466	YES			-
Airport Commercial Terminal Facility	4,851,990	4,543,556	269,391	38,028	307,419	NO		2017	-
Solid Waste Facility Relocation	2,703,690	2,609,994	2,602,849	-	2,602,849	YES			-
Rocksprings Park Revitalization	2,598,750	2,527,787	2,527,787	-	2,527,787	YES			-
Renovate Police Headquarters Building	2,905,650	3,120,300	3,120,300	-	3,120,300	NO	YES		-
Computer Aided Dispatch & Records Mgmt System	1,458,270	1,414,522	1,414,522	-	1,414,522	YES			-
Expand and Replace Transit Vehicles	2,141,370	1,015,218	994,849	15,994	1,010,843	NO	YES		-
Sheriff-Assigned Vehicle Program	267,000	232,511	232,511	-	232,511	YES			-
ACC Tennis Center	2,386,890	3,239,083	2,822,905	378,037	3,200,942	NO	YES		-
Classic Center Foundry Street Warehouse	8,781,300	8,434,773	8,434,774	-	8,434,774	YES			-
Pulaski Creek Greenway & Park	1,014,750	984,308	742,670	21,588	764,258	NO	YES		-
Gospel Pilgrim Cemetery Restoration	361,000	306,476	306,476	-	306,476	YES			-
North Oconee Rivers Greenway Project	1,427,580	1,384,753	580,331	256,083	836,414	NO		2017	-
ACC Library Additions & Renovations	9,108,000	9,142,247	8,949,103	102,824	9,051,927	NO	YES		-
ENSAT Phase 2 - Sandy Creek Nature Center	2,923,470	3,139,688	3,042,521	53,526	3,096,047	NO	YES		-
Downtown Parking Deck	6,954,500	6,768,205	6,768,149	-	6,768,149	YES			-
Greenspace Acquisition Program	2,174,040	2,340,319	2,340,319	-	2,340,319	YES			-
Access Improvements for People with Disabilities	136,000	131,920	131,919	-	131,919	YES			-
Youth Facility Partnership	2,800,000	1,002,085	1,002,085	-	1,002,085	YES			-
Diversion - Work Release Center	1,000,000	3,514,000	3,502,019	-	3,502,019	YES			-
Winterville SPLOST 2005 Programs	1,300,000	1,300,000	1,300,002	-	1,300,002	YES			-
Program Management - SPLOST 2005	-	3,621,000	3,357,024	122,665	3,479,689	NO		2017	-
TOTAL SPLOST 2005	$ 122,000,000	$ 125,257,438	$ 103,543,385	$ 3,810,532	$ 107,353,917				

Special Purpose Local Sales Tax 2011
(SPLOST 2011)

Road Projects	35,480,000	34,925,000	2,583,533	2,362,427	4,945,960	NO		2020	-
Other Projects (Listed Below)									
Oconee Rivers Greenway Network Connectors	6,000,000	5,825,000	67,535	88,586	156,121	NO		2019	-
Greenspace Acquisition Program	1,000,000	970,000	8,200	11,339	19,539	NO		2021	-
Jail Expansion (2)	76,645,000	73,003,591	25,030,292	24,686,491	49,716,783	NO		2017	-
Classic Center Expansion (3)	23,748,000	23,503,112	23,347,311	153,630	23,500,941	NO	YES		-
Fire Protection Services & Safety Equipment	5,208,000	5,052,000	-	1,060	1,060	NO		2020	-
Integrated Public Safety/Judicial Information System	2,612,000	2,534,000	636,365	309,625	945,990	NO		2017	-
Public Safety Communication Systems Improvements	11,000,000	11,135,904	313,580	5,002,377	5,315,957	NO		2016	-
Transit Vehicles & Bus Stop Improvements Program	1,850,000	1,794,000	-	-	-	NO		2020	-
Cooperative Extension Service Center	2,565,000	2,488,000	-	2,494	2,494	NO		2019	-
Athens-Clarke County Library Improvements	2,364,000	2,295,000	57,163	102,055	159,218	NO		2021	-
Morton Theatre Facility Repair & Renovation	600,000	1,334,288	116,152	341,300	457,452	NO		2016	-
Sandy Creek Park Renovation & Development	2,000,000	1,935,000	-	-	-	NO		2020	-
Rocksprings Park Pool Renovations	1,400,000	1,182,772	1,182,772	-	1,182,772	YES			-
Park Facilities Improvements	4,000,000	4,060,225	890,726	29,385	920,111	NO		2021	-
Dudley Park Improvements	1,000,000	970,000	-	-	-	NO		2019	-
Satterfield Park Renovations & Upgrades	631,000	614,950	61,520	389,494	451,014	NO		2016	-
Animal Shelter Expansion	620,000	1,292,308	98,830	709,082	807,912	NO		2016	-
Government Facilities Fire Protection	1,220,000	1,184,000	1,316	44,831	46,147	NO		2018	-
Public Art Program	410,000	400,000	-	-	-	NO		2020	-
Youth & Community Enrichment Facility Partnership	2,940,000	2,854,000	-	-	-	NO		2020	-
Energy Sustainability Program	1,000,000	970,000	239	359	598	NO		2021	-
Infrastructure Improvements for Affordable Housing Programs	515,000	500,000	50,000	75,000	125,000	NO		2020	-
CHaRM - Center for Hard to Recycle Materials	193,000	187,000	1,316	-	1,316	NO		2016	-
Facility Management Facility Relocation	2,500,000	2,428,500	2,326,396	65,554	2,391,950	NO	YES		-
Expansion of Property & Evidence Facility	1,918,000	1,862,400	501,827	1,218,139	1,719,966	NO		2016	-
Costa Building Renovation	3,628,000	3,520,000	-	-	-	NO		2020	-
Ware-Lyndon House Historic Garden	225,000	219,000	8,940	87,461	96,401	NO		2016	-
City of Winterville SPLOST funding	1,773,000	1,773,000	591,000	197,000	788,000	NO		2020	-
Town of Bogart SPLOST funding	227,000	227,000	75,666	25,222	100,888	NO		2020	-
Program Management - SPLOST 2011	-	3,368,000	782,747	199,503	982,250	NO		2021	-
Transfer Out to Debt Service Fund (Jail Bonds) (2)	-	58,675,902	11,702,245	11,001,765	22,704,010	NO		2019	-
Transfer Out to Debt Service Fund (Classic Center Bonds (3)	-	11,936,819	11,923,394	-	11,923,394	YES			-
TOTAL SPLOST 2011	$ 195,272,000	$ 265,020,771	$ 82,359,065	$ 47,104,179	$ 129,463,244				

Additional Information: All amounts are as of June 30, 2015. All projects remain on schedule to be completed. Based on the current estimated cost, no projects are currently underfunded. Several projects have exceeded their budgets by minimal amounts. Interest revenue from SPLOST proceeds was used to fund these overages. There are currently no excess proceeds projected for any SPLOST program.

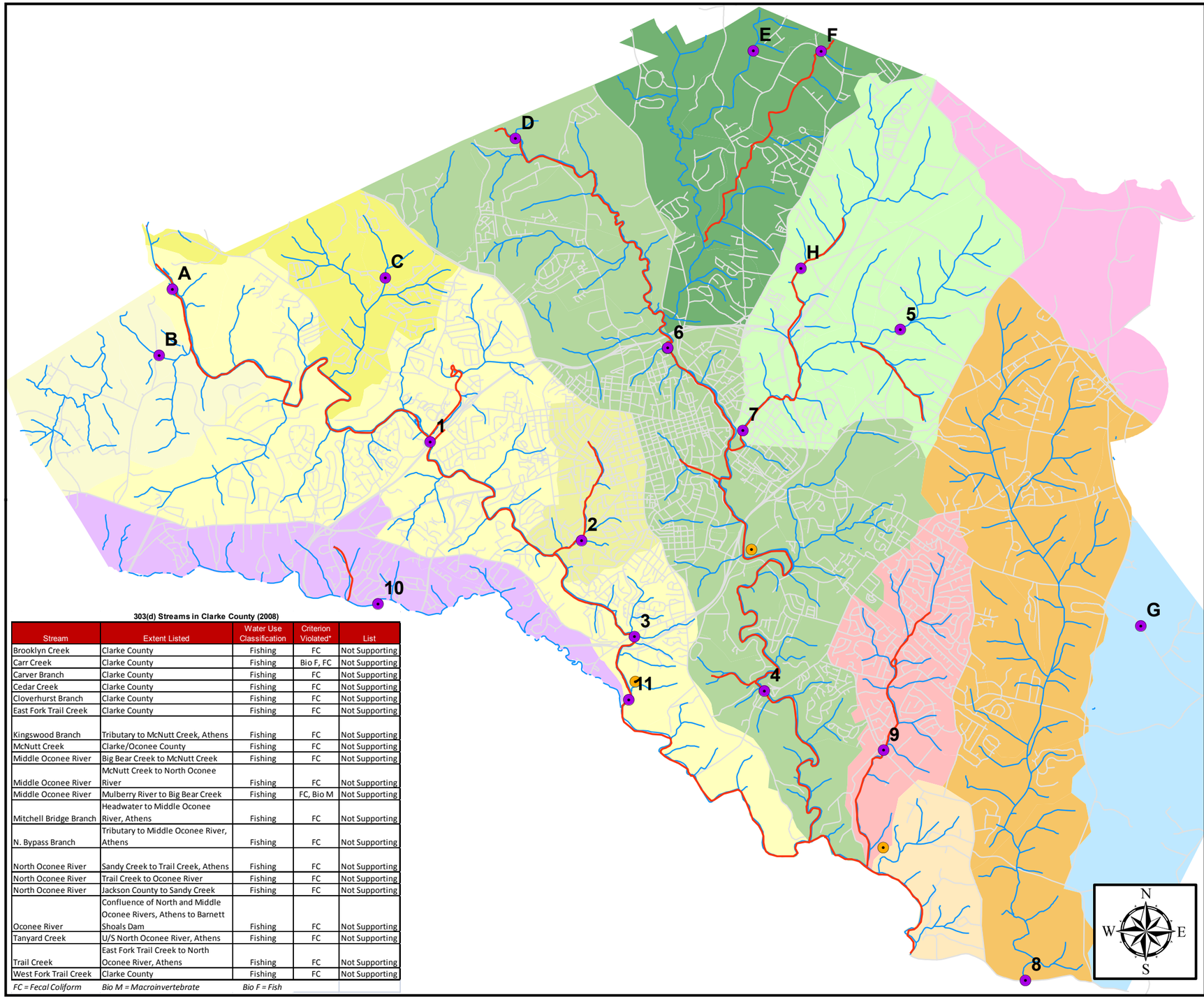
(1) Note: The Downtown Infrastructure component of this project in SPLOST IV & 2000 was placed on hold by the Mayor and Commission on 12/1/09. The Mayor and Commission removed the hold and approved plans for completion at their December 3, 2013 regular meeting. All other Road Projects in SPLOST IV have been completed.

(2) Note: The Latest Estimated Cost for the Jail Expansion project includes $57,375,089 in Bond Proceeds from the Mayor & Commission approved bond issuance on May 7, 2013. A total estimated cost of $58,675,902 was moved to the Transfers Out account to cover all the debt service payments for the Jail Bonds.

(3) Note: The Latest Estimated Cost for the Classic Center Expansion project includes $11,891,931 in Bond Proceeds from the Mayor & Commission approved bond issuance on December 6, 2011. A total estimated cost of $11,936,819 was moved to the Transfers Out account to cover all the debt service payments for the Classic Center Bonds. In FY13, the final debt service payments were made for the Classic Center Bonds.

JG Finance Department
mber 15, 2015

PO # 28162



303(d) Streams in Clarke County (2008)

Stream	Extent Listed	Water Use Classification	Criterion Violated*	List
Brooklyn Creek	Clarke County	Fishing	FC	Not Supporting
Carr Creek	Clarke County	Fishing	Bio F, FC	Not Supporting
Carver Branch	Clarke County	Fishing	FC	Not Supporting
Cedar Creek	Clarke County	Fishing	FC	Not Supporting
Cloverhurst Branch	Clarke County	Fishing	FC	Not Supporting
East Fork Trail Creek	Clarke County	Fishing	FC	Not Supporting
Kingswood Branch	Tributary to McNutt Creek, Athens	Fishing	FC	Not Supporting
McNutt Creek	Clarke/Oconee County	Fishing	FC	Not Supporting
Middle Oconee River	Big Bear Creek to McNutt Creek	Fishing	FC	Not Supporting
Middle Oconee River	McNutt Creek to North Oconee River	Fishing	FC	Not Supporting
Middle Oconee River	Mulberry River to Big Bear Creek	Fishing	FC, Bio M	Not Supporting
Mitchell Bridge Branch	Headwater to Middle Oconee River, Athens	Fishing	FC	Not Supporting
N. Bypass Branch	Tributary to Middle Oconee River, Athens	Fishing	FC	Not Supporting
North Oconee River	Sandy Creek to Trail Creek, Athens	Fishing	FC	Not Supporting
North Oconee River	Trail Creek to Oconee River	Fishing	FC	Not Supporting
North Oconee River	Jackson County to Sandy Creek	Fishing	FC	Not Supporting
Oconee River	Confluence of North and Middle Oconee Rivers, Athens to Barnett Shoals Dam	Fishing	FC	Not Supporting
Tanyard Creek	U/S North Oconee River, Athens	Fishing	FC	Not Supporting
Trail Creek	East Fork Trail Creek to North Oconee River, Athens	Fishing	FC	Not Supporting
West Fork Trail Creek	Clarke County	Fishing	FC	Not Supporting

FC = Fecal Coliform *Bio M = Macroinvertebrate* *Bio F = Fish*

Figure AP45: Watersheds

Clarke County Watersheds
Athens-Clarke County
Watershed Protection Plan

Legend

- Sampling Locations
- WRF
- WTP
- 303(d) Streams
- Streams
- Roads
- Bear Creek
- Big Creek
- Brooklyn Creek
- Cedar Creek
- McNutt Creek
- Middle Oconee
- North Oconee
- Oconee River
- Sandy Creek
- Shoals Creek
- Sulphur Springs
- Trail Creek
- Turkey Creek

Date: July 2009
Job No: 2001-129

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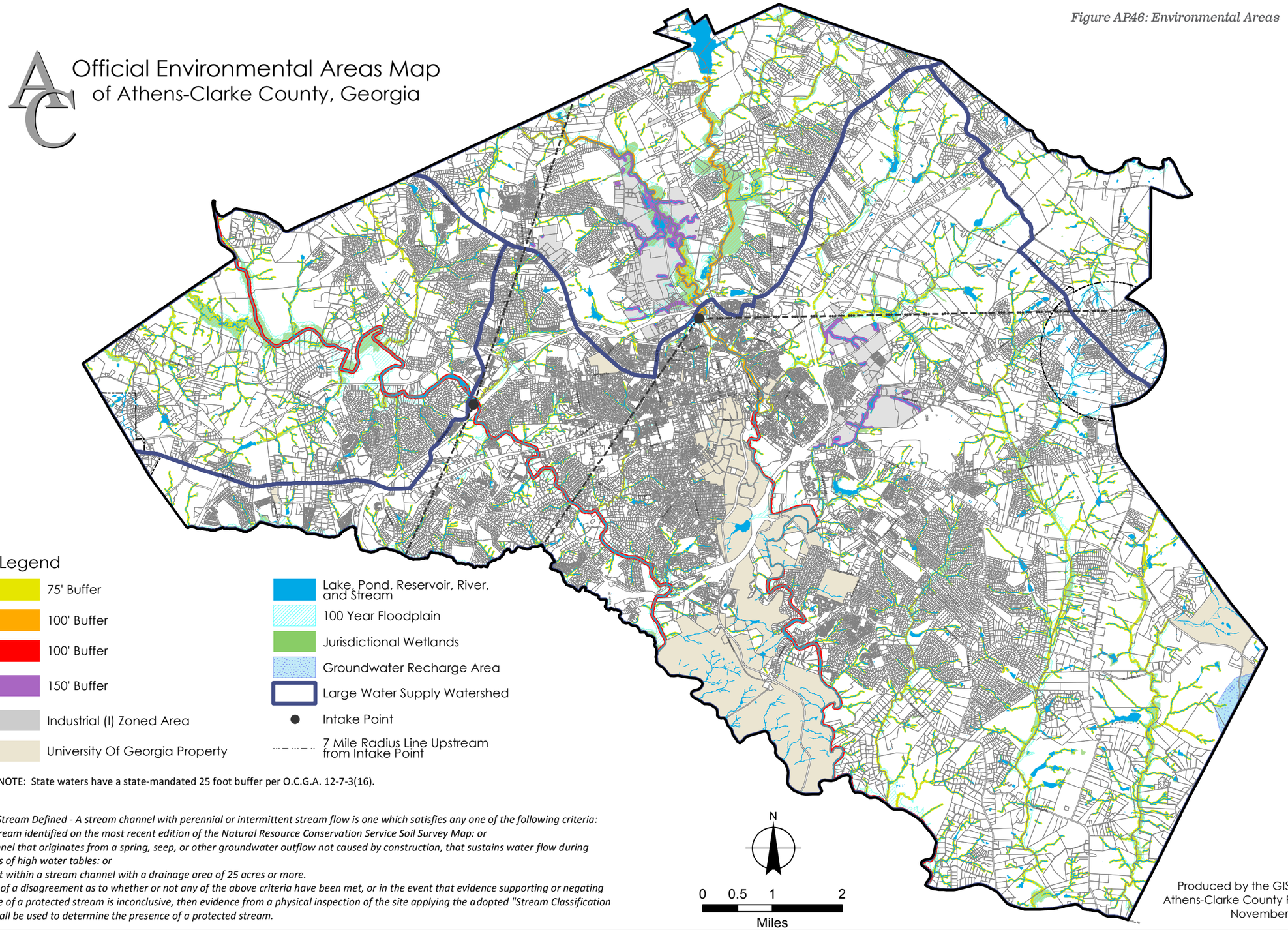
ATHENS-CLARKE COUNTY ENVIRONMENTAL AREAS MAP

Figure AP.46: Environmental Areas



NOTE: State waters have a state-mandated 25 foot buffer per O.C.G.A. 12-7-3(16).

**Protected Stream Defined - A stream channel with perennial or intermittent stream flow is one which satisfies any one of the following criteria:*

1. *Any stream identified on the most recent edition of the Natural Resource Conservation Service Soil Survey Map: or*
2. *A channel that originates from a spring, seep, or other groundwater outflow not caused by construction, that sustains water flow during periods of high water tables: or*
3. *A point within a stream channel with a drainage area of 25 acres or more.*

In the event of a disagreement as to whether or not any of the above criteria have been met, or in the event that evidence supporting or negating the existence of a protected stream is inconclusive, then evidence from a physical inspection of the site applying the adopted "Stream Classification Protocol" shall be used to determine the presence of a protected stream.

Produced by the GIS/Graphics Division
Athens-Clarke County Planning Department
November 10, 2014

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