

FLINT RIVER TRAILS

Master Plan and Implementation Strategy

Prepared for

Albany/ Dougherty County,
Georgia

Prepared by

KAIZENCOLLABORATIVE

October 10, 2016



Albany/ Dougherty County Greenway Master Plan



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Executive Summary

World class trail systems connect a variety of destinations and experiences, offering something for all types of trail users. They connect people to outdoor recreation areas, neighborhoods, schools, restaurants, and shops. These trail systems become a draw not just to locals, but to people from afar as well. These systems become an economic driving force and create a culture where people want to visit and stay, or move to these communities.

In 2015, Dougherty County and the City of Albany realized they have all the pieces to the puzzle, and they just needed to fit them together into one cohesive trail system. This trail system will impact the citizens of Dougherty County by encouraging a more active community, promoting healthier and happier lifestyles, bringing the community together through connectivity, and encouraging economic growth downtown and throughout the county. To achieve this goal, key stakeholders from around the county came together with the design team, KAIZEN Collaborative, in January 2016 to discuss the benefits and opportunities of this trail master plan and to fit the pieces together.

From there, a smaller steering committee was formed to review proposed routes, design standards, and branding elements for the trail system. The input from the steering committee was critical in gaining valuable local insight and feedback. The proposed trail system was presented as five phases with “before” and “after” images of key locations. Each segment was analyzed and documented to give a clear understanding of what is being proposed. In addition, cost data was estimated to help guide funding and phasing implementation.

The ***Flint River Trails*** master plan identifies over 20 miles of multi-use trails, including proposed areas for mountain bike and equestrian trail expansion as well as improvements for canoe and kayak access. This trail system has something for everyone and has the potential to change the landscape around Dougherty County forever.



Introduction

The Dougherty County Trail Master Plan was started as a means to develop an interconnected trail system throughout the City of Albany and Dougherty County. In today's real estate market, trails are being called the new beach front property. People want to live close to trails as they provide many benefits such as increased mental and physical health, increased sociability, a way of transportation, and an increase in economic activity. The millennial generation desires to be near trails and the benefits they provide. As the millennials in Albany look elsewhere and leave for cities that provide these amenities, it is crucial that the City of Albany and Dougherty County promote the development of this trail system as a means of encouraging their younger generation to want to stay or come back. This trail system will also be a major draw to businesses looking to locate in a city that has a greater quality of life for its workers. In addition to increased quality of life, the trail system will increase local spending and tax revenues. The return on this investment should be a win for everyone.

Opportunities abound with over 1,560 acres of publicly-owned property along the banks of the Flint River within Dougherty County. This asset provides a range of unique opportunities of different types of recreational trail facilities to serve many citizens' interests.

Now is the time for Dougherty County to be interconnected and re-linked to the Flint River and Albany's downtown core. A well-designed, well-constructed trail system will go a long way towards making Dougherty County one of southern Georgia's most desirable emerging areas, so let's get a move on!



2 Methodology

On November 6, 2015, the Dougherty County Board of Commissioners approved a master agreement with KAIZEN Collaborative to provide planning and design development of the County's greenway trail system. The KAIZEN team was selected based on their experience planning over 650 miles of similar trails around the southeast. The County viewed KAIZEN Collaborative as a desirable partner because of their trail planning expertise and implementation strategies.

The County trail master plan process comes on the heels of the Albany/Sasser Rail Trail project which is a 13.62 mile multi-use trail from Sasser to Albany. KAIZEN Collaborative worked alongside the PATH Foundation to execute a design and implementation plan for the three counties through which the rail trail passes. In response to this project, the City of Albany and Dougherty County recognized the need to execute a county-wide trail master plan to start the vision of a diverse, interconnected trail system. The implementation of these trail projects anticipates the utilization of SPLOST funding, private donations, and public sector funding options.

2.1 Planning Process

The **Flint River Trails** document is intended to serve as the blueprint for Dougherty County's greenway trail development for the next 20+ years. A streamlined planning process was initiated with an on-the-ground approach to assess feasible trail corridors. The KAIZEN team began the planning process by meeting with city and county staff, officials, and stakeholders to gain insight into local opportunities. The design team then introduced the benefits of greenway trails, formed a steering committee, and established overall goals for the greenway trail system. Data collection and field work was followed by the development of branding options, design standards, and a preliminary greenway trail master plan. Each step in the process was vetted with the steering committee.



The 2013 Silver Comet Trail Economic Impact Analysis and Planning Study reported \$60 million dollars annually were spent with the three counties along the greenway trail.

2.2 Steering Committee

The **Flint River Trails** Steering Committee was first convened on January 19, 2016. Albany/Dougherty Planning Department Project Manager, Paul Forgey, and Dougherty County Attorney, Spencer Lee, identified Steering Committee representatives from the following departments, organizations, and municipalities:

- AB&T National Bank
- Albany Audubon Society
- Albany-Dougherty Inner City Authority
- Albany Civil Rights Institute
- Albany Convention and Visitors Bureau
- Albany Economic Development Commission
- Albany State University
- Buffalo Equestrian
- Chehaw Park

- City of Albany
- Darton State College
- Dougherty County Commission
- Dougherty County Greenspace Committee
- Flint Riverkeeper
- Flint River Water Trails Program
- Georgia Department of Natural Resources
- Georgia Forestry Commission
- Georgia Power, a Southern company
- Good Life City Runners
- Historic Dixie Highway-Scenic ByWay
- Keep Albany-Dougherty Beautiful
- Mountain Bike Associations
- Pecan City Peddlers
- Phoebe Putney Memorial Hospital
- Renasant Bank
- Saddle Club
- South Georgia Rails to Trails Inc.
- Southwest Georgia Saddle Club
- Thronateeska Heritage Foundation and Flint RiverQuarium
- University of Georgia Extension Service
- Radium Gardens and Radium Golf Course Property
- Radium Springs Neighborhood Association

(A list of individual Steering Committee Members is included as the Appendix)

The first meeting was structured as a work session to present examples of various trail projects, to discuss benefits of greenway and blueway trails, and to introduce proposed standards for the **Flint River Trails** system. During the work session, the primary goals for creating the trail system were established:

- Create a viable network for walking and biking to key destinations
- Provide opportunities for improving health and wellness
- Spur downtown redevelopment and tourism
- Extend, improve, and brand existing trails within the county



Assessing feasibility connections to the Riverfront Trail from the Albany Sasser Rail Trail

- Protect the quality of natural areas, creeks, and river corridors

After spending several months collecting field data, KAIZEN's design team reconvened the Steering Committee to review the proposed trail corridors and offer feedback. The design team also revealed a preliminary trail system logo and name, **Flint River Trails**, along with trail amenity options for the Steering Committee's consideration. The Steering Committee then selected trail design standards in order to create an identity for the **Flint River Trails** system.

After reviewing Steering Committee feedback and completing additional field work, KAIZEN's design team presented the Steering Committee with the final master plan, an implementation strategy, and final trail design standards.

2.3 Data Collection and Analysis

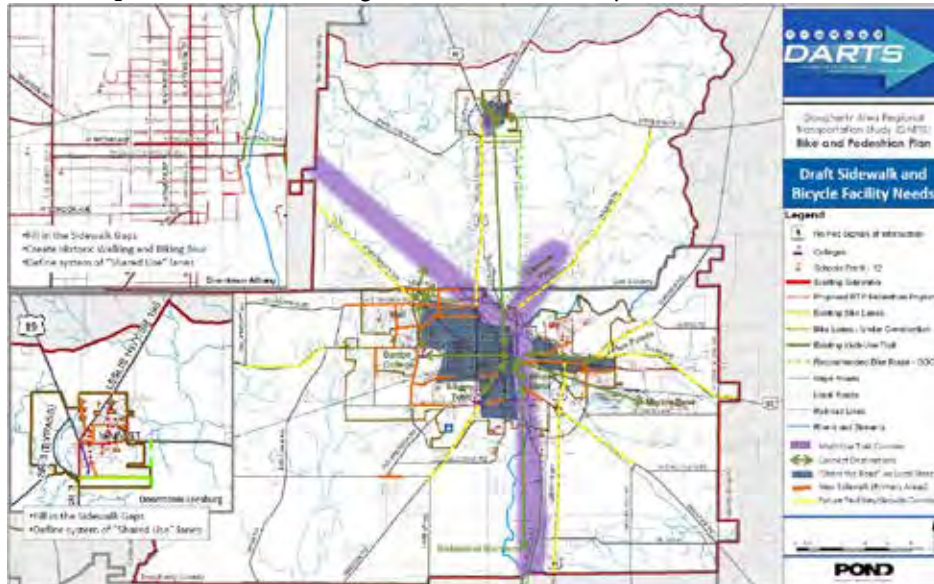
Using the County GIS data and the 2011 DARTS MPO Regional Bicycle and Pedestrian Plan, analysis of existing and proposed trail connections within Dougherty County focused on the following criteria:

- Is the trail route feasible for construction?
- Is the trail route appealing to all users?
- Is the trail route perceived as safe?
- Does the trail route connect desirable destinations?

Over an eight-month period, KAIZEN's design team conducted field work and analyzed data to determine if the trail routes were feasible, appealing, safe, and destination driven. The design team recorded and transferred all information onto field maps and into ArcGIS once they validated all the routes.

2.4 Greenway Trail Development

Steering Committee input, assessment of field data, and analysis of GIS data (aerial photography, elevation contours, rivers, flood plains, and property ownership) led to the following *Flint River Trails* objectives:



The 2011 DARTS MPO Regional Bicycle and Pedestrian Plan was created to make detailed recommendations for the region. Each proposed trail segment within Dougherty County was assessed and altered to meet the Flint River Trail system's goals and criteria.

- Extend, connect, and strengthen existing trails within Dougherty County.
- Connect major destinations to encourage use as transportation corridors.
- Connect existing parks and greenspace to provide linear park corridors for recreation including:
 - Chehaw Park
 - Radium Springs gardens and golf course
 - Various city parks
 - 3 miles of existing greenway trails
- Identify regional connectivity to Sasser, Georgia by way of the proposed Albany/Sasser Rail Trail

2.5 Public Meeting

KAIZEN Collaborative presented the *Flint River Trails* plan at a public meeting coordinated and hosted by Dougherty County at the Southwest Georgia Council on Aging (SOWEGA) on February 22, 2016. During the meeting, the design team outlined the benefits of trails and shared the master planning process for the *Flint River Trails* system. Then the design team presented the preliminary master plan and design standards. The second half of the meeting focused on open discussion and mapping, where participants could give their feedback to the design team and write/draw directly on maps of the county. This meeting was followed up by an online survey to gain additional feedback and allow a chance for those that could not attend to provide their input.



February 22nd Public Meeting at the SOWEGA Building

2.6 Types of Trails

For the *Flint River Trails* master plan, the design team looked at a variety of trail types including multi-use, mountain bike, equestrian, and water trails. These different trail types were all vetted through the steering committee.

Multi-use Trails:

Multi-use trails follow linear corridors such as rivers, abandoned railroads, utility rights-of-way and other linear elements in the landscape. Multi-use trails can be within road rights-of-way; however, they are completely separated from vehicular traffic. The trail is typically 12 feet wide to accommodate several users traveling in both directions. This width can vary according to the anticipated number of users and the location of the trail.

To accommodate all types of users, concrete or other hard surface materials are used to pave a smooth surface. In areas of regular flooding or wetlands, boardwalks are constructed to protect the sensitive environment and maintain a year-round usable trail.

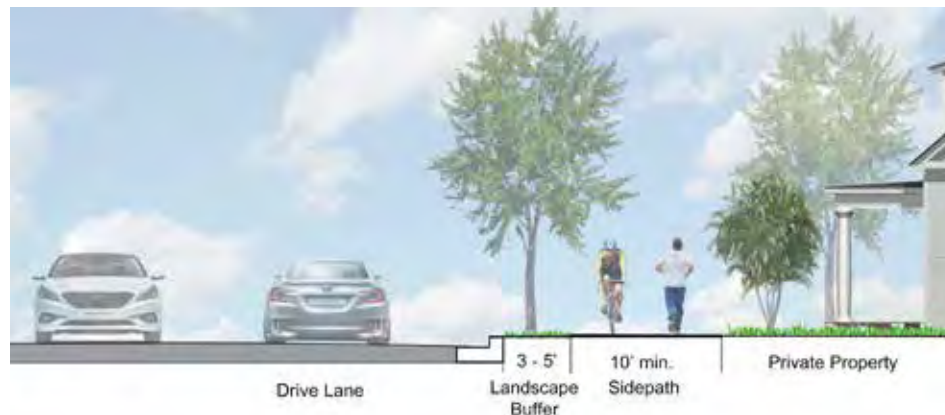


Multi-use Trail Typical Section

Side Paths:

Side Paths are multi-use trail facilities adjacent to roadways with a 3 to 5 foot landscape buffer to separate the trail users from the roadway. These are typically 8 to 12 feet wide, hard surface trails to accommodate a variety of users. Side Paths become more common as trails enter into more dense urban environments, and therefore need to accommodate for driveway and entrance

crossings as well as intersections and mid-block crossings.



Side Path Typical Section

Mountain Bike Trails:

Within Dougherty County, a strong coalition of mountain biking enthusiasts exists, and two areas have already been developed for mountain biking trails. Currently there are 10+ miles of trails at Chehaw Park and 11 miles just south of downtown along the west side of the Flint River. Based on information the design team gathered from public meetings and from the steering committee, a strong desire exists to expand these trails and connect them. The International Mountain Biking Association (IMBA) has a local chapter in Albany, and the national chapter has expressed interest in developing trails in the area as well. The design team has gathered information and insight from the local mountain biking community. It was determined that expanding future mountain biking trails and creating better access are goals to be included in the plan.

For additional design information please see the IMBA website:
<https://www.imba.com/>

Also seek out your local IMBA representative:

Lonnie Wormley - lonnie@wormley.org

Terry Palmeri - Southeast Associate Regional Director, IMBA

2125 Elachee Drive

Gainesville, GA 30504

terry.palmeri@imba.com

c: 706-515-5221

w: 706-273-1849

Equestrian Trails:

Within Dougherty County there is a strong interest in equestrian trails. Based on information gathered from local equestrian trail users, the following considerations were taken into account for proposed equestrian trail areas.

- Dirt or grass is the preferred surface for equestrian trails. Paved is too slippery for horses (especially when wet) and very hot. Gravel is painful to most horses and often can damage their feet.
- Many equestrian riders are happy with 2 hours or less of riding with some preferring 3 to 4 hours of riding. Gaited horses are faster and can go at 5 mph or more while non-gaited are slower at 3 to 4 mph. Gaited horses will need 10 miles for a 2 hour ride or 15 to 20 miles or more for 3 to 4 hour ride. Non-gaited will need 6 miles for a 2 hour ride or 9 to 16 miles for a 3 to 4 hour ride. To attract users from far away and have them spend the weekend or longer, it is recommended to have a minimum 20 miles of trail.
- Many equestrian riders enjoy camping over night if they are traveling distances over 1 hour to ride. There should be a variety of camping options from primitive campsites to sites that provide water and electricity. These should be level and pull-thru sites with areas for the horses to stay overnight (Ga State Parks have great barns - look at A H Stephens State Park). If there is room at the campsites, high-tie posts should be installed.
- At trailhead areas there needs to be clear indication of where to park as equestrian truck and trailers should be parked separately from non-equestrian trail users.

For more information please visit the below website:

http://www.fs.fed.us/t-d/php/library_card.php?p_num=0723%202816

Water Trails:

Historically, the Flint River has served as a source of life for the people and lands through which it flows. Regionally the river traverses through many landscapes, both urban and rural, connecting communities from the headwaters near Atlanta to the confluence with the Chattahoochee River at Lake Seminole. The city of Albany has recognized the importance and beauty this waterway encompasses and they realize the value in bringing people closer to it. As part of this master plan, several potential water access points have been identified for the Flint River within Dougherty County, and vetted through the steering committee. Along with the efforts of this trail master plan, a larger regional water trail effort is currently under way for the entire Flint River basin. It is the intent that the canoe and kayak launch sites within this document correspond with the Georgia River Network's Flint River Water Trail. The design team proposes using their design standards for launch site improvements and sign design standards. The proposed logo is to be combined with the Dougherty County *Flint River Trails* logo to give identity to both the local and regional system.

Please see the below websites for more information and guidance on design standards for water trails:

GA River Network:

<http://www.garivers.org/gwtc/>

National Park Service Watertrails:

<https://www.nps.gov/ncrc/portals/rivers/projpg/watertrails.htm>

Within Dougherty County there are 11 total water trail access points. Most access points have existing facilities, though four will require new facilities. For this master plan the access points are divided into two parts. The upper Flint River which is the area above the Georgia Power Dam and the lower Flint River which is the area below the dam. The access points identified are as follows:

Upper Flint:

- U.S. Hwy 19 Bridge Landing
- Cox Landing
- Chehaw Park Landing
- GA Power Landing - Lake Worth
- Cromartie Beach Landing
- Turner Park Landing

Lower Flint:

- GA Power Landing - Flint River
- Downtown Riverfront Docks (3)
- Veterans Park Landing - Proposed
- Radium Boat Ramp Landing
- Radium Creek Landing - Proposed

Each access point was assessed by the Flint River Water Trail, south Flint River sub basin group, led by David Dixon. They reviewed existing features and facilities it provided, including the type of boat use, restrooms, access, signage, and current site conditions. This information is essential to identifying improvements needed.



Kayak paddler getting ready for a day on the Flint River at Cox Landing



View of the Flint River just north of downtown

Flint River Water Trail Existing Launch Site Assessments:

Landing	Location	Boat Ramp	Dock	Vessel Use Types	Rest Rooms	Parking	Road	Signage	Day Use	Managed By:
Turner Landing	McAdams Street - Flint River	Yes	Yes	Mostly Motor	Yes - Portable	Yes - Paved	Yes - Paved	Poor	Good	City of Albany
Cromartie Beach Landing	Cromartie Beach Road - Lake Worth	Yes	Yes	Mostly Motor	Yes - Portable	Yes - Paved	Yes - Paved	Fair	Fair	City of Albany
Georgia Power Dam and Muckafoonee Spillway Portage	Off small lagoon between Georgia Power Dam and Muckafoonee Spillway on Lake Worth	Yes	Yes	Canoe/Kayak	Same ones as Tail Race Landing below	Yes - Gravel	Yes	Good	Yes	Georgia Power
Muckafoonee Creek Fishing Area Access	Off Georgia Power Dam Road just after the Muckafoonee Creek Bridge	No	No	Canoe/Kayak	Same ones as Tail Race Landing below	Yes - Gravel	Yes	Good	None	Georgia Power
Cleve Cox Landing	Philema Road Bridge - Lakefront Drive - Lake Chehaw	Yes	Yes	All	Yes - Portable	Yes - Paved	Yes - Paved	Good	Poor	City of Albany
Chehaw Park Landing	Chehaw Park - Lake Chehaw/Muckalee Creek	No	Yes	Canoe/Kayak	unknown	Yes	Yes-dirt	unknown	Excellent	Chehaw Park
U. S. 19 Landing Lee County	U. S. 19 South Lee County - Kinchafoonee Creek	No	No	Canoe/Kayak	None	Yes - Dirt	Yes - Dirt	None	None	Lee County
Georgia Power Tail Race Landing	Georgia Power Dam Road - Flint River	Yes	No	All	Yes*	Yes - Gravel	Yes- Dirt and Paved	Poor	Good	Georgia Power
Albany Riverfront Docks (3)	Downtown Albany - Flint River	No	Yes	Canoe/Kayak	None*	Yes - Paved	Yes - Paved	none	Excellent	City of Albany
Veteran's Park Overlook - Proposed	Flint River	No	No	Canoe/Kayak	None	Yes - Paved	Yes - Paved*	none	none	City of Albany
Radium Landing	Off Radium Springs Road - Flint River	Yes	No	All	None	Yes- Dirt	Yes- Dirt and Paved	Poor	none	Georgia DNR
Radium Springs Park - Proposed	Off Radium Springs Road - Flint River	No	No	Canoe/Kayak	*None	No	No	None	Yes*	City of Albany

Note: "Kayak Attack" in the Lee County/Dougherty County area has fee based kayak rental, drop-off, and pick-up service from one landing to another.

Note: Paddle Boards could be used at all lake sites and the lower Muckalee and Kinchafoonee Creeks access points.

Hazards: Georgia Power Dam and Muckafoonee Spillway. Power dam water releases at Georgia Power Landing. Broad Avenue Shoals.

3

Flint River Trails Master Plan



3 Flint River Trails Master Plan

The *Flint River Trails* plan identifies over 21 miles of greenway trail, 11 water trail access points, and over 600 acres of available land for additional mountain biking and equestrian trail opportunities within Dougherty County. The steering committee concentrated the master plan along the Flint River as that is where most of the publicly available land and feasible opportunities reside. A steering committee of local residents reviewed and selected the proposed initial trail segments based on ease of development and stand-alone feasibility. Implementation of the initial trail segments will follow the *Flint River Trails* plan adoption as described within the following pages.



Existing Riverfront Trail

3.1 Trail Segments

Within the overall master plan, the steering committee has reviewed and dissected the trail master plan into five separate segments for clearer understanding and easier implementation. The segments have been chosen in terms of logical starting and ending points, feasibility, and priorities determined by the steering committee. The segments are as follows:

1. Albany Sasser Rail Trail Connectivity to the Riverfront Trail and Downtown
2. Chehaw Connection
3. Albany State University to Paul Eames Sports Complex
4. Albany State University to Radium Springs
5. Downtown to the Boy Scout Property

3.2 How To Determine Costs

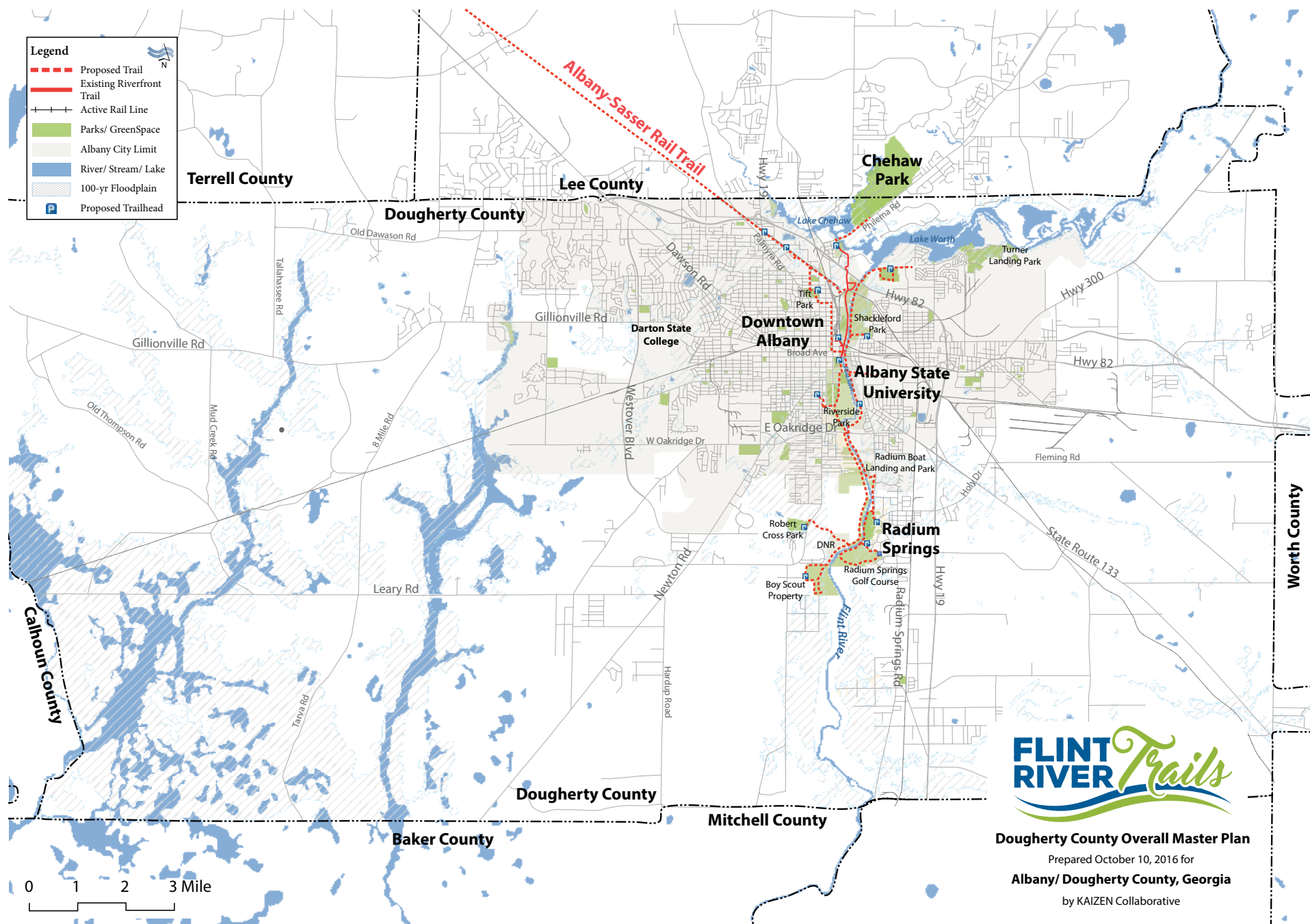
As part of the master plan, the design team created cost estimates and a phasing plan by considering a variety of factors including but not limited to:

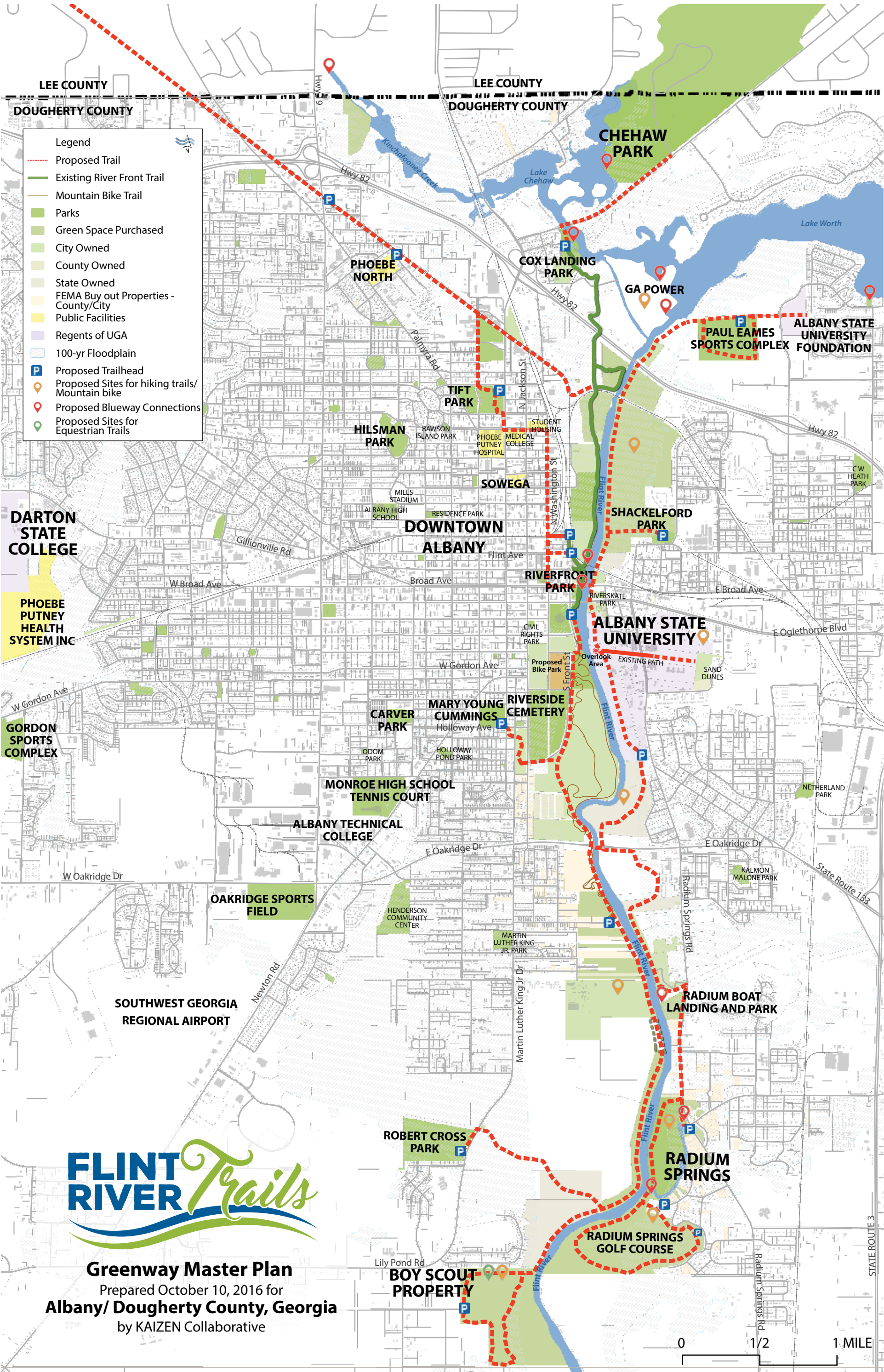
1. Trail type, width, and material
2. Structural elements such as bridges, culverts, retaining walls, and boardwalks
3. Acquisition needs through private property
4. Trail signage and amenities
5. Surveying, engineering, and design for construction

For the different trail types proposed within this plan, the following linear foot estimates were used based on 2016 construction costs.

- 12' wide concrete multi-use trail: \$175.00 per linear foot
- Mountain bike trail: \$6.00 per linear foot
- Equestrian trail: \$6.00 per linear foot
- Water trail: \$75,000 lump sum - new parking and landing/launch facility
\$50,000 lump sum - new ramp/launch facility w/o parking
\$25,000 lump - improving existing facility

**As implementation begins, a cost for inflation will need to be considered with an average increase of 4-6% annually.*





3.3 Trail Segment #1: Albany/Sasser Rail Trail to Riverfront Trail

For years, the railroad corridor from Albany to Sasser was utilized to transport goods to the City of Albany and across the Southeast. Since the abandonment of the rail, it has become an overgrown eyesore of little importance to the region. With successful implementation of the first trail segment, this will no longer be the case. South Georgia Rails to Trails, Inc. and the City of Albany have begun a resurrection of this once busy transportation corridor for a completely different purpose: a multi-use greenway trail for non-motorized travel. The rehabilitation of this old rail bed into a trail system for recreation will increase the overall health of the region, and will once again make this corridor a vibrant asset and economic generator for the community.

The route utilizes the abandoned railroad from Sasser, Georgia to the Jefferson Street overpass in the City of Albany, where the rail bed intersects with the west side of the Norfolk Southern rail line. When the trail enters Dougherty County, it crosses Slappey Blvd and the new Wal-Mart Neighborhood Market. This is a popular destination for trail users and an ideal location for a trailhead at the edge of the existing parking lot. The trail continues along the rail corridor towards Albany, running adjacent to several neighborhoods. Residents in these neighborhoods will be able to access the trail by using existing sidewalks or intersecting residential streets. The goal is to make a connection to the existing Riverfront Trail along the Flint River. There are two viable and equally important options to make this connection. The first option is to continue down the rail corridor and build a pedestrian bridge over the active Norfolk Southern rail lines allowing trail users to safely cross this obstacle. The trail will continue along the abandoned corridor for a short distance before connecting directly into the Riverfront Trail. The second option is to link this trail into the Albany community by connecting to Tift Park and into downtown Albany.

Feedback from community meetings has shown that a strong connection to Tift Park is desired by many Albany residents. This is a focal point for the community and is a critical link for the Rail Trail corridor just a few blocks north of the park. The design team believes the best way to make this connection is to merge off the rail corridor at North Monroe Street on the east side, and head south to Tift Park. This multi-use path will weave through city or county

owned property for this entire segment with no acquisition or easements needed. There is a possibility for a future recreation facility on the north side of the National Guard Armory, which would provide opportunity for the trail to connect with this facility. Once the trail reaches 7th Ave, an at-grade crossing with rapid flashing beacons will provide a safe crossing into Tift Park. Community feedback suggests a major trailhead is desired at Tift Park for locals and visitors to access the trail.

Once the trail reaches the proposed trailhead at Tift Park, it will head southeast connecting to the adjacent Boys and Girls Club, tennis courts, and the existing community bathrooms. Once to the corner of 5th Ave and Jefferson Street, the trail will cross 5th and continue south on the west side of Jefferson Street. The sidewalk is proposed to be widened to accommodate a 10’ wide side path. At 4th Ave, the trail will cross Jefferson Street on the south side and head east to North Washington Street, modifying the sidewalk to a 10’ wide side path. This will allow the trail to link into Phoebe Putney Hospital, the UGA College of Pharmacy, and the new medical student housing development. At the corner of 4th Avenue and Washington Street, a small trailhead is proposed where Phoebe Putney Hospital has purchased two adjacent lots. At this point the trail will head south on the west side of the street, as a side path within the right-of-way to Broad Ave. In areas where the right-of-way is constricted, there are areas where the curb and gutter will need to be modified to obtain a 3 foot minimum buffer between the trail and roadway. The side path will continue down to Broad Avenue, making critical connections to two proposed trailhead locations. The first location is at the Thronateeska Heritage Center at the open greenspace just to the south side of the train depot museum. The second is at the end of Flint Avenue where the existing spur to the Riverfront Trail is located. The trail will reach Broad Ave where it will then turn to the east, and follow the north side of Broad Ave down to the riverfront. Here it will connect with the existing Riverfront Park and gain access to Albany State University via the Broad Avenue Bridge.

Within this segment improvements to the water trail access point at U.S. Hwy 19 Bridge are needed. Improvements for parking are proposed along with signage and improved canoe and kayak launch facilities.

Trail Segment #1 Overview:

This trail segment looks at connecting the Albany/Sasser Rail Trail to the Riverfront Trail. The first option is making a direct connection from the rail by building a pedestrian bridge over the active Norfolk Southern rail lines. The second option pulls away from the rail trail corridor at Monroe Street and heads south to Tift Park within the right of way. The trail will connect into Tift Park where a trailhead is proposed. The trail continues south along Jefferson Street to 4th Avenue where it will cross and head east to Washington Street. From here the trail goes south to downtown Albany. The trail will make connections to the Riverfront Trail at Roosevelt Avenue and Flint Avenue trailheads. The trail will continue to Broad Avenue where it will turn east and connect to the Broad Avenue Bridge.

Opportunities and Benefits:

- Provides connectivity to key destinations such as Walmart, Phoebe Putney Hospital, Tift Park, Medical College, Student Housing, Downtown, and the Riverfront Trail
- Allows for non-motorized transportation and encourages walkability downtown
- Provides connectivity to the Riverfront Trail
- Connects regionally to the Albany to Sasser Rail Trail

Potential Obstacles:

- Abandoned rail corridor still needs to be acquired before bridging over active railroad line
- Trail down Washington and Broad Avenue will require road modification

Acquisition: This trail alignment passes through approximately 1,340 LF of private property.

** Acquisition is based on a 25' permanent easement. Most linear easements can be negotiated as a donation.*

Trail Recommendations:

Multi-use: 5,625 lf (1.1 miles)

- Downtown connection is most likely the more feasible option and should

be considered phase 1 of this segment as the remainder of the abandoned rail corridor east of Jefferson Street is yet to be acquired

- Phase two of this segment will need to work with Oxford Construction Company on the timing and location of their train supply cars where the trail crosses their active spur.

Water Trail:

U.S. Hwy 19 Bridge Landing

- Improve water access by adding gravel parking and canoe/kayak launch
- Add benches, trash receptacles, and water trail signs

Downtown Landing (2)

- Improve signage for water trail

Trail Segment #1A - Rail Trail to Downtown

Acquisition (allowance)	\$	3,822.31
Surveying	\$	19,431.13
Planning, Design, and Engineering	\$	138,436.25
Construction Cost (2016)	\$	2,768,725.00
Construction Contingency @15%	\$	415,308.75
Total Cost to Implement	\$	3,345,723.44

Trail Segment #1B - Rail Trail to Riverfront Trail

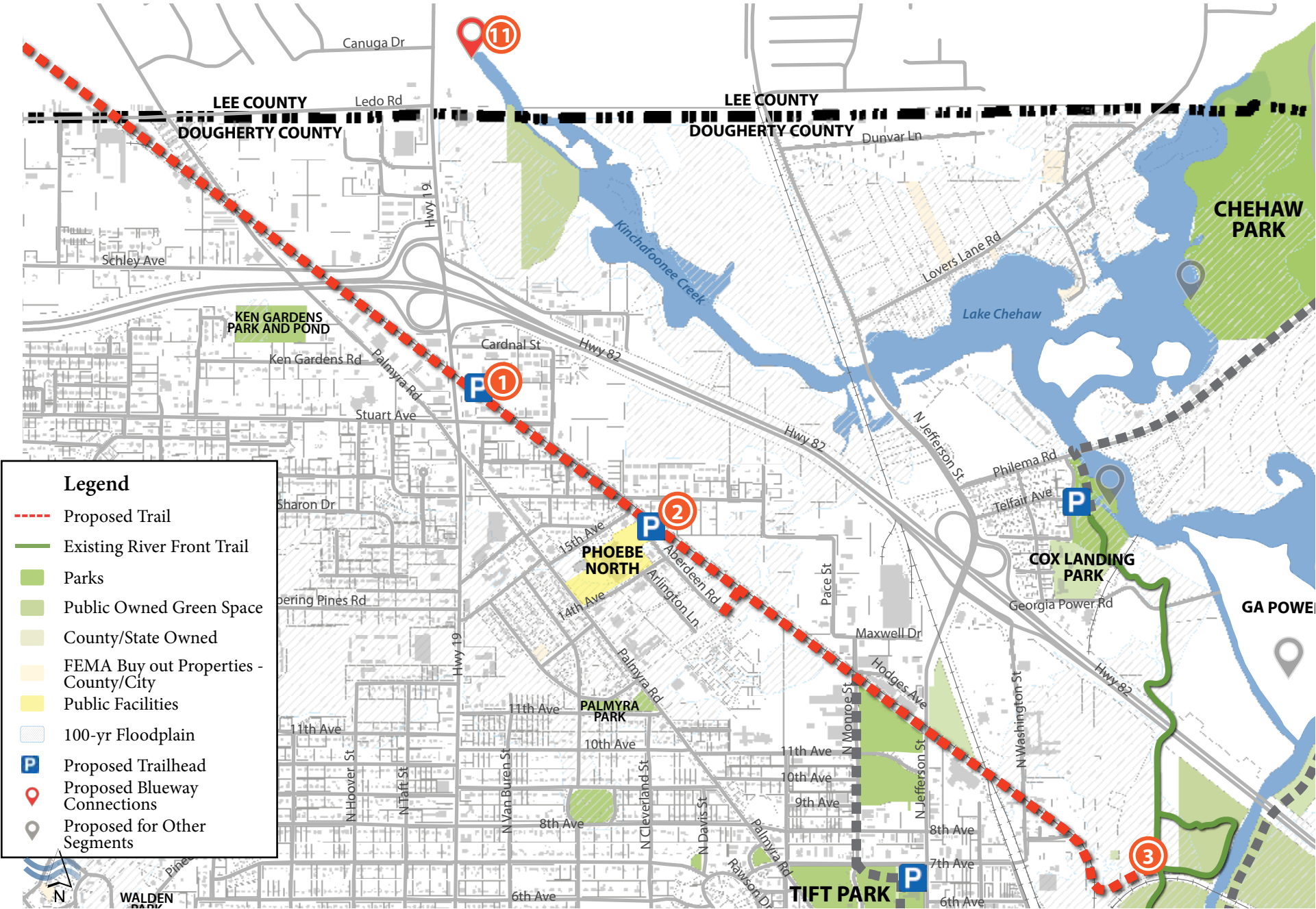
Acquisition (allowance)	\$	17,432.85
Surveying	\$	7,231.40
Planning, Design, and Engineering	\$	134,625.00
Construction Cost (2016)	\$	2,243,750.00
Construction Contingency @15%	\$	336,562.50
Total Cost to Implement	\$	2,739,601.76

	Quantity	Units	Unit Price	Cost
Segment #1A				
12' Multi-Use Trail	7,120	LF	\$ 175.00	\$ 1,246,000.00
At-grade crossing of 7th Ave. - RRFB	1	LF	\$ 60,000.00	\$ 60,000.00
Sidepath down Washington to downtown	6,987	LF	\$ 175.00	\$ 1,222,725.00
Flint Ave Trail Access	1	LS	\$ 15,000.00	\$ 15,000.00
Trailhead at Tift Park	1	LS	\$ 75,000.00	\$ 75,000.00
Water Trail Improvements (3) - Downtown	1	LS	\$ 75,000.00	\$ 75,000.00
Water Trail Improvements - Hwy 19 Landing	1	LS	\$ 75,000.00	\$ 75,000.00
TOTAL				\$ 5,844,889.26

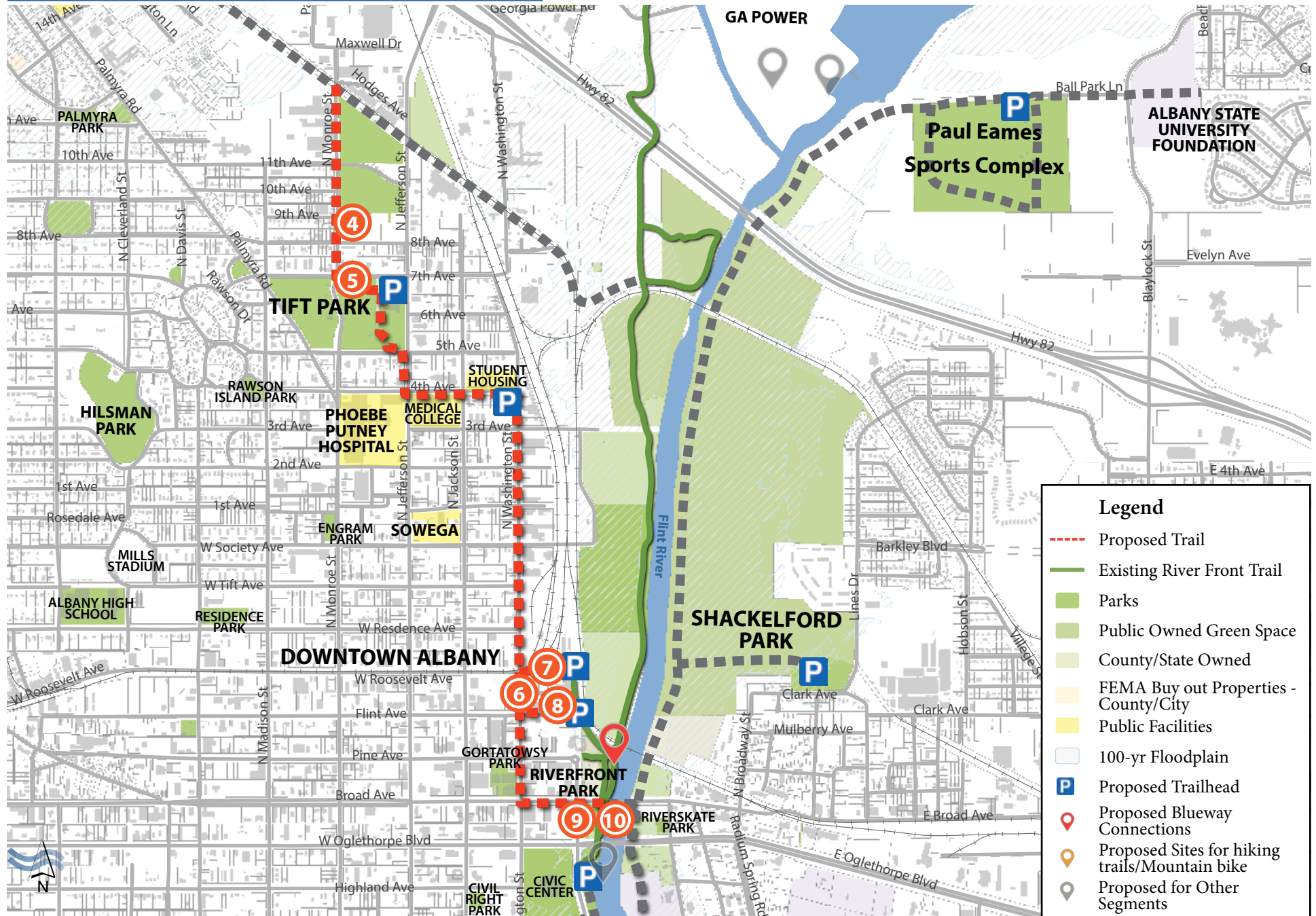
Segment #1B

12' Multi-Use Trail	4,250	LF	\$ 175.00	\$ 743,750.00
Pedestrian Bridge across Norfolk Southern Railroad	1,000	LF	\$ 1,500.00	\$ 1,500,000.00
TOTAL				\$ 2,243,750.00

Albany/Sasser Rail Trail to Riverfront Trail



Rail Trail to Downtown Riverfront Trail





Updated signals and pedestrian crossing at intersection of Slappey Blvd and the new Walmart



View of existing abandoned railroad corridor in Dougherty County



The abandoned rail corridor crossing at 18th Ave



A junk yard which has over taken the abandoned railroad corridor near the Flint River



① Proposed Walmart Neighborhood Market trailhead

Left: The abandoned rail corridor runs adjacent to the new Walmart parking lot in an open greenspace

Below: New Walmart Neighborhood Market location. The abandoned rail corridor runs along the south side of the parking lot (right side of picture) to the new intersection crossing at Slappey Blvd. The existing parking and adjacent greenspace provides opportunity for a trailhead location.



② Proposed trailhead at Phoebe North Hospital

Right: Existing property condition at Phoebe North Hospital, located at the north end of the property where 13th Avenue dead ends at the abandoned rail corridor.

Below: Proposed improvements to the parking area with trailhead amenities and signage noting a spur to the rail trail.





③ Proposed pedestrian bridge over railroad

Left: Existing condition of abandoned railroad corridor beneath North Jefferson Street, heading east where it intersects with active Norfolk Southern railroad tracks.

Below: Proposed pedestrian bridge to extend over the active railroad tracks to create a safe and inviting connection to the existing Riverfront Trail. Opportunity for a future trailhead is shown adjacent to the trail.



④ Proposed trail through National Guard property

Right: Existing condition at the National Guard property looking south towards Tift Park.

Below: Proposed trail adjacent to North Monroe Street utilizing city right-of-way. A 10' side path with a 5' grass buffer is desired.



⑤ Proposed trail entering Tift Park

Left: Existing condition at Tift Park looking north to Monroe Street

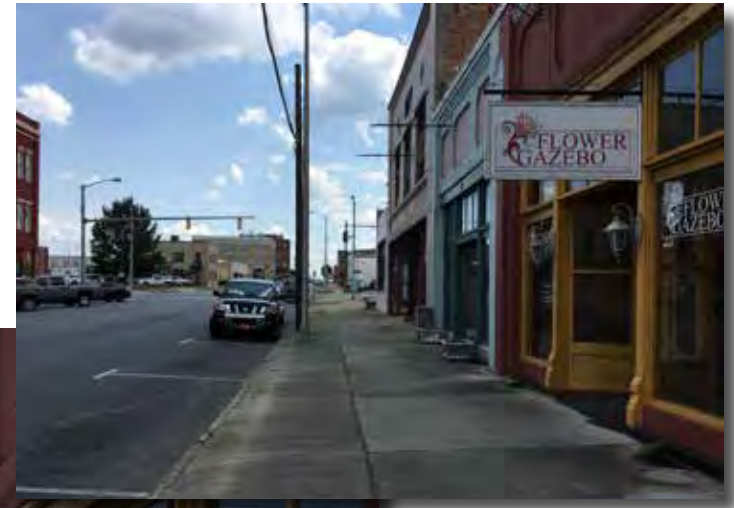
Below: Proposed multi-use trail crossing 7th Ave into Tift Park. The at-grade crossing at 7th Ave may require a rapid flashing beacon to assist pedestrians to cross the road safely.



⑥ Proposed trail along Washington Street

Right: Existing condition of Washington Street just north of downtown Albany.

Below: Proposed multi-use trail extending along the west side of Washington Street. This portion of the trail is achieved by narrowing the traffic lanes and using the extra room to accommodate the trail. Site amenities are added in this area to make a more inviting entrance into downtown and for the adjacent store fronts.



⑦ Proposed spur trail to historic train depot building

Left: Existing condition of West Roosevelt Ave. which terminates at the historic train depot and Throneateska Heritage Center.

Below: Proposed spur trail to the historic train depot building. Open greenspace allows for a bright and vibrant trailhead with benches, bike racks, trash receptacles and a pocket park. A proposed mural along the existing brick wall helps to create a sense of excitement to the space. The existing wide street allows for ample parking.



⑧ Proposed Flint Ave greenway trailhead

Right: Existing condition of Flint Avenue looking east towards the Riverfront Trail.

Below: Proposed trailhead with kiosk, benches, bike racks and existing parking. Existing access to the Riverfront Trail would be directly behind the proposed trailhead. There is opportunity for businesses to develop on the north side of the street.





⑨ Proposed trail along Broad Avenue

Left: Vacant buildings and shop facades on Broad Ave at Downtown Albany.

Below: Proposed cycle track along Broad Avenue with landscape buffer and parallel parking. Proposed streetscape improvements includes lighting, bike racks and benches. There is opportunity for the trail to spur business development on the north side of the street and increase economic activity downtown.



⑩ Proposed trail crossing to Broad Avenue Bridge

Right: Existing condition of Broad Ave to Flint River bridge

Below: Proposed Flint River greenway trail crossing to connect the Flint River bridge. The crossing design includes a separate cyclists crossing signal, directional signage, protective curb bulb-outs and brick bands to warn trail users of the approaching intersection.



① Proposed water access improvements at U.S. Hwy 19 Bridge

Left: Existing conditions at U.S. Highway 19 Bridge on the Kinchafoonnee Creek

Below: Proposed parking and water access improvements



3.4 Trail Segment #2: Chehaw Connection

The existing Riverfront Trail is a 3 mile multi-use path that runs from downtown Albany north to Cox Landing Park. To make this trail more successful and increase utilization, community members have expressed a desire to connect the existing trail to Chehaw Park. With Chehaw being a highly used amenity for the community, the design team sees this as a major priority for the trail system.

To connect the existing Riverfront Trail to Chehaw Park there is one obstacle to carefully consider, and that is the crossing of Philema Road. The design team sees two options to achieve this connection. The first is to head north from Cox Landing Park and pass under the Philema Road Bridge adjacent to Lake Worth. The trail will then traverse up to the road elevation and cross the bridge on the north side. The shoulder of the bridge will need to be widened to accommodate a 10' wide multi-use trail. The trail will then follow Philema Road within the right-of-way until it reaches the Chehaw Park property, where it will then have opportunity to pull away from the roadway and connect into the park.

The second option is to head north at Cox Landing and access the Philema Road bridge at-grade on the south side. The shoulder is currently wide enough to accommodate a 12' wide multi-use trail and will not need modification. The trail will head east across the Philema Rd bridge where it can then diverge away from the roadway and traverse the slope to circle down under the road bridge on the south side of the road. The trail can continue under the bridge and turn to the east once on the other side. The trail will then climb the slope to align within the Philema Rd right-of-way on the north side of the road. The trail will then follow the same alignment as in option one to make the connection into Chehaw Park.

Both of these options allow trail users to cross Philema Road without any interaction with vehicles on the roadway. This is a safer connection for trail users and the steering committee highly encouraged avoiding any at-grade crossings of Philema Road.

Trail Segment #2 Overview:

This trail segment is approximately 1.1 miles beginning at the northern end of the existing Riverfront Trail at Cox Landing Park. Going north the trail will go under the Philema Road bridge by building a retaining wall with railings next to the bridge abutment. The trail will traverse to the north side of the road and head east across the bridge. The sidewalk on the bridge will be modified to accommodate a 10' wide multi-use trail. The trail continues east adjacent to the road. A retaining wall may be needed on the north side of the trail in areas where the slope deems it necessary. The trail enters into Chehaw Park property at its western property line and continues to the entrance gates. Mountain bike facilities are desired in the Georgia Power property and along the existing Riverfront Trail to connect to downtown.

Opportunities and Benefits:

- Provides connectivity to Chehaw Park from downtown
- Extends the existing Riverfront Trail
- Creates a safe crossing of Philema Road

Potential Obstacles:

- Private property acquisition
- Modification of north side of Philema Road Bridge

Acquisition: This trail alignment passes through approximately 1,340 LF of private property.

** Acquisition is based on a 25' permanent easement. Most linear easements can be negotiated as a donation.*

Trail Recommendations:

Multi-use: 5,625 LF (1.1 miles)

- Utilizing the south side of Philema Road bridge with its existing wide sidewalk is the preferred side to cross the bridge, then loop down and cross under the bridge on east side of Lake Worth
- If property easement is not able to be obtained on the east side of Philema Road bridge, then crossing under the bridge on the west side of Lake Worth should be considered.

- Trail should traverse into Chehaw property on the west end to pull pedestrians away from the road and have a better experience.

Mountain Bike: (4 miles)

- Utilize Georgia Power property and areas along existing Riverfront Trail for additional mountain bike trails.
- Consult with local IMBA representative regional director on design and construction standards

Water Trail:

Cox Landing

- Improve water access by adding gravel parking and canoe/kayak launch
- Add benches, trash receptacles, and water trail signs

Chehaw Park Landing

- Improve water access by adding canoe/kayak launch facilities
- Add benches, trash receptacles, and signage for water trail

Georgia Power Landing - Lake Worth

- Improve water access by adding canoe/kayak launch facilities
- Add benches, trash receptacles, and signage for water trail

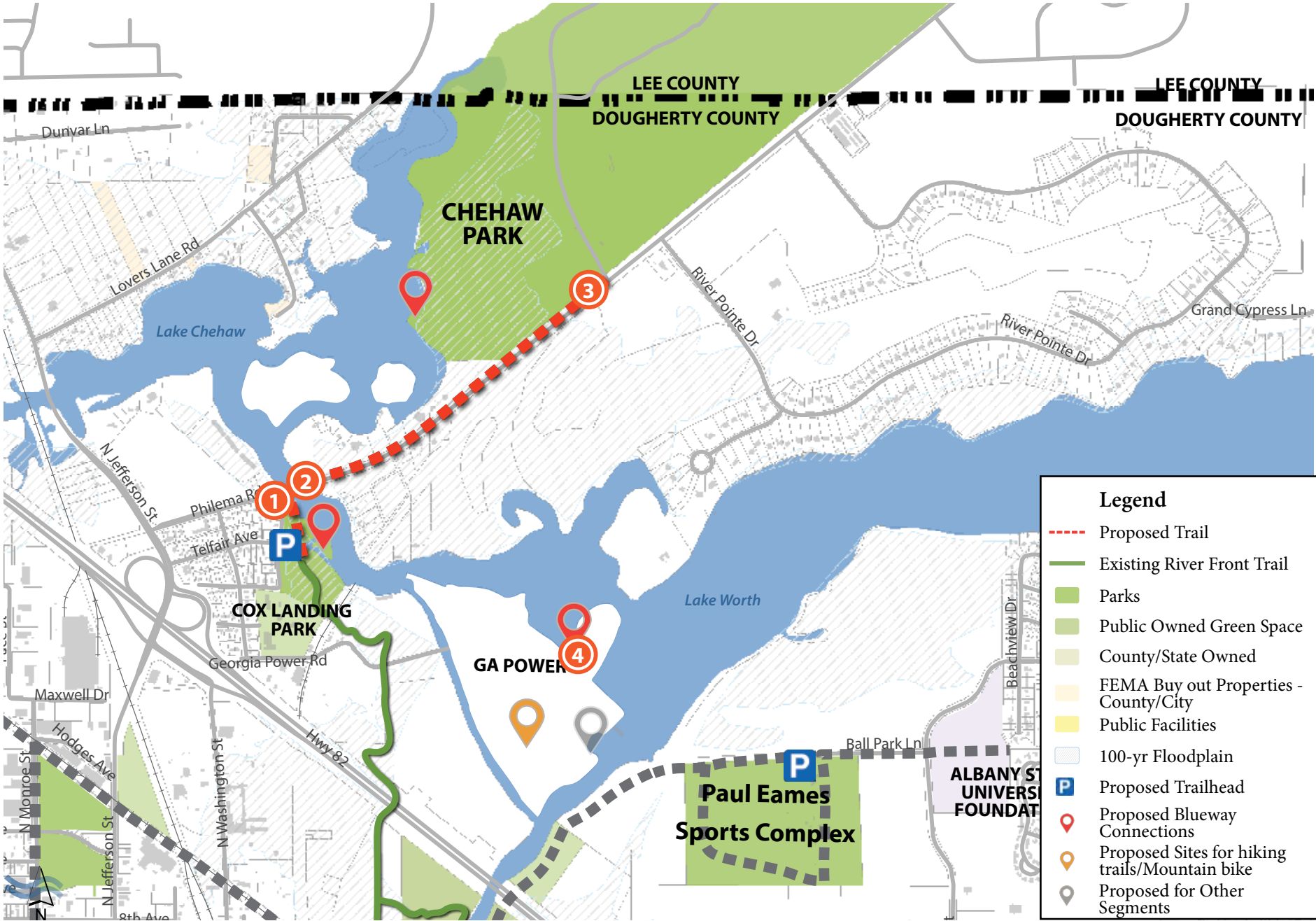
Trail Segment #2 - Riverfront Trail to Chehaw

Acquisition (allowance)	\$	30,762.17
Surveying	\$	15,495.87
Planning, Design, and Engineering	\$	92,455.30
Construction Cost (2016)	\$	1,320,790.00
Construction Contingency @15%	\$	198,118.50

Total Cost to Implement \$ 1,657,621.83

	Quantity	Units	Unit Price	Cost
12' Multi-Use Trail	5,010	LF	\$ 175.00	\$ 876,750.00
Trail under Philema Road Bridge	150	LF	\$ 800.00	\$ 120,000.00
Modify Philema Road Bridge	465	LF	\$ 200.00	\$ 93,000.00
Retaining wall structure VFW	180	LF	\$ 200.00	\$ 36,000.00
Water Trail Improvements - Chehaw	1	LS	\$ 50,000.00	\$ 50,000.00
Water Trail Improvements - Cox Landing	1	LF	\$ 25,000.00	\$ 25,000.00
Water Trail Improvements - GA Power (Lake Worth)	1	LF	\$ 25,000.00	\$ 25,000.00
Mountain Bike Trails - GA Power Property	15,840	LF	\$ 6.00	\$ 95,040.00
TOTAL				\$ 1,320,790.00

Chehaw Connection



① Proposed trail under the Philema Road Bridge

Left: Existing Philema Road bridge over Lake Worth

Below: Proposed alignment to pass under the Philema Road bridge by extending out from existing bridge abutment. A minimum head clearance of 7'6" is necessary to pass under. Break away hand railing provides a protective barrier and copes well with fluctuating water levels.



② Proposed modification of Philema Road Bridge

Right: Existing condition of Philema Road bridge

Below: Proposed modification of Philema Road bridge to accommodate a 10' wide multi-use trail and connection under the roadway to make a safe connection to the south side of the road.



③ Proposed trail along Philema Road

Left: Existing condition of the north side of Philema Road

Below: Proposed trail interacting with local business along Philema Road



④ Proposed improvements to Georgia Power Landing- Lake Worth

Right: Existing conditions GA Power Landing on the Lake Worth side

Below: Proposed water access improvements to existing dock and ramp





Existing boat ramp and docks at Cox Landing



Existing dock at Chehaw Park



Existing boat ramp, signage, and restroom facilities at Cox Landing



Existing water access at Chehaw Park

3.5 Trail Segment #3: Albany State University to Paul Eames Sports Complex

Albany State University is located on the east side of the Flint River directly across from downtown Albany. Currently there is a disconnect between the two, and there is a desire for students to be able to walk and bike across the river and access downtown. This would create a critical link between the University and city by providing a more walkable experience for students.

Along with the connection downtown, there is a desire to extend the trail system north along the east bank of the Flint River. There is a wide expanse of county and city owned property to work within. After reviewing topographic data, the design team has deemed this area feasible for trail development. Paul Eames Sports Complex is at the northern end of this segment and is an excellent community amenity to have connected within the trail system.

On the west side of the university property is a major levy that was built to help mediate flood waters from the Flint River from entering campus. This levy system has a level service road along the top side which creates an excellent opportunity upon which a multi-use trail can be built. For this segment, starting at the ASU athletic fields towards the south end of campus is advised to allow for students and athletes to utilize the trail to access these campus amenities. The trail will head north from the athletic fields towards Oglethorpe Blvd. Once it reaches the Oglethorpe Blvd bridge, the trail will travel down the levy on the west side and follow the existing access road under the bridge to the north. When the Oglethorpe Blvd bridge is redeveloped in the future, a pedestrian component should be implemented within the structure. The trail continues north passing under the new Broad Ave bridge where it will then climb the east bank and access the north side of Broad Ave. This bridge has existing bicycle and pedestrian facilities; however, to have a safer and more desirable experience for trail users, it is proposed to widen the existing sidewalk along the north side of the bridge to accommodate a 10' wide multi-use path.

This portion from ASU to downtown Albany has received much interest from the community and is suggested to be implemented as "phase 1" for this segment.

Within Albany State University's campus master plan, it is proposed to have an outdoor classroom space near the river. With this in mind, it is proposed to have a spur from the trail to an overlook/gathering area along the river. Another feature that has been discussed in public meetings is the sand dunes on the east side of campus. It is within the campus master plan to have a strong promenade from the levy to the east side of campus directly in front of the sand dune area. The plan proposes to have signage to direct trail users through central campus to visit this unique and protected landscape.

Looking north from the Broad Ave bridge, there is a wide expanse of city and county owned greenspace on the east side of the river that is relatively untouched, moderate topographic terrain, and an excellent location for a combination of multi-use, mountain biking, and primitive nature trails. The design team proposes the multi-use trail continue from the Broad Ave bridge to follow the east bank of the Flint River northward through this publicly owned property. The trail passes under one active trestle bridge and one inactive trestle operated by Norfolk Southern Railroad. The trail should take advantage of expansive river views when possible, and meander through the more wooded areas when necessary, following the natural contours of this property. The design team proposes a trailhead location at Shackelford Park where there is existing parking and restroom facilities.

Continuing north, the trail will pass under an inactive trestle bridge and the Highway 19 roadway bridge before reaching the GA Power Dam. Once at the dam, the trail meanders north through wooded property owned by GA Power, following existing dirt paths before entering into the Paul Eames Sports Complex property. This is a major destination for the trail system and an excellent trailhead location for the northern end of the trail. The sports complex has adequate parking and existing public restroom facilities. The design team proposes a loop trail around the ball park to create more interaction with the park. From here, a spur across Blaylock St through Albany State University owned property would connect the adjacent neighborhood, creating better connectivity and increased usage from this area.

Trail Segment #3 Overview:

This trail segment begins as a multi-use trail at Albany State University athletic fields heading north, making connections to downtown Albany. Once past the Broad Ave Bridge, the trail becomes a cleared dirt trail north to Paul Eames Sports Complex to be more cost effective. Utilizing all city and county open greenspace, no acquisition is needed for this segment. Spurs should be made to the river overlook on ASU campus as well as Sand Dunes on east edge of ASU campus. A spur should also be considered from Paul Eames Sports Complex to adjacent neighborhood across Blaylock Street.

Opportunities and Benefits:

- Provides connectivity for students from ASU campus to downtown
- Connects to Paul Eames Sports Complex and adjacent neighborhoods
- Connects the ASU campus to more of the community
- Draws more people to the river and other natural elements like the Sand Dunes

Potential Obstacles:

- Modification of Broad Ave bridge
- Dumping is currently an issue through some of the property the trail will traverse through

Acquisition: None

Trail Recommendations:

Multi-use: 7,060 LF (1.3 miles)

- Connecting Albany State University to downtown Albany is a high priority
- Utilize top of existing levy as much as possible
- Spur to sand dunes should utilize existing campus walkway with added signage to direct pedestrians and cyclists. Campus master plan shows a future link to sand dune area.
- Opportunity for hiking trails to spur off main trail along property between Broad Ave and Paul Eames Sports Complex

Water Trail:

Georgia Power Dam - Flint River

- Improve water access for canoe/kayak launch
- Add benches, trash receptacles, and signage for water trail

Cromartie Beach Landing

- Improve water access for canoe/kayak launch
- Add benches, trash receptacles, and signage for water trail

Turner Park Landing

- Improve water access for canoe/kayak launch
- Add benches, trash receptacles, and signage for water trail

Trail Segment #3A - Albany State Athletic Fields to Downtown

Acquisition (allowance)	\$	-
Surveying	\$	22,396.69
Planning, Design, and Engineering	\$	72,825.00
Construction Cost (2016)	\$	1,456,500.00
Construction Contingency @15%	\$	218,475.00
Total Cost to Implement	\$	1,770,196.69

Trail Segment #3B - Downtown Albany to Paul Eames Sports Complex

Acquisition (allowance)	\$	-
Surveying	\$	49,465.56
Planning, Design, and Engineering	\$	163,280.00
Construction Cost (2016)	\$	3,265,600.00
Construction Contingency @15%	\$	489,840.00
Total Cost to Implement	\$	3,968,185.56

*Segment #3A Construction

12' Multi-Use Trail	7,060	LF	\$	175.00	\$	1,235,500.00
Modify Broad Avenue Bridge	870	LF	\$	200.00	\$	174,000.00
Spur connections to ASU	200	LF	\$	175.00	\$	35,000.00
ASU Access at Athletic Fields	1	LS	\$	12,000.00	\$	12,000.00
TOTAL					\$	1,456,500.00

*Segment #3B Construction

Cleared dirt path from Broad Ave to Sports Complex	17,952	LF	\$	175.00	\$	3,141,600.00
Access to Paul Eames Sports Complex	1	LS	\$	12,000.00	\$	12,000.00
Access to Shackelford Park	1	LS	\$	12,000.00	\$	12,000.00
Water Trail Improvements - GA Power	1	LS	\$	50,000.00	\$	50,000.00
Water Trail Improvements - Cromartie Beach Landing	1	LS	\$	25,000.00	\$	25,000.00
Water Trail Improvements- Turner Park Landing	1	LS	\$	25,000.00	\$	25,000.00
TOTAL					\$	3,265,600.00

*To start with a cleared dirt path from Broad Ave to Sports Complex \$538,560.00 for 17,952 linear feet at \$30/LF



Top side of Albany State University levy looking north



Existing sand dunes on the east side of Albany State University campus



Albany State University athletic fields looking north



Proposed river overlook area on the west side of Albany State University campus

Albany State University to Paul Eames Sports Complex





Existing pathway along the east side of the Flint River near the Hwy 19 road bridge



Existing boardwalk to view the sand dunes on the east side of Albany State University



View north from proposed trailhead site at Shackelford Park



Existing Paul Eames Sports Complex



① Proposed trail pass under Oglethorpe Blvd Bridge

Left: Existing conditions on the east side of the Flint River going under Oglethorpe Blvd road bridge.

Below: Proposed greenway trail going under Oglethorpe Blvd road bridge.



② Proposed trail pass under the Broad Ave Bridge

Right: Existing condition under Broad Avenue bridge

Below: Proposed Flint River greenway trail going under the Broad Ave Bridge to connect to Albany State University. Benches, trash cans, and pedestrian lights are proposed in this area.



③ Proposed modification of Broad Avenue Bridge -Night time vision

Left: Existing condition on the Broad Ave bridge

Below: Night time look at the proposed modification of the Broad Ave bridge at night with pedestrian lighting.



③ Proposed modification of Broad Avenue Bridge - Day time vision

Right: Existing conditions on Broad Avenue bridge

Below: Proposed modification of the Broad Avenue bridge to support a 10' wide multi-use path.





Existing boat ramp and docks at Cromartie Beach Landing



Existing boat ramp and dock at Turner Park Landing



Two women going fishing at the GA Power Dam property



View from Turner Park Landing looking northeast down the Flint River



Existing picnic area next to the boat ramp at Turner Park Landing



Existing boat ramp just below the GA Power Dam



Existing portage path access from Lake Worth to the boat ramp just below the GA Power Dam



Existing water trail signage at the GA Power access

3.6 Trail Segment #4: Albany State University to Radium Springs

Along the east side of the river about 4 miles south of downtown Albany is one of the most unique attractions in Dougherty County and even the entire state. Named one of Georgia's seven natural wonders, Radium Springs has been attracting people since prehistoric times as a place for worship, recreation, and social gatherings. Over the years, Radium Springs has served many purposes such as a place of worship to the early Native Americans, a nationally known resort in the 1920's, and a casino later in its life. Over the years the property has overcome many disasters such as small pox epidemic wiping out the Native American tribes that inhabited the area, fires to the casino building, and several flooding events. With several natural disasters happening in a short period of time, the springs were no longer able to be operated privately and were sold to two public agencies. The Department of Natural Resources and Dougherty County purchased the land around the springs in the 1990's and early 2000's in order to preserve what was left of the property. The spring has since been made into a county park with gardens, interpretive signage, and overlooks to view the spring. With such a rich history and a beautiful public park, it is critical that Radium Springs be tied into the overall trail system.

The connection from Albany State University campus to Radium Springs will follow the eastern edge of the Flint River for a majority of this segment. As the trail heads south from the ASU athletic complex, it will meander through state owned forested property until reaching the Oakridge Drive bridge. The trail will pass under the bridge and head east within the right-of-way to the access drive for the Radium Crossing Shopping Center. The trail, adjacent to the west side of the road, will head south and follow the curve of the road back to the east. From here, the trail will turn back south at the entrance drive to property owned by Albany Springs Limited Partnership. The trail will follow this property line directly south until it crosses back into state DNR property. At this point, the trail will turn back to the west meandering towards the river, then turn back to the south following DNR and county greenspace parcels. The trail will continue until it reaches Radium Boat Landing and Park, where it will follow the drainage canal east towards Radium Springs Road. The trail will cross the canal with a small pedestrian bridge, then follow the west side of Radium Springs Rd within the right-of-way, heading south, towards Radium Springs. Once the trail reaches

the springs, it will veer to the west side of the springs into DNR property, and head south staying along the highest ridge between Radium Springs Creek and the Flint River. Some areas of this property experience frequent flooding and wet unstable soils. With this challenge in mind, a boardwalk system is suggested which will also give a more unique trail experience. The trail will eventually reach the confluence between the Flint River and Radium Springs Creek by crossing the historic Radium Springs Bridge. From here, the trail will enter the old Radium Golf Course property which is now owned by the county. Currently, there are plans for a loop trail system around this property with a proposed trailhead at the old club house parking and facility area. The trail will merge into this multi-use loop trail system and will become the southern terminus of the trail system on the east side of the river.

Radium Springs Gardens is a great attraction and the steering committee would like to see a spur from the main trail connecting into the gardens and parking area. The parking at the gardens will also be a great trailhead location, not only for the Flint River Trails system but also for the newly designated Dixie Highway, which runs along Radium Springs Road from downtown Albany to Thomasville, Georgia. This trailhead will serve the community well, especially bicyclists wanting to ride the Dixie Highway to the south.

Trail Segment #4 Overview:

This trail segment is approximately 6 miles long beginning at the Albany State University Sports Complex and ending at the Radium Springs Golf Course property. This segment traverses a variety of city, county and state easements, as well as easements from private property owners, which will need to be acquired. There are approximately 1,850 linear feet of easements needed through private property. A spur connection needs to be made to Radium Gardens and the adjacent parking area.

Opportunities and Benefits:

- Connects Radium Springs, a major attraction, to ASU and downtown, Albany
- Connects to the proposed Radium Golf Course loop trail

Potential Obstacles:

- Working with private property owners to gain easements.
- Indian artifacts were uncovered just north of Oakridge Drive Bridge during road improvements, caution must be taken disturbing any soil in this area.
- Land through Radium Springs has some steep grades and frequent standing water. Where necessary, boardwalk should be considered for the trail.
- Radium Golf Course club house property needs to be acquired for a trailhead location.

Acquisition: This trail alignment passes through approximately 1,815 linear feet of private property.

** Acquisition is based on a 25' permanent easement. Most linear easements can be negotiated as a donation.*

Trail Recommendations:

Multi-use: 31,680 lf (6 miles)

- Trail should take advantage of river views when possible, meandering

through wooded areas.

- Spur connection to Radium Gardens and adjacent parking area for an alternate trailhead location
- Work with land owners directly south of Oakridge Drive to gain easement through their property along the river. If not possible, follow alignment as shown on map

Water Trail:

Radium Boat Landing

- Improve water access for canoe/kayak launch
- Add benches, trash receptacles, and signage for water trail

Radium Springs Creek Landing

- Propose canoe/kayak dock at the confluence of Radium Springs Creek and the Flint River.
- Create access from boat dock to multi-use trail
- Add benches, trash receptacles, and signage for water trail

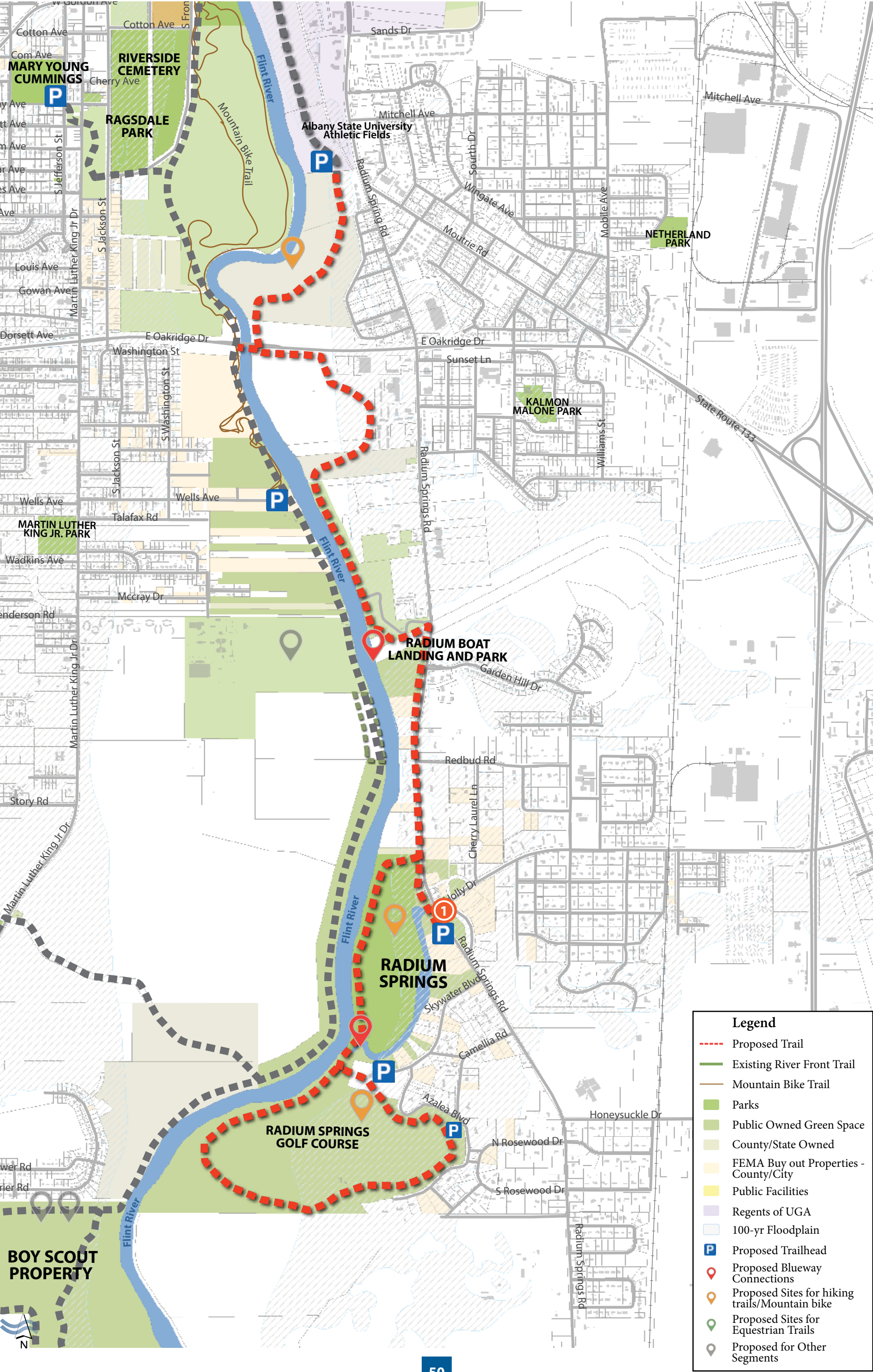
Trail Segment #4 - Albany State Athletic Fields to Radium Springs

Acquisition (allowance)	\$	6,770.83
Surveying	\$	87,933.88
Planning, Design, and Engineering	\$	285,937.30
Construction Cost (2016)	\$	5,718,746.00
Construction Contingency @15%	\$	857,811.90
Total Cost to Implement	\$	6,957,199.92

	Quantity	Units	Unit Price	Cost
12' Multi-Use Trail	31,680	LF	\$ 175.00	\$ 5,544,000.00
40' Bridge	40	LF	\$ 1,643.65	\$ 65,746.00
Spur connections to Radium Gardens	200	LF	\$ 175.00	\$ 35,000.00
Access at Radium Springs Gardens	1	LS	\$ 12,000.00	\$ 12,000.00
Access at Radium Golf Course	1	LS	\$ 12,000.00	\$ 12,000.00
Water Trail Improvements - Radium Landing	1	LS	\$ 25,000.00	\$ 25,000.00
Water Trail Improvements - Radium Creek	1	LS	\$ 25,000.00	\$ 25,000.00
TOTAL				\$ 5,644,746.00

*1.9 miles of multi-use trail cost is Radium Golf Course loop trail

Albany State University to Radium Springs





Existing dirt path at Radium Landing Park where the proposed multi-use trail will follow



Beautiful overlook of the Flint River at Radium Golf Course



Discussing the trail alignment through Radium Springs to the proposed Radium Golf Course trail



Existing Radium Springs Creek Bridge where the proposed multi-use trail will cross



Existing Radium Golf Course Park where a series of trails are proposed

① Proposed Radium Springs Spur

Right: Existing conditions at Radium Gardens entrance

Below: Proposed spur through Radium Gardens to access parking, where a trailhead opportunity is proposed.

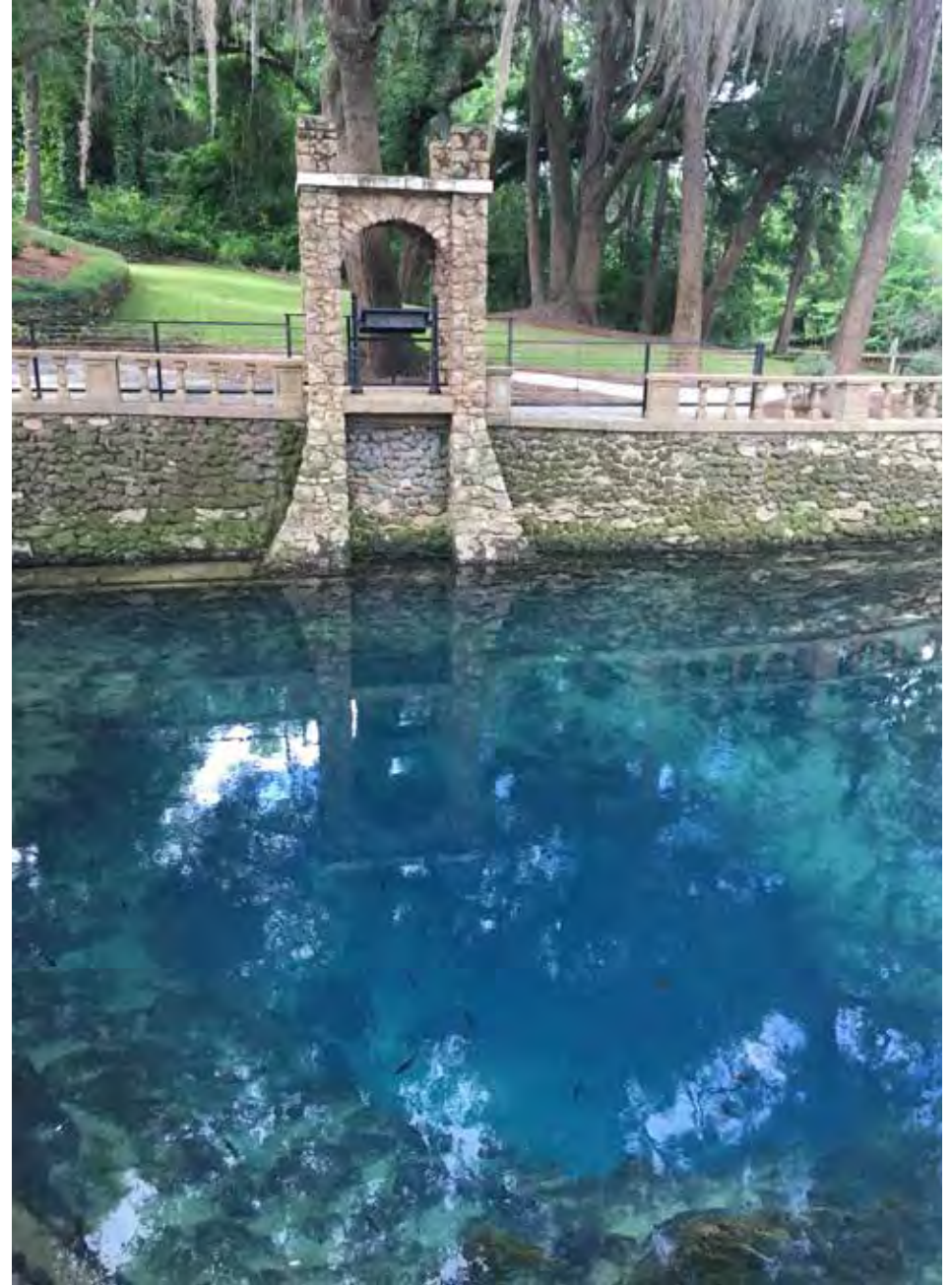




Flint River water access at Radium Landing



Existing boat ramp at Radium Landing



Radium Springs Park

3.7 Trail Segment #5: Downtown to Boy Scout Property

During meetings with the public and with the steering committee, much discussion concerned the possibilities on the west side of the river, from downtown Albany to the Boy Scout property. Since the 1994 and 1998 floods, much of the adjacent property to the river has been purchased by the city or county for greenspace, leaving a long linear corridor along the river. With interest from runners, road bikers, mountain bikers, and equestrian riders, this trail segment offers something for everyone. Along with local interest, the International Mountain Biking Association (IMBA) has shown great interest in this area with its close proximity to downtown hotels and amenities. They believe this could become a nationally recognized mountain biking trail system bringing an extraordinary wave of tourism to downtown Albany.

The trail segment starts at the south end of the Riverfront Trail at Veterans Park. The trail will run adjacent to South Front Street to the bend in the road back west, then turn back south at the first left, and continue along South Front Street once more along the east side of the road. At the corner of Mercer and South Front Street, it is desired by the mountain biking community to have a practice course and pump track at this property. It is approximately 17 acres of old golf course property now owned by the city. This would be an excellent place for beginners to train as well as more experienced riders to work on their skill levels. There is an existing building on the property that is proposed to be the office and headquarters for the mountain biking facilities. The multi-use trail will be a way of linking mountain biking riders to this facility and the trails further south along the river.

Once the trail passes the proposed mountain biking facilities, it will continue along South Front Street and will split from the road once it turns back to the west, and the trail will continue south into Riverside Park. There are 9 miles of existing single track mountain bike trails through this area. The design team proposes to stay on the western edge of these trails and provide bikers connectivity between the trails. The trail will continue through Riverside Park to Oakridge Road bridge and pass under the bridge. It is proposed to have a spur loop up to the bridge and offer connectivity across the river to the Radium Springs trail on the east side. This spur should also be extended to South Jackson Street.

From the Oakridge Drive bridge, the trail continues south and will follow county and city owned greenspace adjacent to the river. There are a few small parcels that will require acquisition, a few of which the Dougherty County Greenspace Committee is currently working. The trail will continue adjacent to the river until it reaches Georgia DNR property about 2.5 miles south from Oakridge Rd. At this point, the trail will have a spur through the DNR property linking into a city owned easement which parallels a drainage canal to Martin Luther King Jr. Dr. An at-grade crossing with rapid flashing beacons is proposed to make for a safe crossing and link the trail directly into Robert Cross Park. Robert Cross Park is an excellent destination and trailhead location on the south side of town. It is a community gathering point with an elementary school nearby and an internal walking path. It is at this split in the trail that the design team proposes the multi-use spur to Robert Cross Park be paved, and the main trail alignment heading south transition to a crushed aggregate trail.

Once the main trail alignment passes the spur to Robert Cross Park, it will continue into the Boy Scout property, which is 190 acres of pristine forested land. The property is no longer used by the Boy Scouts, and the county has taken ownership. Recently, the county cleared several fire break paths through the forested areas creating a system of natural trails in itself. From discussions with steering committee members, this area would make a great location for equestrian trails. The location would also be an ideal camping spot for trail users who might be traveling from out of town and would like to stay the night. Discussions with equestrian trail users has revealed that equestrian trails can coincide with mountain biking trails and hiking trails, but there must be adequate signage with helpful educational tips. To accommodate this cohesion, it is suggested to have one loop of a crushed aggregate trail loop around the property, while the internal system remains as a natural dirt pathway.



Existing service road looking north towards Veterans Park and amphitheater. Location of proposed access for the water trail.



Veterans Park downtown and ending point of the existing Riverfront Trail

Trail Segment #5 Overview:

This segment covers over 6 miles of multi-use trails, several potential areas to expand the mountain bike trail system, and an opportunity for equestrian trails at the southern part of this segment. This trail segment begins at the south end of the existing Riverfront Trail where the proposed multi-use trail will connect trail users to a proposed mountain bike course and pump track, the current system of mountain biking trails, and the Boy Scout property at its southern terminus. This segment primarily follows the west side of the Flint River with a large emphasis on expanding the existing mountain bike trails. Multi-use spurs should be considered to Mary Young Cummings Park, South Jackson Street, and Robert Cross Park.

Opportunities and Benefits:

- Extends existing mountain bike trail system
- Connects to two city parks, Robert Cross and Mary Young Cummings
- Develops more interest and brings more people to the mountain biking trails due in part to the bike park

Potential Obstacles:

- Working with private property owners to gain easements.
- Hurricane Town, a historic American Indian settlement, is located on DNR property which the spur to Robert Cross will need to pass through. Will need to work closely with DNR and caution must be taken to not disturb this area.
- Modification of Oakridge Drive Bridge for multi-use trail

Acquisition: This trail alignment passes through approximately 1,247 linear feet of private property.

** Acquisition is based on a 50' permanent easement. Most linear easements can be negotiated as a donation.*

Trail Recommendations:

Multi-use: 33,390 LF (6.3 miles)

- Trail should stay on west side of mountain bike trails providing connectivity to them

- Trail between downtown and Oakridge Drive should be designed to follow adjacent to the proposed Riverside Drive

Mountain Bike: (15 miles)

- Coordinate with IMBA on design and construction for expansion of mountain bike trails and bike park/pump track

Equestrian: (6 miles)

- Trailhead parking needs to be adequate for at least 10 trucks with trailers
- Parking needs to be separated from other trail users
- Camping sites should be considered near the trailhead area
- Install tie up posts at trailhead locations
- Reference National Park Service website for design standards
http://www.fs.fed.us/t-d/php/library_card.php?p_num=0723%202816

Water Trail:

Veterans Park Landing

- Add new water access at look out point for canoe/kayak launch
- Add benches, trash receptacles, and signage for water trail
- Consider drive access to launch point on existing service path

Trail Segment #5 - Downtown to Boy Scout Property

Acquisition (allowance)	\$	5,296.03
Surveying	\$	132,713.50
Planning, Design, and Engineering	\$	397,351.10
Construction Cost (2016)	\$	7,947,022.00
Construction Contingency @15%	\$	1,192,053.30

Total Cost to Implement \$ 9,674,435.93

	Quantity	Units	Unit Price	Cost
12' Multi-Use Trail	33,390	LF	\$ 175.00	\$ 5,843,250.00
Soft surface trail at Boy Scout Property	13,200	LF	\$ 30.00	\$ 396,000.00
Modify Oakridge Bridge for Trail Crossing	1,500	LF	\$ 200.00	\$ 300,000.00
Bike Park	1	LS	\$ 500,000.00	\$ 500,000.00
Trail Access at Bike Park	1	LS	\$ 12,000.00	\$ 12,000.00
Trail Access at Bike Park	1	LS	\$ 12,000.00	\$ 12,000.00
Trail Access at Robert Cross Park	1	LS	\$ 12,000.00	\$ 12,000.00
Trailhead at Boy Scout Property	1	LS	\$ 75,000.00	\$ 75,000.00
40' Bridge (2)	80	LF	\$ 1,643.65	\$ 131,492.00
Mountain Bike Trail	79,200	LF	\$ 6.00	\$ 475,200.00
Equestrian Trail	31,680	LF	\$ 6.00	\$ 190,080.00
TOTAL				\$ 7,947,022.00

Legend

- Proposed Trail
- Existing River Front Trail
- Mountain Bike Trail
- Parks
- Public Owned Green Space
- County/State Owned
- FEMA Buy out Properties - County/City
- Public Facilities
- Regents of UGA
- 100-yr Floodplain
- Proposed Trailhead
- Proposed Blueway Connections
- Proposed Sites for hiking trails/Mountain bike
- Proposed Sites for Equestrian Trails
- Proposed for Other

The map shows the Flint River flowing through Albany, Georgia. A red dashed line represents the proposed trail route, which starts near the University of Georgia and extends south towards the Radium Springs Golf Course. Key locations marked on the map include Albany State University, Radium Springs, and various parks and schools. A legend in the bottom left corner provides a key for the symbols used on the map.



Open greenspace for proposed pump track and mountain bike practice course



Beautiful oak trees at Boy Scout property along existing fire break road



Vacant building proposed to house operations for the pump track and mountain bike practice course



Existing hiking and mountain biking trails just south of Downtown Albany

① Proposed trail connection to Mary Young Cumming Park

Left: Existing condition crossing South Jefferson St. to Mary Young Cumming Park

Below: Proposed trail to Mary Young Cummings Park



② Proposed trail connection to Robert Cross Park

Right: Existing condition on Martin Luther King Jr Dr looking towards the entrance of Robert Cross Park

Below: Proposed at-grade crossing to connect trail to Robert Cross Park





View looking north with Riverfront Park and dock



Existing overlook at Veterans Park



Existing downtown dock just south of the Broad Ave bridge



Existing dirt service road could provide access to proposed launch site

Implementation Strategy

Overview

It is the recommendation of the KAIZEN team to immediately incorporate each of the following steps in order to keep the momentum for the Flint River Trails Master Plan moving from a vision to reality. These recommendations are informed by years of experience working with cities and counties throughout the Southeast and their success in implementing trails the KAIZEN team has master planned. The Implementation Strategy is comprised of the following:

- Funding
- Model Project
- Creation of Friends Group
- Steering Committee Transition
- Implementation Committee
- Priorities and Goals
- Cost Summary
- Implementation Timeline
- Next Steps

Each implementation item is critical in the timely success of creating the Flint River Trails system. If followed, the trail system of over 20 miles is projected for completion in ten years (2026).

Funding

The main challenge with the Flint River Trails system's implementation is identifying and allocating funding to ensure a timely implementation. The current support of the public is strong, so it is highly recommended for local funds to be identified during the first five years of implementation.

Local Funding:

A variety of opportunities for funding should be considered by Albany/Dougherty County. Local funding considerations for the Flint River Trails system include:

- Allocations within city/county budget
- Bond referendums
- Special-purpose local-option sales tax (SPLOST)
- Development impact fees
- In-kind services

Federal / State Funding:

Pedestrian and bicycle funding opportunities through the U.S. Department of Transportation, Transit, Highway and Safety Funds can be reviewed through this web link:

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm

The federal-aid grants and funding programs accessible for consideration are:

- Transportation Investment Generating Economic Recovery Discretionary Grant Program (TIGER)
- Federal Transit Administration Capital Funds (FTA)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- Land and Water Conservation Fund (LWCF)
- National Highway Performance Program (NHPP)
- Outdoor Recreation Legacy Partnership Program (ORLPP)
- Surface Transportation Block Grant Program (STBG)
- Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program) (TA)
- Recreational Trails Program (RTP)

Model Project

Missing any of the recommended steps within the Flint River Trails system's implementation strategy can result in loss of public interest and support within Albany and Dougherty County. In the initial meetings with the steering committee, the KAIZEN team recommended identifying one segment of the

Flint River Trails system for early implementation as the ‘model project.’ This approach immediately shows the public that their desires and interest in the Flint River Trails system has been recognized by the city/county. Once the ‘model project’ is constructed, the public will see the results of their local dollars directly benefitting the quality of life in the area and will result in additional support.

The steering committee has recommended the Rail Trail to Riverfront Trail segment (page 17) of the proposed plan as the ‘model project.’ The Rail Trail to Riverfront Trail segment is a critical missing trail connection between the existing Riverfront Trail and the Rail Trail. It will provide connection through downtown and a continuous 21 mile trail system in the Albany/Dougherty County region. Construction of this segment using the Flint River Trails system branding and specifications presented in this plan will be extraordinarily beneficial to promote development of the entire system.

Creation of Friends Group

Creating a community support organization to advocate for the Flint River Trails system is recommended to ensure continuous public support of the trail and to establish a private partner for the city/county. The South Georgia Rails to Trails, Inc. has been the region’s not-for-profit ‘Friends Group’ advocate focused on the rail trail between Sasser and Albany and promoting the need for this Flint River Trails system master plan. Potential restructuring of the South Georgia Rails to Trails, Inc. organization into a Flint River Trails, Inc. organization should be considered.

The mission of the ‘Friends Group’ should be to coordinate:

- Fund Raising
- Public Relations
- Promotion
- Community Education and Involvement
- Implementation Support

The friends group should file for incorporation, appoint a board of directors, and apply for 501C3 non-profit status. A web site and Facebook page are

recommended as avenues to engage the public and keep them informed.

Steering Committee Transition

The steering committee, which guided this planning process, needs to evolve into a committee charged with implementation. The job of acquainting the KAIZEN team with local needs and wants, reviewing the selected routes, and choosing the final logo and design standards has been completed upon adoption of the Flint River Trails Master Plan. A new committee tasked with encouraging and overseeing implementation must be formed.

Implementation Committee

The Implementation Committee needs to be a politically savvy group who can discover public and private funding to be allocated for the project. Monthly meetings are suggested to ensure continuous progress with funding allocations, easement acquisition, design/engineering, permitting, and construction progress. Representatives of the committee need to have adequate knowledge of the construction process to garner the respect and confidence from the city/county and the citizens at large. The committee would benefit from individuals filling the following roles:

- Key Steering Committee Members to ensure continuity
- City Manager/staffers from appropriate departments
- Pro bono real estate or right-of-way specialist
- Pro bono attorney
- Fundraising specialist/Foundation Representative
- Part-time paid employee (Friends Group Executive Director)
- Design/construction team member
- Police/Fire representatives

The Implementation Committee should assume oversight of the project as soon as the Master Plan is adopted by the city/county.

Priorities and Goals

To help prioritize trail segments for implementation, the following considerations should be discussed within the Implementation Committee:

- Extending existing trail segments to provide greater trail use and connectivity.
- Responding to public sentiment to determine the most desired trail connection within the district.
- Locating desired destinations at each end of the trail segments.
- Determining the level of complexity and property acquisition.
- Requiring private developments located along a proposed trail segment to include construction of the trail segment within the developer's project.

The goal for implementation is for the Implementation Committee to have at least one trail segment within acquisition, design, permitting, and construction at all times until completion. For planning purposes, the following time should be allocated for each implementation step:

- Acquisition - 3 to 6 months depending on the number of parcels, surveying time for creating easement plats and legal descriptions, and obtaining property value assessments.
- Surveying/Design/Engineering - 2 to 3 months for surveying, 3 to 6 months for complete design and engineering.
- Permitting - 3 to 6 months for county and state permits.
- Construction - 6 months for Dougherty County procurement process and 4 to 6 months for complete construction.

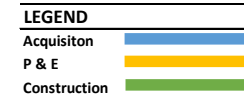
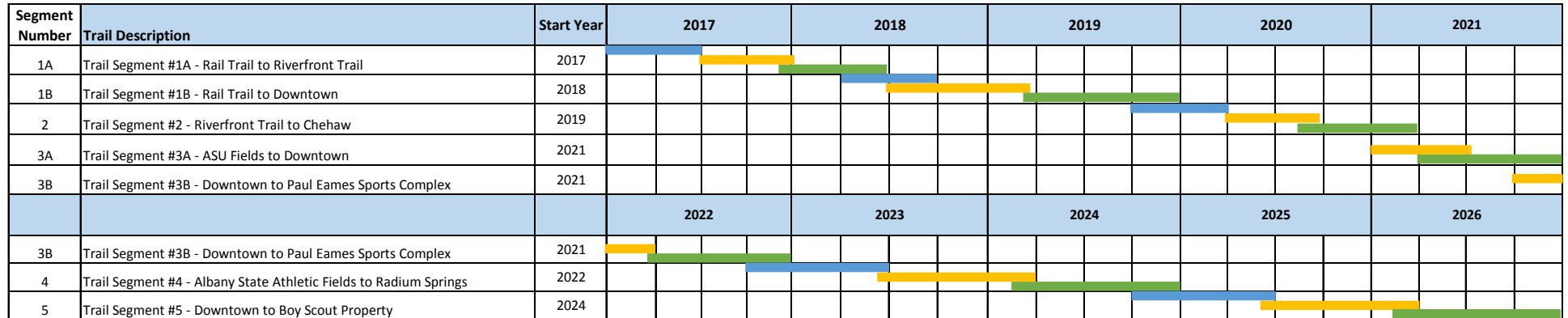
(Note: All estimates above assume local and private funding. If federal or state funding is allocated for a trail segment, the allocated times above should be multiplied by 3.)

Next Steps

- Adoption of the Flint River Trails Master Plan by Albany/Dougherty County Council
- Formation of the Implementation Committee
- Identify funding for the Model Project and acquisition of key parcels
- Review prioritization plan and advance implementation
- Establish Friends Group to advocate for the trail system
- Apply for federal and state funding for segments to be constructed in 2020 and beyond

Implementation Timeline

Flint River Trails - Implementation Timeline



Cost Summary

Trail Segment Description	Distance (linear feet)	Acquisition (allowance)	Surveying	P&E	Construction Costs (2016)	Const. Contingency (15%)	Estimated Cost to Implement
Trail Segment #2 - Riverfront Trail to Chehaw	5,625	\$ 30,762.17	\$ 15,495.87	\$ 92,455.30	\$ 1,320,790.00	\$ 198,118.50	\$ 1,657,621.83
Trail Segment #1B - Rail Trail to Downtown	14,107	\$ 3,822.31	\$ 19,431.13	\$ 138,436.25	\$ 2,768,725.00	\$ 415,308.75	\$ 3,345,723.44
Trail Segment #1A - Rail Trail to Riverfront Trail	5,250	\$ 17,432.85	\$ 7,231.40	\$ 134,625.00	\$ 2,243,750.00	\$ 336,562.50	\$ 2,739,601.76
Trail Segment #3A - Albany State Athletic Fields to Downtown	8,130	\$ -	\$ 22,396.69	\$ 72,825.00	\$ 1,456,500.00	\$ 218,475.00	\$ 1,770,196.69
Trail Segment #4 - Albany State Athletic Fields to Radium Springs	31,920	\$ 6,770.83	\$ 87,933.88	\$ 285,937.30	\$ 5,718,746.00	\$ 857,811.90	\$ 6,957,199.92
Trail Segment #5 - Downtown to Boy Scout Property	48,175	\$ 5,296.03	\$ 132,713.50	\$ 397,351.10	\$ 7,947,022.00	\$ 1,192,053.30	\$ 9,674,435.93
	113,207	\$ 64,084.19	\$ 285,202.48	\$ 1,121,629.95	\$ 21,455,533.00	\$ 3,218,329.95	\$ 26,144,779.57

4

Flint River Trails Design Standards



4 Design Standards

In order to excite and alert trail users to the new trail system, it needs to have a crisp, clean brand and an inviting amenity package. To create this sense of excitement and pride, a logo was developed unifying all the trails within the county. The accompanying amenity package was designed with local influences and cohesion with existing standards in mind.

Greenway trails should be designed and constructed in accordance with certain guidelines developed by various governmental agencies. All standards proposed for the *Flint River Trails* are intended to meet or exceed the guidelines listed below:

- AASHTO Guide to Development of Bicycle Facilities, 1999
- MUTCD (Manual on Uniform Traffic Control Devices), 2009
- ADA (Americans with Disabilities Act) requirements
- NACTO Urban Bikeway Design Guide, 2011

4.1 Flint River Trail System Logo

To reinforce the *Flint River Trails* identity, a logo was the first branding component of the greenway trail system developed. The logo development began by considering various graphic icons and words reflective of the Flint River. As the design evolved, it became evident that the steering committee desired a style that was complimentary of the city's logo while taking on its own individual flair.

Logo Development:



Overall Logo:



This version of the *Flint River Trails* logo was chosen as the preferred option for the trail system. The bright blue and green waves reflect the experiences along the trail and represent both the water trail as well as the greenway trails. These colors also compliment the City of Albany's logo, helping to unify the trail system with the rest of the community. It allows flexibility for layout on banners and signs while providing a strong graphic icon that could stand alone for other marketing materials.

Logo With Optional Branding Icon:



**Additional icons can be added at any time for additional groups, destinations, activities, or sponsors.*

4.2 Trail Signage Standards

After finalizing the trail logo, the design team created the trail signage. The sign types for the *Flint River Trails* are information kiosks, secondary identification signs, regulatory signs, mile marker signs, and bollards. The sign style established by the Steering Committee uses weathered steel in the sign structure with Flint River stone bases to allow for the sign to be in character with both the urban and rural areas of Dougherty County. The following rendering of the trail signage conveys the overall design intent which developed further into construction details.

- Kiosk Signs – these are information signs to be placed at trailheads along the *Flint River Trails* system. The sign panels will provide information on trail rules, trail etiquette, recognition/acknowledgment, and/or a trail map showing the entire trail system.

- Secondary Identification Signs – these are signs for identifying access points to the trail system from spur trails to existing neighborhoods, commercial areas, or shared use parking areas. The sign panels will contain the *Flint River Trails* logo and provide directional information.
- Regulatory Signs – these are the most frequent signs along the greenway trail system. The sign panels will vary depending on information needed for the trail user to safely navigate the trail system.
- Mile Marker Signs – these are located at each one-mile distance along the trail and will have the *Flint River Trails* logo. The sign panel will show the distance in miles and kilometers and also include the elevation of the trail at that location.



4.3 Trail Amenities

As a complement to the trail signage, the trail amenities chosen for the *Flint River Trails* are a compliment to the existing Riverfront Trail amenities. The style and materials entail a traditional powder coated metal finish. As the trail transitions away from Downtown Albany, incorporation of wood with the metal is suggested. This will allow for a more seamless connection between the existing and proposed trails and help tie the *Flint River Trails* system together as one.



Production Collection by Victor Stanley

model #PRS-127
Description: 6-foot bench, surface mounted, vertical steel scrolls, powder coated black



Production Collection by Victor Stanley

model #PRS-10
Description: 6-foot bench, walnut recycled plastic slat seat, surface mounted, powder coated black steel components



Production Collection by Victor Stanley

model #-PRS-36
Description: 36-gallon capacity trash receptacle, Vertical steel slats with lattice-work and circular detailing, powder coated black, black plastic liner, and surface mounted.



Greensites Series by Victor Stanley

model #RTH-36
Description: 36-gallon capacity trash receptacle, walnut recycled plastic side slats, standard tapered form lid powder coated black, black plastic liner, and surface mounted.



Fixit Service Station by Dero

Powder coated black; includes all tools necessary to perform basic bike repairs and maintenance with air pump kit 3.



Deluxe Single Pull Dog Station by Jazzy

Description: single pull station holds up to 400 bags, Commercial-grade aluminum, durable powder coated/UV protected finish in black



Pet Drinking Fountain by BYO Recreation

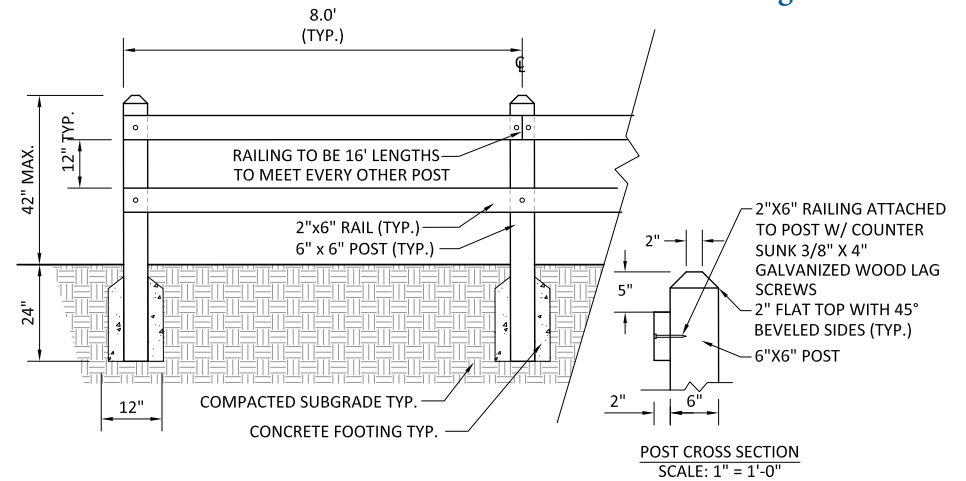
Description: Push button chrome-plated brass valve, Push button recessed in 3/8" steel plate, Adjustable flow regulation, Welded bottom plate



Cycle Sentry Series by Victor Stanley

model #BRCS-105

Description: standard five loop bike rack, in-ground mount, and steel powder coated black.

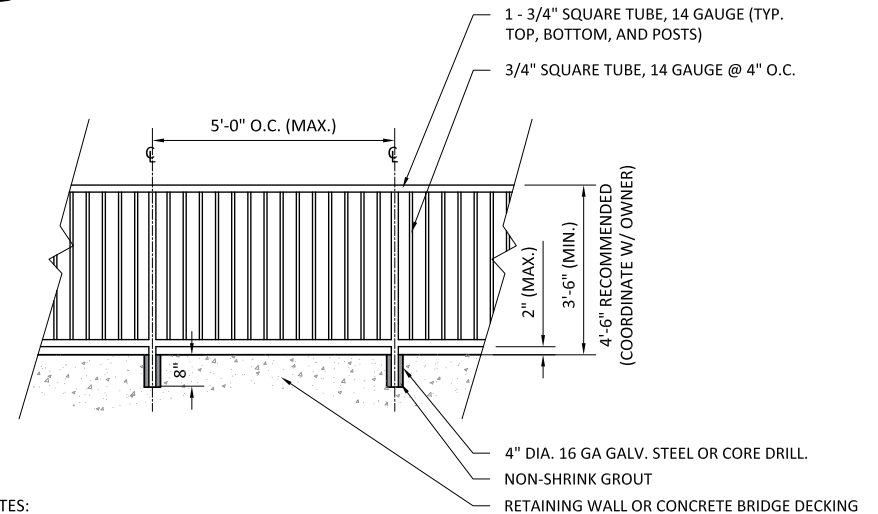


NOTES:

1. FENCE TO BE CONSTRUCTED WITH PRESSURE TREATED WOOD.
2. RAILING TO MEET FLUSH WITH OUTSIDE EDGE OF LAST POST.
3. REFER TO CONSTRUCTION PLANS FOR FENCE LOCATIONS.

2 PANEL WOOD FENCE

SCALE: 1/2" = 1'-0"



NOTES:

1. ALL STEEL TO BE POWDER COATED BLACK.
2. ALL POSTS SHALL BE PLUMB AND RAILS PARALLEL TO THE GROUND.

HANDRAIL DETAIL

SCALE: 1/2" = 1'-0"

4.4 Bike Parking

Public input indicates a desire for long term bike parking downtown near the trail system. Survey feedback on page 90 of this document shows over 63% of respondents would like a long term bike parking option within a building that is secure. Almost 58% of respondents stated bike parking would increase their usage of the existing Riverfront Trail if bike parking were provided downtown.



*Example of an indoor bike parking facility. Only individuals who have bikes in the facility have the door code to enter the building and surveillance cameras add an extra sense of security. The bike racks shown are the **Dero Decker** double stacked bike parking on the right, and the **Hoop Rack Heavy Duty** bike racks on the left.*



Hoop Rack Heavy Duty by Dero

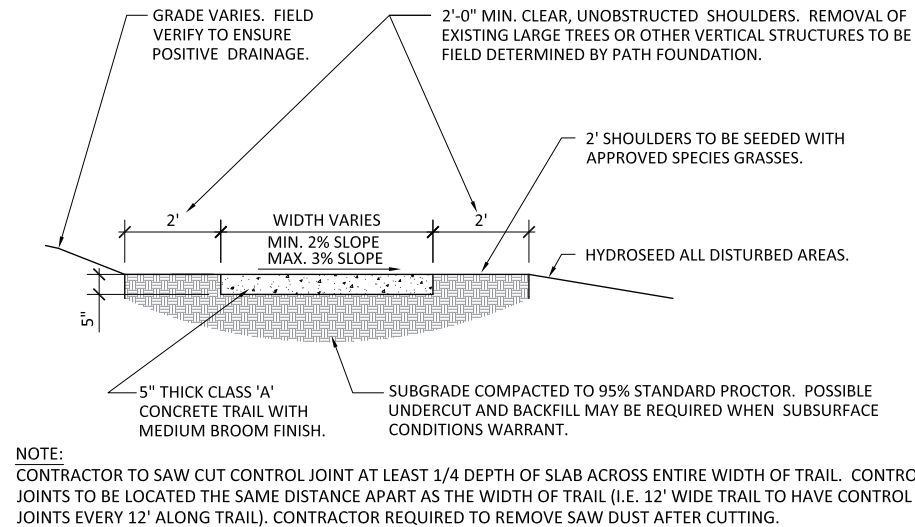
Description: Hoop Rack Heavy Duty, hot-dipped galvanized finish, surface mounted, 36" between racks



Dero Decker Bike Rack by Dero

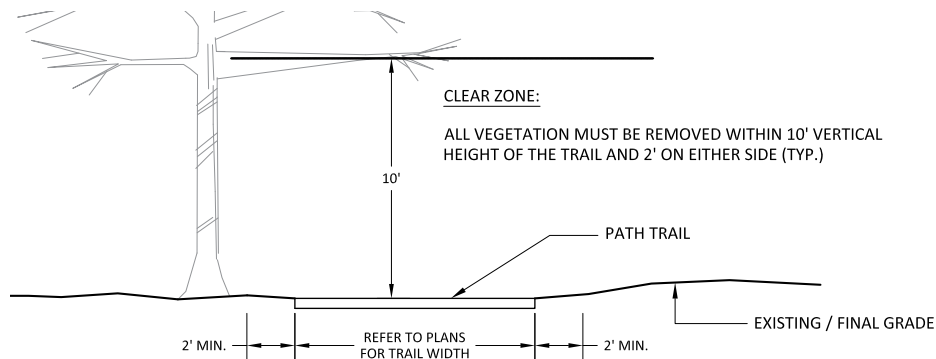
Description: Dero Decker Rack, hot-dipped galvanized finish, single sided, four per unit

4.5 Construction Details and Standards



TRAIL TYPICAL SECTION

SCALE: 1/2" = 1'-0"

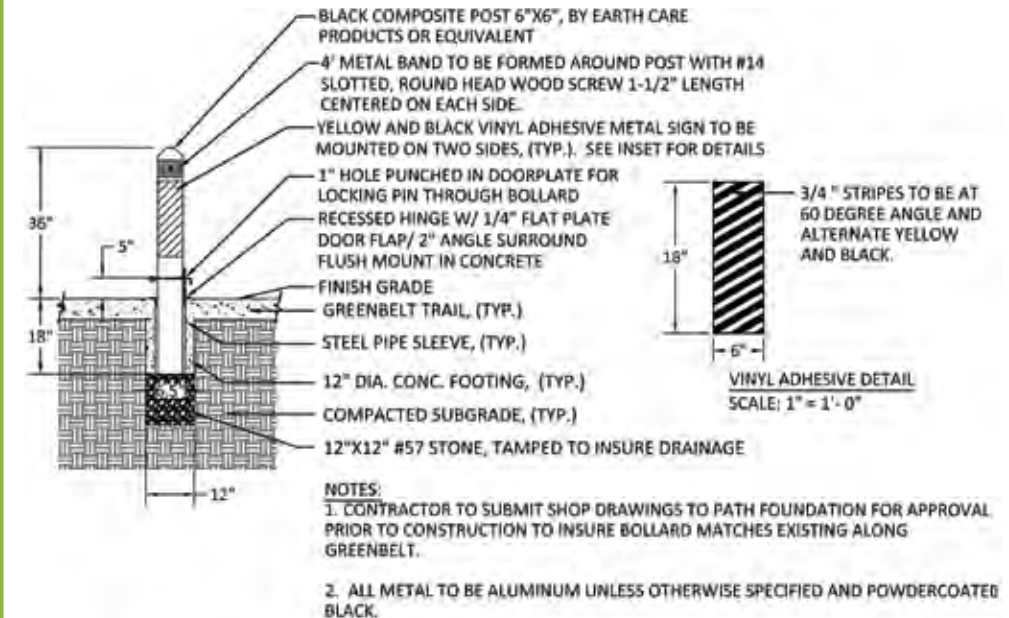


CLEAR ZONE

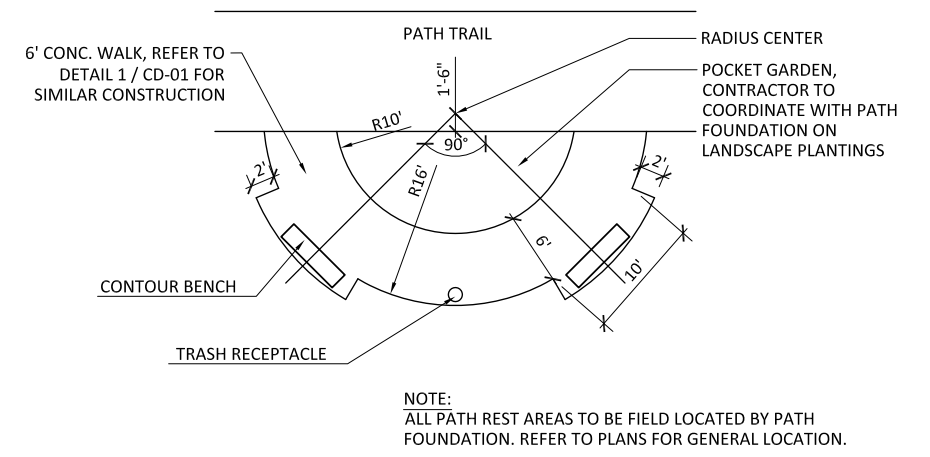
SCALE: 1/4" = 1'-0"



Multi-use trails with a 12-foot wide concrete surface provide for low long-term maintenance.



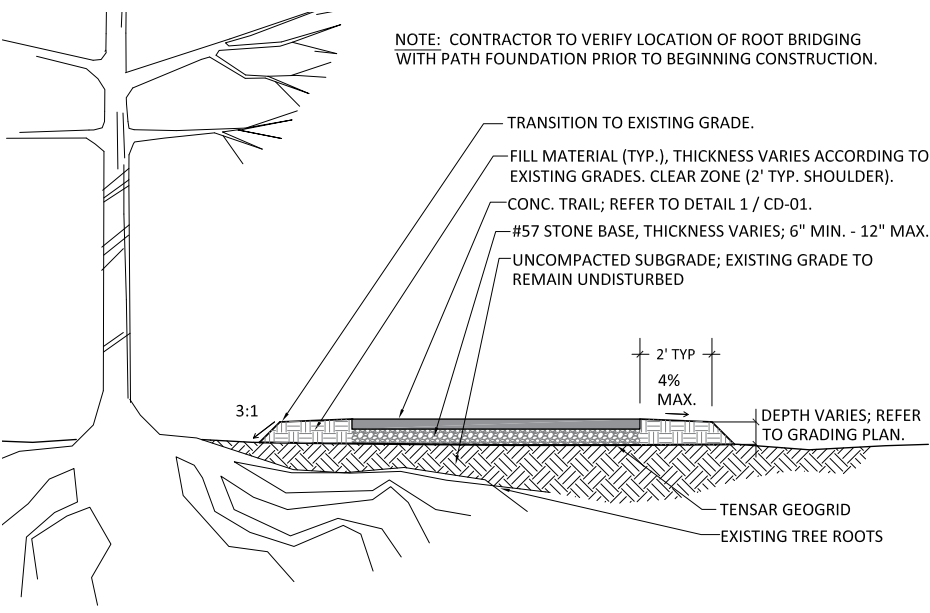
REMOVABLE DOOR PLATE BOLLARD



POCKET PARK
SCALE: 1/8" = 1'-0"



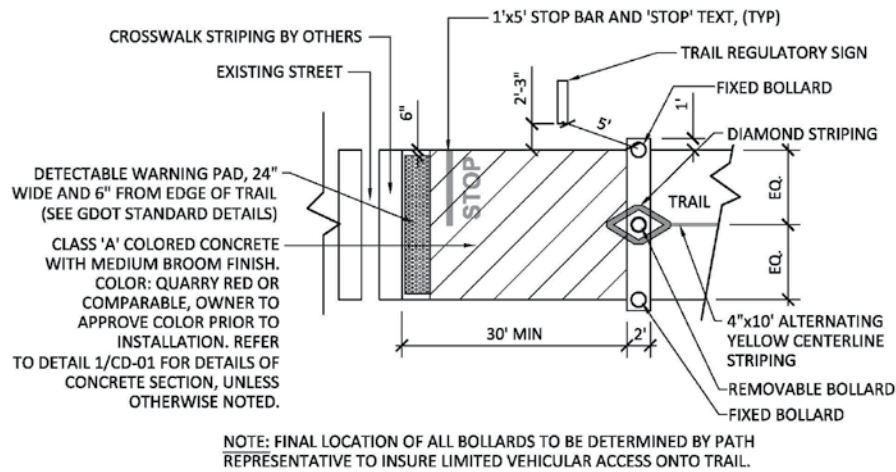
Pocket parks provide opportunities for trail users to enjoy time with friends and neighbors.



ROOT BRIDGING DETAIL
SCALE: 1/4" = 1'-0"



Root bridging insures protection of existing trees and allows the trail to blend into a wooded setting.

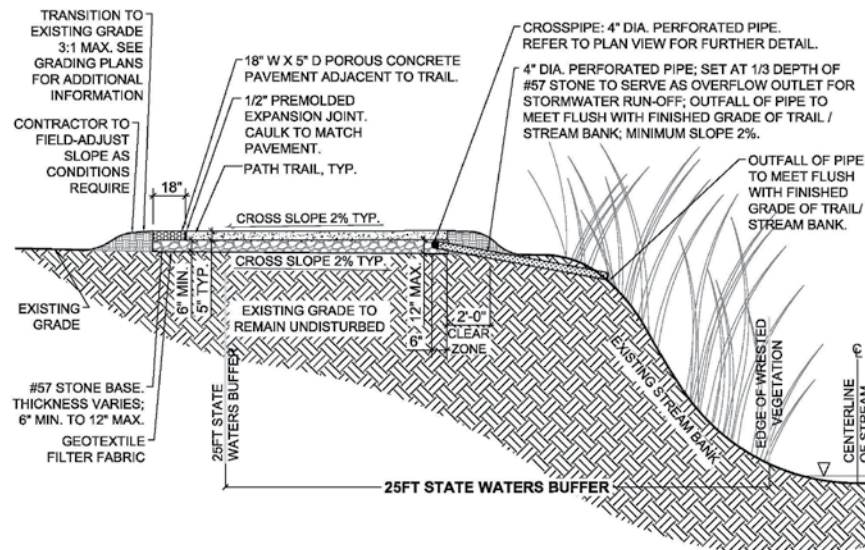


STANDARD INTERSECTION: PLAN VIEW

SCALE: 1/8" = 1'-0"



Typical trail intersection with signage, bollards, and pavement striping.

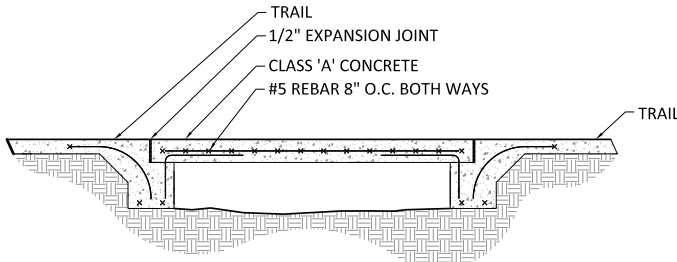


INFILTRATION DETAIL

SCALE: 1/4" = 1'-0"



Water allowed to infiltrate under trail in low lying area



- NOTES:
- 1. CONTRACTOR TO PROVIDE SHOP DRAWINGS COMPLETED BY A LICENSED STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION, FOR APPROVAL BY OWNER AND LANDSCAPE ARCHITECT.
 - 2. TOTAL HEIGHT FROM TOP OF TRAIL SURFACE TO LOW POINT OF SWALE IS NOT TO EXCEED 30".

STRUCTURAL SLAB CROSSING
SCALE: 3/8" = 1'-0"



Wooden Boardwalk structure for crossing lakes and wetlands.



Custom steel bridge structures allow the trail to naturally blend into wooded areas.



Mid-block crossings are to be considered when not crossing at a lighted intersection.



Prefabricated steel bridges allow trails to cross above existing roads and waterways.



A modified bridge on Westview Dr SW in Atlanta to accommodate a 10' wide multi-use trail



Multi-use trail going beneath an existing road bridge.



Multi-use trail going beneath an existing road bridge.

5

Flint River Trails

Maintenance, Operations,
and Recommendations





Maintenance, Operations, and Recommendations

5.1 Management Plan

To insure the resources and facilities associated with the *Flint River Trails* system are kept in a good, usable condition, a management plan should be established by the entities responsible for maintaining the greenway trail system. The management plan should outline the specific day-to-day operations required for long-term maintenance and should be updated annually. Comprised of tasks, operational policies, standards, and routine and remedial maintenance goals, the management plan should engage community groups, residents, business owners, developers, and other stakeholders in the long term stewardship of the greenway trail system. Maintained as a public resource, the management plan should include regular inspections of the greenway trail system.

The management plan should also provide for both routine and remedial maintenance of the greenway trail system to keep the facility in a good, usable condition. The longevity of the concrete multi-use trail system is 20+ years, while the boardwalk sections are 10-20 years. The *Flint River Trails* design standards have been chosen to provide longevity and minimal repair or replacement which will result in reduced maintenance costs for the County.

Routine Maintenance Activities (activities performed on a regular basis):

- Mowing / blowing
- Removing trash
- Trimming and pruning trees and shrubs
- Edging
- Controlling invasive species

Remedial Maintenance Activities (activities performed on an as needed basis):

- Replacing and repairing concrete
- Removing debris along trail edges
- Regrading to eliminate drainage issues
- Repairing bridges, boardwalks, retaining walls, etc.



Lack of routine police patrol has resulted in the public's perception of the Riverfront Trail being unsafe.

5.2 Operation Responsibilities

Dougherty County and City of Albany Department of Parks and Recreation are responsible for a large amount of parkland and greenspace. In addition to the operations and maintenance of these parklands, the majority of the greenway planning, operations and maintenance will be the responsibility of both the **city and county**. In order to increase the revenue generated for operations and maintenance of the greenway system, the following actions should be considered:

- Organize an "Adopt-a-Trail" program
- Hire one new maintenance crew person for every 15 miles of trail developed
- Purchase necessary equipment to properly maintain trail and amenities

5.3 Trail Security

In order to attract large numbers of users to the *Flint River Trails* system, there must be a perception of safety on the trails. The KAIZEN design team suggests increased visibility of the City of Albany and Dougherty County Police Department to assure a higher level of trail user safety including a bicycle patrol as the County begins implementation of the *Flint River Trails* greenway system plan. Many examples of bicycle patrols implemented in similar cities exist and could serve as models for Dougherty County. One example would be the City of Carrollton, Georgia. In addition to bicycle patrols, motorcycle policemen and officers on four-wheelers can be utilized to satisfy the public's request for police presence on the trails

The County should also educate trail users about personal safety through various media and signage. Safety tips for trail users include the following:

- Be aware of your surroundings - wearing earphones while on the trail may prevent you from sensing nearby dangers.
- Carry a cell phone - cell phones provide a quick response from emergency officers to assist a hurt trail user or to respond to suspicious activity
- Be prepared - cyclists should carry spare tubes and tools for unforeseen bicycle maintenance.
- Stay hydrated - carry water to prevent dehydration while exercising on the trail
- Follow trail rules and etiquette - all trail rules are posted at each trailhead



Police Departments patrol trails on bicycle and ATV to insure trail safety for all trail users.

5.4 Land Development Regulations

In order to establish the needed regulatory framework to implement the *Flint River Trails* plan, KAIZEN's design team suggests approving changes to the Dougherty County Code of Ordinances to add wording containing greenways development, protection, and support for the *Flint River Trails* system. The wording should reflect a similar statement as below:

"In any case in which a greenway is indicated on an adopted plan of Dougherty County as being located on lands proposed for development, such greenway shall be dedicated and developed."

This requirement should be inserted into Dougherty County's Land Development Regulations to insure the greenway improvement is required and should be included within the Code of Ordinances as a new "Greenways" section. As the Land Development Regulations generally outline provisions for sidewalks, streets, and other required improvements, greenways should be no different in this respect and should be dedicated upon development.



View of the existing Riverfront Trail. Implementation steps are critical for Dougherty County to expand and grow their trail system.

5.5 'Next Steps' Checklist

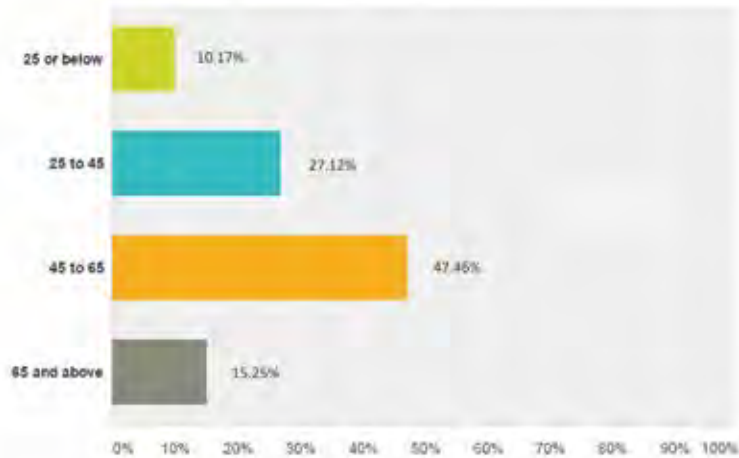
As implementation begins for the *Flint River Trails* plan, the following checklist should be followed:

- Adoption of the *Flint River Trails* master plan by the City of Albany and Dougherty County Commission
- Creation of a "***Friends of The Flint River Trails***" non profit 501c3
- Establishment a ***Flint River Trails*** Implementation Committee to lead the following:
 - Begin implementation of initial trail projects
 - *Albany to Sasser Rail Trail* (pg.20)
 - *Radium Golf Course Trail* (pg. 60)
 - Promotion of the *Flint River Trails* plan through the City of Albany and Dougherty County to insure its integration with other planning efforts
 - Pursuit of local funding from City of Albany and Dougherty County and identifying private funding sources
 - Development and implementation of education, encouragement, and awareness programs through the *Flint River Trails* Committee
 - Requesting the City of Albany and Dougherty County to adopt a Complete Streets Policy to compliment the master plan

Public Survey Results:

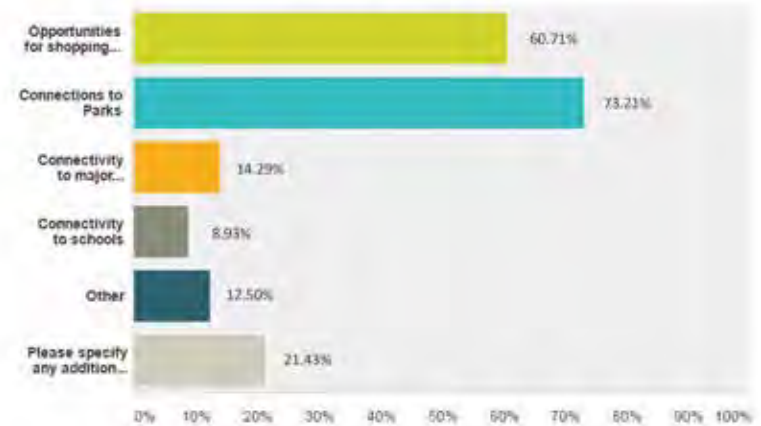
To help us better understand the trail users in Dougherty County, please specify your age?

Answered: 55 Skipped: 2



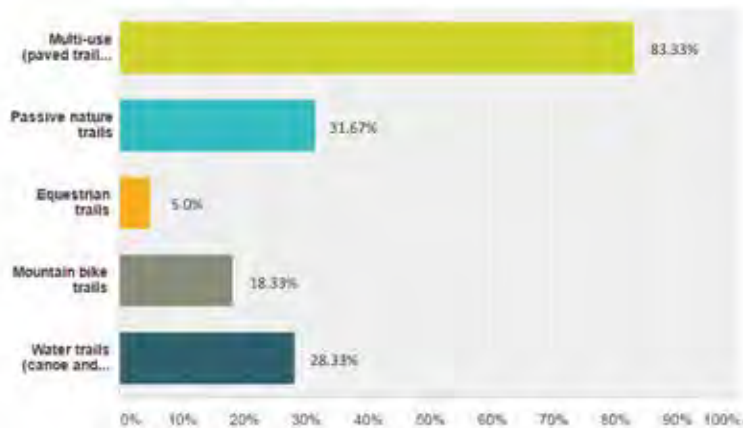
Which of the following would increase your use of the trail system if you could access them by bike?

Answered: 56 Skipped: 5



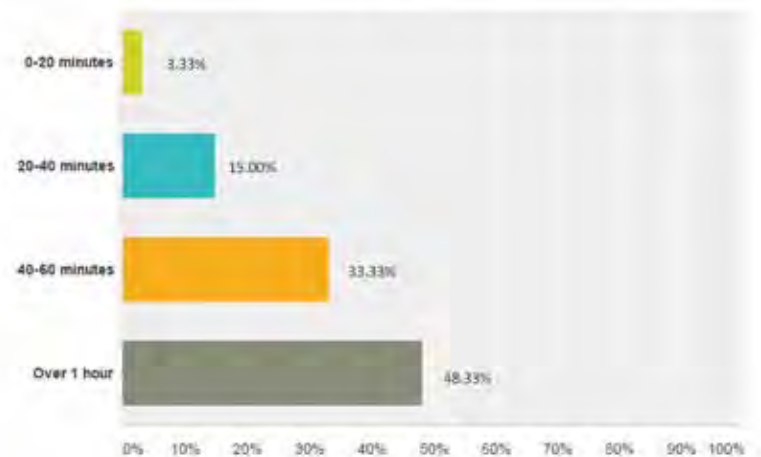
What type of trails are you most interested in?

Answered: 80 Skipped: 1



When you use a trail, what is the typical length of time that you spend?

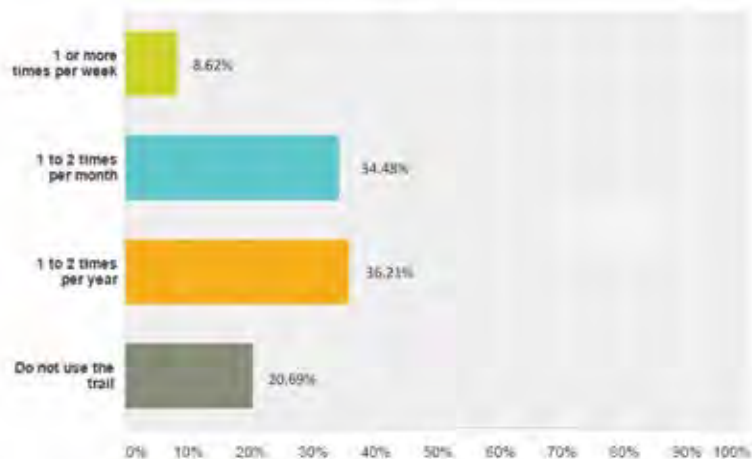
Answered: 60 Skipped: 1



Public Survey Results:

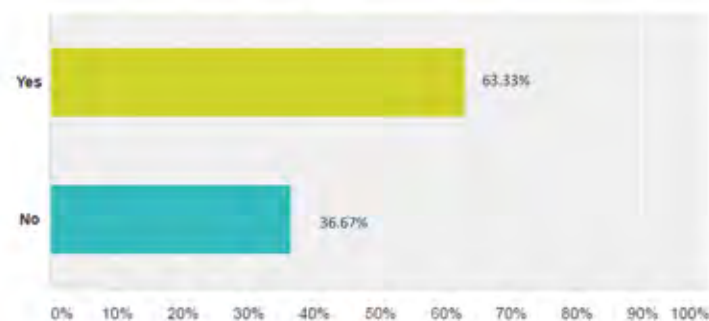
How often do you use the existing Riverfront Trail?

Answered: 54 Skipped: 3



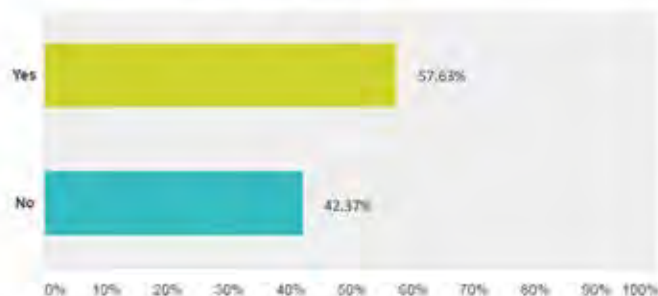
Would you desire having bike parking in downtown, Albany? Bike parking would be a secure space in a building you could rent to store your bike and check it out at your choosing. Ideally, the Bike Parking location would be within close proximity to the trail for easy access.

Answered: 60 Skipped: 1



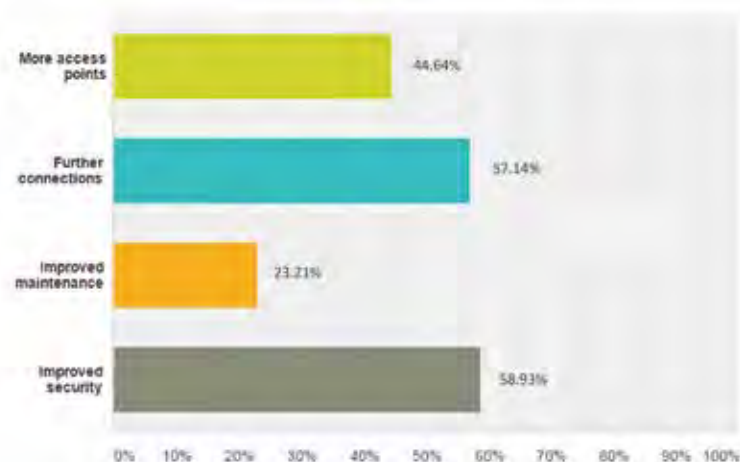
If bike parking were provided, would it increase your use of the trail system?

Answered: 69 Skipped: 2



What areas of improvement would you like to see on the existing Riverfront Trail?

Answered: 56 Skipped: 5



Appendix: Steering Committee Members

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