EFFINGHAM COUNTY

Effingham County is nestled between the Savannah River and the Ogeechee River - two of the longest rivers with the largest watersheds on the east coast of the United States. The terrain is flat and the soil sandy with large tracts of low-lying wet areas and wetlands - the highest point in the county is barely 138 feet above sea level.



Abandoned Central of Georgia Railroad right of way in Guyton.

Effingham County's population stood at 64.769 in the 2020 US Census, an increase of 24% since 2010 and 73% since 2000. The county is within the Savannah metropolitan area which has seen rapid economic expansion due to its port logistics and tourism industries. With a rapidly growing population and the demand for logistics-related industrial development, the county is focused on expanding infrastructure to keep up with development pressures. Parks and recreation and transportation are two areas of concentration. The county has recently completed a parks plan update and a Transportation Plan. These plans both reference the need for interconnecting bike and pedestrian paths and for improved access to nature and more opportunities for passive recreation.2

The Georgia Hi-Lo Trail is a relatively low-cost, high-impact way to increase Effingham's attractiveness to new residents and new businesses, as well as to improve the quality of life for existing residents. The Hi-Lo Trail will connect a number of Effingham County's recreational and educational assets - making bicycle and pedestrian access safer and more inviting for residents and visitors alike

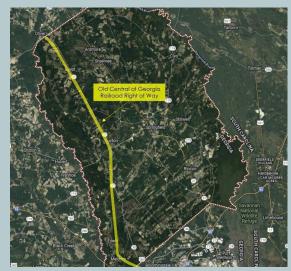
PATH-led trail planning efforts conducted in coordination with county stakeholders and members of the public identified key destinations in Effingham County that could be served by a cross-county trail. These key destinations include schools, county parks and recreation facilities, the Honey Ridge Agricenter, and the towns of Guyton, Springfield, Egypt, and Meldrim.



Old caboose at existing Guyton trailhead.

Connecting many of these key destinations, the old Central of Georgia Railroad right of way forms a line running north to south across the western side of the county. Abandoned in the 1960s when the railroad went out of business, today the alignment is primarily owned by the Southern Company - corporate parent of Georgia Power - which uses the right of way for local power transmission. The City of Guyton has used the portion of the old railroad alignment that it owns to build a recreational trail through the center of town and past Guyton Elementary School. extending nearly 0.75 miles from Gracen Road south to 3rd Avenue.

PATH recommends that Effingham County stakeholders, in collaboration with the Georgia Hi-Lo Trail Initiative, begin discussions with Georgia Power's real estate division to determine the feasibility of a permanent easement or longterm property lease along the former railroad right of way, Railroad rights of way are advantageous for regional trails because they cover long distances and are typically well away from busy highways with fewer at-grade vehicular crossings. They have raised beds and bridge infrastructure that can sometimes be leveraged when building a trail, reducing costs and construction time. The most valuable characteristic from a trail planning perspective is that railroad rights of way are often miles-long, singleowner assets where negotiations with one entity can yield highly appealing, long-distance trails in natural settings. Alternatives capturing this same trail user experience would be impossible to achieve if negotiations had to occur with the dozens or hundreds of individual land owners along a similar alignment.



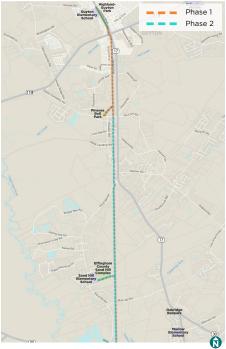
Old Central of Georgia Railroad right of way of Effingham County

https://www.peakbagger.com/peak.aspx?pid=23353
 Effingham County Parks and Recreation Plan (2023), p. 6.

GEORGIA HI-LO TRAIL EFFINGHAM **COUNTY MODEL PROJECT**

The model project identified by PATH staff in collaboration with key county stakeholders and the Georgia Hi-Lo Trail Initiative is an approximately 10.2-mile, two-phase, multi-use trail that provides connections to and between the City of Guyton, the county's Pineora Park and Ballfields, Effingham County Sand Hill Sports Complex and Elementary School, and the county's planned Atlas Reservoir Park.

Success for the Effingham County Model Project rests on achieving an agreement with Georgia Power regarding sharing the old railroad right of way for both power transmission and a trail. In summer 2023, PATH staff met with Georgia Power representatives, who expressed preliminary support for a trail if several considerations were met, and if company leadership approved the design. The representatives provided a document titled "General Guidelines for Bicycle and Pedestrian Trails on Georgia Power Transmission Rights of Way," which is included in the Appendix. These guidelines cover design and engineering details, such as how far the trail needs to be from transmission line infrastructure and noticing requirements for adjoining landowners. The Georgia Hi-Lo Initiative, in collaboration with Effingham County stakeholders, will continue to work with Georgia Power to align on a strategy to satisfy requirements so that they can begin building the model project.



Effingham County Hi-Lo model project map.

GEORGIA HI-LO FEFINGHAM COUNTY MODEL PROJECT PHASE 1

Phase 1 is a 2.8-mile greenway trail that follows the old railroad right of way from Guyton to the Pineora Park and Ballfields. The Phase 1 Trail begins at the current terminus of the Guyton Trail on 3rd Avenue and Georgia Highway 17, where the city has developed a pleasant trailhead with parking, benches, and a restored train caboose. It continues south to the site of Ken's IGA on the northwest corner of GA-17 and GA-119 on public right of way related to Central Boulevard or West Central Boulevard. The trail crosses the entrance to Ken's IGA (which is slated for expansion) upgrading the existing cross-walk with paint and signage to clearly warn drivers of trail interaction. The trail proceeds along the grassy boulevard south to the existing pedestrian crossing on the east leg of the roundabout at GA-17 and GA-119. A user-activated pedestrian signal (or other safety treatment) will be installed to provide safe access for trail users.

The trail then turns east as a sidepath on the south side of the road back to the roundabout, where it turns south onto the railroad right of way to the east of and paralleling Central Avenue.

At about 1.500 feet south of the roundabout, the trail begins to interact with the Georgia Power transmission line. Assuming an agreement with Georgia Power can be reached. the Phase 1 Trail continues south following the power line. making a crossing with a user-activated pedestrian traffic signal at Halfway Road. The Phase 1 Trail then proceeds south for 1.25 miles, potentially on the Central Avenue roadbed, which may have been closed off by the county or along the Georgia Power transmission alignment. The Phase 1 Trail terminates at the intersection with Honey Ridge Road. A spur trail heads west to Pineora Park and Ballfields at a point along the mainline trail that is 1.300 feet north of the intersection with Honey Ridge Road. This spur terminates at the administration building in the middle of the park.



Map of Effingham County Phase 1 Trail.

GEORGIA HI-LO FEFINGHAM COUNTY MODEL PROJECT PHASE 2

Phase 2 is a 7.4-mile extension of the trail continuing south on the Georgia Power transmission alignment. This long phase makes crossings of two types of roadways - low-traffic-volume, short connector streets and higher-traffic-volume longer roads. The low-volume streets do not warrant user-activated pedestrian traffic signals, but the higher-volume roads do require this additional infrastructure investment.

Proceeding south from Honey Ridge Road, the Phase 2 Trail continues for 2.0 miles through a suburban area where it makes uncontrolled crossings of Atlantic Avenue, 2nd Street, Pineora Estates Drive, Oak Street, and McIntyre Road. The trail makes controlled crossings of Midland Road, Central Avenue (near intersection with James Road), and Sand Hill Road (south of Old Marlow Road) with user-activated pedestrian traffic signals.

South of the Sand Hill Road intersection, the Phase 2 Trail proceeds through a natural area for approximately 3.5 miles until the intersection with Blue Jay Road and a user-activated pedestrian signal for safe crossing. A spur trail to the west at approximately 2.5 miles south of the Sand Hill Road intersection (or about 1 mile north of Blue Jay Road) provides trail users access to the Effingham County Sand Hill Sports Complex and Elementary School.

South of Blue Jay Road, the Phase 2 Trail proceeds along the Georgia Power transmission alignment to a point where an easement can be found on a parcel on the east side of Sand Hill Road that connects the trail across to the west side of Sand Hill Road and into Effingham County's planned park at the Atlas Reservoir. Depending on where the easement is identified, a sidepath may need to run along the east side of Sand Hill Road until it can access the county-owned parcel west of Sand Hill Road. For planning purposes only, a parcel has been identified that appears to contain a mining operation and that does not currently have a residence on it - 3187 Sand Hill Road.

If the county cannot find a willing landowner, a less valuable but still workable alternative would be to run a sidepath 0.2 miles on the south side of Blue Jay Road and another sidepath 1.2 miles on the east side of Sand Hill Road within the public right of way with a crossing onto county-owned property on the west side of Sand Hill Road across from 3113 Sand Hill Road with a useractivated pedestrian traffic signal.

Depending on the final design of the Atlas Reservoir Park, the Georgia Hi-Lo could function as a component of an internal trail system to the park or as a sidepath to an entrance driveway. The Phase 2 Trail should stop at a point where trail users have access to restrooms and bicycle parking.



Georgia Power corridor following Central Avenue out of Guyton.

MODEL PROJECT – PARCEL INFORMATION

The information provided below is offered in draft format at the planning level. No decisions have been made and no aspect of the project will move forward without the full consent of the subject property owners. Under no circumstances does the county envision using eminent domain to acquire easements. Property owners who grant access for the public to use a trail are shielded from liability by Georgia law. Further details regarding precise alignments and required easements will be determined in the design phase of the project.

Key	Phase	Ownership	Address	Parcel ID	Owner
1	1	Public	South of Trailhead	NA	City of Guyton?
2	1	Private	101 W. Central Blvd	G0080006	Ken's Guyton IGA
3	1	Private	East of Central Ave	NA	Georgia Power
4	2	Private	South of Halfway Rd	NA	Georgia Power
5	2	Public	Central Ave	02960030B00	Effingham County BOC
6	2	Public	Honey Ridge Rd	02960074	Effingham County







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1 See chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://rivercenter.uga.edu/wp-content/uploads/2021/01/Landowner-Liability-2009.pdf

Key	Phase	Ownership	Address	Parcel ID	Owner
7	2	Private	Off Sand Hill Rd	02990076	CG Property Partners LLC
8	2	Private	295 Stagecoach Ave	03000037	Effingham County Rec Dep
9	2	Private	3187 Sand Hill Rd	03010041	David Adam Lindamood et al
10	2	Public	US Hwy 80	03010027	Effingham County BOC
11	2	Public	Sand Hill Rd	03010071	Effingham County BOC



Effingham County Hi-Lo model project map.

GEORGIA HI-LO TRAIL EFFINGHAM COUNTY MODEL PROJECT COST ESTIMATES

The charts below summarize the preliminary cost estimates for the model project phases identified in the previous section. PATH recommends updating this cost estimate at every design interval to accommodate the change in cost over time. These cost estimates come with the following considerations:

- The cost for building a soft surface trail as an intermediate step towards full-length paving is offered as an alternative that lowers
 initial costs and enables more miles of trail to be brought on line sooner. Concrete is the strongly recommended long-term design
 solution both for access for people with disabilities and for substantially lower ongoing maintenance costs.
- The costs for public right-of-way, easement and property acquisition are not included.
- Estimated P&E (Planning and Engineering) costs include surveying, design, and engineering for construction, permitting, bidding, and construction administration of the project.
- Estimated Construction Costs for a 10-foot wide trail are based on material and labor pricing from Fall 2023 using the trail design standards recommended in Chapter 4...
- · Costs for lighting and security camera systems are not included.
- Trail maintenance operating costs are not included.

Phase	Mileage	P&E	Construction (w/ Concrete)	Total Cost	
1	3.1	\$216,000	\$3,474,000	\$3,690,000	
2	7.9	\$313,000	\$8,397,000	\$8,710,000	
Total	11.0	\$529,000	\$11,871,000	\$12,400,000	

Preliminary cost estimate of construction with in one stage.

Phase	Mileage	P&E	Construction (w/Gravel)	Total First Stage Gravel	Marginal Cost of Second Stage Concrete	Long Run Final Cost
1	3.1	\$216,000	\$2,749,000	\$2,965,000	\$1,438,000	\$4,403,000
2	7.9	\$313,000	\$6,396,000	\$6,709,000	\$3,498,000	\$10,207,000
Total	11.0	\$529,000	\$9,145,000	\$9,674,000	\$4,936,000	\$14,610,000

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Preliminary cost estimate of alternative construction construction method with intermediate soft surface trail.

¹ PATH recommends that the Implementation Committee assess acquisition cost several months prior to the beginning of construction of each trail segment.

GEORGIA HI-LO TRAIL EFFINGHAM COUNTY MODEL PROJECT IMPLEMENTATION PLAN

The Georgia Hi-Lo Trail is an ambitious undertaking to build at least 211 miles of paved multi-use trails from Athens to Savannah and beyond. This trail planning effort has introduced the Effingham County community to the trail as generated some initial momentum that will need to be harnessed to bring the two-phase model project to life (and further advance the cause of the Georgia Hi-Lo Trail).

IMPLEMENTATION TEAM FORMATION

PATH recommends that the stakeholders who have helped shape the Georgia Hi-Lo Trail vision in Effingham County into a plan now stay on as founding members of the implementation team. Their first step will be to draw other committee members from the ranks of county staff, community leaders, outdoors people, and others to oversee the design and the construction of the Georgia Hi-Lo Trail Effingham County Model Project.

FUNDING STRATEGY

The PATH team recommends that Effingham County develop a multi-year grant strategy including back-up plans for those times when grant applications are not successful. Well-thought-out local funding and grant strategies are highly attractive to governmental granting agencies and philanthropic donors. They form the basis of a successful public-private partnership that can be leveraged to maintain momentum and keep the Georgia Hi-Lo Trail Effingham County Model Project on track until all 10.2 miles are completed and Effingham County residents can start to experience the benefits of trails.

LOCAL FUNDING SOURCES

Some examples of local funding include:

- City/County budget allocations for parks, transportation, or sewer and water
- · Bond referenda
- · Sales surtax funds
- Hotel-Motel taxes
- Development impact fees
- · In-kind products and services
- · Philanthropic grants
- Transportation Special Purpose Local Options Sales Tax (TSPLOST)

STATE OF GEORGIA FUNDING SOURCES

- Some examples of state funding include:
- · Special project allocation
- Georgia Outdoor Stewardship Program (GOSP)
- · DNR Recreational Trails Program (RTP)
- Land and Water Conservation Fund (LWCF)

DONATIONS

Foundations and generous individuals are often supportive of trail infrastructure especially if the benefits to the community are clearly spelled out. Additionally, fundraisers engaging smaller donors can yield substantial money to invest in design and engineering and eventually construction.

FEDERAL FUNDING SOURCES

- Metropolitan Planning Organization (MPO) prioritizes and distributes federal transportation funding through the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program
- Federal Transit Administration Capital Funds (FTA)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- 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)
- Transportation Improvement Program (TIP)
- · Safe Routes to School
- · Safe Streets and Roads for All

HIGH-LEVEL SCHEDULE

The PATH Foundation recommends that the 10.2-mile, two-phase model project connecting the City of Guyton to Atlas Reservoir Park be completed within six years as broken down below:

	2024	2025	2026	2027	2028	2029
Building County-wide Support						
Phase 1: Design & Permit						
Phase 1: Construction						
Phase 2: Design & Permit						
Phase 2: Construction						

To ensure progress while understanding that staff time is a finite resource, PATH recommends that as the first phase of the model project shifts out of design and into construction, the next phase immediately goes into design. This reduces the lag time between completion of the first phase and completion of subsequent phases while promoting an efficient division of labor and limiting the impact on staff workloads.

PUBLIC ENGAGEMENT STRATEGY

To maintain momentum and public enthusiasm for the Georgia Hi-Lo Trail's Effingham model project, it is crucial to keep the public informed of the design and construction progress. PATH recommends that local leaders follow a communications schedule with four touch points with the public regarding the model project:

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- At the public meeting for adoption of the Georgia Hi-Lo Plan (and model project) by the Effingham County Board of Commissioners;
- 2. At a public meeting to gather feedback on the 30% design of the model project;
- 3. At a public meeting to show how the feedback impacted the 100% design of the model project; and
- 4. At a public meeting to share the construction schedule and any traffic impacts.

GEORGIA HI-LO TRAIL EFFINGHAM COUNTY LOOK AHEAD

When the last phase of the model project proceeds into design, the implementation team should begin planning for the extension of the Georgia Hi-Lo as the next step to completing a county-wide trail alignment. County leaders should continue to engage Georgia Power Company as well as key rural property owners with in-depth discussions with the goal of finding a cross-county alignment that would be acceptable to county residents.

Future destinations of the Georgia Hi-Lo trail in Effingham County will be planned with the support of county and local leadership and vetted with the community. A key consideration will be the crossing of the Ogeechee River. There are currently two road bridges that connect Effingham County to Bulloch County - GA Highway 24 that crosses just north of the county border to Oliver and GA Highway 119 that crosses to the central part of the county to Guyton.

As can be seen in the photos at left, neither of the bridges is bicycle or pedestrian friendly. Georgia DOT has no plans to change the design of either bridge for the foreseeable future. A safe river crossing is essential for the viability of the Georgia Hi-Lo Trail as a regional trail connecting longer distances for the purposes of tourism and recreation. A trail from Savannah to Statesboro that passes through Guyton and uses the GA-24 crossing would be approximately 59 miles long whereas one crossing GA-119 (and potentially avoiding Guyton) would be approximately 56 miles long. But the distance matters less than the experience – and the alignment options in western Effingham may mean that a nicer trail experience is easier to achieve.

PATH looked briefly at two potentially feasible locations for setting a separate bicycle and pedestrian bridge across the Ogeechee River - one near the Oliver Bridge Wildlife Management Area south of the existing GA-24 bridge and another further south along Old River Road, that could access a City of Guyton-owned parcel on the east side of the river. Further evaluation of these pedestrian-bicycle bridges should

be conducted prior to settling on Georgia Hi-Lo alignments in either Effingham County or Bulloch County.

Another consideration for future Georgia Hi-Lo Trail planning in Effingham County relates to the willingness of Georgia Power to work with county leadership and staff on building a trail along the western side of the county. If a good working relationship is established during the first two phases of trail building, Effingham County may seek to continue the trail building efforts on that alignment further to the north. Georgia Power is still determining the extent of its ownership of the old railroad right of way between Guyton and Oliver.

To the south of the Phase 2 Trail terminus at Atlas Reservoir Park, a future phase should consider extending the trail along the old railroad right of way as far south as possible into the Town of Meldrim and beyond and into Chatham County, where it can link up with efforts at trail building in the cities of Bloomingdale and Pooler (see the Chatham County section for more details on this alignment).



Existing conditions of GA-119 bridge over the Ogeechee River near Guyton.

CHATHAM COUNTY

Chatham County is the eastern terminus of the Georgia Hi-Lo Trail and is by far the most populous and urbanized of the counties the trail passes through. The population of the county stood at 295,291 in the 2020 US Census - a gain of 11.4% over 2010. The county has thrived economically due to its strong tourism base and its logistics assets that make it the fourth busiest port in the United States. Industrial development is occurring at a rapid pace, especially in the western part of the county, where land is suitable for warehouse locations and other logistics-related development. Residential areas are also expanding rapidly in all areas of the county.

Unlike Georgia Hi-Lo Trail counties to the west, Chatham has large wetland tracts and land that is drained by canals. These canals represent an early 19th century transportation solution that was later replaced by the railroads and later by the highways. This transportation history is clearly visible in Chatham County. Unfortunately, the transportation assets were not planned with pedestrians and bicyclists in mind, and the massive character of the transportation infrastructure tends to cut neighborhoods off from one another – isolating some communities and overburdening others. Much of the county outside of the historic core of old Savannah until recently, for example, had relatively few sidewalks and almost no bicycle infrastructure.

With these infrastructure characteristics as a backdrop, the PATH team and Chatham County stakeholders met to evaluate alignments for a cross-county trail and to select a model project. Through a series of planning exercises, stakeholders and the public agreed that the goals of the county involve bringing the community together in safe and healthy ways that are also conscious of the impacts of intense economic development, such as residential displacement and inequitable health and economic outcomes.

County stakeholders are very supportive of the Georgia Hi-Lo Trail as a relatively low-cost, high-impact strategy to improve the quality of life for existing and future residents. When

complete, the Georgia Hi-Lo Trail intends to connect a number of recreational assets in the county – making bicycle and pedestrian access safer and more inviting and more useful for those seeking alternatives to driving.



Existing trail near Bloomingdale Elementary School.

Chatham County and its city partners have conducted extensive bicycle and pedestrian planning that the PATH team used as a base in its evaluation of cross-county alignment options. The 2016 Chatham County Greenway Implementation Study, the 2019 Chatham County Parks and Recreation Plan, the 2020 update to the Coastal Region Metropolitan Planning Organization's Non-Motorized Transportation Plan, the 2022 Savannah Vision Zero Action Plan, and the 2023 SR26/US-80 Corridor Study all provided useful inputs and context for trail alignment evaluation and to get a broader perspective on the values of the community as they relate to trails.