



DRIVEWAY CROSSINGS

DESCRIPTION & GUIDANCE

Driveway crossings are typically in areas where vehicles are entering/exiting businesses, offices, and residences from a roadway parallel to the trail. Crossings should be designed to promote awareness of the presences of pedestrians and bicyclists, lower vehicular speeds, and facilitate proper yielding of motorists to bicyclists and pedestrians.

GUIDANCE:

- The sidepath should be given the same priority as the parallel roadway at all uncontrolled crossings. Geometric design should support this by providing clear sight triangles for all approaches.
- Figures 4-15 through 4-17 and table 4-2 provide guidance for minimum trail setback based on roadway context.
- Maintain a level surface for the sidepath through the crossing, potentially as a type of raised crosswalk.
- Crossing design should emphasize visibility of users and clarity of expected yielding behavior. Crossings may be STOP or YIELD controlled depending on sight lines and bicycle and motor vehicle volumes and speeds.
- “Turning Vehicles Yield to Pedestrians” sign is recommended in advance of turns across sidepaths to remind motorists to yield to path users and the combination “Bike and Ped Crossing” sign may be used in advance of crossings.

TABLE 4-2. TRAIL DRIVEWAY SETBACK GUIDANCE

Roadway Context	≤ 35 MPH		≥ 40 MPH
	Constrained or limited sightlines	Wide right-of-way	
1. Adjacent Crossing (6.5 ft setback)	Y	EJ	EJ
2. Separated Crossing (16.5 ft setback)	EJ	Y	EJ
3. Deceleration Lane with Adjacent Crossing (6.5 ft setback)	X	EJ	Y

Y = Desirable; EJ = Engineering Judgment Needed; X = Not Recommended

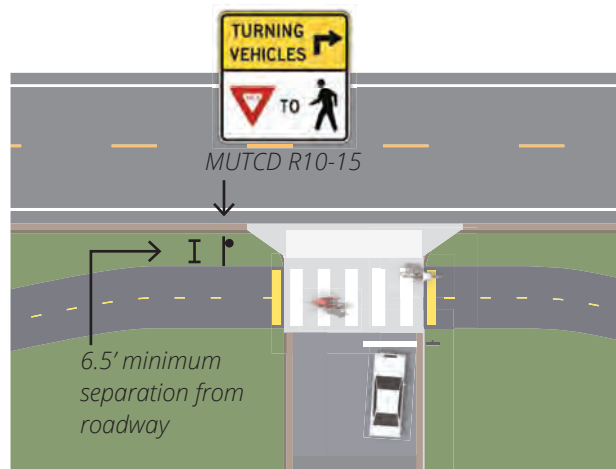


FIG. 4-15 ADJACENT CROSSING

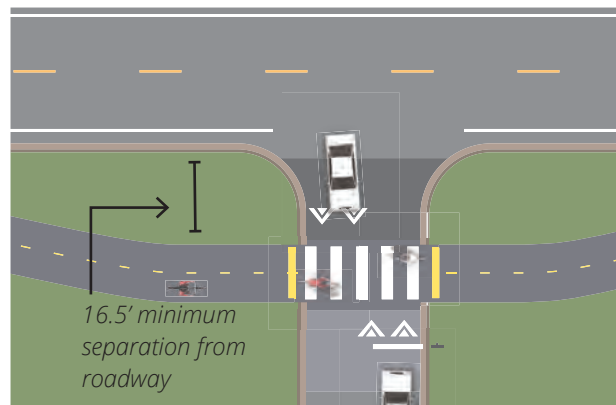


FIG. 4-16 SEPARATED CROSSING

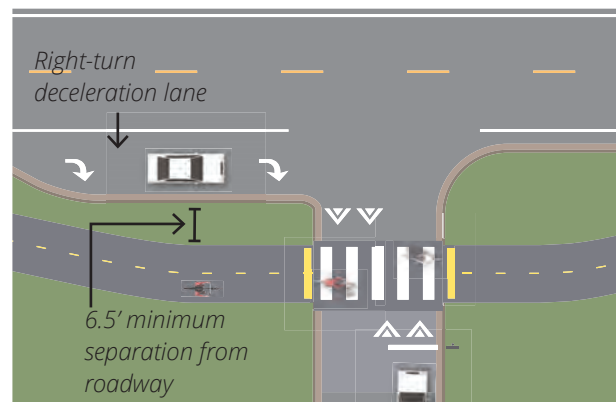


FIG. 4-17 DECELERATION LANE WITH ADJACENT CROSSING

Graphics by



TRAIL-AT-TRAIL CROSSINGS

DESCRIPTION & GUIDANCE

There are several design approaches for locations where two trails intersect. The primary focus should be to make users aware that they are approaching an intersection and of the potential for encountering different user types from multiple directions. This can be achieved through a combination of trail design and engineering to create unobstructed sight lines as well as regulatory and wayfinding signage.

GUIDANCE:

- Trails should be aligned to intersect at 90-degree angles when possible.
- Sight lines should be clear for all users.
- Consider off-setting the trail intersection and creating two three-way intersections rather than one four-way intersection.
- A traffic circle (Figure 4-19) may be a viable design option to slow speeds and clarify expected operation.
- Include directional signage at intersections.
- If a traffic circle design is used, consider the use of landscaping with low growing (no more than 24 inches high) and minimally spreading native shrubs and groundcover that require little maintenance and provide clear sight lines.
- Other material can be used within traffic circles such as boulders and public art to discourage shortcut paths through the central island as long as clear sight lines under 36 inches are maintained.

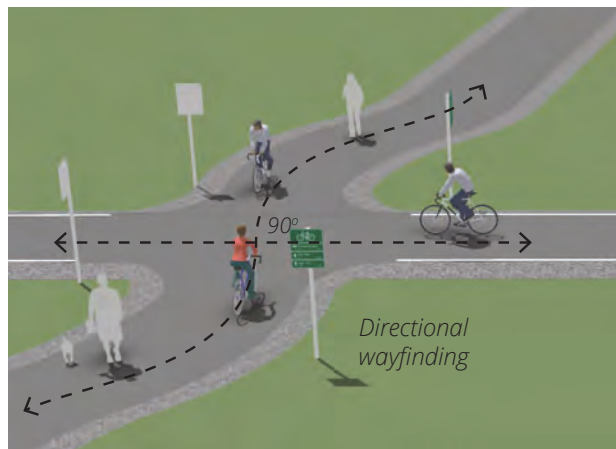


FIG. 4-18 NINETY DEGREE TRAIL-AT-TRAIL CROSSING



FIG. 4-19 "TRAIL TRAFFIC CIRCLE"



CHANNELIZED RIGHT TURN LANES

DESCRIPTION & GUIDANCE

In some intersections of arterials streets, design vehicle requirements or intersection angles may result in wide turning radii at corners. Configuring the intersection as a channelized (or free-right) turn lane with a raised refuge island can improve conditions for pedestrians trying to cross the street.

To improve safety and comfort for pedestrians, measures to slow traffic at the pedestrian crossing are recommended such as provision of a raised crosswalk, signalized pedestrian walk phase, high visibility crosswalk, and/or pedestrian crossing signage. Corner aprons may be used where larger turn radius is required based on volume of large vehicles. Figures 4-20 and 4-21 on the following page illustrate possible configurations of trail crossings at channelized right turn lanes.

Pavement markings and signage in a channelized right turn lane depend upon the type of vehicle control. Providing a "Stop" control on the channelized right turn lane may provide more crossing opportunities than "Yield" control. Signage and pavement markings should follow MUTCD specifications.

Similar treatments may be used at some highway off-ramps that cross sidepaths, as they share many characteristics.

DESIGN GUIDANCE

- Channelized right-turn lanes should be no wider than 14 feet to encourage slower speeds. Consider narrowing wider lanes with striping.
- Design speed through turn lane should be 14-18 MPH.
- Maximum turn radius of 30 to 35 feet
- Crossing may be raised or at intermediate level, as opposed to street level, at locations where additional speed management is necessary, or where there are especially high pedestrian and bicyclist volumes.
- The preferred angle of intersection between the channelized turn lane and the roadway being joined is no more than 15 degrees to allow for simultaneous visibility of pedestrians and potential roadway gaps.
- Install standard pedestrian crossing assembly signs and "Turning Vehicles Yield (or Stop) to Pedestrians" signs as appropriate per the MUTCD.
- The use of warning signs and pavement markings such as the combination bicycle and pedestrian crossing and accompanying "TRAIL X-ING" plaque may be used where both bicyclists and pedestrians might be crossing an uncontrolled location.
- **Typical application:** Where design vehicle requirement or intersection angles result in wide turning radii at corners.

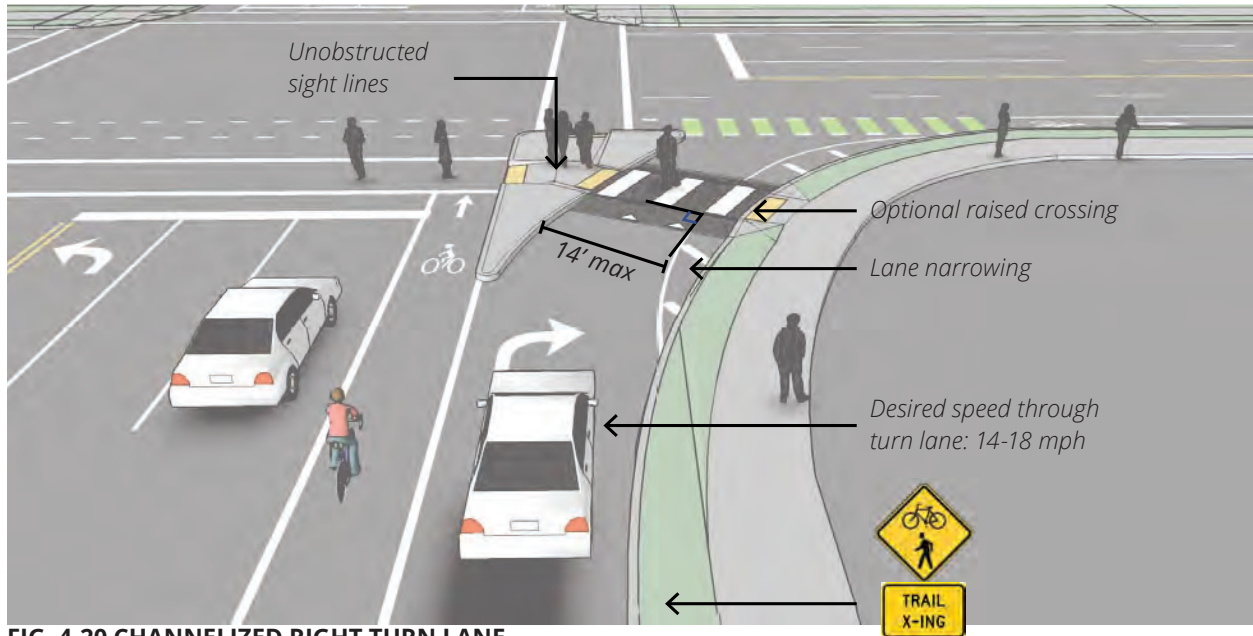


FIG. 4-20 CHANNELIZED RIGHT TURN LANE

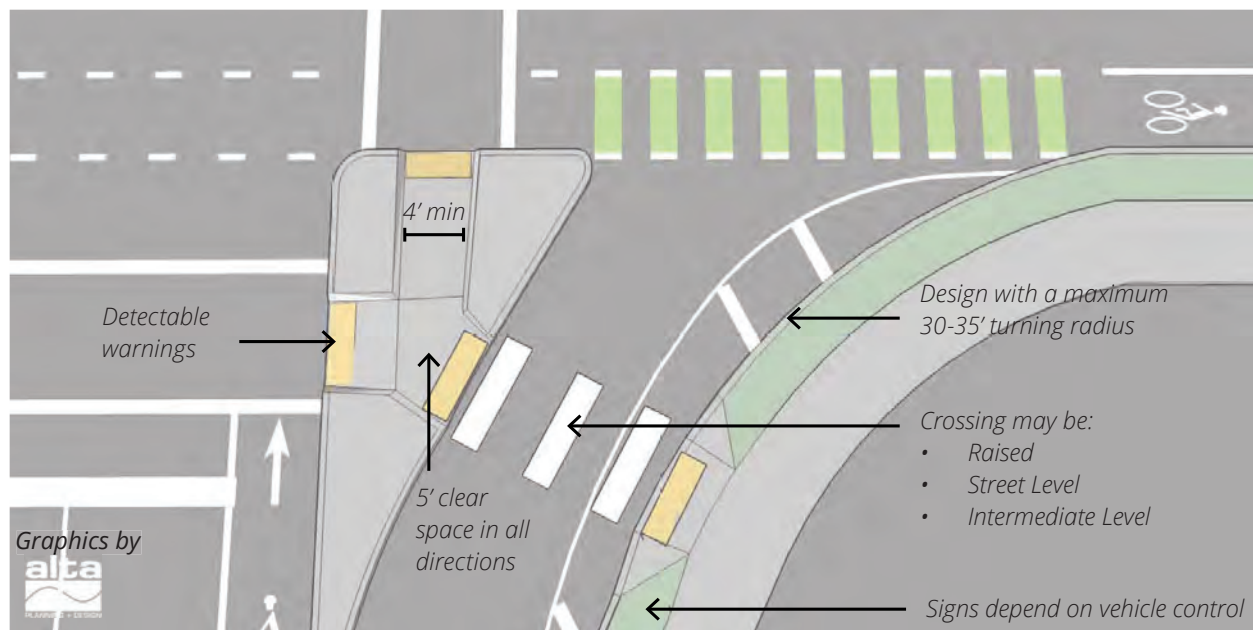


FIG. 4-21 CHANNELIZED RIGHT TURN LANE - OVERHEAD VIEW



BOLLARDS & ALTERNATIVES

DESCRIPTION & GUIDANCE

The routine use of bollards and other similar barriers to restrict motor vehicle traffic is not recommended.³ Bollards are often ineffective at preventing undesired motor vehicle access to shared use paths, and create obstacles to legitimate trail users. Alternative design strategies use signage, landscaping and curb cut design to reduce the likelihood of motor vehicle access.

Bollards should never be a default treatment, and should not be used unless there is a documented history of intrusion by unauthorized cars, trucks, or other unauthorized vehicles. Even properly installed bollards constitute a serious and potentially fatal safety hazard to trail users.

BOLLARD ALTERNATIVE GUIDANCE

- “No Motor Vehicles” signage (MUTCD R5-3) may be used to reinforce regulatory access rules.
- Design path entries to not be mistaken for vehicle access point, and to make intentional motor vehicle access difficult
- Vertical curb cuts may be used to discourage motor vehicle access.
- At intersections, split the path tread into two sections separated by low landscaping. Each tread should be seven feet wide to allow for side-by-side riding, while appearing too narrow for motor vehicle access.
- Emergency vehicles can still enter by straddling the landscaping median.
- Consider targeted surveillance and enforcement at specific intrusion locations.
- Planting should be low and/or ground cover to permit emergency vehicles access.
- **Typical application:** At the entrance to shared-use paths, or at roadway crossings, where motor vehicle use is prohibited and should be discouraged. Where bollards or other vertical barriers in the pathway can be justified despite their risks and access issues, refer to the guidance on Bollards in the AASHTO Guide for the Development of Bicycle Facilities (2012) Section 5.3.5.

BOLLARD GUIDANCE

- Bollards must be easily visible, especially in low light conditions. The MUTCD requires retro-reflectorization of any obstruction in the traveled way of a shared-use path (Section 9C.03). This includes posts along the edge of a path.
- Must not restrict access for people with disabilities
- Should have sufficient sight distance to allow users to adjust speed.
- Should permit passage, without dismounting, for adult tricycles, bicycles towing trailers, and tandem bicycles. All users legally permitted to use the facility should be accommodated.
- Must be at least 3.2 feet tall and should be placed at least 20 feet from the intersection. This will allow trail users to cross the intersection before negotiating the barrier posts.
- MUTCD Figure 9C-2 defines a diamond-shaped marking that should be used around bollards or other obstructions.
- Should be designed to be knocked-down, removable, or hinged to permit entrance by emergency and service vehicles. A knocked-down bollard must be reinstalled or removed immediately to avoid additional safety hazards.
- One bollard is generally sufficient to indicate that a path is not open to motorized vehicles. The post should be placed in the center of the trail tread. Where more than one post is necessary, an odd number is preferred, as two bollards would direct opposing path users to the center. Five feet minimum spacing between bollards is recommended to permit passage of bicycle trailers, adult tricycles, and wheelchairs.⁴
- **Typical application:** Bollards should only be used under specific circumstances, properly placed, marked and designed to be as safe and conspicuous as possible when there is a demonstrated danger of people mistaking the trail for a roadway and there isn't a feasible alternative design.



FIG. 4-22 ALTERNATIVE TO BOLLARDS AT ACCESS POINTS



FIG. 4-23 BOLLARDS AT ACCESS POINTS



TRAIL SIGNAGE

SUMMARY & GUIDANCE

Signage is a critical and sometimes overlooked element of a successful greenway and trail system. Signs help users not only recognize trails through branding, but also navigate the network, plan trips, and access nearby destinations. Trail signage also helps to establish trail use etiquette, helping create a more comfortable experience for all users. This section provides guidance on various types of trail signs.

Effective signs are critical to providing trail users with positive experiences and making them want to come back again. Consistent signs are among the most effective ways to establish the identity of a trail and increase public awareness of a trail. Multiple types of signs are typically employed throughout a greenway and trail system, including regulatory, wayfinding, and etiquette signs. Off-road signs differ from on-road signs in that they are not intended specifically for vehicular visibility, but rather are directed

towards pedestrians and cyclists, in general. Each type has a different purpose and it is important to keep in mind the intended audience of signs during the design process.

Objectives of a comprehensive trail sign system should include the following:

- Communicate the presence of the trail, attracting users
- Educate users about the trail and surrounding environment
- Communicate user and trail location, direction of travel, and reassure users that they are in the right location
- Guide trail usage to create a safe, comfortable experience

In general, symbols, fonts, color schemes, and stylistic elements from a trail's signage should be applied to published maps for the same system, for consistency and ease of navigation. Simple, easy-to-understand symbols should be used to avoid confusion.

NATIONAL SIGNAGE STANDARDS

The Manual on Uniform Traffic Control Devices (MUTCD) defines the standards used by road managers nationwide to install and maintain traffic control devices. This includes sign design specifications related to size, type and placement. It is considered a best practice to use MUTCD standards for the design and placement of off-road signs. Local jurisdictions may have additional requirements. During each phase of a given project, design professionals should coordinate with the local jurisdiction to determine if there are any additional approval processes and procedures to take into account for the project. Signage should seek to balance jurisdictional regulations and local design guidelines or preferences.

When placing destination names on signs, the use of abbreviations should be kept to a minimum whenever possible. When insufficient space is available for full wording, MUTCD approved abbreviations may be used (see MUTCD Section 1A.15, Table 1A-1).

All on-road signs must be retroreflective or illuminated to show the same shape and similar color by both day and night. The requirements for sign illumination shall not be considered to be satisfied by street or highway lighting.

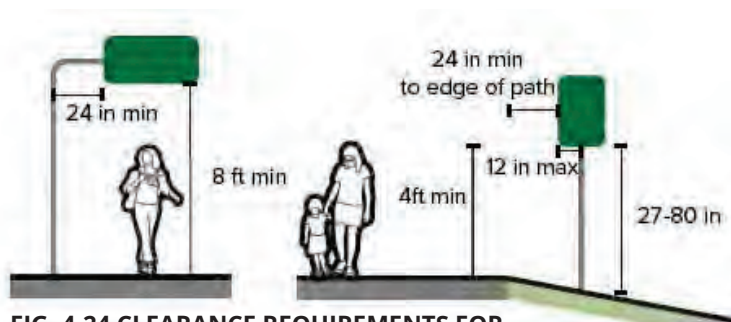


FIG. 4-24 CLEARANCE REQUIREMENTS FOR SHARED USE PATHS

The lettering for names of places, streets, and highways on conventional road guide signs shall be a combination of lower-case letters with initial upper-case letters. All other word legends on conventional road guide signs shall be in upper-case letters and follow MUTCD guidance for size.

PLACEMENT

Placement is key to effective signage. Signs must be within a viewer's sight line without inhibiting the flow of all user movements. MUTCD, AASHTO, and the ADA provide guidance regarding placement of on- and off-road signs.

GUIDANCE

- All on-road signs must be placed in accordance with Section 2A.16 of the MUTCD.
- All overhead signs over a shared-use path must have a clearance of eight feet and be a minimum of 24 inches from edge of path to the post.⁵
- All signs along a shared use path must be two feet from edge of path to sign edge and be a minimum of four feet from the top of sign to the top of path.⁶
- Signs for bicycle facilities and shared-use paths should follow guidance and sizes provided in MUTCD Table 9B-1 for "Bicycle Facility Sign and Plaque Minimum Sizes." The layouts shall be as shown in the "Standard Highway Signs and Markings" book.



SIGNAGE TYPES

ROADWAY SIGNAGE

Use and placement of all roadway regulatory, warning, guide, and other signs should be MUTCD-compliant. The MUTCD contains standards, guidance, and options for signing to communicate regulations, warnings, and guidance for road users. Specifically, Chapter 2B provides guidance about regulatory signs, including for pedestrians, and Chapter 9B provides guidance about bicycle signs.

Standard regulatory and warning signs should be used at appropriate locations in advance of the intersection or crossing locations. Examples of some such signs are shown in Figure 4-25. The combined bicycle and pedestrian crossing sign with supplemental "Trail X-ing" plaque may be used as appropriate for trail and sidepath crossing locations. Other regulatory signs and plaques for bicycle facilities, such as "Bike Lane," "Bike may use full lane," and "Begin right turn lane yield to bikes" may also be used as appropriate. Signs should be located based upon speed limit, as provided for in the MUTCD.



ETIQUETTE SIGNAGE

To help guide usage of trails and create a safe and comfortable environment, etiquette signage may be placed at trailheads on kiosk signage and in printed material for public distribution. Below is a partial list of suggested points that may be included in etiquette signage. Not all information will apply to all trail types or uses, and this information should only be posted as necessary in appropriate locations, such as entry points to a trail.

- Respect private property.
- Respect other visitors and their experience.
- Use caution when using headphones. You may not be able to hear warnings.
- Keep your dog under control at all times.
- Share the trail. Keep right except to pass. Warn people when you are planning to pass.
- Bicyclists yield to pedestrians.
- Be friendly and courteous.
- Stay on the trail.





MUTCD R10-15



MUTCD W11-15



MUTCD R1-5



MUTCD R1-5b

FIG. 4-25 EXAMPLES OF BICYCLE AND PEDESTRIAN REGULATORY AND WARNING SIGNS



TRAIL SIGNAGE FOR A SEGMENT OF THE KENNESAW TRAIL SYSTEM



TRAILHEAD SIGNAGE

Care should be taken to be mindful of arrival sequencing for all modes of transportation. Sign placement should be useful, visible, and used strategically to avoid unnecessary clutter. The context and setting of the trailhead are also important. More signage is appropriate at major trailheads than at minor ones. For smaller neighborhood connector-style trails, a simple entrance marker symbol may be sufficient.

GATEWAY MARKER

Gateway Markers should be used as a simple totem, used at larger Gateway or Trailhead sites, announcing the presence of the trail. The marker should be placed in a prominent and central location, ideally within view of the trail entrance.

KIOSK

Kiosks should be placed at Gateway sites to serve as system-wide education tools, trip planning devices, regulatory information centers, and interpretive signs. Maps should include the entire trail network and indicate where the user is located within the system. Use of the single or double panel kiosk is at the discretion of the designer. Considerations should be taken to provide ample circulation around the kiosk and nearby seating.

VEHICULAR ENTRY SIGN

Intended as a primary trail identification sign for Gateways and Trailheads with parking, vehicular entry signs should be within clear view of vehicles traveling along the roadway with a plan to manage or clear surrounding vegetation to provide visibility. When possible, place this sign outside of the right-of-way.

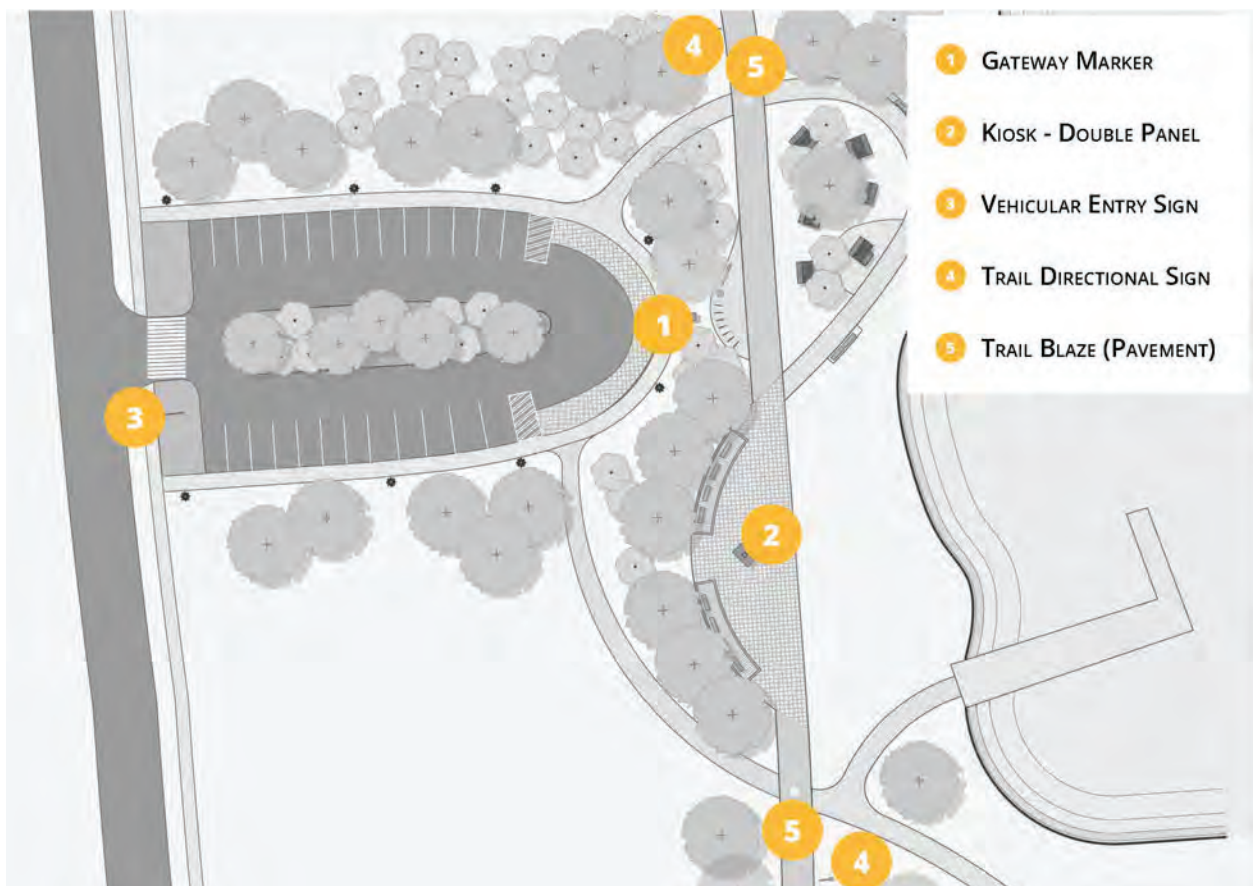


FIG. 4-26 SUGGESTED TRAILHEAD SIGNAGE PLACEMENT DIAGRAM

DIRECTIONAL SIGN

Directional signs serve as both navigation and encouragement programming devices. These signs are placed within communities to direct intended users to the trail system. These signs build awareness of the system by creating a presence for the greenway outside of the system. Directional signs may also be attached to posts of existing signs as well as to community light posts.

TRAIL BLAZE

Trail blazes are used to identify a given trail to users along its length to keep them oriented and certain of their location. Pavement blazes are markings that reinforce user confidence and awareness of the identity of the trail along its length. Tread markings can be a variety of materials, including thermoplastic, paint, and vinyl decals, each with a variety of life span. Whichever product is chosen, they should be installed by a specialized

contractor and per product specifications. Tread markings are best used in areas where directions are not needed but confirmation that users are still on the trail is still needed.

INTERPRETIVE SIGN

Interpretive displays provide greenway and trail users with information about the path, wildlife, vegetation, history and the significance of elements along the corridor. They may be combined with public art and sculpture. Interpretive displays are typically installed at Gateways, Trailheads, vistas, or notable points along the trail. Interpretive signs primarily serve an informational or educational function. They should be clear, easy to understand, and engaging. Local historians or experts should be consulted when preparing content. Signs should also be weather-proof or protected from the elements and secured to the ground.



MINOR TRAILHEAD ON THE ATLANTA BELTLINE EASTSIDE TRAIL MAKES USE OF SEATING, SIGNAGE, AND PUBLIC ART



WAYFINDING SIGNAGE

A wayfinding system consists of comprehensive signage and pavement markings to safely guide users to destinations along preferred routes. Signs throughout the network should, at a minimum, indicate to users the direction of travel, the locations of destinations and the travel time/distance to those destinations. Other sign purposes include education about natural features and cultural landmarks. Sign messages should be considered in the context of the sign placement for safety and convenience. Signs should avoid directing users to destinations which they cannot access safely. For this reason, signs might need to be phased in or revised along sections of trails with proposed connection facilities.

Trail wayfinding signs should communicate the name of the trail or system, distance to nearby destinations, and if space permits, tell people how long it will take to get there. The image at right is an example from Portland, OR. Wayfinding signs along the trail should be of pedestrian scale and oriented to trail users, whereas wayfinding signs along roads are generally of a more vehicular scale and directed at motorists. Sign clutter can confuse users and should be avoided. Trail signs should not repeat messages that already appear on existing vehicular or bicycle signs. Sign clutter can sometimes be reduced by grouping signs on the same supports. See Section 2A.16 of the MUTCD for more information.

Trails should be marked at regular intervals with distance or mile markers, which show the distance or mileage at that point from one end of the trail. Mile marker signs are simple distance markers and may include an official symbol for the trail and often, no other route markers are needed; however, directional, regulatory, and cautionary signs should all be used along trails, depending upon location and context.

Components of a successful wayfinding system include standards for logos, color, typography, and symbols. All of these elements should provide consistency across a range of sign types, including trailhead identification signs, trail markers, mile markers, pedestrian directional signs, regulatory signs, confidence markers, interpretive signs, and information kiosks.

Consistency in signage should ideally be throughout the entire county-wide system; however, it is understood that individual branding already exists for some individual trails. Figure 4-27 provides an example of one way to blend and integrate state, regional, and local brands in signage. For future signage along Cobb County trails in unincorporated areas, a county-specific trail logo and wayfinding system should be developed and implemented as priority trails are constructed. Where future signage is needed along county-wide corridors that cross jurisdictional boundaries, partner logos should appear on the county-wide signage package. Inclusion of city or CID logos also aids in user orientation and unites the trail as a regional transportation and recreation facility.

Cobb County may choose to develop a cohesive signage family that local governments can use if they cannot invest in their own signage system. For communities that already have their own creative identity, the county can include a “blaze” or “rider” that can be added to the local signs. This accomplishes the simultaneous goals of preserving the unique identity and branding of the local trails while identifying them as a component of the county-wide system. An example of how to blend regional and local signage is provided on the following page. The package showcases the individual trail, while also communicating that it is part of the local and regional brands.





THE AWARD-WINNING SKIP SPANN CONNECTOR IS A GOOD EXAMPLE OF A MULTI-MODAL FACILITY

5

RECOMMENDATIONS

FILLING GAPS & CONNECTING THE DOTS

This chapter provides recommendations for new trail projects and associated improvements that respond to the challenges and opportunities in planning, designing, and constructing greenways and trails in Cobb County as outlined in Chapter 3 and guiding principles laid out in Chapter 1. Recommendations include priority greenway and trail projects, new proposed trails, other capital projects, and associated recommendations.



GUIDING PRINCIPLES



SAFETY AND SECURITY



ACCESSIBILITY



ECONOMIC COMPETITIVENESS



CONNECTIVITY AND ACCESS TO DESTINATIONS



COMFORT AND DESIGN FOR EVERYONE



EQUITY



ENVIRONMENTAL SUSTAINABILITY



PRIORITIZATION/OPPORTUNISTIC IMPLEMENTATION

Building upon the elements of a successful trail network, understanding of trail user types, and design guidance, several guiding principles were developed to establish an approach to trail and greenways design and implementation that mirrors the key qualities of successful walking and bicycling networks established ARC's *Walk. Bike. Thrive!* report as well as previously approved Cobb County plans and studies.



SAFETY AND SECURITY

Cobb County should be an active community where bicycling and walking are safe, healthy, fun, and part of everyday recreation and transportation options.

A network of interconnected active transportation facilities that considers personal safety and accessibility in its design will attract and sustain activity. Cobb County supports the tenets of Vision Zero – a policy-driven and action-based response to reducing preventable traffic deaths by valuing human life over mobility, sharing responsibility between providers and regulators, mitigating roadway designs that are inhospitable to users, especially the most vulnerable, and coordinating change between providers, regulators, and users. Safety improvements focused on crash hot-spot areas, particularly those that have high incidents of fatalities and serious injuries, are likely to have the greatest impact.

Crime Prevention Through Environmental Design (CPTED) is a proactive crime fighting technique in which the proper design and effective use of the built environment can lead to a reduction in the fear of and incidents of crime and an improvement in quality of life. In contrast to the approach of addressing crime concerns by implementing visually affronting security or target

hardening measures such as locks, hard barriers, security gates, security patrols, etc., CPTED promotes high quality and visually pleasing solutions as first responses that aim to enhance the legitimate use of space. CPTED can be applied without interfering with the normal use of spaces. It is easy to apply and can be economical to implement, especially if done during early planning and design stages of a project.

The Principles of CPTED are:

- Natural Surveillance
- Natural Access Control
- Territorial Reinforcement
- Maintenance



ACCESSIBILITY

At the core of accessibility is inclusivity. An active transportation system needs to meet the mobility needs of all users, including senior citizens, children, people in wheelchairs and people with visual or hearing impairments.

Adhering to the design guidelines established by the Americans with Disabilities Act (ADA) and removing barriers will ensure universal access. Additionally, Cobb County can encourage walking and bicycling on their trails by focusing on creating network connections for short trips that allow residents and visitors to access work, transit, and daily needs. This approach closes gaps in the network, considers travel sheds – distances most people are willing to travel on foot and by bike – and leverages existing walkway, bicycle, and trail facilities. Establishing first- and last-mile connections to transit, especially in areas where access to a personal vehicle is limited, will also increase access.



ECONOMIC COMPETITIVENESS

A comprehensive trail network will not only boost personal health, but economic health too. A well-connected trail network in Cobb County will link people to jobs, shops, restaurants, historic sites, and parks; create a strong sense of place for local residents; and attract tourists from the Atlanta Region and beyond.

The Chattahoochee River, Kennesaw Mountain, and communities from Acworth to Marietta to Austell will be seamlessly connected, providing residents and visitors fun and healthy ways to enjoy the cultural amenities and natural landscapes of Cobb County. This attractive force will be felt in the tourism industry and real estate market on multiple levels: it will draw in visitors, increase property values, connect people without access to personal vehicles to places of economic opportunity and cultural destinations, and attract people looking to buy homes or open new businesses.



CONNECTIVITY AND ACCESS TO DESTINATIONS

An interconnected network of trails will enable people to get where they want to go. Pairing Cobb's local trail network with inviting public spaces, sidewalks, and all ages and abilities on-street bikeways will increase convenience and enhance direct connections.

Short trail segments, or neighborhood connector trails that prioritize key destinations like schools, parks, town centers and commercial cores, and grocery stores will have the greatest impact. It is also important



to provide connections to, from, and between:

- Major parks and recreation sites like Kennesaw Mountain, the Chattahoochee River National Recreation Area, and Allatoona Creek Park, as well as Lakes Acworth and Allatoona
- Colleges like Kennesaw State University, Life University, Gwinnett College, and Chattahoochee Technical College
- Cities and towns like Acworth, Austell, Kennesaw, Marietta, Powder Springs, Smyrna, and the Cumberland, Town Center, and Gateway Marietta CIDs
- Regional trail networks like the Silver Comet and NW Corridor Trail that will facilitate long-distance travel, opening the door to regional travel by bike



COMFORT AND DESIGN FOR EVERYONE

Comfort directly encourages or hinders a person's decision to walk, roll, or ride a bike. Recognizing this, Cobb County aims to design trails that consider users well-being, as well as to identify and improve current areas of discomfort.

Providing adequate trail widths, considering microclimates, accounting for adjacent roadways and intersection conflict points, wayfinding signage, and supporting trail amenities all add to a person's sense of comfort and ensure that trails can be used by everyone. Trail design and placemaking that suit the local context also contribute to an increased level of comfort. Cobb County can ensure its trails are welcoming environments by implementing best practices of Crime Prevention Through Environmental Design (CPTED) that influence the built environment (see above) and by adhering to the design standards set forth in Chapter 4 of this plan document.



EQUITY

Cobb County strives to develop an equitable multi-modal transportation network by providing access and connectivity for all residents and visitors.

Development of an equitable greenway and trail system that serves all residents and visitors is a priority for Cobb County. This includes connections in disadvantaged areas, such as with a high proportion of households with no vehicle or one vehicles. Equitable Target Areas, as defined by the Atlanta Regional Commission, are areas that warrant special attention for recreation and active transportation improvements.



ENVIRONMENTAL SUSTAINABILITY

Greenways and trails are prime opportunities to contribute positively to environmental health. Cobb County seeks opportunities to improve environmental conditions through siting, design, and increased use of greenways and trails.

Cobb County can seize opportunities to improve environmental health through development of a greenway and trail network that respects the natural environment through the use of sustainable practices and materials. Greenways and trails are great opportunities to promote natural stormwater filtration and groundwater recharge, increase tree coverage, and reduce impervious surfaces. Plus, providing options for biking and walking can help reduce CO₂ emissions and fuel consumption.

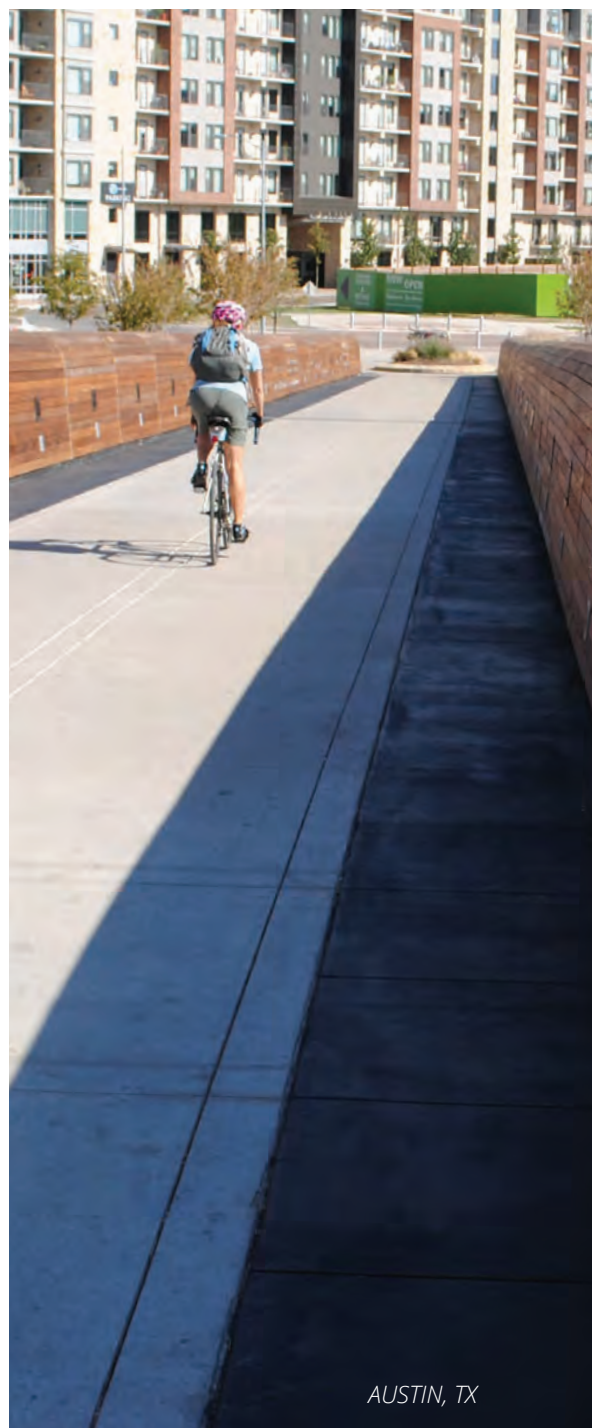


PRIORITIZATION/OPPORTUNISTIC IMPLEMENTATION

Expansion of any trail network happens incrementally over time. Cobb County can establish a framework for prioritizing future investments in the greenway and trail network based upon the criteria used to identify Countywide focus areas and priority projects in this Plan, while also taking advantage of opportunities to construct trail segments in conjunction with other projects as they arise.

While it is helpful to prioritize potential projects and investments based upon needs, funding availability and other factors, it is also important to be able to leverage other projects and seize unanticipated opportunities. Prioritization criteria for greenways and trails may include things like: closes network gaps, connects to regional trails, connects to high concentrations of potential users, and connects to key destination(s). However, the results of a prioritization exercise should not preclude opportunistic implementation of a trail if it can be built outside of its scheduled phasing. Coordinating with resurfacing and re-engineering projects that are already programmed through Cobb County, its Department of Transportation, or partner agencies or jurisdictions can greatly reduce costs.

SEIZE OPPORTUNITIES TO BUILD TRAIL SEGMENTS IN CONJUNCTION WITH OTHER PROJECTS



AUSTIN, TX



2020 AND BEYOND: RECOMMENDATIONS

PROPOSED TRAILS

With guiding principles, design guidance, and best practices as a background, the Greenways and Trails Master Plan provides recommendations for new greenway and trail projects, including eight priority projects, other proposed trails, and complementary non-capital projects. This section describes a scoring exercise used to evaluate proposed trail projects in order to help guide future decisions about project implementation. It also highlights the eight priority greenway and trail projects, briefly describes new proposed trails directly identified through this planning process, and summarizes associated capital improvement projects and other recommendations.

Chapter 6 – Implementation Strategy provides overarching guidance to assist with future decision-making about which projects to implement as well as policy and programmatic considerations to support new biking and walking infrastructure.

Hundreds of miles of greenways and trails have been proposed through various plans and studies over the past several years. These projects represent hopes and aspirations of creating a vast interconnected network; however, it is unlikely that all of these proposed trails will be built in the near future. Over time, it will be necessary to revisit and refine proposed trail projects based upon needs and priorities at the time. As discussed elsewhere in this *Plan*, there are plentiful opportunities to improve upon and expand the greenway and trail network in Cobb County. With the current round of SPLOST-funded greenway and trail projects already significantly underway, the focus of this *Plan* is to identify the next set of logical, strategic investments – those projects that will be the County's focus over the next five to ten years.

These recommendations will result in a more interconnected network across Cobb County, in which biking and walking can be a greater part of everyday life for residents and visitors. Other recommendations are intended to support and complement investments in infrastructure and facilities, enhancing connectivity, giving people more choice in how they get around, and encouraging biking and walking as convenient, viable modes of travel.

**DATA SHOWS THAT IF ALL OF THE
207 MILES OF PROPOSED TRAILS
WERE TO BE BUILT:**

- **ROUGHLY 57% OF COBB COUNTY'S POPULATION WOULD LIVE WITHIN ONE MILE OF A TRAIL**
- **APPROXIMATELY 93% OF JOBS IN COBB COUNTY WOULD BE WITHIN ONE MILE OF A TRAIL**
- **NEARLY 171 MILES OF TRAILS COULD BE ACCESSED WITHIN ½-MILE OF COBBLING STOPS (315 MILES OF TRAILS WITHIN THREE MILES OF BUS STOPS)**
- **ROUGHLY 92% OF PARKS IN COBB COUNTY WOULD BE ACCESSIBLE WITHIN ONE MILE OF A TRAIL**
- **ABOUT 213 MILES OF TRAILS WOULD BE ACCESSIBLE WITHIN ½-MILE OF K-12 SCHOOLS**

Includes Cobb County multi-use trails and trails in National Parks. Source: Atlanta Regional Commission, U.S. Census Bureau's American Community Survey 2011-2015 5-year Estimates, and project team calculations, as of December 2017.



IMPLEMENTATION GUIDANCE

SCORING PROPOSED PROJECTS

Throughout the course of the development of the *Greenways and Trails Master Plan*, the project team received **more than 180 suggestions** for locations of new trails from citizens and community members. In addition, there are more than **205 miles of trails that have been proposed** as part of previous plans or studies, approved by the County, Cities, and/or CIDs. Although this *Plan* emphasizes the priority projects to be pursued over the next five to ten years, beginning with the next SPLOST, it is also a framework for long-term coordination and development of future trail projects.

To that end, this *Plan* groups proposed trails into tiers in an effort to help guide future decisions about longer-term implementation. The results of this grouping do not specify a particular order of project implementation and are not meant to preclude development of trail projects as opportunities arise. In many cases, it may make sense to take advantage of opportunities to implement projects in conjunction with new development or roadway projects. The implementation order may vary based upon available funding, future land acquisition, and development projects. For example, a lower tier project may be able to be built in conjunction with redevelopment projects or roadway design projects, helping reduce overall costs. It is important to remain flexible, and as opportunities arise, to consider proposed trails and determine at the time whether to advance those projects on a case-by-case basis.

Scoring of proposed trails is based on the methodology summarized on the following pages. Criteria were developed collaboratively by the project team in consultation with County staff, based upon criteria used in similar planning efforts, and in consideration of regional and countywide strategies and priorities.

INITIAL ASSESSMENT OF COMMUNITY SUGGESTIONS

The first round of assessment was intended to narrow the list of community-provided suggestions. In total, community members and stakeholders suggested **more than 330 miles** of trails. To determine which community suggestions would be considered for scoring and possible inclusion as new “proposed” trails in the *Plan*, the project team conducted an initial screening, based upon potential connectivity, overall length, and proximity to schools and parks. The team also screened for locations that would be better candidates for on-street bike facilities, such as shared streets or neighborhood bikeways. This resulted in a set of **66 community-suggested greenways or trails** that were considered as part of the proposed project scoring process. All citizen suggestions have been preserved in Geographic Information Systems (GIS) data, maps, and in written format so that they can be referred to and revisited in the future. (Maps of all community suggestions are provided in Appendix C).

SCORING OF PROPOSED TRAILS

The scoring exercise was designed to produce a composite score of all trails that have been proposed in previously approved plans and studies (which have been shown as “proposed” trails on the Cobb County Trail Map) along with the identified subset of community suggestions, and new projects identified through this planning process. The purpose of the scoring exercise is to inform decisions about future project selection and implementation; the results are not intended as an automatic vetting or expression of support for individual projects.

In keeping with the overall framework and strategies recommended by ARC in the regional walking and biking plan, *Walk.Bike.Thrive!*, the scoring criteria emphasized regional connectivity; opportunities for trails to

become destinations and generate economic activity; linkages and connectivity to trails of Countywide significance (spine trails); their ability to close gaps in the existing network; and proximity to public transportation. They also reflected criteria used by Cobb County for prioritization of sidewalk projects and factors identified by ARC that yield good investments in active transportation, such as propensity for biking and walking and location in equitable target areas.

Scoring criteria used in this *Plan* built and expanded upon these criteria to consider stated plan goals, such as potential for attracting visitors (a measure of economic development potential), improving connectivity by linking to other trail segments, and factors such as proximity to schools and parks, roadway conditions, and more. The criteria were grouped into three categories, reflecting important components of the viability of greenway and trail projects:

- 1) Demand
- 2) Connectivity
- 3) Project Readiness

Within these three categories, a total of 18 criteria were used to evaluate potential trail projects. Scores were assigned for each criterion based upon quantitative and qualitative data. Criteria were weighted somewhat, differentiating between greenway trails and sidepath trails, to account for factors that would affect viability and project readiness for a trail alongside roadways versus those in a more natural setting, such as roadway conditions and environmental considerations. For additional details on this process, see Appendix D.

Proposed trails were grouped into several tiers that reflect how well projects meet the criteria listed above. Generally speaking, higher tier projects meet more of the above criteria, whereas lower tier projects meet fewer of these criteria.

Demand:

1. Proximity to Schools
2. Proximity to Parks
3. Proximity to Transit
4. Serving Areas of Low Auto Ownership
5. Proximity to Activity Centers
6. Proximity to Recreation Centers / Community Facilities
7. Potential to Become Destination in its Own Right
8. Serving Equitable Target Areas
9. Serving Areas of High Biking and Walking Propensity

Connectivity:

10. Connects to or is Part of Major Spine Trail
11. Potential for Regional Connection
12. Completes a Gap in the Trail Network
13. Feeder to Existing or Programmed Trail

Project Readiness:

14. Multi-Agency Collaboration
15. Availability of Public Lands
16. Roadway Environment / Potential Barriers
17. Environmental Permitting
18. Community Value

Figures 5-1 and 5-2 show the results of proposed project scoring for greenway trails and sidepath trails. These tiers are not binding and should not necessarily discourage or preclude the implementation of any of the trails, should interest and opportunities arise. The scoring can be used as part of a decision-making process that will also take into consideration other factors such as available resources. It is fully anticipated that in the future, as the *Greenways and Trails Master Plan* is updated, the tiers and priorities will shift according to change in Countywide priorities, available resources, and the context of the physical environment around proposed trail corridors. A list of all proposed trails is provided in Appendix D.

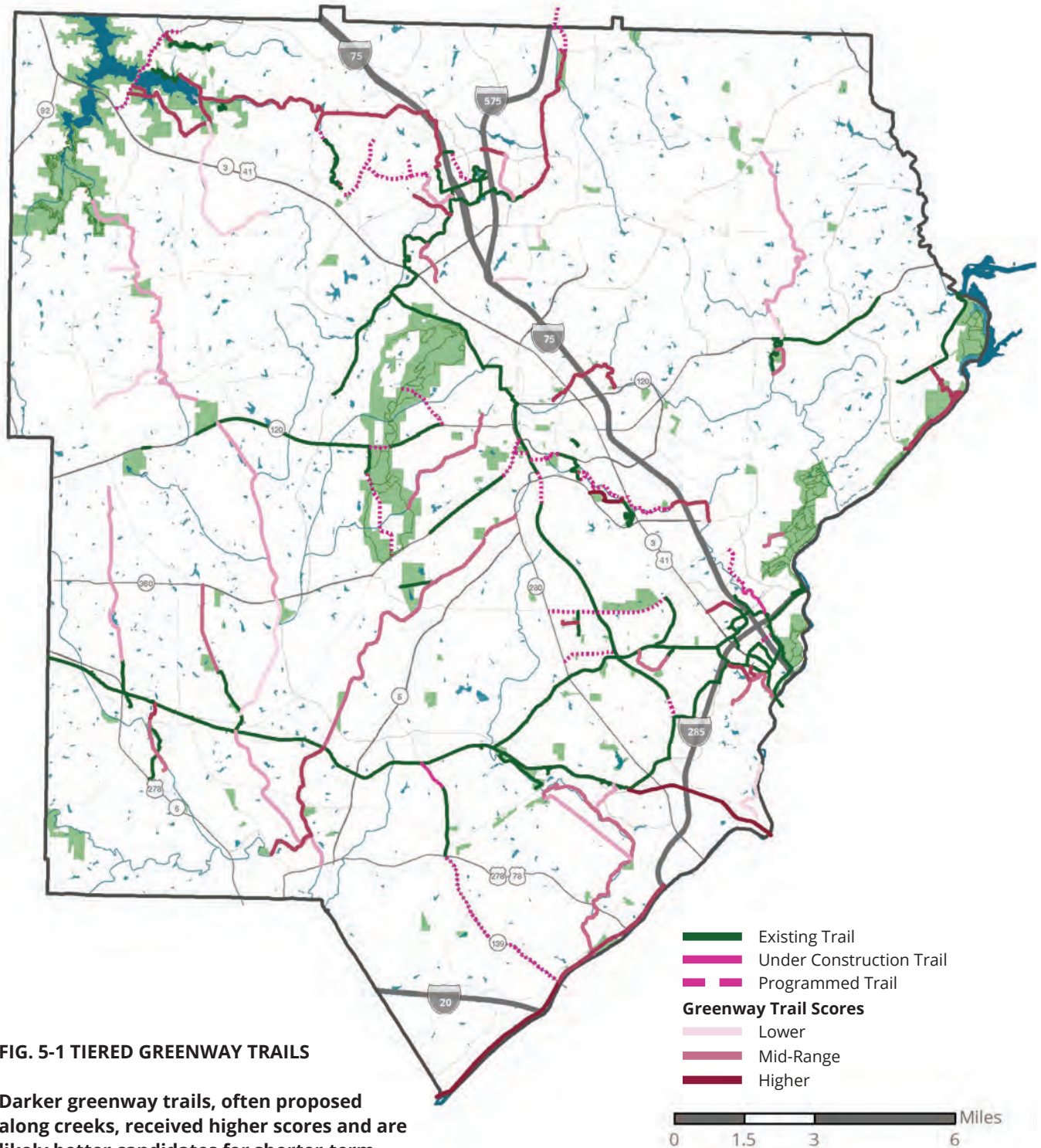


FIG. 5-1 TIERED GREENWAY TRAILS

Darker greenway trails, often proposed along creeks, received higher scores and are likely better candidates for shorter-term implementation than lighter greenway trails, which did not score as well.

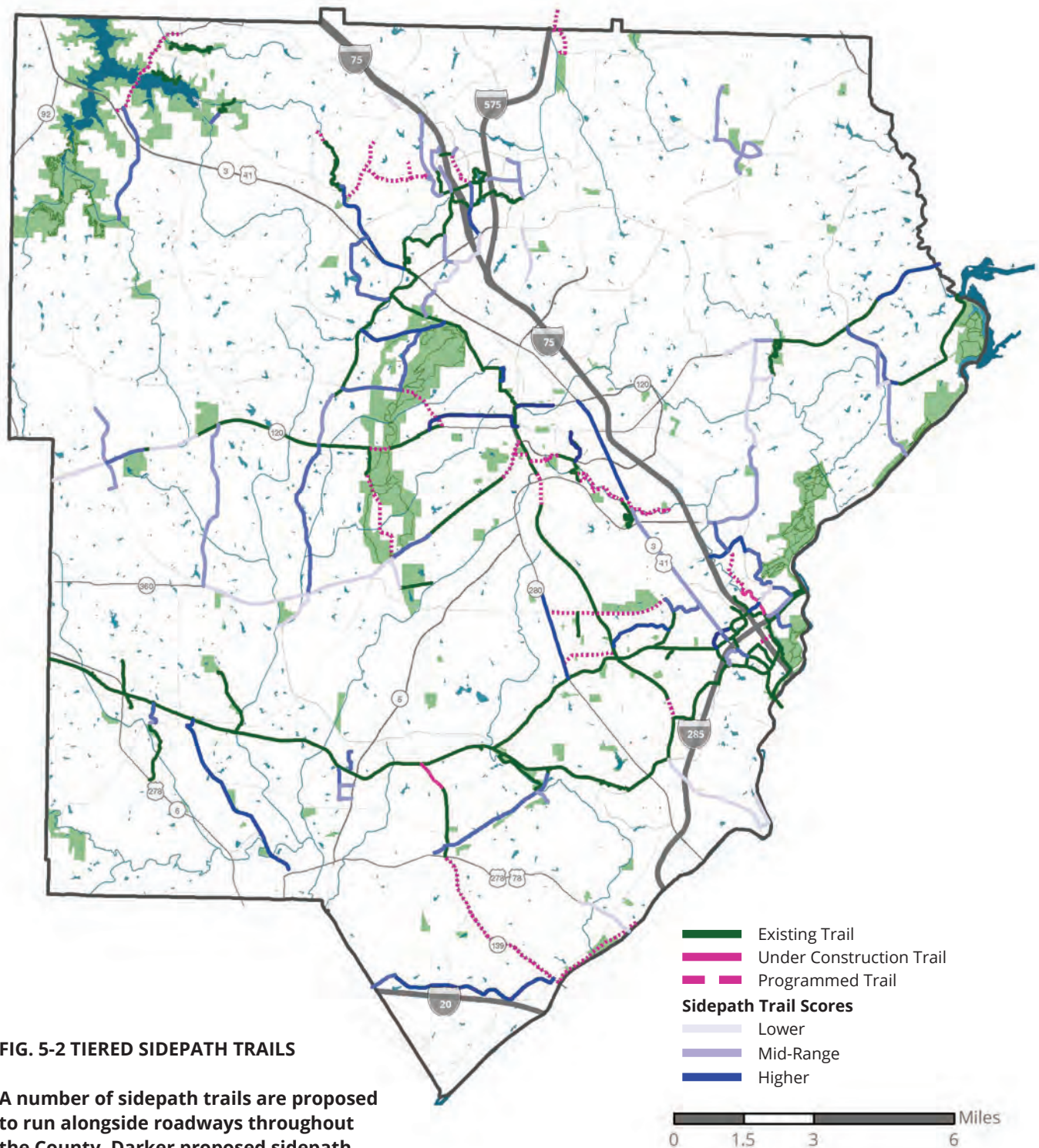
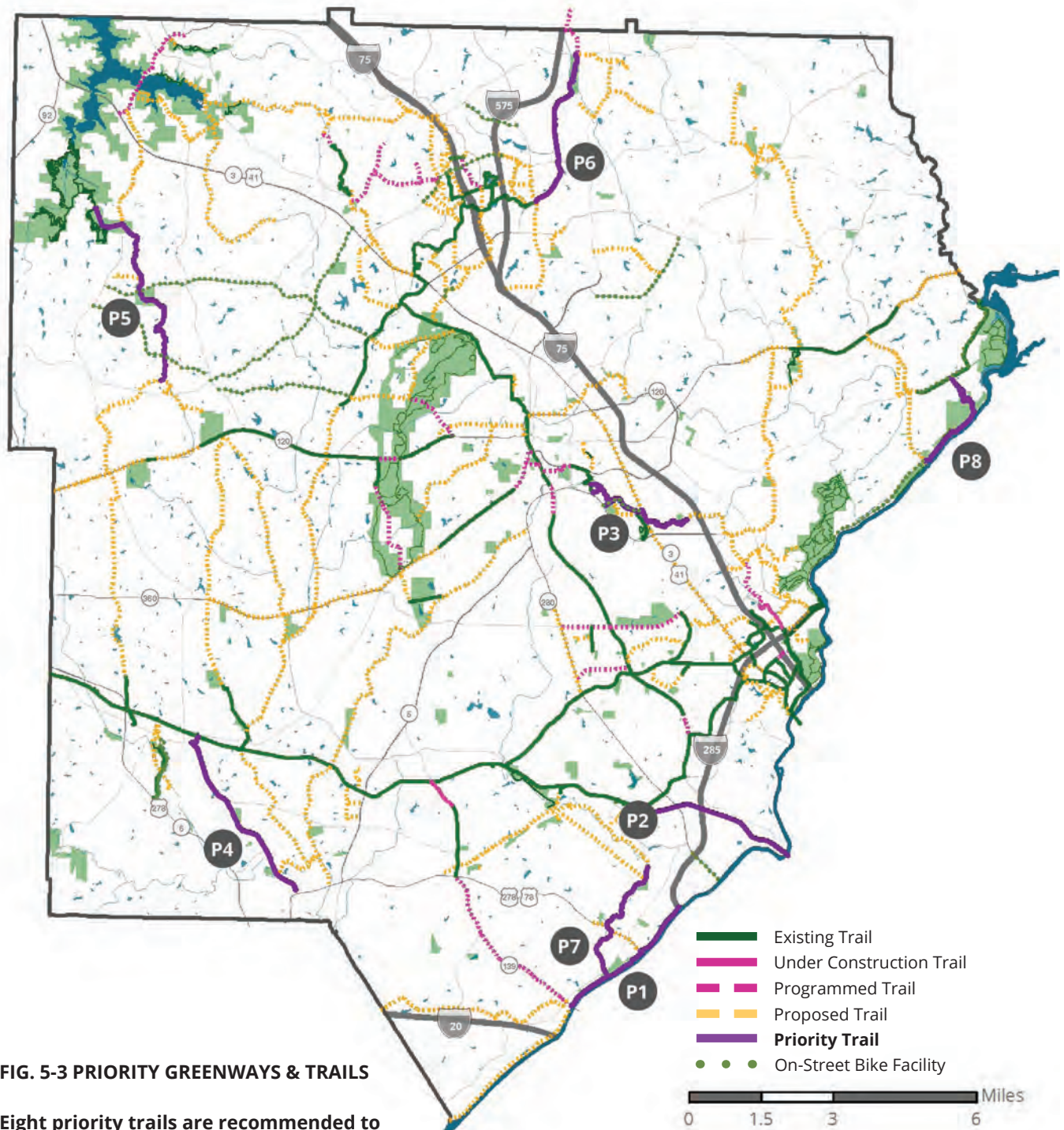


FIG. 5-2 TIERED SIDEPATH TRAILS

A number of sidepath trails are proposed to run alongside roadways throughout the County. Darker proposed sidepath trails received higher scores and are likely better candidates for shorter-term implementation than lighter ones.



PRIORITY GREENWAYS & TRAILS

OVERVIEW

The following pages offer descriptions of identified priority projects along with anticipated benefits, potential challenges, and reference maps. These descriptions are accompanied by separate project “cut-sheets” with illustrations, maps, planning-level cost estimates, and key features of each project, provided in Appendix A.

Based upon a combination of the results of the scoring process, community input, and input from Cobb DOT, **eight projects** have been identified as **priorities for implementation** (see Figure 5-3). Identification of priority projects was based upon numerous factors such as willing project partners, public support, potential for improved connectivity, geographic distribution, demand and propensity for walking and biking, opportunities for regional connections, and the potential for trails to become destinations and attract visitors.

Designation as a “priority” means there is support and momentum for these projects and that they should be prioritized in terms of funding for design and construction. They represent strategic priorities because they meet multiple stated plan goals, have support from partner agencies, and will confer significant benefits to the overall trail network and community in general. Potential benefits include:

- Direct and indirect health benefits from increased physical activity and access to

greenspace and recreation, in the form of reduced healthcare costs and reduced risk of chronic disease

- More people will have the option to bike or walk instead of drive for day-to-day trips or work commutes, reducing congestion and improving human and environmental health
- Increased potential for short non-automobile trips and longer multimodal trips through connections to existing sidewalks and transit service
- Enhanced access to and development of walkable, vibrant centers
- Access to and preservation of natural areas, wildlife, and greenspace
- Environmental benefits from increased vegetation, which produces oxygen, filters air pollutants, reduces erosion, and filters stormwater runoff
- A more equitable and accessible transportation system with more travel options for people of all ages and abilities, including under-served communities, vulnerable populations, and those who lack access to vehicles
- Improved access to natural and cultural resources, including parks, historic areas, creeks and streams, and the Chattahoochee River, as well as places like schools, workplaces, recreation facilities, and commercial areas
- Expanded opportunities for social gatherings, public art, and better use of underutilized public property



P1 - CHATTAHOOCHEE RIVER TRAIL

MABLETON PARKWAY TO I-285

The Chattahoochee River Trail has the potential to become one of Cobb County's most appealing and most important assets. It would highlight what is arguably one of the County's best kept secrets – the Chattahoochee River. The Trail would provide unprecedented access to the portion of the river south of I-285, giving people the opportunity to see, interact with, and experience nature in a new and unique way. Community members have long advocated for a riverfront trail in this area and it has been discussed and envisioned by groups and organizations including the National Park Service, Chattahoochee NOW, the Trust for Public Land, and Chattahoochee Riverkeeper. In 2017, Cobb County, the Trust for Public Land, and the City of Atlanta were awarded funding to conduct master planning and engineering design of a Chattahoochee River Trail.

Within Cobb County the trail would stretch for just over three miles, from Mableton Pkwy to near I-285, where the Proctor Creek Greenway is anticipated to meet the Chattahoochee River in the future. From there, the proposed trail would cross the river and continue northward within the City of Atlanta to Peachtree Creek.

Steps have been taken to set the stage for waterfront access and a trail in this area. Cobb County owns nearly 47% of the land needed to accommodate a potential trail along this portion of the river. Furthermore, the Riverview Landing development inside the City of Smyrna has pledged to set aside 12 acres of land for public access along the river. There are some areas of steep terrain and it will be important to carefully design access points to encourage public access and ensure safety. The project will need to conform to the standards set as part of Metropolitan River Protection Act (MRPA). The existing utility easement is relatively flat and well-maintained, potentially accelerating the initial phases of the project.

The proposed trail would support the vision for regional connectivity: it could eventually be connected to the Silver Comet Trail via Floyd Road Trail and the programmed Mableton Parkway Trail or the proposed Fontaine Road Trail, providing much-needed trail access in South Cobb. It could also expand connectivity to the south, crossing into Douglas County. The Chattahoochee River Trail would increase public access to the river, offer scenic views, and enable visitors to catch rare glimpses of the river through the design of pull-offs and resting areas with views of the water. It could also set the stage for transformation of an underutilized resource and provide opportunities for complementary economic development and redevelopment of nearby properties.

The project scored relatively well in terms of demand and public support. It would require close coordination with various agencies and entities who control property along the river, including federal agencies, Cobb County, the City of Smyrna, as well as with likely project partners, the Trust for Public Land, and the City of Atlanta.

CONTEXT MAP



REVEAL THE RIVER

"We know that when corridors like the Chattahoochee River take on ideas designed to improve the lives of people, they become life-affirming social spaces and engines for our culture and economy – they bring us together and make our region stronger."

- Ryan Gravel, originator of the Atlanta BeltLine

(Source: www.rivernow.org)





P2 - SILVER COMET CONNECTOR TRAIL

EAST-WEST CONNECTOR TO CHATTAHOOCHEE RIVER

The project known as “Connect the Comet” is a grassroots effort to connect the existing Silver Comet Trail to the Atlanta BeltLine to provide transportation options and greater connectivity. The Silver Comet Trail is a regionally significant, nationally recognized rail trail, built on abandoned CSX railroad track. There have been ongoing efforts to encourage the State of Georgia and other local entities to coordinate with CSX to obtain a lease or easement for use of the rail corridor to complete the Silver Comet Trail. During the summer of 2017, “Connect the Comet” delivered a petition to Governor Deal with more than 4,000 signatures supporting the project. The existing portions of the trail already see significant volumes of users and with a connection to the Atlanta BeltLine, the trail would become even more of an asset.

Completing this segment of the Silver Comet Trail would provide regional connectivity and links to proposed future trails, as well as showcase cultural and historic resources like the River Line Historic Area and Trolley Line Park. Furthermore, the trail would enhance access to public transportation, expand the potential for people to walk and bike to work, and generate significant economic benefits. In 2013, it was estimated that the existing Silver Comet Trail generates more than \$100 million per year in economic expenditures throughout the region and supports about 750 jobs.¹ Furthermore, the proposed trail would fill a void in an area that is currently underserved by greenways and trails, providing much needed opportunities for active transportation and recreation east of I-285 and south of Cumberland.

The Silver Comet – Atlanta BeltLine Connector segment within Cobb County is roughly 3.4 miles between East-West Connector and the Chattahoochee River at the Fulton County line. The majority of the trail corridor is CSX railroad property. The width of the railroad ROW ranges from approximately 100 feet to approximately 180 feet in some sections.

Although most of the corridor is relatively flat, there are steeper segments at either end of the corridor. The existing width of the project should be carefully coordinated to involve all potential partner agencies, including, but not limited to the State Legislature, Cobb County, City of Smyrna, City of Atlanta, Georgia DOT, PATH Foundation, utility companies, and CSX, as well as other stakeholders.

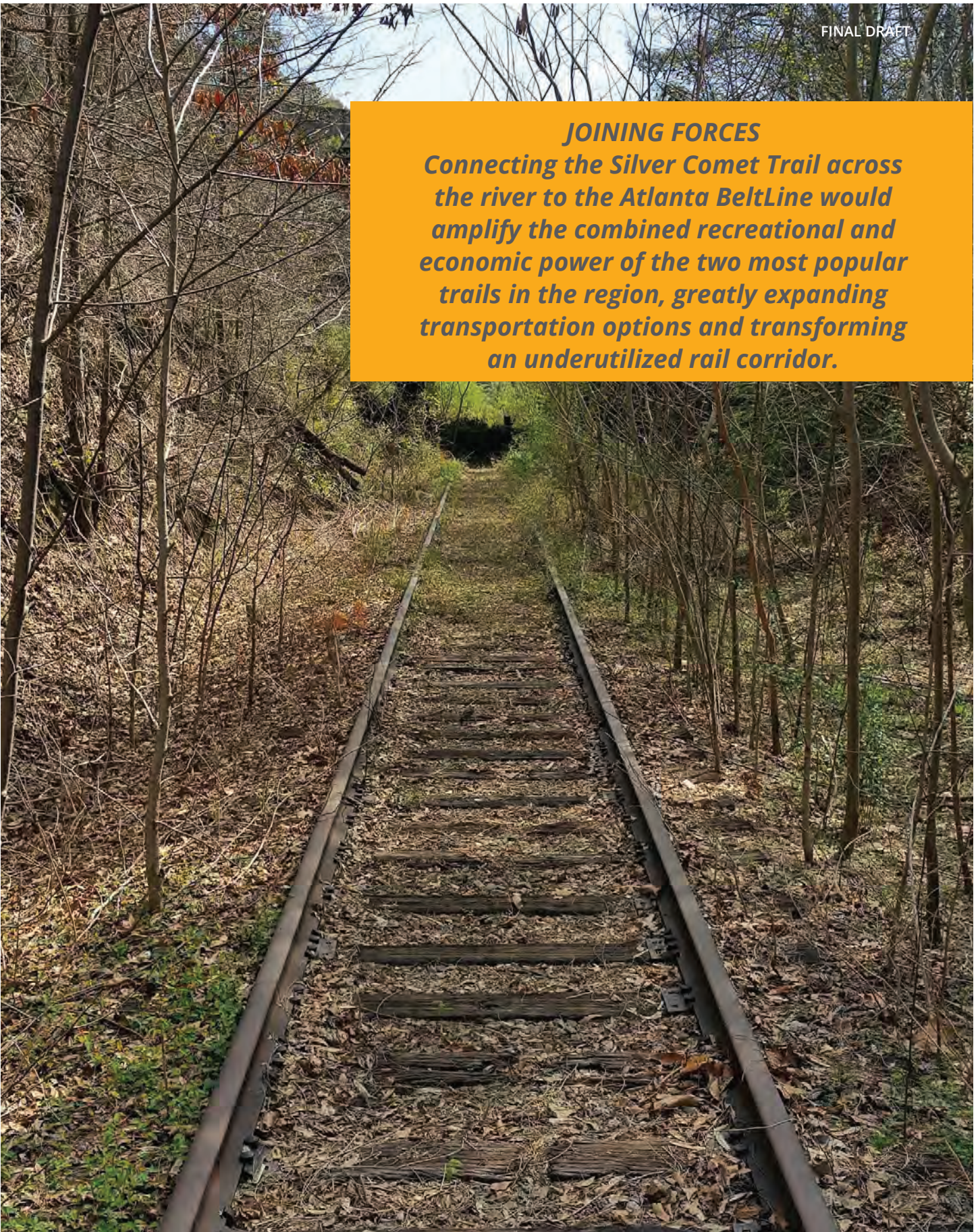
This project scored well in terms of demand and connectivity due to the high potential for regional connectivity, proximity to schools, and connections to an existing spine trail. It also has strong community support, though will take considerable coordination with the railroad and other entities to complete the trail.

CONTEXT MAP



JOINING FORCES

Connecting the Silver Comet Trail across the river to the Atlanta BeltLine would amplify the combined recreational and economic power of the two most popular trails in the region, greatly expanding transportation options and transforming an underutilized rail corridor.





P3 - ROTTENWOOD CREEK TRAIL (PHASE I)

ALUMNI DRIVE TO FRANKLIN GATEWAY

The City of Marietta and its various partners have had a vision for the Rottenwood Creek Trail for years and have made significant progress toward design and construction. It was initially identified as part of the MU2LCI (Livable Centers Initiative) study in 2012. Scoping and concept reports were completed in 2015 and 2016 respectively, and the project is currently undergoing preliminary engineering. The vision is to expand the City's multi-use trail network to facilitate connections to the Bob Callan/Rottenwood Creek, Mountain to River, and Silver Comet Trail networks, improving access, connectivity, and providing greater choice in transportation options.

The 3.3-mile first phase of the Rottenwood Creek Trail would generally consist of a 10-foot-wide paved trail along roadways and Rottenwood Creek. Substantial portions of the trail would lie within floodplain, following easements where possible, while others would travel along local and state roads, requiring close coordination with multiple agencies, which has already begun. Pedestrian bridges and trailheads are also proposed as part of the project.

The project enjoys strong interest and support from partners and the community at large. It would connect City of Marietta recreational facilities, two universities – Kennesaw State University and Life University – to retail and residential uses, and the Franklin Gateway Sports Complex. In addition, the trail will connect to the Rottenwood Creek/University Trail (previously known as Aviation Park Connector), which connects to the programmed Mountain to River Gap Trail in the northeast corner of the Larry Bell Complex, ultimately providing a seamless connection from Town Center and Kennesaw Mountain to the Franklin

Gateway Sports Complex. It would also serve existing bus routes and is within ¼-mile of the Marietta Transfer Center, improving multi-modal connectivity. The project has the potential to provide alternative transportation options as well as recreational opportunities to thousands of students and other community members in the area.

This City of Marietta project is a high Countywide priority for its tremendous potential benefits in terms of providing increased connectivity and multi-modal transportation options in a large activity center. It would serve many people and provide greater access to other trails in the area.

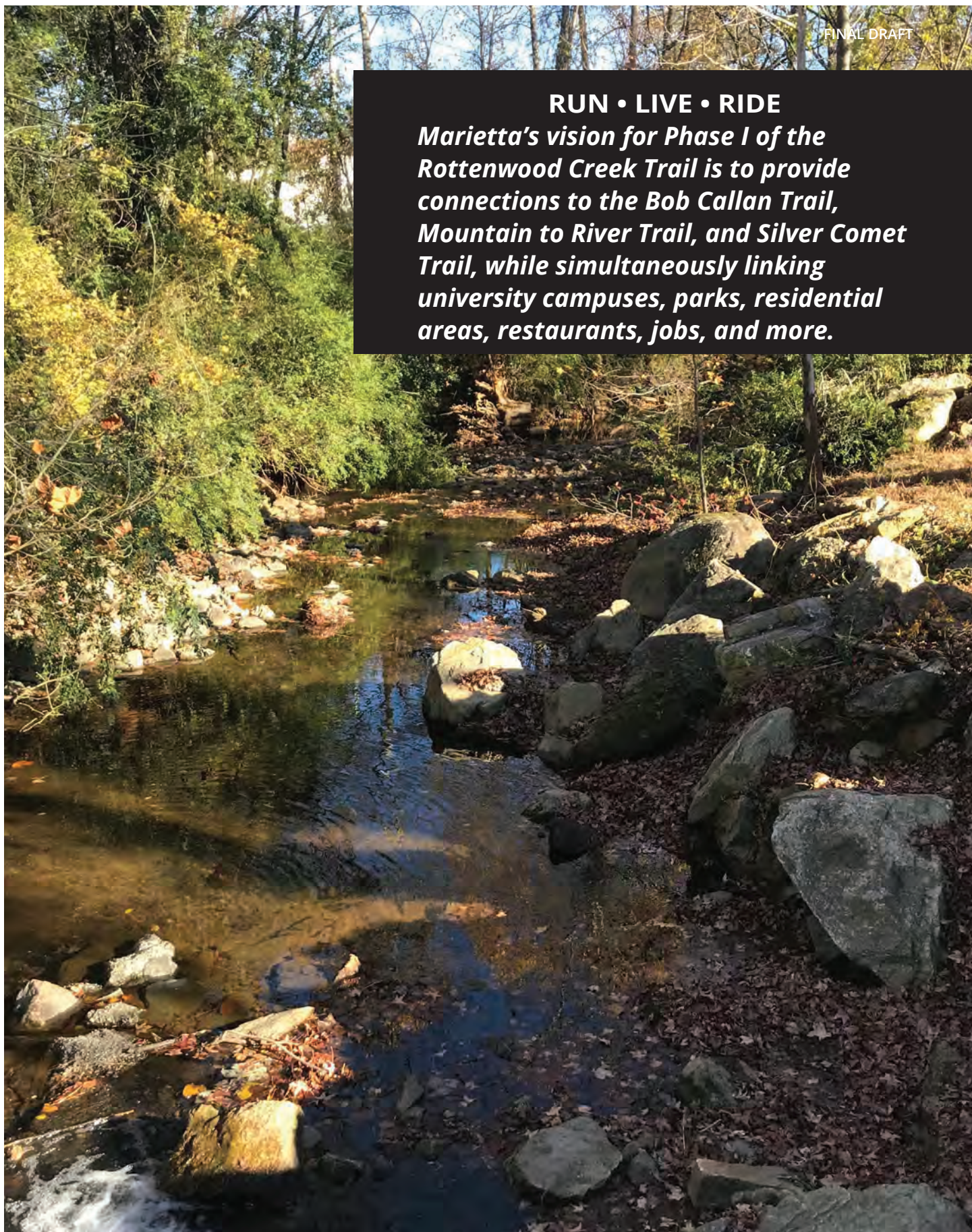


CONTEXT MAP



RUN • LIVE • RIDE

Marietta's vision for Phase I of the Rottenwood Creek Trail is to provide connections to the Bob Callan Trail, Mountain to River Trail, and Silver Comet Trail, while simultaneously linking university campuses, parks, residential areas, restaurants, jobs, and more.





P4 - AUSTELL POWDER SPRINGS ROAD TRAIL

JOE JERKINS BLVD TO SILVER COMET TRAIL

The Austell Powder Spring Road Trail would be the first formal multi-use trail in the City of Austell. It is proposed to run alongside Austell Powder Springs Rd between Joe Jerkins Blvd and Marietta St/Powder Springs Rd, where it would jog slightly east to connect to the Silver Comet Trail and Linear Park at the end of Lindley Rd in Powder Springs. The trail was first proposed as part of *Envision Austell*, the City's 2017 Comprehensive Plan Update. Although other trails are proposed in the area, this one rose up as a priority due to its ability to connect various parts of the community and provide multimodal transportation options.

As the first transportation-oriented trail in Austell, it would greatly increase the community's options for non-automobile transportation to and from a variety of destinations. With quality design, the proposed trail would be an opportunity to preserve and enhance the character of the surrounding areas, including the historic district, while providing safe transportation and recreational opportunities.

The approximately four-mile trail is proposed as a 12-foot-wide paved sidepath connecting multiple schools, parks, and businesses, and increasing access to the Silver Comet Trail. It also would connect recreational and community facilities with businesses. A bridge structure that can accommodate bicyclists and pedestrians will be needed where the road crosses Sweetwater Creek.

The project will require close coordination between multiple entities, as it crosses jurisdictional boundaries between unincorporated Cobb County, Clarkdale Historic District, the City of Austell, and

the City of Powder Springs. The proposed alignment follows a local road, increasing feasibility of construction; however, the presence of the historic district and constrained right-of-way present challenges.

This project scored well in terms of demand, in part due to its proximity to parks, activity centers, community facilities, as well as for serving areas with lower rates of access to automobiles and moderate biking and walking propensity. It also is supported by potential project partners, including the City of Austell and Cobb County Commissioner who represents the district. Other factors include potential for interagency partnerships and the connection to the Silver Comet Trail.

CONTEXT MAP



POTENTIAL TO TRANSFORM

A trail on Austell Powder Springs Road could transform mobility and recreation for residents and visitors, linking two cities, parks, schools, businesses, and providing unprecedented access to the Silver Comet Trail and the Powder Springs Linear Park



P5 - ALLATOONA CREEK GREENWAY

DUE WEST RD TO ALLATOONA CREEK PARK

This nearly five-mile segment of the Allatoona Creek Greenway is part of a longer proposed trail stretching from Dallas Hwy to Lake Acworth along Allatoona Creek and Mars Hill Rd. It would stretch from Harrison High School on Due West Rd to Allatoona Creek Park – the property leased by Cobb County from the Army Corps of Engineers.

The proposed project enjoys support from community groups such as Friends of Price Park and would provide much needed connectivity in West Cobb. It would improve access to the more than 25 miles of mountain bike and hiking trails in Allatoona Creek Park, as well as hiking paths in Price Park. The greenway would increase access to and provide non-motorized transportation options for students, staff, and visitors at several area schools. It would also improve access to the kayak put-in where Allatoona Creek meets County Line Rd.

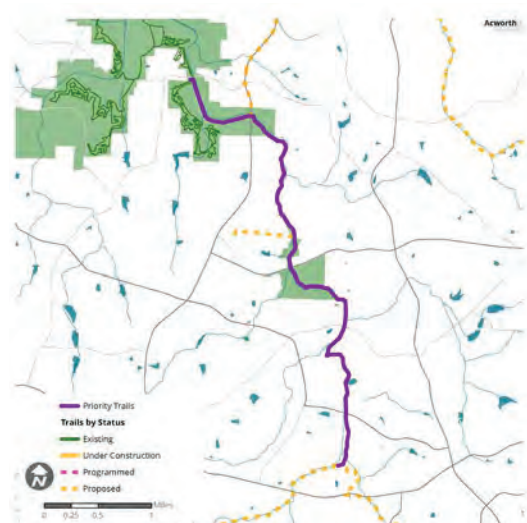
A proposed spur trail would potentially follow power line easements west of Allatoona Creek to provide access to the West Cobb Regional Library, Kroger, and Northwest Family YMCA off of Dennis Kemp Ln, near Stilesboro Rd and Mars Hill Rd. Several opportunities have been identified for trailheads and access points along the proposed alignment.

Substantial portions of the proposed alignment are within floodplain and or wetlands and will require permits and resilient materials. Portions of boardwalk may also be needed in some areas. Recent acquisitions of land by Cobb County mean that more than half of the land needed to build this trail are in public ownership, increasing the feasibility of construction.

The project would involve partners such as the P.A.R.K.S. Department, Friends of Price Park, Cobb County Schools and West Cobb neighborhoods.

Although the project was not in the highest tier of the scored proposed trails, it scored well on some elements of demand, such as proximity to parks and schools and connectivity to existing trails. It has risen to a high countywide priority level because of the need for trails and greenways in this part of the County and because of the momentum behind the initial planning work. It also benefits from community support and was selected as a priority project for its potential to serve a currently underserved area and begin creating new opportunities for access, connectivity, and options for non-automobile transportation in the western part of the County.

CONTEXT MAP



... C.O.N.N.E.C.T. . T.H.E. . D.O.T.S. . .

The Allatoona Creek Greenway would connect several schools, a kayak launch, and increase access to more than 20 miles of hiking and mountain biking trails at Allatoona Creek Park, greatly expanding recreational opportunities in western Cobb County and providing new ways to explore the creek.



P6 - NOONDAY CREEK TRAIL

BELLS FERRY TRAILHEAD TO NOONDAY CREEK PARK

The Noonday Creek Trail project is proposed as an extension of the existing Noonday Creek Trail, from the Bells Ferry Road trailhead to the northern end of Noonday Creek Park, near the Cherokee County line. It would connect to the ongoing joint project between Cherokee County and the City of Woodstock to the north, which would construct a 10-foot multi-use path from the north end of Noonday Creek Park at Shallowford Rd to meet the existing section of Noonday Creek Trail in Woodstock. The northern segment of trail that terminates at SR 92 already sees roughly 200,000 users per year. To the south, the existing Noonday Creek Trail connects to other Cobb County and Marietta Trails, including what is known as the Mountain to River Trail. The entire network was recognized by ARC as a trail of regional significance, the Northwest Trail Corridor, in the regional trail plan.

The majority of the priority trail corridor extends across Cobb County-owned land; however, easements will be required at some privately-owned properties. The Noonday Creek Trail is a complex alignment that will require crossing beneath three existing roadways and the installation of boardwalk, depending on the extent of hydric soils along Noonday Creek. While a sewer easement presents some opportunity for a shared public facility, much of the corridor is in floodplain or floodway, which may have permit impacts during trail development.

This three-plus mile trail extension would provide additional recreation and active transportation opportunities to a number of single-family neighborhoods in Cobb County, connecting them to Noonday Creek Park, improving access to area schools

and Kennesaw State University, and future connections to the City of Woodstock. It is likely the project would be a collaboration between Cobb DOT and P.A.R.K.S., and would involve the Town Center CID, Cherokee County, neighborhood groups, and the City of Woodstock.

The project is one of the most highly anticipated of the proposed trail projects by the community. During public engagement activities, the project team was frequently asked when this project would be finished so that people could travel from Kennesaw Mountain to Woodstock.

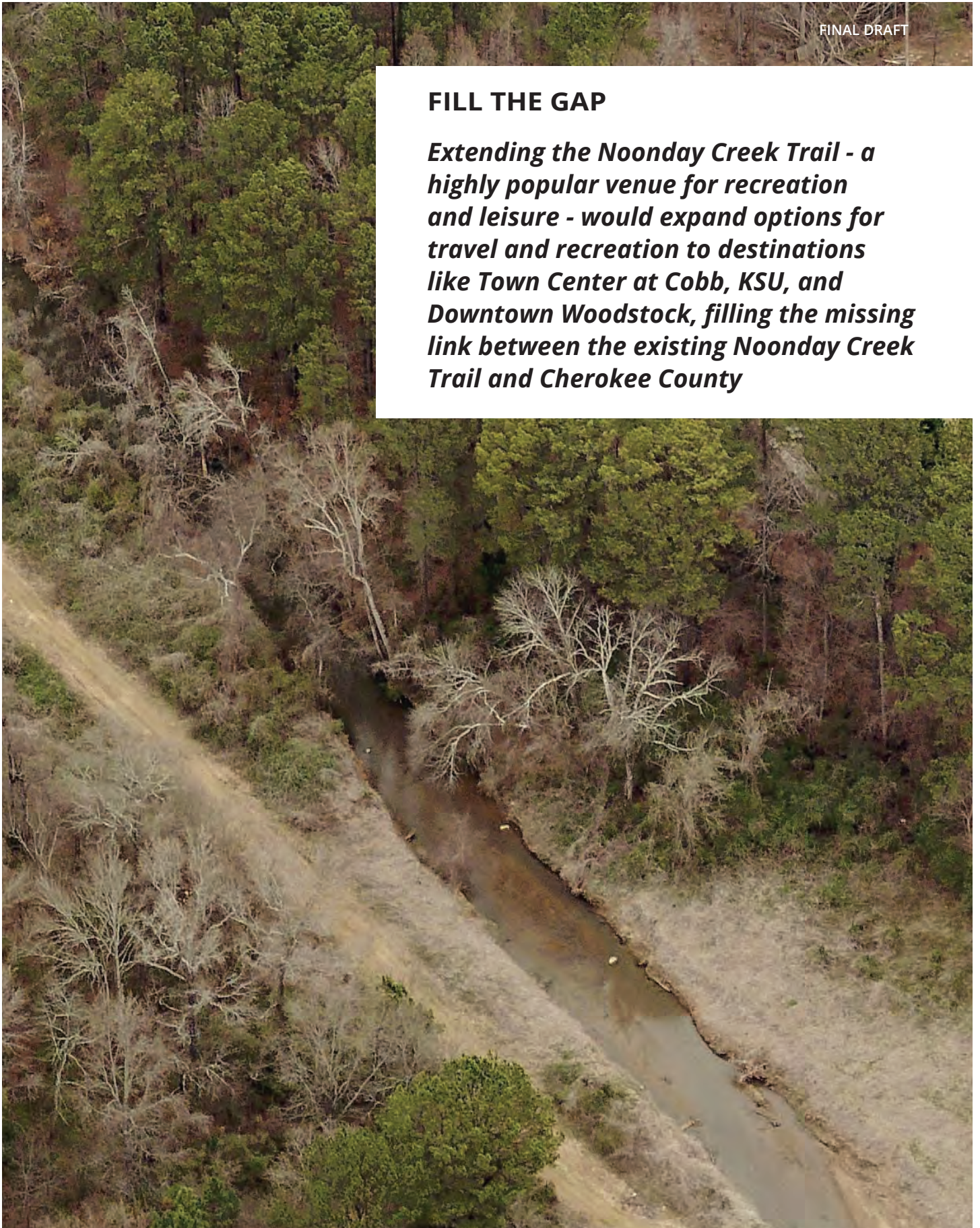
It would enhance and expand access to the existing Zagster bikeshare station operated by the Town Center CID, located at the Bells Ferry trailhead. This project scored well in terms of connectivity because of its role in connecting the existing Noonday Creek Trail to the programmed project in Cherokee County. It also has the benefit of proximity to parks and activity centers, as well as substantial portions of publicly owned land, and the ability to become a destination trail.

CONTEXT MAP



FILL THE GAP

Extending the Noonday Creek Trail - a highly popular venue for recreation and leisure - would expand options for travel and recreation to destinations like Town Center at Cobb, KSU, and Downtown Woodstock, filling the missing link between the existing Noonday Creek Trail and Cherokee County





P7 - NICKAJACK CREEK GREENWAY

CHATTAHOOCHEE RIVER TO BUCKNER RD

This proposed three-mile greenway would begin at the Chattahoochee River and end at Buckner Rd near the Lindley 6th Grade Academy. The trail would largely utilize Cobb County-owned land and follow sewer easements where possible.

The Nickajack Creek Greenway has a relatively long history and core group of supporters. In 1998, Cobb County's Comprehensive Plan identified the trail as a Short-Term Work Program item. The following year, the County's Community Development Planning Division prepared a feasibility study to identify potential opportunities and challenges along Nickajack Creek within a seven-mile study area, beginning at Heritage Park in the Concord Covered Bridge Historic District to the Chattahoochee River.

The corridor features several natural and historic resources, which can add to the draw of the greenway, attracting future visitors. Extensive coordination will be needed with federal agencies, the City of Smyrna, Cobb County, and community organizations active in the area. The County owns several large tracts of land along the southern portion of the trail corridor, including nearly contiguous properties from Nickajack Park to the County-owned park at the Chattahoochee River. Potential locations for trailheads have been identified along the proposed alignment, including near the Shoupades in the 100-acre County park property.

It is likely that the project would be a collaboration between Cobb DOT and the P.A.R.K.S. Department, with involvement from local groups, including but not limited to the River Line Historic Area and Mableton Improvement Coalition.

The area is characterized by the presence of hydric soils and significant floodplain, and the area along Nickajack Creek from the river and north of Discovery Blvd is included in Metropolitan River Protection Act buffer and setback restrictions. All land-disturbing activity in the corridor will need to be reviewed, approved and certified for consistency with Corridor Plan standards.

This priority project would have numerous benefits to the surrounding community, contributing greatly to the natural and historic qualities of this portion of South Cobb and Mableton. The project scored moderately well in terms of demand, due to proximity to parks, schools, and other community facilities. It benefits from substantial public land ownership (more than two-thirds of the length of the trail) and its potential to increase access to the river.

CONTEXT MAP



KEEPING HISTORY ALIVE

The Nickajack Creek Greenway would provide rare access to important historic resources and features such as Shoupades and Civil War trenches while expanding much-needed access to greenspace and recreation in South Cobb.



P8 - HYDE FARM - JOHNSON FERRY TRAIL

LOWER ROSWELL RD TO JOHNSON FERRY RD

The Hyde Farm - Johnson Ferry Trail would leverage existing assets by connecting an existing sidepath with the Chattahoochee River National Recreation Area (CRNRA) through trails on public lands, utilizing utility easements where possible. The proposed 2.7-mile trail would connect the existing Lower Roswell Trail to the Johnson Ferry North trailhead at the Chattahoochee River. It would increase recreation options for residents and visitors in East Cobb and expand access to one of the most treasured and popular attractions in the County - the CRNRA.

The trail would largely utilize public lands, likely following existing paths already worn by park visitors, as well as utility easements where possible, reducing the need for clearing and grading. Between Lower Roswell Rd and Hyde Rd, the trail would use a power line easement, which could potentially be paved, to ensure access to Hyde Farm for a variety of users. From there, the trail would cross Hyde Rd and head southeast, toward the river. Within NPS property, the trail would follow NPS standards and align with recommendations and policy spelled out in NPS and CRNRA plans. Trail segments within the park would be unpaved, since CRNRA does not allow paved trails.

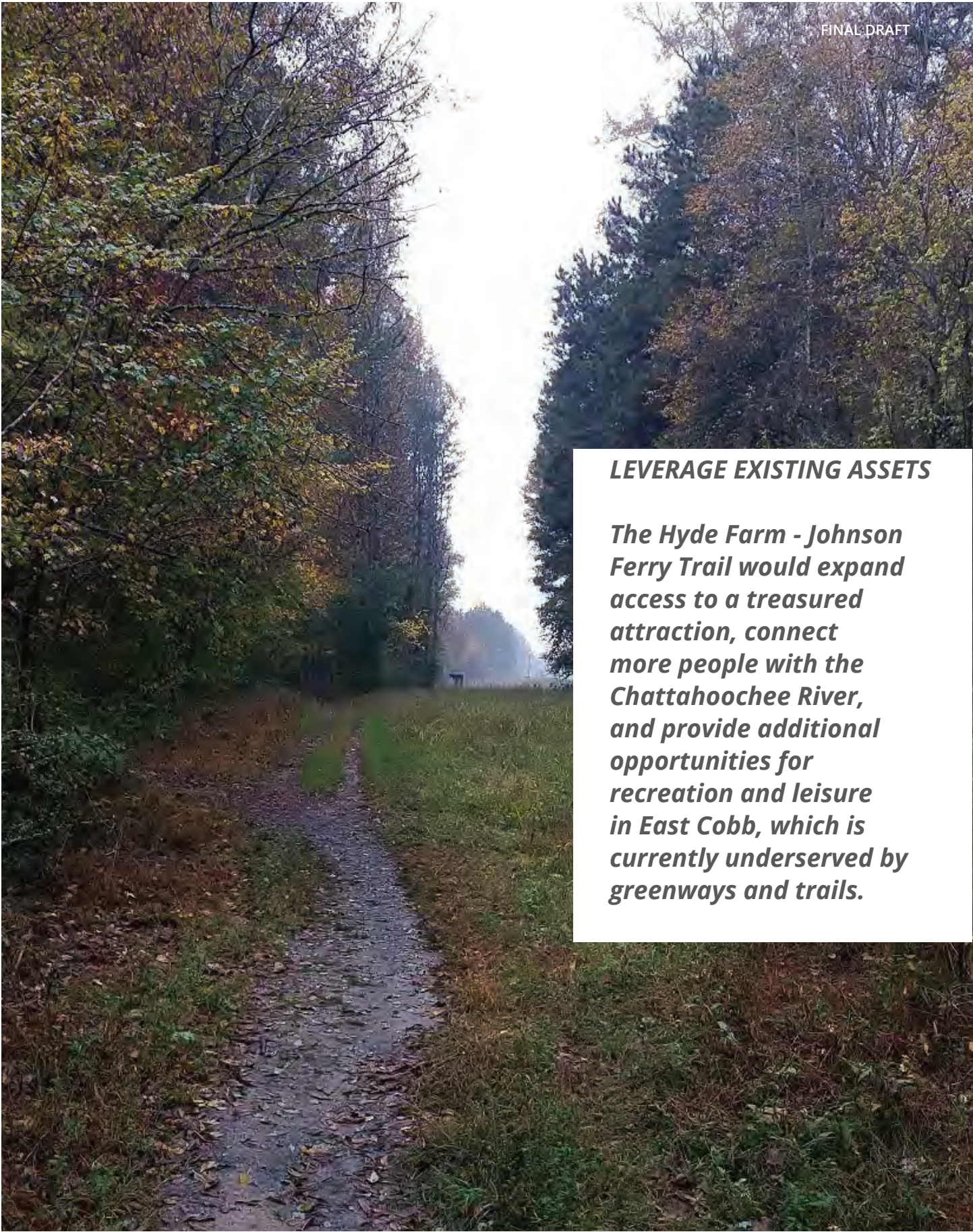
The topography and character of the areas through which the trail would travel present challenges in terms of slope (some areas as steep as 15%) and trails will need to be carefully designed to conform with current best practices and standards, so as not to exceed maximum desired slopes and to minimize erosion and other potential risks. The trails would also need to meet buffer and setback restrictions associated with the MRPA and all land-disturbing activity in the corridor will need to be reviewed, approved and certified for consistency with Corridor Plan standards.

In addition to expanding hiking opportunities and facilitating travel between, trails through this section of the park may open the door for additional river-side amenities, such as kayak launches and wildlife viewing areas. There may also be opportunities for direct connections to neighborhoods in some areas, via Neighborhood Connector Trails, if desired. It is recommended that Cobb County and CRNRA/NPS consider establishing a wider loop network of trails through the area to establish it as a destination for park visitors, rather than simply a through-route.

This project will require close coordination between multiple agencies, including but not limited to NPS, Cobb County DOT and P.A.R.K.S. Department, Georgia Power, the Trust for Public Land, the Atlanta Regional Commission, and others. It is recommended that an inter-agency agreement be established as the project advances to delineate roles and responsibilities and ensure that all parties are on the same page. The project benefits from public support, both in terms of interest from agencies mentioned above and community members who expressed a desire for more connections to the CRNRA, Chattahoochee River, and for more trails in East Cobb in general.

CONTEXT MAP



A photograph of a dirt path leading through a forest. The path is muddy and covered with fallen leaves. The trees on either side have autumn foliage in shades of green, yellow, and brown. The path leads towards a bright, hazy area in the distance.

LEVERAGE EXISTING ASSETS

The Hyde Farm - Johnson Ferry Trail would expand access to a treasured attraction, connect more people with the Chattahoochee River, and provide additional opportunities for recreation and leisure in East Cobb, which is currently underserved by greenways and trails.

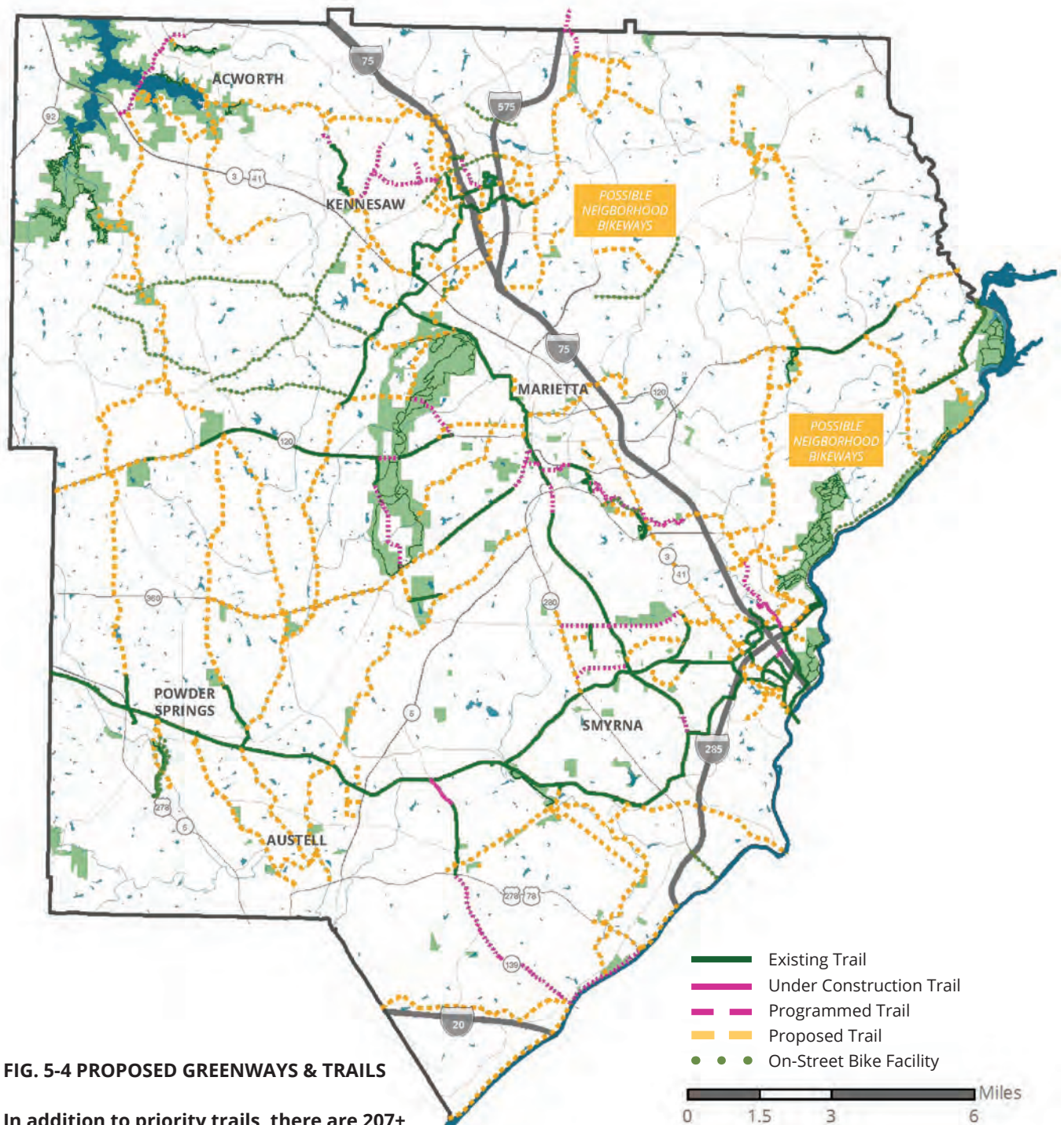


FIG. 5-4 PROPOSED GREENWAYS & TRAILS

In addition to priority trails, there are 207+ miles of proposed sidepaths, greenways, and other trails serving all parts of Cobb County.

FUTURE NETWORK DEVELOPMENT

LOCAL PRIORITIES, NEW TRAILS, AND OTHER RECOMMENDATIONS

The following pages contain brief descriptions of proposed trails at the local level - within each of the six Cities and three CIDs. Following that are summaries of newly proposed trails, other capital project recommendations, and non-capital recommendations that will complement investments in infrastructure and facilities.

Beyond the priority trails prioritized for targeted and focused implementation as part of the next round of SPLOST funding and as other resources become available, this *Plan* includes approximately 207 miles of proposed trails from a variety of sources, including previously approved plans and studies at the County, City, and CID levels, as well as trails that have been proposed as part of this planning process. A table of proposed trails is provided in Appendix D.

Figure 5-4 shows the location of proposed trails and how they relate to the existing network and trails programmed for near-term implementation. The proposed trails shown here include the priority trails described earlier in this chapter, as well as other, conceptual, potential future projects. They reflect a combination of facility types: Greenway Trails, Sidepath Trails, Unpaved Recreational Trails, Neighborhood Connector Trails, and Greenway Connectors.

Local priorities vary by jurisdiction and are largely dependent on available resources, ongoing projects, and other factors, such as previous planning efforts and community support. Local priorities represent the main focus for each jurisdiction, including some signature projects that are being advanced at the time of this plan, as well as more conceptual longer-term projects that likely require further study.



NETWORK DEVELOPMENT: LOCAL PRIORITIES

ACWORTH

The trail network within the City of Acworth is primarily comprised of park trails providing recreational opportunities around Lake Acworth. Trails are present at Logan Farm Park, Cauble Beach, and Kenworth Park/Acworth Sports Complex.

GDOT has programmed a project along SR 92/Lake Acworth Dr that will include a 10-foot multi-use path alongside the roadway and a new bridge over Lake Acworth. The project will also preserve the existing roadway bridge and convert it to a bicycle/pedestrian facility to provide a safe crossing over the lake. The City's focus is on creating a loop network

around Lake Acworth, connecting existing trails at Logan Farm Park to the programmed sidepath on SR 92/Lake Acworth Dr, which will eventually be linked to proposed trails on the south side of the lake through South Short Park and eastward to Acworth Due West Rd, where it will connect to existing sidewalk on Nance Rd. From there the loop would travel north on S. Main St past Kenworth Park. The long-term vision is to connect S. Main St with Cauble Beach, which can be seen in Figure 5-5.

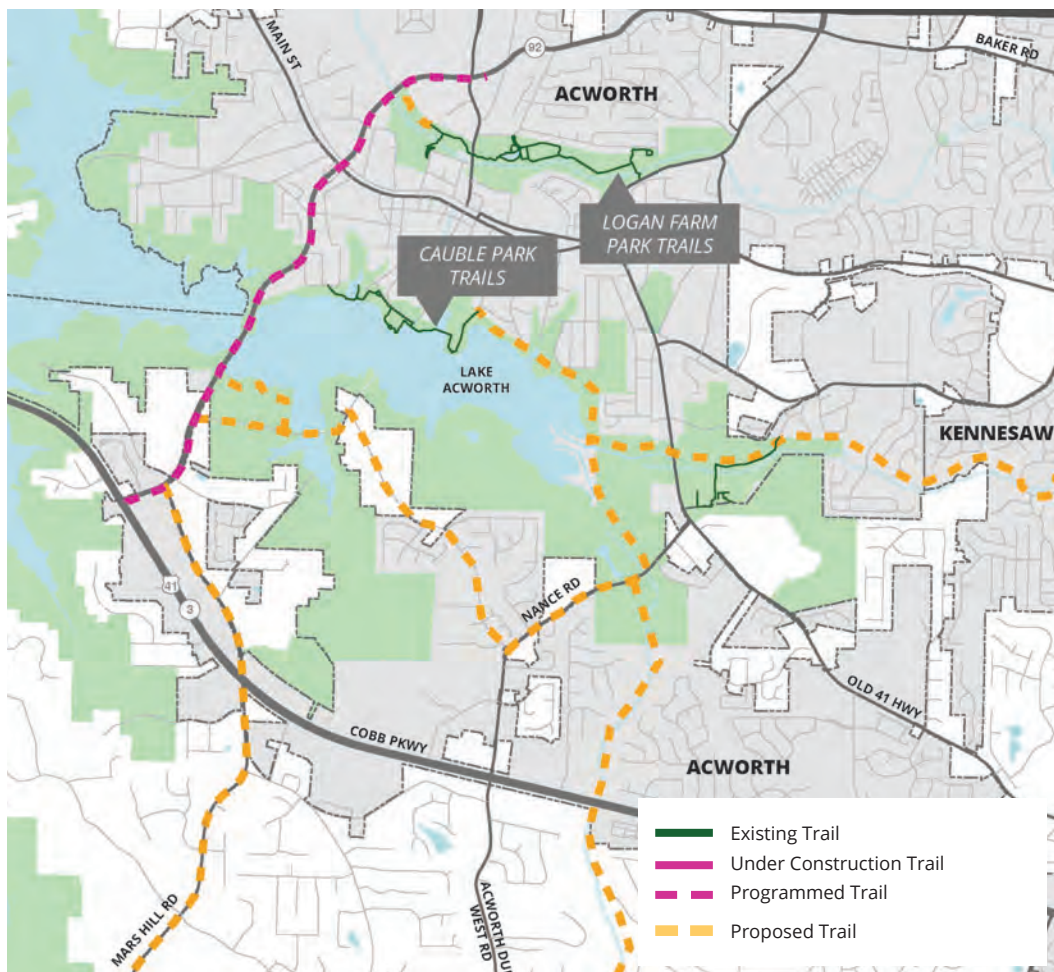


FIG. 5-5 ACWORTH RECOMMENDATIONS

AUSTELL

The City of Austell, in southwest Cobb, currently has a limited system of trails around the Threadmill Complex and the City-owned property near the corner of Austell Powder Springs Rd and Luke Glenn Garrett Jr. Memorial Hwy. While local organizations are helping to blaze and formalize some of these trails, there are not currently any formal trails in the city. Austell is home to more 1,300 acres of wetland and floodplain and one of its priorities is to leverage these resources to create opportunities for recreation and non-motorized transportation.

There are several proposed trails in parts of Austell, including along Austell Powder Springs Rd, along Sweetwater Creek, Olley Creek, and Noses Creek (Figure 5-6). The City's Comprehensive Plan Update recommended a trail along Austell Powder Springs Rd, and this trail was identified as a Priority Project. Olley Creek has strong potential in terms of connectivity; however, this proposed trail presents a number of challenges in terms of wetlands and roadway crossings. The City would also like to eventually establish connectivity to its neighbor, the City of Powder Springs.

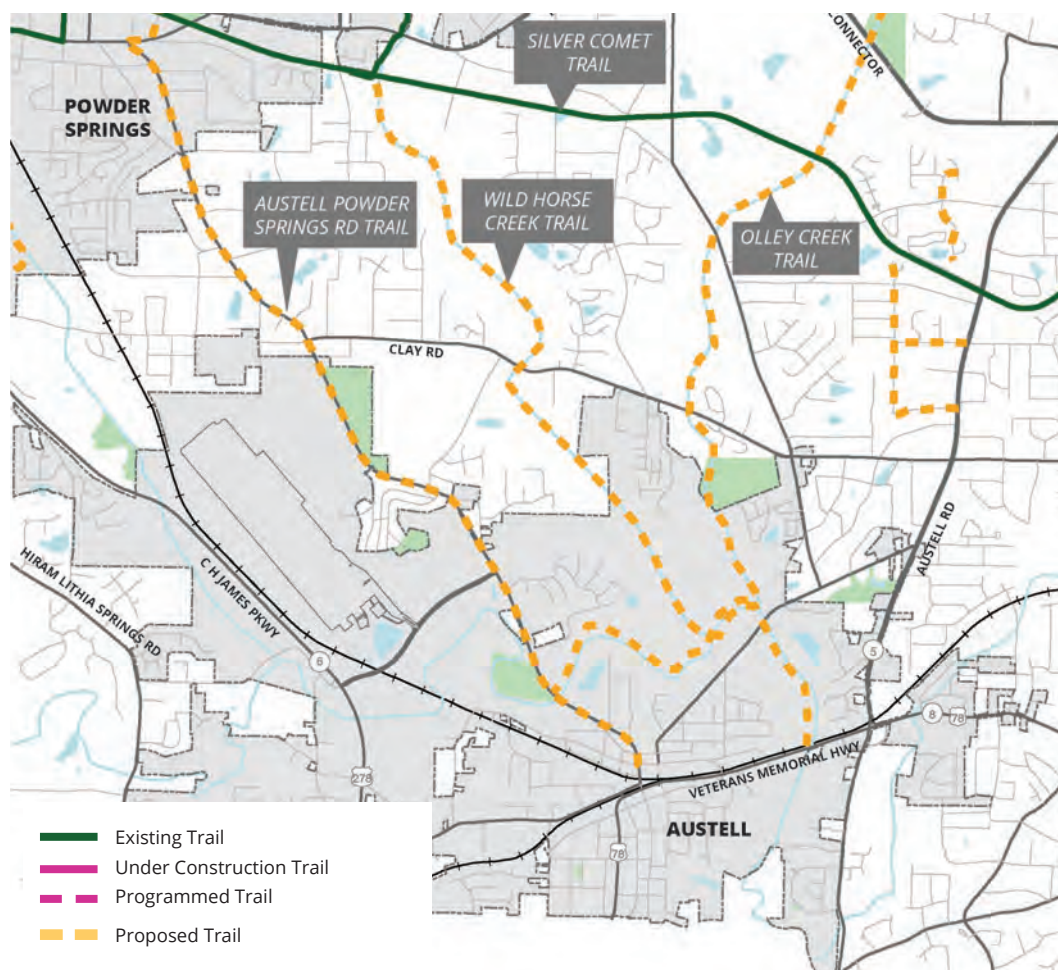


FIG. 5-6 AUSTELL RECOMMENDATIONS



KENNESAW

Planned and proposed projects in the City of Kennesaw are shown in Figure 5-7. Between 2007 and 2013, the City of Kennesaw constructed a system of walking paths north of downtown that follow creeks, utility easements, and public property. A proposed extension of the trail network would connect Winchester Forest Park Trail to Jiles Rd. This project is expected to get underway soon.

Other future projects include a programed SPLOST project along Cherokee St, from Main St to McCollum Pkwy that will include a 10-foot sidepath. Projects are also programmed

along Ben King Rd and Big Shanty Rd that would improve connectivity between KSU and downtown Kennesaw.

Longer-term proposed trail projects include a connection from downtown Kennesaw along S. Main St, Old Hwy 41, and Cobb Pkwy where a connection could be made to the Noonday Creek Trail. Another proposed project would connect the Jiles Rd/Shiloh Rd/Cherokee St area to Acworth via a proposed recreational style trail. While there is agreement that a connection between Kennesaw and Acworth is desirable, further study is needed to identify the best way to facilitate that connection.

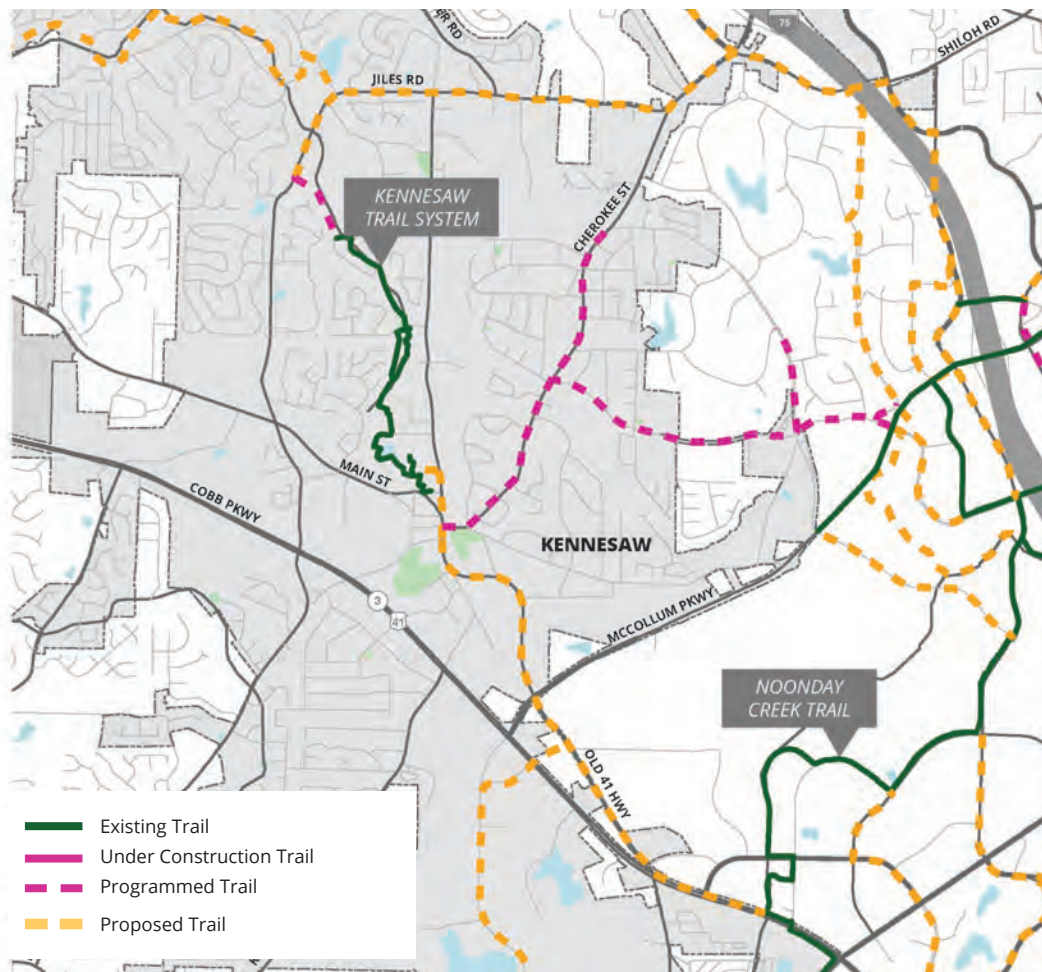


FIG. 5-7 KENNESAW RECOMMENDATIONS

MARIETTA

Marietta is home to several segments of existing trail. Over the past several years, the City has been focused on completing its portions of the Mountain to River Trail, as well as the first phase of the Rottenwood Creek Trail, between Alumni Dr and Franklin Gateway (see Priority Projects earlier in this chapter). Other programmed projects include: an extension of the trail along Powder Springs Rd to the Marietta City Cemetery; connecting the Mountain to River Trail to Fairground St via the via Dixie Ave and the Larry Bell Complex (Mountain to River Gap Trail); and a trail along Fairground St between S. Marietta Pkwy and the Custer Park Sports and Fitness Center.

Proposed projects within Marietta are shown in Figure 5-8. They include Phase II of the Rottenwood Creek Trail, between Franklin Gateway and Terrell Mill Rd, for which the City submitted an application for funding for design and engineering. Other proposed projects include a more conceptual, long-term Sope Creek Greenway and Ward Creek Greenway; a trail along N. Marietta Pkwy connecting the Mountain to River Trail to the programmed Fairground St trail; and a trail along Polk St between Burnt Hickory Rd and N. Marietta Pkwy.

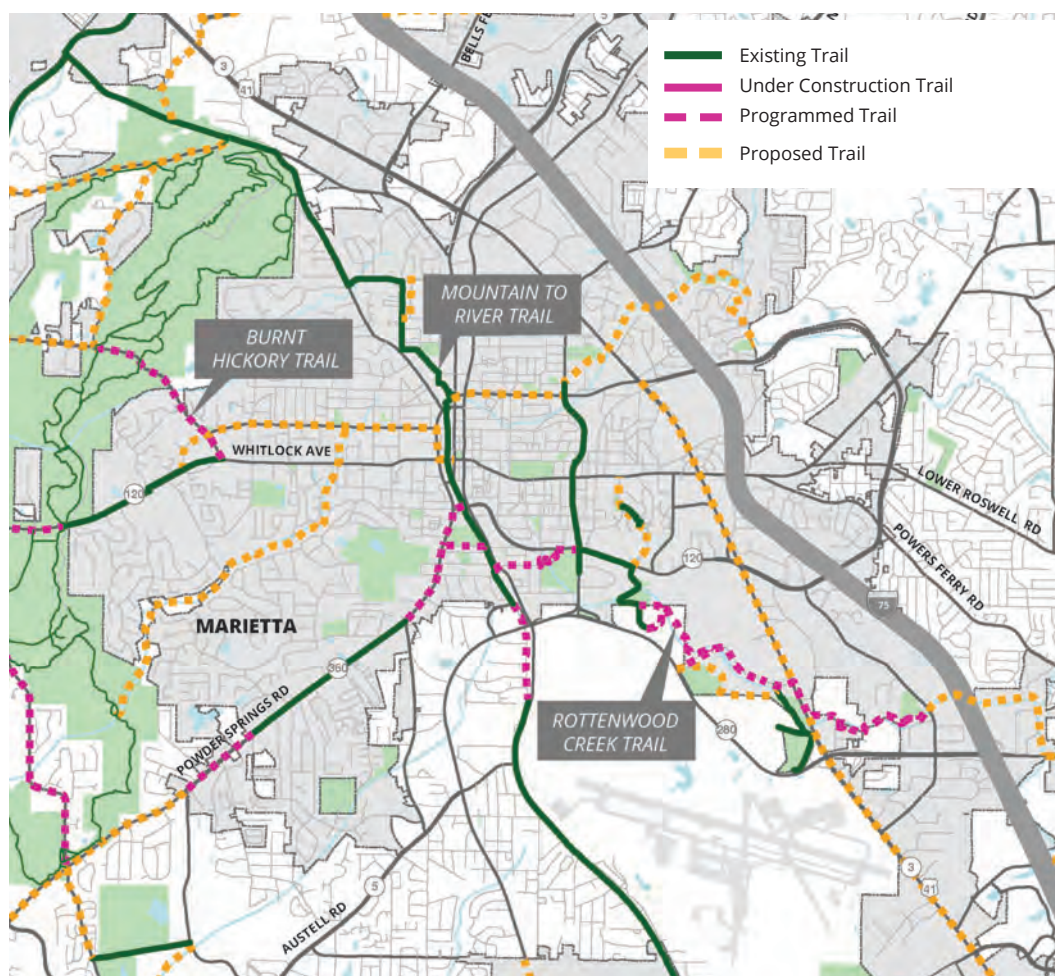


FIG. 5-8 MARIETTA RECOMMENDATIONS



POWDER SPRINGS

The City of Powder Springs has a strong trail network, providing connections to the Silver Comet Trail. The City's current focus is on strengthening connections between existing trails and its downtown. In its recent LCI Plan Update (Springs in Motion, 2016), the City reaffirmed its goal of creating a comprehensive trail system that connects key destinations and the Silver Comet Trail. The plan proposed several trail projects:

- Two new connector trails to the Silver Comet via Jackson Way/Old Lost Mountain Dr or Lynn Dr and floodplain property
- A multi-use trail from Old Lost Mountain Rd at Jackson Way, heading southeast to Pineview Dr
- Pineview Drive Multi-Use Trail - Sidewalk along Pineview Trail from Cemetery St to Marietta St
- Brownsville Rd Multi-Use Trail – Concrete trail from edge of Powder Springs Park northeast to Marietta St
- Recreation Trails from Brownsville Rd southward through the floodplain

The northern part of the proposed Priority Trail along Austell Powder Springs Rd would also travel into Powder Springs, where it would connect to the Silver Comet Trail.

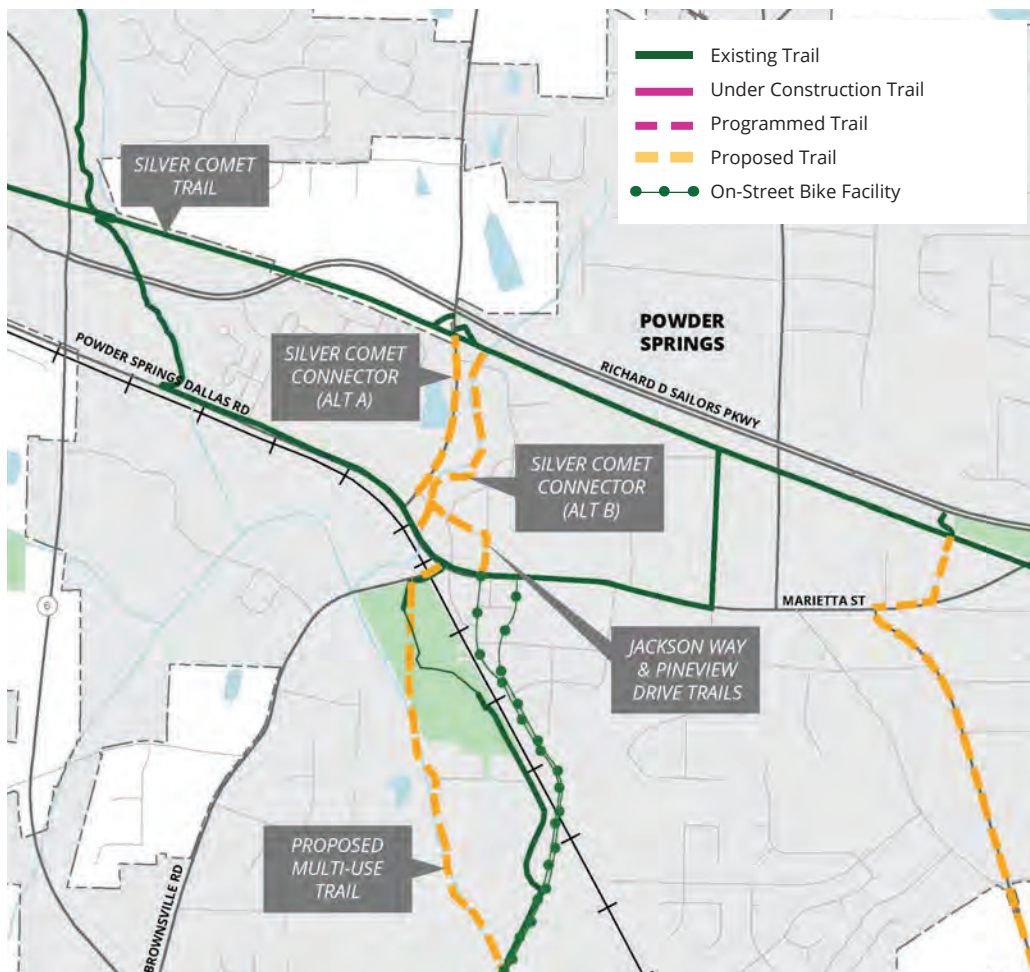


**FIG. 5-9 POWDER SPRINGS
RECOMMENDATIONS**

SMYRNA

The City of Smyrna has several long sections of sidepath trail crisscrossing the City along Spring Rd, Atlanta Rd, Concord Rd, and Village Pkwy. The Silver Comet Trail and Silver Comet Cumberland Connector also travel through Smyrna. Programmed projects will create sidepath trails along Windy Hill Rd between Village Parkway and S. Cobb Drive and on Church St between Atlanta Rd and S. Cobb Dr. The latter will include traffic calming measures as well.

The City is actively pursuing several projects to reconfigure portions of South Cobb Dr between Windy Hill Rd and Concord Rd.

A new pedestrian HAWK signal is programmed to be installed on S. Cobb Dr south of Plaza Dr to reduce pedestrian risk along the corridor. The proposed Windy Hill Blvd project, between S. Cobb Dr and Atlanta Rd, will incorporate bicycle lanes and pedestrian sidepaths. An extension of the Poplar Creek Trail is also proposed, which would extend the existing trail along the creek from Spring Rd south and loop back around to Spring Rd west of Jonquil Dr. Another proposed connection would link commercial development and offices along Cobb Pkwy to Village Pkwy, via Lake Park Dr, parallel to portions of Poplar Creek.

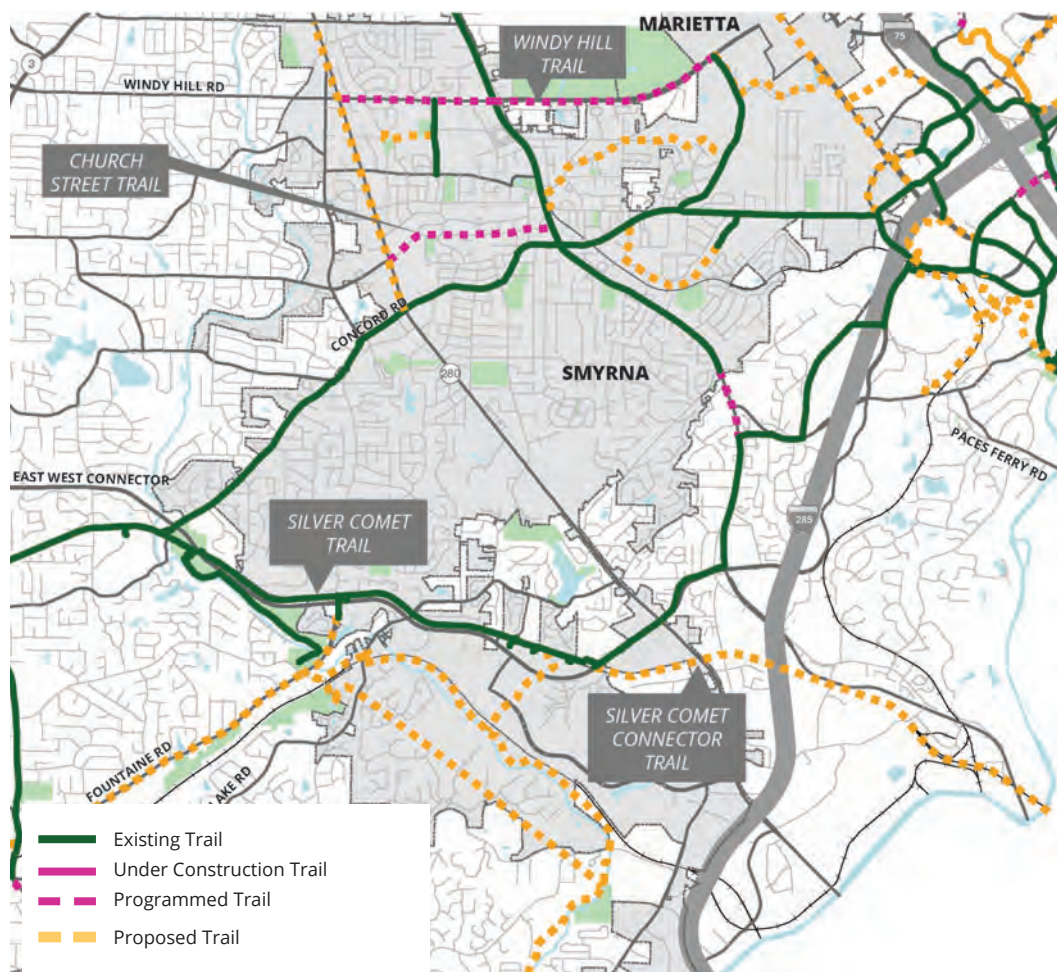


FIG. 5-10 SMYRNA RECOMMENDATIONS



CUMBERLAND COMMUNITY IMPROVEMENT DISTRICT

The Cumberland CID recently completed its Bicycle Connectivity Improvement Plan (2016). The plan includes 22 new miles of greenways and trails proposed by the CID and partners. The emphasis of future projects is identifying sidepath trails as recognizable “trails” to all users through pavement markings, signage and wayfinding, and new trail development. Prioritized future greenway projects include portions of the Bob Callan Trail along Rottenwood Creek; the Stillhouse Trails; Vinings Trail; Camp Bert Adams Lake Trail; and the Circle 75 to Cobb Pkwy Trail, extending the existing trail north and west of Herodian Way.

The plan also includes more than five miles of prioritized urban trails (sidepaths):

- Circle 75 Pkwy Trail
- Akers Mill Rd Trail
- Cumberland Trail from Cobb Galleria Pkwy to Bob Callan
- Terrell Mill – Windy Hill Connector Trail
- Windy Ridge Trail (east segment)
- Interstate North Pkwy Trail
- Cumberland Trail
- Cobb Pkwy Trail
- Windy Hill Rd Trail
- Galleria to Cumberland Trail
- Wildwood Pkwy Trail

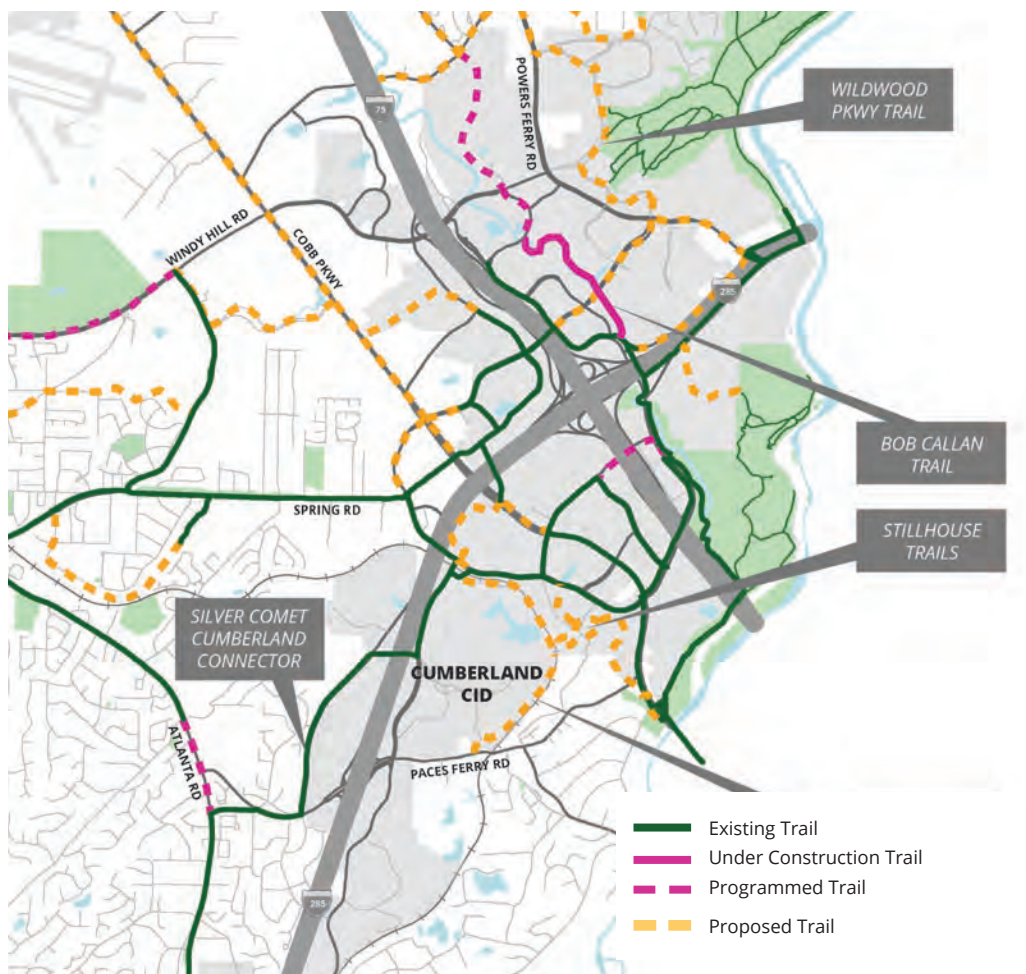


FIG. 5-11 CUMBERLAND CID RECOMMENDATIONS

GATEWAY MARIETTA COMMUNITY IMPROVEMENT DISTRICT

The Gateway Marietta CID is focused on improving streetscape and pedestrian facilities along Franklin Gateway, between S. Marietta Pkwy (SR 120) and Delk Rd (SR 280). A portion of the streetscape project has been completed and the remaining portion, from Twin Brooks Dr to Delk Rd, is proposed. Eventually the widened sidewalk will reach the Rottenwood Creek Trail.

The CID is also an active partner in the City of Marietta's Rottenwood Creek Trail projects, since both Phase I and Phase II pass through a portion of the CID.

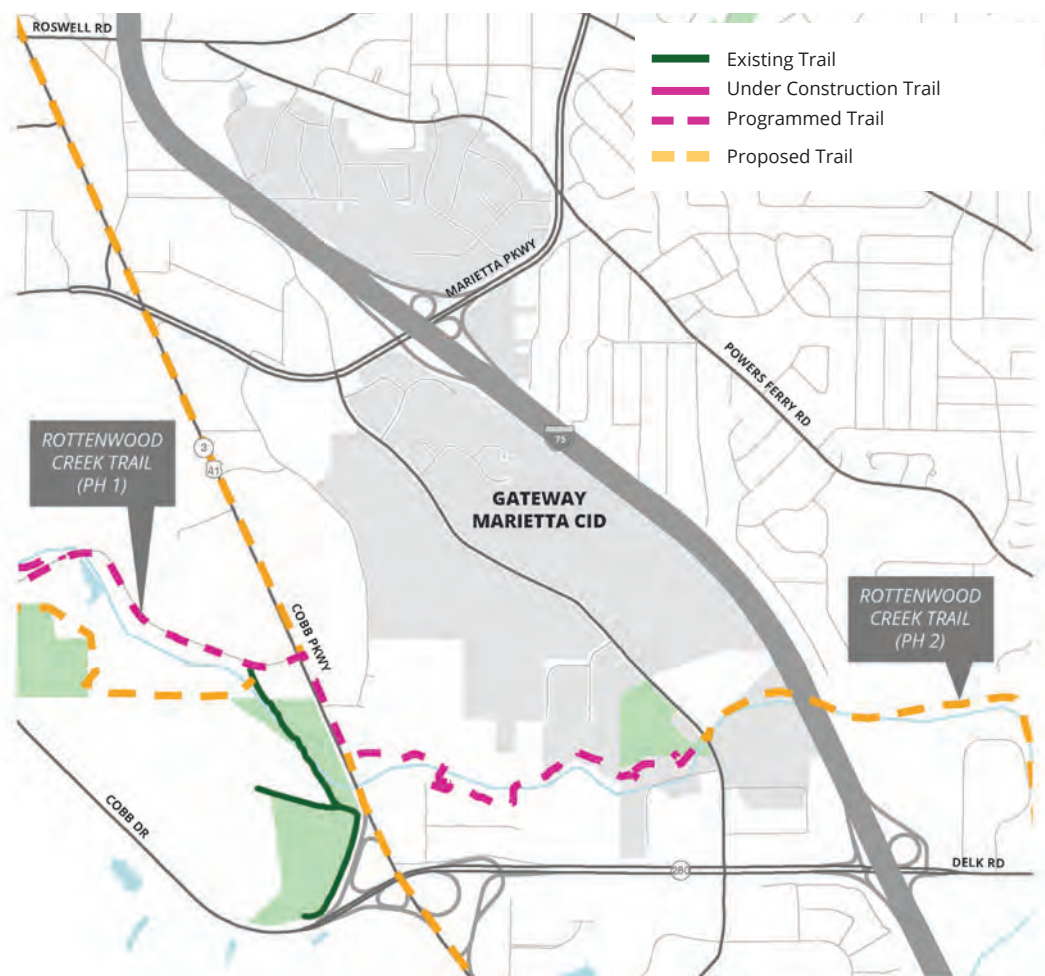


**FIG. 5-12 GATEWAY MARIETTA CID
RECOMMENDATIONS**



TOWN CENTER COMMUNITY IMPROVEMENT DISTRICT

The Town Center CID has recently completed its Master Plan Update, which proposes a number of new bicycle and pedestrian projects. The District is already home to the Noonday Creek Trail and several sidepath trails along Big Shanty Rd, Skip Spann Connector, and bike lanes on Chastain Rd.

Other proposed projects include improving connectivity to Kennesaw State University, complete streets on Barrett Lakes Blvd, and establishing better connectivity throughout the south part of the District, including the South Barrett Reliever project.

The primary focus of proposed improvements is creating a loop network, the Town Center Loop, consisting of roughly seven-miles of existing and future bike lanes, sidewalks, sidepaths, and greenway trails around the Town Center area. The Town Center Loop is shown in Figure 5-13 below.

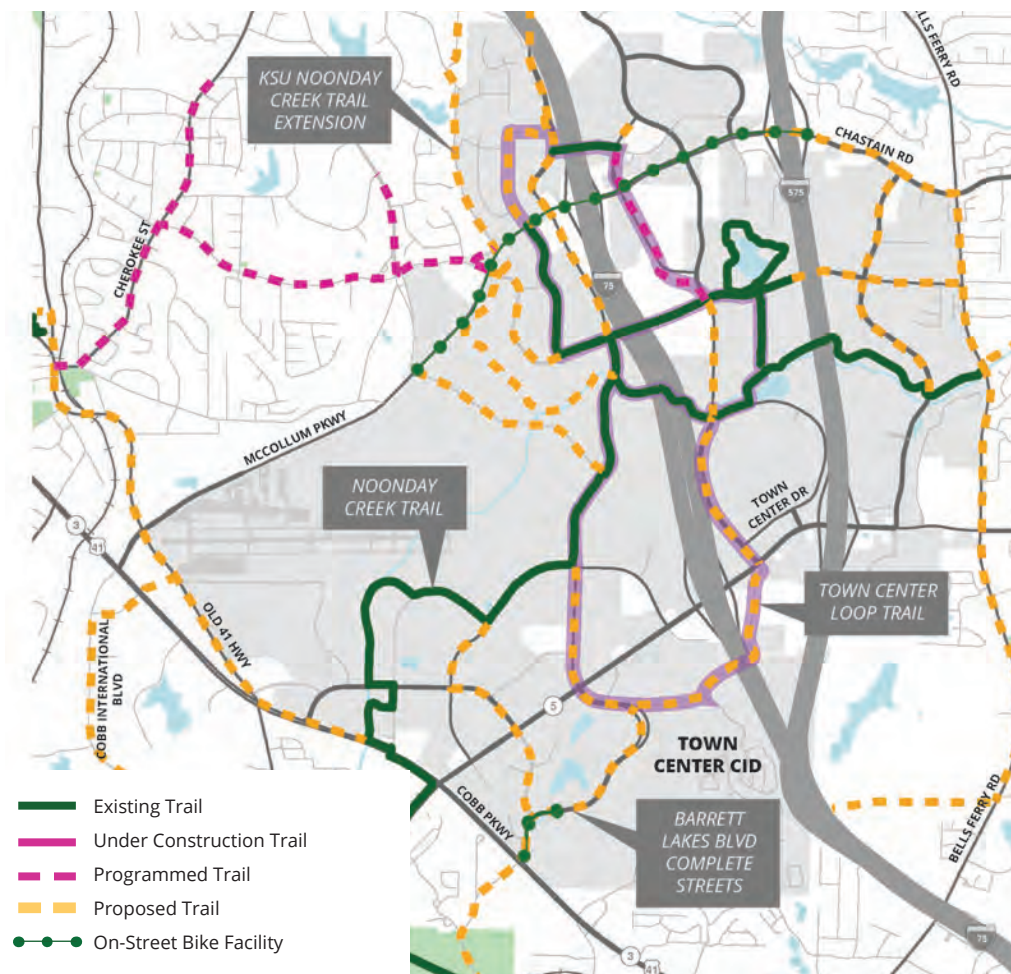


FIG. 5-13 TOWN CENTER CID RECOMMENDATIONS

NEW PROPOSED TRAILS

PROJECT DESCRIPTIONS

Throughout the process of developing this Greenways and Trails Master Plan, several new potential non-priority trail alignments were identified. These are briefly described below and are shown on the proposed trail map (Figure 5-4) and listed in Table 5-1.

AKERS DRIVE/AKERS RIDGE DRIVE TRAIL

This approximately 0.5-mile project would connect Akers Mill Rd to the Chattahoochee River National Recreation Area (CRNRA) at the Akers Mill parking lot. It would largely follow Akers Dr and Akers Ridge Dr, both private roads. Additional study and discussion are needed to determine how best to achieve the desired improvement, given the private nature of the roads. The proposed project would increase access to the CRNRA and provide safer non-motorized transportation options for nearby residents and visitors.

The Chattahoochee Bluffs Homeowners Association is interested in making their currently private road safer for pedestrians. Akers Dr and Akers Ridge Dr are both private streets and have no sidewalks. In addition, the hilly and curved nature of these streets make it difficult to see oncoming pedestrians or cyclists. Akers Ridge Dr is just steps from the Akers Mill Trail in the CRNRA and increasingly, people are using these private roads for access to the trail and parking area, and as a way to get between the trail and SunTrust Park.

BUTLER CREEK TRAIL

The proposed Butler Creek Trail would connect a proposed Lake Acworth Trail along Nance Rd to Mack Dobbs Rd. This 3.8-mile trail is proposed in coordination with the P.A.R.K.S. Department Comprehensive Master Plan Update. Additional study is recommended to determine the extent of floodways, the need for bridges, and other associated improvements.

CANTON ROAD NORTH TRAIL

This proposed trail would connect the south end of Noonday Creek Park to Lake Dr, where there is a proposed connection to Kell High School. The 1.7-mile sidepath trail would parallel the soccer fields along Hawkins Store Rd and travel along the north portion of Canton Rd. It would increase access to parks, schools, and sports fields.

COBB PARKWAY - WINDY HILL CONNECTOR TRAIL

This roughly one-mile sidepath trail would serve as a connector between a proposed trail and existing businesses on Cobb Pkwy and the programmed trail on Windy Hill Rd, in the City of Smyrna. It could follow Lake Park Dr to Village Pkwy where it could cross at the signalized intersection to the west side of Village Pkwy which already has an eight-foot wide shared-use path. Ideally the eight-foot path could be widened to ten or more feet to meet recommended guidance. As an alternative, the Cobb Pkwy-Windy Hill Connector trail could follow the east side of Village Parkway to reach Windy Hill Rd.

COBB INTERNATIONAL BOULEVARD TRAIL

A trail is proposed to connect the Noonday Creek Trail along Barrett Pkwy with Old Hwy 41 via a power line easement and Cobb International Blvd. This 2.25-mile route would create a lower-stress environment as an alternative to a proposed trail along Cobb Pkwy, and would increase biking and walking options for employees of businesses along Cobb International Blvd, as well as for nearby residents. Should they be desired, direct connections could be provided to residential communities and subdivisions, like those near Ellison Lake and off of Barrett Pkwy. Improvements are recommended to improve safety at possible roadway crossings.



EAST COBB PARK – ROBINSON RD CONNECTOR

This proposed trail would consist of formalizing an extension of existing trails in and around East Cobb Park and Fullers Recreation Center. Trails already exist through this area but are in need of additional maintenance and signage. The proposed extension would formalize the roughly 0.75-mile pathway from Sewell Mill Creek at the north of Fullers Fields to the east, where it would meet with Fullers Park driveway at Robinson Rd. Additional improvements should be made to the trail following the creek from East Cobb Park to Robinson Rd, to formalize the connection and increase awareness and use.

HARRISON HIGH - OREGON PARK TRAIL

This 1.3-mile unpaved recreational trail would connect Oregon Park and the Green Meadows Preserve with Harrison High School and the proposed Allatoona Creek Greenway by following the stream from Oregon Park northwest until it reaches Due West Rd. From there, the trail would become a sidepath along the south side of Due West Rd, crossing at the entrance to the High School, where there is a traffic signal. Coordination would be needed with homeowners associations in the area.

As an alternative, the trail could also follow the power line easement that travels north from Oregon Park, but this option would require a longer sidepath on Due West Rd, which would be more expensive and is not the preferred option from a user comfort standpoint. Coordination will be needed with the school district to determine how to traverse school property and arrangements would need to be made to govern access during school hours. Improvements may also be needed to the crossing at the signal at the school driveway.

HERITAGE PARK TO THOMPSON PARK CONNECTOR

Heritage Park on Fontaine Rd and Thompson Park on Nickajack Rd are roughly 0.3 miles apart; however, there is currently no safe way to get between them. As part of future proposed trail projects, or perhaps a small standalone project, it is recommended to build a sidepath along Nickajack Rd connecting the two parks. The project would require constructing a safe railroad crossing and improving crossings at either the signalized intersection of Nickajack Rd at Fontaine Rd or opposite the entrance to Thompson Park. The project would serve to connect and improve access to both parks and is supported by the P.A.R.K.S. Department as well as community members.



THE TRAIL LINKING EAST COBB PARK TO ROBINSON ROAD COULD BENEFIT FROM AMENITIES AND SIGNAGE

LIBERTY HILL AND MORGAN ROAD TRAILS

To increase connectivity and access in this part of North Cobb, in and around the Canton Rd corridor, the *Plan* proposes trails along low-stress roadways between Canton Rd and Sandy Plains Rd. Two trail segments would travel along Liberty Hill Rd and Morgan Rd for approximately 0.8 miles each. The trail on Morgan Rd would connect directly to paved bikeable shoulders on Sandy Plains Rd, increasing bike access in the area. Together these proposed trails would add 1.64 miles of walkable and bikable network.

NICKAJACK CREEK SPUR TRAIL

The assessment of the Nickajack Creek Greenway priority project revealed the possibility of constructing a spur trail along the existing power line easement between the proposed future Nickajack Creek Greenway near Buckner Rd and Thompson Park. This could potentially be an alternative to the northwestern portions of the proposed Nickajack Creek Greenway, which would be a challenging project, due to the constraints of the railroad right-of-way and lack of construction access between the creek itself and the railroad tracks.

The proposed project would likely be an unpaved recreational trail, intended primarily for walking, jogging, or hiking. The easement travels through a residential neighborhood and crosses several neighborhood streets, and access to Thompson Park could potentially be provided via Summerwood Dr or Cooper Lake Rd. Further study is recommended to determine the feasibility of this project. It would require coordination with utilities and homeowner associations.

NOONDAY CREEK PARK - KELL HIGH SCHOOL TRAIL

The aim of this trail is to connect Noonday Creek Park, Kell High School, and the baseball fields in the area. The 1.4-mile trail would follow Shallowford Rd, and make use of existing public right-of-way that leads to Lake Dr and connects to the high school. The trail is proposed to be paved, improving connectivity between regional recreational facilities and increasing opportunities for active transportation.





OLLEY CREEK TRAIL (EXTENSION)

A trail has been proposed along various segments of Olley Creek for some time. This proposed project would extend the trail from its previous termination point at County Services Pkwy, through Fair Oaks Park, to South Cobb Dr. The 2.27-mile trail would further enhance access to park properties and the County government complex; however, several potential challenges may make this project a lower priority over time. Further study and substantial coordination with County and other agencies is recommended.

SHALLOWFORD ROAD TRAIL

This proposed trail would connect the proposed Canton Road North trail to two Cobb County Schools and increase access for adjacent neighborhoods. The proposed one-mile trail would begin at Canton Rd and follow Shallowford Rd until it reaches Maybreeze Rd, where spurs would provide direct access to both Nicholson Elementary and McClesky Middle Schools. Improvements are recommended at the existing traffic

signal to facilitate trail crossing and access to both schools. The trail could be reached from neighborhoods on either side of Shallowford Rd, providing more options for people traveling in the area.

SKIP WELLS PARK TRAIL

In an effort to increase connectivity and access to existing park facilities, in consultation with the Cobb P.A.R.K.S Department, this *Plan* recommends several new connections or minor spur trails to park properties. One such project is a proposed connection between Piedmont Road and “Skip” Wells Park. Development patterns in the area limit direct access to the park from the east and west. The proposed spur trail south of Piedmont Rd would enable residents and visitors to use existing (and likely future) sidewalk to the north for access to the park, which contains sports fields, picnic areas, and tennis courts. The 1/3-mile greenway trail would require close coordination with the P.A.R.K.S. Department and likely would be accompanied by improvements to nearby crosswalks.



OPPORTUNITY TO FORMALIZE TRAILS NEAR WILDWOOD PARKWAY AND CONNECTIONS TO THE CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA

STEINHAUER ROAD TRAIL

The proposed project along Steinhauer Rd would connect Carl Harrison Park and Lassiter High School with Sweat Mountain Park via a 1.5-mile sidepath-style trail. The project would increase connectivity to both parks and schools, facilitating improved access for nearby neighborhoods. It could potentially tie into the existing trail behind Harrison Park and Lassiter High School.

WILDWOOD PARKWAY - COCHRAN SHOALS CONNECTOR TRAIL

This project would consist of a proposed miniature extension of existing trails in the Chattahoochee River National Recreation Area to make the connection to the proposed Wildwood Pkwy Trail on Windy Hill Rd just south of Wildwood Pkwy. It would create an informal, but recognized access point from Windy Hill Rd at Woodwalk Dr to improve connectivity between national park trails and the surrounding community. The project would require coordination with NPS and nearby property owners (Genuine Parts Company). Signage is recommended to announce the access point to potential users. The project would benefit nearby residents, employees, and visitors to the area.

As a component of this project, it is also recommended to establish a formal walk-up access point (trailhead) farther south on Windy Hill Rd where the creek passes under the roadway, north of Windy Ridge Ext. There is already an informal access point in this location and formalizing it would increase access and visibility, giving people more options for walking and biking to existing trails. This could help reduce demand for parking within the park as well as have environmental and health benefits. The proposed trailhead should be given a recognizable name to convey its location and the accessible trails in the area, like 'CRNRA Cochran Shoals – Windy Hill Rd.'

WILDWOOD PARKWAY CONNECTOR TRAIL

This would be a roughly 0.6-mile unpaved recreational trail intended to connect residences and offices along Wildwood Pkwy and nearby areas to hiking and biking trails in the CRNRA. It would begin on Wildwood Pkwy opposite the Hyundai building and follow a creek into the park. There is already an informal path in this area, and it is recommended to formalize the connection through signage to define an access point and direct people to the Cochran Shoals trails. The project would require coordination with NPS and should also involve nearby property owners, including Wildwood Associates.

PARK CONNECTIVITY TRAILS

Simultaneously to this planning process, the Cobb County P.A.R.K.S. Department undertook an update of its Comprehensive Plan. As part of that process, several new trails were identified to offer more and better connections to County parks and County-owned greenspace, outside of park properties. These trails were identified in coordination with the *Greenways and Trails Master Plan* and include a range of potential projects, from short spur trails to longer trail alignments, as well as sidepath trails within roadway right-of-way to greenway trails along creeks, streams, or utility easements. These proposed park connectivity trails are included in the map of proposed trails shown in Figure 5-4 and listed in Table 5-1 on the following page. For details about the P.A.R.K.S. Department Comprehensive Plan Update, please refer to the plan document itself.

**TABLE 5-1 NEW PROPOSED NON-PRIORITY
GREENWAYS AND TRAILS**

Name	From	To	Length
Akers Drive/Akers Ridge Trail	Akers Mill Rd	CRNRA West Palisades	0.48 miles
Bells Ferry Rd Trail	Barrett Pkwy / Piedmont Rd	Rockridge Preserve Trail (proposed)	1.16 miles
Butler Creek Trail	Mack Dobbs Rd	Nance Rd	3.86 miles
Canton Road North Trail	Noonday Creek Park	Nance Rd	1.69 miles
Cobb Parkway - Windy Hill Connector Trail	Cobb Pkwy	Windy Hill Rd	1.03 miles
Cobb International Boulevard Trail	Barrett Pkwy	Old Hwy 41	2.28 miles
East Cobb Park - Robinson Road Connector	East Cobb Park	Robinson Rd	0.75 miles
Harrison High - Oregon Park Connector	Oregon Park	Harrison High School (Due West Rd)	1.30 miles
Harrison Park Connector	Harrison Park	Pete Shaw Rd	0.10 miles
Heritage Park - Thompson Park Connector	Heritage Park	Thompson Park	0.30 miles
Liberty Road Trail	Canton Rd	Morgan Rd	0.86 miles
Lions Park Trail	Ferndale Rd	Lions Park	0.07 miles
Morgan Road Trail	Liberty Hill Rd	Sandy Plains Rd	0.80 miles
Nickajack Creek Spur Trail	Nickajack Park	Thompson Park	2.3 miles
Noonday Creek Park - Kell H.S. Trail	Noonday Creek Park	Kell High School	1.41 miles
Olley Creek Trail (Extension)	County Svcs Pkwy	S. Cobb Dr	2.28 miles
Rockridge Preserve Trail	Bells Ferry Rd	Rockridge Preserve	0.68 miles
Shallowford Road Trail	Canton Rd	Maybreeze Rd	1.07 miles
Skip Wells Park Trail	Piedmont Rd	Skip Wells Park	0.36 miles
Steinhauer Rd Trail	Shallowford Rd	Sweat Mountain Park	1.5 miles
Wildwood Parkway Cochran Shoals Connector	Windy Hill Rd	Cochran Shoals Trail (CRNRA) at Woodwalk Dr	0.04 miles
Wildwood Parkway Connector Trail	Wildwood Pkwy	Trails in Cochran Shoals CRNRA Park Unit	0.60 miles
		TOTAL	24.92 miles

OTHER RECOMMENDATIONS

TRAILHEADS

Trailheads serve as places where people can safely and comfortably access trails and greenways. Trailheads can take several forms, ranging from a simple access point to a trail, to a larger facility with parking, restrooms, bike repair stations, and other amenities.

As mentioned in Chapter 3, there are currently at least 40 recognized trail heads in Cobb County. The *Plan* proposes that **19 new trailheads** be added, as shown in Figure 5-14. Most are recommended to accompany priority trail corridors; however, some are recommended to improve or formalize access to underutilized trails and pathways. Three types of trailhead are recommended - major, minor, and walk-up access points:

- **Major Trailheads:** Major trailheads typically have a full range of amenities, including parking, restrooms, bike share and bike repair stations, and often, playgrounds, pavilions, and other recreational facilities. These are often located in existing park properties.
- **Minor Trailheads:** Minor trailheads typically have limited parking, but may not provide restrooms or other facilities for users. These are often located in areas that have constrained land availability, but have been identified as key locations for trail access or natural access points.
- **Walk-up Access Points:** Walk-up access points are generally the smallest trailhead type. These trailheads have neither parking or restrooms, nor other amenities for users. These access points may consist of unpaved paths from an adjacent major roadway or connection from a neighborhood street.

Many of the proposed trailheads are aligned with County and city parks and recreational areas to take advantage of parking lots, restroom facilities, and other amenities that may already exist on-site. Other trailheads, particularly in more industrial areas or unimproved public green spaces, are located on undeveloped land where small parking lots and restroom facilities may be constructed.

Some trails, such as those that follow creeks, do not have readily available points of access due to the presence of steep topography, floodway, or forest areas. For these trails, the *Plan* identifies walk-up access points where the trail alignment abuts existing development, such as the backs of neighborhoods. Some trailheads are identified at or near County parks and it is recommended that both Cobb DOT and P.A.R.K.S. be involved in planning and development of trailheads at these locations.

Some trailheads are also recommended to be sited at County schools – it should be noted that people would generally be permitted to use these trailheads only during evenings and weekends, in order to maintain a secure environment for students. The DOT should coordinate closely with Cobb County Schools as it pursues construction and operation of trailheads on school property.

Proposed trailheads are shown in Figure 5-14 on the following page and listed in Appendix D.

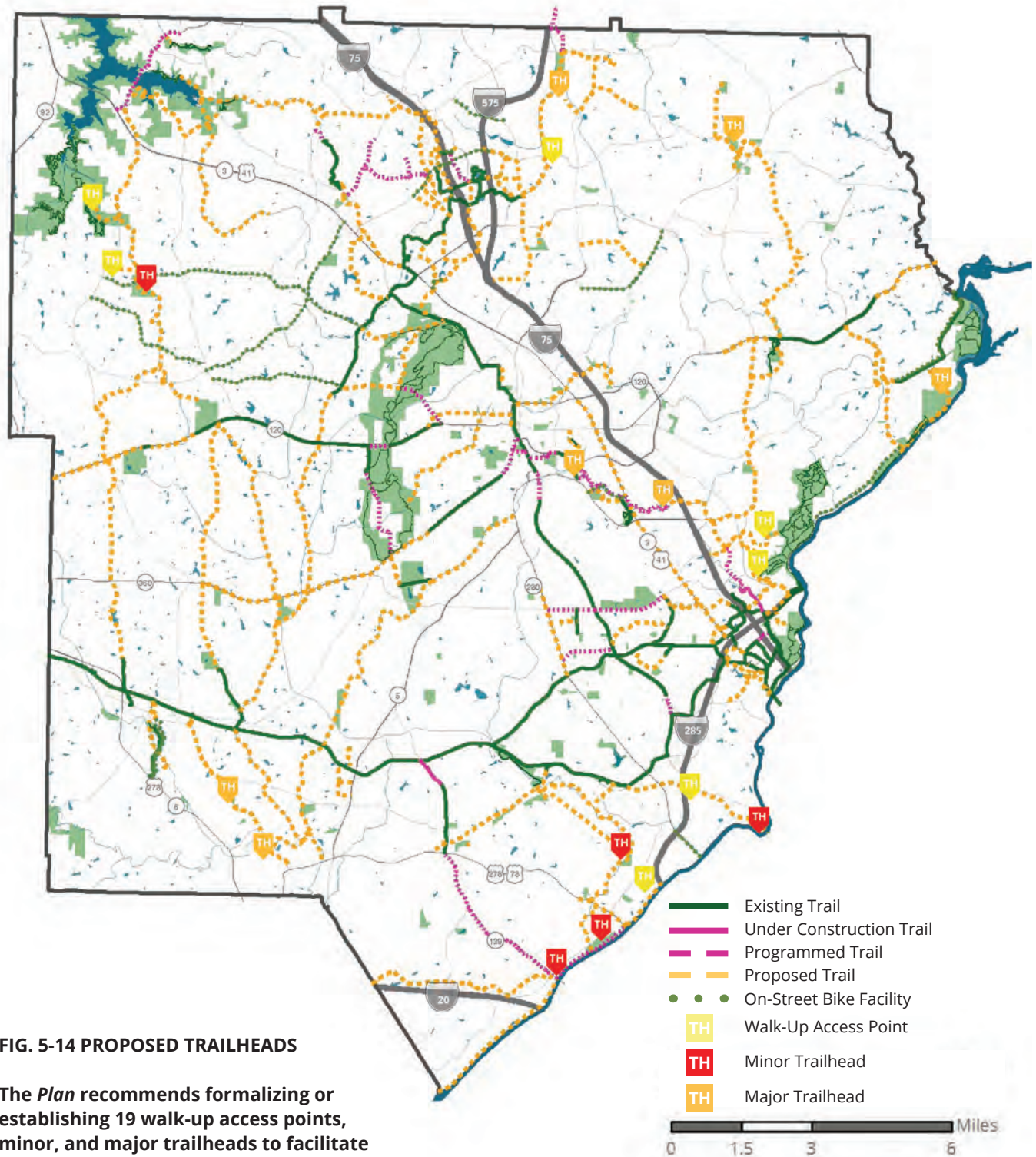


FIG. 5-14 PROPOSED TRAILHEADS

The *Plan* recommends formalizing or establishing 19 walk-up access points, minor, and major trailheads to facilitate access to existing and future priority trails.

OTHER CAPITAL PROJECTS

IMPROVE SIDEPATH CROSSINGS

As part of routine maintenance and intersection improvement projects, sidepath crossings should be improved to provide a consistent user experience, and enhance visibility and safety, where possible. There are places throughout the County where bollards are placed mid-way in the sidepath as they approach driveways but others where they are not. Some driveways have detectable warning strips (also sometimes called truncated domes) approaching driveways and others do not. To the extent possible and reasonable given routine maintenance schedules, intersection improvement projects, and new development projects, it is recommended to standardize sidepath crossings as part of other projects. For details on recommended crossings, see Chapter 4.

ESTABLISH TEMPORARY TRAILS: DIRTWAYS

In an effort to increase access to recreation and expand the trail network in a quick and cost-effective manner, some communities have launched the practice of building rough, unpaved temporary trails while

waiting for paved greenways and trails to be planned and built, as described in Chapter 4. Cobb County should consider the use of temporary, unpaved trails as an interim implementation step for appropriate projects. It is recommended to develop one DIRTway as a pilot project.

FORMALIZE COLUMNS DRIVE AS GREENWAY CONNECTOR

It is recommended to use signage to designate Columns Drive as a Greenway Connector Trail between the Johnson Ferry South CRNRA Park Unit and Cochran Shoals CRNRA Park Unit. This route is already used frequently, but during public outreach activities, several people expressed that they were not aware of the full connection or had not thought of it as a trail. By formalizing the connection with signage, more people are likely to use the facility, enhancing connectivity between existing trails and providing more non-automobile options for travel between parts of East Cobb and the Cumberland area.



CREATING MORE INTUITIVE AND SAFER CROSSINGS WILL ENCOURAGE USE OF SIDEPATH TRAILS



NON-CAPITAL PROJECTS

COMPLETE A SIGNAGE AND WAYFINDING PLAN FOR GREENWAYS AND TRAILS

It is recommended to develop and adopt a signage and wayfinding plan to guide design and implementation of future signage on greenways and trails. The signage and wayfinding plan should recognize the individual identity of established greenways and trails, such as Bob Callan Trail, Noonday Creek Trail, Rottenwood Creek Trail, Silver Comet Trail, Lucille Trail, and Wildhorse Creek Trail, and others, while establishing a cohesive identity that lets people know that these trails are part of Cobb County's overall network of greenways and trails. It is suggested that this could be achieved through the use of a logo or symbol for the entire Cobb County network that could be used in conjunction with individual trail branding. Implementation could begin with identification of locations where new signage and wayfinding is needed, starting with connected segments of smaller trails, like the Mountain to River Trail, or with sidepath trails that are not as easily recognized by community members. For guidance on wayfinding and signage, see Chapter 4.

- The signage and wayfinding plan should identify locations for directional signs, mile markers, regulatory signs, interpretive signs, and information kiosks as well as larger branding opportunities, such as mural walls.

- Trails that currently lack branding and signage should be prioritized, beginning with the Mountain to River Trail.
- Cobb County should consider establishing temporary signage for significant programmed trails to raise awareness and generate excitement about projects underway. A prime example of an opportunity to create buzz about a new trail is the Mountain to River Trail – temporary signs could be placed along the stretch of West Atlanta St announcing the forthcoming trail: “Future Mountain to River Trail.”

APPLY FOR A GRANT TO SPUR ACTIVATION OF THE MOUNTAIN TO RIVER TRAIL

Much of the Mountain to River Trail corridor (Cumberland, Delk Road TOD, Marietta University District, and Town Center) has participated in the Atlanta Regional Commission's Livable Centers Initiative (LCI) program in the past. These communities would benefit from funding to examine adjacent land uses, programming, and ways to activate the trail to encourage use and establish the Mountain to River Trail as a premier regional trail facility and viable alternative to motorized transportation. Components of the study may include identifying opportunities for temporary or new uses, programming, signage, development of trailheads and public spaces and other activities.



SEEK FUNDING AND PARTNERSHIPS TO INCREASE PROGRAMMING AND ACTIVITIES ON THE SILVER COMET TRAIL

The Silver Comet Trail is incredibly popular: according to a 2013 economic impact analysis, the current trail has an estimated 1.9 million users each year and generates \$100 million in annual expenditures throughout the four-counties where it is located.² With additional programming and activities, the trail has the potential to be an even stronger economic force and attract more users.

ESTABLISH A COUNTYWIDE STAKEHOLDER ADVISORY GROUP OR COALITION

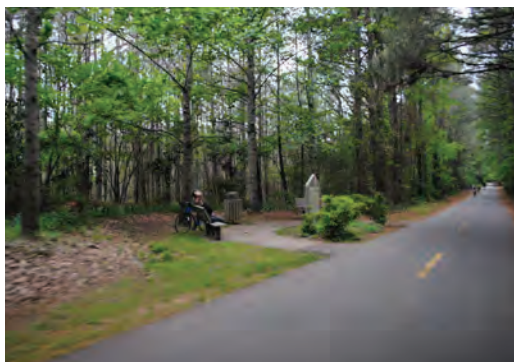
The group should be comprised of representatives of each of the six cities, three CIDs, and other entities and potential partner groups like the National Park Service, Cobb Travel and Tourism, and others. The group should meet quarterly to coordinate and provide updates on project status, engage elected official and keep them apprised of ongoing projects, assist with mobilization of resources, and collaborate with other outside groups for programming and activities.

ESTABLISH SHARED-USE PARKING AGREEMENTS WITH SCHOOLS AND OTHER COBB COUNTY COMMUNITY FACILITIES

To reduce the demand for new parking facilities and increase access to greenways and trails, establish agreements and memoranda of understanding (MOU) that allow use of parking lots for trail access during non-business hours. Consider also formalizing agreements with commercial establishments, or gain buy-in from property owners to allow the use of parking lots after hours.

WORK WITH PARTNERS TO ESTABLISH AND BRAND ONE OR MORE LOOP NETWORKS OF TRAILS TO INCREASE RECOGNITION

The Town Center CID is currently working on developing and branding the Town Center Loop – a network of on-street and off-road sidepaths, bike lanes, and greenway trails that will improve non-motorized transportation throughout the area. It was suggested that a loop network of trails be established in the Mableton area, using the existing and proposed segments of the Silver Comet Trail, Floyd Road Trail, Mableton Pkwy Trail, Nickajack Creek Greenway, and a proposed extension of the Chattahoochee River Trail. The suggested “Mable Loop” could potentially connect attractions and sites such as schools, the Mable House Arts Center, shopping centers, the South Cobb Regional Library, parks, offices, and residential areas.





NON-CAPITAL PROJECTS (CONTINUED)

COORDINATE WITH THE P.A.R.K.S. DEPARTMENT TO PRODUCE MAPS OF TRAILS WITHIN PARK PROPERTIES

Using the recently updated facilities inventory contained in the P.A.R.K.S. *Comprehensive Master Plan Update*, develop and distribute maps for trail users who are interested in recreational trails within park properties. During public engagement activities, community members expressed interest in knowing where they could find recreational trails throughout the county.

DEVELOP A MOBILE APPLICATION FOR GREENWAYS AND TRAILS

Work with a third-party vendor or host a community contest to develop a mobile phone application (app) that provides information about the location, length and difficulty of various trails throughout the County. For an example, see the app developed by Boulder County: <http://www.bouldercounty.org/pages/mobile.aspx>. Supportive features and elements like water fountains, restrooms, vehicle and bicycle parking, and key destinations should also be included.

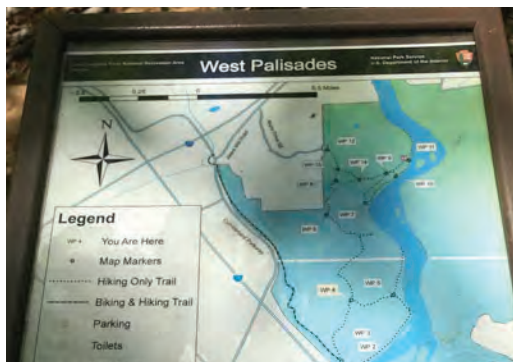
Cobb County may also consider using Cycle Atlanta's open-source data (available on Github) to develop an app that would allow Cobb County to collect cycling data from volunteers in order to better understand where people ride most often.

ENCOURAGE INSTALLATION OF PUBLIC ART ON GREENWAYS AND TRAILS

In addition to branded wayfinding signage, public art can draw attention to greenways and trails and help them stand out to visitors and residents. Government agencies can partner with local entities and businesses to sponsor competitions calling upon local artists to design and install artwork along trails. Artwork such as murals can help disguise less-attractive features or components along trails, like retaining walls or bridges. Other pieces, like sculptures, can mark access points, while other artwork may be able to transform utilitarian structures like light posts, utility cabinets, or drainage structures.

ENCOURAGE AND EXPLORE BIKE SHARE PROGRAMS

In addition to existing systems in Town Center and the City of Smyrna, other local jurisdictions across Cobb County are considering establishing bike share programs. The Cumberland CID is set to launch a bike share program in the near future, using Zagster, the same operator currently used in Town Center and Smyrna. The City of Kennesaw and Kennesaw State University are also exploring the possibility of bike share. To the extent possible, Cobb County should encourage and support these programs. Bike share typically serves as a first- and last- mile connectivity option, providing one way for transit riders to get to and from their origins and destinations, or



for short-distance utilitarian trips; however, it can also serve more recreational needs and increase use of greenways and trails. *(See also Topics for Further Study - Chapter 6.)*

GATHER DATA ON BICYCLIST AND PEDESTRIAN ACTIVITY

Implement a bicycle and pedestrian data collection and count program. Use of infrared sensors, loop detectors, and/or video technology can provide accurate data on use of greenways and trails by all users. This data, in turn, can be used to demonstrate the success of greenways and trails as well as to document demand. In combination with data from fitness tracking mobile applications, such as Strava, Garmin, FitBit and others, this data can tell compelling stories about current usage and make the case for new greenways and trails based on location data.

Cobb County initiated collection of data on pedestrian activity near SunTrust Park in 2017 and is considering expansion of the program to other locations, as resources become available. To assist with expansion of data collection, it should continue to assess and evaluate potential data collection mechanisms and technology, as well as locations for counters. Grant funding may be one way to advance and build upon these initial efforts. *(See also Topics for Further Study - Chapter 6.)*

DESIGNATE ALL TRAILHEADS AS “COMMUNITY FACILITIES” AND INSTALL BICYCLE RACKS AT ALL NEW TRAILHEADS

Consistent with the County's Sustainable Practices Policy, the County should develop an inventory of all existing trailheads and install or request local jurisdictions to install bike racks at those sites that currently have none. Simple U-shaped bike racks are recommended.

LEVERAGE FUNDING FOR INFRASTRUCTURE IMPROVEMENTS TO POPULAR DESTINATIONS

Cobb County and partners should consider ways to leverage public and private sector funding for improvements to infrastructure at key destinations, to ensure they are safe, accessible, and comfortable for bicyclists and pedestrians. Places like downtowns, business districts, Kennesaw Mountain, Lakes Acworth and Allatoona, and the Chattahoochee River are already attractive to people biking and hiking, but additional investment in supporting infrastructure can help them become true destinations. Furthermore, creating direct connections to comfortable biking and walking destinations can be a powerful tool not only for increasing use





CONSTRUCTION OF A PORTION OF THE MOUNTAIN TO RIVER TRAIL IN MARIETTA (2017)

6

IMPLEMENTATION

PLANNING FOR ACTION

The vision for the *Greenways and Trails Master Plan* is to provide a safe, well-connected network of greenways and trails to improve accessibility, safety, economic competitiveness, and well-being of residents and visitors. The end result will be that more people will have viable choices in how they get around for daily trips and more recreational opportunities. In order to achieve this desired outcome, strategic investments are needed to grow and improve upon the network of greenways and trails throughout the County. This chapter provides an overall strategy and guidance for where and how to focus investments in the future.



STRATEGIC APPROACH TO IMPLEMENTATION

OVERVIEW

Through 2021, Cobb County is focused on advancing greenway and trail projects that are part of the current SPLOST. During the subsequent five or so years, the primary focus will be on the eight priority projects identified as part of this *Plan*. Beyond that, as the County seeks to fill in and expand the greenway and trail network and develop project lists for future funding cycles, a focused approach is needed to guide investments and projects that will work towards the vision and goals set forth in this plan – toward improving mobility, accessibility, and connectivity; ensuring comfort and safety; driving economic development; protecting and enhancing the natural environment; fostering healthy choices; increasing awareness of greenways and trails; and maintaining a good state of repair. While there is tremendous interest in greenways and trails throughout most of the County, it makes sense to focus on those projects that will have the biggest impact and will make walking and biking more convenient and attractive for more people.

Planning practice is becoming more performance-based and the use of metrics to guide and prioritize funding, especially at the federal level, has become an important part of the planning process. This *Plan* provides a framework that helps focus resources and identifies areas that can be prioritized for funding. Furthermore, the strategy outlined is in keeping with the policy, programmatic, and infrastructure framework established for local partners in ARC's *Walk.Bike.Thrive!*

The approach articulated below aims to focus attention and resources on projects that blend desired network expansion criteria and principles of walkable, bikeable places, such as improving access to trails in Equitable Target Areas, connecting to activity centers or areas with high biking and walking propensity, as well as improving access to transit, creating local networks, and supporting infrastructure for walking and biking. At the same time, it is important for the County to focus on projects that have the highest potential to get more people biking and walking, not just for recreational and fitness purposes, but as part of daily life. Toward this end, the *Greenways and Trails Master Plan* suggests the following strategies as part of an overall approach to investments in active transportation projects:

- Gap Closure
- Expansion of the Network
- Neighborhood Connectivity
- Travel Sheds
- Countywide Focus Areas
- Trail Enhancements and Support Facilities

By focusing on these strategies, Cobb County will be able to implement projects that meet the stated goals and overall vision of improving accessibility, safety, economic competitiveness, and well-being, resulting in an interconnected network that gets more people biking and walking while working within the regional framework.

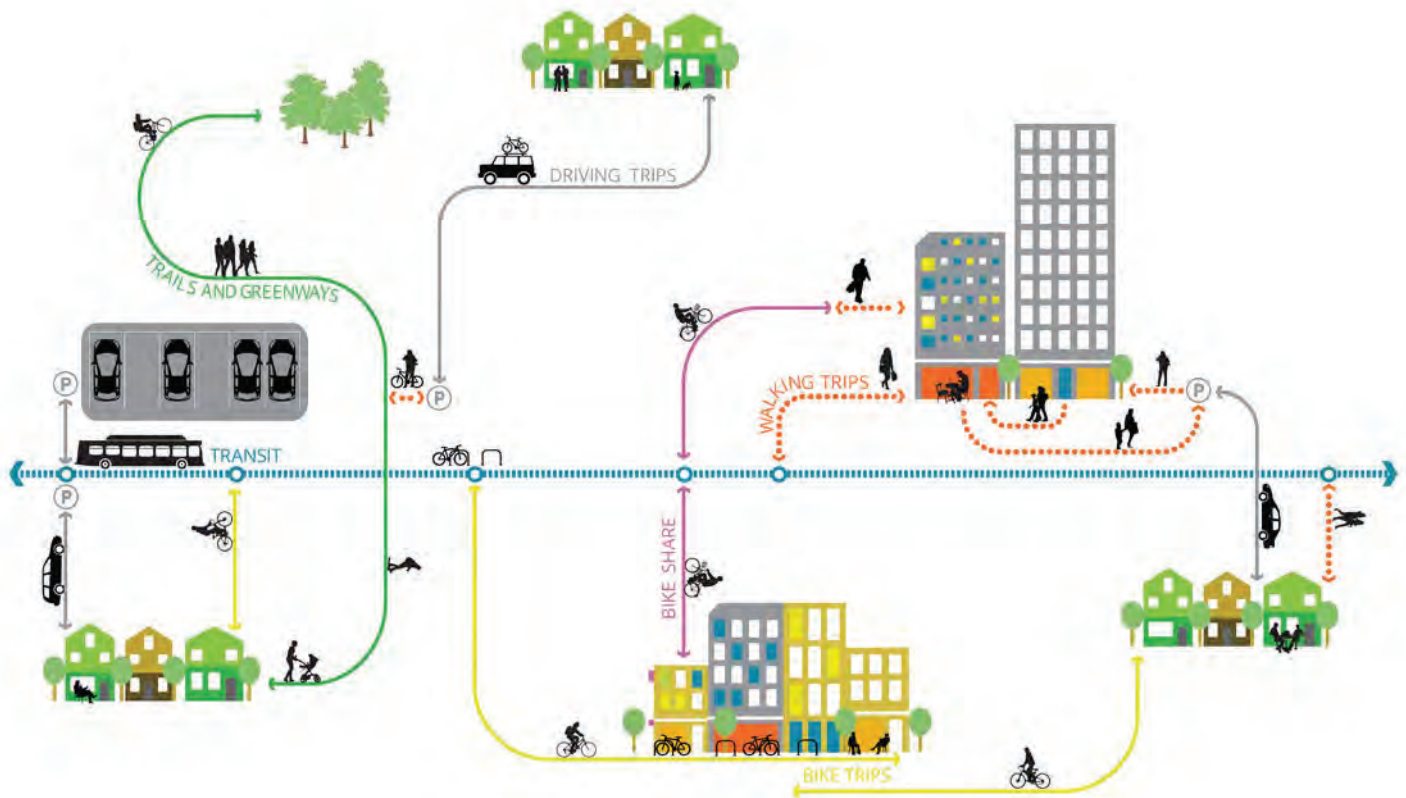


FIG. 6-1 INTERCONNECTED BIKING AND WALKING NETWORK

Credit: Atlanta Regional Commission (2016). Walk.

Bike. Thrive!, Part 1, pg. 14



GAP CLOSURE

LEVERAGE EXISTING ASSETS

The current network of trails and greenways in Cobb County has been developed in a primarily opportunistic manner. As interest has grown in walking and biking, greenways and trails have been built all across the County, as implemented by various jurisdictions and entities. In recent years, as the number of trail and greenway projects has increased, a picture of countywide connectivity has begun to emerge, and has created strategic opportunities to link individual trail segments in order to create better connectivity and a more cohesive system.

By focusing first on closing gaps between existing and programmed trail projects, Cobb County can leverage existing infrastructure, knit together segments of trail that get people to more destinations, and make biking and walking more practical for day-to-day trips in areas where trails already exist.

EXPANSION OF THE NETWORK

FOCUSED GROWTH

Expanding the greenway and trail network beyond filling gaps between existing trails will reach more potential users, provide access to new destinations, and create opportunities for linkages between Cobb County and communities outside of the County. Opportunities to expand the network are present throughout the County. Focusing network expansion on key locations and particular types of projects will help ensure that investments are working towards stated goals and maximizing their potential to serve users. In seeking to expand the greenway and trail network, priority should be given to projects that have the potential to create or improve regional connectivity, those that have the potential to become destinations or attractions, those that provide access to public transportation services, and those that create more neighborhood connectivity to greenways and trails.

REGIONAL CONNECTIVITY

Investment in projects that cross county boundaries where trails already exist, or in locations where trails are programmed or proposed, should be prioritized. Cobb County is part of the ten-county Metro Atlanta region. It is connected to surrounding communities on all sides and linked by key natural features such as the Chattahoochee River, Lake Acworth, and Sweetwater Creek. Surging interest in greenways and trails throughout the region has sparked development of numerous trail systems in neighboring counties on nearly all sides of Cobb County, presenting tremendous opportunities to enhance regional connectivity and provide unique cross-region trips, as illustrated in Figure 3-21 (Chapter 3). These include along Noonday Creek across the Cobb-Cherokee County line, across the Chattahoochee River to the Proctor Creek Greenway and BeltLine, and along the proposed extension of the Silver Comet Trail.

TRAILS AS DESTINATIONS

Trails like the Silver Comet, those at Kennesaw Mountain, and in the Chattahoochee River National Recreation

Area are recognized, on a regional level, as destinations. They are places to which people from throughout Cobb County and beyond are willing to travel, attracting visitors from outside the immediate area. As such, they increase the potential that visitors will stay in the area beyond their visit to the trail – to have lunch, for example – generating economic activity and raising visibility of the trail as an attraction and the area as a destination. In an age where people are seeking out highly walkable transit-friendly communities even in suburban areas, well-integrated and carefully designed trail networks can play a substantial role in improving and catalyzing local economic development. Trails that have a high potential to become destinations are likely to have a high return on investment, generating economic activity beyond what most typical trails would generate, and spurring compatible development, such as restaurants, cafes, and retail.

CONNECTIONS TO TRANSIT

Trails that provide access to public transportation service increase the potential for combining modes to complete longer trips, reducing congestion and improving air quality. They also provide more options for people who choose or are unable to drive cars to get around. Trails within close proximity of transit stops will make it easier for transit riders to walk or bike to stops, providing last-mile connectivity, and may attract more people to use public transportation.

NEIGHBORHOOD CONNECTIVITY

It is not possible nor practical to provide full sidepaths or greenway trails to all desired destinations and neighborhoods. It is important to recognize the role that sidewalks, bike lanes, and other types of paths can play in facilitating access to and from neighborhoods. Establishing cut-through paths and direct connections from commercial storefronts and parking lots to sidewalks can go a long way toward improving neighborhood connectivity.

NEIGHBORHOOD CONNECTIVITY

Generally speaking, people will take the shortest or most direct route available. Sometimes, the most direct route is not the typical sidewalk or trail, but is rather a neighborhood connector path, park, or even parking lot. Typical suburban development patterns are often not conducive to direct walking routes, as they are characterized by cul-de-sacs and dead-end streets, forcing travelers to make longer trips and go out of their way.

Cobb County should prioritize efforts to create a high-quality walking network of sidewalks, trails, greenways, and paths that provide direct routes, safe connectivity between destinations, and where appropriate, areas for rest or socializing.

DIRECT ROUTES: Pedestrian facilities should ideally provide direct connections between destinations, minimizing the need to take longer, out-of-the-way routes. In high pedestrian traffic areas, crosswalks should be frequent.

CONNECTIVITY: The pedestrian network should form a connected system of sidewalks, paths, trails, and public spaces that serve key destinations such as schools, shopping centers, transit stops, and neighborhoods.

SAFETY: The walking network should make people feel safe and comfortable through good design. Good design should ensure adequate width based on the context, buffers between pedestrians and roadways, visible and user-friendly crossings, curb ramps, landscaping, and lighting – and should be barrier-free, enabling universal access. It should also take into consideration the interaction between pedestrians, cyclists, vehicular traffic, and the built environment.

GATHERING SPACES: Sidewalks and walkways are for people. They should provide ample room for people to stop and rest, wait for friends, talk to one another, and even sit to encourage socializing, especially in public spaces and commercial districts.



TRAVEL SHEDS

CONSIDERING BIKING AND WALKING DISTANCES

Across the country, roughly half of all trips taken are less than three miles long, yet nearly three-quarters are driven.¹ Many of these trips could be accomplished on foot or bike, if safe, comfortable facilities were available. Research shows that, depending on the setting and type of destination, a good threshold for how far people are willing to walk is one mile and that three miles is a good approximation for how far people would be willing to bike. Regional data supports these estimates: ARC's PLAN 2040 travel demand model indicates that 50% of all walking trips in the region are less than $\frac{3}{4}$ of a mile and 75% are less than 1.2 miles, while 50% of all bike trips in the region are less than 2.4 miles and more than 75% are less than four miles.²

These thresholds are sometimes referred to as "catchment areas" or "travel sheds" - the area or distance from a given point to which a person would be willing to travel (Figure 6-2). Of course, the distance a person is willing travel varies highly based upon who is making the trip, the purpose of the trip, and the surrounding environment. Even still, if approximately half of all trips taken are shorter than three miles, and people are generally willing to walk at least a half-mile and sometimes up to one mile or bike up to three, then there is a good case for investing in improvements that will give people the option to make those trips by bike or on foot. Shifting even a small percentage of short trips to bike or foot, instead of car, would have a positive impact on congestion and environmental, physical, and mental health.

Travel sheds can be measured from any location, but for the purposes of increasing short biking and walking trips, it is important to consider travel sheds around transit stops, downtowns or business districts, and key destinations. It is also important to consider actual distances pedestrians and cyclists must travel using the existing network of sidewalk, greenways, trails, bike lanes, etc.

and the barriers they might encounter along the way, such as highway interchanges or railroad crossings.

To begin creating safe opportunities for short daily trips by bike or foot, communities should focus first on making sure the appropriate infrastructure is in place in areas where land use and development patterns already support options for shorter trips, such as mixed use districts, downtowns, and town centers. It is also important to invest in creating safe and convenient access to transit, so that people have the option of combining modes for longer trips. This might entail installing bike racks at offices or retail shops or establishing direct physical connections to transit stops.

For areas where land use patterns may not yet be conducive to biking and walking, communities should encourage those types of development patterns where possible. This may include siting commercial developments near one another, creating longer networks of sidewalk, supplementing greenways and trails with on-street bike facilities, and other approaches. Creating connected street grids, safe crossings, and direct access between businesses, neighborhoods, and sidewalks or trails are also critical.

By focusing investment in areas that allow people to make short trips on foot or bike, Cobb County can increase the likelihood that people will choose these modes more often for daily trips. This would have a significant positive impact on physical and environmental health, as well as local congestion. The Environmental Protection Agency (EPA) estimates that getting out of our cars for even half of one-mile trips could save \$575 million in fuel costs and two million metric tons of CO₂ per year - the same effect as taking 400,000 cars off of the road.³ The health benefits would be felt in terms of improved air quality, more physical activity and reduced risk of chronic disease, and lower healthcare costs.

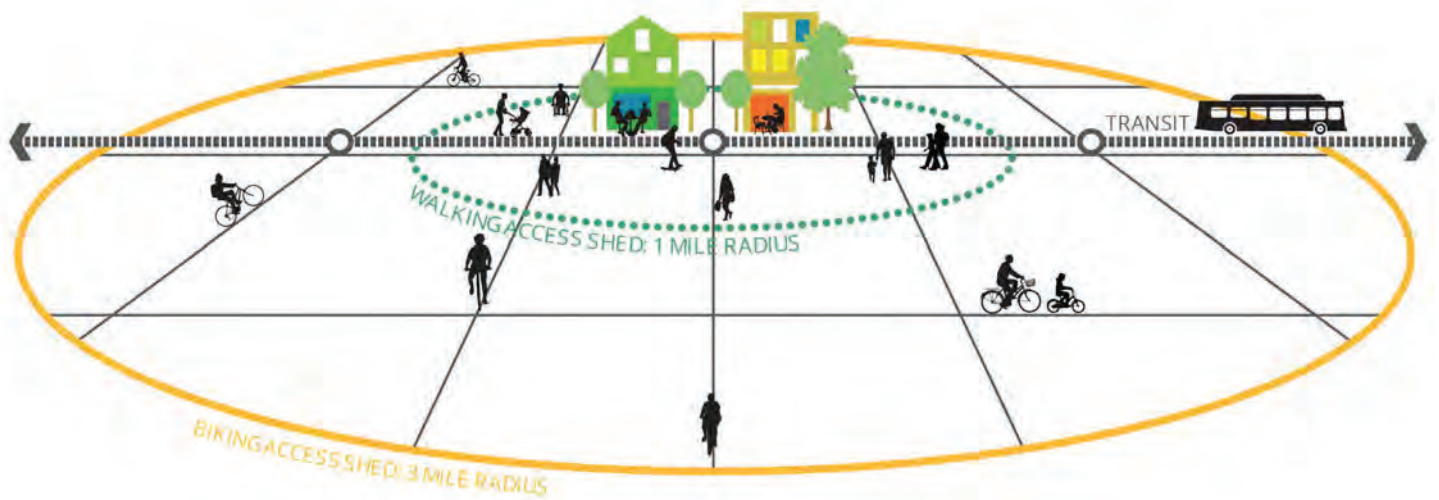


FIG. 6-2 CONCEPTUAL TRAVEL SHED

Credit: Atlanta Regional Commission (2016).

Walk. Bike. Thrive!, Part 1, pg. 11



COUNTYWIDE FOCUS AREAS

A LAYERED APPROACH

It is important to identify areas where investment in greenways and trails are likely to have the biggest impact and the highest potential to get more people biking and walking, as well as those areas where trails will connect more people to more activities. The Countywide focus areas shown in Figure 6-3 represent places where trails and greenways are likely sound investments that will serve more people and have a higher return on investment in terms of meeting stated plan goals.

These areas represent the outcome of a layering of GIS data used during the assessment of existing conditions, many of which are described in Chapter 3 – Community Context. Using data on propensity for biking and walking; Equitable Target Areas; designated regional activity centers; county-level activity centers; proximity to schools and to transit stops; and opportunities to fill gaps in the current trail network, the project team has developed a graphic illustration of geographic areas in which to focus future gap-filling and network expansion projects, as shown at right.

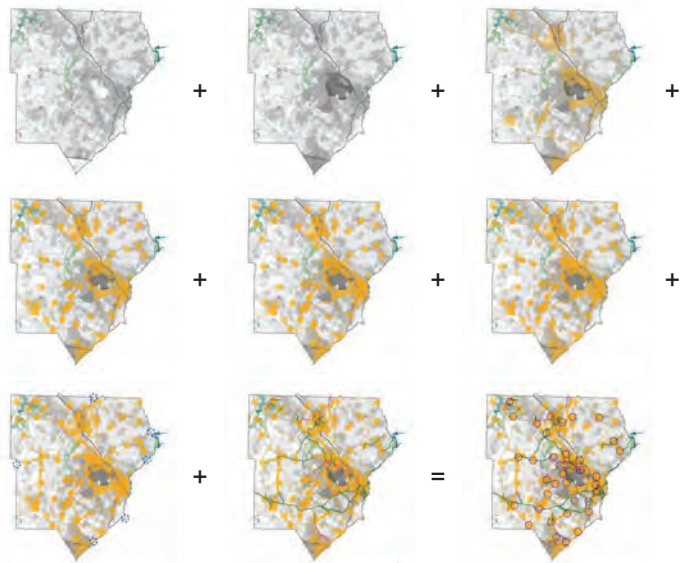
The symbols on the map are not literal boundaries, but represent a one-mile buffer around areas that generally meet the criteria described above. One mile was chosen to reflect the limits of how far and how long most people are willing to walk - a walk-shed - assuming an average speed of 20 minutes per mile (3.5 feet per second)⁴. This is also consistent with the concept of a 20-minute neighborhood, in which a person is able to reach a majority of their travel needs within a 20-minute walk. (For more on 20-minute neighborhoods, see *Walk.Bike.Thrive!* Part 1, page 37.) These focus areas should be considered during the initial screening phases of projects to help identify possible project locations and target investment. (Note: current demographic and GIS data should be used at the time of project planning.)

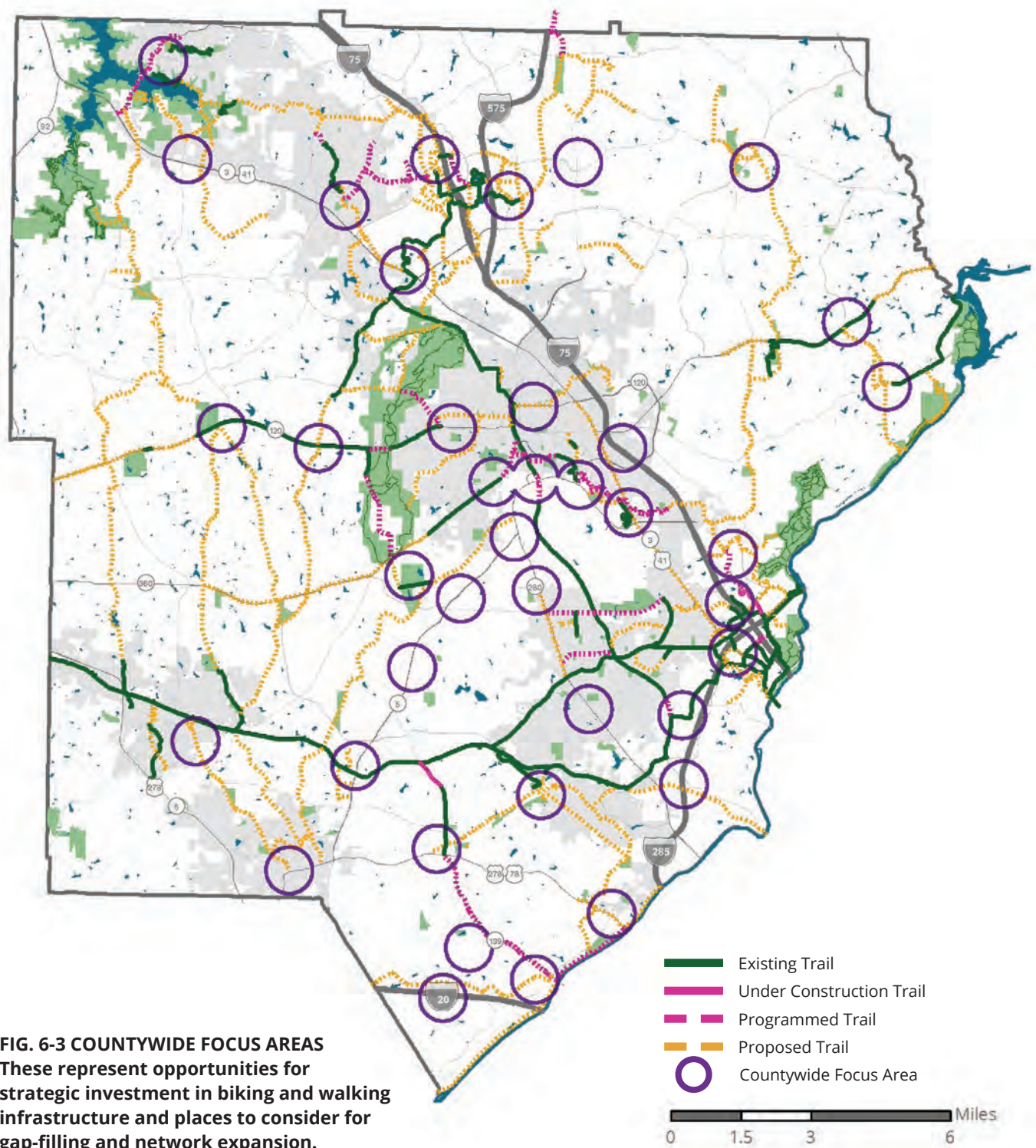
TRAIL ENHANCEMENTS AND SUPPORT

COMPLEMENTING INFRASTRUCTURE

Safe, comfortable paths such as trails, sidewalks, or greenways are the backbone of a connected network. These are the facilities that serve basic transportation purposes and give people opportunities to travel and recreate. However, to attract a wider audience and encourage greater use of greenways and trails, it is important to provide support facilities and amenities that create a more welcoming environment.

Such amenities as lighting, seating, and signage will help get more people biking and walking. Seating makes it possible for people who may not wish or be able to travel long distances to take advantage of trails. Shade is important to provide respite for travelers in the hot Georgia summers and landscaping can help reinforce the buffer between the roadway and trail users, making the trail feel safer and a more pleasant experience for users. Amenities like drinking fountains and restrooms on greenway trails can also make a facility more attractive to more people, especially those out for longer walks or rides and families with children. Enhancement of the trail network can also take the form of trail-oriented development, attracting businesses that have a natural synergy with active transportation, such as restaurants, cafes, and breweries.







TRAIL-ORIENTED DEVELOPMENT

KEY COMPONENTS OF TRAIL-ORIENTED DEVELOPMENT:

- **ENCOURAGE COORDINATION BETWEEN PROPERTY OWNERS**
- **ENCOURAGE A MIX OF USES IN NODES WITH CONTEXTUAL COMMERCIAL DEVELOPMENTS**
- **CREATE DESTINATIONS ALONG TRAILS TO ENCOURAGE USE**

Trail-oriented development is gaining popularity as more communities seek to capitalize on their investment in active transportation, interest in healthy and active lifestyles, and the momentum behind increased levels of biking and walking. The Indianapolis Cultural Trail and Atlanta BeltLine are great examples of greenways and trails that have spurred economic activity in the form of mixed use development, programming and activities, new housing, and tourism.

In February 2017, Metro Nashville Planning Commission passed a Trail-Oriented

Development community policy covering 269 acres in East Nashville. The policy was applied to the district as a way to provide important public connections in an area that previously lacked public street connectivity. The purpose is to encourage active transportation by requiring buildings within the boundaries to build a publicly accessible multi-use trail and to connect all properties within the area. Other communities have enacted similar policies encouraging development to interface with trails and greenways and encouraging the types of uses that are compatible with active transportation facilities.

SAFETY

OVERVIEW

One of the primary goals of the *Greenways and Trails Master Plan* is to ensure comfort and safety for users of the system. This will be achieved through a combination of smart design, infrastructure improvements, signage, education and awareness. This section provides guidance on considerations for creating a safe environment for all users, particularly with respect to pedestrian, bicycle and vehicular conflicts. Details about trail design, crossing, and signage are found in Chapter 4. Specific safety elements should be addressed during design on a trail-by-trail basis.

ARC's *Walk. Bike. Thrive!* plan calls for the region to "adopt a Vision Zero policy...to eliminate preventable traffic deaths." Vision Zero is a strategy developed in Sweden in the 1990s, setting a goal of working towards eliminating traffic fatalities and serious injuries. The strategy has been implemented across Europe and is catching on across the United States (www.visionzeronetwork.org), and it has now been adopted by the ARC in *Walk. Bike. Thrive!*

The National Complete Streets Coalition believes that a "safe systems approach" that considers crash experience, speed limits, and vulnerability of people walking and bicycling will help produce a comprehensive solution for reducing crashes that benefits everyone — not just those driving. Providing space on our streets for drivers, walkers, and bicyclists makes streets safer for everyone, even those who may never ride a bike. After all, drivers and bicyclists are also pedestrians and bicyclists can also be pedestrians and drivers.

Cobb County should work toward leading the region in promoting a safe trail and greenway network which will incorporate all elements necessary to minimize user injuries and fatalities.

"The reason for bikeways is not what they do for bicyclists, but what they do for the whole community."

Dan Burden,
Walkable and Livable Communities Institute



Safety is one of the most important considerations when planning and designing trails. One way to create a safe environment is to minimize areas of potential vehicular conflict and the severity of any potential collisions. For vehicle-pedestrian collisions, the risk of severe injury and death increases dramatically as vehicle speeds increase. At a vehicular speed of 25 MPH, the risk of pedestrian death from a collision with a motor vehicle is approximately 11%; at 35 MPH, this risk increases to 32%; and, at 45 MPH, the risk becomes 65%⁵ (see Figure 6-4).

A wide range of physical elements should be considered while improving existing and developing new trails and greenways to enhance safety and minimize potential vehicular conflicts. Providing adequate separation between trails and the roadway is one way to reduce potential risk. Appropriate lighting, signage, trail and roadway crossings, and other features can also reduce risk and increase safety.

Other features, such as bollards and railings may help provide a barrier between vehicles and/or pedestrians and bicyclists, particularly

at crossing locations or locations where vehicular conflict potential exists.

Other safety elements such as personal safety should also be considered when developing the trail and greenway system. Measures can be implemented to enhance personal safety and should be considered on a case-by-case basis during design and construction and will be highly dependent on location and user frequency. Such measures include:

- Trail lighting
- Emergency location markers
- Public safety patrol officers

While the safety measures listed above are worthy of consideration during trail and greenway planning, the list is by no means exhaustive, and a full safety analysis will be necessary during the planning, design and construction phases of a trail or greenway segment.

For design guidance on intersection treatments, crossings, and signage, see Chapter 4.

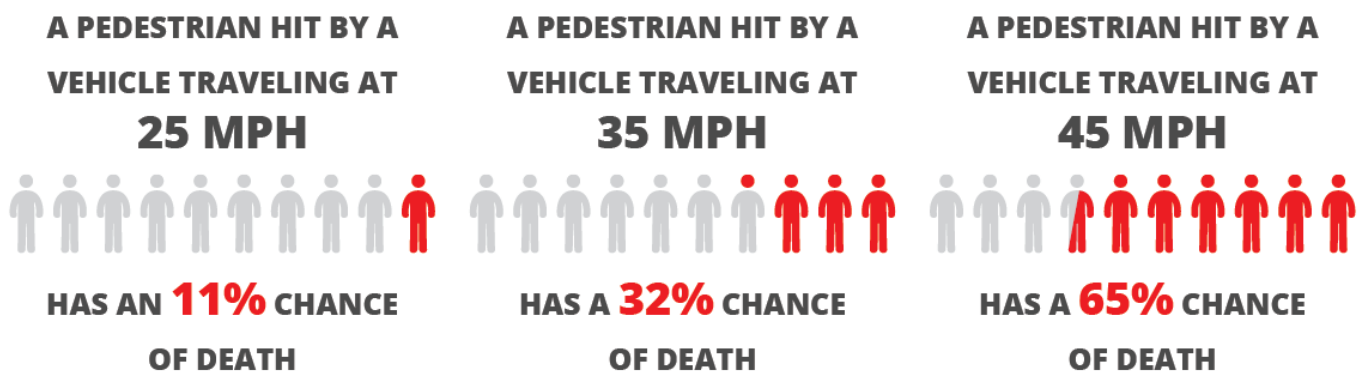


FIG. 6-4 RISKS OF PEDESTRIAN DEATH WHEN STRUCK BY VEHICLES

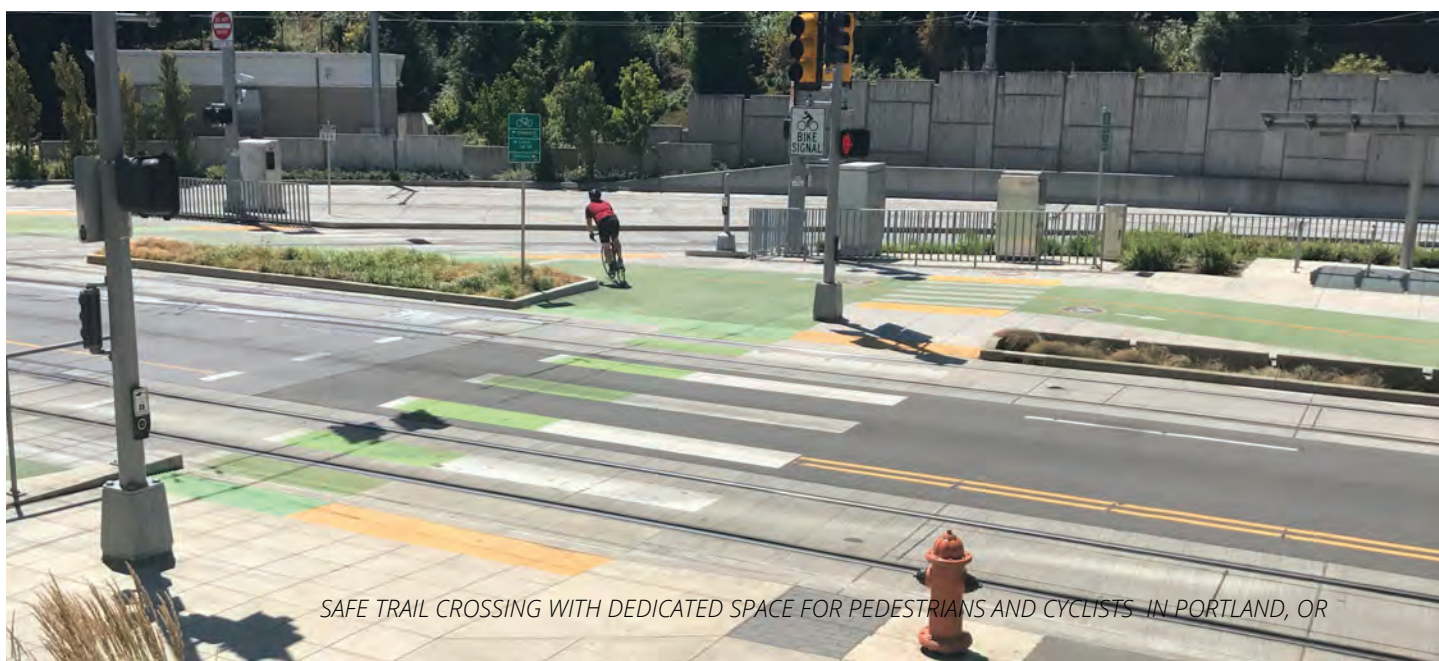
SAFETY PROJECT: EMERGENCY LOCATION MARKERS

Cobb County is undertaking an initiative to improve trail safety by installing **Emergency Location Markers (ELMs)**, which are standardized signs designed to assist emergency responders in finding locations in areas that are otherwise hard to describe or find, especially in large parks and on trails.

The County and its contractors will mark locations along trails using the United States National Grid, a national standard that also conforms to national and international display standards. The ELMs will offer residents and visitors an easier way to communicate location information to dispatchers and responders during emergencies.

Signs will be 12 by 12 inches for trail structures and shelters and six by nine inches for hiking, walking, and bicycle trails. County staff will work with contractors to determine locations for individual signs along each trail. An example of an Emergency Location Marker is shown at right.

The County plans to release a request for proposals (RFP) in late 2017 and it is expected that installation will be complete within 12 months of the beginning of the project.



SAFE TRAIL CROSSING WITH DEDICATED SPACE FOR PEDESTRIANS AND CYCLISTS IN PORTLAND, OR



COMPLETE STREETS

INTEGRATING GREENWAYS & TRAILS

Complete Streets are designed and operated to enable safe access for all users – pedestrians, bicyclists, motorists, and transit riders – of all ages and abilities. Complete Streets are not a defined prescription for roadway design, but rather a policy approach to design and operation of streets that enables safe access for all users. By adopting and embracing a Complete Streets approach to transportation planning and design, agencies commit to making the street network better for everyone as part of each project.

The look, feel, and components of Complete Streets varies based upon the surrounding context of the community in which the street(s) are located. They look different in different communities: some contain sidewalks, bike lanes, and transit lanes, while others may include median refuge islands, narrower travel lanes, and curb extensions. Urban Complete Streets are likely different from small town Complete Streets. The goal is to balance safety, comfort, and convenience of all users.

As discussed elsewhere in this *Plan*, Cobb County has a Complete Streets policy. The County should continue to focus on implementation of this policy through the provision of safe, comfortable facilities for all users with each new project, including

greenway and trail projects. To formalize the integration of greenways and trails into the Complete Streets policy, it could be updated to explicitly state this commitment. Broward County, Florida, conducted a *Complete Streets Greenways Integration Study*⁶ to encourage consideration of the County's Greenways Master Plan as part of the development of complete streets. The report identified the overlap between complete streets and greenway planning initiatives and sought to identify connectivity and accessibility opportunities, as well as problem areas and deficiencies.

Cobb County should consider updating its Complete Streets Policy to directly address on-street connections where greenway trails and sidepaths meet on-street bike facilities or sidewalks and trail-to-trail crossings. Another option could be to incorporate the *Greenways and Trails Master Plan* by reference into future Complete Streets Policy updates. The goal would be to reinforce Cobb County's commitment to Complete Streets and codify some of the design considerations and recommended treatments.



PRIORITIZE MOBILITY FOR ALL USERS AND MODES OF TRANSPORTATION





ADOPTING AND APPLYING TYPOLOGIES

INTEGRATING GREENWAYS & TRAILS

The typologies and classifications described in Chapter 4 are intended to help guide planning and design of future greenways and trails as components of an overall walking and biking network. The facility types described provide multiple options for knitting together a cohesive, connected system that gives people greater choice in how they get around and improves access to destinations, while setting a standard for creating safe, comfortable facilities. These are intended to be applied as appropriate to future projects, with the understanding that each facility type serves a different purpose.

Sidepath trails are more transportation oriented, whereas greenway trails and unpaved recreational trails are more geared toward recreation and exercise. Neighborhood connector trails serve the express purpose of connecting residential neighborhoods or commercial developments to greenways and trails. Greenway connectors are direct links to greenway and trail facilities using existing sidewalks and/or on-street bicycle facilities. Applying one of

these typologies to a proposed trail must take into consideration the surrounding context and purpose of the facility or connection.

From the standpoint of creating safe, comfortable connections, the preferred types are greenway trails and sidepath trails; however, as described elsewhere in this *Plan*, there are times when minor pathways or cut-throughs are needed to provide direct access to residential areas, transit stops, neighborhood destinations, or nearby amenities.

Design guidance included in this plan (Chapter 4) should be adopted as standard practice, recognizing the unique context of individual trail and greenway segments and allowing for flexibility to design to that context as appropriate. As discussed in Chapter 4, Cobb County should develop a trail system “fit and finish guide” tailored to the County’s brand and inclusive of more detailed information such as materials, colors, and placement of amenities and signage.



***IT IS A PRIORITY TO CREATE A
COHESIVE AND INTENTIONAL
SYSTEM***





POTENTIAL PARTNERSHIPS

INCREASING CAPACITY

There are numerous opportunities for partnering with groups and organizations from both the public and private sector to assist in promoting and funding new trail and greenway initiatives as well as maintaining existing facilities. This section describes the potential partnerships that may be available to the County as it pursues expanding the trail network; specifically, opportunities to partner with local municipalities, Community Improvement Districts (CIDs), civic and advocate groups and other organizations. Through these partnerships, Cobb County can leverage its investments and potentially share operations and maintenance costs of the trail system as it looks to increase active transportation connectivity.

MUNICIPALITIES

The County should work with each of the six municipalities (Acworth, Austell, Kennesaw, Marietta, Powder Springs, and Smyrna) to identify grants and local funding sources within each jurisdiction to advance planning, design and construction of specific trail segments. Additionally, each municipality should identify development opportunities that can incorporate trail and greenway design into infrastructure plans. Agreements and memoranda of understanding should be developed for the operation and maintenance of these trails and greenways as they traverse through the respective jurisdictions.

COMMUNITY IMPROVEMENT DISTRICTS

There are three CIDs within Cobb County (Town Center, Cumberland, and Gateway Marietta). These districts are established by property owners and local businesses that pay fees in order to improve infrastructure and other public services within the district. Cobb County already has established relationships with each of the CIDs and has partnered to support previous projects. Going forward, the County should continue to work with the CIDs to maintain a consistent vision for planning of future trail and greenway segments within and adjacent to the districts. The County and CIDs should establish agreements to guide operations and maintenance of trail segments within each of the districts.

ADVOCACY GROUPS & ORGANIZATIONS

The County may consider discussions with any and all appropriate organizations that advocate active transportation on trails and greenways to explore opportunities for expansion and development. Examples of such organizations include:

PATH FOUNDATION

A non-profit group which supports the development and construction of trails throughout Georgia, with over 260 miles of multi-use trails completed and many more planned. Through donation campaigns, PATH has been able to develop a significant trail network including segments of the Atlanta BeltLine and Silver Comet Trail and has recently

expanded to developing facilities outside of the metro area. Discussions and meetings with PATH staff can foster opportunities for expanding and developing the trail network in Cobb County.
(<https://pathfoundation.org/>)

COBB LAND TRUST (CLT)

An incorporated not-for-profit organization whose mission is to “preserve land that has natural, historic, cultural, recreational, scenic, and educational value.” Founded in 1992 to protect natural, scenic, and cultural resources in the face of burgeoning development and growing population, the CLT helps preserve land in Cobb County for the enjoyment of present and future generations. It is actively involved in several projects, including Concord Cemetery, Heritage Park, Kolb Farm, McFarlane Nature Preserve, the Nickajack Watershed, Silver Comet Trail, Wallis Farm, and others. The CLT may be a valuable resource for future greenway and trail projects. (www.cobblandtrust.org)

CONNECT THE COMET

An organization dedicated to connecting the 6.5-mile missing link from the current eastern terminus of the Silver Comet Trail to the planned Westside Trail segment of the Atlanta BeltLine. The group relies on volunteers and partnerships, and hosts forums to educate the public on the increased connectivity and mobility that will arise from the completion of the final trail link. The County should continue working with Connect the Comet to review successes and lessons learned in the trail connection process to-date and look for opportunities to advocate other trail connections along the Silver Comet and other locations across the County. Opportunities may include letters of support, fundraiser events and additional forums to educate and promote increased trail connectivity.
(<http://www.connectthecomet.org/>)

RAILS TO TRAILS CONSERVANCY

An advocacy group that promotes efforts to preserve unused rail corridors for public use, including rails-to-trails conversions such as the Silver Comet Trail. The RTC can be a continuing resource to the County to help identify additional unused rail corridors for the potential for active-use transportation.
(<https://www.railstotrails.org/>)

TRUST FOR PUBLIC LAND

An organization that works with communities to raise funds and assist with planning and land acquisition for parks, recreational areas and trails. Their current slogan, “Everyone deserves a park,” gets at the heart of the organization’s mission – saving land for people to enjoy. The group has worked extensively in the Atlanta area, including at KMNBP, Atlanta BeltLine, and the Westside Park currently under development in Atlanta. The County is already working with TPL to study the feasibility of a Chattahoochee River Trail and should continue this relationship to explore additional opportunities as identified in this Plan. (<https://www.tpl.org>)

NATIONAL PARK SERVICE (NPS)

NPS has provided the County with letters of support during past applications for funding from the Federal Lands Access Program (FLAP) through the Federal Highway Administration (FHWA). FLAP funds are used for improving access to federal lands such as KMNBP. As the County seeks to increase access to facilities such as Kennesaw Mountain and the CRNRA, it should continue to build upon the strong foundational relationships established through previous projects. (<https://www.nps.gov/>)



BUSINESS, TOURISM, AND ECONOMIC DEVELOPMENT ORGANIZATIONS

The economic impacts of trails have been well-documented across the country. World class systems, such as the Silver Comet, are major tourist attractions and, as such, carry with them immense market potential for local businesses including retail areas, restaurants, entertainment venues, hotels, and much more. The County should continue to foster strong relationships with local businesses, tourism organizations, and economic development agencies to leverage the greenway and trail system as community assets.

It takes a high level of planning and coordination to fully leverage the catalytic potential of trails and trail users to realize these positive economic benefits. The critical component of capitalizing on this effort is to make the actual connection between these entities by answering the question, “How do users make choices on which towns they will stay in or where they will eat?” The answer boils down to awareness and physical connectivity. Important factors include the following:

- **Connectivity:** Is your trail/system physically connected to businesses?
- **System Quality:** While there may be a physical connection, is it the type of connection that people feel comfortable using and will encourage users to diverge from the trail?
- **Wayfinding/Signage:** Is information about these opportunities readily available and simple to follow so users can take advantage of these assets?
- **Partnership Coordination:** Are local tourism groups aware of large-scale trail-related events? What is the best way to connect to and leverage those audiences?

The County should work with groups such as the Cobb Chamber of Commerce, Cobb Travel and Tourism, and local business associations and visitors bureaus to ensure that proper and useful branding and wayfinding are provided along the trail system to directs users not only along the trail, but also to nearby attractions and amenities. Other opportunities may exist for these and other groups to tap into or to organize regularly scheduled trail-oriented events on local trails to help capture these temporary, but critical, audiences.



CYCLING, “FRIENDS OF,” AND OTHER GROUPS

There are several cycling groups in Cobb County that actively promote cycling countywide. These groups should be considered as potential partners for future trail-related events and activities. Examples of cycling groups in Cobb County include: BikeCobb; Georgia Interscholastic Cycling League; and Southern Off-Road Bicycle Association.

Within Cobb County, there are numerous “friends of parks” groups that work with local agencies and officials to advocate for parks, green spaces, and trail connections. These organizations play a critical role in assisting with maintenance and upkeep of existing parks and can serve as invaluable resources to help advocate for and maintain trails and greenways that connect to parks and green spaces. Examples of “friends of parks” groups in Cobb County include, but are not limited to: Friends for East Cobb Park; Friends of Mabry Park; Friends of Price Park; Friends of Shoupade Park; and Friends for Tritt Park.

Other local organizations and associations are doing their part to promote and advocate for trails and greenways throughout Cobb County, as well as to engage with County staff and elected officials on behalf of their neighborhoods and communities. Groups such as Kiwanis Clubs and Rotary Clubs can be strong partners in making the case for

new trails, trailheads, and other associated improvements, and could sponsor facilities and receive recognition through signage.

One successful mechanism that has been used to promote maintenance and upkeep of trails is the “Adopt-a-Trail” program. While county and local officials hold the primary responsibility for major maintenance activities, organizations such as businesses, community groups, and church groups can participate in more frequent maintenance such as litter removal, brush clearing, and painting. Volunteers can also assist by identifying issues such as downed trees and repairs to pavement, signage and trail amenities. Some municipalities request financial contributions to adopt greenway segments. Contribution guidelines are typically based on the size of an organization (i.e. larger businesses pay more, while small businesses and non-profits pay less). Some municipalities have created a Adopt-a-Trail Handbooks to formalize procedures for trail maintenance and volunteer responsibilities.⁷ Cobb County has an established “Adopt-A-Stream” program in which community members volunteer to monitor the health of various aspects of local watersheds, assisting with clean-up and other projects. A Cobb County “Adopt-a-Trail” program could work similarly, in partnership with Cobb DOT and the P.A.R.K.S. Department.



ORGANIZED GROUP RIDES ARE A GREAT WAY TO INVOLVE LOCAL PARTNERS AND BUILD MOMENTUM



FINANCIAL RESOURCES

ESTIMATING COSTS

The cost to plan, design, construct, and maintain trails varies based upon a number of factors, including the length of the greenway or trail, the location and context (e.g., the type of vegetation planted alongside the trails, whether it is next to a stream or creek, or in a neighborhood or commercial setting), the surface material, the amount of land to be acquired, and more. This section provides resources to assist with estimating costs for future greenway and trail projects and potential sources of funding.

Cost estimates are an important component of the planning process for greenways and trails; however, cost estimates are fluid and subject to change based upon many factors, particularly as a project advances through the design and engineering phases of development. Current planning-level estimates for construction of greenways and trails in Metro Atlanta are provided below, along with references and benchmark estimates.

The resources provided in this section are intended as guidance only. More detailed estimates will be needed at each phase of individual greenway or trail projects, and it should be noted that cost estimates are likely to change as more detailed information becomes available during the design and scoping phases of projects.

The methodology for developing cost estimates began with a review of estimates from previous plans and studies, actual costs of recently completed trail projects, and consultation with Cobb County DOT.

Estimates for trail construction around the region vary considerably, based upon context, location, type of trail, and other factors. ARC's *Envisioning a Regional Trail Network* used an estimate of \$1,000,700 per mile for trail construction. A review of cost estimates from seven Cobb County-specific trail projects revealed an average per-mile construction cost of just over \$2 million. These estimates were derived from a combination of approved GDOT concept reports, post-construction cost for one local trail, and bids for construction of new trails in Cobb County as of November 2017. To obtain this average per-mile construction cost estimate, the project team identified cost estimates from seven planned or proposed projects in Cobb County, including both greenway trails and sidepath trails, and calculated an average per-mile cost for construction only, adjusting for inflation as needed in order to identify costs in 2017 dollars. The reference projects are typically 10-foot asphalt or concrete multi-use paths, ranging from 2/3-mile to nearly seven miles in length.

Recent bids for construction projects in Cobb County (as of November 2017) reflect anticipated greenway and trail construction costs of \$1 million to \$2.9 million per mile, depending on setting (e.g., sidepath trails along roadways, or greenway trails along creeks or in their own independent alignments). These estimates do not reflect associated costs for preliminary engineering, land acquisition, utility work, environmental coordination, or signing and marking.

While concrete, which is usually used for sidepath trails, is generally more expensive than asphalt, sidepath projects often follow roadway rights-of-way and may require less grading and drainage work than greenway trails in their own independent alignment.

Costs for other phases of greenway and trail projects may be calculated based upon an assumed percentage of construction costs. Reasonable estimates for other phases of projects, as a percentage of construction costs, are as follows: mobilization, 2-3%; scoping and preliminary engineering (PE), 15-20%; utility coordination, 5-10%; and construction administration 10-12%. Right-of-way or land acquisition costs vary considerably, depending upon land value, location, amount of land to be acquired, and other factors. Permitting costs depend upon the level of regulatory compliance, extent of impact to regulated floodways, and amount of mitigation anticipated.

Total per-mile costs of trail projects may be higher or lower depending upon the details of the project; the thickness of the asphalt or concrete used; the amount of land to be acquired; project features such as crossings, bridges, traffic control devices, fences, boardwalk; and the amount of land disturbance, clearing, grading, and utility coordination needed. These estimates may help with project planning and identification of funding for projects.

USING COST ESTIMATES

When planning for future greenway and trail projects, the following should be taken into consideration:

- Estimates reflect planning-level analysis and are provided for planning purposes only. As such, they are provided as a range to reflect likely variations.
- Costs are likely to change and evolve throughout the course of project scoping, preliminary engineering, and other phases, as additional details and more concrete project information becomes available.
- Benchmark per-mile costs for asphalt greenways (alongside creeks) and concrete sidepath trails are based upon construction bids from November 2017 provided by Cobb County.
- Costs are provided in 2017 dollars and rates of inflation should be considered and applied over time.
- Cost estimates provided reflect estimates for greenway and trail construction. They do not reflect costs for land acquisition or other project phases, such as design, preliminary engineering or utility coordination.
- Estimates reflect typical grading and drainage, but do not reflect costs of significant structural elements such as bridges or boardwalk, or features like trailheads or parking, which would likely increase overall project costs.
- Projects that require high levels of coordination with federal agencies and regulatory compliance, such as those in wetlands and regulated floodways, will likely encounter higher costs.
- Maintenance of greenways and trails should also be considered in planning and funding strategies.



Table 6-1 lists a range of typical per-mile costs for construction of 12-foot concrete sidepath trails and asphalt greenway trails, and 10-foot stone and unpaved recreational trails, excluding land acquisition. These costs are reflective of typical grading and drainage, both of which can affect actual costs. These costs do not include estimates for scoping/preliminary engineering, utilities, permitting, or land acquisition. Actual costs will depend upon specific project details, including right-of-way acquisition, the number of roadway crossings, extent of grading and drainage, signage, permitting, and other project components.

In addition to construction of the trail surfaces themselves, some projects may include or require structures such as bridges or boardwalk, or amenities and additional components like trailheads, sign

kiosks, seating and other items. Bicycle and pedestrian bridges vary widely in cost depending upon factors such as span width and length, the type of structure, weight bearing load, and more.

As an example, a recent Cobb County trail project on Floyd Rd included a bicycle and pedestrian bridge, constructed parallel to the existing roadway bridge over the railroad tracks. The bridge is roughly 215 feet long and wide enough to accommodate a 10-foot multi-use trail. According to information received from the County, it cost \$608,000 - equivalent to roughly \$2,800 per linear foot. Other bridges, such as in a wooded area over a small creek, could cost considerably less, whereas larger spans over major roadways would necessarily cost more.



STRUCTURES SUCH AS BRIDGES ARE ONE OF MANY FACTORS THAT AFFECT THE COST OF GREENWAY AND TRAIL PROJECTS. THIS MINOR BRIDGE IS LOCATED IN KENNESAW MOUNTAIN NATIONAL BATTLEFIELD PARK.

Going rates for boardwalk with composite deck and timber piles in Georgia range from \$40 to \$65 per square foot, depending upon whether timber or composite handrails are also used. For a 12-foot wide trail, this translates to a cost of \$480 to \$780 per linear foot, or \$3.1 to \$4.1 million per mile. Costs for greenway and trail features and amenities depend considerably upon vendors, quantity, materials, and other factors. A few examples are provided below for planning purposes.

- Removable bollard: \$2,000-\$3,000
- Sign kiosk: \$7,000-\$21,000
- Mile marker sign (post): \$100-\$550
- Bike rack: \$800-\$5,500
- Trash receptacle: \$750-\$1,500
- Bench: \$1,000-\$2,000
- Large deciduous tree: \$300-\$500
- Bike loop counter: \$2,000-\$5,000

Maintenance of greenways and trails is another factor in the cost of greenway and trail projects and is often overlooked when planning for future projects. Cobb County DOT estimates that the cost to maintain a trail is **\$7,680 per mile annually**. It is strongly suggested by the Department that this maintenance cost be taken into consideration as part of the planning process for future greenways and trails.

**TABLE 6-1 PLANNING LEVEL TRAIL CONSTRUCTION
COST ESTIMATES BY PROJECT TYPE***

Description	Low Estimate	High Estimate	Unit
Greenway Trail <i>12-ft asphalt multi-use trail off-roadway alignment</i>	\$2,600,000	\$2,900,000	Linear Mile
Sidepath Trail <i>12-ft concrete multi-use sidepath separated from roadway by curb and grass strip</i>	\$1,350,000	\$1,500,000	Linear Mile
Unpaved Recreational Trail <i>10-ft crushed stone hiking trail</i>	\$423,000	\$470,000	Linear Mile
Unpaved Recreational Trail <i>10-ft bare earth trail</i>	\$166,000	\$185,000	Linear Mile
Boardwalk <i>12-ft wide composite deck with timber piles and handrails</i>	\$40	\$65	Square Foot

*Notes: Cost estimates are for planning purposes only. They are preliminary and subject to change. Inflation should be considered in costs when using for future planning and implementation.

Cost estimates for greenway trails and sidepath trails are based on bids for construction of trails in Cobb County, as of November 2017.

Cost estimates for unpaved recreational trails and boardwalks are based on project team calculations in November 2017.

Cost estimates do not include: landowner outreach, traffic impact studies, land acquisition, wetland determination/delineation, excavation, attorney costs, transactional fees, or taxes. They also do not include street crossings, trailheads, landscaping, or lighting.



POTENTIAL SOURCES OF FUNDING

RESOURCES BY TYPE

There are a variety of sources of funding for trail and greenway projects. Historically, Cobb County DOT has used funding from the Special Purpose Local Option Sales Tax, or SPLOST, to design and construct greenways and trails. Project partners such as GDOT and CIDs often contribute funds to these projects. Below is a brief summary of select other potential sources of funding that may be used in planning, design, and construction of trails and greenways. There are many more potential sources available; this list is not exhaustive.

SPECIAL PURPOSE LOCAL OPTION SALES TAX (SPLOST)

In 2014, Cobb County voters approved a referendum for a six-year one-cent special purpose local option sales tax (SPLOST) for specific capital improvements for transportation, facilities, technology, public safety, and public services. The referendum included a project list of approximately \$287.3 million in transportation improvements, anticipated for collection through the sales tax over the six-year period, ending in 2021. Pedestrian improvements, including trail segments, are included in the most recent SPLOST project list. As the County prepares for the next SPLOST referendum, Cobb DOT can add priority trail projects for consideration in the overall project list.

BONDS

Bond programs allow local governments to borrow funds for capital projects. The bonds are typically backed by reliable income sources, such as property taxes, and repaid over a specified period of time. The interest income earned from municipal bonds is exempt from federal taxes, making this

funding mechanism an attractive option. Bonds are often used for acquisition of parks and open space and could potentially also incorporate trails/greenways.

ASSISTANCE

- **National Recreation Trails (NRT):** NRT is a designation that recognizes exemplary existing trails. Securing this designation can provide access to technical assistance and listing in a database. NRT designation may be taken into consideration by some funding sources.
- **Rivers, Trails and Conservation Assistance Program (RTCA):** Similar to National Recreation Trails, this program is an arm of the National Park Service and can provide access to technical assistance to develop trail and open space plans.

GOVERNMENT GRANTS

- **Community Development Block Grants (CDBG):** CDBG is an annual grant program given to local governments and states for a wide range of planning initiatives. Intended to benefit low-income and moderate-income persons, these funds have been used for trails in the past.
- **Recreational Trails Program (RTP):** The RTP provides funds to States to develop and maintain recreational trails and related facilities through the Department of Transportation's Federal Highway Administration (FHWA). The Fixing America's Surface Transportation (FAST) Act reauthorized the RTP for FY 2016 through 2020 as a set-aside from the

Transportation Alternatives (TA) under the Surface Transportation Block Grant Program (STBG). RTP is managed by the entity that administers trails in each state and is a competitive grant program. RTP funds must be used for specific programs such as maintenance and restoration of existing trails, acquisition of easements, new trails and educational programs.

- **Congestion Mitigation and Air Quality Program (CMAQ):** These funds are jointly administered by the Federal Highway Administration (FHWA) and Federal Transit Authority (FTA). CMAQ funds are granted for projects that improve air quality, including pedestrian facilities and non-recreational bicycle transportation infrastructure that support a reduction in single occupancy vehicles. CMAQ funds are generally channeled through state departments of transportation, metropolitan planning organizations, and transit agencies.
- **Transportation Alternatives (TA):** The latest federal transportation legislation establishes a set-aside of the Surface Transportation Block Grant (STBG) for Transportation Alternatives (TA). TA funds can be used for a variety of transportation projects that expand travel choices and enhance the transportation experience through improvements such as recreational trails, pedestrian and bicycle facilities, and SRTS projects.

- **Federal Lands and Tribal Transportation Program (FLTTP):** These funds are available for projects that improve access within federal lands for which state and local governments are not responsible, including national forests, national recreation areas, and national parks. There is a specific provision for the use of these funds for pedestrian and bicycle projects within these federal lands.
- **Federal Lands Access Program (FLAP):** Similar to FLTTP, FLAP focuses on improving access to federal lands on infrastructure owned by state or local governments. These funds are generally only eligible to Federal Land Management Agencies (FLMAs): National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, and Bureau of Land Management. Other agencies may receive these funds, but only at the request of one of these FLMAs.

FOUNDATION & COMPANY GRANTS

Organizations such as PeopleForBikes (Bikes Belong Community Grants), National Trails Fund, Kodak (American Greenways Grants), the Conservation Alliance, and many others offer funding for greenway and trail projects.



PERMITTING

OVERVIEW

Compliance with local, state, and federal regulations is an important consideration for any greenway or trail project, particularly those that traverse riparian corridors or are located in close proximity to environmentally sensitive areas. Permits are needed to document compliance with various regulations at multiple levels of government. This section provides a brief overview of local permitting requirements and considerations for compliance with Federal Emergency Management Agency (FEMA) and funding requirements. Specific permitting needs will vary on a project-by-project basis and should be reviewed and assessed as part of the project planning process.

Environmental permitting requirements are often determined based upon proximity to environmentally sensitive areas, such as water bodies, established floodways, and others. Coordination with other agencies is also needed to document compliance with regulations and obtain approvals and/or necessary permits related to minimizing impacts from construction activities, encroachment upon utilities and/or state or national roadways, local government site plan review, and soil erosion, among others.

The following is a list of approvals and permits that are likely needed prior to construction of a greenway or trail:

- Site Plan Review, including Flood Damage Prevention Permit
- Construction Review
- GDOT Utility Facility Encroachment Permit
- National Pollutant Discharge Elimination System (NPDES) General Permits for Common Development, Infrastructure Construction, or Standalone Projects
- NPDES Soil Erosion and Sediment Control Permit
- FEMA Compliance
- Georgia Department of Natural Resources (DNR) Environmental Protection Division (EPD) Stream Buffer Variance Permitting

Other possible permits that may be needed include:

- U.S. Army Corps of Engineers (USACE) Section 401 Water Quality Certification
- USACE Section 404 Permit to Discharge Dredged or Fill Materials in Navigable Waters
- Chattahoochee River Development Certificate (if within 2,000 feet of the River)

SURFACE WATERS

OVERVIEW AND COMPLIANCE GUIDANCE

Cobb County is located in three watersheds – the Upper Chattahoochee, the Middle Chattahoochee-Lake Harding, and the Etowah (Hydrologic Codes 03130001, 0313002, and 03150104, respectively). In Cobb County, the Upper Chattahoochee discharges primarily into Sope Creek, Rottenwood Creek, and Sewell Creek. The Middle-Chattahoochee-Lake Harding flows into Sweetwater Creek, Noses Creek, Nickajack Creek, Powder Springs Creek, and Olley Creek. These two watersheds also discharge into the Chattahoochee River. The Etowah discharges into Noonday Creek and Butler Creek.

The Chattahoochee River is protected by the Metropolitan River Protection Act (MRPA), which created a 2,000-foot buffer along both banks of the river and its impoundments to protect quality of the river. The Chattahoochee is the region's primary source of drinking water, an important National Recreation Area, and the Nation's first National Water Trail. The Chattahoochee River National Water Trail was designated by the National Park Service and offers 48 miles of river trail within the Chattahoochee River National Recreation Area for rafting, canoeing, kayaking, and motorboat use.

Greenway and trail projects may intersect established floodways. Any trail development within a floodplain must obtain a permit and go through the FEMA compliance review process. Plus, any changes in water surface elevation, floodway width or location, or floodway water surface elevations due to trail or greenway construction will require FEMA approval through the Conditional Letter of Map Revision/Letter of Map Revision process. This is a very intensive modeling and review process that can take six to nine months to complete.

Building within floodways not only requires coordination with FEMA, but also involves the Floodplain Management Office of the Georgia DNR and Cobb County Stormwater Management. If trail projects can be kept outside of the floodway, and impacts such as fill and structures (like bridges and boardwalks) that may cause blockages in the floodplain can be minimized, it is expected that a No-Rise Certification can be obtained and approved at the local level. It is beneficial for trails to avoid floodways or floodway fringes not only because of permitting and multi-jurisdictional coordination, but also because it is best for the natural and hydrological environment, as well as the resilience of the trail itself.



THE CHATTAHOOCHEE RIVER, SEEN HERE FROM THE WEST PALISADES TRAIL, IS PROTECTED BY THE METROPOLITAN RIVER PROTECTION ACT



***THE CHATTAHOOCHEE
RIVER WAS THE FIRST
NATIONAL WATER
TRAIL IN THE US***



FUNDING COMPLIANCE

OVERVIEW AND GUIDANCE

LOCAL ADMINISTERED PROJECT CERTIFICATION

When municipal projects receive federal-aid funding, every aspect of the project is required to meet or exceed federal and state laws. Even if the project only receives federal construction funding, the entire project from beginning to end will be required to meet the federal guidelines and will be subject to federal oversight. GDOT determines a local government's qualifications for compliance with Federal and State laws and regulations through the Local Administered Project (LAP) Certification process. Once a project is certified, GDOT then assumes responsibilities and administers federal-aid.

Guidance on the LAP certification process:

- The design and construction will be in compliance with accepted federal details and specifications (in this case GDOT details and specifications).
- The design will be reviewed and approved by GDOT.
- Property acquisition will adhere to procedures and processes of the Right of Way Office, the Acquisition Guide for Local Public Agencies and Sponsors, and the Uniform Act.
- Utility and railroad facilities will meet requirements of GDOT Utilities Accommodation Policy and Standards Manual.
- The project will meet additional requirements related to environmental and natural systems investigation and reporting, including GDOT Environmental Procedures Manual.
- The project will have additional inspection, testing, and oversight requirements during construction.
- Additional federal paperwork and federal audits are required.
- GDOT review and administration charges are applied.
- The local government will keep project records on federal-aid projects for three years after reimbursement to GDOT.

In general, it is anticipated that federalizing a project can increase the total cost of the project from design through construction by 20 to 30%.

In addition to cost, funding type can have an influence on schedule. If trail projects were completed with local funds alone, the local government would not need to wait on the state or federal funding cycles, and could start construction at any time after design and permitting is completed.



LAND ACQUISITION & DEVELOPMENT COORDINATION

OVERVIEW & STRATEGIES

Multiple options exist for property acquisition and mechanisms to manage and regulate trails and greenways. Acquisition strategies differ widely based on the context of each individual trail and existing property. Long-range planning may focus on zoning and regulation based strategies which build in requirements or minimum standards for these facilities to be constructed and easements to be provided as communities grow.

In built-up areas acquisition strategies are focused on variations of purchase of property and easement agreements that provide access. The following paragraphs provide a basic overview of some strategies that can assist with acquisition, assemblage, and management of land to be used for trails and greenways.



COORDINATION WITH DEVELOPMENT IS KEY TO A SUCCESSFUL, CONNECTED TRAIL SYSTEM THAT GETS PEOPLE WHERE THEY WANT TO GO AND CAN STREAMLINE THE DESIGN AND CONSTRUCTION PROCESS

PLANNING & ACQUISITION

ZONING STRATEGIES

OVERLAY ZONING

Overlay zoning is a regulatory tool that can be applied on top of an existing zoning category to add additional requirements in order to maintain the character of an area. In the case of trails and greenways, an overlay zone may be applied along a planned trail corridor, and as property is either developed or significantly altered, the property owner is required to allow the agency to construct the specified facility. This sort of control also allows dimension and material standards to be applied such that the trail, no matter when segments are constructed, will have a unified and cohesive design, look and feel.

INCENTIVE ZONING

Incentive zoning focuses on offering development incentives, such as density bonuses, that can be utilized to build trails or provide easements. These sorts of bonuses may work best in tandem with overlay zones. In these situations, a base requirement for an easement may be in place and the incentive is triggered if the developer agrees to construct the greenway or provide other trail-related amenities.

CONSERVATION ZONING

Conservation zoning focuses on protecting a community's most environmentally vulnerable land such as wetlands, stream corridors, and flood plains. While these zones typically prohibit or restrict development, they present opportunities for the construction of trails and greenways within them.

PURCHASING STRATEGIES

FEE SIMPLE PURCHASE

Perhaps the most common method of property purchase, fee simple is the outright purchase of a parcel of land, including the entire bundle of rights associated with it.

EASEMENT PURCHASE

This acquisition is also classified as fee simple, but the full title is not purchased; only access rights associated with the trail/greenway are purchased. Because of this, the total cost is less than the full property value.

LEASE

Leasing options allow property such as rail corridors to be brought into play where purchase may be untenable. The lease agreements would need to have well-defined terms regarding what is required to break the lease, length of terms, etc.

LAND BANKING

Land banking is a long-term strategy for land purchase in areas where land values are lower. This strategy may pair with the creation of a community land trust. Land banking is often associated with preservation of key agricultural tracts or green belts in more undeveloped parts of communities.



DEVELOPMENT COORDINATION

OTHER ACQUISITION STRATEGIES

CONSERVATION EASEMENTS

Conservation easements protect natural resources from disturbance by new development. The easement itself is more of a spatial placeholder that restricts development or other specific uses and may not include construction. These easements can also help protect valuable lands, farmland, waterways, and scenic views.

EXACTIONS AND IMPACT FEES

Exactions require that developers pay a fee or dedicate an easement to the public for open space or recreation. Exactions are typically leveraged during a development plan process or rezoning and are intended to offset infrastructure/public costs of development. The use of impact fees and credits has been successful in many communities as a way of encouraging inclusion of greenways and trails in new developments. The City of Alpharetta, for example, awards credits for parks, trails, and greenspace that can offset the impact fee of approximately \$5,000 per housing unit. Where a developer would normally be assessed an impact fee of \$5,000 per housing unit, the city allows the use of these fees to be used for construction of trails and greenspace with the development. This results in more public park improvements and has been effective in building out the suburban trail system throughout the city.

LAND TRUSTS

Land trusts are local, regional, or statewide organizations that work to preserve important land resources for public benefit. Often, they conserve and protect parklands, wetlands, farmlands, forests, wildlife habitats, significant residential properties, and other areas that provide value to the surrounding community. Land trusts work cooperatively with landowners to complete real estate transactions, either obtaining conservation easements, acquiring land through donations, or purchasing property interests. Others facilitate conservation and preservation through stewardship of lands or easements.

SUMMARY & GUIDANCE

Recognizing the purview of local jurisdictions when it comes to land use, subdivision, zoning, and/or unified development ordinances, Cobb County and its municipalities should strive for consistency in their respective policies related to the requirement to set aside and construct greenway trails, in addition to sidewalks. A summary of current County and municipal policies is provided below with recommended guidance for consideration.

COBB COUNTY

The County's open space ordinance (Section 134-198.1) provides for a community overlay district which "encourages the preservation of natural resources within residential development." The intent is to preserve greenspace, natural resources, "promote interconnected greenways and corridors throughout the community [and] promote greenspace as passive recreation." By encouraging greenspace, the ordinance also preserves natural stormwater runoff areas and promotes flexibility in design within environmentally sensitive areas. The overlay district, does not, at this time, require any dedication of easement or construction of connections to greenways or trails.

Guidance:

- County Cobb County should consider including language that incorporates the *Greenways and Trails Master Plan* into its Code of Ordinances. It should be noted that Cobb County regulations would only apply to properties in unincorporated Cobb County and that for areas within incorporated Cities and locations in CIDs, local development standards and regulations would apply.
- Cobb County should consider establishing a policy or protocol that requires that the *Greenways and Trails Master Plan* or the subsequently updated official Trail Planning Map be reviewed as part of the site plan and

development review process. This should be incorporated into review of both residential and commercial properties, within certain districts, as appropriate.

- The County should consider developing a policy that requires greenway or trail right-of-way dedication or access in new development projects. Parcels abutting or intersected by programmed trails or existing trails should be requested to provide access to those trails. Within floodplains and stream buffers, the County should require dedication of easements to provide public access to programmed or priority proposed trails and greenways. Limitations may be set regarding single-family residential parcels in proximity to greenways and trails. The language used by Gwinnett County serves as a good model.

MUNICIPALITIES

Municipalities set their own regulations regarding land use and development and are not bound by recommendations in this *Plan*; however, to the extent possible, all jurisdictions within the County should strive for consistency to set clear expectations for development regarding greenways and trails.

Each city in Cobb County has its own code and ordinances guiding development policy. Most have specific districts or overlay districts that encourage the development of greenways and trails as public amenities, though none require dedications for that specific purpose. Some municipalities have ordinances regarding wetland protection districts that specifically allow nature trails as permissible uses as a right. Marietta has several designated zoning districts that specifically identify the development of interconnected greenways and walking trails as part of their purpose and encourage provision of amenities such as parks, open space, and walking trails. The Marietta and Acworth codes discuss the permissible use of

dedication requirements, including for parks, playgrounds, and other public purposes, but do not specifically mention dedications for the purpose of greenway or trails.

The City of Smyrna's conservation subdivision and open space development code (Sec. 718) promotes the construction of landscaped walking trails and bike paths within the subdivision and connected to neighboring communities, businesses, and facilities as a mechanism to reduce reliance on automobiles. The city also requests that during the application process, site plans are reviewed to check for potential connections with existing greenspace and trails (Sec. 718.3). Likewise, Kennesaw's conservation subdivision ordinance (Sec. 4.03) includes similar language and specifically addresses the intent of reducing reliance on automobiles. The city also requires that site plan applications feature potential connections with existing greenspace and trails, as well as proposed trails or greenways identified on the Kennesaw Trail Network Plan (Sec. 4.03.03).

Guidance:

- Municipalities should consider requiring greenway dedication and/or construction as part of standard development practice, particularly if a greenway is proposed through the site of a proposed new development, regardless of type. In addition, municipalities should consider requiring construction of any proposed greenway corridor segments that are part of a local plan or this *Greenways and Trails Master Plan* along with providing high-quality pedestrian/bicyclist connections from the development to the main greenway corridor.



CASE STUDY: GWINNETT COUNTY

Gwinnett County, Georgia has incorporated its *Open Space and Greenway Master Plan* into its Unified Development Ordinance (UDO) (Sec. 360-30) and states that the Plan shall be treated as part of its regulations for the application of minimum standards for design and construction of improvements. In addition to codifying the county's desire for trail expansion, the UDO goes one step further by laying out protocol for access, dedication of easement, and construction requirements for greenway trails (Sec. 360-70.4).

The ordinance states that all properties or assemblages of parcels abutting designated greenways as shown on the greenway network map shall provide at least one multi-use path to a programmed or existing greenway and that the path shall be a minimum of 10-foot wide, constructed with materials approved by the county, and in a location approved by the Department of Community Services. The text of the ordinance is provided below as an example that may be adapted for Cobb County's purposes if desired.

360-70.4 Greenway Access Dedication of Easement and Construction Requirements. Access, dedication of easement and/or construction of greenway trails shall be provided in accordance with the prioritized greenway network map of the most currently approved Gwinnett County Open Space and Greenway Master Plan, as follows:

A. Greenway Access.

All properties or assemblages of parcels abutting designated greenways as shown on the prioritized greenway network map of the Gwinnett County Open Space and Greenway Master Plan shall provide at least one multi-use path to the programmed or existing greenway. The multi-use path shall be paved or constructed with other materials approved by Gwinnett County (Section 900-100), and the route segment shall be a minimum of 10 feet in width. Multi-use path locations to be reviewed and approved by the Department of Community Services.

B. Greenway Construction and Easement Dedication.

- 1. Within flood plains and stream buffers, greenway easements shall be dedicated and constructed to provide public access to trails as shown on the prioritized greenway network map of the Gwinnett County Open Space and Greenway Master Plan. Greenways shall be located so that the route is feasible for both construction and long-term maintenance.*

The specific location of the greenway shall be verified on the ground before approval and project release of the development. The amount of land required for greenway construction shall not exceed 5 percent of the land within the development excluding greenways located within a standard street right-of-way

2. For all other locations, as established by the prioritized greenway network map of the Gwinnett County Open Space and Greenway Master Plan, dedication of easement shall be required for greenways lying outside of any floodplain or stream buffer, or shall be reserved either for public access greenway easement, dedication and construction, or other terms negotiated with the County.

3. In coordination with the Department of Community Services and the Director of Planning and Development, greenways with public access may be allowed to substitute for required sidewalks if the greenway alignment coincides with location intended to be served by sidewalk.

C. Limitations.

1. Single-family residential zoning districts. The dedication or construction of greenways in single-family residential zoning districts is required for subdivisions that involve the creation of a new street. Existing single-family

lots are exempt from greenway easement dedication and construction.

2. All other zoning districts. Construction of the greenway is required in the following situations:

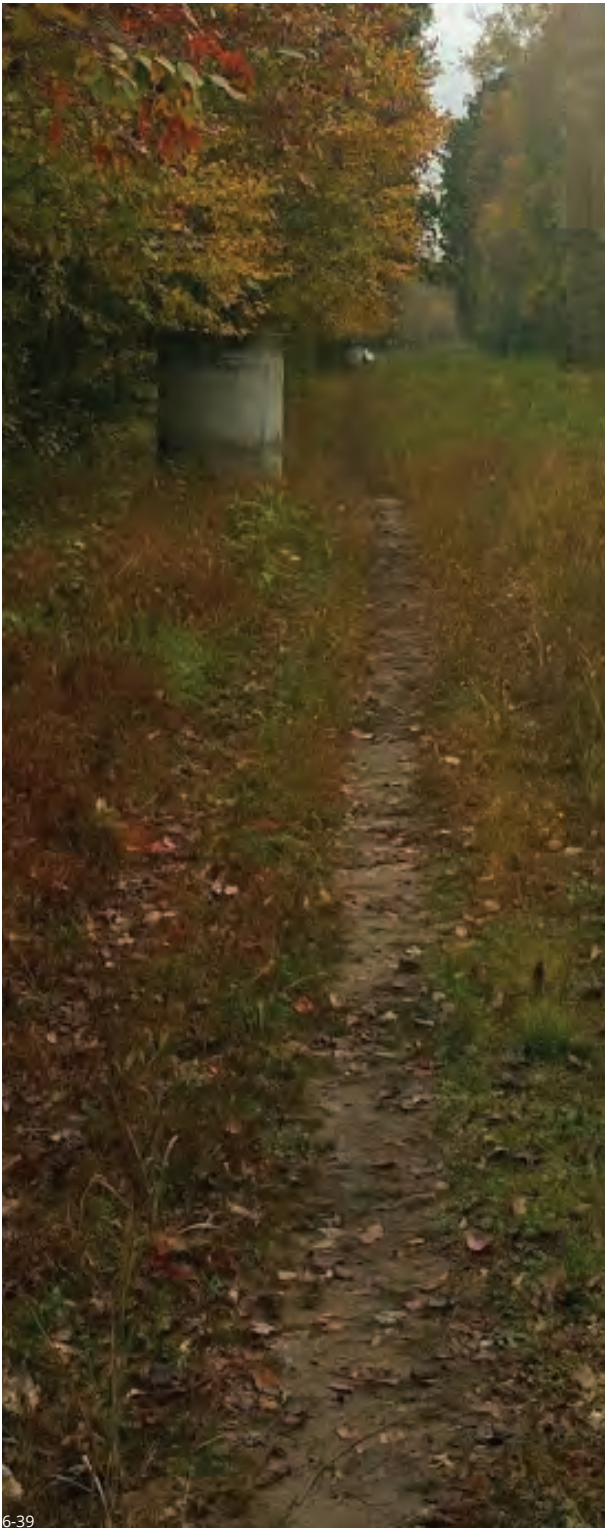
- i. Whenever there is new development; or*
- ii. Whenever alterations to existing development are 25 percent or greater of the total improvements on the site; or*
- iii. Whenever new streets are constructed.*

D. The construction and dedication of greenways shall be in accordance with the approved Gwinnett County Open Space and Greenway Master Plan design standards.

Any deviation or modification of the construction standards contained herein shall be subjected to the modification or waiver process in accordance to Section 340-40.



UTILITY EASEMENTS CAN MAKE GOOD TRAILS



EASEMENTS & PUBLIC RIGHTS OF WAY

SUMMARY & GUIDANCE

With new development often comes expansion of services such as water, sewer, electrical, and gas. Cobb County and its municipalities should make it standard practice to allow public access (trails) within those right-of-way corridors. It is much easier to build this into future expansion of systems as opposed to retroactively allowing public access to easements.

The County maintains several ordinances on easements, particularly for water and wastewater services and the preservation of open space to promote awareness of, and in some cases, access to natural resources and environmentally sensitive areas.

There are several ordinances which protect the County's ability to access its water and wastewater infrastructure through the use of easements. Ordinance Sec. 122-123 regulates the construction and placement of permanent structures near permanent water and wastewater easements, affecting how and where a trail facility could be constructed in a given area with water and sewer easements. The County may grant variances if construction "will not impede maintenance or installation" of the water or wastewater infrastructure within the easement, making possible development of trails, particularly for passive recreation. The County also has the right to access, inspect, maintain, repair and install new infrastructure within the easement (Sec. 122-155).

Guidance:

- Cobb County should consider a policy that easements needed for priority trails identified in the *Greenways and Trails Master Plan* and future updates to the plan be routinely acquired along with other required easements (such as utility lines or roadway right-of-way) and should establish guidelines for the construction of trails within such easements.

ADDITIONAL DEVELOPMENT AND POLICY CONSIDERATIONS

NATIVE AND LOW-WATER PLANTS

Encourage use of native plants and/or low-water plants in greenway landscaping to minimize maintenance responsibilities and encourage wildlife-friendly landscaping and maintenance techniques.

BIKE-FRIENDLY AMENITIES

Consider encouraging or requiring bicycle/pedestrian friendly features in development projects, such as bike racks, bike lockers, or even encouraging apartment, condominium, or townhome complexes to provide bicycles for resident use.

TRAIL-DEVELOPMENT CONNECTIVITY

Consider establishing a policy that requires developments along or adjacent to existing and/or programmed greenways and trails to provide direct connectivity or street access from the subdivision or property to greenways, trails, and nearby destinations. These may take the form of less formal connections.

ENCOURAGE LOCAL THROUGH-PATHS AND NEIGHBORHOOD GREENWAYS

Encourage development of local trail networks and neighborhood greenways. As described in Chapter 4, local Neighborhood Connector Trails can improve connectivity

by providing direct connections between destinations that are not supported by the roadway network or existing trails. Short segments can serve transportation purposes, shortening the walking or biking distance between local destinations like shopping centers and schools. Where possible, they should complement the on-street network and connect to larger trails.

ENCOURAGE NEIGHBORHOOD CONNECTORS

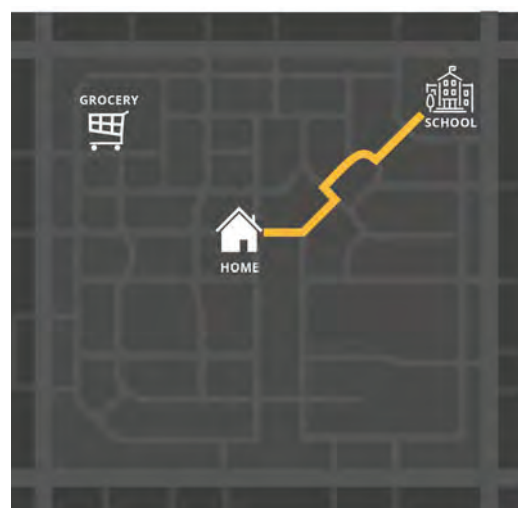
Encourage street connectivity in new developments by minimizing the use of cul-de-sacs providing more direct routes to destinations. Where possible, encourage Neighborhood Connector Trails or cut-through paths between developments or subdivisions to encourage biking and walking.

ENCOURAGE SHARED PARKING

Encourage shared use of existing parking lots at schools and shopping centers by trail users during off hours. This can be especially helpful along sidepath trails, where there may not be dedicated trailheads or entrance points. Many people already use parking lots this way and affirming and promoting the practice, in cooperation with property owners, would go a long way toward making trails more accessible to more people.



FIG. 6-5 NEIGHBORHOOD CONNECTORS PROVIDE MORE DIRECT EFFICIENT ROUTES



Credit: Atlanta Regional Commission (2016). Walk. Bike. Thrive!, Part 1, pg. 39



OPERATIONS & MAINTENANCE

OVERVIEW

Maintenance is essential to the long-term viability and sustainability of regional greenway and trail networks. Construction of greenways and trails cannot take place without a maintenance and priority plan in place. Similar to national roadway maintenance issues that have been well-documented, trails constructed over the past twenty years are in varying states of repair. Monies have poured into new roadways and trails across the United States but maintenance has been a lower priority. This Plan recommends a strong, collaborative approach to maintenance and preserving a state of good repair for greenway trails. Details on Operations and Maintenance can be found in Appendix E.

Recommended greenways and trails in this *Plan* traverse all areas, including six municipalities, three CIDs, and unincorporated Cobb County. Many trail corridors will be off-road, though some portions will be adjacent to the roadway on sidepaths or on-street with bicycle lane/sidewalk combinations. Additionally, the corridors will abut parks, water bodies and utility easements. As such, continued coordination among multiple agencies, representing the State of Georgia, Cobb County, municipalities, community-improvement districts, and other organizations listed in the Potential Partnerships section of this Chapter will

be necessary for effective ongoing trail operations and maintenance.

While each jurisdiction has its own operations and maintenance departments, a key to sustainable quality greenways and trails is consistency, cooperation and coordination amongst the communities, and building enduring public and private partnerships. Growing a successful trail system in Cobb County will take capacity building and diversification of skills and resources to meet this challenge in those communities. In order to meet the challenges, an intergovernmental organization and/or intergovernmental agreement for maintaining and operating the Cobb County greenway system is recommended. An organization or agreement would be in place to address not just maintenance, but also funding, enforcement, facilitating cooperation, organizing volunteer groups, adopting/implementing standards, etc.

Agencies to be involved would include appropriate Cobb County departments, municipalities, local CIDs, and GDOT. Generally trails outside of County parks are built by Cobb County DOT, whereas the P.A.R.K.S. Department is responsible for trails within park properties. Standard trail maintenance generally consists of routine tasks, such as mowing. More intensive maintenance is conducted by DOT's Roadway Maintenance Division as needed.

RESPONSIBILITIES & TASKS

SUMMARY

A comprehensive and cooperative maintenance management program should determine the activities, maintenance levels, and maintenance frequency of the trail system based on expected use. The program should identify tasks, operational policies and procedures, standards, and maintenance goals. At a minimum, the program should also identify cost estimates, funding sources, and the party responsible for performing the work on the trails. This will provide the basis for determining annual funding and assignment of personnel and necessary maintenance equipment while providing for necessary adjustments as needs arise. Maintenance plans should, at a minimum, address two primary types of maintenance: routine and remedial.

ROUTINE MAINTENANCE

Routine Maintenance refers to the day-to-day regimen of litter pick-up, debris removal, sweeping, sign repair and replacement, mowing, tree and shrub trimming, and other regularly scheduled activities. It also includes minor repairs and replacements such as fixing cracks and potholes or repairing a broken hand railing. Routine maintenance tasks include, but are not limited to:

- Facility maintenance and basic housekeeping such as trash collection and sweeping
- Tree and shrub trimming
- Mowing of vegetation

- Mulching and edging
- Weed and invasive species control

REMEDIAL MAINTENANCE

Remedial Maintenance refers to correcting significant defects in the network, as well as repairing, replacing or restoring major components that have been destroyed, damaged, or significantly deteriorated from normal wear and tear. Some items (“minor repairs”) may occur on a five- to ten-year cycle such as repainting, seal coating asphalt pavement or replacing signage. Examples of major reconstruction include stabilization of a severely eroded hillside, repaving a trail surface or a street used for biking, or replacing a footbridge. Remedial maintenance should be part of a long-term capital improvement plan. Remedial maintenance tasks include, but are not limited to:

- Replenish gravel, mulch, or other materials
- Repaint/re-stripe/stain
- Repave/seal
- Replace asphalt or concrete
- Remove debris along paved trail/sidewalk edges
- Regrade to prevent or eliminate low spots and drainage issues
- Add culverts, bridges, boardwalks, retaining walls, etc. to prevent or eliminate drainage/erosion issues



ROUTINE MAINTENANCE IS IMPORTANT FOR ENSURING SAFE, WELCOMING TRAILS AND GREENWAYS



TOPICS FOR FURTHER STUDY

FUTURE STUDIES, PLANS AND INITIATIVES

In the interest of creating a fully connected greenway and trail network that truly provides something for everyone, this Plan identifies a number of topics that could be pursued for future study in the future. These would complement the Greenways and Trails Master Plan by identifying even more opportunities to link active transportation corridors, fostering more physical and social activity, and giving people more choice in how they get around. This section provides an overview of recommended topics for future study.

TRAILS ON UTILITY CORRIDORS



Utility corridor trails are bicycle or pedestrian routes that utilize the same space occupied by utilities, such as power lines, water, or sewer pipelines. Utilities are constructed within a designated right-of-way. Rights-of-way limit vegetation and restrict development and most structures, but allow a few types of uses, including trail construction. Power lines and pipelines often run through cities and neighborhoods leaving strips of cleared, unused green space below or above these utilities providing corridors ideal for trail networks.

Cobb County has recently produced a map of sewer and power easements throughout the County. As an outgrowth of the *Greenways and Trails Master Plan*, this map could be used to identify those easements which could potentially be used to make connections to existing and proposed greenways and trails. The Trail Typology and Classification Memo (see Appendix E) suggests low-cost materials that could be used to construct temporary dirt trails along these easements while long-term planning is ongoing. The Utility Corridor Trail Considerations and Guidance Memo in Appendix E also provide guidance on utility trail user needs, design considerations, safety, and maintenance, which can be used to help plan and design future utility corridor trails.

BLUEWAYS/PADDLE TRAILS



Blueways, or paddle trails are designated small boat or paddling routes that facilitate water-based recreation and transportation. Users might include paddle boarders, kayakers, or canoes. A well-designed paddle trail includes thoughtfully designed launch facilities at designated locations. This may include locations for rest, amenities, and access to nearby land-based destinations.

The Chattahoochee River along the eastern border of Cobb County represents a tremendous opportunity to provide access to the waterfront and expand opportunities for exercise and recreation. Some groups already use the Chattahoochee for floating, rowing, and kayaking. Using the guidance and considerations outlined in the Paddle Trail Considerations and Guidance Memo included in Appendix E of this plan document, Cobb County should consider partnering with neighboring jurisdictions and interested agencies to explore implementation of paddle trails along the Chattahoochee River.

BIKING & WALKING MAPS



In the interest of increasing biking and walking and increasing use of trails and greenways throughout Cobb County, it is recommended that the County pursue development of a series of biking and walking maps to help people understand where trails start and end, and how to navigate the overall greenway and trail network. One set of maps could highlight individual trails, providing details about trail heads, parking areas, restrooms, and associated information as applicable.

Another suggestion is to develop an interactive online map that allows users to turn various layers on and off and helps people see how the whole system works together. These maps should highlight features that make it easy to navigate the trail system and call attention to various types of facilities and potentially difficult areas. Good examples are seen in maps from the City of Madison, WI and the City of Portland, OR:

- <https://www.cityofmadison.com/bikeMadison/> - Click "Plan Your Trip," then "Interactive Map"
- <https://www.portlandoregon.gov/transportation/article/391729> - Click the link for the interactive digital Portland Bike Map





NEIGHBORHOOD BIKEWAYS



Connecting Cobb County residents and visitors to an existing greenway network with low-stress, family-friendly, on-street pedestrian and bicycle facilities, retrofit neighborhood connections, traffic calming and route wayfinding is crucial to creating an accessible, safe, and comfortable interconnected greenway and trail system. Gaps in a trail network disrupt the system and discourage continued use except for those comfortable enough to continue on-street without pedestrian connections or low-stress bicycle facilities. Providing a range of bicycle and pedestrian facilities on local, collector, and arterial roads that close the greenway network gaps can encourage and sustain walking and bicycling throughout the community, and provide greater connectivity to get people to greenways and trails and to where they want to go.

In the future, Cobb County should expand upon the preliminary ideas developed for District 2 in East Cobb as part of the *Greenways and Trails Master Plan*, seeking to identify other suitable routes for neighborhood bikeway facilities through a combination of remote or online and field analysis.

For an optimal, well-connected active transportation system to succeed, bikeway treatments on low stress roadways should also provide a parallel or shared pedestrian treatment. Low stress roadways consider the following features:

- Posted speed limit
- Observed median speed
- Annual average daily traffic volume
- Prevalence of heavy vehicles
- Presence of on-street parking
- Crash history
- Roadway and lane width
- Number of lanes
- Sight lines
- Slope
- Potential barriers or pinch points (bridges, tunnels)
- Intersection density
- Complexity/stress of intersections
- Surrounding land uses
- Implementation costs

The following descriptions offer several facility types that may be applicable to various locations throughout Cobb County. As part of the *Greenways and Trails Master Plan*, the project team conducted an assessment of opportunities for potential application of neighborhood greenways and bikeway facilities in East Cobb.

- **Bicycle Boulevard:** Also referred to as Neighborhood Bikeways, these facilities utilize shared-lane markings alongside traffic calming methods and crossing treatments to create a low intensity roadway. This makes riding alongside cars safer and more comfortable. Diverters can also be used to give priority to cyclists at intersections. These facilities are most appropriate on local roadways with speeds up to 25 MPH and volumes below 3,000 ADT, with much lower thresholds preferred.

- **Shared Lane Markings:** Visible markings, spaced every 250 feet on roadways with low traffic volumes and 50 to 100 feet on roadways with higher traffic volumes, in the travel lane indicating bicycles can use the travel lane with cars. Placement in the travel lane should be in the center or far enough away from the “door zone” of parked cars. These facilities are most appropriate on local or collector roadways with speeds under 35 MPH and volumes below 3,000 ADT.
- **Yield Roadway:** Roads with widths of 12 to 20 feet, which requires courtesy yielding when vehicles are passing each other in opposite directions and reduces traveling speeds, and shared roadways with pedestrians and bicyclists. Lane markings are removed to allow for easy passing. Road widths under 15 feet

require pull-offs for vehicles passing each other in opposite directions. These facilities are most appropriate on local roadways with speeds up to 30 MPH and volumes below 2,000 ADT. See Resources Cited for references to design guidance and applications of the yield roadway from the STAR Guide.

Numerous suggestions were submitted by community members that may be viable candidates for neighborhood greenways in particular parts of the county, such as North Cobb, West Cobb, and East Cobb; these should be considered as part of future planning for an on-street bike network to complement greenways and trails.

For a summary of neighborhood greenways and bikeways and a map showing possible application of neighborhood greenways to roadways in East Cobb, refer to the Greenway Network Memo in Appendix E.





ACTIVITIES & PROGRAMMING



Programs can leverage Cobb County's existing resources, leadership, and community spirit to build interest in greenways and trails. Program recommendations represent a range of level of effort and funding needs; many can typically be implemented quickly and with minimal investment. While the County and its agency and jurisdictional partners (namely GDOT, CIDs and cities/towns) are responsible for infrastructure projects and policy development, community programs can and should be supported and championed by outside partners such as nonprofits, advocacy groups, foundations, private sector businesses, and interested citizens.

Successful programmatic efforts are flexible and can be short- or long-term. Research has shown that a comprehensive approach to walk- and bicycle-friendliness is more effective than a singular approach that would address trail development and infrastructure only. This *Plan* recommends a multi-faceted approach based on the following **five 'E's**: ***Education, Encouragement, Enforcement, Evaluation, and Equity***. The programmatic recommendations outlined here address and incorporate the education, encouragement, enforcement, evaluation, and equity components of this multi-faceted approach.

Partners that may help spearhead and champion programs and activities include, but are not limited to, Cobb Travel and Tourism, Chambers of Commerce, and neighborhood and civic associations. Additional discussion about potential partners is found earlier in this Chapter. Several activities and programs have already been established throughout Cobb County.

These include, but are not limited to:

- Safe Routes to School
- Safe Kids Cobb County
- Lifelong Mableton
- Keep Cobb Beautiful
- Group rides hosted by various cycling groups and bike stores
- Races such as Cobb Make-a-Wish 5K

ART ON THE TRAIL

Public art along a trail or greenway can bring attention to the network, encourage usage of it, and attract newcomers to bicycling and walking. By combining art and greenway facilities, the community is creating a unique interactive amenity for both residents and visitors. Such programs also attract new partners, promoters, and sponsors of the trail network.

Strategies

- Identify any appropriate partners for this effort, such as a local visual arts group, a college or university arts program, a local art patron, or others
- Establish a committee of community members to develop and oversee the program
- Consider art sponsorship or art auctions as potential sources of funding

'E's Addressed: Encouragement



GROUP WALKS/RIDES

Group walks or bike rides are fun ways to engage community members from a variety of ages and backgrounds. These group activities can range from a guided walking tour of local parks or historic sites to a neighborhood bike ride to the coffee shop or farmers market. The focus is to show that walking and biking are enjoyable, social activities and is an easy way to reach various amenities and destinations.

Strategies

- Organize rides through existing neighborhood social media and develop promotional materials to get the word out, including flyers
- Develop themes for various rides or walks that take advantage of Cobb County's greenways and trails
- Elect walk or ride leaders

'E's Addressed: Encouragement

GUIDED NATURE WALK/RIDES

Naturalists are a significant user group of a trail and greenway network. Unique natural resources, such as the Chattahoochee River, can attract significant eco-tourism opportunities. Guided nature walks and bicycle rides could be led by trained volunteers or interested partners, such as a college extension service.

Strategies

- Identify partners interested in supporting, promoting, and/or guiding educational nature walks and rides
- Determine appropriate target markets for guided nature walks and rides and develop specific events geared toward each target group

'E's Addressed: Encouragement

TRAIL CLEANUP CAMPAIGNS

A trail cleanup and beautification initiative enables people to improve their surroundings and take pride in their community. Organizations can support trail cleanups by providing materials such as trash bags, maps of cleanup routes, and tools to clear weeds and prune overgrown bushes and trees.

Strategies

- Identify a funding strategy for cleanup and beautification, with maintenance included
- Set a date and post flyers alerting residents to the initiative
- Work with neighborhood and organization leaders to distribute cleanup supplies

'E's Addressed: Encouragement

BIKE MONTH ACTIVITIES

Cities and towns across the country participate in National Bike Month annually, during May. The League of American Bicyclists (LAB) hosts a website for event organizers. The website contains information on nationwide and local events, an organizing handbook, and promotional materials.

Strategies

- Organize Bike to Work Day events: morning-commute energizer stations with food, encouragement, information, and sponsored goodies for participants; discounts at local businesses for bicycle commuters
- Initiate a "Pedal with Your Politician" group ride (3 miles or less) with County Council members, City Council members, and Mayors

'E's Addressed: Encouragement, Education



WALKTOBER ACTIVITIES

Similar to Bike Month, the local pedestrian advocacy organization, PEDS, partners with governments in metro Atlanta each October to organize and promote walking events.

Strategies

- Organize Walk to Work Day events with food, encouragement, information, and sponsored goodies for participants; discounts at local businesses for people who arrive on foot
- Initiate group walks on trails (3 miles or less) with County Commissioners, City Council members, and area officials

'E's Addressed: Encouragement, Education

along the existing and proposed recommended trail network and identify safe and enjoyable walking and bicycling routes that connect them

- Groups like Cobb Travel and Tourism could assist in promoting the routes as part of a broader effort for heritage tourism and assist in connecting this program with larger marketing campaigns
- Consider expanding the encouragement beyond historic sites and heritage tourism to include local businesses such as breweries and restaurants near trails that also function as destinations

'E's Addressed: Encouragement, Education

HERITAGE TOURISM MAPS/GUIDES

A series of strategically developed walking and biking guides to heritage tourism can capitalize on and promote Cobb County's rich history. One or more maps could be developed for Cobb County showing safe and enjoyable trail routes to visit cultural and historic sites. The series of maps and guides should recognize the variety of market segments and user groups interested in heritage tourism, such as families seeking a half-day visit with a leisurely educational walk or bike ride, organized groups traveling from town to town by chartered bus, and touring bicyclists who travel 20 or more miles a day by bike making their way across a region.

Strategies

- Partner with local and regional organizations focused on historical resources and tourism, such as the Riverline Historic District and the Kennesaw Mountain Historic Battlefield
- Inventory cultural and historic resources

SCHOOL BASED TRAIL ACTIVITIES

In partnership with existing Safe Routes to School efforts, local schools can capitalize on segments of the proposed greenway network that intersects their campus. Activities along the greenway network could include Bike and Walk to School Day routes, outdoor classrooms for science curriculum, educational after-school walks and bike rides, and programs for physical education curriculum.

Strategies

- Establish a partnership with a school that is already engaged in Safe Routes to School and that already has leadership and volunteers (from the principal, PTA, PE teacher, and/or others) supportive of increasing physical activity among children and capitalizing on the bicycle and pedestrian network
- Use this school as a "pilot project" for creating a variety of programs that directly engage children with existing trails

'E's Addressed: Encouragement, Education

YOUTH BIKE SAFETY RODEOS

Bike safety courses can teach kids how to ride a bike and can provide education for adults on responsibilities for both drivers and cyclists. By creating a dedicated, safe space to learn these skills, kids become more confident bicyclists.

Strategies

- Identify potential locations for bike safety rodeos that are accessible, and ideally adjacent to greenways and trails, such as at playgrounds like the Silver Comet Linear Park in Powder Springs, Taylor Brawner Park in Smyrna or others
- Partner with local schools or groups like Safe Kids Cobb to promote the safety rodeos
- Consider dedicating a semi-permanent space for use as a “Bicycle Traffic Garden”, where kids can go at any time to practice their bicycling skills

E’s Addressed: Education

CONCERTS, MUSICAL ACTIVITIES

In addition to visual arts, music can draw more people to use the trails through programming and events. Trails can provide excellent opportunities for safe and fun parade routes, as seen through popular local events such as the BeltLine Lantern Parade.

Strategies

- Partner with local arts organizations and event organizers to discuss the potential for starting a new event or building on an existing event
- Find a location adjacent to a trail or a section of trail that would be suitable for large crowds
- Provide easy access for people attending by foot or bike (bike valet, etc)
- Create opportunities throughout the year for people to interact with music and/or instruments along the trail, such as Atlanta’s “Pianos for Peace”

E’s Addressed: Encouragement

INTERPRETIVE SIGNAGE

Interpretive signage along a trail and greenway network serves as an education tool for residents and visitors alike.

Information related to the history of an area, its cultural significance, or natural features is provided on a graphically appealing sign.

Strategies

- Engage professionals and experts who have experience in developing interpretive signage or historical markers
- Focus the first installation of interpretive signage along a single corridor (or route), such as a newly established greenway segment or extension
- Create an inventory of noteworthy cultural, historical, and natural features along the corridor and begin the process of developing a signage design, potential signage locations, and content to be used on each sign

E’s Addressed: Encouragement, Education





SAFETY CAMPAIGNS

A high-profile marketing campaign is an effective strategy for highlighting the importance of respect and shared responsibility at trail crossings and on the road between bicyclists, motorists, and pedestrians. This type of campaign is particularly effective when launched in conjunction with other events such as Walk to School Day or National Bike Month.

Strategies

- Expand the existing Cobb County safety campaigns such as “Pete’s Street Smarts” to all ages and other modes such as bicyclists
- Consider giving away safety items at community events during that month, such as bike lights, reflective materials, or helmets
- Organize education and enforcement materials for county and local police departments on right-of-way at trail crossings, and how to use push-button activated crossings

’E’s Addressed: Enforcement, Education

TRAIL COUNT PROGRAM

Bicycle and pedestrian counts provide data on bike and pedestrian behavior that can enable analysis of biking and walking trends, such as increase/decrease in facility usage, peak travel periods, and high activity locations. Automatic counters may also be used for detection of users, which can trigger signals at major trail crossings.

Cobb County has initiated a pedestrian and bicycle count program to make biking and walking count by counting people walking and biking. The County has partnered with ARC on an application for Smart Cities funding of a pilot program to count bicyclists and pedestrians in key locations, including some locations along trails.

In addition, the County is also monitoring pedestrian activity through the use of mounted cameras in high-volume areas around SunTrust park. If these techniques prove successful, the County could apply them to trail and greenway locations in the future.

Strategies

- Seek funding for a bicycle and pedestrian count pilot program that focuses on before and after counts of one or two priority trail projects (balance a recreational corridor with a transportation-oriented corridor), and assign staff to manage counts program
- Include regular intercept surveys of trail users and track data over time.
- Determine key locations for manual and/or automatic pedestrian and bicycle counts and identify the appropriate count technology

’E’s Addressed: Evaluation

ECONOMIC IMPACT ANALYSIS

An economic impact analysis can evaluate the costs and benefits for implementing trails. This can be done either as an estimate before a trail is built, or as an evaluation after a trail has been established for a few years.

Strategies

- Conduct a multi-year analysis of existing trails that reviews economic impacts as well as environmental and health impacts
- Findings from the study may be used to fund trail expansion as well as safety improvements at major trail intersections

’E’s Addressed: Evaluation

TRAILS TO HEALTHY FOODS

Many communities are recognizing the role that both physical activity and healthy eating play in improving overall public health and wellness. This important link can be highlighted in a fun and interactive manner through promoting healthy food outlets along the bicycle, pedestrian, and greenway network and partnering with health food providers to identify safe routes for active transportation to their locations.

Strategies

- Identify key outlets for healthy food along the existing bicycle, pedestrian, and trail network (including routes along roads that are already bicycle friendly and existing sidewalks)
- Seek funding from partners in nutrition and healthy food outlets
- Develop a graphically-appealing and user-friendly guide to healthy food outlets with a map showing how residents can access the outlets on foot or bike

'E's Addressed: Equity, Encouragement

BIKE SHARE

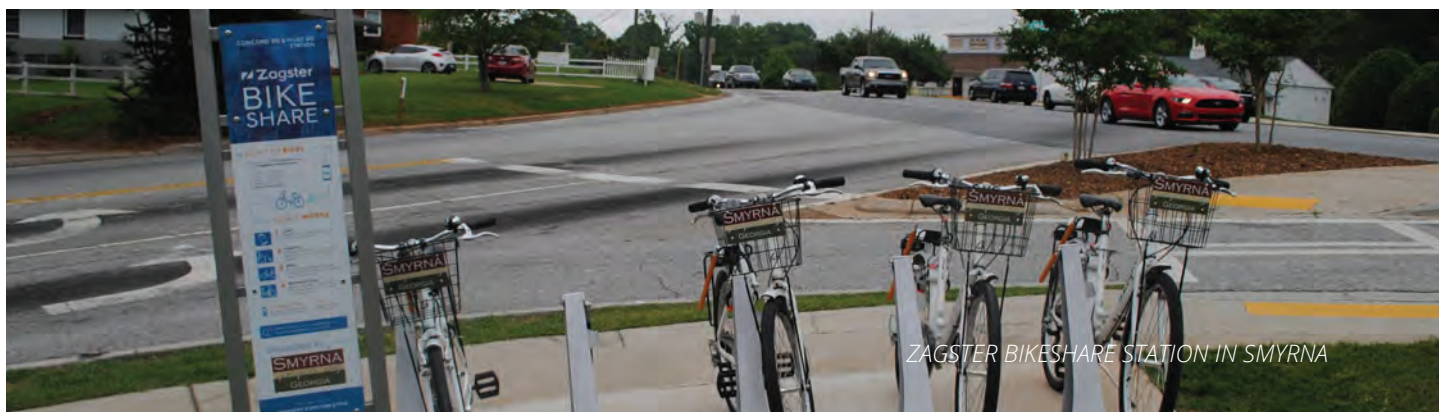
The Town Center CID and City of Smyrna have already implemented bike share programs through Zagster (see Chapter 3). In addition, KSU and the Cumberland CID are in the process of identifying potential locations for bike share. Based on feedback from this planning process, there appears to be interest in bike share among community members in Marietta, and there has been talk of possible expansion of existing bike share in Smyrna and Town Center CID.

Currently each Zagster program operates independently: bikes picked up from a docking station must be returned to a location within that system. Cobb County and its partners should explore possibilities for expanding and/or integrating the systems to reach more users throughout the county. A county-wide bike share system can evaluate bike share expansion in tandem with existing and future trail development.

Strategies

- Identify potential locations for bike share expansion on existing and planned Cobb County trails and greenways
- Develop a bike share feasibility study to determine demand and potential bike share vendors/sponsors
- Partner with area municipalities to expand existing bike share programs to better serve trail users

'E's Addressed: Equity, Encouragement



ZAGSTER BIKESHARE STATION IN SMYRNA



ACTION PLAN

SHORT-TERM ACTIONS

The following table lists a recommended course of potential short-term actions to support implementation of the *Greenways and Trails Master Plan*. The order of potential action steps is not intended to be sequential or suggest priorities.

TABLE 6-2 SHORT-TERM ACTION STEPS

#	Action Item	Reference Section
1	Continue advancing programmed projects, such as completing the Mountain to River Trail.	Chapter 3
2	Apply for funding to develop signage and identify programs, activities, and possible amenities or temporary uses along the Mountain to River Trail.	Chapter 5
3	Determine likely funding sources for eight (8) priority projects, including which projects will be included in the next SPLOST project list, as well as other potential sources of funding for priority projects (e.g., grants, etc.). Pursue scoping studies and/or concept reports, as applicable, to identify design and structural alternatives, as well as to identify utility, property, and environmental coordination and/or permits that may be needed.	Chapter 5
4	Establish and convene a Stakeholder Advisory Group or Committee to provide guidance on development of greenways and trails. Representatives from each City and CID should be invited, along with other stakeholders such as Chambers of Commerce, NPS, and Travel and Tourism.	Chapter 6
5	Establish process, policy, or protocol to incorporate review of <i>Greenways and Trails Master Plan</i> as part of site plan and development review.	Chapter 6
6	Establish a policy that requires greenway or trail right-of-way dedication and/or construction as part of new development projects in accordance with Tier 1 or other high priority trails.	Chapter 6
7	Develop and implement cohesive Countywide wayfinding and signage plan, in collaboration with Cobb Travel and Tourism, that recognizes and celebrates the individual brands of local trails.	Chapter 4
8	Develop a trail system “fit and finish guide” tailored to the county’s brand and inclusive of more detailed information such as materials, colors, and placement of amenities and signage.	Chapter 4, 6
9	Identify partners to begin implementation of programming and activities for select trails, beginning with the Silver Comet Trail.	Chapter 5
10	Coordinate with P.A.R.K.S. Department to publish a series of maps of trails within all park properties in Cobb County.	Chapter 5
11	Work with County staff to designate trailheads as “Community Facilities” and install bike racks at each trailhead that does not already have one.	Chapter 5
12	Initiate a study of Neighborhood Bikeways, building upon the work begun in Commission District 2 as part of this Plan, and include North Cobb neighborhoods.	Chapter 6
13	Continue implementation of the bicycle and pedestrian count program, to obtain data on bicycle and pedestrian activity along greenways and trails.	Chapter 5, 6
14	Work with Cobb County Schools and other County agencies to explore the possibility of shared-use agreements to allow use of parking lots by greenway and trail users outside of normal hours of operation.	Chapter 6

ACTION PLAN

MID TO LONG-TERM ACTIONS

The following table lists a recommended course of potential mid- to long-term actions to support implementation of the *Greenways and Trails Master Plan*. The order of potential action steps is not intended to be sequential or suggest priorities.

TABLE 6-3 MID- TO LONG- TERM ACTION STEPS

#	Action Item	Reference Section
1	Identify and implement one (1) temporary unpaved trail, or DIRTway, as pilot project, expand to other trails if successful.	Chapter 4, 6
2	Establish MOU or other types of agreements to promote shared use of parking at schools, community facilities, and neighborhood businesses where appropriate to reduce demand for new parking and encourage trail use.	Chapter 5
3	Issue guidance for landscaping of greenways and connections associated with new development or redevelopment projects.	Chapter 4, 6
4	Develop a mobile phone application to assist residents and visitors with locating trails, understanding trail characteristics, and navigating the system.	Chapter 5
5	Begin programming new trail projects for a period of roughly 5 years.	Chapter 5
6	Periodically (roughly every five to seven years) conduct an update of the <i>Greenways and Trails Master Plan</i>	N/A
7	Initiate planning studies related to one or more of the “Topics for Further Study” discussed in this plan.	Chapter 6
8	Partner with local organizations to encourage development of an “Art on the Trail” program to place locally-created public art along greenways and trails.	Chapter 5



TRACKING AND UPDATING THE PLAN

The *Greenways and Trails Master Plan* is a document designed to guide Cobb County in the development of trails over the course of several years – at least through the next SPLOST cycle. While the *Plan* cannot fully anticipate how the demographics, availability of funding, and community priorities will change into the future, there are strategies the County can utilize to ensure that the plan is regularly reviewed and tracked, and adapted as needed. These are briefly described below.

PROJECT UPDATES

- Track the status of greenway and trail projects quarterly, updating project status as needed.
- As Cities, CIDs, and universities complete individual trail-related plans, update the project list and incorporate new recommendations as applicable.
- Update the countywide trail planning map a minimum of twice per year, and coordinate with the Cobb County GIS Department to publish the updated map on the County GIS webpage.

FUNDING

- Approximately three months prior to each of the Atlanta Regional Commission's future project solicitations, identify which greenway and trail projects will be pursued for study or infrastructure (capital) funds.
- Near the conclusion of each of the County's SPLOST funding periods, work with County officials to identify projects for the County's next SPLOST project list.

PLAN UPDATES

- Each year, identify a complementary trail planning initiative to undertake. This may include planning for Blueways and Paddle Trails, trails along utility corridors, or Neighborhood Bikeways; development of bicycling and walking maps; or additional new initiatives.
- Conduct a complete update of the *Greenways and Trails Master Plan* roughly every five years, in preparation for new SPLOST funding periods.

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Georgia Recreational Trails Program <http://www.gastateparks.org/grants/rtp>

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**COBB COUNTY
GREENWAYS & TRAILS
MASTER PLAN**

FINAL DRAFT - MAY 2018

