



# **ATHENS IN MOTION**

# **BICYCLE and PEDESTRIAN**

# **NETWORK IMPLEMENTATION**

# What is Athens in Motion (AiM)?



Accepted by the Mayor and Commission in 2018, the AiM plan envisions a community where all forms of transportation (walking, cycling, rolling, driving, and using transit) are **valued equally**, can be **pursued safely**, and are a tool for **addressing inequities**.



**Mark Ebell & Carly Evans**  
Athens in Motion Commission

**How can we make it as safe and enjoyable as possible to walk and bike in Athens, GA?**  
**How can we go from this...**





# To this?







## More people die and more people are injured while biking in Athens than anywhere else in Georgia

Worst 5 counties in Georgia	Cyclist deaths per 100,000 from 2005-2015	Cyclist injuries per 100,000 from 2005-2015
Clarke	4	274
Chatham	4	240
Lowndes	2	157
Richmond	4	145
Dougherty	3	141

*Source: Georgia Bicycle Safety Action Plan, GDOT, 2018*

# Goals and Objectives



## CONNECTIVITY

### GOALS

Design a connected network of low-stress bicycle and pedestrian facilities



## EQUITY

### GOALS

Improve safe access to opportunity for all citizens of Athens-Clarke County



## MORE USERS

### GOALS

Encourage those who do not normally use active transportation to use the network for trips



## EDUCATION

### GOALS

Inform residents and businesses about benefits and laws for active travel and bicycle/pedestrian safety



## IMPLEMENTATION

### GOALS

Provide a variety of different funding mechanisms to finance and maintain the network



**Figure 2-2: User Types**



**NON-BICYCLE**

Uncomfortable bicycling in any condition, have no interest in bicycling, or are physically unable to bicycle.

**INTERESTED BUT CONCERNED**

Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separate bicycle facilities or quiet or traffic-calmed residential streets. May not bike at all if bicycle facilities do not meet needs for perceived comfort.

**SOMEWHAT CONFIDENT**

Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders, if necessary.

**HIGHLY CONFIDENT**

Comfortable riding with traffic, will use streets without bike lanes.



# How will this project close the “Equity Gap” in Athens-Clarke County?

Priority factor	How it is measured
Equity	% in poverty or over age 65, neighborhoods with no or few sidewalks, neighborhoods with more bus coverage and more households without cars
Land use	Proximity to parks, schools, high density residential and commercial districts

*Source: Georgia Bicycle Safety Action Plan, GDOT, 2018*

# How will this project address the Strategic Commitments and Project Selection Criteria? Really, really well!



- Explicitly includes equity in the prioritization process
- Promotes the upgrade and use of alternative transportation facilities
- Promotes increased pedestrian access to transit facilities
- Improves air quality, reduces vehicle miles traveled,, and reduces time spent in vehicles by getting more people walking and rolling.
- Continues TSPLOST 2018 corridor improvements, continues sidewalk and multi-use trail construction, and implements components that are complementary to an updated Greenway Network plan.
- Promotes health and safety by creating a safe and connected network for walking and biking and rolling and accessing transit

# How will this project improve the “Triple Bottom-Line” of Economic Prosperity, Social Well-being, and the Environment?



- Giving people more options for how they can safely get to work or school means they may need only one or even no car
- Great pedestrian and bike facilities help attract industry and increase property values
- Pedestrian and bike oriented development promotes health, interaction with neighbors, and patronage of local businesses
- More people walking and biking means fewer people using cars



# Which projects are currently prioritized by the Athens in Motion Plan?

Currently the Athens in Motion plan has identified:

- 21 Tier 1 combined bike and pedestrian projects
  - total cost range \$32 to \$87 million
- 18 Tier 1 bicycle only projects
  - total cost range \$13 to \$52 million
- 5 Tier 1 pedestrian only projects
  - total cost range \$541,000 to \$675,000

Note that this is a living list and will be updated as the community grows and changes, and other projects are completed.

**See Appendix B for the current full list**

### Project Map and Tier Rankings

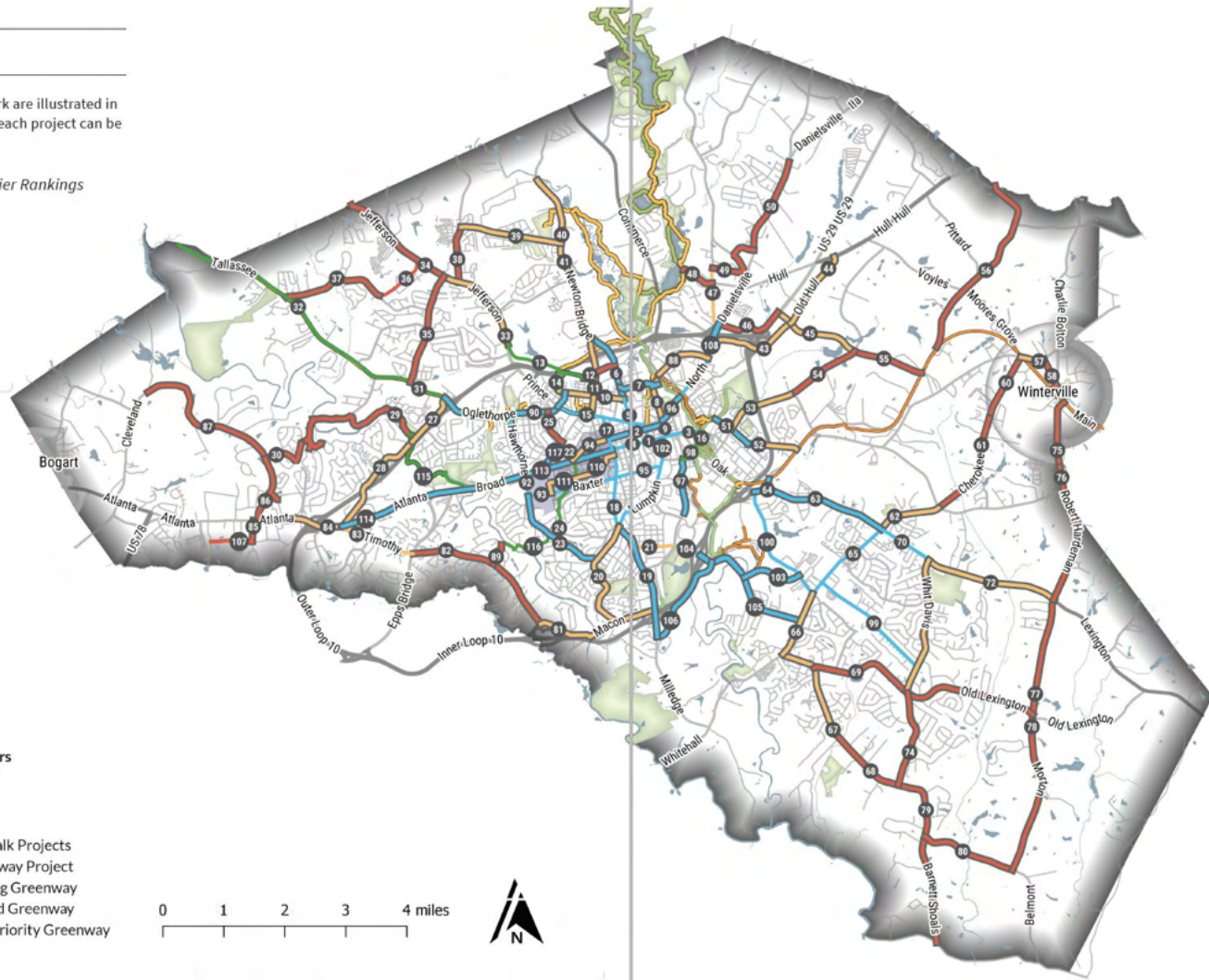
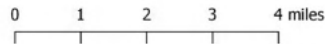
**Tier 1**

**Tier 2**

**Tier 3**

### Priority Tiers

- Tier 1
- Tier 2
- Tier 3
- Sidewalk Projects
- Greenway Project
- Existing Greenway
- Funded Greenway
- High Priority Greenway



# Projects currently in progress or complete

Project	Location
West Broad sidewalk	2310 to 2240 West Broad
Holman Avenue sidewalk	King Ave to Old West Broad St
Magnolia Street sidewalk	Baxter St to West Broad St
Jefferson River Road multi-use path (MUP)	Jefferson Rd to Vincent Dr
Cherokee Road MUP and sidewalk	Lowe's Driveway to Beaverdam Road
Riverbend Road MUP	S. Milledge Ave to Lakeside Dr and Riverbend Pkwy to College Station Rd
Barber Street MUP	Boulevard to Dairy Pak Rd
Barber St. MUP or protected bike lanes	Prince to Boulevard
King Avenue	Old West Broad to West Broad



# ATHENS IN MOTION BICYCLE and PEDESTRIAN NETWORK IMPLEMENTATION



## Contact

Mark Ebell

[ebell@uga.edu](mailto:ebell@uga.edu)

706-247-4953

**Thank you!**

# Additional Content

# Building bike/ped infrastructure

There are many  
phases to  
developing walking  
and biking  
facilities.

## Engineering - Roadway - Planning/Design Phases and Tasks

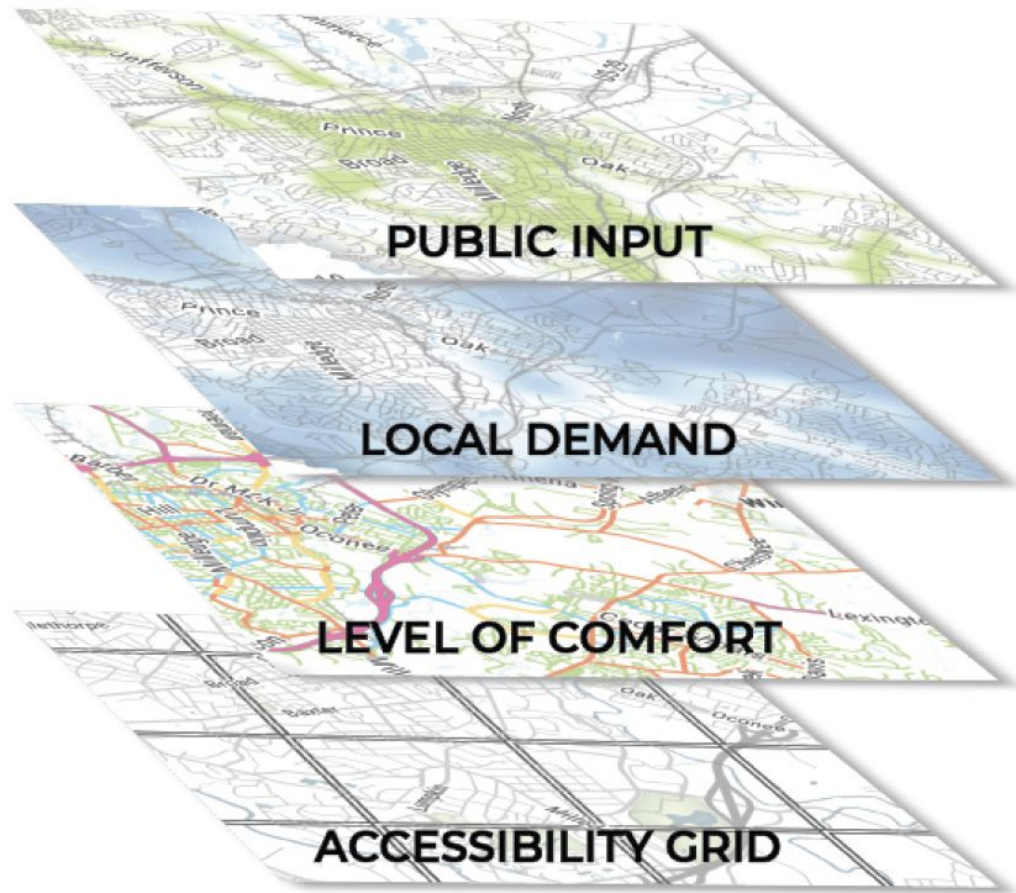
Program Planning	Pre Design	Design	Bid & Award	Construction
<ul style="list-style-type: none"> <li>Establish program needs and purpose</li> <li>Existing conditions analysis</li> <li>Identification of key stakeholders</li> <li>Data collection</li> <li>Concept brainstorming</li> <li>Complete Street Policy</li> </ul>	<ul style="list-style-type: none"> <li>Define final concept for design</li> <li>Develop schedule parameters</li> <li>Develop budget parameters</li> <li>Finalize complete street strategy for roadway</li> </ul>	<ul style="list-style-type: none"> <li>Final project design</li> <li>Meet with impacted property owners</li> <li>Develop project resolution</li> <li>Secure necessary approvals</li> </ul>	<ul style="list-style-type: none"> <li>Develop project description</li> <li>Receive bids</li> <li>Award project</li> <li>Mobilize for construction</li> </ul>	<ul style="list-style-type: none"> <li>Construct project</li> <li>Inspect and monitor the work</li> <li>Control schedule</li> <li>Control costs</li> </ul>
Program Development	Define Requirements	Develop Plan	Bid Plan	Implement Plan
<p>Staff sends information through Manager's Office to update Mayor and Commission</p> <p>Athens in Motion Commission identifies next project for funding</p> <ul style="list-style-type: none"> <li>Staff will present original project scope to AiM Commission with baseline project costs and impacts</li> <li>Identify project tier and proposed facility type</li> <li>Identify alternatives based on constraints and conditions</li> </ul> <p><i>AiM Commission votes on next project for funding and/or identifies recommendations for TPW to analyze for compliance to Complete Streets Policy:</i></p> <ul style="list-style-type: none"> <li>Cost</li> <li>Feasibility</li> <li>Impacts</li> <li>Etc</li> </ul>	<p><i>Mayor and Commission work session</i> Review recommendations from AiM Commission and plan for public outreach</p> <p>Staff incorporates Mayor and Commission recommendations, AiM recommendations, and high level public feedback to create alternative concepts</p> <p><i>Athens in Motion Commission vote on their preferred concept and complete street recommendation (if applicable)</i> <i>Other Citizen's Oversight Committees are given review opportunities, if necessary</i></p> <p><i>Mayor and Commission concept approval</i></p> <ul style="list-style-type: none"> <li>Engineering consultant selection</li> <li>Preferred and alternative alignment development and selection process</li> <li>Preliminary environmental analysis and permitting strategy</li> </ul>	<p><i>Mayor and Commission approval of preliminary construction plans</i></p> <ul style="list-style-type: none"> <li>Database preparation</li> <li>Typical cross sections</li> <li>Intersection design</li> <li>Horizontal and vertical alignments</li> <li>Drainage/erosion control plans</li> <li>Cost estimates</li> </ul> <p>AiM Commission remains updated on design status to give recommendations to Mayor and Commission</p> <p><i>Managers Office approval of final construction plans</i></p> <ul style="list-style-type: none"> <li>Construction plans</li> <li>Final construction documents</li> <li>Contracting strategies</li> <li>Right-of-Way plans</li> <li>Land acquisition cost analysis</li> <li>Individual parcel legal desc.</li> <li>Compute areas of taking</li> </ul> <p><i>Staff work on land acquisition</i></p> <ul style="list-style-type: none"> <li>Acquire necessary right-of-way</li> </ul>	<p><b>Project description is created for bid</b> <i>Athens in Motion Commission and other committees review, if necessary</i></p> <p><b>Manager's Office approves bid</b> Authorize staff to Bid Project</p> <p><b>Project is put out for bid</b></p> <ul style="list-style-type: none"> <li>Alternate/substitution analysis</li> <li>Bid evaluation/negotiation</li> </ul> <p><b>Project is awarded</b></p> <ul style="list-style-type: none"> <li><i>Mayor and Commission approval, as necessary</i></li> <li>Contract development and execution</li> <li>Performance and payment bond review Insurance review</li> </ul>	<p><b>Staff manages contract</b></p> <ul style="list-style-type: none"> <li>Quality assurance and control</li> <li>Materials testing</li> <li>Schedule control</li> <li>Cost accounting and budget control</li> <li>Project close out</li> <li>Maintenance bond monitoring</li> </ul> <p><i>Manager's Office or Mayor &amp; Commission Approval are required for change order</i></p>

## Public Input Opportunities

<p><b>Host walk audit of roadway with community and commissioner</b></p> <p>Online surveys</p> <p>High level input session</p> <p>Neighborhood pop up</p> <p>High level feedback on facilities</p> <p>Host online surveys</p>	<p><b>Public forum on preferred concept</b></p> <p>Online surveys</p> <p>E-mail newsletter on project status</p> <p>AiM Commission to make media statements on project</p> <p>Begin plan for tactical urbanism, if applicable and feasible</p>	<p>Neighborhood pop up on final design and schedule for impact and changes to roadway</p> <p>Educational materials for changes</p> <p>Implement tactical urbanism and host online survey</p>	<p>E-mail newsletter on project status;</p> <p>If tactical urbanism implemented: Close out tactical urbanism experiment for construction finalize all change order requests from lessons learned</p>	<p><b>Host final walk audit with community member and commissioners</b></p> <p>Annually check bike and pedestrian counts</p>
---	--	--	--	--



**Figure 2-4:** *Network Development Process*



# Selection Criteria: Equity and Land Use



## ● Equity:

- Public sidewalk to road ratio
- Bus service coverage area
- Households with no vehicle
- Population commuting by public transit
- Percent in poverty over 65
- Percent in poverty under 18

## ● Land use:

- Proximity to schools, parks, businesses services

ATHENS IN MOTION

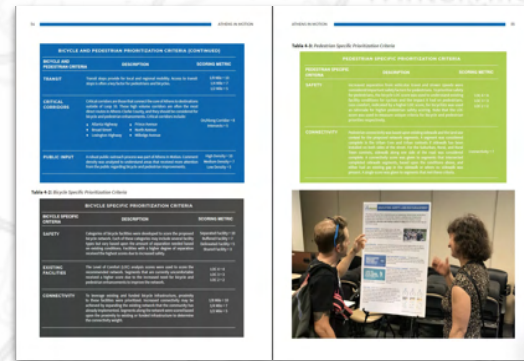
Table 4-1: Bicycle and Pedestrian Prioritization Criteria

BICYCLE AND PEDESTRIAN CRITERIA	DESCRIPTION	SCORING METRIC
<b>EQUITY</b>	A variety of factors, shown in the following table, were considered for the equity prioritization process. Each factor was weighted and summed to provide an overall equity score assigned at the elementary school boundary level. Census data was retrieved using the Athens Neighboring Project's Social Mapping Atlas.	
Public Sidewalk to Road Ratio	Areas with lower sidewalk compared to roads are given higher priority.	<ul style="list-style-type: none"> <li>Lowest Ratio = 10</li> <li>Low Ratio = 8</li> <li>High Ratio = 6</li> <li>Highest Ratio = 4</li> </ul>
Bus Service Area Coverage	Areas with more bus service are given higher priority to encourage transit mobility within Athens County.	<ul style="list-style-type: none"> <li>Highest % = 10</li> <li>High % = 8</li> <li>Low % = 6</li> <li>Lowest % = 4</li> </ul>
Households with no vehicle	Areas where there are more households without access to personal transportation are given higher priority.	<ul style="list-style-type: none"> <li>Highest % = 10</li> <li>High % = 8</li> <li>Low % = 6</li> <li>Lowest % = 4</li> </ul>
Population Commuting by Public Transit	Those who commute by public transit require active transportation infrastructure for first and last mile connectivity, districts with more people using transit receive higher priority.	<ul style="list-style-type: none"> <li>Highest % Commuting = 10</li> <li>High % Commuting = 8</li> <li>Low % Commuting = 6</li> <li>Lowest % Commuting = 4</li> </ul>
Percent in Poverty Over 65	Those who are in poverty and are over 65 are given higher priority to ensure senior citizens have safe transportation.	<ul style="list-style-type: none"> <li>Highest Poverty = 8</li> <li>High Poverty = 6</li> <li>Low Poverty = 4</li> <li>Lowest Poverty = 2</li> </ul>
Percent in Poverty Under 18	Children in poverty are considered a vulnerable population to provide more access to the population, areas with the highest poverty in those under 18 years old are given higher priority.	<ul style="list-style-type: none"> <li>Highest Poverty = 8</li> <li>High Poverty = 6</li> <li>Low Poverty = 4</li> <li>Lowest Poverty = 2</li> </ul>
<b>LAND USE</b> Parks & Schools	Parks are destinations for recreation within a community and offer attract active transportation users. Additionally, parks are often community assets where residents desire to walk to school. Educational facilities were included to capture a population that may have less access to a personal vehicle and could benefit from an active advantage of other forms of transportation. Network segments closest to these uses received the highest scores.	<ul style="list-style-type: none"> <li>1.0 Miles = 10</li> <li>1.5 Miles = 7</li> <li>2.0 Miles = 5</li> </ul>
<b>LAND USE</b> Commercial & High Density Development	Properties that were identified as commercial or high density residential land uses were included in the analysis due to opportunity for pedestrian activity from patrons or high number of residents within a walkable urban network segments closest to these uses received the highest scores.	<ul style="list-style-type: none"> <li>1.0 Miles = 8</li> <li>1.5 Miles = 5</li> <li>2.0 Miles = 3</li> </ul>

See detailed Equity criteria from AiM plan included with project attachment

# Selection Criteria: Transit, Critical Corridors, and more

- Proximity to transit stops
- Critical corridors: Prince Ave., North Ave., Milledge Ave., Atlanta Highway, Lexington.
- Optimizing safety and connectivity
- Existing facilities were also considered for bicycle project selection and prioritization
- Public input also played a role



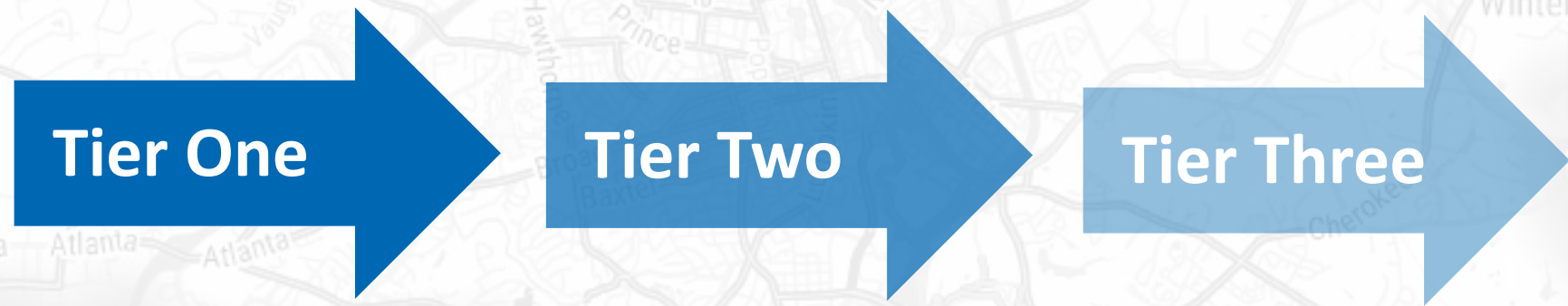
*See additional detailed criteria from AiM plan included with project attachment*



# Bike/Ped Project Tiers



- Each tier represents an important phase as we build out the active transportation network.



**Highest Priority**  
*Sooner*

**Medium Priority**  
*Later*

# Bike/Ped Project Tiers



## Tier One

- There are 60 proposed bike *and* pedestrian projects in Tier One alone!

*See full Tier One project lists from AiM plan included with project attachment*

ATHENS IN MOTION

C-9

## PROJECTS BY BICYCLE TIER

The following table represents all of the projects proposed by the Athens in Motion Plan. Projects are listed by Bicycle tier, a group scoring based upon the bicycle prioritization score described in the Implementation chapter of this plan. The Low Cost is estimated for the proposed bicycle category to be implemented through striping or construction on existing asphalt while the High Cost estimate assumes construction of a new facility outside of existing asphalt.

Tier	Project ID	Project Name	Bike Category	To	From	Low Cost	High Cost	Funding	Project Length (mi)
1	1	Pulaski St	Buffered Facility	Prince Ave	W Broad St	\$256,970	\$842,149		0.2
1	2	E/W Hancock Ave	Buffered Facility	N Milledge Ave	College Ave	\$823,459	\$2,698,662		0.8
1	4	W Broad St	Separated Facility	N Milledge Rd	S Lumpkin St	\$748,447	\$3,526,337		0.7
1	5	Barber St/N Finley St	Delineated Facility	Boulevard	E/W Hancock Ave	\$254,144	\$1,311,382		0.5
1	2	Finley St	Buffered Facility	Boulevard	E/W Hancock Ave	\$254,144	\$1,311,382		0.2
1	4	W Broad St	Separated Facility	N Milledge Rd	S Lumpkin St	\$748,447	\$3,526,337		0.7