

To: ARTS MPO
 From: Alta Planning + Design
 Date: February 6, 2023
 Re: ARTS Bicycle and Pedestrian Plan System Update 2022-2023 – Policy Review

Policy Review

Federal Policy

Over the past two decades, the United States Department of Transportation (USDOT) has increasingly supported a more thorough integration of walking and biking considerations into transportation policy and implementation.

In 2010, USDOT released a policy statement to reflect its support for the development of fully integrated active transportation networks.

The USDOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

Below are excerpts from a recent USDOT Federal Highway Administration (FHWA) report, *Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges* (March 2022), highlighting recent efforts. This report can also be accessed through the [Complete Streets in FHWA webpage](#).

“The House Report accompanying the Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2021, encouraged the United States Department of Transportation (DOT) to adopt a Complete Streets design model, and to evaluate its current activities related to that goal. Specifically, the Congressional direction states:

The Committee is concerned about recent increases in cyclist and pedestrian fatalities and encourages the adoption of a complete streets design model in which roads and streets are designed and operated to enable safe access for all users, including but not limited to pedestrians, bicyclists, motorists, and transit riders across a broad spectrum of ages and abilities. To lay the groundwork for the adoption of a complete streets design model, the Committee directs FHWA to review its current policies, rules, and procedures to determine their impact on safety for road users, particularly those outside automobiles, and to report their findings to the House and Senate Committees on Appropriations within one year after enactment of this Act. Subsequently, the Committee directs the Department to disseminate best practices for complete streets to State and local highway partners.”...

“In March 2021, FHWA established a Complete Streets initiative that seeks to work with State, Tribal and local transportation agencies across the United States to implement a Complete Streets design model as they plan, develop, and operate streets and networks that prioritize safety, comfort, and connectivity to destinations for everyone who uses the street network. The FHWA’s Complete Streets initiative works to ensure that the agency plays a leadership role in the process of providing an equitable and safe transportation network for travelers of all ages and abilities, including those from underserved communities that have faced historic disinvestment.”...

“This Report has identified five overarching areas of opportunity for FHWA as it moves ahead in its Complete Streets efforts:

- A. Improve data collection and analysis to advance safety for all users.
- B. Support rigorous safety assessment during project development and design to help prioritize safety outcomes across all project types.
- C. Accelerate adoption of standards and guidance that promote safety and accessibility for all users and support innovation in design.
- D. Reinforce the primacy of safety for all users in the interpretation of design standards, guidelines, and project review processes.
- E. Make Complete Streets FHWA’s default approach for funding and designing nonaccess-controlled roadways.”...

“The Bipartisan Infrastructure Law creates new funding opportunities to support safety projects, requires States and MPOs to use a portion of their funding to develop and adopt Complete Streets policies, and brings safety for all users into clearer focus in the eligible uses for formula funding programs. ”...

State Policy

Both GDOT and SCDOT have adopted Complete Streets policies that could be referenced by ARTS MPO jurisdictions within each state, with respect to projects on state roads.

[GDOT’s Complete Streets Design Policy - \(see Chapter 9 of GDOT’s Design Policy Manual\)](#) - GDOT’s primary strategy for implementing Complete Streets is to incorporate bicycle, pedestrian, and transit accommodations into roadway construction and maintenance projects. Accommodations for bicycles and pedestrians should be integrated into roadway construction projects through design features appropriate to the context and function of the transportation facility.

[SCDOT’s Complete Streets Policy](#) requires the consideration of accommodations for bicycling, walking, and transit in the design, construction, maintenance, and operations of the state transportation network. Funding for these accommodations is to be included in the budget for each project if warranted on the individual project and in accordance with the regional plans.

Local Policy

One of the most cost-effective implementation strategies for ARTS MPO region jurisdictions is to establish land use and transportation policies, design standards, and development regulations that promote walkable/bikeable new development and capital projects. The tables below include an overview of key policy items for fostering a walkable/bikeable community, and the status of each of those items under the regulations of each jurisdiction in the ARTS MPO.

| Topic/Strategies | Jurisdiction | | | |
|--|--|--|--|---|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>1. Create and Implement a Complete Streets Policy</p> <p>A complete streets policy helps cities and towns to work towards creating a street network that encourages bicycle and pedestrian travel and provides safe and comfortable roadways for all users. Both GDOT and SCDOT have Complete Streets policies that could be referenced by jurisdictions within each state, with respect to state roads. See Smart Growth America's 10 Elements of a Complete Streets Policy for additional guidance on policy development.</p> | <p>Supported in Comprehensive Plan</p> <p>The <i>Envision Augusta 2035 Comprehensive Plan</i> is established support for Complete Streets in the Community Goals: <i>Encourage a countywide network of alternative transportation strategies; implement complete streets.</i> (pg 245)</p> | <p>Supported in Comprehensive Plan</p> <p>The Transportation Element of the <i>Aiken County Comprehensive Plan</i> establishes support for Complete Streets; <i>Plan for Complete Streets design considerations for all new roadway construction and existing roadway improvements.</i> (pg 164)</p> | <p>Supported in Comprehensive Plan</p> <p>No Countywide Complete Streets Policy, but a statement supporting the idea of a Complete Streets Policy is found in Columbia County's <i>Completing Our Streets A Guide to Livable & Sustainable Communities</i>, and the <i>Vision 2035: A Comprehensive Plan for Columbia County, Georgia</i> also supports walking and biking improvements as a goal and policy action item.</p> | <p>Supported in Comprehensive Plan</p> <p>The Transportation Element of the <i>Edgefield County 2019 Comprehensive Plan</i> establishes support for Complete Streets; <i>...the county is encouraged to develop policies related to Complete Streets Design, Access Management, and Mixed Use Development which would improve the quality of future development in the county.</i> (pg 8.12)</p> |
| <p>2. Develop Complete Street Design Guidelines for a variety of contexts and all street/roadway user groups.</p> <p>The subsections below include policies for pedestrian- and bicycle-related elements of Complete Streets and complete walking and biking networks. Sidewalks, bike lanes, shared use paths, and streetscape amenities such as street trees and lighting are some of the most fundamental elements of Complete Streets. Access management, multi-modal level of service assessments, and traffic calming are also critical for developing Complete Streets networks through the development review and capital project implementation process.</p> | <p>No Complete Street Design Guidelines</p> | <p>No Complete Street Design Guidelines</p> | <p>No Complete Street Design Guidelines</p> | <p>No Complete Street Design Guidelines</p> |
| <p>3. Require pedestrian accommodations, including by roadway type during new development or redevelopment or capital roadway projects.</p> <p>Pedestrian facilities should be determined based on street types and land uses of a given roadway corridor, congruent with a local or regional bicycle and pedestrian plan.</p> | <p>Some requirements.</p> <p>Appendix A - Subdivision Standards; Article IV. Design Standards; Section 404. Sidewalks Sidewalks are to be installed at the developer and/or builders expense as follows:</p> <p>a) Subdivisions with 11-19 lots must install sidewalks on one side of the street.</p> <p>b) Subdivisions with 20 or more lots shall install sidewalks on both sides of the street.</p> <p>Site Plan Regulations Section 302, F: Sidewalks may be required by the City Engineer, but they are not required as a minimum standard. Sidewalks, where installed, shall meet the construction standards of the City Engineer</p> | <p>Some requirements.</p> <p>Code of Ordinances, Sec. 24-7.15. Sidewalks. Sidewalks shall be required on one (1) side of each street in all subdivisions with fifty (50) lots or more with an average lot size of one-half (½) acre or less. Sidewalks also may be required by the planning commission to continue an existing walk in an adjacent subdivision or along an existing street to access nearby schools and/or public recreation areas. Within subdivisions, sidewalks shall be at least four (4) feet wide; when providing access to public facilities, sidewalks shall be not less than five (5) feet wide.</p> <p>Code of Ordinances, Sec. 24-3.11. Multifamily housing, residential care facilities and group-occupied dwellings and Code of Ordinances Sec. 24-3.12. - Townhouses, duplexes, triplexes, and quadruplexes. (6) Pedestrian facilities such as sidewalks shall be provided to connect structures and amenities. Connections must be provided to any existing adjoining pedestrian facilities.</p> | <p>Some requirements.</p> <p>Code of Ordinances, Sec. 74-117. Required improvements. (d) Sidewalks may be required where deemed by the planning commission as an integral part of a pedestrian traffic system within a one-mile radius of existing or planned schools, neighborhood recreation or commercial areas or other public places.</p> <p>Code of Ordinances, Sec. 90-56.Planned residential development district. (e) 3. (iv) a. Interconnecting sidewalks with a minimum width of five feet shall be installed on both sides of all streets</p> | <p>Some requirements.</p> <p>Code of Ordinances, Sec. 24-173. - Sidewalks The planning commission may require the developer to construct sidewalks within the right-of-way of public streets to connect with existing or proposed sidewalks and along major streets where sidewalks are needed for pedestrian traffic, such as to school and recreation areas.</p> |

*Note that the City of North Augusta is currently updating their Development Code - the draft version of the Development Code update was accessed in January 2023 for this review.
 **City of Grovetown is also working to update its Form Based Code. A draft of the update was not available at the time of this writing, and the existing Form Based Code was reviewed.

| Topic/Strategies | Jurisdiction | | |
|--|--|--|--|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>1. Create and Implement a Complete Streets Policy</p> <p>A complete streets policy helps cities and towns to work towards creating a street network that encourages bicycle and pedestrian travel and provides safe and comfortable roadways for all users. Both GDOT and SCDOT have Complete Streets policies that could be referenced by each jurisdiction with respect to state roads. See Smart Growth America's 10 Elements of a Complete Streets Policy for additional guidance on policy development.</p> | <p>Supported in Comprehensive Plan</p> <p>The Transportation Element of the <i>Plan Aiken Comprehensive Plan</i> supports walking and biking improvements including the <i>Aiken County Urbanized Area Bicycle and Pedestrian Plan</i>.</p> | <p>Supported in Comprehensive Plan</p> <p>All Goals and Strategies recommended in the North Augusta 2021 Comprehensive Plan Transportation section include recommendations for better balancing all modes of transportation in North Augusta, including a specific recommendation to implement a Complete Streets Policy.</p> | <p>Supported in Comprehensive Plan</p> <p>Form Based Code, 6.170. Streets & Blocks <i>A. Intent. 2. Create fully accessible complete streets that address all modes of travel, including pedestrian traffic, bicycle traffic, transit, and vehicular traffic.</i></p> |
| <p>2. Develop Complete Street Design Guidelines for a variety of contexts and all street/roadway user groups.</p> <p>The subsections below include policies for pedestrian- and bicycle-related elements of Complete Streets and complete walking and biking networks. Sidewalks, bike lanes, shared use paths, and streetscape amenities such as street trees and lighting are some of the most fundamental elements of Complete Streets. Access management, multi-modal level of service assessments, and traffic calming are also critical for developing Complete Streets networks through the development review and capital project implementation process.</p> | <p>No Complete Street Design Guidelines</p> | <p>Good.</p> <p>Development Code, 10.4. Street Types and Design <i>Bicycle and pedestrian facilities are incorporated.</i></p> | <p>Good.</p> <p>Most street sections incorporate bicycle, pedestrian, and streetscaping considerations. See Form Based Code, 6.170 Streets & Blocks.</p> |
| <p>3. Require pedestrian accommodations, including by roadway type during new development or redevelopment or capital roadway projects.</p> <p>Pedestrian facilities should be determined based on street types and land uses of a given roadway corridor, congruent with a local or regional bicycle and pedestrian plan.</p> | <p>Good.</p> <p>Land Development Regulations, 5.71. <i>a. Sidewalks shall only be required in conjunction with new streets, not existing ones.</i> <i>b. Sidewalks shall be required on both sides of all arterial and collector streets.</i> <i>c. Sidewalks shall be required on both sides of streets within one-half mile of an existing or proposed public school or park of over one acre including one outside the City.</i></p> | <p>Good.</p> <p>Development Code, 10.10. Sidewalks <i>10.10.1. Requirements. Sidewalk and graded areas within the right of way shall be required depending on road classification and intensity of development in accordance with the requirements set forth in Table 10-2, Street Design Criteria, or Table 10-3, Conventional Street Design Criteria, as appropriate, and Appendix D, Construction Standards.</i></p> | <p>Good.</p> <p>Street section and standards include pedestrian realm requirements. See Form Based Code, 6.170 - Streets and Blocks.</p> |

| Topic/Strategies | Jurisdiction | | | |
|--|----------------------|------------------|---|----------------------|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>4. Require designated bicycle facilities during new development or redevelopment or capital roadway projects.</p> <p>A range of bicycle facility typologies should be considered based on street typology including sidepaths and buffered/separated bike lanes as detailed in various publications including the NACTO Urban Bikeway Design Guide and the soon-to-be-released update to the AASHTO Guide for the Development of Bicycle Facilities.</p> | No requirements. | No requirements. | No requirements. | No requirements. |
| <p>5. Require dedication, reservation or development of greenways during new development, redevelopment, or capital roadway projects (where greenways cross or run parallel to roadways).</p> | No requirements. | No requirements. | <p>Some requirements.</p> <p><i>Code of Ordinances, Sec. 90-55 RCO Residential cluster overlay district.</i> <i>(c) Protection of open space/dedication of access...The conservation easement shall provide only for passive recreational activities included but not limited to hiking or non-motorized bicycling, trails, parks or landscaped storm water management facilities. With the exception of paved trails, these conservation easements shall not allow for impervious surfaces including but not limited to parking lots, roads, structures including but not limited to storage sheds or pavilions, active recreational activities including but not limited to ball fields, golf courses, swimming pools or tennis courts. Where practical and in accordance with the greenspace master plan, access easements shall be provided to Columbia County for greenway trail construction and maintenance.</i></p> | No requirements. |
| <p>6. Require new sidewalks, bicycle facilities, greenways, etc., to connect to existing facilities.</p> | No requirements. | No requirements. | <p>Some requirements.</p> <p><i>Code of Ordinances, Sec. 90-94 PUD planned unit development district.</i> <i>(4) Linking areas within the development by providing pedestrian-ways, bike-ways, and transportation systems and connecting to public sidewalks and bike paths as feasible.</i></p> | No requirements. |

| Topic/Strategies | Jurisdiction | | |
|--|--------------------------------|--|--|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>4. Require designated bicycle facilities during new development or redevelopment or capital roadway projects.</p> <p>A range of bicycle facility typologies should be considered based on street typology including sidepaths and buffered/separated bike lanes as detailed in various publications including the NACTO Urban Bikeway Design Guide and the soon-to-be-released update to the AASHTO Guide for the Development of Bicycle Facilities.</p> | <p>No requirements.</p> | <p>Good.</p> <p>Development Code, 10.2.7. Bike paths shall be required only if specifically indicated to complete the city's approved Greenway and bikeway systems.</p> | <p>Good.</p> <p>Form Based Code, 6.170.E.2. - Bicycle Facilities All bicycle accommodations shall be coordinated with any City-approved bicycle plan that exists. The following types of bicycle accommodations are permitted in the vehicular realm per Street Type. Refer to Figure 6.170.E-3.</p> |
| <p>5. Require dedication, reservation or development of greenways during new development, redevelopment, or capital roadway projects (where greenways cross or run parallel to roadways).</p> | <p>No requirements.</p> | <p>Good.</p> <p>Development Code, 10.2.7. Bike paths shall be required only if specifically indicated to complete the city's approved Greenway and bikeway systems.</p> | <p>Some requirements.</p> <p>Form Based Code, 6.170.F. Open Space Requirements 2. Rail Trail Easement. Where a railroad right-of-way is located directly adjacent to the parcel, a rail trail easement is required. A minimum 20-foot wide easement for trail and landscape is required on the edge of the rail right-of-way facing the parcel.</p> <p>Municipal Code: Appendix B. Article III. Sec. 308. Public Use and service areas A. Public open spaces Where a school or recreation area, shown on an official map or in a plan made and adopted by the planning commission, is located in whole or in part in the applicant's subdivision, the planning commission may require the dedication or reservation of such open space within the subdivision up to a total of ten (10) percent of the gross area of the plot, including any water frontage for park, school, or recreational purposes.</p> |
| <p>6. Require new sidewalks, bicycle facilities, greenways, etc., to connect to existing facilities.</p> | <p>No requirements.</p> | <p>Good.</p> <p>Development Code, 10.10.5. Connection to Greenways and Bikeways Subdivisions adjoining the Greenway or a bikeway shall provide sidewalks with a minimum right of way of twenty (20) feet that connect the lots internal to the subdivision to the Greenway or bikeway.</p> | <p>No requirements.</p> |

| Topic/Strategies | Jurisdiction | | | |
|--|---|---|--|---|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>7. Consider multi-modal Level of Service (LOS) in Traffic Impact Analyses and other engineering studies.</p> <p>Beyond LOS for motor vehicle travel at intersections, ARTS MPO jurisdictions should consider adopting multi-modal level of service standards. Consideration of bicycle and pedestrian (and transit where applicable) LOS assure appropriate facilities for bicyclists and pedestrians in new development and capital improvements.</p> <p>The Institute of Transportation Engineers (ITE) has developed a draft Multimodal Transportation Impact Analysis for Site Development (MTIASD), and is in the final stages of formally adopting and finalizing the MTIASD at the time of this writing.</p> <p>See also the Caltrans (State of California transportation agency) approach.</p> | <p>No multi-modal level of service considered.</p> | <p>No multi-modal level of service considered.</p> | <p>No multi-modal level of service considered.</p> | <p>No multi-modal level of service considered.</p> |
| <p>8. Adopt traffic calming programs, policies, and standards.</p> <p>Traffic calming on local streets increases safety and comfort for all roadway users, including bicyclists and pedestrians.</p> <p>The FHWA has developed a comprehensive Traffic Calming ePrimer.</p> | <p>Some guidance.</p> <p>Permitted in an R-1E Zone by Special Exception.</p> <p>Comprehensive Zoning Ordinance, 13-15. Special Exception: <i>Circulations System:</i> <i>a) Motor Vehicle Circulation. Traffic calming features such as “queuing streets,” curb extensions, traffic circles, and medians may be used to encourage slow traffic speeds.</i></p> <p>Augusta’s Speed Hump Policy: \$14,000 per year, per District currently allotted in Augusta to construct speed humps (or other similar traffic calming devices), per requests from the public.</p> | <p>No program/policy/standard.</p> | <p>Some guidance.</p> <p>Columbia County Speed Hump Program Procedure Manual <i>In response to concerns of excessive vehicle speeds in residential neighborhoods Columbia County evaluated plans and programs that appear to have favorable results regarding a reduction of documented excessive speeding and cut-through traffic on local residential streets. The most popular and cost effective speed reduction tool that resulted from this evaluation was speed humps.</i></p> <p><i>Any individual can initiate a request for speed hump installation. Prior to issuing an application to the requestor, an initial screening of the requesting street will be performed to confirm the characteristics of the street support consideration for speed humps. Participation by 51% of the registered property owners on the street must be met for the petition to receive further consideration (see Procedure Manual for further detail on program).</i></p> | <p>No program/policy/standard.</p> |

| Topic/Strategies | Jurisdiction | | |
|--|---|---|---|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>7. Consider multi-modal Level of Service (LOS) in Traffic Impact Analyses and other engineering studies.</p> <p>Beyond LOS for motor vehicle travel at intersections, ARTS MPO jurisdictions should consider adopting multi-modal level of service standards. Consideration of bicycle and pedestrian (and transit where applicable) LOS assure appropriate facilities for bicyclists and pedestrians in new development and capital improvements.</p> <p>The Institute of Transportation Engineers (ITE) has developed a draft Multimodal Transportation Impact Analysis for Site Development (MTIASD), and is in the final stages of formally adopting and finalizing the MTIASD at the time of this writing.</p> <p>See also the Caltrans (State of California transportation agency) approach.</p> | <p>No multi-modal level of service considered.</p> | <p>No multi-modal level of service considered.</p> | <p>No multi-modal level of service considered.</p> |
| <p>8. Adopt traffic calming programs, policies, and standards.</p> <p>Traffic calming on local streets increases safety and comfort for all roadway users, including bicyclists and pedestrians.</p> <p>The FHWA has developed a comprehensive Traffic Calming ePrimer.</p> | <p>No program/policy/standard.</p> | <p>Good.</p> <p>Development Code, 10.2.1. Circulation System Design Principles: Shared System <i>The road system shall respect the function of streets as the shared domain of drivers, pedestrians and bicyclists. Street widths shall be adequate to accommodate vehicles and emergency services, but not excessively wide so as to encourage speeding. To the extent possible the street system shall incorporate pedestrian amenities including sidewalks, center medians, landscaping strips between the curb and sidewalk, street trees and narrow intersection radii so as to improve the walkability of the streetscape.</i></p> | <p>No program/policy/standard.</p> |

| Topic/Strategies | Jurisdiction | | | |
|---|---|--------------------------------|--|---|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>9. Require Planting Strips and Street Trees.</p> <p>When planted in a planting strip between the sidewalk and the curb, street trees provide a buffer between the bike/ped zone and the street. In addition to their value for improving air quality, water quality, shade/cooling in hot summer months, and beauty of a community, street trees can also help slow traffic and improve comfort for bicyclists and pedestrians. Trees add visual interest to streets and narrow the street's visual corridor, which may cause drivers to slow down.</p> | <p>Some requirements but not specific to bike/ped buffer to roadway.</p> <p>Tree Ordinance 8-4-13 Tree Protection/Tree Establishment Requirements for Private and Public Development <i>(d) (5) A streetyard area shall be provided along any existing or proposed public street right-of-way or private right-of-way adjacent to or adjoining the property except for those portions of the lot used for driveways. Each street yard shall have at least one large tree for each forty-five linear feet on center of street frontage, with a large tree being located within twenty feet of each side property line.</i></p> | <p>No requirements.</p> | <p>Some requirements but not specific to bike/ped buffer to roadway.</p> <p>Code of Ordinances, Sec. 90-139. Buffers and Screening. <i>(d) Landscape strip. (1) Non-residential and multi-family developments are required to maintain a minimum ten-foot wide landscape strip adjacent to any public or private street, or along any common driveway serving the purpose of a public or private street.</i></p> <p><i>(e) Street trees. Street trees may be provided as a substitute for a required landscape strip, upon approval by the planning services director, within the Evans Town Center Overlay District (ETCOD) or a Node Protection Overlay District (NPOD), and shall be maintained within, or adjacent to, all existing and proposed street rights-of-way in accordance with the following requirements: (2) Street trees shall be planted in a minimum six-foot wide tree lawn between the curb and sidewalk, and shall be planted no closer than three feet from the curb or sidewalk. The planning services director may approve an alternate planting plan to avoid conflicts with utilities.</i></p> | <p>Some requirements but not specific to bike/ped buffer to roadway.</p> <p>Code of Ordinances, Sec. 24-107. <i>(c) Bufferyards shall be required for proposed new uses or substantially expanded uses (over 50 percent gross floor area) in the zoned areas of the county in accordance with the following table (see Sec. 24-107).</i></p> |
| <p>10. Require Pedestrian-Scale Street Lighting.</p> <p>Pedestrian-scale lighting along streets and at intersections is one of the most important tools for night time bicycle and pedestrian crash prevention.</p> | <p>Some guidance.</p> <p>Street and Road Design Manual, 10.02 Street Lighting <i>Street lighting is encouraged in all subdivisions. Street lighting is essential for pedestrian safety and security.</i></p> <p>Comprehensive Zoning Ordinance, 3-A Outdoor/Street Lighting <i>3-A-4 Technical Standards; 6. Pedestrian Path Lighting - Lighting posts must not exceed 16 feet in height from the finished grade.</i></p> <p>Chapter 1 - Administration; Article 7 - Other Powers and Duties; Sec. 1-72. - Street Lights <i>The Board of Commissioners of Richmond County shall be authorized and empowered to establish districts for the purpose of erecting, establishing, maintaining and operating within Richmond County street lights and lamps for illumination of the public streets, roads, sidewalks and ways situated in said county. If at least fifty percent of the property owners within the proposed district shall assent thereto, the board shall be further authorized to levy, assess and collect a tax or special assessment against the property located in said districts for the aforesaid purposes or make service charges against all businesses and residents served by said facilities as the Board of Commissioners shall deem necessary for the services rendered, all without regard to uniformity.</i></p> | <p>No requirements.</p> | <p>No requirements.</p> | <p>No requirements.</p> |

| Topic/Strategies | Jurisdiction | | |
|---|--|---|---|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>9. Require Planting Strips and Street Trees.</p> <p>When planted in a planting strip between the sidewalk and the curb, street trees provide a buffer between the bike/ped zone and the street. In addition to their value for improving the air quality, water quality, and beauty of a community, street trees can also help slow traffic and improve comfort for bicyclists and pedestrians. Trees add visual interest to streets and narrow the street's visual corridor, which may cause drivers to slow down.</p> | <p>Some requirements but not specific to bike/ped buffer to roadway.</p> <p>Zoning Ordinance. Article 6. Landscaping and Tree Preservation. 4.6.4.B.1. Planting Strips Along Street Rights-of-Way <i>a. Depth. A planting strip shall be provided parallel and adjacent to each street right-of-way...</i></p> <p>Zoning Ordinance. Article 6. Landscaping and Tree Preservation. 4.6.7.B. Plantings in Strips Along the Street Frontage <i>1. a) Number, Size, and Spacing. With respect to the approval of a site/landscape plan for a new development, the maximum number of trees must be planted in the planting strip, required by 4.6.4.B.1, as determined by the Planning Director taking into account the size of the trees at maturity except, to allow for the location of a freestanding sign, there may be a gap of no more than 40 feet where Small Trees are planted and 60 feet where Large Trees are planted (Ord. 11222010A).</i></p> | <p>Good.</p> <p>Development Code, Article 7 - Landscaping, Buffers, Open Space, and Trails <i>This section includes detailed landscaping requirements that apply to all new development, redevelopment or building expansion projects including streetscaping of rights of ways.</i></p> <p><i>7.6.2 Street trees shall be located in the right-of-way in the required landscape area between the curb and the sidewalk or the potential location of a sidewalk if one is not present.</i></p> | <p>Some requirements but not specific to bike/ped buffer to roadway.</p> <p>Form Based Code, 6.160.F. Street Trees <i>3. Required Installation. Street trees are required for all new streets and may be required for the pedestrian realm of any existing street. Refer to 6.170.G Streetscape Requirements to determine whether installation of street trees are required. a) Exception. Street trees are not required on the alley street type. (Refer to 6.170.C).</i></p> <p>Form Based Code, 6.170.G Streetscape Requirements <i>2. New Streets. For all developments proposing new streets, the applicant shall submit a Streetscape Design for approval and is responsible for installing streetscape along both sides of the required street, unless otherwise coordinated with the city.</i> <i>3. Implementation of Streetscape on Existing Streets. For all developments with a total existing street frontage of 400 feet or more, a Streetscape Design shall be submitted for approval and installed within the adjacent right-of-way under the following circumstances: a) Redevelopment or Renovation. When an alteration to an existing structure includes an addition of more than 60 percent in gross building square footage. b) New Structure. Development of a new structure on a previously undeveloped or currently demolished lot, or development of a new structure on a lot that increases the total gross building square footage of the lot by 25 percent or more.</i></p> |
| <p>10. Require Pedestrian-Scale Street Lighting.</p> <p>Pedestrian-scale lighting along streets and at intersections is one of the most important tools for night time bicycle and pedestrian crash prevention.</p> | <p>Some guidance.</p> <p>Land Development Regulations, 5.6.4 Lighting <i>The City will pay the cost of installing street lights at intersections, midblock in blocks over 600 feet long or other locations as recommended by the City Engineer.</i></p> | <p>Good.</p> <p>Development Code, 10.15.2 Street Lighting Plan Required <i>A street lighting plan is required for all new developments where additional streets are required by this section. The street lighting plan shall be included as part of the major subdivision plan.</i></p> | <p>Good.</p> <p>Form Based Code, 6.170.G Streetscape Requirements <i>4.d.6. Lighting. Pedestrian and vehicular lighting shall be specified with locations and quantities noted. All lighting shall meet any requirements of Public Works. Cut sheets and samples shall be submitted upon request of the Director.</i></p> |

| Topic/Strategies | Jurisdiction | | | |
|--|--|--|--|--|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>11. Adopt bicycle parking requirements.</p> <p>In general, bicycle parking should be required for all nonresidential developments that have employees or visitors, all public or civic uses or sites, and all multi-family development. Different standards of bicycle parking are needed for short-term visitors and customers and for longer term users like employees, residents, and students.</p> <p>Model standards for bicycle parking policy as well as design can be found through the Association of Pedestrian and Bicycle Professionals' Bicycle Parking Guidelines 2nd Edition.</p> | <p>Good.</p> <p>Comprehensive Zoning Ordinance, 4-8 Bicycle Parking- General Provisions 4-8-2 Applicability: Bicycle parking requirements of this section shall apply to: <i>a) Any new building greater than 1,200 square feet of gross floor area.</i> <i>b) Any existing building undergoing a change of use and or expansions and alterations, greater than 1,200 square feet of gross floor area.</i></p> <p>4-8-4 Required Bicycle Parking Spaces: <i>a) For all required uses, a minimum of two short term- and two long-term bicycle parking spaces shall be provided</i> <i>b) Bicycle parking must be provided at a rate of one bike space for every ten vehicle parking spaces.</i></p> <p>4-8-5 General requirement standards. The following general requirements are specified: <i>b) All required bicycle racks and facilities must be in accordance with the Association of Pedestrian and Bicycle Professionals Bike Parking Guidelines (APBP).</i></p> | <p>No requirements.</p> | <p>No requirements.</p> | <p>No requirements.</p> |
| <p>12. Block size requirements</p> <p>Maximum block length in any situation should rarely exceed 800-1000 feet for good connectivity. In areas with highest development density (urbanized, mixed use centers and high density neighborhoods) block lengths can be as little as 200 feet. In areas with blocks as long as 800 feet or greater, a pedestrian and/or bicycle path through the block and/or alley should be required.</p> | <p>No requirements.</p> | <p>Needs improvement.</p> <p>Code of Ordinances, Chap 24, Sec. 24-7.10 Blocks <i>(1) Residential. a. Block lengths shall be appropriate to topographic conditions and density to be served, but shall not exceed one thousand two hundred (1,200) feet in length, or be less than three hundred (300) feet in length.</i></p> | <p>Good.</p> <p>Code of Ordinances, Sec. 74-81 Blocks <i>(a) Length. Blocks shall not be less than 400 feet, nor more than 1,200 feet in length, except as the planning commission considers necessary to secure efficient use of land or desired features of street patterns. In blocks greater than 800 feet in length, the planning commission may require at locations it deems necessary one or more public crosswalks of not less than ten feet in width to extend entirely across the block, or pedestrian easements in lieu thereof</i></p> | <p>Needs improvement.</p> <p>Code or Ordinances, Sec. 24-175. Blocks Development location, type, and intensity should determine the length of a block, with shorter blocks being more appropriate in areas of higher density.</p> <p><i>1. Blocks should not be greater than 1,200 feet nor less than 300 feet in length unless the unusual characteristics of a particular site dictate otherwise.</i></p> |

| Topic/Strategies | Jurisdiction | | |
|--|---|--|---|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>11. Adopt bicycle parking requirements.</p> <p>In general, bicycle parking should be required for all nonresidential developments that have employees or visitors, all public or civic uses or sites, and all multi-family development. Different standards of bicycle parking are needed for short-term visitors and customers and for longer term users like employees, residents, and students.</p> <p>Model standards for bicycle parking policy as well as design can be found through the Association of Pedestrian and Bicycle Professionals' Bicycle Parking Guidelines 2nd Edition.</p> | <p>No requirements.</p> | <p>Good.</p> <p>Development Code, 8.3.2 Bicycle Parking Required Bicycle parking shall be provided for all non-residential and multi-family residential uses, and where the Director finds that there is sufficient need for such parking in a particular case. The Director may waive or reduce the number of bicycle parking spaces required based on the surrounding use and context of the proposed development and the site's accessibility by bicycle.</p> | <p>Some requirements.</p> <p>Form Based Code, 6.170.G Streetscape Requirements 4.d.4. Bicycle Racks. Bicycle racks shall be supplied to meet a minimum bicycle parking requirements of the block face uses at a ratio of one bicycle space per every 40 parking spaces. If rear bicycle parking is utilized, a minimum of 50 percent of the required ground floor use bicycle parking shall be supplied within the streetscape.</p> |
| <p>12. Block size requirements</p> <p>Maximum block length in any situation should rarely exceed 800-1000 feet for good connectivity. In areas with highest development density (urbanized, mixed use centers and high density neighborhoods) block lengths can be as little as 200 feet. In areas with blocks as long as 800 feet or greater, a pedestrian and/or bicycle path through the block and/or alley should be required.</p> | <p>Good.</p> <p>Land Development Regulations, 5.2. Lot Improvements 5.2.1. Arrangement e. Blocks shall not exceed 2000 feet in length or be less than 600 feet in length in residential areas. Blocks along major arterial shall not be less than 1000 feet in length. f. Where a block is longer than 600 feet, one or more easements through the block may be required to accommodate utilities or pedestrian walkways. Such easements shall not be less than ten feet wide. Such walkways shall not be less than four feet wide.</p> | <p>Good.</p> <p>Block lengths stated for most street types. See Development Code, Table 10.4.1 Street Design Criteria.</p> | <p>Good.</p> <p>Municipal Code: Appendix B. Article III. Sec. 306. Blocks A. Length. Blocks shall be neither less than four hundred (400) feet nor more than twelve hundred (1200) feet in length, except as the planning commission considers necessary to secure efficient use of land or desired features of street pattern. In blocks greater than eight hundred (800) feet in length, the planning commission may require at locations it deems necessary one (1) or more public cross walks of not less than ten (10) feet in width to extend entirely across the block, or pedestrian easements in lieu thereof (see Article III, section 308 [of this appendix]).</p> |

| Topic/Strategies | Jurisdiction | | | |
|---|--|--|---|---|
| | Augusta/Richmond, GA | Aiken County, SC | Columbia County, GA | Edgefield County, SC |
| <p>13. Require connectivity/cross-access between adjacent developments.</p> <p>Requiring connectivity or cross-access between adjacent developments is a great tool for reducing the amount of traffic on major roads while increasing connectivity for bicycles, pedestrians, service vehicles, and neighborhood access.</p> | <p>No requirements.</p> | <p>Needs improvement.</p> <p><i>Code of Ordinances, Chap 24, Sec. 24-7.3 Streets and Driveways</i> <i>(4) Cul-de-sacs. (c) Cul-de-sacs shall be avoided wherever possible by connecting new subdivision roads with nearby or adjacent existing roads. The planning commission shall determine whenever such connections are required. (d) In all subdivisions, whether single-phase or multi-phased, all reasonable efforts shall be made to provide current or future connections with existing nearby roads and/or with proposed future roads in an attempt to eliminate excessively long cul-de-sacs.</i></p> | <p>Good.</p> <p><i>Code of Ordinances, Sec. 74-79. Relation to present, proposed, and future street system.</i> <i>(c) (2) Unless approved otherwise by the planning commission, a subdivision shall provide a street connection to each public street that it adjoins, and shall provide direct or indirect continuity through the subdivision between each connection.</i></p> | <p>No requirements.</p> |
| <p>14. Limit dead end streets or cul-de-sacs.</p> <p>Dead end streets or cul-de-sacs, while good at limiting motor vehicular traffic in an area, are a severe hindrance bicycle and pedestrian connectivity and overall neighborhood/ community accessibility, including for emergency access and other services.</p> <p>Make the maximum length for cul-de-sacs 250-300 feet (except in “rural” or very low-density development; e.g., density of less than 1 dua) to improve connectivity and accessibility.</p> <p>Where dead-end/cul-de-sac streets are designed in neighborhoods to prevent through vehicle traffic, bicycle/pedestrian connections should be provided for convenience.</p> | <p>Needs improvement.</p> <p><i>Street and Road Design Technical Manual, Section 3.02</i> <i>The maximum length of any dead-end/cul-de-sac street shall be 1,000 feet.</i></p> | <p>Needs improvement.</p> <p><i>Code of Ordinances, Chap 24, Sec. 24-7.3 Streets and Driveways</i> <i>(4) Cul-de-sacs. (a) Dead-end streets designed to be permanently closed at one (1) end shall not exceed two thousand five hundred (2,500) feet in length, measured from the right-of-way of the connecting street to the center point of the turn-around.</i></p> | <p>Good.</p> <p><i>Code of Ordinances, Sec. 74-79. Relation to present, proposed, and future street system.</i> <i>(c)(4)To the greatest extent practical, cul-de-sacs should be avoided in favor of loop streets or a curvilinear or grid system of streets.</i></p> <p><i>Code of Ordinances, Sec. 74-80. Design of streets.</i> <i>(f) Culs-de-sac shall not be more than 700 feet long unless necessitated by topographic or other conditions and approved by the planning commission.</i></p> | <p>Needs improvement.</p> <p><i>Code of Ordinances, Sec. 24-166.e.z. Dead-end roads (e) Cul-de-sacs. 1. Dead-end roads designed to be permanently closed at one end shall not exceed 2,500 feet in length measured from the right-of-way to the center point of the turn-around.</i></p> |

| Topic/Strategies | Jurisdiction | | |
|---|---|--|--|
| | City of Aiken, SC | *City of North Augusta, SC | **City of Grovetown, GA |
| <p>13. Require connectivity/cross-access between adjacent developments.</p> <p>Requiring connectivity or cross-access between adjacent developments is a great tool for reducing the amount of traffic on major roads while increasing connectivity for bicycles, pedestrians, service vehicles, and neighborhood access.</p> | <p>No requirements.</p> | <p>Good.</p> <p>Required connectivity ratio for proposed single-family subdivisions. See Development Code, 10.17.1 Connectivity Ratio.</p> | <p>Good.</p> <p>Form Based Code, 6.170. Streets & Blocks <i>A. Intent 1. Create an interconnected system of streets that provide multiple routes of travel.</i> <i>C. Block & Street Layout 1. Interconnected Street Pattern. Streets shall connect and continue existing streets from adjoining areas. 3. Access Points. When complete, all new lots within the development shall have two separate routes to at least two connections to an existing major street...</i></p> |
| <p>14. Limit dead end streets or cul-de-sacs.</p> <p>Dead end streets or cul-de-sacs, while good at limiting motor vehicular traffic in an area, are a severe hindrance bicycle and pedestrian connectivity and overall neighborhood/community accessibility, including for emergency access and other services.</p> <p>Make the maximum length for cul-de-sacs 250-300 feet (except in “rural” or very low-density development; e.g., density of less than 1 du/a) to improve connectivity and accessibility.</p> | <p>Needs improvement.</p> <p>Land Development Regulations, 5.6. Roads <i>5.6.2 Design Standards</i> <i>c) Dead-End Roads ii) Where a road is not intended to continue onto adjoining property, its terminus shall not be closer than 50 feet to the boundary and shall have a cul-de-sac. Such road shall not be longer than 1000 feet.</i></p> | <p>Good.</p> <p>Development Code, 10.2.3 Connectivity and Cul-de-Sacs <i>The street system shall balance the public goal of connectivity with market demands for privacy. While this Article does not ban cul-de-sacs, cul-de-sacs and dead-end streets shall be reserved for situations involving unique topography, environmental restrictions or similar considerations.</i></p> | <p>Good.</p> <p>Form Based Code, 6.170.C. Block & Street Layout <i>1. Interconnected Street Pattern. Streets shall connect and continue existing streets from adjoining areas. Cul-de-sac and dead end streets shall be avoided when not necessitated by natural features or site constraints such as railroad tracks, city limits, or other limits determined by the Director.</i></p> |