



## RESOLUTION

WHEREAS, on January 14, 2003, the South Carolina Department of Transportation Commission passed a Resolution that affirmed that bicycling and walking accommodations should be a routine part of the department's planning, design, construction and operating activities, and will be included in the everyday operations of our transportation system;

WHEREAS, that same Resolution also required South Carolina counties and municipalities to make bicycling and pedestrian improvements an integral part of their transportation planning and programming where State or Federal Highway funding is utilized;

WHEREAS, presently there exists an abundant number of municipalities and counties with Complete Streets language in Resolutions, Policies, Ordinances, and Comprehensive Plans; there are an equally abundant number of Pedestrian and Bicycle Master Plans developed for multimodalism for municipalities, Counties, and Metropolitan Planning Organizations;

WHEREAS, the proportion of fatalities in South Carolinians while walking and bicycling, relative to all traffic fatalities, has increased linearly from 10% to 16.5% from 2006 to 2016;

WHEREAS, the proportion of pedestrian fatalities on state owned streets is 95%;

NOW, THEREFORE, BE IT RESOLVED that the South Carolina Department of Transportation Commission adopts the following Multimodal Policy.

### **Introduction**

In 2003, the South Carolina Department of Transportation (SCDOT) Commission approved the Resolution for Bicycle and Pedestrian Facilities, which directed that "bicycling and walking accommodations should be a routine part of the Department's planning, design, construction and operating activities, and will be included in the everyday operations of our transportation system." In the time since that original resolution was adopted, the State has seen an increase in demand for bicycle and pedestrian facilities from our citizens and businesses, an increased emphasis on such facilities from the federal transportation agencies who provide funding, and, unfortunately, a continued high level of cyclist and pedestrian injuries and fatalities. After 14 years, the SCDOT Commission finds it appropriate to adopt the following additional statement of policy and direction.



## Intent

It is the intent of this Commission that:

1. This policy is intended to address the needs of people of all ages and abilities, who walk, bike, or utilize public transit in coordination with walking or biking.
2. Pedestrian facilities are to be included on any street project in the designated urban areas of the state, and/or where specifically part of a state, regional, county or local plan in rural areas;
3. Bicycle facilities or shoulders are to be included on any project where a state, county or local plan calls for such an improvement, be it urban or rural; AND as recommended by ED22 for provision of shoulder bikeway improvements?
4. Existing infrastructure is to be retrofitted to incorporate bicycle facilities where new construction, reconstruction, shoulder widening, or repaving is planned through adjustments to lane or shoulder widths, or road reconfigurations; and
5. Overall street design in all areas shall consider the context of the area, including land use, community design standards and community character, and finally the existing presence of and potential for people walking and bicycling, which is informed by crash history and demand projections based on counts of people walking, bicycling, and utilizing transit.
6. A network approach to multimodal access is considered.

In order to equitably and economically implement this policy, the SCDOT shall adopt a set of flexible policies and procedures providing that pedestrian and bicycling facilities can be included as intended by locally adopted Pedestrian, Bicycle, Greenway, Neighborhood, Community and/or Corridor Master Plans, and only proceed without such facilities within defined exceptions. SCDOT shall also adopt a set of design guidelines based on street type that address complete streets concepts.

## Planning

Give local governments a guide on doing effective engagement. Is it online, public hearing, etc. Exceptions must be made available online and also to the Advisory Committee.

The following are Warrants for Accommodation:

1. **Pedestrian Facility Warrants:**
  - a. **Safety & Equity:** SCDOT shall be effective in providing safer access to mobility for those areas that stand to make the greatest gains in systemic safety. Ensuring equitable access to multimodal mobility occurs with focus on meeting the needs first of those population areas identified to have the greatest need, via a data driven, systemic pedestrian safety analysis, SCDOT must work with other agencies as appropriate within the state, on assessing and planning to meet those identified gaps. Integrate requirements from the South Carolina Department of Public Safety (SCDPS) Strategic Highway Safety Plan, adopted in 2015. Specifically, those planning criteria are to “install separated paths/sidewalks and other pedestrian-

friendly road features along corridors and at intersections where supported by crash analysis.”

- To this end, SCDOT shall work with SCDPS to ensure that crash data, once verified, shall be made readily available to both SCDOT staff and members of the public or local planning professionals, through the provision of an interactive online mapping tool.
  - Transit: in rural areas, SCDOT shall plan and set goals for equitable distribution of transit facilities, in population centers where it is most economically feasible to do so.
- b. **Plan Present:** In order to assure an appropriate, thorough planning process for bicycle and pedestrian facilities, SCDOT shall first honor locally adopted Pedestrian, Greenway, Neighborhood, Community and/or Corridor Master Plans, and utilize these plans as guidance regarding facility location and type in SCDOT design, construction, reconstruction, and resurfacing/repaving. Additionally, SCDOT shall coordinate with Metropolitan Planning Organizations (MPOs), Councils of Governments (COGs), and local governments to ensure that planning recommendations are vetted against design constraints and shall employ flexibility based on design realities
- c. **Evidence:** where there is evidence of significant pedestrian traffic (i.e. worn pathways), provide sidewalks and high visibility crosswalks.
- d. **Transit:** construct sidewalks, high visibility crosswalks, and pedestrian refuge islands or mid-block crossings (when appropriate) when located within 0.5 mile of every transit stop. (When any sidewalk facility is added, or upgraded, in the immediate vicinity of a transit stop, a Boarding and Alighting (B&A) area is required for ADA compliance. This is a firm, stable, slip-resistant surface measuring 5’x8’, perpendicular to the sidewalk and extending to the curb. The sidewalk counts as part of this area a five-foot sidewalk adjacent the curb, for example, would require only a 5’x3’ area at the rear of the sidewalk to be fully compliant)
- e. **Schools:**
- When a SC Safe Routes School Travel Plan is present, provide for physical changes with sidewalks, high visibility roadway crossings and trails leading to their campus
  - In the absence of Travel Plans, construct sidewalk facilities and high visibility crosswalks, within 1.5 mile of every school (elementary, middle, and high)", that is located within an Urbanized Area, as defined by the US Census.
- f. **Density and destinations:** Construct sidewalks and high visibility crosswalks in locations within 0.5 mile of colleges, hospitals and parks, dense shopping areas, neighborhoods, government facilities or other obvious pedestrian destinations.

## 2. Bicycle Facility Warrants:

- a. **Plan Present:** In order to assure an appropriate, thorough planning process for bicycle and pedestrian facilities, SCDOT shall first honor locally adopted Bicycle, Greenway, Neighborhood, Community and/or Corridor Master Plans, and utilize these plans as guidance regarding facility location and type in SCDOT design, construction, reconstruction, and resurfacing/repaving. Additionally, SCDOT shall coordinate with



- Metropolitan Planning Organizations (MPOs), Councils of Governments (COGs), and local governments to ensure that planning recommendations are vetted against design constraints and shall employ flexibility based on design realities
- b. Safety: Implement requirements from the South Carolina Department of Public Safety (SCDPS) Strategic Highway Safety Plan, adopted in 2015. Specifically, those planning criteria are “implement separate paths for bicyclists where supported by crash/safety data.” To comply with this, utilize the following defined safety prioritization criteria:
    - where the occurrence of bicycle crashes equals or exceeds a rate in excess of 90th percentile as determined by GIS analysis, annually re-determined, over the most recent three years for which crash data is available
    - To this end, SCDOT shall work with SCDPS to ensure that crash data, once verified, shall be made readily available to both SCDOT staff and members of the public or local planning professionals, through the provision of an interactive online mapping tool.
  - c. Density and destinations: locations with demonstrated bicycle traffic; corridors serving colleges, hospitals and parks; and along corridors serving multiple bicycle destinations such as shopping, neighborhoods, or government facilities.
  - d. South Carolina’s six (6) Bicycle Touring Routes: On each of these in South Carolina, add a minimum five foot (5’) shoulder.
  - e. United States Bicycle Route System (USBRS): On each of these in South Carolina, USBR 1, 5, and 84, and the 6 SC Bicycle Touring routes, add a minimum five foot (5’) shoulder.
  - f. East Coast Greenway: Along this corridor, within the road right-of-way, SCDOT shall coordinate with MPOs, COGs, and local governments to ensure that planning recommendations are vetted against design constraints and shall employ flexibility based on design realities. In any segments not yet adopted in a local plan, the state shall add a minimum of 5’ shoulders to the existing road route.
  - g. Regarding Rumble Strips, on roadways designated as bicycle routes in adopted Federal, State, Regional or Local Policies and Plans, either do one of the following, and consider Run-Off-The-Road crash data in making a decision:
    - add 4’ of shoulder clear of the rumble strip, or
    - exclude rumble strips where the shoulder is less than 4’.
  - h. Storm Drains: except where a project is located on a highway which does not allow bicycle travel, bicycle-friendly storm drains shall be installed.

## Project Development

As projects are added to the Transportation Improvement Programs (TIPs) of MPOs and COGs, the Purpose and Need Statement shall specifically include the appropriate bicycle and pedestrian facilities and community context considerations based on this policy.

As projects are added to SCDOT’s long-term repaving, replacement, or reconstruction program, they should be checked against the above criteria (IE, Warrants) so that restriping of routes or



widening of shoulders to accommodate facilities can be duly considered in time to be included in the work schedule. Both central and District offices of SCDOT shall review long-range and mid-range plans, in collaboration with each other, and with local government agencies as they are adopted, in order to facilitate cooperation on projects and to provide local governments the time to adopt any budgetary plans necessary for these collaborative projects. That schedule should be increased from two (2) years to five (5) years to better improve state/local coordination and planning needs, with regards to pedestrian, transit, and bicycle accommodations as handled by the local Public Works, Transit, or other related departments.

The preliminary design process shall include a robust assessment of bicycle and pedestrian needs so that those needs can be addressed in the initial cost estimate. In addition, coordinate with the associated public transit agency to ensure that ADA compliance occurs, so these improvements are also put into the project scope.

Regarding projects on SCDOT's list to receive Rumble Strips, SCDOT shall annually notify local governments of their three (3) year list of future Rumble Strip projects, specifically including lane miles eligible for replacement that could have 4' shoulders added, thereby providing opportunity for local departments to consider multiple funding sources to provide wider shoulders.

If during project design a facility or other community design concept is proposed for deletion or significant modification, the affected local government(s) may appeal this decision to the Deputy Secretary of Engineering, who shall prepare a specific response to the stated rationale and concerns.

## **Design**

In order to provide the greatest opportunity for bicycle and pedestrian facilities to be incorporated into projects, and for the local design context to be respected, SCDOT will exercise flexibility in the following areas, and to enable this, the Pedestrian and Bicycle Advisory Committee (p.7) may assist SCDOT in assessing internal policies in these areas:

1. Lane Widths – consideration of narrower lane widths to accommodate bicycle facilities, on-street parking or pedestrian refuges;
2. Design speeds – consideration of lower design speeds in downtown areas, residential areas and special pedestrian-dense areas near mixed use development or institutional uses;
3. Curb Radii – consideration of the balance between pedestrian safety and the documented needs of trucks and other oversized vehicles at a given location, including the reasonable availability of alternate routes for trucks and other oversized vehicles;
4. Road Reconfiguration – consideration of the reallocation of right-of-way to allow the provision of facilities in the existing right-of-way and/or between existing curb lines, when traffic volumes and operational characteristics allow, and future needs are substantiated by historical and projected data;



5. Streetscaping and Traffic Calming – consideration of the allowance for landscaping, tree planting, and other streetscaping measures to reinforce or modify the design speeds of existing and proposed roadways in order to provide both physical protection for pedestrians and bicyclists as well as visual cues to drivers so that traffic travels in speeds more appropriate for the specific roadway.

The following best and latest FHWA endorsed design guidelines are endorsed by SCDOT for use in appropriate contexts as defined by each guide, and endorsed and permitted by FHWA as both compliant and experimental. SCDOT shall adapt and develop transportation design manuals, standards and guidelines based upon best practices in urban design or street design. The manual must be made publicly available online.

1. A Policy on Geometric Design of Highways and Streets, from the American Association of State Highway and Transportation Officials (AASHTO);
2. Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice, from the Institute of Transportation Engineers;
3. The Institute of Transportation Engineers (ITE) Implementing Context Sensitive Design Handbook
4. Guide for the Development of Bicycle Facilities (AASHTO);
5. Guide for the Planning, Design and Operation of Pedestrian Facilities (AASHTO);
6. Public Rights of Way Accessibility Guidelines, from the U. S. Access Board;
7. FHWA Achieving Multimodal Networks: Applying Design Flexibility;
8. FHWA Incorporating On-Road Bicycle Networks into Resurfacing Projects;
9. Other prescribed by FHWA in their 2013 Memorandum on Bicycle and Pedestrian Facility Design Flexibility: the NACTO Urban Bikeway Design Guide, the online FHWA Bicycle and Pedestrian Design Guidance;
10. All NACTO Design Guides, including but not limited to the Urban Street Design Guide Urban Streets Design Guide, and the Transit Street Design Guide.
11. Americans with Disabilities Act Accessibility Guidelines, 2006, which specifies pedestrian and transit design and access

State Local Public Agencies (LPAs) approved by the state Department of Transportation have authority to design according to the above Design Guides, and the state Department of Transportation and District Offices will refer to these guides when approving LPA created plans.

## **General Maintenance**

In compliance with existing Fix It First concepts, ensure adequate maintenance of grass at the edge of shoulders where pavement meets the grass. Preventing grass encroachment provides the greatest intended shoulder width possible, in order to provide the greatest accommodation to potential vulnerable road users utilizing them. Where on-street bicycle facilities are provided, a regular sweeping schedule should be developed for maintenance of bicycle facilities to remove safety hazards from bicycle facilities such as accident debris, loose gravel, etc.

## **Exceptions**



SCDOT shall not make an exception to providing these accommodations described unless one or more of the following circumstances arise:

1. Use prohibited by law;
2. Absence of current or future need;
3. Cost of accommodations is excessively disproportionate to need, which is defined as exceeding 15% of total project cost. The cost should consider construction, required right-of-way, environmental impacts, and in some cases operation and maintenance. Where accommodations provide safety benefits to pedestrian and bicycle crash history, these benefits must be considered as a part of the cost benefit analysis;
4. Emergency repairs such as a water main leak that requires immediate, rapid response; however, temporary accommodations for all modes should still be made. Depending on severity of the repairs, opportunities to improve multimodal access should still be considered where possible.

Proposed exceptions require written documentation, for each mode, with supporting data and approval from the review arm of SCDOT, via a Design Variance. Where cost is excessively disproportionate to need, alternate routes can be recommended that are equally efficient and effective.

SCDOT shall consult local and regional plans and leaders, as appropriate, in assessing exceptions. Written reasons should be provided in writing to the agency with the adopted plan, and a comment period shall be scheduled for further discussion, before a final, written decision is submitted to that agency. Documentation of any granted exceptions shall be made publicly available and shared with the SCDOT Multimodal Advisory Committee in a timely manner.

## **Evaluation and Reporting**

SCDOT shall:

1. With regard to low- and moderate-income communities, annually prepare an initial report to identify barriers, and propose solutions to successful implementation of this policy.
2. Be responsible for establishing benchmarks and collecting, monitoring and reporting data as related to implementing this policy. Collect and monitor data to determine compliance with SCDOT benchmarks. Data must be made publicly available online. This information must also be reported to the U.S. Department of Transportation (USDOT), pending future USDOT guidance on reporting.
3. Report the above findings to the agency staff who can implement the solutions. Also report the findings to the Bicycle/Pedestrian Advisory Committee

## **Bicycle/Pedestrian Advisory Committee**

The Commission hereby creates a Bicycle/Pedestrian Advisory Committee to assist the Department in the implementation of these policies and continued refinement of the Department's practices in accommodating all users in roadway design. This Committee shall



also conduct outreach activities to MPOs, COGs and local governments explaining the Commission's bicycle and pedestrian policies, and reinforcing the roles of those organizations in the planning and project development processes. The Committee shall be provided technical support from Department administration, and shall include five (5) representatives from local government technical staffs, five (5) representatives of bicycle or pedestrian interest groups, and five (5) members at-large with an interest in transportation issues and roadway design. Committee composition should be carefully considered to ensure that bicycle and pedestrian interests are equally represented. The Advisory Committee shall meet a minimum of five times per calendar year.

The charge of this group will include working with Department staff to:

1. Define the specific areas of allowable flexibility to facilitate the implementation of the policy;
2. Specify the conditions and schedule of the state/local review process; and
3. Consider how to establish and communicate a clearinghouse for attribute-specific GIS data tied to bicycle and pedestrian plans for use by SCDOT and the public.
4. Establish a procedure for obtaining formal comments from local jurisdictions where bicycle or pedestrian plans have been adopted, ensuring that these comments are to be obtained early enough in the process allow for consideration and design of bicycle and pedestrian facilities where recommended.
5. Assist SCDOT in revising existing plans or policies, or developing new designs policies;
6. Assist SCDOT in hosting trainings or workshops.
7. Assist SCDOT in A) understanding the disparities in ped/bike crashes by income and car ownership, and B) defining and implementing solutions to reduce those disparities.
8. Assist SCDOT in improving methods of engagement.

The Committee and the Secretary shall report back to the Commission with the above standards within 12 months of the adoption of this policy.

### **Policy Review Team**

Blake Sanders, AICP  
John Gardner, AICP  
Michael Covington

ALTA Planning, and Mayor of Pelzer  
former Director Economic Development, City of Mauldin  
former SCDOT Government Liaison



Leigh DeForth, AICP	City of Columbia planner
John Fellows, AICP & MLA	City of Columbia Planning Administrator
Kelly Mezzapelle, AICP	City of Myrtle Beach planner
Ernie Boughman, AICP	Toole Design Southeast Director
Josh Martin, AICP	Special Advisor to Charleston Mayor
Keith Brockington, AICP	Greenville County, GPATS Transportation Planning Manager

DRAFT