Final Report

ES. EXECUTIVE SUMMARY

The Bicycle and Pedestrian Pathways Plan examines bicycle and pedestrian related concerns and identifies what actions can be taken to develop best practices, policies, strategies, and tangible bicycle and pedestrian projects, in order to encourage and advance bicycling and walking as viable modal choices in the Columbia Area Transportation Study (COATS) region.

The vision for the plan is: The Central Midlands region will be a place where people choose to make walking and/or bicycling a part of their everyday lives. Residents and visitors will walk and ride with confidence, safety, and security, as bicycling and walking become a routine part of our transportation system. Based on this vision, a number of goals were established for the planning process:

GOAL I: To provide a safe, efficient, and accessible transportation system to all residents and visitors, which allows them to walk and bicycle alongside other modes with independence and comfort.





- GOAL 2: To foster bicycle and pedestrian access and mobility in all transportation and development projects at local, regional, and state levels of government and in all project phases, including planning, design, construction, and maintenance.
- GOAL 3: To support and encourage the integration of transportation and land use decisions that result in the promotion of development patterns that allow bicycling and walking to be viable, everyday modes of travel.
- GOAL 4: To support and enhance healthy lifestyles and good stewardship of the environment by providing safe and convenient opportunities for bicycle and pedestrian travel, thereby increasing active living, while reducing auto emissions and fuel usage.



Bike lanes and sidewalks presently exist along Knox Abbott Drive.

GOAL 5: To identify opportunities, funding sources, and responsible public and private agencies/entities at the local, regional, and state levels so that bicycle and pedestrian projects and programs can be implemented.

> The 2005 COATS study area boundary was utilized as the study area for the Bike and Pedestrian Pathways Plan. The COATS study area includes the urban areas of Richland and Lexington counties as well as portions of Kershaw County to the east and Calhoun County to the south to account for urban commuter patterns between Columbia and outlying suburbs.

> Public involvement was essential to the success of this project; therefore, communication between the Project Team and the public was ongoing in the form of a Public Involvement Plan (PIP). This PIP

consisted of three major parts: establishing a Study Steering Committee (SSC) to provide overall policy and technical guidance to the plan; coordination with stakeholder groups that will have a strong influence on the implementation of the plan; and informing and soliciting comments/suggestions from the general public primarily through two public meetings held on July 19, 2005 and November 14, 2005.

ES.I Existing Laws, Policies, Programs, and Facilities

A variety of existing laws, policies, programs, and facilities influence bicycle and pedestrian accommodations within the COATS region. These include initiatives at both the state and local levels. A review of the following was conducted:

- Laws that regulate pedestrian and bicycle travel within South Carolina;
- South Carolina Department of Transportation (SCDOT) policies, programs, and projects;
- Local government (i.e., municipalities and counties) policies and programs; and
- Existing bicycle and pedestrian facilities in the COATS region.

ES.2 Bicycle and Pedestrian Trip Generation

Bicycle and pedestrian trips are made between many combinations of origins and destinations in the Central Midlands region. Nonmotorized trips often originate from residents homes; therefore, population density is an important indicator of pedestrian and bicycle trip potential. Bicycle and pedestrian trips can also start from a place of employment (e.g., walking to a restaurant for lunch), originate from public transportation (e.g., bringing a bike on a CMRTA bus and then riding the rest of the way to a park), or be included in travel between several activities (e.g. walking between stores in a commercial area or making a side trip to the post office from a friend's house).

The Central Midlands Council of Governments (CMCOG) has gathered a large amount of geographic information system (GIS) data that assisted in the identification of locations in the region where a high potential for bicycle and pedestrian activity exists. The features that were utilized in evaluating the potential for nonmotorized travel included: residential areas; employment sites; retail space; colleges and universities; primary and secondary schools; parks; libraries; churches; and bus routes.

It was determined that a number of areas of the Central Midlands region have land use patterns that are especially conducive to nonmotorized travel. Traditional downtown areas, neighborhoods adjacent to commercial, religious, and educational uses, and areas near the University of South Carolina and Fort Jackson all have excellent potential for bicycle and pedestrian trips.

ES.3 Bike and Pedestrian Strategies

Bike and pedestrian strategies were developed based on existing conditions and associated opportunities and constraints, vision statement, goals, stakeholder meetings, and public feedback received. The goal of the strategies is to develop a synergy between the recommendations of the plan and the policies and practices of member governments and SCDOT (i.e., those responsible for roadway design, construction, and maintenance).

Over 35 strategies were developed and classified into 8 major groupings. From these, 12 Early Action Strategies were identified as priorities in the successful implementation of the plan. These **Final Report**

For the Columbia Area Transportation Study

strategies are presented below and should be pursued during the first 0-2 years after the plan is adopted.

Early Action Strategies

(See Section 5 of the Bike and Pedestrian Pathways Plan for a detail description of each strategy)

- I. Establish a full-time bike and pedestrian coordinator for the COATS region.
- 2. Draft a model ordinance with language that requires pedestrian facilities in new developments and supports pedestrian and bicycle connectivity.
- 3. Establish a Safe Routes to School program.
- 4. Encourage member governments to adopt bicycle and pedestrian design guidelines.
- 5. Encourage USC to develop a pedestrian and bicycle plan for the campus and surrounding neighborhoods.
- 6. Encourage the SCDOT to draft an engineering directive for pedestrian accommodations.
- 7. Evaluate the suitability of roads throughout the region for bicycle and pedestrian travel using Bicycle and Pedestrian Level of Service Models.
- 8. Develop a bicycle map for the Central Midlands region.
- 9. Create and maintain a comprehensive database of location, type, and condition of bicycle facilities.
- 10. Collect and analyze police-reported pedestrian crashes from the past five years.
- 11. Conduct a bus stop access improvement study.
- 12. Work with law enforcement agencies to conduct increased enforcement of laws pertaining to bicycle, pedestrian, and automobile travel.

ES.4 Recommendations

Specific components of the plan include pedestrian facility improvements, bicycle facility improvements, and Early Action Projects. An implementation plan was developed that included detailed cost estimates for Early Action Projects and routing and phasing plans for bicycle and pedestrian facility improvements.

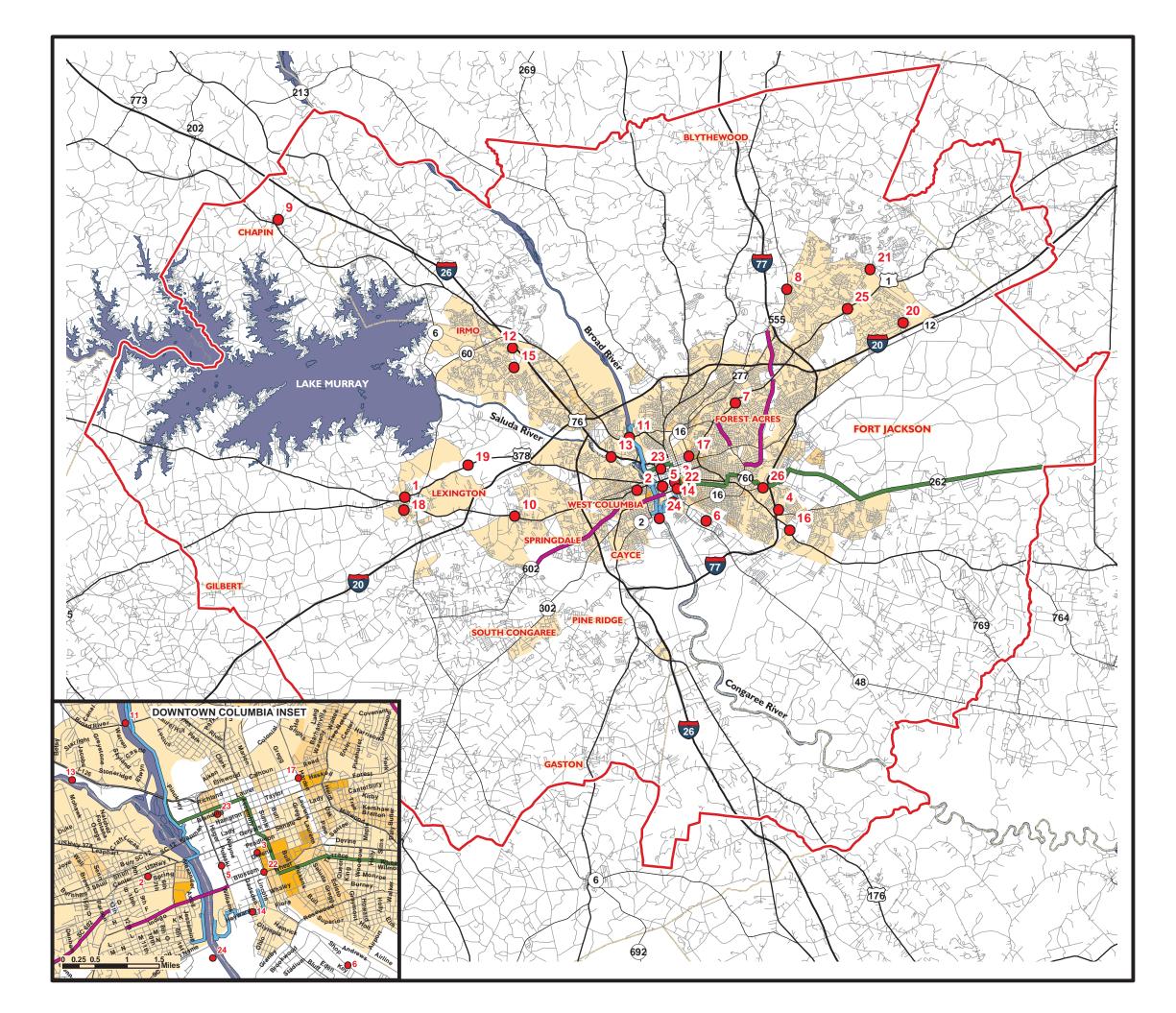
The following page lists the 26 Early Action Projects and their geographic locations are depicted in **Figure ES-I**. These projects are the first actions that should be taken to improve bicycling and walking in the Central Midlands region. They have the potential to be implemented relatively quickly (i.e. in the first 0-2 years following adoption of the plan), providing funding can be secured, which will build excitement and momentum for the other future bicycle and pedestrian initiatives outlined in the plan. The Early Action Projects are described in detail in Section 6 of the Bike and Pedestrian Pathways Plan.

Early Action Projects (See Section 6 of the Bike and Pedestrian Pathways Plan for a detailed description of each project) 1. Improve pedestrian crossings at the intersection of North Main Street (US I) and Columbia Avenue (US 378) in the Town of Lexington. 2. Establish a signed bike route and striped shoulders on Center Street in the City of West Columbia. 3. Stripe bike lanes on Assembly Street in downtown Columbia. 4. Provide signage that shows bicyclists how to get to the Pennington Drive underpass to cross I-77 in Richland County. 5. Improve the signage and connection between the University of South Carolina and Three Rivers Greenway. 6. Construct new sidewalks and bus shelters on both sides of Shop Road on the south side of Columbia. 7. Stripe bike lanes on Two Notch Road between Beltline Boulevard and Parklane Road on the northeast side of Columbia, Forest Acres, and Richland County. 8. Add a paved shoulder on Farrow Road between Hard Scrabble Road and Clemson Road in Richland County. 9. Add sidewalks and bike lanes on Columbia Avenue between downtown Chapin and Chapin High School. 10. Construct sidewalks on both sides of Augusta Road (US I) in Lexington County. 11. Include wide sidewalks and bike lanes on the new Broad River Road (US 176) Bridge. 12. Add sidewalks on both sides of Columbiana Drive on the south side of Irmo. 13. Develop a design for the Three Rivers Greenway along the Saluda River. 14. Provide a connection between the Three Rivers Greenway in the Granby Park area and Gervais Street in Columbia. 15. Install pedestrian signals and crosswalks at intersections along Harbison Boulevard on the south side of Irmo. 16. Improve pedestrian conditions along Garners Ferry Road (US 76/US 378) between Veteran Road and Benson Road. 17. Provide new pedestrian signals at the intersection of Laurel Street and Harden Street in Columbia. 18. Kick off a new Neighborhood Sidewalk Program in the Town of Lexington. 19. Provide sidewalks on both sides of Sunset Boulevard (US 378) on the east side of the Town of Lexington. 20. Add new sidewalks on both sides of Clemson Road in the commercial area north of Percival Road in Richland County. 21. Improve pedestrian accommodations at the intersection of North Springs Road and Clemson Road in Richland County. 22. Provide new facilities to accommodate pedestrians at the intersection of Blossom Street and Assembly Street in Columbia. 23. Start planning for a new greenway trail in the abandoned rail corridor between Elmwood Park and Downtown Columbia. 24. Plan and design an extension to the Three Rivers Greenway to the south of Cayce along the Congaree River. 25. Add sidewalks on the southeastern side of Two Notch Road in the commercial area between North Brickyard Road and Burmaster Drive in Richland County. 26. Study the Kilbourne Road/Shady Lane/Kings Grant Drive/Fort Jackson Boulevard area and develop a conceptual design for bicycle facility improvements.

Final Report

For the Columbia Area Transportation Study

This page intentionally left blank.



Bike and Pedestrian Pathways Plan

for the Columbia Area Transportation Study

LEGEND

EARLY ACTION PROJECTS* POPULATION (Per Sq. Mi.)** • 14 Improve pedestrian crossings Establish a bike route and striped shoulders Stripe bike lanes Under Í,000 1,000 - 4,999 4 - Provide signage 5,000 - 9,999 5 - Improve signage and connection to greenway6 - Construct new sidewalks and bus shelters 10,000 - 24,999 7 - Stripe bike lanes 8 - Add paved shoulder9 - Add sidewalks and bike lanes 25,000 - 50,000 10 - Construct sidewalks 11 - Include wide sidewalks and bike lanes **EXISTING FACILITIES** 12 - Add new sidewalks I3 - Design greenwayI4 - Provide greenway connection Bike Lanes 15 - Install pedestrian signals and crosswalks Shared-Use Path 16 - Improve pedestrian conditions along road17 - Provide pedestrian signals Palmetto Trail 18 - Start neighborhood sidewalk program 19 - Provide sidewalks 20 - Add new sidewalks 21 - Improve intersection for pedestrians 22 - Provide pedestrian facilities at intersection 23 - Plan for new greenway trail 24 - Plan and design greenway extension 25 - Provide sidewalks26 - Concept design for bicycle improvements **COATS Study Area** *Full descriptions of the Early Action Projects are provided in the text of this document. **Population is for year 2000. Source: PB & TDG 2005 Map Created: 12/30/05 This map is for conceptual presentation purposes only, and is

believed to be fundamentaly accurate; however, no guarantees as to its accuracy or completeness are expressed or implied.

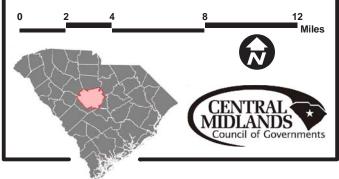


Figure ES-1 Early Action Projects