



UNIVERSITY OF SOUTH CAROLINA

VISION FOR A SUSTAINABLE FUTURE

2010 MASTER PLAN



CONTENTS

Introduction	2
Goals	6
Program for Planning.	8
The 2010 Master Plan	10
Land Use.	12
The Vision Plan for South Campus	16
Pedestrian and Vehicular Circulation	21
Parking	25
Implementation of the 2010 Master Plan	26
Acknowledgements	28



INTRODUCTION

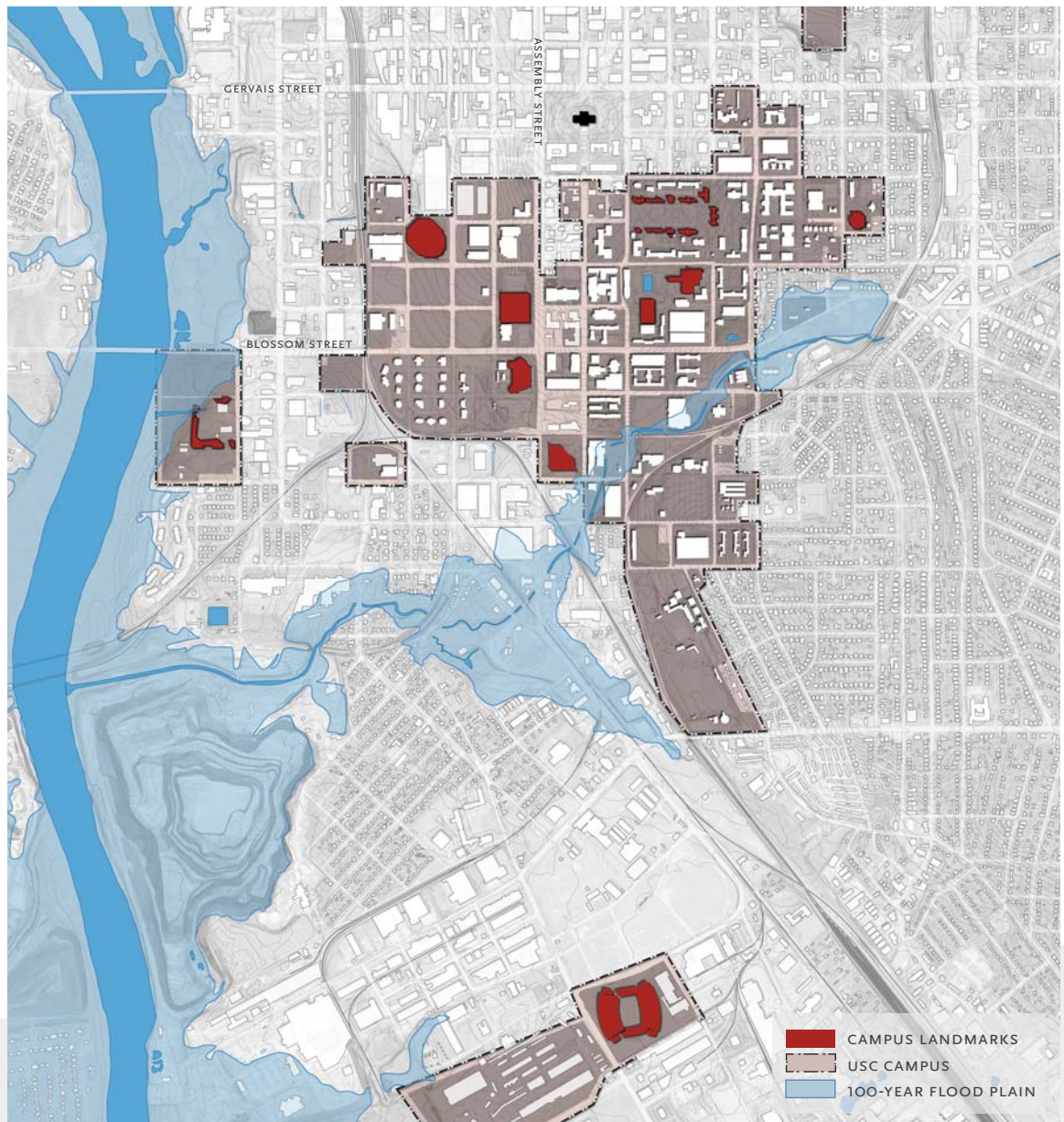
The University of South Carolina's Capital Planning Committee (CPC) and Capital Operations and Planning Subcommittee (COPS) have completed a comprehensive planning process that reflects the University's Mission Statement and sustainable master planning goals. The 2010 Master Plan responds to these goals and addresses the University's existing and projected facility needs.

Founded in 1801 as South Carolina College, the University of South Carolina is one of the oldest public universities in the United States. Initially founded on a campus of 36 acres, the campus has grown to encompass approximately 450 acres in 2010. The University has undergone several growth spurts, including a dramatic expansion in the post World War II period.

Campus planning was initially carried out in the 1930s. A master plan was completed in 1961 and guided the growth of the campus until preparation of the Bicentennial Master Plan in 1994. Since preparation of the Bicentennial Plan, the University has completed several master planning efforts, including: the Master Plan Update in 2002, Varsity Athletics Master Plan in 2006, and site development district plans for Innovista in 2007 and the Athletics Village in 2008.



THE HISTORIC HORSESHOE REFLECTS THE HIGHEST QUALITY OF ARCHITECTURAL AND LANDSCAPE DESIGN



EXISTING UNIVERSITY OF SOUTH CAROLINA CAMPUS WITH LANDMARKS HIGHLIGHTED IN RED

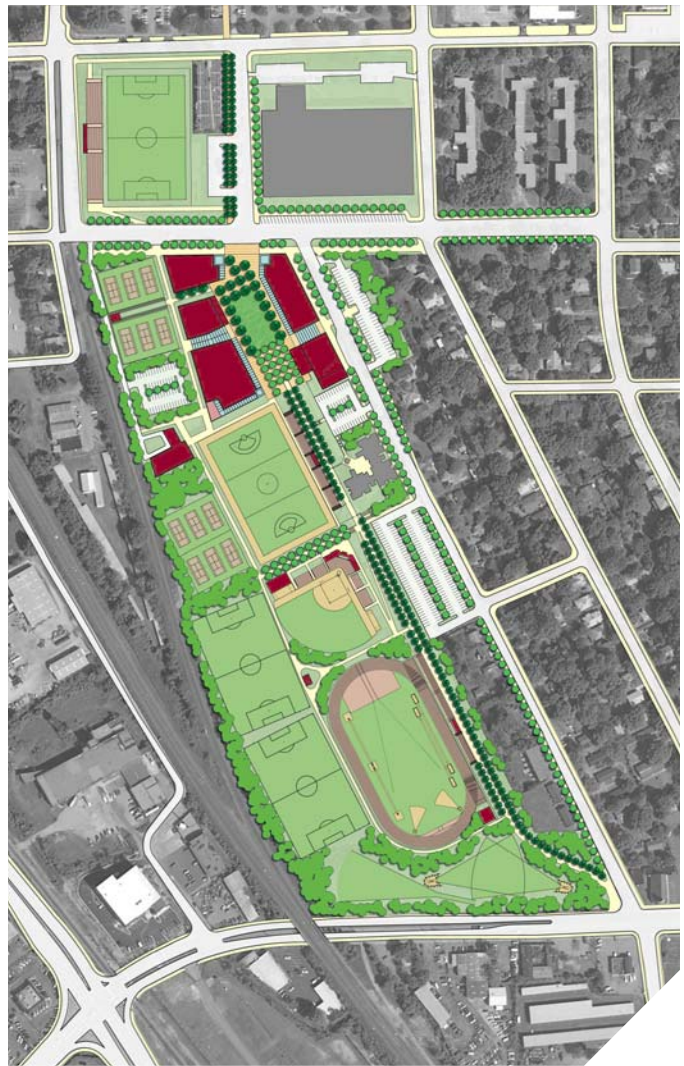
Founded in 1801 as South Carolina College, the University of South Carolina is one of the oldest public universities in the United States. Initially founded on a campus of 36 acres, the campus has grown to encompass approximately 450 acres in 2010. The University has undergone several growth spurts, including a dramatic expansion in the post World War II period.

The University of South Carolina campus has a distinct personality that is rooted in its history, physical setting, traditions, and programs. At USC, this personality is embedded in the Horseshoe, where the mixed-use character, scale and quality of the landscape, and frame of beautiful historic buildings make it one of the classic campus quadrangles in the United States. This great quadrangle allows easy and safe pedestrian interchange between buildings. As the University has grown, it extended this physical pattern of landscaped quadrangles to Gibbs Green. In the post World War II period the University bridged Pickens Street and developed the College Street landscape promenade leading to Capstone House. The Bicentennial Master Plan extended the courtyard concept where possible to develop new landscape spaces at Preston College, the Russell House, and at the new student housing complexes. More recently the district plan for the Athletics Village also includes a new landscape quadrangle as its central feature.

The Innovista Master Plan introduced a new but complementary urban form of street-oriented mixed land use to the traditional campus landscape form of the Horseshoe. Conceived as an urban, mixed-use, live-work academic and research district, Innovista is designed to accommodate the University's research initiatives in nanotechnology, alternative energy, biomedical science and environmental science and the University's service and economic development role within the State and greater Columbia metropolitan area. The urban form is a response to the historic street grid of one of America's first planned cities.

The 2010 Master Plan has three distinguishing characteristics:

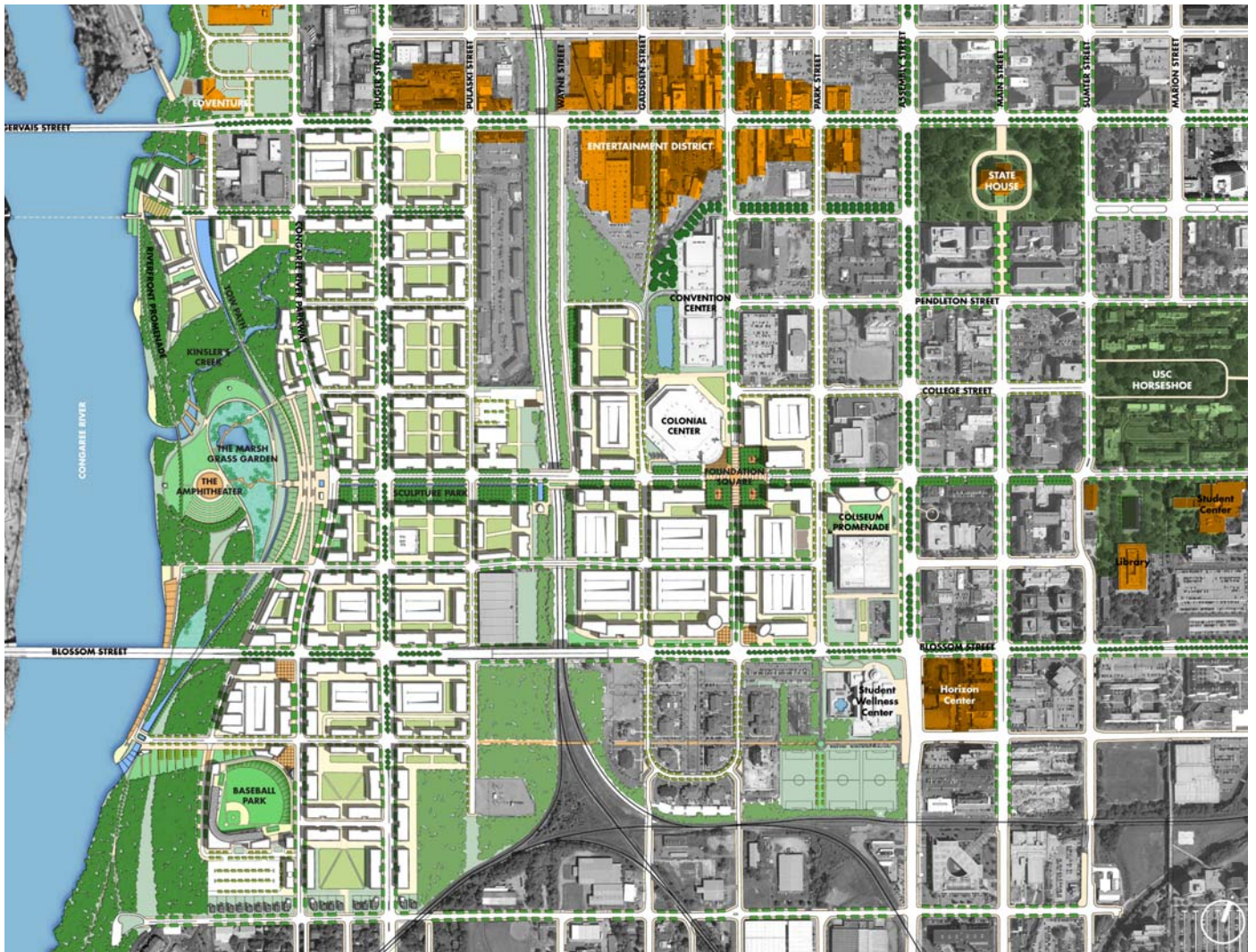
- First, the 2010 Master Plan has been informed by the University of South Carolina Framework for Sustainability which addresses environmental, economic, and social sustainability for the campus.
- Second, the 2010 Master Plan focuses on the development framework of the campus, addressing the University's community context, size and scale of the academic core, pedestrian and vehicular connections, the location of central shared facilities, open space, and how to surmount existing physical barriers. In establishing a development framework, the plan provides a single unifying vision for the campus while still allowing the flexibility for the University to make incremental decisions as circumstances and resources permit.
- Third, the 2010 Master Plan projects a long range vision for the South Campus—the "South Campus Vision Plan"—which features the redevelopment of Rocky Branch Creek as a linear park and student recreation area and improved vehicular as well as pedestrian connections to Williams Brice Stadium.



ATHLETICS VILLAGE MASTER PLAN



VIEW OF PROPOSED QUADRANGLE AT ATHLETICS VILLAGE



INNOVISTA MASTER PLAN



THE CHARACTER AND QUALITY OF THE BUILT ENVIRONMENT AT MIT'S UNIVERSITY PARK IS A NOTABLE PRECEDENT FOR INNOVISTA.

GOALS

Goals for the 2010 Master Plan were derived from the University’s Mission Statement, “Focus Carolina,” and the “University of South Carolina Framework for Sustainability.”

The University’s goals address the quality of teaching and learning, recognition for research, scholarship and creative achievement, the commitment to service excellence, improving the quality of life on campus for faculty, staff and students, and recognition and visibility for excellence and leadership in education, research, scholarship, creative endeavors, athletics, and public service.

The University’s Framework for Sustainability sets forth master planning goals for Environmental, Economic, and Social Sustainability. Principal goals for Environmental Sustainability include reducing water consumption and energy demand, reducing vehicle miles traveled, and maintaining a compact pedestrian campus. For Economic Sustainability, goals include reprioritizing the University’s capital budget to respond to early-action facility needs and securing capital funds to improve pedestrian safety at street crossings. For Social Sustainability, principal goals include optimizing the use of existing instructional space and improving the quality of instructional space; and celebrating and nurturing adjoining neighborhoods.

At the level of master planning, reducing vehicular traffic impacts, optimizing the use of existing space, orienting new building facilities to reduce heat loading, and retaining a compact pedestrian campus are anticipated to have the greatest beneficial impact to the University campus.

Goals	USC GOALS FOR SUSTAINABILITY
	MASTER PLAN GOALS FOR SUSTAINABILITY
Analysis & Strategies	DATA/ANALYSIS
	SUSTAINABLE MASTER PLAN STRATEGIES
Strategic Impacts	BUILDINGS (Quantity, orientation and configuration)
	PARKING & CIRCULATION
	OPEN SPACE
	INFRASTRUCTURE (Below ground)

THE UNIVERSITY’S FRAMEWORK FOR SUSTAINABILITY ENUMERATES GOALS, ANALYSIS, AND STRATEGIC IMPACTS FOR THE 2010 MASTER PLAN RELATIVE TO ENVIRONMENTAL, ECONOMIC, AND SOCIAL SUSTAINABILITY. A SUMMARY OF THE UNIVERSITY’S FRAMEWORK APPEARS ABOVE.

[illegible]

PROGRAM FOR PLANNING

In the fall of 2009, University enrollment totaled 28,150 students with 20,495 undergraduate and 7,657 graduate head count students supported by 4,927 faculty and staff. The University will have 1,600 additional undergraduate students by the academic year 2014–2015 and has existing capacity to accommodate an additional 1,000 graduate students. No additional faculty and staff are anticipated to be added in this period. While no further growth has been projected by the University beyond 2014–2015 academic year, a series of equal growth modules of 1,455 undergraduate and graduate students along with the related faculty and staff was tested in order to provide the University with a long range development framework should additional growth occur.

Given the imperative to maximize the use of existing space, a comprehensive analysis was carried out of existing instructional, research, and office space at the University utilizing State of South Carolina space standards and national standards including CEFPI (Council of Educational Facilities Planners International) standards and Sasaki models. Also, the University carried out a physical inspection of underutilized classrooms and laboratories. Selected classrooms and laboratories were removed from the general analysis of current and future space needs based upon their condition, specialized character, or unsuitability for continued use as instructional space.

Current Space Needs in 2010

The analysis of instructional space identified a current need of 46,150 gsf of laboratory space to address issues of over-scheduling and overcrowding, particularly in Biology, Chemistry, Geological Science, and Physics teaching laboratories. The analysis of classrooms and offices shows that classroom instruction can be accommodated within existing space and that no additional office space is required. There is a current deficit of 38,700 gsf of student life space for Russell House activities and a current deficit in intramural recreation fields and courts including 7 multipurpose fields and 4 softball fields.

Additional Space Needs by the Academic Year 2014–2015

With the growth of 1,600 undergraduate students and a need for swing space, total classroom and laboratory space needs will grow to 100,000 gsf by the academic year 2014–2015. Total student life needs for Russell House type activities will grow to 125,000 gsf. The total for both instructional and student life needs include current laboratory and student life deficits. If the current freshman and sophomore residency requirement is retained, student housing needs will total 640 new beds by the academic year 2014–2015. A comprehensive housing study is needed to address specific undergraduate and graduate/married student needs based on market demand, pricing, and a physical assessment of the existing housing stock, among other factors. No additional parking will be required. Given the time required to program, design, and build academic space, the 2010 Master Plan recommends an immediate program to plan and construct a 100,000 gsf academic building in order to have it complete by the 2014–2015 academic year.

Growth Modules for Long Range Planning

Each growth module of 1,000 undergraduates, 455 graduate students and 255 faculty and staff will generate 100,000 gsf of classroom, laboratory, and office space needs and an additional 400 beds of student housing. Five growth modules have been tested for accommodation in the long range framework master plan.

Space to be Removed

The Master Plan recommends the removal of six existing building facilities comprising 190,000 assignable square feet of academic space. These include facilities such as Benson which have deteriorated and buildings in the flood plain of Rocky Branch Creek. This space should be removed as replacement space becomes available and is in addition to the space needs identified for the academic year 2014–2015 and the space requirements of each growth module.



VIEW OF CAPSTONE



VIEW OF COURTYARD AT RUSSELL HOUSE

THE 2010 MASTER PLAN

The 2010 Master Plan for the University of South Carolina confirms the traditional values articulated in the Bicentennial Master Plan and addresses the connections between the historic core campus and Innovista, and the connections to and environmental quality of South Campus.





HAMPTON STREET

HUGER STREET

GERVAIS STREET

ASSEMBLY STREET

SUMNER STREET

BULL STREET

PICKENS STREET

HARDEN STREET

GREENE STREET

BLOSSOM STREET

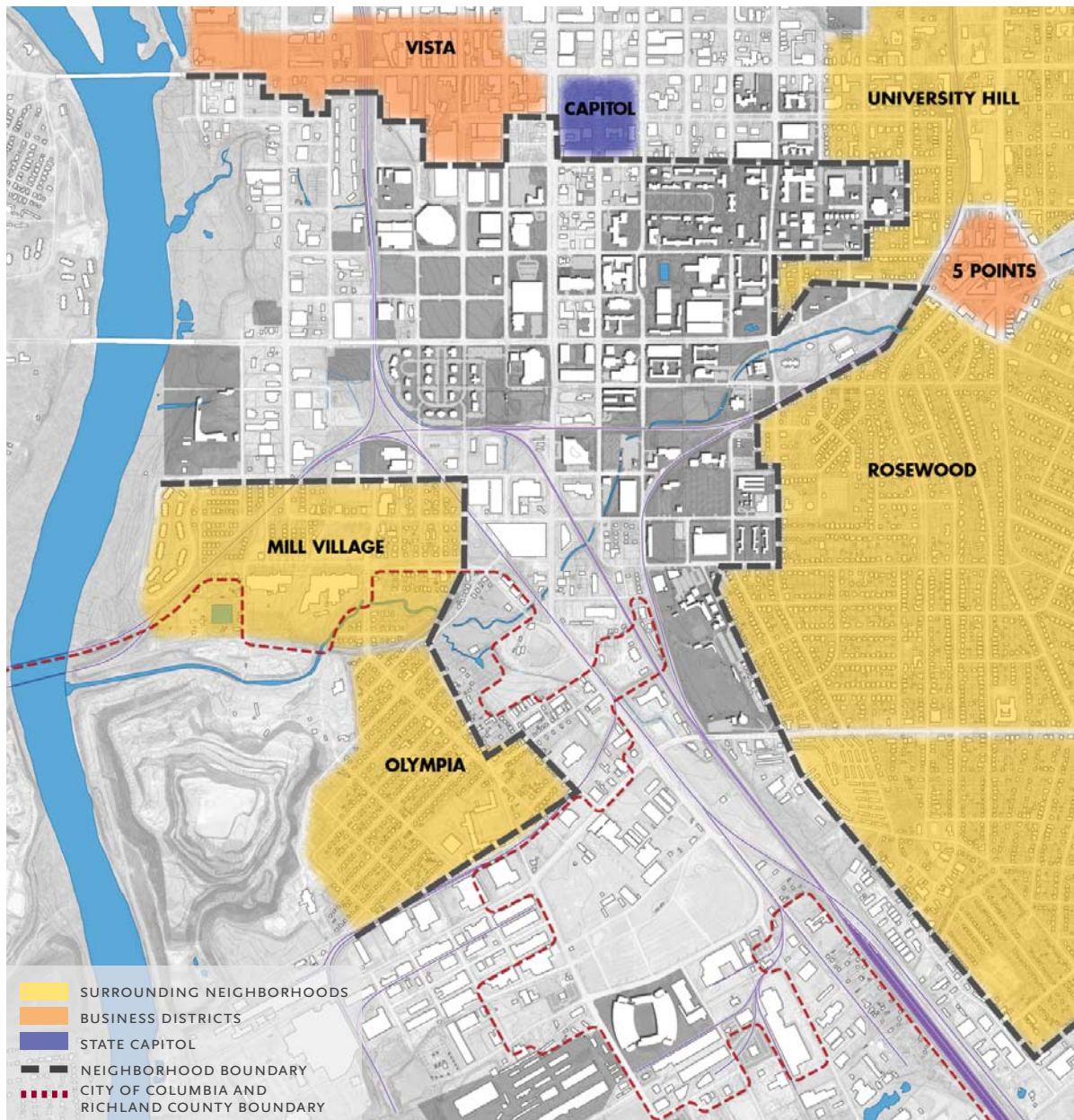
WHALEY STREET

OLYMPIA AVENUE

ROSEWOOD DRIVE

BLUFF ROAD

GEORGE ROGERS BLVD



THE UNIVERSITY CAMPUS IS FRAMED BY IMPORTANT RESIDENTIAL AND COMMERCIAL NEIGHBORHOODS WHICH SHOULD BE CELEBRATED

Land Use

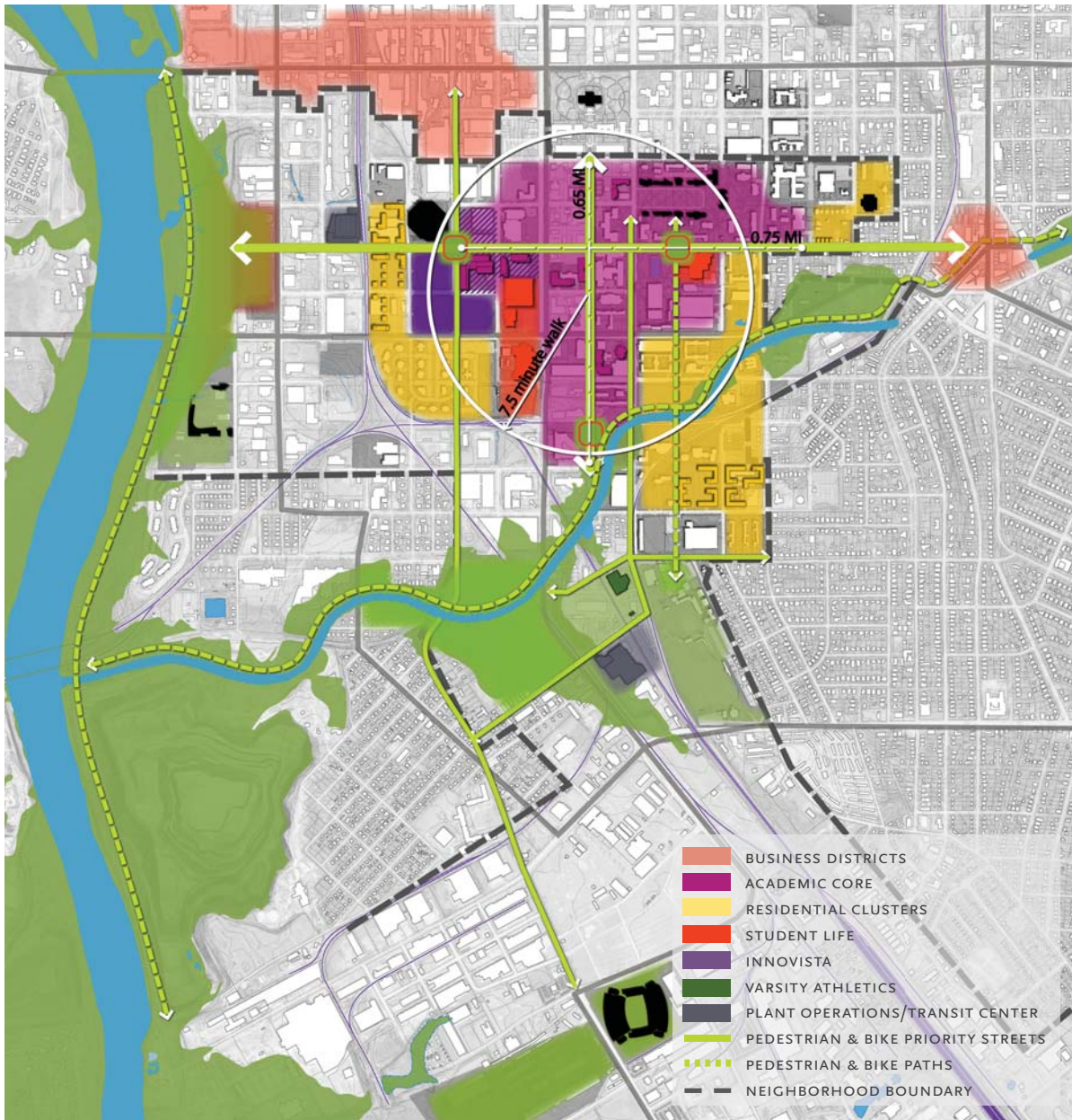
Community Context

The University of South Carolina is embedded within the historic street grid and urban fabric of the City of Columbia. The residential and commercial neighborhoods adjoining the University are an important asset to the University and should be celebrated.

The 2010 Master Plan recommends that any expansion of the University take place to the west in Innovista and to the south within the context of a community framework generally defined by Pendleton Street to the north, Capstone at Barnwell Street to the northeast, Pickens Street and the Rosewood neighborhood to the east, and Catawba and Bluff Road framing the Mill Village and Olympia neighborhoods to the southwest.

Academic Facilities

The existing campus core, with the Horseshoe at its heart, is compact and comfortably traversed by students, faculty, and staff within a 15 minute class change interval. A number of important academic facilities lie outside the core by virtue of distance, including Swearingen Engineering and McMaster College. Several are challenged by the major physical barrier of Assembly Street, including academic units in the Carolina Coliseum, Koger Center, and Health Research Center. The planned location of the Moore School of Business on a site west of Assembly Street represents a significant shift of the academic core westward. At present, approximately 15% of all weekly student contact hours on campus occur within the Moore School of Business.



THE PROPOSED ACADEMIC CORE IS COMPACT AND CAN BE TRAVERSED BY STUDENTS, FACULTY, AND STAFF WITHIN A FIFTEEN-MINUTE CLASS CHANGE INTERVAL

The 2010 Master Plan defines the academic core as the area from Foundation Square at Lincoln Street on the West to Gambrell Hall on the East, Pendleton Street to the North, and Swearingen Engineering to the South. The proposed 100,000 gsf classroom/laboratory building that is needed by the 2014–2015 academic year is recommended to be located on the southeast corner of Foundation Square.

Within the framework of the 2010 Master Plan, additional academic building sites have been identified in the academic core for long range development including the adaptive reuse of the Carolina Coliseum which can accommodate an additional 5,000 undergraduates and 2,275 graduate students should that growth occur in the future. The adaptive reuse of the Coliseum alone could accommodate an additional 100,000 to 200,000 gsf of academic space. Additional academic and research building sites are also available in Innovista.

Housing

Existing student housing frames the academic core to the east and south within walking distance of the academic facilities.

The 2010 Master Plan recommends maintaining the close relationship of housing to the academic core and illustrates the location of new housing needed by the 2014–2015 academic year in Innovista on Gadsen Street between Greene and Blossom Streets. The Plan recommends a mixed use concept of conventional student housing with Greek Housing. The location will also introduce 24 hour student life in Innovista.

Several additional locations are illustrated in the long range framework plan should additional student housing be needed beyond the 2014–2015 academic year. As many as 800 beds of housing could be accommodated on the site of the existing plant operations facility in Innovista and 1,200 beds could be accommodated on the site of the existing Bates House parking lot and the adjacent Benson site.



PROPOSED MIXED USE CONCEPT OF CONVENTIONAL STUDENT HOUSING AND GREEK VILLAGE EXPANSION

Student Life

The need for additional space for student life including Russell House type activities totals 125,000 gsf by the academic year 2014–2015.

The 2010 Master Plan recommends that additional student life and indoor recreation activity be part of the adaptive reuse of the Carolina Coliseum. This location is convenient to the Greek Village, proposed new student housing, proposed academic facilities, Strom Thurmond Wellness & Fitness Center, and parking for commuting students.

Student Recreation and Varsity Athletics

A significant existing need has been identified for recreation fields for scheduled student recreation and club sports. The 2010 Master Plan recommends near-term acquisition of the SCANA and adjoining properties for the development of playfields as an initial phase of the Rocky Branch Creek redevelopment. Additionally, Athletics has identified the need for a women's lacrosse field.



VIEW OF A CONCEPT FOR ADAPTIVE REUSE OF THE CAROLINA COLISEUM WHICH PRESENTS A UNIQUE OPPORTUNITY TO ACCOMMODATE ACADEMIC, RESEARCH, RECREATION, AND STUDENT LIFE USES



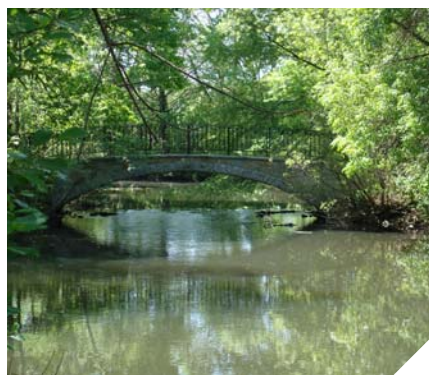
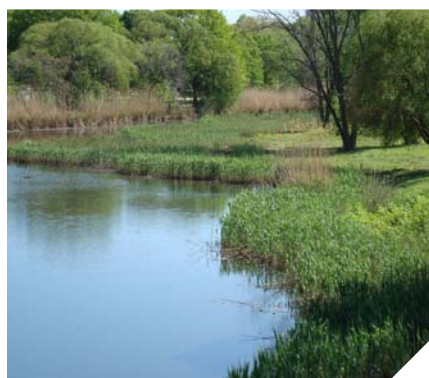
The Vision Plan for South Campus

South campus, defined as the area south of Wheat Street extending to Williams Brice Stadium, is bisected by Rocky Branch Creek, railroads, has a fragmented street system, and has a land use pattern dominated by semi-industrial uses and characterized by sharp topographic changes. Rocky Branch Creek floods frequently, most recently in the late spring of 2010. Remnants of mill housing and industrial buildings below Whaley Street are in poor condition and some buildings have been abandoned. The existing pattern of streets is confusing and lacks connectivity with the University and adjoining neighborhoods.

The 2010 Master Plan recommends a major restructuring of the existing street system in South Campus and the redevelopment of the Rocky Branch Creek corridor as a linear park and student recreation area.

Restructuring of the street system is designed to improve connections back to the main campus, the Athletic Village, and Williams Brice Stadium. Principal features of the street restructuring include extending Lincoln Street from Foundation Square through the Greek Village to Bluff Road in order to provide connectivity to Williams Brice Stadium, and the proposal to link Heyward Street from the Athletics Village to Assembly Street, and to Bluff Road.

The redevelopment of the Rocky Branch Creek corridor has the mutually reinforcing goals of reducing the impact of the existing flood conditions, satisfying the existing programmatic need for recreation fields in proximity to existing student housing, and the need for a significant improvement to the overall environmental quality of South Campus. The proposed linear park will also introduce to the University and South Campus a necklace of small lakes and ponds along with the student recreation fields. The long range plan envisions the extension of the existing Maxcy Gregg Park from Five Points through South Campus to the Three Rivers Greenway on the Congaree River. In the long range vision, with the removal of University buildings in the flood plain, the 2010 Master Plan proposes the naturalization of the existing stream corridor and the introduction of a large pond across Main Street from Swearingen Engineering. The extensive flood plain at the foot of Assembly Street at the site of the SCANA properties is envisioned to be developed in a park-like setting with the varsity lacrosse field and student intramural fields.



FREDRICK LAW OLMSTED'S RESTORATION OF THE "MUDDY RIVER" IN BOSTON'S BACK BAY FENS EXEMPLIFIES THE CHARACTER AND QUALITY ENVISIONED FOR THE RESTORED ROCKY BRANCH CREEK CORRIDOR







VIEW OF SWEARINGEN ENGINEERING FROM THE BANKS OF THE RESTORED ROCKY BRANCH CREEK AT THE INTERSECTION OF WHEAT AND SUMTER STREETS





EXISTING VIEW OF GREENE STREET LOOKING WEST TOWARD ITS INTERSECTION WITH SUMTER STREET



VIEW OF THE PROPOSED TRANSFORMATION OF GREENE STREET INTO A PEDESTRIAN FRIENDLY ENVIRONMENT



Pedestrian and Vehicular Circulation

Academic Core

The University is embedded within the historic grid of the City of Columbia, with public streets traversing the campus. The streets and accompanying sidewalks become the campus pathways for movement between academic facilities.

In order to facilitate the safe and easy movement of students within the expanded academic core, the 2010 Master Plan recommends redevelopment of Greene Street from Russell House to Foundation Square with removal of on-street parking, narrowing of the vehicular travel way, and the development of broad landscaped sidewalks. The Plan recommends the development of a University transit way along Greene Street with 10 minute or less headways to facilitate the movement of faculty and students within the academic core.



The Plan also recommends the redevelopment of Assembly Street from Blossom Street to Pendleton Street to facilitate safe crossing. The recommended Assembly Street plan consists of the removal of the center street parking and its replacement with a landscaped median, and modification of intersections such as Greene and Assembly to provide shortened student crossings along with pedestrian signal lights.

Further, the 2010 Master Plan recommends reconstruction of the entry of the existing pedestrian underpass at the Law Center in order to remove the existing stairs and replace them with ramping that is accessible to handicapped persons and bicyclists.





VIEW OF THE PROPOSED REDEVELOPMENT OF GREENE STREET AT THE LONGSTREET THEATRE LOOKING WEST





VIEW OF PEDESTRIAN AND BICYCLE TRAILS ALONG THE RESTORED ROCKY BRANCH CREEK

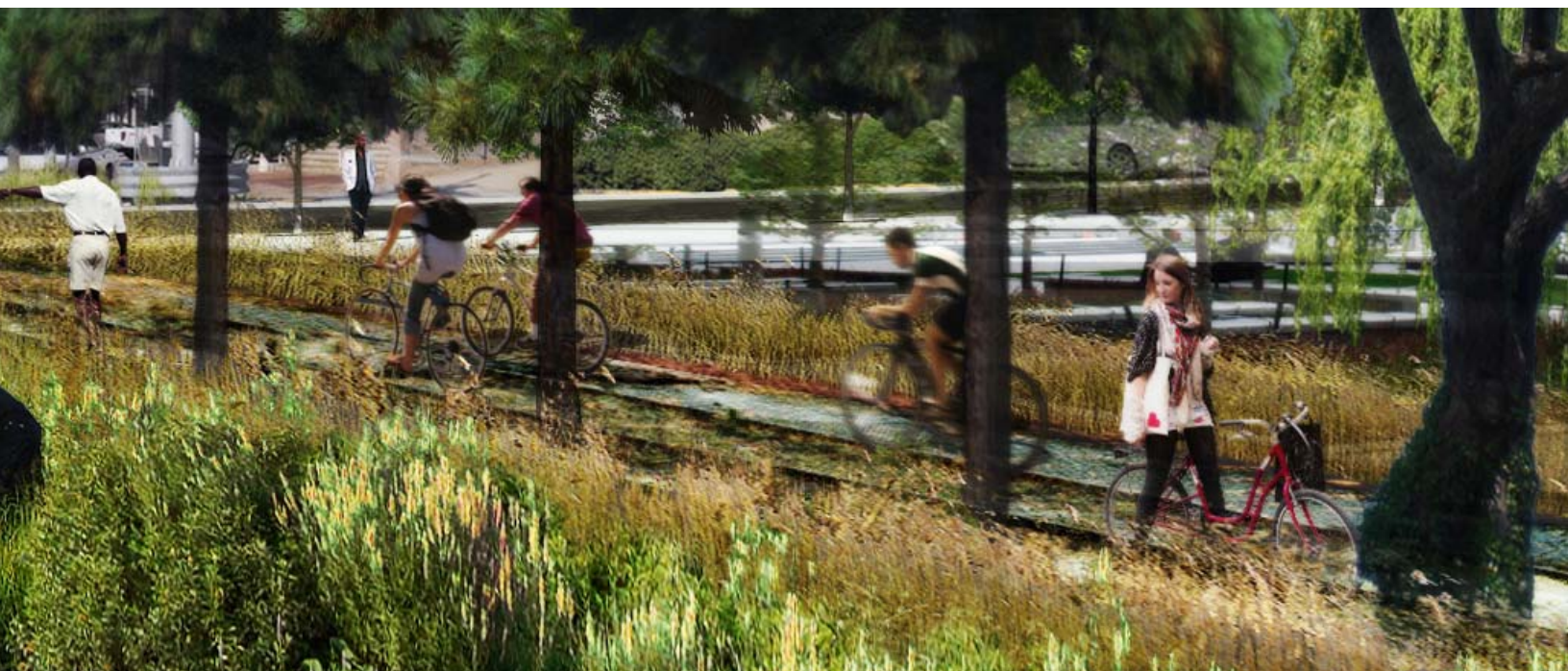
Innovista and South Campus

A major goal of the 2010 Master Plan is to strengthen pedestrian and bicycle connections west to Innovista and south to South Campus and Williams Brice Stadium

The 2010 Master Plan identifies three pedestrian priority streets: Greene Street, Main Street, and Sumter Street, and two north-south streets in South Campus for improvement in connectivity, pedestrian movement, landscape and lighting: Lincoln-Bluff Road and Assembly Street. At present, Lincoln Street terminates in the Mill Village and requires connection to Bluff Road.

The three pedestrian priority streets—Greene, Main, and Sumter—complement the two vehicular priority streets through campus/downtown, Blossom and Assembly Streets. Greene Street, the east-west pedestrian priority street, links the proposed Waterfront Park to Five Points, and is punctuated by two activity centers on campus—one at Foundation Square in Innovista, and a second at the Student Center and Library. Main Street is a primary pedestrian street in the north-south direction, linking the State House at its northern terminus to a new student recreation destination at Rocky Branch Creek to the south. The identification of Main Street provides for the most hospitable pedestrian environment from a topographical perspective, affords dramatic views of the State House and Rocky Branch, and enhances connections to existing academic facilities such as Swearingen Engineering.

A secondary network of pedestrian connections further links key campus and city assets. Lincoln Street connects the Vista entertainment district at the north, through Foundation Square at Innovista, and the Greek Village, terminating in a new student recreational campus along Rocky Branch Creek. Further, a second north-south pedestrian connection extends from the Horseshoe, between Russell House and the Library, and continues along Marion Street through existing and future student housing, terminating at the Athletics Horseshoe and the Roost. A pedestrian and bikeway system along a restored Rocky Branch Creek creates a local amenity for area residents, provides connections to a regional recreation network, and creates significant development value in the south campus area.



Parking

Main Campus

The University has a total of 16,113 parking spaces on the main campus, with 8,702 of those spaces in parking structures. Only 550 surface parking spaces remain within the core campus. Surface parking is predominately located west of the Coliseum in Innovista. With construction of the Discovery I and Horizon I garages, the University presently has a surplus of over 4,300 parking spaces and will not require any additional parking spaces through the projected growth in enrollment by the 2014–2015 academic year as well as long term growth.

The 2010 Master Plan recommends that the remaining surface parking areas in the academic core be reduced in size and managed for the convenience of handicapped persons, visitors and VIPs. The reduction in size of the existing surface parking will permit improvements to the landscape quality of the academic core.

Innovista

The University presently has a total of 3,744 parking spaces in Innovista, with 1,400 spaces in the Discovery I garage and 2,344 surface spaces. The Innovista Master Plan calls for parking structures within the interior of the blocks as the present surface parking is utilized for building development. Greene Street, which is designated as a pedestrian priority street, is planned to be the primary means for pedestrians and bicyclists to travel through the academic core from Foundation Square to Russell House and the Thomas Cooper Library.

In support of this pedestrian spine, the 2010 Master Plan recommends the development of a transit center adjacent to the west side of the proposed new Greene Street bridge and the provision of an emissions-free, high-frequency transit system along the Greene Street Corridor. The proposed transit center is envisioned to include a large parking structure for commuters and to be physically connected to the adjoining Amtrak station and operationally linked to City transit services.

The redevelopment of Rocky Branch Creek and the restructuring of the street system will be a phased program requiring the joint efforts of the City of Columbia, Richland County, and the University with respect to both planning and funding. The Army Corps of Engineers has jurisdictional responsibility for the Creek and its associated flood plain and the River Alliance has sought to extend the Three Rivers Greenway along the Creek.



VIEW OF THE SOUTH CAMPUS RECREATION DISTRICT SHOWING THE REDEVELOPMENT OF ROCKY BRANCH CREEK AND THE REUSE OF THE SCANA PROPERTIES FOR STUDENT RECREATION FACILITIES





IMPLEMENTATION OF THE 2010 MASTER PLAN

The 2010 Master Plan for the University of South Carolina addresses current needs at the University and sets a vision for the future physical development of the campus. It is a vision that will require several decades to implement. The distinguishing physical development characteristic of the 2010 Plan is the plan for South Campus. The long range South Campus Vision Plan compliments the existing district plans for Innovista and the Athletics Village, bringing together the University's planning of the last two decades into a single comprehensive vision for the campus—a campus whose buildings and grounds will reflect the quality of the University's academic and service programs.

ACKNOWLEDGEMENTS

University Of South Carolina

Harris Pastides, President

Capital Planning Committee

Ted Moore (Co-chair), VP Finance & Planning
 Michael Amiridis (Co-chair), Provost, VP Academic Affairs
 Mary Anne Fitzpatrick, Dean of Arts & Sciences
 Steve Kresovich, VP Research
 Dennis Pruitt, VP Student Affairs
 Tom Quasney, Associate VP Facilities

Capital Operations & Planning Subcommittee

Stacey Bradley, Associate VP Student Affairs
 Sonya Brown, Assistant Dean of Arts & Sciences
 Charlie FitzSimons, Director of Capital Budgets & Finance
 Jeff Lamberson, Director of Campus Planning & Construction
 Tom Quasney, Associate VP Facilities
 Ed Walton, Associate VP Resource Planning

Thomas Stepp, Secretary to the Board of Trustees

Bill Hogue, VP Information Technology
 Derrick Huggins, Associate VP Transportation
 Jane Jameson, VP Human Resources
 Don Herriott, Director of Innovista Partnerships
 Eric Hyman, Director of Athletics
 Kirsten Kennedy, Director of University Housing
 Michael Koman, Director of Sustainability
 Gene Luna, Associate VP Student Affairs

Joy Gillespie, Facilities Coordinator
 Meredith Ross, Student Body President 2009–2010
 Ebbie Yazdani, Student Body President 2010–2011

SASAKI ASSOCIATES

Richard Galehouse, AICP, AIA, Principal in Charge
 Igor Andersen, Project Designer
 Nathalie Beauvais, AICP, Planner
 Phillip Bruso, Planner
 Justin Fay, AICP, Project Planner/Manager
 Stephen Gray, Project Designer
 Robyn Reed, ASLA, Project Landscape Architect
 Elizabeth Hixson, Designer
 Amy Houghton, Project Landscape Architect
 Gregory Janks, Planner
 Matt Kanaracus, Graphic Designer
 Andy McClurg, AICP, Transportation Planner
 Neda Movaghar, Graphic Designer
 Richard York, Designer



S A S A K I

