3.1 LANDSCAPE

The following landscape guidance is meant to establish a level of continuity and order among the different landscape spaces on campus. This guidance provides general suggestions and does not prescribe specific design solutions for any particular space. The goal is to achieve a comprehensive campus landscape system that responds to climatic and functional limitations, and in which all parts of the campus landscape relate to each other to establish a network of comfortable, valued outdoor spaces.

The historic spaces on the Hattiesburg campus, in which buildings contribute to formation of outdoor spaces, are the most cherished by the campus community. Borrowing from the original campus plan, the proposed landscape structure builds on and reinforces this established system of quadrangles, walkways, and canopy trees to complete a pattern of connected outdoor spaces. To the north of the Cochran Center, a new, longitudinally-oriented landscape that runs through Spirit Park and Century Park echoes the Memorial Drive Mall to the south. Century Park North and Century Park South flank this landscape in a similar layout to that of the original residence halls on campus including Mississippi, Hattiesburg, and Hickman Halls.

GOALS

DESIGN LANDSCAPE SPACES TO BE “WORKING LANDSCAPES”
IMPROVE TREE PLANTINGS ALONG STREETS AND IN PEDESTRIAN CORRIDORS
ENHANCE AND CREATE IDENTIFIABLE QUADRANGLES, COURTYARDS, AND GATHERING PLACES
The landscape structure takes further cues from the campus landform—building on the high ground while reserving the stream corridors for park land and flood storage. A key feature of the proposed plan is an extension of the existing stream corridor landscape to the east in front of the Cochran Center. Although the stream has been buried and placed in a culvert in front of the Cochran Center, Spirit Park follows the original path of the stream and continues the Fitness Trail from the Payne Center to the Athletic Center Building.

The replication of the historic building pattern combined with the open space structure provides a framework for campus development and shaded pedestrian routes.

**GENERAL RECOMMENDATIONS FOR CAMPUS LANDSCAPE STRUCTURE**

*Design landscape spaces to be “working landscapes” that not only enhance the aesthetic value of the campus, but also meet campus functional needs.*

Trees provide shade for pedestrians and mitigate the heat island effect. "Heat island effect" refers to the phenomenon of localized temperature increases caused primarily by expanses of dark pavement and lack of shade. Shaded areas are typically five to ten degrees cooler than areas exposed to direct sunlight. Hattiesburg’s average July high is 91° with humidity levels averaging 93%. Hence, the provision of adequate shade is a prerequisite to the comfort of pedestrians. A comprehensive shade strategy is proposed for the campus—a strategy which aligns proposed tree planting with major pedestrian routes and other outdoor gathering spaces on the campus.

When making landscape improvements or designing new spaces:

- Plant canopy trees to increase the overall level of shade on campus, including parking lots, where possible;
- Utilize indigenous plants and trees to the extent possible;
- Build shade structures over paved plazas to reduce the heat island effect;
- Limit large expanses of sunny grassed areas, except when building athletic or recreation fields; and
• Investigate opportunities to use stormwater management practices, such as rain gardens, detention zones, porous paving and infiltration basins.

*Improve tree plantings along streets and in pedestrian corridors.*

Streets and pedestrian corridors provide the network in which people and vehicles access and move throughout the campus. Delineating these passages with a continuous shade canopy along both sides of the pavement will have the positive effects of reducing solar heat gain and heat reflection, while also visually unifying the campus and improving pedestrian comfort.

*Enhance and create identifiable quadrangles, courtyards, and gathering places for people.*

*Tomorrow Southern Miss* calls for the creation of a hierarchy of open spaces from athletic and recreation fields to malls to shaded walkways to intimate, residential courtyards. It is important to understand the following relationships of built space and open space when implementing design decisions:

• Locate and organize new buildings to define outdoor living spaces. Optimize the usefulness and attractiveness of new outdoor spaces by locating them along primary pedestrian paths, at building entrances or near major activity zones.

• Respect the power of the sun by orienting buildings to minimize heat gain and locate outdoor spaces that provide favorable climatic conditions.

• Provide amenities such as seating, shade trees, ornamental plantings, special paving, lighting, and shade structures to enrich the sensory appeal of outdoor courtyards, quadrangles, and gathering places.
VILLAGE CENTER GREEN

A new open space is proposed to the south of the planned Village Center Commons. This open space is imagined as a gathering space and informal recreation lawn for members of the Greek Community and the University community in general.

ATHLETICS AND RECREATION FIELDS

A new pedestrian pathway extending west from the central axis of the Green Coliseum will connect the proposed athletic and recreation facilities back to the established Campus Core. Four lighted multipurpose recreation fields are proposed to accommodate football, soccer, lacrosse, rugby, and softball. These fields will address the lack of recreational sport facilities as identified in the *Recreational Sports White Paper*.

Varsity Track & Field will be relocated to this area as well. Six sand volleyball courts also are planned along the south side of the pedestrian pathway to broaden the range of recreation amenities provided in the Campus Core.

NPHC PLAZA

NPHC Plaza is planned for the land east of Research Drive. Each NPHC chapter will have a distinct monument that can be adorned with chapter insignia and outfitted for chapter meetings at the outer points of the plaza.

It is intended to honor the founders, promote unity among all of the groups, and provide education to the general student population about these organizations.
CENTENNIAL GREEN

The decommissioning of George Commons (2009) presented an opportunity for new open space in the Campus Core. The site formally occupied by this building will be regenerated as Centennial Green. *Tomorrow Southern Miss* reflects the designs created for the space as part of previous planning studies.

SPIRIT PARK

Spirit Park is envisioned as a continuation of the open spaces associated with Pride Field and the existing stream corridor located adjacent to the Payne Center. Spirit Park will serve as a campus gathering space and informal recreation lawn; it is the realization of the north mall as proposed in the 2007 Master Plan.

It will be connected to Pride Field on the west via a proposed landscaped pedestrian corridor through the existing parking lot. Connections to the east and notably, Scianna Hall, will be provided along the existing shaded routes north of Roberts Stadium. The overall design goal is to establish an open space extending from the Payne Center area eastward to Scianna Hall incorporating pedestrian routes, parking, jogging trails and lawn areas for various programmed and informal activities.

HIGHWAY 49 EDGE

The frontage along Highway 49 is reimagined as a tree lined corridor that will redefine this prominent seam between the campus and city. A buffer consisting of trees, lawn, and low shrubs will establish a green edge for the campus. Championship Lane will be reorganized to provide parking in a less cluttered manner, to allow for stronger pedestrian links to the Campus Core, and to improve the safety of pedestrians and cyclists.

THE CRESCENT LAWN

As noted, the original plan for the USM campus included a crescent lawn along Hardy Street. The long term plan is to restore this open space through removal of existing buildings and reestablishing the lawn and a pattern of informal tree planting.

THE “QUAD”

The Quad is reimagined as a renewed open space defined by future housing. It will serve as the central gathering and passive recreation space for the surrounding residents.
3.2 LAND USE

The value of a land use plan is to guide the orderly development of Hattiesburg Campus and to ensure the highest and best use of the University’s property. The diagram to the right lays out where the various uses that comprise the campus are ideally situated.

Academic and administrative activities require access from the broadest subset of the University community, and thus belong in the Campus Core. To that end, major classroom facilities and other academic uses are located in the pedestrian core of the campus as part of a strategy to facilitate the 15-minute class change period.

Residential uses are sited on the periphery of the campus core but are well connected by means of improved pedestrian routes.

Civic uses are located where they are easily visible and accessible to the public from the three major gateways: Memorial Drive, 31st Avenue, and Ross Boulevard.

Similar to civic uses, varsity athletics benefit from visible and publicly-accessible locations. West 4th Street is planned as the “front door” for Athletics. Both varsity and recreational sports will benefit from proximity to Campus Core as part of a goal to increase student attendance and participation.

Ancillary uses include parking and maintenance facilities. These uses are located in peripheral locations.

GOALS

SITE ALL RELATED USES WITHIN WALKING DISTANCE OF EACH OTHER
ENSURE THAT CLASSROOMS ARE REACHABLE ON FOOT WITHIN THE CLASS CHANGE PERIOD
SITE PUBLIC USES NEAR CAMPUS GATEWAYS
SITE ANCILLARY USES AT THE CAMPUS PERIPHERY
3.3 FACILITIES & SPACE

Academic units that are currently fragmented and dispersed will be colocated into modern, appropriately-designed facilities.

The University is anticipating a surplus in space resulting from the construction of several new buildings, including Asbury Hall, Scianna Hall and Century Park South presents the University with a unique opportunity to renovate and restore existing buildings and to relocate units to suitable facilities. Three major buildings will be vacated: Greene Hall, Harkins Hall, and Bolton Hall. Ultimately, these buildings are proposed for renovation to accommodate units on a permanent basis.

A number of units are currently in substandard or inappropriate space and are proposed for relocation. Chapter 4 of this report provides details for the space migration plan and timeline for implementing these moves with sensitivity to time, disruption of operations, and other factors.

GOALS

MODERNIZE AND/OR REPURPOSE INTERIOR SPACES TO ACCOMMODATE NEW OCCUPANTS
COLLOCATE FRAGMENTED DIVISIONS
AVOID MOVING UNITS MORE THAN ONCE
PLANNED CAPITAL PROJECTS

1. Varsity Soccer field and stands
2. Varsity Softball stands
3. Village Center Commons
4. Payne Center expansion
5. Physical Plant relocation
6. Greek apartment building
7. Greek town houses
8. Greek chapter houses
9. Center for Children and Families
10. College of Education & Psychology building
11. School of Music / Performing Arts Center
12. University museum
13. Asbury Hall
14. Harkins Hall renovation
15. Theatre & Dance Building expansion
16. General classroom building
17. Greene Hall renovation
18. Fritzscbe-Gibbs Hall renovation
19. Cook Learning Commons renovation
20. Centennial Green pavilions
21. Southern Hall renovation
22. Triad renovation
23. South stands renovation
24. Scianna Hall
25. Quad redevelopment
26. Kennard-Washington renovation
27. Mclemore Hall renovation
28. Tennis Court Stadium
29. Midtown development

NEW CONSTRUCTION

RENOVATION
3.4 HOUSING & STUDENT LIFE

Most of the University’s housing was constructed in the 1950s and 1960s. Much of it was poorly-built and has since demanded substantial maintenance resources to keep it operational. In accordance with the 2007 Master Plan, the University is well-underway with an initiative to replace substandard residential buildings with contemporary structures. Scott Hall, Bond Hall’s east wing, Vann Hall, and the east side of Pinehaven have all been demolished under this initiative.

The next wave of replacements can commence upon Century Park South’s phased completion in fall 2014 and spring 2015. At that time Roberts Hall and Pulley Hall can be decommissioned. Bolton Hall will no longer be needed for dormitory beds, but the building will be preserved temporarily as swing space for academic programs. The west side of Pinehaven is slated for demolition in 2015.

Many fraternity chapter houses are similarly substandard. Also, the chapter houses tend to be oversized and financially unsustainable. Recent studies have recommended replacing and right-sizing fraternity chapter houses to smaller, more sustainable prototypes. Other goals include providing new chapter houses for National Pan-Hellenic Council chapters that do not currently have residences, and building a new Greek apartment building designed to keep upperclassmen connected to their chapters while providing an independent living style only available now in off-campus, private apartments.

GOALS

DECOMMISSION AND REPLACE SUBSTANDARD RESIDENTIAL BUILDINGS
REDEVELOP THE GREEK COMMUNITY
PLANNED RESIDENTIAL FACILITIES

1. Hillcrest Hall
2. Century Park North
3. Century Park South
4. McCarty Hall
5. Greek chapter houses
6. Cedarbrook apartments
7. Greek town houses
8. Greek apartments
9. Undergraduate themed housing
10. The Quad

NEW CONSTRUCTION
RENOVATION
EXISTING
There is increasing recognition that existing chapter houses are by and large outdated and oversized to be financially and socially sustainable. Feasibility studies revealed that investing capital funds in renovation would be prohibitively expensive, whereas new construction would yield greater efficiencies and would allow for more sustainable, competitive layouts. Moreover, public-private partnerships may offer the opportunity to provide on-campus Greek housing that is competitive with the private, campus-adjacent apartment complexes in which many upperclassman Greek students currently rent.

Tomorrow Southern Miss’ vision for Greek community housing is based on the recommendations of two white papers written on the issue: *Fraternity Housing of the Future White Paper (2012)* and the *Pierce Report (2012)*. The programmatic components of the plan include new chapter houses for National Pan-Hellenic Council chapters that desire them; replacement chapter houses for the National Intra-fraternity Council chapters that are right-sized and designed with financially-sustainable floor plans and competitive amenities; a 200-bed Greek apartment complex targeted at upperclassman Greek students who currently opt to rent off-campus, private apartments; a new NPHC Plaza; and a common building containing flexible meeting space, food and beverage service, and convenience retail.

For more detail on the planned improvements to the Greek area of campus, please see the companion document, *Tomorrow Southern Miss: A Vision Plan for Greek Community Housing*. 
THE “TRIAD” AND THE “QUAD”

When Century Park South is complete, 950 beds currently located in Pulley Hall, Jones Hall, and Bolton Hall will be relocated to Century Park South. In the short term, a portion of the vacated residence halls of the “Quad” will be used as swing space. Long term, all will be decommissioned and replaced with new residence halls. Beds from the “Triad,” i.e. Mississippi Hall, Hickman Hall, and Hattiesburg Hall; will migrate to the revamped Quad. The triad residence halls, in turn, will be repurposed for academic and administrative uses.

CENTURY PARK SOUTH

Fulfilling a major directive of the 2007 Master Plan, Century Park South will complete the residential district planned for the north mall of the campus. The project consists of three new residence Halls: Vann Hall, and Luckday Citizenship Hall will open in fall 2014 and Scott Hall will open in the spring of 2015. Van Hall will house female students and the Luckday Foundation Citizenship Scholars Program office. The latter will be a coed residence hall for freshman Luckday scholars. Scott Hall will open in spring 2015. It will house undergraduates and the Moffitt Health Center. In total, Century Park South will contain 950 beds.
3.5 MOBILITY

Like many campuses, USM was originally designed to be pedestrian and transit-oriented. Throughout the prewar period, students, faculty, and visitors could access the campus via a streetcar that ran along Hardy Street, connecting the campus to downtown Hattiesburg.

In the postwar period, mirroring a national trend, Hattiesburg transitioned from a pedestrian and transit-oriented city to an automobile-oriented city. The Hardy Street streetcar was decommissioned and, in response, much of the campus was reorganized to accommodate vehicular circulation and parking.

Tomorrow Southern Miss recognizes that most people expect to drive and park with convenience; however, a key objective of this Master Plan is to mitigate the negative side effects of existing car-dominated environments: parking lots, air pollution, and financial burden on students, among others. The ultimate goal is to make walking and cycling easier, more pleasant, and safer.

GOALS

PROVIDE WALKING ENVIRONMENTS THAT ARE PLEASANT, SAFE, AND SHADED
ENCOURAGE A “PARK ONCE AND WALK” CULTURE. DISCOURAGE INTRA-CAMPUS VEHICULAR TRIPS
LOCATE LARGE PARKING LOTS AT THE CAMPUS PERIPHERY AND LIMIT CAMPUS CORE PARKING
New Parking Lot
Team Bus drop-off
Ped/Bike Path
Pedestrian Pathway
Montague Boulevard Complete Street upgrade
Eagle Walk Extension
Golden Eagle Avenue Pedestrianization
Pedestrian Crossing Improvements
Forrest Avenue Pedestrianization
Parking Lot Redesign
Black & Gold Blvd Realignment/Extension
Championship Lane
Montague Boulevard Extension
Eagle Walk Pedestrianization
West Memorial Walk Extension
Pedestrian Crossing Improvements
Planned Projects
WALKABILITY

Despite being auto-oriented, the USM campus remains fairly walkable due to its compact dimensions. To walk the campus end-to-end takes approximately twenty minutes or less, and most destinations in the Campus Core are within a five-minute walk of one another. While the campus is compact, the quality of the pedestrian environment stands to be improved greatly.

*Tomorrow Southern Miss* focuses on the provision of shade and the reduction of pedestrian/vehicular conflicts as tactics for improving the overall walkability of the campus. Several major pedestrian walks currently exist and others are proposed as part of the overall strategy to make the campus more pedestrian oriented. These include:

- New east/west walks within the blocks defined on the north by Montague and on the south, by Pearl. These walks are envisioned as the key pedestrian routes connecting the expanded academic core to the established campus core. The walks, as proposed, feature shade trees and offer interior connections where buildings currently block east-to-west movement. This is the case at Owings-McQuagge Hall and Greene Hall which both are barriers to movement. Cross-campus routes are designed to move through these buildings in a way that utilizes existing corridors.
- Montague and Pearl Streets are envisioned as “complete streets”, that is, streets designed to accommodate pedestrian, bicycle and vehicular movement. As with all routes, improvements to Montague Boulevard are coordinated with the landscape and shade strategy for the campus.
- A new landscape, recreation and pedestrian corridor will improve east/west pedestrian connectivity between the western parts of campus across Spirit Park to Scianna Hall. Spirit Park will be created north of the Cochran Center and is imagined as an informal lawn and student gathering space.
- Several improvements are planned for the narrow walkway connecting Walker Science to Bond Hall, including: the introduction of a shade structure in the area east of the Chain Building, a screen to block views of the Cochran Center loading docks, and a new tree lined pathway connecting Chain to Bond Hall.
- A new east/west pedestrian route connecting the Payne Center to the recreation and athletics facilities proposed in the west campus area.
BIKEABILITY

Over the past decade, bicycle use in the United States has increased significantly and has been embraced as a practical, reliable, and economical mode of transportation. Across the United States, bicycle culture is strongest in college towns. In Davis, California, bicycles account for 19.1% of journeys to work (or school). In Boulder, Colorado that figure is 12.1%. In Cambridge, Massachusetts that figure is 8.5%. The trend had been slow to pick up in the South (Tennessee is a notable exception). In Mississippi, bicycles account for only 0.13% of journeys to work. However, the number of bicycle commuters increased by 15.6% between 2005 and 2012.¹

Safe riding conditions and the availability of infrastructure are major influences on cycling culture. Older cities, such as Cambridge, benefit from compactness and narrow streets—conditions that make cycling safer. Hattiesburg, on the other hand, is a car-oriented city. Much of the built environment is designed around cars and is unsafe for cycling. However, the University has already taken strides to improve conditions for cyclists: covered bike racks and the initial phases of a network of protected bike lanes have been constructed. Tomorrow Southern Miss focuses on completing the bicycle network and locating bicycle parking in convenient locations across campus. While off-campus cycling will remain a challenge for the foreseeable future, the Master Plan provides connections to the Longleaf Trace trail and the network proposed in the vision for the Mid-town district to the south.

A bicycle plan is shown with different routes indicated:

- **SEPARATED PATH**
- **MIXED BIKE/PEDESTRIAN ZONE**
- **ON-STREET ROUTE** (bike lane or sharrow)

Several streets are marked, including:

- W 4TH ST
- W 7TH ST
- N 37TH ST
- S 34TH ST
- S 37TH ST
- S 31ST ST
- N 31ST ST
- S 29TH AVE
- US HWY 49
- MONTAGUE BLVD
- HARDY ST
- PEARL ST

The map shows a 10 min (from Cook) walk distance indicator.
Interest in transit stemmed from a 2013 transportation study that evaluated the feasibility of cross-campus shuttles at USM. Transit is typically employed on large campuses that cannot be traversed on foot alone. The Hattiesburg campus, conversely, is compact and walkable. Most on-campus destinations can be reached within ten minutes on foot, and it takes about twenty minutes to walk the campus end to end.

Even though the entire campus is within walking distance, transit has the potential to provide cross-campus trips that are marginally faster than walking; but only if the transit is operated properly. Humans walk at about 3 MPH and the Hattiesburg campus is about 0.5 miles lengthwise, so a door-to-door trip will take no more than 20 minutes on foot.

The same trip on transit involves 1) the walk time from the origin to the nearest bus stop, 2) time spent waiting for the bus, 3) the average speed of the bus, and 4) the walk time from the destination bus stop to the final destination. Let’s assume it will take 3 minutes to walk to and from bus stops and that buses are operated at 10-minute intervals. Thus, the overall time spent on either side of the bus ride would range from 6 to 16 minutes. Once on the bus, buses travel at about 10 MPH in urban conditions (this factors in boarding and alighting time, wait time at traffic signals, and other factors). If the passenger rode the bus for 0.5 miles, she would spend 3 minutes on the bus. The duration of her door-to-door trip would range from 9 to 19 minutes. Hence for a 0.5-mile trip, transit would save between 1 and 11 minutes over walking.

In addition to potential time savings, transit provides comfort in inclement weather and transport to persons with limited mobility. These benefits must be evaluated against the costs of operating a transit system.

Further study is needed to determine the optimal route, equipment, operations, and other logistics. However, several principles should be observed in any form of implementation. Ten-minute headways should be maintained in order to achieve a baseline level of convenience and to make the system faster than walking. Bus stops should be spaced at least 800’ apart such that buses can maintain average speeds of 10 MPH or greater. The system should take on a single loop format so that trips from one end of the campus to the other end are as efficient as trips to the campus core. Finally, a real-time bus tracking app should be developed so that the system can provide the predictability that transit riders have come to expect.
THE UNIVERSITY OF SOUTHERN MISSISSIPPI

TRANSIT PLAN

PROPOSED ROUTE

PROPOSED STOP

Remote Parking

Hillcrest

Century Park

Scianna Hall

Greek Village

Montague Blvd

Peck House

Ross Blvd

31st Street

HUB

Lucas Administration Building

Montague Blvd

Centennial Green

W 4TH ST

S 34TH ST

S 37TH ST

S 31ST ST

N 31ST ST

S 29TH AVE

US HWY 49

US HWY 49

W 7TH ST

W 4TH ST

PEARL ST

HARDY ST

MONTAGUE BLVD

PEARL ST

N 37TH ST

W 7TH ST

N 37TH ST

W 4TH ST

W 4TH ST

MONTAGUE BLVD

HARDY ST

PEARL ST
VEHICULAR MOBILITY AND PARKING

The overwhelming majority of USM faculty, staff, visitors, and commuter students utilize private cars to access the Hattiesburg campus. While reducing dependency on cars is a goal of Tomorrow Southern Miss, the plan also proposes improvements to motorists’ parking experience. Parking will be increased by 644 spaces to 8,484 total spaces to bring supply in line with demand. Well-lighted and landscaped parking lots will be built at the periphery of campus and connected back to the core via short, shaded, and pleasant walks. Under this framework, congestion on campus streets will be reduced by minimizing intra-campus trips and promoting a “park once and walk” culture, a pedestrian and bicycle-friendly environment can be maintained, and the overall supply of parking can be increased.

The existing parking supply is sufficient to meet the demands of the existing campus population, however convenient parking spaces can be hard to find due to high utilization. Hence, perceived scarcity of parking is evidently a factor of convenience, not lack of supply. The current USM population of roughly 16,000 and their visitors generate an estimated demand for 7,458 parking spaces. There are several factors that influence parking demand. The percentage of students, faculty, and
ASSUMPTIONS:
- Total supply is inclusive of visitor parking
- Absenteeism and alternative transportation discounts are factored into supply ratios
- Parking lot capacity based on 350 GSF/space including landscaping and circulation

PARKING SUPPLY RATIOS:

<table>
<thead>
<tr>
<th>Faculty + Staff</th>
<th>Residential Students</th>
<th>Commuter Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.85</td>
<td>0.80</td>
<td>0.25</td>
</tr>
</tbody>
</table>
PLANNED PARKING INVENTORY

TOTAL PARKING SPACES

8,484

For new lots parking is estimated at 350 square feet per parking space, including circulation and landscape.
staff that work or study on a part-time basis; the percentage of students that are commuter students; absenteeism; and the degree to which alternative transportation modes (e.g. carpooling, cycling, etc) are utilized all factor into demand for parking. For comparable universities, typical faculty/staff parking demand is 0.85 spaces/FTE, typical residential student demand is 0.80 spaces/FTE, and typical commuter student demand is 0.25 spaces/FTE. At these ratios, parking demand at USM can be estimated at 7,458 spaces.

Currently, there are 7,840 parking spaces on campus, yielding a raw surplus of 382 spaces. Overall supply, however, is typically discounted by 10% so that available parking spaces can be conveniently found. Hence, the USM’s adjusted supply is 7,056, which yields a deficit of 402 spaces and explains the perceived scarcity of parking.

Under Tomorrow Southern Miss, the overall parking supply will grow to 8,484 spaces (or 7,635 adjusted). The University population is expected to experience only gradual growth during the foreseeable future. At its current population of 16,000, the planned surplus of parking is 1,026 spaces (or 177 adjusted).