

Design Week 2011 School of PLANNING,
DEVELOPMENT, PRESERVATION
AND LANDSCAPE ARCHITECTURE

In partnership with Design Workshop

## acknowledgements

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# Clemson Advancement Foundation (CAF)

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Vince Graham, Founder, I'On Group (Keynote speaker)

## Town of Hilton Head

Steve Riley, Town Manager
Charles Cousins, Director of Community Development
Shawn Colin, Comprehensive Planning Manager
Marcy Benson, Senior Grants Administrator

# **DESIGN**WORKSHOP

Kurt Culbertson, Chairman, Principal and Partner Glenn Walters, Principal and Partner Scott Baker, Project Landscape Architect Kristen Walsh, Landscape Architect Kathy Fry, Human Resources Specialist



Tom Schurch, Ph.D., Professor and Chair

#### FACULTY ADVISORY TEAM

Mary Beth McCubbin, Director, a.LINE.ments Studio, Chair Design Week Cari Goetcheus, Associate Professor Cliff Ellis, Ph.D., Director, City and Regional Planning Robert Benedict, Ph.D., Director, Master of Real Estate Development Program

#### STUDENT RESEARCH TEAM

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Elise Herron, MLA
Susannah Horton, MLA
Tiffany Managad, MLA
Morgan Malley, MCRP
Ryan Medlen, MCRP
Adam Tietz, MRED
Jacob Jackson, MRED
Matt Lincolnhol, BLA
Daniel Merritt, BLA

Design Week exposed me to a holistic design process, the importance of communication in a multi-disciplinary team, and the importance of shared goals and vision. —Design Week Participant

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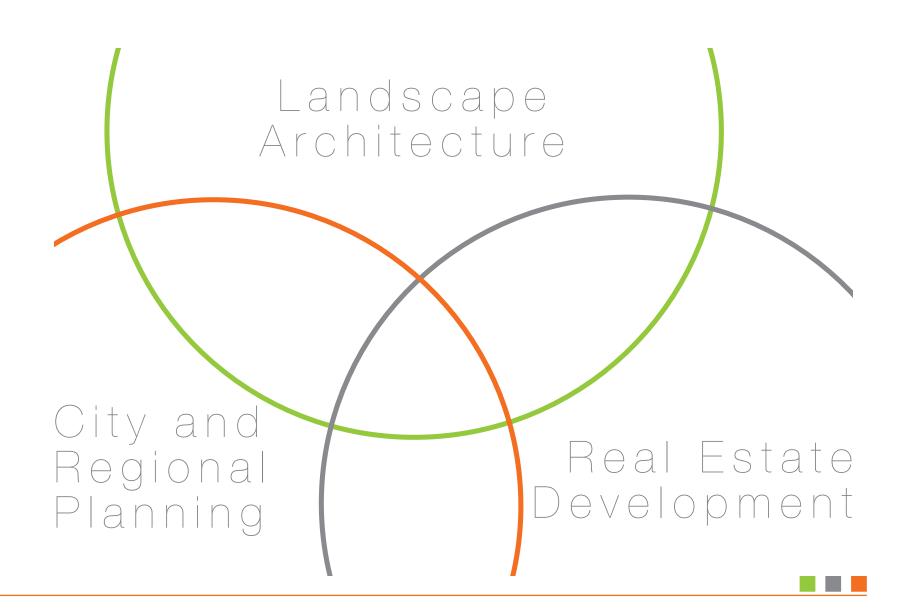


# partnership



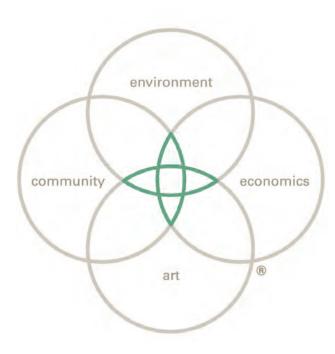


## collaboration





## **DESIGNWORKSHOP**



We believe that when environment, art, community and economics are combined in harmony with the dictates of the land and needs of society, magical places result, places that lift the spirit, sustainable places of beauty, significance and quality.

We are dedicated to designing extraordinary landscapes that leave a legacy for future generations, creating such places for our clients, for society and for the well-being of our planet. Design Workshop is an award-winning, international firm practicing landscape architecture, land planning, urban design and tourism planning. The firm focuses on principles of smart growth, sustainable design and environmentally sound planning to reconcile economic needs with the preservation of scenic, cultural and community values. Its pioneering efforts have been recognized with nearly 100 local, regional, national and international awards from such organizations as the American Society of Landscape Architects (ASLA), the American Planning Association (APA) and the Urban Land Institute (ULI). In 2008, Design Workshop was awarded the ASLA Landscape Architecture Firm of the Year and Joe Porter, one of the firm's founders, received the ASLA Gold Medal for his contributions to the profession.

Design Workshop was born in academia. In 1969, as assistant professors of landscape architecture at North Carolina State University, founding partners Joe Porter and Don Ensign decided to create a firm that would be named not for themselves but for the collaborative process with which they taught. Their earliest projects engaged them in planning new communities in Columbia, Maryland, and Raleigh, North Carolina, as well as resort work on the Outer Banks of North Carolina. Large ski-resort projects brought them to the western United States in the early 1970s, where they began to develop expertise in mountain, desert and prairie ecology. A focus on urban design and strategic services resulted in the founding of the Denver office, followed by an expansion throughout the West. In 2002, it established a North Carolina office and most recently established an office in Austin, Texas

Today, the firm encompasses a staff of 77 led by eight partners in seven offices. While urban design and resort and tourism projects account for much of the firm's current portfolio, residential garden design has always been a strong component of *Design Workshop*'s work, with an emphasis on collaborative design that honors aesthetic, economic and environmental values.

# design workshop bios



#### KURT CULBERTSON, CHAIRMAN, PRINCIPAL AND PARTNER

Chairman and Principal of the landscape architecture and land planning firm Design Workshop, Kurt Culbertson has been instrumental in the company's success both nationally and internationally for over 30 years. Mr. Culbertson has been involved in planning and development projects throughout North and South America, Asia, Europe and the Middle East.

With a background in landscape architecture, planning and real estate, Kurt has led a diverse range of projects from large scale strategic planning, corridor planning and tourism planning to detailed design of parks and streetscapes. He is currently leading comprehensive planning efforts in Casper, Wyoming and for the Petra region in Jordan, both of which include extensive public engagement processes.

Kurt is a leader in the field of evidence based design and the application of metrics and performance measures to large scale planning projects. This cutting edge approach which addresses not only the environmental performance but the community and economic performance of the built environment, has been highlighted in numerous publications. His work has been recognized through professional awards by the American Planning Association and the American Society of Landscape Architects.

Culbertson has initiated the creation of a model "sustainable development," a community that promotes stability between both the physical and social systems. He has shaped the firm's belief that when environment, economics, art and community are combined in harmony with the dictates of the land and needs of society, magical places result. Places that lift the spirit. Sustainable places of timeless beauty, enduring quality and untold value—for our clients, for society and for the well being of our planet.

#### GLENN WALTERS, PRINCIPAL AND PARTNER

Glenn Walters has 23 years of experience in creative land planning, landscape architecture and realestate development in North Carolina, Georgia, Florida, Hawaii, Arizona, Nevada, Pennsylvania, California, Idaho, Oregon and Colorado. His development experience combined with his landscape architecture and planning background enables particular insight into new community, resort village and urban design projects. His current interests lie in formulating meaningful design solutions that balance environmental response with place-making and economic considerations. Glenn holds a BLA from the University of Georgia and an MLA from Penn State, where his thesis work was focused on Environmental Assessment for the Site Design Process. He is currently the principal of Design Workshop's Asheville, North Carolina office.



#### SCOTT BAKER, LEED AP

Scott Baker is a landscape designer in the Denver office of Design Workshop. He is a graduate of Pennsylvania State University where he received his Bachelor of Landscape Architecture degree. While at Design Workshop, he has focused on various scales of design that express sensitivity to place and community. He has been involved in all stages of project design, from schematic design through construction documentation. Scott participated in Design Week during the fall of 2004 in his third year at Penn State. His group won the overall design award and the experience provided him with an understanding of what it means to be a practicing professional.

Through Scott's work with Design Workshop, he has gained valuable experience in the disciplines of urban planning and mixed-use projects such as district revitalization, urban plaza, park and streetscape designs; and mixed-use development. Scott has taken an active role in the local design community as Secretary for Architecture for Humanity's Denver Chapter.



## clemson faculty advisory team



ROBERT BENEDICT, PH.D. Prior to joining Clemson, Robert was a vice-president and partner with Carolina Holdings with project management responsibilities for over \$30 million in development including neighborhood retail, single-tenant retail and infill residential projects. With over 25 years of real estate finance and development experience, Robert started his career with The Travelers Insurance Company and was promoted to Real Estate Investment Manager with positions in Charlotte, Atlanta and Washington, D.C. He was also an assistant vice president with U.S. Shelter in Greenville, developing over 2,000 apartments in the Carolinas and Florida. In addition to his extensive development experience, Robert has been a historic preservation consultant specializing in historic tax credits, adaptive use rehabilitations and National Register of Historic Places nominations. He was an adjunct instructor of preservation economics at the University of Georgia for seven years and currently serves on South Carolina's Department of Archives and History National Register Review Board. Robert is also a member of the City of Greenville's Design Review Board and is a past chairman of Greenville's Architectural Review Board. Current research areas include the adaptive use of historic structures, green building practices with historic structures and transit-oriented development. His dissertation is titled The Reintroduction of Heritage Streetcars and the Related Effects of Community Identity and Social Interaction with the Residents in Streetcar-Oriented Developments.



CLIFF ELLIS, PH. D. Cliff Ellis is an Associate Professor in the School of Planning, Development, Preservation, and Landscape Architecture at Clemson University. He is the Director of the Graduate Program in City and Regional Planning and he also teaches courses in the Master of Real Estate Development program. Dr. Ellis received his Master of Planning and Community Development degree from the University of Colorado at Denver and a Ph.D. in City and Regional Planning from the University of California at Berkeley. His research areas include New Urbanism, urban design, land use planning, history of urban form, planning history, and planning theory. He has published articles in the leading journals of planning and urban design.

#### CARI GOETCHEUS, ASLA, RLA IN GA, MA Cari Goetcheus is an

Associate Professor in the Department of Planning and Landscape Architecture at Clemson University located in South Carolina, USA. She holds a Bachelor of Landscape Architecture from Utah State University and a Master of Historic Preservation from the University of Georgia. Her research interests include landscape preservation education, physical evolution of land uses and land use history, vernacular landscapes, and the impact of African American culture on the landscapes of the Southeast. Prior to her academic career, Ms. Goetcheus worked in both the public and private sector. As a Historical Landscape Architect with the National Park Service in Atlanta, GA and Washington, D.C., Cari worked with the Cultural Landscape Inventory (CLI) program. In Washington, D.C. she worked with NPS regional colleagues who assisted the 396 national parks with a variety of cultural landscape issues. In private practice, Ms. Goetcheus worked in both traditional landscape architecture offices on master plans, site designs and comprehensive planning reports, as well a preservation firms known for their cultural landscape work and developing National Heritage Areas. With 25 years of experience in research, planning, preservation, and project management, Ms. Goetcheus is a licensed landscape architect in the Commonwealth of Massachusetts and Georgia.



# MARY BETH MCCUBBIN, ASLA, LEED-AP Mary Beth McCubbin joined the Clemson landscape architecture faculty in the fall of 2005 and was appointed Director of External Projects and founded the a.LINE.ments studio in 2006. The a.LINE.ments studio has been involved with more than forty public service projects throughout South Carolina involving nearly 300 students from a variety of disciplines. For these efforts she was awarded Clemson University's Service Learning Award and the 2010 South Carolina Commission on Higher Education Service Learning Award. She has taught principles of design, community design, parks and recreation design, site design, and community engagement at Clemson. She holds the degrees BFA, BLA, and MLA all from Penn State University and joined Clemson University from Design Workshop (Vail and Denver offices) where she

concentrated on community and resort planning and design.



## student research team

The student team compiled the site analysis, which was presented to the charrette participants. In addition, each student participated in a roundtable discussion with stakeholders from Hilton Head to better understand the project. Each team member also served as a captain/facilitator for the ten multidisciplinary teams.



ELISE HERRON, MLA Before returning to graduate school, Elise completed her Bachelor of Arts in Architecture at Clemson University and worked at a local architecture office and as an interior designer for a construction company. Currently in her final year of the Landscape Architecture Masters program, Elise has worked in the a.LINE.ments Studio for two years. Her interests are primarily focused on community design projects and residential design.



SUSANNAH HORTON, MLA Susannah is in her final year of the Masters in Landscape Architecture program at Clemson. Before returning to graduate school in her home state of South Carolina, she worked in the laboratory for a cancer diagnostic company in Santa Barbara, California. Susannah has worked in the a.LINE.ments studio over the last year and has been involved in community revitalization and design projects.



JACOB JACKSON, MRED 2008 Graduate of Biola University in Los Angeles. Jacob has a background in mortgage and debt consolidation in California. He also has been involved in master-planned communities with Reed Development (Hilton Head Island) and in CA. Jacob has also been active with third world relief projects specifically as Project Director and Fund Raising Coordinator for a college-based "Honduras Developmental Relief Effort."



MATT LINCOLNHOL, BLA From Greenville, SC, Matt started Clemson's landscape architecture program in the fall of 2007. A current fourth-year undergraduate student, he serves as the President of the Clemson University Student Chapter of the American Society of Landscape Architects. His interests within the field include urban, regional, and sustainable design. Matt has worked as a design assistant and nursery manager at Groundsmaster LLC and at the Cliffs Communities.



KATIE LLOYD, MLA Having received a bachelor's degree in fine arts: sculpture from Winthrop University, Katie has considerable training and enthusiasm for imaginative problem solving and design strategies. Her creative works across all disciplines display an interest in objects and spaces that promote sensory discovery through interactive and participatory endeavors, while responding to her social and environmental consciousness.

MORGAN MALLEY, MCRP Morgan received her BS in Civil and Environmental Engineering from the University of Maine in 2010 and is pursuing a Master's degree in City and Regional Planning, with interests in sustainability in relation to surface transportation and urban design. This past summer Morgan interned with two non-profit organizations. In Portland, ME, she provided strategic planning services as a sustainable transportation advocate for Portland Green Streets; and in Cambridge, MA, she served as an assistant for corridor assessments with the Urban Ecology Institute's Sustainable Cities Program



**TIFFANY MANAGAD, MLA** Tiffany Johanna Managad is currently in her third year pursuing a Master of Landscape Architecture. She received her Bachelor of Science degree from the University of Florida in Integrative Biology and Zoology. Tiffany continues to bring her zeal and enthusiasm for the environment and science to the design field. Her passion is driven by the possibility of developing creative solutions which embody both science and art. She enjoys trying to push the boundaries of any design or artistic medium in the pursuit of something unique.



RYAN MEDLEN, MCRP Ryan first acquired an interest in city planning by studying the effect of urban growth boundaries on housing prices in Oregon as part of undergraduate studies at Willamette University, graduating in 2008 with a dual major in Economics and Rhetoric. He experienced living in diverse settings including Oregon, Washington, California, Alaska, and Germany. August 2010, he enrolled in graduate school to pursue a Master of City and Regional Planning in order to pursue a career as a planner in local or state government.



DANIEL MERRITT, BLA From Greer, SC, Daniel is currently a fourth year undergraduate student in the Landscape Architecture program at Clemson. Growing up in a mostly rural area, Daniel's interests in the field include natural and historic preservation, sustainable development, and ecosystem rehabilitation. The two summers he spent as a design consultant at Todd Rudisill, Inc., a landscape contractor in the Greenville area, have given Daniel valuable experience working one-on-one with clients and the general public.



ADAM TIETZ, MRED 2004 (B.A. in Urban Geography) and 2006 (Masters of Urban Planning) graduate of the University of Nebraska. Over four years of project management experience in land development and urban planning for the City of Wheat Ridge, Colorado. Adam also managed several residential and commercial projects ranging in size from 20,000 square feet up to 700,000 square feet. He has extensive experience in zoning, land use and other entitlement issues.



# professional support

#### the round table

On Thursday August 11, 2011, the student research team and advisory faculty met with a group of Hilton Head stakeholders, local design professionals, ecological experts, as well as a representation of the Gullah/Geechee community to discuss the dilemma of Hilton Head, as well as potential design sites for the charrette. The students are especially grateful for the experience to talk with Steve Riley, Charles Cousins, Shawn Colin, and Marcy Benson from the Town of Hilton Head; Edward Pinckney from Pinckney Associates; Perry L. Wood and Mark L. Baker from Wood+Partners; Blaik Keppler from the Coastal Training Program, ACE Basin National Estuarine Research Reserve, and the SC Department of Natural Resources; Dr. Jessica Whitehead and April Turner from the SC Sea Grant Consortium; as well as Emory S. Campbell of the Gullah/Geechee Corridor Commission.

## keynote address

On Friday August 26, 2011, students and faculty had the opportunity to attend the keynote address *Radical Charles Fraser: What would he do today?* by Vince Graham, the founder of I'On group. Clemson University is very grateful to Mr. Graham for his lively and informative lecture about Mr. Fraser, Hilton Head, as well as urban and community design.

The truth is that our cultural identity is reflected in the details of our daily lives—in the scope of our sidewalks, what is noted on signs, the curve of our roads, the craftsmanship of our homes and their proximity and relationship with neighbors. Our neighborhoods speak volumes about who we are as people.

-Vince Graham





design professionals

> educational enrichment

real world experience

informed dialogue

# history of design week



Design Week started as a week-long charrette and academic experience involving staff from Design Workshop, students from an accredited Landscape Architectural program and a private client. Developed by Kurt Culbertson, the on-campus experience was first conducted in 2003 at Kurt's alma mater, Louisiana State University. Through his relationship with the school and subsequently with many other schools, Kurt developed the event to serve multiple purposes. The primary objectives of Design Week are to contribute to the academic experience of future professionals, to develop long-term relationships with academia that may lead to research relationships, project referrals and future hires and to enrich the professional development of participating staff.

Design Week charrettes have been conducted at colleges and universities across the nation, including Louisiana State, Cal Poly, the University of Illinois, Penn State and North Carolina Agriculture and Technical State University. The students in these programs tackled projects such as the redevelopment of an underutilized rail site in California; the redevelopment of an industrial brownfield site with the preservation of historic industrial structures outside of Chicago, and a multi-use master plan for a site in Baton Rouge, Louisiana, that was bounded by an oil refinery, park, a river and rail yards. Because of the devastation in the wake of Hurricane Katrina, the firm and university's landscape architecture department chose to focus MSU's 2006 Design Week on planning and design ideas for rebuilding the Mississippi Gulf Coast.

The firm's experience with this event has led to an evolution of sorts, one where we have seen the value in helping the students take the most comprehensive approach to a design problem; one where students are encouraged to understand the macro and micro implications of human impact on the land and to look at the best solutions from the broadest views. As a firm, we believe that the surest way to create meaningful and sustainable places is by synthesizing environmental, social, aesthetic and economic elements in harmony with the dictates of the land and the needs of society.

Design Workshop was pleased to conduct their eleventh design week with Clemson University. At Clemson, each team was asked to assess the four Legacy elements for the project area, address them individually and synthesize them into a solution, using a dilemma/thesis approach. With the integration of multiple disciplines and departments, the student work provided comprehensive solutions for the affected area in hopes of supporting and sustaining its unique culture and environment.

## definitions

DILEMMA A dilemma sums up the major forces of opposition that the project is trying to reconcile or the major problem it is trying to solve. It begins with a brief discussion of setting and context or situation, which may be social, political, economic, physical, aesthetic, environmental or some other condition. It addresses both the client's critical success factors and all four of the Legacy rings. It answers the questions: What is pressing back on a good outcome? What's standing in the way of a project's potential for success? The dilemma is not the scope of work or the client's goal. Instead, it is a compelling question that makes people care about the outcome. It can be approached by asking: What does this place want to be?

Why is a project dilemma important? Before putting pen to trace, it is important to put forth a question for consideration and solution. A scientist would never undertake an experiment without defining a problem statement. If our design process is to have similar rigor, we too must state the central question our design investigations are trying to answer.

THESIS A thesis is a proposed solution to the central problem or question stated in the dilemma. It is an assertion about the project outcome that will be tested and resolved in the team's design and planning investigations. It can often be most effectively stated as an if/then statement: "If we do X (action), then we will get Y (outcome)."

Why is a project thesis important? As with a dilemma, it is important to make a statement about the big idea of the project before putting pen to trace. A thesis is the central proposition of the project put forth for the purposes of argument and investigation. A scientist would never undertake an experiment without stating a hypothesis that the experiment will attempt to prove. A debater would never enter into a debate without a position. If our design processes are to have similar rigor, we too must state the big idea of the project so that the team's design assertions are aligned toward a common goal.

NARRATIVE PRINCIPLES Narrative principles are universal touchstones or fundamental truths that are commonly understood and believed. They should be applied to projects in order to gain perspective and to test your thesis.

Why are narrative principles important? Narrative principles provide insight and perspective. They are assumptions against which a thesis can be tested. Narrative principles help us argue persuasively for a Legacy outcome with clients and in public meetings. Articulating these principles helps guide us through a discovery process. They are central to the process of rigorous thinking. They also help us find form and build a story that will carry a project as close as possible to Legacy.

LEGACY GOALS Legacy Goals are the specific desired outcomes that your team has for environment, economics, art and community.

Why are Legacy goals important? Legacy is a way of achieving measurable benefits for people. Organized according to the Design Workshop Legacy rings, Legacy goals remind us in specific and measurable ways to assess the environment, art, economics and community in the design for projects.

## design week process

The DW Legacy Design® method is comprehensive in four categories; inclusive of a range of ideas, experiences and knowledge of all team members; transparent in its decision-making process; and accountable to goals and metrics from beginning to end. The sequence of the Design Week activities, highlighted below, follows the stages of the Legacy Design process and incorporates these principles.

**SLEUTHING AND ASSEMBLING INFORMATION** The first step of the design process is to sleuth, gather and assemble the facts, to understand the issues surrounding the project, and to identify a client's and community's critical success factors—the things that absolutely must happen and be an outcome of the process in order for them to consider the project a success. Because of the short amount of time we had to focus on the project and little time allotted for research, we provided each participant with information completed by the research team to review for the charrette.

FOUNDATION BUILDING AND ANTICIPATING OUTCOMES with the initial pool of information gathered, the next step was to organize it to develop a framework in which to begin to solve the problem. In this phase, we were introduced to the DW Legacy Design® Process, which aids in aligning the team to a collectively-developed project story. In the full group and in individual teams, we articulated the critical problems that needed to be solved. We referred to this critical problem as the project's Dilemma. What is pushing back on a positive outcome for the project? Assimilating what we knew at this stage, and without getting into design, we then hypothesized as a group the anticipated solution of the project, which we called the Thesis. We tested our Thesis against Narrative Principles which are statements that articulate universal truths that enable us to build a strong foundation for the project. We established Legacy Goals in the four Legacy Design categories: Environment, Art, Community, and Economics.

**DIAGRAMMING** In our teams, we engaged in a diagramming session to quickly discover and communicate ideas. Diagramming is an important step to take abstract things, such as narrative principles or stated goals, and to begin to locate them on site. Diagrams are distillations that ultimately were synthesized into a complex project solution.

**SYNTHESIZING** The balance of the Design Week utilized the earlier foundation-building sequence and discovery processes to forge synthesized design solutions. Beginning with the development of "straw plans" to quickly capture and locate the major design moves, and moving on to concept designs, all of the thinking and strategizing was captured in a final proposal that reflected the stated thesis and Legacy goals.

RAPID CYCLING For the majority of the Design Week, focus area teams worked together to evolve concept designs, using the foundational project stories, principles and frameworks developed in previous exercises. We called this process of quickly iterating the design Rapid Cycling. The teams went through a sequence of pin-up critiques, design reviews and a final presentation within the student groups, members of Design Workshop and Clemson University Faculty. Through these various reviews of the designs, alternatives were developed and concepts were refined and improved. It is a core value of Design Workshop to foster a transparent design process and to pin up the work frequently to seek outside objective feedback.

#### CAPTURING, STORYBOARDING, COMMUNICATING AND PRESENTING Throughout Design

Week, we emphasized the need for continual capturing of work completed and the importance of storyboarding presentations to improve the articulation of the project story both verbally and graphically.

As the concept plans became more finalized, the teams focused on crafting an effective presentation. Tips were shared to assist in organizing the information graphically in order to clearly convey the great ideas developed over the span of Design Week. The teams also assessed areas in which additional studies needed to be made to effectively tell a story.

Teams presented their work to members of Design Workshop, Clemson University Faculty and the Hilton Head leadership and stakeholders. At the end of Design Week, all charrette documents were be compiled to produce this summary booklet. The booklet will be electronically available to all Design Week participants and project stakeholders.

**DELIVERING AND STORYTELLING** Each team was required to have completed the following list of deliverables for the final presentation in order to trace the thought process and to tell the project's story in a compelling and concise way:

- List of issues affecting the project
- Dilemma and Thesis
- Site visit diagrams and sketches
- Napkin sketch
- Narrative Principles and Goals in each Legacy Design category
- Diagrams

- Concept Design
- Illustrative Concept Plan
- Illustrative Vignettes

(sections, perspective sketches, etc. to be determined by each team that further elucidate design proposals)

- Strategic Service-related deliverable
- Storyboard of final presentation

# project statement

## dilemma

Hilton Head has seen significant growth since its early days when Charles Fraser and colleagues established the seminal project Sea Pines resort in the late 1950's which established our basic notions about how resort master planned communities should be considered. Following Sea Pines, the large "Plantations" on the island developed to various levels of quality and integrity into fairly low density amenity oriented communities that catered to beach goers, tennis players and golfers. As part of their development, and in keeping with the times they were developed in, the Plantations were designed in a suburban model where densities were low, the social and commercial environment was limited to mostly recreational amenities and little or no interconnectivity was established between the various Plantations. Additionally, most of the Islands connectivity (bike and auto) and commercial traffic have been funneled onto two arterial roadways that transverse the island creating traffic and pedestrian issues (It is important to note that efforts were made to create design guidelines that helped to control signage, setbacks and landscape along these arterials). Finally, given the Island's popularity as a vacation destination as well as a permanent functioning place to live, much of the attractive developable land has been consumed in this pattern, leaving few opportunities for future growth on the Island itself. New development occurs off Island accentuating the issues associated with urban sprawl.

## thesis

Given that ideas have evolved about the nature of resort communities since Seaside and others were developed, and since amenities like tennis and golf are not as supportable from an economic perspective as they may have been in the past, and since ideas about the nature of arterial roadway infrastructure and inter-connectivity have evolved toward urbanizing principles, an opportunity exists to envision Hilton Heads future in a new form that can support more economic growth while maintaining and or expanding upon the cultural and environmental qualities that have made it a popular resort destination for the last 60 years. A new vision can be considered Island-wide from a long range planning perspective in order to create new environments and expanded development capacity that will meet the expectations of old and new visitors as well as permanent residents. Areas of study may also include underperforming golf courses, the corridors established by the arterial roadway network, the beach front environment, the establishment of new centers and linkages, and a fresh look at environmental design issues.

# site specific requirements

Each must have at least one "center"

- May be defined by or include facilities for social interaction, community services, recreation, cultural uses, employment, and shopping.
- "centers" should be within ¼ mile walking radius of residential.

Each must have a residential component.

• Consider a range of affordability options and housing types.

#### Environmental Issues

• Preserve important environmental components including:

Existing water bodies, subject to strategies for mitigation (replacement of poorly functioning system with a smaller and better system).

Functioning ecosystems

Preserve (or restore to its natural state) 25% of each parcel.

Dedicate 10% of each parcel to water management, active recreation and connectivity.

Commercial parked at four cars/1000sf, with 325 sf allocated per parking space as a minimum. Building height should generally be capped at four stories to maintain character and scale of the island. This will keep the architecture below the tree canopy and preserve the character of the island.

Use/Description	SF	FAR	Acreage
Resort	50,000.00		30.00
Hotels (2)			8.00
Commercial	350,000.00	4.50	36.16
Open Space			109.75
Additional Programmed Parks		ĺ	15.00
Roads/Infrastructure			43.90
General Office	150,000.00	3.00	10.33
Waste Water Facility		ĺ	13.75
Waste Water Treatment Pond			1.00
Elementary School (1)			8.00
Day Care (3)			6.00
Churches (3)			6.00
Community Center			6.00
Ecology/Education Center		ĺ	6.00
Residential			
20 DU per Acre		İ	46.25
10 DU per Acre		İ	46.25
4 DU per Acre		İ	46.25
TOTAL	•	,	438.64

TOTAL		439
Site 3		180
Site 2		105
Site 1		154

town owned property





project site boundary

# team 1 winner: best concept

Katie Lloyd, MLA
Jennifer Buchanan, BLA
Gradey Grumman, BLA
Reid Bagwell, BLA
Nick Allport, BLA
Manny DeOliveira, BLA
Akshay Badwe, MLA
Anthony Aten, MLA
Scott Aulen, MCRP
Mills Armstrong, MRED
Roddey Jordan, MRED



#### dilemma

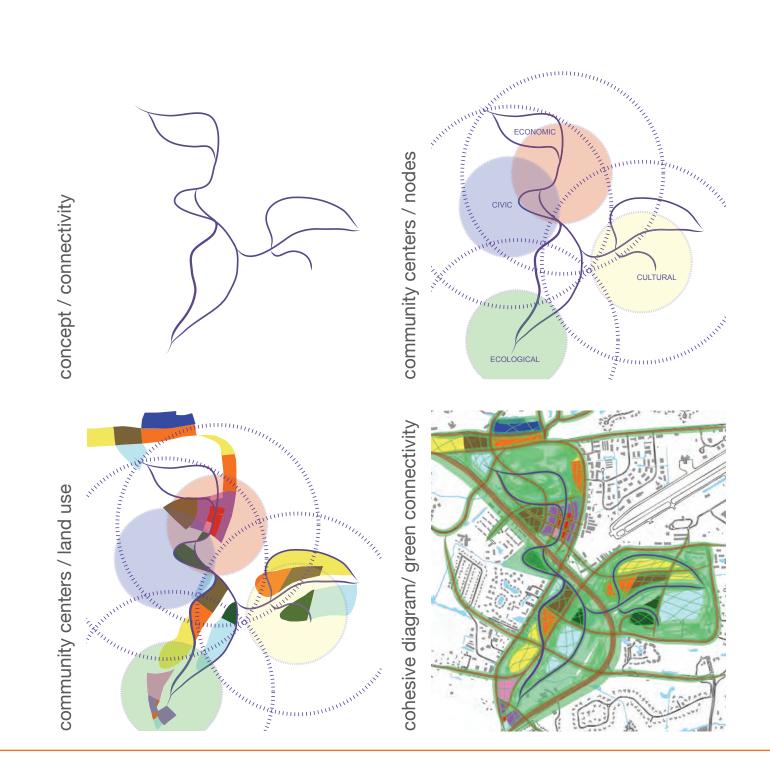
Although the Town of Hilton Head, SC offers residents and tourists a lowcountry island paradise, it is physically, socially, culturally, and economically fragmented. From a physical standpoint, the landscape lacks interconnectivity due to disconnected transportation systems, gated community entrances, and substantial tracts of privately owned land. Socially, the island's resident population remains segregated from both the off island workforce and tourists. This is further exacerbated by a lack of public and civic destinations. Culturally, the island's populace lacks sufficient diversity. Fore example, the Gullah/Geechee population continues to shrink and limited affordable housing prevents younger families from inhabiting the island. Economically, golf is not the lucrative force that it once was and businesses are struggling to remain on the island. The appeal of relocating to the ever-growing Bluffton has captured many of Hilton Head's retail amenities. Environmental considerations are immense. The fragile barrier island ecosystem is constantly threatened by development and attempts to prevent the evolving beach shoreline from encroaching on the seaside architecture. The aesthetics of Hilton Head are quite distinctive within some of the gated communities, however, the lack of housing diversity creates monocultures both in the appearance of the place as well as in the individuals that are attracted.

## thesis

The key to Hilton Head's future involves the interconnectivity across all physical, social, cultural, economic, environmental, and aesthetic considerations. Through interconnectivity, Hilton Head will begin to attract a more diverse population, provide variety in architectural character and housing options, generate abundant job opportunities, and preserve healthy island ecosystems. An essential component to insuring social/cultural connectivity is creating commanding public space. Currently the island lacks the quality of public amenities found within the planned communities, so there is no incentive to leave the gates. By enticing people to shop, dine, and relax within a communal town center, the physical and metaphoric barriers will start to diminish between the residents, workforce, and tourists.

#### vision

The proposed plan will create a multi-modal greenway transportation system that links the ecological, cultural, economic, and civic destinations in and around the new town center, ultimately achieving a diverse human-scale sense of community. Three cultural destinations will be created in the form of a satellite college campus, nature center that focuses on island ecology, and an expanded library and technology center to attract young professionals. These destinations will be linked by the greenway system and will lead to the central commercial core. An expansive, vegetated pedestrian bridge will link the commercial core to a community arts center with an outdoor performing green, while traversing highway 278. This main thoroughfare will become a multi-way boulevard that will consist of four lanes of high-speed traffic centered between two lanes of local roadways and street side parking. Additional outlet opportunities and increased road connectivity will ease the strain of this arterial, where as the on street parking will ensure the fiscal success of the retail businesses. The Hilton Head of tomorrow will not only serve as a paradise vacation destination, but will function as a cultural, environmental, and educational hub providing amenities for the newly diverse resident population as well as the year-around eco-tourists and vacationers.







Just as Charles Fraser let the natural environment dictate the architecture of Sea Pines, the expansive greenway systems physically shape this development. Varying densities of tree canopy allow for diverse ecosystems and various edge habitats for wildlife. At the apex of the town center, looking over the lagoon, an organically woven wooden structure will serve as an open air market for community activities, including a location for the Gullah/ Geechee residents to share their cooking, crafts, and culture.

# site metrics:

- Increase of 14.5 miles of multimodal transportation network
- Increase of 100 acres of recreational green space and public open space while preserving 160 acres of woodlands and marshes
- 200 units of rent controlled medium and high density units and tax incentives for housing



The eco-tourism resort will allow vacationers direct access to Hilton Head's natural amenities, as well as the educational and cultural resources of the new town center amenities.



Downtown Hilton Head will constantly be crawling with residents and tourists, as they shop, dine, and relax together. Permeable pavers will designate on-street parking, as well as pedestrian walkways while allowing for stormwater infiltration.



The rapid cycling allowed the project to evolve and conclude before ever becoming boring or old. The pace kept an excitement over all of the students.

—Design Week Participant

# team 2

Elise Herron, MLA
Willie Lee Jones, BLA
Sanders Chapman, BLA
Daniel Giordano, BLA
Lisa Marie Girard, BLA
Ryan Letzeiser, MLA
Vineet Date, MLA
Priyanka Jagdale, MLA
Bill Aultman, MCRP
Shep Benjamin, MRED
Adam Mitchell, MRED



## dilemma

Hilton Head has a long history as a popular destination for family beach vacations and golf. However, the interests of residents and visitors have started to change and diversify, causing the singular economy that once thrived to show signs of decline. As values evolve, Hilton Head needs a plan of action in order to create an identity and remain relevant. This plan should address the interaction between residential and touristic public spaces, attract and provide for a younger demographic, and provide a distinct gateway and vibrant town center for everyone to enjoy.

#### thesis

In order to accomplish our vision for Hilton Head Island, a town center centralized on 439 acres will be the catalyst for new development focusing on the community and environment. This town center will cater to the retail needs of residents and tourists targeting all age demographics. It will be a new destination, including high and medium density housing, retail space and will incorporate a greenway flyover, to link three distinct areas. This flyover will provide access points to these newly developed areas and will improve pedestrian mobility.

#### vision

#### Connectivity

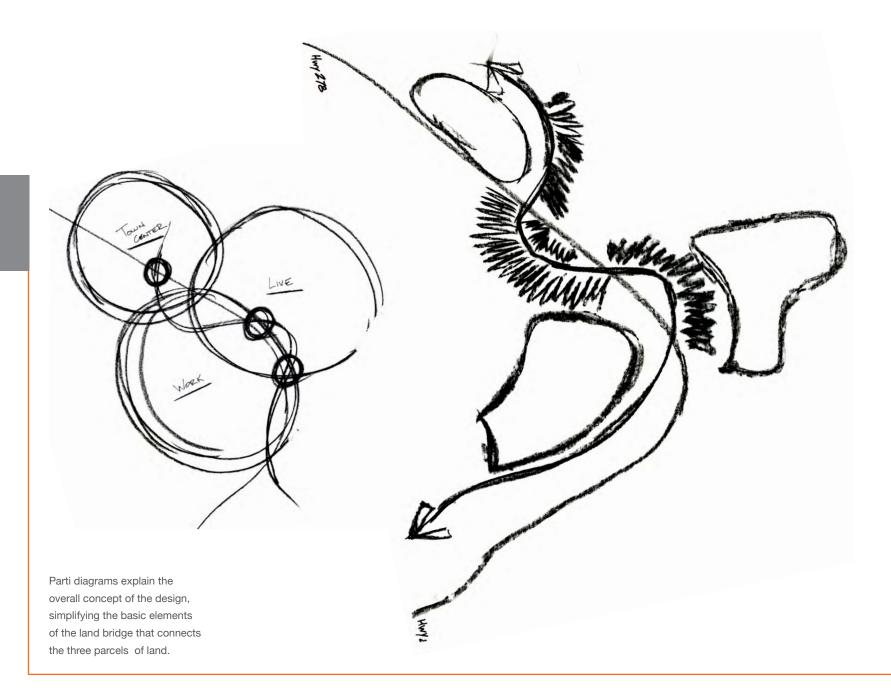
The three parcels of land are located on opposing sides of the major island connector Highway 278. In order to promote a sense of connectivity between all three areas of development it was important to physically connect them. An elegant flyover land bridge would allow access to users from all areas of the development. Residents and visitors would be able to walk from one area to another surrounded by lushly planted beds filled with native plant species without having to cross high traffic roads.

#### Gateway

The flyover land bridge would serve as a landmark noting the location of the new town center and welcoming visitors and residents to Hilton Head. This inspiring and iconic gateway denotes both the entry and exit depending on the direction of traffic. By providing a distinct destination, we hope to provide a place to see and be seen; an active environment, social in nature, instantly attracting visitors.

#### Open Space and Preserved Woodlands

Wherever possible, existing green space is preserved rather than developed. As a result areas that are developed are done so at a higher density. The green spaces are seen as natural amenities that should be accessible to all residents and visitors. Passive forms of recreation should be incorporated into these areas to provide safe access to people of all ages and abilities.

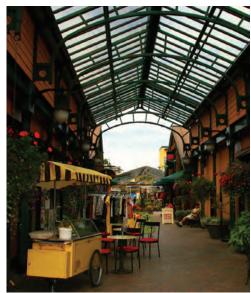




The master plan depicts the density of the developed areas and the undisturbed green spaces. Commercial, technical, and residential areas are all connected with the land bridge.





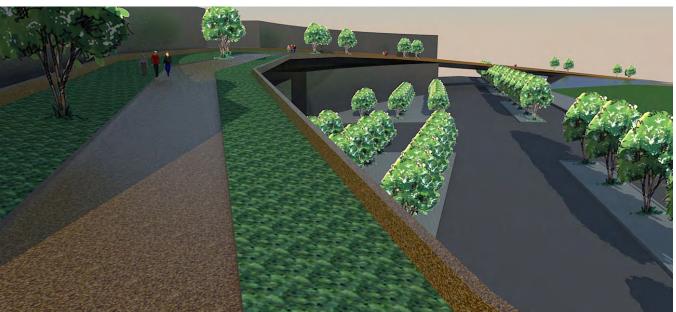




The master plan is further explained by depicting the zoning in correlating colors. Examples of the built environment and materiality are shown on the right.



This rendering depicts the openness of the urban plaza that is the culmination of the land bridge into the new town center.



This rendering depicts the land bridge as it would cross Hwy 276. The land bridge would be vegetated through out its entire length.



The most beneficial aspect of Design Week was the collaborative work between disciplines. Compromise and cooperation achieved the goals of the project. Each could input his/her expertise, but, the overall project had to be a combined effort.

- Design Week Participant

# team 3

Susannah Horton, MLA
Adam Kozic, BLA
Nick Myers, BLA
Carlin Bartlett, BLA
Ally Hangartner, BLA
John Lashley, MLA
Mike Kulik, MLA
Nate Collier, MLA
Erica Christensen, MCRP
Natalia Valenzuela, MCRP
Taylor Brown, MRED
Elizabeth Moeri, MRED



## dilemma

While Hilton Head Island is a beautiful vacation spot and an ideal retirement place for many, the island is lacking a central core. Residents from each development are isolated from one another as well as from the tourists and that in turn promotes the use of personal vehicles and limits opportunity for social interaction. Currently there is no incentive for young professionals to locate to the island due to lack of stimulating jobs, the high cost of living, and the relatively few cultural opportunities. A majority of island visitors are seasonal so the island has a transient feel with no real sense of community outside of the gated communities.

The main constraint is the high speed, high-density highway, Highway 278, which splits this site, making pedestrian connectivity extremely difficult. This highway also serves as an evacuation route limiting the possibility for changing it. Another concern is the marshland that comprises a large portion of the site and limits the area we can develop.

This site has an advantageous central location on the island. People from all sides of the island can meet in this location, which also has prime access to the existing medical center and airport. While Highway 278 is a constraint, it provides a development opportunity due to high traffic volume, visibility to the site and direct access to the beach. The eastern portion of the site is currently a golf course and is viable fertile land for adaptive reuse.

# thesis

If we build upon existing physical, social and economic connections and form bridges between the cultural and generational gaps, these connections and bridges will create a unique and compelling community that will make the island a viable place to live, work, and play for the current and future generations.

#### vision

The overall vision of the team is to establish an interconnected community town center, implement viable transportation options, provide opportunities for strategic recruitment of innovative companies and research institutions to promote a cluster of green jobs, attract young residents to the island through creation of innovative jobs and culturally rich town center, to support local Gullah people, and to employ preservation techniques, responsible farming, and ecotourism to keep the island viable for future generations.

#### Town Center

To encourage a sense of community and to provide a central gathering place for people from all walks of life we proposed a mixed-use town center. This town center creates work opportunities through commercial and office space and will support the green and medical research through innovation and service jobs.

#### Transportation

An electric trolley system is proposed connecting the airport and surrounding area to the site. The trolley will stop every ¼ mile along the perimeter including a stop at the beach. Additionally, the trolley will stop at every other block in the town center.

#### Open space

While a large portion of open space has been preserved it was the goal to make sure that it was usable open space. One type of usable open space was defined as wildlife and nature preserves, which includes an extensive boardwalk and trail system with an informative nature center.

#### Green Energy Research

The large water treatment plant currently in existence was expanded upon in the southern part of the site into a green energy research facility. This facility was designed to be a permanent job generator for the island and to attract young professionals with its innovative nature.

#### Agriculture and Culture

Moving to the east, we enter part of the site, which embraces the island's identity and encourages sustainability. The golf course was turned into an agricultural and cultural center through adaptive reuse.

Beginning with a study of land uses the team then used the Parti diagram (below) to articulate the type of spaces and their connections. We then moved on to a series of diagrams (right) that studied the different layers of connections within and around the island.





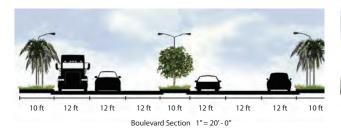


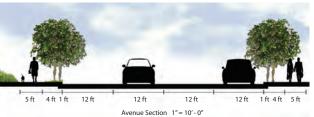






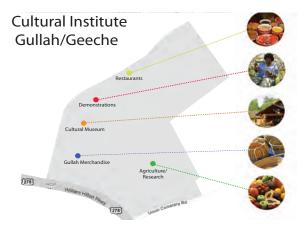
The green energy research center provides a beautiful living and working environment as well as many opportunities for recreation.







The different street types provide a range of different experiences through the site. The most memorable experience will be the land bridge that connects the three diverse areas.





(Top Right): Nestled along the edge where the shore meets the wetlands, the nature center provides a stopping point for boardwalk goers. (Right): With convenient stops, the electric trolley is an easy way to get around town.





The master plan connects three currently isolated areas through the use of land bridges and extensive bike and pedestrian paths. By using a modified grid on each side of Highway 278, there is more permeability through the site and to other spots on the island.



The collaborative nature of the program and the relatively high level of independence in our design direction was most valuable. —Design Week Participant

# team 4 winner: best teamwork

Tiffany Managad, MLA
Jack Cebe, BLA
Will Ayers, BLA
Mallory Clark, BLA
Cody Zanni, BLA
Corina Mundry, BLA
Joey Burton, BLA
Christine Rollins, MLA
Beyza Sen, MLA
Gina Hartness, MLA
Kerri Palma, MCRP
Brien Buffington, MRED
Derren Pellegrin, MRED



# dilemma

Hilton Head Island is a popular destination for vacationers wanting to spend time at the beach relaxing, shopping, golfing, playing tennis and enjoying the unique and beautiful environment and culture that defines South Carolina's coast. When Charles Fraser conceived his vision in the 1950's for the then undeveloped island, he stressed the importance of preserving and building upon the current character and natural beauty of Hilton Head Island. His innovative foresight is what still makes Hilton Head attractive to so many people today. Despite its successes, in recent years, the town of Hilton Head has been facing growing economic, social, and environmental issues. Industry and employment on the island are largely seasonal and centered around beach tourism. Since affordable housing is almost non-existent on Hilton Head due to high property values, this has resulted in service workers having to be bussed in from as far as 2 hours away to fill jobs on the island. The focus on Hilton Head's tourism industry has also led to limited opportunities for new businesses and permanent residency. This not only reduces the financial stability of the town, but also gives Hilton Head a transient sense of community. The island also does not provide the resources and amenities to attract younger residents and families. Scientists predict the probability of as much as an 1 ft sea level rise in the next 100 years as a result of several factors such as global warming. If this is the case, a majority of Hilton Head Island's current waterfront development will be susceptible to encroaching sea levels, changing the way future generations will inhabit the island. The availability of clean, fresh water is also a major issue due to the minimal annual rainfall, shallow aquifer, and high intensity water-use on the island. Irrigation used to maintain the golf courses and residential lawns on the island have created stress on the water supply.

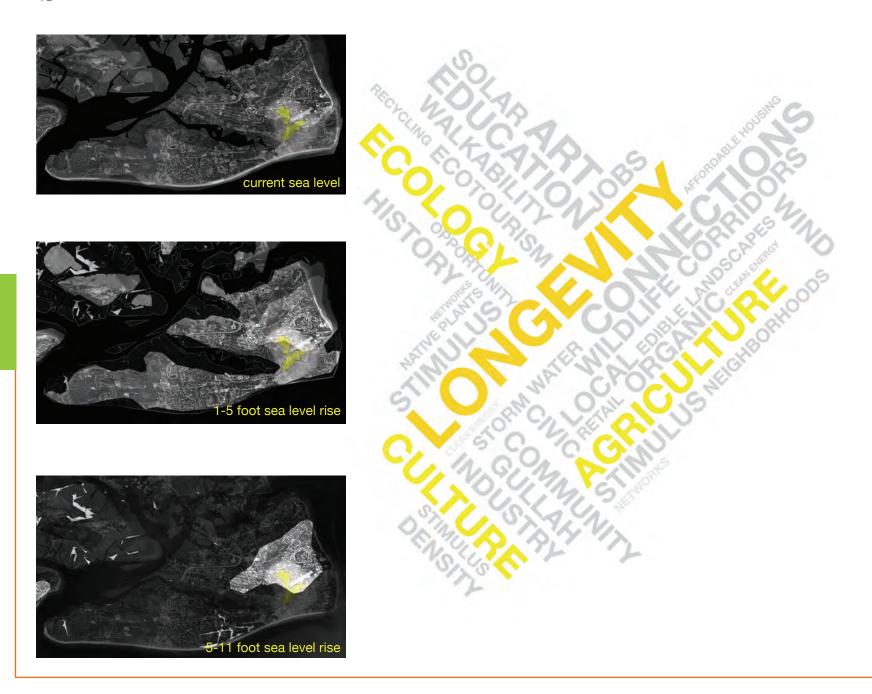
## thesis

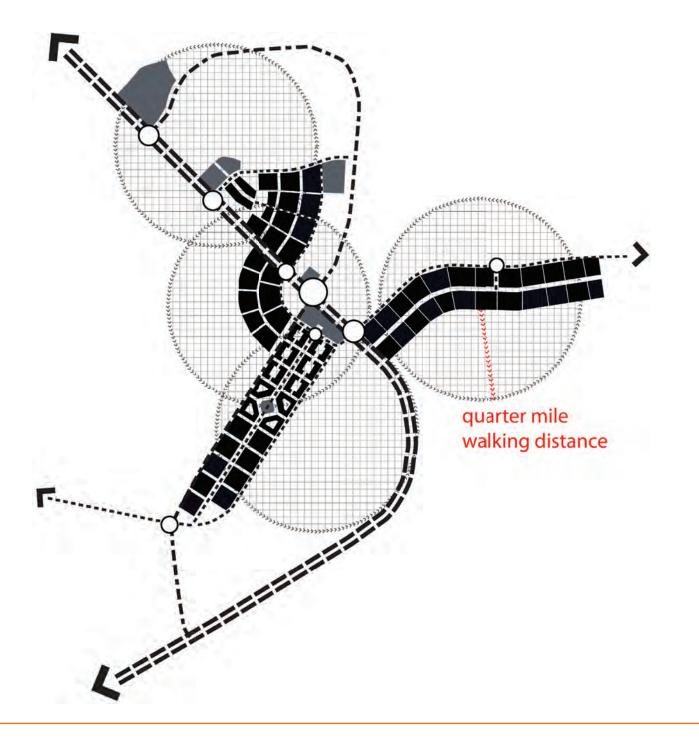
Hilton Head Island currently lacks a cohesive, permanent community and faces several pressing environmental issues. Our team proposes to create permanence for Hilton Head Island to address these growing issues and concerns. This permanence could be achieved by enhancing the identity of Hilton Head by creating attractive opportunities for a younger sector. The design proposes incorporating new educational amenities such as wildlife museums and a medical research center. In addition to educational attractions, ecotourism will be a central emphasis. New ecological outdoor opportunities would foster active, healthy environments and be accessible for both residents and tourists alike. The main driver of the design culminates in a synergistic central town center. Affordable housing will be addressed along with new jobs through clean energy industries. Overall, the goal is to celebrate the island's unique character for future generations through designing for permanence and sustainability for the community, the environment and the economy.

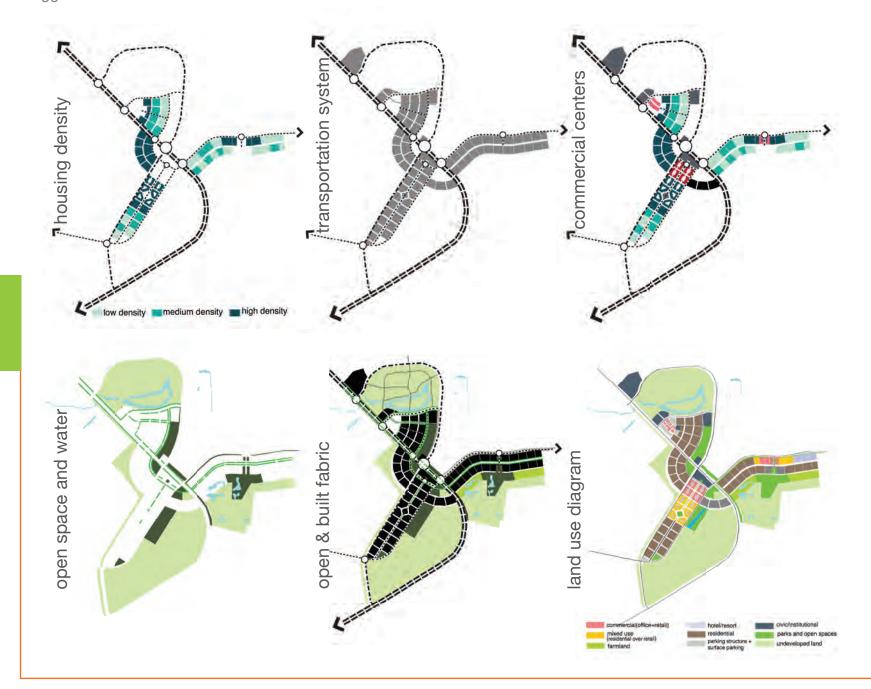
# vision

This vision will be achieved through a series of strategic goals and objectives to be implemented on the site:

- Create a Town Center to draw a more diverse population to the island, grow and expand business opportunities, increase population density, and provide a place for culture and identity to develop.
- Create a network of alternative transportation opportunities to improve the ease and equality of accessibility, attract a more diverse population, and reduce the emphasis and dependence on the car.
- Expand opportunities for outdoor recreation that attract people, protect and enhance the environment, and educate.
- Create a center for local, sustainable agriculture.
- Design for the probability of sea-level rise.









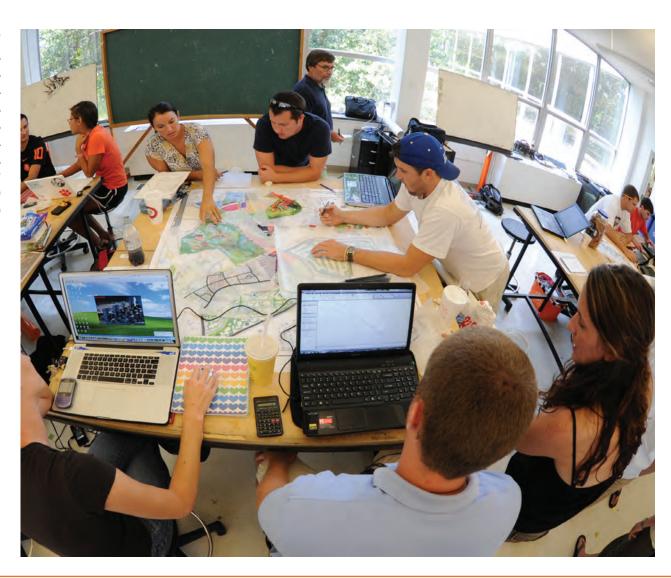
Proposed site design showing the town center and supporting residential communities linked via a multi-modal transportation system and connective green infrastructure systems.



I found it extremely valuable to be working in a firm like setting. I now know I will enjoy my field of work when I get out of school. —Design Week Participant

# team 5

Morgan Malley, MCRP
Megan Corbett, BLA
Brenda Diaz, BLA
John Bradley Little, BLA
Rachel Powell, BLA
Casey Davis, BLA
Virginia Bailey, MLA
Erika Mueller, MLA
Mill Graves, MCRP
John Robertson, MRED
Gwinna Cahal, MRED



## dilemma

The limited range of residential, employment, and economic opportunity on Hilton Head Island has led to agglomeration of development off the Island, ultimately causing the absence of a core public place. Furthermore, the lack of public transportation coupled with the influx of commuters encourages automobile dependency and the congestion of Route 278, the only access onto the Island. In order to attract a diverse population and sustain growth in a manner that preserves Hilton Head Island's environmental integrity and cultural heritage, a new paradigm of development must be put forth to overcome these challenges:

- Absence of core public place
- Lack of employment and housing diversity causing wealth disparity
- Limited alternative transportation options and poor connectivity limiting public access

# thesis

With the site spanning Route 278, a new public center at this location will serve not only as a gateway to destinations throughout the island but as a place of unique cultural, economic, and social value- a placeway. This placeway shall be accomplished by promoting diversity through a variety of housing options and employment opportunities, as well as accessibility with a multi-modal transportation network. We believe these inclusionary elements will foster innovation, local economic growth, and enrichment of the entire Island.

## vision

In the next thirty years and beyond, we envision Hilton Head Island as a diverse and accessible community grounded in an environmentally conscious framework where a central town center, interconnected neighborhoods, long-term economic vitality, and cultural heritage advocacy play an integral role in crafting sense of place. This site shall be is a place where citizens and visitors live, work and play as one community that will last for years to come.

- Livable Community Center
- Economic Innovation- Attracting Jobs and Diversity
- Environmental Conservation and Landscape Integration
- Cultural Heritage Preservation

#### Community Center

Purpose: To form a civic center that serves both the community and the surrounding neighborhoods as a crossroads of social, cultural interaction and means to other points on the Island.

- Commercial center with a main street terminating to a community greene where a local music, food, and art can be exhibited in the form of markets and fairs
- Mix of uses- retail, office, and housing

#### Research and Development Institute

Purpose: To cultivate economic innovation through a world class institute focused on research and development of bio-medical technology that may serve not only as headquarters for corporate executives, but a retreat for visitors and a progressive live-work experience for residents.

- Island visitors center with transit connection to airport as
- Retreat for hospital visitors and airport travelers
- Bio-medical employment center- research campus, offices, light industrial uses

#### Agricultural Cohousing Campus

Purpose: To preserve the Island heritage of fishing and farming with a farm-to-table model that utilizes existing open space to provide for a co-housing community built on public health and nutritional education, bringing the old and young together.

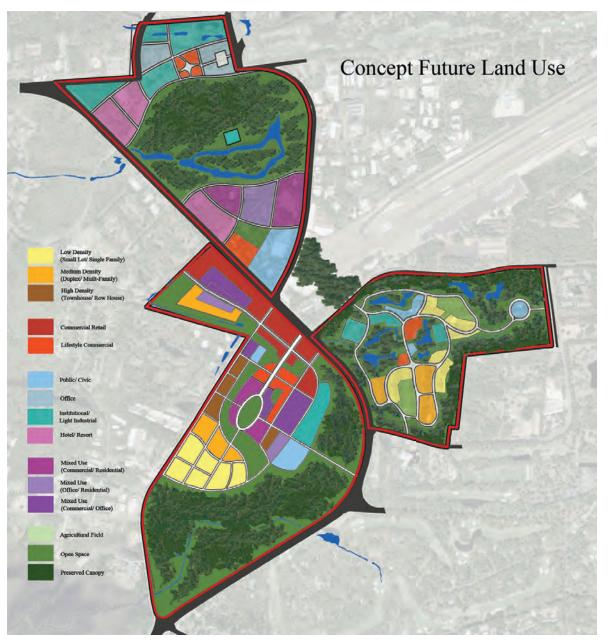
- Utilization of developed open space for agricultural fields and educational center
- Neighborhood centers provide locations for selling locally grown agricultural products

# PLACEWAY

built environment + natural environment + people as culture



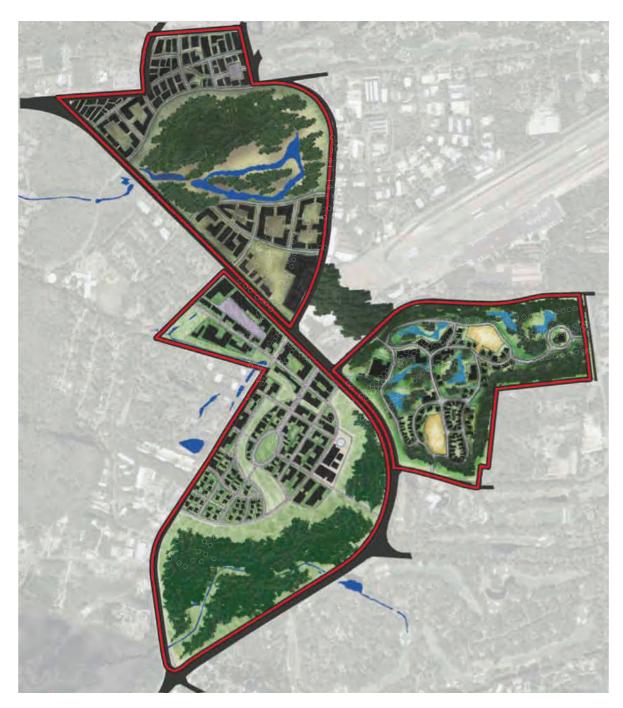




The community center located at the southern side of the site includes a gradient of housing densities, where public open space serves as the major transition between primary commercial center and residential. A ring road serves as development barrier to the conserved land that buffers environmentally sensitive areas including Broad Creek.

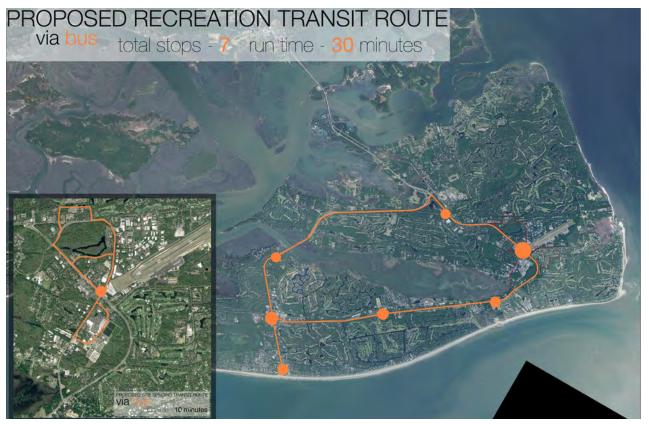
The research and development institute is located in the northern most corner of the site and includes a mix of office/retail/housing uses to create a live-work environment. This is supplemented by preserved tree canopy and additional active green space.

The agricultural cohousing campus is located at the eastern side of the site, and consists of low-medium density homes, Mitchellville influence, serving seasonal population. The existing canopy of the site was entirely preserved.



The plan creates an accessible and multi-modal community grounded in an environmentally conscious framework based around a town center and interconnected neighborhoods.





The downtown in the community center consists of a walkable street system that is organic yet defined. It furthermore serves the multi-modal goals of the community by providing designated lanes transit and bike that will connect to Island's existing network. Muti-modal transportation allows for multiple forms of transportation with integrated bioswales and medians for water management.



I learned a lot... I loved everything Design Workshop had us do process wise — I will most likely assimilate this into being my own personal process in future studios. —Design Week Participant

# team 6 winner: best presentation

Ryan Medlen, MCRP
Bear Cheezem, MRED
Jessica Robbins, BLA
Brian Kisko, BLA
Caitlin Seamon, BLA
Colleen Williams, BLA
Nathan Cox, BLA
Brad Goshorn, MLA
Yang Song, MLA
Seth Robertson, MRED



# dilemma/thesis/vision

Think Charles Fraser meets Charles Darwin.

Hilton Head Island is unequivocally a unique place. This is a fact team six put at the forefront of our thoughts during our first brainstorm session. Rather than imposing our vision arbitrarily on Hilton Head, we are seeking to integrate new elements into the existing culture and place of the island. Instead of asking how we can improve Hilton Head, we ask what the town's natural next step is. Hilton Head is comprised primarily of planned urban developments of unique character encompassing 70% of the island. In addition, native Gullah communities contribute to the island's rich cultural heritage. Theses factors reflect that design is not lacking nor is identity, rather the opportunity present in building on these to enhance Hilton Head's sense of place. Outside of these gated communities, the island is in need of a commercial core to anchor their economy and a central location to serve as a gathering place for residents. From here the dilemma is apparent: develop a town center that creates a sense of place, community, and history for Hilton Head Island.

Considering our defined dilemma, we examined the site for opportunities to utilize the existing state of the island to lead us to solution rather than imposing an overhaul of the landscape. Early-on we saw that while the whole site was 439 acres, there were three distinct areas that each represented a different style of the island. Mathews Drive offers the opportunity to build on existing retail and develop a commercial core separated but directly connected to the main arterial of the island for access to all residents, as well as a Gullah church to anchor a connection to island heritage. An underutilized golf course with airport adjacency creates an environment conducive to innovative corporate satellite office developments which encapsulate the Hilton Head lifestyle. To the north, a wetland in its natural state sets an area up for compact development close to a commercial center and a maintained connection to nature. Each of these areas has opportunities to take on unique identities that will evolve the landscape of Hilton Head Island into a cross-generational, dynamic environment.

These three districts we envision as separate but complementary. Respecting the differing opportunities the goal is to connect them and design them in a way so that they work together. Our design looks at the natural flow of pedestrian and automobile traffic to improve the area in a manner which will naturally integrate it with current island life. Using the entire opportunistic site, our vision is to create a town center that will bring Hilton Head into the next generation and be an example for the rest of the island as a destination for residents and visitors, a node of public interaction, natural preservation and recreation, while keeping its identity and advancing the towns economy. We believe Hilton Head need not change, nor do we see a desire to change amongst residents. Rather we see the need for enabling development that will serve as a catalyst for placemaking, economic growth, and fiscal stability. Elements of our vision may be viewed as outlandish, similar to the criticisms of Charles Fraser's original vision of Sea Pines. Improbable ambitions are what built Hilton Head into the attraction it is today and that same spirit is what will move the town forward. The plan we present asserts that the landscape of Hilton Head Island need only encouragement to emerge as an icon of community just as it is already an icon of paradise.





The masterplan unifying the three separate area plans into a complementary district creating a town center.



Matthews Drive, already a bypass of Hwy 278, harnesses traffic flow to create a vibrant corridor of retail, office space, and entertainment. This neighborhood will provide opportunities for new stores in Hilton Head, reduce retail leakage while including a district for businesses to identify as the logical place to develop a startup company. An existing Gullah church on the south end provides an ideal focal point for cultural expression, education, and entertainment via an outdoor amphitheater and Hilton Head Heritage discovery trail, allowing a modern downtown to emerge.



The proposed downtown area includes two landscaped traffic circles with fountains as center points in the retail and office districts.



The Drew Laughlin Skywalk connects new City Hall to the Visitors Center and permits safe pedestrian crossing over Hwy 278.



Design Week reinforced the importance of time management, identifying and assigning hierarchy to key elements, as well as the willingness to collaborate and compromise with other members when creating and implementing design.

- Design Week Participant

## team 7

Adam Tietz, MRED Ryan Hunt, BLA Sean Haviland, BLA Chris Pierson, BLA Courtney Smith, BLA Kim Thoures, BLA Hunter Rigsby, BLA Blake Thomas, BLA Jing Zhong, MLA Eric Mixon, MCRP Trey Conway, MRED



### dilemma/thesis/vision

Hilton Head Island, South Carolina is a unique place and a world-class destination for visitors from all over the world. The island was originally developed primarily in the 1950's and 1960's as one of the top golf destinations in the U.S. Much of the growth on the island was centered on the traveler and catered to their needs. During this same time, the island began to see fragmented residential growth occur in gated communities that isolated themselves from the rest of the island. Since the original development of the island began it has, for the most part, been completely built out. Land prices have escalated to a point that make purchasing real estate on the island difficult for most people and discourages reinvestment in the existing developments. As a result, resident population is wealthy but aging, there is very little affordable housing, commercial centers are outdated, there is no one identifiable central core where residents can gather, there is very little office space to attract new jobs, and the pattern of development has made public transit very difficult.

Team Seven approaches the dilemma at hand by wanting to create an area that will serve as the social and cultural center for the island and its inhabitants while also providing areas for new jobs and high-density affordable housing. A network of greenways and an island wide public transit system that connects with the main land is also proposed.

The site chosen for the project can accommodate all of these land uses while preserving much of the open space. A mix of land uses is placed on the southern portion of the site including commercial, civic space, office, and high density residential. This area is identified by the team as the area that will serve as the "central core" of the island where residents can gather and events can be held. A public trolley system along a greenway connects the entire site.

The eastern most part of the site is primarily identified as being a medium density neighborhood in order to provide more affordable housing options. A small commercial node is also introduced in this area to provide the neighborhood with retail and restaurants. Surrounding the residential development is a network of green spaces and waterways in order to provide recreational opportunities for the residents and tourists.

The northern portion of the site incorporates mixed uses including high density residential and a large tract dedicated to office. This land could attract one or more large employers presenting new employment opportunities. The high-density residential and commercial areas of the site will provide affordable housing for newly created workforces. Finally, defined civic space will be preserved and used as a welcome/heritage center for the island.

The new design will adopt a green network of multi modal transportation opportunities that will connect the island to the main nodes of commercial, high density residential, and office spaces. When completed the site will serve Hilton Head Island by providing a heart for commercial and retail access, social interaction and recreational opportunities. It will also encourage the inflow of young professionals onto the Island.



#### General Land Use Plan:

The general land use plan shows a mix of uses throughout the site. Commercial (red) and mixed (purple) uses are introduced through the "core " of the site in order to create a critical massing of both people and structures. This mass will help to create an urban setting. Stemming out from the core of the site land uses become less intense but should contribute to the population that is necessary to support the central core. Much of the open space is preserved with both active and passive areas including a network of multimodal transportation (yellow-green) connecting all portions of the site. A large tract of land is reserved on northern portion of the site (dark blue) for large scale corporate development.



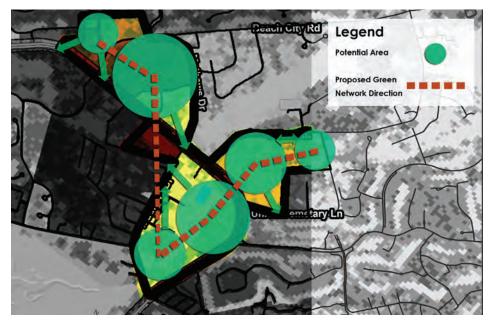
Nearly all of the existing greenspace was preserved and enhanced to encourage use by island residents and tourists alike.

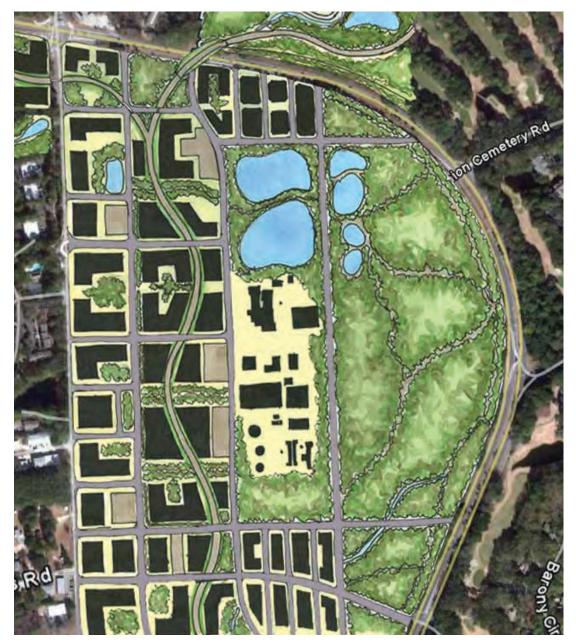
Opportunities will be created for people who live and work on the site to connect with other parts of the community via the green space network and landscape nodes.





A trolley or similar transportation system (green path) is proposed to run through the entire site providing even more connectivity. This line will run along an open, green corridor with the ability to support pedestrian and bicycle traffic. This system will tie into a larger island-wide light rail system (yellow path) that will parallel highway 278. The island-wide system extends off the island to the main land to provide alternative travel options for non-residents. A major stop connecting the light rail system and the trolley system will be located at this stop (star).







Site specific plan representing the central commercial and mixed use "core". The site will have a high concentration of buildings with a street network similar to an urban environment to encourage movement through out the site without an automobile. An emphasis is placed on keeping connections within the greenspace by providing ease of access to the trolley system through the center of site. Enhancements are made to the existing greenspace to ensure future efficiency.



Design Week reinforced [my] ability to synthesize a complex process into a cohesive understandable narrative.

- Design Week Participant

### team 8 winner: best overall

Jacob Jackson, MRED
Marc Meddaugh, BLA
Joshua Robbins, BLA
Tim Freitag, BLA
Miller Snyder, BLA
Todd Baxley, BLA
Chris Pay, MLA
Willa Qin, MLA
Willa Qin, MLA
Michael Hunt, MCRP
Jing Zhang, MCRP
Richard Cox, MRED



#### dilemma/thesis

Dilemma: Traffic congestion / Lack of transit options

Thesis 1: Re-align Hwy 278 and Matthews Drive, one-way couplets

Thesis 2: Introduce limited bus routes around site and to airport

Dilemma: Lack of walkability / connectivity

Thesis 1: Increase sidewalk/trail/path availability in new development

Thesis 2: Study pedestrian options across/over/under Hwy 278 and

Matthews Dr.

Thesis 3: Link new developments / use more of a grid road pattern

Dilemma: Existing commercial and residential developments are significantly underperforming with current practices

Thesis 1: Replace with compact urban developments

Thesis 2: Smaller, more efficient footprints and technologies

Dilemma: Difficulties retaining younger residents

Thesis 1: Create lively urban center with amenities directed toward younger users

Thesis 2: Implement schools and other development to meet needs of this demographic

Dilemma: Lack of workforce housing options

Thesis 1: Create developments of smaller, quality housing types at

lower price points

Thesis 2: Subsidize workforce housing and cluster near town center

Thesis 3: Utilize satellite campus area housing for seasonal workforce

Dilemma: Existing trees (especially Live Oaks) are disappearing

Thesis 1: Preserve existing trees

Thesis 2: Promote and nurture tree nursery/habitat areas

Thesis 3: Create island forestry pilot program (presumably within the

Campus/institutional area)

#### vision

Design Infinitum seeks to create a unique and innovative environment for Hilton Head Island that allows current and future residents a place of work, education, and recreation while providing a "sense of identity" in a setting where growth and prosperity can flourish while maintaining a harmonious balance within the natural world. Through extensive planning and design consideration, Design Infinitum can address & manage the issues facing the island's future as well as its present. Sustainability, traffic calming, pedestrian orientation, educational advancement, economic viability, generational conflict, and environmental stewardship can be assessed equally.

In addition to multi-modal transportation considerations, the design will incorporate all aspects of island life in a flowing and efficient manner, while designing for pedestrian connections alongside motorized transit. Effective water management through low-intensity runoff collection seeks to create an amenity from the treatment of stormwater through a greenway system that further emphasizes pedestrian access. The greenway will maximize economic potential and attractiveness through the design of a linear park system connecting multiple districts to amenities, both natural and built, while providing for safe crossing of US 278 via a light access pedestrian underpass. Active and preserved green space serves to provide aesthetic and economic benefits alike, allowing the enjoyment of the "outdoor room" in a way that will also provide incentives for local eateries, businesses, and local merchants to locate within its embrace. Local food producers, seafood suppliers, and artist involvement furthers the project's ability to provide its users for generations. Pleasing vistas and thoughtful land management allow maximal use of buildable space, and provide for office, retail, educational, and residential space to coexist in a manner that can satisfy the needs of residents, students, seasonal workers, and tourists equally. This all-inclusive design approach also produces an ultimately walkable community, no matter where a person lives, works or recreates within the project design area.

Design Infinitum seeks to provide the basis for smart growth and effective business management through the implementation of a higher education campus, interspersed within the village; College living, alongside traditional island living; All within a live-work environment which seeks to generate the synergy to provide a livable future for Hilton Head Island. Ultimately, the plan hopes to create a lasting vision of an inviting place to be year-round in a setting steeped in Hilton Head's rich heritage. Thoughtful land-use and preserved open space alongside a legacy design for the island's future creates a path forward for the island's prosperity, while remaining ever-mindful of it's colorful



Diagram identifying current land use against proposed future use and how it could be transformed into a more cohesive plan.



The re-routing of major arterial Highway 278 into one way couplets in order to create a downtown urban core.



View of the re-routed Highway 278 and traffic moving southbound by the downtown core. Two centered express lanes, two frontage roads, angled parking, and sidewalks for pedestrian activity.



View looking south over the new downtown city center promenade consisting of commercial mixed use and high density residential. A view of the transformed Highway 278 South on the right.



Specific plan identifying the downtown commercial mixed use plaza and promenade, residential nodes on the peripheries (including high-density apartments, condos, town homes, and single family detached near the airport), and an academic district to the north for the consideration of a university satellite campus.



View of the promenade looking south toward the giant canal and bio-swale, the commercial, core, and rerouted Highway 278 with one way couplets surrounding the new city center.

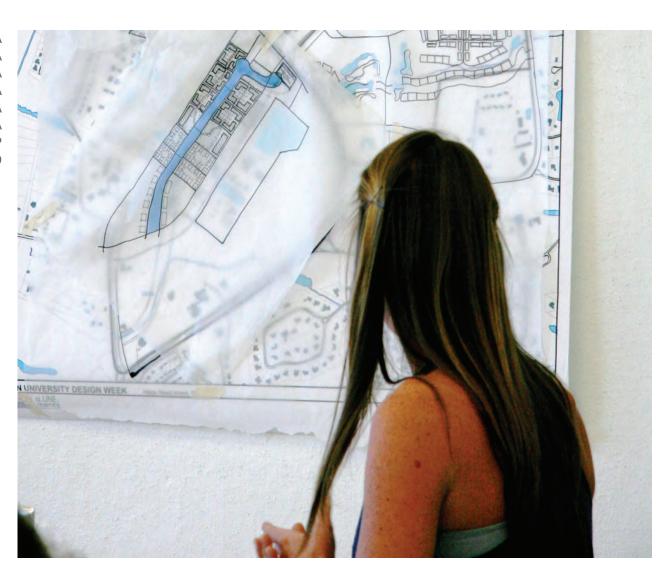


Diagramming allowed me to visualize and explain my creative thoughts more effectively, so that they could be critiqued and evolve more efficiently.

- Design Week Participant

## team 9

Matt Lincolnhol, BLA John Lindenmuth, BLA Lori Race, BLA Katie Fronek, BLA Jamie Russell, BLA Laura Signoretti, MLA Kirsty Sanchez, MCRP Neil Robinette, MRED



#### dilemma

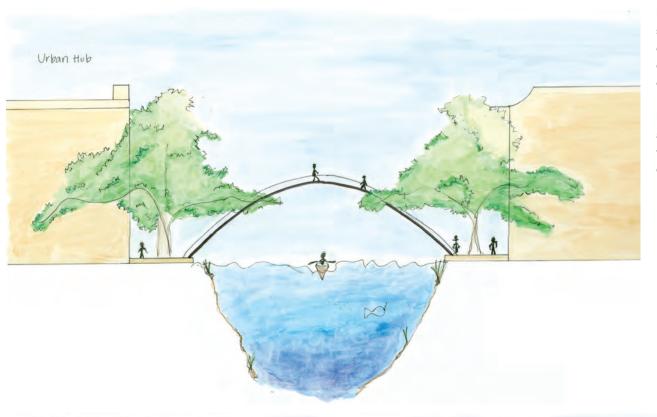
Hilton Head is an island located in the southern most point of the South Carolina coast that is defined by nature and nurtured by tourism. Once a beacon for development thanks in large part to the innovations of Charles Fraser, is now dealing with problems such as lack of connectivity and heavy traffic congestion. Various problems include predominantly low-density housing catering mostly to the service industry, no town center, weak green space connection, and little incentives for new businesses or young professionals.

#### thesis

Our mission is to transform the perception in Hilton Head from a low-density, segregated and separated entity to an environmentally connected community of smart growth.

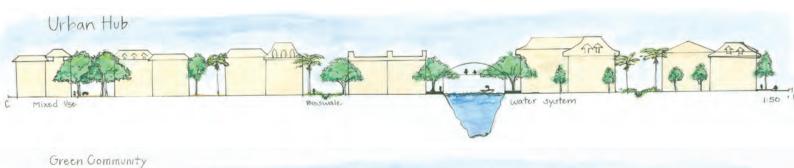
#### vision

Our vision creates a unique community consisting of three diverse centers connected by multi-modal transportation and sustainability. Our design will create areas of high, medium and low densities with mixed use development such as office space and retail hubs providing an exceptional quality of life for residents and visitors. The proposed environmental research institute will promote economic development by attracting permanent residents and visitors to the area and creating employment opportunities. The plan ensures the preservation of valuable ecosystems and open spaces and will integrate green technologies such as solar panels, bioswales, retention ponds, and electric buses to reduce human impact making Hilton Head Island a leader in sustainable and environmental responsibility.



Left and Below: Sections showing the high density in our Urban Core. Also note the canal system that provides extra modes of transportation.

Bottom: Section showing an array of density that respect the valuable greenspace and ecology running through it.





Master plan identifying the circulation problem that is prevalent on Hilton Head. The new regional transportation hub would connect different modes of transportation such as a blue way canal system along with a rapid bus system converging on 278.





A view of the ecological research park located in the civic sector.

Left: A view of the affordable housing units located on our site. Also these houses would act as a example for LEED housing that is affordable to the service industry workers working on the island.



A rendering of the blue way canal system located in the heart of a new urban core.



Being able to get real world experience and meeting the wonderful, knowledgeable and approachable team from Design Workshop created an amazing experience.

- Design Week Participant

# team 10

Daniel Merritt, BLA
Ben Miskelly, BLA
Madison Rice, BLA
Brennan Hansley, BLA
James Smith, BLA
Nolan Rish, BLA
Yi Zhang, MLA
Maria Ghys, MLA
Jason Tanenbaum, MCRP
Amanda Taylor, MCRP
Kate Graham MRED
Jimmy Williams, MRED



#### dilemma

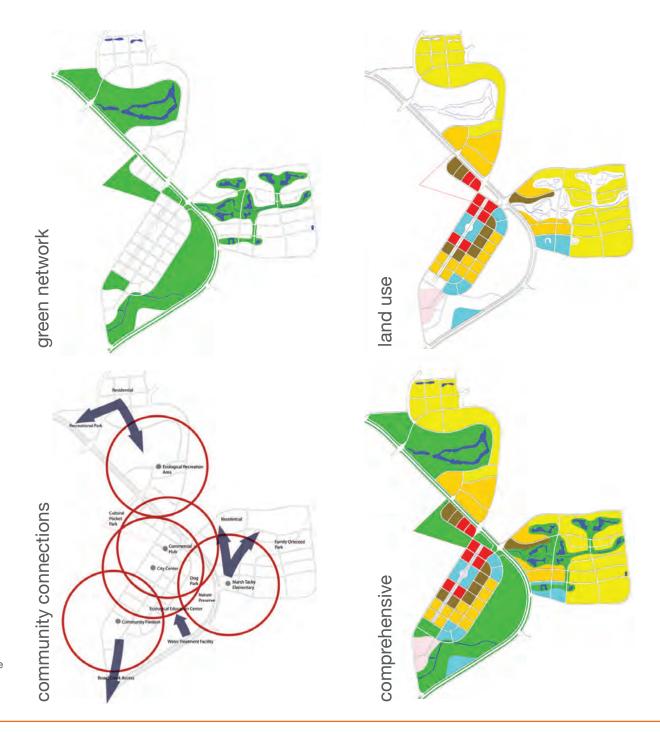
As Team 10 studied the project area, one dilemma was evident on Hilton Head: there was no centralized hub or downtown area. Each commercial and retail center on the island, just like the residences, was scattered across the landscape. This created another dilemma for the island, one of connectivity of spaces and accessibility of island amenities by multiple modes of transportation, for people of mixed incomes and cultures. Finally, we realized the fragmentation of natural habitat spaces on the island.

#### thesis

The challenge was to create a community center that serves residents and visitors of all income ranges. It was evident that this community center would need to be mixed use, utilizing commercial and retail spaces, civic areas, a range of housing opportunities, and natural areas for both habitat and recreation. Team 10 also desired to lessen the dependence of the automobile by promoting alternative methods of transportation within the new community core. Our plan connects the core area to the rest of the island and provides connection between preserved open spaces.

#### vision

Considering the dilemmas facing the island and the thesis created in response to these dilemmas, Team 10 created a vision for the new community core and the island itself. The vision statement expresses the desire to create a comprehensive community with environmental, cultural, educational, and economic opportunities for young and old, all ranges of income and ability, resident and visitor, in an interconnected, livable garden. This vision provides the community core that Hilton Head Island lacks.



These diagrams, used in the creation of the master plan, show relationships between different aspects of the site. Shown are the walkability diagram, open space networks, and basic land uses.

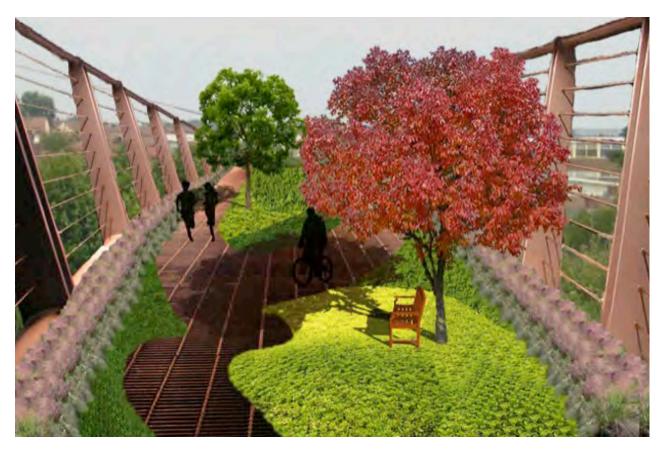


In the master plan shown at right, the new town center is shown along with the surrounding residential and mixed-use areas. As shown in the plan, much of the natural space has been preserved, and the green street network connects the open spaces. Also shown on the plan is the new residential neighborhood at the site of the former golf course. The neighborhood utilizes the open spaces that already exist from the former golf course.



Sections across the site show how the commercial/retail core is designed for pedestrian traffic via a multiway boulevard, also utilizing natural spaces to link the preserved areas. The second section shows the boulevard system that would be created on highway 278.





View of the pedestrian bridge that crosses highway 278 is shown at left. The bridge serves to connect both sides of the site, and also utilizes natural elements to maintain the connectivity between the preserved open space.



### conclusion

Creating great places requires the knowledge, insight, and skills of many professions. The task of arranging buildings, streets, and public spaces in a beautiful and functional fashion must be informed by a sense for the overall pattern of a region and the realities of the real estate market. Clemson's 2011 Design Week brought together students from landscape architecture, city planning, and real estate development to create designs for key sites on Hilton Head Island. The result was a productive collaboration between the disciplines, generating a wide range of imaginative yet practical designs. Charles Fraser's original vision for the island set a high standard for the integration of human settlement into an ecologically sensitive environment. Half a century later, it is appropriate that a new generation of designers take on the challenge of envisioning new possibilities for walkable, mixed-use centers and interconnected green spaces for this special place. The students and faculty of Clemson University deeply appreciate the opportunity that was provided by Design Workshop and the Town of Hilton Head Island to take on this challenging design project. It proved to be a wonderful learning experience for all of the participants.

Cliff Ellis, Ph.D. Director, City and Regional Planning





