COLLEGE TOWNS AS A MODEL OF SUSTAINABLE PLACE-MAKING: LEARNING FROM TWO SUCCESSFUL COLLEGE TOWNS IN SMALL METROPOLITAN REGIONS

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In the face of the current economic crisis, most downtowns have experienced decline, particularly those of small metropolitan regions. In the context of shrinking population and deteriorating infrastructure, these cities are facing critical problems: How to sustain a healthy way of life? How to attract investments? How to maintain a safe physical environment? With increasing real estate foreclosures, devaluation of community assets, and danger of losing a healthy way of American life, models of sustainable urban development are necessary. Studies indicate that only a small number of North American metropolitan regions possess a successful downtown (Filion et. al. 2004; Lyndon 2006). These studies also reveal that a large number of these successful examples are college towns (12 out of 19 towns in the Filion 2004 study). With vibrant quality of life, stable economic opportunities, and an educated workforce, these college towns are exemplary settings to learn from. In each town, a mixed-modal methodology is employed involving morphological studies and spatial syntax analysis, which are to be combined with in-depth qualitative research using interviews and naturalistic observation. The analysis would draw lessons specific to small-metro towns for implementing revitalization policies and projects in these shrinking cities. Studying these college towns can generate models of sustainable urban development and can further guide revitalization policies and projects in shrinking communities concentrated on niche markets and sustainable quality of place.

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Introduction

The author is conducting a multi-year research project to study examples of successful small towns toward developing a model of sustainable places. This pursuit of successful models is rooted in the author's dissertation *The Public Realm as a Place of Everyday Urbanism* (2008), supported by the 2007 AIA RFP grant. This original research involved the study of four college towns: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI, the results of which are published in the AIA Report on University Research Volume 3. This work on public realm and college towns has been presented and published at the 7th International Space Syntax Symposium (SSS7), held in Stockholm, Sweden in June 2009 and at the 50th American Collegiate Schools of Planning Conference (ACSP), held in Crystal City, VA in Oct 2009. The present research, *College Town as a Model of Sustainable Placemaking* project, is a small component in extending the body of case studies to two additional college towns in small metropolitan region: Asheville, NC (University of North Carolina at Asheville) and Savannah, GA (Savanna College of Art and Design).

Research Goals and Objectives

The goal of the proposed project is to develop a sustainable urban model for towns in small metropolitan areas (small-metro towns), which are struggling to survive amidst the global economic meltdown. Collapsing real estate and financial markets, surging foreclosures, rising unemployment, and the decline of the manufacturing sector has all come together to produce a severe crisis (Ernsten & Moceri, 2009). This economic crisis has had a huge impact on several cities, especially on small-metro towns. These towns, with fewer assets and less diverse economic infrastructure, are left with a shrinking population and a deteriorating environment. With the traditional economic development models failing to address these issues, new models of sustainable urbanism are necessary to revive these cities. Some planning studies indicate that only a few small metropolitan regions possess a successful town, with the majority of them being college towns (Filion et al, 2004). In this study, two exemplary college towns (Asheville, NC and Savannah, GA) are examined to learn from their success and generate sustainable models for the shrinking small-metro towns.

Evaluation of a place is based on meanings, activities, and physical environment (Canter 1985). Through relationships among these three elements, universities and towns have adopted new ways to coexist, which are explored in the two case studies. Specifically, the spatial configuration and organization of the campus and the downtown in each city will be examined. It is at this interface (campus-town) that the characteristic tension between the university's desire to be both included and separated from the larger town plays out. Specifically, the research objective is to find how the spatial configuration of a place (spatial variable) and people's activities in these places (action variable) correspond to perceptions of a place (perception variable)—to what extent does the spatial organization (campus-downtown configuration) relate to experience and perception of place quality?

Research design

The relationship between the physical environment and its perception is investigated through a comparative analysis. This comparative binary case study research design employs a multi-method approach that includes:

(1) Study of historic documents, maps, and photographs (through archival study, literature search) for an in-depth description of the two college towns.

(2) Spatial analysis of public places in the college towns using *Space Syntax* theories and techniques (Hillier & Hanson, 1984) to measure the spatial properties (connectivity—S1, global integration—S2, and local integration—S3) of the town and 32 selected public places (n=32).

The morphological and spatial analysis strategies will be combined with in-depth qualitative studies on-site:

(1) Interview of residents using multiple sorting tasks [(a) open sort and (b) directed sort] (Canter et al, 1985) and open-ended questions to identify their perceptions regarding the town and the same 32 public settings (highly public—P1, moderately public—P2, and restricted public—P3).

(2) Multivariate analysis is applied to recognize patterns within the given set of responses (Zvulun, 1978).

	Ashville, NC	Savannah, GA
Geographic Location	South-east	South-east
City Population	73,875	130,331
City Area	41.3 square miles	78.1 square miles
White Percentage	82.0	38.1
Black Percentage	14.7	57.6
Hispanic Percentage	4.2	2.8
Asian Percentage	1.0	1.6
Other Percentage	2.2	2.6
Male Percentage	46.1	48.3
Female Percentage	53.9	51.7
University	University of North Carolina at Asheville	Savanna College of Art and Design
University founded in	1927/ campus expanded in 1966/1972	1978
Student Population	3,650	11,897
Nearest metro region	Charlotte, NC	Atlanta, GA; Jacksonville, FL
Relationship with metro	Distant/suburban campus	Distant/urban campus

Table 1: Comparative profile of the two college towns.

Two Towns—Two Stories

In a recent study of "healthy downtowns of small metropolitan regions," college towns were recognized as successful cases of downtowns in small metropolitan regions (Filion et al, 2004). In the study, niche market and specialized industry like "educational establishments" is identified as an important success factor. Seven of the 19 successful cities considered in their respective regions have a university in the downtown and 12 of the 19 cities have a university campus within two miles of the downtown. Asheville, NC and Savanna, GA, the two case studies in this proposal, are two of the 19 abovementioned successful cities.

The two selected cases, Asheville, NC and Savannah, GA, are prominent college towns in small metropolitan regions. Table 1 identifies various comparative features across these exemplar towns (U.S. Census, 2007). The historic morphology, a study of the transformation of the urban form of the two college towns, will focus on several critical aspects of these towns: description of the town, development of the educational institution, and the everyday lives of people, all evolving together. This evolution specifically highlights the physical configuration of the town-campus organization. First, there is Asheville (North Carolina), where the university campus exists in a relatively isolated environment not too far from the downtown. Second, Savannah (Georgia) presents a picture of integration, where the downtown and the campus have coalesced into a strong and vibrant interface reinforcing the historic city-campus interrelationship.

	Ashville, NC	Savannah, GA
number of axial lines	21693	5048
mean connectivity	2.30	3.66
global integration	0.74	1.04
local integration	0.16	1.76

Table 2: Syntactic properties of the two college towns.

Morphological and spatial analysis

Space syntax is a set of analytical computer based techniques to analyze any spatial configuration such as built spaces and urban environments. It investigates the classical spatial-social relationship, but specifically centers around examination of the crude physical form that is the morphological organization and the spatial configuration of the city. The street layout of the city is explored by analyzing the urban grid. The objective of the spatial analysis is to reveal the social dynamics behind an urban configuration. The analysis uses Global Integration, a measure of accessibility that indicates the depth of a location and easiness to reach that location from all other points of the urban system, as a key quantitative measure to evaluate various parts of the city and compare the physical variation with changes in land use and activities.

The dynamic interaction between urban configuration (environment), human behavior (actions) and common cultural understanding (meanings) continually shapes the growth of a city through time (Habraken, 2000). So, along with exploring the separate aspects of perception, activities, and form, the emphasis is also in understanding their interrelationships that generate a sense of place and that explore the public realm as a place of everyday urbanism.

Formal analysis of the two cities reveals a similar pattern of city-campus relationship, as found in the previous study of the four other college towns (see Adhya, AIA Report on University Research, Volume 3). The interface of the downtown (shown in red) and the campus (shown in blue) is significantly different in the two cities. Savannah portrays an integrated campus juxtaposed with the downtown, whereas Asheville has a newer campus distant from the downtown. This morphological analysis is compared with the spatial analysis of the street pattern and grid structure of the two cities. Using the measure of connectivity and global/local integration, the element of overall connections and accessibility is evaluated. Comparison suggests that tighter downtown-campus relationship (as seen in the rectilinear grid structure in Savannah) is reflected in a strong connectivity in the city and a strong integration core. The weaker connectivity and integration in Ashville can be related to the campus being completely unrelated to and away from the downtown.

This pattern of city-university interaction develops the possibility of understanding universities as generators of activities and as developers. It is not uncommon to find universities as stabilizing factors in many cities during periods of economic depression and political turmoil. The presence and influence of the campus in acquiring land, generating activities, and impacting land use is significant, as indicated by the integration map.
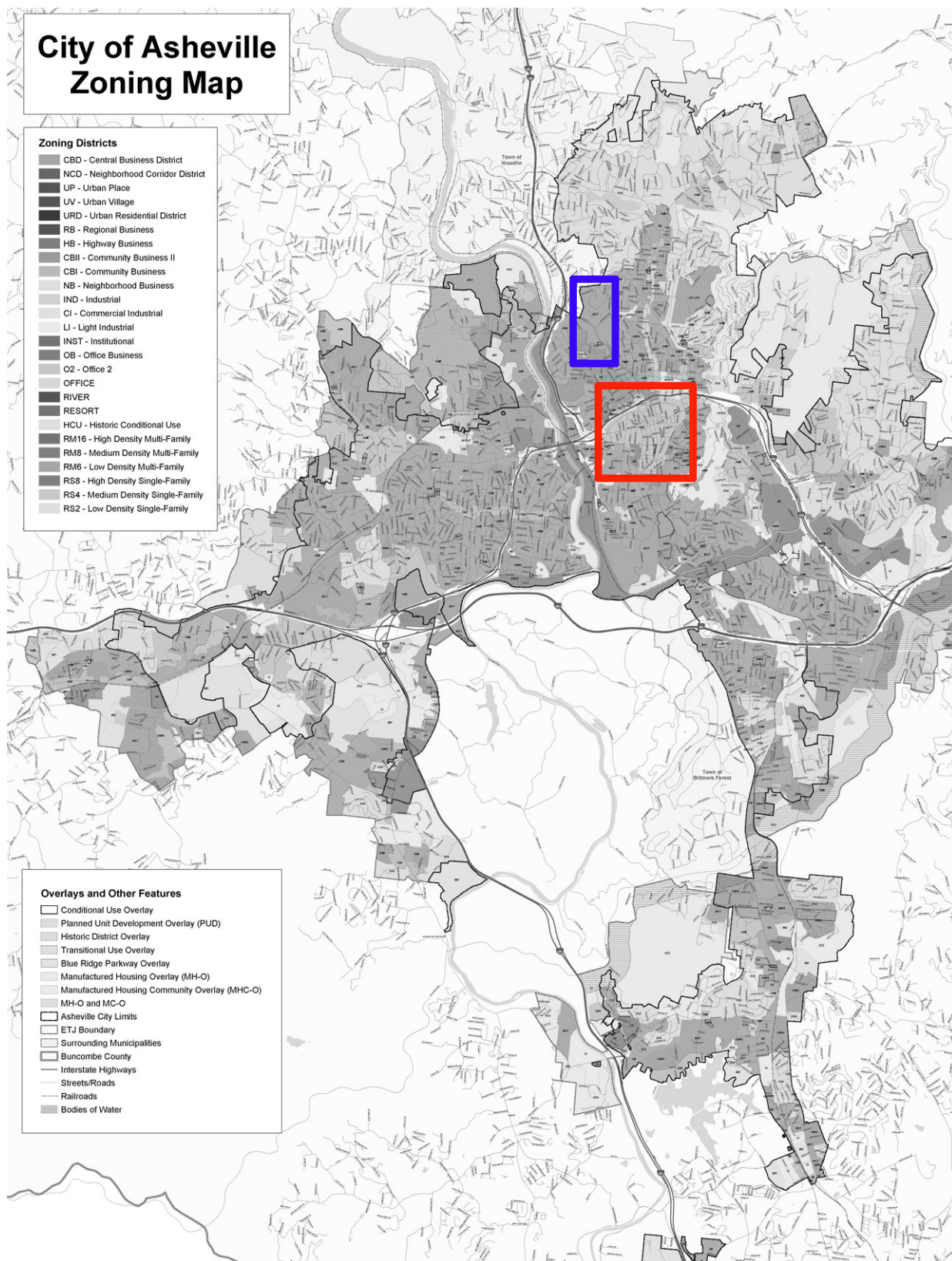
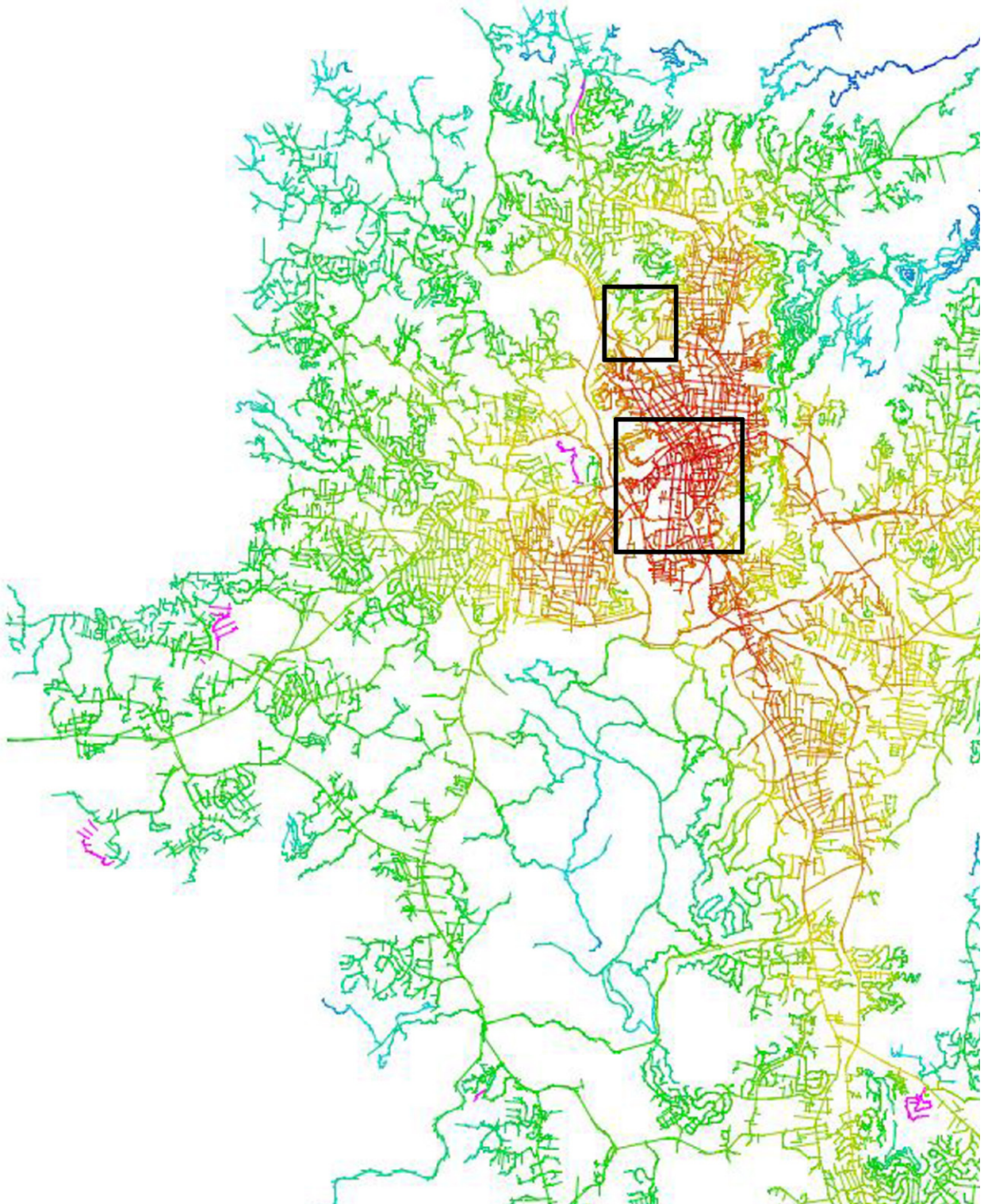Figure 1: Downtown-campus relationship (Red = Downtown, Blue = campus) in Asheville, NC.

Figure 2: Space syntax analysis of global integration (measure of accessibility) in Asheville, NC (scale varies from Red = highest integration/accessibility to blue = lowest integration/accessibility).

City of Savannah Neighborhoods 2008

1. Woodville/Bartow
2. Hudson Hill/Bayview
3. West Savannah
4. Bay Street Viaduct Area
5. Carver Heights
6. Yamacraw Village
7. Kayton/Frazier Area
8. North Historic District
9. South Historic District
10. Beach Institiute
11. Hitch Village/Fred Wessel Homes
12. Eastside
13. Dixon Park
14. East Victorian District
15. West Victorian District
16. Laurel Grove/Railroad Area
17. Cuyler/Brownville
18. Metropolitan
19. Thomas Square
20. Midtown
21. Baldwin Park
22. Live Oak
23. Benjamin Van Clark Park
24. Blackshear
25. Hillcrest Area
26. Winter Gardens/Brightwood
27. Gordonston
28. Twickenham
29. Savannah Gardens
30. Pine Gardens
31. East Savannah
32. Avondale
33. Victory Heights
34. Victory Manor/East Hill/Donwood
35. Sunset Park
36. Dale Terrace/Olympus/Victory Square
37. Parkside
38. Ardsley Park/Chatham Cresent
39. Bingville
40. Cann Park
41. Jackson Park
42. Beach HS Area/Feiler Terrace
43. Ogeecheeton/Dawes Avenue
44. Cloverdale
45. Tremont Park
46. Liberty City/ Summerside
47. Feiler Park/Hussars Terrace/Dittmerville
48. Tatemville
49. Sylvan Terrace
50. Ardmore/Gould Estates/Olin Heights
51. Abercorn Heights/Lamara Heights/Ridgewood
52. Medical Arts

53. South Garden
54. Memorial Hospital/Fairfield
55. Sackville
56. Edgemere
57. Oakland Park/Northgate/Eastgate/Pinehurst
58. Laroche Park/Springhill/Daffin Heights
59. Fernwood/Parkwood
60. Savannah State/Glynnwood/Placentia Place
61. Forest Hills
62. Popular Place/University Place
63. Groveland/Kensington Park
64. Fairway Oaks
65. Magnolia Park/Blueberry Hill
66. Brookview/Skidaway Terrace/Parkview
67. Bacon Park Area/Sandfly
68. Habersham Woods
69. Oakdale
70. Highland Park
71. Avalon/Oglethorpe Mall Area
72. Chippewa
73. Skyland Terrace/Greenway Park/Grove Park
74. Mayfair
75. Lynhurst/Rivers End
76. Oakhurst
77. Paradise Park
78. Leeds Gate/Colonial Village/Hunters Chase
79. Largo Woods
80. Wilshire Estates/Savannah Mall/et al
81. The Village/Rio/Armstrong
82. White Bluff/Holland Drive
83. White Bluff Neighborhoods
84. Windsor Forest
85. Coffee Bluff/Rose Dhu
86. Wild Heron Plantation/Southern Woods/Habersham
87. Vallambrosa
88. Chatham Parkway
89. Hutchinson Island
90. Sweetwater Plantation
91. Bradley Pointe South Area
92. Godley Station
93. Crossroads Business Center
94. Savannah International Airport
95. SPA Industrial Park
96. Dean Forest Road Landfill
97. Teal Lake/Gateway Village/South Oaks/Canebreak
98. Gateway West
99. Belford
100. New Hampstead
101. New Hampstead East
102. Newton
103. Bonaventure Cemetary
104. Hunter Army Airfield

Legend
Pavement
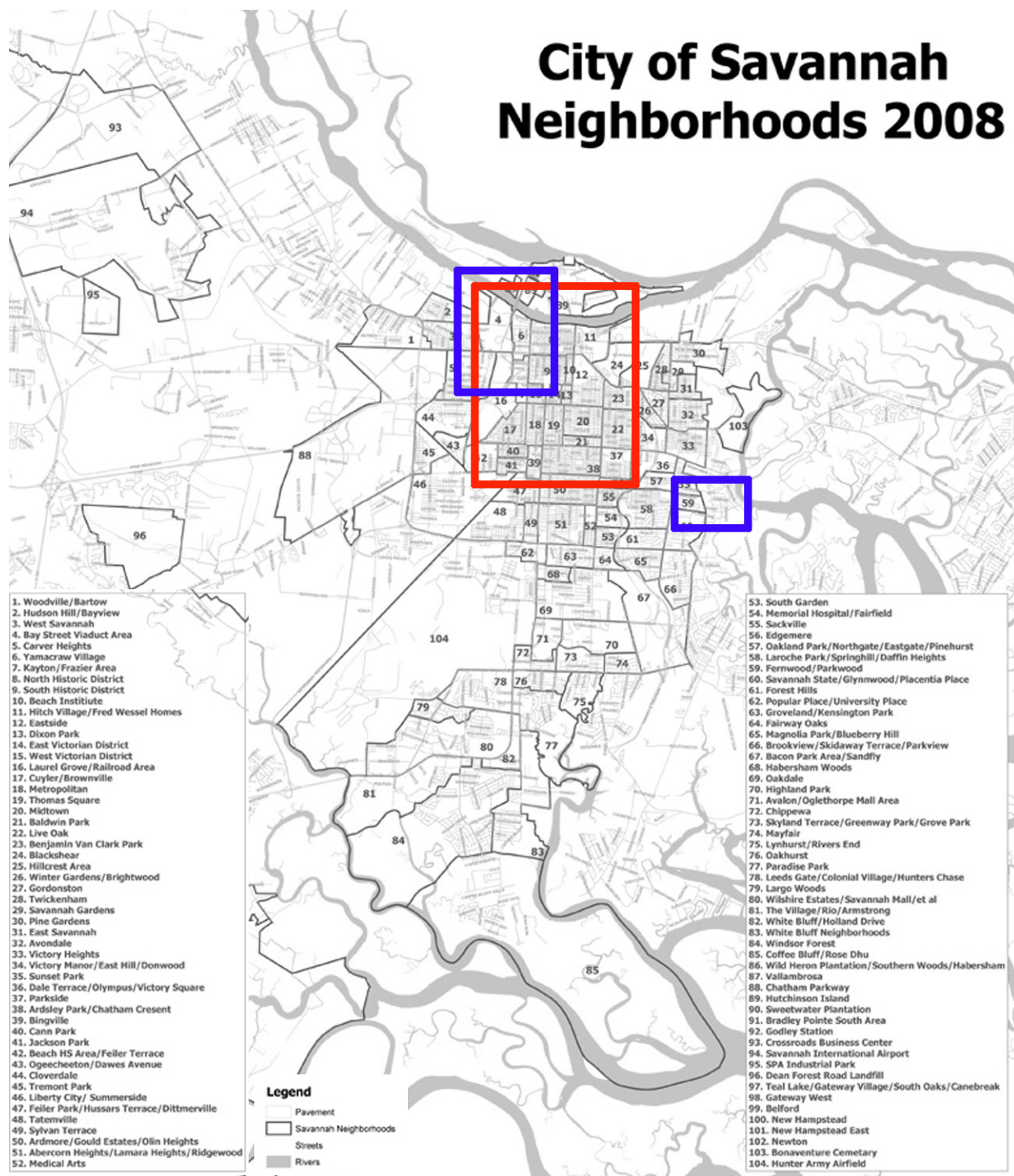Savannah Neighborhoods
Streets
Rivers

Figure 3: Downtown-campus relationship (Red = Downtown, Blue = campus) in Asheville, NC.
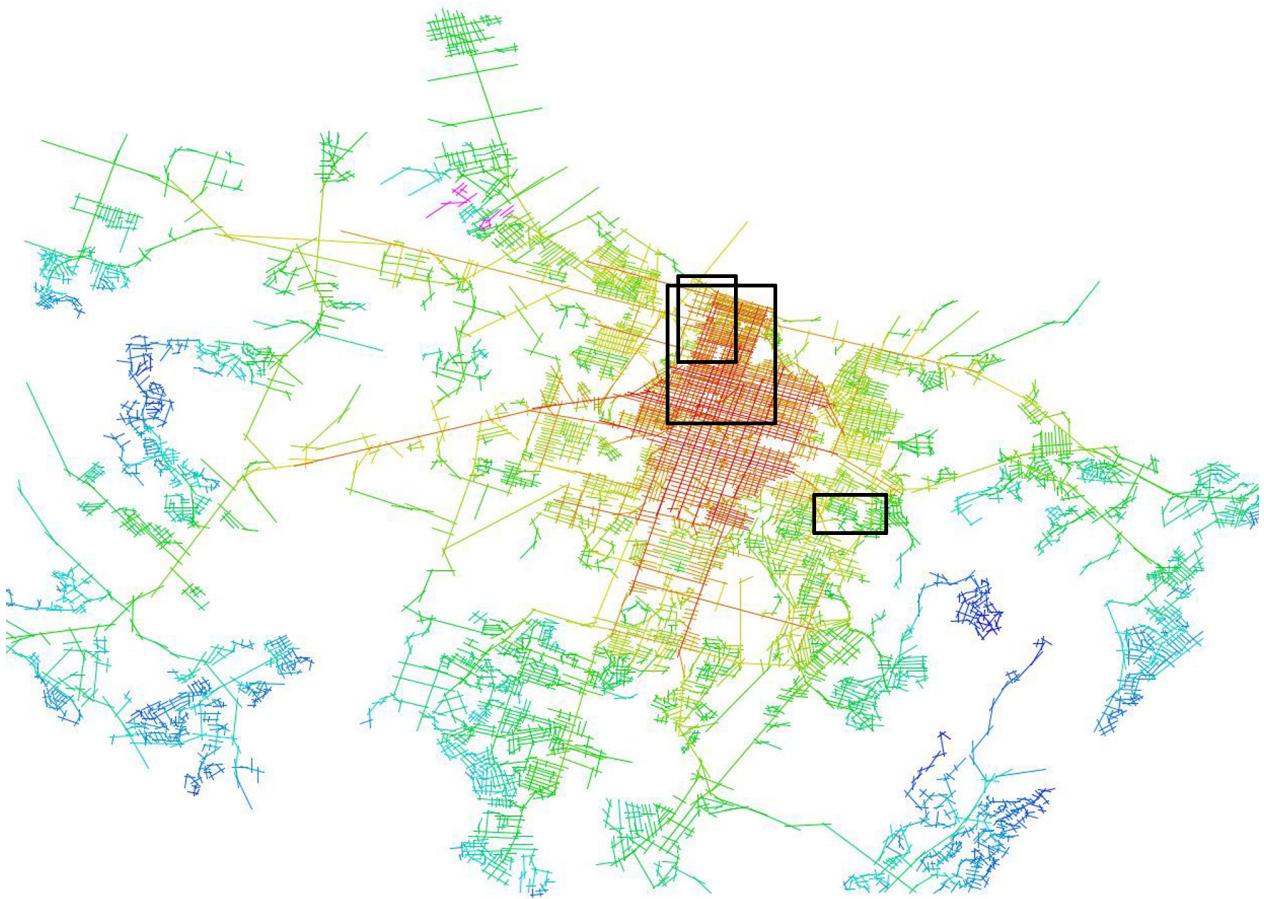
Figure 4: Space syntax analysis of global integration (measure of accessibility) in Savannah, GA (scale varies from Red = highest integration/accessibility to blue = lowest integration/accessibility).

Conclusions and Future Directions of This Research

The partial comparative analysis reveals the pattern of spatial configuration as an important factor in the university-downtown relationship. The results reinforce the earlier findings of the four original case studies conducted with the support of the 2007 AIA RFP program and validates the methodology when replicated in other environments. Once completed, the project could describe the extent to which the spatial configuration of the campus-downtown relationship is formative of the perceived qualities of places. The results will allow us to understand the social, functional, and physical factors and characteristics behind the sustained success of these towns and to develop a sustainable placemaking model for small metropolitan regions at the time of crisis and beyond.

The current research proposal also provides a different and new approach to successful college towns. Prevalent research on college town can be assigned to four broad categories: (1) historic research tracing the structural evolution of college towns; (2) environment behavior and social science studies measuring human behavior in college towns; (3) architecture and urban design studies addressing the physical nature of the campus; and (4) urban planning studies documenting agencies and highlighting the scenarios of campus planning. Although the philosophy, history, economics, politics, architecture, and planning of the campus have been well documented and analyzed, the spatial-perceptual connection—an important aspect of the campus-downtown relationship—has often been ignored or less carefully studied. This proposal focuses on examining the role of the spatial configuration of the campus-downtown relationships on people's place experience, which holds exciting promise for future research.

The proposal is conceived as a foundation for further grant funding. Completing this project and applying the research design/methodology to other case studies across different contexts will help in developing a robust case for longer and more substantial projects. Some short term and long term future directions are as follows:

(1) The model of sustainable placemaking from this initial study will be applied in the community of Warren, MI, through a Spring 2010 architecture/urban design studio, to test and evaluate the model and its validity in the immediate context of Detroit.

(2) This initial project can be expanded to the full-scale study of a robust and diverse sample of successful college towns. Grants such as, 2012 Boston Society of Architects research grant, 2011 Graham Foundation Grant for Advanced Studies in the Fine Arts, and 2010 American Institute of Architects Upjohn research grant, will be pursued in this direction.

(3) Works accomplished through these applied research grants will also be used for publications in peer-reviewed journals such as, *Journal of Urban Design*, *Journal of Architectural and Planning Research*, and *Journal of Architectural Education*.

(4) In conjunction with Lawrence Technological University's leadership in sustainable design, this initial project has the potential to add a new dimension of sustainability (sustainable placemaking) and contribute to the university's recent initiative in helping communities in Detroit facing the economic crisis.

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Notes

In this research, small-metro towns are considered as urban settlements in a metropolitan region with a population between 100,000 and 500,000.

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